Strength in Numbers:
The Political Economy of MNCs Supply-Chain Linkages

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Considerable research in IPE on supply chains
Introduction

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  - Firms’ Preferences
    - Kim et al. (2018); Malesky and Mosley (2018)
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- **Antidumping patterns**
  - *Jensen et al. (2015)*
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  - Risk of expropriation
    - *Johns and Wellhausen* (2016)
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• What are the causes of MNCs’ supply chain decisions?
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What are the causes of MNCs’ supply chain decisions?

Motivating Question

How do the political institutions in the host-country affect MNCs supply-chain linkages?
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- Linkages: use of suppliers inside host country for inputs
Political Institutions and Linkages

- Johns and Wellhausen (2016)
  - Linkages → lower risk of expropriation
  - Suppliers have "incentive to exert effort to protect the target"
  - Linkages create allies → raises costs of expropriation
- Would MNCs strategically adopt linkages?
  - Many strategies available:
    - Lobbying
    - Political connections
    - Campaign contributions
    - Bribery
- Proposition: Linkages useful under fragmented bureaucratic power
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**Proposition:** Linkages useful under fragmented bureaucratic power
Theoretical Framework

Centralized Bureaucratic Power

Fragmented Bureaucratic Power

Hypothesis: Fragmented bureaucratic power → MNCs adopt more supply-chain linkages.
Theoretical Framework

Centralized Bureaucratic Power → MNC

Fragmented Bureaucratic Power
Theoretical Framework

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Empirical Strategy

Indonesia

- **Pre-reform**
  - President Soeharto tightly controls state apparatus
    - Civil service, military, judiciary, and parliament
  - Presidential approval required for all FDI

- **1999**: Democratization
- **2001**: Decentralization

- **Post-reform**
  - Constitution limits powers of President
  - 450 regional governments with influence over business environment
  - Government ministries independent and uncoordinated
Empirical Strategy

Senior consultant specializing in Government Relations for MNCs in Indonesia (Interviewed on September 20, 2018):

• In the pre-1998 period [...], the requirements were simpler, you needed someone who was on good terms with the central government and had some connections there.

• In the post-1998 period, there were vastly more constituents [for MNCs] to satisfy. So it became very hard to know which partner you needed.
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Data

- Annual Manufacturing Census of Indonesia
  - Coverage: 1975-2015
  - Information on proportion of inputs sourced in host country
  - Around 2,500 manufacturing MNCs
Empirical Strategy

- **Variables**
  - **Linkages**: proportion of inputs sourced in host country
  - **Treatment**:

    \[ d_t = \begin{cases} 
    1, & \text{if year} > 2000, \\
    0, & \text{otherwise}. 
    \end{cases} \]  

- **Identification and Estimation**
  - Compare firm-level changes in linkages before and after fragmentation

  \[ \text{Linkage}_{it} = \alpha_i + \beta d_t + X_{it}' \delta a + \epsilon_{it} \]

- **“Within estimator”**
  - Unit fixed effects
  - Time trends (linear and quadratic)
  - Age of MNC
Baseline Results

- FE
- FE + Linear Time Trend
- FE + Quadratic Time Trend
- FE + Age
Results

Linkages Inside and Outside Industrial Estates


Industrial Estate

- No
- Yes

Linkages

0.5 0.6 0.7
Results

Linkages by Productivity Level

![Graph showing linkages by productivity level from 1995 to 2015. The graph compares linkages between the bottom 80% and the top 20% of productivity levels. There is a significant increase in linkages for the top 20% post-2000, while the linkages for the bottom 80% remain relatively stable.](image-url)
Key Insights

- **Fragmentation** of bureaucratic power → **greater** supply chain linkages

- **Bureaucratic structure** shapes the behavior of MNCs in the host country

- Extending **scope** of literature on political determinants of FDI
Thank you!
Results

Treatment Effect by Productivity Level

Estimates

Bottom 80%  Top 20%