

# The Political Economy of State Employment and Instability in China

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  - ▶ Also: ethnic unrest, food prices, sex ratios

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  - ▶ Especially autocracies (Svolik 2012, Gehlbach Sonin Svolik 2016)
  
- ▶ **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

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(Brandt et al 2012, Hsieh Song 2015, Chen et al 2018)
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  - 3.1 SOEs operate in a diverse array of sectors [Chart](#)
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Why?

# SOEs provide political benefits

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- ▶ **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

# What I do

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

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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) Literature
  - ▶ Creates appearance that benefits are earned  
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Dell Querubin 2018 (Vietnam)
  
- ▶ Directly engenders positive feelings for ruling party  
Wang 2016; Voigtlaender Voth 2014 (Germany)

# Contributions to related literatures

- ▶ Economic policy as a political tool
  - ▶ **Fiscal expenditures:** Nordhaus (1975), Rogoff (1998), Persson and Tabellini (1990), Schuknecht (2000), Drazen (2000, review), Brender and Drazen (2005), Alt and Lassen (2006), Bertrand et al (2007), Lee Sung (2008)
  - ▶ **Autocracies:** Egorov, Guriev, and Sonin (2009), Boix and Svobik (2013), Lorentzen (2013); Gehlbach and Sonin (2014); Gehlbach, Sonin, and Svobik (2016); Gehlbach (2018)

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

# Road map

- 1 Background
- 2 Data and Descriptive Evidence
- 3 Empirical Strategy
- 4 Results
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# Chinese government objectives

- ▶ Growth
  - ▶ Rhetoric, GDP targets, personnel policy
- ▶ Stability
  - ▶ “Stability overrides everything.” - Deng Xiaoping, 1989
  - ▶ Bureaucratic promotion

# 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
  - ▶ Just rhetoric?

Other Policies

# Examples of unrest

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  - ▶ Tibetans in Tibet
  - ▶ Uyghurs in Xinjiang province
    - ▶ Visible minority, live mostly in Xinjiang province
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  - ▶ Tibetans in Tibet
  - ▶ Uyghurs in Xinjiang province
    - ▶ Visible minority, live mostly in Xinjiang province
    - ▶ Population outside Xinjiang is scattered
- ▶ Uyghur conflict
  - ▶ Extremely high government priority (Thum 2019)
  - ▶ Mostly localized (Bovingdon 2010)

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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 Quality Coverage
  
- ▶ 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)

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1. SOEs hire more men and male minorities
2. SOEs hire countercyclically to trade shocks
  - 2.1 Private firm employment strongly procyclical
3. SOEs hire after natural disaster floods
  - 3.1 Private firms shed labor

Table

Trade Var.

Flood Var.

Flood County

Flood Map



# Caveats

## Caveats:

- ▶ State employment and private hiring may interact
  - ▶ Wages?
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## 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  $\uparrow$ , private employment  $\downarrow$ , and wages  $\uparrow$
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)

Forsberg (2014), Buhaug Gleditsch (2008), Cederman Girardin Gleditsch (2009)

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

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...in (non-Xinjiang) counties with large **Uyghur population shares**

- ▶ China's 2000 Census Summary Statistics



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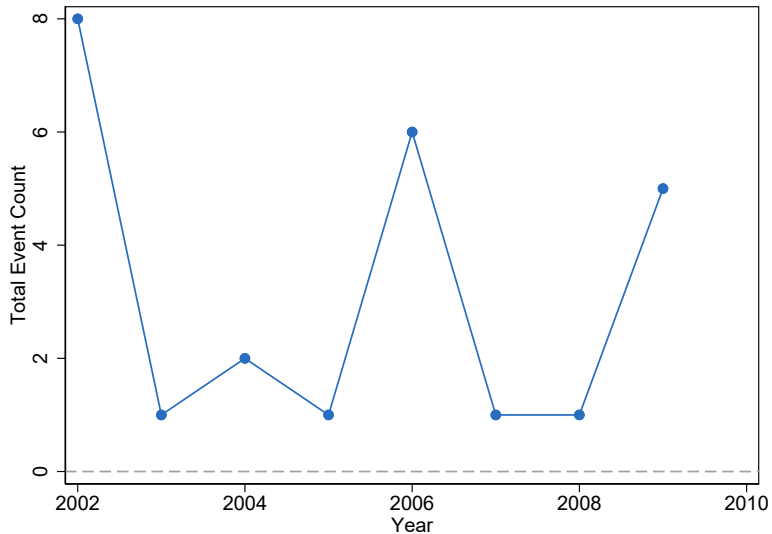
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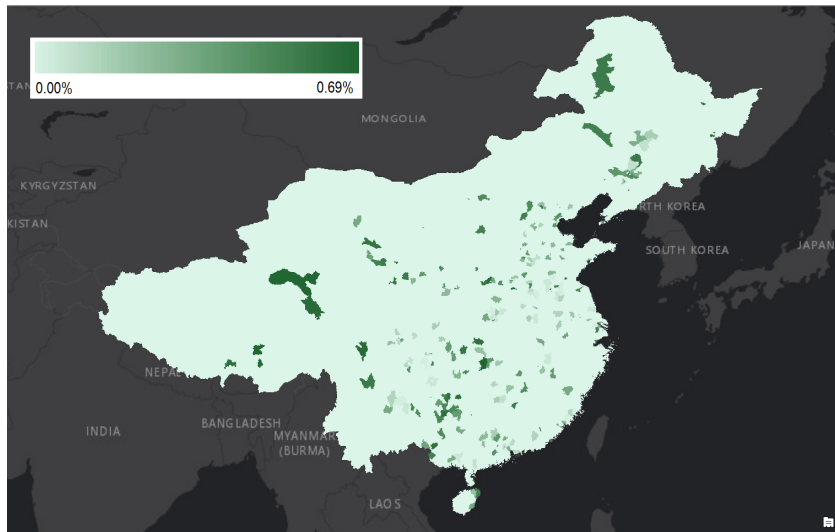
$$\text{Inc}_{t-1}^{XJ} \times \text{Uyg}_c$$

$c$  counties,  $t$  years

# Xinjiang incident timeline



# Map of county Uyghur shares



# Difference-in-differences

$$Y_{ict} = \alpha + \beta \text{Inc}_{t-1}^{XJ} \times \text{Uyg}_c + \tau_t + \eta_c + \dots + \epsilon_{ict}$$

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

$$\begin{aligned} Y_{ict} = & \alpha + \beta_M \text{Inc}_{t-1}^{XJ} \times \text{Uyg}_c \times \text{Male Min}_i \\ & + \beta \text{Inc}_{t-1}^{XJ} \times \text{Uyg}_c \\ & + \gamma_1 \text{Inc}_{t-1}^{XJ} \times \text{Male Min}_i + \gamma_2 \text{Uyg}_c \times \text{Male Min}_i \\ & + \delta_i \text{Inc}_{t-1}^{XJ} \times \text{Uyg}_c \times \mathbf{X}_i \\ & + \delta_c \mathbf{X}_c \times \tau_t \times \text{Male Min}_i \\ & + \text{Dist XJ}_c \times \tau_t + \eta_c \times \text{Male Min}_i + \tau_t + \epsilon_{ict} \end{aligned}$$

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

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# Baseline employment predictions

|   | (1)      | (2)      | (3)                  |
|---|----------|----------|----------------------|
| Dependent Variable:   | SOE      | Private  | Salary<br>(000s RMB) |
| <i>Mean of dependent variable</i>                                       |          |          |                      |
| Coun. Uyg. Share × Lag Xinjiang Incid.<br>× Male Minority ( $\beta_M$ ) | Positive | Negative | Positive             |
| Observations  |          |          |                      |
| R-squared   |          |          |                      |

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$



# Baseline employment results

|  | (1)                 | (2)                 | (3)                  |
|--|---------------------|---------------------|----------------------|
| Dependent Variable:  | SOE                 | Private             | Salary<br>(000s RMB) |
| <i>Mean of dependent variable</i>                                      | <i>0.550</i>        | <i>0.250</i>        | <i>45.51</i>         |
| Coun. Uyg. Share × Lag Xinjiang Incid.<br>× Male Minority ( $\beta$ M) | 36.59***<br>(12.59) | -24.24**<br>(11.04) | 5,422***<br>(2,075)  |
| Observations   | 224,412             | 224,412             | 176,962              |
| R-squared  | 0.231               | 0.156               | 0.431                |

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# Robustness: strategic sectors

- ▶ Alternative SOE motive: control strategic sectors
  - ▶ Public services, mining, utilities
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| Dependent Variable:   | (1)<br>SOE          | (2)<br>Private      | (3)<br>Salary<br>(000s RMB) |
|---|---------------------|---------------------|-----------------------------|
| Coun. Uyg. Share × Lag Xinjiang Incid.<br>× Male Minority ( $\beta_M$ ) | 38.70***<br>(13.85) | -25.38**<br>(11.57) | 5,892***<br>(2,024)         |
| <b>Control for '02 share in:</b>  |                     |                     |                             |
| Public services * Year FE * Male Min.                                   | Y                   | Y                   | Y                           |
| Mining * Year FE * Male Min.  | Y                   | Y                   | Y                           |
| Utilities * Year FE * Male Min.   | Y                   | Y                   | Y                           |
| Observations  | 224,412             | 224,412             | 176,962                     |
| R-squared   | 0.232               | 0.156               | 0.435                       |

+ p<0.1, \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

Drop

## Robustness: drop economically-triggered incidents

- ▶ Drop all incidents triggered by economic events (8.9%)
  - ▶ Factory layoffs in Hotan county (2001)
  - ▶ Xinjiang tax on cab drivers (2007)

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| Dependent Variable:   | (1)<br>SOE          | (2)<br>Private      | (3)<br>Salary<br>(000s RMB) |
|---|---------------------|---------------------|-----------------------------|
| Shock without economically-triggered incidents<br>× Male Minority ( $\beta_M$ ) | 60.08***<br>(19.20) | -46.63**<br>(18.14) | 7,312***<br>(2,336)         |
| Observations  | 224,412             | 224,412             | 176,962                     |
| R-squared   | 0.231               | 0.156               | 0.431                       |

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

More

# Placebo: lead of Xinjiang incidents

|   | (1)               | (2)              | (3)                  |
|---|-------------------|------------------|----------------------|
| Dependent Variable:   | SOE               | Private          | Salary<br>(000s RMB) |
| Coun. Uyg. Share × Lead Xinjiang Incid.<br>× Male Minority ( $\beta$ M) | -16.04<br>(13.40) | 7.605<br>(7.529) | -2,513<br>(1,580)    |
| Observations  | 224,412           | 224,412          | 176,962              |
| R-squared   | 0.231             | 0.156            | 0.431                |

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# Placebo: minority women

|  | (1)                 | (2)                | (3)                  | (4)              | (5)               | (6)                  |
|--|---------------------|--------------------|----------------------|------------------|-------------------|----------------------|
| Sample:  | Men                 |                    |                      | Women            |                   |                      |
| Dependent Variable:  | SOE                 | Private            | Salary<br>(000s RMB) | SOE              | Private           | Salary<br>(000s RMB) |
| Coun. Uygh. Share × Lag Xinjiang Incid.<br>× Minority ( $\beta$ M) | 36.25***<br>(12.21) | -22.49*<br>(12.35) | 5,350**<br>(2,081)   | 2.741<br>(13.15) | -8.842<br>(10.01) | 272.4<br>(1,246)     |
| Observations   | 116,239             | 116,239            | 98,737               | 108,173          | 108,173           | 78,225               |
| R-squared  | 0.204               | 0.146              | 0.440                | 0.276            | 0.191             | 0.429                |

+  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

More



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# Conclusion

- ▶ 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!