

# Transparency in Extractive Sectors: Channels and Empirical Evidence

Juan Pablo Rud  
juan.rud@rhul.ac.uk

Royal Holloway, University of London

3ie - Uganda, March 2017

# The Economics of Natural Resources

Are extractive industries good for economic growth?

- Resource 'curse': early evidence suggests they are not (Sachs and Warner (1995) and Sachs and Warner (2001))
  - Main reason: resources (including labor) flow to a sector that is relatively less dynamic.
  - Channels: exchange rate, rent-seeking behavior, conflict
- More recent evidence challenges (Alexeev and Conrad (2009)) or qualifies the existence of the curse (e.g. quality of institutions)
- Policy-makers usually focus on FDI, royalties and windfalls, foreign currency through exports.

## Recent developments: Local Economic Effects

- Recent evidence using micro-data (e.g. household surveys) to understand positive/negative effects
- A strong emphasis on mechanisms
  - Markets: linkages, employment, agglomeration: e.g. Aragon and Rud (2013), Allcott and Keniston (2015), Kotsadam and Tolonen (2016)
  - Externalities: pollution, migration, displacement, conflict: e.g. Aragon and Rud (2016), Rau et al. (2013), Maystadt et al. (2013)
  - Budget windfalls: decentralization, transfers, corruption, technical capacity: e.g. Vicente (2010), Brollo et al. (2013), Aragon and Casas (2014)

# Transparency

- Important *per se* but also instrumental for economic and social outcomes
- Transparency can help with the following
  - Rent-seeking behavior
  - Corruption
  - Conflict
  - Regulatory effectiveness
  - Compensation and fairness

## Two key challenges in evaluating the role of transparency

- ① Multiplicity of channels and their interactions.
- ② Data generation and accessibility

# An example: Mining and Pollution in Ghana

Aragon and Rud (2016)

- Mines are located in a region where traditional agriculture is the main source of livelihood
- Highly mechanised operations generate environmental pollution: this channel has been disregarded even though there is evidence from natural sciences that it affects crops' health
- Farmers in mining areas suffer a relative decrease in agricultural productivity
  - Sizeable effects (around 40% over 8 years, consistent with findings in natural sciences)
  - Knock on effect on poverty measures in mining areas

# An example: Mining and Pollution in Ghana

## The importance of transparency

- How do we know if pollution is a problem?
  - AKOBEN: data on pollution produced but not accessible
  - Rely on satellite imagery instead
- Distributional implications
  - Central government keeps 80% of fiscal windfall, local governments, only 9%.
  - Total royalties paid not enough to compensate farmers
- Other issues: Central government awards licences to multinationals that compensate displaced farmers (no regulation, no data); Human Rights
- Other evidence: Rau et al. (2013): lead contamination in Chile reduced health and schooling outcomes; van der Golts and Barnwal (2013): stunting and anemia near mines (data from 44 countries).

## Rent-seeking, Corruption and State Capacity

- Vicente (2010): oil discoveries in Sao Tome and Principe increases perception of corruption
- Brollo et al. (2013): resource windfalls in Brazil increase corruption, reduce the quality of individuals that enter in politics, allow politicians to get away with corruption.
- Caselli and Michaels (2012): find no improvements in public good provision in Brazil
- Aragon and Rud (2013): substantial budgetary windfalls in Peru are not associated with an increase in economic welfare, mainly due to lack of technical capacity.



## Lessons

- Natural resources may affect local and aggregate well-being in many ways.
- Transparency can play an important role
  - Directly: decentralization of information and decisions, local control and monitoring, regulation to reduce corruption, rent-seeking, conflict
  - Indirectly: Generation and access to key data, key to understand mechanisms at play and help design better policies.