

# OECD WORK ON GLOBAL VALUE CHAINS AND TRADE IN VALUE ADDED

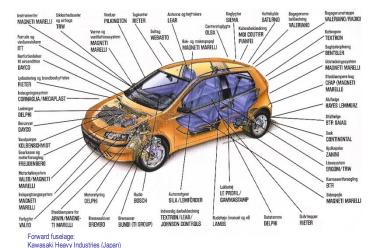
Koen De Backer



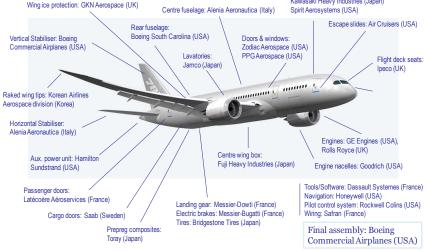


#### Global Value Chains – case studies









Wing box: Mitsubishi Heavy Industries (Japan)



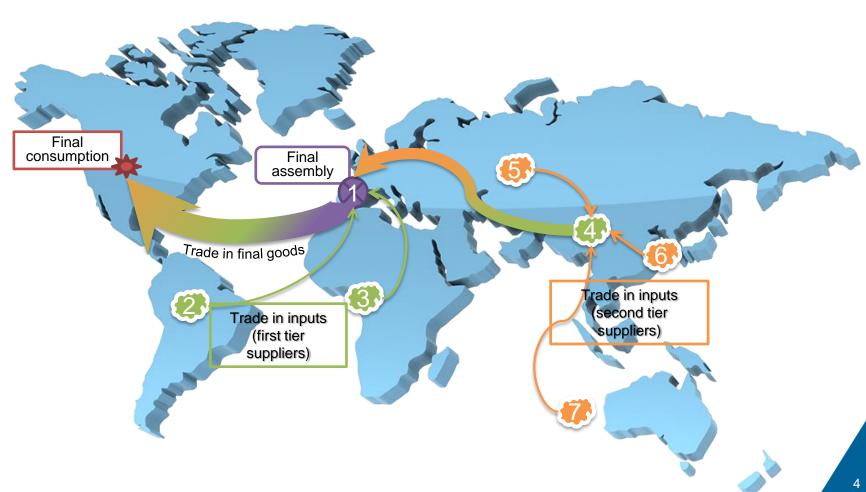


### What does the OECD work add?

- Large literature on GVCs
  - Rather conceptual
  - Rather focused on developing economies
- GVCs are not new... started already in the 1960s
- Size, scale and complexity of GVCs are new
- OECD work on measuring GVCs Trade in Value Added
- OECD work on GVC policies: so what question?

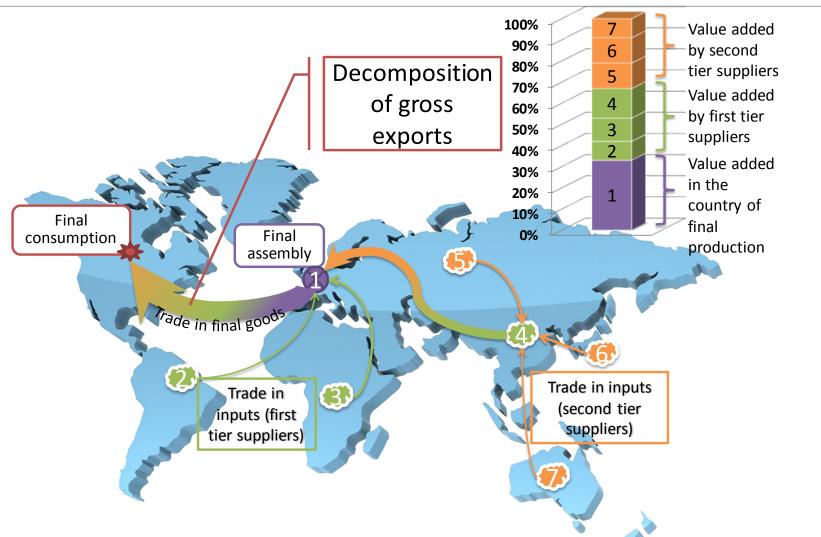


### OECD work on Trade in Value Added(1)





#### OECD work on Trade in Value Added (2)





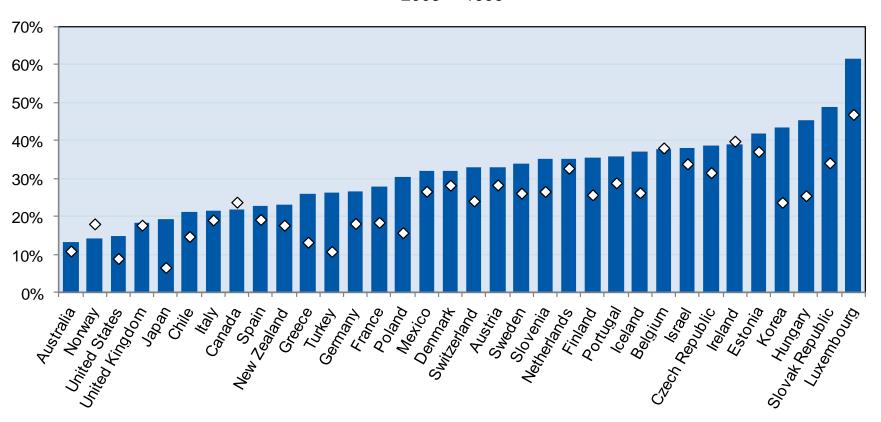
### OECD work on Trade in Value Added (3)

- Global Input-Output Model: national IO tables linked by bilateral trade statistics
- Official statistics making it mainstream work
- Large and growing coverage
  - 57 countries
  - > 95% of GDP, > 90% of world trade
  - China; processing and non-processing trade
- First release (of results) on 16 January 2013 new release during OECD Ministerial Meeting (May 2013)
- Trade flows in value added and applied indicators
- Further work: employment and skills, income, firm heterogeneity...



### Foreign value added of exports, OECD economies

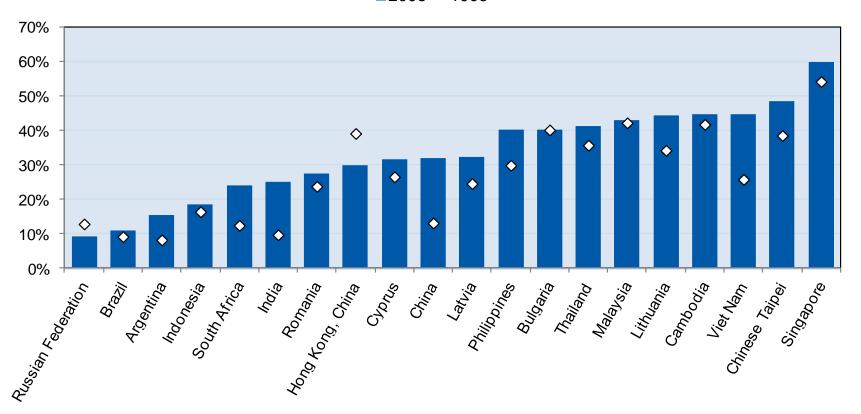
■2008 ♦1995





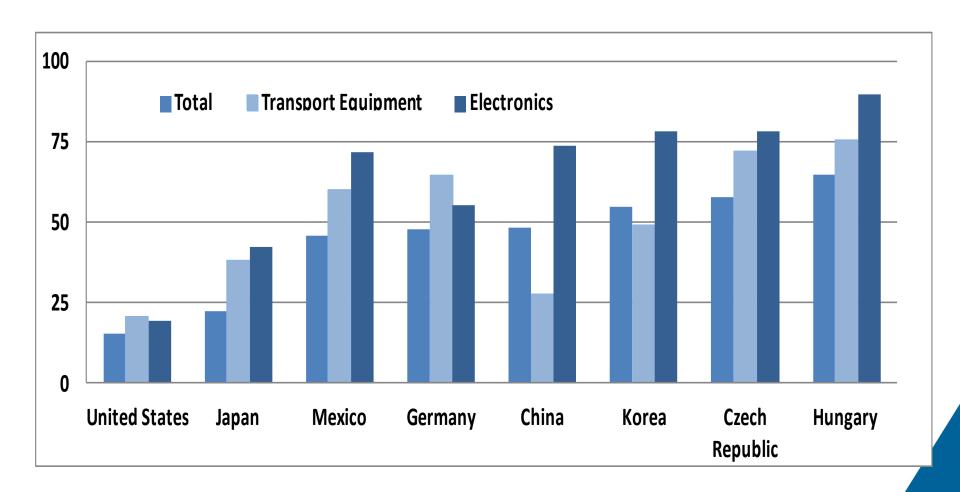
### Foreign value added of exports, non-OECD economies

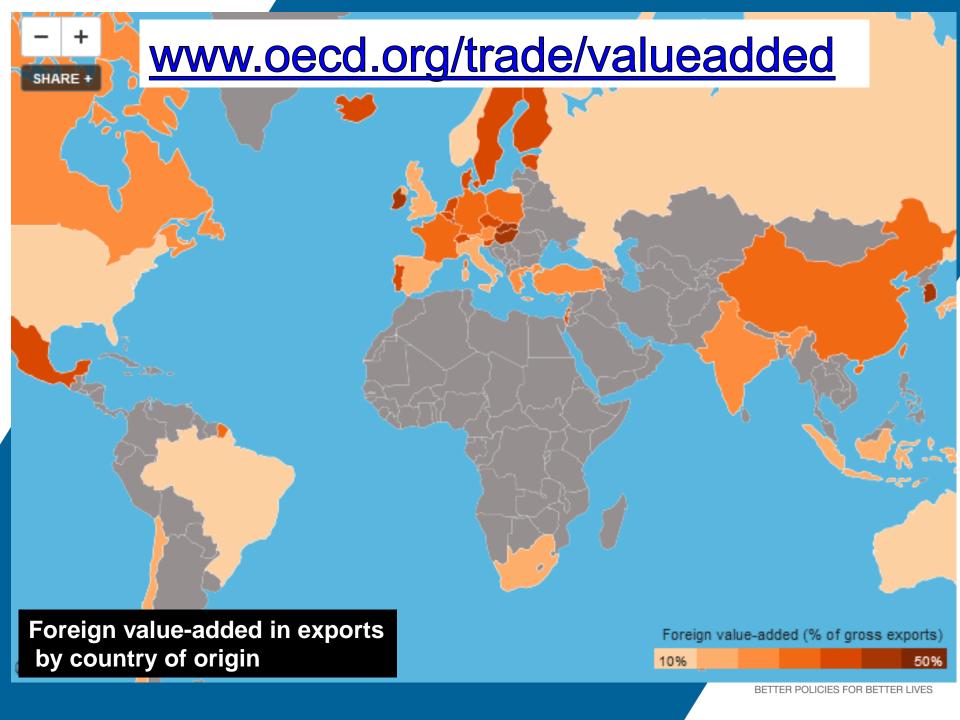
■2008 ♦1995

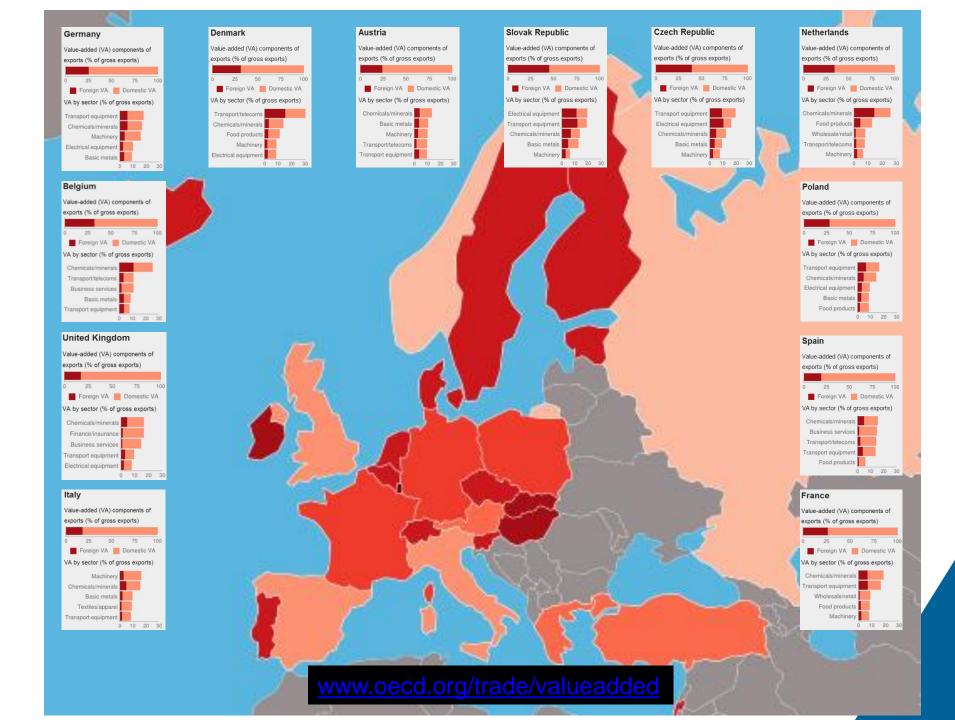


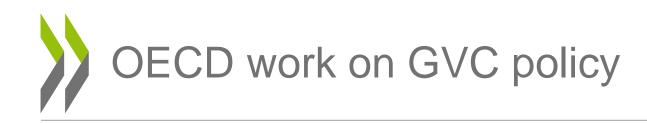


### Intermediate imports embodied in exports (% of total intermediate imports)









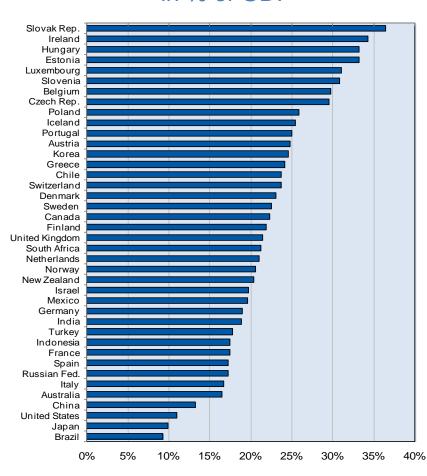
- Border policies and behind the border policies
- Trade and investment policy
- Economic development
- Competitiveness and knowledge based assets
- Global systemic risk resilience

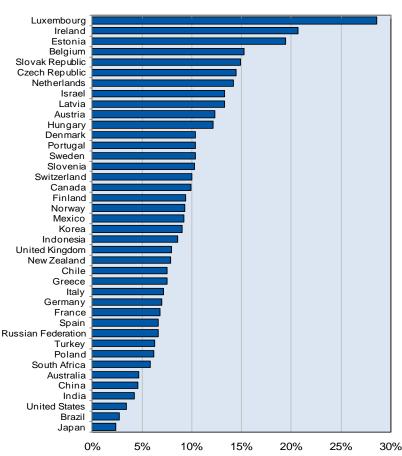


### Effectiveness of industrial policy at the national level?

#### Foreign value added content in final demand in % of GDP









## Offshoring and export specialisation/competitiveness (1)

	RCA in Gross Exports (symmetric)						
Variables		П	III	IV	V	VI	VII
Domestic demand index	0.079***	0.077***	0.081***	0.081***	0.072***	0.079***	0.074***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
K endowment × K intensity	0.001***	0.001***	0.002***	0.001***	0.002***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
High-skill endowment x High-skill intensity	1.828***	1.849***	2.057***	2.104***	1.724***	1.866***	1.807***
	(0.253)	(0.251)	(0.251)	(0.249)	(0.247)	(0.254)	(0.249)
Intermediate use intensity (broad definition)		0.165***		0.154***			
		(0.020)		(0.019)			
Intermediates import intensity (broad definition)			0.097***	0.097***			
			(0.006)	(0.006)			
Intermediate use intensity (narrow definition)					0.058***		0.065***
					(0.004)		(0.004)
Intermediates import intensity (narrow definition)						0.006***	0.008***
						(0.001)	(0.001)
Observations	18639	18612	18603	18603	18612	18603	18603
R-square	0.192	0.197	0.209	0.212	0.205	0.197	0.211



# Offshoring and export specialisation/competitiveness (2)

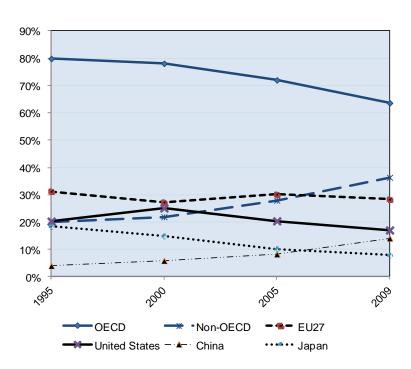
	RCA in Value Added (symmetric)						
Variables	1	l l	III	IV	V	VI	VII
Domestic demand index	0.077***	0.075***	0.079***	0.078***	0.071***	0.077***	0.072***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
K endowment × K intensity	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
High-skill endowment x High-skill intensity	1.963***	1.961***	2.124***	2.151***	1.858***	1.992***	1.935***
	(0.255)	(0.254)	(0.254)	(0.254)	(0.250)	(0.257)	(0.252)
Intermediate use intensity (broad definition)		0.098***		0.088***			
		(0.020)		(0.019)			
Intermediates import intensity (broad definition)			0.075***	0.074***			
			(0.007)	(0.006)			
Intermediate use intensity (narrow definition)					0.057***		0.063***
					(0.004)		(0.004)
Intermediates import intensity (narrow definition)						0.006***	0.008***
						(0.001)	(0.001)
Observations	18639	18612	18603	18603	18612	18603	18603
R-square	0.191	0.193	0.2	0.202	0.203	0.195	0.208

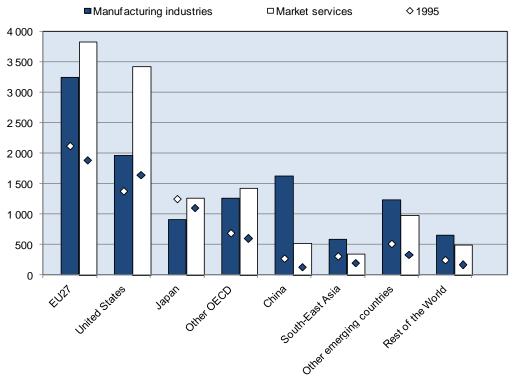


#### OECD competitiveness in manufacturing?

Share of GVC income in manufacturing, market services, 1995-2009 (%)

#### GVC income in manufacturing and 1995 and 2009 (billion USD)



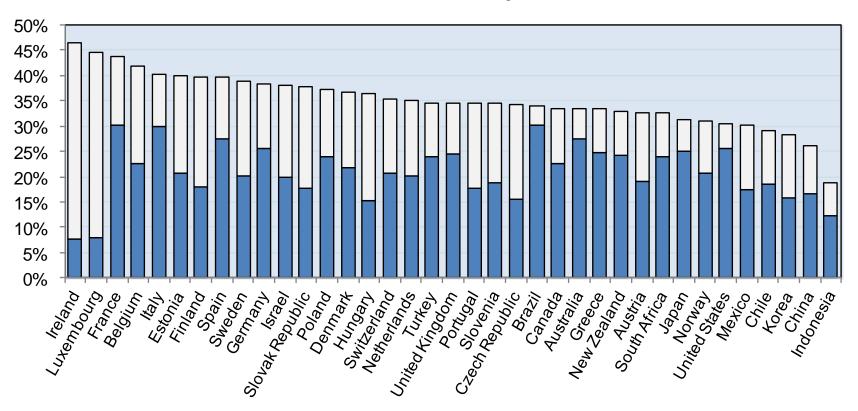




#### Manufacturing competitiveness - services

Services content of gross manufacturing exports, 2009

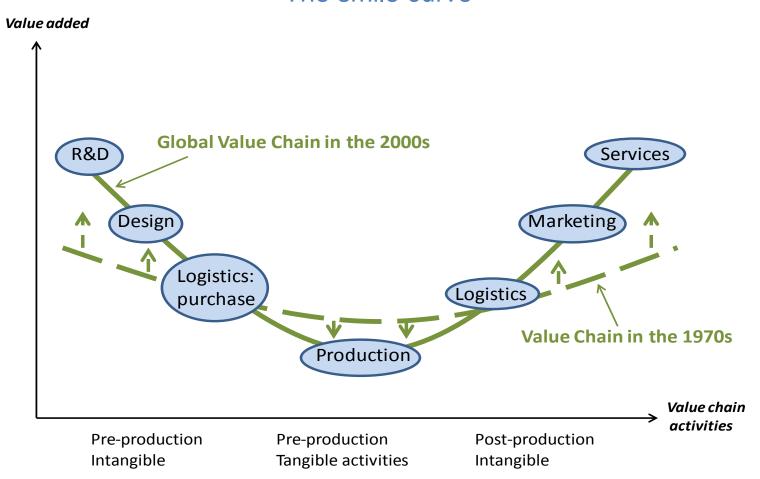
■ Domestic □ Foreign





### Manufacturing competitiveness – knowledge based assets (1)

#### The smile curve





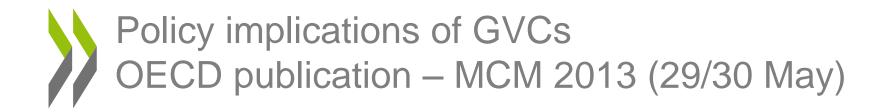
### Manufacturing competitiveness – knowledge based assets (2)

	RCA in Gross Exports (symmetric)			RCA in Value Added (symmetric)			
Variables		II	III		II	III	
Domestic demand index	0.024***	0.020**	0.019**	0.023**	0.019**	0.018*	
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	
K endowment x K intensity	0.003***	0.003***	0.003***	0.004***	0.003***	0.003***	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
High-skill endowment × High-skill intensity	3.077***			3.064***			
	(0.475)			(0.483)			
Intermediates import intensity (broad definition)	0.111***	0.127***	0.125***	0.081***	0.097***	0.095***	
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	
Intermediates use intensity (broad definition)	0.159***	0.172***	0.161***	0.094***	0.107***	0.096***	
	(0.036)	(0.035)	(0.035)	(0.035)	(0.035)	(0.035)	
Intangible Capital endowment × High-skill intensity		0.040***	-0.01		0.041***	-0.007	
		(0.005)	(0.009)		(0.005)	(0.010)	
Intangible Capital endowment × High-skill intensity ×			0.685***			0.665***	
Imported intermediates use intensity			(0.097)			(0.097)	
Intangible Capital endowment x Imported intermediates			-0.286***			-0.278***	
use intensity			(0.042)			(0.042)	
Observations	6585	6585	6585	6585	6585	6585	
R-square	0.316	0.317	0.323	0.308	0.31	0.315	



### Key policy messages - Competitiveness

- The manufacturing of goods remains a core activity in GVCs. Governments can help **anchor production and value creation** by supporting investment in skills and advanced manufacturing technologies and through policies that strengthen networks and cooperation.
- Old-style support policies are not the answer to the decline of the manufacturing sector in advanced economies, as they ignore the interconnected nature of production in GVCs and the need for international competition and openness. Moreover, they raise risks of protectionism.
- **Competitiveness in GVCs** involves strengthening production factors that are "sticky' and not susceptible to movement across borders.
- Today, what you do i.e. the activities that a firm or country are involved in matters more for growth and employment than what you sell i.e. the products that make up final sales or exports.



- CH. 1: The rise of GVCs
- CH. 2: Measuring Trade in Value Added
- CH. 3: GVCs and trade policy
- CH. 4: GVCs and investment policy
- CH. 5: GVCs and economic development
- CH. 6: National competitiveness and GVCs
- CH. 7: GVC upgrading and knowledge based assets
- CH. 8: GVCs and global systemic risk



#### FOR MORE INFO:

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