Impact of Liquidity, Profitability, and Solvency Ratios on Dividend Per Share: A Panel Data Analysis of Mining Companies Listed on the Jakarta Islamic Index

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***ABSTRAK**: Sektor pertambangan memiliki karakteristik unik dalam hal struktur modal dan pembagian dividen. Perusahaan-perusahaan dalam sektor ini sering kali menghadapi tantangan seperti fluktuasi harga komoditas, kebutuhan investasi modal yang besar, dan risiko operasional yang tinggi.Tujuan penelitian ini untuk mengetahui pengaruh secara parsial ataupun simultan dari rasio likuiditas yakni Quick Ratio, rasio profitabilitas yakni Net Profit Margin dan rasio solvabilitas yakni Debt to Equity Ratio terhadap Dividend Per Share pada perusahaan sektor pertambangan yang terdaftar di Jakarta Islamic Index (JII) periode 2013-2022. Penelitian ini menggunakan pendekatan kuantitatif dengan teknik analisis regresi data panel. Data sekunder dihimpun dari laporan keuangan tahunan pada website resmi masing-masing perusahaan sektor pertambangan yang terdaftar di Jakarta Islamic Index. Langkah analisis yang digunakan adalah uji asumsi klasik, uji pemilihan model terbaik, uji hipotesis dan uji koefisien determinasi. Hasil penelitian menyatakan model terbaik adalah Fixed Effect Model dengan rincian rasio likuiditas yakni Quick Ratio dan rasio solvabilitas yakni Debt to Equity Ratio secara parsial tidak berpengaruh signifikan terhadap Dividend Per Share. Adapun rasio profitabilitas yakni Net Profit Margin secara parsial berpengaruh positif dan signifikan terhadap Dividend Per Share. Secara simultan Quick Ratio, Net Profit Margin dan Debt to Equity Ratio berpengaruh signifikan terhadap Devidend Per Share dengan koefisien determinasi sebesar 81.32% sedangkan sisanya sebesar 18,68% dijelaskan oleh variasi variabel lain yang tidak diteliti. Implikasi dari penelitian ini, investor dan perusahaan dapat menjadikan Net Profit Margin sebagai salah satu indikator penting dalam mempertimbangkan keputusan investasi ataupun dalam mengambil kebijakan yang berkaitan dengan Dividend Per Share.*

***Kata kunci**: Quick Ratio, Net Profit Margin*, *Debt to Equity Ratio*, *Dividend Per Share*.

***ABSTRACT**: The mining sector has unique characteristics in terms of capital structure and dividend distribution. Companies in this sector often face challenges such as fluctuations in commodity prices, large capital investment needs, and high operational risks. The purpose of this study was to determine the partial or simultaneous effect of the liquidity ratio, namely Quick Ratio, profitability ratio, namely Net Profit Margin and solvency ratio, namely Debt to Equity Ratio on Dividend Per Share in mining sector companies listed on the Jakarta Islamic Index (JII) for the period 2013-2022. This research uses a quantitative approach with panel data regression analysis techniques. Secondary data is collected from annual financial reports on the official website of each mining sector company listed on the Jakarta Islamic Index. The analysis steps used are classical assumption test, best model selection test, hypothesis testing and determination coefficient test. The results stated that the best model was the Fixed Effect Model with details of the liquidity ratio, namely the Quick Ratio and the solvency ratio, namely the Debt to Equity Ratio partially had no significant effect on Dividend Per Share. The profitability ratio, namely Net Profit Margin, partially has a positive and significant effect on Dividend Per Share. Simultaneously Quick Ratio, Net Profit Margin and Debt to Equity Ratio have a significant effect on Dividend Per Share with a coefficient of determination of 81.32% while the remaining 18.68% is explained by variations in other variables not examined. The implication of this research is that investors and companies can make Net Profit Margin as one of the important indicators in considering investment decisions or in making policies related to Dividend Per Share.*

***Keywords**: Quick Ratio, Net Profit Margin*, *Debt to Equity Ratio*, *Dividend Per Share*.

1. INTRODUCTION

Dividend distribution is one of the important policies taken by companies, especially those listed on the capital market. Dividend policy can affect shareholders' investment decisions and market perceptions of the company. In an effort to provide welfare, the company will strive to generate maximum profits, so that the company is also able to provide higher dividends. Shareholders are very interested in high dividend distribution, because shareholders get a large return on their investment. So this dividend policy is very important for the company because it is related to the profits distributed. The purpose of dividend distribution is to show the achievement of shareholders and also for the liquidity of the company (Wicaksono & Nasir, 2017). Dividend per share (DPS) is a ratio that measures the extent of dividends paid compared to the number of shares outstanding in a given year. This ratio illustrates how much profit per share is distributed to shareholders as dividends (Khadka & Gaire, 2024; Putri & Suaryana, 2023; Suraya et al., 2024). High Dividend Per Share (DPS) reflects good prospects for the company, because it can pay large dividends, thus attracting investors to buy the company's shares (Hutami, 2012). Therefore, it is important for investors and company management to understand the factors that affect dividend per share (DPS).

Financial ratios, such as liquidity, profitability and solvency ratios, are often used to assess a company's financial performance and its ability to pay dividends (Van horne, 2009). Liquidity ratios measure a company's ability to meet its short-term obligations. The company's liquidity can be seen from the Quick Ratio. Quick Ratio measures the company's ability to meet short-term obligations using assets owned by the company. This ratio indicates that the most liquid current assets have the ability to cover current debt. The greater this ratio, the better, so the ability to pay dividends is also high (Sartono, 2001). A company will prefer the profits obtained to pay debt, the rest is distributed as dividends per share (Sintha, 2019). While profitability ratios show a company's efficiency in generating profits. Net Profit Margin (NPM) is a profitability ratio used to measure the extent to which a company can generate net profit at a certain level of sales. The higher this ratio indicates that the better the company generates net income, which means that the ability to pay dividends is also higher (Halim, 2005). According to Kasmir (2008), states that Net Profit Margin is a measure of profit that compares earnings after interest and taxes with sales. On the other hand, solvency ratios describe a company's ability to meet its long-term obligations. Solvency shows the ability of a company to fulfill obligations and generate income. One of the company's solvency can be seen in the Debt to Equity Ratio (DER) ratio (Sutrisno, 2003). These three ratios can provide important insights into a company's financial health and its ability to pay dividends to shareholders.

The mining sector, particularly those listed on the Jakarta Islamic Index (JII), has unique characteristics in terms of capital structure and dividend distribution. Companies in this sector often face challenges such as fluctuating commodity prices, large capital investment requirements, and high operational risks. Therefore, understanding how liquidity, profitability, and solvency ratios affect dividend per share of these companies is very important. The research object in this study consists of mining sector companies listed on the Indonesia Stock Exchange (IDX) and also included in the Jakarta Islamic Index (JII), which comprises sharia-compliant stocks. The mining sector in the JII includes 10 companies. From these ten companies, the researcher selected the four largest companies for analysis over the period from 2013 to 2022. These four companies, namely PT Aneka Tambang Tbk, PT Adaro Energy Indonesia Tbk, PT Bukit Asam Tbk, and PT Indo Tambangraya Megah Tbk, were chosen because they consistently distribute dividends per share annually and are leading companies in the mining sector. The selection of these companies is based on the criteria that they are

major entities in the industry and have stable dividend distribution policies, making them interesting subjects for studying the influence of liquidity, profitability, and solvency ratios on Dividend Per Share (DPS).

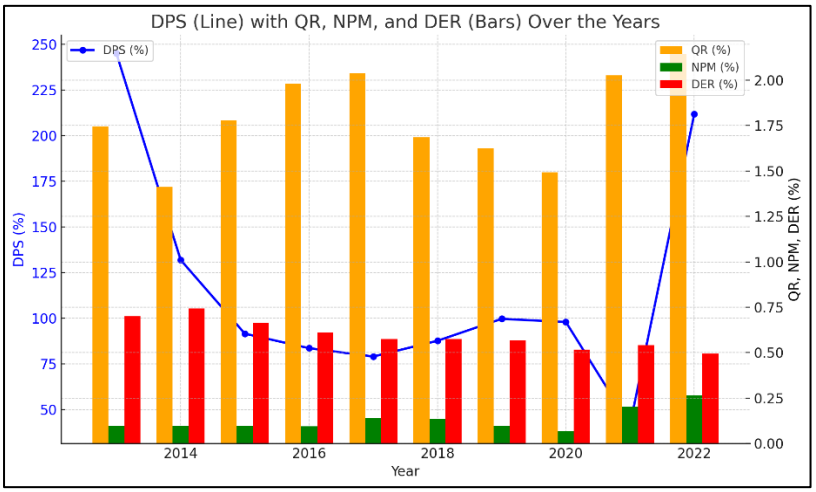

Figure 1. Average DPS, QR, NPM and DER in mining sector companies in 2014-2022

The financial trends observed in the graph, reflecting Dividend Per Share (DPS), Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER), can be interpreted in the context of the four sample mining companies listed on the Jakarta Islamic Index (JII): PT Aneka Tambang Tbk, PT Adaro Energy Indonesia Tbk, PT Bukit Asam Tbk, and PT Indo Tambangraya Megah Tbk. The average DPS fluctuated significantly over the ten-year period, with a notable decline between 2013 and 2021, followed by a strong rebound in 2022. This trend suggests that the four companies, on average, experienced variations in dividend distribution, possibly due to shifts in profitability and strategic capital allocation. The sharp recovery in 2022 reflects an improvement in financial conditions across the sector, likely supported by favorable commodity prices or operational efficiencies. This indicates that, while some years may have seen lower returns for investors, the mining sector, particularly these four firms, managed to restore dividends when profitability improved. The average QR across the four companies remained relatively stable, indicating that these firms maintained consistent liquidity levels throughout the period. The average NPM increased notably towards the end of the period, particularly in 2021 and 2022. The average DER showed a gradual decline over the period, indicating that the companies reduced their reliance on debt financing and strengthened their equity bases

Previous studies have shown mixed results regarding the impact of Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on Dividend Per Share (DPS). Akbar (2023) found that Net Profit Margin (NPM) has a positive and significant effect on Dividend Per Share (DPS). However, studies by Girresyendikal & Purba, (2019) and Susanto (2016) indicated that the Quick Ratio (QR) has no significant effect on Dividend Per Share (DPS). A positive correlation exists between the Quick Ratio and cash dividends, meaning companies with higher liquidity are more inclined to distribute dividends to shareholders (Amyas, 2014). Liquidity, represented by the Current Ratio, shows a mixed impact (Lestari et al., 2024; Siregar & Akhmadi, 2024). While some studies indicate a positive relationship with financial performance, its direct effect on DPS remains less clear. In contrast, Girresyendikal & Purba (2019) suggested that the Debt to Equity Ratio (DER) has a positive and significant effect on Dividend Per Share (DPS), while Prasetyo (2015) found that Debt to Equity Ratio (DER) has no significant effect on Dividend Per Share (DPS). These differing findings reveal a gap in

the literature regarding the influence of Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on Dividend Per Share (DPS). Some studies show contradictory results on the impact of Quick Ratio (QR) and Debt to Equity Ratio (DER) on Dividend Per Share (DPS). This research aims to fill this gap by re-examining the effects of Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on Dividend Per Share (DPS) in the mining sector companies listed on Jakarta Islamic Index (JII), using panel data regression analysis. This approach is expected to provide a deeper and more comprehensive understanding of the factors influencing dividend policy in the mining sector. The results of this study are expected to contribute to financial literature related to dividend policy and provide guidance for investors in making investment decisions in the mining sector. In addition, this research is also expected to assist company management in formulating more effective financial policies, especially in terms of dividend distribution.

The objective of this study is to investigate the impact of financial ratios namely the Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on Dividend Per Share (DPS) in mining sector companies listed on the Jakarta Islamic Index (JII). The primary issue addressed in this research is how liquidity, profitability, and solvency ratios influence dividend policy in these companies. The first question to be answered is descriptive: What data shows the trends in changes in QR, NPM, DER, and DPS among mining sector companies listed on the JII during the period from 2013 to 2022?; The second question is analytical: How do QR, NPM, and DER affect DPS in JII mining sector companies, and is there a significant relationship between these ratios and dividend policy?; The third question is implicative: How can the findings of this research enhance the understanding of dividend policy in the mining sector and provide solutions for company management to formulate more effective financial strategies?. This study contributes not only to the financial literature but also offers practical insights for company management and investors on the key factors influencing dividend policy in sharia-compliant mining companies.

Based on the background and literature review, the following hypotheses are proposed to examine the influence of Quick Ratio, Net Profit Margin, and Debt to Equity Ratio on Dividend Per Share (DPS) in mining sector companies listed on the Jakarta Islamic Index (JII): H1 is The Quick Ratio (QR) has a significant effect on Dividend Per Share (DPS) in mining sector companies listed on the Jakarta Islamic Index (JII); H2 is The Net Profit Margin (NPM) has a positive and significant effect on Dividend Per Share (DPS) in mining sector companies listed on the Jakarta Islamic Index (JII); H3 is The Debt to Equity Ratio (DER) has a significant effect on Dividend Per Share (DPS) in mining sector companies listed on the Jakarta Islamic Index (JII). These hypotheses aim to determine whether these financial ratios have a meaningful impact on the dividend distribution policies of the selected companies.

2. METHOD

2.1 Research Approach and Data

This study employs a quantitative approach to analyze the impact of financial ratios, Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on Dividend Per Share (DPS) in mining sector companies listed on the Jakarta Islamic Index (JII). The quantitative approach is used to systematically collect, analyze, and interpret numerical data related to the financial performance of the selected companies. Quantitative research is defined as a methodology that employs numerical data to quantify attitudes, opinions, and behaviors, facilitating generalizations across larger populations (Haradhan, 2020).

Data for this research is gathered from secondary sources, specifically the annual financial reports of the companies over the period from 2013 to 2022. The analysis involves the use of panel data regression, which combines cross-sectional and time-series data, allowing for a more comprehensive examination of the relationships between the variables over time and across different companies. In this study, data was obtained from the Financial Report at www.idx.co.id and the official website of each company.

By employing this approach, the study aims to quantitatively determine the extent to which Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) influence Dividend Per Share (DPS), providing statistically significant insights into the financial dynamics that drive dividend policy in the mining sector within the Jakarta Islamic Index (JII). This method enables the research to test the proposed hypotheses, validate the theoretical framework, and draw data-driven conclusions that can be generalized to similar contexts.

2.2 Population and Samples

The population is defined as the generalization area consisting of objects or subjects with certain qualities and characteristics determined by the researcher to be studied, from which conclusions are then drawn (Sugiyono, 2016). In this study, the population includes all mining sector companies listed on the Jakarta Islamic Index (JII) during the research period from 2013 to 2022. This population comprises a total of 10 companies. These companies are PT Adaro Energy Tbk, PT Harum Energy Tbk, PT Indika Energy Tbk, PT Barito Pacific Tbk, PT Vale Indonesia Tbk, PT Indo Tambangraya Megah Tbk, PT Bukit Asam Tbk, PT Timah Tbk, PT United Tractors Tbk, and PT Aneka Tambang Tbk.

A sample is a subset of the population that shares similar characteristics (Sugiyono, 2016). In this study, the sample was determined using the Purposive Sampling method. Purposive Sampling is a technique for selecting samples based on specific criteria (Sugiyono, 2016). The researcher chose this method because not all companies in the population meet the criteria required for the study. The criteria used to select the sample for this research are as follows: Mining sector companies listed on the Indonesia Stock Exchange (IDX) during the research period from 2013 to 2022; Companies that were consistently listed on the Jakarta Islamic Index (JII) during the research period from 2013 to 2022; and Companies that published complete financial statements, including the data needed for the research, for the period from 2013 to 2022. Based on these criteria, the sample consists of 4 companies. The selected mining sector companies listed on the Indonesia Stock Exchange and the Jakarta Islamic Index (JII) included in the sample are PT Aneka Tambang Tbk, PT Adaro Energy Indonesia Tbk, PT Bukit Asam Tbk and PT Indo Tambangraya Megah Tbk.

2.3 Variables

The independent variables in this study are the Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER). The dependent variable is Dividend Per Share (DPS).

Table 1. Operational definitions of variables

Variable	Definition	Indicator	Scale
X_1 *Quick Ratio*	To measure how the company can fulfill its obligations, without having to liquidate or depend on inventory (Sulindawi, Yuniarto, & Purnamawati, 2017).	$QR = \frac{Current\ assets - Inventory}{Current\ Liabilities}$x100% X_1 = Log(QR)	Ratio
X_2 *Net Profit Margin*	To determine the company's ability to generate net profit (Kasmir,2016)	$\text{NPM} = \frac{Net\ profit\ after\ tax}{net\ sales}\ X\ 100\%$	Ratio
X_3 *Debt to Equity Ratio*	The ratio used to determine the comparison between total debt and capital stock. This ratio is useful for knowing how much the company's assets are financed from debt (Kasmir, 2012).	$\text{DER} = \frac{Total\ debt}{Total\ equity}\ \text{X}\ 100\%$	Ratio
Y *Dividend Per Share*	A ratio that measures and illustrates how much dividends are distributed to shareholders adjusted for the number of shares obtained by the company (Eduardus Tendelilin, 2010).	$\text{DPS} = \frac{\text{Total dividend paid}}{\text{Number of outstanding shares}} \times 100\%$ Y = Log(DPS)	Ratio

2.4 Data Analysis Technique

Panel data regression is a statistical method that combines cross-sectional and time-series data to analyze the relationships between variables over time and across multiple entities, such as companies. In this study, panel data regression is used to examine the impact of financial ratios, Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER) on Dividend Per Share (DPS) in mining companies listed on the Jakarta Islamic Index (JII).

Panel data offers several key advantages in statistical analysis (Ajija, 2011). First, it increases the efficiency of the estimates by providing more data points through the combination of cross-sectional and time-series observations. This allows for greater degrees of freedom and reduces the problem of multicollinearity among explanatory variables, resulting in more reliable and precise estimates. Second, panel data helps control for unobserved heterogeneity, capturing individual-specific effects that may vary across entities but remain constant over time. This ensures that the analysis takes into account differences that are not directly measurable, such as management quality or company culture, thus reducing omitted variable bias. Third, panel data enables dynamic analysis by allowing researchers to study changes over time. This provides insights into both short-term and long-term effects, making it possible to identify trends and patterns that are not evident in pure cross-sectional or time-series data. Lastly, by combining two types of data, panel data reduces the risk of biased results, providing a more comprehensive and nuanced understanding of the relationships between variables. This makes it an ideal method for exploring complex financial phenomena, such as the relationship between financial ratios and dividend policies in companies.

The basic form of a panel data regression equation is:

$$Log(DPS)_{it} = \propto + \beta_1 \log (QR)_{it} + \beta_2 NPM_{it} + \beta_3 DER_{it} + \epsilon_{it}$$

Where DPS_{it} is the dependent variable (Dividend Per Share) for entity *i* at time *t* . QR_{it}, NPM_{it}, and DER_{it} represent the independent variables for entity *i* at time *t.* α is the constant term. $\beta_1, \beta_2, \beta_3$ are the coefficients for the independent variables. ϵ_{it} is the error term.

In panel data analysis, three main models are commonly used (Winarno, 2013): the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), each with distinct characteristics. The Common Effect Model (CEM), also known as Pooled OLS, assumes that all entities (such as companies or individuals) are homogeneous, meaning that the differences between them are insignificant for the analysis (Ghozi, S., 2018). This model treats the data as a single large dataset, ignoring any individual or time-specific effects. While simple to implement, the CEM can be less accurate because it doesn't account for variations across entities or over time (Baltagi, 2005). The Fixed Effect Model (FEM), on the other hand, accounts for individual-specific characteristics that do not change over time (Gujarati, 2004). This model assumes that each entity has unique traits that may influence the dependent variable, but these traits are constant across the time period being studied (Gujarati, 2003). FEM controls for these unobserved characteristics by allowing each entity to have its own intercept, making it particularly useful when the focus is on understanding the effects within entities. However, the FEM doesn't allow for variation between entities, as it assumes individual differences are fixed (Baltagi, 2005).

The Random Effect Model (REM) assumes that individual-specific effects are random and uncorrelated with the independent variables. In REM, variation across entities is captured by including these random effects in the error term (Nachrowi, Djalal Nachrowi, 2006). This model is more efficient when the differences between entities are considered random and when the sample includes many entities. Unlike FEM, the REM allows for variation between entities (Munandar, 2017), but its reliability depends on the assumption that individual effects are uncorrelated with other explanatory variables. Choosing between these models depends on the nature of the data and the research question. FEM is preferred when the focus is on analyzing differences within entities, while REM is more appropriate when the goal is to analyze differences between entities and those differences are random (Ghozi, 2018). CEM is typically used when the data is homogeneous, though it may lead to oversimplified results.

In this study, the data analysis follows several key steps to ensure reliable and accurate results. The process begins with descriptive statistics, which summarize the key features of the dataset. These statistics provide a clear picture of the data by showing measures like the mean, median, standard deviation, and range, offering insights into the central tendencies and variability of the variables.

Next, a series of classical assumption tests are conducted to validate the data for regression analysis. The normality test checks whether the residuals from the regression model are normally distributed, ensuring that the model's predictions are valid. The multicollinearity test is performed using the Variance Inflation Factor (VIF) to ensure that the independent variables are not highly correlated, as multicollinearity can distort the results. The heteroscedasticity test examines whether the variance of the residuals is constant across the dataset, with the Breusch-Pagan or White tests often used to detect any inconsistencies. Additionally, the autocorrelation test, commonly using the Durbin-Watson statistic, checks for correlations between the residuals over time, as autocorrelation can lead to biased estimates.

Following these tests, the best panel data model is selected through model selection tests. The Chow test helps decide between the Pooled OLS (Common Effect Model) and the Fixed Effect Model (FEM) (Baltagi, 2005), while the Hausman test helps choose between the Fixed Effect Model and the Random Effect Model (REM)

(Baltagi, B. H., & Baltagi, 2008). Lastly, the Breusch-Pagan Lagrange Multiplier (LM) test compares the Pooled OLS with the Random Effect Model. Based on these tests, the most suitable model for the analysis is selected (Baltagi, B. H., & Baltagi, 2008).

Once the model is determined, hypothesis testing is performed to evaluate the significance of the independent variables. The t-test (partial test) checks whether each individual independent variable, such as Quick Ratio, Net Profit Margin, or Debt to Equity Ratio, has a significant impact on Dividend Per Share. The F-test (simultaneous test) assesses whether all the independent variables combined significantly affect the dependent variable.

Finally, the R^2 (coefficient of determination) is used to measure how well the independent variables explain the variance in the dependent variable. A higher R^2 indicates a better fit, while the adjusted R^2 provides a more refined measure when comparing models with different numbers of predictors. By following these steps, the analysis ensures that the regression model is robust and offers meaningful insights into the relationships between the financial ratios and dividend policies of the mining companies studied.

3. RESULT AND DISCUSSION

3.1 Descriptive Statistics Results

Descriptive analysis serves as a foundational tool in data analysis by summarizing and organizing large datasets to present key patterns and trends. Its primary function is to provide an overview of the data's main characteristics, including measures of central tendency (mean, median), dispersion (standard deviation, variance), and distribution (skewness, kurtosis).

Table 2. Descriptive statiostical results

Component	DPS	QR	NPM	DER
Mean	1.467	0.237	0.129	0.598
Median	1.323	0.245	0.130	0.615
Maximum	2.840	0.490	0.350	1.110
Minimum	0.299	-0.070	0.010	0.330
Std. Dev.	0.788	0.120	0.090	0.177
Skewness	0.212	-0.309	0.745	0.592
Kurtosis	1.873	2.617	2.803	3.236
Jarque-Bera	2.298	0.882	3.765	2.431
Probability	0.298	0.643	0.152	0.296
Sum	58.692	9.480	5.180	23.950
Sum Sq. Dev	24.239	0.566	0.316	1.223
Observasions	40	40	40	40

The Table 2 provided presents descriptive statistics for four variables, Dividend Per Share (DPS), Quick Ratio (QR), Net Profit Margin (NPM), and Debt to Equity Ratio (DER), based on a dataset of 40 observations. DPS (Dividend Per Share) has a mean value of 1.467 and a median of 1.323, indicating that the data is slightly right-skewed with a skewness of 0.212. The standard deviation is 0.788, showing moderate variation, with a minimum of 0.299 and a maximum of 2.840. The Jarque-Bera test statistic is 2.298 with a probability value of 0.298, suggesting that DPS is approximately normally distributed. QR (Quick Ratio) has a mean of 0.237 and a median of 0.245, showing slight negative skewness (-0.309). The standard deviation is 0.120, indicating relatively low variation. The minimum value of QR is -0.070, while the maximum is

0.490. The Jarque-Bera probability of 0.643 suggests that QR is normally distributed as well.

NPM (Net Profit Margin)** has a mean of 0.129 and a median of 0.130, with a skewness of 0.745, indicating a more pronounced right skew. The standard deviation is 0.090, and the values range from a minimum of 0.010 to a maximum of 0.350. The Jarque-Bera test statistic of 3.765 with a probability of 0.152 indicates the distribution is close to normal, though slightly skewed. DER (Debt to Equity Ratio) shows a mean of 0.598 and a median of 0.615, with moderate right skewness (0.592). The standard deviation is 0.177, with values ranging from 0.330 to 1.110. The Jarque-Bera test statistic is 2.431 with a probability of 0.296, suggesting no significant departure from normality. These descriptive statistics provide an initial understanding of the data's distribution and variability for each variable, forming the basis for further analysis like hypothesis testing or regression.

3.2 Classical Assumption Test Results

The normality test using the Jarque-Bera statistic yielded a value of 0.631 with a corresponding probability of 0.729. Since the p-value is greater than the common significance level of 0.05, we fail to reject the null hypothesis that the residuals are normally distributed. This indicates that the data does not deviate significantly from a normal distribution, suggesting that the assumption of normality is satisfied. Consequently, the model's residuals are likely to be appropriate for further analysis, such as regression.

Table 3. Normality test results

Component	Value
Skewness	-0.066
Kurtosis	3.600
Jarque-Bera	0.631
Probability	0.729

The Table 4. presents the correlation matrix for the independent variables: Quick Ratio, Net Profit Margin, and Debt to Equity Ratio, which is used to test for multicollinearity. Multicollinearity occurs when two or more independent variables are highly correlated, which can distort the results of regression analysis. The correlation between QR and NPM is 0.648, indicating a moderate positive correlation. While this is noticeable, it is below the generally accepted threshold of 0.8, suggesting that multicollinearity is not a significant concern between these two variables. The correlation between QR and DER is -0.282, which represents a weak negative correlation. This value is low, implying no multicollinearity issue between these variables. The correlation between NPM and DER is -0.201, which also indicates a weak negative correlation. Again, this suggests that multicollinearity is not a problem. Overall, the correlation values between the independent variables are all below the critical level (typically 0.8 or higher), indicating that multicollinearity is not present in the data, and the variables can be used in the regression analysis without concern for multicollinearity.

Table 4. Multicollinearity test results

Variables	QR	NPM	DER
QR	1.000	0.648	-0.282
NPM	0.648	1.000	-0.201
DER	-0.282	-0.201	1.000

The heteroscedasticity test was conducted using the White test, which evaluates whether the variance of the residuals is constant across all levels of the independent

variables. The test yielded an F-statistic value of 2.216 and a probability (p-value) for the chi-square distribution of 0.067. Since the p-value is slightly above the conventional significance level of 0.05, we fail to reject the null hypothesis of homoscedasticity. This suggests that there is no significant evidence of heteroscedasticity in the regression model. Therefore, the variance of the residuals appears to be relatively constant, indicating that the assumption of homoscedasticity holds, and the model's estimates are likely reliable.

Table 5. Heteroscedasticity test results

Component	Value
F-statistic	2.216
Prob. Chi-Square	0.067

Table 6. Autocorrelation test results

Component	Value
Durbin-Watson stat	1.719651
d_U	1.6589
4 - d_U	2.3411

Based on Table 6, the Durbin-Watson statistic is 1.719651. According to the Durbin-Watson table, the upper bound value d_U is 1.6589, and the value for 4 - d_U is 2.3411. According to the Durbin-Watson decision rule, if $d_U < d < 4 - d_U$, then there is no evidence of autocorrelation. In this case, 1.6589 < 1.719651 < 2.3411, which falls within the range indicating no autocorrelation. Therefore, based on these results, there is no significant autocorrelation present in the residuals.

3.3 Panel Data Regression Results

After conducting the model selection tests, the Fixed Effects Model (FEM) was chosen as the most appropriate model based on the results of the Hausman test, Chow test, and Lagrange Multiplier (LM) test. The Chow test was used to compare the Pooled Ordinary Least Squares (POLS) model and the Fixed Effects Model (FEM). The test results favored FEM, indicating that individual-specific effects should be considered, suggesting the presence of heterogeneity among the companies. The Hausman test was then conducted to compare the Fixed Effects Model (FEM) with the Random Effects Model (REM). The test rejected the null hypothesis, which implies that FEM is more appropriate than REM, indicating that the unobserved individual effects are correlated with the independent variables. Lastly, the Lagrange Multiplier (LM) test was conducted to decide between the Random Effects Model (REM) and the Pooled OLS model. The results of the LM test supported the use of REM over POLS, but since the Hausman test indicated FEM was better, FEM was ultimately chosen. Thus, based on these model selection criteria, the Fixed Effects Model (FEM) is the most suitable for analyzing the data in this study.

Table 7. Fixed effects model results

Variable	Coefficient	t-Statistic	Prob.
C	1.230	2.854	0.007
Log(QR)	-0.170	-0.238	0.812
NPM	2.511	2.580	0.014**
DER	-0.079	-0.141	0.888

Note: **Significant at 5%

The Fixed Effects Model (FEM) presents several key findings. The constant term is 1.230, which represents the estimated value of the dependent variable when all independent variables are zero. The QR coefficient is -0.17 with a p-value of 0.812, indicating a negative impact on the dependent variable, but this effect is not statistically

significant, suggesting that QR does not substantially contribute to the model. In contrast, the NPM coefficient is 2.511 with a p-value of 0.014, reflecting a positive and statistically significant effect on the dependent variable, signifying that higher NPM values are associated with increased values of the dependent variable. The DER coefficient is -0.079 with a p-value of 0.888, which shows a negative relationship with the dependent variable, but this relationship is not statistically significant. The overall model is statistically significant, as evidenced by the F-statistic of 23.942 and a p-value of 0.000, indicating that the model as a whole is a good fit. The R-squared value of 0.813 suggests that the model explains approximately 81.3% of the variability in the dependent variable, demonstrating a strong explanatory power.

The Fixed Effects Model (FEM) equation obtained from the regression analysis is as follows:

$$Log(DPS) = 1.230 - 0.170\ \mathrm{Log}(QR) + 2.511\ NPM - 0.079\ DER$$

The coefficient of Net Profit Margin (NPM) is 2.511, meaning that for every unit increase in NPM, the DPS is expected to increase by 2.511 units. This implies a strong positive relationship between profitability and the dividend payments to shareholders.

3.4 Discussion and Research Implications

The results of this study provide insightful implications regarding the impact of financial ratios on Dividend Per Share (DPS) in mining companies listed on the Jakarta Islamic Index (JII). The findings reveal that Net Profit Margin (NPM) has a significant and positive influence on DPS, while Quick Ratio (QR) and Debt to Equity Ratio (DER) do not show a significant impact. This section discusses these results in light of previous studies and theoretical frameworks.

The positive and significant relationship between NPM and DPS indicates that profitability plays a crucial role in a company's ability to distribute dividends. The findings of this analysis are consistent with the theory proposed by Kasmir (2018), which posits that a higher Net Profit Margin (NPM) indicates improved operational efficiency within a company. An increase in NPM enhances the amount of Dividend Per Share (DPS) distributed to investors. The significant influence of NPM on DPS suggests that the magnitude of a company’s net profit has a direct impact on the dividends received by investors. Moreover, the level of net profit generated by a company influences its market price, as a higher market price signals superior company performance, thereby attracting investor confidence (Wijaya & Jessica, 2017). This finding is consistent with the signaling theory, which suggests that profitable companies tend to pay higher dividends as a signal of their financial health to investors (Bhattacharya, 1979). The study by Wijaya & Jessica (2017) also found a similar positive relationship between NPM and DPS, highlighting that higher profitability increases a company's capacity to reward shareholders with dividends. Mining companies, despite their high capital expenditures and operational risks, demonstrate that when profitability improves, dividends are prioritized to maintain investor confidence and attract further investment.

Contrary to what traditional financial theory might predict, QR does not have a significant impact on DPS in this study. This is because a company's liquidity is not used to predict the level of return on investment in the form of dividends distributed to shareholders. Instead, high liquidity is utilized to pay off maturing debts and allocate funds for the company's operational expenses. Moreover, it is suggested that dividend distribution tends to be influenced more by the company's profitability rather than by how quickly the company can settle its short-term liabilities. This means that the company's ability to meet short-term obligations does not significantly impact the size of the dividend received by investors (Wijaya & Jessica, 2017). This suggests that

liquidity, as measured by the Quick Ratio is not a critical determinant of dividend policy in mining companies. This result aligns with findings from previous studies, such as those by Susanto (2016) who also observed that liquidity ratios did not significantly influence dividend payouts. One possible explanation is that mining companies tend to have large fixed assets and long-term projects, meaning that liquidity is not as crucial in their dividend decisions compared to other sectors.

The Debt to Equity Ratio (DER) was also found to be insignificant in influencing DPS. The results of this analysis are consistent with the theory presented by Syaifuddin (2008), which asserts that the Debt to Equity Ratio (DER) measures a company's ability to cover its total debt using its own capital. A company with a high DER ratio may indicate poor financial health. As a consequence, the dividends distributed to investors may decrease, as the company is obligated to meet its financial liabilities using the profits generated (Prihantoro, 2003). This result diverges from some studies, such as Girresyendikal and Purba (2019), which found a positive relationship between DER and DPS. However, it is consistent with Prasetyo (2015), who concluded that DER had no significant impact on dividend policy. The insignificance of DER may indicate that mining companies, due to their capital-intensive nature, may prioritize reinvestment over dividends when leveraging high debt levels. As a result, DER may not be a direct driver of dividend policy in this sector, suggesting that mining companies with higher debt may opt to retain earnings rather than distribute dividends.

These findings provide valuable theoretical and practical insights. From a theoretical perspective, the study reinforces the importance of profitability in determining dividend policy, supporting the signaling theory and suggesting that investors view dividend payments as a reflection of a company's profitability and future growth potential (Miller & Rock, 1985). It also aligns with the agency theory, where profitable firms may reduce agency costs by paying higher dividends to shareholders. At the same time, the insignificance of QR and DER challenges the relevance of liquidity and solvency ratios in dividend decisions for capital-intensive industries like mining.

Practically, the findings imply that financial managers in the mining sector should focus on improving profitability to enhance shareholder returns through dividends. Meanwhile, investors seeking dividend income may prioritize profitability metrics such as NPM over liquidity or leverage ratios when evaluating mining companies. Since QR and DER do not significantly impact DPS, managers might not need to overly prioritize liquidity and debt levels when deciding on dividend payments, especially in capital-intensive industries like mining. Instead, they should aim to enhance operational efficiency and profitability, as these directly influence the ability to pay dividends. Managers should also communicate profitability improvements effectively, as this has a positive effect on investor confidence and dividend payouts. For investors, the positive and significant relationship between NPM and DPS provides a clear indicator: companies with higher profitability are more likely to offer consistent and attractive dividends. The insignificance of QR and DER suggests that investors looking for dividend returns should prioritize a company's profitability over its liquidity or debt levels. This is particularly relevant for investors in the mining sector, where fluctuating commodity prices and high capital expenditures can create uncertainty. By focusing on NPM, investors can better assess the dividend potential of mining companies in the Jakarta Islamic Index.

4. CONCLUSION

The study concludes that the Net Profit Margin (NPM) has a significant and positive effect on Dividend Per Share (DPS), indicating that companies with higher

profitability are more likely to distribute higher dividends to their investors. In contrast, both the Quick Ratio (QR) and Debt to Equity Ratio (DER) were found to have no significant impact on DPS, suggesting that liquidity and leverage levels do not necessarily determine dividend payments in the mining sector. These findings are aligned with the theoretical framework, where profitability is seen as a key driver of dividend policy, while liquidity and leverage might play a more indirect role. The study highlights the importance of profitability in determining shareholder returns, emphasizing the need for companies to focus on maintaining high profit margins to ensure stable or increasing dividend payouts. However, the lack of significant influence from QR and DER suggests that further research is needed to explore other potential determinants of dividend policy, particularly in sectors characterized by high capital intensity, such as mining. From a practical perspective, the results imply that investors may prioritize companies with stronger profit margins when seeking consistent dividends, while companies should aim to optimize their profitability to meet shareholder expectations.

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