Foreign Mining, Labor Welfare and Local Trust: Evidence from Kyrgyzstan
Gold Mine
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Introduction
The impact of foreign investment in natural resources on worker welfare and host country politics is controversial. This paper explores this issue by examining Kyrgyzstan’s dominant foreign-invested gold mine, which in 2020 accounted for 12.5% of Kyrgyzstan’s GDP. A key finding is that mines with foreign ownership isolate local communities from the benefits of the mining industry. Using geolocation data from Kyrgyzstan household panel surveys from 2010 to 2016, the study shows that foreign mining companies, high labor demand, high profit, and less trust in local leaders by mine workers.

Background
- Kumtor: Largest company in Kyrgyzstan. Foreign owned gold mine.
- 10% employment. 90% of the country's gold production.
- Centerra (Canadian) holds a 100% interest in the Kumtor Mine.
- State owned enterprise Kyrgyzaltyn holds 32.75% share of the mine.
- General tax 13% percent of gross income.

There have been multiple protests around Kumtor over the years in support of nationalizing the mine and raising environmental concerns and allegations of corruption.
- 10 large uprisings in 15 years (Kumtor News Release 2005)
- Two national uprisings related to Kumtor - the same 3000 households and 8000 individuals.
- All seven Kyrgyz regions (oblasts) and the two cities of Bishkek and Osh are addressed.

Mechanism
Higher welfare of miners:
- Large Foreign mining companies, high labor demand, high profit.
- Higher salary (Harrison and Scorse 2010).

Lower trust of miners in local leaders:
- Fiscal system highly centralized. Foreign companies pay more to the center.
- Local government collects tax indirectly.
- State-Mining Sector:
  - Direct claimant of company revenue
  - State elites and mining workers can benefit from mineral wealth through state ownership and revenue.
- Local-Non Mining Sector:
  - Local communities benefit from mineral wealth only through partial taxes.
  - Higher trust by other workers.

Life in Kyrgyzstan
- The same 3000 households and 8000 individuals.
- All seven Kyrgyz regions (oblasts) and the two cities of Bishkek and Osh are addressed.
- Low social trust, who against who unknown.

Main Question
Why? Because people not well treated? Not really!

Hypothesis 1
- Mining workers who live closer to Kumtor mining pit have higher income and better social welfare.
- Non-mining working family who live closer to Kumtor mining pit don’t have higher income and better social welfare.

Hypothesis 2
- Mining workers who live closer to Kumtor mining pit have lower trust in local authorities.
- Non-mining working family who live closer to Kumtor mining pit have lower trust to local authority.

Y_{it} = \beta_0 + \beta_1 \text{Distance}_{it} + \beta_2 \text{Miner}_{it} + \beta_3 \text{Distance}_{it} \times \text{Miner}_{it} + \beta_4 + \text{Control Variables} \times \text{Worker}_{it}

Dependent Variables:
- ln(income) trust in local authority 1
- written contract, ijob training, local security.

Independent Variables:
- LnDistance: distance to Kumtor.
- Miner: if worker works in mining.
- Control Variables: Year (t) and District (d) fixed effects, demographic characteristics.
- Logit regression if Y_{it} is a dummy.

Results

Data

Empirical Specification

Identification and Robustness
- Self-selection problem: Probit-IV Matching. (Demographic characteristics and distance)
- \textit{C} consistent Result
- \textit{C} consistent Result (in appendix)
- Evaluate lag effect of gold shock.
- \textit{Distance to alternative domestic mines as a counterfactual.}

Conclusion
Because the way of profit distribution, foreign mining creates alliances between non-mining workers and local authorities in opposition to mining workers and the state. Mining workers have higher wages, better social welfare, but lower levels of trust in local leaders. Non-mining workers had higher levels of trust in local leaders but worse social welfare. Local controversy is prominent around highly distrust mined towns.

References

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