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Industrial Policy in Indonesia: A quantitative analysis of Indonesia's nickel export ban

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Master in Economics

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Department of Economics

Department of Political Economy

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Resumo

Nos últimos anos, a transição energética global desencadeou debates intensos nos países em desenvolvimento. Neste contexto, a Indonésia, o quarto país mais populoso do mundo e membro do G20, implementou uma série de políticas industriais. Embora a política industrial não seja uma novidade na Indonésia, desde a última década que a intervenção do Estado se tem centrado nos recursos naturais e no seu papel no mercado global, bem como na sua importância para a transição energética.

Esta tese analisa as consequências da proibição da exportação de níquel pela Indonésia, um metal crucial para as baterias dos veículos elétricos e parte integrante da transição energética. Analisando um conjunto de dados de séries temporais compreendidas entre 1989 e 2021, recolhidos do World Bank e da FRED, os resultados da regressão linear múltipla mostram que a exportação de níquel tem uma correlação ligeiramente positiva com a taxa de crescimento do PIB e que os anos da proibição de exportação ainda não apresentam qualquer significado estatístico. Dado que este comportamento de "nacionalismo de recursos" é relativamente recente, irá oferecer oportunidades de investigação para os próximos anos.

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Classificação JEL:
O25 - Política industrial
O53 - Economia da Ásia e Médio Oriente

Palavras-Chave:
Indonésia, Política industrial, Proibição de exportação, Níquel, Economias em desenvolvimento

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Abstract

In recent years, the global energy transition has triggered intense debates in developing countries. In this context, Indonesia, the world's fourth most populous country and member of the G20, has implemented a series of industrial policies. Although industrial policy is not new to Indonesia, since the past decade, state intervention has focussed on the natural resources and their role in the global market as well as their importance for energy transition.

This thesis delves into the consequences of Indonesia's export ban on nickel, a metal crucial for electric vehicle batteries and integral to the green transition. Analysing a time series dataset comprised between 1989 and 2021 gathered from the World Bank and FRED, the results of the multiple linear regression show, that nickel export has a slightly positive correlation with the GDP growth rate and the years of the export ban do not show any statistical significance yet. Given that this behaviour of “resource nationalism” is relatively recent, it gives opportunities for research in the upcoming years.

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JEL Classification:
O25 - Industrial Policy
O53 - Economy of Asia and the Middle East

Keywords:
Indonesia, Industrial Policy, Export Ban, Nickel, Developing Economies

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Acronyms

BGS - British Geological Survey

BLUE - Best Linear Unbiased Estimator

BRICS - Brazil, Russia, India, China, South Africa

EV - electric vehicle

FRED - Federal Reserve Economic Data

GATT - General Agreement on Tariffs and Trade

GDP - Gross Domestic Product

IMF - International Monetary Fund

OECD - Organisation for Economic Co-operation and Development

OLS - Ordinary Least Squares

OPEC - Organization of the Petroleum Exporting Countries

R&D - Research and Development

RIPIN - National Industry Development Master Plan

RPJMN - National Medium-Term Plan

UGS - U.S. Geological Survey

USD - United States Dollar

VIF - Variance Inflation Factor

VOC - Dutch East India Company (Dutch: Verenigde Oostindische Compagnie)

WITS - World Integrated Trade Solution

WTO - World Trade Organization

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