

17

Structural Equation Model of Dividend Effect on Market Price of Shares: A study on the Cement Sector of India

Frenki R. Chauhan^{1*} & Dr. Butala C. Ajmera²

¹Research Scholar, Department of Business Administration, Maharaja Krishnakumarsinhji Bhavnagar University.

²Professor, Department of Commerce, Maharaja Krishnakumarsinhji Bhavnagar University.

*Corresponding Author: frenkirc@gmail.com

DOI:

Abstract

Researcher has made an attempt to use a structural equation model of dividend policy effect on market price of share. The time period was five years from 2017 to 2021. The secondary data have been used for the study. Sources of Data are annual reports and prowess database. Researcher has defined dependent variable stock price and EPS, DPS, ROE, RR, PAT, DY and PE ratio have been taken as independent variables. SPSS Amos. 23 version was used for the structural equation model. The results of SEM explained that EPS and PAT have significant effect on stock price. Model fit. Squared multiple correlation is 97.10% which means that all independent variables have caused a combined effect of 97.10% on market price of share.

Keywords: Dividend, Stock Price, Structural Equation Model (SEM).

Introduction

In the field of corporate finance, dividend policy is one of the most researched topics. Regrettably, from the previous time to this time, the buzzing issue among those researchers, academicians, and investors is whether or not the dividend policy influences the price of stock. Every company will have a different dividend policy. I.e. regular, stable, irregular and no dividend policy. Dividend policy is a key variable in predicting a company's financial performance. The amount of dividend paid by a company, whether large or small, has a direct and indirect impact on the stock price. Dividend policy is an attractive aspect for investors. It is also important for researchers and investors because it is a source of income and a type of measurement used to assess a company's financial performance for investment. In India, the company must also pay a tax on dividend distributions. From the company's point of view, dividend distribution is a cost. If a company saves its profits for the future, it saves one type of cost. When a company pays a dividend to its shareholders, it reduces the fund available for future investments. When a company does not pay a dividend to its shareholders, it can bring the entire amount. Investors are interested in dividends as a source of income and also the creation of wealth in the long run. The

dividend distribution has an opportunity cost for the company. The dividend policy influences both the stock price and the wealth of investors. The following paragraph describes the theories of the dividend policy.

Theoretical Framework

Dividend policy means how much of a company's dividend is retained and how much is distributed to shareholders. All of these dividend-related activities are termed to as dividend policy. The dividend policy is generally based on three theories. First one has Modigliani and Miller theory second was the Walter's model and third was the Gordon's model of dividend policy. According to Modigliani and Miller theory (1961), a perfect market condition, no tax, and no transaction cost are assumed. They assume the value of the firm is determined by the earning power of the firm's assets and the investments policy. They assume dividend policy will not support the creation of a firm's value. As a result, the dividend policy has no effect on the stock price or the firm's value. It supports the approach of dividend irrelevance theory.

Walter's model (1963) assumes that internal financing is important, that the firm has an infinite life, and that the internal rate of return and cost of capital are constant. They assume that a firm's dividend policy is based on the relationship between the firm's internal rate of return (r) and its cost of capital or required rate of return (K_e). Simple words, the fund is retained by the firm if the return on investment is greater than the cost of capital, and it is distributed to shareholders if the return on investment is less than the cost of capital. As a result, Walter's model supports the approach of dividend relevance theory.

Gordon's model assumes that retained earnings can be used to make an investment. There are no other financial resources available for future investment. The rate of return (r) and cost of capital (K) are both constant. A company's life is indefinite. As a result, Gordon's model supports the dividend relevance theory approach. It also supports Kirshman's 'bird-in-hand' argument, which insists investors' myopic vision. It is most often used in mathematical models used to calculate the market value of a company based on its dividend policy.

Therefore, the researchers want to look into the effects of dividend policy on stock prices. They examine the impact of the dividend policy on the stock price using a total of six variables. i.e. earnings per share (EPS), dividend yield (DY), dividend per share (DPS), return on equity (ROE), profits after tax (PAT) and retention ratio (RR) in determining the market price of shares (MPSs).

Review of Literature

Many academics and researchers use various statistical tools to examine the impact of dividend policy on stock prices. The following paragraphs provide a brief overview of their studies.

Pani, Upananda (2007) seeks to identify the links between dividend policy and stock price behavior in the Indian corporate sector. He used fixed-effect model, random effects model and pooled OLS model to analyse the data of 500 companies between the periods of 1996-2006 year. The fixed effect model reflects dividend retention ratio, firm size and debt – equity ratio have played a significant role in variations of the stock price. As per the research, the clientele effect is important in some industries. **Ali, Mohammad and Chowdhury, Tanbir (2010)** examine the reactions of the stock price on the announcement of dividend. They

obtained a Statistical pooled t-test and event study method for an event window of 44 (30 days before and 14 days after) days of the announcement of the dividend for the period of January 2008 and September 2008. According to the dividend announcement events study, it suggests out of 25 sample banks 11 banks' stock price decline, 6 banks' stock price rise, and in 8 banks stock price is not available any changes. The Statistical pooled t-test indicates no statistically significant changes in the stock price due to the announcement of the dividend. **Hashemijoo, Mohammad et. al., (2012)** prefers to investigate the relationship between dividend policy and stock price volatility in the Malaysian stock market. Researchers applied a multiple regression model on 142 consumer product manufacturing companies' financial data for the period of year 2005 to 2010. The regression model specifies that there is a significant negative relationship between share price volatility with three measurements of dividend policy which are dividend yield, dividend payout and size. **Masum, Abdullah (2014)** to investigate the impacts of dividend policy on the stock price. The authors operated a panel data approach for the time span of 2007 to 2011 of 30 banks that are listed in the Dhaka stock exchange. The statistical results show that dividend policy has a positive relationship with earnings per share, return on equity, and dividend retention ratio, as well as a significant role in stock price fluctuations, whereas it has a negative and insignificant relationship with dividend yield and profit after tax. **Lashgari, Zahra and Ahmadi, Mousa (2014)** to understand the impacts of dividend policy on stock price volatility in the Tehran stock exchange. Research reviewers employ the Multivariable regression model, Unit root test, Chow test and Hausman test, Stationary tests on the secondary data of 51 companies from the period of 2007-2012. As per the findings of the statistical analysis, dividend payout ratio has a significant negative impact on stock price volatility, whereas asset growth has a significant positive impact. Other variables such as leverage, earnings volatility, and company size have no discernible impact on stock price volatility. **Hooi, S. et.al.,(2015)** to examine the relationship between dividend policy and stock price volatility in the Malaysian market. Academicians conduct descriptive statistics, correlation analysis, and regression analysis on the financial data of 319 companies which are listed on the Kuala Lumpur stock exchange. The inquiry's sample period is ten years, beginning in 2003 and ending in 2013. The statistical analysis conveys dividend payout ratio, dividend yield negatively related with stock price volatility but was statistically significant. The firm size and share price negatively related with the stock price volatility. The earning volatility and long term debt have positive and statistically significant relationships with the stock price volatility whereas growth in the assets has no significant relationship with stock price volatility. **Ali, A. et.al., (2015)** To investigate the effect of dividend policy on stock prices. For the statistical analysis, they used 45 non-financial companies listed on the KSE-100 index from 2001 to 2012. Researchers adopted pooled regression, fixed-effect model, and random effect model. The regression results found the relationship between the control variables and stock price. However, the overall statistical model suggests that if a company pays dividends on a regular basis, the stock price will continue to rise, whereas if the company keeps its profits, the stock price will fall. **Naik, P. et. al., (2016)** to evaluate the impact of dividend announcements on the stock prices of the Nifty-50 companies. Investigators borrowed event-study methodology and also applied standard deviation, variance, and t-test on the data of Nifty-50 Companies from the time span of January 2011 to December 2015. The event study recommends that in the short term the dividend announcement significantly affects the price of a stock and also the

volume of the stock trading. But in the long run, the dividend announcement only affects the stock price & the price of the stock will lead to the upside and provide abnormal gains to the investors. **Gunarathne, U. et. al.**, (2016) has a major concern of this study is to identify the impacts of dividend policy on the stock price volatility and market value of 12 firms with evidence of Sri Lankan manufacturing companies. They used the Panel data regression model to analyse secondary data from 2006 to 2014. This empirical study revealed that dividend yields have a negative impact on the share price volatility and market value of the firm. The dividend payout has a positive impact on the share price volatility. In short, the findings reassure that the dividend policy has a significant impact on share price volatility but not on the firm's market value fluctuations. **Araoye, Felix (2019)** to evaluate the impacts of dividend policy and dividend payment on the stock price of listed companies in the Nigerian stock exchange. He collected secondary data for 12 companies from five industries from 2005 to 2014. For data analysis, the researchers used OLS pooled regression, Fixed-effects (within) regression, and Random-effects. The empirical study indicates from the various determinants that only one dividend per share is the main effective determinant for the stock price volatility. The dividend payout ratio and the earnings after tax negatively affect the share price volatility whereas the dividend per share has positive impacts and also an inclusive relationship with the stock price volatility. **Islam, Mohammad and Kabir, Shahriar**(2019) know the impacts of dividends on the market price of the share listed in the Dhaka stock exchange. Analysts chose 22 banks to study over a 20-year period beginning in 1994 and ending in 2013. They used the Structural equation model for the data analysis. The model outcome shows that the dividend per share has an impact on the market price of the share. This study also supports the dividend relevance theory in terms of shareholder wealth. **Singh, Narinder and Tandon, Aakarsh** (2019) examine the impacts of the dividend policy on the stock price of Nifty50 companies. For the empirical study, they referred to Pooled regression, fixed effect model, and random effect model. Data of the top 50 companies on national stock exchanges was compiled from 2008 to 2017. The random effect regression model endorses the relevant approach of the dividend policy. Findings conclude that dividend policy has a significant impact on the market price of the share. **Thi Kieu Hoa Phan & Nam Hoai Tran** (2019) examine the impacts of the dividend policy on the stock price volatility in the Vietnamese market. For the sample period of 2008-15, the authors used a Comprehensive panel dataset. The statistical experiments reassure dividend yield mitigates stock price volatility in the emerging market of Vietnam. There is no moderation effect on the relation between dividend yield and stock price volatility. **Ohiaeri, N.et.al**, (2019) to study the impact of dividend policy on the stock price of quoted companies listed in the Nigerian stock exchange. For the statistical tests, data from ten companies were gathered from 2009 to 2017. Research analysts use the multiple panel least square model and Housman's test. The findings suggest that there exists a joint significant relationship between dividend yields, earning per share, dividend per share, profit after tax, retention rate, and share prices whereas a positive relationship between dividend payment and share prices of quoted firms. The research also supports the dividend relevance theory of Gordon (1963). **Ajmera, Butalal and Shah, Nirav** (2019) prefer to examine the influences of dividend policy on the stock price of pharmaceutical companies of India. Academicians utilized descriptive statistics, t-test, one-way ANOVA, and two-way ANOVA for the statistical calculation. They choose data from the pharmaceutical industry for the years 2009 to 2019.

The statistical analysis reveals that dividend policy is positively related to EPS, RR, DPR, ROE, Growth of the firm, Size of the firm. **Shah, Z. et. al., (2019)** to find out the impacts of dividend policy on the volatility of the stock price. The investigators used the Pooled OLS model and the fixed effect model to analyse the data of 137 firms from 2007 to 2017. The statistical model's outcomes confirmed that dividend policy significantly influences the prices of stock. **Ahmed, Waseem and Idrees, Muhammad (2020)** examine the influences of the dividend policy on the stock price of non-financial companies listed on the KSE-100 index. From 2010 to 2016, 100 samples were drawn from 12 non-financial companies listed on the KSE-100 index. For the empirical examination, researchers conduct various tests. I.e. pooled regression, fixed effect model, Random effect model. This analytical study shows that dividend policy significantly influences the variation of the stock price and it also supports the dividend relevance theory of Gordon. **Shrestha, Purna (2020)** likes to know the impacts of dividend policy on the market price of shares. For the period 2001-19, she selected 33 dividend-paying companies. The researcher applied Breusch and Pagan Lagrangian multiplier test, Pooled regression model, the Hausman test, Random Effect model on the financial information of the companies. The fixed-effect model indicates the significant impact of dividend policy on the market price of shares. As per the research, cash dividends have a significant negative impact on the market price of the share, whereas stock dividends have a significant positive impact. **Ogege, Samson (2020)** to identify the influences of dividend payments on the market price of shares. He chooses data of 25 manufacturing companies from 2014 to 2018 for the linear regression model. The panel regression model outcomes suggest DPS and EPS positively influence the share price whereas DY adversely influences the share price. The credit risk adversely influences the share price of small manufacturing companies and positively influences the share price of big manufacturing companies. **Lavanya K V (2021)** to examine the dividend policy and its effect on the share price of listed companies on the BSE-100. For the period 2008-2020, the researcher chooses six companies from the Bombay Stock Exchange Sensex 100 to perform multiple linear regression. The empirical study reveals that dividend policy plays an insignificant role in the variation of the stock price. The return on the stock is an independent variable not affected by the magnitudes of the dividend declaration.

- **Research Gap:** From the review of literature, researchers found two schools of thought for the dividend policy. One school of thought suggests the dividend policy plays a significant role in the value of the firm whereas the second school of thought suggests the dividend policy plays an insignificant role in the value of the firm. Many researchers used a pooled OLS model, random effect model, and fixed effect model to identify the impact of dividend policy on the stock price. Therefore, in this paper, researchers applied a structural equation model to accurately examine the impact of dividend policy on the stock price. This paper has the potential to fulfill the gap in the existing research.

Research Objectives

The main objective is to examine the effect of dividend policy on stock price of selected cement companies in India

Research Design

Researchers have taken Bombay stock exchanges' top 30 companies data for an empirical study. For the research work, the research sample's study period is 7 years from 2015 to 2021. This research is based on the secondary data and its nature is analytical. The source of data is published annual reports of BSE-30 companies on their official website of Bombay stock exchange. The stratified random sampling method is followed for the collection of data.

Hypothesis:

H0: There is no relation between dividend and Market price of share.

Variables used in Study

S. No.	Variables	
1	Market price per share (MPS)	Dependent
2	Dividend Yield (DY)	Independent
3	Retention ratio (RR)	Independent
4	Earnings per share (EPS)	Independent
5	Dividend per share (DPS)	Independent
6	Return on equity (ROE)	Independent
7	Profit after tax (PAT)	Independent

Variables taken for the effect of dividend policy on stock price

S. No.	Variables	Symbol	Formula	Measurement
1	Dividend Yield	DY	Dividend Price Share/ Price Per Share	%age
2	Retention ratio	RR	1 – Dividend Payout Ratio	%age
3	Earnings per share	EPS	Net profit available for equity shareholders/ No. of equity shares	Rs.
4	Dividend per share	DPS	Dividends/ Total number of shares	Rs.
5	Return on equity	ROE	Net income /Shareholder's equity*100	%age
6	Profit after tax	PAT	Operating Income * (1 – tax rate)	Rs.

Model and Method

This theoretical statement could be framed as :

$$MPSt = \alpha + \beta_1 EPSt + \beta_2 DPSt + \beta_3 ROEt + \beta_4 RRt + \beta_5 PATt + \beta_6 DYt + \beta_7 PET + u_{it}$$

Structural Equation Modeling technique is applied to examine the optimum model and to identify the effect of dividend on Market price of share.

Analytical Result

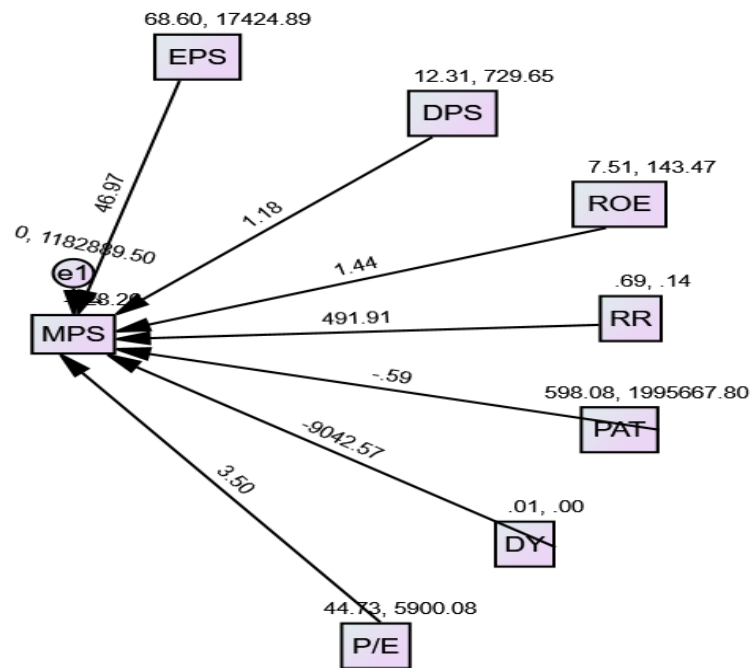


Figure 1

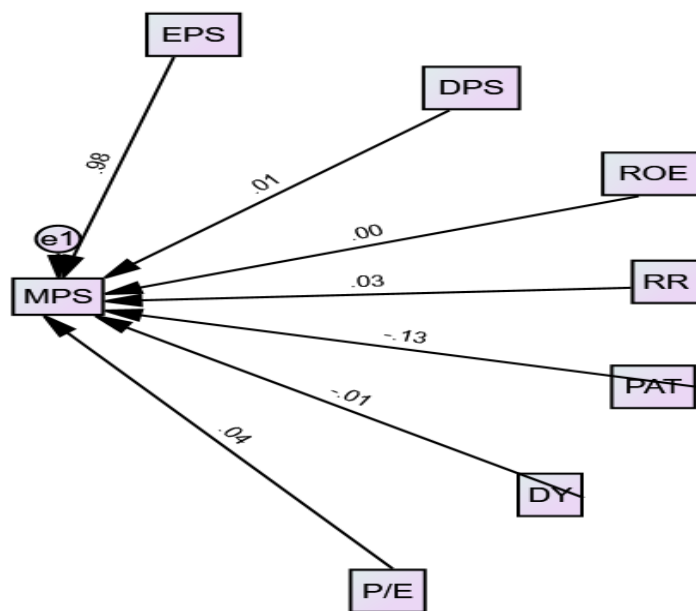


Figure 2

Maximum Likelihood Estimates**Table 1: Regression Weights: (Group number 1 - Default model)**

			Estimate	S.E.	C.R.	P
MPS	<---	EPS	46.974	1.176	39.932	***
MPS	<---	DPS	1.185	5.749	.206	.837
MPS	<---	ROE	1.443	12.964	.111	.911
MPS	<---	RR	491.907	414.482	1.187	.235
MPS	<---	PAT	-.587	.110	-5.338	***
MPS	<---	DY	-9042.573	16796.921	-.538	.590
MPS	<---	PE	3.502	2.022	1.732	.083

Table No-1 shows a regression model using maximum likelihood estimates. The EPS has a positive and significant effect on stock price. DPS, ROE, RR, and PE ratio have positive and insignificant effect on market price of the share. PAT has a negative and significant effect on the market price of the share. So both variable EPS and PAT are significant variables affecting the market price of stock.

Model Fit: model fit is based on comparison between implied covariance and observed sample covariance. The Table No-2 indicates the calculated value chi-square (135.377) and P-value if 0.00. P- Value is less than 0.05 which indicates that there is significant difference between implied covariance and observed covariance. So the null hypothesis is rejected and an alternative hypothesis is selected and concluded that the model is fit. So modification is required to get optimal results.

Table 2

Result (Default model)	
Minimum was achieved	
Chi-square	135.377
Degrees of freedom	21
Probability level	0.000

Modification to get optimum output**Table 3: Modified Model**

Number of distinct sample moments:	44
Number of distinct parameters to be estimated:	26
Degrees of freedom (44 - 26):	18
Result of Default model	
Minimum was achieved	
Chi-square = 37.893	37.893
Degrees of freedom = 18	18
Probability level = .004	0.004

Researcher has modified the model to get optimum results. After reducing modification indices, chi-square value is 37.89 and P-value is 0.004 which is less than 0.05 which indicates that null hypothesis is rejected and alternative hypothesis is selected. Hence the model is not still fit. But researchers have tried to minimize the chi-square value.

T able 4: Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
MPS	<---	EPS	46.721	2.204	21.195	***	par_1
MPS	<---	DPS	2.364	10.772	.219	.826	par_2
MPS	<---	ROE	4.443	18.329	.242	.808	par_3
MPS	<---	RR	435.066	412.388	1.055	.291	par_4
MPS	<---	PAT	-.598	.147	-4.076	***	par_5
MPS	<---	DY	-15078.872	18315.882	-.823	.410	par_6
MPS	<---	PE	3.418	2.015	1.696	.090	par_7

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
MPS	<---	EPS	.967
MPS	<---	DPS	.010
MPS	<---	ROE	.009
MPS	<---	RR	.026
MPS	<---	PAT	-.132
MPS	<---	DY	-.023
MPS	<---	PE	.041

Means: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
EPS	68.598	18.858	3.638	***	par_12
DPS	12.310	3.859	3.190	.001	par_13
ROE	7.513	1.746	4.302	***	par_14
RR	.691	.054	12.894	***	par_15
PAT	598.080	201.812	2.964	.003	par_16
DY	.007	.001	5.081	***	par_17
PE	44.734	10.973	4.077	***	par_18

Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
MPS	-459.897	370.165	-1.242	.214	par_11

Covariance: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
EPS	<-->	DPS	3019.652	667.501	4.524	***	par_8
ROE	<-->	PAT	10624.506	2740.526	3.877	***	par_9
ROE	<-->	DY	.045	.015	3.040	.002	par_10

Correlations: (Group number 1 - Default model)

			Estimate
EPS	<-->	DPS	.847
ROE	<-->	PAT	.615
ROE	<-->	DY	.380

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
EPS	17424.891	3520.360	4.950	***	par_19
DPS	729.648	147.411	4.950	***	par_20
ROE	149.430	28.491	5.245	***	par_21
RR	.141	.028	4.950	***	par_22
PAT	1995667.794	403185.780	4.950	***	par_23
DY	.000	.000	4.950	***	par_24
PE	5900.083	1191.997	4.950	***	par_25
e1	1173392.744	237061.133	4.950	***	par_26

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
MPS	.971

Table No-4 shows regression after modification of model. The regression indicates that EPS (46.721) and PAT (-0.587) are statistically significant to MPS.

Squared multiple correlations: This is an important tool for measuring the correlation of squared multiple independent variables. The total effect of independent variables on dependent variables is 97.10%. The independent variables like EPS, DPS, ROE, RR, PAT, DY and PE ratio are explanatory variables and have caused 97.10% effect on dependent variables like Market price share.

Table 5: Model Fit Summary**CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	26	37.893	18	.004	2.105
Saturated model	44	.000	0		
Independence model	16	302.008	28	.000	10.786

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.875	.805	.930	.887	.927
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.643	.562	.596
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

NCP

Model	NCP	LO 90	HI 90
Default model	19.893	5.953	41.575
Saturated model	.000	.000	.000
Independence model	274.008	221.859	333.616

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	.773	.406	.121	.848
Saturated model	.000	.000	.000	.000
Independence model	6.163	5.592	4.528	6.808

Table No-5 shows a different model of fit index. The first model is CMIN and its full form is a commonly used fit model which is based on chi-square value. Lesser the chi square value more is the model fit. The chi-square is 37.89 which is higher than 0.00 which means still there is some discrepancy between actual data and observed data. But researcher has reduced chi-square value through modification model. Those variables who have a high modification index got modified.

Baseline Comparisons: NFI (Normal Fit index) indicates how far between the independence (Terribly fitting) model and the (perfectly fitting) saturated model the default model is. In this case its 87.5% which means that it is not a 100% perfect fit.

- **Parsimony-Adjusted Measures:** The PRATIO (Parsimony Ratio) is an overall measure of how parsimonious the model is. In this case the ratio is 64.30%.
- **NCP:** The non centrality parameter. The columns labeled "LO 90" and HI 90" gives the 90% confidence interval for this statistics. This statistics can also be interpreted as a chi-square, with the same degree of freedom as in CMIN. Here; this value is more than 0 which does not indicate the support of model fitness.

Optimum Model
$MPSt = \alpha + \beta_1(EPSt) + \beta_2(PAT) + e_{it}$

Summary of Findings

The correlation between EPS and DPS is 0.847 and between ROE and PAT is 0.615. Correlation between ROCE and DY is 0.380. The standardized regression weights of EPS on MPS is 0.967, DPS on MSP is 0.010, ROE on MPS is 0.009, RR on 0.026, PAT on MPS is (-0.132), DY on MPS is 0.041. The squared multiple correlation of MPS with All EPS, DPS, ROE, RR, PAT, DY and PE is 0.97. The C.R. of EPS, DPS, ROE, RR, PAT, DY and PE are 21.20, 0.21, 0.24, 1.05, -4.08, -0.82 and 1.69. The C.R. of EPS and PAT are statistically significant. So it is certain that the EPS and PAT have an impact on market price of share. Structural equation modeling indicates that EPS has a positive effect on stock price which does not support the relevance theory of dividend policy.

Recommendations

The EPS is the significant factor for determining the market price per share which does not support the relevance theory and favors the irrelevance theory. Companies should increase earnings per share to increase the market price of the share. However investors puts premium if they are paid a dividend (Myron Gordon) and discount the when dividend is not paid. So the best way to sustain the investors is to pay a dividend regularly.

Conclusion

from the above analysis it is concluded that out of total independent variables, two variables named EPS and PAT have significant effect on market price of the share. Whereas other variables named DPS, ROE, RR and DY have insignificant effect on market price of the stock. The Chi-square value of model fit is 135.37 which indicates that model does not indicate goodness of fit. Researcher has also used modification index to calculate chi-square value. The modified model suggests a value of chi-square 37.89 and P-value 0.00 which is less than 0.05 which means that null hypothesis is rejected and alternative hypothesis is accepted and again the modified model indicates there is no goodness of fit between actual result and observed result. Square multiple correlations is 0.97 which indicates that all independent variables combined together affect market price share by 97.10%. Model fit summary indicates that CMIN model indicates 37.89 and Baseline Comparison indicates 87.5% which means that model is not 100% fit. Parsimony-Adjustment measures shows PRATIO ratio 63.40% which also indicates the model is not 100% parsimonious. NCP means non- centrality parameter which is explained by "LO 90 and HI 90" the value is 5.93 and 41.57 which is more than 0.00 which indicates the model is not showing goodness fit.

References

1. Adnan Ali, F. A. (2015). Effect of Dividend Policy on Stock Prices. *Business & Management Studies: An International Journal*, 3(1), 56-87. Retrieved from <http://dx.doi.org/10.15295/bmij.v3i1.101>
2. Sew Eng Hooi, M. A. (2015). Dividend policy and share price volatility". *Investment Management and Financial Innovations*, 12(1), 226-234.
3. Waseem Ahmed, M. A. (2020). The Impact of Dividend Policy on Share Prices – A Case from Pakistan. *Indus Journal of Management Sciences (IJMS)*, 1(1), 01-21.
4. Araoye, F. E. (2019). Effect of Dividend Policy on Stock Price Volatility in Nigeria Stock Exchange. *International Journal of Accounting and Financial Reporting*, 9(2), 219-231. doi:doi:10.5296/ijaf.v9i2.11861
5. Dr.Zahra Lashgari, M. A. (2014). THE IMPACT OF DIVIDEND POLICY ON STOCK PRICE VOLATILITY IN THE TEHRAN STOCK EXCHANGE. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 3(10), 273-283.
6. Masum, A. A. (2014). Dividend Policy and Its Impact on Stock Price – A Study on Commercial Banks Listed in Dhaka Stock Exchange. *Global Disclosure of Economics and Business*, 3(1), 9-17.
7. Mohammad Hashemijoo, A. M. (2012). The Impact of Dividend Policy on Share Price Volatility in the Malaysian Stock Market. *Journal of Business Studies Quarterly*, 4(1), 111-129.
8. Mohammad Shahidul Islam, S. K. (2019). "Structural Equation Modeling of Dividend Effect on Market Price of Shares: A Study on the Banking Sector of Bangladesh. *THE COST AND MANAGEMENT*, 47(1), 11-17.

9. Narinder Pal Singh, A. T. (2019). The Effect of Dividend Policy on Stock Price: Evidence from the Indian Market. *Asia-Pacific Journal of Management Research and Innovation*, 1-2(15), 7-15. doi:10.1177/2319510X19825729
10. Pani, U. (2007). Dividend Policy and Stock Price Behaviour in Indian Corporate Sector: A panel data approach. M.Phil Thesis - University of Hyderabad, 01-29.
11. Tran, T. K. (2019). Dividend policy and stock price volatility in an emerging market: Does ownership structure matter? *Cogent Economics & Finance*, 7: 1637051, 01-29.
12. Mohammad Bayezid Ali, T. A. (2010). "Effect of Dividend on Stock Price in Emerging Stock Market: A Study on the Listed Private Commercial Banks in DSE. *International Journal of Economics and Finance*, 2(4), 52-64.
13. N. V.Ohiaeri, F. I. (2019). The Impact Of Dividend Policy On The Share Price Of Quoted Companies In Nigerian Stock Exchange. *SSRG International Journal of Economics and Management Studies*, 6(8), 145-156.
14. Nirav K. Shah, B. C. (2019). AN IMPACT OF DIVIDEND POLICY ON STOCK PRICE OF SUN PHARMA. *CIKITUSI JOURNAL FOR MULTIDISCIPLINARY RESEARCH*, 6(5), 402-420.
15. Ogege, S. (2020). The Influence of Dividend Payments on Share Price in Manufacturing Firms Quoted on the Nigerian Stock Exchange. *Emerging Markets Journal*, 10(2), 63-69. doi:DOI 10.5195/emaj.2020.196
16. P. Vidhya Priya, M. M. (2016). Dividend Policy and Its Impact on Firm Value: A Review of Theories and Empirical Evidence. *Priya & Mohnasundari, Apeejay- Journal of Management Sciences and Technology*, 3(3), 59-69.
17. Priyanka U Naik, P. P. (2016). "Impact of Dividend Announcements on the Stock Prices and Liquidity: Evidence From India. *Amity Journal of Finance*, 1(2), 51-63.
18. Shrestha, P. M. (2020). Effect of Dividend on Stock Market Price: A Panel Data Approach. *Management Dynamics*, 23(1), 199-208. doi:Doi: <https://doi.org/10.3126/md.v23i1.35579>
19. Ugvd gunarathne, W. P. (2016). "impact of dividend policy on stock price volatility and market value of the firm: evidence from Sri Lankan manufacturing companies. *Corporate Ownership & Control*, 13(3), 219-225.
20. V, L. K. (2021). A Study On Dividend Policy And Its Impact On Stock Prices Of Selected Companies With Reference To Bse Sensex 100. *Palarch's Journal Of Archaeology Of Egypt/Egyptology*, 18(9), 393-372.
21. Ziaullah Shah, S. K. (2019). The Impact of Dividend Policy on Stock Price Volatility in Pakistan. *Global Regional Review (GRR)*, 4(1), 506-515. doi:DOI: 10.31703/grr.2019(IV-I).54
22. Websites:
23. <https://www.moneycontrol.com/stocks/marketinfo/marketcap/bse/cement.html?classic=true>

Review of Literature Extra

24. <https://www.sciencedirect.com/science/article/abs/pii/S0304405X74900063> - Not downloadable
25. [https://doi.org/10.1016/0304-405X\(74\)90006-3](https://doi.org/10.1016/0304-405X(74)90006-3) - Not downloadable
26. <https://www.sciencedirect.com/science/article/pii/S1877042812007227> - Dividend announcement
27. [journals.univ-danubius.ro/index.php/euroeconomica/article/view/4052/4058#:~:text=Findings%20from%20the%20study%20show,initiative%20for%20a%20better%20performan](https://journals.univ-danubius.ro/index.php/euroeconomica/article/view/4052/4058#:~:text=Findings%20from%20the%20study%20show,initiative%20for%20a%20better%20performance.)ce.

