

wiiw Spring Seminar 2015

26 March 2015

EU Manufacturing Specialisation:
Challenges and Options ahead

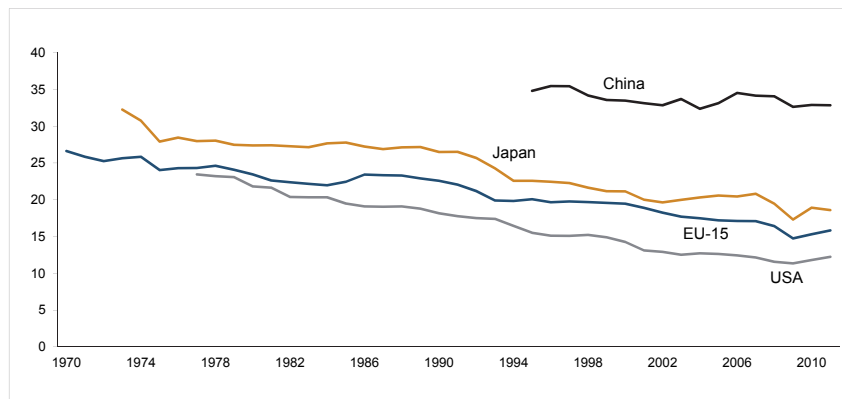
Robert Stehrer, Roman Stöllinger

Content

- Global dimension: How competitive is the EU's manufacturing sector?
- Internal dimension: Do all Member States contribute to and benefit from the EU's global position?
- Policy dimension: Any need for corrections?

Long-term decline of the manufacturing share

Manufacturing value added, in % of GDP



Source: EU KLEMS; WIOD; wiiw calculations.

Manufacturing matters

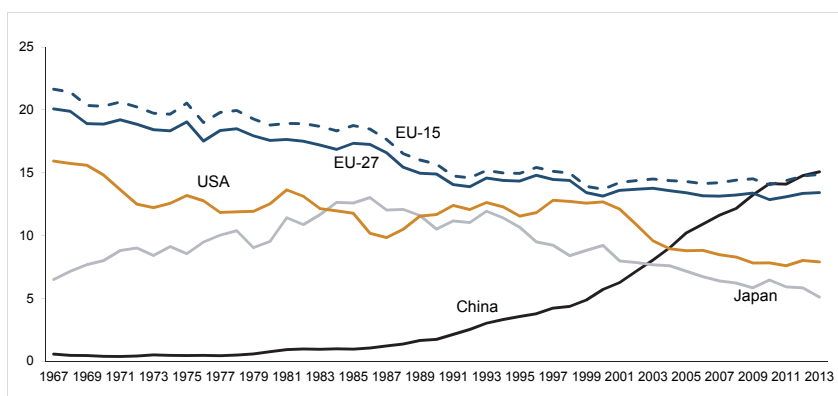
- Innovation
- Production of tradables
- Strong linkages to services
 - as provider of capital goods for services
 - as user of business services
- Stable and secure jobs

Content

- Global dimension: The EU's 'manufacturing performance' in the global economy
- Internal dimension: Specialisation patterns within the EU
- Policy dimension: Implications and options

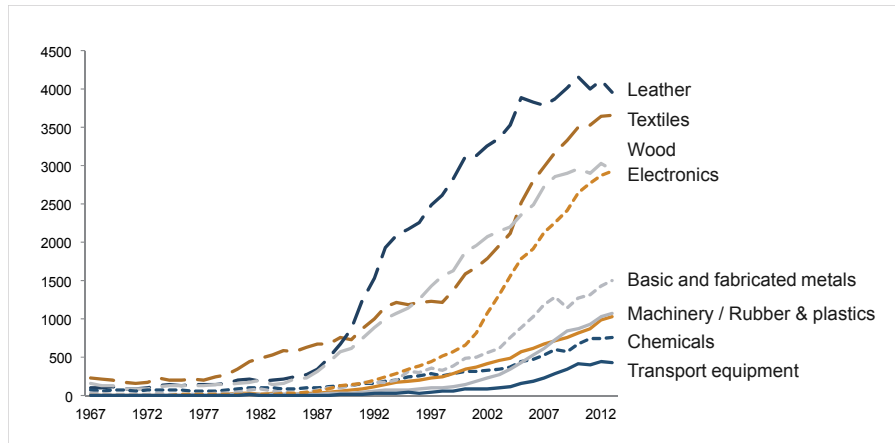
Changing landscape of world trade

Market shares, in % of global exports (excluding intra-EU trade)



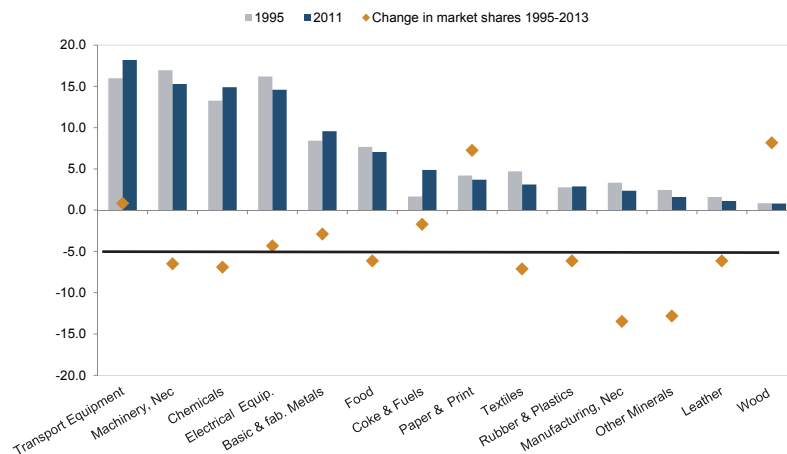
Source: CHELEM; CEPII-CIREM calculations.

China: Climbing up the ladder? Market shares by industry, in % of global exports (excluding intra-EU trade)



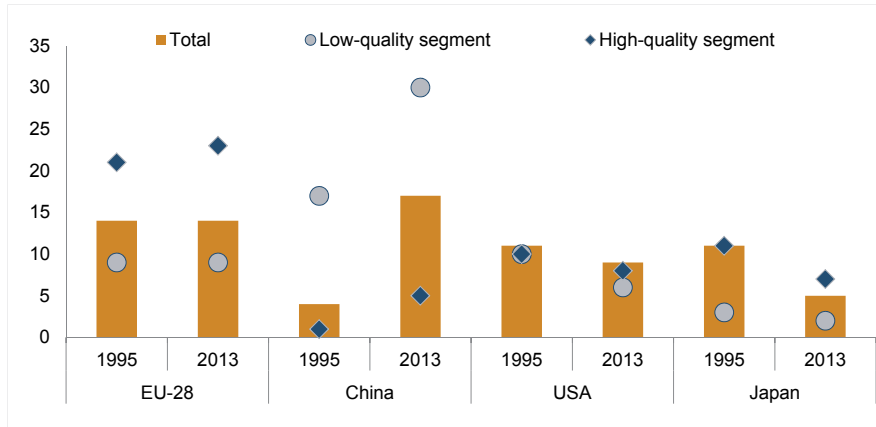
Source: CHELEM; CEPII-CIREM calculations.

Structure of EU manufacturing exports by industry



Source: BACI; wiiw calculations.

Export market shares by unit value segments

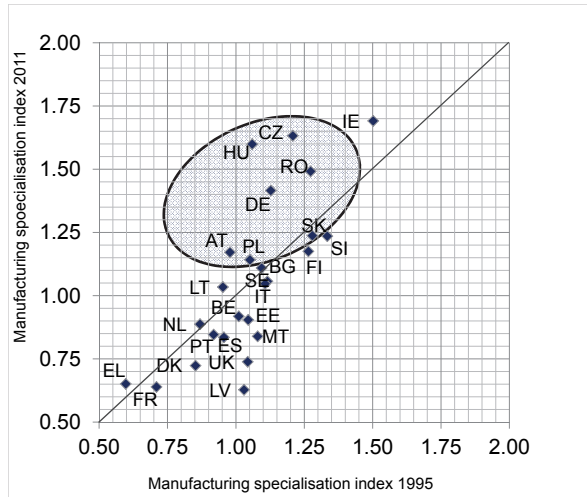


Source: BACI; wiiw calculations.

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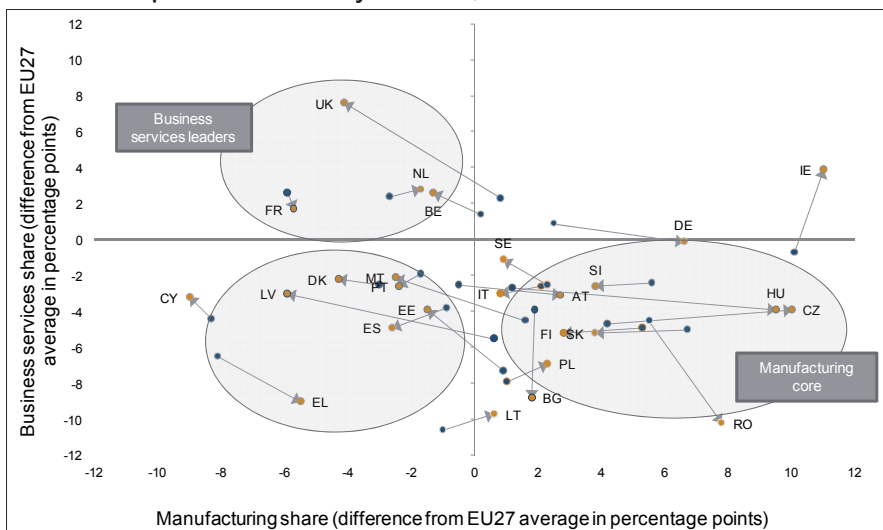
- Global dimension: The EU's 'manufacturing performance' in the global economy
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Emergence of the Central European Manufacturing Core Relative specialisation in manufacturing, 1995 vs. 2011



Source: WIOD; wiiw calculations.

EU-27 specialisation dynamics, 1995-2011



Source: WIOD; wiiw calculations.

Explanations for the 'manufacturing divide'

- Demand push from fast-growing emerging markets (especially for the manufacturing core)
- Improved cost competitiveness through wage moderation (DE, AT)
- Efficiency gains from regional production integration following EU enlargement (manufacturing core)

Production integration explains part of the 'manufacturing divergence' in the EU

Dependent variable:	change in manufacturing share	
initial manufacturing share	-0.0057	
initial GDP per capita	-0.0602	
(initial GDP per capita) ²	0.0030	
dummy for CE manufacturing core	0.0060 *	
production integration	-0.0335 *	Production integration intensifies 'de-industrialisation' for EU-MS
production integration x dummy for CE manufacturing core	0.0644 **	
change in labour costs	0.0387 *	... but supports manufacturing specialisation in the CE manufacturing core
change in real effective exchange rate	-0.0852 **	

Production integration explains ≈13% of the overall structural divergence; the divergence amounts to ≈5 p.p.

Content

- Global dimension: The EU's 'manufacturing performance' in the global economy
- Internal dimension: Specialisation patterns within the EU
- Policy dimension: Implications and options

Implications

- EU as a whole is rather well positioned to maintain competitiveness in manufacturing
- EU internal 'manufacturing divide'
- Erosion of national manufacturing systems in parts of the EU
- Negative consequences for job security and quality
- Reduced long-term growth prospects for EU-MS outside the manufacturing core (except maybe those with strong business services sector)
- Recurring current account imbalances

Policy options

- Accept the 'manufacturing divide'
- Counter the 'manufacturing divide' actively:
 - Fiscal transfers
 - EU internal labour mobility
 - Industrial policy

Principles of an industrial policy

- Meeting most pressing societal challenges:
green industrial policies
- Industrial policy with a strong investment component



Example: Investment initiative

A large-scale roll-out of zero emission buses in the EU

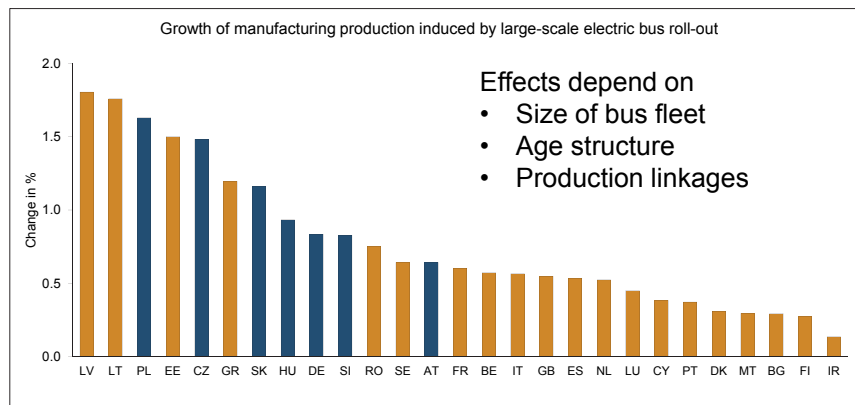
- Number of urban buses 430,187
- Replacement of buses ≥ 10 years ($\approx 48\%$) 207,000
- Cost per bus EUR $\sim 400,000$

- Assumption: roll-out over 3 years
- Average annual investment demand

electric bus scenario	EUR 26.7 bn
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- Effects on manufacturing production due to this additional investment demand for the transport equipment industry can be calculated (using Global Input-Output Tables)

Large-scale roll-out of zero emission buses: Production outcome across Member States



Source: European Commission (2009); Civitas (2013); WIOD; wiiw calculations.

Principles of an industrial policy

- Meeting most pressing societal challenges:
green industrial policies
- Industrial policy with a strong investment component
- Coordination of activities within S3 ('smart specialisation strategy')
- Keeping value-added generation within the European Union
- New 'Airbus Projects' (e.g. shipbuilding, high-speed trains)

Conclusions

- EU well positioned in global markets
- The 'manufacturing divide' poses a formidable challenge for the EU
(more than 'globalisation' as such)
- Several policy options but politically difficult to implement
- European industrial policy initiative is the 'least unlikely' amongst
the policy options
- Diverging specialisation patterns hard to counteract
(even with targeted policy measures)

Country codes

AT	Austria	IE	Ireland
BE	Belgium	IT	Italy
BG	Bulgaria	LT	Lithuania
CY	Cyprus	LU	Luxembourg
CZ	Czech Republic	LV	Latvia
DE	Germany	MT	Malta
DK	Denmark	NL	Netherlands
EE	Estonia	PL	Poland
GR	Greece	PT	Portugal
ES	Spain	RO	Romania
FI	Finland	SE	Sweden
FR	France	SI	Slovenia
HR	Croatia	SK	Slovakia
HU	Hungary	UK	United Kingdom
<hr/>			
CESEE	Central, East and Southeast Europe		
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NMS	New Member States	RoW	Rest of the World
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