Transport and GVC connectivity: Evidence from the TiVA database

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27 November 2017
Transport services as a means to facilitate economic transactions

- Efficient and cost-effective transport services are vital for international production sharing
- Components and intermediate goods cross national borders multiple times along a value chain
- Nominal differences in transport and logistics costs translate into sizable differences
- Access to cost-efficient transport services could ultimately determine competitiveness
- Ability to meet requirements for timely production and delivery is key
Evolution of transport services: Evidence from the TiVA database

• Following analysis presents indicators from the TiVA database on three country groupings (developed, developing and Arab countries) to:
  • Assess the exports of transport and storage services in both value-added and gross terms
  • Gauge the extent to which transport and storage services contribute to the exports of partners
  • Though imperfect, this also provides a measure of the extent to which countries are involved in production sharing
Evolution of measurements of trade

- Conventional trade statistics do not accurately reflect activity along modern value and supply chains
  - trade flows measured in gross terms
  - true extent of services’ contribution not captured
- The Trade in Value-Added (TiVA) initiative
  - an approach linking national I-O tables with bilateral trade statistics
  - allows tracking the flows of value added
  - provides broad insights into the nature and impact of economic globalization and international product sharing
A simple example providing the motivation behind the TiVA initiative
TiVA Database

- indicators for 63 economies covering OECD, EU28, G20, most East and South-East Asian economies and some South American countries
- Covers 16 manufacturing and 14 services sectors
- ESCWA has partnered with the OECD to integrate Tunisia and Morocco in the database in 2016
- ESCWA collaborates with the OECD to integrate more Arab countries
The value-added share of transport and storage services in selected economies

Source: ESCWA calculations based on data from the OECD-WTO TiVA database, December 2016 release.
Exports of transport and storage services in developed economies

Panel A: Gross transport and storage exports as a share of total domestic value added

Panel B: The exports of transport and storage value added as a share of total domestic value added

Source: ESCWA calculations based on data from the OECD-WTO TiVA database, December 2016 release.
Exports of transport and storage services in developing economies

Panel A: Gross transport and storage exports as a share of total domestic value added

Panel B: The exports of transport and storage value added as a share of total domestic value added

Source: ESCWA calculations based on data from the OECD-WTO TiVA database, December 2016 release.
Exports of transport and storage services in Arab countries

Panel A: Gross transport and storage exports as a share of total domestic value added

Panel B: The exports of transport and storage value added as a share of total domestic value added

Source: ESCWA calculations based on data from the OECD-WTO TiVA database, December 2016 release.
Transport and storage value-added content originated in the selected developed economies in the exports of partner economies.
Transport and storage value-added content originated in the selected developing economies in the exports of partner economies.

Source: ESCWA calculations based on data from the OECD-WTO TiVA database, December 2016 release.
Transport and storage value-added content originated in the Arab countries in the exports of partner economies

Source: ESCWA calculations based on data from the OECD-WTO TiVA database, December 2016 release.
Thank you