Determinants of Dividend Policy in the Indian Corporate Sector: A Study of Companies Listed on Nifty 50, NSE

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Abstract

The present study investigated determinants of dividend policy of Nifty 50 of National Stock Exchange of India Limited (NSE). The paper examined the effects of four basic variables on the dividend policy. These factors included economic performance of organizations, liquidity, leverage, and size of the firm. Regression analysis was employed to study the selected determinants that affected the dividend payout policy of the firms listed on the NSE. A positive and significant relationship was found in between organization's economic performance (*ROE*) and dividend payout policy, while a significant negative relationship was found between size and dividend policy. In contrast, a negative relationship and no significance was found in between liquidity and dividend payout policy. The same tendency was found in between leverage and dividend policy of the listed sample companies of Nifty 50.

Key words: dividend policy, NSE of India, financial performance, leverage, liquidity

JEL Classification: G1, G3, G11, G35

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In the literature of corporate finance, the subject of dividend policy is always debatable since the times of Miller and Modigliani (1961). They demonstrated that under specific postulations, dividends were inappropriate and had no impact on the firm's value. Since then, academicians, researchers, practitioners have coined different ideas on the subject of dividend policy. Most of them argued that the proposed propositions on perfect capital market competition are not true in the real world. A series of theoretical models described that there are some factors, which influenced the dividend payment policy of the firm. Dividend policy, in the perspective of the present study, relates to a firm's dividend payout ratio in which the top-level management was supposed to follow a pattern and size of cash flows to be distributed to equity shareholders over a time period. As already mentioned, following the work of Miller and Modigliani (1961), the issue of the dividend policy has remained disruptive until recent times.

With the advent of new literature in corporate finance, the dividend relevance theory relaxes the assumptions of perfect capital markets. Lease, John, Kalay, Loewenstein, and Sarig (2000) rightly pointed that in the real world,

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market frictions are not costless and investors do not always act rationally. The dividend relevance theory came into existence against the backdrop of the dividend irrelevance theory. As per Black (1976), the concept of dividend policy remained as an enigma in that "the harder we look at the concept of dividend policy, the more it seems like an unending puzzle, with pieces that just do not fit together" (p.1).

Some questions are not yet answered that include: what are the determinants of dividend policy?; whether the dividend payout policy is determined independently or is dependent? The opinion of Lintner (1956) was that organizations in the developed markets focus on their dividend payout ratio with the combination of present earnings and dividends paid in the past. He concluded that to connect to the objective, several modifications have to be made for the dividend payout policy of a firm to stable dividend policies.

Most of the literature in the corporate finance has been drawn from the perspective of developed markets where dividend irrelevance theory could be validated with given assumptions thereon. However, the context of developing markets is certainly different from that of developed markets in many ways. Therefore, the central idea of the present study is to examine the dividend policy debate in the circumstances of developing markets as the Indian capital market represents emerging economies.

Review of Literature

A huge volume of literature has been approved in the area of corporate finance in relation to dividend policy. A brief review of these studies is highlighted in the following paragraphs in order to examine the importance of the present study. The term dividend policy can be defined as the policy of an organization used to declare how much it will be paid to shareholders in the form of dividends and how much has to be retained? Lintner's model was analyzed by Fama and Babiak (1968) on the dividend policy, and they opined when the dividends could be continued in the future, then the firms would try to increase the dividends. Ho (2003) analyzed a comparative study of Japanese and Australian firms. In his study, he found that the relation between size and dividend policy was positively significant in case of Australian firms, as was liquidity in case of Japan. Kumar (2003) studied the possible association between corporate governance, ownership structure, and firm's dividend payout policy. He observed that the association between dividends and earnings showed a positive trend, while a negative association was found between debt-to-equity and dividend policy.

Acharya, Biswaroy, and Mahapatra (2012) found that there was a strong and significant relation between earnings per share and dividend payout per share. Anil and Kapoor (2008) studied the dividend payout ratio determinants in the case of Indian information technology sector. They observed that corporate tax, cash flows, growth of sales, and the ratio of market-to book value did not influence the dividend payout pattern. However, beta and liquidity were found to be the determinants of dividend payout. In the same way, Abdelsalam, El-Masry, and Elsegini (2008) investigated the dividend policy of 50 listed firms in Egypt for the period from 2003-2005 and found that the relationship was significant and there was a positive association between performance of firms and institutional ownership.

Regardless of the availability of literature in the field of the study, as mentioned already, most of the literature was drawn from developed markets where the availability of literature may not justify the prevailing conditions of emerging markets as these are different from the former. Therefore, so as to throw more light on determinants of the firms' dividend policy, the present study intends to re-examine selected determinants of dividend payout policy of firms listed on Nifty 50 of NSE.

According to Gordon (1959), the firm share prices always depend upon the dividend payout policy, and he found that the uncertainty could be possible in the capital markets regarding future cash inflows. Miller and Modigliani (1961) analyzed the effect of dividend payout policy on the shareholding prices. They found that no dividend payout policy will be superior to any other policy, and it is not relevant to the value of firm and

shareholder's wealth maximization. Many studies showed that a relationship existed between ownership concentration and dividend policy, and they focused on agency theory, which recommended to reduce agency conflicts (Jensen & Meckling, 1976; Rozeff, 1982; Setia-Atmaja, 2009).

Vandemaele and Vancauteren (2015) analyzed the relation between corporate governance, ownership structure, and dividend policy, and they presented the results about the clear relation between the dividend payment policy and the ownership structure. Jabbouri (2016) identified the determinants of dividend policy in MENA stock markets from 2004 to 2013, and found that current profits, size of the firm, and liquidity showed a positive significant association with dividend payments. Growth, leverage, cash flows, and the state of the economy had a negatively significant relation with dividend policy; whereas, the past dividend and expectation of future profits had no significant influence or relationship with firms' dividend payout policy.

Sudhahar (2010) analyzed the Bombay Stock Exchange Group A and B companies and found that a positive relation was associated with last year's dividend and present year's profitability with dividend payout, by contrast to this, there was a negative relation between present year depreciation and dividend payout.

Booth and Zhou (2017) indicated that the size of the firm, profitability, and growth opportunities were all important measures or determinants to find the relationship with dividend payout policy. Rozeff (1982) revealed that the risk and transaction costs of the firm could be increased due to high financial leverage of the firm. The higher financial leverage ratio determined the fixed payments of the firm for external financing usage. Therefore, the financial leverage ratio was negatively related to the dividend payouts (Gugler & Yurtoglu, 2003), and it is supported by the agency cost theory of dividend policy.

Rizvi and Khare (2011) found that a positive significant association existed between earning per share and dividend payout and an insignificant association was found in the case of cash flow, tax to profit, and debt equity ratios.

Size of the firm is one of the most significant determinants of the dividend payout policy. According to the trade theory, the relationship between leverage ratio and size of the firm should be positive. The same showed in literature (Boot, Aivazian, Demirguc-Kunt, & Maksimovic, 2001; Harris & Raviv, 1990; Rajan & Zingales, 1995). Rajan and Zingales (1995) documented that larger size firms were inclined to be more diversified, therefore, bankruptcy risk could be less. In contrast, Titman and Wessels (1988) approved the negative relationship between size of the firm and leverage ratio; it was based on the pecking order theory. Large firms are more willing to pay dividends and have easier capital market access to dividends (Aivazian, Booth, & Cleary, 2003; Ho, 2003).

Objectives of the Study

The main objective of the study is to inspect the certain determinants of dividend payout policy with reference to Nifty 50 of NSE. Further, the following are the specific objectives. These are:

- (i) To test the fitness of the model.
- (ii) To identify the most influencing explanatory variables on explained variable.

Research Design and Methodology

(1) Statement of the Problem: The purpose of the study is to investigate the determinants of dividend payout of NIFTY 50 under NSE. Since NIFTY 50 is heterogeneous in character, the analysis on the determinants of dividend payout ratio of NSE Nifty could guide the existing as well as the future investors to take appropriate investment decisions. Although several studies are available on stock exchanges, studies on NSE-NIFTY 50 are negligible.

Hence, this study is an attempt to fill the gap.

- (2) Data: To fulfill the objectives of the study, secondary data were used exclusively and the same were collected from the official websites of the respective firms, journals, magazines, policy papers of regulatory bodies, etc. The annual reports of the firms were obtained from respective websites of those firms. The study period is for 5 years, that is, from January 1, 2011 to December 31, 2015. A total 50 of listed firms were selected for analysis. The collected data was tabulated and processed carefully to achieve the end results. We used the ordinary least square method (OLS) to capture the relation in selected variables of the study. Further, descriptive statistics, Pearson's coefficient of correlation were used to analyze the data of the sample firms. Furthermore, the multicollinearly test was used to know whether independent variables faced the problem of multicollinearity.
- **(3) Hypotheses:** On the ground of available literature in the subject area, we planned to test the following hypotheses to fulfill the objectives of the study. The present inquiry tests whether the considered variables have any statistically significant influence on dividend payout or not, and for testing the same, we have the following specific hypotheses:

\$\bigsep\$ **H1:** Higher return on equity is potential to pay high dividends.

🖔 **H2:** A decrease in the financial leverage would cause a high dividend payout.

🖔 **H3:** Lower liquidity of a firm means higher dividend payout.

🖔 **H4:** A larger sized firm will give more dividend payout.

(4) Model Specification : To fulfill the objectives of the study, the following model is used to re-examine the association between dependent and independent variables of the study :

$$DPR_{ii} = f(ROE_{ii}, LIV_{ii}, LIQ_{ii}, SIZE_{ii}) \dots (1)$$

The above equation can be written as:

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DPR_{ii} = \beta 0 + \beta 1 ROE_{ii} + \beta 2LIV_{ii} + \beta 3 LIQ_{ii} + \beta 4SIZE_{ii} + et .....(2)
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where,

 DPR_{ii} = dividend payout ratio,

 ROE_{it} = return on equity,

 LIV_{ii} = financial leverage of the firm,

 LIQ_{ii} = liquidity of the firm,

 $SIZE_{ii} = \text{size of the firm},$

et = error term

t =time dimensions of the variables,

B0 = Constant/intercept, and

 β 1-4 = Coefficients to be estimated.

- (5) Description of Variables Used in the Study
- (i) **Dividend Payout Ratio**: Dividend payout ratio is measured as the dividend per equity share divided by earnings per share.
- 40 Indian Journal of Finance January 2018

- (ii) Return on Equity: Return on equity for firm i at time t (in years) is used as a proxy for performance and is measured as net profit after tax divided by shareholders' equity.
- (iii) Financial Leverage: Financial leverage is used as a proxy as the debt to equity ratio. It measures the percentage of debt over equity.
- (iv) Liquidity of the Firm: It is believed that liquidity of the firm has a direct influence over dividend payout ratio. Here, current ratio is taken as the proxy of liquidity of the firm.
- (v) Size of the Firm: Firms' size is measured by the natural logarithm of the book value of the firms' total assets.

Analysis and Results

Descriptive statistics of the variables considered in the study are given in the Table 1. The mean of the *DPR* is 30.31 with a standard deviation of 21.71. It may represent that 31.30% of the returns were distributed by the firms those are under consideration of the study with the given deviation noted. The range of *DPR* of sample firms during the study period is 4.18 to 107.35. The means of other variables such as *ROE*, *LIQ*, *LIV*, and *SIZE* are 19.24, 1.13, 2.17, and 5.16, respectively for the sample firms considered under the study.

It is quite interesting to note that a firm among the sample registered negative *ROE*. In case of the ratio of current assets to current liabilities (*LIQ*), the minimum value is 0.02, while 4.01 is the maximum. The former indicates low liquidity while the later indicates the highest. Both of these extremes may influence *DPR* to a large extent. The minimum and maximum of financial leverage (*LIV*) of the sample firms are 0.00 and 15.77. It means some of the sample firms exclusively used equity while others had high volume of debt in their capital structures. The size of the firms is proximated with the book value of the sample firms. The minimum and maximum values of the size varies from 2.75 times to 7.63 times.

Table 1. Descriptive Statistics of Variables of Nifty 50

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Variables	Observations	Minimum	Maximum	Mean	Std. Deviation
DPR	50	4.18	107.35	30.31	21.71
ROE	50	-4.30	112.65	19.24	18.82
LIQ	50	0.02	4.01	1.13	.819
LIV	50	0.00	15.77	2.17	4.15
SIZE	50	2.75	7.63	5.16	1.11

Table 2. Pearson's Correlation Coefficient for Nifty 50

Variables	DPR	ROE	LiQ	LiV	Size
DPR	1				
ROE	.519**	1			
LIQ	.112	.218	1		
LIV	272	167	569**	1	.306*
SIZE	428**	346*	261	.306*	1

Note: **. Correlation is significant at the 0.01 level (2-tailed).

Table 3. Variance Inflation Factor

Variables	Tolerance	VIF
ROE	0.862	1.160
LIQ	0.657	1.521
LIV	0.649	1.541
SIZE	0.813	1.230

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Table 4. Regression of the Sample Variables

Model	R	R Square	Adjusted R Square	Std. Error
1	.611ª	.374	.315	17.96842
Variables	Coefficients	Standard Erro	r <i>t -</i> Stat	p - value
Intercept	54.2115	15.6976	3.4534	0.0012
ROE	0.49724	0.1499	3.3161	0.0018
LIQ	-4.6018	3.9426	-1.1671	0.2495
LIV	-1.1489	0.7821	-1.4689	0.1491
SIZE	-4.9836	2.6037	-1.9140	0.0492

Note: ^a indicates the correlation between predicted values and observed values.

Pearson's correlation of coefficient values are presented in the Table 2. A glance at the Table 2 shows that a positive correlation exists between dividend payout ratio and financial performance of the sample firms represented by *ROE* and it is significant at the 1% level. Further, it can be noticed that the coefficient of correlation between *DPR* and *SIZE* is significant at the 1% level, but is negatively correlated. Both the financial leverage and liquidity of the sample firms are not significant, but the former has a negative correlation while the latter has a positive correlation.

The test for multicollinearity was done to analyze the regression model. The results are depicted in the Table 3. The test of multicollinearity is essential to avoid the multicollinearity problem among the sample variables those are intended to be used in the model.

Ademeyi and Fagbemi (2010) recommended that a tolerance value less than 0.1 is an indication of a serious multicollinearity problem between the sample independent variables. In the present study, there is no such indication of multicollinearity since all the values arrived at are greater than that of 0.1. Furthermore, they suggested that a variance inflation factor must not exceed 10. For this study, all the variables have exhibited a value of less than that of the upper limit.

The output of the regression of the sample variables is furnished in the Table 4. Findings from the regression indicate that the R which is referred to as the coefficient of the variables of the study is 0.611. R - squared, which explains the measure of overall fitness of the model, indicates that the model was able to explain .374% of the variability of the sample variables. Therefore, it can be understood that this model explains only 37.4% of the symmetric variation in the dependent variable. Indirectly, nearly 62.6% of the variation may be explained by other variables those are not fitted in the model. The same is judged by the adjusted R^2 (adjusted R- squared). It is evident from the Table 4 that there is a significant relationship between dividend payout policy of the firms and the indicators of the financial performance during the study period. This is proved with the t- statistic value of 3.45 and a p > |t| (0.0012).

In general, this number indicates that if rest of the variables are constant, an increase of say 1%, an indicator of the economic performance proxied by *ROE*, may lead to an increase (on an average) of 0.49724% in the dividend payout polices of the sample companies listed on Nifty 50 of NSE India Limited. It means any increase in the financial performance of the sample organizations would cause an increase of the dividend payout ratio. Hence H1 is accepted. In fact, the results of the regression are in the line with the results obtained by other previous studies (Baker & Powel, 2000; Kowalewski, 2007). Therefore, it may be inferred that the financial performance of firms decides the dividend payout policy of the firms listed on Nifty 50 to a large extent.

In general, the firms with high earnings have the potential to pay high dividends to their equity shareholders. In the same way, the empirical results explain that there is a significant negative relationship between firms' size and

dividend payout decisions of the sample firms under study. The same is evident from the t- stat value of -1.91 and a p > |t| (0.0492). This result implies that there is a negative relationship between firms' size and dividend payout decisions of the sample firms of the study. Hence, H4 is rejected. It is really a divergent result against the existing literature in the field of the study. This result contradicts the outcomes of the studies of Al-Najjar and Hussainey (2009), Ho (2003), Aivazian et al. (2003), Kumar (2003), and Al-Malkawi (2007). These studies strongly opined that the firm size was a strong determinant factor in firms' dividend payout decisions since larger firms have more and diversified resources to pay dividends.

Moreover, empirical findings of the regression on the relationship between liquidity (a proxy of current assets to current liabilities) and dividend payout ratio of sample firms gives a clue that there is an inverse relationship between these two variables. Theoretically, more liquid assets enable the firm to pay good dividend as compared to those companies that face a crunch of liquidity. But the model suggests that there is an inverse relationship between liquidity of the firm and its dividend policy. This strange phenomenon may account for overlocking of funds in inventory. Hence, H3 is accepted.

Furthermore, leverage represented by the ratio between equity and debt capital of the firms and dividend payout policy of the firms also exhibits an inverse relationship. Accordingly, as the portion of the debt in the capital structure of the firm decreases, its dividend payout ratio increases and vice versa. Hence, H2 is accepted. Therefore, risky and financially sick firms prefer to pay low dividends. Even previous studies: Rozeff (1982), Kowalewski (2007), Al - Malkawi (2007), and Al-Kuwari (2009) proved the same notion where they opined that an inverse relationship did exist between leverage and dividend policy of the firms.

Summary and Conclusion

The present study investigates the determinates of dividend policy of Nifty 50 of National Stock Exchange of India Limited (NSE). To fulfill the objectives of the study, all the companies listed on Nifty 50 (index) of the NSE were selected and analyzed for a period of 5 years. The mean of the dividend payout ratio (*DPR*) is 30.31 with a standard deviation of 21.71. It may indicate, on an average, that 31.30% of the returns have been distributed by the firms in form of dividend. It is quite interesting to note that a firm among the sample registered a negative *ROE*. From the descriptive statistics, it is evident that some of the sample firms exclusively used equity only, while others had a high volume of debt in their capital structures. Pearson's correlation coefficient describes that there is a positive correlation between dividend payout ratio and financial performance of the sample firms represented by *ROE*, while other variables exhibit either negative or low correlations with *DPR*. The multicollinearity test proves that there is no evidence of multicollinearity between the sample independent variables.

The findings from the regression indicate that R^2 , which is referred to as the coefficient of the variables of the study, is 0.611, while R-squared that measures overall fitness of the model indicates that the model can explain .374% of the variability of the sample variables. Further, it is evident that there is a significant relationship between dividend payout policy of the firms and the indicators of the financial performance during the study period. The same relationship was found by Booth and Zhou (2017) in their study.

The empirical results explain that there is a significant negative relationship between firms' size and dividend payout policy of the sample firms under the study. It is really a divergent result against the existing literature in the field of the study area. Theoretically, more liquid assets enable a firm to pay good dividends as compared to firms who face a crunch of liquidity. The relationship between liquidity (a proxy of current assets to current liabilities) and dividend payout ratio of sample firms give a clue that there is an inverse relationship between these two variables. This strange phenomenon may account for overlocking of funds in inventory. Leverage represented by the ratio between equity and debt capital of the firms and dividend payout policy of the firms also exhibits an inverse relationship.

Research Implications

In relation to dividend theory, there are some studies which are favorable to some variables that determine the dividend policy, while there are some variables those may not be considered to determine dividend payout ratio of a company. The study throws light on the area of dividend decisions to know which variables will have an impact on dividend payout ratio, and which will not have an impact. Furthermore, it is expected that the output of the present study will be useful academicians, researchers, and policy makers in their respective areas.

Limitations of the Study and Scope for Further Research

However, no generalization can be made with respect to similar clusters in the absence of further research. The sector wise and industry wise analysis using a comparative study can be considered for future studies. A limitation of the present analysis could be related to the selection of variables, sector, and time series. The present study considered few variables as a determinant for NIFTY 50, and these are not sufficient to represent all the sectors in the stock market. Moreover, homogeneity is not present in the results of the study taken by considering 5 years' data.

References

- Abdelsalam, O., El-Masry, A., & Elsegini, S. (2008). Board composition, ownership structure, and dividend policies in an emerging market: Further evidence from CASE 50. *Managerial Finance*, 34(12), 953 964.
- Acharya, P. N., Biswaroy, P. N., & Mahapatra, R. P. (2012). Determinants of corporate dividend policy: A study of Sensex included companies. *Indian Journal of Finance*, 6 (4), 35 43.
- Adeyemi, S.B., & Fagbemi, T.O. (2010). Audit quality, corporate governance and firm characteristics in Nigeria. *International Journal of Business and Management*, *5* (5), 169 179.
- Aivazian, V., Booth, L., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from U.S. firms? *The Journal of Financial Research*, 26(3), 371 387.
- Al-Kuwari, D. (2009). Determinants of the dividend policy in emerging stock exchanges: The case of GCC countries. *Global Economy & Finance Journal*, 2(2), 38 63.
- Al-Malkawi, H. A. N. (2007). Determinants of corporate dividend policy in Jordan: An application of the TOBIT model. *Journal of Economic & Administrative Sciences*, 23 (2), 44 70.
- Al-Najjar, B., & Hussainey, K. (2009). The association between dividend payout and outside directorships. *Journal of Applied Accounting Research*, 10(1),4-19.
- Anil, K., & Kapoor, S. (2008). Determinants of dividend payout ratios A study of the Indian information technology sector. *International Research Journal of Finance and Economics*, 450, 63 73.
- Baker, H.K, & Powell, G.E. (2000). Determinants of corporate dividend policy: A survey of NYSE firms. *Financial Practice and Education*, 10, 29 40.
- Black, F. (1976). The dividend puzzle. *Journal of Portfolio Management*, 2 (Special Issue), 5 8.
- 44 Indian Journal of Finance January 2018

- Boot, L., Aivazian, V., Demirguc Kunt, A., & Maksimovic, V. (2001). Capital structure in developing countries. *Journal of Finance*, 56(1), 87-130.
- Booth, L., & Zhou, J. (2017). Dividend policy: A selective review of results from around the world. *Global Finance Journal*, *34*, 1-15. DOI: http://dx.doi.org/10.1016/j.gfj.2017.07.002
- Fama, E. F., & Babiak, H. (1968). Dividend policy: An empirical analysis. *Journal of the American Statistical Association*, 63 (324),1132-1161.
- Gordon, M. (1959). Dividends, earnings, and stock prices. *The Review of Economics and Statistics*, 41 (2), 99-105. DOI: http://doi.org/10.2307/1927792
- Gugler, K., & Yurtoglu, B. (2003). Corporate governance and dividend pay out policy in Germany. *European Economic Review*, 47(4), 731 758. DOI: http://doi.org/10.1016/S0014-2921(02)00291-X
- Harris, M., & Raviv, A., (1990). Capital structure and the informational role of debt. *Journal of Finance*, 45 (2), 321-349.
- Ho, H. (2003). Dividend policies in Australia and Japan. *International Advances in Economic Research*, 9 (2), 91-100.
- Jabbouri, I. (2016). Determinants of corporate dividend policy in emerging markets: Evidence from MENA stock markets. *Research in International Business and Finance*, *37*, 283 298. DOI: http://dx.doi.org/10.1016/j.ribaf.2016.01.018
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial of Economics*, 3 (4), 305-360.
- Kowalewski O. (2007). The financial system. In M. Weresa (ed.), *Competitiveness report 2007: The role of foreign direct investment*. Poland: World Economy Research Institute, Warsaw School of Economics.
- Kumar, J. (2003). Corporate governance and dividend payout in India. *Journal of Emerging Market Finance*, 5 (1), 15 58.
- Lease, R.C., John, K., Kalay, A., Loewenstein, U., & Sarig, O.D. (2000). *Dividend policy: Its impact on firm value*. Boston: Harvard Business School Press.
- Lintner, J. (1956). Distribution of incomes of corporations among dividends retained earnings and taxes. *The American Economic Review*, 46(2), 97 113.
- Miller, M., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *Journal of Business*, 34 (4), 411-433.
- Rajan, R.G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50(5), 1421-1460.
- Rizvi, S., & Khare, S. (2011). Determinants of dividend payout ratios: A study of the Indian banking sector. *Indian Journal of Finance*, 5 (2), 24-31.
- Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *The Journal of Financial Research*, 5(3), 249 259.
- Setia-Atmaja, L. Y.(2009). Governance mechanisms and firm value: The impact of ownership concentration and dividends. *Corporate Governance: An International Review, 17* (6), 694 709. DOI: http://doi.org/10.1111/j.1467-8683.2009.00768.x

- Sudhahar, M. (2010). Determinants of dividend policy in selected Indian industries: An empirical analysis. *Indian Journal of Finance*, 4(12), 29 - 39.
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. *The Journal of Finance*, 43 (1), 1-19.
- Vandemaele, S., & Vancauteren, M. (2015). Nonfinancial goals, governance, and dividend payout in private family firms. Journal of Small Business Management, 53(1), 166 - 182. doi: http://doi.org/10.1111/jsbm.12063

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