Mapping Global Value Chains

Scoping paper
DSTI/IND/WPGI(2011)3
TAD/TC/WP(2011)11

Working Party on Globalisation of Industry – 19 May 2011
Background: the fragmentation of production

• The second “unbundling” (Baldwin, 2006)
  – First unbundling (1850-1914 / 1960s to present): separation of production and consumption
  – Second unbundling (from mid-1980s): separation of production in different stages (geographically and organisationally)

• Causes:
  – Reduction of trade costs (container, Internet...) ... but also services trade liberalisation
  – Changing global demand structures (emerging economies)

• Consequence: New firm strategies of vertical specialisation
Global value chains analysis

- The “commodity chain” (Hopkins and Wallerstein, 1977)
- The “global commodity chain” (Gereffi, 1994)

- The “global value chain” (Gereffi, Humphreys and Sturgeon, 2005)
- “Global production networks” (Coe and Hess, 2007)
Policy relevance

• Competitiveness, growth and development: How economies can become more competitive? How can countries capture value in GVCs?
• Market access and trade policy: Adjustment of current trade policies to new firm strategies. To what extent trade barriers hurt domestic producers in the context of GVCs? What is the cost of protectionist policies when accounting for trade in intermediates and foreign investment?
• Trade and employment: what is the impact of GVCs on labour markets? How can competitive imports boost domestic jobs creation?
• Macro-economic analysis: what is the role of GVCs in the transmission of macro-economic shocks? What are the drivers of export demand in the context of global production networks?

Mapping GVCs is the first step to answer such questions.
• 3 objectives
  – Develop new methodologies to analyze international production networks
  – Empirical analysis of key industries (manufacturing and services)
  – Policy relevant analysis by identifying the role of specific countries in value chains
Methodology (1)

• Ownership links:
  – Mapping based on ownership links in OECD ORBIS database
  – On-going work in STD on the identification of international and domestic business groups

• Limitations:
  – Coverage of ownership information in ORBIS
  – Only vertical integration (same ownership)
• Vertical trade in intermediate goods and services: combining trade and input-output data
  – Identification of vertical links using OECD input-output tables and more disaggregated national tables when available
  – Vertical links are then used to map flows of intermediate goods and services (trade data)
  – Work related to current efforts for the measurement of trade in value-added terms

• Limitations:
  – Industry are quite aggregated in input-output data
  – Issues when matching trade and I/O data (different classifications)
• “Visualisation” of specific GVCs; “everyone talks about them, but no-one sees them”

• Estimates of trade flows involved

• Characterization of the role of specific countries:
  – Share of each country in terms of output, VA, trade and employment
  – Position of the country in the GVC:
    • weighted index based on the degree of processing
    • calculation of average propagation lengths (Dietzenbacher and Romero, 2007).
• “Complementary micro-level studies: more insights on the role of (emerging) economies at the industry or firm-level.

INPUT NEEDED FROM COUNTRIES
• Technical report providing analytical tools, data and illustrative examples to be used in other OECD studies addressed to a broader audience.

• First results by December 2011. The study should be finalized in Q2 2012.