

# Analysis of the Effect of Debt-to-Equity Ratio, Profitability, and Firm Size on Dividend Payout Ratio with Effective Tax Ratio as an Intervening Variable

Indarto<sup>1</sup>, Dian Indudewi<sup>2</sup>, Naratama Hermawan<sup>3</sup>

<sup>1,2,3</sup> Universitas Semarang, Indonesia

\* Correspondence e-mail; [naratama.hermawan@gmail.com](mailto:naratama.hermawan@gmail.com)

## Article history

Submitted: 2026/04/21; Revised: 2026/05/12; Accepted: 2026/06/05

## Abstract

The phenomenon of dividend puzzle and the inconsistency of results (research gap) from previous studies are the background to this study. This study aims to analyze the effect of Debt to Equity Ratio (DER), Profitability (ROA), and Firm Size on Dividend Payout Ratio (DPR) with Effective Tax Ratio (ETR) as an intervening variable. The research method used is quantitative with an empirical study of companies listed in the LQ45 index on the Indonesia Stock Exchange for the period 2022–2024. The data analysis techniques applied panel data regression analysis with the Fixed Effect Model (FEM) estimated using Robust Standard Errors (PCSE). The results of the study indicate that company size has a negative and significant effect on ETR, ETR is proven to have a negative and significant effect on dividend policy, which means the lower the effective tax burden, the higher the dividends distributed; Company size is the most dominant determinant that has a positive effect on dividend policy; DER and profitability (ROA) are not found to have a significant effect on dividend policy directly in this sample. Regarding the mediation role, ETR is proven to mediate the effect of company size on dividend policy significantly, but is not proven to mediate the effect of DER and profitability on DPR.

## Keywords

Dividend Payout Ratio, Debt to Equity Ratio Effective Tax Ratio, Firm Size, Profitability



© 2026 by the authors. This is an open access publication under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY SA) license, <https://creativecommons.org/licenses/by-sa/4.0/>.

## INTRODUCTION

Dividend policy is one of the most crucial financial decisions in corporate management, determining the proportion of net income distributed to shareholders versus reinvested in the company. This decision is made amidst various pressures and competing interests, ranging from debt repayment obligations, operational needs, and investor expectations. Despite being the subject of decades of research, dividend policy

remains a phenomenon known as the "dividend puzzle" in modern financial literature (Barros et al., 2022; Franc-Dąbrowska et al., 2020). Recent empirical research has shown diverse and contradictory findings regarding the impact and determinants of dividend policy, thus making this issue relevant for further research (Ali & Hegazy, 2022).

Theoretically and empirically, several factors are believed to influence corporate dividend policy, namely capital structure, profitability, and firm size. Capital structure is related to the proportion of debt and equity in a company's financing. A high proportion of debt creates fixed interest obligations, which ultimately reduce a company's ability to distribute dividends to shareholders (Rani et al., 2020). Several studies have confirmed a significant negative effect of capital structure on dividend policy, including Harahap et al. (2021), Sakr & Bedeir (2020), and Ali et al. (2022). However, research by Wiyogo & Ekadjaja (2023) found no significant effect, indicating inconsistencies in the results that require further study.

Regarding the influence of profitability as a fundamental factor in determining dividend size, the pecking order theory perspective explains that companies tend to retain profits to finance future investments, resulting in low dividend payouts (Abdullah & Tursoy, 2021). Conversely, dividend signaling theory argues that high dividend payments are a positive signal to investors that a company is in a healthy financial condition (Handayani et al., 2022). Inconsistencies in research results were also found in this variable, where Budianto et al. (2022) and Asiam & Rahmawati (2022) found a significant positive influence, while Abdullah (2021) and Damayanti & Sucipto (2022) obtained insignificant results or even in the opposite direction.

Based on dividend signaling theory, larger companies tend to pay larger dividends as a signal that they are generating stable profits and are in a sound financial position (Hashmi et al., 2020). Empirical evidence supports this argument, as demonstrated by Jamaludin et al. (2023), Benyadi & Andrianantenaina (2020), and Tekin (2020). However, Pattiruhu & Paais (2020) found that company size had no effect on dividend policy, indicating an unresolved research gap.

The inconsistency of previous research findings on these three variables suggests the possibility of other factors acting as a connecting mechanism between capital structure, profitability, and company size and dividend policy. In this context, taxes, measured by the effective tax rate (ETR), are proposed as a relevant mediating variable. When a company has a high tax burden, available net income decreases, and the company's ability to distribute dividends also decreases (Kuswanto, 2023). Conversely, efficient tax management through effective tax planning can improve a company's cash flow, ultimately increasing its dividend payment capacity (Anderson

et al., 2022). Research by Barros et al. (2020) and Kuswanto (2023) confirmed the positive effect of ETR on dividend policy, although Putri & Irawati (2019) found no significant effect.

ETR acts as an indirect pathway connecting the three predictor variables to dividend policy. Without considering this tax dimension, understanding the determinants of dividend policy will be partial. The use of ETR as a mediating variable is a novelty in this study, distinguishing it from previous studies that generally only examine direct effects.

This study uses companies listed on the LQ45 index on the Indonesia Stock Exchange as research subjects for the 2022–2024 period. The LQ45 index was selected based on the considerations that these companies have high stock liquidity, relatively stable financial performance, and the availability of complete and consistent data. Empirical data shows an increasing trend in the dividend payout ratio (DPR) of LQ45 companies during this period, from around 55% to nearly 70%, indicating a tendency for large companies to continuously increase profit distribution to their shareholders. This phenomenon reinforces the urgency of examining the factors underlying dividend payment behavior, including the mediating role of taxes. Based on this background, this study aims to analyze the influence of DER, profitability, and company size on dividend policy, with ETR as a mediating variable in LQ45 companies listed on the Indonesia Stock Exchange.

## METHODS

This study uses a quantitative approach with secondary data in the form of annual financial reports sourced from official company websites and the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)) for the period 2022 to 2024. The study population comprised all companies listed in the LQ45 index on the Indonesia Stock Exchange. The sampling technique used purposive sampling based on the following criteria: consistent listing in the LQ45 throughout the observation period, presentation of complete financial reports for each period, profit generation, and dividend distribution during the 2022–2024 period. Twenty-two companies were selected as samples from a total of 45 companies in the LQ45 index.

This study involved five variables: three independent variables, one mediating variable, and one dependent variable. Capital structure was measured using the Debt to Equity Ratio (DER), which is the ratio of total debt to shareholders' equity. Profitability was measured using Return on Assets (ROA), which is the ratio of net profit after tax to total assets. Firm size was measured using the natural logarithm of total assets. Tax as a mediating variable is measured using the Effective Tax Rate (ETR),

which is the ratio of the current year's tax burden to profit before tax. Dividend policy, as the dependent variable, is measured using the Dividend Payout Ratio (DPR), which is the ratio of dividends per share to earnings per share.

Hypothesis testing is conducted using two panel data regression equations processed using EViews 13 software. The first equation examines the effect of DER, ROA, and firm size on ETR, while the second equation examines the effect of DER, ROA, firm size, and ETR on DPR. The panel data used is a balanced panel, a combination of time series and cross-sectional data, which is considered to produce more efficient estimates with minimal bias.

$$\text{Model 1. ETR} = \alpha_1 + \beta_1 \text{ DER} + \beta_2 \text{ ROA} + \beta_3 \text{ SIZE} + \varepsilon_1$$

$$\text{Model 2. DPR} = \alpha_2 + \beta_4 \text{ DER} + \beta_5 \text{ ROA} + \beta_6 \text{ SIZE} + \beta_7 \text{ ETR} + \varepsilon_2$$

Where DER is the Debt to Equity Ratio, ETR is the Effective Tax Rate, ROA is the Return on Assets, and SIZE is the Firm Size. To determine the most appropriate panel data estimation model, a series of model specification tests were conducted, including the Chow Test to select between the Common Effect Model (CEM) and the Fixed Effect Model (FEM), the Hausman Test to select between the FEM and the Random Effect Model (REM), and the Lagrange Multiplier (LM) Test, if necessary, to compare the CEM with the REM. Furthermore, testing was also conducted using the Robust test provided by the EViews software.

## FINDINGS AND DISCUSSION

This study employs balanced panel data consisting of 22 companies included in the LQ45 Index over three observation periods (2022–2024).

**Table 1. Descriptive Statistics of Research Variables (Revised after Outlier Treatment)**

	<b>DPR</b>	<b>ROA</b>	<b>SIZE</b>	<b>DER</b>	<b>ETR</b>
Mean	53.144	8.561	32.022	210.514	22.351
Median	52.260	6.418	31.648	107.123	21.282
Maximum	111.250	45.427	35.426	646.589	48.582
Minimum	2.140	1.795	28.414	17.031	13.273
Std. Dev.	28.838	7.722	1.772	194.329	6.209
CV	54.265	90.204	5.533	92.312	27.780
Observations	66	66	66	66	66

The descriptive statistics indicate that the average Dividend Payout Ratio (DPR) is 53.14%, suggesting that, on average, the sample companies distribute more than half of their net income to shareholders. The average Effective Tax Rate (ETR) is 22.35%, which is very close to Indonesia's prevailing corporate income tax rate of 22%. Meanwhile, the Debt-to-Equity Ratio (DER) exhibits the highest variation, with a coefficient of variation (CV) of 92.3%, reflecting substantial heterogeneity in capital structures across firms. This variability is largely

attributable to the diverse industrial composition of the LQ45 Index, which includes sectors such as banking that typically operate with exceptionally high leverage.

A series of panel data model selection tests, including the Chow Test, Hausman Test, and Lagrange Multiplier Test, consistently identified the Fixed Effect Model (FEM) as the most appropriate estimation model. Given the technical limitations of conventional heteroscedasticity and autocorrelation tests within the FEM framework in EViews, this study applies robust standard errors using the Cross-section SUR (PCSE/Panel Corrected Standard Errors) method. This approach simultaneously corrects for both potential violations, ensuring that the resulting statistical inference remains valid and reliable.

**Table 2. The Effects of ROA, SIZE, and DER on ETR**

Variable	FEM Coefficient	t-Statistic	Prob.	FEM with SUR Correction t-Statistic	Prob.
C	333.868	3.187	0.003	6.771	0.000
ROA	-0.041	-0.629	0.533	-0.405	0.687
SIZE	-9.697	-2.973	0.005	-6.248	0.000
DER	-0.003	-0.374	0.710	-2.043	0.048
R-squared	0.937				
Adjusted R-squared	0.900				
F-statistic	25.263				
Prob(F-statistic)	0.000				

The estimation results presented in Table 2 reveal notable differences between the standard FEM and the FEM with robust standard error correction (SUR/PCSE), particularly for the DER variable. Under the standard FEM estimation, DER is statistically insignificant; however, after applying the SUR correction, DER becomes significant at the 5% level. A similar pattern is observed for the SIZE variable, where the SUR correction produces substantially larger absolute t-statistics, although the variable remains significant under both estimation approaches. In contrast, ROA consistently remains insignificant across both models.

These differences arise because the standard FEM assumes homoscedastic residual variance and no cross-sectional correlation among units, assumptions that are difficult to satisfy in panel data comprising LQ45 companies from highly heterogeneous sectors such as banking, mining, and consumer goods. When these assumptions are violated, the standard errors generated by the conventional FEM become inefficient and are often underestimated, causing the t-statistics to be artificially inflated or deflated. The SUR/PCSE correction addresses this issue by simultaneously accounting for potential heteroscedasticity and contemporaneous correlation across firms, thereby producing more accurate standard errors and more reliable statistical inference.

The FEM-PCSE estimation results indicate that DER, ROA, and firm size jointly exert a significant effect on ETR, with an Adjusted R<sup>2</sup> of 89.96%. Partially, DER has a negative and statistically significant effect on ETR (coefficient = -0.0031; p = 0.0475). This finding is consistent with the tax shield concept, whereby interest expenses arising from debt financing are deductible from taxable income. Consequently, a higher DER leads to a lower corporate ETR. In contrast, ROA does not significantly affect ETR (p = 0.6873). This insignificance may

be explained by the theoretical dualism observed among LQ45 firms. On one hand, highly profitable firms possess greater capacity to engage in aggressive tax planning; on the other hand, their high public visibility exposes them to stricter scrutiny by tax authorities. These opposing forces may offset each other, resulting in a statistically insignificant relationship. Firm size is found to have a negative and significant effect on ETR (coefficient =  $-9.6967$ ;  $p = 0.0000$ ), indicating that larger firms are better able to leverage organizational resources, international tax consultants, and complex group structures to reduce their effective tax burden. This finding is consistent with both agency theory and political power theory.

Table 3. The Effects of ROA, SIZE, DER, and ETR on DPR

Variable	FEM Coefficient	t-Statistic	Prob.	FEM with SUR Correction t-Statistic	Prob.
C	-902.772	-1.812	0.078	-6.586	0.000
ROA	0.031	0.108	0.914	0.130	0.897
SIZE	30.963	2.023	0.050	7.206	0.000
DER	-0.023	-0.641	0.525	-1.268	0.212
ETR	-1.390	-2.090	0.043	-2.144	0.038
R-squared	0.948				
Adjusted squared	R- 0.916				
F-statistic	29.221				
Prob(F-statistic)	0.000				

The estimation results for Model 2 also reveal informative differences between the standard Fixed Effect Model (FEM) and the FEM with SUR/PCSE correction. The most notable difference is observed in the SIZE variable, where the standard FEM produces a t-statistic with a probability value exactly at the 5% significance threshold. After applying the SUR correction, however, the t-statistic increases substantially. This finding suggests that the standard FEM tends to underestimate the strength of the SIZE effect due to inefficient standard errors, whereas the SUR correction reveals that the influence of firm size on the Dividend Payout Ratio (DPR) is substantially stronger and more robust than indicated by the conventional estimation. The ETR variable remains relatively consistent across both approaches, with both models indicating a significant negative effect, although the SUR correction yields slightly more precise estimates. Meanwhile, DER and ROA remain statistically insignificant under both estimation methods, implying that the conclusions regarding these variables remain unchanged. An interesting result is observed for the model constant: while it is insignificant in the standard FEM, it becomes highly significant after SUR correction, suggesting that the baseline dividend policy, after controlling for all independent variables, differs meaningfully across firms.

Overall, the pattern observed in Model 2 reinforces the rationale for selecting FEM-SUR as the primary estimator. The robust standard error correction does not alter the direction or magnitude of the coefficients but improves the accuracy of statistical inference, particularly for the SIZE variable, which shifts from being marginally significant to highly significant after correcting for heteroscedasticity and contemporaneous correlation among firms. This finding

further demonstrates that relying solely on the standard FEM in the context of highly heterogeneous LQ45 panel data may lead to misleading conclusions, especially when assessing the significance of firm size in determining dividend policy.

The results of Model 2 indicate that ROA, SIZE, DER, and ETR jointly exert a significant influence on DPR, with an Adjusted R<sup>2</sup> value of 91.56%. Partially, DER does not have a significant effect on DPR ( $p = 0.2121$ ). After controlling for firm-specific effects through FEM, variations in DER during the observation period are insufficient to generate significant changes in DPR, suggesting that dividend policies among LQ45 firms are relatively persistent and unresponsive to short-term fluctuations in leverage. Similarly, ROA does not significantly affect DPR ( $p = 0.8974$ ), reflecting the dividend-smoothing behavior commonly observed among large, established firms. Management tends to maintain stable dividend payments regardless of periodic fluctuations in profitability. Firm size, however, has a positive and significant effect on DPR (coefficient = 30.9626;  $p = 0.0000$ ), making it the most dominant determinant in the model.

This finding is economically intuitive because after-tax net income, which serves as the primary source of dividend payments, is directly reduced when the effective tax burden increases.

Table 4. Indirect Effects

Path		Coefficient (a)	Coefficient (b)	Sab (Std. Error)	Z-Statistic	P-Value	Conclusion
DER	→	-0.003	-1.390	0.003	1.474	0.140	Not Significant
ETR	→						
DPR							
ROA	→	-0.041	-1.390	0.144	0.400	0.689	Not Significant
ETR	→						
DPR							
SIZE	→	-9.697	-1.390	659.411	2.043	0.041	Significant
ETR	→						
DPR							

The mediation effect analysis using the Sobel Test produced varying findings across the three tested pathways. First, ETR does not mediate the relationship between DER and DPR ( $Z = 1.474$ ;  $p = 0.140$ ). Although DER significantly affects ETR and ETR significantly affects DPR, the tax savings generated through leverage are not automatically converted into higher dividend payments. This is particularly relevant for highly leveraged firms, such as banks, which are subject to strict dividend distribution regulations imposed by relevant authorities. Second, ETR also fails to mediate the relationship between ROA and DPR ( $Z = 0.400$ ;  $p = 0.689$ ), reinforcing the finding that the pathway from profitability to dividend payments does not operate through tax management strategies. Instead, dividend distributions appear to be driven by long-established dividend policies that have become institutionalized within firms. Third, ETR is found to significantly mediate the relationship between firm size and DPR ( $Z = 2.043$ ;  $p = 0.041$ ). This mechanism suggests that larger firms are better able to exploit the complexity of tax structures to effectively reduce their ETR, and the resulting tax savings are

subsequently distributed to shareholders in the form of higher dividends to satisfy institutional investors' preferences. Therefore, firm size influences dividend policy not only directly through greater financial capacity but also indirectly through the channel of tax efficiency.

## **Discussion**

The effect of DER on ETR is found to be negative and statistically significant, indicating that firms with a higher proportion of debt tend to bear a lower effective tax burden. This finding is consistent with the tax shield concept in capital structure theory, which posits that interest expenses arising from debt financing are tax-deductible and therefore reduce taxable income. Furthermore, agency theory suggests that highly leveraged firms are motivated to pursue more aggressive tax efficiency strategies in order to preserve cash flows necessary to meet obligations to creditors (Kasmir, 2019). This result is consistent with the findings of Berliana and Mahpudin (2021) as well as Kurniasari and Listiawati (2019), who also reported a significant negative relationship between DER and ETR.

In contrast, the effect of ROA on ETR is not statistically significant, although the negative coefficient is consistent with theoretical expectations. This insignificance can be explained by the coexistence of two opposing theoretical mechanisms among LQ45 firms. On one hand, agency theory argues that managers of highly profitable firms are incentivized to engage in tax avoidance activities to maximize net income (Anasta, 2019). On the other hand, firms with high ROA in the LQ45 Index often attract greater scrutiny from tax authorities and face a higher likelihood of tax audits, thereby limiting opportunities for aggressive tax planning. These opposing forces appear to neutralize the statistical relationship between ROA and ETR. This finding provides additional nuance to the study of Febriany and Syarif (2025), which reported a significant negative effect. The discrepancy may be attributable to differences in sample composition and the application of the FEM-PCSE approach, which more rigorously controls for unobserved heterogeneity across firms.

Firm size is found to have a negative and significant effect on ETR, making it the most consistent tax-related determinant in the model. Larger firms possess greater resources to exploit tax incentives, regulatory loopholes, international tax consultants, and complex corporate group structures to reduce their effective tax rates below the statutory tax rate (Belz et al., 2019). Although political cost theory predicts the opposite relationship because larger firms are subject to greater public scrutiny, the empirical evidence in this study provides stronger support for agency theory and political power theory, which argue that the ability to utilize tax-related resources outweighs the monitoring effect associated with firm size. This finding is consistent with Novianti et al. (2019) and Gita et al. (2021), both of whom found a significant negative relationship between firm size and ETR.

In the dividend policy equation, DER is not found to have a significant effect on DPR. After controlling for firm-specific effects through the Fixed Effect Model, variations in DER during the observation period are insufficient to significantly influence dividend policy

decisions. This condition reflects a unique characteristic of cross-sectoral LQ45 firms, where highly leveraged companies such as banks often maintain highly predictable dividend policies due to regulatory pressure from the Financial Services Authority (OJK), while non-bank firms with lower leverage tend to prioritize business expansion. Managers of LQ45 firms appear to regard dividend policy and debt policy as two independent strategic pillars, while placing greater emphasis on dividend smoothing to maintain credibility among institutional investors. This finding is consistent with the results reported by Wiyogo and Ekadjaja (2023).

ROA is also found to have no significant effect on DPR, although the coefficient is positive as theoretically expected. This result strongly supports the dividend smoothing theory, which argues that mature firms tend to maintain stable dividend levels and do not immediately adjust dividends in response to short-term fluctuations in profitability. Firms included in the LQ45 Index appear to have established long-term dividend policies that have become institutionalized, making variations in ROA over the three-year observation period insufficient to materially alter dividend decisions. Although both agency theory and pecking order theory predict a positive relationship between profitability and dividend payments, the use of FEM, which captures only within-firm variation over time, may have limited the detectability of ROA's effect. This result is in line with the findings of Damayanti and Sucipto (2022).

Firm size is found to have a positive and significant effect on DPR. This finding is consistent with signalling theory, which suggests that large firms distribute dividends as a positive signal to the market regarding their stable cash flows and strong financial condition (Hashmi et al., 2020). Life cycle theory also supports this finding, arguing that mature firms generally face fewer profitable investment opportunities while generating substantial free cash flow, thereby increasing their propensity to distribute dividends. Furthermore, agency theory reinforces the argument that dividends function as a monitoring mechanism by reducing the amount of free cash flow under managerial control and consequently mitigating agency conflicts between managers and shareholders. This result is consistent with the findings of Jamaludin et al. (2023), Benyadi and Andrianantenaina (2020), and Tekin (2020).

ETR is found to have a negative and significant effect on DPR, implying that an increase in the effective tax burden directly reduces a firm's capacity to pay dividends. Mechanically, after-tax net income, which serves as the primary source of dividend payments, declines as ETR increases. Within the framework of agency theory, taxes and dividends represent competing claims on corporate surplus; therefore, management faces a trade-off between fulfilling tax obligations to the government and providing returns to shareholders (Anderson et al., 2022). This finding contributes to clarifying the direction of the relationship between ETR and dividend policy, which has remained inconclusive in previous studies. While Barros et al. (2020) and Kuswanto (2023) reported a positive effect, the present study finds a negative relationship that appears more economically intuitive when ETR is conceptualized as an actual tax burden that reduces the earnings available for dividend distribution.

The mediation analysis using the Sobel Test yields different results across the three examined pathways. ETR does not mediate the relationship between DER and DPR, nor between ROA and DPR. In the DER pathway, although tax savings generated through leverage successfully reduce ETR, these savings are not automatically converted into higher dividend payments because highly leveraged firms tend to prioritize cash flows for debt repayment. In the ROA pathway, the lack of a significant relationship between ROA and ETR in the first equation prevents the mediation mechanism from forming statistically. However, ETR is found to significantly mediate the relationship between firm size and dividend policy. This mechanism suggests that larger firms are better able to utilize the complexity of tax structures to effectively reduce their ETR, and the resulting tax savings are subsequently distributed to shareholders in the form of higher dividend payments. Therefore, firm size affects dividend policy not only directly through greater financial capacity but also indirectly through tax efficiency mechanisms, as supported by the findings of Duhoon and Singh (2023).

## **CONCLUSION**

Based on the estimation results of the Fixed Effects Model with robust standard error correction (FEM-PCSE) and the Sobel test for mediation, this study yields ten conclusions. First, DER has a negative and significant effect on ETR. Second, ROA has no significant effect on ETR. Third, firm size has a negative and significant effect on ETR. Fourth, DER has no significant effect on DPR. Fifth, ROA has no significant effect on DPR. Sixth, firm size has a positive and significant effect on DPR. Seventh, ETR has a negative and significant effect on DPR. Eighth, ETR is not proven to mediate the relationship between DER and DPR. Ninth, ETR is not proven to mediate the relationship between ROA and DPR. Tenth, ETR is proven to significantly mediate the relationship between firm size and DPR. The finding of partial mediation of ETR enhances understanding that the role of taxes as a transmission mechanism between firm characteristics and dividend policy is contextual and does not apply uniformly to all predictor variables. Specifically, ETR mediation is only evident for the firm size path, but not for the DER or ROA paths.

This study has several limitations that open up opportunities for further research. The observation period of only three years (2022–2024) is not fully capable of capturing the dynamics of dividend policy and tax strategies across various economic cycles. Therefore, future research is recommended to extend the observation period to five to ten years to produce more stable estimates. The limited sample coverage of LQ45 companies limits the generalizability of the results, so future research could expand the sample to all companies listed on the IDX or conduct comparative analyses across sectors to determine whether tax mediation patterns are universal or differ across sectors. Future research could consider additional independent variables such as free

cash flow, sales growth, or managerial and institutional ownership structures, which theoretically have stronger interactions with tax variables. The use of alternative tax proxies such as the Cash Effective Tax Rate (CETR) or Book-Tax Differences could provide a more comprehensive picture of the spectrum of corporate tax planning strategies not captured by the accrual-based ETR.

## REFERENCES

- Abdullah, H. (2021). Profitability and Leverage as Determinants of Dividend Policy: Evidence of Turkish Financial Firms. Munich Personal RePEc Archive, No. 112134. <https://doi.org/10.23918/ejmss.v2i3p15>
- Abdullah, H., & Tursoy, T. (2021). Capital structure and firm performance: a panel causality test. Munich Personal RePEc Archive, 105871, 1–18. <https://mpra.ub.uni-muenchen.de/105871/>
- 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(November 2021), 169–192. <https://doi.org/10.1016/j.iref.2022.02.002>
- Ali, J., Soukaina, K., Shah, W., Khan, S., Ullah, Z., & Tahira, Y. (2022). The impact of capital structure on dividend policy: Evidence from Pakistan. *Journal of Public Value and Administrative Insight*, 5(1), 142–152.
- Anasta, L. (2019). The Effect of Profitability and Tax Avoidance on Profit Management and Its Impact on Company Value. *European Journal of Business and Management*, 11(27), 32–46. [www.iiste.org](http://www.iiste.org)
- Anderson, M., Kabir, M., Rashid, H., & Warsame, H. (2022a). Corporate Dividend Policy and Tax Avoidance. *Canadian Tax Journal*, 70(4), 747–784.
- Anderson, M., Kabir, M., Rashid, H., & Warsame, H. (2022b). Corporate Dividend Policy and Tax Avoidance. *Canadian Tax Journal/Revue Fiscale Canadienne*, 70(4), 747–784. <https://doi.org/10.32721/ctj.2022.70.4.anderson>
- Asiam, S., & Rahmawati, R. (2022). Faktor-Faktor yang Mempengaruhi Kebijakan Dividen pada Perusahaan LQ45. *Jurnal Akuntansi Syariah.AKTSAR*, 5(2), 231–244. <https://doi.org/10.21043/aktsar.v5i2.18156>
- Barros, V., Guedes, M. J., Santos, P., & Sarmento, J. M. (2022). Does CEO turnover influence dividend policy? *Finance Research Letters*, 44(February 2021). <https://doi.org/10.1016/j.frl.2021.102085>
- Barros, V., Verga Matos, P., & Miranda Sarmento, J. (2020). What firm's characteristics drive the dividend policy? A mixed-method study on the Euronext stock exchange. *Journal of Business Research*, 115(June), 365–377. <https://doi.org/10.1016/j.jbusres.2019.11.042>

- Belz, T., von Hagen, D., & Steffens, C. (2019). Taxes and firm size: Political cost or political power? *Journal of Accounting Literature*, 42, 1–28. <https://doi.org/10.1016/j.acclit.2018.12.001>
- Benyadi, F. C., & Andrianantenaina, H. (2020). Profitability, Liquidity, Leverage and Firm Size on Dividend Payment. *Perspektif Akuntansi*, 3(Juni), 155–166.
- Berliana, M., & Mahpudin, E. (2021). Pengaruh ROI dan DER Terhadap Tax Avoidance. *Competitive Jurnal Akuntansi Dan Keuangan*, 5(1), 2021.
- Budianto, R., Suyono, E., Purwati, A. S., & Suparlinah, I. (2022). Factors Affecting Corporate Dividend Policy: Evidence from Emerging Market. *Kompartemen : Jurnal Ilmiah Akuntansi*, 20(1), 17. <https://doi.org/10.30595/kompartemen.v20i1.12318>
- Damayanti, R., & Sucipto, A. (2022). The Effect of Profitability, Liquidity, and Leverage on Firm Value With Dividend Policy as Intervening Variable. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 6(2), 863.
- Dosis, A. (2018). On signalling and screening in markets with asymmetric information. *Journal of Mathematical Economics*, 75, 140–149. <https://doi.org/10.1016/j.jmateco.2018.01.001>
- Duhoon, A., & Singh, M. (2023). Corporate tax avoidance: a systematic literature review and future research directions. *LBS Journal of Management & Research*, 21(2), 197–217. <https://doi.org/10.1108/lbsjmr-12-2022-0082>
- Febriany, A., & Syarif, D. (2025). Pengaruh Return on Asset, Debt to Equity Ratio, dan Capital Intensity Terhadap Effective Tax Rate Pada Perusahaan Barang Konsumen Primer. *ECo-Buss*, 8(1), 167–178. <https://doi.org/10.32877/eb.v8i1.2450>
- Franc-Dąbrowska, J., Mađra-Sawicka, M., & Ulrichs, M. (2020). Determinants of dividend payout decisions—the case of publicly quoted food industry enterprises operating in emerging markets. *Economic Research-Ekonomska Istrazivanja*, 33(1), 1108–1129. <https://doi.org/10.1080/1331677X.2019.1631201>
- Gita, I. A. M. A., Partika, I. D. M., & Suciwati, D. P. (2021). Effect Firm Size, Profitability and Inventory Intensity Against Effective Tax Rate (ETR). *Journal of Applied Sciences in Accounting, Finance, and Tax*, 4(1), 9–15. <https://doi.org/10.31940/jasafint.v4i1.2410>
- Handayani, H., Niandari, N., Perdana, D., & Jati, B. P. (2022). Profitability, liquidity, leverage, and corporate dividend policy. *Journal of Business and Information Systems (e-ISSN: 2685-2543)*, 4(2), 79–87. <https://doi.org/10.36067/jbis.v4i2.128>
- Harahap, N. H. Q., Situmorang, M. B., Karo, F. K. B., & Hayati, K. (2021). Pengaruh DER, ROA, SIZE, EPS, cash position dan TATO terhadap DPR perusahaan

- manufaktur Periode 2016-2019. *Jurnal Paradigma Ekonomika*, 16(3), 527–542. <https://doi.org/10.22437/jpe.v16i3.12598>
- Hashmi, S. D., Gulzar, S., Ghafoor, Z., & Naz, I. (2020). Sensitivity of firm size measures to practices of corporate finance: evidence from BRICS. *Future Business Journal*, 6(1), 1–19. <https://doi.org/10.1186/s43093-020-00015-y>
- Jamaludin, J., Singh, B., & Bahri, S. (2023). Effect of Dividends Policy on Firms Size, Leverage and Performance Effect of Dividends Policy on Firms Size, Leverage and Performance (Issue September).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3, 305–360.
- Kasmir. (2019). Analisis Laporan Keuangan. (12th ed.). PT Raja Grafindo Persada.
- Kurniasari, E., & Listiawati, L. (2019). Profitabilitas Dan Leveraged dalam Mempengaruhi Effective Tax Rat. *Jurnal Manajemen*, 9(1), 17–29.
- Kuswanto, R. (2023). Tax Avoidance and Dividend Policy: Evidence from Indonesian State-Owned Enterprises. *Jurnal Dinamika Akuntansi Dan Bisnis*, 10(2), 199–212. <https://doi.org/10.24815/jdab.v10i2.30037>
- Novianti, D. R., Praptiningsih, P., & Lastiningsih, N. (2019). Pengaruh Ukuran Perusahaan, Dewan Komisaris Dan Capital Intensity Terhadap Effective Tax Rate (Etr). *Equity*, 21(2), 116–128. <https://doi.org/10.34209/equ.v21i2.637>
- 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), 35–42. <https://doi.org/10.13106/jafeb.2020.vol7.no10.035>
- Putri, N. R., & Irawati, W. (2019). Pengaruh Kepemilikan Manajerial dan Effective Tax Rate terhadap Kebijakan Dividen dengan Likuiditas sebagai Variabel Moderating. *Jurnal Kajian Akuntansi*, 3(1), 93. <https://doi.org/10.33603/jka.v3i1.1971>
- Putri, Rizal, & Vidiyanna. (2020). Pengaruh Inventory Intensity dan Debt Policy Terhadap Penghindaran Pajak. *Jurnal Akuntansi Keuangan Dan Bisnis*, 13(2), 118–125. <http://jurnal.pcr.ac.id/index.php/jakb/>
- Rani, N., Yadav, S. S., & Tripathy, N. (2020). Capital structure dynamics of Indian corporates. *Journal of Advances in Management Research*, 17(2), 212–225. <https://doi.org/10.1108/JAMR-12-2017-0125>
- Sakr, A., & Bedeir, A. (2020). The Interrelationship between Capital Structure and Corporate Payout Policy. *International Research Journal of Finance and ...*, March 2020. <https://www.researchgate.net/profile/Amina->

Bedeir/publication/348744015\_The\_Interrelationship\_between\_Capital\_Structure\_and\_Corporate\_Payout\_Policy/links/600ebc6145851553a06b4123/The-Interrelationship-between-Capital-Structure-and-Corporate-Payout-Policy.

Sriyono, S., & Andesto, R. (2022). The Effect of Profitability, Leverage and Sales Growth on Tax Avoidance with the Size of The Company as A Moderation Variable. *Dinasti International Journal of Management Science*, 4(1), 112–126. <https://doi.org/10.31933/dijms.v4i1.1408>

Tekin, H. (2020). Firm Size and Dividend Policy of European Firms: Evidence from Financial Crises. *Marmara Üniversitesi Avrupa Topluluğu Enstitüsü Avrupa Araştırmaları Dergisi*, 28(1), 109–121. <https://doi.org/10.29228/mjes.11>

Wiyogo, Y., & Ekadjaja, A. (2023). Pengaruh Struktur Modal, Likuiditas, Dan Profitabilitas Terhadap Kebijakan Dividen Pada Perusahaan Manufaktur. *Jurnal Multiparadigma Akuntansi*, V(1), 330–337.

Yeo, H. J. (2018). Role of free cash flows in making investment and dividend decisions: The case of the shipping industry. *Asian Journal of Shipping and Logistics*, 34(2), 113–118. <https://doi.org/10.1016/j.ajsl.2018.06.007>