Discussion of

A Theory of Economic Coercion and Fragmentation

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Critically Important Research Agenda

The world is changing…and we need new models

- Need to incorporate supply-chain resilience, national security, **geopolitical tensions**
- Cost/benefit analysis of moving away from free trade/capital flows
- **Need to understand the tradeoffs**

Part of an exciting new research agenda

- IMF: extensive work, e.g., “Changing Global Linkages: A New Cold War?” by Gopinath, Gourinchas, et al
- Day at NBER summer institute on International Economics and Geopolitics
- Recent papers focusing on impact on monetary policy/exchange rates (next session)

Ambitious Paper

1. Theoretical Model: key pieces

- Static model of world economy built on production network w/strategic complementarities
- Geoeconomic power is based on financial & trade linkages, elasticity of substitution
- Hegemon can use “geoeconomic power” to achieve goals through “threats” to network
- Countries can enact “anti-coercion” policies to reduce dependence on hegemon
- Model solves for optimal contract between hegemon and each economy
- Can lead to inefficient fragmentation as countries seek to insulate own economy

2. Discussion of application to global payments system

3. Empirical analysis: different frameworks to test different parts of model

- Uses framework to estimate geoeconomic power
- Embeds measures of geopolitical weight in gravity equation
- Other extensions in the works…

Theory: High Level Comments

This is very ambitious…Tour de force

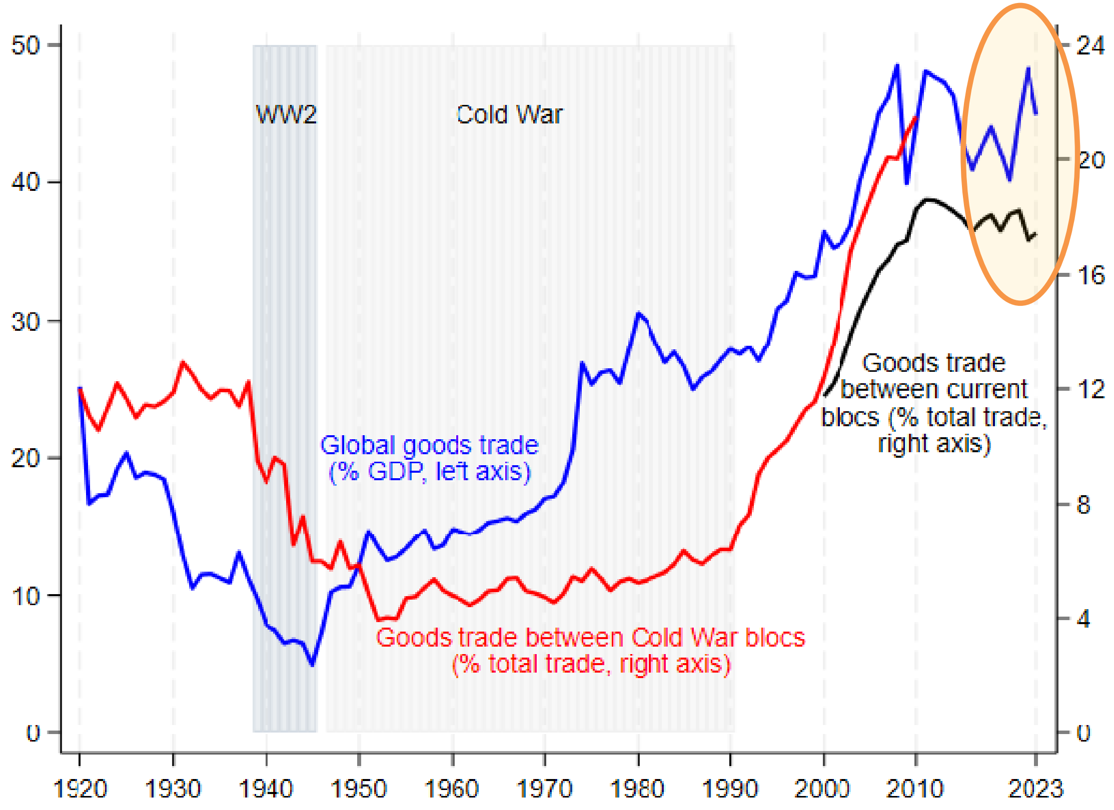
- But is not a "simple" model

Many assumptions/decisions required to solve model

3 areas where "real world" even more complex

1. Many geopolitical issues are **dynamic** (repeated game), can't capture in static model
   - Connector countries; foster new payment system
2. Today are **2 hegemons** in many sectors, **"aligned"** and **"non-aligned"** economies,
   - Interaction important
   - Broader set of options than "take it or use domestic option"
3. Trade model based on input-output linkages may work better for certain industries (rare minerals/oil/gas)
   - **Different set of issues (and data needed) around financial flows**

The “Non-Aligned” and “Connectors”



(a) Trade between blocs in history

Source: Changing Global Linkages: A New Cold War?” by Gopinath, Gourinchas, Presbitero and Topalova (2024). *IMF Working Paper WP/24/76*

Financial Restrictions: Different Model Needed

Thought process:

- Hegemon (Switzerland) limits access to Swiss watches….
- Hegemon (US) limits access to financial system…..
  - Nonlinearity? Much more than access to financial services (insurance, pensions, etc)

Broader macro implications: capital flows & demand for currencies

- S-I = current account = financial account
- Exchange rates, inflation, bond yields, etc
- **Capital flows: A forte of these authors!**

Empirics: Measuring Geoeconomic Power

Power of hegemon over country *n,* measured as aggregate loss to all firms in *n* of losing access to hegemon's goods

$$\tilde{\nu}_n \equiv \sum_{i \in \mathcal{I}_n} \sum_{J \in \mathcal{J}} \left(\log \nu_i(\mathcal{J}_i) - \log \nu_i(\mathcal{J}_i \backslash \{(Jm)\}) \right)$$

- Sums across the loss value to all firm *i*'s in country n from losing access to hegemon *m*''s industry *j*
- Constructed based on detailed input/output matrix by sector for exposure to hegemon *m*

To estimate: uses International Trade and Production Database for Estimation (ITPD-E)

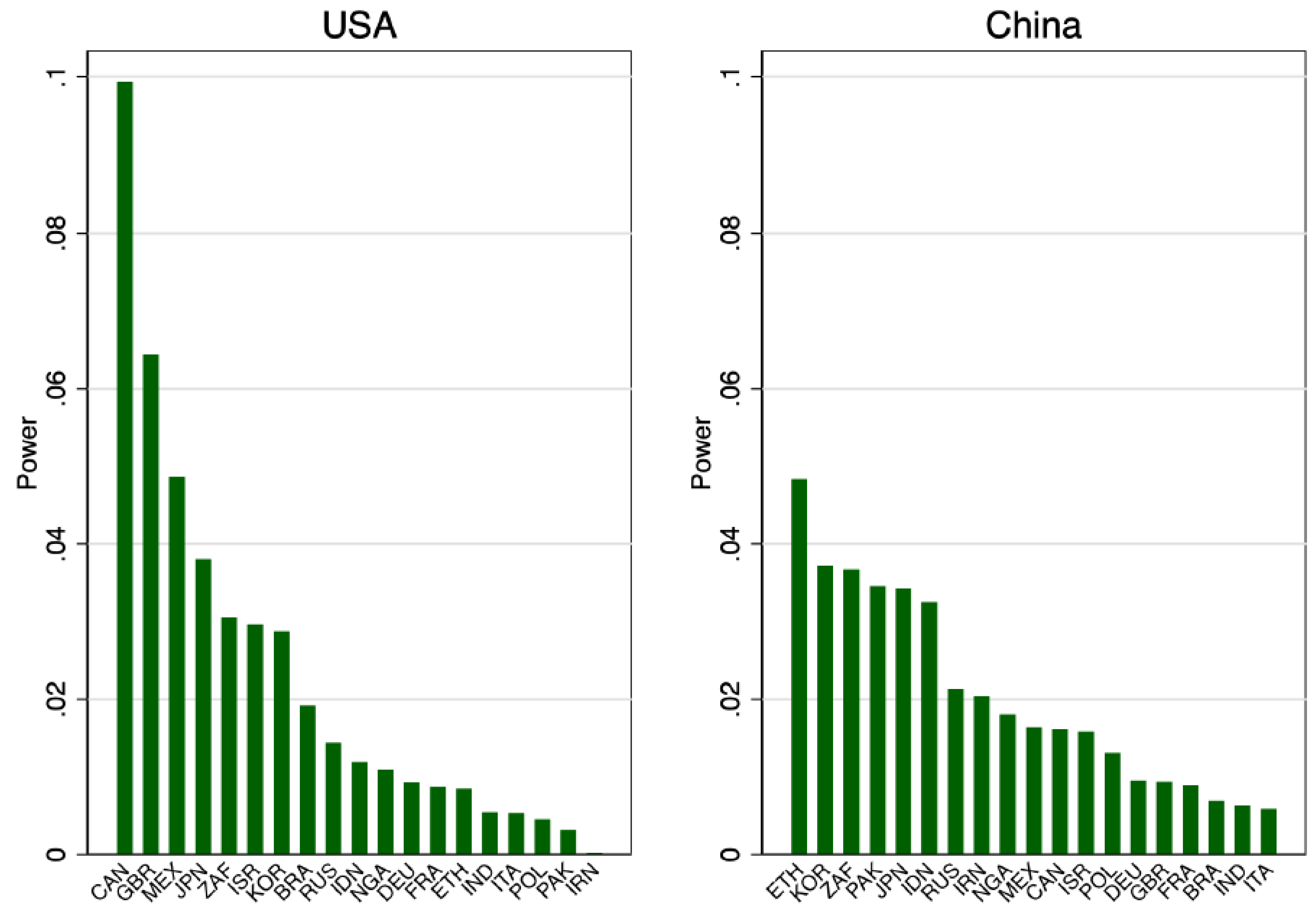
- Good measure for many sectors/industries, but **only through 2018**
- **Finance challenging**: value added (often interest margin) in financial services & pensions/insurance)

Key parameters: Elasticities of substitution based on **tariff changes** (Fontagne et al, 2022)

- Sectors with no tariffs? Application to finance?

Figure 3:

American and Chinese Geoeconomic Power, 2018



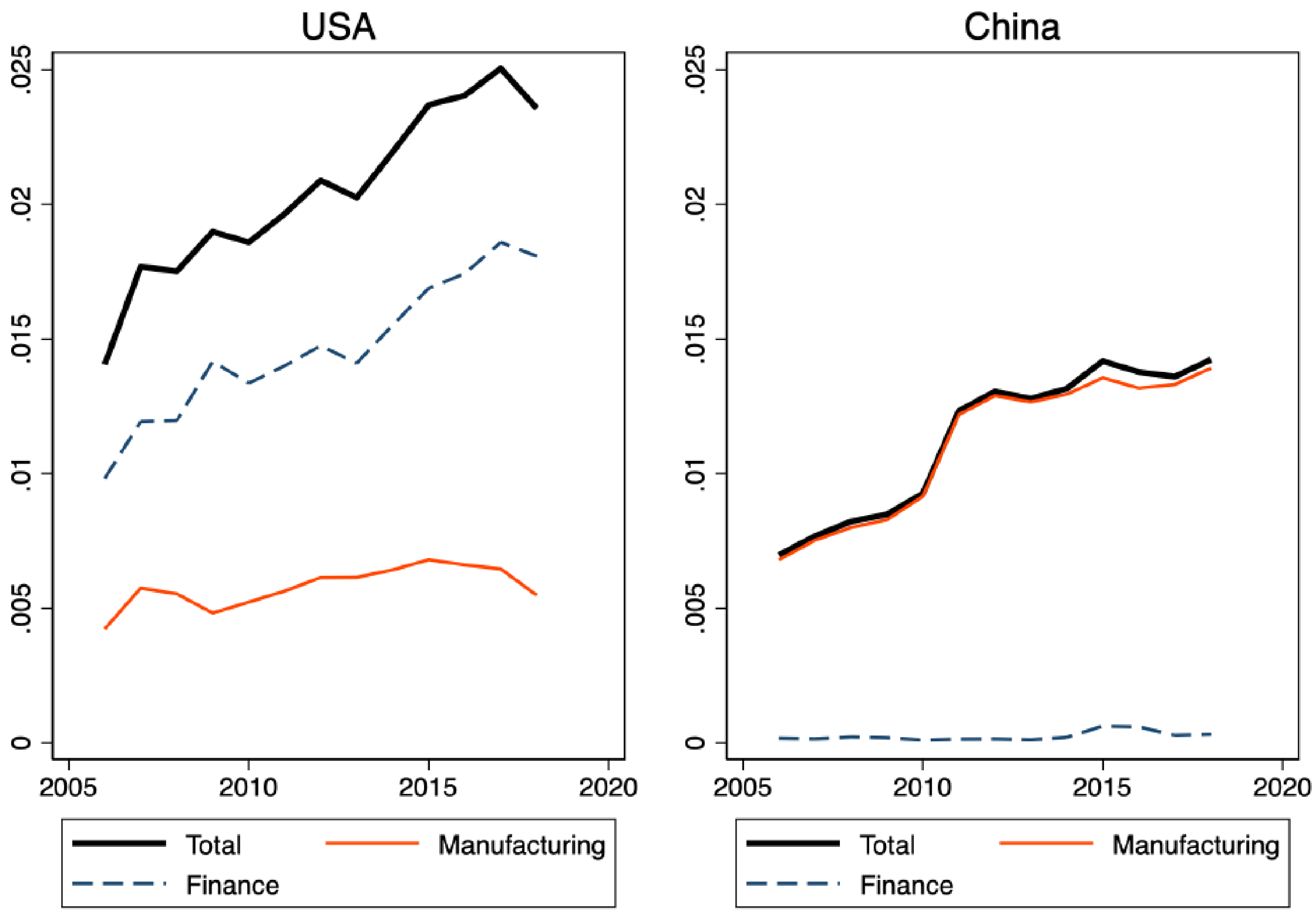
Super interesting: *would like to learn more*

Figure 4

US and Chinese Power: Manufacturing and Finance

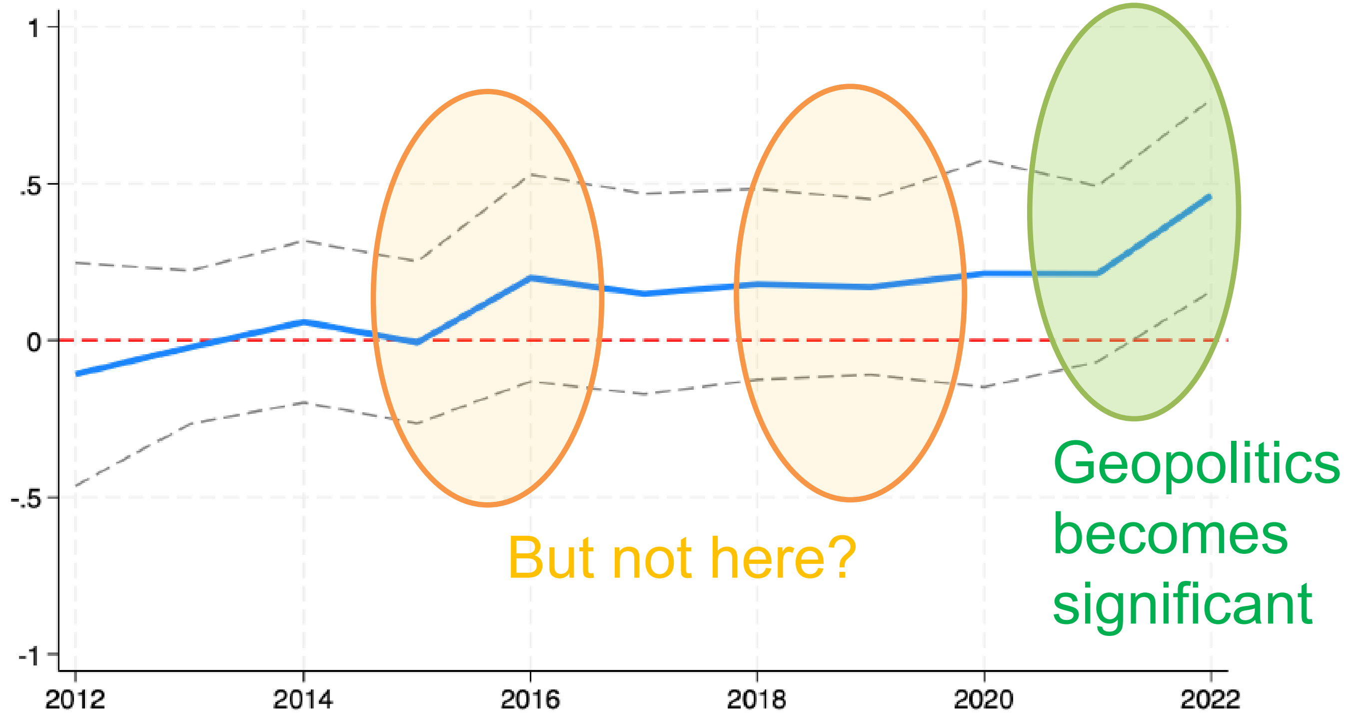
Super interesting:

- *looking forward to results post-2020*
- *But not really about role of $/ payments*



Another Approach

Figure 5: Time Variation in Geopolitical Weight, θ_t



- Gravity equations with term for “geopolitical alignment”
  - Based on UN voting disagreement
- Bilateral trade flows based on HS12 industry code
  - Advantage: up to 2022
  - Disadvantage: no financial services trade

Big Picture

- Very important line of research
- Modelling framework state-of-the-art
    - Merges firm-level analysis, trade, political science
- Promising empirical measures: would like more detail/discussion
    - Albeit better for traditional sectors, less for finance
- Paper may try to do too much…
    - Could be 3 different papers (or more)
    - Different framework/empirics for finance/payments system/$ role