Franco-German Conference

French Economy: What Policies to reduce unemployment and foster competitiveness?

Lionel Fontagné

PSE-University Paris 1 & CEPII

Motivation

- What are the main determinants of unemployment in France?
  - Frictions on the labor market?
  - Demand?
  - Competitiveness?
- Not necessarily equivalent from a policy perspective
- CICE (Crédit d'Impôt Compétitivité Emploi)
  - Tax credit = 6% of gross wage bill (excl labor taxes) below 2.5 x minimum wage (2,800 euro net)
  - Around 20 bn/year
- Reducing labor cost for *all* firms → competitiveness?
  - What's the mean wage of exporters / non-exporters?
    - Tradeable & non-tradable
    - Labor cost in outsourced services
  - How are labor intensive / capital intensive sectors impacted?
  - How do employers and employees share the windfall?
  - Do firms reduce their prices or increase mark ups ?

Motivation

- Impact on compet of CICE-type reduction in labor cost:
  - Technicalities: tax credit instead of cut in labor taxes
  - Substitution of unskilled/medium skilled to high-skilled labor:
    - Quality down
  - Reduces threshold of exporting for low productive firms (lower wages)
    - Increased participation in export markets
    - Reduced mean value of exports
  - Job creation:
    - Substitution of labor to capital and to imported inputs
    - Substitution of domestic intermediate inputs to foreign sourcing
    - Hiring of less productive workers
  - Mark ups up : favorable to investment (variety, quality, process)
  - Prices down : market shares up, modulo elasticity

Overview

- What we do
  - Competitiveness in value added
  - Diagnosis of competitiveness problem: price *vs* quality
- What we find
  - German gains in market shares less impressive in VA
  - Net effect of reduced domestic content and increased exports is positive in terms of generated VA, and the more so for Germany
  - Important positive role of domestic demand for France
  - Specialization and orientation of exports plays limited role
  - Pure competitiveness effects combine price and quality
  - France: Problem of price before crisis and quality afterwards
  - Cost problem fixed in France
  - Policies should now target industrial investment

Competitiveness in VA

- Global value chains
- Importing cheap inputs is similar to technical progress
  - Increases the productivity of the non-offshored tasks
  - Incomplete pass through increases firms mark ups, investment, product variety and quality
  - Johnson & Noguera (JIE, 2012) – Koopman, Wang & Wei, AER, 2014) – Grossman & Rossi-Hansberg (AER, 2008) – Timmer, Los, Stehrer & de Vries (EP, 2013)
- Imported intermediate inputs
  - Import content reduces exported VA compared to gross exports
  - Import content increases the cost competitiveness of exports and increases the gross exports
  - What about the *net* effect on value added?

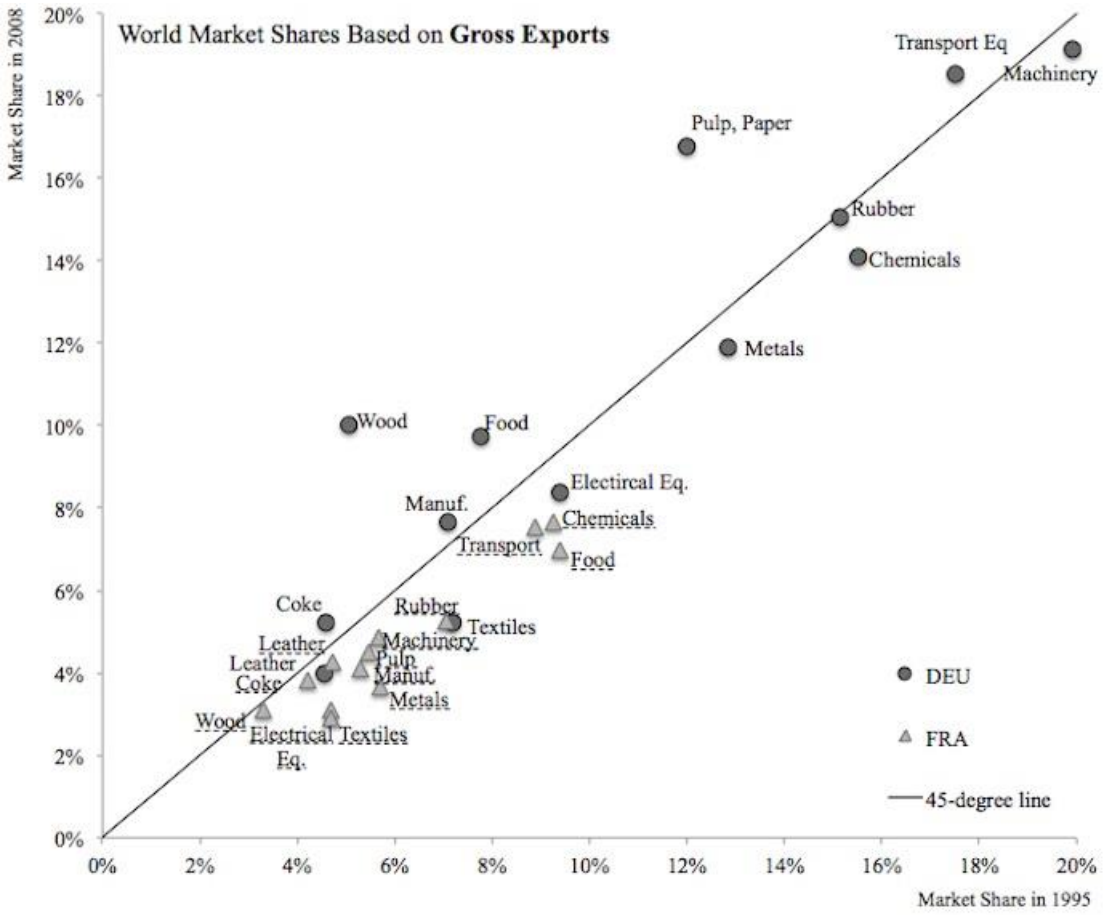
Competitiveness in VA

- Competitiveness → a sector's share in its respective world market *defined in terms of VA*
- Income earned through:
  - domestic VA contained in domestically produced and consumed final goods;
  - domestically produced exports of final goods directly absorbed by the recipient country;
  - exporting intermediates to a recipient country;
  - sales of intermediates, which are further processed in the recipient country and re-exported to third countries;
  - sales of intermediates further processed in the recipient country and reimported by the source country to produce final products for domestic consumption
- We disregard connections with services sectors: manufactured VA embodied in manufactured exports, not total VA
- Results from CEPII – *Katharina Laengle (2016). Competitiveness in value added – A French-German comparison*

Competitiveness in VA

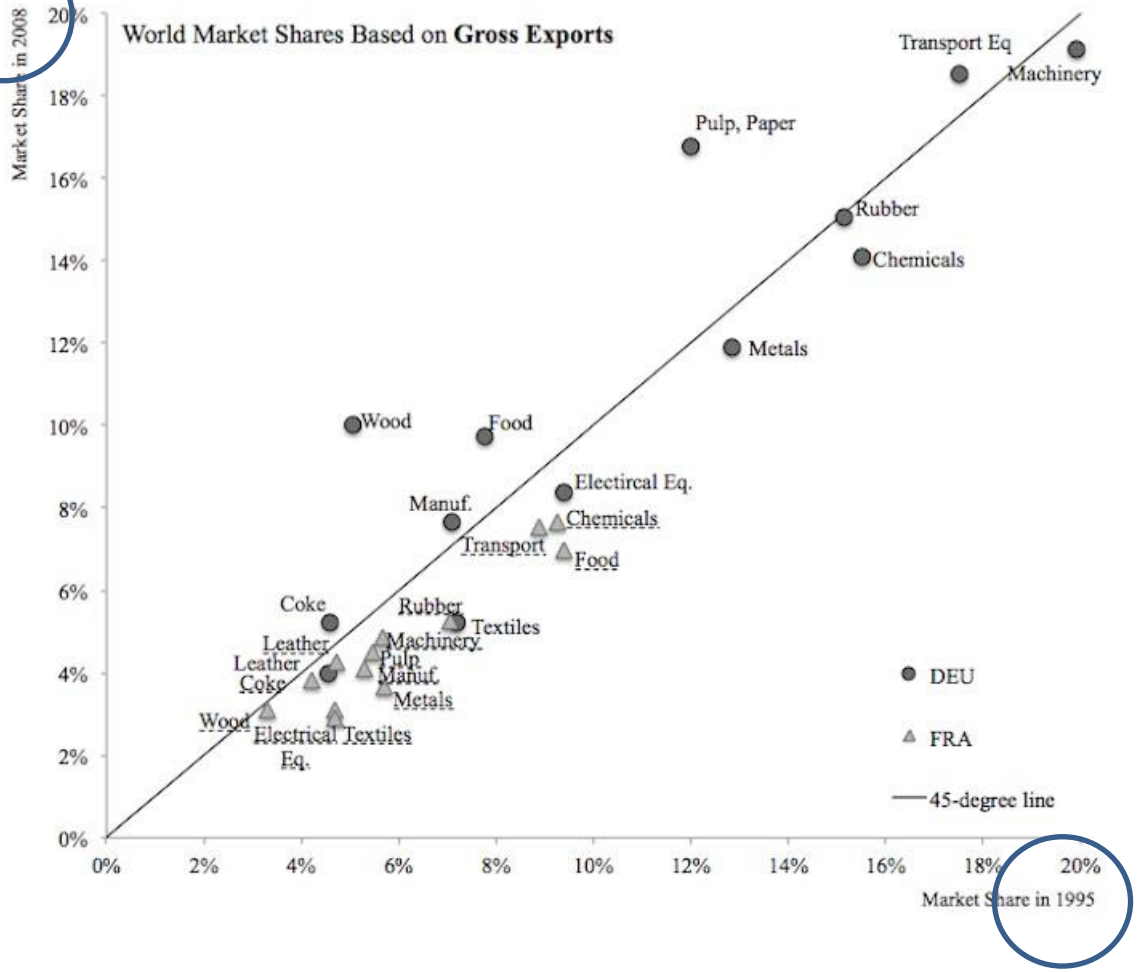
- First step:
  - Compute manuf VA embodied in exports and compare with exports in gross terms
  - 1995 & 2008
  - France and Germany
  - Compare world market shares in gross and VA terms
  - Takes account of *domestic* market
- Second step:
  - Compute manuf VA in *absolute* terms (at 1995 prices)
  - Takes account of enlargement of world market and net effect of:
    - Increasing imported content of exports
    - Pro competitive effect of offshore outsourcing

World market shares of manufacturing industries in terms of gross exports



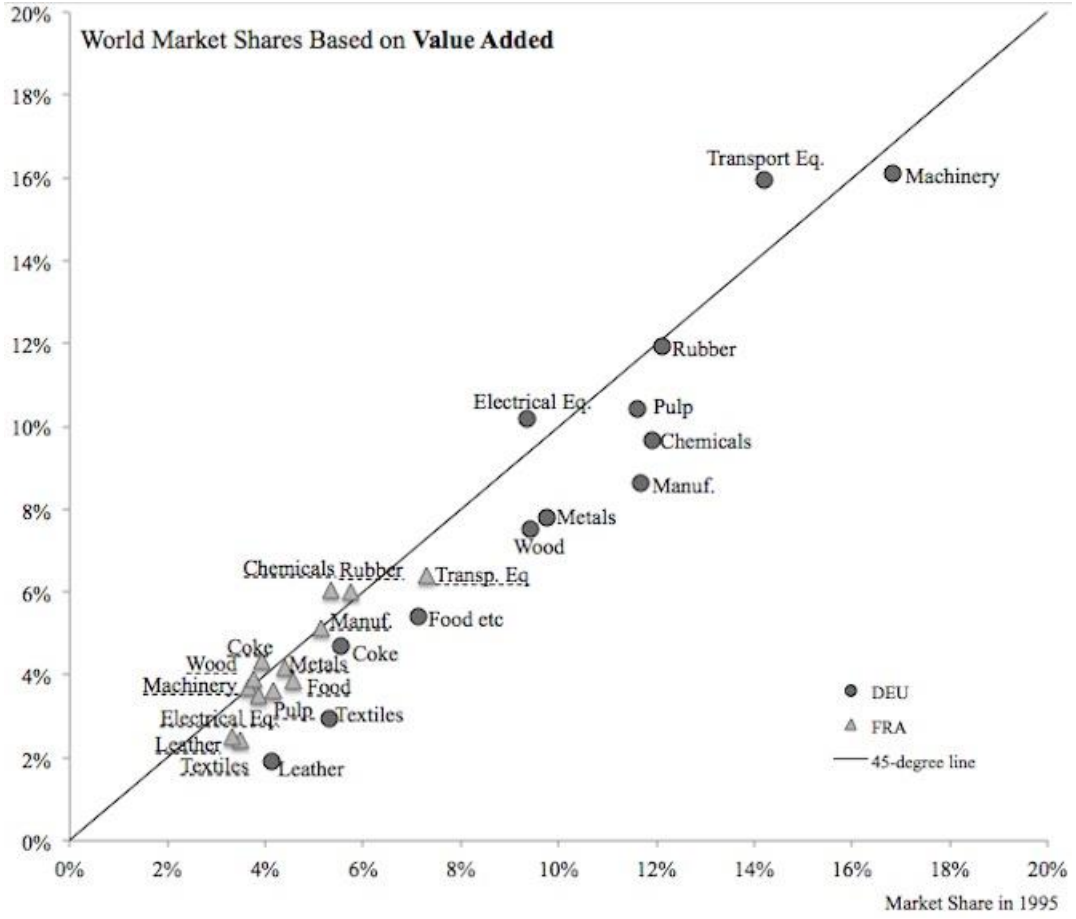
World market shares of manufacturing industries in terms of gross exports

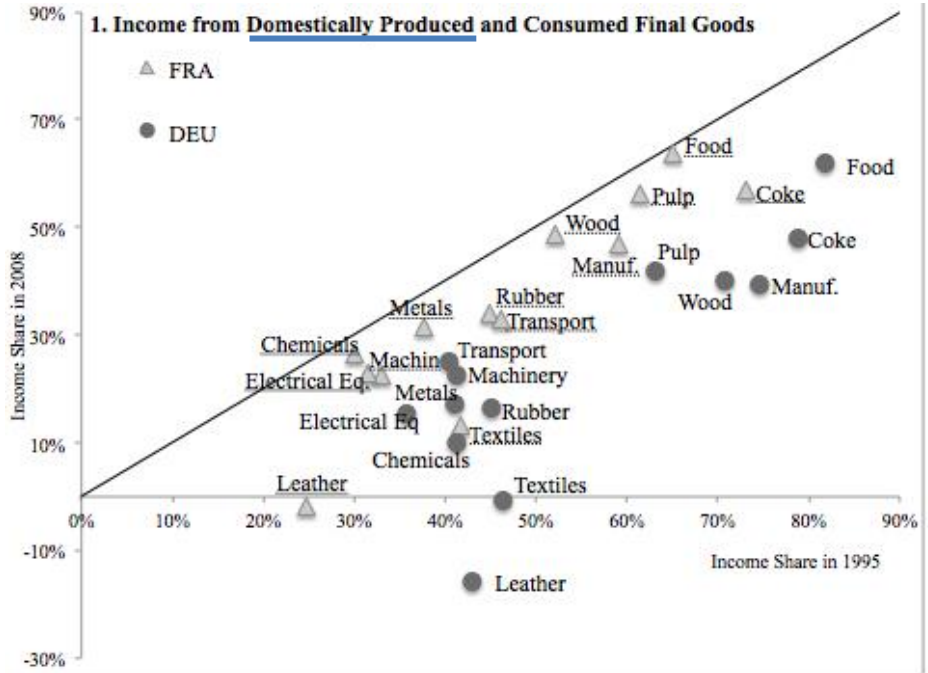
2008

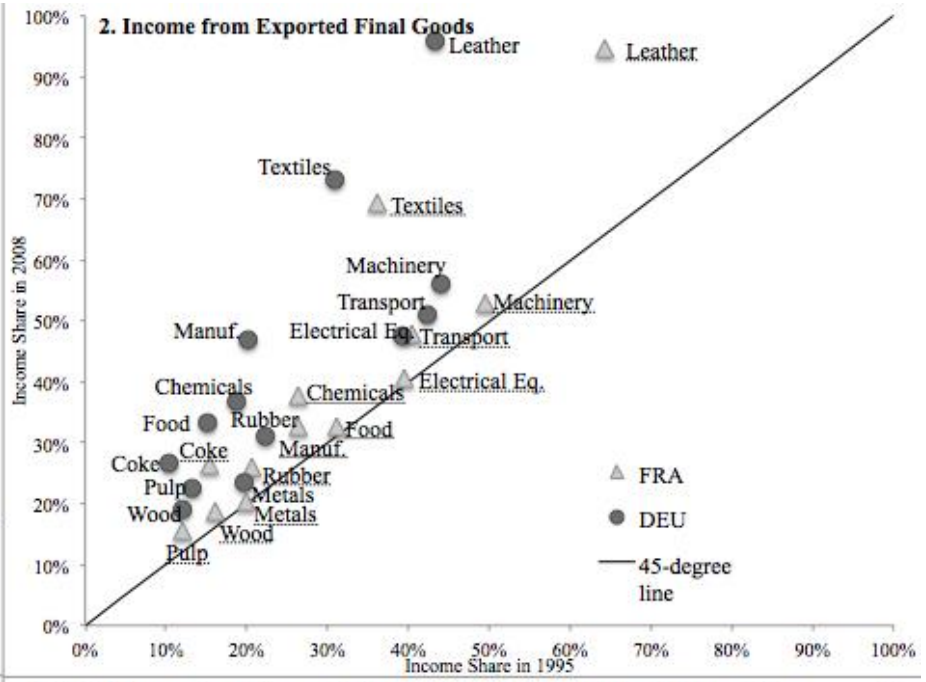


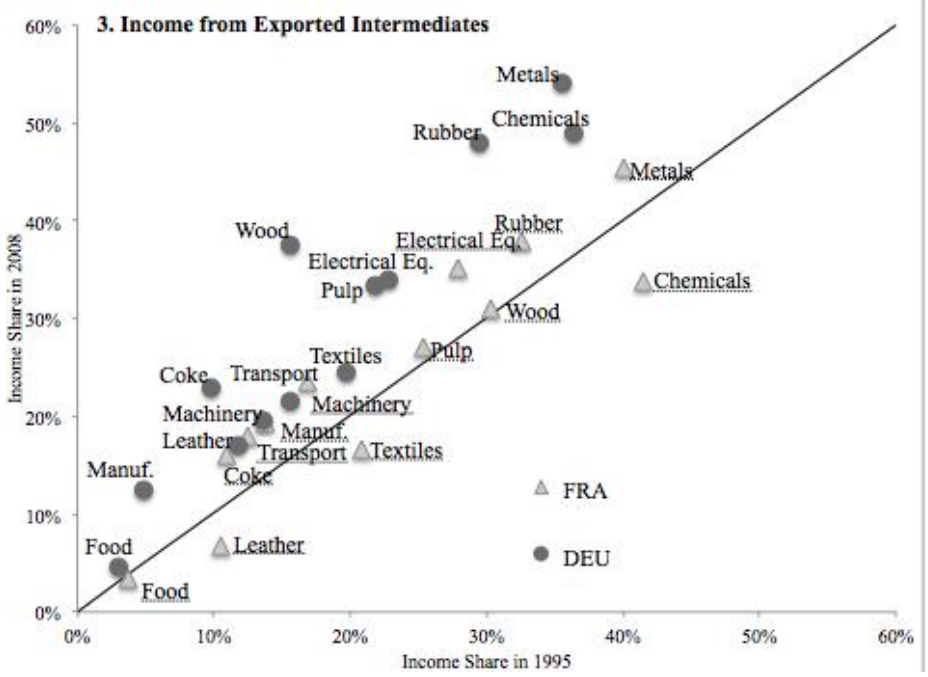
1995

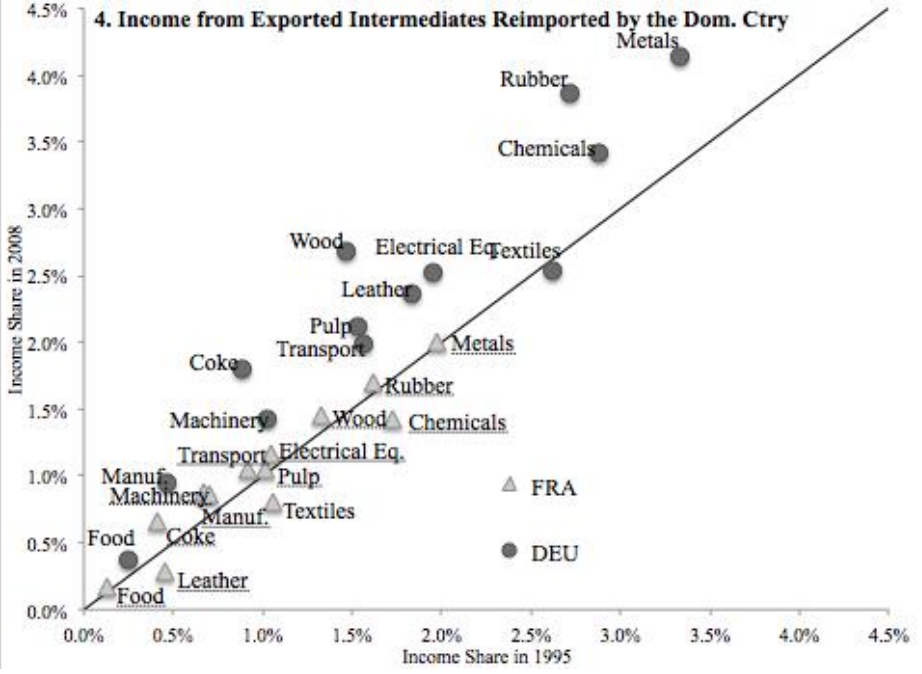
World Market Shares of Manufacturing Industries in Terms of Value Added



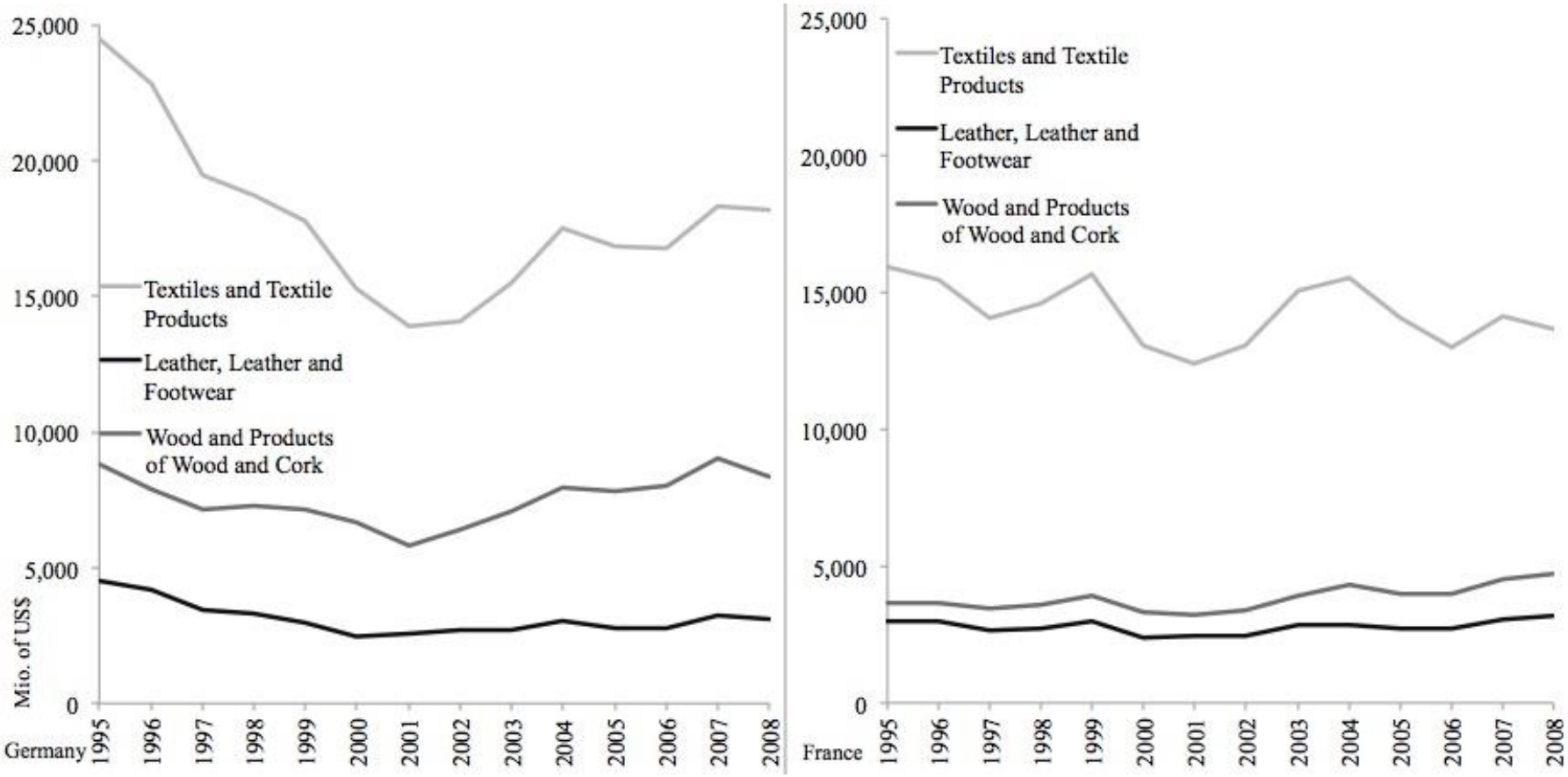

1. Income from Domestically Produced and Consumed Final Goods
FRA
DEU
Income Share in 2008
Income Share in 1995
90%
70%
50%
30%
10%
-10%
-30%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
Food
Food
Pulp
Coke
Wood
Coke
Manuf.
Pulp
Wood
Manuf.
Metals
Rubber
Transport
Chemicals
Machin
Transport
Electrical Eq.
Machinery
Metals
Rubber
Electrical Eq
Textiles
Chemicals
Leather
Textiles
Leather


2. Income from Exported Final Goods
Income Share in 2008
Income Share in 1995
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Leather
Leather
Textiles
Textiles
Machinery
Transport
Machinery
Manuf.
Electrical Eq.
Transport
Chemicals
Chemicals
Electrical Eq.
Food
Rubber
Food
Coke
Coke
Manuf.
Rubber
Pulp
Metals
Wood
Metals
Wood
Pulp
FRA
DEU
45-degree line

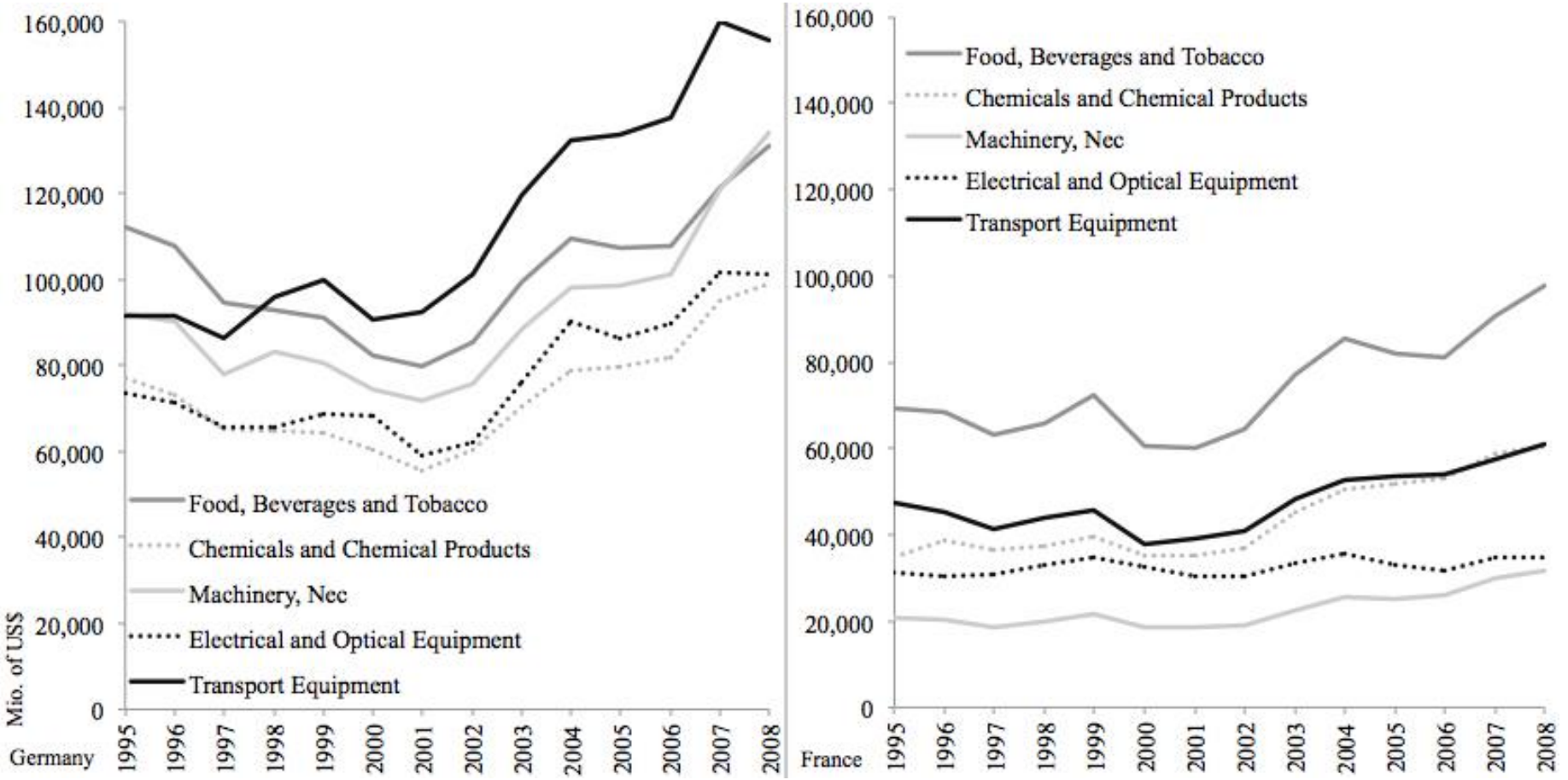

3. Income from Exported Intermediates
Income Share in 2008
Income Share in 1995
60%
50%
40%
30%
20%
10%
0%
0%
10%
20%
30%
40%
50%
60%
Metals
Chemicals
Rubber
Metals
Wood
Rubber
Electrical Eq.
Electrical Eq.
Chemicals
Pulp
Wood
Pulp
Textiles
Coke
Transport
Machinery
Machinery
Manuf.
Leather
Transport
Textiles
Manuf.
Coke
FRA
Food
Leather
DEU
Food


4. Income from Exported Intermediates Reimported by the Dom. Ctry
Income Share in 2008
Income Share in 1995
4.5%
4.0%
3.5%
3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
0.0%
0.5%
1.0%
1.5%
2.0%
2.5%
3.0%
3.5%
4.0%
4.5%
Metals
Rubber
Chemicals
Wood
Electrical Eq.
Textiles
Leather
Pulp
Transport
Metals
Coke
Rubber
Machinery
Wood
Chemicals
Transport
Electrical Eq.
Manuf.
Pulp
Machinery
Textiles
Manuf.
Food
Coke
Leather
Food
FRA
DEU

Manuf VA income: disadvantaged sectors



Manuf VA income: advantaged sectors

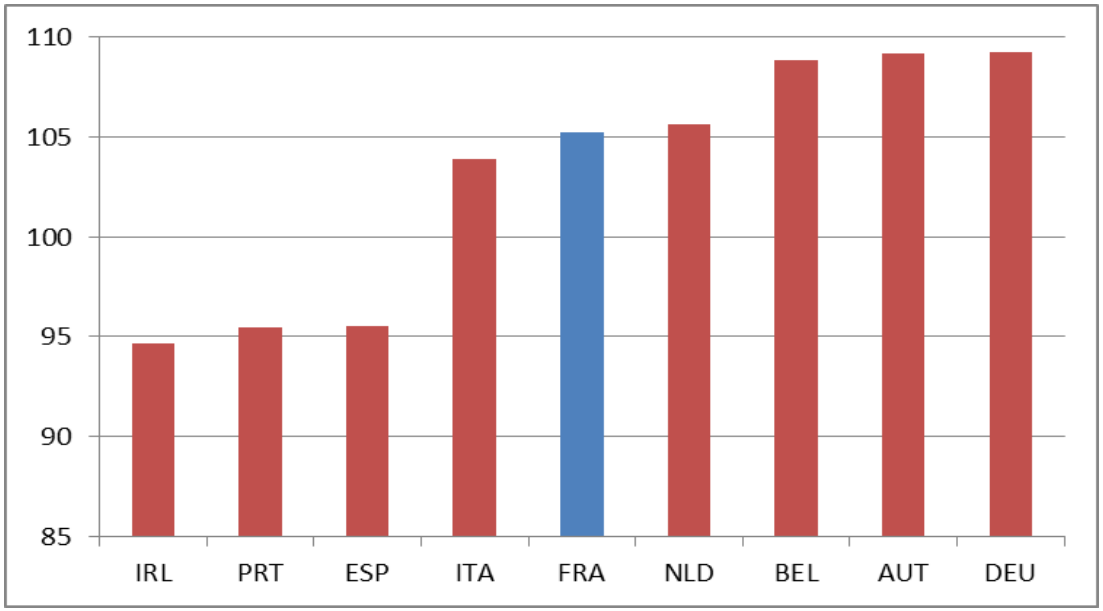


The French problem: specialization, price or quality?

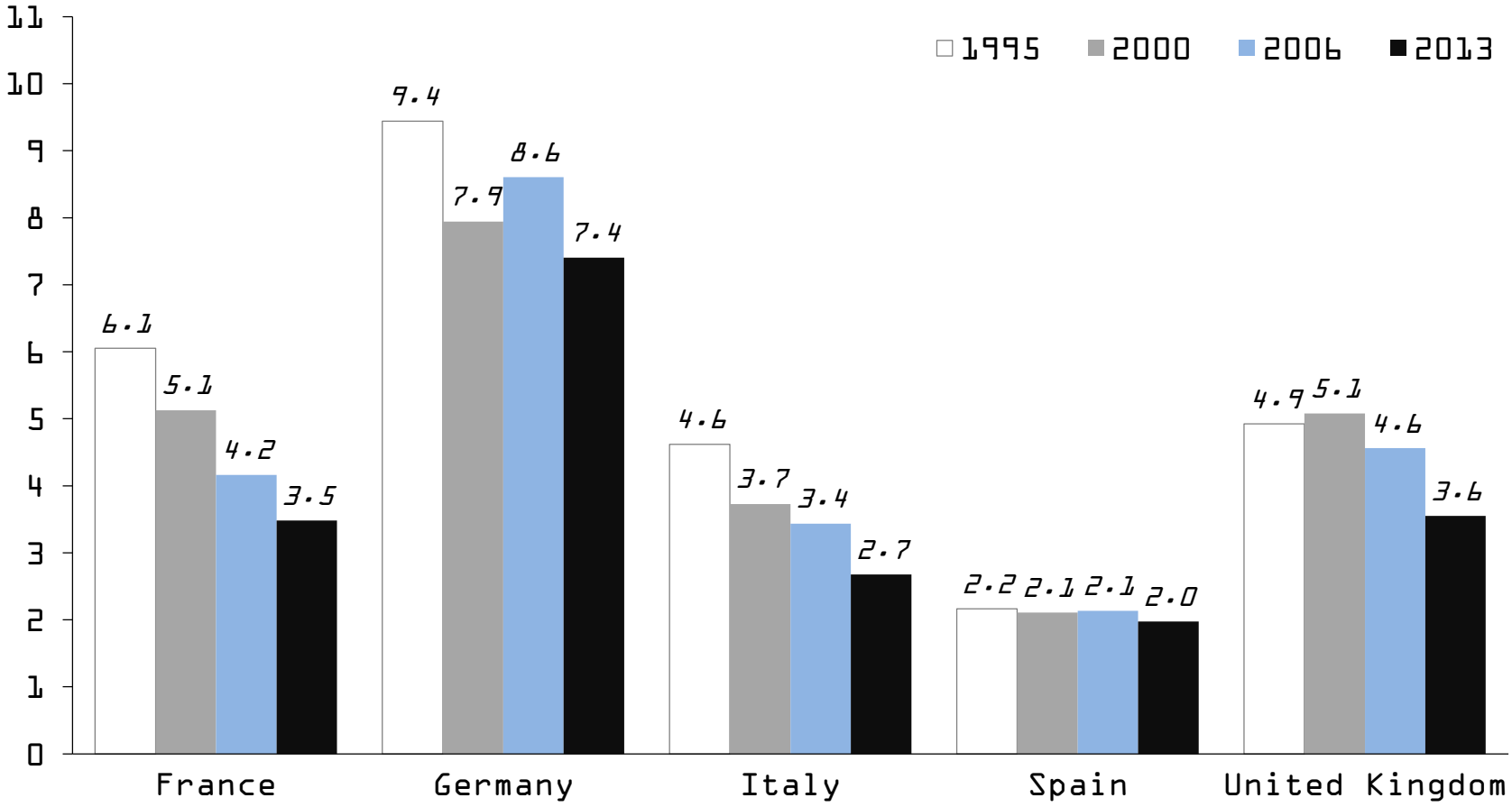
- France is losing market share…
- … as all advanced countries (there are new players in the world economy)
- … but faster than most EU countries
- Results from *Bas, Fontagné, Martin, Mayer (2015). "In search of lost market shares". CAE*
- Price should not be the main determinant in recent period

- ULC 2015 (2010 = 100)
  All sectors

Source: OECD (2014 for IRL & BEL)



Market share for goods and services for the five largest EU countries



Composition effects

- Product and destination dimensions
  - Product specialization
  - Geographic orientation of exports
- Simple decomposition of changes in market share
- Shift share econometric method:
  - Cheptea, Fontagné & Zignago (RWE 2014)
  - Gaulier, Santoni, Taglioni & Zignago (WB wp 2013)
- Product effect – destination effect – exporter effect (pure competitiveness)
- Quarterly data
- Export Competitiveness DataBase
- 200+ countries, HS6, 2006q1 -> 2014q3

Composition effects

- « Pure competitiveness »
- What would the variation in exports for France be if the geographic and sectoral structure of its exports were the same as that of its competitors?
- Ability to cope with competition for a given good on a given market
- Two periods, before/after trade collapse

→ Results: poor French export performance is linked to an inadequate “quality/price ratio”, not to poor country or product positioning

Price vs quality

- Price:
  - labor cost, energy cost, cost of capital
  - intermediate consumptions
  - productivity, mark ups, exchange rate
- Non-price:
  - variety
  - quality, reputation
  - a demand shifter, once prices are controlled for

Back to fundamentals

- Non-price competitiveness is not observable
  - Bas, Martin & Mayer (wp mapcompete 2014) adaptation of the method developed by Khandelwal, Schott & Wei (AER 2013)

- Demand shifter approach (in logs):

$quantity_{ijkt} + \sigma_k \, . \, price_{ijkt} = \alpha.GDP_{it} + \beta.D_{ij} + e_{jkt} + \varepsilon_{ijkt}$

-> σ from Broda & Weinstein (QJE 2006), D a vector of bilateral characteristics, time subscript omitted, price is unit value

Non-price compet = $\varepsilon_{ijkt} \, / \, (\sigma_k - 1)$

Measuring non-price competitiveness

- Results on products aggregated within 100+ sectors
- e.g. Aircraft leading French sector for non-price compet. (Germany: automotive parts)
- Prices should be divided by two in absence of deviation of French non-price competitiveness from the mean of the reference group (benchmark OECD)

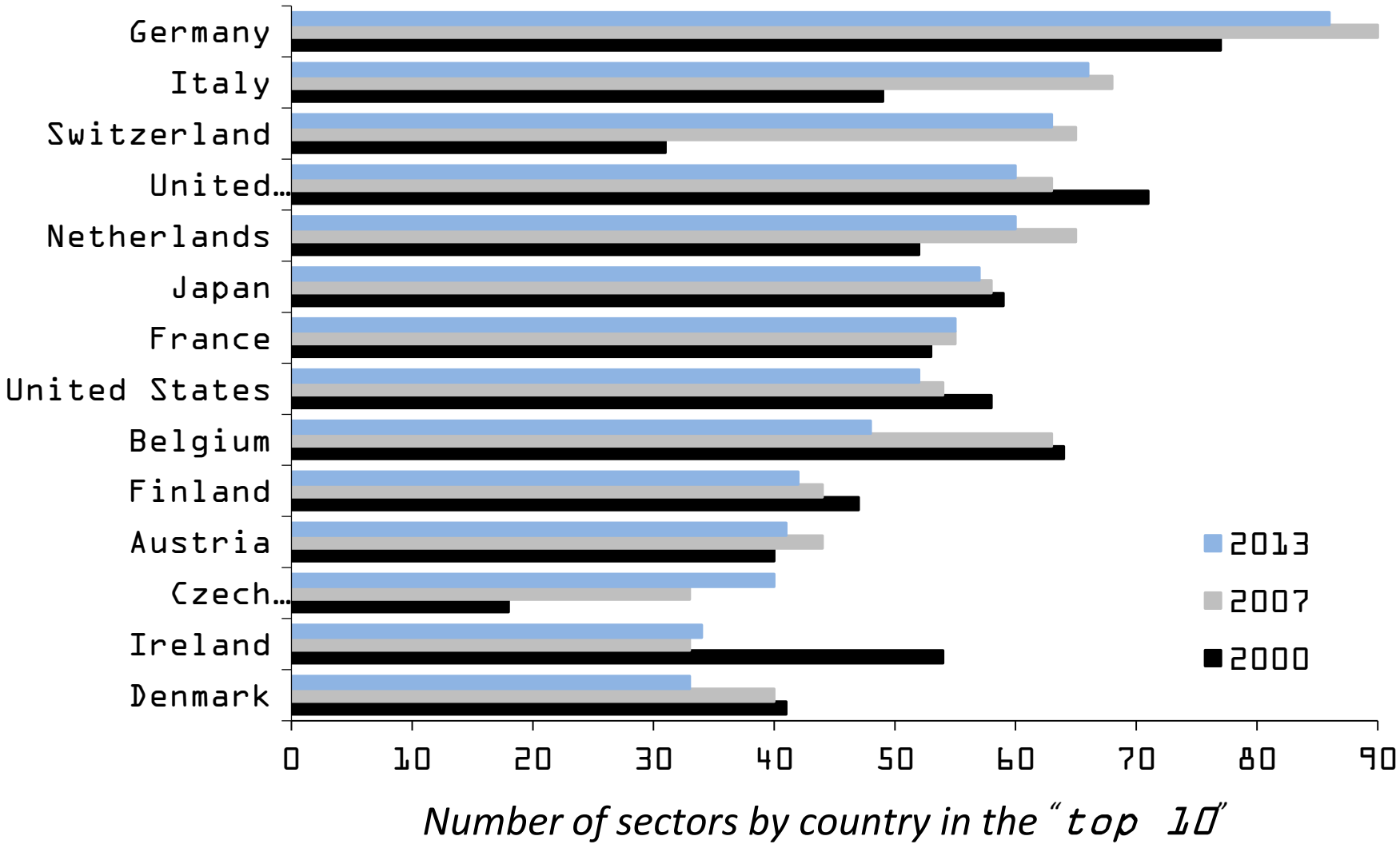
Measuring non-price competitiveness

The French top ten	Market share within the OECD as a %	Sector share of total country exports as a %	Non-price competi-tiveness[a]	OECD Ranking
Aeronautics	10.2	3.4	2.4	1
Leather goods	25.6	1.3	7.3	2
Wine	28.0	2.4	2.2	3
Electrical distribution equipment	6.0	1.7	4.5	3
Automotive spare parts	6.2	6.0	1.4	5
Dairy products	14.6	2.2	1.2	5
Clothing	9.3	1.1	1.2	5
Plastics	7.5	3.9	1.1	7
Other metal products	5.8	2.2	1.2	7
Plastic products	6.4	2.8	1.3	8

Measuring non-price competitiveness

The German top ten	Market share within the OECD as a %	Sector share of total country exports as a %	Non-price competi-tiveness[a]	OECD Ranking
Automotive spare parts	22.6	8.0	3.4	1
Non-ferrous metals	16.4	3.6	1.4	1
Plastic products	20.4	3.3	2.8	1
Automotive vehicles	16.8	3.0	1.6	1
Other metal products	21.5	3.0	2.2	1
Electrical distribution equipment	24.2	2.5	34.2	1
Machinery, other	20.7	2.3	3.7	1
Machine-tools	27.4	2.3	2.1	1
Precision instruments	21.1	2.2	21.4	1
Electronic components	17.1	1.8	25.6	1

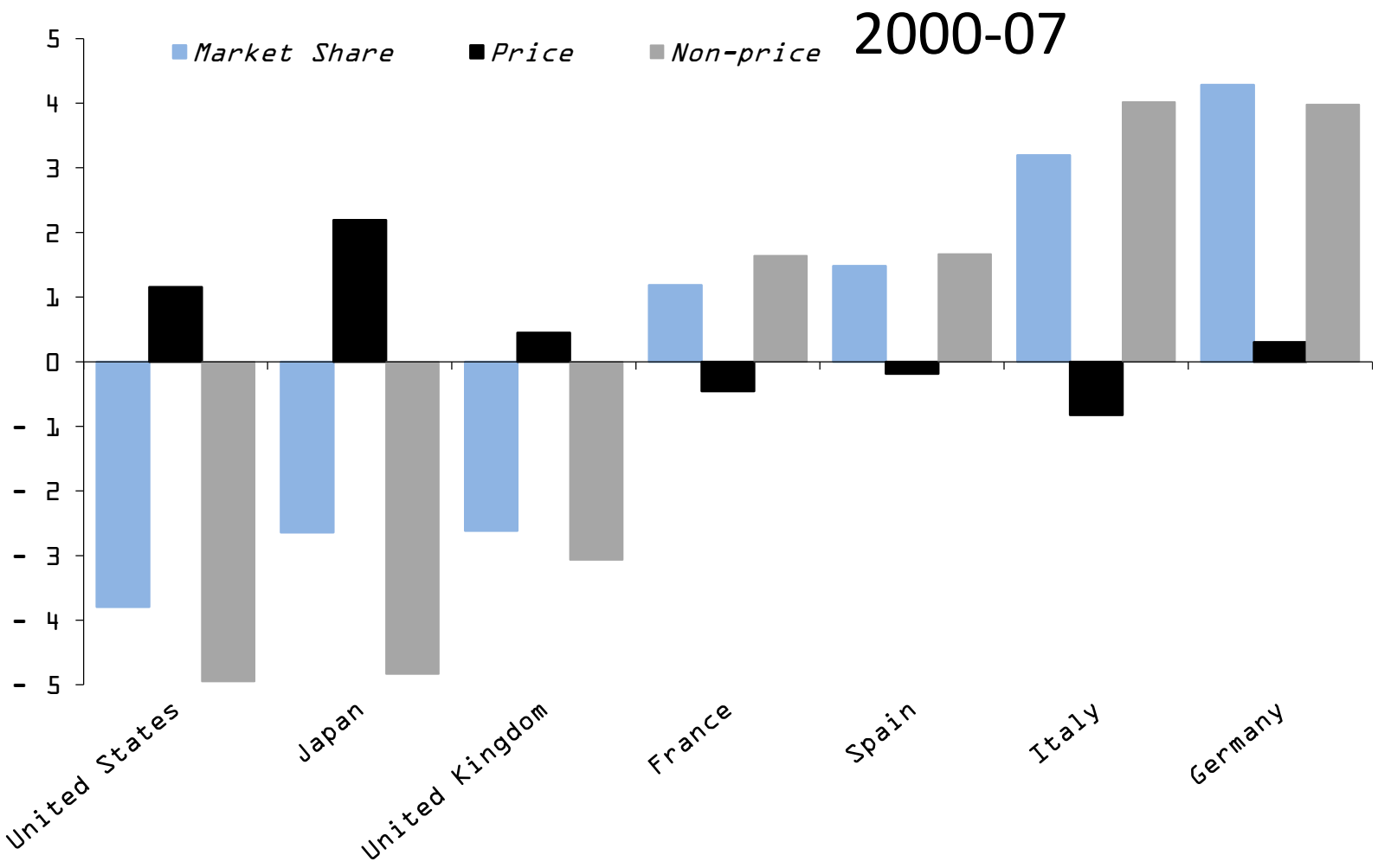
Measuring non-price competitiveness



Measuring non-price competitiveness

- Contribution of non-price competitiveness?
- Compute annual changes in market shares and price and non-price competitiveness contribution, in %
- For two sub periods: 2000-07 & 2008-13
- Sheds new light on German performance
- Points to selection effects in France

Measuring non-price competitiveness



Measuring non-price competitiveness