Primary Resources, Secondary Labor*

Resource Booms and Immigration Policy in the Era of Trade Liberalization

Adrian J. Shin

Department of Political Science, University of Michigan

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Trade and Firm Preferences over Immigration Policy

- Increasing trade openness should lead to business support for open immigration policy among labor-intensive firms.
- Divergent policy responses to trade liberalization across countries and over time
  - Closing doors in the U.S., Canada, Australia, the Netherlands, Norway, etc.
  - Opening doors in Sweden, Belgium, Austria, Japan, etc.
Trade and Firm Preferences over Immigration Policy

- Increasing trade openness should lead to business support for open immigration policy among labor-intensive firms.

- **Divergent policy responses to trade liberalization across countries and over time**

- Closing doors in the U.S., Canada, Australia, the Netherlands, Norway, etc.

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Existing Explanations and Remaining Questions

• Workers should oppose both trade and immigration (Hatton and Williamson 2005a, b).
  • Why have workers succeeded in immigration policymaking while failing in trade politics?
• Immigration and trade are policy substitutes for economic openness (Meade 1957; Mundell 1957).
  • Do policymakers flip a coin to decide which market to open?
• Increasing trade openness causes firms to exit or move abroad, and they no longer lobby for immigration (Peters, 2014, 2015).
  • Increasing trade openness should increase firm support for open immigration.
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Questions

• Are trade and immigration policies substitutes or complements?
• Under what circumstances, do policymakers close or open doors to immigrants?
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Short Answers

• Trade and immigration policies are substitutes during resource booms.
• Trade and immigration policies are complements otherwise.
• Resource booms have greatly reduced immigration policy openness in the era of free trade.
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1 Introduction
   Mystery
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Actors and Institutions

- Labor-intensive firms are the main driving force behind immigration policy.
- Near perfect market competition
- Policymakers are only interested in their political survival.
  - Policymakers in democracies in the special-interest politics framework (Grossman and Helpman 1994, 2001)
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Costs of Resource Booms: Firms in the Tradable Sector

- Resource exploration, extraction, refinement and exports damage firms in the tradable sector.
- The Dutch disease
  - Spending effect
    - A resource boom $\rightarrow$ ↑ private and public spending $\rightarrow$ ↑ prices and output in the non-tradable sector
    - Firms in the tradable sector cannot raise their prices or wages.
    - Workers $\Rightarrow$ the non-tradable sector
  - Exchange rate appreciation
Firm Preferences over Immigration Policy

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Opportunities of Resource Booms: Firms in the Tradable Sector

- Firms can liquidate their assets and invest in the resource industry (resource movement effect).
  - Increase in resource wealth $\rightarrow$ booming non-tradable sectors (spending effect).
    - Firms move to the non-tradable sector.
    - Under perfect competition, firms in the non-tradable sector do not lobby for pro-immigration policy.
      - Potential competitors can free ride on firms’ lobbying efforts.
      - New market entries $\rightarrow$ zero profit.
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Firm Preferences over Immigration Policy

Sectoral Choices: Non-tradable and Tradable

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Inter-sector Mobility

L, K

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Firm Preferences over Immigration Policy

Trade Protection, No Resource Boom $\rightarrow \downarrow$ Immigration

$P_{nt} = P_{t,w}(1+\tau)$

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Firm Preferences over Immigration Policy

Trade Protection, Resource Boom $\rightarrow \uparrow$ Immigration

\[ P_{nt} \uparrow \]

\[ W_d \uparrow \]

\[ L, K \leftrightarrow \]

\[ P_t = P_{t,w}(1+\tau) \]
Firm Preferences over Immigration Policy

Free Trade, Resource Boom $\rightarrow$ ↓ Immigration

$P_{nt} \uparrow$

$W_d \uparrow$

$L, K$

$P_t = P_{t,w}$
Firm Preferences over Immigration Policy

Free Trade, No Resource Boom $\rightarrow$ ↑ Immigration

$P_{nt}$

$W_d$

$L, K$

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Domestic Interests over Immigration Policy

- **Pro-immigration Coalition**
  - Labor-intensive firms
  - Immigrants themselves

- **Anti-immigration Coalition**
  - Native citizens
  - Trade unions (sometimes)
  - Right-wing populists

- **Indifferent Groups**
  - Capital-intensive firms who are formidable opponents of labor-intensive firms in trade politics.
  - Labor-intensive firms with financial resources and political capital dominate in immigration policymaking.
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Firm Preferences and Immigration Policy

- Firm preferences directly affect immigration policy with little organized opposition from other domestic interests.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>Low</td>
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<tr>
<td>Resource Boom</td>
<td>Low Support</td>
</tr>
<tr>
<td></td>
<td>High Indifferent</td>
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Table: Firm Support for Immigration Policy
Hypotheses

- **Hypothesis 1**: Trade openness reduces immigration policy openness during a resource boom.
- **Hypothesis 2**: Trade openness increases immigration policy openness in the absence of a resource boom.
- **Hypothesis 3**: A resource boom increases immigration policy openness when trade is closed.
- **Hypothesis 4**: A resource boom reduces immigration policy openness when trade is open.
Hypotheses

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<td>Discrimination based on nationality</td>
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<td>Universality by Skill or Income</td>
<td>Discrimination based on skills or income</td>
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<td>Citizenship</td>
<td>Ease of naturalization or citizenship acquisition</td>
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<td>Number of refugees allowed to enter</td>
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<td>Refugee Provisions</td>
<td>Provisions on refugees</td>
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<td>Ease of getting an asylum</td>
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<td>Asylum Provisions</td>
<td>Provisions on asylum</td>
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<td>Visas or government programs</td>
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<td>Labor market restrictions for immigrants</td>
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<td>Deportable offenses and administrative processes</td>
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<td>Border enforcement or employment screening</td>
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<tr>
<td>Family</td>
<td>Sponsorship by citizenship and restrictions</td>
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<tr>
<td>Family Provisions</td>
<td>Special provisions for families</td>
</tr>
<tr>
<td>Quota</td>
<td>Percentage of population allowed to enter annually</td>
</tr>
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New Countries to Dataset (1)

- A team of three international lawyers with specialty in national and immigration laws and proficiency in English, French, German, and Spanish coded five countries from 1950-2013 (320 country-year observations).
New Countries to Dataset (2)

Figure: Immigration Policy in the Countries New to the Dataset

Austria
Belgium
Chile
Norway
Sweden

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Resource Income and Trade Openness

- Retrieved and **updated** the following data:
  - Resource boom: log of income per capita from all capital-intensive resources (Haber and Menaldo 2011)
  - Trade Policy: Import duties over total value of imports (Clemens and Williamson 2004; Peters 2015)
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Netherlands and Norway

Graphs

- Log of Resource Income per capita
- Trade Policy Openness
- Immigration Policy Openness
Canada and U.S.

Graphs

Canada

United States

Year

Log of Resource Income per capita

Trade and Immigration Policy Openness

1945 1965 1985 2005

Trade Policy Openness

Immigration Policy Openness
Australia and New Zealand

Graphs

Australia

New Zealand

Year

Log of Resource Income per capita

Trade Policy Openness

Immigration Policy Openness
In 1991, Swiss People's Party gains 20.2% of votes.

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Empirical Strategy

\[
\text{Immigration Policy}_{it} = \beta_0 + \beta_1 \text{Tariff Level}_{it} + \beta_2 \log\text{ of Resource Income per Capita}_{it} + \beta_3 \text{Tariff Level}_{it} \times \log\text{ of Resource Income per Capita}_{it} + \sum_{k=4}^{n} (\beta_k \text{Control Variable}_{(k-3),it}) + \tau_{it} + \alpha_i + \mu_t + \epsilon_{it},
\]

- OLS with robust standard errors
- \(\tau_t\): a linear time trend specific to each country
- \(\alpha_i\): country fixed effects
- \(\mu_t\): year fixed effects
Empirical Analysis

Empirical Expectations

Immigration Policy_{it} =
\beta_0 + \beta_1 \text{Tariff Level}_{it} + \beta_2 \text{Log of Resource Income per Capita}_{it}
+ \beta_3 \text{Tariff Level}_{it} \times \text{Log of Resource Income per Capita}_{it}
+ \sum_{k=4}^{n} (\beta_k \text{Control Variable}_{(k-3),it}) + \tau_{it} + \alpha_i + \mu_t + \epsilon_{it},

• Note: negative sign, positive sign

• \beta_1 is negative because Hypothesis 2 predicts a positive correlation between immigration policy and trade openness in the absence of a resource boom.
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# Regression Results

## Immigration Policy in Democracies, 1946-2013

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<th>(4)</th>
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<td></td>
<td>Peters</td>
<td>Augmented</td>
<td>Peters</td>
<td>Augmented</td>
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<tr>
<td></td>
<td>Tariff Level</td>
<td>-0.042**</td>
<td>-0.042*</td>
<td>-0.045***</td>
<td>-0.048***</td>
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<tr>
<td></td>
<td>(0.017)</td>
<td>(0.020)</td>
<td>(0.013)</td>
<td>(0.016)</td>
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<tr>
<td></td>
<td>Resource Income</td>
<td>0.048</td>
<td>-0.114*</td>
<td>-0.016</td>
<td>-0.137**</td>
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<td>(0.107)</td>
<td>(0.062)</td>
<td>(0.116)</td>
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<td>Tariff Level × Resource Income</td>
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<td>0.012**</td>
<td>0.011***</td>
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<td>(0.002)</td>
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<td>Log of Population Density</td>
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<td>1.006**</td>
<td>0.906*</td>
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<td>(0.514)</td>
<td>(0.366)</td>
<td>(0.488)</td>
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<td>GDP Growth</td>
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<td>0.580</td>
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<td>(0.272)</td>
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<td>Log of GDP per capita</td>
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<td>Polity Score</td>
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<td>Time Trend</td>
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<td>-0.018**</td>
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<td>(0.677)</td>
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<td>$R^2$</td>
<td>0.560</td>
<td>0.519</td>
<td>0.615</td>
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### Alternative Hypotheses (1)

<table>
<thead>
<tr>
<th>Model</th>
<th>(5)</th>
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<tbody>
<tr>
<td>Tariff Level</td>
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<td>-0.078***</td>
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<td>-0.041**</td>
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<tr>
<td></td>
<td>(0.025)</td>
<td>(0.023)</td>
<td>(0.023)</td>
<td>(0.016)</td>
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<tr>
<td>Resource Income</td>
<td>-0.175***</td>
<td>-0.206***</td>
<td>-0.225***</td>
<td>-0.241***</td>
</tr>
<tr>
<td></td>
<td>(0.056)</td>
<td>(0.056)</td>
<td>(0.055)</td>
<td>(0.039)</td>
</tr>
<tr>
<td>Tariff Level × Resource Income</td>
<td>0.022***</td>
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### Regression Results

#### Alternative Hypotheses (2)

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Regression Results

Marginal Effects with 95% CIs (Model 4)

**Average Marginal Effects of Resource Income**

- Effects on Immigration Policy Openness
- Tariff Level

**Average Marginal Effects of Tariff Level**

- Log of Resource Income per capita

---

Primary Resources, Secondary Labor

Adrian J. Shin
Marginal Effects with 95% CIs (Model 8)

Average Marginal Effects of Resource Income

Average Marginal Effects of Tariff Level
Questions and Answers

- Are trade and immigration policies substitutes or complements?
  - They can be substitutes or complements.
  - They are substitutes sometimes because of firm preferences over immigration policy, NOT because policymakers flip a coin to decide which market to open. Economists are wrong again!

- Under what circumstances, do policymakers close or open doors to immigrants?
  - Open
    - Increasing trade liberalization in a resource-poor economy
    - A growing resource boom under closed trade
  - Close
    - Increasing trade liberalization during a resource boom
    - A growing resource boom under free trade
Questions and Answers

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Implications

- Labor-intensive firms dominate in immigration policymaking.
- In resource-poor economies, firms are willing and able to fight one aspect of globalization (free trade) with another (open immigration).
- This seemingly ironic political strategy of firms toward globalization leads to a conjoint opening of trade and immigration in resource-poor countries.
- The U.S. is expecting a large resource boom. With lawmakers (especially senators) from oil-rich states in Congress, the U.S. under open trade will never reform immigration policy.
  - No visible partisan difference. Most lawmakers from oil-rich states just happen to be Republicans.
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Thank You!

adrianjs@umich.edu
Outline

1. **Introduction**
   - Puzzle
   - Questions and Answers

2. **Theory**
   - Assumptions
   - Firm Preferences over Immigration Policy
   - Policymakers and Firms

3. **Data Sources**
   - Data on Immigration Policy
   - Other Data Sources

4. **Data Analysis**
   - Graphs
   - Empirical Analysis
   - Regression Results

5. **Conclusion**

6. **The End**

7. **Appendix**
   - **Transitional Democracies**
   - International Capital Mobility
   - U.S. Trade and Immigration Policies and Resource Booms

---

*Primary Resources, Secondary Labor*  
Adrian J. Shin
Transitional Democracies

Brazil and South Africa

![Graph showing Log of Resource Income per capita, Immigration Policy Openness, and Trade Policy Openness for Brazil and South Africa over the years 1945 to 2005. The graph includes shaded areas representing Log of Resource Income per capita and lines indicating Trade Policy Openness and Immigration Policy Openness.]

Primary Resources, Secondary Labor

Adrian J. Shin
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Primary Resources, Secondary Labor
Adrian J. Shin
Hypotheses 1 and 2

- **Hypothesis 1**: Trade openness reduces immigration policy openness during a resource boom.
  - Immobile capital: firms still move to other domestic sectors.
  - Mobile capital: firms move abroad (more restrictions on immigration policy).

- **Hypothesis 2**: Trade openness increases immigration policy openness in the absence of a resource boom.
  - Immobile capital: firms lobby for pro-immigration policy.
  - Mobile capital: firms move abroad (less support for open immigration policy).
Hypotheses 1 and 2

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  - Immobile capital: firms lobby for pro-immigration policy
  - Mobile capital: firms move abroad (less support for open immigration policy).
Hypotheses 3 and 4

- **Hypothesis 3**: A resource boom increases immigration policy openness when trade is closed.
  - Immobile capital: firms are going to lobby aggressively for pro-immigration policy.
  - Mobile capital: firms move abroad (less support for immigration policy).

- **Hypothesis 4**: A resource boom reduces immigration policy openness when trade is open.
  - Immobile capital: firms still move to other domestic sectors.
  - Mobile capital: firms move abroad (more restrictions on immigration policy).
Hypotheses 3 and 4

- **Hypothesis 3**: A resource boom increases immigration policy openness when trade is closed.
  - Immobile capital: firms are going to lobby aggressively for pro-immigration policy
  - Mobile capital: firms move abroad (less support for immigration policy).

- **Hypothesis 4**: A resource boom reduces immigration policy openness when trade is open.
  - Immobile capital: firms still move to other domestic sectors.
  - Mobile capital: firms move abroad (more restrictions on immigration policy).
### Alternative Hypotheses (1)

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Marginal Effects with 95% CIs (Model 11)

Average Marginal Effects of Resource Income

Average Marginal Effects of Tariff Level

Effects on Immigration Policy Openness

Primary Resources, Secondary Labor

Adrian J. Shin
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Voting Behavior in U.S. Senate