THE IMPACT OF THE RUSSIA-UKRAINE CONFLICT ON PROFITABILITY AND VALUATION OF INDONESIAN COAL STOCKS

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Abstract
This research investigates the impact of the 2022 Russian invasion of Ukraine on the profitability and valuation of publicly listed Indonesian coal companies. Leveraging panel regression, the study offers empirically grounded perspectives on how an acute geopolitical conflict disrupted global energy trade flows to influence key financial metrics of a major exported commodity. Specifically, the analysis focuses on five leading Indonesian coal miners over 2019-2022. Profitability dynamics are examined through gross profit margins while valuations reliance on price-to-earnings ratios. Control variables capture coal prices, a conflict indicator, inflation, interest rates, and exchange rate fluctuations. Results reveal the global coal price spike had a statistically significant positive impact on profit margins, affirming the turmoil's commodity super-cycle upside. However, valuations diverged from earnings trends, suggesting more complex reassessments of long-term prospects. The conflict itself directly affected profitability but not valuations. This research contributes timely empirical insights on an understudied intersection of geopolitics, commodity markets, and emerging market equities. Evidence-based quantification of financial linkages and risk transmission inform both theory and practice. Strategic decision makers obtain granular clarity regarding exposures and opportunities during energy market turmoil.

Keywords: geopolitical conflict; profitability; valuation; panel regression

Introduction
The Russian invasion of Ukraine on February 24, 2022, triggered heightened volatility in global commodity markets, including the coal sector (Avis, 2022). As a major exporter, the circumstances presented both opportunities and critical risks for Indonesian coal producers. The issue lies in the uncertainty surrounding whether Indonesian coal companies can sustain higher profitability and how stock valuations and market movements are reflecting the conflict's risks and prospects.
The Impact of Russian-Ukraine Conflict on Profitability and Valuation of Indonesian Coal Stocks

Figure 1
Global coal price around Russian-Ukraine conflict

Multiple academic studies have analysed associations between geopolitical conflicts and fluctuations in profitability, pricing multiples, and systematic risk exposure of related industries like oil and gas (Zhang et al., 2023) and (Devadoss & Ridley, 2024). However, literature focusing on emerging coal markets remains sparse. This poses strategic dilemmas for Indonesian coal firms attempting to translate short-term performance windfalls into lasting market share and competitive advantages (Kim, 2021).

The Russian-Ukrainian conflict sparked turmoil in global commodity markets, presenting strategic opportunities and risks for major Indonesian coal exporters (Avis, 2022). While research on emerging coal markets is sparse (Kim, 2021), past geopolitical conflicts have destabilized related industries like oil and gas) and airlines. Initially, top Indonesian coal companies saw surging profitability, with gross margins jumping 50-250% over the last five years, indicating strengthened market positions. However, with profits relying on conflict-induced price spikes, a resolution could prompt sharp declines. The lack of research on correlations between geopolitical events and Indonesian coal profitability makes it difficult to predict future performance. Though low 2022 Price-to-Earnings ratios signal undervaluation despite rising profits, more analysis is needed to determine whether this stems from the conflict itself or other factors. Overall, Indonesian coal firms face strategic dilemmas leveraging short-term windfalls into lasting competitive advantages without clarity on how geopolitical uncertainties could reshape market dynamics.

The research questions for this research are “how does the Russian-Ukraine conflict influence the profitability of coal companies?” and “how does the Russian-Ukraine conflict influence the valuation of coal companies?”. This research questions are deovlopes into six hypotheses that will be tested using panel data regression.

The first part of hypotheses for this research that are related to the first research question are as follows:
H1: The increase in coal prices due to the conflict has a significant positive impact on the gross profit of coal companies.
H2: The presence of conflict, represented by a dummy variable, has a significant impact on the profitability of coal companies.

H3: Macroeconomic factors altered by the conflict have a significant impact on the profitability of coal companies.

Rationale: The Russia-Ukraine conflict disrupted energy markets, triggering a spike in global coal prices as countries sought cheaper alternatives to Russian oil and gas (Colgan et al., 2023). Economic theory suggests higher commodity selling prices directly translate to increased revenues and profitability for producers (de Gorter et al., 2021). Empirically, oil and gas companies exhibited positive gross profit movements in response to geopolitics-driven oil price shocks (Yakovleva & Nickless, 2022). This precedent establishes the plausibility of a similar impact on coal company profitability.

The second part of hypotheses for this research that are related to the first research question are as follows:

H4: The increase in coal prices due to the conflict has a significant impact on the valuation of coal companies.

H5: The presence of conflict, represented by a dummy variable, has a significant impact on the valuation of coal companies.

H6: Macroeconomic factors altered by the conflict have a significant impact on the valuation of coal companies.

Rationale: Theoretical and empirical research shows commodity price booms directly impact relevant companies’ valuations through cashflow effects on earnings multiples like the price-to-earnings (P/E) ratio (Odiero, 2013). As the coal price spiked due to shifted energy dynamics during the conflict, corresponding revaluation likely occurred.

Furthermore, investor risk perceptions tend to increase amidst geopolitical conflicts, raising systematic risk and equity risk premiums – key inputs into valuation models (Stoupos et al., 2023). This distinct conflict effect gets captured through a dummy indicator. Moreover, fluctuations in macro variables like inflation and interest rates impacted the discount rates applied in valuation, driving changes separate from coal prices.

Specifically in Indonesia, the coal sector represents a large weighting in the overall stock index at over 7% (Purwantara et al., 2023). Significant foreign investor ownership of key coal equities also saw perceptions of Indonesia country risk factor into valuations. As emerging markets grew sensitive to global instability from the conflict, valuations adjusted downwards (David & Veronesi, 2022).

In summary, theory and evidence on geopolitics swinging commodity valuations, altering risk metrics, shifting macroconditions, and amplifying country risk supports hypotheses of the conflict distinctly impacting Indonesian coal stock valuations through prices, uncertainty, and macro financial channels. Panel regression analysis will empirically assess significance.

This research will analyze the relationship between Russian-Ukraine conflict on Indonesian coal stocks’ profitability and valuation using panel data regression and analyze the possible cause and the implication of the results.
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**Methodology**

This study employed a quantitative research design to objectively measure the impact of the Russia-Ukraine conflict on Indonesia's coal stock market. The data came from secondary data such as financial statement, historical stock price, coal price, and macroeconomic indicators that is publicly listed on www.idx.com, www.barchart.com, and www.bi.go.id.

The research used panel data regression as an analytic tool following previous research that had been about the impact of Covid-19 on dividend policy and the impact of political instability on certain commodities (Ahmed et al., 2021). All simulations were performed using R application. The panel data regression used two proxy variables for dependent variables to represent the profitability and valuation of the company. For independent variables, five proxy variables were used to represent the impact of the conflict on macroeconomic and industrial level. The samples consisted of five biggest Indonesian coal companies (PTBA, ADRO, ITMG, BYAN, and GEMS) to represent the market capitalization of all Indonesian coal stocks. The timeframe for the analysis was five years from 2018 to 2022.

The proxy variables used for this research were as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxy Variable</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>Gross Profit</td>
<td>Revenue - COGS</td>
</tr>
<tr>
<td>Valuation</td>
<td>P/E ratio</td>
<td>Price / EPS</td>
</tr>
<tr>
<td>The impact of conflict</td>
<td>Coal price</td>
<td>Newcastle Coal Price</td>
</tr>
<tr>
<td></td>
<td>Conflict dummy</td>
<td>1 = conflict, 0 = no conflict</td>
</tr>
<tr>
<td></td>
<td>Inflation rate</td>
<td>Indonesian Inflation rate</td>
</tr>
<tr>
<td></td>
<td>Interest rate</td>
<td>BI-7day RR</td>
</tr>
<tr>
<td></td>
<td>Exchange rate</td>
<td>USDIDR</td>
</tr>
</tbody>
</table>

The using of proxy variables was caused by the impact of the conflict could not be quantified directly, so intermediary variables were chosen to quantify the impact of the conflict (Dworschak, 2021). The variables were chosen based on these justifications:

- **Global coal price**: As one of the primary commodities impacted by geopolitical conflict, coal prices can serve as a direct indicator of market sentiment and supply chain disruptions. Fluctuations in coal prices can significantly impact a company's profitability and valuation (Mayliza et al., 2020).
- **Conflict Time Dummy**: The inclusion of a conflict time dummy is based on the event-study methodology, widely used in finance to capture the impact of a significant event (like geopolitical conflict) on a dependent variable. In this case,
the dummy variable helps isolate the effects of the Russia-Ukraine conflict on the coal companies' profitability and valuation.

- **Gross Profit**: Gross profit is a fundamental measure of a company's operational efficiency and its ability to turn raw inputs into earnings. It reflects the difference between sales and the cost of goods sold. Higher gross profit can indicate better cost management and productive efficiency, which is a direct contributor to the financial health of a company. Furthermore, the gross profit is the metric that can help in giving business solutions to the coal companies by focusing on the core business.

- **P/E ratio**: The P/E ratio was chosen as a proxy variable to represent valuation of Indonesian coal companies because it is the familiar parameter that is used to value companies by investors. The P/E ratio is commonly used as a valuation metric in financial markets. It is the market's assessment of the earning capability of a firm relative to its industry peers. The ratio encapsulates the market's expectation of future earnings growth, risk, and the required rate of return (Aswath Damodaran, "Investment Valuation"). It also can be analysed using time-series and cross-section which absolute valuation such as Discounted Cash Flow cannot achieve.

- **Interest Rates**: Interest rates directly affect the cost of capital for businesses and can significantly impact investment decisions and profitability within the coal industry. Interest rates can have both direct and indirect effects on a company's profitability. Higher interest rates increase the cost of borrowing and affect the financial expenses (Tinungki et al., 2022).

- **Inflation**: Inflation rates can influence operational costs, coal prices, and ultimately the profitability of coal companies. Inflation can erode purchasing power and affect both costs and revenues. Companies might be unable to pass increased costs onto consumers, affecting their profitability. It serves as a control variable to isolate such macroeconomic effects from the impact of the conflict.

- **Exchange Rates**: As coal is a globally traded commodity, exchange rates play a pivotal role in determining export competitiveness and revenue in local currency terms.

### Results and Discussions

There were two models being used for this research, with gross profit and PE ratio as dependent variables. The dependent variables were the result from macroeconomic and industry analysis. The models and explanations of each variable are as follows:

\[
GP = \alpha + \alpha \text{COAL} + \beta_2 \text{CONFLICT\_Dummy} + \beta_3 \text{INTEREST} + \beta_4 \text{INFLATION} + \beta_5 \text{INFLATION} + u
\]

\[
PER = \alpha + \beta_1 \text{COAL} + \beta_2 \text{CONFLICT\_Dummy} + \beta_3 \text{INTEREST} + \beta_4 \text{INFLATION} + \beta_5 \text{INFLATION} + u
\]

Where

GP: Gross profit
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PER: P/E ratio
α: intercept
β: coefficient of each independent variables
u: residual

Table 2 Statistic descriptive

<table>
<thead>
<tr>
<th></th>
<th>GP</th>
<th>PER</th>
<th>Coal</th>
<th>Conflict dummy</th>
<th>Interest</th>
<th>Inflation</th>
<th>Exchange rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>5.58</td>
<td>1.15</td>
<td>3.94</td>
<td>0</td>
<td>3.5%</td>
<td>1.4%</td>
<td>9.53</td>
</tr>
<tr>
<td>1st Quartile</td>
<td>7.22</td>
<td>1.73</td>
<td>4.23</td>
<td>0</td>
<td>3.5%</td>
<td>1.7%</td>
<td>9.57</td>
</tr>
<tr>
<td>Median</td>
<td>7.78</td>
<td>2.01</td>
<td>4.64</td>
<td>0</td>
<td>4.3%</td>
<td>2.9%</td>
<td>9.58</td>
</tr>
<tr>
<td>Mean</td>
<td>7.89</td>
<td>2.07</td>
<td>4.77</td>
<td>0.2</td>
<td>4.5%</td>
<td>2.8%</td>
<td>9.58</td>
</tr>
<tr>
<td>3rd Quartile</td>
<td>8.42</td>
<td>2.28</td>
<td>5.14</td>
<td>0</td>
<td>5.3%</td>
<td>3.3%</td>
<td>9.60</td>
</tr>
<tr>
<td>Max</td>
<td>9.98</td>
<td>3.23</td>
<td>6.04</td>
<td>1</td>
<td>6.0%</td>
<td>5.5%</td>
<td>9.66</td>
</tr>
</tbody>
</table>

Table 2 shows the statistical descriptive of each variable in the model. Gross profit, coal price, and exchange rate were using logarithmic transformations to help stabilise the variance of the error term, especially when the variance of the residuals increases with the level of the dependent variable (heteroscedasticity). By compressing larger values and expanding smaller values, the transformation would make the spread of the residuals more consistent across different levels of the dependent variables. Table 2 shows that the gross profit and coal prices showed substantial variation, Interest rates and inflation demonstrated moderate variability, and exchange rates remained relatively stable.

Table 3 Chow, Haussman and Lagrange Test

<table>
<thead>
<tr>
<th></th>
<th>Chow Test</th>
<th>Haussman Test</th>
<th>Lagrange Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross Section X (Statistics)</td>
<td>p-value</td>
<td>Cross Section Random (X Statistics)</td>
</tr>
<tr>
<td>GP</td>
<td>7</td>
<td>5.25E-05</td>
<td>37,724</td>
</tr>
<tr>
<td>PER</td>
<td>1,427</td>
<td>0.23</td>
<td>-</td>
</tr>
</tbody>
</table>

The Chow test result for Gross Profit model showed p-value <0.05 that indicates the Fixed Effect Model is a better model compared to the Common Effect Model. The Hausman Test was conducted next to compare between Fixed Effect Model (FEM) and Random Effect Model (REM). The result shows p-value <0.05 that indicates the best model is Fixed Effect Model (FEM). The Lagrange Multiplier test was not carried out because Chow and Hausman consistently selected FEM (Tinungki et al., 2022).

The result of the Chow test for P/E ratio model showed a p-value >0.05 that indicates Common Effect Model is a better model compared to the Fixed Effect Model. Lagrange Test was conducted next to compare between Common Effect Model and Random Effect Model The result shows p-value >0.05 that indicates the best model is Common Effect Model. The Haussman test was not carried out because Chow and Lagrange tested consistently selected CEM (Tinungki et al., 2022).

Table 4 Result of Goodness Fit Test
The goodness of fit tests indicate the regression model for Gross Profit strongly explains the variability in profitability of Indonesian coal companies. The R-squared of 0.802 shows 80.2% of profitability changes are accounted for by the independent variables. The high adjusted R-squared of 0.802 confirms this even after considering the number of variables. Additionally, with a statistically significant F-statistic, the model is valid. In summary, the tests demonstrate high explanatory power, good model fit and that the conflict, coal prices and other factors significantly influence profitability. This supports the robustness of using the model to evaluate the geopolitical event's impact.

Meanwhile the model evaluating factors impacting the price-to-earnings ratios of Indonesian coal companies demonstrates strong explanatory power and statistical validity. An R-squared of 0.686 indicates almost 69% of changes in the PE ratios are accounted for by the independent variables like coal prices and conflict events. The high adjusted R-squared of 0.666 further supports the model's robustness even considering the number of variables. Additionally, with a significant F-statistic, the overall model itself is valid. In summary, the goodness of fit assessments show the model strongly fits the data and significantly explains PE ratio movements, supporting its use for determining how much the conflict and other factors drive market valuation changes.

Tests were conducted to ensure the gross profit and P/E ratio models did not violate classical assumptions. The gross profit model passed tests for normality, multicollinearity, autocorrelation, and heteroscedasticity, indicating no violations. However, the P/E ratio model failed the normality test with a p-value below 0.05, showing the error is not normally distributed and this assumption is violated. Still, the P/E model passed tests for multicollinearity, autocorrelation, and heteroscedasticity. In summary, while the gross profit model does not violate any classical assumptions, the normality assumption is violated in the P/E ratio model (Alghifari et al., 2022). However, the other assumptions remain valid, though this normality issue should be considered when
interpreting the P/E model results. To address the normality issue for P/E ratio model, robust standard error was performed ().

<table>
<thead>
<tr>
<th>Table 6 Panel Data Regression Test for Gross Profit Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>COAL</td>
</tr>
<tr>
<td>CONFLICT DUMMY</td>
</tr>
<tr>
<td>INFLATION</td>
</tr>
<tr>
<td>INTEREST</td>
</tr>
<tr>
<td>EXCHANGE RATE</td>
</tr>
</tbody>
</table>

Table 6 shows the result of panel data regression for each independent variable. Coal price has a positive coefficient and p-value less than 0.05 that means it has a positive and significant relationship with gross profit. This indicates the profitability of Indonesian coal companies is highly affected by the movement of global coal price and hypothesis 1 can be accepted. This result is supported by previous research where oil price shocks affect the financial performance of U.S. oil and gas companies significantly. Conflict dummy has p-value less than 0.05 that means the presence of Russian-Ukraine conflict has significant impact on the profitability of Indonesian coal companies and hypothesis 2 can be accepted. Inflation, interest rate, and exchange rate has p-value greater than 0.05 that means macroeconomic factors do not have significant impact on the profitability of Indonesian coal companies and hypothesis 3 is rejected.

The positive and significant relationship between coal prices and profitability aligns with the current market dynamics. Global coal prices in 2022 reached record highs due to strong post-pandemic demand and supply constraints. Indonesian coal companies reaped the benefits through increased profit margins during this super cycle, consistent with hypothesis 1. Past literature documents similar boosts in oil and gas earnings from price spikes caused by geopolitical tensions disrupting energy trade flows (Li et al., 2023).

Confirmation of hypothesis 2 highlights the uniqueness of the Russia-Ukraine conflict as an epochal geopolitical event driving volatility beyond just commodity prices. The significant dummy coefficient conforms recent findings that major conflicts directly increase firms’ systematic risk exposure and cashflow uncertainty from altered consumer behaviours (Stoupos et al., 2023). Indonesian coal miners likely confronted demand fluctuations, shifting contract terms, and inventory revaluations tied to the conflict itself.

Rejection of hypothesis 3 counterintuitively implies Indonesian coal profitability had insulation from broader macroeconomic instability triggered by the conflict, like imported inflation and rising interest rates which squeezed margins in other sectors. A potential explanation is the sector’s export-orientation and currency hedging allowing relief from domestic monetary impacts. Furthermore, as a global price-taker, Indonesian firms possibly passed higher input costs to international coal customers amidst tight supply conditions.

<table>
<thead>
<tr>
<th>Table 7 Panel Data Regression Result for P/E Rasio Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>COAL</td>
</tr>
</tbody>
</table>
Table 7 shows the result of robust standard error of panel data regression for each independent variable. Coal price has a negative coefficient and p-value less than 0.05 that means it has a negative and significant relationship with gross profit. This indicates the valuation of Indonesian coal companies is highly affected by the movement of global coal price and hypothesis 4 can be accepted. This result is supported by previous research where there is significant effect on the role oil price on GCC stock markets during the Gulf War as an exogenous geopolitical shock (Alqahtani & Klein, 2021). Conflict dummy has p-value greater than 0.05 that means the presence of Russian-Ukraine conflict has no significant impact on the valuation of Indonesian coal companies and hypothesis 5 is rejected. Inflation, interest rate, and exchange rate has p-value greater than 0.05 that means macroeconomic factors do not have significant impact on the valuation of Indonesian coal companies and hypothesis 6 is rejected.

The negative and significant coal price coefficient contradicts expectations but aligns with falling price-to-earnings (P/E) ratios for Indonesian coal stocks in 2022 despite record coal prices. This inverse relationship implies valuations fell even as commodity earnings rose, accepting hypothesis 4. One explanation is investors applying higher discount rates amid economic uncertainty, or perceptions that peak coal demand is near despite current profitability. Similar trends occurred during the 1970s oil crisis where petroleum valuations dropped before recovering (Alqahtani & Klein, 2021).

Dismissal of hypothesis 5 reinforces that the Russia-Ukraine conflict itself did not significantly impact valuations. This suggests the downturn had more complex origins than just geopolitical tensions increasing systematic risk (Stoupos et al., 2023). Potential factors include pre-existing environmental policies accelerating energy transitions in major markets like China and the EU, tamping Indonesian coal growth prospects.

Additionally, rejection of hypothesis 6 indicates domestic inflation and interest rate shifts tied to the conflict did not affect valuations. This contrasts with evidence that monetary conditions sway equity risk premiums. However, currency hedging and foreign investor ownership may have cushioned valuations from Indonesian monetary impacts (Purwantara et al., 2023).

The results of this research can be used by stakeholders related to coal industry to strategize during the conflict. Some business solution that can be implemented based on for stakeholders are as follows:

Coal Companies
1. Leveraging periods of geopolitical supply constraint: Global coal prices tend to spike during geopolitical conflicts that disrupt exporting regions, as seen with the Russia-Ukraine war tightening supply (Doshi, 2023). Indonesian coal companies
can capitalise on these supply squeezes by locking in long-term export contracts at inflated spot prices to lock in wider profit margins. This provides an earnings buffer even as prices normalise post-conflict. Looking at how global coal price relation with profitability of Indonesian coal companies, this can maintain the profitability of Indonesian coal companies especially when there is a correction of global coal price or when the conflict is ended.

2. Stock buyback: Stock buybacks allow companies to repurchase their own shares, reducing the number of outstanding shares and boosting earnings per share and shareholder value (Pinto & Rastogi, 2022). This is an effective way for coal companies to return cash to shareholders when valuations are low during geopolitical conflicts, but profitability is high due to supply constraints. Coal companies can time buybacks to take advantage of dips in price-earnings ratios.

Investor
1. Acquire undervalued coal stocks based on price-earnings ratios: Geopolitical conflicts that roil coal markets often affect valuations and disconnect stock prices from fundamentals. The positive and significant relationship between coal price and presence of conflict on profitability shows a strong fundamental of coal stocks performance during the conflict. On the other hand, the negative relationship between coal price and PE ratio and insignificant relationship between the presence of conflict and PE ratio shows that the coal stocks are undervalued. The price-earnings ratio for Indonesian coal companies declined around recent tensions. This creates value investing opportunities to acquire undervalued stocks based on low P/E multiples despite strong earnings outlooks. Investors can pick opportune moments to take positions in beaten-down coal stocks based on depressed valuations rather than negative sentiment. This contrarian strategy paid off for investors that bought coal stocks during pandemic lows based on value disconnects (Monteiro et al., 2023). Similar mispricing arises around conflicts.

2. Maintain diversified portfolio: Diversification is a fundamental investing principle to reduce portfolio risk by allocating across assets with low correlations. Overweighting coal stocks can expose investors to high volatility from unpredictable geopolitical events. Looking at the relationship between the profitability and valuation to coal price, those metrics volatility are determined by the movement of global coal price. There is a risk that the coal price will drop due to other factors outside the conflict or the conflict itself is ended. This makes investing overweight in coal stocks cause the portfolio more exposed to greater declines. Indonesian coal stocks saw greater declines versus the broader market during recent tensions (Kurniawan et al., 2020). A prudent strategy is holding a diversified portfolio that limits concentration in coal stocks rather than making binary bets on geopolitics.

Regulator
1. Implementing fairer Domestic Market Obligation (DMO) pricing: The research found the Russia-Ukraine conflict and resultant coal price surge significantly
increased Indonesian coal companies’ profitability (hypothesis 1), while the geopolitical tensions themselves also impacted earnings (hypothesis 2). However, these positive effects may not be sustainable if domestic supply obligations hinder firms’ ability to fully capitalize on favourable export dynamics. The DMO scheme forced suppliers to sell 25-30% of output locally at often unprofitable discounted fixed rates amidst global prices rising over 200% (Doshi, 2023). This led to export restrictions temporarily halting overseas sales for many miners. The research confirmed global coal price as the prime profit driver (hypothesis 1), so export controls directly reduce income for Indonesian firms. Reforming DMO to allow fairer compensation for high-contribution companies, through mechanisms like tradable supply quotas, can therefore promote resilience. Letting productive firms optimize export sales during conflict windfalls gives upside to withstand instability per hypothesis 2. Sustainable DMO progress requires pricing reflecting global dynamics per hypothesis 1’s coal price profit linkage.

2. Change the formula of Indonesian coal price reference (HBA): The research found a significant positive relationship between global coal prices and Indonesian coal company profitability (hypothesis 1). However, domestic Indonesian Coal Price (HBA) benchmarks materially diverged from global price signals in 2022. This disconnects between actual price drivers per hypothesis 1 and local reference indexes poses strategic challenges. The current HBA formula averages four global indexes weighted equally, despite their capture of predominantly high-calorie coal dynamics unrelated to Indonesia’s lower-calorie export profile (Doshi, 2023). The ensuing large spread between HBA and real-world Indonesian Coal Index (ICI) prices faced by firms has fuelled market distortions. Reforming the formula to accurately reflect Indonesia-specific supply-demand dynamics and export competitive factors will better align with the global price profitability linkage found in hypothesis 1. Tying HBA construction to indexes like ICI that capture thermal coal markets where Indonesian miners operate will bolster transparency. Additionally, a segmented benchmark approach using unique formulae tailored for low, medium, and high calorie coal categories rather than indiscriminate averaging will promote fairness. This will account for the grade variations confronting different Indonesian miners. Making these sensible reforms will mean domestic price signals sync with global conditions influencing financial outcomes as per the research (hypothesis 1), supporting efficient markets. The changes can facilitate better-informed planning and investments by Indonesian coal companies seeking to ride global commodity cycles amidst volatility, including from events like the Russia-Ukraine conflict.

Conclusion

This thesis analysed the impact of the 2022 Russian invasion of Ukraine on profitability, valuation, and market efficiency of Indonesian coal stocks. The eruption of
this major geopolitical conflict disrupted global energy trade flows, spurring an exponential increase in international coal prices.

Empirical analysis via panel data regressions yielded several key conclusions regarding the conflict’s repercussions on Indonesian coal miners listed on the stock exchange. Firstly, the price surge boosted profit margins, confirming positive significant effects on earnings performance. However, corresponding upward revaluations did not materialize as valuations fell despite rising profits. Market efficiency also prevailed throughout the event window as prices rapidly incorporated new public information without lag.

Diving deeper, the conflict itself only directly impacted profitability patterns rather than valuations or market movements. Meanwhile, shifts in domestic monetary conditions tied to the conflict had negligible effects across all three aspects studied. This suggests isolation from localized risks, likely afforded by the sector’s export-driven nature and high foreign investor ownership.

Therefore, Indonesian coal stocks harvested upside from global supply bottlenecks and the resultant commodity cycle upside. However, persistent regulatory headwinds surrounding coal partly suppressed valuations amidst peak profitability. As the conflict evolves, energy transitions, geopolitics, and climate policies will likely further reshape market dynamics.

In conclusion, this thesis underscores the interconnectedness of geo-economic events and emerging market sector performance while illuminating novel nuances regarding Indonesian coal financials. The empirical insights can guide firms, investors, and policymakers in navigating markets during turbulent times. Further research can explore adjacent aspects like optimal risk management and structural shifts in global coal demand.
REFERENCE


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