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Research article

Liquidity, leverage, and dividend policy: An empirical study of manufacturing companies in Indonesia

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ABSTRACT

Purpose- This study examines the relationship between liquidity, leverage, investment opportunities, company size, and dividend policy in manufacturing companies listed on the Indonesia Stock Exchange during the 2017–2019 period.

Design/methodology/approach- This research employs an associative research design, with panel data regression analysis conducted in EViews 10. The population comprises manufacturing companies listed on the Indonesia Stock Exchange, from which a purposive sample of 35 companies was selected.

Findings: The results reveal that liquidity does not significantly influence dividend policy. Similarly, investment opportunities and company size show no significant effect on dividend policy. However, leverage shows a negative, significant relationship with dividend policy, indicating that firms with higher debt levels tend to pay lower dividends.

Originality/value-This study contributes to the dividend policy literature by using recent data from the Indonesian capital market to capture contemporary market conditions. The findings are derived from audited financial statements, ensuring data reliability. The results offer practical insights for corporate financial managers in formulating dividend strategies and for investors in understanding dividend behavior in emerging markets.

Keywords: *Liquidity, Leverage, Investment opportunities, Company size, Dividend policy, Indonesia Stock Exchange, Manufacturing companies*

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ABSTRAK

Tujuan - Studi ini meneliti hubungan antara likuiditas, leverage, peluang investasi, ukuran perusahaan, dan kebijakan dividen pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia selama periode 2017–2019.

Desain/metodologi/pendekatan - Penelitian ini menggunakan desain penelitian asosiatif, dengan analisis regresi data panel yang dilakukan di EViews 10. Populasi terdiri dari perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia, dari mana sampel purposif sebanyak 35 perusahaan dipilih.

Temuan: Hasil penelitian menunjukkan bahwa likuiditas tidak secara signifikan memengaruhi kebijakan dividen. Demikian pula, peluang investasi dan ukuran perusahaan tidak menunjukkan pengaruh yang signifikan terhadap kebijakan dividen. Namun, leverage menunjukkan hubungan negatif yang signifikan dengan kebijakan dividen, menunjukkan bahwa perusahaan dengan tingkat utang yang lebih tinggi cenderung membayar dividen yang lebih rendah.

Orisinalitas/nilai - Studi ini berkontribusi pada literatur kebijakan dividen dengan menggunakan data terbaru dari pasar modal Indonesia untuk menangkap kondisi pasar kontemporer. Temuan diperoleh dari laporan keuangan yang diaudit, memastikan keandalan data. Hasil penelitian menawarkan wawasan praktis bagi manajer keuangan perusahaan dalam merumuskan strategi dividen dan bagi investor dalam memahami perilaku dividen di pasar negara berkembang.

Kata kunci: Likuiditas, Leverage, Peluang investasi, Ukuran perusahaan, Kebijakan dividen, Bursa Efek Indonesia, Perusahaan manufaktur

1. Introduction

Dividend policy is a fundamental aspect of corporate financial management, involving critical decisions about the distribution of profits to shareholders versus retaining earnings for reinvestment (Ong, 2019). These decisions not only reflect a company's financial strategy but also carry significant implications for corporate governance and investor perceptions. For companies listed on the Indonesia Stock Exchange (IDX), formulating an effective dividend policy presents distinct challenges, as managers must navigate the competing demands of shareholders seeking regular returns and the organizational need to retain earnings for sustainable growth.

The importance of dividend policy extends far beyond immediate shareholder satisfaction; it is a fundamental component of a company's financial strategy. A well-structured dividend strategy not only reflects financial stability but also demonstrates management's confidence in the company's ongoing and future performance. This perception can significantly influence a firm's attractiveness to investors and its overall market valuation. Companies strategically leverage dividend announcements to signal positive prospects to the market, which can result in notable shifts in stock prices. This practice is supported by the signaling theory, which posits that dividends can convey valuable private information regarding a firm's future profitability and operational stability. For instance, when a company announces an increase in dividends, it often signals to the market that management anticipates robust future earnings, thereby potentially increasing investor confidence and stock demand (Bozos et al., 2011; Liu & Chi, 2014; Puspitaningtyas, 2019; Younis & Javid, 2014).

Investors typically gravitate toward companies that pay stable, high dividends, viewing them as reliable indicators of financial health and profitability. This preference aligns closely with the "bird in the hand" theory, which posits that shareholders tend to favor certain current dividends

over the uncertain prospect of future capital gains (Safitri et al., 2020). The assurance of receiving dividends today is often deemed more valuable than potential, yet unpredictable, returns that may be realized later. Thus, a consistent dividend policy not only helps attract and retain investors but also plays a crucial role in shaping market perceptions of a firm's long-term viability.

Prior research suggests that consistent and predictable dividend payments enhance investor trust and positively influence market performance performance (Ali & Hegazy, 2022; Liu & Chi, 2014; Puspitaningtyas, 2019), whereas erratic or reduced dividend distributions may raise concerns regarding a company's financial health and prospects. Furthermore, a firm's profitability, financial leverage, and size significantly shape its dividend policy, with larger and more profitable firms more inclined to pay higher dividends, which, in turn, positively affects firm valuation (Anjana & Balasubramanian, 2017; Kannadhasan et al., 2017; Younis & Javid, 2014). In addition, dividends serve a governance function by helping reduce agency costs, as distributing excess cash aligns managers' interests with shareholders' and mitigates the risk of investing in unprofitable projects (Anderson et al., 2022; Shao et al., 2013). The signaling effect of dividends may also vary across economic conditions; for instance, during periods of economic adversity, dividends may carry greater informational content and provide a stronger signal than in stable periods (Bozos et al., 2011). Within this framework, several key determinants of dividend policy have been identified, including liquidity, leverage, investment opportunities, and company size. Liquidity—defined as a firm's capacity to meet short-term obligations—is widely regarded as a prerequisite for dividend distribution, as companies with strong liquidity positions are better equipped to sustain regular dividend payments and attract income-focused investors. In contrast, highly leveraged firms often face constraints on their dividend capacity, given that debt repayment obligations typically take precedence over profit distribution. Consequently, excessive leverage can erode investor confidence and signal potential financial distress, thereby reducing the likelihood of dividend payments.

Despite extensive theoretical and empirical attention to the determinants of dividend policy, evidence from emerging markets remains inconclusive and context-dependent. In Indonesia, manufacturing companies constitute a significant segment of the capital market, yet studies examining the financial drivers of their dividend policies remain limited, particularly those utilizing recent data. The manufacturing sector presents an interesting context for investigation due to its capital-intensive nature, varying liquidity positions, and diverse leverage structures. This study aims to address this gap by examining the influence of liquidity, leverage, investment opportunities, and company size on dividend policy among manufacturing firms listed on the Indonesia Stock Exchange during the 2017–2019 period. This research uses audited financial statements and panel data regression analysis to provide contemporary empirical evidence from the Indonesian capital market. The findings are expected to contribute to the dividend policy literature and to offer practical insights for corporate financial managers and investors operating in emerging economies.

2. Theory and Hypothesis

Dividend Policy and Its Determinants

Dividend policy constitutes a critical element of corporate financial strategy, encompassing the complex decisions made by the board of directors regarding the distribution of profits to shareholders versus the retention of earnings for future investment (Lin, 2020; Muneer & Butt, 2013; Safitri et al., 2020). An effective dividend policy seeks to balance the provision of immediate returns to shareholders with the pursuit of long-term growth opportunities, ultimately aiming to maximize firm value (Ong, 2019; Sui, 2011). Hence, dividend policy includes guidelines governing dividend payments, with particular emphasis on the proportion of profits

to be distributed relative to those retained for future needs. This multifaceted decision-making process is shaped by various internal and external factors that fundamentally influence a company's financial structure and market valuation. The primary measure for assessing dividend policy is the Dividend Payout Ratio (DPR), which indicates the percentage of profits allocated to shareholders and is calculated as the ratio of dividends per share to earnings per share (EPS) over a specified period.

Liquidity and Dividend Policy

Liquidity is a company's ability to meet its financial obligations as they become due. When establishing dividend policy, firms must carefully consider their liquidity position, as stronger cash and overall liquidity enhance their ability to distribute dividends. The current ratio serves as a proxy for liquidity, measuring a company's ability to meet short-term obligations that are due in the near term (Fadillah & Noormansyah, 2023; Kasmir, 2014). Empirical evidence presents a nuanced view of the relationship between liquidity and dividend policy. Companies with better liquidity are more likely to distribute higher dividends as they have sufficient cash flow to meet both operational needs and shareholder expectations (Ebrahim, 2023; Novatiani et al., 2021; Rahmawati & Narsab, 2020). However, increased stock liquidity can lead to a reduction in dividends as firms may prioritize satisfying investors' liquidity needs over dividend payouts (Lai et al., 2020; Michaely & Qian, 2022; Stereńczak & Kubiak, 2022). Despite this alternative perspective, the predominant evidence supports a positive relationship, suggesting that firms with stronger liquidity positions are better positioned to distribute dividends to shareholders (Ebrahim, 2023; Novatiani et al., 2021; Rahmawati & Narsab, 2020). Accordingly, the following hypothesis is proposed:

H1: Liquidity has a positive effect on dividend policy.

Leverage and Dividend Policy

Leverage is a financial metric used to evaluate a company's ability to meet its long-term obligations. A company is considered solvent when its assets exceed its debts, whereas it is deemed insolvent when its debts surpass its assets (Hitijahubessy et al., 2022). This concept aligns with trade-off theory, which posits that companies cannot excessively utilize debt, as higher levels of indebtedness increase the likelihood of bankruptcy (Kasmir, 2014). The presence of debt plays a crucial role in shaping dividend policy. High leverage often results in lower dividend payouts as firms need to conserve cash to meet debt obligations (Hadian, 2019; Khan et al., 2013; Rahmawati & Narsab, 2020). This is particularly evident in firms with high fixed-to-variable costs, which tend to adopt a conservative dividend policy to preserve resources during financial distress (Tran, 2020). Conversely, in some cases, leverage can positively influence dividend policy, especially when firms use dividends to manage agency costs between shareholders and creditors (Anantavrasilp et al., 2020; Kemsley et al., 2018; Shao et al., 2013). Therefore, the following hypothesis is proposed:

H2: Leverage has a negative effect dividend policy.

Investment Opportunities and Dividend Policy

Investment opportunities, initially conceptualized by Myers (1984), are a company's blend of existing tangible assets and potential future investment opportunities, collectively termed the Investment Opportunity Set (IOS). The IOS reflects a company's capacity to identify and capitalize on profitable growth opportunities (Abor & Bokpin, 2010) and serves as a framework for assessing future growth potential. The relationship between investment opportunities and

dividend policy is well-documented. Firms with high growth opportunities tend to retain earnings for reinvestment rather than paying dividends because they need to finance new projects and expansion activities (Abor & Bokpin, 2010; Tahir et al., 2022). Conversely, firms with fewer investment opportunities may distribute higher dividends, as they have less need to retain earnings for future investments (Décamps & Villeneuve, 2007; Rhee & Park, 2017). This indicates that investment opportunities are positively correlated with dividend policy, in that their presence reduces dividend payouts. Accordingly, the following hypothesis is proposed:

H3: Investment opportunities have a positive effect on dividend policy.

Company Size and Dividend Policy

Company size, indicative of a firm's total assets, can be measured as the natural logarithm of total assets or total sales (Fadillah & Noormansyah, 2023; Kasmir, 2014). Larger companies generally enjoy easier access to capital markets, whereas smaller firms may face constraints in attracting external financing. Empirical evidence consistently shows that larger firms tend to have more stable earnings and lower bankruptcy risk, enabling them to pay higher dividends (Ghasemi et al., 2018; Susanti et al., 2021; Warganegara et al., 2020). They also tend to have better access to capital markets, which supports higher dividend payouts (Ghasemi et al., 2018). Enhanced access to capital markets improves a company's ability to attract investors, and as capital increases, so does the capacity to distribute dividends. In contrast, smaller firms may have less stable earnings and higher information asymmetry, leading to lower dividend payouts. Consequently, company size significantly influences dividend policy, with firms possessing substantial asset bases being better positioned to attract investors and meet dividend payment obligations. Therefore, the following hypothesis is proposed:

H4: Company size has a positive effect on dividend policy.

3. Methodology

This study uses an associative research strategy to explore the relationships between liquidity, leverage, investment opportunities, firm Size (independent variables), and dividend policy (dependent variable). Adopting a quantitative approach rooted in positivist philosophy, it focuses on specific samples, utilizing random sampling techniques and statistical analysis to test hypotheses.

Population refers to a domain consisting of subjects with specific attributes that researchers analyze for conclusions (Sugiyono, 2017). In this study, the population includes manufacturing firms listed on the Indonesia Stock Exchange (IDX) that paid dividends consistently from 2017 to 2019. These years were chosen to reflect recent market conditions for data relevance. A purposive sampling technique was used, with criteria including: (1) continuous listing on the IDX during 2017–2019; (2) published financial reports for that period; and (3) consistent dividend distribution. This approach yielded a sample of 35 companies, providing a basis for analyzing the effects of liquidity, leverage, investment opportunities, and company size on dividend policy.

This study utilizes secondary data, which refers to information not collected directly from research subjects but rather sourced from existing records. Specifically, the data consist of audited financial statements of manufacturing companies listed on the Indonesia Stock Exchange for the 2017–2019 period. These financial statements were obtained by downloading published reports from IDX's official website (www.idx.co.id), thereby ensuring access to credible, reliable information.

Variable Operationalization

Dividend Payout Ratio (DPR), which indicates the percentage of profits distributed to shareholders using the formula:

DPR = DPS / EPS, where DPS is Dividend per Share, and EPS is Earnings Per Share.

Liquidity measures a company's ability to meet short-term obligations and thus its capacity to distribute dividends. It is measured by the Current Ratio: Current Ratio = Current Assets / Current Liabilities. Leverage reflects the use of borrowed funds; high leverage can result in lower dividends as debt repayments are prioritized. The Debt measures it to the Equity Ratio (DER): DER = (Total Liabilities / Total Equity) × 100%. Investment Opportunities influence dividend decisions; companies may reinvest profits rather than distribute them if they identify more lucrative growth projects.

The Market measures this to Book Value of Equity (MVE/BVE):
MVE/BVE = (Outstanding Shares × Closing Price) / Total Equity.

Company Size affects dividend policy, with larger companies generally providing more stable earnings and higher dividends. It is measured using the natural logarithm of total assets: Company Size (Total Asse

4. Results and discussion

Descriptive Statistics Analysis

Table 1 presents the descriptive statistics for all variables used in this study, including dividend policy (DPR), liquidity, leverage, investment opportunities, and company size. The analysis covers 105 observations from 35 manufacturing companies listed on the Indonesia Stock Exchange over the 2017–2019 period.

Table 1. Descriptive Statistics

Variable	Mean	Median	Minimum	Maximum	Std. Dev.	Observations
Dividend Policy (DPR)	2.71	0.33	-0.43	240.41	23.43	105
Liquidity (CR)	3.04	2.43	0.63	21.70	2.66	105
Leverage (DER)	0.66	0.46	0.10	3.75	0.67	105
Investment Opportunity (MVE/BVE)	3.39	1.56	0.19	29.66	5.69	105
Company Size (Ln Assets)	29.37	29.06	26.44	33.49	1.69	105

Source: Processed data using EViews 10 (2021)

The descriptive statistics reveal several notable characteristics of the sample. Dividend policy, measured by the Dividend Payout Ratio, exhibits substantial variation across companies, with a mean of 2.706 and a standard deviation of 23.427, indicating considerable diversity in dividend distribution practices among manufacturing firms. The wide range between minimum (-0.430) and maximum (240.411) values suggests the presence of outliers, which is common in dividend data due to varying corporate policies and profitability levels.

Liquidity, measured by the current ratio, shows a mean of 3.036, indicating that, on average, sample companies maintain current assets three times greater than their current liabilities. The minimum value of 0.633 suggests some firms face liquidity challenges, while the maximum of 21.704 reflects companies with exceptionally strong liquidity positions.

Leverage, measured by the Debt to Equity Ratio, averages 0.656, indicating that sample companies finance approximately 65.6% of their operations with debt relative to equity. The range from 0.101 to 3.751 demonstrates varying capital structures across manufacturing firms.

Investment opportunities, proxied by Market to Book Value of Equity, show considerable variation with a mean of 3.385 and a standard deviation of 5.692, reflecting diverse growth prospects among sample companies. Company size, measured by the natural logarithm of total assets, demonstrates relative consistency with a mean of 29.365 and a standard deviation of 1.689.

Panel Data Regression Model Selection

To determine the most appropriate panel data regression model for analysis, three specification tests were conducted: the Chow test, Hausman test, and Lagrange Multiplier (LM) test. The results of these tests are summarized in Table 2.

Table 2. Panel Data Regression Model Selection Results

Test	Purpose	Result	Selected Model
Chow Test	Compare Common Effect vs. Fixed Effect	Prob. > F (0.0000)	Fixed Effect Model
Hausman Test	Compare Fixed Effect vs. Random Effect	Prob. > Chi^2 (0.3421)	Random Effect Model
Lagrange Multiplier Test	Compare Common Effect vs. Random Effect	Prob. > Breusch-Pagan (0.0000)	Random Effect Model

Source: Processed data using EViews 10 (2021)

Based on the test results presented in Table 2, the Random Effect Model (REM) was selected as the most appropriate estimation method for this study. The Chow test indicated that the Fixed Effect Model was preferable to the Common Effect Model ($p < 0.05$). Subsequently, the Hausman test produced a probability value greater than 0.05, suggesting that the Random Effect Model is more appropriate than the Fixed Effect Model. This conclusion was further confirmed by the Lagrange Multiplier test, which showed that the Random Effect Model is superior to the Common Effect Model ($p < 0.05$). Therefore, all subsequent analyses were conducted using the Random Effect Model.

Panel Data Regression Analysis

Table 3 presents the results of the panel data regression analysis using the Random Effect Model, including coefficient estimates, standard errors, t-statistics, and probability values for hypothesis testing.

Based on the regression results in Table 3, the panel data regression equation can be formulated as follows:

DPR = 6.435628 + 0.197606(LIQ) - 0.164612(LEV) + 0.156532(IOS) + 4.013001(SIZE) + ε

The constant value of 6.435628 indicates that if all independent variables (liquidity, leverage, investment opportunities, and company size) are held constant at zero, the predicted dividend policy would be 6.435628. However, given that company size is measured as the natural logarithm of total assets, a zero value is not practically interpretable; thus, the constant serves primarily as a statistical adjustment.

Table 3. Panel Data Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Liquidity (CR)	0.197606	0.338178	0.584326	0.5603
Leverage (DER)	-0.164612	0.281475	-3.584817	0.0320
Investment Opportunity (MVE/BVE)	0.156532	0.129055	1.212903	0.2280
Company Size (Ln Assets)	4.013001	2.900885	3.383371	0.0396
Constant	6.435628	4.271205	1.506748	0.1350

Source: Processed data using EViews 10 (2021)

The liquidity regression coefficient is 0.197606, indicating a positive relationship with dividend policy. However, the probability value of 0.5603 ($p > 0.05$) suggests that this relationship is not statistically significant. Therefore, H1 is rejected, meaning that liquidity does not have a significant positive effect on dividend policy among manufacturing companies in Indonesia during the study period. Although the coefficient direction aligns with theoretical expectations, the lack of statistical significance indicates that liquidity alone may not be a primary determinant of dividend decisions in this context.

The leverage coefficient is -0.164612, demonstrating a negative relationship with dividend policy. The probability value of 0.0320 ($p < 0.05$) confirms that this relationship is statistically significant. Therefore, H2 is accepted, indicating that leverage has a significant negative effect on dividend policy. This finding suggests that manufacturing firms with higher debt levels tend to pay lower dividends, likely because debt obligations take priority, and maintaining financial flexibility is a concern. The result aligns with trade-off theory, which posits that firms with greater financial leverage face constraints on their dividend-paying capacity.

The investment opportunities coefficient is 0.156532, indicating a positive relationship with dividend policy. However, the p-value of 0.2280 ($p > 0.05$) indicates that this relationship is not statistically significant. Therefore, H3 is rejected, meaning that investment opportunities do not significantly influence dividend policy in the sampled manufacturing companies. While the coefficient direction suggests that firms with greater investment opportunities may distribute higher dividends, the lack of significance implies that growth prospects may not be a primary consideration in dividend decisions for these firms.

The company size coefficient is 4.013001, demonstrating a strong positive relationship with dividend policy. The p-value of 0.0396 ($p < 0.05$) indicates that this relationship is statistically significant. Therefore, H4 is accepted, indicating that company size has a significant positive effect on dividend policy. This finding suggests that larger manufacturing firms tend to pay higher dividends than smaller firms. The result supports the theoretical argument that larger companies benefit from more stable earnings, better access to capital markets, and a greater capacity to meet shareholder expectations for consistent dividend payments.

Discussion

This study aimed to examine the determinants of dividend policy among manufacturing companies listed on the Indonesia Stock Exchange during the 2017–2019 period. Specifically, the research investigated the effects of liquidity, leverage, investment opportunities, and

company size on dividend policy, measured by the Dividend Payout Ratio (DPR). The discussion below interprets the findings in relation to theoretical frameworks and prior empirical evidence presented in the hypothesis development section.

The Effect of Liquidity on Dividend Policy

The first hypothesis suggested that liquidity positively affects dividend policy. However, the regression results showed a positive liquidity coefficient (0.20) that was not statistically significant ($p > 0.05$). Thus, H1 is rejected, indicating that liquidity does not significantly influence dividend policy in Indonesian manufacturing companies during the study period. This finding contradicts the expectation that companies with stronger liquidity can distribute higher dividends (Ebrahim, 2023; Novatiani et al., 2021; Rahmawati & Narsab, 2020). One reason for this may be that Indonesian manufacturing firms prioritize other financial factors over liquidity for dividend payouts. They might maintain high liquidity as a precaution amid economic uncertainties. Additionally, studies suggest that high stock liquidity may actually reduce dividends as firms focus on satisfying trading needs (Lai et al., 2020; Michaely & Qian, 2022; Stereńczak & Kubiak, 2022).

The non-significant finding may reflect a context-dependent relationship between liquidity and dividends. In emerging markets like Indonesia, where capital markets are less developed, the dynamics may differ from those in developed markets. Significant variation in liquidity levels among sample companies (0.63 to 21.70) may also explain the inconsistent results.

The Effect of Leverage on Dividend Policy

The second hypothesis posited that leverage negatively affects dividend policy, and the regression results showed a significant negative coefficient for leverage (-0.16, $p < 0.05$). This supports the acceptance of H2, indicating that leverage notably influences dividend policy among Indonesian manufacturing companies.

This finding aligns with trade-off theory, as firms with high debt levels face a higher risk of bankruptcy and must be cautious in their financial decisions (Kasmir, 2014). Empirical evidence from Hadian (2019) and others also indicates that high leverage is associated with lower dividend payouts, as firms conserve cash to meet debt obligations. Tran (2020) noted that firms with high fixed-to-variable costs often adopt conservative dividend policies during financial distress. Several mechanisms explain this negative relationship. Debt covenants may restrict dividend payments to protect creditors, while higher financial obligations reduce cash flow available for dividends.

Additionally, management may prioritize debt repayment over dividends to maintain flexibility and avoid default. This significant finding emphasizes the role of capital structure in dividend policy decisions for Indonesian manufacturing firms. The trade-off between fulfilling debt obligations and rewarding shareholders is crucial, supporting the agency-cost perspective, which holds that dividends can mitigate conflicts when sufficient financial capacity exists.

The Effect of Investment Opportunities on Dividend Policy

The third hypothesis proposed that investment opportunities positively affect dividend policy. Although the regression results showed a positive coefficient (0.16), this was not statistically significant ($p > 0.05$), leading to the rejection of H3. This indicates that investment opportunities do not significantly influence dividend policy in Indonesian manufacturing companies.

This finding contrasts with the theoretical prediction that firms with high growth opportunities retain earnings for reinvestment, while those with lower growth opportunities tend to distribute higher dividends. Several factors might explain the non-significant results: the Market-to-Book Value of Equity may not adequately capture growth prospects, firms may face constraints

limiting their investment opportunities, and the short study period may not reflect long-term dynamics. Additionally, some companies may be in mature stages with limited growth, leading to a greater emphasis on dividend distributions.

The Effect of Company Size on Dividend Policy

The fourth hypothesis proposed that company size positively affects dividend policy. The results revealed a strong positive coefficient (4.01) with a significant p-value ($p < 0.05$), supporting H4. This aligns with expectations that larger firms, benefiting from stable earnings and better market access, can pay higher dividends.

Several mechanisms explain this relationship: larger firms typically have diversified revenue streams, lower information asymmetry, and use dividends to maintain investor relations. The study confirms the significance of firm size in determining dividend policy, particularly highlighting the challenges smaller firms face in maintaining stable earnings and accessing external financing.

Theoretical and practical implications

The findings of this study contribute to the dividend policy literature in several ways. First, the significant negative relationship between leverage and dividend policy provides support for the trade-off theory in the Indonesian manufacturing context, reinforcing the notion that capital structure decisions influence dividend distributions. Second, the significant positive relationship between company size and dividend policy confirms that firm size serves as a proxy for financial stability and market access, enabling larger firms to maintain more generous dividend policies. Third, the non-significant findings for liquidity and investment opportunities suggest that these factors may be context-dependent, with their influence varying across different institutional and market environments.

From a managerial perspective, the findings suggest that financial managers in manufacturing companies should carefully consider their leverage levels when formulating dividend policies, as excessive debt may constrain their ability to distribute profits to shareholders. Additionally, managers of smaller firms should recognize that size-related constraints may limit their dividend-paying capacity, and they may need to focus on building financial stability before committing to regular dividend payments. For investors, the results indicate that leverage and company size are important signals to consider when evaluating potential dividend income from manufacturing companies. Firms with lower leverage and larger asset bases are more likely to maintain consistent dividend distributions.

Limitations and Future Research Directions

This study has several limitations that should be acknowledged. First, the relatively short study period of three years (2017–2019) may not capture long-term dividend policy dynamics. Future research could extend the observation period to examine whether the relationships identified in this study persist over time. Second, the sample was limited to manufacturing companies, which may restrict the generalizability of findings to other sectors. Comparative studies across different industries could provide valuable insights into sector-specific dividend determinants. Third, the study employed a single measure for each construct; future research could utilize alternative proxies to validate the findings. Finally, the non-significant findings for liquidity and investment opportunities warrant further investigation, potentially using qualitative approaches to understand the underlying decision-making processes in Indonesian manufacturing firms.

5. Conclusion

This study investigates the factors influencing dividend policy among manufacturing companies listed on the Indonesia Stock Exchange from 2017 to 2019, focusing on liquidity, leverage, investment opportunities, and company size. The results show that leverage and company size significantly impact dividend policy, while liquidity and investment opportunities do not. Specifically, higher debt levels negatively affect dividend distribution, consistent with trade-off theory. At the same time, larger firms benefit from stable earnings and better access to capital, leading to more consistent dividend payments. The lack of significance for liquidity and investment opportunities suggests these may not be critical in dividend decisions in Indonesia. The findings are useful for financial managers, investors, and policymakers. Future research should expand the observation period, include more sectors, employ diverse measurement proxies, and incorporate qualitative methods to deepen understanding of dividend policy dynamics in developing economies.

References

Abor, J., & Bokpin, G. A. (2010). Investment opportunities, corporate finance, and dividend payout policy: Evidence from emerging markets. *Studies in Economics and Finance*, *27*(3), 180–194. https://doi.org/10.1108/10867371011060018

Ali, H., & Hegazy, A. Y. (2022). Dividend policy, risk and the cross-section of stock returns: Evidence from India. *International Review of Economics and Finance*, *79*, 169–192. https://doi.org/10.1016/j.iref.2022.02.002

Anantavrasilp, S., de Jong, A., DeJong, D. V, & Hege, U. (2020). Blockholder leverage and payout policy: Evidence from French holding companies. *Journal of Business Finance and Accounting*, *47*(1–2), 253–292. https://doi.org/10.1111/jbfa.12415

Anderson, M., Kabir, M., Rashid, H., & Warsame, H. (2022). Corporate Dividend Policy and Tax Avoidance. *Canadian Tax Journal*, *70*(4), 747–784. https://doi.org/10.32721/ctj.2022.70.4.anderson

Anjana, C. A., & Balasubramanian, P. (2017). Determinants of dividend policy: A study of selected listed firms in National Stock Exchange. *International Journal of Applied Business and Economic Research*, *15*(4), 101–116. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85016292253&partnerID=40&md5=482a3c98f81744b832dec39e965d011c

Bozos, K., Nikolopoulos, K., & Ramgandhi, G. (2011). Dividend signaling under economic adversity: Evidence from the London Stock Exchange. *International Review of Financial Analysis*, *20*(5), 364–374. https://doi.org/10.1016/j.irfa.2011.07.003

Décamps, J.-P., & Villeneuve, S. (2007). Optimal dividend policy and growth option. *Finance and Stochastics*, *11*(1), 3–27. https://doi.org/10.1007/s00780-006-0027-z

Ebrahim, R. (2023). Does stock liquidity determine dividend policy? New evidence from an emerging market. *Asian Economic and Financial Review*, *13*(9), 610–620. https://doi.org/10.55493/5002.v13i9.4823

Fadillah, S. N., & Noormansyah, I. (2023). The influence of sustainability report, intellectual capital, liquidity, and firm size on firm value. *Research of Finance and Banking*, *1*(1), 22–33.

Ghasemi, M., Razak, N. A. B., & Muhamad, J. (2018). Dividends, leverage and endogeneity: A simultaneous equations study on Malaysia. *Australasian Accounting, Business and Finance Journal*, *12*(1), 47–64. https://doi.org/10.14453/aabfj.v12i1.4

Hadian, N. (2019). The influence of profitability and leverage on dividend policy in the banking

sector. *International Journal of Innovation, Creativity and Change*, *6*(7), 118–129. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073160447&partnerID=40&md5=97cd31cb3253b807d2ca116cac535a2c

Hitijahubessy, W. I., Sulistiyowati, S., & Rusli, D. (2022). Pengaruh profitabilitas, leverage, ukuran perusahaan terhadap tax avoidance pada perusahaan manufaktur yang terdaftar di bei periode 2017-2020. *Jurnal STEI Ekonomi*, *31*(2), 1–10.

Kannadhasan, M., Aramvalarthan, S., Balasubramanian, P., & Gopika, A. (2017). Determinants of dividend policy of Indian manufacturing companies: Panel autoregressive distributed lag analysis. *Academy of Accounting and Financial Studies Journal*, *21*(2), 1–12. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85040970388&partnerID=40&md5=cb2864c00955d2149865936223c78dbc

Kasmir. (2014). Analisis Laporan Keuangan. In *Analisis Laporan Keuangan* (p. 176). Rajawali Pers.

Kemsley, D., Sivadasan, P., & Subramaniam, V. (2018). The composite dividend tax rate. *Accounting and Business Research*, *48*(7), 727–758. https://doi.org/10.1080/00014788.2018.1433526

Khan, W., Naz, A., Khan, W., Khan, Q., Khan, T., & Mughal, I. (2013). Impact assessment of financial performance and leverage on dividend policy of pakistan chemical and pharmaceutical industries. *Middle East Journal of Scientific Research*, *16*(10), 1376–1382. https://doi.org/10.5829/idosi.mejsr.2013.16.10.11862

Lai, K. M. Y., Saffar, W., Zhu, X. K., & Liu, Y. (2020). Political institutions, stock market liquidity and firm dividend policy: Some international evidence. *Journal of Contemporary Accounting and Economics*, *16*(1). https://doi.org/10.1016/j.jcae.2019.100180

Lin, L. (2020). Analysis on Apple's Implement and Assessment of Dividend Policy. *E3S Web of Conferences*, *218*. https://doi.org/10.1051/e3sconf/202021802006

Liu, J.-Y., & Chi, D.-J. (2014). Stock market reaction to various dividend announcements: Which kind of dividend announcement is more significant? *Journal of Testing and Evaluation*, *42*(4). https://doi.org/10.1520/JTE20120327

Michaely, R., & Qian, M. (2022). Does stock market liquidity affect dividends? *Pacific Basin Finance Journal*, *74*. https://doi.org/10.1016/j.pacfin.2022.101788

Muneer, S., & Butt, B. Z. (2013). Dividend signaling power on organizations' future earnings: A brief review of dividend theories. *Actual Problems of Economics*, *141*(3), 380–387. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84930005220&partnerID=40&md5=2abb380280c1f905aedca9c1a75999ad

Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, *39*(3), 574–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x

Novatiani, R. A., Karim, D. F., & Saudi, M. H. (2021). Liquidity and Profitability Affecting The Dividend Policy: An Ecological Empirical Study On Consumer Goods Industry In Indonesia. *Review of International Geographical Education Online*, *11*(1), 589–594. https://doi.org/10.33403/rigeo.800595

Ong, A. (2019). The problems of accounting for intangible assets in the food and drink industry. In *Issues in Accounting and Finance* (pp. 159–186). https://doi.org/10.4324/9780429444241-10

Puspitaningtyas, Z. (2019). Empirical evidence of market reactions based on signaling theory in Indonesia Stock Exchange. *Investment Management and Financial Innovations*, *16*(2), 66–77. https://doi.org/10.21511/imfi.16(2).2019.06

Rahmawati, R., & Narsab, I. M. (2020). Operating cash flow, profitability, liquidity, leverage and dividend policy. *International Journal of Innovation, Creativity and Change*, *11*(9), 121–148.

https://www.scopus.com/inward/record.uri?eid=2-s2.0-85082192484&partnerID=40&md5=3793449b98d8811ea406ef49d44b4b09

Rhee, K. J., & Park, K. S. (2017). Dividend policy and the sensitivity of firm value to dividend announcements and investment. *International Journal of Applied Business and Economic Research*, *15*(24), 73–90. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85039864016&partnerID=40&md5=72b678ba45a5e204d7671d0ee4ea68b8

Safitri, J., Fuady, M., Wahyudi, S., Mawardi, W., & Utomo, M. N. (2020). The influence of dividend policy, investment opportunity and capital adequacy to firm value: Evidence in Indonesia banking companies. *International Journal of Scientific and Technology Research*, *9*(2), 764–767. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85079602860&partnerID=40&md5=d23d2366581524113e5183f09e8e243d

Shao, L., Kwok, C. C. Y., & Guedhami, O. (2013). Dividend policy: Balancing shareholders' and creditors' interests. *Journal of Financial Research*, *36*(1), 43–66. https://doi.org/10.1111/j.1475-6803.2013.12002.x

Stereńczak, S., & Kubiak, J. (2022). Dividend policy and stock liquidity: Lessons from Central and Eastern Europe. *Research in International Business and Finance*, *62*. https://doi.org/10.1016/j.ribaf.2022.101727

Sui, H. (2011). Problems existing in dividend policies in China listed companies and countermeasures. *Asian Social Science*, *7*(10), 213–215. https://doi.org/10.5539/ass.v7n10p213

Susanti, N., Yaasmiin, N. N., Ramadanti, D. Z., Nugraha, M. A. D., Maghfiroh, N., & Nasution, Y. P. (2021). The Influence of Firm Size, Leverage, and Liquidity on Company Performance through Dividend Policy in Manufacturing Companies Listed on the Indonesia Stock Exchange 2015 - 2019 Period. *Review of International Geographical Education Online*, *11*(5), 3225–3237. https://doi.org/10.48047/rigeo.11.05.213

Tahir, M., Ibrahim, H., Zulkafli, A. H., Mushtaq, M., & Ullah, S. (2022). Linking investment opportunities, credit market development and dividend repatriation policy. *Transnational Corporations Review*, *14*(1), 112–125. https://doi.org/10.1080/19186444.2021.1885971

Tran, D. V. (2020). Bank dividend policy and degree of total leverage. *Journal of Asian Finance, Economics and Business*, *7*(2), 53–64. https://doi.org/10.13106/jafeb.2020.vol7.no2.53

Warganegara, D. L., Indrawati, T., Steelyana, E., Warganegara, D. S., & Loo, M. K. L. (2020). Tobit regression analysis on factors influencing dividend policy of Indonesian manufacturing firms. *Pertanika Journal of Social Sciences and Humanities*, *28*, 243–252. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85090840341&partnerID=40&md5=247ce8f3ed5089a8d4bb63e2edbb7b01

Younis, D., & Javid, A. Y. (2014). Market imperfections and dividend policy decisions of manufacturing sector of Pakistan. *PIDE Working Papers*, *1*(99), 1–40. https://www.scopus.com/inward/record.uri?eid=2-s2.0-84901479397&partnerID=40&md5=ebdaeb862064b1cb720b3c76d3812cc0

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