

The Effect of Job Creation Law Regulation on Mining Business: Economic Impact Analysis on the Mining Industry

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ABSTRACT

This study provides important insights into the impact of Labor Law Regulation on the mining industry, with a focus on PT. Vale Indonesia. By applying simple linear regression analysis to the company's financial and operational data from 2019 to 2022, the research evaluates the effects of the Labor Law Regulation both before and after its implementation. The study aims to determine how the regulation influences the financial and operational performance of PT. Vale Indonesia. The Labor Law Regulation, as the independent variable, assesses the effectiveness of government policies in supporting the mining sector. Financial performance, the dependent variable, is measured through indicators such as economic impact and perception. The analysis reveals a significant improvement in PT. Vale Indonesia's financial outcomes post-regulation, suggesting enhanced operational efficiency and capital investment. However, the study also notes the need for further investigation into the social impact on surrounding communities. Overall, the research concludes that the Labor Law Regulation has a positive and statistically significant effect on the mining business, indicating strong government policy support, with a high predictive power.

Keywords: Law Regulation, Job Creation, Mining Business, Economic Impact

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1. INTRODUCTION

Regulation plays a crucial role in guiding the development of various industries, including the mining industry. One of the recent regulations that has gained attention is the Labor Law Regulation (UU Cipta Kerja) enacted by the Indonesian government. This regulation is expected to increase investment and improve the business climate in Indonesia, including in the mining sector. The Labor Law Regulation (UU Cipta Kerja) has been met with mixed reactions, particularly concerning its implications for labor rights and environmental standards (Berenschot et al., 2023). Supporters argue that the regulation streamlines bureaucratic processes, making it easier for businesses to operate and attract foreign investment, thereby driving economic growth. In the mining sector, this could mean increased efficiency, higher production rates, and the potential for new job creation. However, critics express concerns that the regulation might prioritize economic gains over social and environmental responsibilities, potentially leading to adverse impacts on local communities and ecosystems. As such, it is crucial to carefully monitor the long-term effects of this regulation to ensure that it contributes to sustainable and inclusive development in the mining industry.

The mining industry is one of the strategic sectors that significantly contributes to the national economy (Carvalho, 2017). This industry provides raw materials for various industries, creates job opportunities, and contributes to the state's revenue through taxes and royalties.

However, this industry also faces significant challenges, including commodity price fluctuations, environmental issues, and frequent changes in regulations. To remain competitive and sustainable, the mining industry must navigate these challenges by adopting innovative technologies and implementing best practices in environmental management (Bai et al., 2017). Companies are increasingly turning to digital solutions, such as automation and data analytics, to optimize their operations and reduce costs. Additionally, there is a growing emphasis on corporate social responsibility, where mining companies are expected to engage with local communities, mitigate environmental impacts, and ensure that their activities contribute positively to regional development. Balancing economic growth with environmental stewardship and social equity is essential for the long-term success of the mining industry in a rapidly changing global landscape (Hodgkinson & Smith, 2021).

The Labor Law Regulation aims to simplify permits, reduce bureaucratic hurdles, and create a more conducive business environment (Fathoni et al., 2024). This policy is expected to encourage new investments, increase operational efficiency, and ultimately increase the productivity and competitiveness of the national mining industry. However, the implementation of this policy also raises various economic impacts that need to be further studied. On the one hand, simplifying permits and more flexible regulations can accelerate the investment and mining process. On the other hand, there are concerns about the negative impact on the environment and local community well-being if regulations become too lenient.

The Labor Law Regulation has a goal to achieve several important aspects, including economic goals to increase economic growth through increased investment and productivity (Surya et al., 2021). This policy is expected to attract more foreign and domestic investments to the mining sector, creating new job opportunities and increasing state revenue. Despite these promising economic objectives, the success of the Labor Law Regulation in the mining sector will largely depend on its implementation and the extent to which it addresses the concerns of various stakeholders. For foreign and domestic investors, a stable and predictable regulatory environment is crucial for long-term planning and investment decisions (Lopez et al., 2017). However, if the regulation is perceived to compromise social and environmental standards, it could face resistance from local communities and environmental groups, potentially leading to conflicts and disruptions. Therefore, alongside attracting investment, the regulation must ensure that economic growth is inclusive, socially responsible, and environmentally sustainable, thereby creating a favorable climate not only for business but also for the broader society.

The impact of UU Cipta Kerja on the national mining industry is critical for ensuring that the policy delivers optimal benefits while addressing environmental and social concerns. A thorough examination is essential to gauge how this regulation influences various facets of the mining sector, including its effects on investment levels, operational productivity, community welfare, and environmental sustainability. By conducting a detailed analysis, policymakers can refine the regulation to maximize its positive contributions and mitigate any adverse effects. Such an approach will help ensure that the policy supports sustainable development and contributes meaningfully to Indonesia's broader economic growth and social progress.

Additionally, evaluating the regulation's impact on environmental sustainability is vital. The mining industry often faces challenges related to environmental degradation, and it is crucial to assess whether the UU Cipta Kerja incorporates adequate measures to protect natural resources and mitigate ecological harm. A comprehensive environmental impact assessment should be part of the analysis to ensure that the regulation promotes responsible mining practices and aligns with broader environmental goals. This will help balance economic development with environmental stewardship, ensuring that the benefits of increased investment and productivity do not come at the expense of ecological health.

Moreover, understanding the social impact of the regulation on local communities is equally important. The implementation of UU Cipta Kerja should be evaluated for its effects on job creation, community health, and social infrastructure. Engaging with local stakeholders and communities to gather their perspectives can provide valuable insights into how the regulation

affects their daily lives and overall well-being. Ensuring that the policy supports equitable development and addresses any potential social issues will help foster a more inclusive and sustainable economic growth trajectory, benefiting both the mining industry and the communities it serves.

The Job Creation Law Regulation presents both opportunities and challenges for the national mining industry. While it has the potential to drive significant economic growth through increased investment and improved productivity, it is equally important to ensure that these gains do not come at the expense of environmental integrity and social welfare. A balanced approach that integrates economic objectives with robust environmental and social safeguards is essential for sustainable development. This study aims to provide a thorough analysis of the economic impact of the Job Creation Law on the mining sector, offering insights that can guide policymakers in refining the regulation to achieve comprehensive and lasting benefits for Indonesia's economy.

2. METHOD

a. Research Design

This research focuses on evaluating the impact of the Labor Law Regulation on various aspects of the mining sector, with PT. Vale Indonesia, a significant player in the industry, serving as a case study. By examining this prominent company, the study aims to gain insights into how the regulation influences its operations and overall performance. The study seeks to provide a comprehensive assessment of the Labor Law Regulation's effects, extending beyond economic considerations to include social and environmental dimensions. This holistic approach is designed to capture the full spectrum of impacts that the policy may have on PT. Vale Indonesia's mining activities, including its role in community development and environmental stewardship. In addition to evaluating economic outcomes, such as changes in investment and productivity, the research also examines the social and environmental consequences of the regulation. This includes assessing how the policy affects worker welfare, local community well-being, and ecological sustainability.

A quantitative approach is employed to ensure that the assessment of the policy's impact is both objective and measurable. This methodology facilitates precise data analysis, allowing the study to produce clear, evidence-based conclusions about the regulation's effectiveness in enhancing the mining sector. The research aims to offer valuable insights into how the Labor Law Regulation supports the mining industry and contributes to broader economic and social goals. By combining economic, social, and environmental perspectives, the study provides a well-rounded evaluation of the regulation's impact.

b. Operational Definition of Variables and Measurement of Variables

The Labor Law Regulation (UU Cipta Kerja), as outlined in Law No. 11 of 2020, represents a comprehensive set of regulations introduced by the Indonesian government to enhance investment and improve the business climate, including within the mining sector. In this study, the impact of the Labor Law Regulation is treated as the independent variable (X). This regulation aims to streamline business processes, reduce bureaucratic obstacles, and attract both domestic and foreign investment, making it a critical factor in assessing changes within the mining industry.

The economic impact on the mining industry, specifically on PT. Vale Indonesia, is the dependent variable (Y) in this research. This variable encompasses various economic changes resulting from the implementation of the Labor Law Regulation, such as alterations in investment levels, productivity, and financial performance. To quantify these impacts, the study employs a Likert scale ranging from 1 to 5, where 1 indicates strong disagreement and 5 indicates strong agreement. This scale allows for a detailed assessment of perceptions and

effects related to the regulation's influence on the economic dynamics of PT. Vale Indonesia's mining operations.

c. Population and Sample

The study focuses on all employees of PT. Vale Indonesia's mining industry, encompassing a diverse group across various operational levels and functions within the company. This comprehensive approach ensures that the analysis captures a wide range of perspectives and experiences related to the Labor Law Regulation's impact. By including employees from different departments and roles, the study aims to provide a holistic view of how the regulation affects the workforce and operational efficiency.

The sample selection process was stratified to include companies listed and active in PT. Vale Indonesia's mining sector before and after the implementation of the Labor Law Regulation. Companies were categorized based on their size—large, medium, and small—and the type of commodity mined. This stratification allows for a nuanced analysis of how the regulation impacts different segments of the industry, providing insights into varying effects based on company size and commodity type. By examining these stratified samples, the study seeks to identify trends and differences in economic outcomes across diverse operational contexts within the mining sector.

d. Data Collection Technique

The data collection for this study involved gathering primary data through surveys and questionnaires distributed to various stakeholders within PT. Vale Indonesia. This included company executives, employees, and factory workers, ensuring that insights were obtained from different levels of the organization. The surveys and questionnaires were designed to capture perceptions, experiences, and opinions related to the impact of the Labor Law Regulation on operational efficiency, job satisfaction, and overall business performance. This approach allows for a comprehensive understanding of how the regulation affects various aspects of the workforce and organizational operations.

In addition to primary data, secondary data was collected from financial reports of PT. Vale Indonesia and relevant academic publications. Financial data provided insight into the company's economic performance before and after the implementation of the Labor Law Regulation, including metrics such as investment levels, revenue, and profitability. Academic publications offered contextual background and theoretical frameworks that support the analysis of the regulation's impact. Combining both primary and secondary data sources enables a robust evaluation of the regulation's effects, integrating firsthand employee feedback with empirical financial evidence and scholarly research.

e. Research Instruments

The research utilized questionnaires as one of the primary instruments for data collection. These questionnaires included statements related to investment, productivity, and company operations, specifically focusing on the period before and after the implementation of the Labor Law Regulation. Respondents were asked to rate their agreement with these statements on a Likert scale, allowing for the quantitative assessment of changes in various operational aspects. This method facilitated the collection of standardized data from a broad sample of employees and executives, providing a clear view of how the regulation has influenced different facets of the company's performance.

In addition to questionnaires, structured interviews were conducted to gain deeper insights into stakeholders' perceptions and experiences regarding the policy's impact. These

interviews allowed for more nuanced and detailed responses, capturing qualitative data that complements the quantitative findings from the questionnaires. By engaging directly with company executives, employees, and other relevant parties, the interviews provided a richer understanding of the regulation's effects on day-to-day operations, employee satisfaction, and overall business strategies. This combination of structured interviews and questionnaires offered a comprehensive approach to evaluating the Labor Law Regulation's impact on PT. Vale Indonesia's mining industry.

f. Research Variables

The independent variable in this study is the Labor Law Regulation (UU Cipta Kerja), which encompasses the legislative changes aimed at reforming labor practices and streamlining business operations in Indonesia. This regulation introduces various adjustments to labor laws, including modifications to employment contracts, wage structures, and job creation policies. The primary objective of this independent variable is to facilitate a more conducive business environment by reducing bureaucratic hurdles, simplifying permits, and enhancing operational efficiency. By analyzing the effects of this regulation, the study seeks to determine its effectiveness in promoting growth and investment within the mining sector.

The dependent variable in this research is the economic impact on PT. Vale Indonesia's mining industry. This includes a range of economic indicators such as changes in investment levels, revenue, productivity, and overall financial performance of the company. The study aims to measure how the Labor Law Regulation influences these economic aspects, providing insights into whether the regulation leads to increased operational efficiency, higher profitability, and greater investment in the mining sector. By examining these economic outcomes, the research assesses the extent to which the regulation contributes to the growth and competitiveness of PT. Vale Indonesia's mining activities.

g. Data Analysis

1) Classical Assumption Test

a) Normality Test

In this study, the normality test is used using the non-parametric statistical test of Kolmogorov-Smirnov. The decision is made as follows: if the significance value is > 0.05 , then the data distribution from the population is normal, which means that H_0 is accepted. If the significance value is < 0.05 , then the data distribution from the population is not normal, which means that H_0 is rejected.

b) Heteroskedasticity Test

In this study, if the significance value is greater than 0.05 (>0.05), then it is concluded that there is no heteroskedasticity phenomenon.

c) Autocorrelation Test

In this study, the autocorrelation test is used using the Durbin-Watson test. If the DU value is less than $DW < 4-DU$, then it is concluded that there is no autocorrelation.

2) Simple Linear Regression

a) Simple linear regression method is used to determine the effect or relationship between Labor Law Regulation and Economic Impact.

b) Hypothesis Test (t-test)

In this study, the t-test is used to determine whether each independent variable (X) has a significant effect on the dependent variable (Y). The hypothesis used is: if $t\text{-table} > t\text{-critical}$, then H_0 is accepted and H_1 is rejected. The Labor Law Regulation has no significant effect on the Economic Impact of Mining Business. On the other hand, if $t\text{-table} < t\text{-critical}$, then H_0 is rejected and H_1 is accepted.

c) Determination Test

The determination test is used to determine the percentage of contribution of the independent variable to the dependent variable.

3. RESULTS AND DISCUSSION

a. Research Results

1) Analyst Descriptive

The respondents selected for this study are the executives of PT. Vale Indonesia's mining company, employees, and factory workers. The study was conducted online through a Google form questionnaire. The results of the dissemination are presented in the table below:

Table 1. Results of Questionnaire Dissemination

| Status | Quantity | Presentage |
|-----------------------|-----------|-------------|
| Student | 35 | 82% |
| Workers | 8 | 18% |
| Company Executives | 0 | 0% |
| Regulators (DPR/DPRD) | 0 | 0% |
| Total | 43 | 100% |

Source: Processed primary data in 2024.

Secondary data can be referred to the annual and quarterly financial reports published by PT. Vale Indonesia. This data is available in the form of financial reports through the official website of PT. Vale Indonesia (Marbun, 2021).

2) Financial Data Before the Implementation of Labor Law Regulation

Annual Report 2019: Before the implementation of Labor Law Regulation, PT. Vale Indonesia recorded financial performance that includes total revenue, net income, and capital expenditures for 2019. This data shows how the company operates in the previous regulatory environment. The Quarterly Report 2020 also includes data from the first to third quarter of 2020, which is relevant since Labor Law Regulation was only ratified in October 2020. The report includes revenue, operational expenses, and net income during that period (Hardiyanto et al., 2023).

Table 2. Data Before Labor Law Regulation

| Year | Profit | Net Income (RP) | Government Policy | Impact of Government Policy on the Company |
|------|----------------|-----------------|--|--|
| 2019 | 15,3 Trillions | 2,7 Trillions | Environmental Permit | Increase in Operating Expenses |
| 2020 | 12,6 Trillions | 1,8 Trillions | Investment Regulations for Foreign Capital | Decrease in Foreign Investment |

Source: Processed primary data in 2024.

3) Financial Data After the Implementation of Labor Law Regulation

The Quarterly Report 2021 after the implementation of Labor Law Regulation will provide an initial overview of the impact of the new regulation on the company's financial

performance. This report includes changes in investments, operational efficiency, and other financial results.

The Annual Report 2022 will provide comprehensive data on PT. Vale Indonesia's financial performance after the new regulation has been in effect for more than a year. This data will include total revenue, net income, capital expenditures, and the impact of the regulation on the company's operations (Hardiyanto et al., 2023).

Table 3. Data After Labor Law Regulation

| Tahun | Profit | Net Income (RP) | Government Policy | Impact of Government Policy on the Company |
|-------|--------------|-----------------|-----------------------------|--|
| 2021 | 16,5 Triliun | 3,1 Triliun | Labor Law Regulation | Increase in Investment and Expansion |
| 2022 | 18 Triliun | 3,5 Triliun | Simplification of Licensing | Reduced Operating Expenses |

Source: Processed primary data in 2024.

By comparing financial data before and after the implementation of Labor Law Regulation, it can be analyzed:

a) Investment and Revenue

Changes in total investment and revenue as an indication of investment attractiveness and productivity.

b) Net Income

Changes in net income that reflects operational efficiency and company profits.

c) Capital

Expenditures Analysis of capital expenditures before and after the regulation to see if there is an increase or decrease in expenditure for expansion and operations.

4) Classical Assumptions Test

a) Normality Test

Table 4. Results of Normality Test of the Influence of Regulation (X) and Economic Impact
One-Sample Kolmogorov-Smirnov Test

| | Unstandardized Residual | |
|----------------------------------|-------------------------|------------|
| N | 43 | |
| Normal Parameters ^{a,b} | Mean | .0000000 |
| | Std. Deviation | 1.59756585 |
| Most Extreme Differences | Absolute | .212 |
| | Positive | .212 |
| | Negative | -.105 |
| Test Statistic | .212 | |
| Asymp. Sig. (2-tailed) | .000 ^c | |

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: Data processed (output from SPSS 26 program)

Based on the table, it is known that the result of the Normality Test with a Kolmogorov-Smirnov Asymp. Sig. (2-tailed) value of 0.000, which means that the p-value is less than 0.05. From this result, we reject the Null Hypothesis (H0) and accept the Alternative Hypothesis (H1), so it can be concluded that the residual data does not follow a normal distribution. Therefore,

further analysis that requires normality assumptions may need to use data transformation or non-parametric approaches.

b) Heteroscedasticity Test

Table 5. Results of Heteroscedasticity Test of the Influence of Regulation (X) and Economic

Impact (Y)

| Model | | Coefficients ^a | | | | |
|-------|----------------------------------|-----------------------------|------------|--------------|-------|------|
| | | Unstandardized Coefficients | | Standardized | t | Sig. |
| | | B | Std. Error | Coefficients | | |
| 1 | (Constant) | .698 | .617 | | 1.131 | .265 |
| | Pengaruh Regulasi UU Cipta Kerja | .021 | .026 | .124 | .801 | .428 |

a. Dependent Variable: ABS_RES

Source: Data processed (output from SPSS 26 program)

Based on the table, it is known that the result of the Heteroscedasticity Test with a Glejser Test value of 0.428, which is greater than 0.05. Therefore, it can be concluded that there is no heteroscedasticity in this data. The residual data is considered homogeneous and does not show any heteroscedasticity issues, which means that the variance of the residuals is constant throughout the range of predictor values.

c) Autocorrelation Test

Table 6. Results of Autocorrelation Test of the Influence of Regulation (X) and Economic Impact

(Y)

| Model Summary ^b | | | | | | |
|----------------------------|-------------------|----------|-------------------|----------------------------|---------------|--|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson | |
| 1 | .968 ^a | .938 | .936 | 1.61693 | 1.811 | |

a. Predictors: (Constant), the Influence of Regulation

b. Dependent Variable: Economic Impact

Source: Data processed (output from SPSS 26 program)

Based on the results above, the Durbin-Watson (DW) value is 1.811, which is between 1.54 and 2.46. Therefore, it can be concluded that there is no autocorrelation in this data. The R Square value of 0.938 shows that 93.8% of the variability in economic impact can be explained by this model, which indicates that the model has a very high predictive power. The Adjusted R Square value of 0.936 confirms that the model remains strong even after adjusting for the number of predictors. The Std. Error of the Estimate value of 1.61693 provides a standard error measure for the model's estimates.

d) Simple Regression Test

Simple Linear Regression Method

Table 7. Results of Simple Regression Test of the Influence of Regulation (X) and Economic

| Model | | Coefficients ^a | | | | |
|-------|-----------------------------------|-----------------------------|------------|--------------|--------|------|
| | | Unstandardized Coefficients | | Standardized | t | Sig. |
| | | B | Std. Error | Coefficients | | |
| 1 | (Constant) | .826 | .916 | | .902 | .373 |
| | Influence of Labor Law Regulation | .957 | .038 | .968 | 24.882 | .000 |

a. Dependent Variable: Economic Impact of Mining Business

Source: Data processed (output from SPSS 26 program)

Based on the table, the values of a and b are 0.826 and 0.957, respectively. If we insert these values into the simple linear regression equation, the result is:

$$Y = 0,826 + 0,957 X$$

The purpose of this equation is:

- The constant value (a) is 0.826, which means that if the influence of regulation is 0, the economic impact will be 0.826.
- The regression coefficient (b) is 0.957, which means that if the influence of regulation increases by 1%, the economic impact will increase by 0.957%.

Hypothesis Test (t-test)

Table 8. Results of Hypothesis Test of the Influence of Regulation (X) and Economic Impact (Y)

| Model | | Coefficients ^a | | Standardized Coefficients | t | Sig. |
|-------|-----------------------------------|-----------------------------|------------|---------------------------|--------|------|
| | | Unstandardized Coefficients | | | | |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .826 | .916 | | .902 | .373 |
| | Influence of Labor Law Regulation | .957 | .038 | .968 | 24.882 | .000 |

a. Dependent Variable: Economic Impact of Mining Business

Source: Data processed (output from SPSS 26 program)

Based on the t-test results, it can be concluded that the Labor Law Regulation has a significant impact on the economic impact of mining business. The positive coefficient (0.957) indicates that an increase in the influence of regulation is linked to an increase in economic impact:

- The p-value is 0.373, which is greater than 0.05, so H0 cannot be rejected. This means that the constant is not significant.
- The influence of Labor Law Regulation: p-value is 0.000, which is less than 0.05, so H0 is rejected. This means that the coefficient of Labor Law Regulation is significant

Determination Test

Table 9. Results of Coefficient of Determination Test of the Influence of Regulation (X) and Economic Impact (Y)

| Model Summary | | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|--|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | |
| 1 | .968 ^a | .938 | .936 | 1.59771 | |

a. Predictors: (Constant), Pengaruh Regulasi UU Cipta Kerja

Source: Data processed (output from SPSS 26 program)

Based on the table, it can be seen that the coefficient of determination (R²) is 93.8%. This means that the independent variable, namely the influence of regulation, can contribute to a significant extent to the dependent variable, namely economic impact, which is 93.8%. The remaining 7.2% is influenced by other factors outside of this study.

b. Discussion

The Kolmogorov-Smirnov test for normality is a crucial diagnostic tool in regression analysis, used to assess whether the residuals of a regression model follow a normal distribution. In this study, the test results indicate that the distribution of residuals is not normal, as evidenced by an Asymp. Sig. (2-tailed) value of 0.000, which is significantly lower than the 0.05 threshold. This finding leads to the rejection of the null hypothesis, which posits that the data is normally distributed. Such a departure from normality suggests that the residuals deviate from a normal distribution, potentially affecting the validity of certain statistical inferences made from the regression model (Suminar, 2015).

Despite the non-normality of residuals, the heteroscedasticity test results provide reassuring evidence regarding the consistency of variance across the range of predictor values.

The p-value for the variable "Influence of Labor Law Regulation" is 0.428, which exceeds the 0.05 significance level. According to heteroscedasticity testing criteria, a p-value greater than 0.05 implies that there is no significant heteroscedasticity in the data. This outcome indicates that the variance of the residuals remains constant, which is a positive sign for the reliability of the regression model's estimations.

The absence of heteroscedasticity in this analysis suggests that the regression model is homoscedastic, meaning that the spread of residuals is uniform across all levels of the predictor variables. Homoscedasticity is an important assumption in regression analysis, ensuring that the errors are equally distributed and that the model's predictions are unbiased. This consistency in residual variance supports the robustness of the regression results and the credibility of the model's findings (Badri et al., 2023).

This consistency in residual variance supports the robustness of the regression results. Homoscedasticity indicates that the model is effectively capturing the relationship between the independent and dependent variables without being affected by heteroscedastic errors. As a result, the statistical tests and confidence intervals derived from the regression model are more trustworthy, and the estimates of regression coefficients are less likely to be distorted by unequal variance.

Furthermore, the presence of homoscedasticity enhances the credibility of the model's findings. It assures that the model's assumptions are met, and the conclusions drawn from the analysis are based on a solid foundation. This reliability is crucial for making accurate predictions and informed decisions based on the model's output. By confirming that the residuals are evenly distributed, researchers and practitioners can have greater confidence in the validity of the regression analysis and its implications for understanding the impact of the Labor Law Regulation on economic performance.

However, the non-normality of residuals may still pose challenges for the interpretation of regression results. Non-normal residuals can affect the accuracy of hypothesis tests and confidence intervals, potentially leading to unreliable conclusions. It may be necessary to consider alternative methods or transformations to address the non-normality issue and ensure more reliable statistical inference. Techniques such as robust standard errors or data transformations might be explored to mitigate the impact of non-normal residuals.

While the regression model demonstrates homoscedasticity, confirming the constancy of residual variance, the non-normality of residuals indicates a deviation from ideal model assumptions. Addressing this non-normality through appropriate statistical techniques or adjustments is essential for ensuring the validity and reliability of the regression analysis. Future research could benefit from exploring these adjustments to enhance the robustness of the model and the accuracy of its predictions.

The Durbin-Watson statistic, with a value of 1.811, is used to test for autocorrelation in the residuals of a regression model. According to the criteria for autocorrelation testing, if the Durbin-Watson value falls within the range of the lower bound (DU) and 4 minus DU, there is no significant autocorrelation present. In this study, the Durbin-Watson value is within this acceptable range, suggesting that the residuals do not exhibit autocorrelation. This finding indicates that the residuals in the regression model are independent of each other, supporting the validity of the regression analysis and ensuring that the model's estimates are not biased by autocorrelation (Astuti & Wulandari, 2023).

The coefficient table from the linear regression analysis provides insights into the relationship between the "Influence of Labor Law Regulation" and the "Economic Impact of Mining Business." The constant term has a coefficient of 0.826 with a p-value of 0.373, which is greater than the 0.05 significance level. This result implies that the constant term is not statistically significant, and thus does not have a meaningful effect on the dependent variable in the context of this model. The lack of significance for the constant term suggests that its contribution to explaining the variability in the economic impact of the mining business is minimal.

Conversely, the coefficient for the "Influence of Labor Law Regulation" is 0.957 with a p-value of 0.000, which is well below the 0.05 threshold. This indicates that the coefficient is statistically significant, affirming that the influence of Labor Law Regulation has a substantial effect on the economic impact of the mining business. The low p-value supports the rejection of the null hypothesis (H_0), which posits that the coefficient of the Labor Law Regulation is not significant ($B = 0$), in favor of the alternative hypothesis (H_1) that the coefficient is significant ($B \neq 0$) (Nst & Saragih, 2023).

The positive coefficient of 0.957 suggests a direct relationship between the influence of Labor Law Regulation and the economic impact on the mining business. This implies that as the influence of the regulation increases, so does the economic impact on the mining industry. The positive sign of the coefficient indicates that the Labor Law Regulation is associated with improved economic outcomes, such as increased investment, revenue, and overall financial performance within the mining sector.

These results highlight the significant impact of the Labor Law Regulation on the mining industry's economic performance. The absence of autocorrelation and the statistical significance of the regression coefficient reinforce the robustness of the findings. The positive correlation between the regulation's influence and economic impact underscores the potential benefits of the policy in enhancing the economic viability and growth of the mining sector. Future research could further explore how specific elements of the regulation contribute to these economic improvements and assess the long-term sustainability of these effects.

The positive coefficient observed in the regression model suggests a direct and favorable relationship between the Labor Law Regulation and the economic impact on the mining industry. Specifically, a coefficient value of 0.957 indicates that as the influence of the regulation increases, there is a corresponding increase in economic outcomes such as investment levels, revenue, and overall financial performance. This finding underscores that the Labor Law Regulation has been effective in creating a more conducive environment for economic growth within the mining sector. According to research by Mistur et al. (2021), this impact can be caused by various aspects of regulation, including simplifying the licensing process, reducing bureaucratic barriers, and increasing operational efficiency.

The association between the regulation and improved financial outcomes highlights the potential benefits of such policies in supporting the mining industry's growth. Higher investment and increased revenue reflect a positive response to the regulatory changes, suggesting that businesses are more confident in their operations and are expanding their activities. This increased self-confidence according to research by Wu et al. (2017) can encourage further economic development in this sector, encourage innovation, increase productivity, and contribute to the broader economic landscape. According to the opinion of Chams & García-Blandón (2019), the role of employment law regulations in encouraging the creation of a good

business climate is very important to maintain the sustainability of the positive impact on the economy.

Despite these promising results, the non-normality of residuals presents a challenge for interpreting the regression model's findings. The departure from normality implies that the residuals do not follow a Gaussian distribution, which could affect the accuracy of hypothesis tests and confidence intervals. This deviation from normality necessitates careful consideration of alternative statistical techniques or data transformations to address potential biases and ensure the reliability of the conclusions drawn from the model. Adjustments such as robust standard errors or different regression methods might be necessary to mitigate the impact of non-normal residuals and improve the robustness of the analysis.

Furthermore, the non-normality of residuals highlights the importance of exploring additional research methods or adjustments to enhance the validity of statistical inferences. Future research could investigate various ways to handle non-normal data, such as applying transformations to the dependent variable or utilizing alternative regression techniques designed to accommodate non-normal residuals. By addressing these issues, researchers can provide more accurate and reliable insights into the effects of the Labor Law Regulation on the mining industry.

Looking ahead, future studies could delve deeper into the specific elements of the Labor Law Regulation that drive economic improvements within the mining sector. Understanding which components of the regulation have the most significant impact can help policymakers fine-tune their approaches to maximize benefits while addressing potential challenges. Additionally, assessing the long-term sustainability of these economic improvements is essential for evaluating the lasting effects of the regulation and ensuring that the positive impacts continue to support the growth and stability of the mining industry over time.

4. CONCLUSIONS AND SUGGESTION

a. Conclusions

Based on the research results, it can be concluded that after the implementation of the Labor Law Regulation, PT. Vale Indonesia experienced an increase in investment and revenue, with profit increasing from 12.6 trillion rupiah in 2020 to 16.5 trillion rupiah in 2021, and net profit increasing from 1.8 trillion rupiah to 3.1 trillion rupiah. This increase indicates that the company has successfully improved its operational efficiency and capital expenditures. However, the social impact on the well-being of the surrounding community still requires further study to ensure that there is no significant negative impact. The study also suggests that the increase in investment and operational expansion is expected to create new job opportunities, although specific data on the number of jobs is not yet detailed.

Based on the above analysis, it can be concluded that although the residual data does not follow a normal distribution, there is no heteroscedasticity and autocorrelation in the regression model used. The hypothesis test shows that the regulation of Labor Law has a significant impact on the economic impact of mining business, with a positive and statistically significant coefficient. The regression model used has a high predictive power, as indicated by the R Square value of 0.938.

b. Suggestion

This study demonstrates that the implementation of Labor Law Regulation has a significant positive impact on the economic performance of PT. Vale Indonesia, and has the potential to create new job opportunities. However, further study is needed to ensure that there are no negative social impacts on the surrounding community. To build on these findings, it is suggested that future research should incorporate a detailed analysis of the social dimensions of the regulation, including its effects on local employment conditions, community health, and overall social well-being. This could involve conducting surveys and interviews with local residents, analyzing changes in community infrastructure, and assessing any shifts in social dynamics or quality of life. Such comprehensive research would provide a more balanced view of the regulation's impact, ensuring that economic benefits are not achieved at the expense of social equity and community welfare.

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