Discussion of "Recent Evolutions in the Global Trade System" by Airaudo, Soyres, Gaillard and Santacreu

Diego Comin (Dartmouth College)

July 2^{nd}, 2025

ECB FORUM

What is this paper about?

- Impact of China's emergence as technological leader on industrial policies and distortionary interventions that cause economic fragmentation, and the challenges of operating in this new environment
- Many new facts about important patterns and associations, often hard to measure
- A potential summary:
  1. Increased competition from China in high-tech sectors where EU (Germany) has historically dominated (machinery, advanced manufacturing, robots)
  2. This together with geopolitical tensions triggers a policy response in EU/US that leads to trade reversal, and that enhances fragmentation
  3. The fragmentation may have implications for inflation, output and policy-making

My discussion

1. Evidence on increased competition and its relevance for growth
2. Drivers of policies that cause fragmentation
3. Consequences of the fragmentation: positive and normative

1. Increase Technological competition from China

- Facts:
  - Increase share of global patents by China
  - Increased overlap in sectors where West and China patent and export
  - China has increased exports in sectors where the west has imported more (machinery and transport equipment)
  - EA has exported less in sectors where China has imported more (machinery and transport equipment)
- Measurement Drawbacks
  - Patents are an imperfect measure of innovation
    - Do not reflect the significance/value of innovation
    - Many innovations are not patented
  - Is 2-digit thin enough?

Should we care?

- Is innovation really a zero-sum game?
  - For sure not
  - Innovations are non-rival (Romer, 1990, Aghion and Howitt, 1992)
  - Knowledge spillovers are difficult to encapsulate

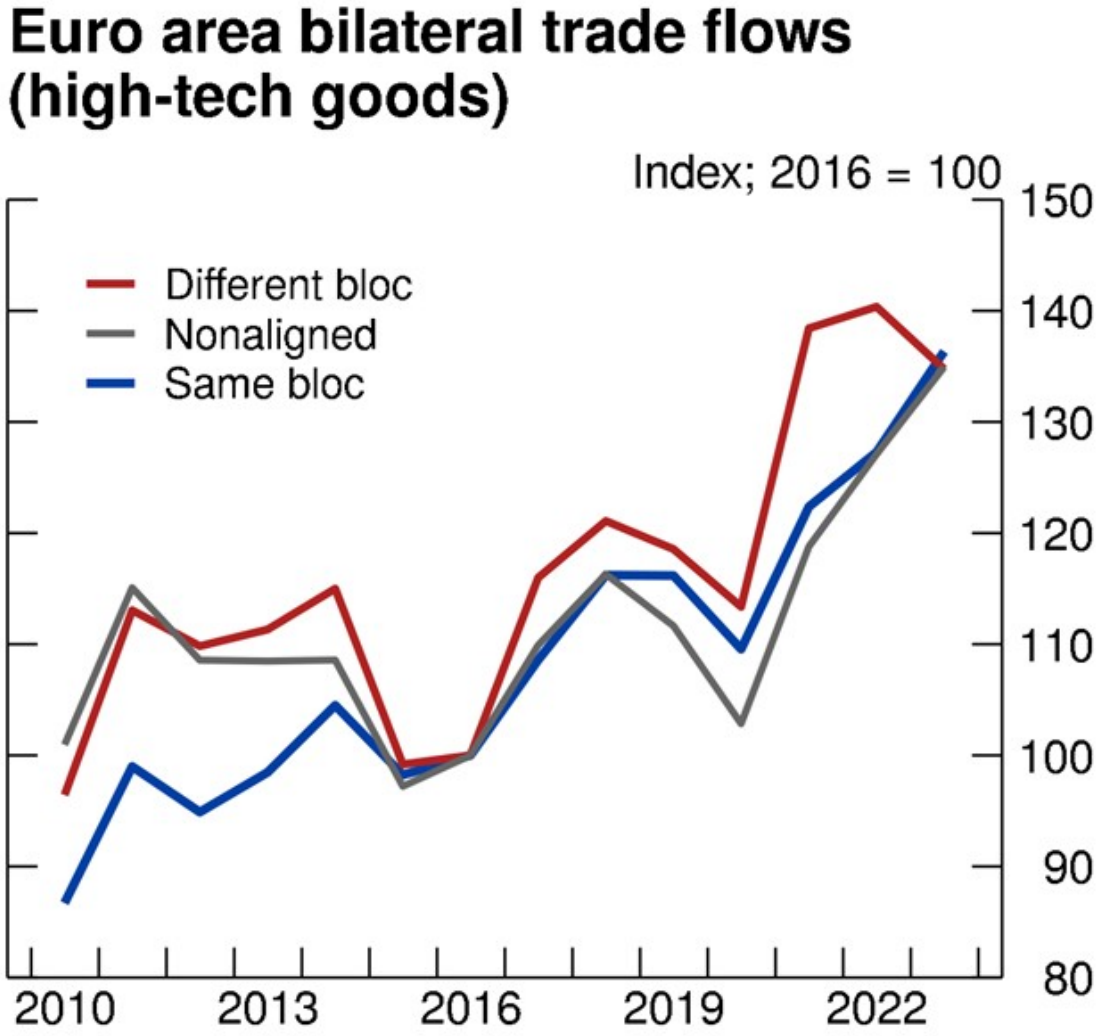
- Is innovation the main source of productivity growth?
  - Most companies **do not** innovate (only 20% innovate in high-income economies, WES)
  - **Adoption** of technologies, and **extension in the use of more sophisticated technologies** are more important (Cirera, Comin and Cruz, 2024).
- What is the net effect on jobs of raising barriers to the import of technology/high-tech goods?
- Potential trade offs: Protect European EV industry, at the cost of climate change

Distortive policies

- Impressive account of number and type of barriers
- Very significant increase in distortive policy interventions
  - Both at the EU and national levels
  - Directed to both domestic and foreign economies
  - Very distinct nature: Some clearly motivated by geo-political factors (sanctions), others more driven to protect/enhance domestic industries
- Gradual increase in tariff equivalents, presumably driven by policies
- Would like to see them more disaggregated by sector
- The world has changed a lot in the last 5 months

2. What drives distortionary policies

- Geopolitical: Some evidence after 2022, but the trend was underway well before then.



Source: Bureau of Economic Analysis & authors' calculations.

Drivers of distortionary policies cont'd

- Welfare enhancing Industrial policy:
  - Knowledge spillovers are largely global
  - Equity certainly is
- Jobs for the middle class: A Fallacy
  - Trade is a minor driver of medium-skill jobs
  - More important than trade:
    - Automation (e.g., Acemoglu and Autor, 2011)
    - Income-elastic sectors are skill intensive (Comin, Danieli and Mestieri, 2023).
    - Skill intensity increases with firm size (Comin, Dey and Mestieri, 2025)
- Industrial policy driven by interest groups (e.g., EU automakers)

3. Consequences of fragmentation

1. Asynchrony of business cycles within the Euro Area

2. Geopolitical tensions + concentration of supply in "other block" countries $\Rightarrow$ supply-chain constraints & inflation
   - This is not what happened during Covid
     - Initial reduction of supply capacity was not driven by geopolitical tensions
     - From 2021-2024, constraints were binding because of high demand (monetary policy) rather than reduced supply (Comin, Jones and Johnson, 2023).

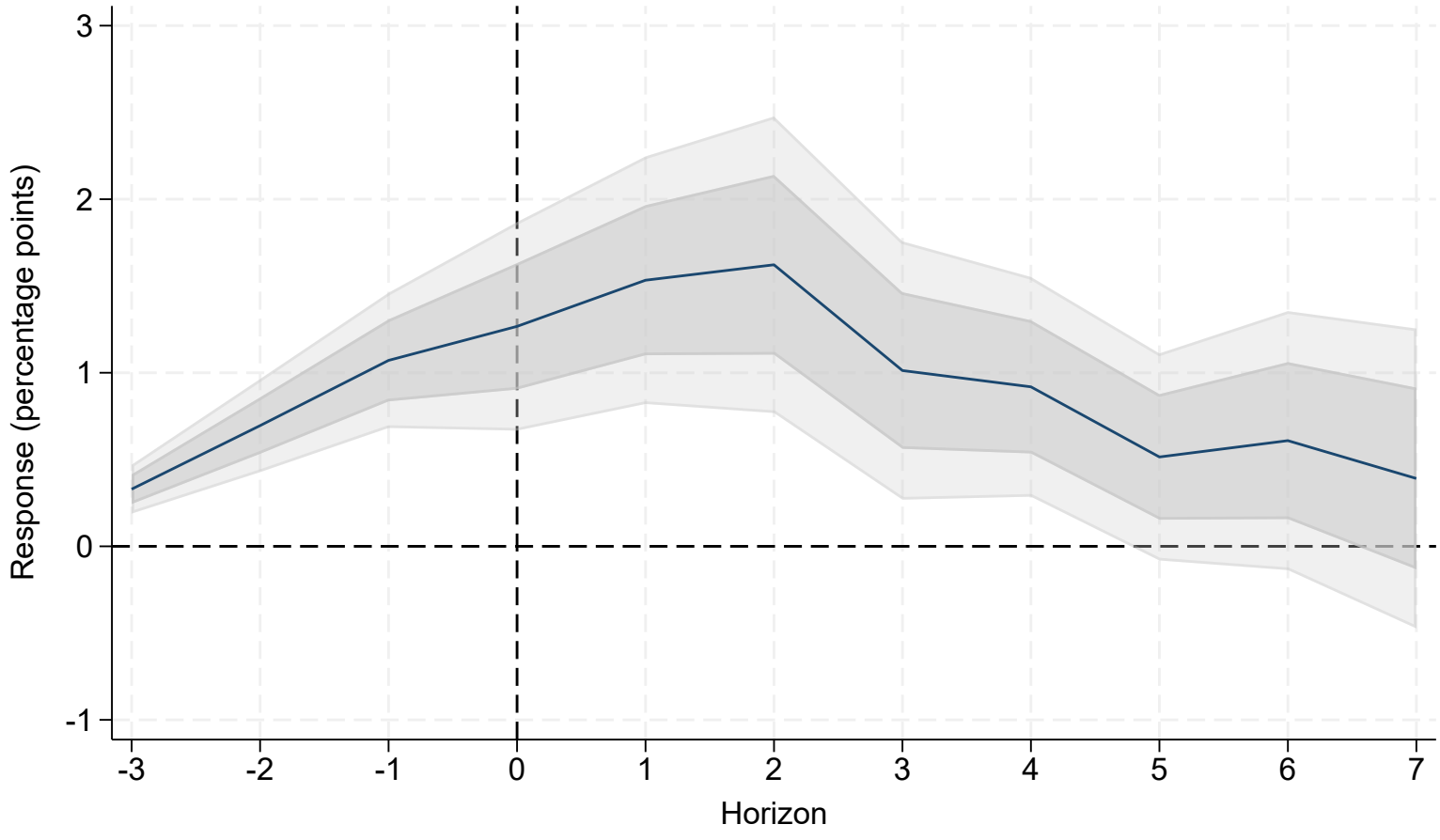
Positive consequences of fragmentation for inflation

- How does fragmentation affect inflation?
- It largely depends on how fragmentation unravels.
- A one time un-anticipated increase in tariffs is inflationary because it raises the real marginal costs of production
- However, fragmentation/integration processes are not sudden or unanticipated

$$\lambda_t^M = \rho_M \lambda_{t-1}^M + \xi_t^0 + \xi_{t-1}^1$$

- A persistent, anticipated future increase in tariffs lowers the real natural rate and current inflation rate, Comin and Johnson (2020).
- This helps explains why inflation is decreasing in the US (and EU)

Effect of anticipated trade integration through FTA



Source: Comin and Johnson (2020)

Normative implications of fragmentation

$$i_t = i_t^* + \Gamma_\lambda \lambda_{Ht}^M + \Gamma_\xi \xi_t^1$$

- Optimal monetary policy cannot be characterized with a Taylor rule, and it should respond to anticipated trade shocks

- The wait and see approach is suboptimal!