

---

# Trade in Value-Added

---

Ronald Jansen

Chief of the Trade Statistics Branch

United Nations Statistics Division / DESA

E-mail: [Jansen1@un.org](mailto:Jansen1@un.org)

---

## What is Trade in Value-Added?

The world is becoming increasingly interconnected and goods and services that were once produced in their entirety in a single country are now commonly produced as part of a global production chain, driven by technological progress, cost, access to resources and markets and trade policy reforms.

This *fragmentation of production* has meant that traditional measures of trade that record **gross** flows of goods and services every time they cross borders may present an inaccurate picture of the importance of trade to economic growth and employment and also of the structural nature of bilateral trade balances.

---

---

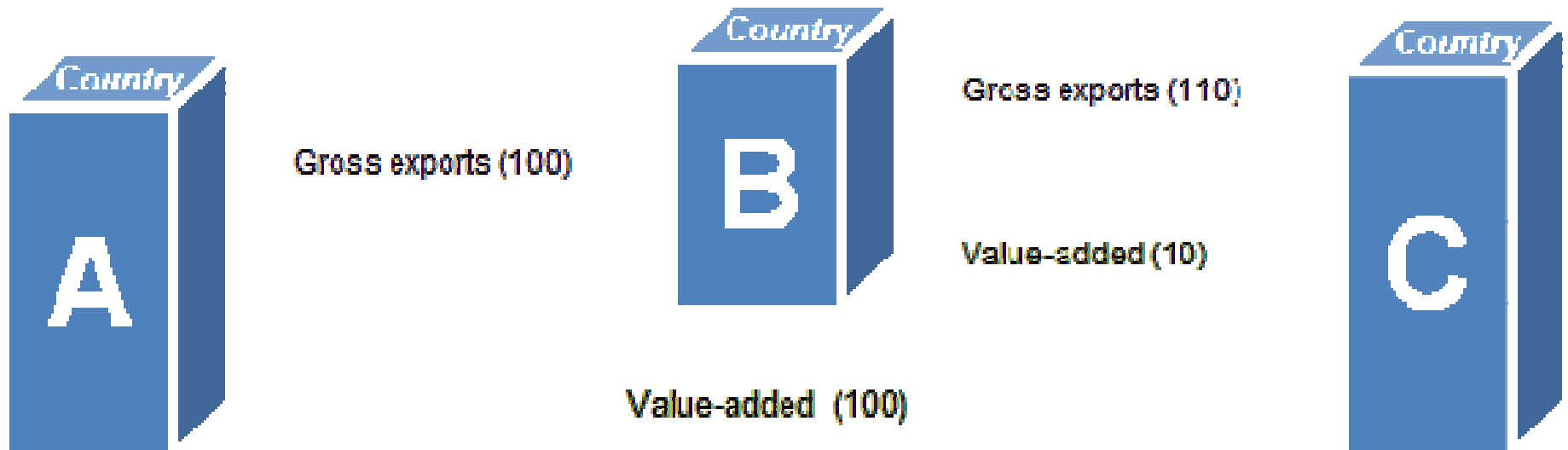
## What is Trade in Value-Added?

The **Trade in Value-Added** initiative is an attempt to account for the *double counting* implicit in current gross flows of trade, and instead measure flows related to the **value** that is **added** (labour compensation, taxes and profits) by a country in the production of any good or service that is exported.

---

---

# What is Trade in Value-Added?



---

# Why is it important?

## **Trade, growth and employment:**

While there are concerns that imports threaten domestic jobs, the reality is that jobs are increasingly created as part of global value chains. Trade flows in value-added terms indicate where jobs are created and highlight the benefits of trade for all economies involved in the value chain.

Interdependencies within global value chains are key to explaining the competitiveness of countries and the productivity gains that capitalise on these dependencies.

---

---

# Why is it important?

## **Global imbalances:**

With respect to a country's overall trade surplus or deficit with the rest of the world, measures based on gross trade flows and value-added measures are consistent, but measures of bilateral trade, based on gross concepts, can present a misleading picture of who ultimately benefits from the trade and exaggerate the importance of producing countries at the end of value chains. Value-added measures of bilateral trade better reflect who benefits, both in monetary terms but also, by extension, employment terms.

---

---

# Why is it important?

## **Trade disputes:**

Conventional measures therefore may create a risk of protectionist responses that target those countries at the end of global value chains, on the basis of an inaccurate perception of the origin of trade imbalances. Indeed ‘beggar thy neighbour’ strategies can turn out to be ‘beggar thyself’ miscalculations. Returning to the schematic above, if C exported goods worth 90 say to A, which in turn used these to produce its 100 of exports, policies initiated by C in response to a deficit with B, would have their greatest impact on the sector in C producing intermediate goods for A.

---

---

## Why is it important?

### **Managing macro-economic shocks:**

The 2008-2009 financial crisis was characterised by a synchronised trade collapse in all economies, as the effects of a drop in demand fed through to countries located upstream in the global value chain. A better understanding of value-added trade flows would provide tools for policymakers to identify the transmission of macro-economic shocks and adopt the right policy responses.

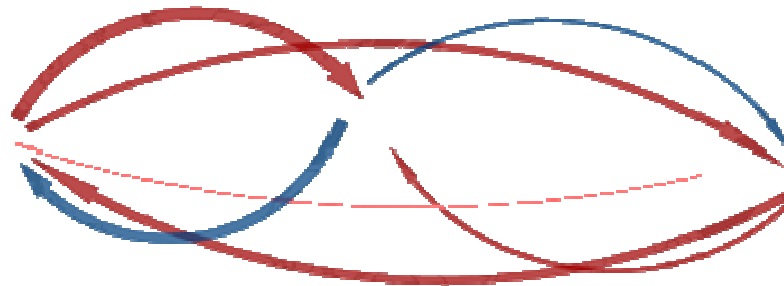
---



---

# Does this matter in practice?

**Figure 1: Exports (of domestic value-added and gross) between major regions, 1995**



Domestic value added shares 80% or more

Domestic value added shares between 80-90%

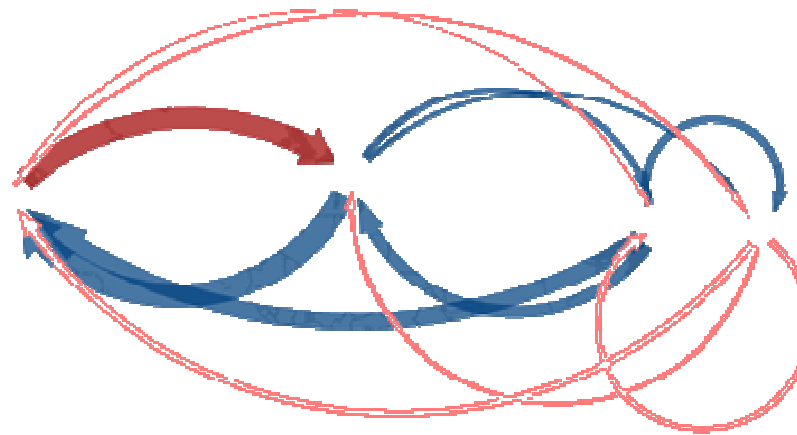


Domestic value added shares 80% or less

---

# Does this matter in practice?

**Figure 2: Exports (of domestic value-added and gross) between major regions, 2005**



Domestic value added shares 80% or more

Domestic value added shares between 50-80%



Domestic value added shares 50% or less

# Does this matter in practice?

Figure 3: Motor vehicles in Germany, 2005 - direct domestic and imported content: Gross

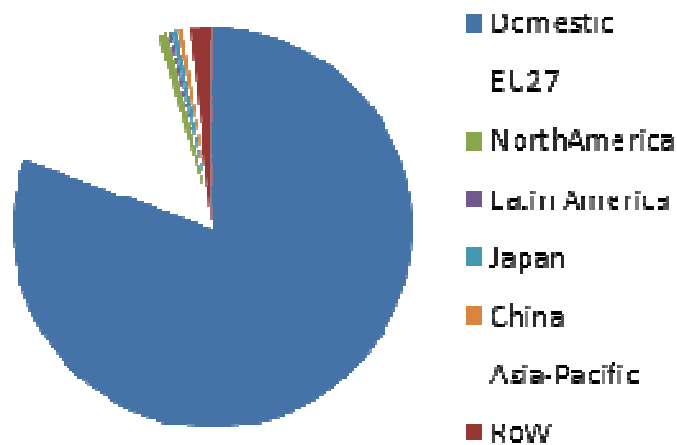
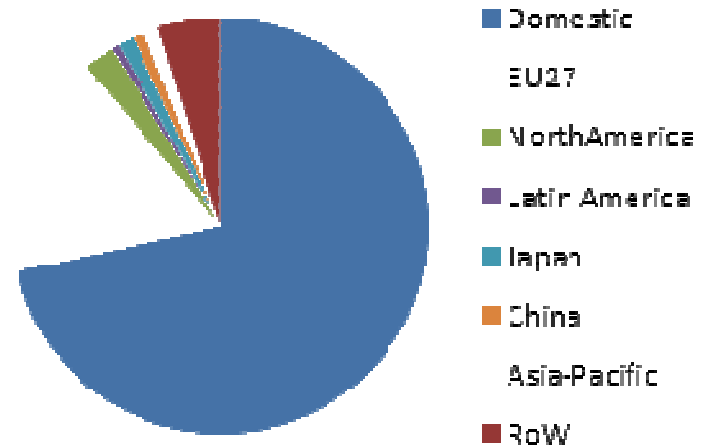


Figure 4: Motor vehicles in Germany, 2005 - domestic and imported content: Value-added



# Does this matter in practice?

Figure 5: Computers in China, 2005 - direct domestic and imported content - Gross

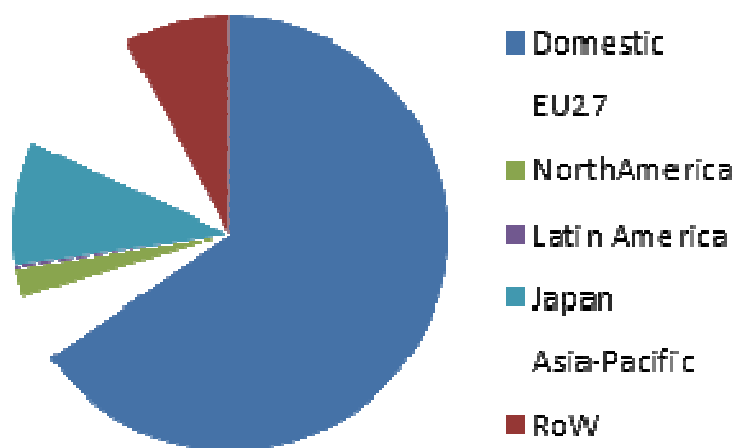
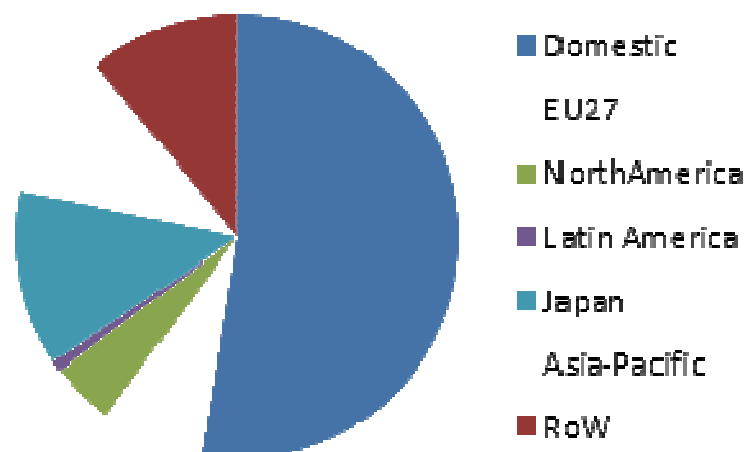
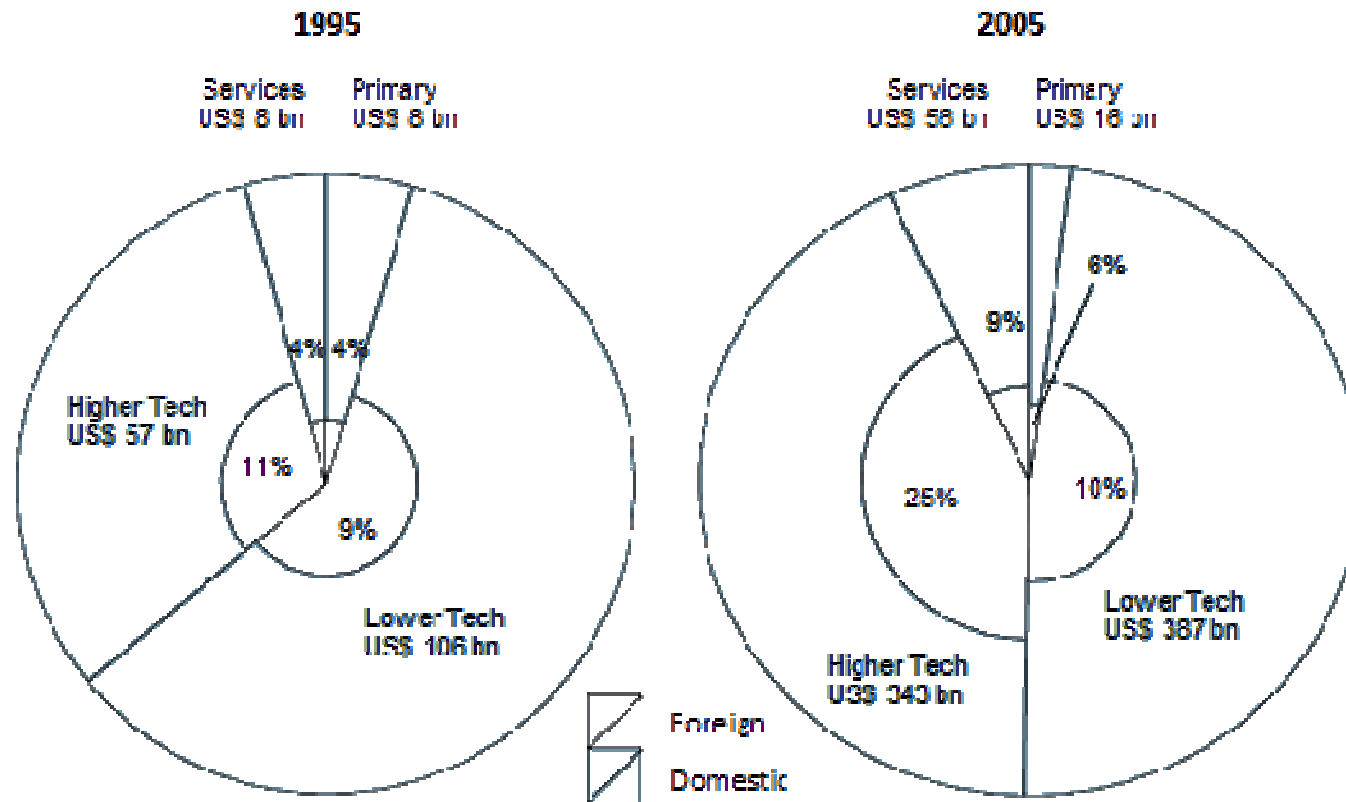


Figure 6: Computers in China, 2005 - domestic and imported content - value-added



# Does this matter in practice?

Figure 7. Foreign content share of China's exports by broad industry category



---

# What needs to be done?

It will require the development of a **new statistical model** that is able to reflect global interdependencies in production

- **National input-output tables** are necessary to track domestic value-added flows
  - To fully account for value-added flows a **global input-output table** is needed
  - From global I-O table → construct **measures of trade in value-added**
-