TRADE IN VALUE ADDED

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Increasing international fragmentation of production…

Explosion of trade in intermediates as firms specialise in stages (tasks) of production

Conventional, ‘gross’ trade statistics do not fully capture this fragmentation, creating misleading perceptions and imperfect policies:

- Export driven growth strategies may target the wrong sectors or trading partners;
- protectionist policies can hurt domestic upstream industries;
- imperfect assessments of systemic (macro-economic) risks for supply-chains;...
...requires a new statistical response: TiVA

[no direct relationship]

[in value added terms, there is a direct relationship between A and C]
From a ‘gross trade’ to a TiVA perspective

• **TiVA** aims to increase our understanding of the process of globalization by providing **insights** into the **value added** created by **each country and industry** 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?
  – What is the (indirect) role of services in international trade?
  – What are the risks (in GVCs) and impacts of policy measures
  – How much is our economy/industry dependent upon foreign demand?

• TiVA’s work horse: **Inter-Country Input-Output Table** (ICIO), tracing input-output (GVC) relationships across industries AND countries
  – Constructed by combining **national SUTs** and other national accounts statistics with international trade in goods and services statistics
SUTs are a core input for TiVA indicators

In combination with bilateral trade statistics, **SUTs are the main building blocks**, for constructing Inter-Country Supply and Use tables (and the ICIO), from which TiVA indicators can be derived.

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<thead>
<tr>
<th>Country A</th>
<th>Country B</th>
<th>Country C</th>
<th>Final Demand</th>
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<tbody>
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**National Supply & Use (SUTs) and/or Input-Output tables (IOTs)**

**Bilateral trade statistics in goods and services**

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**Inter-Country Input-Output (ICIO) table**

- **Taxes less subsidies on products**
- **Cif-fob adjustments**
- **Value added**
  - Labour compensation
  - Operating surplus
  - Taxes less subsidies on production
- **Output**

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**New perspectives for trade analysis and policy**
TIVA: WHAT DOES IT TELL US?
TiVA highlights: growing export intensity of production…

Exported domestic value added as % of GDP
...even if in not all countries the import content of exports has
returned to pre-crisis levels, partly also reflecting domestic upgrading
... meaning protectionism can be counter-productive

Imports are often embodied in exports

Intermediate imports embodied in exports as % of total intermediate imports, 2014
(upstream) services providers play an important role in GVCs…

Services account for more than half of the value added embodied in exports

Services value added as a % of exports, 2014
Smaller surplus with US, smaller deficits with Asian markets

Gross and Value Added Trade Balances - 2014
Foreign value added content of domestic consumption by country by source region, 2014
9% of UK value added (‘GDP’) is dependent on EU27 final demand (vice versa: 2%) – and in some industries this share is even higher.

A further 2.5% of UK GDP is dependent on exports via EU27 countries’ to serve markets outside the EU.
BEYOND VALUE ADDED
Beyond TiVA: trade, investment and inclusive globalisation

• TiVA and its underpinning ICIO has already been used to shed new light on the relationships between trade, production and consumption.

But more is possible – and necessary!

• Examples of policy questions regarding GVCs:
  – What is the role of SMEs, MNEs (international investment) and other firms in countries, and in countries position in Global Value Chains?
  – What are the social consequences (employment: how many jobs are involved in GVCs, how to achieve inclusive globalisation)
  – What are the consequences of GVCs for the natural environment (e.g. emissions and pollution related to GVCs)
  – And what about taxes?

Extended supply and use tables are the core statistical ‘tool’ to provide answers to these questions by integrating disparate statistics. They thereby also provide important scope for improved and coherent accounts, nationally AND – via global (extended) Supply and Use tables – internationally.
Example (1): SMEs’ contribution to exports in gross and value-added terms

Role of SMEs in international trade and GVCs greater than observed in gross export data alone

Value added exports of SMEs = Direct value added in SMEs’ exports + value added in inputs produced by SMEs and used by exporting firms
Example (2): Domestic MNEs are a key channel to foreign markets for non-MNEs*

*Non-MNEs: domestic enterprises without foreign affiliates
Example (3): Up to 20% of employment at non-trading enterprises is sustained by foreign final demand.

*Share of employment that is embodied in exports, by firm type, 2013*

- **Denmark**
  - Exporters
  - Importers
  - Two-way traders
  - Non-Traders
- **Finland**
  - Exporters
  - Importers
  - Two-way traders
  - Non-Traders
- **Norway**
  - Exporters
  - Importers
  - Two-way traders
  - Non-Traders
- **Sweden**
  - Exporters
  - Importers
  - Two-way traders
  - Non-Traders

**Legend:**
- Direct exports
- Indirect exports
Institutionalising and mainstreaming TiVA

• **Improved statistical foundations**
  – Continued expansion of *official collection* of national Supply-Use Tables (OECD and non-OECD countries)
  – Development the *tools and mechanisms* to ensure consistency between regional TiVA initiatives and OECD-WTO TiVA
    • Balanced international merchandise and services trade statistics
    • Regional-Global TiVA Steering Group, to coordinate activities and develop a joint Handbook for a globally recognised, jointly developed, single measure of TiVA

• **Increasing quality and country coverage**
  – *Bilateral collaboration* (based on country requests)
  – Via *regional partnerships* (e.g. with Eurostat (Figaro), UNESCWA, UNECA, APEC (APEC-TiVA initiative), CEFTA, UNECLAC,...)
Development of statistical infrastructure for the ‘beyond TiVA’ agenda

- CSSP Expert Group on Extended SUTs
- Support for microdata linking:
  - OECD Handbook on Linking Trade and Business Statistics (in progress)

- Improved statistics on the Trade-Investment nexus
  - Started construction of an OECD database on multinational enterprises
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See also:
http://oe.cd/tiva
http://oe.cd/tiva-nowcast