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Untangling Nickel Downstreaming: A Political Economy Analysis of Indonesia's Morowali Industrial Park

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Abstract:
Indonesia's policy to downstream its nickel industry represents a significant strategic shift aimed at increasing domestic value addition and strengthening its position in the global market. This article analyzes the political economy dynamics of this policy, with a specific focus on the Indonesia Morowali Industrial Park (IMIP) as the central hub of its implementation. This study employs a qualitative case study method, utilizing stakeholder analysis, a Power-Interest Grid, and SWOT analysis to dissect the complex interactions among various actors. The analysis is based on a comprehensive review of academic literature, government regulations, and civil society reports. The findings reveal the formation of a powerful "growth machine" alliance between the Indonesian central government, PT IMIP as the park operator, and foreign investors, primarily from China. While this alliance has successfully driven rapid industrialization and boosted processed nickel exports, it has also generated significant negative externalities. These include the emergence of new forms of dependency on foreign capital and technology, severe socio-environmental degradation, and inequitable distribution of economic benefits, leading to conflicts with local communities and labor groups. The article concludes that while the downstreaming policy has achieved macroeconomic goals, its long-term sustainability is challenged by its failure to foster inclusive and environmentally sound development, presenting a critical paradox for Indonesia's developmental state ambitions.

Keyword: Nickel Downstreaming, Political Economy, Morowali, Developmental State, Stakeholder Analysis

INTRODUCTION

Indonesia possesses immense natural resource wealth, with nickel being one of its most significant commodities. As the country with the world's largest nickel reserves, holding approximately 52% of the global total, Indonesia is uniquely positioned to be a key player in the global market (Sunuhadi et al., 2024). This substantial resource endowment offers a strategic opportunity for Indonesia to enhance its influence in international trade and capture greater economic value from its geological assets

(Ozdemir et al., 2022; Rebak, 2013). For decades, however, the country's approach to its nickel wealth was characterized by the export of raw, unprocessed ore.

This practice resulted in relatively low revenue, forcing Indonesia into the paradoxical position of exporting cheap raw materials only to import expensive processed nickel products, thereby forfeiting a significant portion of the potential surplus value (Hati et al., 2024; Kurniyanto et al., 2024; Santoso et al., 2024).

In a decisive move to reverse this trend and assert greater control over its resources, the Indonesian government implemented a strategic downstreaming policy. This policy, which officially culminated in a complete ban on the export of raw nickel ore on January 1, 2020, was designed to compel the development of a domestic mineral processing and refining industry (Santoso et al., 2024).

The central objective was to transform Indonesia from a mere supplier of raw materials into a significant producer of higher-value, semi-finished and finished nickel products (Camba et al., 2022). The epicenter of this ambitious industrial transformation is the Morowali region in Central Sulawesi, home to the Indonesia Morowali Industrial Park (IMIP), a sprawling industrial complex established to house nickel smelters, predominantly financed and operated through Chinese investment.

This article is situated within the broader academic discourse on resource nationalism, industrial policy, and state-led development in the Global South. While many studies have examined the macroeconomic outcomes of such policies, this analysis delves into the complex political and economic dynamics that underpin the Morowali project. It seeks to untangle the intricate web of relationships between the state, multinational corporations, and local actors.

The originality of this study lies in its critical examination of a state-led development project that, unlike classic developmental state models, is profoundly dependent on foreign capital and technology (Unctad et al., 2007). This unique configuration creates a series of paradoxes and tensions, which this article aims to dissect through a detailed political economy lens, thereby offering a nuanced counter-narrative to the often-simplified official discourse of national success.

The urgency of critically examining Indonesia's nickel downstreaming policy is underscored by both global market dynamics and the profound local consequences of its implementation. Globally, the demand for nickel is surging, driven not only by its traditional use in stainless steel production (Zeng & Fang, 2014) but, more critically, by its role as an essential component in the batteries for electric vehicles (EVs).

As the world pivots towards a green energy transition, Indonesia's nickel reserves have become a strategic asset of global importance. This positions the Morowali case not merely as a national industrial project but as a critical node in the future of global green energy supply chains, making an understanding of its internal dynamics imperative for international policymakers, investors, and consumers.

The scientific contribution of this article stems from its focus on the deep-seated contradictions masked by the policy's apparent macroeconomic success. On the surface, the downstreaming initiative has been remarkably effective, spurring rapid industrial development in Morowali and driving regional economic growth to rates that have significantly surpassed the national average. However, this top-line success obscures a more complex and troubling reality on the ground.

This paper argues that the pursuit of rapid, capital-intensive industrialization has generated severe negative externalities, including environmental degradation, social inequality, and new forms of economic dependency. The study aims to reveal the "benang kusut" (tangled threads) of this policy, exposing the inherent tensions between the state's

developmental ambitions and the on-the-ground realities of foreign capital dominance, ecological damage, and social conflict.

By providing a critical, evidence-based analysis of these contradictions, this article seeks to contribute a more holistic understanding of the true costs and benefits of this development model, highlighting why the issue is worthy of publication and urgent academic and policy attention.

The primary objective of this study is to unravel the complex political and economic dynamics of the nickel downstreaming policy as implemented in the Indonesia Morowali Industrial Park. The analysis focuses on PT IMIP as a central actor, examining the intricate interplay of interests, power structures, and dependencies that shape the outcomes of this ambitious national project. The approach is guided by a central question: How do the interactions between the Indonesian state, foreign capital, and local actors define the political economy of nickel downstreaming in Morowali, and what are the implications for sustainable and equitable development?

To address this question, the article employs a qualitative case study of IMIP. This methodological approach is particularly well-suited for a deep and holistic analysis of a complex, real-world phenomenon where the boundaries between the policy and its broader context are blurred. The analysis is structured through a multi-tool framework designed to provide a layered and nuanced understanding of the case. This framework integrates three distinct analytical tools a Stakeholder Analysis, Power-Interest Grid and SWOT Analysis

By combining these tools, this study moves beyond a simple description of events to offer a structured dissection of the conflicts, alliances, and dependencies that constitute the political economy of nickel downstreaming in Morowali. This multi-faceted approach enables a comprehensive assessment of the policy's successes, its profound contradictions, and its far-reaching socio-environmental consequences.

RESEARCH METHOD

The Research Method section of this article outlines the approach used to conduct the study in a comprehensive and systematic manner. This research employs a qualitative case study design, focusing on a descriptive and analytical approach to explore the political economy of Indonesia's nickel downstreaming policy.

The chosen research design is a qualitative case study. This method is particularly appropriate for conducting an in-depth, holistic investigation of a complex, real-world phenomenon where the boundaries between the subject of study and its context are not clearly evident. The nickel downstreaming policy as implemented in Morowali is a multifaceted issue involving intricate interactions between state policy, global capital flows, and local socio-environmental impacts, making the case study approach exceptionally well-suited for capturing this complexity.

The unit of analysis for this study is the Indonesia Morowali Industrial Park (IMIP). IMIP was selected as a critical case for several reasons. It is the largest integrated nickel industrial park in Indonesia and serves as the epicenter for the implementation of the national downstreaming policy.

Furthermore, its status as a joint venture involving both domestic and foreign capital (primarily from China) and its direct role in executing the state's industrial vision make it a critical nexus where diverse interests, power dynamics, and socio-environmental impacts converge. Analyzing IMIP therefore provides a powerful lens through which to understand the broader dynamics of the national policy.

Data for this study were collected through document analysis and a comprehensive literature review. This method allows for the triangulation of information from a wide array of perspectives, enhancing the validity and reliability of the findings. The sources were systematically collected and categorized into three main groups:

a. Academic Literature: Peer-reviewed journal articles, books, and academic papers focusing on relevant theoretical frameworks, including developmental state theory, dependency theory, and resource governance in Southeast Asia.
b. Government Regulations: Official government documents that form the legal and policy foundation of the downstreaming initiative. Key documents include Law No. 4 of 2009 on Mineral and Coal Mining and Ministerial Regulation (Permen ESDM) No. 11 of 2019, which formalized the raw ore export ban (Finasisca & Hayati, 2021).
c. Civil Society and Think Tank Reports: In-depth investigative reports from non-governmental organizations (NGOs) and research institutions such as the Action for Ecology and Emancipation of the People (AEER) and the Mining Advocacy Network (JATAM). These reports provide critical, on-the-ground perspectives on the policy's social and environmental consequences, offering a crucial counterpoint to official government and corporate narratives.

For data analysis, the study employed a framework grounded in the political economy of development, utilizing a combination of three specific analytical tools. The integration of these tools allows for a multi-layered analysis that moves from identification to strategic evaluation:

a. Stakeholder Analysis: This was used to systematically identify all relevant actors, ranging from central government ministries and corporate entities to local communities and civil society organizations (Guðlaugsson et al., 2020). For each actor, their primary interests (economic, political, social) and sources of power were mapped out.
b. Power-Interest Grid: Following the stakeholder identification, this tool was employed to visually categorize the actors based on their relative levels of power (their ability to influence the policy) and interest (the degree to which they are affected by it). This grid is instrumental in identifying the dominant "Key Players" and understanding the strategic positioning and potential marginalization of other groups (Scrich et al., 2024).
c. SWOT (Strengths, Weaknesses, Opportunities, Threats) Analysis: This tool was utilized to conduct a strategic evaluation of the key stakeholders identified through the preceding analyses (Sujatha, 2016). It provides a dynamic view of their internal capacities and external challenges within the downstreaming policy landscape (Tusil, 2016).

Ethical considerations for this research were centered on the responsible use of publicly available data. As the study relies exclusively on published documents, reports, and academic literature, it minimizes the risks typically associated with research involving human subjects. The study upholds its ethical commitment by striving to represent the diverse perspectives found within these documents accurately and fairly, ensuring that the analysis is balanced and grounded in the available evidence. By providing this detailed overview, the methodology section allows readers to understand the rigor, validity, and transparency of the research process.

RESULT AND DISCUSSION

The implementation of nickel downstreaming in Morowali reveals a complex interplay between developmental ambitions, capital dependency, and profound socio-

environmental consequences. This section analyzes these dynamics by first examining the theoretical paradoxes at play, followed by a detailed presentation of the stakeholder landscape, and concluding with an analysis of the conflicts and dependencies that define the region's political economy.

1. The Paradox of a Dependent Developmental State

Indonesia's nickel downstreaming policy is a classic manifestation of a developmental state strategy, wherein the state actively intervenes in the market to achieve national industrial and economic goals. Rejecting a passive, market-led approach, the Indonesian government has utilized its sovereign authority to fundamentally reshape the nickel sector. The cornerstone of this interventionist strategy is the ban on raw ore exports, a decisive policy tool designed to force investment into domestic processing facilities.

This was complemented by a suite of powerful incentives, such as generous tax holidays and the designation of IMIP as a National Strategic Project (PSN), which streamlines regulations and signals strong state support (Budiono & Purba, 2023; Nye, 2017). This approach aligns perfectly with theories of the developmental state, which posit that state intervention is essential to overcome market limitations and guide a nation's economy towards higher-value activities and structural transformation (Darmo, 2016). The objective is clear: to upgrade the nation's industrial capacity, capture a greater share of the value chain from its natural resources, and reposition itself in the global economy a clear exercise in resource nationalism.

Despite these developmental state ambitions, a significant contradiction emerges in the policy's implementation: its overwhelming reliance on foreign capital and technology, particularly from China's Tsingshan Group and its associated entities (V. Krylova et al., 2021). While Indonesia successfully set the national goal of downstreaming, it lacked the immense domestic capital and specialized technological capacity required to build a sophisticated smelting industry at the desired speed and scale. Consequently, the state created highly favorable conditions to attract foreign direct investment, effectively outsourcing the core industrial process. This dynamic introduces a central paradox that resonates strongly with dependency theory.

The state's assertion of economic sovereignty through the export ban has, in practice, led to the creation of a new and arguably deeper form of dependency. Indonesia is transitioning from being a dependent exporter of raw materials to the global North to being a dependent processor of semi-finished goods (such as Nickel Pig Iron and ferronickel) for a specific industrial core China (Zeng & Fang, 2014). This technological and capital dependency risks stifling the development of indigenous innovation and can create significant economic vulnerabilities tied to the strategic interests of a single foreign partner.

Evidence of this limited local benefit is found in reports highlighting a high degree of PDRB (Gross Regional Domestic Product) leakage from Morowali. This indicates that a substantial portion of the wealth generated within the industrial park does not circulate within or benefit the local or national economy but is instead repatriated, underscoring the extractive nature of the investment despite the "value-adding" processing taking place on Indonesian soil.

The initial rationale for the state's intervention can be framed as a legitimate response to a clear market failure. The private market, left to its own devices, was unwilling or unable to undertake the high-risk, capital-intensive investments required to build a domestic smelter industry. Without state intervention to de-risk and compel this investment, Indonesia would have remained locked in its role as a low-value raw material

exporter. In this sense, the downstreaming policy was a rational attempt to correct this failure and steer the market toward a more developmentally beneficial outcome.

However, the solution implemented has, in turn, created new and arguably more severe market failures in the form of massive negative externalities that the state has failed to adequately regulate (Bachmann, 2011). The pursuit of rapid industrialization has come at an enormous environmental and social cost. These externalities include widespread pollution of air, water, and land from mining and smelting activities; extensive deforestation and habitat loss; severe damage to coastal and marine ecosystems vital for local fishing communities; and staggering carbon emissions from the industry's near-total reliance on captive coal-fired power plants.

The state's singular focus on achieving production and export targets has resulted in a profound governance failure. Regulatory oversight concerning environmental standards, labor conditions, and the mitigation of social impacts like land dispossession has been demonstrably weak (Paschalidou et al., 2018). In effect, the state successfully corrected one market failure (lack of investment) but created another (unregulated externalities), shifting the immense costs of industrialization onto local communities and the environment.

2. The Stakeholder Landscape: Power, Interests, and Alliances

The political economy of Morowali is defined by a diverse set of stakeholders with competing interests and vastly different levels of power. A systematic analysis reveals the primary motivations of each group:

a. Central Government (RI): Driven by macroeconomic imperatives, its interests lie in increasing state revenue through taxes and royalties, boosting export value to improve the trade balance, attracting foreign direct investment, creating large-scale employment, and enhancing Indonesia's geopolitical standing as a key player in the global EV supply chain.
b. PT IMIP: As the industrial park operator, its core interests are ensuring operational stability and continuity, maximizing profitability for itself and its joint venture partners, attracting and retaining tenant companies, and maintaining a positive corporate image and good relations with all levels of government.
c. Tenant Companies and Foreign Investors (e.g., Tsingshan): Their primary interests are securing access to a stable supply of high-quality nickel ore, minimizing production costs (labor, energy, regulatory compliance), maximizing their return on investment, and gaining secure access to global markets for their processed products.
d. Local Government (Pemda Morowali): Its interests are more localized, focusing on increasing Local Own-Source Revenue (PAD), managing social order amidst rapid population growth, ensuring local residents benefit from job creation, and securing political legitimacy for re-election.
e. Local Communities: This heterogeneous group is highly affected by the industry. Their interests center on securing fair employment opportunities with safe working conditions, protecting their land rights and receiving just compensation, preserving the environment upon which their traditional livelihoods (fishing, farming) and health depend, and seeing tangible benefits from corporate social responsibility programs.
f. Civil Society Organizations (CSOs/NGOs): Actors like JATAM and AEER are driven by advocacy goals. Their interests include promoting environmental justice, defending labor rights and worker safety, ensuring corporate accountability and transparency, and challenging the dominant development model with calls for more sustainable and equitable alternatives.

The analysis of these interests reveals the formation of a dominant and powerful "growth machine" alliance. This coalition is composed of the Central Government, PT IMIP, and the foreign investors/tenant companies. These three actors are bound by a powerful, shared interest in promoting rapid, large-scale industrial growth above all else. In this symbiotic relationship, each actor plays a critical role: the Central Government provides the essential policy framework, regulatory facilitation, and political legitimacy (e.g., the PSN status); the foreign investors supply the massive capital investment and crucial processing technology that Indonesia lacks; and PT IMIP provides the physical and managerial platform the infrastructure and operational coordination (Tritto & Camba, 2022) that allows the industrial project to function.

This tripartite alliance forms the core of the political and economic power structure in Morowali, effectively driving the agenda of industrialization. The stakeholder landscape is characterized by a profound power asymmetry, which can be visualized using a Power-Interest Grid. This tool clarifies the strategic positioning of each actor and highlights the deep imbalances that define their interactions. The actors fall into distinct categories:

a. Key Players (High Power, High Interest): This quadrant is exclusively occupied by the "growth machine" alliance: the Central Government, PT IMIP, and the Foreign Investors. They possess both a high stake in the outcome of the downstreaming policy and the significant economic, political, and regulatory power to shape its direction.
b. Keep Satisfied (High Power, Low Interest): The Morowali Local Government resides here. It wields a degree of local regulatory power and is the direct interface with the community. However, its authority is often circumscribed by the project's national strategic status, and its interests are primarily local (PAD, social stability) rather than global or national. The key players must manage this actor to ensure smooth local operations, but it is not a primary driver of the overall strategy.
c. Keep Informed (Low Power, High Interest): This quadrant contains the Local Communities and CSOs. These groups are the most directly and often negatively affected by the industry's operations, giving them a very high interest in its conduct. However, they possess limited institutional power to influence major policy or corporate decisions. Their power is primarily mobilized through informal channels such as protests, media advocacy, and legal challenges, which can create disruptions but rarely alter the fundamental trajectory of the project.

Table 1. This mapping demonstrates a clear consolidation of decisive power within the government-capital alliance

Stakeholder Group	Primary Interests	Sources of Power	Power-Interest Grid Classification
Central Government (RI)	Macroeconomic growth, export value, FDI, geopolitical standing	Legislative authority, control over permits, fiscal incentives	Key Player
PT IMIP	Operational stability, profitability, expansion, corporate image	Control of infrastructure, relationship with investors, PSN status	Key Player
Foreign Investors/Tenants	Access to resources, low production costs, ROI, market access	Control of capital and technology, market dominance	Key Player

Stakeholder Group	Primary Interests	Sources of Power	Power-Interest Grid Classification
Local Government (Pemda)	Local revenue (PAD), social order, political legitimacy	Local regulatory authority (limited), community interface	Keep Satisfied
Local Communities	Fair employment, land rights, environmental & health protection	Potential for social mobilization/protest, local knowledge	Keep Informed
CSOs/NGOs	Environmental justice, labor rights, corporate accountability	Research & advocacy, media mobilization, legal challenges	Keep Informed

Source: Author, 2025

3. The Paradox of a Dependent Developmental State

The profound power asymmetries and divergent interests within the stakeholder landscape inevitably give rise to predictable and persistent lines of conflict (Petrescu-Mag et al., 2025). The primary fault line exists between the dominant "growth machine" alliance (government and corporations) and the marginalized groups (local communities and CSOs). These conflicts are not peripheral but are central to the political economy of the region, revolving around three key areas:

a. Land and Livelihoods: The expansion of mining concessions and the industrial park itself has led to widespread land acquisition, often resulting in the dispossession of local communities from their agricultural lands and ancestral territories with inadequate compensation. This directly fuels conflict over land rights.
b. Environmental Degradation: Pollution from industrial activities has severe impacts on the livelihoods of those who depend on the natural environment. Contamination of coastal waters affects fisherfolk, air pollution impacts public health, and waste disposal degrades agricultural land, creating a direct conflict between industrial production and the well-being of the local population (Suwito et al., 2020; Alvernia et al., 2021; Gambi et al., 2022; Ivanov et al., 2023;).
c. Labor Conditions: While the industry creates jobs, conflicts frequently erupt over labor issues, including worker safety standards, low wages, the prevalence of precarious short-term contracts, and clashes between local and foreign workers. These tensions have led to significant labor unrest, strikes, and even fatal accidents, highlighting the conflict between the corporate drive for low-cost production and the rights and safety of the workforce.

Alongside these conflicts, a complex web of mutual dependencies exists that reinforces the existing power structure and often mitigates the potential for radical change. These dependencies create a powerful inertia that maintains the status quo.

a. State-Capital Co-dependency: A powerful co-dependency exists between the Indonesian government and the corporate actors. The government relies on IMIP and its foreign investors to deliver on its national downstreaming targets, achieve macroeconomic goals, and provide employment. In return, the corporations depend on the government for continued policy support, regulatory stability, and protection from social and political challenges. This mutual reliance solidifies the "growth machine" alliance.
b. Induced Community Dependency: A more pernicious form of dependency is created at the local level. As traditional livelihoods like farming and fishing are destroyed or rendered unviable by the environmental impacts of the industry, local communities

become increasingly dependent on the very industry that displaced them for wage labor. This creates a powerful cycle of dependency that significantly weakens their bargaining power. The need for a job to survive often overrides concerns about low wages, poor safety, or environmental damage, making collective action more difficult and risky.

This dynamic reveals an inherent instability within the Morowali model. The success of the "growth machine" is predicated on the externalization of social and environmental costs. However, this process creates a dangerous feedback loop. The more the project succeeds in its narrow macroeconomic terms that is, the more nickel it produces and exports the greater the negative externalities it generates in the form of pollution, land use conflicts, and social friction (Chen et al., 2024).

This growing "social and environmental debt" accumulates over time, increasing the risk of major labor unrest, sustained community opposition, and damaging international scrutiny. As global markets, particularly for "green" products like EV batteries, place a higher premium on sustainable and ethical supply chains, the project's poor environmental and labor record transforms from a local issue into a significant strategic liability. Therefore, the very logic that drives the project's short-term economic success simultaneously creates the conditions for its potential long-term instability and failure.

CONCLUSION

The political economy analysis of Indonesia's nickel downstreaming policy in Morowali reveals a story of profound contradictions. The research confirms that the policy has successfully achieved several of its primary developmental state objectives. It has attracted massive foreign investment, dramatically increased the nation's domestic processing capacity, and significantly boosted the value of its nickel exports, transforming Indonesia's position in the global nickel market. In this industrial metamorphosis, PT IMIP has functioned as the central engine, facilitating the rapid build-out of a world-class processing hub.

However, this study's central finding is that this macroeconomic success is built upon a fragile and problematic foundation of dependent development. The model is characterized by a deep-seated reliance on foreign capital and technology, which raises critical questions about long-term national autonomy and the optimal capture of value for the Indonesian economy.

The macroeconomic benefits have failed to trickle down effectively, as evidenced by significant regional GDP leakage and the persistence of local poverty despite the influx of billions of dollars in investment. Most critically, the relentless pace of industrialization has inflicted severe and potentially irreversible environmental damage from deforestation and coastal pollution to massive carbon emissions and has created significant social disruption, including land conflicts, the marginalization of local communities, and deeply problematic labor conditions.

The significance of these findings lies in the critical counter-narrative they provide to the official discourse of unqualified success. While the downstreaming policy has succeeded in pulling Indonesia up the value chain from a raw material exporter to a processed goods producer, its claim to be a comprehensive development success is highly questionable.

This study's primary contribution is to demonstrate that, from a broader, sustainable development perspective, the policy has so far failed to create growth that is truly inclusive or environmentally sound. The Morowali case serves as a powerful,

empirically grounded case study that contributes to the wider academic debate on the viability and desirability of foreign capital-led, state-facilitated industrialization in the 21st century. It highlights the critical trade-offs between rapid economic growth and long-term social and environmental sustainability, offering a cautionary tale for other resource-rich nations in the Global South embarking on similar development paths.

In the interest of academic rigor, it is important to acknowledge the limitations of this study. The primary limitation is its reliance on secondary data, including academic literature, government documents, and civil society reports. While this approach allowed for a comprehensive and multi-perspective analysis of the policy and its impacts at a macro and meso level, it lacks the fine-grained, experiential detail that can only be captured through primary field research. The study could not, for instance, incorporate direct testimonies from workers inside the smelters or conduct ethnographic observation within the affected local communities to fully understand their lived experiences.

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