

FREE VIRTUAL | Data in Macro COURSE | Development

Lecture 7: International Trade Data Friday O3 May 2024

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Presentation Slides

Recording

Q: Does COMTRADE data cover digital goods and services?

A: Typically not. David will cover separate data sources for services in a minute — services trade typically is not tracked in COMTRADE, so you need bespoke datasets, such as the labour flows in Mathilde Munoz's work. The reason is that customs data are recorded at ports and then summed up.

Q: Do you know where can I find the service trade in R&D or Intellectual Property? I know under BOPS2010 there is one category called R&D and IP, but the data provided by OECD and UNCTAD is not in good quality for some countries.

A: Great question. Alternatives for flows in IP would be to use patent data (say, from PATSTAT) or citations by country, or firm-level data from the same firm operating in multiple countries (for instance, as used in Bilir and Morales 2020 "Innovation in the Global Firm"). A last option is to focus on one country with good data because of licensing requirements, such as Brazil which requires technology licensing (see de Souza 2023 "The Labor Market Consequences of Appropriate Technology").

Q: Also, follow up this question, there are two service classification system, BOPS2002 and BOPS2010, is there any way to make concordance between these two?

A: Either the OECD would have posted the change in classifications, or you / another academic would have to create this.

Q: For service trade data, we can get bilateral trade value from both export or import, then is export value more reliable or import value more reliable?

A: As with goods data, no clear right answer here — will depend on the data quality of the country + the incentive to report.

Q: Does accessing data through sources such as Panjiva, Datamyne, etc. satisfy data legality requirements for data policies such as by the AEA journals?

A: Not familiar with AEA policies specifically, but in most cases the customs data obtained are already public. For instance the US bill of lading data are publicly posted and Panjiva et al's contribution is to clean them up. For other countries, as long as the data are public or available via some Freedom of Information Act (or equivalent) they are fine to use.

Q: Is 2sls widely used in gravity model?

A: Mostly gravity models are just observational. But as David just pointed out, this can't help you get causation. For that yes, one needs methods like two stage least squares.

Q: Are there data sources for value-addition in exports? Or Is such data likely be sources only from firm surveys on inputs and outputs in specific country?

A: Good question. Typically, no: in global input-output tables such as the WIOD, we know VA content of *production* for each country-by-sector, but not of exports specifically. Johnson and Noguera (2012) is the canonical reference here. Some options for exports:

- 1) Some datasets specifically record "processing" trade, for instance China's customs data used to
- 2) Some datasets connect inputs to exports for a specific transaction, for instance in Bangladesh (see Cajal Grossi et al 2023 QJE "BUYERS' SOURCING STRATEGIES AND SUPPLIERS' MARKUPS IN BANGLADESHI GARMENTS")

See the slide "Global Value Chains and Trade Within The Firm".

Q: What are the six big puzzles that affect datasets in trading?

A: I think the reference is to this: https://scholar.harvard.edu/files/rogoff/files/nber2000.pdf. You might find it interesting to look at David's prior lecture on spatial frictions, which he is mentioning now: https://youtu.be/Bn9SATAblyE.

You might find a couple of other lectures in that prior series that would be interesting; e.g., the ones by Melanie Morten and Natalia Ramondo... https://steg.cepr.org/courses/virtual-course-key-concepts-macro-development.

Q: I am wondering has anyone explore the community detections in international trade? I find it very interesting implementing the social network to define country groups especially under the rising geopolitical risks.

A: There is work on the effects of community proximity on trade, both historically (Avner Greif 1993, 1994 on Maghribi traders) and somewhat more recently (Rauch and Trinidade 2002, "Ethnic Chinese Networks in International Trade"), but less with social networks.

One example w Facebook data is Bailey et al. 2020 "International Trade and Social Connectedness" (https://www.nber.org/papers/w26960).

Q: I'm interested in trying to test the smile-curve hypothesis at country level using EORA data, do you have any good recommendations for papers on this topic and within the context of methodologies to use?

A: Here is an example by Baldwin and Ito for various countries in Asia! https://onlinelibrary.wiley.com/doi/full/10.1111/caje.12555.

Q:Does the Input-Output table only cover data up to 2014? Can we use this data for more recent periods?

A: WIOD has 1965-2000 (historical) and 2000-2014. EORA is more updated (1990-2022 and improving!).

Q: "Made in China" products sold in the US are different from "Made in China" products sold in Africa. We know that the inputs used in these two products differ in some aspects, even though they were both produced in China. I want to know any implication of the inputs on the consumer's perception and wellbeing.

A: That's interesting. The mix of goods probably differs a lot. You could pursue this using the data David mentioned at the outset using fine level of disaggregation. But even within those categories China may be shipping lower quality goods to Africa. David may have ideas about how to address this using available data.

Q: If we can't have causation, what can we use to shape policy recommendations? You mentioned trade elasticity earlier, but I'm still not quite getting how that translates into concrete suggestions.

A: This class is about data. You're right that to make points that are relevant for policy once needs to make causal statements using a particular empirical methods like IV or a structural model.