

Drivers of Transfer Pricing Decisions in Strategic Industries: An Empirical Analysis of the Iron and Steel Sector in Indonesia

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ABSTRACT

This study aims to analyze the effects of tax burden, exchange rates, tunneling incentives, and bonus mechanisms on transfer pricing decisions in manufacturing companies in the iron and steel subsector listed on the Indonesia Stock Exchange (IDX) during the 2019–2024 period. This study employs a quantitative approach using secondary data obtained from companies' annual reports and analyzed via panel data regression. The research sample was selected using purposive sampling, yielding 30 data points from 5 companies that met the study criteria. The results indicate that the exchange rate influences transfer pricing. Transfer pricing decisions are influenced not only by internal company factors but also by external economic conditions, particularly the exchange rate. Additionally, companies tend to consider operational stability and business risk when determining transaction policies with related parties.

INTRODUCTION

Taxes are the government's primary source of revenue, supporting development programs and economic stability. As of September 2025, tax revenue reached Rp1,295.3 trillion, or 62.4% of the government's outlook target, representing a 4.4% decrease compared to the same period in September 2024, which stood at Rp1,354.9 trillion. This situation reflects the challenges associated with Indonesia's fluctuating tax-to-GDP ratio in recent years. Indonesia's iron and steel sector faced significant pressure in 2022 due to a case of illegal steel imports involving six companies and indirectly linked to transfer pricing practices. The Attorney General's Office revealed that these companies are suspected of illegally importing steel between 2016 and 2021 by submitting Explanatory Letters (Sujel) to the Directorate of Imports, which allowed imports to exceed permitted limits, thereby driving domestic steel prices below those of local products. Iron and steel commodities are generally traded across countries and integrated into the global market. Within a global corporate group, various entities are involved in the export and import chain—from raw materials to finished products—making the determination of *transfer pricing* a crucial and unavoidable aspect.

Agency theory explains that within a company, there is a conflict of interest between management and shareholders. Management is motivated to pursue tax efficiency to maintain profits, one way being through *transfer pricing* by shifting profits to entities located in countries with lower tax rates. However, companies also consider the risk of tax disputes and compliance costs, which may outweigh the tax savings themselves (Wu et al., 2023). In addition to the tax burden, changes in *exchange rates* also influence the financial strategies of multinational corporations. Data from the Central Statistics Agency (BPS) shows that Indonesia's iron and steel imports reached US\$6.85 billion (2020), surging to US\$11.95 billion (2021), and US\$13.35 billion (2022). In 2024, the rupiah weakened to around Rp16,162 per U.S. dollar. These conditions have prompted companies with cross-border affiliates to manage transaction prices between entities through *transfer pricing* in response to exchange rate fluctuations. A "*tunneling incentive*" arises when majority shareholders have the ability to shift a company's assets, resources, and profits to benefit a specific group. In multinational corporations, this approach is often carried out through intra-group transactions at unreasonable prices, which are increasingly difficult to detect in the iron and steel industry due to its large assets and complex cross-border operations. The *bonus mechanism* is explained through *positive accounting theory*, which states that management tends to choose certain policies to increase profits in order to secure larger bonuses. In *transfer pricing*, management can structure transactions with related parties to influence the company's reported profits (Maylia et al., 2022).

METHOD

This study employs a quantitative approach using secondary data from the annual financial statements of iron and steel manufacturing companies listed on the Indonesia Stock Exchange (BEI) for the period 2019–2024. The sample was selected using purposive sampling, yielding 30 data points from 5 companies (PT Krakatau Steel, PT Gunung Raja Paksi, PT Steel Pipe Industry of Indonesia, Citra Tubindo, and PT Gunawan Dianjaya Steel).

RESULTS AND DISCUSSION

The transfer pricing variable has a mean of 1.614 with a standard deviation of 2.391, indicating variation in related-party transactions among companies. The exchange rate has the highest mean of 2.095 with a standard deviation of 3.089, reflecting considerable exchange rate volatility. The tax burden has a mean of 0.252, while the tunneling incentive and bonus mechanism have means of 1.101 and 1.153, respectively.

The *Jarque-Bera* normality test yielded a probability of 0.967 (>0.05), indicating that the residuals are normally distributed. The multicollinearity test showed no correlation among the independent variables exceeding 0.80 (the highest value was 0.181). The *Durbin-Watson* statistic of 1.729 indicates no autocorrelation. The heteroscedasticity test using the *Glejser*

test showed that all variables had a probability >0.05 , indicating that there is no heteroscedasticity.

The Chow test yielded a *cross-section chi-square p-value* of 0.044 (<0.05), so the Fixed Effects Model (FEM) is more appropriate. The Hausman test yielded a p-value of 0.088 (>0.05), so the selected model is the Random Effects Model (REM).

The resulting panel data regression model is: $TP = 41,187.39 - 0.026 \cdot X1 + 0.397 \cdot X2 + 0.039 \cdot X3 + 0.163 \cdot X4$. Based on the results of the panel data regression test, the constant term is 411, meaning that when $X1$, $X2$, $X3$, and $X4$ are all zero, Y equals 411. The adjusted R^2 of 36.9% indicates the ability of the independent variables to explain the variation in *transfer pricing*, while 63.1% is explained by other variables outside the model. H1 (Tax Burden): Probability value 0.871 (>0.05), coefficient -0.026 . Tax burden does not have a significant effect on *transfer pricing*. Iron and steel companies tend to consider the risks of tax audits and higher compliance costs to be greater than the benefits of tax savings through *transfer pricing* (Wu et al., 2023). H2 (Exchange Rate): Probability value 0.005 (<0.05), coefficient 0.397. The exchange rate has a significant positive effect on *transfer pricing*. Exchange rate fluctuations affect a company's operating costs, sales revenue, and profits, prompting management to adjust transactions between affiliated entities to maintain financial stability (Mayzura et al., 2021). H3 (Tunneling Incentive): Probability value 0.873 (>0.05), coefficient 0.039. The tunneling incentive does not have a significant effect on *transfer pricing*. The extent of controlling ownership does not necessarily encourage a company to engage in *transfer pricing*; the company still considers profit stability and the interests of all shareholders (Rusydi et al., 2024). H4 (Bonus Mechanism): Probability value 0.147 (>0.05), coefficient 0.163. The bonus mechanism does not have a significant effect on *transfer pricing*. Awarding bonuses to management does not necessarily encourage *transfer pricing* practices; transfer pricing decisions take into account long-term risks and various other factors beyond bonus attainment (Maylia et al., 2022).

CONCLUSION

This study analyzes the factors influencing *transfer pricing* decisions at iron and steel companies listed on the Indonesia Stock Exchange for the period 2019–2024. The results show that tax burden, *tunneling incentives*, and *bonus mechanisms* were not found to have a significant effect on *transfer pricing* decisions. The only significant variable was the *exchange rate*, indicating that exchange rate fluctuations are a primary consideration for multinational companies when adjusting transactions between affiliated entities to minimize foreign exchange risk.

These findings imply that *transfer pricing* decisions are influenced more by external economic conditions than by internal corporate factors. For regulators, *transfer pricing* oversight must take into account international economic dynamics, not merely tax-related

aspects. For investors, these results suggest that *transfer pricing* also serves as a corporate strategy to maintain profit stability amid shifting global economic conditions.

This study has limitations due to its relatively small sample size, which means it does not fully represent the population. Future research is recommended to expand the sample, broaden the coverage of industrial sectors, extend the observation period, and consider additional variables such as *corporate governance*, firm size, and profitability to produce more accurate and generalizable findings.

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