EUROPEAN CENTRAL BANK

EUROSYSTEM

Trade Costs and Inflation Dynamics **Discussion**

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Disclaimer

The views expressed are mine and do not necessarily reflect those of the European Central Bank

This paper

Key questions

- What is the effect of trade costs on global inflation?
- Does this differ for intermediate vs. final goods?

Data

- Input-output tables (1995–2020) for 44 countries

Methodology

- Structural gravity (Armington) model → identify trade cost
- Panel local projections → impact of trade cost shocks on inflation
- Multi-country New Keynesian DSGE model with final and intermediate goods' trade
- Scenario analysis

This paper

Main findings

- Trade cost shocks are inflationary
- Final goods: sharp but short-lived inflationary spike
- Intermediate inputs: milder but more persistent pressures

Recent applications

- Trade costs major driver of 2021–23 inflation surge
- Inflation persistence reflected global supply frictions, not only demand

This paper

Nice paper!

- Relevant and timely analysis
- Multifaceted, consistent approach (empirics + model)
- Compelling findings

Two comments: focus on empirical link trade costs → inflation

- One set-up fits all?
- Exogeneity trade cost shock

Comment 1: One set-up fits all?

- **Trade costs** encapsulate all barriers to trade
  - Tariffs; non-tariff barriers (e.g. quota, embargo); transportation costs; supply-chain disruptions etc.
  - Determined by methodology of paper (trade flows → trade costs)

- Elasticity: +10 p.p. trade costs → +0.8 p.p. CPI inflation in first year
  (+0.3 intermediate; +0.5 final goods)

- **But does one set-up fits all?**

Comment 1: One set-up fits all?

Example: effect of different types of "trade cost shocks" on oil prices

Comment 1: One set-up fits all?

Example: effect of different types of "trade cost shocks" on oil prices

Do all types of trade cost shocks have the same inflation pass-through?

Comment 1: One set-up fits all?

Tariffs	Supply-chain disruptions	Embargo
Raise import prices, but trade continues	Import prices rise more persistently as supply chains are specialised (Grossman et al, 2024)	Imports halt abruptly, triggering sharp price spikes (Itskhoki & Ribakova, 2024)
Inflation: could be one-off price level shift (Schmitt-Grohé & Uribe, 2025)	Inflation: intermediate goods; major shocks can spill into core inflation	Inflation: large, abrupt, possibly non-linear and persistent
Example: US-China tariffs	Example: Covid-19	Example: EU/US embargo on Russian oil

Comment 1: One set-up fits all?

Possible angles to explore

- Could understand better what drives variation in trade costs
  - Cross-validate with external proxies
    - Tariffs (Furceri et al, 2018); sanction database (Yalcin et al, 2025), GVC bottleneck indices (Benigno et al, 2022), etc.
  - Analyse country-pair and sectoral variation
  - Validate with event studies

- Matters for scenario analysis and policy implications

Comment 2: Trade cost “shock”?

Exogeneity of trade cost shocks

- Critical for causal interpretation
- Structural model implies exogeneity, but not empirically tested
- Broad definition of “trade costs” raises risk of endogeneity

Comment 2: Trade cost “shock”?

An example

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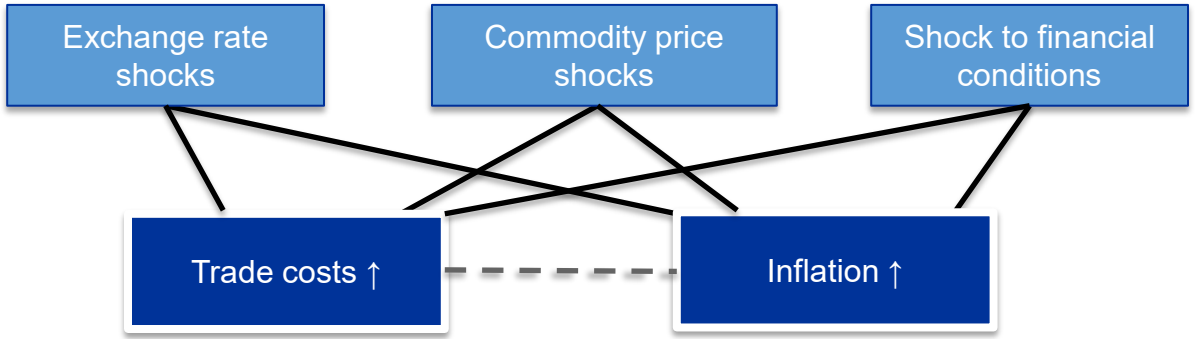
An example



- Trade costs and inflation: both respond to common shocks
  - Country fixed effects might only partially control for it
- Shocks considered part of trade costs? → blurs interpretation (cfr. comment 1)

Comment 2: Trade cost “shock”?

Possible angles to explore

- Strengthen identification of trade cost shocks
  - Use external instruments / instrumental local projections (Stock & Watson, 2018)
- Broaden controls (e.g. oil prices) – though data can be challenging
- Predictability of trade costs?
  - Test in bilateral setting (e.g. US–China) to ease data demands

Conclusion

Nice paper!

- Relevant topic with a neat, multifaceted approach
- Timely applications and clear policy relevance
- Sharper definition of trade cost shocks would help interpretation and policy insights
- Highly recommended read

Thank you