

# The Impact Of The Dividend Policy On The Market Price Of The Shares And Growth Of Joint Stock Companies Covered In Sensex

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## **ABSTRACT:**

*When a corporation earns a profit or surplus, it can either re-invest it in the business (called retained earnings), or it can distribute it to shareholders. A corporation may retain a portion of its earnings and pay the remainder as a dividend. Dividend policy is concerned with financial policies regarding paying cash dividend in the present or paying an increased dividend at a later stage. Whether to issue dividends and what amount, is determined mainly on the basis of the company's inappropriate profit (excess cash) and influenced by the company's long-term earning power. When cash surplus exists and is not needed by the firm, then management is expected to pay out some or all of those surplus earnings in the form of cash dividends or to repurchase the company's stock through a share buyback program. The study is focussed on achievement of following four objectives. To empirically examine the determinants of dividend smoothing by firms and find out its linkage with information content of dividends. To analyze the influence of firms' characteristics like profitability, growth, risk, cash flows, agency cost and on dividend payment pattern. i.e. to identify various determinants of dividend payout. To investigate the association between various ownership groups and dividend payout policies of Indian corporate firms. To find the impact of dividend announcement on shareholders' wealth. . For the result of the study researcher analysed the data by using the Statistical package of SPSS, employing the statistical tool of T Test Analysis, correlation and regression.*

## **KEY TERMS:**

DIVIDENDPAYOUTRATIO;DIVIDENDPOLICY;SHAREHOLDERS'VALUE;LINTNER MODEL;AGENCY COST;DIVIDEND SMOOTHING;INFORMATION ASSYMETRY;EVENT STUDY;PECKING ORDER HYPOTHESIS;ENTRENCHMENT HYPOTHESIS;DIVIDEND SIGNALING;ABNORMAL RETURNS;FACTOR ANALYSIS;PANEL DATA;MULTIPLE REGRESSION ANALYSIS

## **INTRODUCTION**

A dividend is a payment made by a corporation to its shareholders, usually as a distribution of profits. When a corporation earns a profit or surplus, it can either re-invest it in the business (called retained earnings), or it can distribute it to shareholders. A corporation may retain a portion of its earnings and pay the remainder as a dividend. Distribution to shareholders can be in cash (usually a deposit into a bank account) or, if the corporation has a dividend reinvestment plan, the amount can be paid by the issue of further shares or share repurchase. Hence, a company can pay dividend only if it is earning sufficient profits and the dividend declaration is recommended by the Board of Directors and approved by the shareholders in annual general

meeting. The board of directors decide whether to declare dividend and if so, the quantum of dividend to be paid after taking into account, the financial position and requirements of the company. This recommendation of the board needs to be approved by the company's shareholders in the meeting and once this approval is obtained, dividend becomes Payable

### **1.1 Dividend Policy**

Dividend policy is concerned with financial policies regarding paying cash dividend in the present or paying an increased dividend at a later stage. Whether to issue dividends and what amount, is determined mainly on the basis of the company's inappropriate profit (excess cash) and influenced by the company's long-term earning power. When cash surplus exists and is not needed by the firm, then management is expected to pay out some or all of those surplus earnings in the form of cash dividends or to repurchase the company's stock through a share buyback program. According to Weston and Brigham, "Dividend policy determines the division of earnings between payments to shareholders and retained earning". Gitman, "The firm's dividend policy represents a plan of action to be followed whenever the dividend decision must be made". The MM hypothesis (Miller-Modigliani) Theory has advocated that dividends are of no relevance and effect on the valuation of a firm. On the other hand Walter and Gordon have prorogated that investment policy and dividend policy of accompany are interlinked and affects the price of shares of a company. Hence, dividend assumes immense significance in deciding the value of a firm.

### **1.2 Factors Affecting Dividend Policy**

The boards of directors of a company have the sole right to declare dividend and decide the quantum of dividend. In addition to legal restrictions, there are many factors affecting the dividend policy of a company such as Preference of Shareholders, Current Year's Earnings, Past Dividends, Management Control Motive, Liquidity Position, Future Financial Requirements, and Access to Capital Market, Contractual Restrictions, Taxation Policy, Inflation, Stability of Earnings and Legal Restrictions.

### **1.3 Dividend Policy and Share Prices**

Financial management having major three functions, one of them is dividend policy. Financial management has to make an important decision on deciding the part of profits of company to be distributed to shareholders and the part to be retained by it for future expansion endeavors. Dividend policy has to be formulated on the light of impact the decision about dividend is likely to have on shareholders wealth. Dividend payment shall be determined such that it leads to maximization of shareholders wealth. In case dividend payment does not lead to maximization of shareholders wealth, then the company should rescind from paying dividend and retain its earnings. However, financial experts have not expressed a unanimous view on this issue.

## **THEORETICAL FRAMEWORK**

In this study market price is taken as dependent variable. Dividend yield, retention ratio, earning per share, return on equity, and net profit after tax are used as independent variable. It is expected that all these variables have significant effect on stock price.

**Market Price (MP):** Market price is taken as dependent variable which is calculated by taking the average of high and low market prices of the shares while in the previous studied researchers like Rashid & Rahman (2009), Nazir, Nawaz, Anwar, & Ahmed (2010), Asghar, Shah, Hamid, & Suleman (2011), Hussainey, K., Mgbame, C.O., & Chijoke-Mgbame, A.M. (2011) use price volatility as a dependent variable to see the effect of dividend policy on stock market prices.

**Dividend Yield (DY):** Dividend yield of a stock signifies how much a company pays dividend in relation to its stock price. It is calculated as a fraction of annual dividends paid by the company upon its stock price. Dividend yield is considered an important variable that is used by Allen & Rachim (1996), Nishat and Irfan (2003), Rashid & Rahman (2009), Nazir, Nawaz, Anwar, & Ahmed (2010), Asghar, Shah, Hamid, & Suleman (2011), Hussainey, Mgbame, & Chijoke-Mgbame (2011) and it is significantly explaining the effect of dividend policy on stock market prices. All these researchers found positive relation between dividend yield and stock price.

**Retention Ratio (RR):** Retention Ratio is opposite to dividend pay-out ratio and is calculated by subtracting Total Dividend from Total Earnings and then dividing the resulting amount by Earnings. Pani (2008) used dividend to Retention Ratio to see its effect on Stock Prices and found positive relation between them. This ratio is previously ignored by the researchers and they used either dividend payout ratio or dividend yield ratio in their studies for explaining the variation in stock price.

**Profit after Tax (PAT):** Profit after tax is used a control variable. Pani (2008), Adesola & Okwong (2009), Ahmed Javid (2009) and Al-Kuwari (2010) used profit after tax as independent variable in their studies and found positive relation between stock prices and profit after tax. They consider profit after tax as an important variable to explain the variation in stock prices.

**Earnings per Share (EPS):** Earnings per share is the amount of earnings per each outstanding share of a company's stock.

A brief description about different schools of thought on the issue is given under.

**1. Traditional Position:** According to the traditional position expounded by Graham Benjamin and David L. Dodd, stock Market places considerable weight age on dividends than on retained earnings. They have propagated that the stock market is highly responsive to liberal dividend rather than conservative dividend. They have found that value of shares of a company is affected by dividend payments four times as that of retained earnings. This can be evident from their version of equation in which E is replaced by (D + R).

$P = m [D + (D+R)/3]$  The weights arrived at by Graham and Dodd are based on their subjective judgments and not objective and empirical analysis. Notwithstanding the subjectivity of these weights, the major contention of the traditional position is that a liberal dividend payout policy has a favorable impact on stock price.

**2. Walter's Model of Dividend Relevance:** James E. Walter has presented a model in 1963, which explains the relevance of dividend for valuation of shares or maximization of shareholders wealth. According to Walter, investment policy of a company cannot be alienated from its dividend policy and both are interlinked. An appropriate dividend policy favorably affects the company's value. The key argument in support of the relevance proposition of Walter's model is the relationship between return on firm's investment or its internal risk of return ( $r$ ) and its cost of capital or required rate ( $k$ ). The firm would have an optimum dividend policy, which will be determined by the relationship of  $r$  and  $k$ .

**Share Valuation Formula** Walter put forward the following share valuation formula:  $P = D/k + [r(E-D)/k] / k$  Where,  $P$  = Price per share  $D$  = Dividend per share  $E$  = Earnings per share  $(E-D)$  = Retained earnings per share  $r$  = Rate of return on investments  $k$  = Cost of capital The above equation may alternatively be written as:  $P = [D + (E - D) r / k] / k$ .

**3. Gordon's Model of Dividend Relevance:** Gordon's Model is based on the principle that dividend payment is relevant to value of company. According to Myron J. Gordon, dividends are highly relevant and dividend policy significantly affects value of firm. This theory is based on compounded relationship between dividend policy and market value of shares of a company.

**4. Gordon's Model versus Walter's Model:** Gordon's model contends that dividend policy of the firm is relevant and the investors put a positive premium on current incomes/dividends. He argues that dividend policy affects the value of shares even in a situation in which the return on investment of a firm is equal to the required/capitalization rate (i.e.  $r = ke$ ). Walter's model is of the view that the investors are indifferent between dividends and retention.

**5. Modigliani and Miller Hypothesis of Dividend Irrelevance:** Franco Modigliani and Merton H. Miller advocated that dividend policy of a firm is irrelevant, as it does not affect the wealth of the shareholders. Thus, dividends are irrelevant and the value of firm is independent of its dividend policy. The value actually depends on the firm's earnings, which results from its investment policy. Once the investment policy of a firm is formulated, dividend decisions are of no significance in influencing value of firm.

## **THEMATIC REVIEW OF LITERATURE**

Black (1976) in his study concluded with the following question: “What should the corporation do about dividend policy? We don't know”. A number of factors have been identified in previous empirical studies to influence the dividend policy decisions of the firm. Profits have long been regarded as the primary indicator of the firm's capacity to pay dividends. Lintner (1956) conducted a classic study on how U.S. managers make dividend decisions. He developed a compact mathematical model based on survey of 28 well established industrial U.S. firms which is considered to be a finance classic. According to him the current year earnings and previous year dividends influence the dividend payment pattern of a firm. Fama and Babiak (1968) studied the determinants of dividend payments by individual firms during 1946-64. The study concluded that net income seems to provide a better measure of dividend than either cash flows or net income and depreciation included as separate variables in the model. Baker, Farrelly and

Edelman (1986) surveyed 318 New York stock exchange firms and concluded that the major determinants of dividend payments are anticipated level of future earnings and pattern of past dividends. Pradhan (2003) explored the effect of dividend payment and retained earnings on stock prices of Nepalese companies. His study revealed that stock prices of Nepalese companies were strongly influenced by dividend payment while this impact was weak in case of retained earnings. Hence, this study revealed that Nepalese investors attach utmost importance to regular dividend income than capital gains from their share investments. Gunasekarage and Power (2006) also confirmed that dividend announcements influence stock prices though this influence was short lived. The study revealed that those companies following strict dividend policy were able to magnify their earnings. Nazir et al. (2010) found that dividend payout and dividend yield significantly influenced stock prices while earnings and growth of companies have a positive effect on their stock prices. The study also exposed a negative relationship of size and leverage with stock prices. Muhammad Akbar and HumayunHabibBaig (2010) have tested the semi-strong form of market efficiency by investigating the reaction of stock prices to dividend policy. They have analysed dividend in the form of cash, stock and both cash and stock of 79 companies listed in Karachi Stock Exchange during the period of July 2004 to June 2007. Using t-test and Wilcoxon Signed Rank Test, the researchers have found that cash dividend policy resulted in negligible abnormal returns while dividend policy in the form of stock and combination of cash and stock led to a higher and much significant average abnormal and cumulative average abnormal returns

## **RESEARCH OBJECTIVE**

The study is focussed on achievement of following four objectives:

- To empirically examine the determinants of dividend smoothing by firms and find out its linkage with information content of dividends.
- To analyze the influence of firms' characteristics like profitability, growth, risk, cashflows, agency cost and on dividend payment pattern. i.e. to identify various determinants of dividend payout.
- To investigate the association between various ownership groups and dividend payout policies of Indian corporate firms.
- To find the impact of dividend announcement on shareholders' wealth

## **RESEARCH METHODOLOGY AND ANALYTICAL TOOLS**

The proposed research is descriptive in nature, based on secondary data. The samples taken for this study constitute the 30 companies listed in the BSE, which have made dividend policy during the financial year of 2011-12. For the result of the study researcher analysed the data by using the Statistical package of SPSS, employing the statistical tool of T Test Analysis. The researcher has selected some parameters relating to prices of shares to study the impact of dividend policy on share prices. Average share price (opening price + closing price / 2) and the maximum and minimum price of the shares prevalent during the day have been considered for this study. Further, total volume of shares traded, number of trades of the shares and the net turnover of shares before and after dividend policy in respect of the 30 companies listed in BSE have been considered in this study to assess the change in investment decision of investors

relating to buying, holding and selling the shares of the companies making dividend announcements. HDFC, HDFC BANK, HERO MOTOCORP, HINDALCO, HUL, ICICIBANK, INFOSYS, ITC, JINDAL STEEL, LARSON & TURBO, MAHINDRA & MAHINDRA, MARUTI SUZUKI, NTPC,ONGC, BAJAJ AUTO, BHARTI AIRTEL, BHEL,CIPLA, COAL INDIA, Dr. REDDY'S, GAIL,RELIANCE, SBI, STERLITE, SUN PHARM, TATA MOTORS, TATA POWER, TATA STEEL, TCS, WIPRO are the companies that are taken for the study.

## **6.1 HYPOTHESES FOR THE RESEARCH**

H1: There is no significant difference in the average share prices of companies before and after announcing dividend.

H2: There is no significant difference in the maximum share price of companies before and after announcing dividend.

H3: There is no significant difference in the minimum share prices of companies before and after announcing dividend.

H4: There is no significant difference in the number of shares traded before and after announcement of dividend by the companies.

## **LIMITATIONS OF THE STUDY**

**TIME CONSTRAINT:** - The duration of the research will not sufficient to lay down thorough emphasis on the various financial aspects of the companies.

**RESOURCE CONSTRAINT:** Resources available for the analysis will not sufficient as mainly the annual report of the companies was available which will not revealing the detailed aspects of financial matters in the company.

**PERIOD OF ANALYSIS:** The period of five financial years will taken for the analysis and this duration will not sufficient to conclude about all the aspect.

**SECONDARY DATA:** The data used for the analysis will secondary in nature as it was taken from the annual reports of the companies.

**WIDE AREA TO STUDY:** There will be the wide scope of the study but could not be covered completely due to the lack of time and resources.

## **RESULT AND FINDINGS**

### **Data Analysis and Discussion**

Impact of dividend announcement on stock prices of companies has been seen using many variables such as average share prices, maximum and minimum share prices, number of trades of shares of the 30 companies listed in BSE

The descriptive statistics of variables is presented in table 1.

### **Table 1**

### Descriptive Statistics

Variable	Mean	Std. Dev.
PV	0.702635	0.58038
EV	0.083346	0.036395
DP	0.145866	0.187588

The result of the Table 1 indicates that the mean value of price volatility (PV) is 0.70 with a 0.58 standard deviation, which means that it remained highly volatile during this session. Among the independent variables the mean of earning volatility remained 0.08 with 0.036 standard deviation, which indicates very little volatility. The dividend yield has 0.30 mean values and 0.133 standard deviation which indicate less volatility. While mean and standard deviation of dividend payout remained 0.145 and 0.187 respectively. On the other hand the mean and standard deviation of growth in assets is 0.136 and 0.196 respectively. Nishat and Irfan (Unpublished), obtain a standard deviation of 0.15 and similar variation was observed in case of other variables. This may be attributed to the time period change and gap from our study time period of 2005-2009 and the study of Nishat and Irfan for the time period 1981-2000 investigation. Secondly Nishat and Irfan took all stock exchange companies list during 1981-2000 period, while present study relate to five sectors only. The results of Nishat and Irfan (Unpublished) are similar to Allen and Rachin (1996), while reverse may be true in present as per reasons outlined in paragraph narrated above. The correlation results are presented in table 2.

**Table 2**  
**Correlation Matrix**

PV	EV	DP	DY	GA
PV	1	1	1	1
EV	0.21	0.56	1	0.67
DP	0.37	0.34	1	1

DY	0.51	0.45	1	1
GA	-0.57	-0.37	-0.03	-0.29

The earnings volatility and the price volatility have 0.21 correlation which is significant at 0.05 level and ensures that H1 is acceptable regarding to the significant positive correlation. In the

same way DP, DY are also positively correlated to PV and are significant at 0.01 level, hence accepts the H2 and H3 with respect to positive correlation. The correlation in between GA and PV is highly negative but significant at 0.01 levels but rejects the part of H4.

The results pertaining to relationship between share prices and dividend policy variable are presented in table 3.

**Table 3**  
**Model 1**

Variable	Coefficient	Beta	T- Value	Sig
Constant	0.039	0.298	0.132	0.897
DY	1.890	0.983	1.922	0.071
DP	0.561	0.700	0.802	0.43

### **POLICY IMPLICATION**

Results of t-test reveal that dividend announcements affects significant impact on average share prices as there is significant difference in the average prices of shares after announcement of dividend. Further it is found that dividend announcements affects significant impact on the maximum share prices of the companies making such announcements as there is a significant difference in maximum price of shares after dividend announcement. Similarly, a dividend announcement affects significant impact on the minimum prices of shares of companies making dividend announcements. However, it is found that dividend announcements do not exert any impact on the number of trades of shares of the companies making such announcements as there is no significant difference in the number of trades of shares after the companies announcing dividend Hence, it can further be elaborated that the first three null hypotheses have been rejected leading to the acceptance of the irrespective alternative hypotheses while the last null hypotheses have been accepted.

### **RECOMMENDATION / SUGGESTIONS**

Presently issues regarding to the dividends decisions that may affect stock prices and return patters have created the attention of the financial analysts and economists to establish relationship between these parameters. Gordon (1962) developed a model to describe dividend price ratio, the model is as under.

Gordon or dividend price ratio model is used to predict discount rate and growth of dividend. Gordon narrated that high dividend would be less sensitive to discount rate and may depict lower price volatility. Fama and French (1992) inferred that dividend and cash flow variables such as earning, investment and industrial production may serve as indicator of stock returns. Baskin(1989) had different approach and studied the impact of dividend policy on stock price instead of stock returns. The variables considered in Baskin study were earning, size of the firm and level of debt financing, payout ratio and level of growth. Gordon model was quite simple and subject to limitation. Hence later on comprehensive approach was adopted by Campbell and Shiller (1989) and other econometrists to describe the dividend price model. Similar study was conducted in Pakistan by Nishat and Irfan (Unpublished ) in order to determine the impact of

dividend policy on stock price risks in Pakistan. The objectives of the study were to determine role of dividend policy measures ( dividend yield and payout ratio) on share price changes in long run and also to ascertain relationship during pre-reform (1981-1990) and reform (1991-2000) periods. The reforms relating to dividend policy were tax sealing, bonus exemption from tax, pattern shifting from cash to share dividends and making easy transfer of market profit by the Government. The data was collected from Karachi stock exchange is important stock exchange market and is also representative of the region. The variables involved in study were Dividend yield, Price volatility Earning Volatility, Payout ratio , size were independent variables and Price volatility is dependent variables .The results of the study indicates that dividend yield and payout ratio both had impact on share price volatility. The dividend yield in relation to stock price volatility was more responsive during reform period (1991-2000). The Size of firm has also affected stock price volatility. It was negative during perform period (1981-1990) but positive during reform period and overprices the impact was positive and significant. The earning impact is negative during reform period. The results of their findings were similar to that Baskin(1989) but different from Allen and Rochin (1996), Irfan and Nishat (2003) observed a positive correlation between debt and price volatility but its influence is less than that of dividend yield. Allen and Rachine (1996) sorted the relationship between dividend policy and stock price risk. They observed that dividend yield was not related to stock price volatility and earning dynamicity, But there was a negative correlation between size and stock price volatility, as large companies incurs more liabilities. Size of firm is important variable that affect the volatility of stock return. The stock price of small firms may be more unstable compare to large firms, as small firms are less diversified than large firms. Moreover investor of small firms acts more irrationally to new events. Hence size of firm may affect choice of dividend policy. **Far East Journal of Psychology and Business Vol 4 No 1 July 2011 47**

Roll(1983) observed that abnormally large returns of small firms are obtained in last trading day of December. Fama and French (1992) discovered that book to market equity was important as high equity values are associated with high future returns. Miller and Roch (1985) model described that dividends policy information about fund constraints and predict future expected earnings. The Larger the change in dividend and profit, larger will be change in share price. Akderiz et al.(2006) employed dividend discount model to test stock price volatility in Turkey the result of the study testify the dividend discount model is quite valid and markets are efficient and in certain instances stock price may be volatile to be explained by dividend discount model. Although Nishat and Irfan (Unpublished) has pioneered investigations pertaining to dividend policy and stock price volatility in Pakistan, yet this is start and lot is still to be done , hence study will be conducted to develop dividend discount model to study its impact on stock price volatility in Stock exchange in Pakistan.

## **CONCLUSION**

The results of present study considers the previous studies of Baskin (1989) Allen and Rakhim (1996) and Nishat and Irfan (Unpublished) concluded that dependency of price volatility on other variables is site specific but also depends on the structure of market. The stable and efficient markets are easy to predict but the markets where high share price fluctuations exists then it is difficult to design a model which can forecast the prices and returns in a more accurate manner. One thing is very clear from the results of this study that some variables have their impact on the price volatility. In present study price volatility and dividend yield have strong

positive correlation but price volatility is highly negatively correlated with growth in assets. Growth in assets has impact on the price volatility for this time period. This is suggested that for future study the data for the period should take into account more sectors with small and large firm size to develop a comprehensive model that may predict the visual economic situation, price volatility in prevalent market in its true prospective.

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