Do tariff revenues generate a resource curse? Theory and evidence from the First Wave of Globalization

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Large fiscal windfalls can generate a resource curse.

For instance, natural resource revenues and aid:
- Reduce political competition.
- Increase domestic conflict.
- Increase regime survival.
Motivation

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Can import tariff revenues generate a resource curse? Yes!: political competition falls and domestic conflict increases. It is atypical: There's a moderating redistributive effect.
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Low pol. competition:
- Depends more on tariff revenues.

High pol. competition:
- Depends less on tariff revenues.

Figure: Import tariff revenues and institutions, 1972-2012
Theoretical framework: the politics

- **Two groups:**
  - Ruling elites.
  - A group of competitors.

- Competitors have no political power.
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- **Comparative advantage in the agricultural sector.**
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A fall in transportation costs:

1. **International prices fall.**
2. Improves the terms of trade.
3. Imports become cheaper.
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6. **Import tariff revenues grow.**
Testable hypotheses: Rapacity effect

H1: Tariff revenues grow $\rightarrow$ lower political competition.

- Ruling elites want to hold onto power.
- They want to consume the fiscal windfalls.
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This is the *rapacity effect*. 
Testable hypotheses: Redistributive effect

The comparative advantage is in agriculture:

- Ruling elites benefit from better terms of trade.
- Inequality grows—elites are stronger.

**H2a:** Tariff revenues \((\uparrow)\) + inequality \((\uparrow)\) \(\rightarrow\) pol. competition. \((\downarrow)\)

- Strong incentives to capture the fiscal windfalls.

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**H3a:** Tariff revenues ($\uparrow$) + inequality ($\uparrow$) $\rightarrow$ domestic conflict ($\uparrow$).
  - Both groups want the fiscal windfalls.
  - But the competitors are weak to fight.
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The comparative advantage is in manufactures:

- Ruling elites lose from better terms of trade.
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**H2b:** Tariff revenues \((\uparrow)\) + inequality \((\downarrow)\) → pol. competition \((\uparrow\downarrow)\)
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**H2a - H3b** are the *redistributive effect*. 
Empirical context: First Wave of Globalization (1870-1913)

The advent of the steam ship reduced shipping times...

**Figure.** Log-change in the average time-to-sail

Empirical context: First Wave of Globalization (1870-1913)

... increased trade flows substantially...

**Figure.** Total trade (USD 1990=100)

Empirical context: First Wave of Globalization (1870-1913)

... also tariff revenues...

**Figure.** Tariff revenues (Mill. pounds 1990=100)

Source: Authors’ calculations.
Why do we focus on the First Wave of Globalization?

We can identify the rapacity effect:

- Fiscal windfalls increase substantially.
- Geographic component of shipping times provides identification.
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  - Comparative advantage in manufacturing sector.
  - Stronger competitors/weaker ruling elite.
  - Transport shock weakens the ruling elite.
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Low urban density:
- Higher agricultural productivity.
- Better terms of trade.

High urban density:
- Lower agricultural productivity.
- Worse terms of trade.

Figure: Terms of trade and agricultural productivity, by urban density
Empirical strategy

Δ Shipping times $\rightarrow$ Tariff revenues $\rightarrow$ Pol. competition

Conflict

DVs: Indices of political competition (Polity IV, Vanhanen, V-Dem).
IV: Tariff evenues instrumented by exogenous change in shipping times.
Controls: country + time fixed effects, and GDP, population size, urban concentration, etc. (lagged.)
Unit of observation: Country-year.
Standard errors: Clustered by country and year.
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△ Shipping times $\rightarrow$ Tariff revenues $\rightarrow$ Pol. competition

Arrows represent causality:

- From shipping times to Tariff revenues
- From Tariff revenues to Political competition
- Conflict influences shipping times

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**Figure.** Effect of tariff revenues on political competition, OLS

<table>
<thead>
<tr>
<th>Index</th>
<th>Effect of 1% increase in tariff revenues on standard deviations of the outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polity IV Index</td>
<td>−.25</td>
</tr>
<tr>
<td>Vanhanen’s index</td>
<td>−.05</td>
</tr>
<tr>
<td>V–Dem index</td>
<td>.15</td>
</tr>
</tbody>
</table>

Note: 95% confidence intervals.
Estimating the rapacity effect

Figure. Effect of transport shock on political competition, 2-SLS

Note: 95% confidence intervals.
Heterogeneous effects

Low urban density:
- Comp. advantage in agriculture.
- Strong ruling elites.

High urban density:
- Comp. advantage in manufactures.
- Weaker ruling elites.

Figure. Heterogeneous effect of tariff revenues on pol. competition, 2-SLS
Mechanism: Conflict, heterogeneous effects

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- Comp. advantage in agriculture.
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Figure. Heterogeneous effect of tariff revenues on domestic conflict, 2-SLS

Effect of 1% increase in tariff revenues on the likelihood of conflict

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Conclusions

When the terms of trade move against the ruling elite:
- They seek to avoid the conflict over tariff revenues.
- But conflict may still occur.

When the terms of trade move in favor of the ruling elite:
- Ruling elites move to capture the tariff revenue.
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