Mapping Global Value Chains

Sébastien Miroudot
Koen De Backer
OECD
Why mapping GVCs is important

1. Trade policy
2. Trade and employment
3. National competitiveness and growth
4. Moving up the value chain and innovation
5. Global systemic risk
A number of indicators

• Participation in GVCs: to what extent are countries participating in GVCs

• Length of GVCs: how many production stages in GVCs

• Position of countries in GVCs: where are countries positioned in GVCs
A number of indicators

- Participation in GVCs:
  - Import content (or foreign VA content) of exports
  - GVC participation index: imports and exports of inputs used in third countries

- Length of GVCs:
  - Average propagation length (APLs)
  - Index of the number of production stages

- Position of countries in GVCs:
  - VA as a percentage of gross output
  - Distance to final demand index
New data available at OECD

- Bilateral Trade Database by Industry and by End-Use (BTDIxE)
- OECD inter-country input-output tables
- OECD ORBIS firm-level data

- Global view
Some stylised findings

1. Increasing importance of GVCs

2. Larger versus smaller countries

3. Not only Asia, but also NAFTA and EU

4. Emerging economies moving up the value chain
Average length of GVCs (2005)

Source: OECD ICIO model, indicator based on Fally (2011)
Length of GVCs, by industry (2005)

Source: OECD ICIO model, indicator based on Fally (2011)
GVC participation and distance to final demand: motor vehicle industry

Source: OECD ICIO model, indicator based on Koopman et al. (2011)
Trade network of intermediate inputs: motor vehicle industry

Source: OECD BTDIxE database
GVC participation and distance to final demand: computer services

Distance to final demand (left)  GVC participation index (right)
Latin America in GVCs: Argentina

![Graph showing participation and distance to final demand for various sectors in Argentina. The x-axis represents different sectors such as Agriculture, Mining and quarrying, Food, Textile, Wood, Paper, Fuel, Chemicals, etc., while the y-axis represents percentages up to 100%. The graph is color-coded to indicate participation and distance to final demand.]
Latin America in GVCs: Mexico

Distance to final demand

Participation