

# Are Customs Records Consistent Across Countries?

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- International trade and Global Value Chains (GVCs) play a central role in the world economy.
- Most of GVCs involve multiple countries as well as within firms and arms length trade relationships.
- Studying GVCs at firm level requires cross-borders firm-to-firm transactions database.
- There is big literature that use these databases.

# This Paper

- Provides the first evaluation of how much we can trust across border firm-to-firm transaction.
- Evaluates the consistency/discrepancies of the data on additional dimensions beyond trade values by looking into firms and transactions links.
- This exercise is really hard to do and very valuable.
- Main takeaway:
  - Highlight that firm-to-firm transactions that involve names instead of tax ids have to be taken with caution.
  - They are very useful for certain questions but might not be for other questions.

# This Discussion

- External Validity
- IDs
- Transshipment
- Date
- Minor Comments

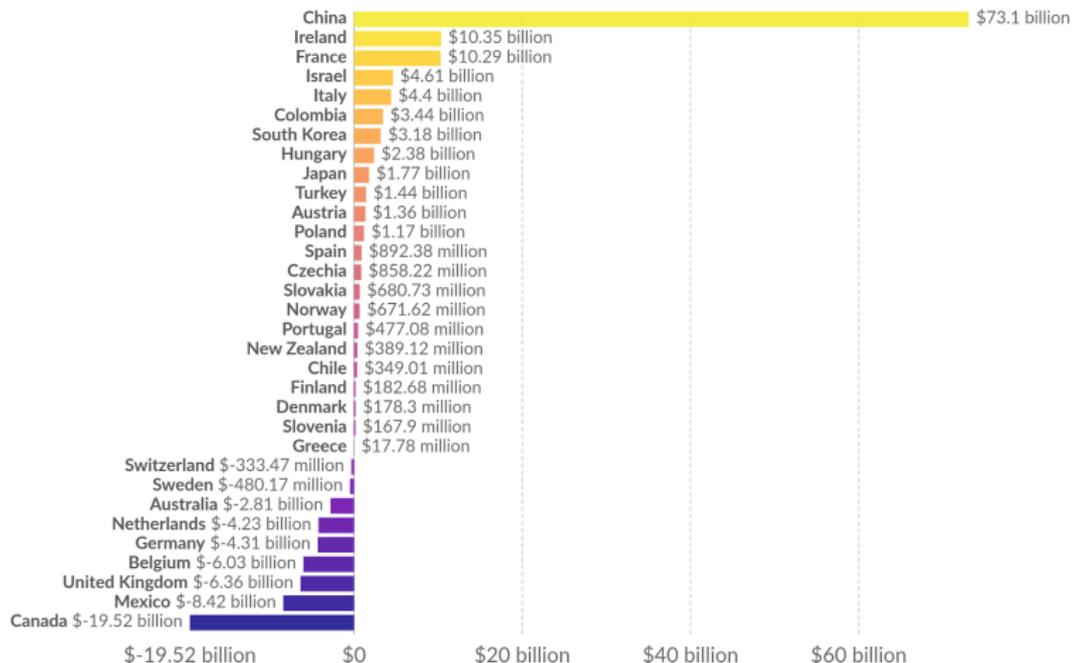
## External Validity

- Discrepancies for other countries/data sources beyond the case they study?  
  
⇒ Yes and Yes.
- Italy: Eurostat figures of the value of exported goods in 2015 are 10% higher than the merchandise trade figures published by the OECD.
- U.S.-Canada: According to IMF data, for example, the value of goods that Canada reports exporting to the US is almost \$20 billion more than the value of goods that the US reports importing from Canada in 2016.

# External Validity - More details on the U.S. trade

## Difference in the value of goods exported to and imported by the US, 2016

Shown are differences between the value of goods that the US reports importing from partner countries, and the value of goods that each partner country reports exporting to the US. For example, for China, the figure in the chart corresponds to "Value of merchandise imports in US from China" minus "Value of merchandise exports from China to the US".



## External Validity - Is there any special about the U.S.?

- Yes, firm IDs are special in the U.S.
- EIN:
  - Identifier for tax reporting purposes.
  - Firms can and often has several different such EINs.
  - BR (Census) only has EINs used for income and payroll tax filings.
  - Firm could use a different set of EINs to file merchandise trade shipments.
- Firms may file trade shipments using an identifier other than the EIN (or name) such as a foreign identifier or SSN.

## Extensions - IDs

- This requires an additional processing in the U.S. side to match EINs/names to stables ID over time.
- How much of these issues can be tracked to the multiple EINs?
  - Compare single unit vs multi-unit to explore this.
- Firms have complex multiple layers of ownership
  - Can exacerbate the multiplicity of EINs.
  - Makes harder to know which company of the conglomerate gets reported in each database.
  - Are we sure that countries are reporting the same company?
  - Use the bridge between Compustat-firmid to explore whether this problem is more acute for MNEs?

## Extensions - IDs

- The LFTTD collects data on the ultimate consignee since 2007 for import transactions.
- Each importer record has two EIN: importer and ultimate consignee.
  - 20% of transactions importer  $\neq$  ultimate consignee
  - Who is reported in the other country transaction?
- How many of missing links can be “recover” by looking into the differences between importer and ultimate consignee

## Extensions - Transshipment

- Use port of entry to test for this hypothesis:
  - It could be the case that trade with the west coast of the U.S. is more be affected by the transshipment?
  - Do you have access to port of destination/port of origin in the Colombia data to check this?
- Mode of transportation:
  - Do the discrepancies depend on the mode of transportation?
  - Transshipments are more common for maritime trade.

## Extensions - Date

- Date difference across databases depend on the mode of transportation?
  - One day by plane vs potentially several days by vessel.
- Shipments waiting on the warehouses can affect the time linkage?
  - How much can be recover by being more flexible in the time restriction?

## Minor Comments

- Why drop agricultural products/minerals?
- Cutoff is different for exports and imports in the U.S.
- Transactions: what are the consequences of many-to-many matching at the transaction level?