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DIVIDEND POLICY AND STOCK PRICE VOLATILITY IN INDIAN CAPITAL MARKET

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Abstract. As argued by Modigilani &Miller, the dividends are irrelevant only in perfect markets but in an emerging market like India, the dividends are expected to show its relevance. Indian capital market have surpassed a sea change in the recent past including demonetization, implementation of new tax regimes, political controversies and the like. Despite these facts, the Indian capital markets soars at many a times due to its active trading. Against this backdrop, this research paper seeks to examine the relationship between dividend policies and share price volatility. The motivation behind this research is to first time employ a powerful unbiased volatility estimator, created by Yang and Zhang that is 14 times as efficient as close to close estimate. A sample of 116 textiles companies, listed and actively traded in Bombay Stock Exchange of India (BSE) from 2008 to 2017 selected for the study. In examining the impact of dividend policy on share price volatility in Indian capital market, multiple least squares regressions is employed. Empirical results shows that dividends are affecting stock prices variations in India which fits in with the bird in hand and signaling theories of dividends. Due to the volatile nature of the market, Indian investors' prefer demanding more dividends from firms rather keeping retained earnings on reinvestment. The outcomes of this study supports the fact that dividends policy influence stock price variations in Indian capital market. The results of this study provides an insight to the financial managers in developing their dividend policies to maximizing the shareholders wealth.

Keywords: dividends; share price volatility; dividend payout

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1. Introduction

Does a firm's dividend policy affect the company's stock price volatility? The answer remains controversial for decades among academic and professional communities despite abounding empirical research findings. Professional experts affirm that the stock prices volatile with dividend proclamations and some often argue that seemingly apparent relationship between dividends and stock prices as an illusion. As a pioneer in dividend policy decision, Lintner (1962) proposed the bird in hand theory that highlights the high certainty of dividend incomes over capital gains based on the time value of money. As a counterpart to this theory, Modigliani and Miller

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(M&M) (1961) dividend theory of irrelevance declared that the firm's dividend policy decision does not affect the initial stock price for firms operating in a perfect capital market with fixed investment policies. M&M argue that shareholders can generate an equivalent homemade dividend at any time by selling shares and thus the dividend choice of the firm should not matter.

Financial economists started developing their prepositions based on the above two groundbreaking studies led to different and in many cases more contradictory findings. An approach by Gordon (1963) highlighted that paying larger dividends (and possibly investing less) reduces risk, which in turn may influence the cost of capital and hence the stock price. A similar study by Baskin (1989) suggested that dividend yield is not merely a proxy-dividends per se may influence stock market risk. DeAngelo et al. (2006) criticized Miller and Modigliani (1961) irrelevance theory of dividends payout to firms and investors' value and wealth, as they suggested that the theory resulted in restricting researchers' view about dividends payout. Several attempts by researchers in examining this relationship across European, Asian and Middle East markets found positive relationship between dividend and stock price changes (Gordon (1963; Baskin (1969), Hashemijoo (2012), Tsoukalas (2005), Marvides (2003), Hussainey (2011) detailing that dividend policy had an impact on stock price volatility.

As argued by M&M the dividends are irrelevant only in perfect markets but in a market like India, the dividends are expected to show its relevance. Liberalization, deregulation of financial sector, appointment of Narashimam committee in 1991 to reform capital sector, formation of Securities Exchange Board of India (SEBI) in 1992 as an apex regulator of capital market, opening of capital market to foreign institutional investors, demonetization all have led to a sea change in the Indian capital market in the recent past. Against this backdrop, this research paper seeks to examine the relationship between dividend policies and share price volatility aftermath the sea changes.

2. Review of literature

Dividend policy is a policy by which firms pay out earnings to shareholders versus retaining them for reinvestment in the firm. Therefore, dividend policy plays an important role in the firm's long-run financing strategies. In finance, valuation models equate a stock price with the present value of its expected future dividends. Gordon (1959) develops a model that relates the market value of the firm to dividend policy. According to this model, the dividend policy of the firm is relevant and that investors prefer a high dividend policy because dividends are less risky than the capital gain expected from an investment of retained profits. Investors are assumed to be rational and thus want to avoid risk which refers to the possibility of not getting a return on investment (Kumaraswamy, 2017). The payment of current dividends completely removes any chance of risk However, with retaining the earnings, investors expect to get dividends in future which are uncertain. The retained earnings represent a risky promise to investors.

Over the years, a number of dividend theories have been developed to explain the influence of corporate dividend policies on stock prices.
Dividend Irrelevance Theory: Miller and Modigliani (1961) propose that, in a perfect market, dividend policy is irrelevant to shareholders and that value of the firm is determined by its investment and financing decisions and not by dividend decision. This argument is based mainly on the assumptions of perfect capital markets which can be summarized as follows: (1) there are no tax, (2) no flotation or transaction, (3) information is symmetrical and cost less (i.e., all market participants have free and equal access to the same information); (4) there is no conflict of interests between managers and shareholders, and hence no agency costs; and (5) all market participants are price takers. Given these assumptions, Miller and Modigliani (1961) argue that all dividend policies are effectively the same to all investors. This is because investors can create "homemade" dividends through selling the appropriate portion from their stock holdings. Consequently, shareholders would be indifferent between dividends and capital gains. A number of empirical studies provide support for the dividend irrelevance theory.

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Black and Scholes (1974) studied the effect of dividend policy on stock prices by investigating the relationship between dividend yield and stock returns using stocks listed on the New York Stock Exchange (NYSE). They find that dividend increase does not have a permanent impact on stock prices. They attribute the temporary changes in prices following dividend changes to investors' belief that the change in dividend is an indication of a shift in future earnings. Similar results are found by Miller and Rock (1985) argue that dividends are a tool for signalling information on earnings to the market, and, consequently, the price reaction to dividend changes is actually a reaction to earnings, rather than dividends. Moreover, Miller and Scholes (1982) and Bernstein (1996) provide evidence to support the irrelevance theory of dividends and confirm that dividend policy has no effect on the firm's stock price.

Bird-in-Hand Theory: The bird-in-hand theory developed by Gordon (1959; 1963) as a reaction to the dividend irrelevance theory by M&M. The hypothesis suggests that dividends can increase a firm value and shareholders wealth as, more certainty is attached to dividend payments received today, against earnings retention for investment in projects whose future earnings are not certain. He argues that the firm's current dividend policy creates an illusion about the firms' future dividends perceived by the investor, alter the level of uncertainty of dividends, which in turn impacts the returns on the shares. It was the arguments of this theory considered as the predecessor of the information asymmetry theory. Notwithstanding the wide criticism raised against this theory, there were empirical studies that supported the assumptions of this theory. Gordon and Shapiro (1956), Lintner (1962) and Walter (1963), Baker (1974), Brennan and Thakor (1990) La Porta et.al (2000). Notwithstanding the fact that the two theories are divergent Rubinstein (1976) claim that in perfect capital markets, both Gordon and M&M model provide equal shareholder value and do not rely on dividends.

Tax Theory: There are other theories such as the tax preference theory (Brennan, 1971; Elton et.al, 1970; Litzenberger and Ramaswamy, 1979) which propose that, in the existence of market imperfections such uneven tax treatments, dividend payments can decrease firm's value and cause negative effects on shareholders wealth. Because of the relative tax disadvantage of dividends compared to capital gains investors require a higher before-tax risk-adjusted return on stocks with higher dividend yields (Brennan, 1971). According to this theory, firms should, therefore, pay low or no dividends if they want to maximize their share prices.

*Signalling Theory:*However, one of their main assumptions of Miller and Modigliani's theory is that all investors have the same information about the firm and are able to understand and translate this information in the same way, as well as managers and investors have the same information and, hence the same expectations, about the firm. In real markets, however, asymmetric information between market participants exists and investors and managers have different information and expectations about the firm's future profitability and risk. Moreover, managers are likely to possess better information about the firm's future performance than outside investors and hence they may use dividend policy as a means to convey such information to investors (Bhattacharya 1979; Miller and Rock 1985; Bali 2003). Therefore, dividend policy can affect firm value by decreasing the information gap between managers and investors.

Agency Cost Theory: Moreover, Miller and Modigliani (1961) assume that there is no agency problems between managers and shareholders and managers are the best agents of shareholders. Easterbrook (1984) argues that the payment of dividends and the subsequent raising of external funds result in the monitoring of the firm by capital market participants. This monitoring reduces agency costs and thus increases firm value. Several studies have highlighted that paying dividends can serve as a tool to decrease agency costs that arise from the separation of ownership and control (Rozeff 1982; Chen et al. 2007; Wardhana and Tandelin 2018).

Dividend Policy and Share Price Volatility: The share price volatility has been used as a proxy of risk and it measures the rate of change in the price of a share over a given period of time. Many studies examine the relationship between dividend policy and share price volatility. Baskin (1989) use data from 1967 to 1986 of

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2,344 US firms and find a negative relationship between stock price volatility and dividend yields. Such results indicate that firms with higher dividend yields are associated with lower risk. Similar results are noted by Allen and Rachim (1996). A significant negative relationship observed between payout ratio and stock price volatility. Earnings volatility and leverage found to be the major determinants of price volatility.

Consistent with this view, Rashid and Rahman (2008) investigate the link between share price volatility and dividend found share price reaction to the earnings announcement in Bangladesh during the study period produced insignificant results. Institutional settings in Bangladesh, the dominance of few shareholder groups and efficiency of the capital market are quoted to be the possible reasons for the insignificant results.

Nazir et al (2010) examined the impact of dividend policy on the volatility of stock prices in Pakistan. They use fixed effect and random effect models and find that the dividend policy has a significant impact on the stock price volatility. They conclude that by employing an effective corporate dividend policy, price volatility may be reduced. Consistent results were found by Hashemijoo et al (2012) who employed a sample of 84 consumer product companies listed in the main market of Bursa Malaysia to examine the relationship between dividend policy and share price volatility in Malaysia. They found a significant negative relationship between share price volatility with dividend yield and dividend payout. Similar results were found by Sadiq et al. (2013) who focus on non-financial firms listed on Karachi Stock Exchange.

Corporate dividend policy found to be a key driver of stock price changes in London as identified by Hussainey et.al (2011) in their research paper. The study utilized publicly quoted companies from the London Stock Exchange from 1998 to 2007 reinforce the fact that dividends are relevant in influencing stock price volatility. Similar findings were reported by Song (2012).

Jecheche (2012) carried out a similar research on 60 listed companies in Zimbabwe Stock Exchange during the years 2001 to 2011and found that dividend policy measures had a significant impact on the share price volatility showing shreds of evidence of arbitration, duration and information effect on Zimbabwe firms.

In a recent study, Zainudin et al. (2016) investigated the relationship between dividend policy and stock price volatility of 166 industrial products firms listed on Bursa Malaysia found dividend policy is a strong predictor of stock price volatility.

When it comes to Indian market context, Kumar (2016) investigated the impact of stock price volatility on CNX 200 index companies found a negative relationship with dividend yield. And the payout showed an insignificant relationship with stock price fluctuations.

As the literature suggests the dividends remain a puzzle and inconclusive with regards to stock price variations most specifically to markets where industries are operating. Furthermore, few research studies have examined the relationship between stock prices and dividend yield in Indian context using Baskin method to compute price volatility which ignores the closing drifts of stock prices. In an active and volatile market like the Indian Stock market, the drift values have to be accounted for in calculating the stock prices to be more efficient. Thus an attempt is made in this paper to fill out the gap by adopting a highly efficient volatility estimator proposed by Yang Zhang (2000).

3. Hypothesis development, data, and methodology

Hypothesis Development

H_1: There is no significant relationship between dividend yield and stock price volatility

H_2: There is no significant relationship between dividend payout and stock price volatility

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Data

A sample of 116 textiles companies which are listed and actively traded in the Bombay Stock Exchange of India (BSE) has been utilized for this study from the year 2008 to 2017. Daily stock prices of the sample companies were collected from the BSE website and the data pertaining to dividend payout collected from Thomson Reuter's database. In order to eliminate the potential industry effects, a single sector was selected.

Variables' Definition: Independent Variable

Stock Price Volatility: The share price volatility which has been used as a proxy of risk is measured as the rate of change in the price of a share over a given period of time (close to close). The motivation behind this research is that this research for the first time employs a powerful unbiased volatility estimator created by Yang and Zhang (2000) that is 14 times as efficient as close to close estimate. This advanced volatility estimator is based on multiple periods of high, low, open, and close prices in a historical time series handle both opening jumps and drifts. In such an active market like the Indian capital market, since the possibility of opening jumps are considerably higher, an attempt is made to compute price volatility using the estimate of Yang and Zhang.

As the dependent variable in this study, price volatility is calculated for each year from 2008-2017 employing the following equation:

$$\text{Volatility}_{\text{Yang-Zhang}} = \sigma_{YZ} = \sqrt{F}\sqrt{\sigma_{overnight\ volatilty}{}^2 + k\sigma_{open\ to\ close\ volatility}{}^2 + (1-k)\,\sigma_{RS}{}^2}\ ) \quad (1)$$

where,

$$\sigma_{overnight\ volatilty}{}^2 = \sqrt{\frac{1}{n-1}\sum_{i=1}^{n}\left(\ Ln\left(\frac{O_i}{C_{i-1}}\right) - \overline{Ln\left(\frac{O_i}{C_{i-1}}\right)}\ \right)^2} \quad (2)$$

$$\sigma_{opento\ close\ volatilty}{}^2 = \sqrt{\frac{1}{n-1}\sum_{i=1}^{N}\left(\ Ln\left(\frac{C_i}{O_i}\right) - \overline{Ln\left(\frac{C_i}{O_i}\right)}\ \right)^2} \quad (3)$$

$$\text{Volatility}_{\text{Rogers-Satchell}} = \sigma_{RS} = \sqrt{\frac{F}{N}}\sqrt{\sum_{i=1}^{N} Ln\left(\frac{h_i}{c_i}\right)Ln\left(\frac{l_i}{o_i}\right) + Ln\left(\frac{l_i}{c_i}\right)Ln\left(\frac{l_i}{o_i}\right)} \quad (4)$$

$$k = \frac{0.34}{1.34 + \frac{N+1}{N-1}} \quad (5)$$

Dependent Variables

Dividend Yield is amplified as the dividend per share as a percentage of the stock price. The stock prices were collected from the BSE website and the proportion of D-yield to stock price is then computed.

Payout Ratio: The payout ratio is constructed as a percentage of the firm's earnings that is paid out as dividends to shareholders. Payout policy considers only internal factors in its computation whereas dividend yield is influenced by external factors as it utilizes stock price.

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Control Variables

Firm Size: Firm size is calculated in terms of the market value in each year. A transformation using natural logarithm was applied to obtain a variable that reflects orders of magnitude.

Long-term debt: the proportion of long-term debt excluding capital lease obligations to total assets which included current assets, long-term assets, net intangibles, long-term investments, long-term notes receivables, and other long-term assets.

Earnings Volatility: For calculation of earnings volatility, firstly, the ratio of EBIT to the total asset is calculated for each year and then the results are averaged for ten years. Finally, the average of second power deviation from the overall average is computed and a square root transformation is used.

Research Model

In line with the renowned, pioneer work of Baskin (1989) in examining the association between the dividend policy and share price volatility, this research study analyses the relationship between the two variables by applying the correlation analysis and multiple least square regressions using STATA. In regression analysis, the dependent variable share price volatility is regressed against two main independent variables dividend yields and payout ratio. In line with the recommendations by Baskin (1989), a number of control variables were included to account for certain factors that affect both dividend policy and stock price volatility, debt, earnings volatility, and firm size. The following research model is adopted to develop a relationship between share price volatility and dividend policy.

$$\text{P-VOL}_{it} = \alpha + \beta_1 \text{D-YIELD}_{it} + \beta_2 \text{PAYOUT}_{it} + \beta_3 \text{SIZE}_{it} + \beta_4 \text{DEBT}_{it} + \beta_5 \text{E-VOL}_{it} + \varepsilon_{it} \quad (6)$$

Where $P-VOL_{it}$ is the price volatility for firm i during the year t; $D-YIELD_{it}$ and $PAYOUT_{it}$ are measures of a firm's dividend policy of firm i during the year t; $SIZE_{it}$ is the firm's size of firm i during the year t; $DEBT_{it}$ is the debt of firm i during the year t; and $E-VOL_{it}$ is the earnings volatility of firm i in year t.

4. Analysis of data

In order to identify the characteristics of the data to be regressed, tests for multicollinearity, homoskedasticity, and autocorrelation were conducted in this section.

Multicollinearity

To detect multicollinearity between the variables used in the regression analysis, two tests were employed; the Pearson correlation matrix (Table 1) and Variance Inflation Factor (VIF) in Table 2. The correlation coefficient matrix of the variables is less than 0.75 we conclude that the variables are free from multicollinearity. In addition, the results of VIF Table 2 also shows that the coefficient of the variables are less than 10, which indicates that there is no strong correlation between the independent variables.

Table 1. Cross-Correlation of Variables

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VARIABLES	P-VOL	PAYOUT	D-YIELD	SIZE	DEBT	E-VOL
P-VOL	1					
PAYOUT	0.0046 0.8796	1				
D-YIELD	-0.1602** 0	0.1299** 0	1			
SIZE	-0.3736** 0	0.0321 0.2954	0.0992* 0.0012	1		
DEBT	0.0815* 0.0056	-0.0457 0.1276	-0.1120* 0.0003	-0.0691* 0.0212	1	
E-VOL	0.0631* 0.0318	-0.0414 0.1675	-0.0244 0.4274	-0.0755* 0.0118	0.0211 0.473	1

Source: 2008-2017 STATA output,* Significant at 5% ** Significant at 1%

From the results of correlation Table 1, payout shows a positive correlation with stock price volatility and the results are not statistically significant. The dividend yield has a significant negative association with price volatility as expected. These results are consistent with Kumar (2016) in the Indian capital market and from other studies around the world Hussainey et.al (2011), Song (2012), Hooiet.al (2015), Nazir et.al (2010), Sadiq et.al (2013) contradicts with Tahir (2017). Correlation tables also strengthen the significance of counting control variables in the regression equations. Price volatility has a highly significant negative relationship with market value and positive significant association with debt to total assets and earnings volatility.

Table 2. Variance Inflation Factor of Variables

Variable	VIF	1/VIF
D-YIELD	1.04	0.96381
PAYOUT	1.02	0.98007
DEBT	1.02	0.98148
SIZE	1.02	0.98198
E-VOL	1.01	0.99305
Mean VIF	1.02	

Source: 2008-2017 STATA output

White's test for Ho: Homoskedasticity

To proceed with the regression analysis, the White's test was conducted to test the homoskedasticity of the data included for analysis. The violation of the assumption of Homoskedasticity indicates that the standard errors are biased which will mislead the regression results. The results of White's test in Table 3 shows that the p values are greater than 0.05. This indicates that the data is homoskedastic and error variance is constant across all variables.

Table 3. Results of White's Test for Ho: Homoskedasticity

against Ha: unrestricted Heteroskedasticity	
chi2(20)	11.05
Prob > chi2	0.9448

Source: 2008-2017 STATA output

Wooldridge test for autocorrelation in panel data

Considering the nature of the data (panel) used in this study it is imperative to identify whether the correlation between variables exists at different points in time. For this reason, Wooldridge test is employed and the results are shown in Table 4. As the p values are greater than 0.05, we accept the null hypothesis which states that there is no first-order autocorrelation in the variables.

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Table 4. Results of Wooldridge Test

H0: no first-order autocorrelation
F(1, 115) = 1.617
Prob > F = 0.2060

Source: 2008-2017 STATA output

Empirical Results and Discussion

A broad description of the characteristics of the variables used in the study is shown in Table 5 which reports their statistical means and standard deviations. The average stock price volatility at 0.055 with a standard deviation of 0.024 indicates that the stock prices movements across the same sample firms were identical. The average dividend yield of the sample firms shows at 1.36% with 2% standard deviation depicting that most of the sample firms have similar dividend values. Though the stock price movements are expected to be identical, the average payout of the sample firms is 0.122 with a standard deviation of 0.82. The earnings volatility of sample firms shows average volatility of 0.019 depicting consistent variations in the earnings of the sample firms.

Table 5. Descriptive Statistics of the Variables

Variables	Obs	Mean	Std.Dev.	Min	Max
P-VOL	1,161	0.055681	0.024615	0.018713	0.313567
PAYOUT	1,114	0.122572	0.821806	-14.2857	20
D-YIELD	1,064	0.01369	0.021494	0	0.20429
SIZE	1,113	6.365112	1.664092	1.9407	11.53311
DEBT	1,163	0.321785	0.26709	0	1.955509
EVOL	1,169	0.019079	0.022327	0	0.222739

Source: 2008-2017 STATA output

Results of Regression

This model includes share price volatility as independent variable regressed against dividend policy variables dividend yield and payout with firm size, earnings volatility and debt to total assets as control variables. The results of the regression analysis are shown in Table 6.

Table 6. Results of the Regression Model

Source	SS	df	MS	Number of obs	=	1,059
				F(5, 1053)	=	41.43
Model	0.10475	5	0.02095	Prob > F	=	0
Residual	0.53254	1,053	0.00051	R-squared	=	0.1644
				Adj R-squared	=	0.1604
Total	0.63729	1,058	0.0006	Root MSE	=	0.02249
P-VOL	Coef.	Robust Std. Err.	t	P>t	[95% Conf. Interval]	
D-YIELD	-0.1398	0.0327177	-4.27	0	-0.204	-0.0756
PAYOUT	0.00113	0.0008322	1.35	0.176	-0.0005	0.00276
SIZE	-0.0052	0.0004166	-12.47	0	-0.006	-0.0044
DEBT	0.00445	0.0027	1.65	0.099	-0.0008	0.00975
E-VOL	0.0924	0.0342693	2.7	0.007	0.02516	0.15964
_cons	0.08709	0.0030461	28.59	0	0.08111	0.09306

Source: 2008-2017 STATA output

The overall F-value at 41.43 evidence that the model is statistically significant at 1% level as the p-value is at 0. Adjusted R^2 at 16% indicates that the model explains 16% of the variance in the stock price volatility with the dependent variables. In addition, another significant criterion in determining the fitness of the model Root Mean Square shows 0.02. The square root of the variance of the residuals at lowest at 0.02 indicates that the data is close to the predicted values of the model.

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The regression results from Table 6 shows that payout depicts a positive association with stock price volatility and the results are not statistically significant at 5%. Dividend yield shows a negative, highly significant association with share price volatility. The empirical results show that dividends affect stock prices significantly in Indian capital markets (Ho_1 is thus rejected). These results are consistent with previous studies of Baskin (1989), Nazir et.al (2010), Sadiq et.al (2013), Hussainey et.al (2011) Jecheche (2012 Hashemijoo et al (2012) Gunarathne et al (2015) Zainudin et al. (2016) Profilet and Bacon (2013) and at variance with the studies of Allen Rachim (1996), Rashid and Rahman (2008) Habib et al. (2012) Al-Shawawreh (2014) showed a positive relationship with share price volatility with no or weak statistical significance. The results imply that paying larger dividends and possibly investing less reduces risk which in turn may influence the cost of capital and hence the stock price. The higher the dividend yield the less the volatile the stock price is. A number of theoretical mechanisms also highlighted the dividend yield vary inversely with stock price. The beta statistics also suggest that it is the dividend yield which has much the greater influence on price volatility.

The findings contradict with M&M proposition of dividends irrelevance theory and align with the bird in hand theory developed by Gordon and Linter. Indian investors are keen on receiving the dividends today than waiting for capital gains due to the relatively volatile nature of the Indian capital market.

Given the control variables, the firm size has proved a significant negative association with share price volatility as anticipated. The larger the size of the firm the stock price volatility decreases due to an increase in the number of shares outstanding. As highlighted by Christie (1982) smaller firms are more sensitive to idiosyncratic shocks compared to larger firms and are prone to higher stock price volatility. Moreover, in terms of geographical locations and enterprise, larger firms are well diversified in comparison to smaller firms. The regression results achieved are persistent with the studies of Allen Rachim (1996) Habib et al. (2012) Hashemijoo et al (2012) Hussainey et.al (2011) Ramadan (2013), Rashid and Rahman (2008) and repudiate with the results of Profilet and Bacon (2013) Al-Shawawreh (2014) Gunarathne et al (2015) showed a significant positive influence on stock price volatility.

Alongside firm size, earnings volatility display a positive, significant association with share price volatility. It is easy to understand that if a company has stable profits that follows dividend smoothing, eventually results in less volatile stocks. Goncharov (2015) demonstrated a strong relationship between earnings volatility and share price volatility highlighting that investors use earnings volatility in risk assessment and the management uses earnings as a signaling device showing the firm's future prospects. Similar results were observed by Song (2012), Hooi et.al (2015) Zainudin et al. (2016) Hashemijoo et al (2012) Allen and Rachim (1996).

As an indicator of a firm's financial leverage, debt to total assets appears positively regressed with stock price volatility as presumed. The results strengthen the fact dictated by the financial theory that the greater the leverage, the increased risk and subsequent volatility in stock prices (Alaoui et.al 2017). A firm with a high leverage ratio implies that the firm relies more on debt at less cost compared to the reinvestment rate. As identified in the regression results earlier that, dividend yield associated negatively with stock price volatility indicating less reinvestment, the same results are replicated in the leverage ratio. Analogous results were conferred by Allen and Rachim (1996), positive and no significance, Hussainey et.al (2011) positive and significant and Profilet and Bacon (2013) got negative association inconsistent to the hypothesized signs.

5. Conclusion

Based on the empirical results it can be concluded that dividends are affecting stock prices variations in India and is fitted with the bird in hand and signaling theory of dividends. In contrary to M&M prepositions, dividends depict relevance in influencing the stock prices in India during the sample period. Due to the volatile nature of the market, Indian investors' prefer demanding more dividends from firms rather keeping retained earnings on

reinvestment. When firms follow dividend smoothing, which in turn acts as a signal on the prospective future performance of the company to the investors and thus create stock price variations.

There are few limitations faced by this study which provides scope for future research in this area of study. As highlighted by Baker and Wurgler (2004) dividends are highly relevant in influencing stock prices, but in different directions in different times, the derived results of this study may not be generalized with other geographical markets. Moreover, the dividend payments are not only influenced by internal factor but could also be influenced by market-specific factors which is not included in the present study.

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