



International Journal of Research in Academic World



Received: 06/December/2023

IJRAW: 2024; 3(1):52-57

Accepted: 12/January/2024

Impact of Dividend Announcement on Share Price Volatility in NSE on Indian Stock Market-with Special Reference to Heidelberg Cement Company-An Empirical Study

*¹Ms. A Raveena and ²Dr. RS Ch Murthy Chodisetty

¹Student, Department of Management Studies, Vardhaman College of Engineering, Shamshabad, Hyderabad, Telangana, India.

²Associate Professor, Department of Management Studies, Vardhaman College of Engineering, Shamshabad, Hyderabad, Telangana, India.

Abstract

Purpose: In general dividend is paid once in a year to the investors according to their investments made in the company. Dividend is one of the ways where the investors can make money out of their investments. This paper explains about Share price Volatility of Heidelberg Cement before and after announcement using Arch Model.

Design/Methodology/Approach: This paper explains about Share price Volatility of Heidelberg Cement before and after announcement using Arch Model. When a part of the profit is distributed among the investors of the company is known as "Dividend". In general dividend is paid once in a year to the investors according to their investments made in the company. Dividend is one of the ways where the investors can make money out of their investments.

Originality/Value: The 10 public sector banks' annual reports provided the secondary data. For the sake of further investigation and confirmation, ww.moneycontrol.com was consulted. Before the data was utilised for the study, it was put through some basic mathematical processes, such calculating the ratios.

Findings: The study is restricted to consider only the share prices of the stocks on dividend announcement day. Ten cement companies registered on the National Stock Exchange are the only ones included in the research. From 2013 to 2022, a whole decade, is covered by the research.

Keywords: Share price volatility, dividend announcement, arch & garch models

1. Introduction

Every company when it goes public, they have to be clear about their dividend policy. Dividend policy includes all the detailed information about how the company is going to treat its profits and the way of giving the dividend, in what time that they are going to pay dividend, how much they are going to pay, procedures followed for dividend decision, etc.

Different Forms of Dividend Policy

Policy on Regular Dividends: This is one of the types of the dividend policy that the company can adopt for treating its dividend decisions. Under regular dividend policy the company will pay the part of the profit to its investors. Under this policy the amount that the investors are going to get not sure. Sometimes it can be more and sometimes it can very less. It all depends on the performance of the for that year and the profits that it has made by doing the business.

Stable Dividend Policy: This dividend policy stipulates that, out of its net income, the firm would distribute a portion of its earnings to its shareholders. Investors will earn dividend payments at predetermined periods under a consistent

*Corresponding Author: Ms. A Raveena

dividend policy. Investors in a corporation with a consistent dividend policy will obtain a predetermined payout regardless of the company's profitability. Investors will be getting a fixed amount every time when the company issues dividend.

Irregular Dividend Policy: As the name say the companies which follows the irregular dividend policy pays their investors irregularly. The dividend decision is taken by the company in the Annual General Meeting (AGM) whether to give dividend or to retain the profits. Companies which follow this policy will mutually discuss and take decision regarding the payment of dividends. One year they may give dividend and in the other year they may not provide the dividend. The company focuses on the wealth maximization of the investors than the short-term gain that they make on the dividends.

2. Review of Literature

- Sudarshan Roy (2021) ^[1] the objective of this study, as stated in the paper "Dividend Pay-Out and Share Price Movement: An Empirical Study in India," is to compare organizations that deliver profits and those that don't throughout the span of a year to assess the profit strategy

and its effect on stock value. Take a look at how dividend payments and share price movement are related for various sectors and firms in India. Secondary data was used to carry out the investigation. A ten-year span (2011-2020) is planned for the research. Twenty-254 firms from all industries listed on India's main stock markets make up the sample. Some of these companies pay dividends while others do not. They converted the data into trend lines when data collection was complete. According to the data, paying firms had larger share price volatility over the last decade (2011-2020) compared to non-paying companies. This might mean that investors favour paying companies. A positive connection between stock cost and profit payout is possible, as shown by the data.

- Bahtiar Usman, Henny Setyo Lestari, Syofriza Sofyan (2020) ^[2] the published article named "The Impact of Profit Strategy on Offer Value Assembling Organizations in Indonesia" expresses that the target of the experimental review is to analyze the connection between stock costs and profit strategy. Modern organizations that were recorded on the Indonesia Stock Trade somewhere in the range of 2014 and 2018 are the focal point of this examination. This research uses secondary data to draw conclusions on an example of 36 organizations that are recorded on the Indonesia Stock Trade. The research made use of the following methods: panel data regression, multiple linear regression, and the purposive sampling methodology. According to the research, a dividend per share lowers the stock price of the firm. A company's stock price is positively correlated with its earnings per share. The stock price is unaffected by retention ratios and return on equity.
- Duy T. Nguyen, Mai H. Bui, and Dung H. Do (2020) ^[3] In light of the article "The Relationship of Dividend Policy and Share Price Volatility: A Case in Vietnam" published in the same journal, this study intends to examine the correlation between profit strategy and offer cost unpredictability in non-finance organizations recorded on the Ho Chi Minh Stock Trade in Vietnam from 2011 to 2016. The review centers around optional information and elements 141 non-monetary organizations that are recorded on the Ho Chi Minh Stock Trade in Vietnam. A regression model, standard deviation, and mean were all used in the research. The data shows that dividend payment and dividend yield considerably reduce share price volatility statistically. Credence to the concept is shown by the finding that there is an inverse correlation between firm size and unpredictability in share cost. The profit yield coefficient suggests that, out of all the parameters studied, it has the greatest effect on the unpredictability of stock prices.
- Rumana Haque, A. T. M. Nasiruddin, Farhana Mishu (2019) ^[4] An article titled "Dividend Policy and Share Price Volatility: Through the years 2004-2014, the Dhaka Stock Exchange (DSE) in Bangladesh was home to a number of industrial companies that were subject to stock price volatility. This study looks at the effect of profit strategy on this market. After collecting primary data, the study analyzed secondary data from 35 industrial companies listed on Bangladesh's Dhaka Stock Exchange (DSE). Multiple regression analysis and correlation have been used. Findings from this study's empirical analysis were inconsistent. Share price volatility is significantly correlated with dividend yield and business size,
- suggesting that these two factors significantly influence share price volatility.
- Narinder Pal Sing, Aakash Tandon (2019) ^[5] the purpose of this article, published as "The motivation behind this review, named "The Impact of Profit Strategy on Stock Cost: Evidence from the Indian Market," is to analyze the market price per share of Nifty 50 businesses in India from 2008 to 2017 in connection to dividend policy. The goal is to draw conclusions about the policy's impact on these companies' share prices, whether positive or negative. The sample consists of the 50 largest businesses listed on the National Stock Exchange (NSE), and the data used is secondary data. They have conducted studies using panel regression, unit root testing, and correlation. According to the study's findings, shareholders are more concerned with the dividend yield than with the dividend amount paid per share. Market price per share (MPS) is influenced by dividend distribution, and dividend policy positively influences stock price.
- Musaed S. Alali, Sundus K. Al-Yatama, Nour M. AlShamali, Khuloud M. Al Awadhi (2019) ^[6] It was said in the article "The Impact of Dividend Policy on Kuwaiti Insurance Companies Share Prices" that the purpose of the research was to look at how four insurance firms listed on the Kuwait stock market fared in terms of their share prices from 2009 to 2017. The sample consists of four insurance businesses registered on the Kuwait stock market, and the data is derived from secondary sources. The researchers in this study employed panel data to examine skewness, kurtosis (the highest point of a distribution curve), financial ratios, and the relationship between the variables. If investors are willing to take risks in pursuit of anticipated capital gains rather than guaranteed dividends, then it stands to reason that profit payout proportion and profit yield would adversely affect share prices. This analysis lends credence to the dividend irrelevance argument put out by Miller and Modigliani.
- Muhannad Akram Ahmad, Ashraf Mohammad Salem Alrjoub, Hussein Mohammed Alrabba (2018) ^[7] In light of the article "The Impact of Profit Strategy on Stock Value Unpredictability: Observational Proof from Amman Stock Trade" published between 2010 and 2016, the purpose of this study is to inspect how profit strategy affected the volatility of stock prices of businesses listed in the Amman Stock Exchange during it. Specifically, the study analyzed secondary information from 228 organizations that are recorded on the Amman Stock Trade. We have used descriptive statistics, panel GMM, and Pearson correlation. Evidence from this study shows that profit strategy impacts stock cost instability. As a consequence, a decrease in stock price volatility and an increase in dividend yield and payment lead to more stable stock prices. Companies trading on the Amman Stock Exchange should make sure their dividend policies are in accordance with what investors want, according to the report.
- Ahmed Butt Ifikhar, Nabeel-Ud-Din Jalal Raja, Khan Nisar Sehran (2017) ^[8] "Impact of Dividend Policy on Stock Prices of Firm" takes a look at the ten-year period between 2005 and 2014 on Pakistan's Karachi Stock Exchange and how profit strategy impacted the stock costs of organizations in the banking industry. Five financial institutions trading on Pakistan's Karachi Stock Exchange make up the study's sample and secondary data. In the research, they used methods for regression and correlation analysis. A reasonable dividend policy, the findings

showed, helps a lot in bolstering a company's capital structure and draws in respectable investors. Furthermore, the research showed that a company's stock price can benefit from dividend policy changes that are based on cautious investigation of the market's capital design and the practices of other companies.

- Roraima Zainuddin, Nurul Shahnaz Mahdzan, Chee Hong Yet (2017) Their goal in writing "Profit strategy and stock value unpredictability of modern items firms in Malaysia" was to take a gander at modern items organizations recorded on the Malaysian Stock Trade and see whether there was a connection among SPV and profit strategy from 2003 to 2012. Secondary data for the study came from 166 firms traded on the Malaysian Stock Exchange. Standard deviation, square root transformation, and Baskin's framework have all been implemented. The aggregate data shows a strong negative connection between's profit strategy and the unpredictability of offer costs. Data from Malaysian businesses selling industrial goods reveals that profit strategy is areas of strength for an of stock cost instability, particularly in the years after the financial crisis. Share price volatility is significantly inversely related to company size, according to the data. The stock price of large companies should be less volatile than that of smaller ones since these companies are often more lucrative, stable, and financially solid.
- Dr. V. Chitra, Dr. T. Hemalatha (2017) ^[10] Our goal in writing this piece is to better comprehend how the offer costs of concrete organizations that deliver profits and are traded on the NSE India changed before and after the announcement of those dividends. The study observed the patterns for a period of 10 years (2005-2015). Sample is 6 Indian cement companies, and the data is secondary data. They have used Parametric Significance Test, Generalized Autoregressive Conditional Heteroscedasticity model (GARCH), Garman Klass model Volatility. Results were:-

3. Statement of the Problem

The date of the dividend announcement is considered Day 0 or event day for the purposes of this research. In the event that the trading day after event day is also non-trading, then the trading day following that will likewise be an event day. The fifteen trading days (days-15 to-1) before the dividend announcement date constitute the pre-announcement period. Days +1 to +15, or fifteen trading days after the dividend announcement, make up the post-announcement period. As a result, we have used a 31-day trading window (with day 0 serving as the event day) for the event. In order to get the Cumulative Average Abnormal Returns (CAARs), we average the projected abnormal returns across all securities and then add them up over time.

4. Objectives of the Study

- To examine how Heidelberg Cement Company's share price is affected by a split announcement.
- To analyse how the share price of Heidelberg Cement Company is affected before and after a dividend announcement
- In order to examine the pre-and post-dividend price volatility of stocks or shares utilizing ARCH family or ARCH models.

5. Hypotheses of the Study

H0: There is no Relationship between Divided and Share price in Heidelberg Cement Company

H1: There is a Relationship between Divided and Share price in Heidelberg Cement Company

H0: There is no Impact of pre and post dividend announcement on share price in Heidelberg Cement Company

H1: There is a Impact of pre and post dividend announcement on share price in Heidelberg Cement Company

H0: There is no volatility of pre and post dividend announcement on share price in Heidelberg Cement Company.

H1: There is no volatility of pre and post dividend announcement on share price in Heidelberg Cement Company

6. Research Methodology

Sources of Data: The 10 public sector banks' annual reports provided the secondary data. The website www.moneycontrol.com was used to gather additional data for the purposes of analysis and verification. Prior to being used for the research, the data underwent certain basic mathematical processes, such as calculating the ratios.

Research Tools

- Correlation,
- Regression
- Descriptive Statistics
- Stationary test
- Regression Analysis
- Arch and Garch Models.

7. Scope of the Study

- Dividends, share price volatility, and ARCH models are all covered in the research, along with their fundamental meaning, kinds, theories, and ideas.
- The study is restricted to consider only the share prices of the stocks on dividend announcement day.
- The study only covers 10 cement industries that are listed on the National Stock Exchange.
- The research spans a decade, from 2012 to 2021.

8. Need for the Study

Even though dividend policy has been the subject of much study in the realm of finance, academics, managers, and policymakers are still divided on the subject of whether or not it influences stock prices. Managers, lenders, and other interested parties should pay attention to dividend policy. According to Al-Masum (2014) and Rossi (2015), investors perceive dividends as a means to assess companies from an investment perspective, in addition to being a source of income (2015).

9. Limitations of the Study

- The research only covers a subset of the cement industry.
- Focusses only on 10 selected cement industries rather than all cement industries.
- This study included data only form 2012-2021 and not anything beyond.
- The research relies on secondary data. This means that data may not be completely accurate.
- Secondary data retrieved from websites such as Money Control, Yahoo! Finance, and Screener forms the basis of the research.

10. Result and Discussion

Table 1: Table Shown Correlations of Heidelberg Cement Company from 2016-17 to 2020-2021.

Year	Dividend in Rs. (X)	dx=X-A	dx2	Share price on announcement day (Y)	dy=Y-A	dy2	dxdy
2011-2012	0	0	0	0	0	0	0
2012-2013	0	0	0	0	0	0	0
2013-2014	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0
2015-2016	0	0	0	0	0	0	0
2016-2017	2	2	4	132	132	17424	264
2017-2018	1	1	1	133	133	17689	133
2018-2019	1.5	1.5	2.25	187	187	34969	280.5
2019-2020	6	6	36	161.3	161.3	26017.69	967.8
2020-2021	8	8	64	254	254	64516	2032
	Ex=	18.5	107.25	Edy=	867.3	160615.69	3677.3

Table 2: Table Shown Correlations of Heidelberg Cement Company from 2016-17 to 2020-2021.

Year	Dividend in Rs. (X)	Share Price (high) on Announcement day (Y)	X2	Y2	XY
2011-2012	0	0	0.00	0	0
2012-2013	0	0	0.00	0	0
2013-2014	0	0	0.00	0	0
2014-2015	0	0	0.00	0	0
2015-2016	0	0	0.00	0	0
2016-2017	2	132	4.00	17424	264
2017-2018	1	133	1.00	17689	133
2018-2019	1.5	187	2.25	34969	280.5
2019-2020	6	161.3	36.00	26017.69	967.8
2020-2021	8	254	64.00	64516	2032
	18.5	867.3	107.25	160615.69	3677.3

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Correlation (r) = 0.830051342

$$A = \frac{(\sum y)(\sum x^2) - (\sum x)(\sum xy)}{n(\sum x^2) - (\sum x)^2}$$

$$B = \frac{n(\sum xy) - (\sum x)(\sum y)}{n(\sum x^2) - (\sum x)^2}$$

Regression Values a=79.59090909, b=165.9787879

Table 3: Summary Output of Heidelberg Cements

Regression Statistics					
Multiple R	0.9982357				
R Square	0.996474513				
Adjusted R Square	0.996033827				
Standard Error	15.92928607				
Observations	10				
ANOVA					
	df		df		df
Regression	1	Regression	1	Regression	1
Residual	8	Residual	8	Residual	8
Total	9	Total	9	Total	9
	Coefficients		Coefficients		Coefficients
Intercept	14.14610712	Intercept	14.14610712	Intercept	14.14610712
X variable 1	1.021683304	X variable 1	1.021683304	X variable 1	1.021683304

Result and Discussion

Heidelberg Cements's opening data shows a mean of 3394.9, a maximum of 3470.915, at least 3350.185, and an end worth of 3422.18. The standard deviation for opening data is 1450.330569, with a maximum of 1483.176617, a minimum

of 1448.342266, and a closing value of 1487.189837. Kurtosis for opening data is 1.100692924, with a maximum of 0.734192523, a lowest of 1.095037784, and a closing data of 0.678227491.

Table 4: Table Shown DS of Heidelberg Cement Company from2016-17 to 2020-2021.

	Opening	Highest	Lowest	Closing price
Mean	84.395	86.73	83.52	85.68
Standard Error	30.12289592	30.80309526	29.90642462	30.54186762
Median	61.275	66	60.95	64.8
Mode	0	0	0	0
Standard Deviation	95.25696081	97.40794001	94.57241846	96.58186568
Sample Variance	9073.888583	9488.306778	8943.942333	9328.056778
Kurtosis	-1.37558916	-1.41428908	-1.304703877	-1.344036928
Skewness	0.480494934	0.455744287	0.503769302	0.480623791
Range	248.45	254	248.1	253.3
Minimum	0	0	0	0
Maximum	248.45	254	248.1	253.3
Sum	843.95	867.3	835.2	856.8
Count	10	10	10	10

Result and Discussion

According to the data presented in the table, Ultra Tech Cements has an opening mean value of 3394.9, a maximum value of 3470.915, a minimum value of 3350.185, and a closing value of 3422.18. The opening standard deviation is 1450.330569, with a maximum of 1483.176617, a minimum of 1448.342266, and a closing value of 1487.189837. The opening kurtosis value is 1.100692924, with a maximum of 0.734192523, a lowest value of 1.095037784, and a closing value of 0.678227491.

Table 5: Table Shown Arch Model of Heidelberg Cement Company from2016-17 to 2020-2021.

Dependent variable: HBC				
Method: ML ARCH-Normal distribution (BFGS/Marquardt steps)				
Date: 07/08/22 Time: 08:18				
Sample (adjusted): 3 91				
Included observations: 89 after adjustments				
Convergence achieved after 20 iterations				
Coefficient covariance computed using outer product of gradients				
Pre-sample variance: backcast (parameter = 0.7)				
GARCH = C(3) + C(4)*RESID(-1r2				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-2.448384	18.09950	-0.135274	0.8924
WPC (-1)	1.002686	0.022199	45.16814	0.0000
Variance Equation				
C	198.7151	38.04458	5.223218	0.0000
RESID (-1) ^2	0.326093	0.133677	2.439408	0.0147
R-squared	0.958695	Mean dependent var	819.3522	
Adjusted R-squared	0.958221	S.D. dependent var	83.22815	
S.E. of regression	17.01181	Akaike info criterion	8.509336	
Sum squared resid	25177.96	Schwarz criterion	8.621185	
Log likelihood	-374.6655	Hannan-Quinn criter.	8.554419	
Durbin-Watson stat	1.970738			

Result and Discussion

Above Table shows Indicates Arch Model of Heidelberg Cement Company for the period of 5 Months and This time I identified Stock Volatility on Russian and Ukraine war. It is observed the Coefficient Values are 1.002686 and -2.448384. Arch Model applied in the Lupin Pharma is Durbin-Watson is for Linearity is 1.970738 and also applied Akaike info

criterion for stationarity is 8.509336. When looking at the volatility of equities throughout this period, the R-squared value is 0.958695. Among a limited range of models, the Hannan-Quinn information criterion (HQC)-a measure of a statistical model's quality of fit-often serves as a criteria with a value of 8.554419. With an observed value of 8.621185, the Schwarz Criterion provides an index to aid in quantifying and selecting the least complicated probability model among a set of alternatives. At last, the model was fit. There is a margin of error of 17.01181 in the regression, which is otherwise called the standard blunder of the gauge. It shows how far the noticed qualities fall on normal from the regression.

11. Conclusion of the Study

In conclusion, the study would benefit the investors by directing their future investments in the right direction. The impact of profit declarations on share costs is a major focus of investors as they strive to make logical investing decisions. Whether deciding whether to invest, the report would serve as a useful resource for potential backers. Company executives could also find this information helpful when deciding on a dividend payout. Several new insights on the impact of profit declarations on stock costs among the concrete business' chosen businesses over the research period have emerged from this study. The paired t-test findings reveal that the dividend has no effect on the share prices. Specifically, in all three pairings, there is no significant change in the share prices after the announcement of the dividend. No pair of Cement Industry high-low share price indicators showed a statistically significant difference in mean value during the research period.

References

1. Sudarshan Roy. In the article "Dividend Pay-Out and Share Price Movement: An Empirical Study in India; Time's Journey, 2021, 10.
2. Bahtiar Usman, Henny Setyo Lestari, Syofriza Sofyan. In the article "The Effect of Dividend Policy on Share Price Manufacturing Companies in Indonesia; Advances in Economics, Business and Management Research, 2020, 169.
3. Duy T. Nguyen, Mai H. Bui, and Dung H. Do. In the article "The Relationship of Dividend Policy and Share Price Volatility: A Case in Vietnam; Annals of Economics and Finance, 2020, 2009

4. Rumana Haque, A. T. M. Jahiruddin, Farhana Mishu. In the article "Dividend Policy and Share Price Volatility: A Study on Dhaka Stock Exchange; Australian Academy of Accounting and Finance Review, 2019, 4(3).
5. Narinder Pal Sing, Aakash Tandon (2019) in the article "The Effect of Dividend Policy on Stock Price: Evidence from the Indian Market; *Asia-Pacific Journal of Management Research and Innovation*, 1-9
6. Musaed S. Alali, Sundus K. Al-Yatama, Nour M. AlShamali, Khuloud M. Al Awadhi. In their article "The Impact of Dividend Policy on Kuwaiti Insurance Companies Share Prices; *World Journal of Finance and Investment Research*. 2019, 4(1).
7. Muhannad Akram Ahmad, Ashraf Mohammad Salem Alrjoub, Hussein Mohammed Alrabba. In the article "The Effect of Dividend Policy on Stock Price Volatility: Empirical Evidence from Amman Stock Exchange; *Academy of Accounting and Financial Studies Journal*, 2018, 22(2).
8. Ahmed Butt Iftikhar, Nabeel-Ud-Din Jalal Raja, Khan Nisar Sehran. In the article "Impact of Dividend Policy on Stock Prices of Firm; *International Scientific Journal Theoretical & Applied Science*, 2017, 47(3).
9. Rozaimah Zainudin, Nurul Shahnaz Mahdzan, Chee Hong Yet. In the article "Dividend policy and stock price volatility of industrial products firms in Malaysia", 2017.
10. Dr. V. Chitra, Dr. T. Hemalatha. In the article "Impact of Dividend Announcements on Share Price Behavior Among the Selected Companies in Cement Industry in India; *Journal of Management and Science*, 2017, 7(3).
11. Athambawa Jahfer, Abdul Hameed Mulafara. In the article "Dividend policy and share price volatility: Evidence from Colombo Stock market; *Int. J Managerial and Financial Accounting*, 2016, 8(2).
12. Tuigong Wilson Kibet, Jagongo A. O, Ndede F.W. S. In the article Effects of Dividend Policy on Share Price of Firms Listed at the Nairobi Securities Exchange, Kenya, *Research Journal of Finance and Accounting*. 2016, 7(8)
13. Syed Akif Shah, Umara Noreen. In the article "Stock Price Volatility and Role of Dividend Policy: Empirical Evidence from Pakistan, *Global Journal of Management and Business Research*. 2016, XII(V).
14. Byson B. Majanga. In the article "The Dividend Effect on Stock Price-An Empirical Analysis of Malawi Listed Companies; *Accounting and Finance Research*, 2015, 4(3).
15. Anas Al Qudah, Aziz Yusuf. In the article "Stock Price Volatility and Dividend Policy in Jordanian Firms; *Research Journal of Finance and Accounting*, 2015, 6(22).
16. Fawaz Khalid Al-Shawawreh. In his article "The Impact of Dividend Policy on Share Price Volatility: Empirical Evidence from Jordanian Stock Market; *European Journal of Business and Management*, 2014, 6(38).
17. Yasir Habib, Zernigah Irshad Kiani & Muhammad Arif Khan. In the article "Dividend Policy and Share Price Volatility: Evidence from Pakistan; *International Journal of Economics and Financial Issues*. 2016; 6(2):461-472.
18. Khaled Hussainey, Chijoke Oscar Mgbame, Aruoriwo M. Chijoke-Mgbame. In the article "Dividend policy and share price volatility: UK evidence, *The Journal of Risk Finance*, 2011, 12(1).
19. Dr. JJ Adefila, Dr. JA Oladipo, JO Adeoti. In the article "The Effect of Dividend Policy on the Market Price of Shares in Nigeria: Case Study of Fifteen Quoted Companies", 2004.
20. Radhe Shyam Pradhan. In the article "Effects of Dividends on Common Stock Prices: The Nepalese Evidence, 2003.