Obsolescent Treaties: Global Value Chains and the Termination of Bilateral Investment Treaties

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New York University

November 29, 2022
Why do states terminate their bilateral investment treaties (BITs)?
Overview: Global value chain (GVC) integration ⇒ BIT termination

For host country government

- GVCs create positive spillovers
- Incentive to expropriate
- Need for BIT as a contractual form of asset protection

Democracy values GVC spillovers more

- Stronger substitute effect of GVCs for BITs
Overview: Global value chain (GVC) integration ⇒ BIT termination

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Chart showing the trend of GVC integration from 1960 to 2020, with data points for GVC, Signature, and Termination.
Overview: Global value chain (GVC) integration ⇒ BIT termination

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Overview: Global value chain (GVC) integration $\Rightarrow$ BIT termination

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Overview: Findings

GVCs ↑ → BIT termination ↑

With shallow GVCs, democracies are less likely to terminate BITs

With deep GVCs, democracies are more likely to terminate BITs
Overview: Findings

- GVCs $\uparrow \rightarrow$ BIT termination $\uparrow$
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Assumptions

1. GVCs as a globally fragmented production process
   ▶ Positive spillovers to economy ⇒ political support
   ▶ GVC integration ↑ ⇒ political support ↑

2. BITs and Investor-State Dispute Settlement (ISDS)
   ▶ A commitment device
   ▶ A probability that host government pays a compensation upon violation
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Argument: Political Calculus of Expropriation

- Rents of regulations/expropriations
- Political benefits of GVC spillovers

GVC ↑ → incentive to expropriate ↓
Argument: Political Calculus of Expropriation

Host government trades off between

- Rents of regulations/expropriations
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GVC $\uparrow \rightarrow$ incentive to expropriate $\downarrow$
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- Political benefits of GVC spillovers

\[ \text{GVC} \uparrow \rightarrow \text{incentive to expropriate} \downarrow \]
Argument: How do GVCs affect BITs?

Does government regulate?

Do firms invest?

Does government sign/maintain BITs?

0

Extremely low  Low  High

GVC spillovers

Zoe Ge (NYU)
Argument: How do GVCs affect BITs?

When GVC integration is **EXTREMELY LOW**

- Does government regulate?
- Do firms invest?
- Does government sign/maintain BITs?

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Extremely low  Low  High

GVC spillovers
Argument: How do GVCs affect BITs?

When GVC integration is **EXTREMELY LOW** → expropriation is certain

- Does government regulate?
- Do firms invest?
- Does government sign/maintain BITs?

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GVC spillovers
Argument: How do GVCs affect BITs?

When GVC integration is **EXTREMELY LOW** → expropriation is certain

- Does government regulate? (Yes)
- Do firms invest?
- Does government sign/maintain BITs?

GVC spillovers

Extremely low | Low | High
---|---|---
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Argument: How do GVCs affect BITs?

When GVC integration is EXTREMELY LOW $\rightarrow$ expropriation is certain

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When GVC integration is **EXTREMELY LOW** → expropriation is certain

- **Does government regulate?**
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  - No

- **Do firms invest?**
  - No

- **Does government sign/maintain BITs?**
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GVC spillovers

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- Extremely low
- Low
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Argument: How do GVCs affect BITs?

When GVC integration is **LOW**

- Does government regulate? Yes
- Do firms invest? No
- Does government sign/maintain BITs? No

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Extremely low  Low  High

GVC spillovers
Argument: How do GVCs affect BITs?

When GVC integration is **LOW** → high prob. of expropriation

- **Does government regulate?**
  - Yes

- **Do firms invest?**
  - No

- **Does government sign/maintain BITs?**
  - No

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- **Extremely low**
- **Low**
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GVC spillovers

Zoe Ge (NYU)
Argument: How do GVCs affect BITs?

When GVC integration is **LOW** → high prob. of expropriation

- **Does government regulate?**
  - Yes
  - Yes when large enough rents
- **Do firms invest?**
  - No
- **Does government sign/maintain BITs?**
  - No

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When GVC integration is **HIGH**

- **Does government regulate?**
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- **Do firms invest?**
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- **Does government sign/maintain BITs?**
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  - Yes

GVC spillovers:
- Extremely low
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Argument: How do GVCs affect BITs?

When GVC integration is **HIGH** → low prob. of expropriation

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GVC spillovers

Extremely low \(0\)  \(\rightarrow\) Low  \(\rightarrow\) High
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0 Extremely low Low High GVC spillovers
Argument: How do GVCs affect BITs?

When GVC integration is **HIGH** → low prob. of expropriation

- Does government regulate? Yes → Yes when large enough rents
- Do firms invest? No → Yes
- Does government sign/maintain BITs? No → Yes

GVC spillovers

Extremely low → Low → High
Argument: How do GVCs affect BITs?

When GVC integration is **HIGH** $\rightarrow$ low prob. of expropriation

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Does government regulate?

- Yes when large enough rents
- Yes when large enough rents

Do firms invest?

- Yes
- Yes

Does government sign/maintain BITs?

- Yes
- No

GVC spillovers
Hypotheses

Hypothesis 1
GVC integration substitutes for BITs
Argument: Heterogeneity in Regime Type
### Argument: Heterogeneity in Regime Type

Democracies put greater weight on GVC spillovers than autocracies.

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GVC spillovers
Argument: Heterogeneity in Regime Type

Democracies put greater weight on GVC spillovers than autocracies

- **Does government regulate?**
  - Yes (Democracy)
  - Yes when large enough rents
  - Yes when large enough rents

- **Do firms invest?**
  - No
  - Yes
  - Yes

- **Does government sign/maintain BITs?**
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  - Yes
  - No

- **GVC spillovers**
  - Extremely low
  - Low
  - High
Argument: Heterogeneity in Regime Type

Democracies put greater weight on GVC spillovers than autocracies

- Does government regulate?
  - Yes: Democracy
  - Yes when large enough rents: Autocracy
- Do firms invest?
  - No
- Does government sign/maintain BITs?
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GVC spillovers:
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Zoe Ge (NYU)
Hypotheses

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With shallow GVCs, democracies are less likely to terminate BITs than autocracies
Hypotheses

Hypothesis 1
GVC integration substitutes for BITs

Hypothesis 2
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Hypothesis 3
With deep GVCs, democracies are more likely to terminate BITs than autocracies
Empirical Specification

- DV: whether the dyad experienced BIT termination (/renegotiation)
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- Cox proportional-hazards regression model
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- Cox proportional-hazards regression model
- Coefficient estimate: how likely to terminate
- Sample: dyad-year when a BIT is in force
H1: GVCs and BITs Termination

Termination of BIT

Full sample Sample in (3)

log(1+GVC) 1.232 ∗∗∗ 1.227 ∗∗∗ 1.211 ∗∗ 1.216 ∗∗

(4.61) (3.68) (3.11) (3.20)

Cumulative disputes 0.977 0.988 0.987 (-0.35) (-0.19) (-0.21)

PTA 1.370 ∗ 1.555 ∗∗ 1.549 ∗∗

(1.82) (2.28) (2.26)

Between EU members 2.178 ∗∗ 2.252 ∗∗ 2.220 ∗∗

(2.39) (2.38) (2.34)

Sum(FDI inflow/GDP) 0.499 (-0.65)

Observations 31,494 31,494 28,584 28,584

Control Y/N Y Y Y

Party 1 RE Y Y Y Y

Party 2 RE Y Y Y Y

Year RE Y Y Y Y

AIC 278.41 281.54 257.89 259.34

BIT 254.47 240.49 215.81 220.51

Note: ∗ p < 0.1; ∗∗ p < 0.05; ∗∗∗ p < 0.01

Coefficients greater than 1 indicate a positive relationship, and vice versa.

Z scores in parentheses.

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## H1: GVCs and BITs Termination

### Termination of BIT

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| Observations         | 31,494      | 31,494        | 28,584      | 28,584      |
| Control              | Y/N         | Y             | Y           | Y           |
| Party 1 RE           | Y           | Y             | Y           | Y           |
| Party 2 RE           | Y           | Y             | Y           | Y           |
| Year RE              | Y           | Y             | Y           | Y           |
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**Note:**

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H2&3: Heterogeneity in Regime Type
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- Unit of analysis: directed dyad-year
H2&3: Heterogeneity in Regime Type

- Unit of analysis: directed dyad-year
- DV: unilateral termination
H2&3: Heterogeneity in Regime Type

- Unit of analysis: directed dyad-year
- DV: unilateral termination
- Marginal effects of regime type on termination given a certain level of GVC
H2&3: Heterogeneity in Regime Type

![Graph showing marginal effects of Polity IV on GVC integration.](image-url)
Conclusion

I find that

GVC integration substitutes for BITs
Especially in democracies when GVC integration is deep

Implications
A technological-based explanation for the decline of international institutions
How globalization transforms itself through technological change

Thank you very much!

Zoe Ge
xg762@nyu.edu
https://wp.nyu.edu/zoege
Conclusion

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Appendix

Empirics

- Specification
- Sample
- Deepest GVCs
- Who terminates
- GVC by BIT status
Empirical Specification

- Cox proportional-hazards regression model with time-dependent covariates

\[ h(t|Z_{ij,t-1}) = h_0(t)e^{\beta_1 GVC_{ij,t-1} + Z_{ij,t-1}\Gamma + \theta_i + \lambda_j + \gamma_y} \]

- \( e^{\beta_1} \) captures the hazard ratio
- \( Z_{ij,t-1} \): previous disputes, gap in GDP per capital, population, and Polity IV, whether any country has a common law origin, PTA, inflow FDI change
- \( \theta_i, \lambda_j, \gamma_y \): country \( i \), country \( j \), and year-specific frailty
- Sample: dyad-year when a BIT is in force

Appendix

Zoe Ge (NYU)
Top 20 Dyads with Deepest GVC Integration

Canada-USA -
Germany-Netherlands -
France-Germany -
Germany-Italy -
Belgium-Germany -
Germany-UK -
China-Germany -
Germany-USA -
China-Japan -
Belgium-Netherlands -
Mexico-USA -
Germany-Switzerland -
Austria-Germany -
China-South Korea -
China-Hong Kong -
Belgium-France -
Japan-USA -
France-Italy -
China-USA -
Germany-Spain -

Yearly Average GVCs Integration (billion USD)
Data: Who terminated the most BITs?

Data Source: BITs: UNCTAD

Zoe Ge (NYU)
Data: GVCs by BIT Status

Data Source: GVC: dyadic value-added in trade (UNCTAD-Eora Database)