Policy Journal of Social Science Review

Online ISSN 3006-4635

Print ISSN 3006-4627

Vol. 3 No. 10 (2025)

EMPIRICAL ANALYSIS OF FINANCIAL FACTORS INFLUENCING DIVIDEND DECISIONS: EVIDENCE FROM THE CHEMICAL INDUSTRY IN PAKISTAN

[1]Saira Mehmood
[2]Zohaib Ali
[3]Dr. Azmat Ali Shah
[1]*Assistant Controller Examination, Iqra National University, Peshawar, KP.*
[2]*Lecturer, Iqra National University, Peshawar, KP.*
[3]*Assistant Professor, Iqra National University, Peshawar, KP*
[1]saira.mehmood@inu.edu.pk, [2]Zohaib.ali@inu.edu.pk, [3]Azmat.ali.shah@inu.edu.pk

Abstract

This study aims to empirically investigate the key financial factors that influence the dividend payout decisions of firms within the chemical industry of Pakistan. Specifically, it examines the impact of profitability, cash flow, sales growth, debt to equity, and corporate tax on dividend policy. The study employs a quantitative approach, utilizing panel data for a sample of 20 firms listed in the chemical sector of the Pakistan Stock Exchange over a five-year period from 2007 to 2011. Data was collected from the State Bank of Pakistan. A panel regression model was used to analyze the relationship between the dependent variable (dividend payout) and the selected independent variables. The regression analysis reveals that profitability has a statistically significant and positive relationship with the dividend payout, indicating that more profitable firms tend to distribute higher dividends. Conversely, cash flow was found to have a significant negative relationship with dividend payout. The results for sales growth, corporate tax, and debt to equity were statistically insignificant in explaining the variance in dividend payout policies for the sampled firms.

Key Words: Dividend Policy, Dividend Payout, Corporate Finance, Chemical Industry.

Article Details:

Received on 02 Sept 2025
Accepted on 01 Oct 2025
Published on 02 Oct 2025

Corresponding Authors*:

Policy Journal of Social Science Review

Online ISSN 3006-4635

Print ISSN 3006-4627

Vol. 3 No. 10 (2025)

INTRODUCTION

The strategic decision regarding dividend payout is one of the most persistent and debated topics in corporate finance. Often referred to as "The Dividend Puzzle" (Black, 1976), the choice of how much profit to distribute to shareholders versus how much to retain for internal investment is a critical managerial function. This decision has significant implications for a firm's financial planning, investment capacity, share price, and overall market value. When a corporation generates profit, it faces the fundamental choice of allocating those earnings, a decision that directly impacts both shareholder wealth and the company's future growth trajectory (Khan et al., 2016). Despite decades of extensive academic inquiry, a universal consensus on the definitive factors influencing dividend policy and its subsequent effect on firm performance remains elusive.

The theoretical landscape of dividend policy is shaped by several competing theories. The dividend irrelevance theory, famously proposed by Miller and Modigliani (1961), posits that a firm's value is determined by its earning power and investment decisions, not by its dividend policy. In direct contrast, the "bird-in-hand" theory argues that investors prefer the certainty of immediate dividend payments over the potential for future capital gains, thus placing a premium on dividend-paying stocks (Gordon, 1963). Other prominent theories include the signaling theory, which views dividend announcements as signals of a firm's future prospects (Asquith & Mullins, 1983), and the agency cost theory, which suggests dividends can mitigate conflicts of interest between managers and shareholders by reducing the free cash flow available for discretionary spending (Jensen & Meckling, 1976).

While these theories provide a foundational framework, empirical research highlights that the determinants of dividend policy are often context-specific, varying across different markets and industries. Studies in Pakistan, for example, have shown that dividend policies can exhibit unique characteristics compared to global markets (Khan et al., 2016). Factors such as profitability, firm size, growth opportunities, leverage, and liquidity are consistently cited as influential, yet their precise impact can differ. The chemical industry represents a vital component of Pakistan's economy, but the specific financial dynamics driving its dividend decisions require more focused investigation.

Therefore, this study aims to conduct an empirical analysis of the key financial factors influencing dividend payout decisions specifically within the chemical industry of Pakistan. The primary objective is to clarify the relationship between dividend policy and a set of critical firm-specific variables. This research will specifically seek to:

- Investigate the relationship between cash flow and dividend payout.
- Examine the effect of sales growth on dividend payout.
- Determine the influence of profitability on dividend decisions.
- Analyze the relationship between the debt-to-equity ratio and dividend payout.
- Assess the impact of corporate taxation on dividend payout policies.

By focusing on the chemical sector in Pakistan, this study contributes to the broader corporate finance literature by providing targeted evidence from a key emerging market. The findings are intended to offer valuable insights for corporate managers in their strategic financial planning, for investors in making informed decisions, and for policymakers in understanding the corporate landscape.

LITERATURE REVIEW

The strategic decision regarding dividend payout is considered one of the most persistent and debated topics in corporate finance. It involves determining the proportion of net

Policy Journal of Social Science Review
Online ISSN Print ISSN
3006-4635 3006-4627
Vol. 3 No. 10 (2025)

earnings to be distributed to shareholders versus retained for future investment. When a corporation earns profits, it must decide how much to distribute as dividends and how much to retain to support internal operations and future growth (Khan et al., 2016). This managerial decision holds significant importance as it affects planning funds, investment methods, share prices, and the company's overall worth. The debate surrounding dividend policy is frequently summarized by the term "The Dividend Puzzle" (Black, 1976). Despite extensive research carried out over decades, a general consensus on the relationship between dividend policy and firm performance remains elusive.

MAJOR DIVIDEND THEORIES

Several key theories attempt to explain the determination and impact of dividend policies:

Dividend Irrelevance Theory: Introduced by Miller and Modigliani (1961), this theory posits that the market value of a firm is determined entirely by its earnings potential and investment decisions, regardless of its dividend distribution strategy.

The Bird-in-Hand Theory (Relevance): Contrasting the irrelevance theory, Gordon (1963) proposed that investors prefer immediate, certain dividends over the uncertainty of future capital gains, thus favoring dividend-paying firms.

Signaling Theory: Since financial managers possess internal information unavailable to external stakeholders, dividend announcements are viewed as a signal of the company's future financial prospects (Asquith & Mullins, 1983). An increase in dividends often signals positive future performance and profitability.

Agency Cost Theory: Dividend payments are viewed as a means for managers (agents) to minimize the conflict of interest with shareholders (principals) (Jensen & Meckling, 1976; Jensen, 1986). By distributing profits as dividends rather than retaining them, managers restrict the availability of free cash flow, thus mitigating the potential for managerial overinvestment.

Residual Dividend Theory: This suggests that firms should prioritize profitable investment opportunities first, funding them with retained earnings, and only distribute the residual earnings to shareholders as dividends. This implies that if a firm has strong growth opportunities, its dividend payouts will be lower (Ahmad & Javid, 2009).

Empirical Determinants of Dividend Payout

Global and regional studies highlight various factors (determinants) influencing dividend policy, often categorized as firm-specific (internal) variables. These determinants include profitability, size, growth opportunities, liquidity, and leverage.

PROFITABILITY

Profitability is repeatedly cited as a primary determinant of dividend policy, typically demonstrating a positive association with the dividend payout ratio. Highly profitable companies are generally more inclined to distribute higher dividends (Amidu & Abor, 2006; Jabbouri, 2016; Pattiruhu & Paais, 2020). Profitability is frequently measured using metrics such as Return on Equity (ROE) or Earnings Per Share (EPS). For instance, a systematic review covering manufacturing companies found that profitability often shows a significant positive correlation with the dividend payout ratio. However, some studies indicate that higher earnings might sometimes negatively impact dividend payments (Arif & Akbar, 2013).

LEVERAGE AND LIQUIDITY LEVERAGE

It is also known as the debt-to-equity ratio. This ratio exposes companies to financial risk, as debt obligations and interest payments reduce the residual income available for shareholders. Consequently, high leverage often demonstrates a significant negative

Policy Journal of Social Science Review
Online ISSN 3006-4635
Print ISSN 3006-4627
Vol. 3 No. 10 (2025)

relationship with the dividend payout amount (Pattiruhu & Paais, 2020; Tahir et al., 2020). Some studies, however, report an insignificant relationship between leverage and dividend payout ratios.

LIQUIDITY

It reflects a firm's ability to fulfill short-term obligations and is essential for cash distributions. Higher liquidity, generally proxied by the current ratio or cash flow, is often found to have a positive association with dividend payout ratios (Amidu & Abor, 2006).

GROWTH OPPORTUNITIES

When Growth opportunities are available to a firm play a critical role in dividend decisions. According to the residual dividend policy framework, firms with abundant growth or investment opportunities tend to retain more earnings, leading to a negative relationship between growth opportunities and dividend payout ratio (Arif & Akbar, 2013).

FIRM SIZE

It is often measured by the log of total assets. it is frequently cited as a key determinant. Larger firms are generally more established, have easier access to capital markets, and tend to pay higher, more consistent dividends compared to smaller firms.

OTHER DETERMINANTS

Other factors identified include Lagged Dividend (reflecting dividend smoothing behavior, positively associated with current payouts), Business Risk (negatively associated, as earnings volatility reduces certainty of future returns), Corporate Tax (found to have a positive association in some Pakistani studies, as higher corporate tax rates incentivize higher dividend payouts), and Retained Earnings (which typically exhibits a negative correlation with dividend payout, as earnings retained reduce funds available for distribution).

Determinants of Dividend Payout in the Context of Pakistan and the Chemical Sector

The dividend policies adopted in the Pakistani stock market often exhibit unique behaviors compared to global markets, even differing significantly across various industrial levels (Khan et al., 2016).

Empirical research in Pakistan consistently identifies profitability, firm size, and investment opportunities as crucial drivers of dividend policy across non-financial firms (Arif & Akbar, 2013; Chohan et al., 2019; Khan et al., 2017; Yousaf et al., 2019). Research focusing on the factors influencing dividend policy specifically found that profitability and corporate tax show a significant positive relationship, while investment opportunities and firm size exhibit a significant negative relationship (Chohan et al., 2019). Earlier research on Pakistan's non-financial firms also suggested that most firms base their payouts on current or past profits (Ahmed & Javid, 2009).

CHEMICAL SECTOR

Studies concentrating on the Chemical sector, or the broader manufacturing and non-financial corporate sectors in Pakistan, provide specific insights relevant to the determinants of dividend payout.

A study investigating the determinants of dividend policy in the chemical sector of Pakistan (2007-2011) found that both **profitability** and **cash flows** were positively and statistically significantly related to dividend payout. Another study examining the relationship between dividend policy and market price in the chemical sector (2013-2022) found that profitability measures (ROE and EPS) were significant explanatory factors (Bhatti et al., 2023).

Policy Journal of Social Science Review
Online ISSN 3006-4635
Print ISSN 3006-4627
Vol. 3 No. 10 (2025)

Research across the chemical, oil, and gas sectors (2011–2015) in Pakistan utilized Dividend Per Share (DPS), Retained Earnings Per Share (REPS), Lagged Price-Earnings Ratio (LPER), and Return on Equity (ROE) as determinants impacting Market Price per Share (MPS). The findings suggested a strong **positive and significant association** between the dividend policy and shareholder wealth, with DPS, REPS, LPER, and ROE all significantly related to MPS.

A study comparing the chemical and pharmaceutical industries in Pakistan found that while Dividend Per Share (DPS) and ROE significantly influenced stock prices, EPS and PAT did not show a significant impact (Khan, 2012). Conversely, Bhatti et al. (2023) found EPS, ROE, Dividend Yield, and Retention Ratio to be significant proxies of dividend policy in the chemical sector, while Profit After Tax (PAT) was insignificant.

Determinants such as firm size, leverage, and growth influence the dividend payout relationship, often aligning with major theories like agency cost, pecking order, and signaling theory in sectors like chemical manufacturing.

In conclusion, empirical literature confirms that dividend policy remains a critical decision in Pakistan's corporate finance landscape. For the chemical sector specifically, profitability and measures of dividend distribution are crucial determinants, strongly affecting market perception and shareholder wealth, aligning broadly with the relevance and signaling theories of dividends.

HYPOTHESIS

H1: There is a positive relationship between the dividend payout and cash flow.
H2: There is a positive relationship between the dividend payout and profitability.
H3: There is a positive relationship between the dividend payout and Debt to equity.
H4: There is a positive relationship between the dividend payout and sales growth.
H5: There is a positive relationship between the dividend payout and corporate tax.

METHODOLOGY

For the study the sample of 20 chemical sector firms from the period of 2007-2011 has been taken into the consideration. The data has been collected from State Bank of Pakistan. The dependent variable of the study is Dividend payout and independent variables are. Profitability, cash flows, sales growth, corporate tax and debt to equity.

INDEPENDENT VARIABLES

There are many independent variables which identified the firm dividend payout policy but in this study five variables are used which are profitability, cash flows, sales growth, corporate tax and debt to equity.

TABLE 1: ***VARIABLES AND THEIR MEASURES***

Variables	Measures
Dividend payout	Yearly dividend/Net income
Cash flows	Cash flow from operations
Profitability	Net profit before tax/total sale
Sales growth	current sales-previous sales/previous sales
Corporate tax	corporate tax/ net profit before tax
Debt to equity	Liabilities/Owner's equity

DATA AND PROCEDURES

For the analysis of data panel regression was used. Panel data refers to the multidimensional data. Panel data contains observations on multiple phenomena observed over multiple time periods for the same firms or individuals.

Policy Journal of Social Science Review

Online ISSN 3006-4635

Print ISSN 3006-4627

Vol. 3 No. 10 (2025)

MODEL

$$DP=\beta_0+\beta_1 SG_{it}+\beta_2 T_{it}+\beta_3 CF_{it}+\beta_4 D/E_{it}+\beta_5 ROA_{it}+\mu_{it}$$

In the above equation

β_0 is the term for intercept (constant),

β_1, β_2, β_3, β_4, β_5 = the slope of coefficients,

μit= error term,

i=cross sectional

t=time period

SG= Sales growth

T= Tax

CF= Cash flow

D/E= Debt to equity

ROA= Profitability

RESULTS AND ANALYSIS

Panel regression method is used in this study in which first find out the descriptive statistics in which the mean and standard deviation. And secondly find out the correlation between dependent and independent variables. Also find out positive or negative coefficient relation and it's significant or insignificant statistically

TABLE 2: ***CORRELATION COEFFICIENTS OF THE DEPENDENT AND INDEPENDENT VARIABLES***

	Dividend payout	**Sales growth**	**Corporate tax**	**Cash flows**	**Debt to equity**	**ROA**
Dividend payout	1.000					
Sales growth	-.015	1.000				
Corporate tax	.039	.002	1.000			
Cash flows	-.099	.018	.048	1.000		
Debt to equity	-.021	.033	.073	.421	1.000	
ROA	.240	.175	.167	.280	-.174	1.000

Table 2 shows the summary of correlation coefficient between the payout ratio and the five independent variables. The sign indicates the relationship between the variables. Positive sign indicate the positive relationship and negative sign shows the negative relationship between the variables.

The correlation table indicates that dividend payout is negatively related with sales growth. If we increase the dependent variable dividend payout by 1% there will be the 0.015 decrease in sales, dividend payout is positively related with the corporate tax if we change the dependent variable i.e. dividend payout by 1 there will 0.039 increase in corporate tax. There is negative relationship between the dividend payout and cash flows. If we change dividend payout by 1 cash flows decrease by 0.099. The correlation table also indicates that dividend payout is negatively related with debt to equity, if we change the dividend payout by 1 debt to equity decrease by 0.021. Furthermore, dividend payout is positively related with profitability if we change the dependent variable by 1 profitability (ROA) increase by 0.240.

Correlation table indicate that there is a positive relationship between sales growth and corporate tax, cash flows, debt to equity and profitability. If we change the sales growth by 1 corporate tax increase by 0.002, cash flow increase by 0.018,debt to equity increase by 0.033 and profitability increase by 0.175. Corporate tax is positively related with cash flows,

Policy Journal of Social Science Review

Online ISSN 3006-4635

Print ISSN 3006-4627

Vol. 3 No. 10 (2025)

debt to equity and profitability. If we change corporate tax by 1 cash flows increase by 0.048, debt to equity increase by 0.073 and profitability increase by 0.167.

There is a positive relationship between cash flows and debt to equity ratio and profitability. If we change cash flow by 1 debt to equity will increase by 0.421 and profitability increase by 0.280. Debt to equity is negatively related with the profitability (ROA) if we change the debt to equity by 1 profitability decrease by 1.74.

TABLE 3: ***COEFFICIENT***

	Coefficient	**Standard error**	**t-Statistic**	**Sig (P value)**
Sales growth	-.378	.484	-.780	.437
Corporate tax	-.178	.912	-.195	.846
Cash flows	-2.281	.000	-2.231	.028
Debt to equity	.943	.697	1.352	.180
ROA	.137	.043	3.192	.002
R-Squared				.109
Adjusted R-squared				.061
F-Statistic				2.296
Sig				.051

The result in above table shows that 10.9 percent (R-square= .109) variance in the value of dividend payout can be explained by five independent variables. 10.9% changes in the dependent variable (Dividend payout) are explained by independent variable (sales growth, corporate tax, cash flows, Debt to equity, profitability). All independent variable combainly explain the change in dependent variable and all variable are significant.

The relation between dividend payout and sales growth with the t-statistics of -0.780 and the significant value (P value) of 0.437. The coefficient value between the dividend payout and sales growth is -0.378. The statistical relationship between dividend payout and sales growth is negative. When the firm's sales increase dividend payout will decrease. Firms that experience growth in revenue and growing quickly lead to pay low dividend, because there is a huge demand of capital. Gill et al. found a significantly negative relationship between sales growth and dividend payout and also Higgins (1972) found a negative relationship between the dividend payout and sales growth.

The relation between dividend payout and corporate tax with the t-statistics of -0.195 and the significant value (P value) of 0.846. The coefficient value between the dividend payout and corporate tax is -0.178. The statistical relationship between dividend payout and corporate tax is negative. Taxes affect the dividend policy of the corporate. When the government tax policies change dividend payout expected to change. No doubt taxes reduce the profit which is distributed among the shareholders therefore when taxes are increased dividend payout will be decrease.

Amidu and Abor (2006) found a positive relationship between tax and dividend payout ratio. Gill et al. (2010) found a positive relationship between tax and standard payout in the entire sample and in the manufacturing industry. The relationships between standard payout and tax were non-significant.

The relation between dividend payout and cash flows with the t-statistics of -2.231 and the significant value (P value) of 0.028. The coefficient value between the dividend payout and cash flows is -2.281. The statistical relationship between dividend payout and cash flows is negative. There is a significant relationship between the dividend payout and cash flows.

Policy Journal of Social Science Review
Online ISSN 3006-4635
Print ISSN 3006-4627
Vol. 3 No. 10 (2025)

The more liquid a firm's stock, the firm more will be able to invest in NPV projects thus the amount of dividends paid to the shareholders will be less.

Alli et al. (1993), Amidu and Abor (2006), and Anil and Kapoor (2008) found a positive relationship between cash flow and dividend payout ratios. Gill et al.(2010) found no significant relationship between cash flow and dividend payout ratios. The relation between dividend payout and Debt to equity with the t-statistics of 1.321 and the significant value (P value) of 0.180. The coefficient value between the dividend payout and debt to equity is 0.943. The statistical relationship between dividend payout and debt to equity is positive. Firms that finance mostly with debt financing their earnings will be divided on lesser number of shareholders therefore earning per share increase and dividend payout ratio is increased.

Gill et al. (2010) found neither significant relationship between the D/E ratio and the standard dividend payout ratio in the entire sample nor in service and manufacturing industries. When the Adjusted dividend payout ratio was defined as the dependent variable, they found that for the entire sample there is a positive relationship between D/E and dependent variable, and for both the service and the manufacturing industries.

The relation between dividend payout and Profitability with the t-statistics of 3.192 and the significant value (P value) of 0.002. The coefficient value between the dividend payout and debt to equity is 0.137. The statistical relationship between dividend payout and profitability is positive. There is a significant relationship between dividend payout and profitability.

Profit is the most significant determinants that directly affect the dividend payout, therefore the firms with high profitability pay higher dividend as compared to the non-profitable firms. Amidu and Abor (2006) and Anil and Kapoor (2008) found a positive relationship between profitability and dividend payout ratios. Gill et al.(2010)found i) a negative relationship between profitability and standard payout in the entire sample, ii) a positive relationship between profitability and payout in the entire sample, iii) a positive relationship between profitability and payout in the service industry, and iv) a negative relationship between profitability and standard payout in the manufacturing industry.

CONCLUSION

The relation between dividend payout and sales growth is statistically insignificant and negative value of coefficient reject the expected relation for this study. The relation between corporate tax and dividend payout statistically insignificant and negative value of coefficient rejects the expected relationship for this study. The relation between the cash flows and dividend payout negative and statistically significant. The increase in dividend payout decreases the cash flows. Its mean that when firms increase their cash flows so the dividend payouts are decrease. The relation between debt to equity and dividend payout is insignificant and positive value of coefficient reject the expected variable. The relation between the dividend payout and profitability is positive and statistically significant. It means if the firms earned more profit, dividend payout will increase.

The findings offer valuable insights for corporate managers in Pakistan's chemical sector, highlighting the primary role of profitability in shaping dividend decisions. The results can also guide investors in assessing the dividend-paying potential of chemical firms based on their financial performance.

Policy Journal of Social Science Review

Online ISSN 3006-4635

Print ISSN 3006-4627

Vol. 3 No. 10 (2025)

REFERENCES

Ahmed, H., & Javid, A. Y. (2009). Dynamics and determinants of Dividend policy in Pakistan (Evidence from Karachi stock Exchange Non-Financial listed Firms). *International Research journal of Finance and Economics*, (25). Retrieved from.

Amidu, M. & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. *The Journal of Risk Finance*, *7*(2), 136-145. https://doi.org/10.1108/15265940610648580.

Arif, A. & Akbar, F. (2013). Determinants of Dividend policy: A Sectoral Analysis from Pakistan. *International Journal of Business and Behavioral Sciences*, *3*(9)..

Asquith, P., & Mullins, D. W. (1983). The Impact of Initiating Dividend Payments on Shareholders' Wealth. *Journal of Business*, *56*(1), 77-96..

Azhagaiah, R., & Priya, S. (2008). The Impact of dividend policy on shareholders' wealth. *International Research Journal of Finance and Economics*, (20), 180-187..

Baskin, J. (1989). Dividend policy and the volatility of common stocks. *Journal of portfolio Management*, *15*(3), 19..

Bhatti, A. A., Patoli, A. Q., & Kumar, T. (2023). Dividend Policy and its Impact on Market Price: An Empirical Study of Chemical Sector. *Journal of Development and Social Sciences*, *4*(2), 316-326..

Black, F. (1976). The Dividend Puzzle. *The Journal of Portfolio Management*, *2*(2), 5-8. https://doi.org/10.3905/jpm.1976.408558.

Chohan, M. A., Ramakrishnan, S., Al-Harthi, S. A. & Butt, S. (2019). Firm Level Determinants and Dividend Policy in Pakistan. *International Journal of Recent Technology and Engineering*, *8*(2S9), 924–929. https://doi.org/10.35940/ijrte.B1190.0982S919.

Dewasiri, N. J., Koralalage, W. B. Y., Azeez, A. A., Jayarathne, P. G. S. A., Kuruppuarachchi, D. & Weerasinghe, V. A. (2018). Determinants of dividend policy: evidence from an emerging and developing market. *Managerial finance*, *45*(3), 413-429. https://doi.org/10.1108/MF-09-2017-0331.

Gordon, M. J. (1963). Optimal investment and financing policy. *The Journal of Finance*, *18*(2), 264-272..

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. https://doi.org/10.1016/j.ribaf.2016.01.018.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, *76*(2), 323-329..

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360..

Khan, K. I. (2012). Effect of dividends on stock prices–A case of chemical and pharmaceutical industry of Pakistan. *Management*, *2*(5), 141-148..

Khan, M. N., Naeem, M. U., Rizwan, M., & Salman, M. (2016). Factors affecting the firm dividend policy: An empirical evidence from textile sector of Pakistan. *International Journal of Advanced Scientific Research and Management*, *1*(5), 144-149..

Khan, N. U., Jehan, Q. U. A. S., & Shah, A. (2017). Impact of taxation on dividend policy: Evidence from Pakistan. *Research in International Business and Finance 42*, 365-375. https://doi.org/10.1016/j.ribaf.2017.07.157.

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, *34*(4), 411-433..

Patra, T., Poshakwale, S. & Ow-Yong, K. (2012). Determinants of Corporate dividend policy in Greece. *Applied Financial Economics*, *22*(13), 1079-1087. https://doi.org/10.1080/09603107.2011.639734.

Pattiruhu, J. R. & Paais, M. (2020). Effect of Liquidity, Profitability, Leverage and Firm Size on Dividend Policy. *Journal of Asian Finance, Economics and Business*, *7*(10), 035-042. https://doi.org/10.13106/jafeb.2020.vol7.no10.035.

Tahir, H., Masri, R. & Rahman, M. (2020). Determinants of dividend payouts policy of listed non-financial firms in Malaysia. *International Journal of Financial Research*, *11*(2), 68-76. https://doi.org/10.5430/ijfr.v11n2p68.