

Dividend Policy and Share Price Volatility of Listed Micro Finance Companies in Nepal

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ABSTRACT

The major purpose of this study is to examine the impact of dividend policy on share price volatility of listed micro finance companies in Nepal. The study follows quantitative approach and descriptive research design. Multiple regression analysis is used to explore the causal relation between share price volatility and both dividend yield and dividend payout ratio. The study reveals a positive relationship of dividend yield, dividend payout, earning volatility, debt, growth of assets with share price volatility which shows higher the dividend yield, dividend payout, earning volatility, debt, growth of assets, higher would be the share price volatility. However, there is negative relationship between size and share price volatility showing higher the size of the company, lower would be the share price volatility. Since both management and investors are concerned about the volatility of stock price, this study provides a light on the pathway for discovering what moves stock price as well as important factors to be considered by investors before making investment decision.

Keywords: Share price volatility, Dividends, Micro finance companies

Introduction

Dividend policy has become an issue of interest in financial literature. Dividends are commonly defined as the distribution of earnings (past or present) in real assets among the shareholders of the companies in proportion to their ownership (Frankfurter, and Wood 2003). Dividend policy connotes to the payout policy; which managers pursue in deciding the pattern of cash distribution to shareholders over time. Dividend policy remains a source of controversy despite years of theoretical and empirical research, including one aspect of dividend policy: the linkage between dividend policy and stock price risk (Allen and Rachim, 1996). A number of theoretical mechanisms have been suggested that cause dividend yield and payout ratios to vary inversely with share price volatility. Some authors have stressed the importance of information content of dividend (Asquith and Mullin, 1986). Miller and Rock (1985) suggested that dividend announcements provide the missing pieces of information about the firm and allows the market to estimate the firm's current earnings.

The information signaling hypothesis of dividends has received much attention since Modigliani and Miller (1961) first recognized the idea as a potential explanation for corporate dividend setting behavior. Although MM proves the irrelevance of dividends under perfect capital market assumptions, they observe that in practice stock prices do respond to announcements of dividend changes. MM suggest that markets are characterized by information asymmetry with managers knowing more about their firm's prospects than the market. Consequently, managers may use dividends to signal the true value. Since MM's initial suggestion, there have been a number of attempts to provide a theoretical underpinning to the information signaling hypothesis of dividends. Bhattacharya (1979) and John and Williams (1985) adopt Spence's (1974) job signaling framework to provide insight into the use of dividends as a signaling device.

Various attempts have been made to establish the effect and relationship between dividend payment and the market prices of shares. Empirically it has been established that there is a positive relationship between the movement of stock prices and the stock exchange to earnings, trading volume, dividend or general economic conditions. Theorists like Gordon (1963), Walter (1963), Modigliani and Miller (1961) have raised question about the determinants of movement of stock prices which led to the emergence of two distinctive groups namely the dividend relevance and dividend irrelevance groups.

Empirical evidence suggests that profitability, investment opportunities, and size are the important factors determining dividends (Fama and French (2001)). Though there are these findings on the determinants of dividend

policy in developed countries and in India, they are not yet clearly known in Nepal. The debate has been whether corporate dividend policy has any relationship with stock price movement. In this connection, this study aims at establishing a relationship between dividend policy and share price volatility, with particular focus on the Nepalese stock market.

Therefore, this study provides the answer of following research questions:

- (i) What would be the relationship of dividend policy on share price volatility of different micro finance companies?
- (ii) How does dividend yield impact on share price volatility?
- (iii) Does dividend payout affect the share price volatility?

Literature Review

Conceptual Review

The dividend policy causes to increase the wealth of shareholders, finance manager makes different financial decisions and dividend policy decision is one of them. Dividend decision has great impact on firm financial decision and stock price. The stock price increases when there is smooth payment of dividend exist. Investors do not prefer to purchase the shares of such type of companies, which cannot make payment regularly and of which the dividend decisions have variability because of the risk of loss associated with these variations. The dividend decisions can donate to the value of firm or not which is a controversial issue. There are mainly two schools of thoughts available in the field of finance that presented two different opinions about the dividend policy. One school of thought followed the opinion of Miller and Modigliani (1961) and considered dividend policy irrelevant while the second school of thought followed the point of view of Gordon (1963) and considered dividend policy relevant. Since the half century passed, the question still remains i.e. whether dividend policy is relevant or not. The impact of dividend on share price is a vital issue. If there is impact of dividend, the company should aware for dividend payment. For this reason, this study has been undertaken to analyze the relationship between dividend policy and share price volatility and to identify the degree of influence of dividend yield and dividend payout on share price volatility.

Theoretical Review

Dividend irrelevance theory

Miller and Modigliani (1961) proposed that dividend policy is irrelevant to the shareholder and that stockholder wealth is unchanged when all aspects of investment policy are fixed and any increase in the current payout is financed by fairly priced stock sales. According to them therefore, the dividend policy does not have any impact on shareholder's wealth and they further noted that all dividend policies are equivalent. This implies that firms will continue paying dividend to their shareholders. They further noted that the shareholder's wealth is affected by the income generated by the investment decisions a firm makes, and not by how it distributes that income. According to Modigliani and Miller, to an investor all dividend policies are effectively the same. This is due to the fact that investors can create homemade dividends by adjusting their portfolios in a way that matches their preferences.

Theorists such as Lintner (1962) and Gordon (1963) argue that returns on capital required rise when the cash dividends ratio decreases because investors are less sure of their resulting capital gains than the return earnings and rising stock prices from obtaining these cash dividends. According to these theorists the investors are able to evaluate the dollar, which they received from cash dividends more than the dollar they receive from capital gains. Therefore, company's share price which has a low cash dividend and high return earnings for future capital gains will be less than the share price which has high cash dividends.

Agency theory assumes that the relationship between shareholders and management is an agency one (Jensen and Meckling, 1976). There is always a conflict of interest between shareholders and management. While the former tries to maximize their wealth, the latter try to maximize their compensation. To minimize the conflict between them, management tends to take steps to assure shareholders. The theory postulates that monitoring of the firm and its management is helpful mainly to the shareholders in reducing agency conflicts and in assuring the market that the managers are not in a position to abuse their position.

Dividend relevance theory

Actually investors are not indifferent between current dividends and retention of earnings with the prospect of future dividends, capital gains and both. The share price is reduced if the discount rate increases with the length of time in future in case dividend payment is lowered down. Gordon concluded that dividend policy of a firm affects its value. The conclusion of the study is that investors prefer the present dividend more than future capital gain. This argument insisted that an increase in dividend payout ratio leads to increase in the stock price for the reason that investors consider the dividend yield (D_1/P_0) is less risky than the expected capital gain.

Professor Walter supports the relevancy of dividend policy that has to maximize the wealth position of stockholders. The model shows clearly the importance of the relationship between the firm's internal rate of return (r) and its cost of capital (K) in determining the dividend policy that will maximize the wealth of shareholders. The Walter model is based on number of assumptions as given by Francis (1972). In Corporations finance, all investment through retained earnings can be considered as debt or new equity, which is not issued. Both the internal rate of return (r) and the cost of capital (k) are constant. Corporations distribute all earnings as dividends or reinvest all earnings internally and immediately. The corporate earnings at the beginning and the dividends are assumed to remain constant for any given values. Corporations are assumed to have a very long or infinite life.

Empirical Review

Dividend Policy and Share Price Volatility

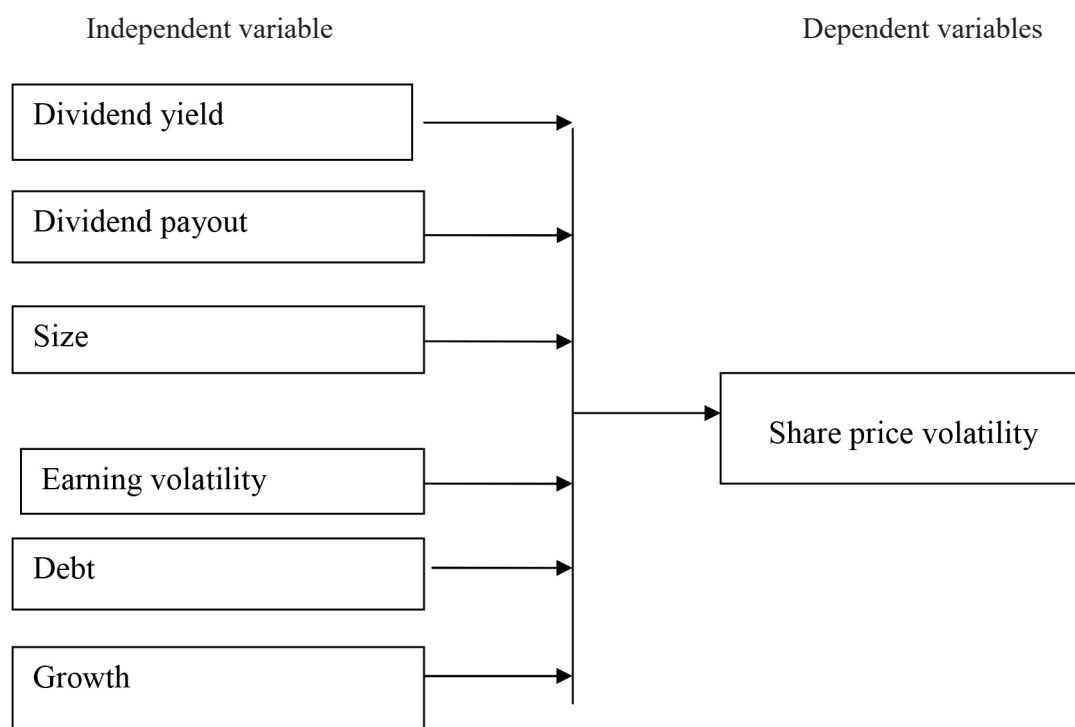
In early corporate finance, dividend policy referred to a corporation's choice of whether to pay its shareholders a cash dividend or to retain its earnings. It addressed the frequency of such payments (whether annually, semi-annually or quarterly) and how much the company should, if it decides to do so, pay. The volatility of ordinary stock is a measure used to define risk and represents the rate of change in the price of a security over a given time: the greater the volatility, the greater the chance of a gain or loss in the short run. The link between the dividend policy of corporations and the volatility of their stock prices has been explored at different times by different researchers (Allen and Rachim, 1996; Baskin, 1989). Also, a number of dividend theories exist that attempt to explain the influence of corporate dividend policies on stock prices. These theories include the clientele effect, the information or signaling effect, the bird-in-hand theory and the rate of return effect.

Dividend payout and Share Price Volatility

In Nepalese stock market Pradhan (2003) using pool cross section data of 29 companies from 1994 to 1999 with the total of 93 observations attempted to determine relative importance of dividends and retained earnings in determining market price of the share. The study pointed out that dividend payment is more important as compared to retained earnings in Nepal. Actually, the study used regression model either linear or log. The study findings indicated that share value is affected by dividends payments. The study the model using data taken from financial statement of limited companies vol. III published by Nepal Stock Exchange using secondary data.

In the context of Nepal, few but significant contributions have been made with dividend payout but as this dynamic world dividend practice and its influencing factors are changing day per day. The earlier studies on dividends need to be updated because of the rapid changes taking place in financial market of Nepal. Therefore, this study has been expected to find a pathway in dividend policy to affect share price volatility providing useful information for all financial scholars, economists, planners and managers at both micro and macro level.

Theoretical Framework



Research Methods

Research Design

This study uses descriptive as well as analytical research design. Descriptive research design determines and reports the way things are (Mugenda & Mugenda, 2003). This approach is appropriate for this study because it involves fact finding and enquiries from the effect of the dividend policy on the stock price volatility at the NEPSE. This study is an empirical study, carried out with the objectives to measure the effect of dividends announcement to the stock prices in the context of Nepalese micro finance Companies.

Population and Sample

There are 63 listed micro finance companies in Nepal Stock Exchange up to the Poush 2074. These all companies are population of this study. So, this study concentrates only 12 companies that shares are traded and dividends are paid during the study period of 2070/071 to 2074/075. The study has used purposive sampling to select those companies which have traded in the NEPSE since 2070 for consistency of the data. According to the records at the NEPSE there are 12 companies which have been trading since 2070 paying regular cash dividend.

Sampling method

In Nepal, Corporate firms are categorized under various sectors such as Commercial Banks, Development banks, Micro Finance Companies and Insurance Companies. There are many micro finance companies that shares are traded actively in stock market and have paid dividends for years. These companies are taken as population but it is not reasonable to study all of them since all these companies have no practice of dividend culture. Therefore, only those companies are taken as sample in this study that have paid regular dividend.

Data Analysis Tools and Techniques

To examine the impact of dividend policy on share price different statistical analysis methods is used. Different statistical and econometric models have been used to analyze the secondary data using EXCEL, SPSS etc. or any type of data files. Secondary data is analyzed through multiple regression models.

First, the dependent variable, price – volatility – is regressed against the two main independent variables, dividend yield and payout ratio. This provides a crude test of the relationship between share price volatility and dividend policy with the regression equation:

$$P - Vol = \beta_0 + \beta_1 D - yield_{it} + \beta_2 Payout_{it} + \varepsilon_{it} \quad (\text{Eq. 1})$$

The dependent variable is regressed against the two independent variables and the control variables with the following regression equation:

$$P - Vol = \beta_0 + \beta_1 D - yield_{it} + \beta_2 Payout_{it} + \beta_3 Size + \beta_4 Earnings + \beta_5 Debt + \varepsilon_{it} \quad (\text{Eq. 2})$$

Where,

P-Vol = Share price volatility

D-yield = Dividend yield

Payout = Dividend payout ratio

Size = Size of micro finance

Earnings = Earnings volatility

Debt = Long term debt of micro finance

Growth = Growth of asset

E_{it} = Error term

Results and Findings

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 2070 through 2075 associated with 12 samples micro finance companies of Nepal.

Table 1: Descriptive statistics

Variables	N	Mean	Std. Deviation	Minimum	Maximum
Price volatility	60	0.866	0.043	0.810	0.960
Dividend yield	60	0.015	0.007	0.002	0.030
Dividend payout	60	0.137	0.091	0.018	0.296
Size	60	5.799	0.436	5.025	6.302
Earnings volatility	60	0.032	0.023	0.001	0.094
Debt	60	0.425	0.238	0.087	0.871
Growth	60	0.262	0.123	0.022	0.371

Table 1 shows that the share price volatility ranges from minimum value of 0.81 times to maximum value of 0.96 times with an average of 0.87 times. Similarly, dividend yield ratio varies from minimum value of 0.2 percent to maximum value of 3 percent with an average value of 1.5 percent. Dividend payout ratio of firm ranges from minimum value of 1.8 percent to maximum value of 29.6 percent with an average value of 13.7 percent. The size varies from Rs. 5.025 million to Rs. 6.302 million with an average of Rs.5.799 million. Likewise, earnings volatility during the study period is found to have minimum value of 0.1 percent and maximum value of 9.4 percent with an average 3.2 percent. Debt has an average of 42.5 percent with minimum value of 8.7 percent and maximum value of 87.1 percent. The average growth of assets is noticed to be 26.2 percent having minimum value of 2.2 percent and maximum value of 37.1 percent.

Correlation Results

Table 2: Computation of Pearson's correlations coefficients for dependent and independent variables

Variables	Price volatility	Dividend yield	Dividend payout	Size	Earnings volatility	Debt	Growth
Price volatility	1						
Dividend yield	0.253	1					
Dividend payout	0.302	0.170	1				
Size	-0.316	-0.002	0.544	1			
Earnings volatility	-0.395	0.303	0.298	0.625	1		
Debt	0.102	0.115	0.618	0.592	0.504	1	
Growth	0.365	-0.169	0.261	0.492	-0.114	0.262	1

Table 2 reveals that correlation amongst the variables utilized for the study. From the table, it can be seen that the correlation between price volatility and dividend yield is 0.253 showing that higher the dividend yield, higher would be the share price volatility. As expected, this is in line with that of Allen and Rachim (1996), which was positive (0.006). Similarly, dividend payout ratio is positively related to share price volatility which depicts that higher the dividend payout, higher would be the share price volatility. There is positive relation between debt and share price volatility which shows that higher the debt, higher would be the share price volatility.

The result shows positive relation between growth of assets and share price volatility showing that higher the growth of assets, higher would be the share price volatility. However, the variable size is negatively related to share price volatility which indicates that higher the size of the bank, lower would be the share price volatility. Moreover, earnings volatility is negatively related to share price volatility which indicates that higher the earnings volatility, lower would be the share price volatility. There is negative relation between size and dividend yield that means larger firms which have high growth will have more investment opportunities as compared to smaller firm so they pay fewer dividends to the stockholders. Likewise, the relation between growth and dividend yield and earning volatility is also negative. According to the correlation table, it is observed that there is a significantly high correlation between size and earnings volatility.

Regression Results

The result of regression analysis has been presented in Table 4.3. More specifically, the regression of two independent variables dividend yield and dividend payout on share price volatility is shown in Table 3.

Table 3: Regression result:

Variables	Coefficient	t-stat	p-values
Intercept	0.83	23.829	0.000
Dividend yield	1.236	0.658	0.527
Dividend payout	0.125	0.847	0.419

Tabl 3 shows the results obtained from equation (1). The regression results of share price volatility with dividend yield and dividend payout show a positive relationship between dividend yield and share price volatility, similarly dividend payout and share price volatility. Next, the control variables are added to see if there would be any change in the coefficient of dividend yield and dividend payout. This is given by the regression equation (2). As shown in Table 4.4, it is observed that the coefficient of dividend yield and dividend payout is same, and all other variables were exactly as expected. This explains the fact that dividend policy is the determining factor of price volatility, there is close examination of the t-statistic of the dividend yield and dividend payout is 1.325 and 2.555 respectively, similarly p - value is 0.036 shows that this is significant.

Table 4: Regression result:

Variables	Coefficient	t-stat	p-values	Tolerance	VIF
Dividend yield	1.405	1.325	0.242	0.787	1.271
Dividend payout	0.266	2.555	0.051	0.506	1.976
Size	-0.118	-3.597	0.016*	0.222	4.506
Earnings volatility	0.242	0.451	0.671	0.289	3.46
Debt	0.028	0.678	0.528	0.472	2.119
Growth	0.286	3.5	0.017*	0.449	2.228

Model	R - Square	Durbin-Watson	F - Value	F - Prob.
Regression	0.876	1.475	5.866	0.036

The signs denotes the result is significant at 5 percent level of significance.*

Table 4 indicates that the debt has significant positive impact on share price volatility which reveals that higher the debt ratio, higher would be the share price volatility. This finding supports the finding of Irmala et al. (2011) and Uwuigbe et al. (2012). However, the beta coefficient is negative for size. The result shows that higher the size, lower would be the share price volatility. This result supports the finding of Nazir et al. (2011) and Habib, Kiani and Khan (2012). 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 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 Allen and Rachim (1996). Likewise, the result found that there is positive relation between growth of assets and share price volatility which shows 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). The beta coefficient for growth of assets and size are significant at 5 percent level of significance. The fitted model is highly significant.

Discussions and Conclusions

In this study, dividend yield and dividend payout ratios are considered as proxies of dividend policy, and investigated their effects with the help of control variables on share price volatility through a sample of listed micro finance companies which were publicly traded during the period 2070-2075. Dividend policy intrinsically affected stock price volatility in the United States (Baskin, 1989). A later research by Profilet and Bacon (2013) in the United States also came to the same finding that dividend related negatively to the stock price volatility. However, contradictory studies are also presented in some other countries where evidence of positive, but not significant, relationship between stock price volatility and dividend is found after controlling for earning volatility, payout ratio, debt, firm size and growth in assets (Rashid and Rahman, 2008). From the results presented on this study, the dividend yield, dividend payouts are found to be positively related to share price volatility even after controlling for size, earning volatility, and debt ratio as well as for growth which is consistent with the study of Gautam (2017). The growth of assets is significantly positive with share price volatility relating increase of growth, in-

crease of share price volatility. The relation between size and share price volatility is significant negatively related with share price volatility of micro finance companies in Nepal. Large firms normally have a better access to the capital market to raise funds hence dependency on retained earnings as source of income will reduce. Research by Proffitt and Bacon (2013) depicted the finding that firms' size is negatively related to stock price volatility. Debt, on the other hand, showed a significant positive relationship with price volatility, suggesting that the more leveraged a firm is the more volatile the stock price would be (Hussainey et al., 2011).

The study shows that growth of assets and size (market capitalization) are statistically significant at 5% significance level in the model. The objective of this study is to examine the relationship between dividend policy (dividend yield and dividend payout) and the volatility of stock price. This is done for a period of 5 years (2070 through 2075). It is based on a sample of listed micro finance companies in Nepal. It also examines the relationship between stock price volatility and other variables, such as size, growth, earnings volatility and debt. The overall findings suggest that the higher the payout ratio, the more volatile a stock price will be. This study also suggests that payout ratio and dividend yield is the main determinant of the volatility of stock price. Among the control variables, it is found that growth has the highest correlation with price volatility. The size has significant negative relationship with price volatility, suggesting that larger the firm, less volatile the stock price. On the other hand, the study shows that there is a significant positive relationship between growth and price volatility, indicating that the increasing growth of company leads more volatile the stock price will be.

The findings of this study are highly suggestive to managers to employ dividend policy to influence their stock's risk. Many questions, though, remain unanswered; we need additional tests to distinguish among the various possible theoretical causes of the empirical relationship. One suggestion is to examine the duration effect in its differential sensitivity to variation in interest rates. Another is to explore whether the empirical relationship reported here can be found in data from other countries.

REFERENCES

- Allen, D.E. and Rachim, V.S. (1996). "Dividend policy and stock price volatility: Australian evidence", *Journal of Applied Economics*, Vol. 6, 175-88.
- Asquith, P. and Mullins, W. (1986). The impact of initiating dividend payments on shareholders' wealth, *Journal of Business*, 56, 77-96.
- Bacon, Frank & Proffitt, Kyle. (2013). Dividend Policy and Stock Price Volatility in the U.S. Equity Capital Markets. *Journal of Business and Behavioral Sciences*. 25. 63-72.
- Baskin, J. (1989). "Dividend policy and the volatility of common stock", *Journal of Portfolio Management*, Vol. 15, pp. 19-25.
- Battacharya, S. (1979). "Imperfect information & dividend policy and the 'bird in hand' fallacy", *The Bell Journal of Economics*, Vol. 10, pp. 259-70.
- Fama, E. and French, K. (2001), "Disappearing dividends: changing firm characteristics or lower propensity to pay?" *Journal of Financial Economics*, Vol. 60, pp. 3-43.
- Francis, C. Jack (1972). Investments: analysis and management. New Delhi: McGraw Hill Book Company, Inc. 344.
- Frankfurter, George & Wood, Bob. (2002). Dividend policy theories and their empirical tests, *International Review of Financial Analysis*. 11. 111-138.
- Gautam, Ramji. (2017). "Impact of Firm Specific Variables on Stock Price Volatility and Stock Returns of Nepalese Commercial Banks", *International Journal of Research in Business Studies and Management* Vol. 4, pp. 33-44.
- Gordon, M.J. (1963). "Optimal Investment and Financing Policy". *The Journal of Finance*, 18, 264-272.
- Habib, Y., Kiani Z. I., & Khan M. A. (2012). Dividend policy and share price volatility: evidence from Pakistan. *Global Journal of Management and Business Research*, 12(5), 2249-2283.
- Hussainey, K., Oscar Mgbame, C., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility: UK evidence. *The Journal of Risk Finance*, 12(1), 57-68.
- Irmala, P., Sanju S., & Ramachandran, M. (2011). Determinants of share prices in India. *Journal of Emerging Trends in Economics and Management Sciences*, 2 (2), 124-130.
- Jensen, M., and Meckling, W. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure", *Journal of Financial Economics*, 4, pp. 305-360.
- John, Kose & Williams, Joseph, 1985. "Dividends, Dilution, and Taxes: A Signalling Equilibrium," *Journal of Finance*, American Finance Association, vol. 40(4), pages 1053-1070.

- Lintner, J. (1962). Dividends, Earnings, Leverage, Stock Prices and the Supply of Capital to Corporations. *The Review of Economics and Statistics*, 44, 243-269.
- Miller, M.H. and Modigliani, F. (1961). "Dividend policy, growth and the valuation of shares", *The Journal of Business*, Vol. 34, pp. 411-33.
- Miller, M. H. and Rock K. (1985). Dividend policy under asymmetric information, *Journal of Finance*, 40, September, 1031-51.
- Mugenda, O., & Mugenda, A. (2003). Research methods quantitative and qualitative approaches. Nairobi: Act Press.
- Nazir, M. S., Rakha, A., & Nawaz, M. M. (2012). Corporate Payout Policy and Market Capitalization: Evidence from Pakistan. *Journal of Economics and Behavioral Studies*, 4(6), 331-343.
- Pradhan, Radhe Shyam. (2003). Effects of Dividends on Common Stock Prices: The Nepalese Evidence. *SSRN Electronic Journal*. 10.2139/ssrn.1403725.
- Spence, A.M. (1974). Competitive and optimal responses to signals: analysis of efficiency and distribution. *Journal of Economic Theory*, 7, 296-332.
- Suliman, M., Ahmad, S., Anjum, M. J., & Sadiq, M. (2013). Stock price volatility in relation to dividend policy; A case study of Karachi stock market. *Middle-East Journal of Scientific Research*, 13(4), 426-431.
- Rashid, A., & Rahman A. (2008). Dividend policy and stock price volatility: Evidence from Bangladesh. *Journal of Applied Business and Economics*, 8(4), 71-81.
- Uwuigbe, U., Olusegun, O., & Godswill, A. (2012). An Assessment of the determinants of share price in Nigeria: A study of selected listed firms. *ACTA Universities Danubius*, 8(6), 26 41.
- Walter, J.E. (1963). "Dividend policy; its' influence on the value of the enterprise", *Journal of Finance*, Vol. 18, pp. 280-91.
- Zakaria, Z., Muhammad, J., & Zulkifli, A. H. (2012). The Impact of Dividend Policy on the share price Volatility: Malaysian Construction and Material Companies. *International Journal of Economics and management sciences*, 2(5), 1-8.