

A COMPARATIVE STUDY OF DETERMINANTS OF DIVIDEND POLICY OF INDIAN PUBLIC & PRIVATE SECTOR BANKS

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ABSTRACT: -In this research study, I compared the relationship between the dividend policy of Indian Public Sector Banks and the Indian private sector banks from the shareholder's point of view. The shareholders are free to invest in any sector. There is no legal or economical constrain on them to invest only in public sector banks. They are absolutely free to invest their money wherever they want. I examined whether it is beneficial for the shareholders to invest either in public sector banks or in the private sector banks. The analysis of my research study consists of 25 public sector banks and 11 private sector banks. So the total numbers of banks in my research study are 36 banks. My analysis of the research study consists on the data from the financial year 2002 – 2003 to financial year 2014 – 2015. I used the data of the first difference in my research study. To get the result of my data, I used descriptive statistics, correlation and panel data regression analysis. The evidence of my research study shows that in private sector banks there is more relationship between the shareholder's wealth and the dividend policy than in the public sector banks. By considering the 4 independent variables used in the research study, the adjusted R² value of private sector banks is more than the public banks with respect to the dependent variable, which shows the more relation between the shareholder's wealth and the dividend policy in private sector banks than the public sector banks.

KEY WORDS: Dividend policy, Dividend Payout Ratio, Return on Assets Ratio, Net Margin Ratio, Leverage Ratio, Public Sector Banks and Private sector banks.

INTRODUCTION:

Dividend policy still one of the most important financial policies not only for the perspective of the company, but also for the shareholders, the consumers, employees, regulatory bodies and the Government. According to Alii, K.L., Khan, A.Q. & Ramirez, G.G, 1993, it is like a center point of decision making process and rest off financial policies rotate around it. What percentage of dividend should be declared for distribution among shareholders of company? This question is based on an argument to the different companies. Specifically, all those factors which are affecting dividend distribution decision are a most important argument among the companies. To find out the correct answers for all those factors which affect the dividend distribution decision many academics and practitioners developed a number of theories, in support of dividend decision which were based on empirical test. Therefore to provide clear and accurate guidance the academic literature has been very helpful on practical issues and for the reason literature review sector is being carried out, which consist of valid and authentic books & journals concerning past studies on dividend policy.

DIVIDEND POLICY

Dividend Policy is one of the most complex aspects in finance. Three decades ago, Black (1976: 5) wrote, "The harder we look at the dividend picture, the more it seems like a puzzle, with pieces that just don't fit together". Brealey and Myers (2002) have enlisted dividend policy as one of the top ten puzzles in finance.

Dividend Policy is defined as "Dividend policy is the determination of the proportion of profits paid out to shareholders – usually periodically." (Arnold, 2005, P1010) and it's the board of the directors who set the dividend policy of the business (Brealey & Myers, 2003). It is also the part of the dividend policy of a corporation to decide whether to pay direct cash dividend to its shareholder and, if so then how much to pay and how often (i.e. monthly, quarterly, semiannually or annually) to pay or increase the shareholder's wealth by purchasing the shares from the market i.e by increasing the price of the shares in market (Canina, Advani, Greenman, & Palimeri, 2001). The common stock shareholder bears more risk than the bondholders as the bondholders receive fixed income irrespective of the operations and profits of the business and the common stockholder has no promised for any payments in future (Emery, D.Finnerty, & Stowe, 2007). "Shareholder's wealth is the discounted value of after-tax cash flows paid out be the firm. After-tax cash flows available for consumptions can be shown to be the same as the stream of dividends, Divt , paid to shareholders" (Copland, Weston, & Shastri, 2005, P.20) even with the fact that banking company are distributing dividend but there is few banking companies are growing practice of paying stock dividend in India. It is because stock dividend distributions are the good substitution of low cash dividends. It seems that firms want to keep going on good percentage of earnings and satisfaction of shareholders, they issue stock dividends. In present scenario officials of firms are strongly agree that stock dividends have a positive psychological impact on investors receiving them. Stock split is another feature of dividend policy. Practitioners are agreed on that the purpose of stock split is the way to bring firm's share price into an "Optimal trading range." Specifically, small investors of small means are presumably penalized by high stock prices that deny them the economies of buying stock in round lots. Thus, stock split is the popular practice of developed capital market. Share repurchase is another form of dividend.

THEORETICAL UNDERPINNINGS

In this study I used net earnings, net worth, earning per share, dividend per share, book value per share, dividend payout ratio, market price per share, earning ratio, dividend yield ratio as independent variables, and dividend payout ratio as dependent variable. In this context a rich literature review is part of this chapter.

Firm's financial policy is positively related with dividend policy, because dividend policy is part of financial policy. If there is slightly change in dividend policy it will significantly change in financial policy of firms. Many studies of the literature and models in relation to dividend policy reveals a range of different thoughts in effort to explain why firms are performing such changes—why some firms reducing dividends payment while others are omitting them. Studies which are previously been done, suggest a many diversified potential answers. For this purpose, the statistical techniques of regression analysis, simulations, and prediction tests were used. The study concluded that net income seems to provide a better measure of dividend than either cash flow or net income and depreciation included as separate variable in the model.

In order to find variables closely associates (positive or negative) with dividend trend in firms Smith and Watts (1992) found in their study that size of the firm has positive effect on dividend yield. Cash flow is another important determinant of dividend because it was related with net earnings Mahapatra and Sahu (1993). Mangers perceive current earnings as the most significant factor in determinant of dividend payment. It was the result of survey which is undertook by Bhat and Pandey (1994) Another study by Tuli and Mittal (2001) used 101 Indian firms and found price earnings ratio is significantly influenced by variability of market price and dividend payout ratio.

Gonzalez's (2003) found in his research theoretical model that liquidity position of stock market is negatively correlated with dividend payment.

Many researchers are also found that change in liabilities is positively associates with dividend payment but not significantly. Changes in total assets also positively associates with dividend payment but significantly. It means that firms who are performing well and potentially growing are in the position of paying dividend. Corporate earning and losses has positive and negative relationship with dividend payment .earning play an important role to pay dividend. It is main determinant of to pay dividend, while losses are responsible for reduction and omissions in dividend payment. De Anglo et al. (2004). Tunisian researchers found in their study on Tunisian firms that when panel data is considered profitability,

Amidu and Abor (2006) analyzed in their research study; this study assays the deciding factors of dividend payout ratios of listed companies in Ghana. The explanations are performed using data of during a six-year period derived from the financial statements of firms listed on the GSE. Ordinary Least Squares model is used to estimate the regression equation. key findings of the study were that there is a positive relationship between dividend payout and profitability, cash flow, and tax. The results recommend that, profitable firms tend to pay high dividend. A good liquidity position increases a firm's capacity to pay dividend. The results also show negative relations between dividend payout and risk, institutional shareholding, growth and market-to-book value. Firms experiencing earning volatility find it difficult to pay dividend, such firms would therefore pay less or no dividend.

Javed, Muhammad (2012) found in his study that increase in the earning per share reflect that the companies have a good amount for distribution as dividend among the shareholders. He test empirically in his research paper that dividend per share is positively impacted by dividend yield. If one unit change in dividend yield it will positively impact by 2.69 units in the dividend per share. The conclusion of their study is that the high debt ratio is the reason of low profitability which leads to decrease the dividend per share. Dividend yield and earnings per share is positively associated with the dividend per share. Kumaresan, Sinhuja (2014) According to her study, that there is a significant impact of dividend policy on shareholders' wealth. She found in her study that return on equity, dividend payout ratio, and dividend per share are positively correlated with shareholders wealth, But, retention ratio is negatively correlated. Gul Sajid, et al. (2012) examined in their study with shareholders wealth as dependent variable which is explained by market price per share while explanatory variable dividend policy is measured by dividend per share. They used in their study few more explanatory variables like Lagged Price earnings ratio, Retained Earnings and Lagged Market Value of equity. They found that the difference in average market value (AMV) comparative to book value of equity (BVE) is extremely significant between those companies who are dividend paying and non-paying companies. Retained earnings have insignificant influence on market value of shares. There is significant influence of dividend policy on wealth of shareholder's, as far as the dividend paying companies are concerned. Lagged Price earnings ratio did not appear to have any significant influence on dependent variable, whereas lagged market value of equity has a significant impact on market price per share

RESEARCH HYPOTHESES:

The hypothesis for my research study is to find

- The differences of the dividend policies of Indian Public Sector Banks and the Private Sector banks.
- Whether the dividend policies of the Indian Public Sector Banks are more attractive to the shareholders than the Private Sector banks?

RESEARCH METHODOLOGY

The primary aim of this study is to investigate the impact of EPS, BVPS, MVPS & DYR on DPR of Indian Public & Private sector banks and our study to examine the possible causes for any significant differences between the public sector banks and private sector banks. Our study focuses exclusively on 25 Indian public sector banks and 11 private sector banks. The data has been collected from companies annual reports. All banks data was available for a 13 years' period, covering the accounting period 2002 – 2003 to 2014 – 2015. Each individual i is observed in all time periods t . This is a so-called balanced panel.

EXPLANATORY VARIABLES

The efficiency ratios, namely EPS, BVPS, MVPS and DYR have been computed, using the formulas as follows:

Earnings per share (EPS) = (Profits after tax – Preference dividend)/Number of shares outstanding

Dividend payout ratio (DPR) = Dividend per share/Earnings per share

Return on Assets = (Net Income + Interest Expense, Net of Tax)/ Average Total Assets

CONTROL VARIABLES

In order to account for firm’s size and the other variables that may influence dividend so we use lnsize (the natural logarithm of size), NW (), ROA () and ER are included as control variables in the regressions.

REGRESSION ANALYSIS

To investigate the impact of EPS on dividend, the model used for the regressions analysis is expressed in the general form as given in *equation 1* and the variable *EPS* will be replaced in turn by the other explanatory variables: BVPS, MVPS and DYR.

$$DPR_{it} = f(NW, ROA, LNSIZE, ER, EPS) \quad \text{Equation (1)}$$

$$DPR_{it} = \beta_0 + \beta_1NW_{it} + \beta_2ROA_{it} + \beta_3LNSIZE_{it} + \beta_4ER_{it} + \beta_5EPS_{it} + u_{it} \quad \text{[model 1]}$$

$$DPR_{it} = \beta_0 + \beta_1NW_{it} + \beta_2ROA_{it} + \beta_3LNSIZE_{it} + \beta_4ER_{it} + \beta_5BVPS_{it} + u_{it} \quad \text{[model 1]}$$

$$DPR_{it} = \beta_0 + \beta_1NW_{it} + \beta_2ROA_{it} + \beta_3LNSIZE_{it} + \beta_4ER_{it} + \beta_5MVPS_{it} + u_{it} \quad \text{[model 1]}$$

$$DPR_{it} = \beta_0 + \beta_1NW_{it} + \beta_2ROA_{it} + \beta_3LNSIZE_{it} + \beta_4ER_{it} + \beta_5DYR_{it} + u_{it} \quad \text{[model 1]}$$

The model specifies above is estimated using the regression-based framework (Fixed Effects and Pooled OLS). Our model differs, first by using DPR as a comprehensive measure of dividend and the model includes NW, ROA, SIZE and ER as control variables. For processing of the data MS Excel, Gretl & R has been used at different places.

CORRELATION ANALYSIS (PRIVATE SECTOR BANKS)

Correlation matrix of all variables included in the analysis is presented in table 1 which is calculated based on data of 121 observations. The table shows that dividend payout ratio positively associated with Net worth, Book, Market value per share, and Return on Assets and dividend payout ratio is negatively associated with Earnings per share, Size, Retained earnings, and Dividend yield ratio. Consolidated result in Table 1 suggest that there is a low degree of positive correlation between Net worth and Earning per share, Book value per share, Dividend per share, Market value per share, Size and Return on assets are 0.1896, 0.3443, 0.1834, 0.5867, 0.6405 and 0.3435 respectively. Net worth is negatively correlated at low level with Earning retained and Dividend yield ratio by -0.2374 and -0.1740 respectively. Earning per share is negatively correlated with Earning retained by -0.2374 and it is positively correlated at low level with Market value per share, Dividend yield ratio and Size by 0.1762, 0.2267 and 0.0393 respectively. Earning per share and Dividend payout ratio is (-0.0285), Earning per share and earning retained is (-0.1493), Book value per share and Dividend payout ratio is (0.0687), Book value per share and Earning retained is (-0.2057), Book value per share and Market value per share is (0.2599), Book value per share and dividend yield ratio is (0.1589), Book value per share and Size is (0.1115), Earning retained and Market value per share is (-0.2479), Earning retained and dividend yield ratio is (-0.0228), Earning retained and Size is (-0.0615), Earning retained and Return on assets is (-0.2043), Market value per share and Dividend yield ratio is (-0.2691), Market value per share and Size is (0.6356), Market value per share and Return on assets is (0.2596), Dividend yield ratio and Size is (-0.5654), Dividend yield ratio and Return on assets is (0.1582), Size and Return on assets is (0.1118).

Table 1: Pearson Correlation (Private Sector Banks)

	NW	EPS	BVPS	DPR	ER	MVPS	DYR	Lnsiz	ROA
NW	1	0.100315	0.299588	0.038094	0.009497	0.220868	-0.06509	0.338197	0.193517
EPS		1	0.911954	-0.02709	0.059789	0.224359	-0.03555	-0.18357	0.941178
BVPS			1	-0.01112	0.067139	0.300281	-0.04285	-0.1255	0.955232
DPR				1	-0.03907	0.253135	-0.01194	0.122347	0.004042
ER					1	-0.19929	0.040262	-0.02624	0.060751
MVPS						1	-0.13397	0.360588	0.310633
DYR							1	-0.32344	-0.05048
Lnsiz								1	-0.13907
ROA									1

	W	PS	E	B	D	E	M	D	L	R
	W	PS	E	B	D	E	M	D	L	R
			0	0	0	-	0	-	0	0
W		.189609	.344321	.183407	0.23747	.586722	0.17409	.640525	.343531	
PS			1	.941339	0.02859	0.14932	.176202	.226732	.039346	.941119
E					0	-	0	0	0	0
B						1	.068722	0.20573	.259932	.158936
D								1	.111518	.99995
E										1
M										
D										
L										
R										

PR	1	0.80967	.172074	0.04906	1.4E-05	.06889
R		1	0.24795	0.02289	0.06151	0.20438
VPS			1	0.26919	.635649	.259645
YR				1	0.56543	.158248
nsale					1	.11185
OA						1

Table 2: Pearson Correlation (Public Sector Banks)

Table 2 shows the correlation of Indian Public sector banks. Result shows that low degree of correlation between Net worth and Earning per share is (0.1003), Net worth and Book value per share is (0.2995), Net worth and Earning retained is (0.0094), Net worth and Market value per share is (0.2208), Net worth and Dividend yield ratio is (-0.0650), Net worth and Size is (0.3381), Net worth and Return on assets is (0.1935), Earning per share and Earning retained is (0.0597), Earning per share and Market value per share is (0.2243), Earning per share and Dividend yield ratio is (-0.0355), Earning per share and Size is (0.3381), Earning per share and Return on assets is (0.1935), Book value per share and Earning retained is (0.0671), Book value per share and Market value per share is (0.3002), Book value per share and Dividend yield ratio is (-0.0428), Book value per share and Size is (-0.1255), Earning retained and Market value per share is (-0.1992), Earning retained and dividend yield ratio is (0.0402), Earning retained and Size is (-0.0262), Earning retained and Return on assets is (0.0607), Market value per share and Dividend yield ratio is (-0.1339), Market value per share and Size is (0.3605), Market value per share and Return on assets is (0.3106), Dividend yield ratio and Size is (-0.3234), Dividend yield ratio and Return on assets is (-0.0504), Size and Return on assets is (-0.1390).

	W	PS	E VPS	B PR	D R	E VPS	M YR	D nsale	L OA	R
W	1	.106349	.290523	.041926	0.03153	.358928	0.05865	.432896	.203086	0
PS		1	.914232	0.02471	.033055	.148799	0.0261	0.08683	.94144	0
VPS			1	0.00703	.03585	.211587	0.03433	0.03959	.958109	0
PR				1	0.06667	.158328	0.00977	.082169	.008177	0
R					1	0.14954	.027265	0.05747	.027059	0
VPS						1	0.10158	.463564	.211724	0
YR							1	0.19698	0.03946	0
SIZE								1	0.04204	0
OA									1	0

Table 3: Pearson Correlation (Indian Banking Sector)

The result suggest that there is a low degree of correlation between Net worth and Earning per share is (0.106), Net worth and Book value per share is (0.290), Net worth and Dividend payout ratio is (0.041), Net worth and Earning per share is (0.031), Net worth and Dividend yield ratio is (-0.058), Net worth and Return on assets is (0.203), Earning per share and Dividend payout ratio is (-0.024), Earning per share and Retained earnings is (0.033), Earning per share and Dividend yield ratio is (-0.026), Earning per share and Size is (-0.086), Book value per share and Dividend payout ratio is (-0.007), Book value per share and Retained earnings is (0.035), Book value per share and Size is (-0.039). Dividend payout ratio and Retained earnings is (-0.0666), Dividend payout ratio and Market value per share (0.1583), Dividend payout ratio and Dividend yield ratio is (-0.0097), Dividend payout ratio and Size is (0.0821), Dividend yield ratio and Return on assets is (0.0081)

However, care must be exercised while interpreting the Pearson Correlation coefficients because they cannot provide a reliable indicator of association in a manner which controls for additional explanatory variables. Examining simple bivariate correlation in a conventional matrix does not take account of each variable's correlation with *all* other explanatory variables. Our main analysis will be derived from appropriate multivariate models, estimated using fixed effects framework.

REGRESSION ANALYSIS

Table 4 gives the results of Indian Private Banking Sector (regressions 1 to 4), Indian Public Sector Banks (regression 5 to 8) and Indian Banking Sector (regressions 9 to 12).

A classical test for panel data is one of fixed effects model (FEM) versus Random Effects Model (REM). In the REM, it is assumed that there is a single common intercept term, but that the intercepts for individual firms vary from this common intercept in a random manner. To determine which of these estimators are more appropriate to use, both a fixed effects and a random effects estimator was used to estimate the coefficients in models 1 to 12. The Hausman test, which is a test for the null hypothesis of no correlation, rejects this null hypothesis and so the decision is taken to employ a fixed effects framework.

The first part of Table 1 represents the results of Indian Private Banking Sector (regression 1 to 4), applying a fixed effects methodology, where the intercept term is allowed to vary across firms except regression 1. It is immediately obvious from the R-squared values that the use of a firm specific intercept improves the explanatory power of these models. In Indian Banking Sector (Regression 9), the R-squared explain 55.88% of the variation in dividend payout of Indian Private sector Banks explanatory power increases to 89.80%.

While the coefficient of Earnings per share variable is negative in regression 1, it has the expected sign in the regression 5 and 9, but the coefficient is significantly different from zero. The coefficients of the other variables included in the model are significant, except for Net Worth and Size. The Banks dividend as measured by dividend payout ratio increases with firms' size, dividend efficiency. Indian Banks to the traditional theory of dividend, where a conservative policy is expected to sacrifice the dividend. But, however, the results are significantly different from zero (p-values ranges from 0.02 to 0.05). This is a commonly observed that Indian private sector banks are more focused on dividend policies in the comparison Indian public sector banks

In regression 2, 6 and 10, a highly significant relation is found between Book Value Per Share and dividend payout (p-value = 0.02), and it is negatively associated, which implies that an decrease in the amount of dividend by 1 Rs 1 is associated with a increase in dividend by 28%, 0.63% and 0.59% respectively. The coefficient for market value per share is positive in regression 3 and 11 but the negative correlation in regression 7 between dividend payout and the market value per share. In regression 3 and 7, are not significant relation is found between Market Value Per Share and dividend payout, In regression 11, a significant relation is found between Market Value Per Share and dividend payout (p-value = 0.02), and it is positively associated, which implies that. The coefficient for market value per share is positive in regression 3 and 11 but the negative correlation in regression 7 between dividend payout and the market value per share. In regression 8 and 12, are not significant relation is found between dividend yield and dividend payout, In regression 4, a significant relation is found between dividend yield and dividend payout (p-value = 0.02),

It is interesting to note that the adjusted R^2 s of the Indian public sector banks regressions is lower than the R^2 s Indian private sector banks regressions. Thus the regression models explain a much higher proportion of the variations in dividend payout *within* private sector banks and public sector banks.

CONCLUSION

From the results of the research, it is clear that the dividend payout ratio of the private sector banks have more impact on shareholder's wealth than in the indian banks. So from the shareholder's point of view while investing in public sector banks, it is compulsory for the shareholders to deeply observe the trend of the dividend payout ratio of public sector banks.

As we discussed that the shareholder's wealth is also. From the shareholder's point of view, it is important to consider the net margin in depth while investing in public sector banks because in public sector banks there is more regression between the shareholder's wealth and the net margin than in the Private sector banks. In the end, the multiple regression equation of public sector banks has more value of adjusted R^2 than the private sector banks. So by considering these four uncontrolled independent variables this multiple regression equation shows that there is more relationship between the dividend policy and the shareholder's wealth in public sector banks than the private sector banks.

Table 4: Panel Data Regression of Indian Banking Sector

Variable	Fixed effect modal table											
	Indian Private Sector Banks				Indian Public Sector Banks				Indian Banking Sector			
	1	2	3	4	5	6	7	8	9	10	11	12
const.	88.1308 (0.000***)	90.7280 (0.000***)	90.7799 (0.000***)	93.9111 (0.000***)	14.6140 (0.056*)	26.4710 (0.000***)	17.6103 (0.016**)	15.1035 (0.061*)	18.7847 (0.000***)	25.1720 (0.000***)	26.6855 (0.000***)	22.7228 (0.000***)
NW	-0.0000314 (0.805)	0.0000098 (0.432)	0.00000814 (0.578)	0.0000021 (0.161)	-0.000077 (0.000***)	-0.0000121 (0.653)	-0.0000187 (0.252)	-0.00006241 (0.000***)	-0.0000643 (0.000***)	-0.0000104 (0.960)	-0.0000153 (0.186)	-0.0000311 (0.045**)
ROA	0.00653 (0.005***)	0.28117 (0.027**)	-0.001309 (0.103)	-0.00106 (0.158)	0.003296 (0.185)	0.003925 (0.079*)	0.00033 (0.780)	-0.00107 (0.146)	0.009126 (0.005***)	0.0042517 (0.044**)	-0.000409 (0.580)	-0.0006586 (0.244)
SIZE	-0.09634 (0.311)	-0.133408 (0.163)	-0.16095 (0.162)	-0.2914 (0.024**)	0.597369 (0.053*)	0.09537 (0.773)	0.38201 (0.207)	0.61371 (0.058)	0.763690 (0.000***)	0.526073 (0.000***)	0.278295 (0.072*)	0.672769 (0.000***)
ER	-0.81495 (0.000***)	-0.840707 (0.000***)	-0.83105 (0.000***)	-0.83041 (0.000***)	-0.095928 (0.000***)	-0.10079 (0.000***)	-0.08605 (0.000***)	-0.10925 (0.000***)	-0.20142 (0.000***)	-0.212161 (0.000***)	-0.169141 (0.000***)	-0.224237 (0.000***)
EPS	-0.04739 (0.000***)				-0.026302 (0.056*)				-0.05717 (0.000***)			
BVPS		-0.282046 (0.026**)				-0.006396 (0.000***)				-0.0059812 (0.000***)		
MVPS			0.000298 (0.569)				-0.000476 (0.931)				0.0049142 (0.034**)	
DYR				-2.1194 (0.053**)				0.009013 (0.928)				0.0173993 (0.641)
R ²	0.898	0.8845	0.8761	0.88025	0.33	0.35	0.28	0.26	0.5588	0.5041	0.4215	0.4992

REFERENCES

1. Adaoglu, C. (2000), 'Instability in the Dividend Policy of the Istanbul Stock Exchange (ISE) Corporations: Evidence from an Emerging Market', *Emerging Markets Review*, 1,252–70.
2. Aivazian, V., L. Booth, and S. Cleary (2003), 'Do Emerging Market Firms Follow Different Dividend Policies from U.S. Firms?', *Journal of Financial Research*, 26, 371–87.
3. Allen, F., and R. Michaely (2003), Payout Policy, in G. M. Constantinides, M. Harris and R. M. Stulz (eds), *Handbook of the Economics of Finance*, Chapter 7, 1st edn. Vol.1, Amsterdam: Elsevier, pp. 337–429.
4. Arellano, M., and S. Bond (1991), 'Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations', *Review of Economic Studies*, 58, 277–97.
5. Baker, H.K., E.T. Veit and G.E. Powell (2001), "Factors Influencing Dividend Policy Decisions of Nasdaq Firms", *The Financial Review*, V. 36, No. 3, pp. 19-38.
6. Baker, H.K., G.E. Powell, and E.T. Veit (2002), "Revising the Dividend Puzzle Do all the Pieces Now Fit?", *Review of Financial Economics*.
7. Benartzi, S., R. Michaely, and R. Thaler (1997), "Do Changes in Dividends Signal the Future or the Past?", *Journal of Finance*, Vol. 52, No. 3, July, pp. 1007-1034.
8. Bernstein, P.L. (1998), "The Hidden Risks in Low Payouts", *The Journal of Portfolio Management*, Vol. 25, No.1, Fall, p. 1.
9. Bhat, R. and I.M. Pandey (1994), "Dividend Decision: A Study of Managers' Perceptions", *Decision*, Vol. 21, No.s 1 & 2, January-June 1994.
10. Bhattacharya, S. (1979), "Imperfect Information, Dividend Policy, and 'the bird in the hand' Fallacy", *Bell Journal of Economics*, Vol. 10, No.1, Spring, pp. 259-270.
11. Black, F. (1976), "The Dividend Puzzle", *Journal of Portfolio Management*, Vol. 2, No. 2, Winter, pp. 5-8.
12. Brealey, R.A. (1994), "Does Dividend Policy Matter?" in Stern, J.M. and D.H. Chew (eds.), *Revolution in Corporate Finance*, 2nd edition, Blackwell Publishers Inc., Cambridge, Massachusetts.
13. De Angelo, H. L. DeAngelo and D.J. Skinner (1992), "Dividends and Losses", *Journal of Finance*, Vol. 47, No. 5, December, pp. 1837–1863.
14. Dewenter, K. L., and V. A. Warther (1998), 'Dividends, Asymmetric Information, and Agency Conflicts: Evidence from a Comparison of the Dividend Policies of Japanese and U.S. Firms', *Journal of Finance*, 53, 879–904.
15. Fama, E.F. and K.R. French (2001), "Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?", *Journal of Applied Corporate Finance*, Vol. 14, No. 1, Spring, pp. 67-79.
16. Glen, J.D., Y. Karmokolias, R.R. Miller, and S. Shah, "Dividend Policy and Behavior in Emerging Markets", Discussion Paper No. 26, International Finance Corporation, 1995.
17. Healey, P.M. and K.G. Palepu (1988), "Earnings Information Conveyed by Dividend Initiations and Omissions", *Journal of Financial Economics*, Vol. 21, No. 2, September, pp. 149-175.
18. Jensen, M.C. and W.H. Meckling (1976), "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of Financial Economics*, Vol. 3, No. 4 October, pp. 305-360.
19. John, K. and J. Williams (1985), "Dividends, Dilution, and Taxes: A Signaling Equilibrium", *Journal of Finance*, Vol. 40, No. 4, pp. 1053-1070.
20. Kalay, A. (1982), "Stockholder-Bondholder Conflict and Dividend Constraints", *Journal of Financial Economics*, Vol. 10, No. 2, pp. 211-233.
21. Kevin, S. (1992), "Dividend Policy: an Analysis of Some Determinants", *Finance India*, Vol. VI, No. 2, June, pp. 253-259.
22. Lee, H.W. and P.A. Ryan (2002), "Dividends and Earnings Revisited: Cause or Effect?", *American Business Review*, January, Vol. 20, No.1, January, pp. 117 – 122.
23. Lintner, J. (1956), "Distribution of Incomes Corporations Among Dividends, Retained Earnings and Taxes", *American Economic Review*, Vol. 46, No.2, May, pp. 97-113.
24. Mahapatra, R.P. and P.K. Sahu (1993), "A Note on Determinants of Corporate Dividend Behaviour in India – An Econometric Analysis", *Decision*, Vol. 20, No. 1, January-March, pp. 1-22.
25. Mishra, C. and V. Narender (1996), "Dividend Policies of SoEs in India – An Analysis", *Finance India*, Vol. X, No. 3, September, pp. 633-645.
26. Miller, M.H. and F. Modigliani (1961), "Dividend Policy, Growth and the Valuation of Shares", *Journal of Business*, Vol. 34, No. 4, October, pp. 411-433.
27. Nissim, D., and A. Ziv (2001), 'Dividend Changes and Future Profitability', *Journal of Finance*, 56, 2111–33.
28. Petit, R. (1972), 'Dividend Announcements, Security Performance, and Capital Market Efficiency', *Journal of Finance*, 27, 993–1007.
29. Rajan, R., and L. Zingales (1995), 'What do we Know About Capital Structure? Some Evidence from International Data', *Journal of Finance*, 50, 1421–60.
30. Rozeff, M. S. (1982), 'Growth, Beta, and Agency Costs as Determinants of Dividend Payout Ratios', *Journal of Financial Research*, 5, 249–59.
31. Sargan, J. D. (1958), 'The Estimation of Economic Relationship Using Instrumental Variables', *Econometrica*, 26, 393–415.
32. Smith, C. W., and R. L. Watts (1992), 'The Investment Opportunity Set and Corporate Financing, Dividends, and Compensation Policies', *Journal of Financial Economics*, 32, 263–92.

33. Stulz, R. M. (1990), 'Managerial Discretion and Optimal Capital Structure', *Journal of Financial Economics*, 26, 3–28.
34. Travlos, N., L. Trigeorgis, and N. Vafeas (2001), 'Shareholder Wealth Effects of Dividend Policy Changes in an Emerging Stock Market: The Case of Cyprus', *Multinational Finance Journal*, 5, 87–112.
35. White, H. (1980), 'A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity', *Econometrica*, 48, 817–38.

