The Political Economy of State Employment and Instability in China

Jaya Wen

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June 25th, 2021
Motivation

▶ All governments must maintain **social and political stability**
▶ Especially autocracies (Svolik 2012, Gehlbach Sonin Svolik 2016)
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- Many sources of instability, including:
  - Mass unemployment: trade shocks, natural disasters, pandemics
  - Also: ethnic unrest, food prices, sex ratios
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▶ Many sources of instability, including:
  ▶ Mass unemployment: trade shocks, natural disasters, pandemics
  ▶ Also: ethnic unrest, food prices, sex ratios

▶ Economic stability policies include:
  ▶ Transfers, taxation, social insurance
  ▶ State employment programs:
    WPA (US), NREGA (India), Cobblestone Project (Ethiopia), Work for the Dole (Australia), Plan Jefes y Jefas de Hogar Desocupados (Argentina)
This paper

Does the Chinese government use targeted state employment to maintain political stability?

Focus on state-owned enterprises (SOEs): firms officially owned by the Chinese government
Chinese SOEs: a puzzle

1. The government prioritizes economic growth
Chinese SOEs: a puzzle

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2. SOEs are 25-50% less productive than private firms
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   3.1 SOEs operate in a diverse array of sectors
   3.2 18% of urban employment in 2018
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Why?
SOEs provide political benefits

► **Hypothesis:**
The government uses SOE employment to maintain political stability
SOEs provide political benefits

- **Hypothesis:**
The government uses SOE employment to maintain political stability

- **Empirical Question:**
Does SOE employment increase in response to unrest threats?
Empirical challenges

- **Mechanism:** document a political motive

- **Causal identification:** need exogenous source of unrest
  - Omitted variables
  - Reverse causality

Regional conflict creates unrest threats in the rest of China

Conflict incidents in region $\times$ County ethnic shares outside region $\times$ Male minority
What I do

- **Mechanism:** study SOE response to ethnic unrest threat
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  Triple-differences exploiting variation from regional ethnic conflict
  - Ethnic conflict incidents in region
    - County ethnic shares outside region
    - Male minority

- **Omitted variables:**
  Compare minority men to general population

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- **Reverse causality:**
  - Regional conflict creates unrest threats in rest of China

- **Generality:** consider trade shocks and natural disasters
How state employment protects stability

- Relative to transfers:
  - Better monitoring
  - Opportunity cost of unrest
    Dube Vargas 2013 (Colombia); Blattman Annan 2015 (Liberia), Dell Feigenberg Teshima 2018 (Mexico)
  - Creates appearance that benefits are earned
    Cameron Shah 2014 (Indonesia)
How state employment protects stability

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- Less risk of backlash relative to armed suppression
  - Dell Querubin 2018 (Vietnam)
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- Directly engenders positive feelings for ruling party
  - Wang 2016; Voigtlaender Voth 2014 (Germany)
Contributions to related literatures

- Economic policy as a political tool
Contributions to related literatures

- **Economic policy as a political tool**
  - **Autocracies**: Egorov, Guriev, and Sonin (2009), Boix and Svolik (2013), Lorentzen (2013); Gehlbach and Sonin (2014); Gehlbach, Sonin, and Svolik (2016); Gehlbach (2018)

- **The political economy of China**
  - Cantoni Yang Yuchtman (2019); Campante Chor Li (2019), Qin Stromberg Wu (2018); Martinez-Bravo Padro-i-Miquel Qian Yao (2017); Jia Kudamatsu Seim (2015)
  - **SOE puzzle**: Lin Cai Li (1998); Dong Puttermann (2003); Zeng (2017, regulation); Liu (2018, input subsidies)
Road map

1 Background

2 Data and Descriptive Evidence

3 Empirical Strategy

4 Results

5 Conclusion
Chinese government objectives

- **Growth**
  - Rhetoric, GDP targets, personnel policy

- **Stability**
  - “Stability overrides everything.” - Deng Xiaoping, 1989
  - Bureaucratic promotion

- SOEs potentially play an important role
- SOEs are “a pillar of domestic stability” - CCP, 2017
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- **SOEs potentially play an important role**
  - SOEs are “a pillar of domestic stability” - CCP, 2017
  - Just rhetoric?
Examples of unrest

- Land protests (Yu 2009, Rithmire 2016)
Examples of unrest

▶ Land protests (Yu 2009, Rithmire 2016)
▶ Labor protests (Campante Chor Lee 2019, Lee 2016)

Visible minority, live mostly in Xinjiang province
Population outside Xinjiang is scattered

Uyghur conflict
Extremely high government priority (Thum 2019)
Mostly localized (Bovingdon 2010)
Examples of unrest

- Land protests (Yu 2009, Rithmire 2016)
- Labor protests (Campante Chor Lee 2019, Lee 2016)
- Ethnic unrest
  - Tibetans in Tibet
  - Uyghurs in Xinjiang province
    - Visible minority, live mostly in Xinjiang province
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Main dataset

- **Urban Household Survey, 2002 - 2009**
  - Individual-level data
  - **Demographics:** age, years of education, minority indicator
    - Minority data only available 2002-2009
  - **Labor Market:** Employment by ownership, wage

- Describe other data sources when relevant
Three facts about Chinese state employment

Conditional on age, education, survey year, county, sector:

1. SOEs hire more men and male minorities
   1.1 SOEs: 57% men and 1.7% male minorities
   1.2 Private: 45% men and 1.3% male minorities
   1.3 These groups are most likely to participate in unrest in China (CECC 2019)
Three facts about Chinese state employment

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   2.1 Private firm employment strongly procyclical
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3. SOEs hire after natural disaster floods
   3.1 Private firms shed labor
Caveats:

▶ State employment and private hiring may interact
  ▶ Wages?
▶ Patterns could be generated by apolitical forces
Caveats

Caveats:

- State employment and private hiring may interact
  - Wages?

- Patterns could be generated by apolitical forces

Next:

1. In paper, build a model of SOE stabilization. Three key predictions emerge about the labor market’s response to unrest shocks. Relative to everyone else, male minority:
   1.1 SOE employment ↑, private employment ↓, and wages ↑

2. Test using ethnic unrest shock
   2.1 Explicitly political, cleaner identification
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Ethnic conflict creates threats elsewhere

- Ethnic conflicts tend to spill over when the conflict is severe to places with higher shares of aggrieved group(s)

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- For example:
  - In 1985, Uyghur groups in Xinjiang protested nuclear testing
  - Protests spilled over to Uyghurs in Beijing
Difference-in-differences

- Uyghur unrest threat is greater...
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...when previous year had many Xinjiang unrest incidents

- Hand-coded from Proquest, Wisenews, government documents

- Lagged by one year; employment is sticky
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...in (non-Xinjiang) counties with large Uyghur population shares

- China’s 2000 Census
Difference-in-differences

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\[ \text{Inc}_{t-1}^{XJ} \times \text{Uyg}_c \]

\( c \) counties, \( t \) years
Xinjiang incident timeline

![Xinjiang incident timeline graph]

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Event Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>8</td>
</tr>
<tr>
<td>2004</td>
<td>4</td>
</tr>
<tr>
<td>2006</td>
<td>6</td>
</tr>
<tr>
<td>2008</td>
<td>2</td>
</tr>
<tr>
<td>2010</td>
<td>4</td>
</tr>
</tbody>
</table>
Difference-in-differences

\[ Y_{ict} = \alpha + \beta \ln c_{t-1}^X \times \text{Uyg}_c + \tau_t + \eta_c + \ldots + \epsilon_{ict} \]

Sample omits Xinjiang. \( i \) individuals, \( c \) counties, \( t \) years

- Omitted variables may lead to \( E[\epsilon_{ict}|X] \neq 0 \)
  - Ownership changes
  - 2001 accession to WTO
  - Fiscal stimulus during 2008 recession

- Instead: triple difference, male minority vs. everyone else
Triple difference

\[ Y_{ict} = \alpha + \beta M_{\text{Inc}_t^{XJ}} \times Uyg_c \times \text{Male Min}_i \]
\[ + \beta \text{Inc}_t^{XJ} \times Uyg_c \]
\[ + \gamma_1 \text{Inc}_t^{XJ} \times \text{Male Min}_i + \gamma_2 Uyg_c \times \text{Male Min}_i \]
\[ + \delta_i \text{Inc}_t^{XJ} \times Uyg_c \times X_i \]
\[ + \delta_c X_c \times \tau_t \times \text{Male Min}_i \]
\[ + \text{Dist } XJ_c \times \tau_t + \eta_c \times \text{Male Min}_i + \tau_t + \epsilon_{ict} \]

Sample omits Xinjiang. \( i \) individuals, \( c \) counties, \( t \) years

\( X_i \): individual characteristics (age, years of education, robust. by gender)

\( X_c \): base year county-level characteristics (labor share and growth by ownership)

\( \text{Dist } XJ_c \): county distance from Xinjiang in log kilometers

Standard errors clustered at the county level
Caveats to identification

▶ An omitted variable must covary:
  1. With Xinjiang incidents over time
  2. And with Uyghur population share over counties
  3. And differentially affect male minorities

▶ In a way that increases SOE employment and wages
▶ And decreases private employment
Road map

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## Baseline employment predictions

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>SOE</th>
<th>Private</th>
<th>Salary (000s RMB)</th>
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<tbody>
<tr>
<td>Mean of dependent variable</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Observations</td>
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+ p<0.1, * p<0.05, ** p<0.01, *** p<0.001
Baseline employment results

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<tr>
<td>SOE Private Salary (000s RMB)</td>
<td>0.550</td>
<td>0.250</td>
<td>45.51</td>
</tr>
<tr>
<td>(12.59)</td>
<td>(11.04)</td>
<td>(2,075)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>224,412</td>
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<td>R-squared</td>
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Robustness: strategic sectors

- Alternative SOE motive: control strategic sectors
  - Public services, mining, utilities
  - Initial share by county * year FE * male minority indicator
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<tr>
<td>Coun. Uyg. Share × Lag Xinjiang Incid. × Male Minority (βM)</td>
<td>38.70***</td>
<td>-25.38**</td>
<td>5,892***</td>
</tr>
<tr>
<td></td>
<td>(13.85)</td>
<td>(11.57)</td>
<td>(2,024)</td>
</tr>
<tr>
<td><strong>Control for '02 share in:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public services * Year FE * Male Min.</td>
<td>Y</td>
<td>Y</td>
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<td>Mining * Year FE * Male Min.</td>
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<td>Utilities * Year FE * Male Min.</td>
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Robustness: drop economically-triggered incidents

- Drop all incidents triggered by economic events (8.9%)
  - Factory layoffs in Hotan county (2001)
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<td>SOE</td>
<td>60.08***</td>
<td>-46.63**</td>
<td>7,312***</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary (000s RMB)</td>
<td>(19.20)</td>
<td>(18.14)</td>
<td>(2,336)</td>
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# Placebo: lead of Xinjiang incidents

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<tr>
<td>SOE Salary</td>
<td>-16.04</td>
<td>7.605</td>
<td>-2,513</td>
</tr>
<tr>
<td>Private Salary</td>
<td>(13.40)</td>
<td>(7.529)</td>
<td>(1,580)</td>
</tr>
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## Placebo: minority women

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<td></td>
<td>(12.21)</td>
<td>(12.35)</td>
<td>(2,081)</td>
<td>(13.15)</td>
<td>(10.01)</td>
<td>(1,246)</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.204</td>
<td>0.146</td>
<td>0.440</td>
<td>0.276</td>
<td>0.191</td>
<td>0.429</td>
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Evidence that China uses state employment to maintain stability

- In response to ethnic unrest threat
  - male minority SOE employment increases relative to everyone else
  - male minority wages increase relative to everyone else

- SOEs hire more
  - in response to poor trade shocks
  - in response to natural disasters
Thank you!