Linking economic nationalism with global value chain

Indonesia’s nickel sector industrial policies

Source: Cabinet Secretariat of the Republic of Indonesia

Korea Institute for International Economic Policy
Kyunghoon Kim
① Background
- Jokowi’s economic policy stance
- History
- Economy
- Politics & society
- Logic

② Policies
- Market condition
- Export ban
- Share divestment requirement
- State holding company
- Electric vehicle industry promotion

③ Effects
- Production & exports
- Metal sector investment
- Electric vehicle value chain investment
- Boosting resource protectionism

④ Implications
- World Trade Organization
- United States’ Inflation Reduction Act
- Geostrategic conflict
- Industrial policies in other mineral segments
Jokowi’s economic policy stance (1/2)

Simple mean tariff rate

FDI regulatory restrictiveness index

Ease of doing business index

Sources: World Bank; OECD; Ministry of Investment/BKPM
Jokowi’s economic policy stance (2/2)

Simple mean tariff rate

FDI regulatory restrictiveness index

Sources: World Bank; OECD
History (1/2)

Background

Then: Spices
Now: Nickel

Sources: Vox; Princeton; ESDM
History (2/2)

GDP by sector

(% of value added)

Employment by sector

(% of employment)

Export by main product

(% of exports)

Economy (1/2)

Economic performance

- Standard deviation of GDP growth rate, 2000-2017
- GDP growth rate per annum, 2000-2017 (%)

GDP per capita

- (GDP per capita, constant, PPP 2011 international dollar)

Sources: IMF
Economy (2/2)

Notes: EGW = electricity, gas, water supply; THR = wholesale and retail trade, hotels, restaurants; TSC = transport, storage, communication; FIRB = finance, insurance, real estate, business services; CSP = community, social, personal services.

Sources: GGDC 10-Sector Database
Politics & society

Background (iv)

Party positions, 2017-2018


Bertelsmann Stiftung survey, 2020

Should the country you live in protect its economy more strongly against foreign competitors?

*Figure directly taken from the paper

Sources: Fossati, D., E. Aspinall, B. Muhtadi, & E Warburton (2020). Electoral Studies; YouGov; Bertelsmann Stiftung
Nickel prices, rebased

International nickel price (cathodes, minimum 99.8% purity)

Indonesia's nickel ores and concentrates export unit value

Indonesia's nickel exports, rebased

Net weight

Export value

Export unit value

Sources: World Bank; UN Comtrade
Logic (2/2)

Foreign entities’ views

<table>
<thead>
<tr>
<th>Domestic benefits</th>
<th>Strong</th>
<th>Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>Liberalisation</td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>Protectionism</td>
<td></td>
</tr>
</tbody>
</table>

Nationalists’ views

<table>
<thead>
<tr>
<th>Domestic benefits</th>
<th>Strong</th>
<th>Weak</th>
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<td>Strong</td>
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<td>Weak</td>
<td>Protectionism</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Presenter
Market condition

Global nickel consumption

Nickel market demand, forecast

Global nickel production, 2022

Sources: Norilsk Nickel; International Nickel Study Group; Roskill; USGS
# Export ban

## Transitional measures adopted in implementing Indonesia’s mining export ban

<table>
<thead>
<tr>
<th>Year of announcement</th>
<th>Effective during:</th>
<th>Policy measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2012–2014</td>
<td>[Ministry of Finance Regulation 75/2012 Article 10] Exports of stated raw minerals and ores were allowed subject to an export tax of 20%</td>
</tr>
<tr>
<td>2014</td>
<td>2014–2016</td>
<td>[Ministry of Finance Regulation 6/2014 Article 3] Exports of Type 1 mineral products (such as copper and iron, not nickel) that satisfy the minimum processing levels that have been set lower than previously stipulated were allowed while being subjected to an export tax of 20–25% that gradually increases over time to 60%.</td>
</tr>
<tr>
<td>2014</td>
<td>2014–2017</td>
<td>[Ministry of Finance Regulation 153/2014 Article 4A] Same as above with the end of application period being extended from December 2016 to January 2017. Further, tariff rates on exports of Type 1 mineral products that satisfy the minimum processing levels are lowered to 0%, 5% or 7.5% depending on the percentage of progress in refining facility construction.</td>
</tr>
<tr>
<td>2017–2018</td>
<td>2017–2022</td>
<td>[Ministry of Finance Regulation 13/2017 Article 11] Tariff rates on exports of Type 1 mineral products that satisfy the minimum processing levels were set at 0%, 2.5%, 5% or 7.5% depending on the percentage of progress in refining facility construction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Ministry of Finance Regulation 164/2018 Article 11] Subsequently, tariff rates were set at 0%, 2.5%, 5% depending on the percentage of progress in refining facility construction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Ministry of Energy and Mineral Resources Regulation 11/2017 Article 10] Exports of nickel ore and washed bauxite, previously classified as Type 2 minerals, were allowed for mining companies that satisfy conditionalities such as dedicating at least 30% of their current processing/refining capacity to process nickel ore and bauxite with certain characteristics and making progress in constructing refineries.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Ministry of Finance Regulation 13/2017 Article 12] Exports of nickel ore and bauxite were subject to an export tariff of 10%.</td>
</tr>
</tbody>
</table>

Sources: Government legislation
# Share divestment requirement

## Divestment rules

<table>
<thead>
<tr>
<th>Year of announcement</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>Foreign controlling shareholders must hold at most 80% of shares in a mining company by the end of year 6 after production begins, with this share decreasing annually to reach 49% by the end of year 10.</td>
</tr>
<tr>
<td>2014</td>
<td>The divestment rules were relaxed in terms of the deadline and maximum foreign ownership share conditioned upon the company's progress in and plans on processing/refining activities or whether the company was involved in underground and/or open pit mining.</td>
</tr>
<tr>
<td>2017</td>
<td>Relaxation was reversed in 2017. The foreign ownership limitation was set at 80% by the 6th year of production, declining annually to reach 49% by the 10th year.</td>
</tr>
<tr>
<td>2021</td>
<td>The divestment rules were relaxed (again) in terms of the deadline and maximum foreign ownership share conditioned upon the company's progress in and plans on processing/refining activities or whether the company was involved in underground and/or open pit mining.</td>
</tr>
</tbody>
</table>

Sources: Government legislation; Inalum; CNBC Indonesia

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**Freeport Indonesia divestment in 2018**

**Vale Indonesia divestment in 2020**
State holding company

MIND ID (Inalum)’s assets

<table>
<thead>
<tr>
<th>Year</th>
<th>Inalum (MIND ID)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>181</td>
</tr>
<tr>
<td>2018</td>
<td>181</td>
</tr>
<tr>
<td>2019</td>
<td>181</td>
</tr>
<tr>
<td>2020</td>
<td>181</td>
</tr>
<tr>
<td>2021</td>
<td>181</td>
</tr>
</tbody>
</table>

State enterprises’ assets, 2020

<table>
<thead>
<tr>
<th>SOE</th>
<th>Assets (billion rupiah)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT Perusahaan Listrik Negara</td>
<td>1,588</td>
</tr>
<tr>
<td>PT Bank Rakyat Indonesia Tbk</td>
<td>1,512</td>
</tr>
<tr>
<td>PT Bank Mandiri Tbk</td>
<td>1,429</td>
</tr>
<tr>
<td>PT Pertamina</td>
<td>974</td>
</tr>
<tr>
<td>PT Bank Negara Indonesia Tbk</td>
<td>891</td>
</tr>
<tr>
<td>PT Bank Tabungan Negara Tbk</td>
<td>361</td>
</tr>
<tr>
<td>PT Taspen</td>
<td>289</td>
</tr>
<tr>
<td>PT Telkom Indonesia Tbk</td>
<td>247</td>
</tr>
<tr>
<td>PT Inalum (MIND ID)</td>
<td>181</td>
</tr>
<tr>
<td>PT Garuda Indonesia Tbk</td>
<td>139</td>
</tr>
<tr>
<td>PT Perkebunan Nusantara III</td>
<td>132</td>
</tr>
<tr>
<td>PT Pupuk Indonesia</td>
<td>127</td>
</tr>
<tr>
<td>PT Hutama Karya</td>
<td>111</td>
</tr>
<tr>
<td>PT Waskita Karya Tbk</td>
<td>106</td>
</tr>
<tr>
<td>PT Jasa Marga Tbk</td>
<td>104</td>
</tr>
</tbody>
</table>

MIND ID (Inalum) corporate structure

* Previously, state enterprises

Sources: Inalum; Ministry of Finance
### Electric vehicle industry promotion

#### Indonesia Battery Corporation

<table>
<thead>
<tr>
<th>Percentage</th>
<th>25%</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
<td>25%</td>
</tr>
</tbody>
</table>

#### EV related fiscal incentives

<table>
<thead>
<tr>
<th>Policy measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import duty incentives for battery-related components</td>
</tr>
<tr>
<td>Import duty incentives for machineries &amp; materials</td>
</tr>
<tr>
<td>Incentives for making public electric vehicle charging stations</td>
</tr>
<tr>
<td>Incentives for developing infrastructure related to public electric vehicle charging stations</td>
</tr>
<tr>
<td>Export financing incentives</td>
</tr>
<tr>
<td>Incentives for research &amp; development and technological innovation activities</td>
</tr>
<tr>
<td>Luxury goods incentives</td>
</tr>
<tr>
<td>Central &amp; regional government tax</td>
</tr>
</tbody>
</table>

#### EV related tax holidays

- 5-20 years of tax exemption (depends on investment value)
- + 2 years of tax reduction

for

- integrated BEV assembly,
- EV battery,
- BEV motor,
- flexy engine,
- multiple components,
- Power Control Unit

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Sources: Inalum; Perpres 55/2019; BKPM
Production and exports

Nickel ore production & consumption

- Domestic Sales
- Export

(Million tons)

Exports of nickel-related products

- Stainless steel and products thereof
- Nickel and articles thereof and ferro-nickel
- Nickel ores and concentrates

(Billion dollars)

Sources: BPS; UN Comtrade
Metal sector investment

FDI into Indonesia
(Billion dollars)

Metal Industry
Mining

Number of nickel smelter/processor
(Number)

By 2009
As of 2021
+ Being constructed
Unknown/planned

Nickel Matte
Nickel Pig Iron
Mixed Sulfide Precipitate
Mixed Hydroxide Precipitate
Ferro Nickel
Nickle Sulfate

Sources: BPS; ESDM
### Electric vehicle value chain investment

#### EV value chain in ASEAN c.2021

<table>
<thead>
<tr>
<th>Value chain</th>
<th>Indonesia</th>
<th>Philippines</th>
<th>Malaysia</th>
<th>Thailand</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nickel mining</td>
<td>Eramet (FR), Nickel Mines (AU), Solway Investment (CH), Tsingshan Holding (CN), Vale (BR), Zhejiang Huayou Cobalt (CN)</td>
<td>Sumitomo Metal Mining (JP), Mitsui (JP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nickel smelting</td>
<td>Eramet (FR), Jiangsu Delong Nickel Industry (CN), Nickel Mines (AU), Solway Investment (CH), Tsingshan Holding (CN), Vale (BR), Zhejiang Huayou Cobalt (CN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EV production</td>
<td>Hyundai (KR)</td>
<td>InPlus (KR)</td>
<td>Toyota (JP)</td>
<td>BMW (DE), Foxconn (Taiwan), Mercedes-Benz (DE), Mitsubishi (JP), Nissan (JP)</td>
<td></td>
</tr>
</tbody>
</table>

*selected companies

#### Local content goals for EV production

<table>
<thead>
<tr>
<th>Year</th>
<th>2 or 3 wheeled EV (%)</th>
<th>4 or more wheeled EV (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-2023</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>2024-2025</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>2026</td>
<td>50</td>
<td>60</td>
</tr>
</tbody>
</table>

Sources: ASEAN Secretariat; Perpres 55/2019; BKPM
Boosting resource protectionism

In other mineral segments

In other natural resource sectors

“Don’t you think that downstreaming can only be carried out in nickel, mining sectors. Fisheries, agriculture, and plantation sectors also have great potential and every region has its own potential.”

(23rd Feb/2023 @ Opening of the 2023 National Working Meeting of APPSI)

Sources: ESDM, Cabinet Secretariat of the Republic of Indonesia
"The prohibition on the export of nickel ore... is not excluded from the applicability of Article XI:1 because it is not a prohibition or restriction temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to Indonesia within the meaning of Article XI:2(a) of the GATT 1994."

"The domestic processing requirement... is not excluded from the applicability of Article XI:1 because it is not a prohibition or restriction temporarily applied to prevent or relieve critical shortages of foodstuffs or other products essential to Indonesia within the meaning of Article XI:2(a) of the GATT 1994."

"We must be determined. We will not back down, we do not hesitate since such natural resources belong to Indonesia. It is our sovereignty. We determine them to be the benefit for our people, our society."

“Our policy to stop exporting nickel ores was sued by the EU and it is decided that we lost. However, I said to Minister of Foreign Affairs not to back down because this will be a great leap for our state civilization.”

“I mentioned that the partnership should be equal, without constraints, no country should dictate, and no developed countries think that their standards are better than ours.”

“Bung Karno in 1965 stated it, so we cannot be dictated and be dependent on any other countries. This is what we want to do: to be self-sufficient, be self-sufficient, and be self-sufficient.”

(10th/January/2023 @ Commemoration of 50th Anniversary of PDI-P)
United States’ Inflation Reduction Act – Electric vehicle subsidies

EXCLUDED ENTITIES.—For purposes of this section, the term ‘new clean vehicle’ shall not include—

“(A) any vehicle placed in service after December 31, 2024, with respect to which any of the applicable critical minerals contained in the battery of such vehicle (as described in subsection (e)(1)(A)) were extracted, processed, or recycled by a foreign entity of concern (as defined in section 40207(a)(5) of the Infrastructure Investment and Jobs Act (42 U.S.C. 18741(a)(5))), or

“(B) any vehicle placed in service after December 31, 2023, with respect to which any of the components contained in the battery of such vehicle (as described in subsection (e)(2)(A)) were manufactured or assembled by a foreign entity of concern (as so defined).”
Geostrategic conflict

U.S. nickel dependency risk

FDI in Sulawesi & Halmahera

Sources: BCG; Bloomberg
Industrial policies in other mineral segments

Market power challenge, 2021

Infrastructure challenge

"The difficulty lies on the geography of our country. The island of Sulawesi has much nickel supply. So does North Maluku. Copper is found in Papua and Sumbawa islands. These are the big ones. We also have bauxite in West Kalimantan and Riau Island provinces, in Bintan regency. We have tin in Bangka Belitung Islands provinces."

(31st/Jan/2023 @ 8th Anniversary and National Gathering of PSI)

Sources: USGS; Cabinet Secretariat of the Republic of Indonesia
No going back

Rapid production expansion will... translate into ↑ concentration

Figure 23: Outlook for expected mine supply by country, 2020–2040 (kt N)

Figure 3.9 Shares of the leading regions in global mining of selected critical minerals in 2021 and 2030 based on currently anticipated investments


*Figure directly taken from the paper

Sources: Roskill, IEA