Global prices and internal migration: Evidence from the palm oil boom in Indonesia

Previously titled "Global prices, trade protection, and internal migration: Evidence from Indonesia"

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Results

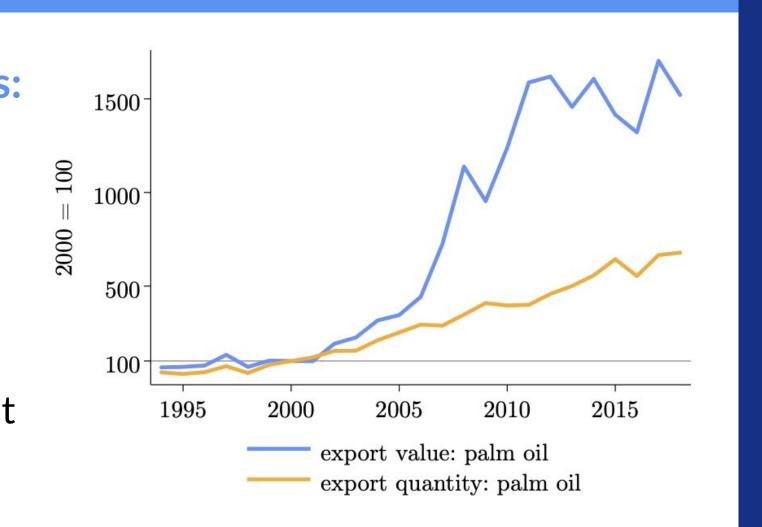
Motivation

- Global prices, especially commodity prices, matter.
- World shocks, stemming from commodity market, explain on average 33% of output fluctuations in individual countries (Fernandez et al., 2017).
- Trade shocks may provide incentives for labor to move.
- Most studies on the impact of trade shocks to labor, e.g., Autor, Dorn, and Hanson (2013), assume and find that trade shocks are localized.
- Most studies in this stream of literature also use trade shocks that are disadvantageous to local income. (Pavcnik, 2017)
- 1 out of 10 people in the world is an internal migrant (Lucas, 2015).

Context

Indonesian economy in the 2000s:

- The economy faced a commodity boom to its exports commodity, including palm oil.
- Palm oil experienced price-driven export growth.
- The country also has regionally-representative data that allows us to study regions.



Theoretical Framework

1) Measurement of price shocks

- **Environment:** 2-sector Specific Factor Model and multi-region economy as in Redding (2016)
- **Proposition:** impact of price shocks to income depends on the share of the sector that experiences the shocks.

2) Welfare changes estimation

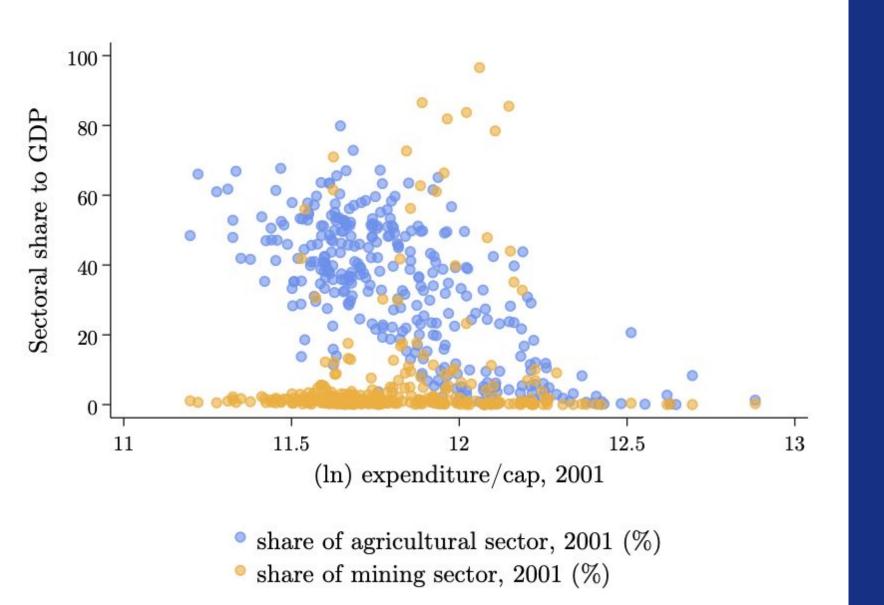
- Environment: continuum of goods, multi-region economy (Redding, 2016)
- **Proposition:** decomposition of welfare changes into gains from trade and gains from migration.

Research Question

How do regions respond to price

Stylized Facts

[Fact 1] Agricultural sector had higher importance in pre-shocks poorer district



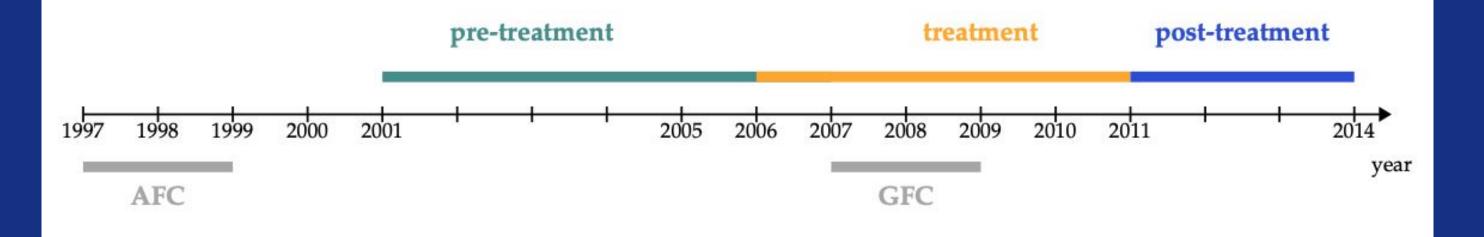
Crops	2000		2010	
	mill. ha	%	mill. ha	%
Rice	12	37%	13	33%
Oil palm	2	6%	6	14%
Maize	4	11%	4	10%
Rubber	2	8%	3	9%
Coconuts	3	8%	3	7%

[Fact 2] Rice and palm oil became the two main crops.

[Fact 3] Districts face upward-sloping labor supply

Empirical Setup

This paper: exploits the regional variation of potential share of palm-oil in the face of uniform price shocks from the world market.

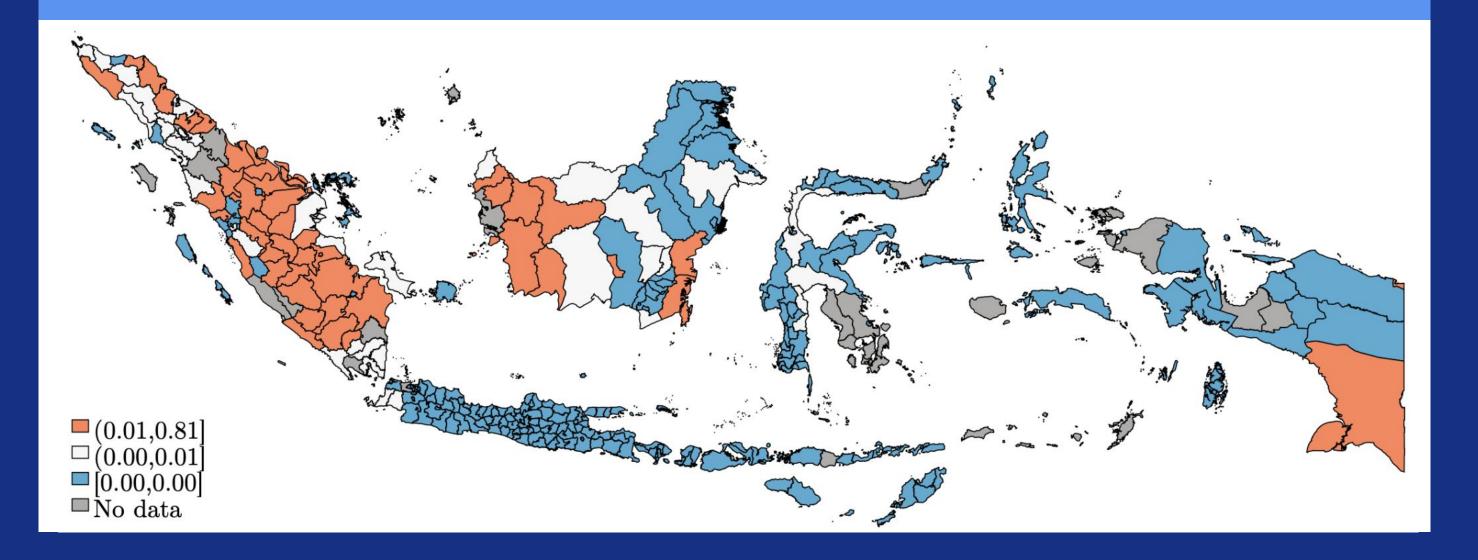


y: difference in difference, with exposure to palm-oil price shocks as the treatment.

real expenditure per capita. They also received more (net inward) migration.

Districts exposed to palm-oil price shocks had higher

Exposure to palm-oil price shocks



More Results and Conclusions

exposure to palm oil price shocks

- 1) Palm-oil price shocks benefited producing districts with higher purchasing power.
- Temporary,
- Spurred through extensification in palm oil sector,
- Internal migration diffuses the shocks.
- 2) There is evidence of spillovers of the shocks to non-exposed districts.
- 3) One-third of the welfare gains in 2005 to 2010 is explained by internal migration.

shocks in the presence of internal migration?

Main Findings & Contribution

- Facing trade shocks that are advantageous to local income, people respond by moving to booming regions, i.e., trade shocks are no longer localized.
- Internal migration has a role in diffusing local windfall to the rest of the economy.
- I find substantial gains from internal migration.