



Trade in Value Added

International trade – past, present, future

Alpbach Economic Symposium

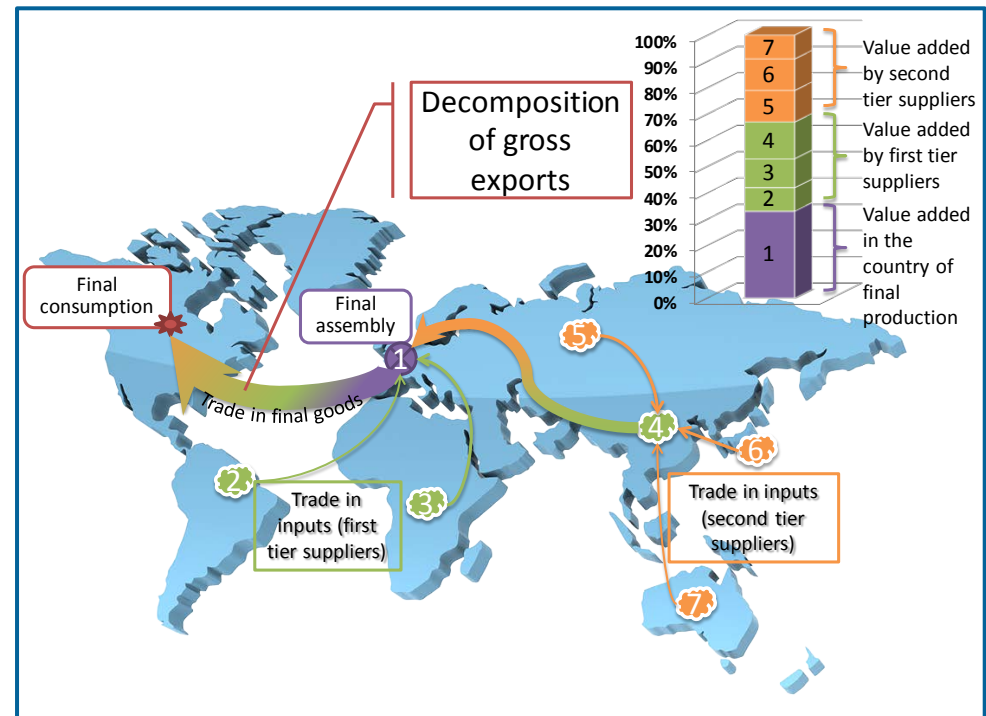
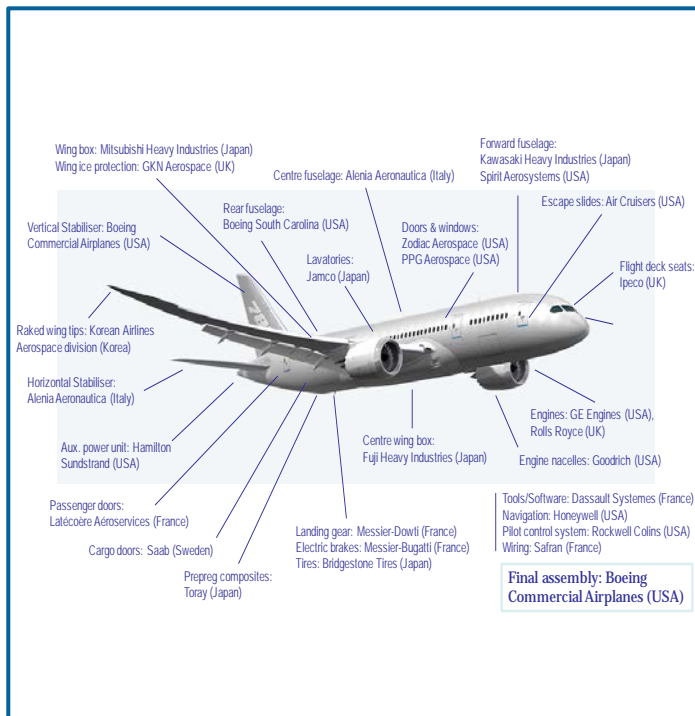
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Increasing international fragmentation of production

The past decades have witnessed an explosion of trade in intermediates as firms specialise in stages (tasks) of production...



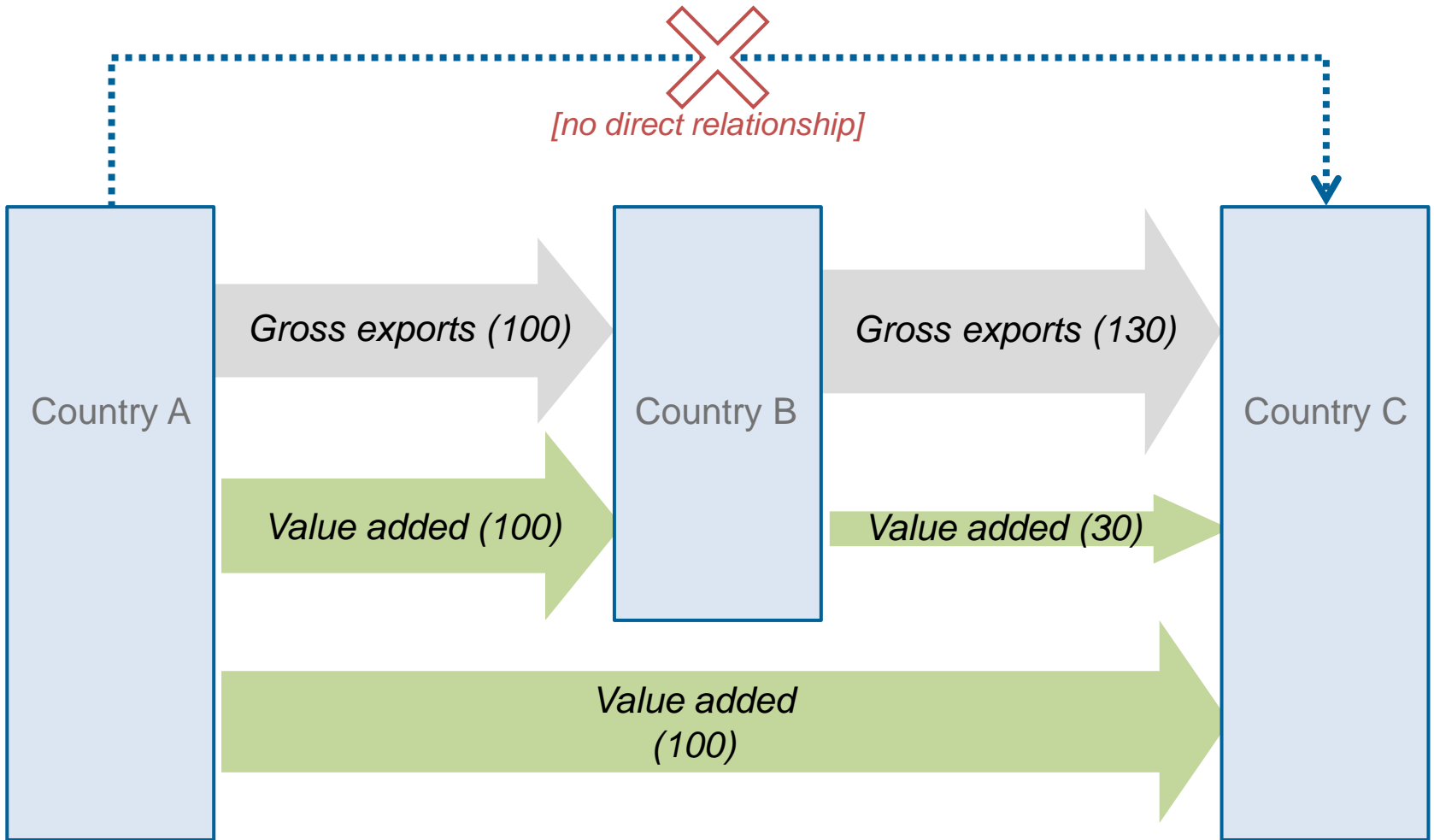


Increasing international fragmentation of production

- ... meaning gross trade flows increasingly embody components (and so value) created elsewhere...
- ...and may thus provide an incomplete or even misleading picture of international trade, hampering adequate policy making
- **OECD-WTO Trade in Value Added** initiative (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



From 'gross trade' to TiVA



[in value added terms, there is a direct relationship between A and C]



OECD-WTO Trade in Value Added

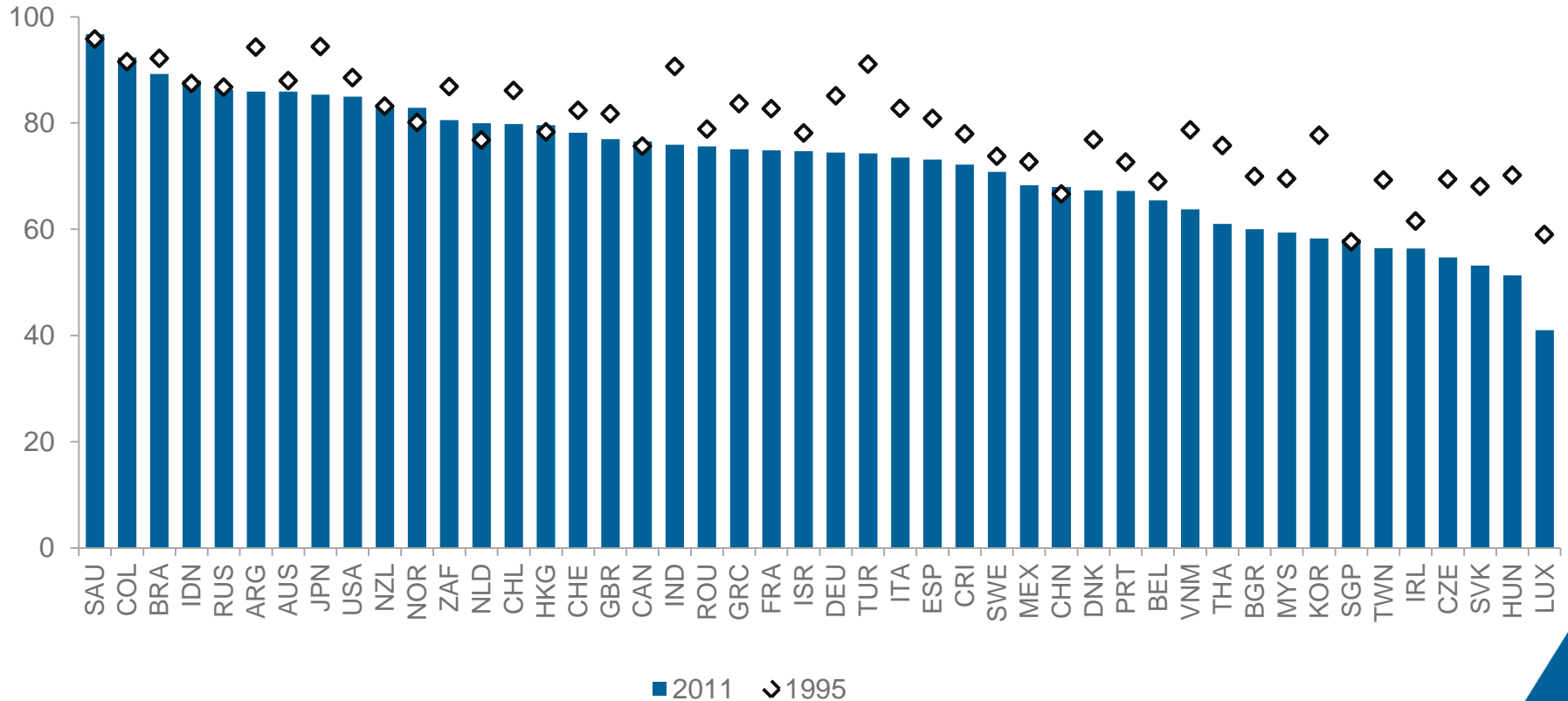
- The joint OECD-WTO TiVA database includes >40 indicators, including:
 - Domestic vs. foreign value added in exports
 - Domestic value added embodied in foreign final demand (% GDP)
 - Foreign value added embodied in domestic final demand (% GDP)
 - Services value added embodied in exports
- The 2015 release covers
 - 61 economies, 34 industries, years 1995/2000/2005/2008–2011
- Conclusions went to high level policy meetings (including OECD MCM and G20)



Policy relevant insights from TiVA (1)

Exports increasingly depend on imports

% of domestic value added embedded in exports (2011 vs 1995)

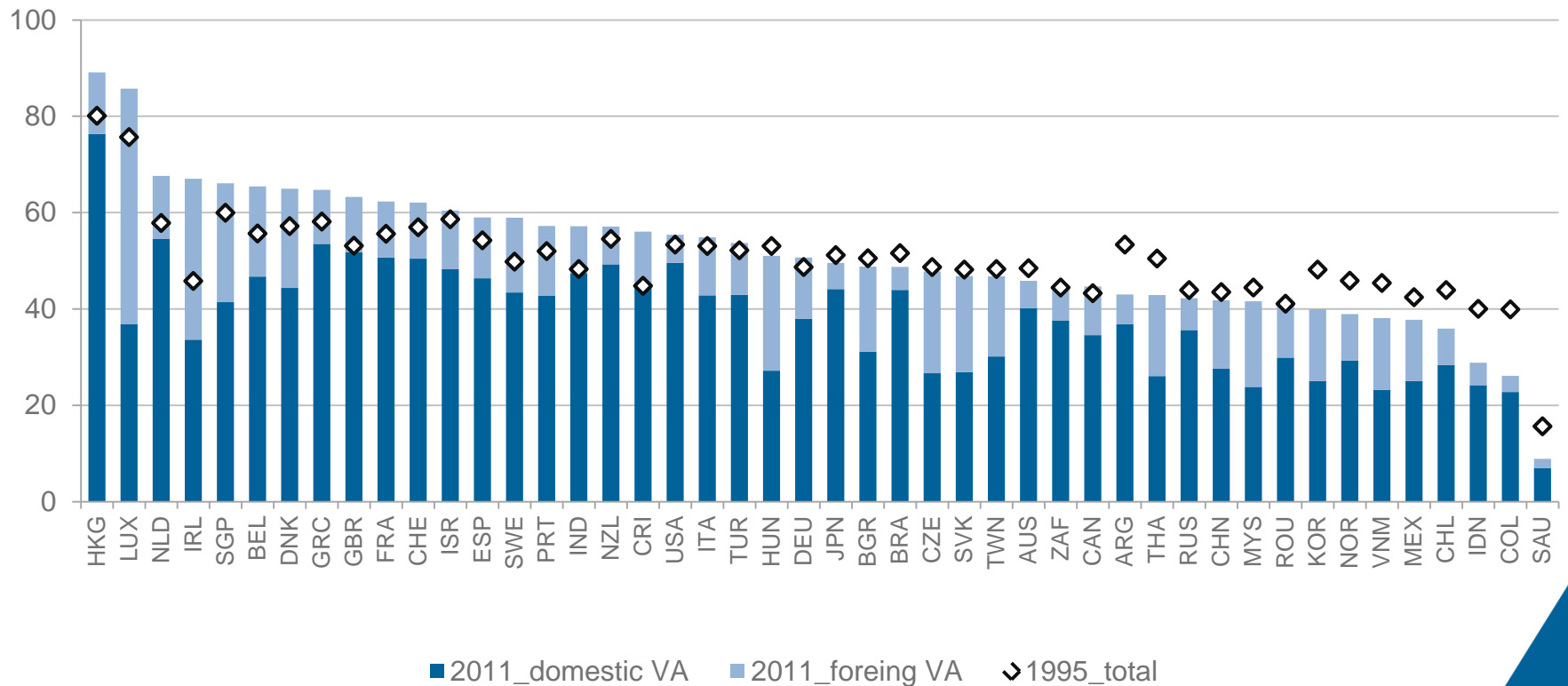




Policy relevant insights from TiVA (2)

Services account for ~half total value added (domestic + foreign) in exports

% of services VA in exports, domestic and foreign (2011 vs 1995)

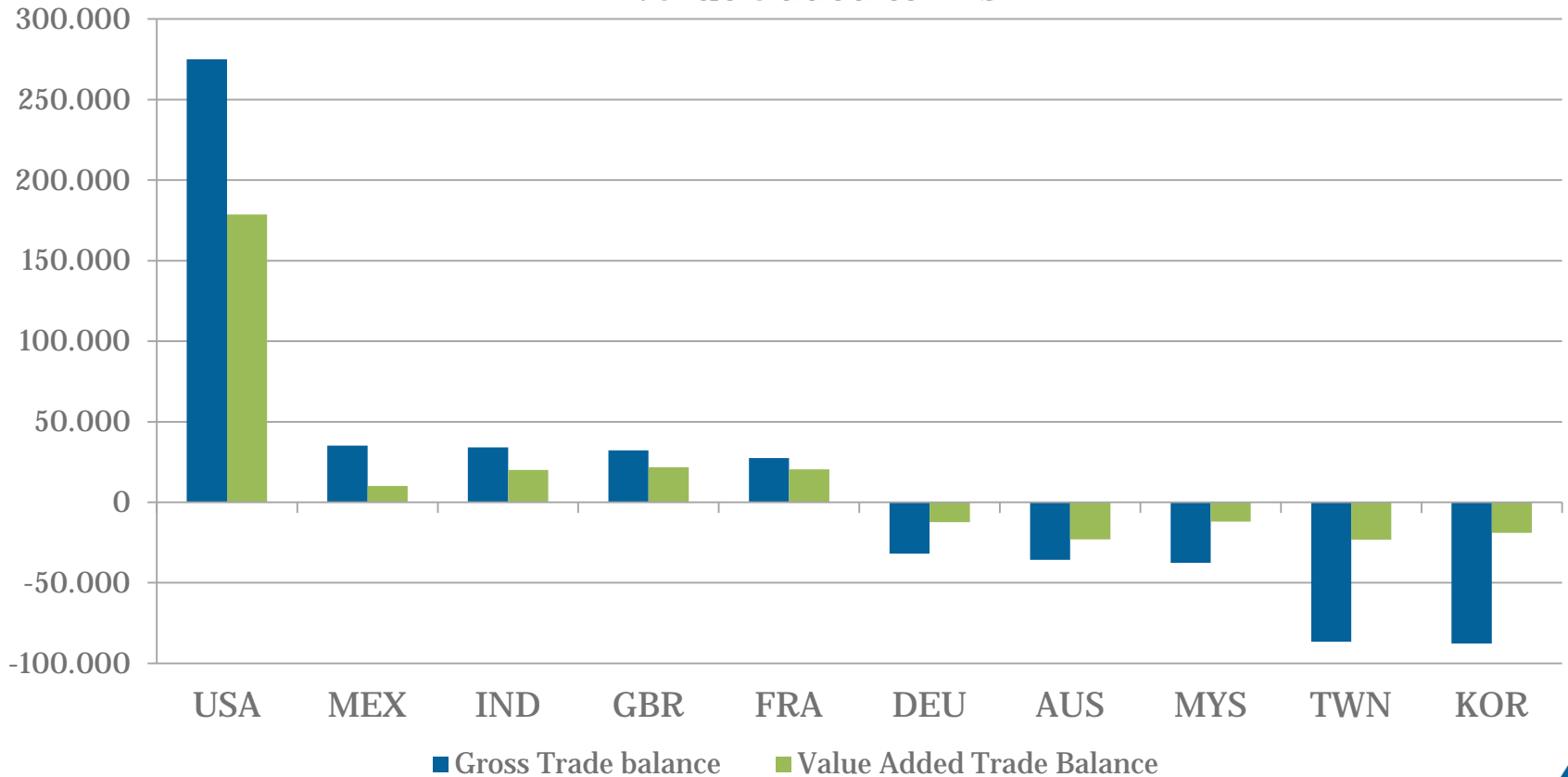




Policy relevant insights from TiVA(3)

Bilateral trade balances change

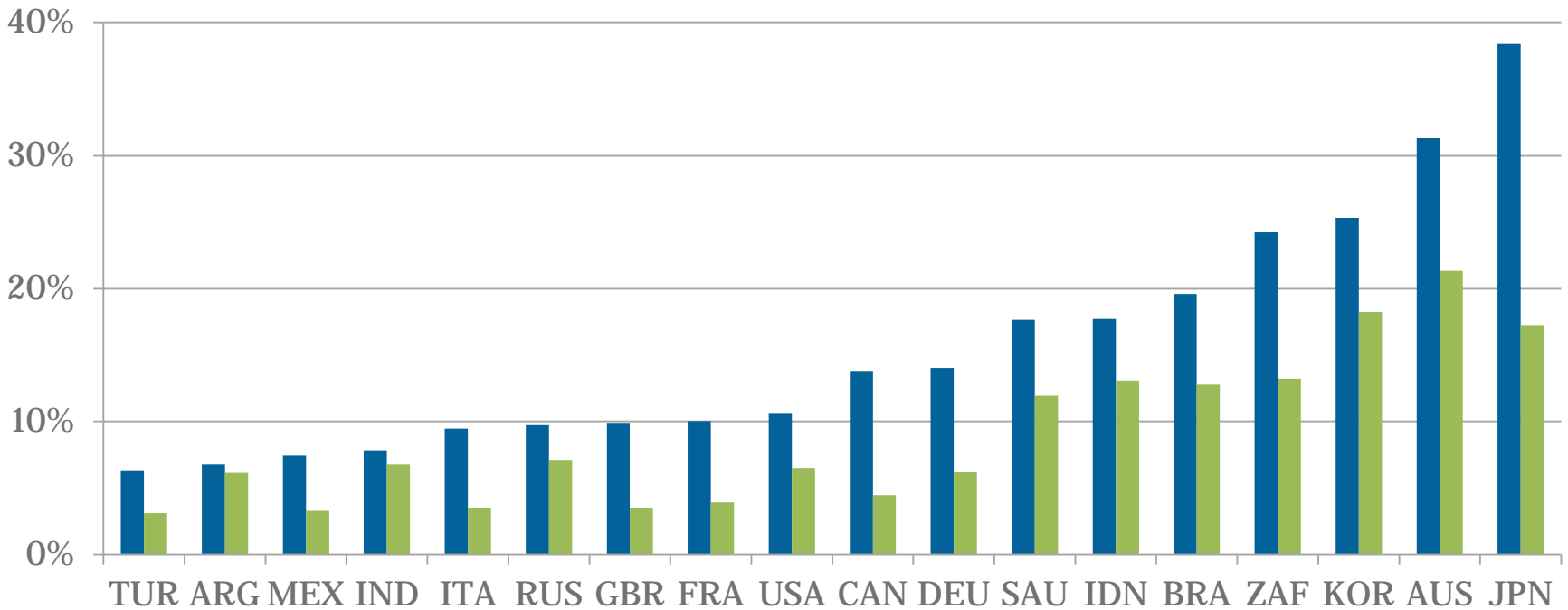
Chinese trade surpluses and deficits are much less pronounced in value added terms





Policy relevant insights from TiVA (4)

Chinese households have been important drivers of export growth in recent years.....what does a slowdown imply?



- Share of increase in total exports in VA terms driven by increased final demand from China, 2005-2011
- Share of total exports in VA terms for Chinese final demand 2011



TiVA methodology: the ICIO

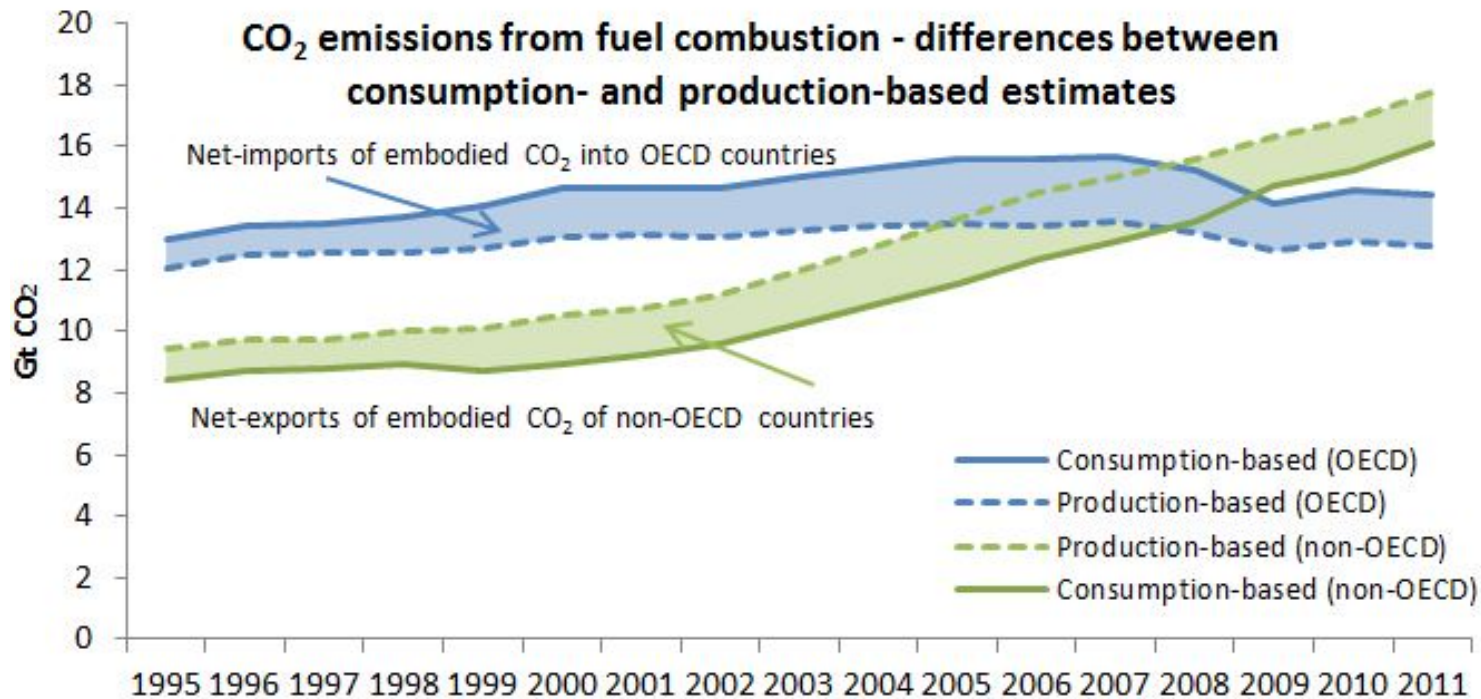
- The inter-country input-output table (ICIO) forms the core system from which the TiVA indicators (and many others!) can be derived
- It is a tool to decompose all production and consumption flows into their value added sources (by country and industry)
- Constructed by combining:
 - National Supply-Use / Input-Output tables (with split in domestic and imported use)
 - National accounts statistics
 - Main aggregates (GDP, final demand components, trade)
 - Value added and output by industry
 - Bilateral trade (goods, services, non-resident), by industry and end-use category



The TiVA ICIO is being used to address many other policy questions...

Environmental footprint indicators:

Combining the ICIO with Green House Gas emissions data (by industry) to estimate consumption-based emissions



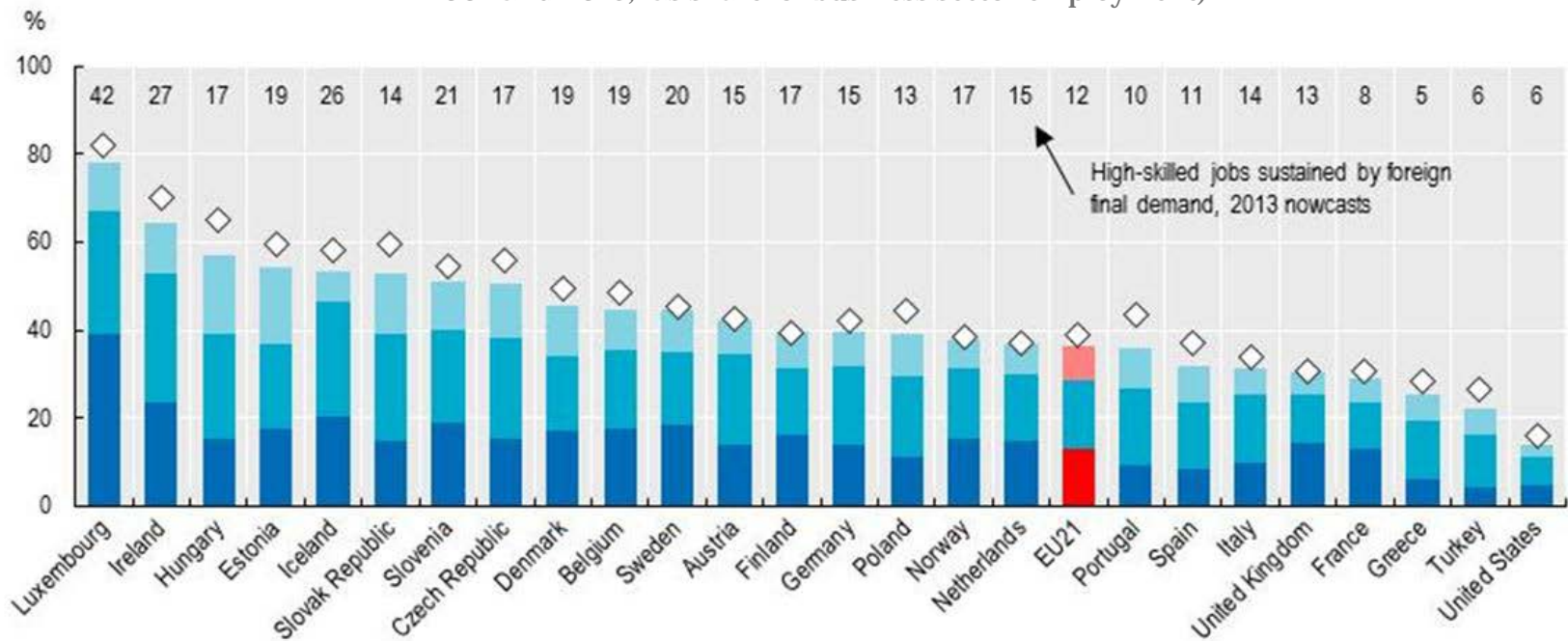


The ICIO is being used to address many other policy questions..

Employment:

Combining the ICIO with a jobs by industry vector to estimate jobs sustained by foreign final demand

Estimated employment sustained by foreign final demand, by skill level, 2001 and 2013, as share of business sector employment)





...but much more is possible

For example:

- Address firm heterogeneity in GVCS: foreign owned enterprises, SMEs, trading firms, processing firms, ... (but also: informal sector)
- Analyse the role of FDI in production, consumption, GVCs and trade
- Better understand the role of investment to improve productivity estimates (e.g. via investment flow matrices)
- ... etc



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

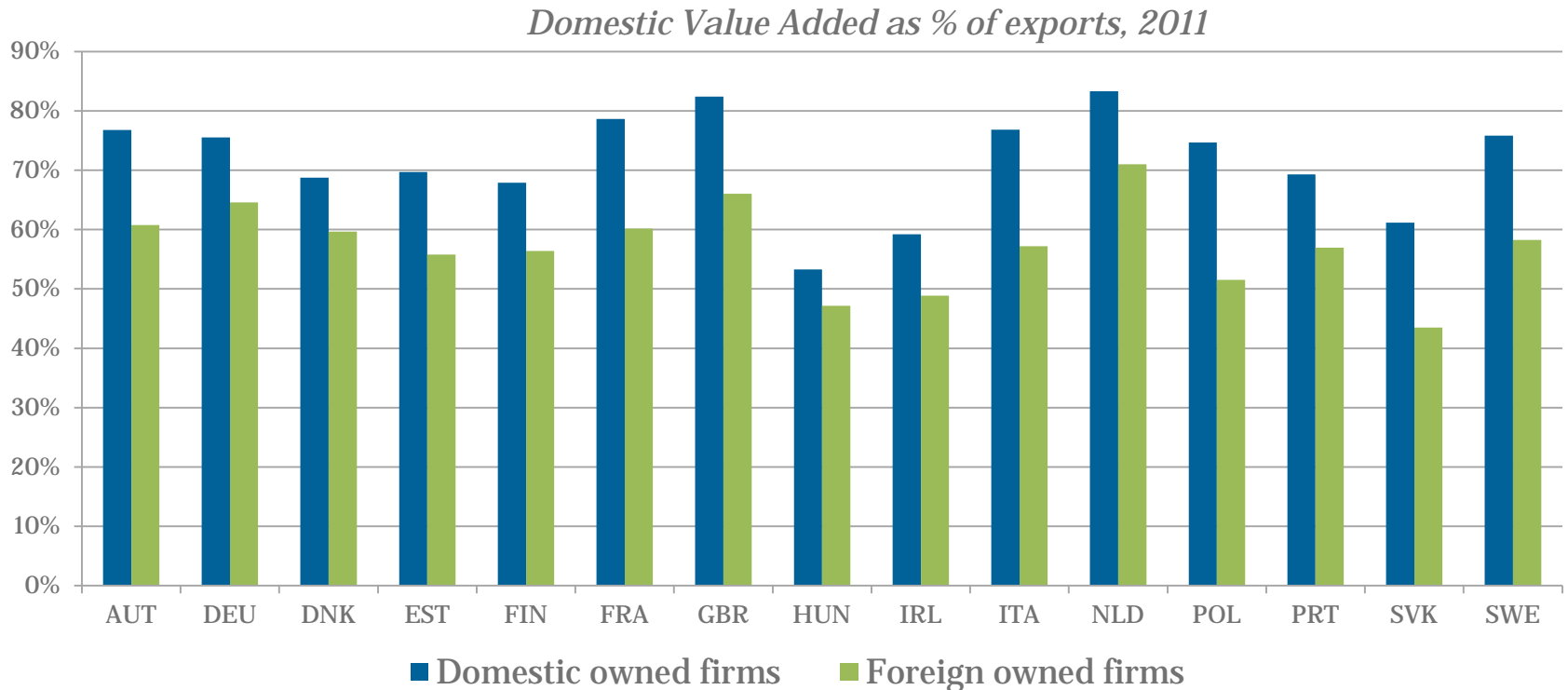


Value added exports of SMEs=Direct value added in SMEs' exports + value added in inputs produced by SMEs and used by exporting firms



Example (2): the import content of exports of foreign-owned firms is higher

Total domestic value added content of exports of foreign owned firms is lower than that of domestic owned firms





OECD-WTO: Mainstreaming TiVA

- Improve data ***quality*** and ***timeliness***
 - Started the official data collection of SUTs among OECD, accession countries and key partners (including China)
 - Collaborate with countries to improve national data quality and timeliness
 - Continued upgrading of OECD-WTO TiVA compilation methods
- Improve ***level of detail*** (firm heterogeneity)
 - OECD Expert Group on Extended Supply and Use Tables
 - OECD Working Party on International Trade in Goods and Services Statistics (WPTGS) (on linked business and trade statistics)
 - OECD Working Group on International Investment Statistics (WGIIS) (on FDI/FATS statistics)
 - Ongoing secretariat work to provide proofs of concept and methodological support



OECD-WTO: Mainstreaming TiVA

- Increase ***country coverage***...
 - e.g. via regional partnerships: APEC, Eurostat, IPEA-UNECLAC, UNESCWA, UNECA
- ... and develop the ***tools and mechanisms*** to ensure ***consistency*** between regional initiatives and TiVA, via the ***collaborative and transparent*** production of “public goods”
 - Balanced international merchandise trade statistics (in which trade asymmetries are reconciled)
 - Estimated trade in services statistics (in which missing values are estimated and asymmetries reconciled)
- Develop the ***integrated international economic accounting*** framework of tomorrow



Thank you

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