



27th Annual DNB Research Conference

The Macroeconomic Effects of Geopolitical Uncertainty

De Nederlandsche Bank

EUROSYSTEM

Are We Fragmented Yet? Measuring Geopolitical Fragmentation and Its Causal Effects

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Discussion by Lukas Hack

27th Annual DNB Research Conference

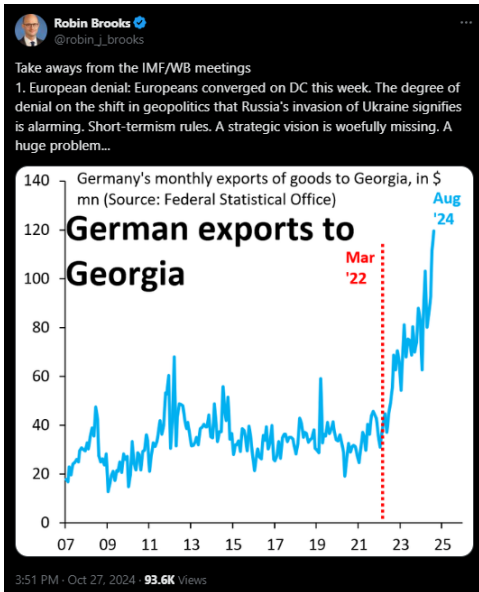
November 21, 2024

What do we want to measure? The role of inputs

- Authors argue that geopolitical fragmentation can be measured via
 - *Globalization encompasses the **interconnectedness and interdependence** of economic and political systems worldwide*
 - ***Policy** measures directly impact fragmentation*
 - ***Uncertainty** regarding trade policies, [...] energy, and concerns related to migration flows*
 - *Fragmentation is **political alignment***

- But why are the selected variables more suited than others?
 - e.g., measures of financial flows but no financial uncertainty, number of conflicts but no measure of defense spending,..
 - e.g., mix of de-facto (trade flows) vs. de-jure (number of trade restrictions). Why need both?


De-facto trade restrictions seems to be key..




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 - e.g., why do cultural aspect do not matter? Spread and repeal in Ikea, Fast-food, etc.?

Cultural aspects are part of the geopolitical game..






Sputnik India 
@Sputnik_India

⚡ Sanctions? No Problem! 😊

Instead of Coca Cola or Pepsi,  Russia's Econade Lemonade is being served to attendees of BRICS summit in Kazan.



11:23 AM · Oct 22, 2024 · **47.6K** Views

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- Suggestion: sharpen notion of fragmentation by stating what you are not measuring

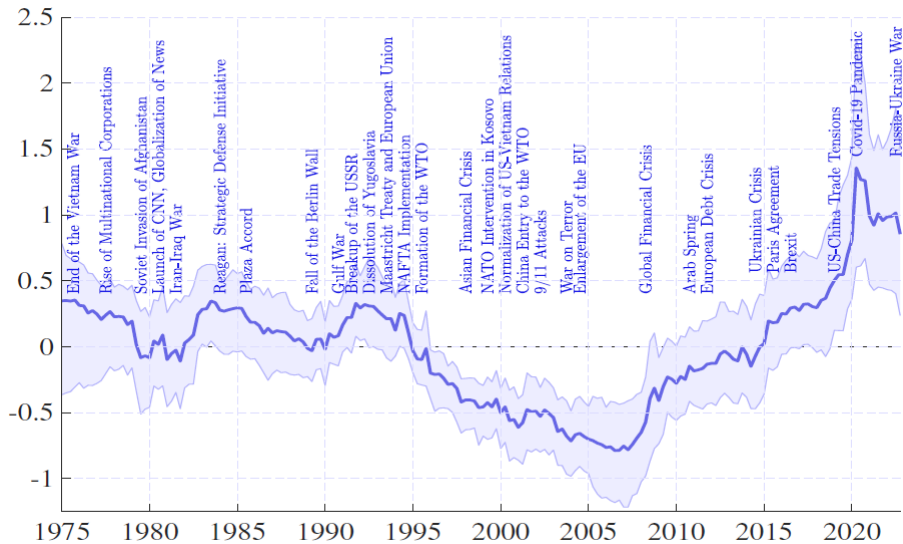
What do we want to measure? The role of trends

- Authors allow for a linear time trend in each variable $y_{i,t}$

$$y_{i,t} = a_{i,0} + a_{i,1}t + b_{i,t}f_t + u_{i,t}$$

- This gives stationary. But why should geopolitical fragmentation be stationary?

Are we really more fragmented than in the 70s and 80s?



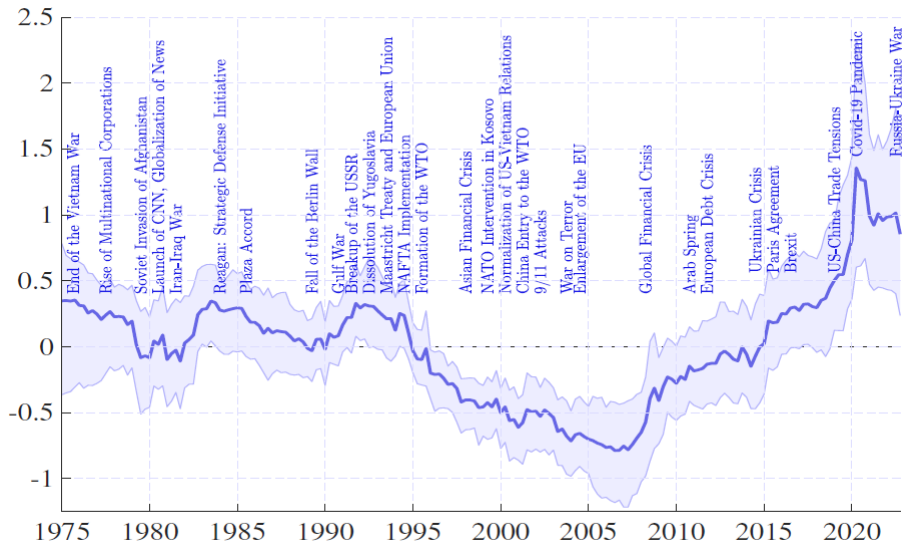
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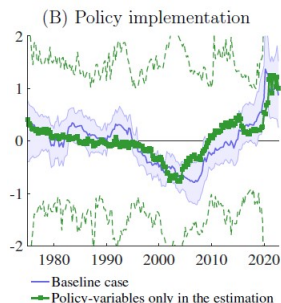
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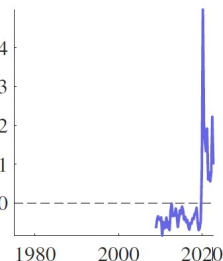
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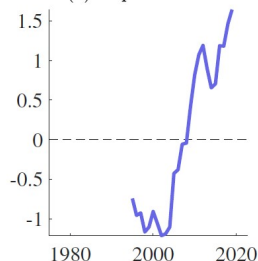
Fragmentation surge driven by policy-implementation/de-jure variables only available in second half of sample?



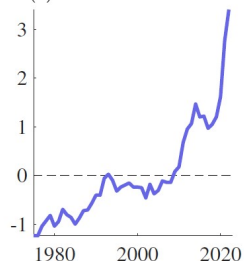
(6) Number of Trade Restrictions



(7) Capital Control

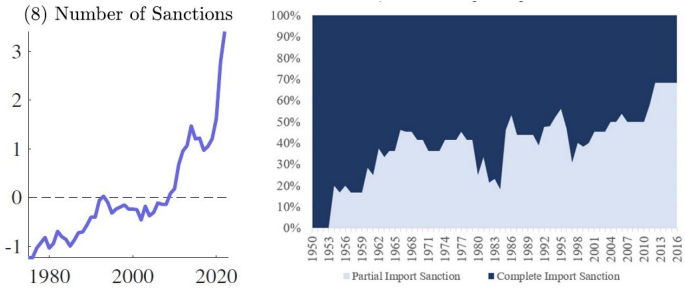


(8) Number of Sanctions



- Trade much more “restricted” in 70s/80s (raise of WTO)? Similar for capital flows?

Fragmentation surge driven by policy-implementation/de-jure variables only available in second half of sample?



- Number of sanctions wrong measure of strength of “economic wars” during 70s/80s?

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 - Fragmentation surge since 2015 driven by choice of indicators?
- Suggestion: be more explicit what you measure and what statements we can derive

Comparison with existing measures?

- Authors argue that their index is less arbitrary than using single time series or simple averages across multiple series. But what about measures of globalization?

Fragmentation = -Globalization

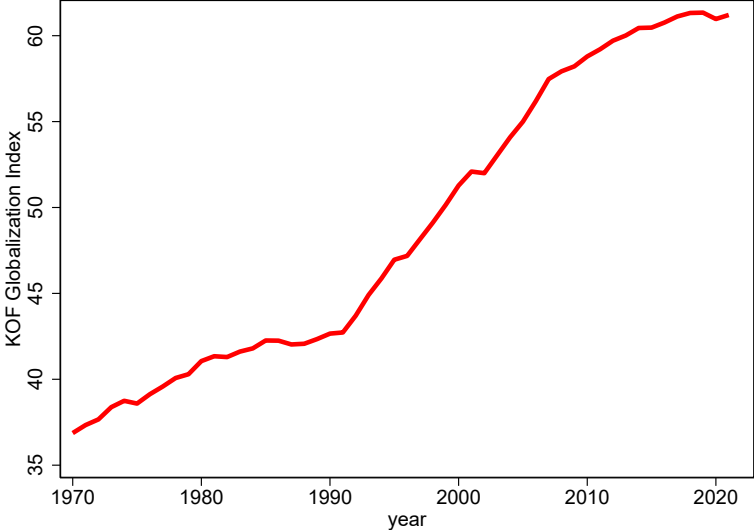
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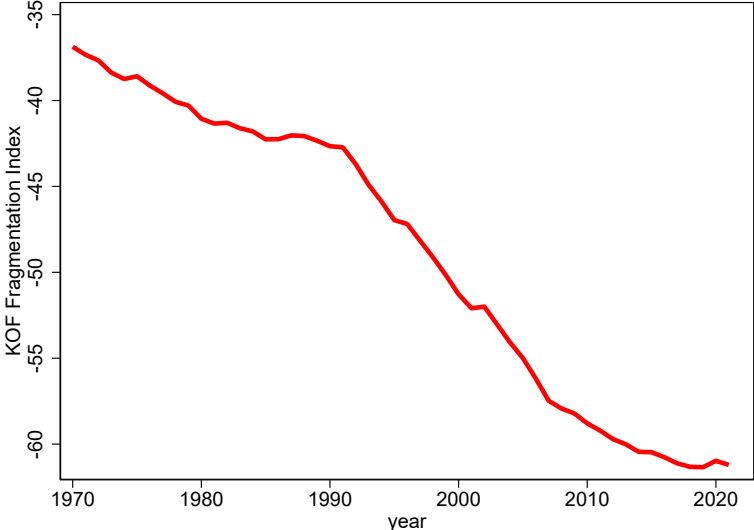
$$\textit{Fragmentation} = -\textit{Globalization}$$

- There are other composite indicators that measure this. E.g. Gygli et al. (2019): “The KOF globalisation index–revisited”
- Not published in leading econ journal but almost 2000 google scholar citations

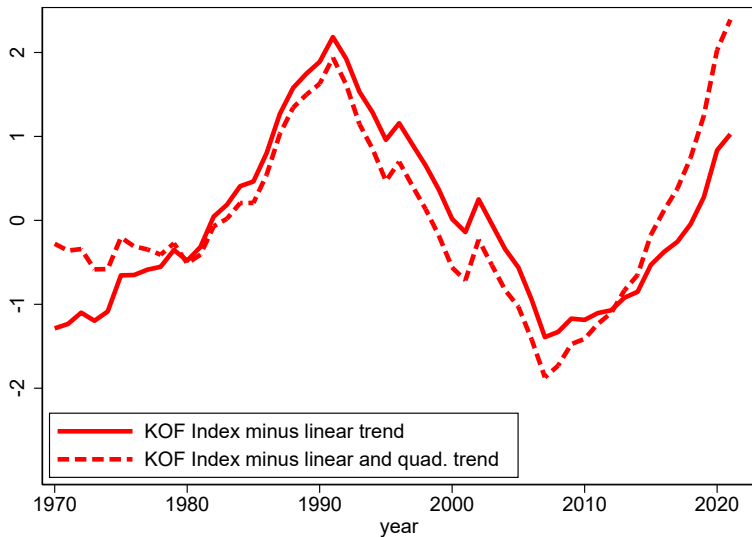
The KOF Globalization Index



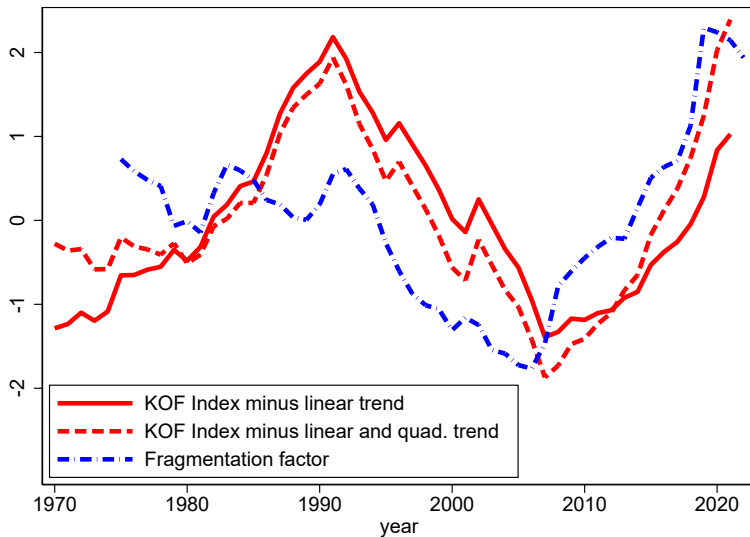
The KOF Fragmentation Index = - Globalization Index



The KOF Fragmentation Index after taking out trends



The KOF Fragmentation Index vs. Fragmentation factor



The KOF Fragmentation Index vs. Fragmentation factor

- Quick comparison

	KOF Fragmentation Index	Fragmentation factor
Frequency	annual	quarterly
Sub-indices	✓	✗
Cultural inputs	✓	✗
Approach	more expert-knowledge	more data-driven

- Note that there are also other Globalization indices
- Suggestion: Argue quarterly frequency and data-driven approach more valuable

Bottom line

- Extremely important topic and very nice measurement approach
- Need to define objective more clearly and argue why your approach gets you there