



GLOBALIZATION AND DATA NEEDS

Next steps in TiVA & related projects to
improve measures of global value chains

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Overview

- Summary of OECD-WTO TiVA Project
 - Aims, concepts, methods
- First results
 - Database with indicators
 - Dissemination
- Future work (data needs)
 - Improvements in data quality
 - New variables (employment, income, etc)
 - Accounting for heterogeneity (TEC and beyond)



Trade in Value Added

- Growing fragmentation of international production means that only using *gross* trade flows gives an incomplete (misleading) picture of globalization
- TiVA aims to increase our understanding of the process of globalization by providing insights into the value added created by each country in the production of goods and services that are traded and consumed worldwide
 - How much value added is created by trade – directly *and* indirectly – and where?
 - Role of services in international trade
 - Better understanding of risks (in GVCs) and impact of policy measures
- TiVA's work horse: global Input Output table
 - Building e.g. on the work of WIOD



Creating a global IO table

- “Macro-Data Linking” of national I-O tables, national accounts and trade statistics;
- Challenges:
 - General: data availability (timeliness (of IO), detailed breakdown (of trade by country/product))
 - Trade: Global trade matrix should be:
 - perfectly symmetrical (deal with asymmetries across reporters, CIF/FOB)
 - Trade matrix should be complete (no missing values)
 - Completely consistent with trade data in Supply Use tables
 - Be converted to end-use categories (-> deal with confidential flows, re-exports, waste/scrap)
- Hence: creation of Global IO requires (a lot of) assumptions, estimations, and optimization.



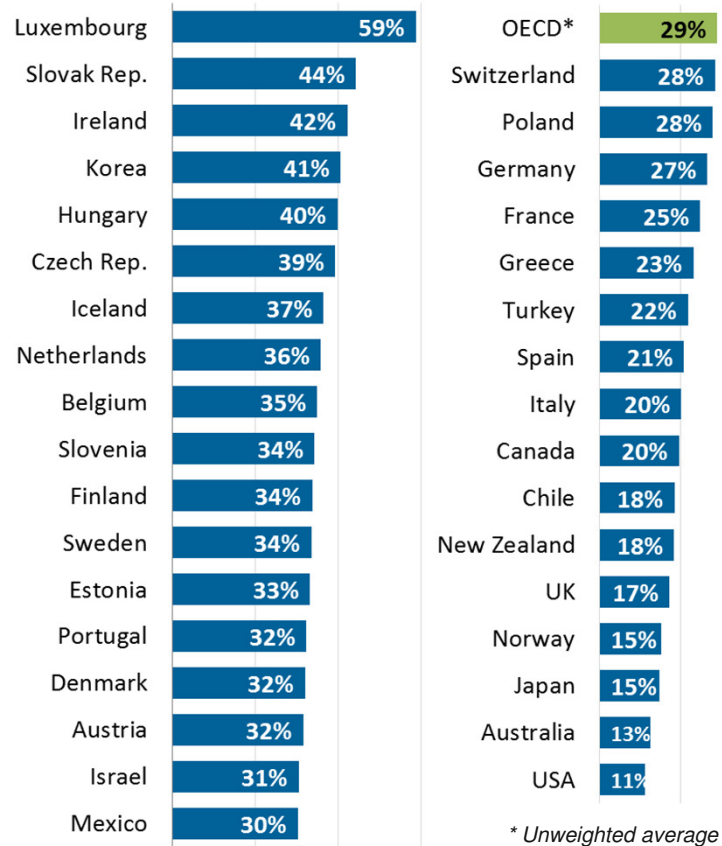
Trade in Value Added database

- The joint OECD-WTO TiVA database includes 38 indicators, e.g.
 - Export value divided by domestically (direct, indirect, re-imported) and foreign produced value added
 - Domestic value added embodied in foreign final demand (% GDP)
 - Foreign VA embodied in domestic final demand (% GDP)
 - Services VA embodied in exports
- First statistics were released in January 2013
 - **40** economies, **18** industries, years **2005/2008/2009**
- An update was released in May 2013
 - **57** economies, **18** industries, + years **1995 / 2000**
- Conclusions from TiVA data served as major input to various high level policy meetings (e.g. OECD MCM; Trade Committee; and G20)

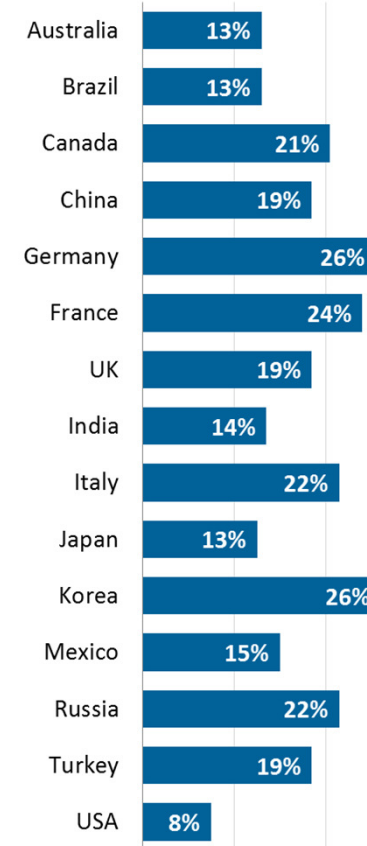


Example of TiVA indicators

Foreign Value Added share of Gross Exports



Jobs sustained by foreign final demand (% of total employment)





Dissemination

- Dissemination
 - TiVA data are available on OECD.stat
 - Background information, including country notes and methodology available on dedicated web page www.oecd.org/trade/valueadded
 - Interactive visualization available on OECD Data Lab
- Upcoming activities
 - TiVA workshop – 5-6 December
 - Next release April/May 2014 (incl. data on jobs, and more countries)



TiVA = work in progress

- Results are *estimates*
 - But they are robust enough to already begin to highlight the need for policies to account for GVCs
- But perhaps more importantly, they highlight the importance of capacity building and better statistics:
 - Improving input data quality is essential
 - Capitalize on existing work on micro data linking (e.g. TEC, FATS) to improve estimates and develop new, ‘richer’ indicators on GVCs (how, where, who)



Future work: improve input data quality

- Reducing + dealing with asymmetries
- Data for better CIF/FOB adjustments
- More detailed services trade data
- Trade harmonized with National Accounts & IO/SU data
- More detail on re-exports
- Harmonize treatment of confidential trade (e.g. at the HS *chapter* level) for better allocation to industry and end-use
- Better identify used/second hand goods (e.g. capital goods like aircraft, ships), waste/scrap (e.g. PCs) (consequences for VA)
- Import flow matrices (imports by country and industry) (requires Micro Data Linking)



Future work: extensions beyond VA

- FDI / Income (e.g., some value added may not ‘stick’)
 - repatriated earnings, compensation for knowledge based assets (-> tax environment)
 - Flows for use of IPPs often recorded as property income and not trade in services
 - May be substantial: in many countries, 20-30% of total VA in business sector is generated by foreign owned firms
 - Improvements in FATS data -> Value added, employment (MSITS CG)
- Jobs, including skills (e.g., how much/which type of employment is sustained by foreign final demand)
 - NB: requires jobs data consistent with value added data (also for productivity estimates); additional (good quality) information on skill levels
- Timely indicators
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Future work: heterogeneity

- Current work assumes homogeneity at industry level
- Virtually all variables that are crucial for GVC analysis differ substantially between trading and non-trading firms, foreign and domestically owned firms, and firms with and without foreign subsidiaries
- TEC and beyond: Linking trade registers, business registers (including UCI) *and SBS*
- To produce SBS variables broken down by industry *and* e.g. trading (export, import, two-way) and non-trading firms
- NB: not just for TiVA, but extremely useful data in their own right for policy makers



Summary – What's needed

- Build global IO based on SU tables
- Better gross trade data (G+S)
- Address income (ownership, FATS) and jobs (employment, skills)
- New indicators based on existing work on micro data linking



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