To Tax and How to Tax: 
Explaining Fiscal Policy Towards Investment in Russian Regions

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IPES, Claremont Graduate School, CA, 25-26 October 2013
Two Questions:

1. Under what conditions did regions cut taxes on investment?
2. Under what conditions did regions implement a universal or discriminatory tax cut?

Findings:

- Governors with business connections were less likely to cut taxes
- Market structure affected the choice between a universal or a discriminatory tax cut
- Weak evidence of diffusion among regions
Theory

Set Up

- Two-stage model:
  1. To cut or not to cut?
  2. Universal or discriminatory?
- Regulatory capture and leader survival
- 3 actors: ruler, vested interests (large corporations), outsider interests (small firms)
- Intuition: the closer the ruler to vested interests, the more discriminatory the tax policy

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Why do Governors with Business Connections Run for Office?

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To Tax and How to Tax
First Stage: To cut or not to cut?

Hypothesis & Corollaries

1. **HP1**: Where ruler = vested interests (i.e. business connected governor) → no tax cut

   ➤ **Corollary**: The effect of a business connected governor is conditional on market concentration
Who Benefits from a Tax Cut?

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To Tax and How to Tax
Special Projects vs. Preferential Treatments
Second Stage: Which Regions Implement a Discriminatory Tax Cut?

Hypothesis & Corollaries

1. **HP2**: Where firms are large and market concentration is high → discriminatory tax cut (yellow regions)

2. **HP3**: Where firms are non-competitive → discriminatory tax cut (yellow regions)
### Main Variables

#### Dependent variables
- Dummy for yellow and green (first stage)
- Dummy for yellow (second stage)

#### Independent variables
- Dummies for business connected governor (original data and Gehlbach et al. 2010)
- HHI, size, and productivity (Orbis, 2002 data)
Control Variables

Baseline Models

- **First stage:**
  - Spatial term for competitive diffusion
  - Preferential treatments (Slinko et al. 2005)
  - GRPpc, GRP growth, federal transfers

- **Second stage:**
  - Spatial term for competitive diffusion
  - GRPpc and GRP growth
Balancing on the Treatment, Business Connected Governor

Standardized Difference btw. Treated and Control Group

- GDP Growth
- GDPpc
- GDP
- Federal Transfers
- Social Share
- Unemployment
- FDI
- Domestic Investment
- Domestic Private Investment
- Natural Resources
- Corruption
- Party Strength
- Democracy
- Media Freedom
- Difference btw 1 and 2 candidates
- Position pre-91
- Party pro Putin
- Party vs. Putin
- Border
- Firm Size
- Firm Productivity
- Total # of Firms
- Reforms
- Votes Against All

before reweighting  after reweighting
Econometric Strategy

Case Selection
- Cross-sectional analysis: 79 regions in the first stage and 44 in the second stage
- TSCS: 79 regions, 2003-04 & 2005-08

Model Specification
- HeckProbit
- Bayesian spatial regression model: diffuse priors, 1100 draws
Main Findings (Business Connected Governor, Gehlbach et al. 2010)

<table>
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Table: * if (at least) $p < .1$
Favored big Russian businesses (Surgutneftegaz and Myechel)
Serious conflict with local elites
Resigned two years before the end of his term
“The Kremlin’s agreement to withdraw a loyal governor shows that in the case of important and powerful regions, Moscow is obliged to consider the interests of the local elites” (Centre for Eastern Studies, 2010)
Main Findings (Business Connected Governor, original data)

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**Table:** * if (at least) $p < .1$
Business Connected Governor Conditional on HHI
Additional Evidence

Further Tests and Model Specifications

1. Business Connected Governor is not statistically significant in the 2005-08 period
2. Governors who hold lower-level positions are not less likely to cut taxes
3. Governors who did not cut taxes are more likely to return to high-level positions in the firm after they leave office
4. SPs are negatively correlated with size/market concentration and positively correlated with productivity
5. Strategic probit (Signorino, 1999)
Conclusion

Contributions of the Research

- Explores the effects of personal business connections on policy outcomes
- Furthers the research agenda on the politics of investment promotion and policy effectiveness
- Generalizes to other developing and transition countries

Next Steps

- Connect governors to treatment of specific firms
- Conduct micro-level analysis of capture in yellow regions (detailed, original dataset of individual projects)
Many thanks!
## Regional Laws To Cut Tax (Green Regions)

<table>
<thead>
<tr>
<th>Green</th>
<th>Law</th>
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<tr>
<td>Amur Oblast</td>
<td>Law of November 28, 2003 No. 263-OZ</td>
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<td>Bryansk Oblast</td>
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<td>Law of July 9, 2003 No. 340-II-Z</td>
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<td>Law of January 5, 2005 No. 5-RZ</td>
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<td>St. Petersburg</td>
<td>Law of December 16, 2004 No. 620-88</td>
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Independent Variables (Second Stage)

From Firm-level Data to Region-level Data

1. We download from Orbis the top 500 or 25 percent of companies for each region (2002 data)

2. We calculate the average HHI, firm size, and firm productivity for each 4-digit product (NACE Rev. 2 Core code)
   - for instance, ‘Growing of non-perennial crops’ ≠ ‘Growing of cereals, leguminous crops and oil seeds’ ≠ ‘Rice’

3. We take the average value across these products (excluding those with a mean equal to zero)
Spatial term for Competitive Diffusion

Operationalization

- Connectivity matrices:
  - correlates each pair of regions on the basis of the volume of direct investment into 17 industries
  - levels of infrastructure and capital endowments
  - shares of GRP contributed by different sectors
- Moran Index: statistically significant spatial correlation in residuals
Mikhail Lapshin: Altai Republic

- Leader of the Agrarian Party of Russia
- Opposed Putin (not nominated in 2005)
- Lower taxes $\rightarrow$ more investment $\rightarrow$ independence from federal government (Malesky, 2008)
Viktor Shershunov: Kostroma Oblast

- Communist Party
- Strong support in rural areas
- Special projects in the agricultural sector
# Regions Not Correctly Predicted

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<th>Regions</th>
<th>Yellow</th>
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‘Business Connected Governor’ Conditional on Weak Institutions

**Figure:** Weak institutions: vote gap btw 1\textsuperscript{st} and 2\textsuperscript{nd} gubernatorial candidates
Firm Size Conditional on Weak Institutions

Figure: Weak institutions: vote gap btw 1st and 2nd gubernatorial candidates
Where Governors with Business Connections Run for Office?
First Stage: Market Structure
First Stage: Market Structure
Predicted Values vs. Actual Values