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# **Research Report**

Standing up for competition: Market concentration, regulation, and Europe's quest for a new industrial policy

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# Standing up for Competition:

# Market Concentration, Regulation, and Europe's Quest for a New Industrial Policy

by Oscar Guinea, Senior Economist and Fredrik Erixon, Director at ECIPE

**SUPPLEMENTARY ANNEX** 



# ANNEX 1: MARKET CONCENTRATION IN EU MEMBER STATES

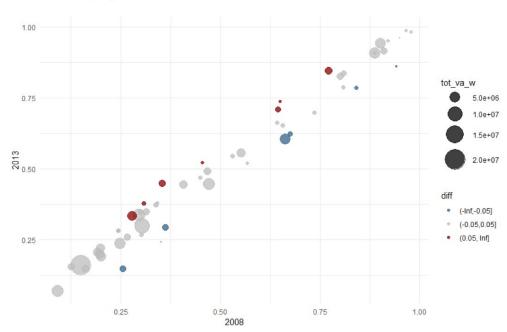
The value of each sector is weighted by its total turnover which is indicated by the size of the circle. The colour of the circle indicates whether the level of market concentration and market power has increased (red), decreased (blue) or stayed relatively the same (grey).

# List of countries:

- Belgium
- Czech Republic
- Estonia
- Finland
- Italy
- Latvia
- Spain
- France
- Germany
- Lithuania
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia

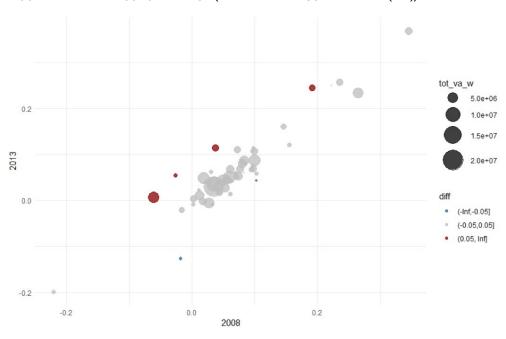
## **BELGIUM**

FIGURE A1.1: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



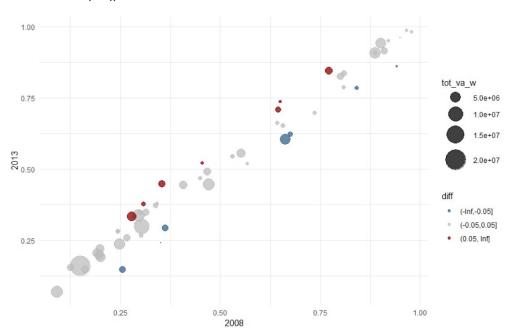
Source: CompNet, authors' calculations.

FIGURE A1.2: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



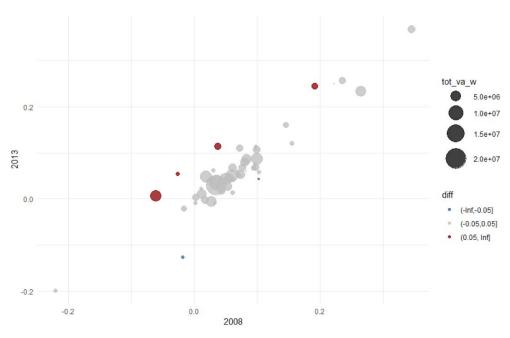
## **CZECH REPUBLIC**

FIGURE A1.3: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



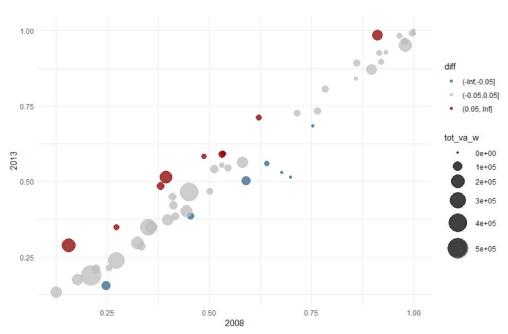
Source: CompNet, authors' calculations.

FIGURE A1.4: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



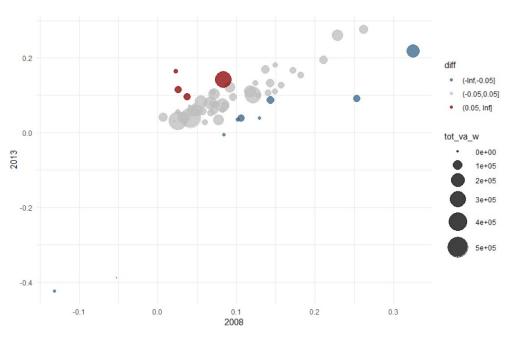
#### **ESTONIA**

FIGURE A1.5: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



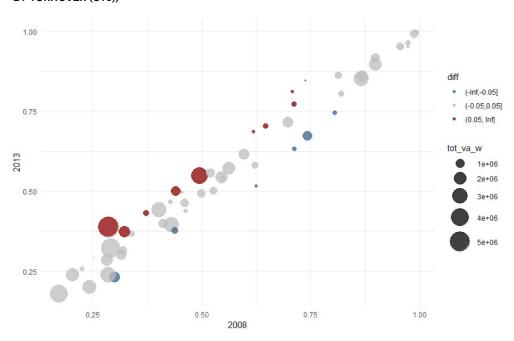
Source: CompNet, authors' calculations.

FIGURE A1.6: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



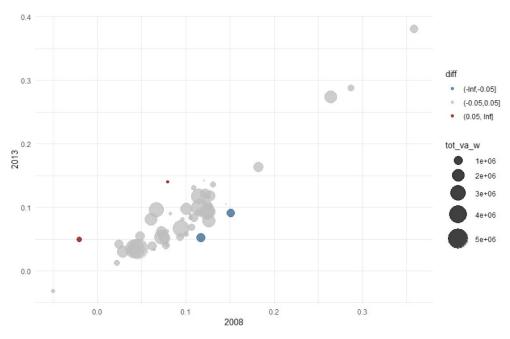
## **FINLAND**

FIGURE A1.7: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



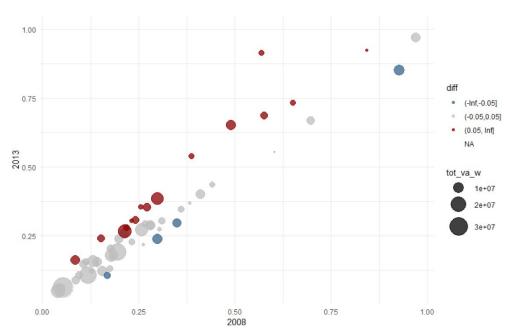
Source: CompNet, authors' calculations.

FIGURE A1.8: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



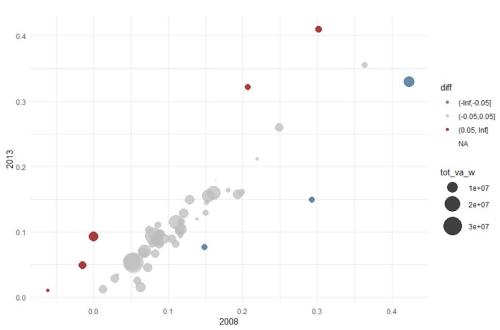
**ITALY** 

FIGURE A1.9: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



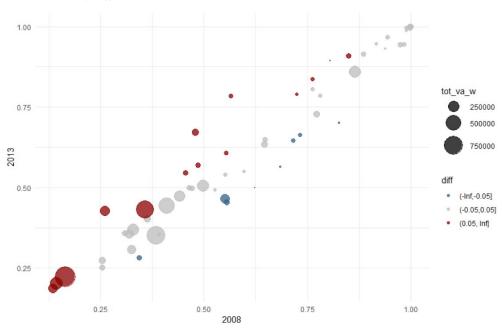
Source: CompNet, authors' calculations.

FIGURE A1.10: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



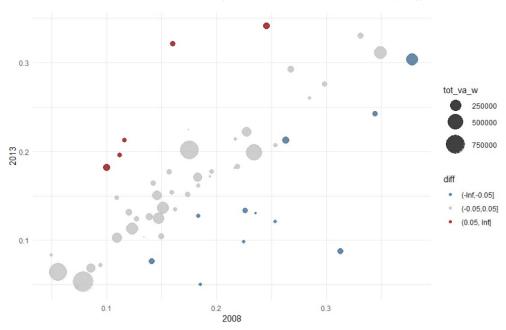
## LATVIA

FIGURE A1.11: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



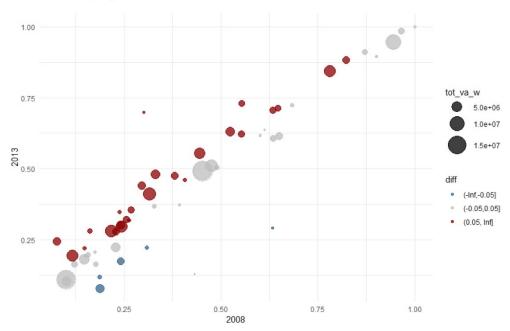
Source: CompNet, authors' calculations.

FIGURE A1.12: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



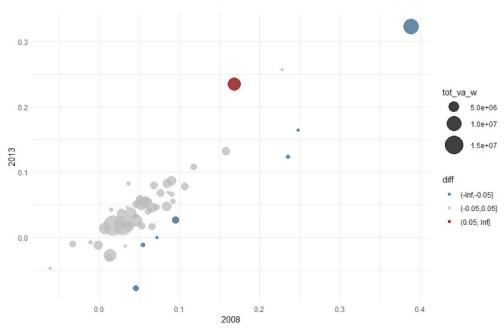
## **SPAIN**

FIGURE A1.13: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



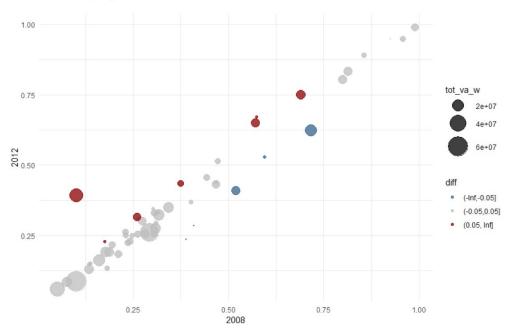
Source: CompNet, authors' calculations.

FIGURE A1.14: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



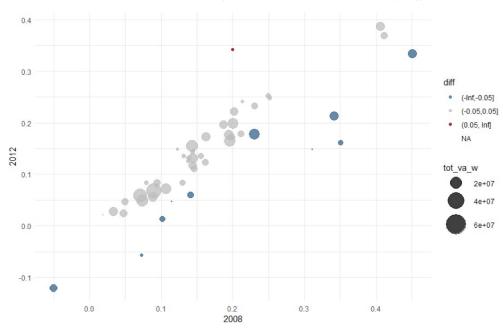
## **FRANCE**

FIGURE A1.15: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



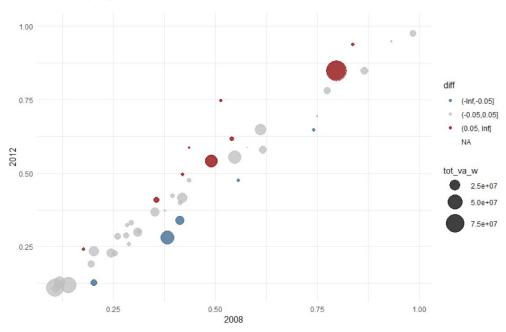
Source: CompNet, authors' calculations.

FIGURE A1.16: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



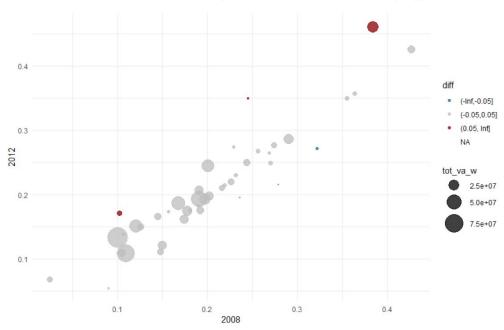
## **GERMANY**

FIGURE A1.17: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



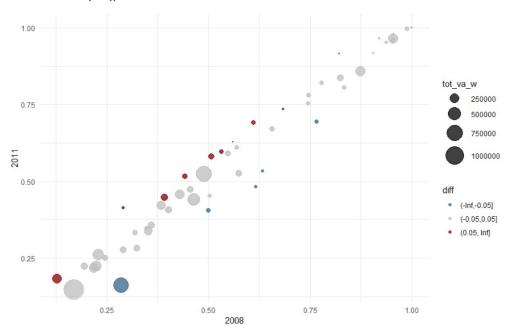
Source: CompNet, authors' calculations.

FIGURE A1.18: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



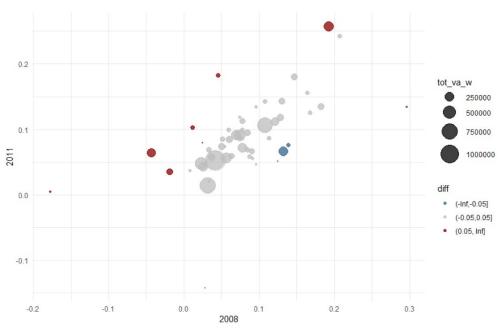
## LITHUANIA

FIGURE A1.19: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



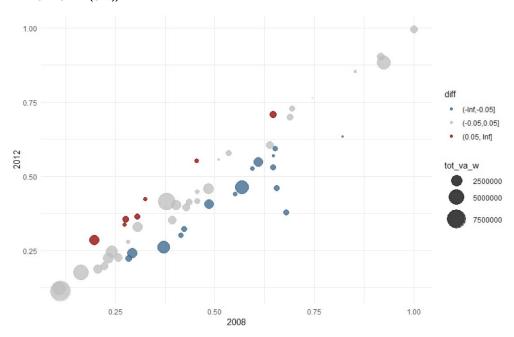
Source: CompNet, authors' calculations.

FIGURE A1.20: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



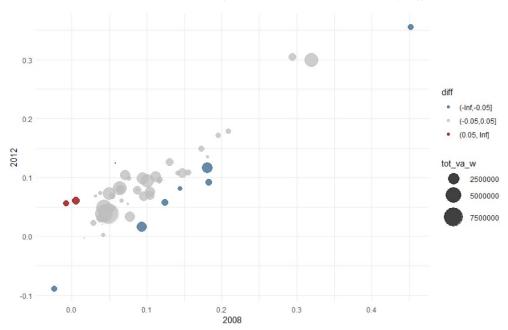
## **POLAND**

FIGURE A1.21: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



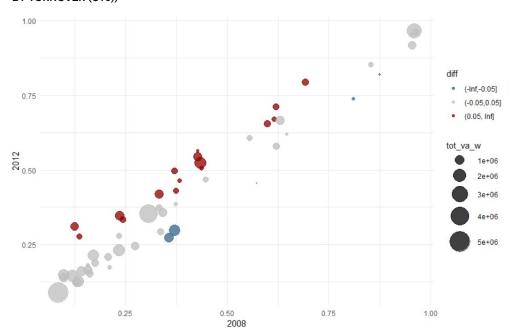
Source: CompNet, authors' calculations.

FIGURE A1.22: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



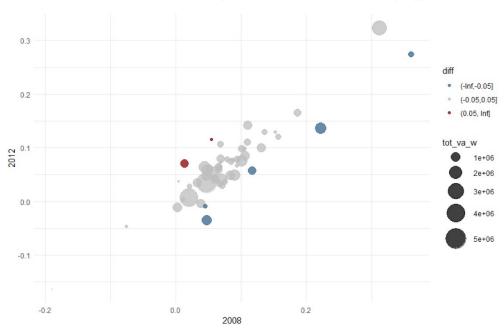
## **PORTUGAL**

FIGURE A1.23: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



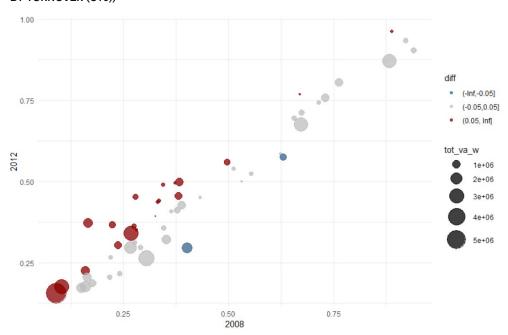
Source: CompNet, authors' calculations.

FIGURE A1.24: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



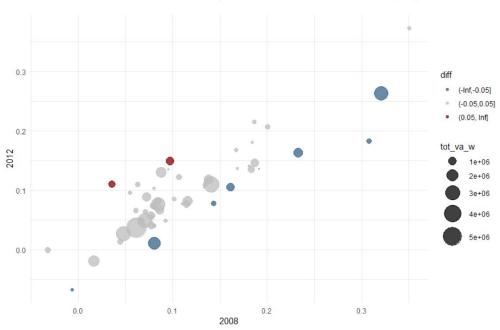
#### **ROMANIA**

FIGURE A1.25: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



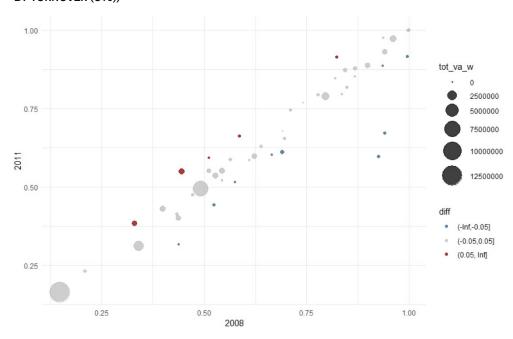
Source: CompNet, authors' calculations.

FIGURE A1.26: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



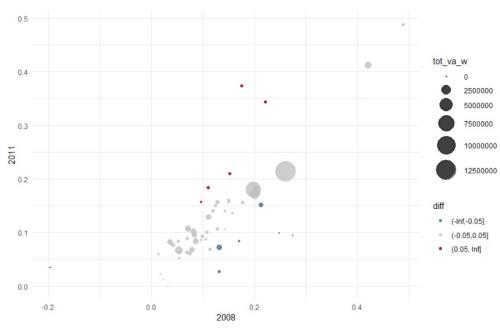
#### **SLOVAKIA**

FIGURE A1.27: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



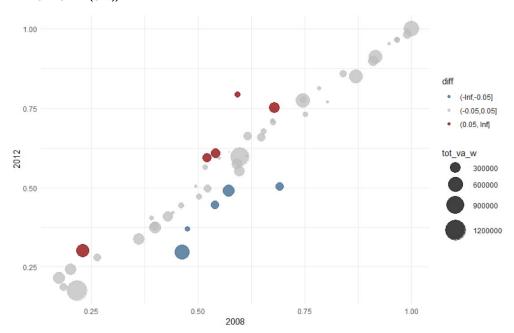
Source: CompNet, authors' calculations.

FIGURE A1.28: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



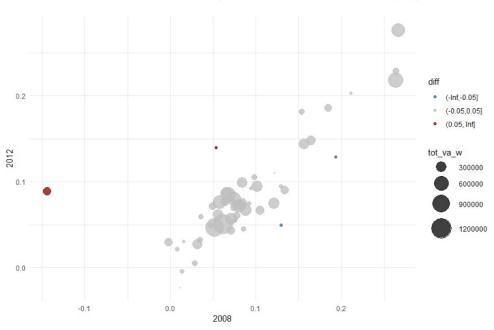
## **SLOVENIA**

FIGURE A1.29: MARKET CONCENTRATION (CONCENTRATION RATIO OF THE TEN LARGEST FIRMS BY TURNOVER (C10))



Source: CompNet, authors' calculations.

FIGURE A1.30: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



# ANNEX 2: COMPNET MACRO-SECTORS AND SECTOR DESCRIPTION

NACE Rev. 2 Section	Macro-sector description	Sector description				
С	Manufacturing	Manufacture of food products Manufacture of beverages Manufacture of tobacco products Manufacture of textiles Manufacture of wearing apparel Manufacture of leather and related products Manufacture of wood and of products of wood and cork, except furniture Manufacture of paper and paper products Printing and reproduction of recorded media Manufacture of chemicals and chemical products Manufacture of basic pharmaceutical products and pharmaceutical preparations Manufacture of rubber and plastic products Manufacture of other non-metallic mineral products Manufacture of basic metals Manufacture of fabricated metal products, except machinery and equipment Manufacture of computer, electronic and optical products Manufacture of machinery and equipment Manufacture of motor vehicles, trailers and semitrailers Manufacture of furniture Other manufacturing Repair and installation of machinery and equipment				
F	Construction	Construction of buildings Civil engineering Specialised construction activities				
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	Wholesale and retail trade and repair of motor vehicles and motorcycles Wholesale trade, except of motor vehicles and motorcycles Retail trade, except of motor vehicles and motorcycles				
Н	Transportation and storage	Land transport and transport via pipelines Water transport Air transport Warehousing and support activities for transportation Postal and courier activities				
I	Accommodation and food service activities	Accommodation Food and beverage service activities				
J	Information and communication	Publishing activities Motion picture, video and television programme production, sound recording and music publishing Programming and broadcasting activities Telecommunications Computer programming, consultancy and related activities Information service activities				
L	Real estate activities	Real estate activities				
М	Professional, scientific and technical activities	Legal and accounting activities Activities of head offices; management consultancy activities Architectural and engineering activities; technical testing and analysis Scientific research and development Advertising and market research Other professional, scientific and technical activities Veterinary activities				
N	Administrative and support service activities	Rental and leasing activities Employment activities Travel agency, tour operator and other reservation service and related activities Security and investigation activities Services to buildings and landscape activities Office administrative, office support and other business support activities				

Product market regulation Barriers to trade Barriers to entrepreneurship State control and investment Regulatory **Explicit** regulatory start-ups Scope of Price controls Licenses Admin. Legal barriers Barriers Differential SOEs and permits burdens for to entry to FDI treatment Command corporations of foreign system Gov't and control Tariff Antitrust suppliers involvement regulation Communi-Admin. barriers exemptions Barriers to cation and burdens for in network sectors simplification sole Barriers in trade of rules and proprietor facilitation network Direct procedures firms sectors control over Barriers in enterprises services Governance sectors of SOEs

ANNEX 3: TREE-STRUCTURE OF THE INTEGRATED PRODUCT MARKET REGULATION INDICATOR

Source: OECD Product Market Regulations

#### **ANNEX 4: ECONOMETRIC ANALYSIS**

TABLE A4.1: COUNTRY AND TIME COVERAGE

Country	Time coverage				
Austria	2000-2012				
Belgium	1995-2013				
Croatia	2002-2013				
Czech Republic	1995-2013				
Denmark	2000-2013				
Estonia	1995-2013				
Finland	1995-2013				
France	2000-2012				
Germany	1997-2012				
Italy	1995-2013				
Latvia	2006-2013				
Lithuania	2000-2011				
Poland	2005-2012				
Portugal	2006-2012				
Romania	2003-2012				
Slovakia	2000-2011				
Slovenia	1995-2012				
Spain	1995-2013				

TABLE A4.2: SUMMARY STATISTICS

	Variable	Description	Number of Obs.	Mean	Std. Dev.	Min	Max
Regulation	Product market regulation (PMR)	Economy-wide PMR	174	1.66	0.30	1.21	2.65
Market power	Price cost margin (pcm)	(Turnover – Labour Costs – Nominal Materials)/Turnover	205	0.11	0.06	0.04	0.34
Market con- centration	Concentration ratio for the ten largest firm (C10)	Sum of the turnover shares of the ten largest firms	205	0.28	0.20	0.03	0.78
	Herfindahl- Hirschman Index (HHI)	Squared sum of firms' market shares	205	0.04	0.05	0.00	0.29
Profitability	Profit margins	Operating profit or loss over turnover	193	0.02	0.07	-0.21	0.23

## TABLE A4.3: REGRESSION RESULTS

- (7) Regulatory Barriers $_{it} = \beta_0 + \beta_1 Market \ power_{it} + \varepsilon_{it}$
- (8) Regulatory Barriers $_{it} = \beta_0 + \beta_1 Market \ concentration_{it} + \varepsilon_{it}$
- (9) Regulatory Barriers $_{it} = \beta_0 + \beta_1 Profitability_{it} + \varepsilon_{it}$

	(7) Regulatory barriers (Economy-wide PMR)	(8) Regulatory barriers (Economy-wide PMR)	(9) Regulatory barriers (Economy-wide PMR)
Market Power (pcm)	13.302***		
Robust Standard error	(2.476)		
P> t	0.000		
R2 overall	0.004		
Obs	149		
Market Concentration (C10)		2.430**	
Robust Standard error		(0.848)	
P> t		0.012	
R2 overall		0.008	
Obs		149	
Profitability (Profit margin)			6.068***
Robust Standard error			(1.825)
P> t			0.005
R2 overall			0.069
Obs			123

Note: \* p<0.10; \*\* p<0.05; \*\*\* p<0.01.

## ANNEX 5: TOTAL LABOUR COST PER EMPLOYEE AND LABOUR PRODUCTIVITY



Source: CompNet, authors' calculations.

Note: EU11 comprises Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Italy, Slovakia, Slovenia and Spain.