

## Commodity Price Volatility with Endogenous Natural Resources

James Hansen, Isaac Gross

PII: S0014-2921(17)30186-1  
DOI: [10.1016/j.euroecorev.2017.10.006](https://doi.org/10.1016/j.euroecorev.2017.10.006)  
Reference: EER 3066

To appear in: *European Economic Review*

Received date: 20 October 2016  
Accepted date: 8 October 2017

Please cite this article as: James Hansen, Isaac Gross, Commodity Price Volatility with Endogenous Natural Resources, *European Economic Review* (2017), doi: [10.1016/j.euroecorev.2017.10.006](https://doi.org/10.1016/j.euroecorev.2017.10.006)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



# Commodity Price Volatility with Endogenous Natural Resources<sup>☆</sup>

James Hansen<sup>a,\*</sup>, Isaac Gross<sup>b</sup>

<sup>a</sup>*Department of Economics, University of Melbourne*

<sup>b</sup>*Keble College, University of Oxford*

---

## Abstract

Natural resource reserves are exogenous in models of small commodity exporters. Changes in the stock of reserves play no role in the macroeconomy including in business cycle volatility, trade dynamics or exchange rate volatility. We consider richer supply dynamics and model exploration and depletion. We show that an endogenous supply of reserves is important for capturing the stylised facts associated with commodity price shocks including a commodity currency, the crowding-out of non-commodity activity (Dutch-Disease) and a volatile business cycle.

We also consider how exploration and depletion affect the ranking of optimal monetary and taxation policies. When natural resource reserves are held fixed, monetary policy is an efficient tool for stabilising the effects of commodity price shocks. However, when exploration and depletion are accounted for, using interest rates to stabilise the effects of commodity price changes becomes inefficient. Using taxes on the resource sector, specifically an ad valorem royalty, remains efficient.

*Keywords:* Commodity currencies, commodity prices, Dutch Disease, non-renewable resources, optimal policy.

*JEL Codes:* E63, F41, Q33, Q38

---



---

<sup>\*</sup>Corresponding author: James Hansen, 111 Barry Street, Level 4 FBE Building, University of Melbourne VIC 3010, Australia. Phone: +61 3 8344 2142, james.hansen@unimelb.edu.au.  
Isaac Gross: Keble College, Parks Road, Oxford, OX1 3PG, UK, isaac.gross@keble.ox.ac.uk.

Download English Version:

<https://daneshyari.com/en/article/7351607>

Download Persian Version:

<https://daneshyari.com/article/7351607>

[Daneshyari.com](https://daneshyari.com)