

Global Value Chain Analysis: Main Inputs from the Conference

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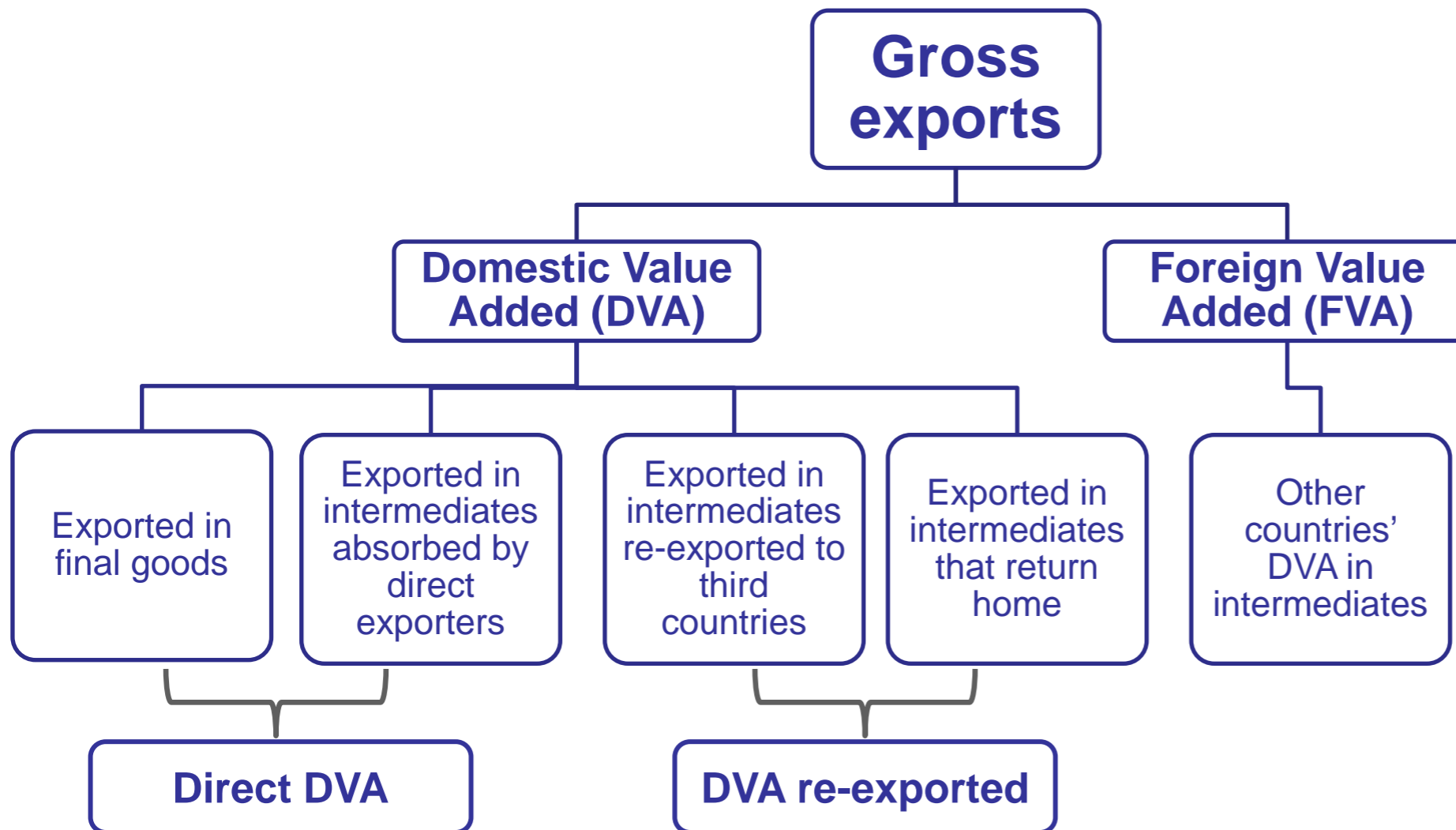
What we knew about Global Value Chains (GVCs)

- **The iPod case → China's value-added is \$4 over \$150 of (gross) exports**
- **In value-added terms China's current account surplus with US is much smaller**
- **GVCs add a new dimension to trade policy**
- **GVCs shed new light on the patterns of international shock transmission**

What we learned from the conference / issues for discussion

1. **Competitiveness must be assessed on value-added.
→ The most important databases now available have been presented here: they are complementary and consistent...**
2. **Specific organization of global production networks matters...**
3. **Trade in services analysis is a critical complement to goods trade...**
4. **Credit constraints affect FDI and export decisions...**
5. **Trade policy: role of IP, tariff preferences...**

1.1. Competition occurs on specific activities, not on final goods (Timmer, Los, Stehrer and de Vries)



3 main databases:

- **World Input-Output Database (WIOD)**
- **Global Trade Analysis Project (GTAP)**
- **WTO-OECD joint initiative of VA trade statistics (TiVA)**

Source: based on Koopman, Wang and Wei (2012)

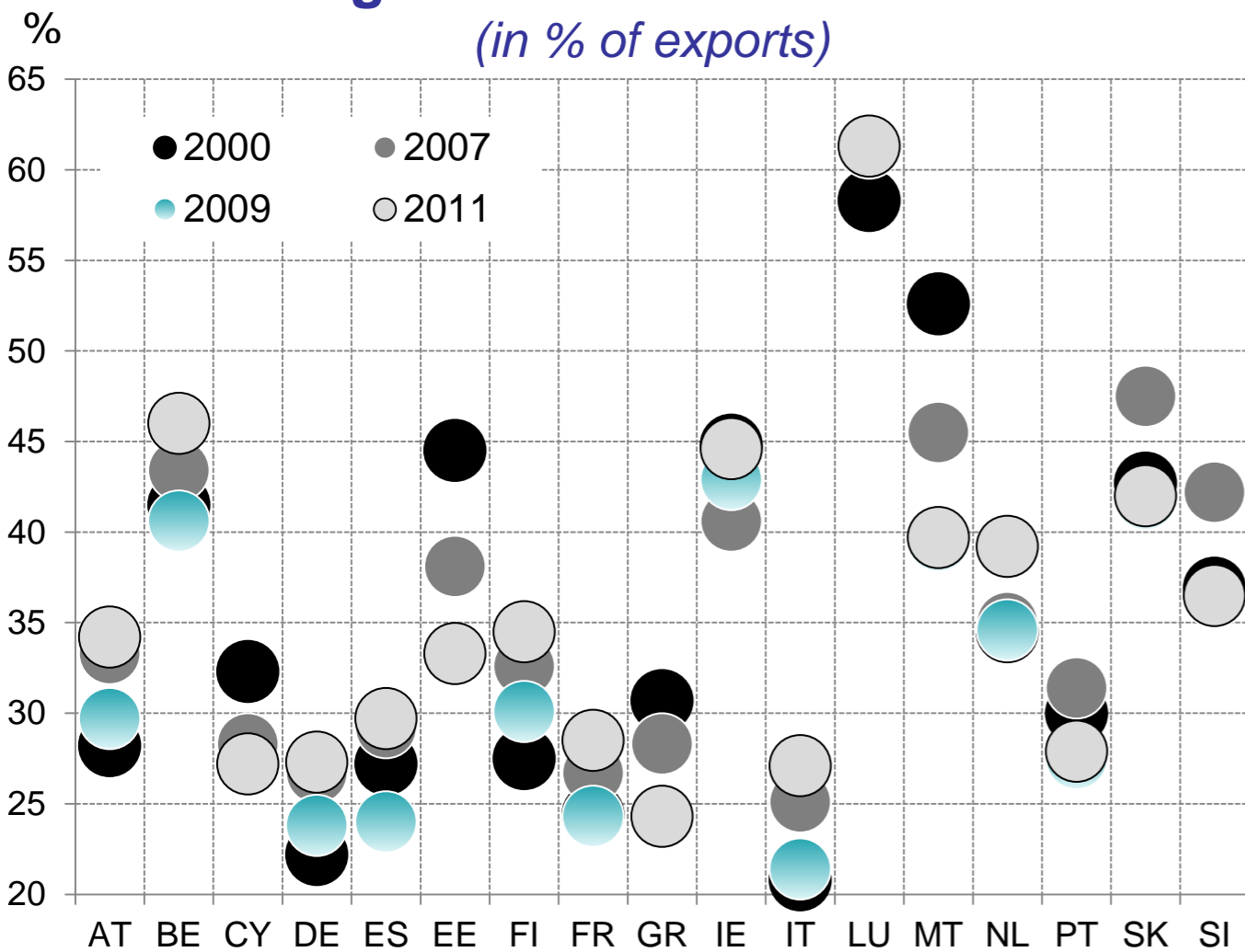
→ industrial and trade policy should be geared at activities

1.2. Message across databases is consistent

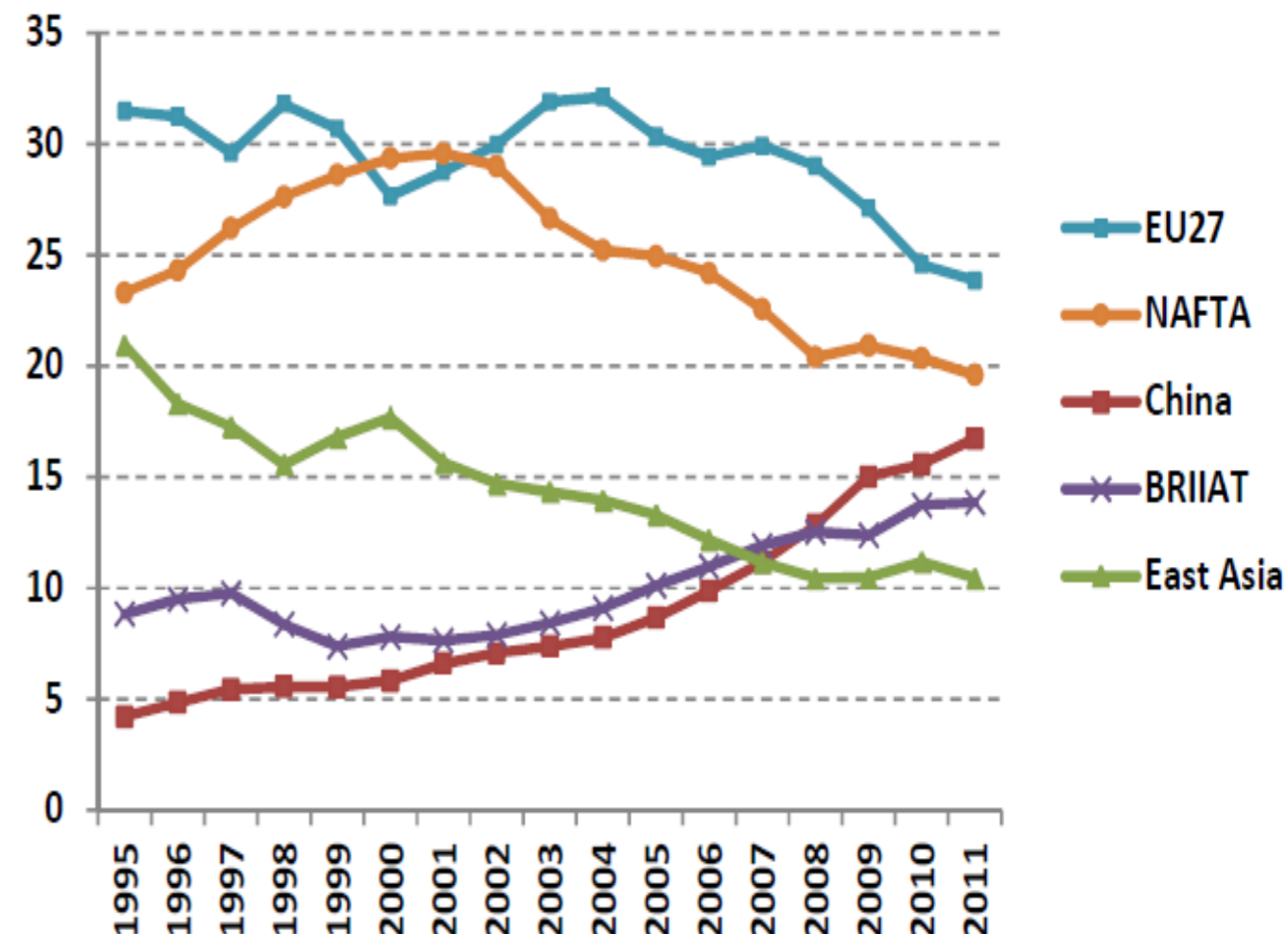
→ Foreign VA is high and rising...

→ BRICS are taking larger shares...

Total foreign value added in the euro area
(in % of exports)



Regional shares in world GVC income
(total manufactures, in %)

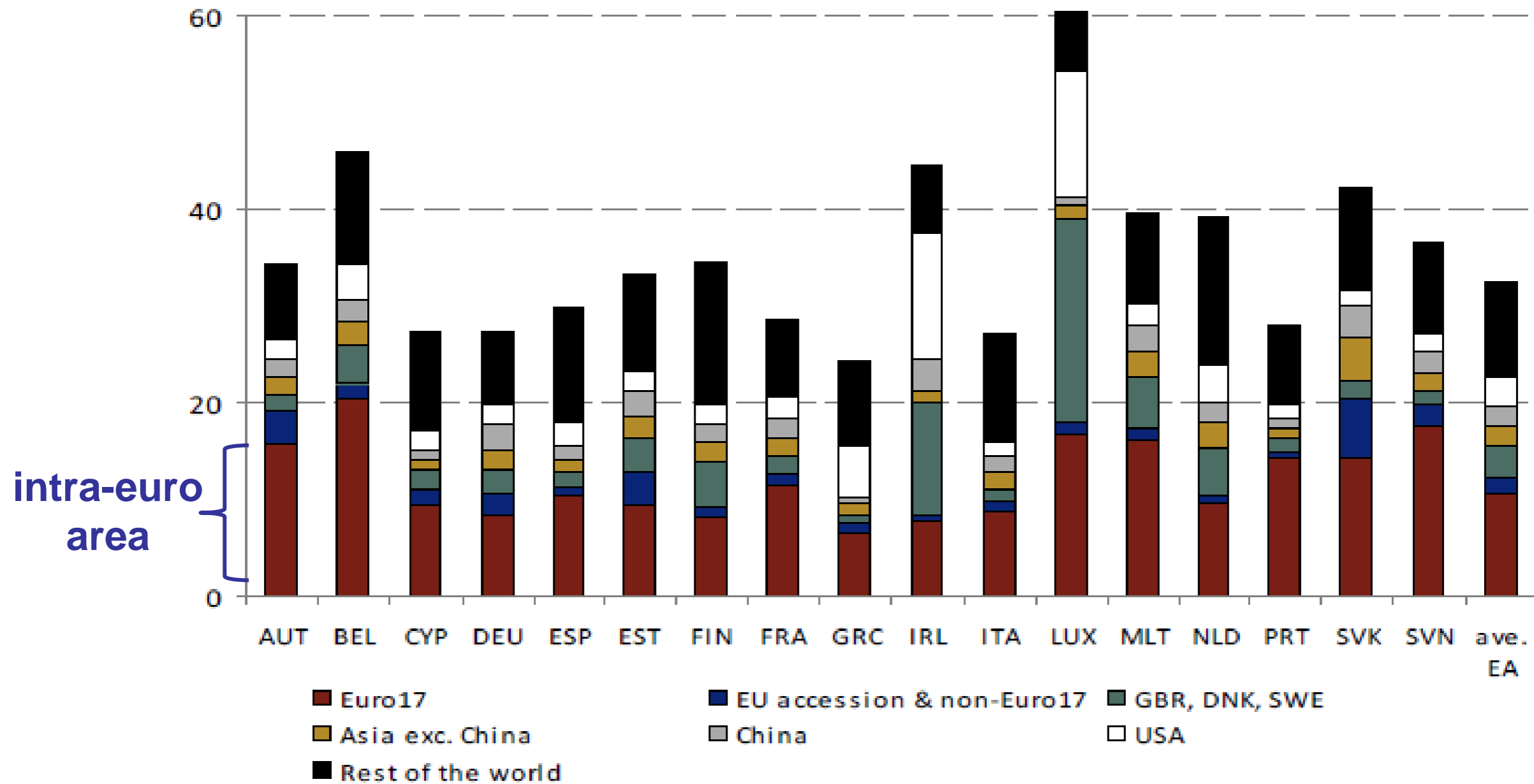


Source: WIOD, Amador, Cappariello and Stehrer

Source: WIOD, Timmer, Los, Stehrer and de Vries

1.3. The euro area has strong internal linkages (Amador, Cappariello and Stehrer)

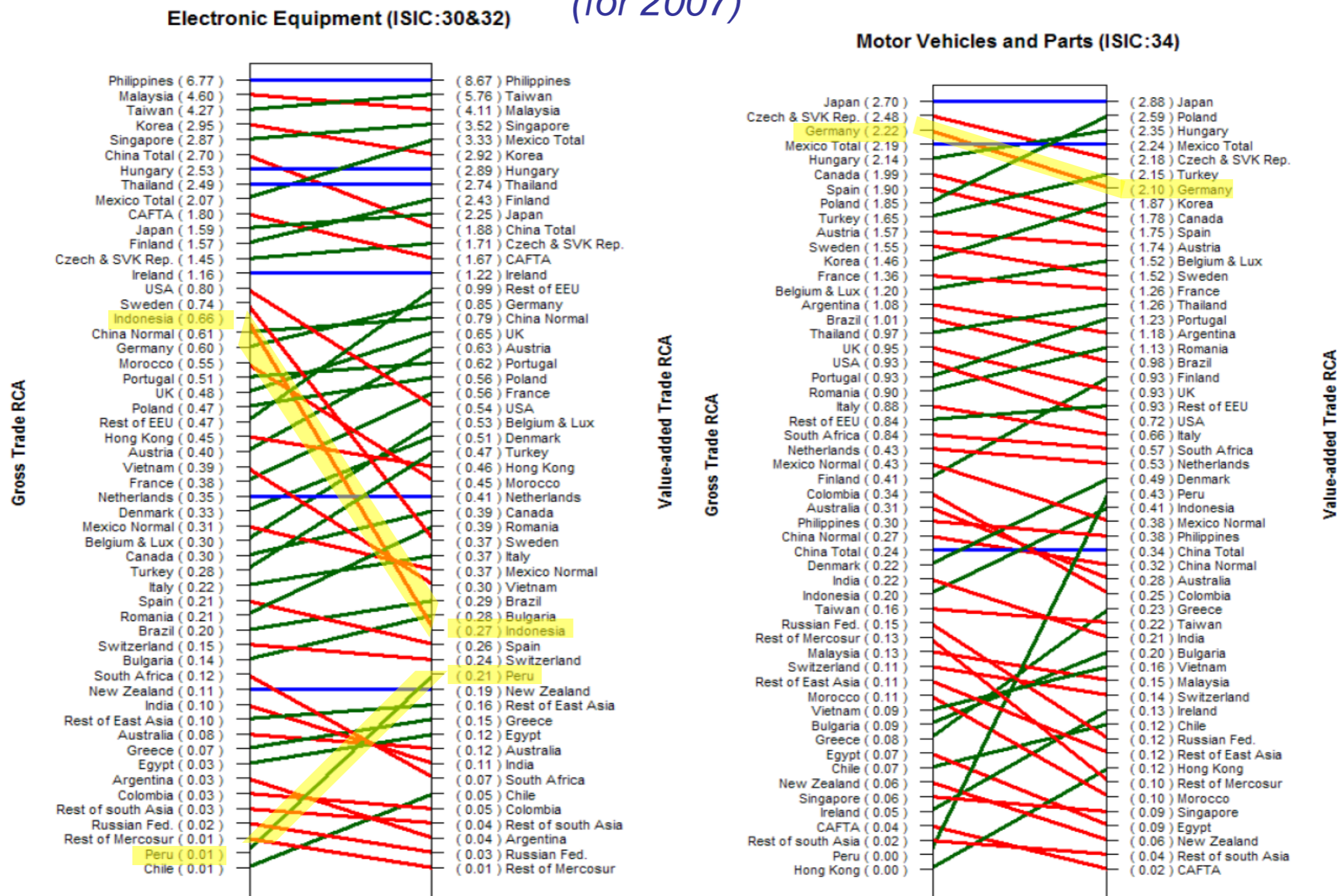
Share of foreign value-added by origin – 2011
(in % of exports)



Source: WIOD, Amador, Cappariello and Stehrer

1.4. Global patterns of specialisation are different when measured in value-added...

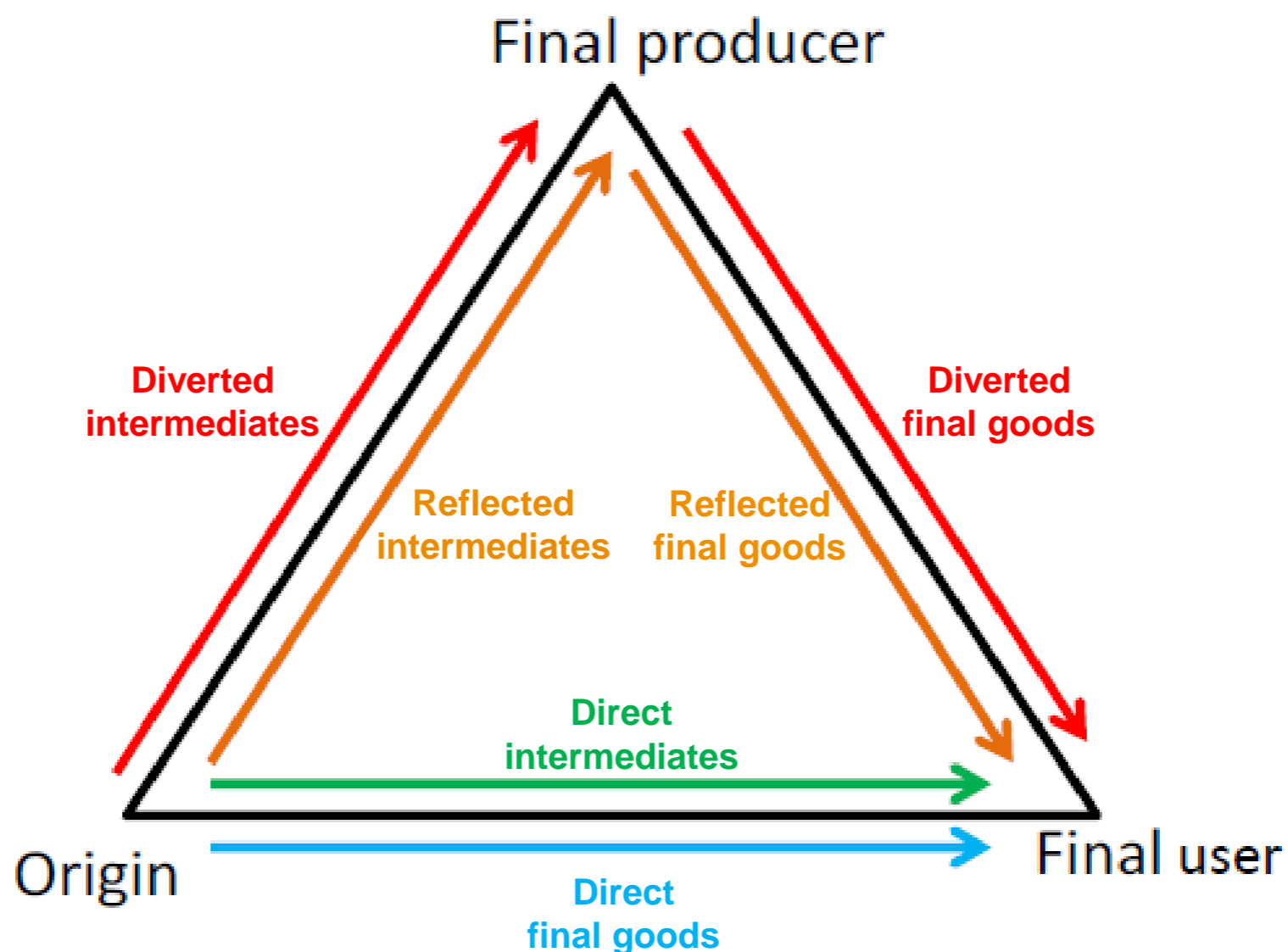
Gross and domestic VA-adjusted RCA indicators (for 2007)



Source: GTAP, Koopman, Wang and Wei (2012)

2. Positions in global value networks matter (Lejour, Rojas-Romagosa and Veenendaal)

- The global value network, rather than a simple chain matters
- Some countries are hubs (China, Eastern Europe) and some are spokes (Western Europe, US)



Source: Lejour, Rojas-Romagosa and Veenendaal

3. Embodied services are increasingly relevant...

- ...in terms of overall industry value-added (Liu, Mattoo, Wang and Wei)
 - ...as a share of employment (Timmer, Los, Stehrer and de Vries)
- Offshoring often has a positive effect on domestic employment (Foster, Poeschl and Stehrer)

Employment in the production chain of final manufactures, 1995 vs 2008
(by sector, in 1000s)

	Agri	Manuf	Services	Total
Germany	-161	-666	1,388	561
France	-96	-423	368	-151
United Kingdom	-128	-1,148	-347	-1,624
Italy	-192	-234	517	91
Spain	-97	185	353	440
all EU15	-1,149	-2,758	2,936	-971
Poland	-468	81	368	-19
Czech Republic	-59	74	35	50
all EU12	-1,150	-251	580	-820
Total EU27	-2,298	-3,009	3,517	-1,791

Source: WIOD, Timmer, Los, Stehrer and de Vries

4. Credit constraints influence the choice over export regimes (Manova and Yu)

- **Credit constraints prevent firms from moving up the value chain in exporting**
- **Higher credit constraints → more processing trade and pure assembly**
 - **lower value added**

5. GVCs add a new dimension to trade policy

1. Ambiguous effect of...

- **Tariff preferences (Edwards and Lawrence)**
- **Patent protection (Zolas, Lybbert and Shenhav)**
 - **Facilitate attracting greenfield FDI**
 - **May lock countries into low-VA activities (processing)**

2. Trade barriers cumulate along GVCs

- **need to view international production structures in their entirety (Fally and Hillberry)**

**Thank you very much for
your attention.**

Comparison of databases

	WIOD	GTAP	TiVA*
Coverage	40 countries, 35 sectors	129 countries/ regions, 57 sectors	40 countries, 18 industries
Time dimension	Intermittent years over 1995 - 2009	2000, 2004, 2007	2005, 2008, 2009
Available features			
• breakdown of domestic VA in an importing country according to end-use category (ICIO table)	✓	✗	✓
• reconciliation of data by using weights from a relative reliability index	✗	✓	✗
Satellite datasets			
• Labour statistics	✓	✗	✗
• Processing trade	✗	✓	✗
• Services	✗	✗	✓

* OECD-WTO, more extensive releases forthcoming

Credit constraints influence the choice over export regimes (Manova and Yu)

- **Chinese firm-level data**
- **Three distinct export regimes:**
 - ordinary trade (OT)
 - processing with imports (PI)
 - pure assembly (PA)

} total processing trade

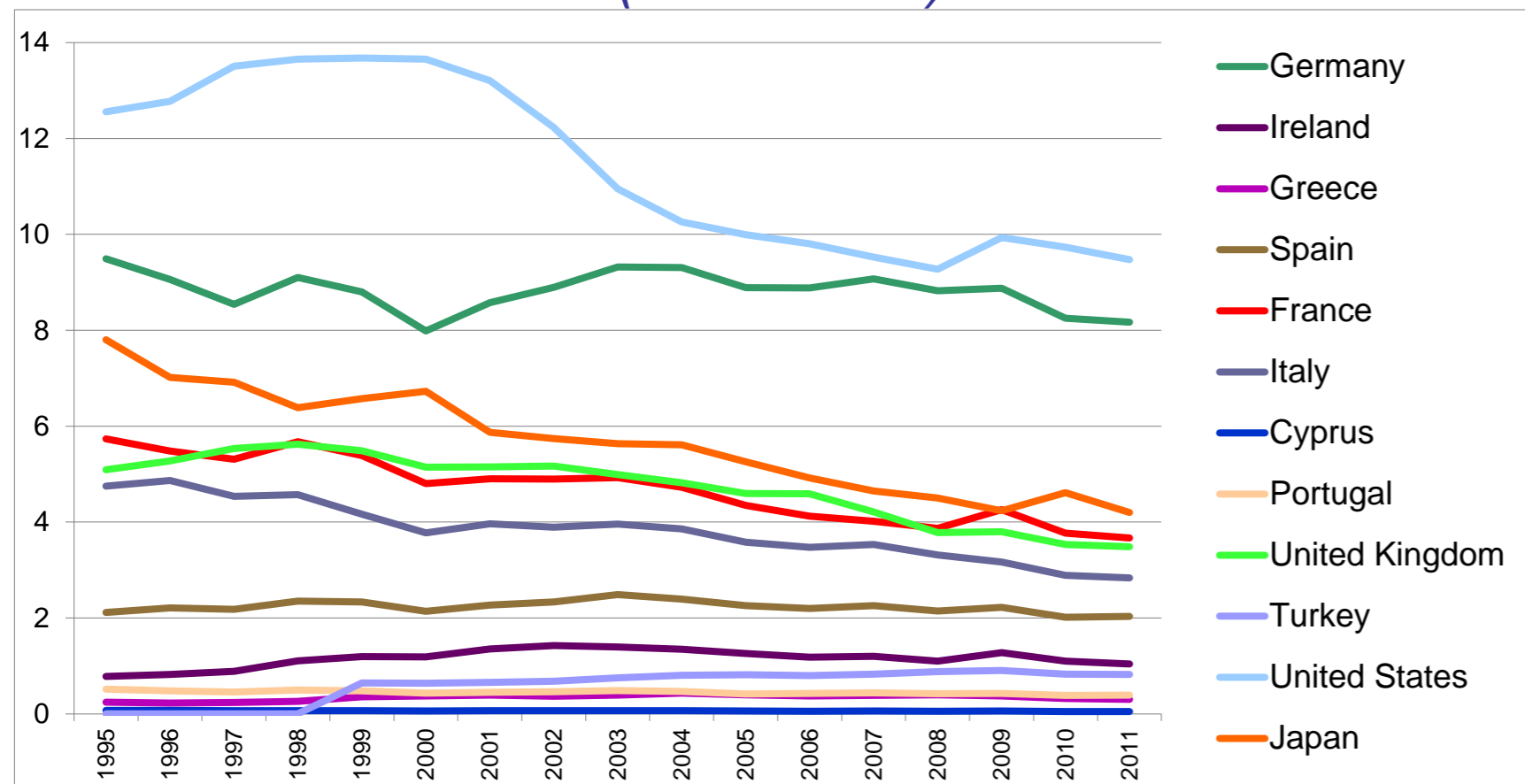
Value-added:	$VA_{OT} > VA_{PI} > VA_{PA}$
Liquidity needs:	$FC_{OT} > FC_{PI} > FC_{PA}$

Higher credit constraints → more processing trade
→ higher share of PA in processing trade

Standard indicators

→ **With increased fragmentation of production across borders traditional measures of competitiveness based on gross exports become less meaningful**

Export market shares in selected countries (%)
(1995-2011)



- **Germany and Spain have maintained export market shares**
 - **Losses for the US, UK and Japan**
- **Reflection of true developments in competitiveness?**

Source: Eurostat