



The Impact Of Profitability And Solvency On Company Value Coal Mining Subsector Businesses Listed On The Stock Exchange Of Indonesia 2020–2024

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Abstract: Coal mining firms listed on the Indonesia Stock Exchange (IDX) are the subject of this study between 2020 and 2024. These Businesses have a very important part in the national economy but simultaneously face difficulties like price volatility, shifts in global demand, and renewable energy transition policies. The study is motivated by previous various research results regarding impact of solvency and profitability on company value, necessitating further empirical examination. This study's objective is to evaluate the impact of profitability and solvency on company value. A quantitative causal-associative approach was employed using panel data from eight businesses that consistently release yearly reports throughout the study period, generating 40 observations. Analysis of multiple linear regression was performed on the data using SPSS version 30. The findings reveal that profitability, represented by Return on Assets (ROA), has a negative yet insignificant impact on company value as measured by Price to Book Value (PBV). Conversely, solvency, proxied by Debt to Equity Ratio (DER), demonstrates a beneficial and noteworthy impact on the company's value. Collectively, profitability and solvency explain 20.3% of company value variation. These results underscore the importance of maintaining a balanced capital structure to enhance investor confidence and corporate valuation. Academically, this research enriches financial management literature within the energy sector, while practically offering insights for managers and investors in financial decision-making.

Keywords: Profitability, Solvency, Company Value, Capital Structure, Coal Mining

INTRODUCTION

The advent of free markets at the regional and international levels has triggered fierce competition between domestic and foreign companies. This situation requires companies to continuously improve aspects that can become competitive advantages, especially internal factors in the financial sector, which are the main foundation for future success. Financial performance is an important method for measuring and maintaining business sustainability (Alam et al., 2025). Technological changes, social issues, and economic dynamics also have a major impact on how companies compete. To survive and grow, companies are required to be adaptable, improve performance, and obtain additional capital through the capital market (go public) by selling shares or bonds to raise expansion funds (Hartono, 2023). Therefore, assessing and managing financial



performance is a strategic approach increasing company value and ensuring sustainable growth. The greater the value of the business, the more degree of success felt by owners and shareholders.

The main goal of business owners is to achieve high company value, as this reflects positive growth prospects in the future. Stock prices in the capital market reflect investment, financing, and asset management decisions made by management. The worth of a company is determined by its management performance as seen from various aspects, such as net cash inflows from investments, growth rate, and cost of capital borne by the company. To achieve and maintain high company value, management needs to pay attention to factors such as profitability and solvency which influence performance as well as investor perception (Aries & Suhartono, 2021). Indonesia has natural resources, including oil, coal, gold, nickel, and other metals. One significant industry listed on the Indonesia Stock Exchange (IDX) is mining with 63 companies divided into several subsectors, one of which is coal, which holds a vital position in the national economy. Indonesia is also among the biggest coal producers in the world, and shares in this subsector have recorded positive performance with the highest increase in 2020 at 24.65% compared to other sectors (Zulfa & Marsono, 2023).

However, despite being a leading industry, coal is not immune to global challenges. Price fluctuations are triggered by the China-US trade war, import restrictions in China and India, declining demand in Europe and East Asia, and oversupply conditions that make the market vulnerable to change. Indonesia's coal production has tended to increase since 2014, despite a decline in 2016 and 2020 due to the Covid-19 pandemic. After that, production rose again to reach 775 million tons in 2023, exceeding the national target, but 2024 is expected to be the peak of production before declining in line with the new renewable energy transition policy Kementerian ESDM (2024). Changes in coal prices also have a direct impact on the capital market. In 2019, the mining sector index weighed on the JCI with negative growth of 12.83% due to oversupply, but in 2021 coal prices improved, causing mining company shares such as HRUM to rise 166.78% and ADRO to grow 17.13% (www.idxchannel.com). This phenomenon shows how sensitive mining stocks are to fluctuations in coal prices.

Stock prices serve as a key indicator reflecting a worth of the business from the standpoint of investors (Shabir & Machdar, 2024). For example, the Price to Book Value (PBV) of coal companies in the 2020–2024 period shows fluctuations influenced by the pandemic, global price



dynamics, and the characteristics of company capitalization. PBV movements reflect adjustments in company valuations to commodity prices and energy policies. Internally, profitability and solvency are the main factors affecting a company's value. High profitability, which in this study is proxied by Return on Assets (ROA), indicates the efficiency of managing own capital in generating profits, and generally has a positive impact on increasing company value (Awliya, 2022). Conversely, solvency as reflected in the Debt to Equity Ratio (DER) shows how much a business depends on debt an excessively high DER can undermine investor confidence and worsen the company's valuation.

In accordance with these conditions, profitability serves as a primary indicator of a business's ability to provide steady profits (Awliya, 2022), while solvency reflects the capability to fulfill long-term liabilities (Kasmir, 2019). These two factors play an important role in shaping company value. However, previous research has yielded inconsistent findings. For example, Utami & Widati (2022) serta Vidi & Ramadhan (2023) found that profitability has a significant positive effect on company value, while Putri (2023) claimed that solvency offers a favorable but insignificant effect. In fact, Hendra & Gama (2024) found that solvency has a negative effect. Dianissa & Yulastuty (2025) also found that a company's worth is significantly impacted negatively by profitability. In addition, the outcomes of Adhiguna's (2023) study show that profitability does not significantly impact on company value. This indicates that the inconsistency persists in the literature, so further research is needed on the impact of profitability and solvency on company value, particularly in the subsector of coal mining in Indonesia.

Based on these conditions, this study aims to analyze the effect of profitability (Return on Assets/ROA) and solvency (Debt to Equity Ratio/DER) on company value (PBV) in coal mining firms from the subsector that are listed on the Indonesia Stock Exchange (IDX) for the time frame 2020–2024. Academically, this study enriches the financial management literature related to factors determining company value in the energy sector. Practically, the results of this study can be taken into consideration by investors in their decision-making, as well as input for management in formulating financial strategies to maintain stability and increase market confidence.



METHOD

This study uses a quantitative methodology and an associative causal research design. Associative causal research seeks to determine the relationship between two or more variables in order to construct a theory that can explain, predict, and control a phenomenon (Sugiyono, 2021). Independent factors have an impact on dependent variables in these causal relationships. Because this study handles numerical data during the collection, processing, and interpretation of outcomes, a quantitative approach was selected. The notion was tested using statistical analysis, and to aid in comprehension, the research findings were displayed as tables, graphs, or pictures. Companies in the coal mining subsector that are listed on the Indonesia Stock Exchange (IDX) between 2020 and 2024 are among the research subjects. Eight of the twenty-five companies that regularly submitted complete yearly reports were chosen as samples using purposive sampling, yielding forty panel data observations. The IDX official website, institutional publications, annual financial reports, and other supporting sources were the sources of secondary data that were gathered using documentation techniques. Using SPSS Statistics version 30, descriptive statistical analysis, multiple linear regression analysis, and traditional assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation) were used to examine the partial and simultaneous effects of profitability (ROA) and solvency (DER) on company value (PBV). The coefficient of determination (R²), t-tests, and F-tests were added to the statistical testing.

| Variabel | Operational Definition | Indicator / Formula | Scale |
|--------------------|--|--|-------|
| Profitability (X1) | The capacity of the business to make money out of its capital and assets | $ROA = \frac{Laba Bersih}{Total Aset} \times 100$ (Kasmir, 2019) | Ratio |
| Solvency (X2) | The capacity of the business to fulfill its long-term commitments | $DER = \frac{Total Hutang}{Total Modal Sendiri} \times 100 \%$ (Kasmir, 2019) | Ratio |



| | | | |
|-------------------|--|---|-------|
| Company value (Y) | A company's share price indicates how well-known it is in the market | $PBV = \frac{\text{Harga Pasar per Saham}}{\text{Nilai Buku per Saham}}$ (Kasmir, 2019) | Ratio |
|-------------------|--|---|-------|

Table 1 Variable Measurement

RESULT AND DISCUSSION

Analysis Descriptive

This research utilizes secondary data drawn from coal mining Companies that were listed on the Indonesia Stock Exchange between 2020 and 2024 (IDX). The study population comprises 25 companies; however, only 8 consistently published complete annual reports throughout the observation period. Thus, 40 company-year observations formed the final sample. SPSS Statistics version 30, was used to analyze the data using several linear regression, aiming to investigate the impact of profitability (ROA) and solvency (DER) on company value (PBV).

| Variable | N | Minimum | Maximum | Mean | Std. Deviation |
|---------------|----|---------|---------|--------|----------------|
| Company Value | 40 | 0.13 | 1.91 | 0.6487 | 0.54824 |
| Profitability | 40 | 0.10 | 0.80 | 0.2845 | 0.16800 |
| Solvency | 40 | 0.10 | 1.62 | 0.5740 | 0.32017 |

Table 2 Analysis Descriptive

For the company value variable, the mean value of 0.649 suggests that, in general, the companies in the sample have moderate valuations. The comparatively elevated standard deviation of 0.548 indicates significant disparities between companies, with some companies having very low values and others having relatively high values. For the profitability variable, the average of 0.285 with a standard deviation of 0.168 shows relatively homogeneous conditions. This figure indicates that companies in the sample are generally able to generate profits, although the value is still at a moderate level compared to the optimal profitability standard. Meanwhile, for the solvency variable, the average of 0.574 shows that companies collectively are still at a moderate



level in terms of their Capacity to fulfill long-term commitments. The standard deviation of 0.320 reflects moderate variation between companies, which means that some companies have a fairly strong financial position, while others are more vulnerable to debt risk. Overall, these conditions illustrate that the companies in the sample have diverse company values, relatively stable profitability, and moderate solvency, which can serve as a basis for further analysis of the effect of profitability and solvency on company value.

Classical Assumption Test

According to Priyatno (2014:89), classical assumption tests are used to detect violations of basic assumptions in regression models, such as normality of residuals, multicollinearity, autocorrelation, and heteroscedasticity. Although the regression model in this work has undergone a number of standard assumption tests, there are numerous constraints that need to be acknowledged. The heteroscedasticity test findings reveal that the profitability variable still has the potential to create residual variance inequality, and the Durbin Watson value suggests positive autocorrelation in the model. These factors can alter the accuracy of regression coefficient estimations and diminish the efficiency of the model in explaining the effect of independent variables on dependent variables. Therefore, the results of this study must still be evaluated with caution, and model improvements in forthcoming investigations are highly encouraged.

| Statistic | Value |
|-----------------------------|--------------|
| N | 40 |
| Kolmogorov-Smirnov Z | 0.102 |
| Asymp. Sig. (2-tailed) | 0.200 |
| Monte Carlo Sig. (2-tailed) | 0.360 |

Table 3, Classical Assumption Test

The Kolmogorov–Smirnov test results indicate that both Asymp. Sig. (0.200) and Monte Carlo Sig. (0.360) exceed the 0.05 significance level, confirming that a normal distribution of residuals and the model meets the normality assumption.



| Variable | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
|---------------|--------|------------|--------|--------|-------|-----------|-------|
| Constant | 0.517 | 0.194 | | 2.661 | 0.011 | | |
| Profitability | -0.985 | 0.495 | -0.302 | -1.989 | 0.054 | 0.936 | 1.068 |
| Solvency | 0.717 | 0.260 | 0.419 | 2.760 | 0.009 | 0.936 | 1.068 |

Table 4. *Multicollinearity Test*

Regression analysis results show that profitability has a negative but insignificant impact on company value (B = -0.985; Sig. = 0.054), whereas solvency has a substantial and favorable impact on company value (B = 0.717; Sig. = 0.009). Therefore, solvency is identified as the primary factor influencing business value in our research. Additionally, the findings of the multicollinearity test indicate a tolerance value of 0.936 (> 0.10) and a VIF of 1.068 (<10), indicating that the regression model is free from multicollinearity issues.

| Variable | B | Std. Error | Beta | t | Sig. |
|---------------|--------|------------|--------|--------|--------|
| Constant | 0.605 | 0.091 | – | 6.663 | <0.001 |
| Profitability | -0.910 | 0.231 | -0.561 | -3.934 | <0.001 |
| Solvency | 0.096 | 0.121 | 0.113 | 0.789 | 0.435 |

Table 5. *Heteroscedasticity Test*

The Glejser according to test results, profitability has a significance value below 0.05, indicating heteroscedasticity, while solvency’s significance (0.435) exceeds 0.05, showing no heteroscedasticity for that variable. Thus, the model may contain heteroscedasticity effects primarily due to profitability.

| R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|----------|-------------------|----------------------------|---------------|
| 0.450 | 0.203 | 0.160 | 0.50261 | 0.771 |

Table 6. *Autocorrelation Test*

Based on the value of regression analysis's coefficient of determination (R Square) obtained was 0.203, it indicates that profitability and solvency were able to clarify 20.3% of the



variation in business worth, whilst the remaining 79.7% was accounted for by additional elements not covered by this research model. The value of the Adjusted R Square for 0.160 indicates that the actual contribution of the two independent variables to the variation in company value is 16%. Meanwhile, a Durbin-Watson value of 0.771 indicates the presence of positive autocorrelation, suggesting that the regression model needs to be further examined in relation to the assumption of residual independence.

Multiple Linear Regression Analysis

| Variable | B | Std. Error | Beta | t | Sig. |
|---------------|--------|------------|--------|--------|-------|
| Constant | 0.517 | 0.194 | | 2.661 | 0.011 |
| Profitability | -0.985 | 0.495 | -0.302 | -1.989 | 0.054 |
| Solvency | 0.717 | 0.260 | 0.419 | 2.760 | 0.009 |

Table 7. Regression Analysis and Partial Test (t-test)

The regression results demonstrate that profitability has a minor but detrimental effect on the value of the company (Sig. = 0.054), while solvency exhibits a positive and significant effect (Sig. = 0.009). This implies that businesses with greater DER ratios tend to have higher company value, possibly due to efficient debt utilization enhancing investor confidence. The negligible impact of profitability suggests that market pricing has not yet fully taken profit generating into account. In the coal mining subsector, profitability tends to fluctuate due to volatile global coal prices, high operational expenses, and policy adjustments connected to energy transition. Increases in ROA do not always translate into higher company valuation in the market since investors emphasize more stable long-term indicators when evaluating firm value. Conversely, the large positive impact of DER shows that higher leverage enhances the company's expansion capabilities, strengthening production capacity and future business prospects, which are seen favorably by investors in a capital-intensive industry like coal mining. This is in line with research Mudzakkir Farij & Laila Wardani (2024), which shows that leverage (DER) has a positive and significant impact on the value of businesses that are listed on the IDX during the years 2018–2022. This reinforces the premise that capital structure optimization is vital to enhancing investor trust.



Simultaneous test (F-test)

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|-------------------|
| Regression | 2.375 | 2 | 1.188 | 4.702 | .015 ^b |
| Residual | 9.347 | 37 | .253 | | |
| Total | 11.722 | 39 | | | |

Table 8. Simultaneous test (F-test)

According to the F test results, the determined F value of 4.702 with a significance level of 0.015 (<0.05) indicates that profitability and solvency together have a major impact on company value. Therefore, the regression model is suitable for explaining the connection between the separate factors (profitability and solvency) and the dependent variable (company value). These findings are consistent with Nugroho (2023), who demonstrated that profitability (ROA) and solvency (DER) simultaneously have a positive and significant effect on firm value as measured by Price to Book Value (PBV), reinforcing the importance of managing earnings performance and capital structure to improve investor perception. Similar results were also found (Okte & Hasanah(2023), confirming that solvency and profitability jointly contribute positively to strengthening firm value.

Coefficient of Determination (R²)

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .450 ^a | .203 | .160 | .50261 | .771 |

Table 9. Coefficient of Determination (R²)

The R² value (0.203) indicates that 20.3% One explanation for the variance in company value is profitability and solvency, while the rest of 79.7% is attributed to additional elements not included in the model. The Adjusted R² (0.160) confirms a moderate explanatory power, and the Durbin Watson (0.771) again suggests mild autocorrelation.

CONCLUSION

The study's findings demonstrate that profitability (ROA) has a negative but negligible impact on firm value (PBV), suggesting that the business's capacity to turn a profit is still



insufficient to affect market valuation. On the other hand, solvency (DER) has a positive and significant influence, which means that a greater debt ratio in the capital structure can boost investor confidence because it is thought to be able to support business expansion and raise growth prospects. Concurrently, profitability and solvency account for 20.3% of the fluctuation in business value, with other factors outside the purview of this study influencing the other 79.7%. These results demonstrate how crucial efficient capital structure management is to preserving a company's value in the capital market and offer managers and investors useful guidance when making financial decisions.

The comparatively small sample size and the use of just two independent variables, which may not adequately represent the factors influencing firm value in coal mining enterprises, are two of the study's weaknesses. In order to increase model accuracy and offer more comprehensive insights, future research is urged to increase the number of samples across various industries, incorporate extra factors including market conditions, corporate governance, and dividend policy, and employ more reliable econometric techniques.

REFERENCE

- A, A. (2023). Pengaruh Return On Equity (ROE), Current Ratio (CR), Ukuran Perusahaan dan Debt to Equity Ratio (DER) terhadap Price to book value (PBV). *COMSERVA : Jurnal Penelitian Dan Pengabdian Masyarakat*, 3(07), 2490–2498. <https://doi.org/10.59141/comserva.v3i07.1055>
- Alam, M. A. S. N., Kamaliyah, N. Al, Destiara, N., Saidah, A., & Nilhakim, F. A. (2025). Pengaruh Struktur Aktiva Terhadap Profitabilitas (Studi Kasus Pada PT Bumi Resources Tbk). *Jurnal Cakrawala Akademika*, 2(1), 1147–1153. <https://doi.org/10.70182/jca.v2i1.480>
- Aries M. P, S., & Suhartono, E. (2021). Faktor Determinan Kompetensi Sumber Daya Manusia Dan Sistem Informasi Akuntansi Terhadap Kualitas Laporan Keuangan Dengan Dimoderasi Sistem Pengendalian Internal. *Jurnal Ilmiah Infokam*, 17(2), 73–86. <https://doi.org/10.53845/infokam.v17i2.295>
- Awliya, M. (2022). Analisis Profitabilitas (Return On Asset (Roa) dan Return On Equity (RoE) Pada PT Sido Muncul Tbk (Periode 2015-2018). *Journal of Economic Education*, 1(1), 10–18.



- Hartono. (2023). *Teori dan Praktik Investasi Obligasi*. Andi Offset.
- Indah Sari Br Siagian, Laily Ramadhani, R. F. (2025). Impact of Investment, Financing, Dividend Policy, and Profitability Decisions on Firm Value in Banking Companies Listed on The Indonesia Stock Exchange for the Period 2019-2023. *E-Bisnis: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(3), 370–383.
- Kadek Adi Pratama Hendra, Agus Wahyudi Salasa Gama, N. P. Y. A. (2024). *Pengaruh Likuiditas, Solvabilitas, Dan Profitabilitas Terhadap Nilai Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2020-2022*. 5(3).
<https://eprints.unmas.ac.id/id/eprint/6214>
- Kasmir. (2019). *Pengantar Analisis Laporan Keuangan* (Edisi Kedu). PT. RajaGrafindo Persada.
- Mudzakkir Farij, & Laila Wardani. (2024). The Effect of Profitability, Leverage and Liquidity on Firm Value in Coal Mining Companies Listed on the IDX for the Period 2018-2022. *Socio-Economic and Humanistic Aspects for Township and Industry*, 2(2), 299–310.
<https://doi.org/10.59535/sehati.v2i2.290>
- Muhamad Ridzki Maulana Okte, & Ade Sobariah Hasanah. (2023). Pengaruh Pengaruh Intellectual Capital, Solvabilitas, dan Profitabilitas terhadap Nilai Perusahaan pada Industri Pariwisata dan Rekreasi. *JBE (Jurnal Bingkai Ekonomi)*, 8(2), 62–77.
<https://doi.org/10.54066/jbe.v8i2.300>
- Priyatno, D. (2014). *SPSS 22 : Pengolah Data Terpraktis* (pertama). Yogyakarta : CV. Andi Offset.
- Putri, L. R. (2023). *Effect of Profitability, Liquidity, Solvency and Size Company To Company Value*.
- Riska Putri Dianissa, Rina Yuliasuty, A. (2025). Pengaruh ROE, Sales Growth Dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Jurnal Ekonomi Bisnis, Manajemen Dan Akuntansi (Jebma)*, 5(1). <https://doi.org/DOI:doi.org/10.47709/jebma.v5n1.4685>
- Shabir, H. M., & Machdar, N. M. (2024). Peran Profitabilitas, Struktur Modal Dan Kebijakan Dividen Pada Harga Saham Perusahaan. *Jurnal Manajemen, Akuntansi, Dan Ekonomi*, 13(2).
<https://doi.org/https://doi.org/10.8734/musyitari.v13i2.9485>
- Sugiyono. (2021). *Metode Penelitian dan Pengembangan (Research and Development)* (Edisi ke-3). Alfabeta.



- Utami, C. N., & Widati, L. W. (2022). Pengaruh profitabilitas , likuiditas dan kepemilikan terhadap nilai perusahaan. *Owner: Riset & Jurnal Akuntansi*, 6(1), 885–893.
- Vidi, Y. T., & Ramadhan, Y. (2023). Pengaruh Profitabilitas, Solvabilitas, dan Inflasi terhadap Nilai Perusahaan. *Reslaj : Religion Education Social Laa Roiba Journal*, 5(5), 2920–2935.
<https://doi.org/10.47467/reslaj.v5i6.3519>
- Zulfa, & Marsono. (2023). Pengaruh Intellectual Capital, Corporate Socialresponsibility, Dan Good Corporate Governanceterhadap Kinerja Keuangan(Studi Empiris pada Perusahaan Pertambangan yang Terdaftar di BEITahun 2016-2020). *Diponegoro Journal of Accounting*, Vol 12(No 2 : 2337-3806), 1–13.