

---

## MODELING OF DIVIDEND PAYOUT, RETENTION, YIELD, CAPITAL GAINS AND IRRELEVANCE AND ITS IMPACT ON VALUE OF THE FIRM

---

**Dr.P.Govindasamy<sup>1</sup>, Dr.Kapila Uma Shankar<sup>2</sup> Mr.R.Ravimohan<sup>3</sup>**

<sup>1</sup>Associate Professor, School of Management Studies, Vels Institute of Science, Technology and Advanced Studies, Chennai 600117, Tamilnadu, INDIA,  
Email id: govindasamy.sms@velsuniv.ac.in

**Orchid Id:** <https://orcid.org/0000-0002-5740-4781>

<sup>2</sup>Assistant Professor, Faculty of Administrative Science and Economics, Department of Accounting, Tishk International University, Ira, Email id: kapila.shankar@tiu.edu.iq

<sup>3</sup>Assistant Professor, School of Management Studies, Vels Institute of Science, Technology and Advanced Studies, Chennai 600117, Tamilnadu, INDI

Email.Id: ravimohan.sms@velsuniv.ac.in

(Corresponding author: Dr.P.Govindasamy

Email id: apgswamy1972@gmail.com\_/ whatsapp no. 9943671442)

---

### ABSTRACT

The organizations' performance measured in various dimensions and one of the tricky oil of efficiency shareholders wealth maximization and this will create a momentum of growth and development. In line with this focus the impact of dividend decision is going to be verified in this paper using payout ratio, retention ratio, capital gain, dividend yield, and dividend irrelevance. While conceptualizing this, a case model has constructed in every estimation angle and the run of the outcomes helps the business and research network to include dividend decision measurement in the process of organization valuation.

**Key Words:** Dividend Payout, Retained Earnings, Capital Gains, Dividend Yield, Dividend Irrelevance.

---

### INTRODUCTION

The power of informative dividends to serve as a substitute for additional financial markets is particularly notable (Hakanson, Nils, H, 1982). Whether to pay or not to pay dividends has been addressed from the perspectives of the welfare implications to the owner (the investors) to render the owner requirements in terms of incentive schemes which is equally important (Harkavy,

Oscar, 1953). Dividend policy has information content in that knowledge that a firm has reduce dividends improves current earnings to predict future earnings (Harry et.al. 1992). It is argued that regular dividends have become less flexible and less responsive to earnings (Leary & Michaely, 2011; Skinner, 2008). In addition, the “consensus [view] in the literature” is that repurchases are gradually replacing dividends as the dominant payout channel (Bonaimé et al., 2020, p. 28). Several studies argue that the evolution of payout policy internationally is broadly similar to that in the United States (Farre-Mensa et al., 2014; Fatemi & Bildik, 2012; von Eije & Megginson, 2008). As the current paper shows with models and interpretations of dividend policy in terms of payout, retention, yield, capital gains and irrelevance. Whereas dividends pay out ongoing or permanent cash flows (Fama & French, 2001; Guay & Harford, 2000; Jagannathan et al., 2000; Lie, 2000). Based on the past behavior the future trends are predicted and investment suggestions are made based on such predictions of trend changes, the timing of an investment when to buy or sell is facilitated by a study of that information (Govindasamy, et.al. 2018). However, Fenn and Liang (2001) and Kahle (2002). Grullon and Michaely (2002) find that firms increasingly initiate payout via repurchases, and that lower-than-expected dividend yields are associated with higher repurchase yields. Banyai et al. (2008); the amounts spent on buying back shares are not offset by proceeds from concurrent share issues. Fama and French (2001), based on the arguments that the decision to pay dividends is negatively related to investment opportunities, and positively related to profitability and size. The management might encourage investor’s satisfaction survey at regular intervals to improve the investor’s satisfaction (Govindasamy, Viswanathan, E. 2015). The measures of risk, and Retained equity/Assets, are introduced, respectively, by Hoberg and Prabhala (2009) and DeAngelo et al. (2006). Higher risk increases the expected cost of the future commitment to pay that is implied by regular dividends. Retained equity is a proxy for company maturity, and dividend payment is positively related to maturity according to the life-cycle theory. David et.al. (2021) Fund providers and investors, who should consider accounting information quality in order to reach a better investment decision,. Jie, Xuan et.al. (2021) Given investors’ aversion to dividend cuts, we predict that firms with higher resource adjustment costs and stickier costs pay lower dividends than their peers because they are less able to sustain any higher level of dividend payouts in the future. We find evidence consistent with this prediction.

All investors’ are looking decent dividend and capital gain as ROI for their investments. In order to satisfy investors’ companies adopt various strategies in announcing and committing dividend payout to their equity capital providers. It is to characterize as wealth creation is a measure of income and also it is an imperative idea to stabilize capital the firm needs a clean chit dividend policy in force and vis-à-vis signify the investors through a sizable capital appreciation out of our wealth creation strategy. At the outset of this process is subject the competitors’ moves in the market and also hedge the risk and win in the market as an ultimate goal of every firm. Hence, the tricky position of finance manager to declare dividend, assure capital appreciation, manage the prevailing market competition and

maintain retained earnings for future growth of the firm sensitizes the overall performance of the firm. The following models of dividend payouts help them to neutralize and provides strength to business operational efficiency.

### 1. PAYOUT RATIO

Ordinarily, a firm would utilize its dividend strategy to seek after its target of augmenting its investors' return with the goal that the estimation of their venture is boosted. Investors return comprises of profits and capital additions. Dividend strategy straightforwardly impacts these two parts of return. Regardless of whether dividends are not proclaimed however held in the firm, the investors' riches or return would go up. We will look at different proportions which sway our Company's dividend strategy

Let us currently take a glance at this with a model: Firms A and B has value capital of Rs.100. Let us expect both the organizations produce 25% income consistently. Let us expect that Firm A pronounces 50 percent of dividend each year and firm B declares just 25% dividend each year.

**Table -1; Firm-A – Earnings and Payout**

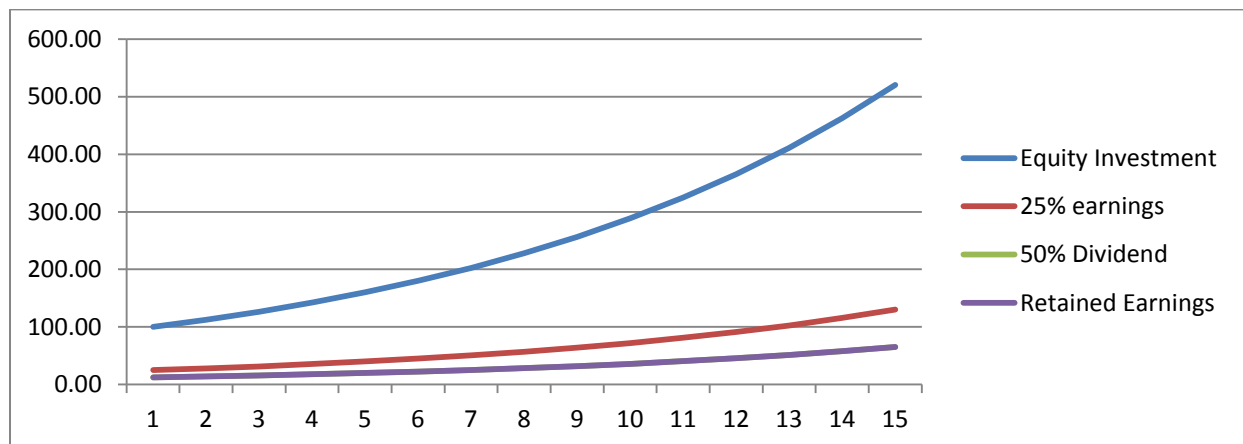
Firm / Year	Equity	25% earnings	50% Dividend
1	100.00	25.00	12.50
2	112.50	28.13	14.06
3	126.56	31.64	15.82
4	142.38	35.60	17.80
5	160.18	40.05	20.02
6	180.20	45.05	22.53
7	202.73	50.68	25.34
8	228.07	57.02	28.51
9	256.58	64.14	32.07
10	288.65	72.16	36.08
11	324.73	81.18	40.59
12	365.32	91.33	45.67
13	410.99	102.75	51.37
14	462.36	115.59	57.80
15	520.16	130.04	65.02
Total dividend received by the investors			<b>485.18</b>

**Table-2; Firm-B – Earnings and Payout**

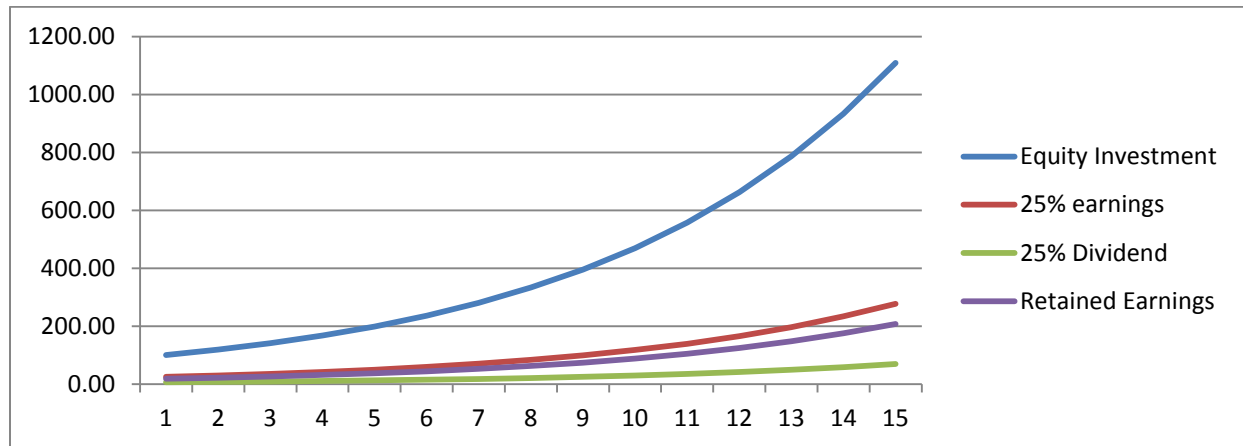
Firm / Year	Equity	25% earnings	25% Dividend
1	100.00	25.00	6.25

2	118.75	29.69	7.42
3	141.02	35.25	8.81
4	167.46	41.86	10.47
5	198.85	49.71	12.43
6	236.14	59.03	14.76
7	280.42	70.10	17.53
8	332.99	83.25	20.81
9	395.43	98.86	24.71
10	469.57	117.39	29.35
11	557.62	139.40	34.85
12	662.17	165.54	41.39
13	786.33	196.58	49.15
14	933.76	233.44	58.36
15	1108.84	277.21	69.30
Total dividend received by the investors			<b>405.58</b>

In the event that you take a glance at the profits (sitting above the premium on the dividend got by method of money) to the investors of firms A and B toward the finish of 15 years, the accompanying position will arise on Rs.100 put resources into each firm. On account of low dividend Payout Company, indeed from the year 14 onwards, the quantum of dividend paid has really surpassed the high profit payout organization. On the off chance that you take a glance at the market esteem, a low payout firm will bring about a higher share price in the market since it builds profit development.



**Fig.1: Firm A – 25% Earnings and 50% Dividend**



**Fig-2: Firm B – 25% Earnings and 25% Dividend**

Vulnerability encompassing future organization productivity drives certain investors to incline toward the sureness of current dividends. Investors lean toward "enormous" dividends. Investors don't care to make "hand crafted" dividends, yet incline toward the organization to appropriate them straightforwardly.

Capital gains taxes are conceded until the real offer of sale of stock. This makes a planning choice. Capital gains are liked to dividends, all that else equivalent. In this way, high dividend yielding stocks should sell at a markdown value to create a higher before-tax pace of return. Certain institutional investors pay no tax.

Dividends are burdened in terms of charging tax more intensely than capital additions, so before-tax returns ought to be higher for high dividend - paying firms. Experimental outcomes are blended - as of late the proof is generally predictable with dividend nonpartisanship.

## 2. RETENTION RATIO

**Table-3; Firm – A – Retention Ratio**

Firm / Year	Equity	25% earnings	50% Dividend	Retained Earnings
1	100.00	25.00	12.50	12.50
2	112.50	28.13	14.06	14.06
3	126.56	31.64	15.82	15.82
4	142.38	35.60	17.80	17.80
5	160.18	40.05	20.02	20.02
6	180.20	45.05	22.53	22.53
7	202.73	50.68	25.34	25.34
8	228.07	57.02	28.51	28.51

9	256.58	64.14	32.07	32.07
10	288.65	72.16	36.08	36.08
11	324.73	81.18	40.59	40.59
12	365.32	91.33	45.67	45.67
13	410.99	102.75	51.37	51.37
14	462.36	115.59	57.80	57.80
15	520.16	130.04	65.02	65.02
Total dividend received by the investors			<b>485.18</b>	

**Table-4; Firm – B – Retention Ratio**

Firm / Year	Equity	25% earnings	25% Dividend	Retained Earnings
1	100.00	25.00	6.25	18.75
2	118.75	29.69	7.42	22.27
3	141.02	35.25	8.81	26.44
4	167.46	41.86	10.47	31.40
5	198.85	49.71	12.43	37.29
6	236.14	59.03	14.76	44.28
7	280.42	70.10	17.53	52.58
8	332.99	83.25	20.81	62.44
9	395.43	98.86	24.71	74.14
10	469.57	117.39	29.35	88.04
11	557.62	139.40	34.85	104.55
12	662.17	165.54	41.39	124.16
13	786.33	196.58	49.15	147.44
14	933.76	233.44	58.36	175.08
15	1108.84	277.21	69.30	207.91
Total dividend received by the investors			<b>405.58</b>	

Retention portion is only the opposite of the payout proportion. As we have seen over, a low payout (and subsequently a high retention) strategy will create a potential higher dividend declaration (and along these lines higher share price in the secondary market prompting colossal capital additions) since it expands income development.

### 3. CAPITAL GAINS

Investors of development and growth organizations will understand their return generally as capital increases. Typically such development organizations will have expanding profit quite a long time after year however their payout proportion may not be extremely high. Their retention proportion will consequently be higher. Investors in such organizations will harvest capital additions in the later years. Notwithstanding, the effect of dividend strategy

(high or low payout with low or high retention proportion) isn't exceptionally basic. Such capital increases will bring about the inaccessible future and subsequently numerous investors may think about them as questionable.

**Table – 5; Capital Gain Analysis**

Particulars	Firm X	Firm Y
Total dividend income	Rs.485.18	Rs.405.58
Total capital gain (over the original investment amount of Rs.100)	Rs.520.16	Rs.1,108.84
Total income	<b>Rs.1005.34</b>	<b>Rs.1,514.42</b>

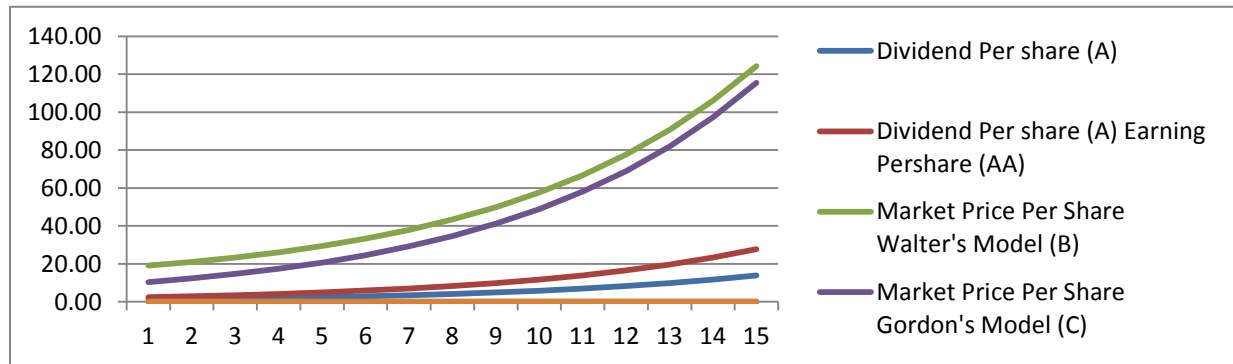
#### 4. DIVIDEND YIELD

The dividend yield is the investors ROI which has arrived as the dividends per share divided by the market price per share. If equity investment of Rs.100 crores with the face of each share Rs.10, the expenses committed for the capital is 12%, growth rate of share price is continually consistently every year at 3% and the return is 25%. The accompanying model portrays the dividend yield when the dividend payouts are 25 percent and 50 percent and the results in terms of market value of shares with the due assumptions' employed as recommended by Walter's and Gordon's dividend decision styles.

**Table-6; Firm - A; 25% Earnings; 50% Dividend Payout and Dividend Yield**

Dividend Per share (A)	Market Price Per Share		Dividend Yield	
	Walter's Model (B)	Gordon's Model (C)	Walter's Model (A/B)	Gordon's Model (A/C)
1.25	19.10	13.89	0.065	0.090
1.41	20.40	15.63	0.069	0.090
1.58	21.86	17.58	0.072	0.090
1.78	23.51	19.78	0.076	0.090
2.00	25.37	22.25	0.079	0.090
2.25	27.45	25.03	0.082	0.090
2.53	29.80	28.16	0.085	0.090
2.85	32.44	31.68	0.088	0.090
3.21	35.41	35.64	0.091	0.090
3.61	38.75	40.09	0.093	0.090
4.06	42.51	45.10	0.095	0.090
4.57	46.74	50.74	0.098	0.090
5.14	51.49	57.08	0.100	0.090
5.78	56.84	64.22	0.102	0.090

6.50	62.86	72.24	0.103	0.090
------	-------	-------	-------	-------

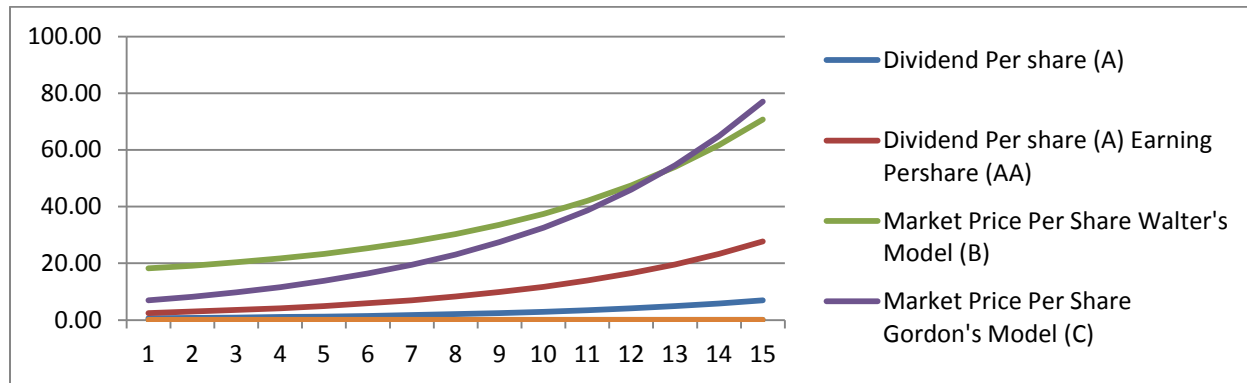


**Fig-3: Firm A – Dividend Payout and Dividend Yield**

**Table-7; Firm A; 25% Earnings; 25% Dividend Payout and Dividend Yield**

Dividend Per share (A)	Market Price Per Share		Dividend Yield	
	Walter's Model (B)	Gordon's Model (C)	Walter's Model (A/B)	Gordon's Model (A/C)
0.63	18.23	6.94	0.034	0.090
0.74	19.21	8.25	0.039	0.090
0.88	20.37	9.79	0.043	0.090
1.05	21.74	11.63	0.048	0.090
1.24	23.38	13.81	0.053	0.090
1.48	25.32	16.40	0.058	0.090
1.75	27.63	19.47	0.063	0.090
2.08	30.36	23.12	0.069	0.090
2.47	33.62	27.46	0.074	0.090
2.93	37.48	32.61	0.078	0.090
3.49	42.06	38.72	0.083	0.090
4.14	47.51	45.98	0.087	0.090
4.91	53.98	54.61	0.091	0.090
5.84	61.65	64.84	0.095	0.090
6.93	70.77	77.00	0.098	0.090





**Fig-4: Firm B – Dividend Payout and Dividend Yield**

## 5. DIVIDEND IMMATERIALITY HYPOTHESIS

In the first case, when the firm pays dividends, shareholders get cash in their hands but the firm's cash balance gets reduced. Though the shareholders gain in the form of such dividends, they lose in the form of their claims on the cash assets of the firm. This can be seen as an exchange of abundance of the investor starting with one portfolio then onto the next. Hence there is no net addition or deficit. In an ideal economic situation, this won't influence the estimation of the firm.

In the subsequent one, the issue of new shares to finance dividend payments brings about two transactions – existing investors get money as dividends and the new investors part with their money to the organization in return for new shares. The current investors endure an equivalent measure of capital misfortune since the estimation of their case on firm's resources gets diminished. The new investors increase new shares at a reasonable cost for every share. The reasonable cost per share is the share price before the payment of dividends less dividend per share to the existing investors. The existing investors move a piece of their claim on the firm to the new investors in return for money. Subsequently there is no increase or misfortune. Since these two exchanges are reasonable, the estimation of the firm value will stay unaffected.

In the third situation, if the firm doesn't deliver dividend, the investor can at present make money to address his issues by selling a section or entire of his shares at the market price in the stock trade. The investor will have lesser number of shares as he has traded a piece of his holdings on the firm to the new investor in return for money. The net impact is the equivalent by and by. The transaction is a reasonable one as there is no increase or misfortune. The estimation of the firm value will stay unaffected.

This dividend immateriality hypothesis passes by the name Miller – Modigliani (MM) Hypothesis as they have propounded the equivalent. Miller have advanced the view that the

estimation of a firm relies entirely upon its profit power and isn't affected by the way in which its income are part among dividends and retained earnings. This view is communicated as the MM – Dividend Irrelevance hypothesis and is advanced in their acclaimed 1961 examination work – Dividend strategy, development and the valuation of offers – in the Journal of Business Vol 34 (Oct 1961). In this work, Miller and Modigliani worked out their contention on the accompanying assumptions: capital markets are perfect and investors are rational: data is unreservedly accessible, transactions are unconstrained, momentary, and costless; securities are divisible and no one particular investor can influence market prices. Floatation costs are nil and unimportant. Investment and dividend decisions are autonomous.

### 5.1 DIVIDEND IRRELEVANCE

Assumptions of dividend irrelevance as per **Miller Modigliani Proposition** with suitable model; There are no transactions costs associated with converting price appreciation into cash, by selling stock. If this were not true, investors who need cash urgently might prefer to receive dividends. Firms that pay too much in dividends can issue stock, again with no flotation or transactions costs, to take on good projects. There is also an implicit assumption that this stock is fairly priced. The investment decisions of the firm are unaffected by its dividend decisions and the firms operating cash flows are the same no matter which dividend policy is adopted. Managers of firms that pay too little in dividends do not waste the cash pursuing their own interests (i.e., managers with large free cash flows do not use them to take on bad projects). Under these assumptions, neither the firms paying the dividends nor the stockholders receiving them will be adversely affected by firms paying either too little or too much in dividends. **A Proof of Dividend Irrelevance:** To provide a formal proof of irrelevance, assume that M/s.ABC Ltd unlevered manufacturing firm manufacturing, has a net operating income with due consideration of tax 20%, share price growth rate 5%, Cost of Capital 15%, Free Flow of Cash Inflow, Value of the firm and Value of Existing Shareholders. Further, assume that this firm has net capital expenditure needs (capital expenditures in excess of depreciation) and that there are 1 crore shares outstanding. Finally, assume that this firm pays out residual cash flows as dividends each year.

**Table -8; Model of Dividend Irrelevance**

Retu rns %	Div iden d %	Valu e of Firm (Ope ratin g CF) Rs.	Retu rns Rs. In Cror es	Divid ends Rs. In Cror es	Tax Rs. In Cror es	Capi tal Exp endi ture rs. inCror es	Free Cash Flow Rs. In Cror es	Valu e of the Firm Rs. In Cror es	Value of the Existi ng Share holde rs Rs. In	Price Per Shar e Rs.	Divide nds Per share Rs.	Tot al Val ue per shar e Rs.
------------------	--------------------	--	--	---------------------------------------	--------------------------------	---	---	--	---	-------------------------------	--------------------------------------	---

		In Cror es							Cre s			
40	50	50.0 0	20.0 0	10.00	4.0 0	3.00	13.0 0	136. 50	0.00	136. 50	0.00	136. 50
35	48	50.0 0	17.5 0	8.40	3.5 0	3.00	11.0 0	115. 50	21.00	115. 50	21.00	136. 50
33	45	50.0 0	16.5 0	7.43	3.3 0	3.00	10.2 0	107. 10	29.40	107. 10	29.40	136. 50
32	40	50.0 0	16.0 0	6.40	3.2 0	3.00	9.80	102. 90	33.60	102. 90	33.60	136. 50
30	35	50.0 0	15.0 0	5.25	3.0 0	3.00	9.00	94.5 0	42.00	94.5 0	42.00	136. 50
28	30	50.0 0	14.0 0	4.20	2.8 0	3.00	8.20	86.1 0	50.40	86.1 0	50.40	136. 50
25	25	50.0 0	12.5 0	3.13	2.5 0	3.00	7.00	73.5 0	63.00	73.5 0	63.00	136. 50
22	20	50.0 0	11.0 0	2.20	2.2 0	3.00	5.80	60.9 0	75.60	60.9 0	75.60	136. 50
18	15	50.0 0	9.00 0	1.35	1.8 0	3.00	4.20	44.1 0	92.40	44.1 0	92.40	136. 50
15	10	50.0 0	7.50 0	0.75	1.5 0	3.00	3.00	31.5 0	105.0 0	31.5 0	105.0 0	136. 50
10	5	50.0 0	5.00 0	0.25	1.0 0	3.00	1.00	10.5 0	126.0 0	10.5 0	126.0 0	136. 50

**Interpretation:** If dividends are, in fact, irrelevant, firms are spending a great deal of time pondering an issue about which their stockholders are indifferent. A number of strong implications emerge from this proposition. Among them, the value of equity in a firm should not change as its dividend policy changes. This does not imply that the price per share will be unaffected, however, since larger dividends should result in lower stock prices and more shares outstanding.

## CONCLUSION

A firm operating in a perfect or ideal capital market conditions may commonly confront the dilemmas as briefed above with regard to payment of dividends. The firm has sufficient cash to pay dividends but such payments may erode its cash balance. The firm needs mode liquidity to honor dividend payments and to meets its installment payments of dividend payouts, the firm may need to issue to new offers. The firm does not pay dividends, but

shareholders expect and need cash. when the firm delivers profits, investors get money in their fold however the company's cash balance gets decreased. To substantiate the information passed in the above models will be gearing us to dividend policy related decisions and maximize investors (owners) returns.

## REFERENCE

1. Hakanson, Nils, H., "To Pay or Not to Pay Dividend," *Journal of Finance*, (May, 1982), PP. 415 - 28. 305
2. Harkavy, Oscar, "The Relations between Retained Earnings and Common Stock prices for larged listed Corporations," *Journal of Finance*, (September, 1953). PP. 283-97.
3. Harry, Deangelo, Linda, D., and Douglas, Skinner, "Dividends and Losses," *Journal of Finance*, (December, 1992).
4. Leary, M.T., & Michaely, R. (2011). Determinants of dividend smoothing: Empirical evidence. *Review of Financial Studies*, 24, pp.3197-3249
5. Skinner, D. J. (2008). The evolving relation between earnings, dividends, and stock repurchases. *Journal of Financial Economics*, 87, 582– 609
6. Bonaimé, A., Harford, J., & Moore, D. (2020). Payout policy trade-offs and the rise of 10b5-1 preset repurchase plans. *Management Science*, 66, 2762– 2786
7. Farre-Mensa, J., Michaely, R., & Schmalz, M. (2014). Payout policy. *Annual Review of Financial Economics*, 6, 75– 134
8. Fatemi, A., & Bildik, R. (2012). Yes, dividends are disappearing: Worldwide evidence. *Journal of Banking and Finance*, 36, 662– 777
9. Von Eije, H., & Megginson, W. L. (2008). Dividends and share repurchases in the European Union. *Journal of Financial Economics*, 89(2008), 347– 374
10. Fama, E. F., & French, K. R. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, 60, 3– 43
11. P.Govindasamy, E.Viswanathan, K.Gunaseakar, (2018). Price volatility of the gold commodity using technical analysis with reference to Rayalaseema Bullion Commtrade Pvt Ltd, Chennai City – An analytical Study. *International Journal of Mechanical and Production Engineering and Research and Development*, pp.423-440.[http://www.tjprc.org/download-conference\\_files.php?fname=9e3cfc48eccf81a0d57663e129aef3cb](http://www.tjprc.org/download-conference_files.php?fname=9e3cfc48eccf81a0d57663e129aef3cb)
12. Guay, W., & Harford, J. (2000). The cash-flow permanence and information content of dividend increases versus repurchases. *Journal of Financial Economics*, 57, 385– 415
13. Jagannathan, M., Stephens, C. P., & Weisbach, M. S. (2000). Financial flexibility and the choice between dividends and repurchases. *Journal of Financial Economics*, 57, 355– 384
14. Lie, E. (2000). Excess funds and agency problems: An empirical study of incremental cash disbursements. *Review of Financial Studies*, 13, 219– 248
15. Fenn, G., & Liang, N. (2001). Corporate payout policy and managerial stock incentives. *Journal of Financial Economics*, 60, 45– 72

16. Kahle, K. M. (2002). When a buyback isn't a buyback: Open market repurchases and employee options. *Journal of Financial Economics*, 63, 235– 261
17. Grullon, G., & Michaely, R. (2002). Dividends, share repurchases, and the substitution hypothesis. *Journal of Finance*, 57, 1649– 1684
18. Banyl, M. L., Dyl, E. A., & Kahle, K. M. (2008). Errors in estimating share repurchases. *Journal of Corporate Finance*, 14, 460– 474
19. Hoberg, G., & Prabhala, N. R. (2009). Disappearing dividends, catering and risk. *Review of Financial Studies*, 22, 79– 116
20. P.Govindasamy, E.Viswanathan, (2015). Study on Investors Attitude towards Mutual Fund with Special Reference to Sharekhan Ltd, Chennai. *HCTL Open International Journal of Technology Innovations and Research*, e-ISSN:2321-1814, pp.1-11. July-2015. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.695.5283&rep=rep1&type=pdf>
21. DeAngelo, H., DeAngelo, L., & Skinner, D. J. (1992). Dividends and losses. *Journal of Finance*, 47, 1837– 1863
22. David Michayluk, Karyn Neuhauser (2021), Scott Walker, “Capital Structure and Earnings quality in Microfinance institutions” *International Journal of Managerial Finance*, DOI: 10.1108/IJMF-10-2019-0387, (2021), pp.454
23. JIE HE, XUAN TIAN, HUAN YANG, “Asymmetric Cost Behavior and Dividend Policy”, *Journal of Accounting Research*, <https://doi.org/10.1111/1475-679X.12328>, pp. 989-1021