Do changes in trade policy affect commodity prices?  
The case of Indonesia's ban on exports of nickel ore

By

Mr. Kris Terauds
Economic Affairs Officer
Special Unit on Commodities

The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.
Do changes in trade policy affect commodity prices?

The case of Indonesia's ban on exports of nickel ore

12 October 2017

Kris Terauds
Economic Affairs Officer
Special Unit on Commodities
Presentation outline

- Introduction to the paper
- Context: export restrictions in response to the 2004-11 commodity price boom
- Indonesia's 2014 mineral ore export ban
- Effects of the ban on international nickel prices
- Other effects of the ban
- Conclusion and policy implications
Introduction

This presentation focusses on the price aspects of a wider policy analysis of Indonesia's 2014 mineral export ban.

Excerpted from:


Research questions

- What were the outcomes of Indonesia's 2014-17 export ban on nickel ore?
- What lessons does the ban provide on using interventionist trade policies in support of industrial and development objectives?
- Under what circumstances might a similar ban be a viable policy option for other commodity-dependent developing countries (CDDCs)?
The Indonesian mineral export ban was part of a flurry of export restrictions imposed on minerals after 2009.

Commodities prices and the incidence of mineral export restrictions, 2000-14

Sources: UNCTADStat (price indices), OECD Inventory on Export Restrictions on Industrial Raw Materials
Note: Export restrictions on HS4 codes 72xx-81xx (i.e. ferrous and non-ferrous metals, metal ores)
On the eve of its ban, Indonesia was the top producer of nickel ore, exported mainly to Chinese NPI producers.

**Context**

NPI: Nickel pig iron is a primary product composed, on average, of 4-13 per cent nickel (Ni), with the balance mainly of iron (Fe) - it is a substitute for ferronickel (FeNi) in steel production.

---

**Average annual nickel ore production, by country, 2004-13**

**China's imports of nickel ore, by provenance, 2004-13**

Source: International Nickel Study Group (INSG)
TNi: Metric tonnes of nickel equivalent

Source: UNCTADStat
The 2014 mineral export ban is part of the 2009 Mining Law, a comprehensive reform of the legal framework.

Legal context

- Article 33.3 of Indonesia's 1945 Constitution: "The land, the waters and the natural resources… shall be used to the greatest benefit of the people".
- The omnibus 2009 Mining Law announced an export ban on mineral ores, among other major provisions.
- The Government implemented the ban as a regulation in January 2014, for bauxite and nickel.
- It relaxed the conditions of the ban in January 2017.

Objectives

- Compel the construction of nickel smelters to increase value added.
- Reduce the nickel extraction rate.
- Reduce deforestation caused by runaway strip mining.
- The ban was not intended to influence international or domestic nickel prices.
Indonesia's 2014 mineral export ban was a rare example of a comprehensive quantitative ban.

Types of export restrictions in force in the trade of minerals and metals, 2012

<table>
<thead>
<tr>
<th>Type of restriction</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export taxes</td>
<td>144</td>
</tr>
<tr>
<td>Quantitative export restrictions</td>
<td></td>
</tr>
<tr>
<td>Partial (e.g. quota)</td>
<td>20</td>
</tr>
<tr>
<td>Comprehensive (e.g. ban)</td>
<td>3</td>
</tr>
<tr>
<td>Others</td>
<td>204</td>
</tr>
<tr>
<td>Total</td>
<td>371</td>
</tr>
</tbody>
</table>

Source: OECD Inventory on Export Restrictions on Industrial Raw Materials
Even during the 2007-13 boom in Indonesia's ore exports, they had low correlation with international nickel prices.

Sources: UNCTADStat (price), Statistical Yearbook of Indonesia (nickel ore exports)
After the export ban, nickel prices rose for 5 months, then realigned with general commodities price trends.

Comparison of price trends, 2002-17

Source: UNCTADStat
The export ban achieved one main objectives, the construction of new smelters, but was ultimately abandoned.

- UNCTAD estimates that the three-year nickel export ban cost Indonesia:
  - USD 11.6 billion in export earnings (USD 3.9 billion / yr.);
  - USD 694 million in government revenues (USD 232 million / yr.); and
  - 30,000 mining jobs.

- In return, the ban led to the construction of at least nine new smelters - when completed in 2020 or so, they should yield the following benefits:
  - Doubling the country's nickel smelting capacity from 100,000 MT in 2013 to 200,000 MT in 2020;
  - Corresponding increase in value added to Indonesia's nickel ore; and
  - 17,500 new smelting jobs.

- The Government relaxed the ban in January 2017, due to budgetary pressures resulting from the generalised slump in commodities prices.
The Indonesian export ban is likely not a generally applicable model for CDDCs.

- The ban succeeded in spite of:
  - Poor policy coordination and a lack of infrastructure investment on the part of the government.
  - Likely operating losses for the new smelters until prices improve.
- The relatively high grade of Indonesian laterite nickel ore was likely a major factor in the effectiveness of the ban.
- By contrast, the bauxite ban failed.
- Nickel represented a relatively small share of the Indonesian economy, so was less risky than a more strategic resource, such as oil or copper.
- For CDDCs that depend more heavily on a particular commodity, an export ban would be considerably riskier.
Thank you!

Kris Terauds
Economic Affairs Officer
Special Unit on Commodities
kris.terauds@un.org