

# **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**

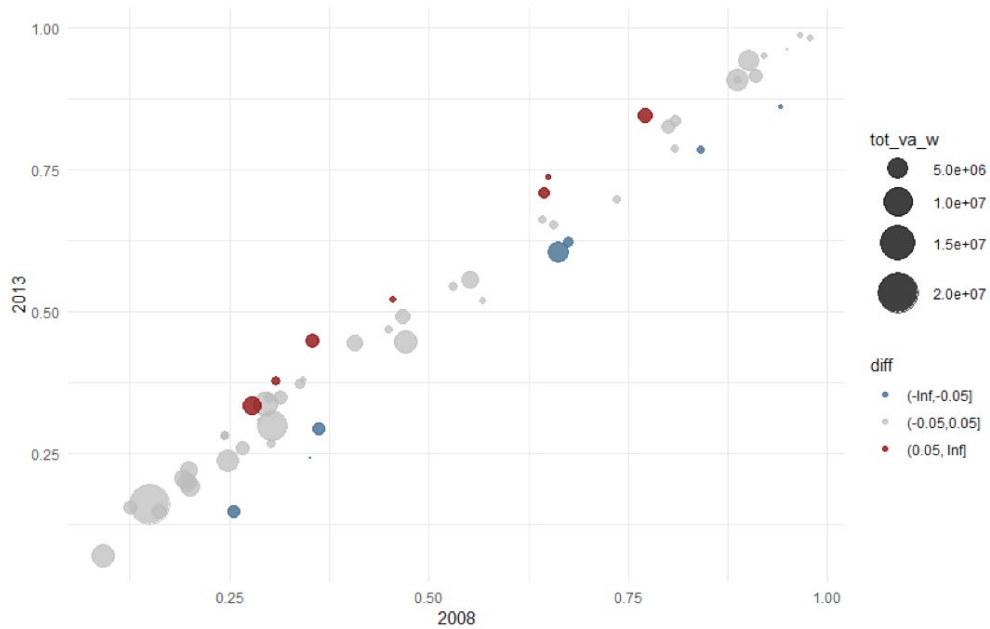
The value of each sector is weighted by its total turnover which is indicated by the size of the circle. The colour of the circle indicates whether the level of market concentration and market power has increased (red), decreased (blue) or stayed relatively the same (grey).

*List of countries:*

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

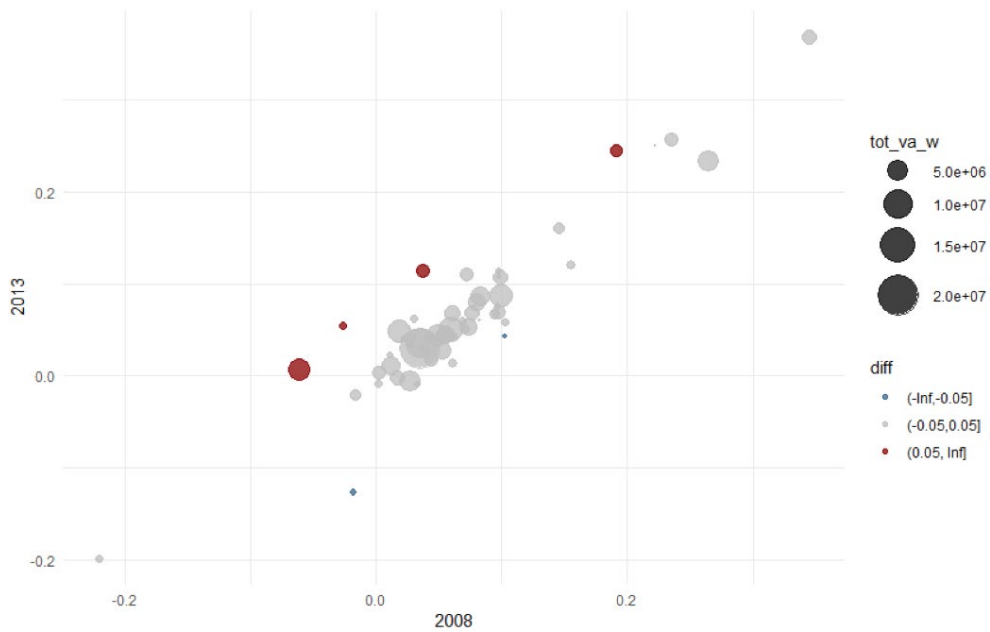
## BELGIUM

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



Source: CompNet, authors' calculations.

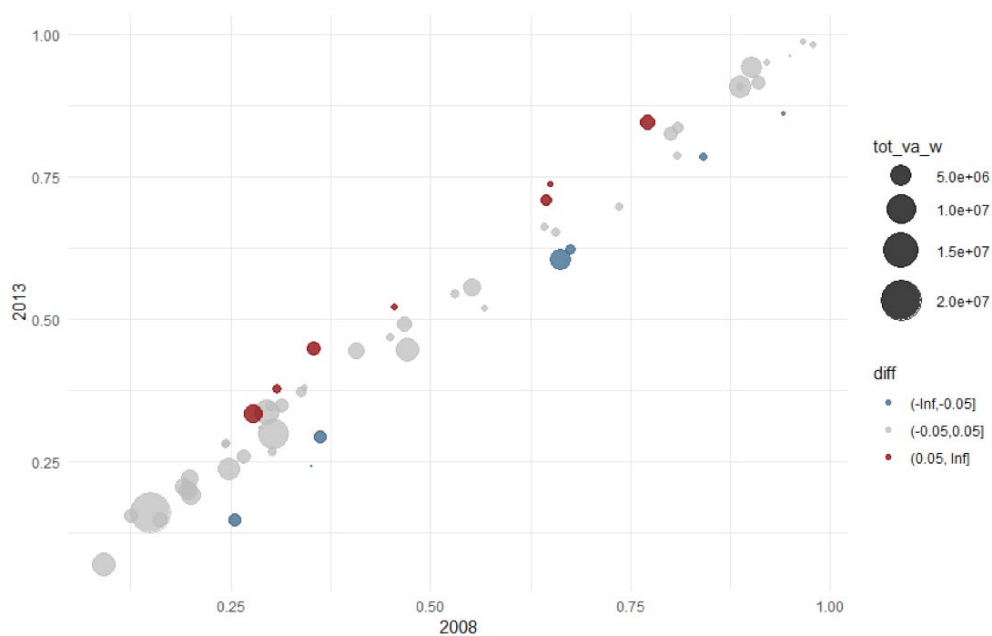
FIGURE A1.2: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

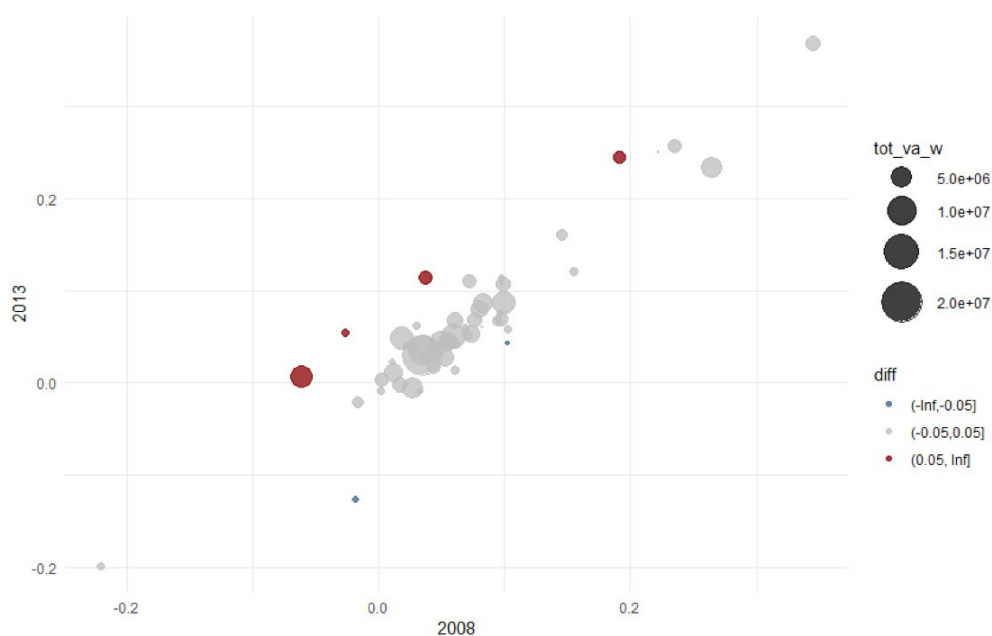
## CZECH REPUBLIC

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



Source: CompNet, authors' calculations.

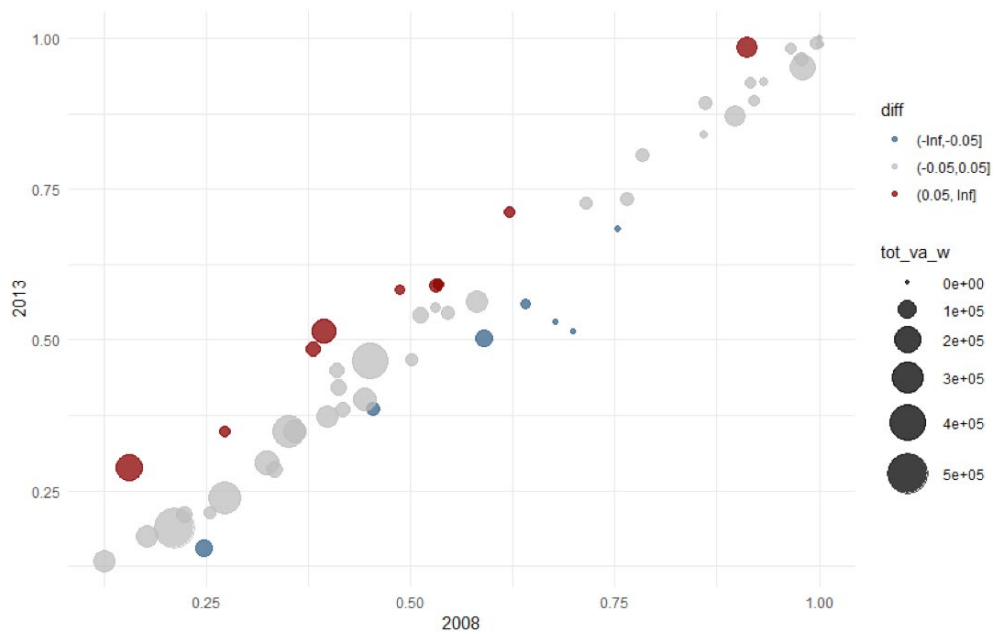
FIGURE A1.4: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

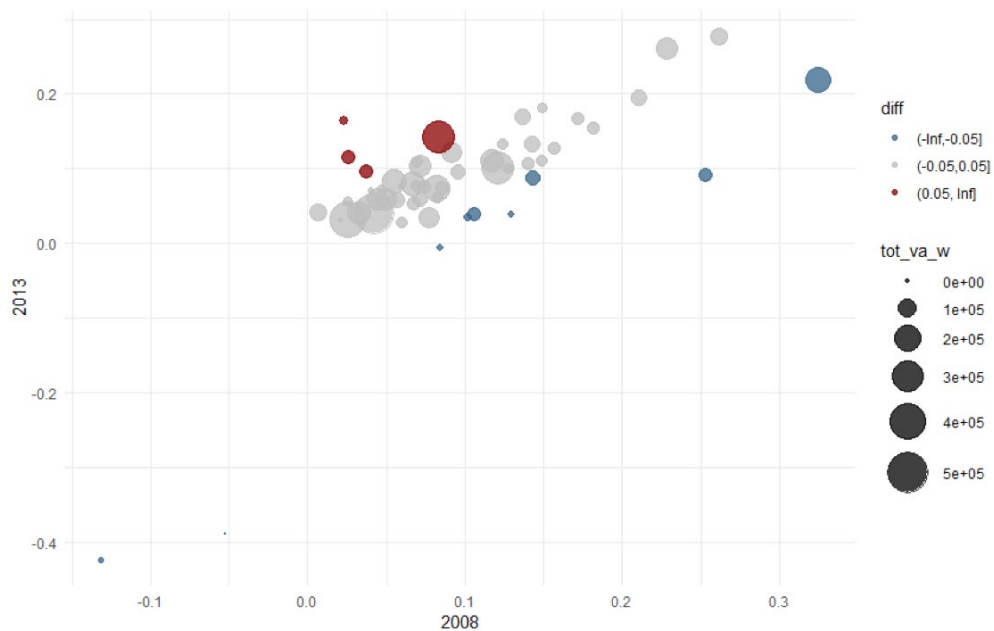
## ESTONIA

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



Source: CompNet, authors' calculations.

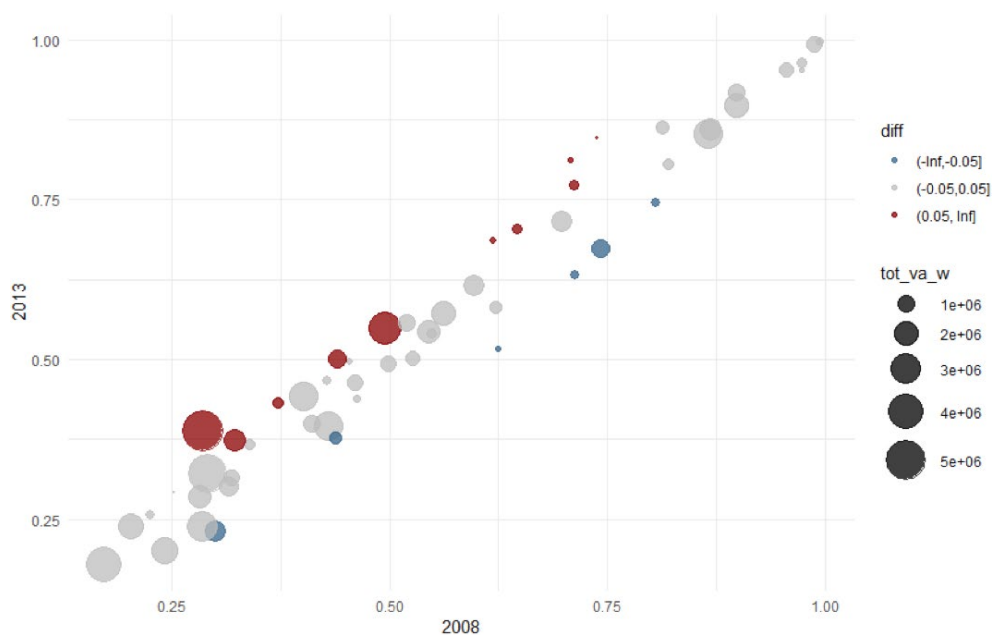
FIGURE A1.6: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

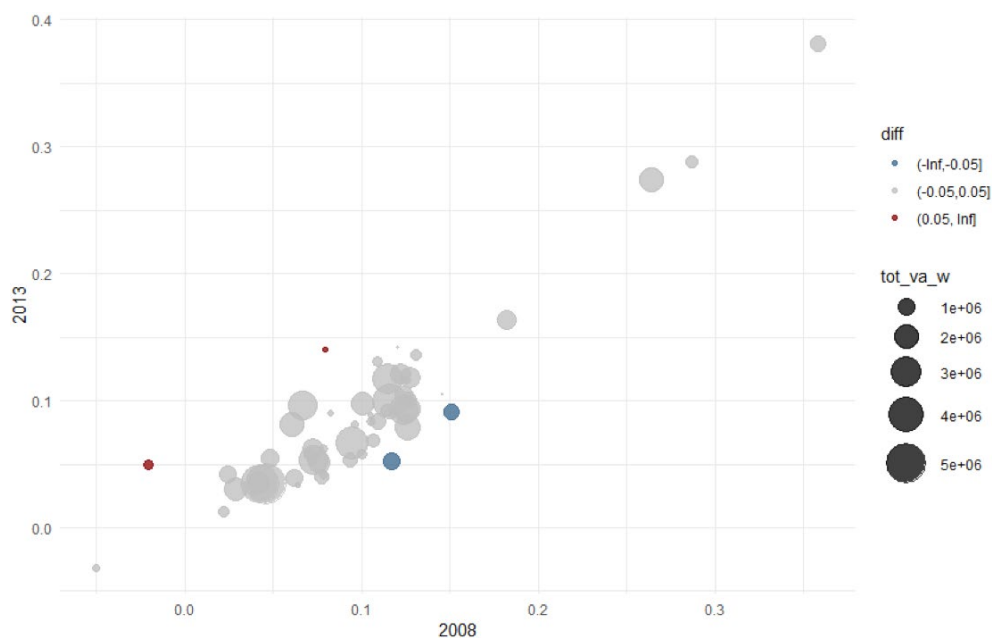
## FINLAND

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



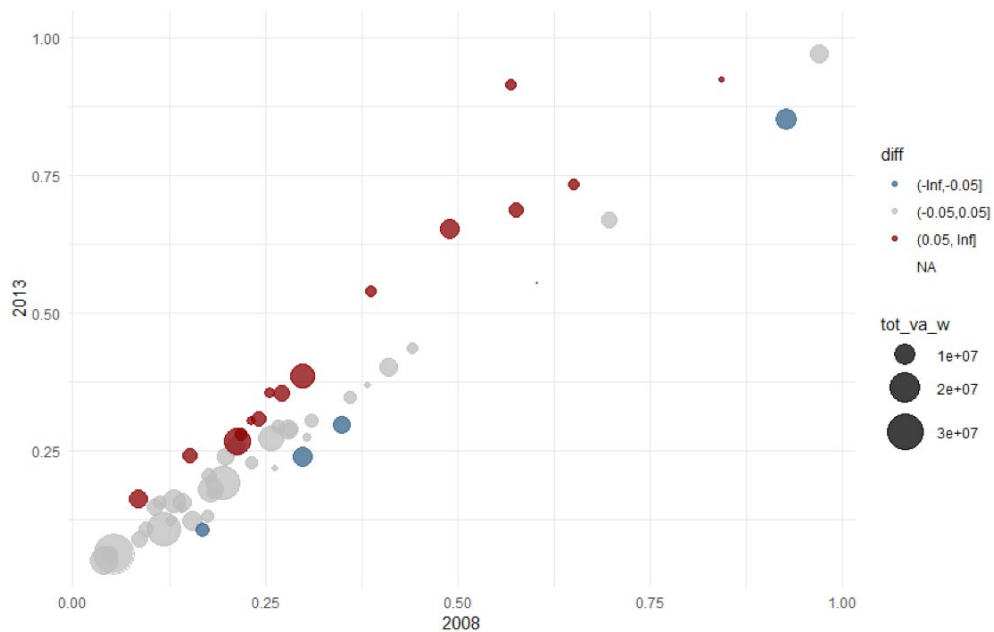
Source: CompNet, authors' calculations.

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

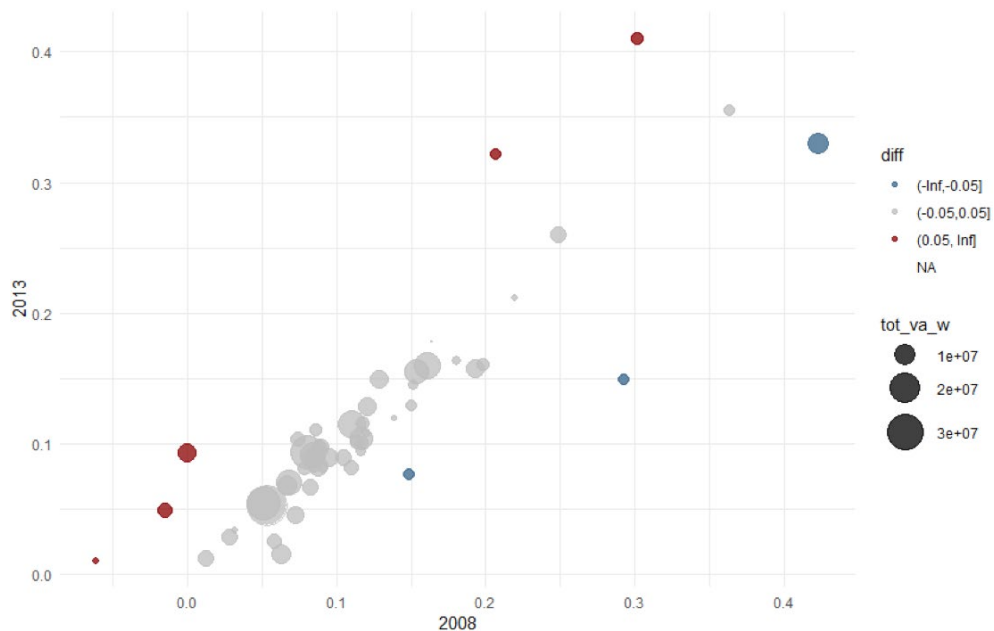


Source: CompNet, authors' calculations.

## ITALY

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

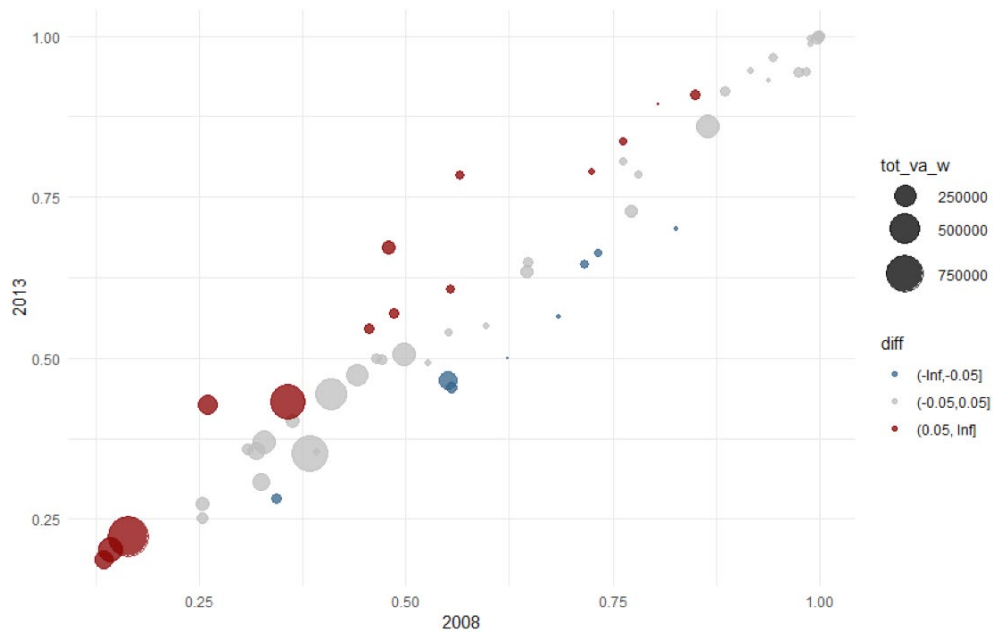
Source: CompNet, authors' calculations.

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

Source: CompNet, authors' calculations.

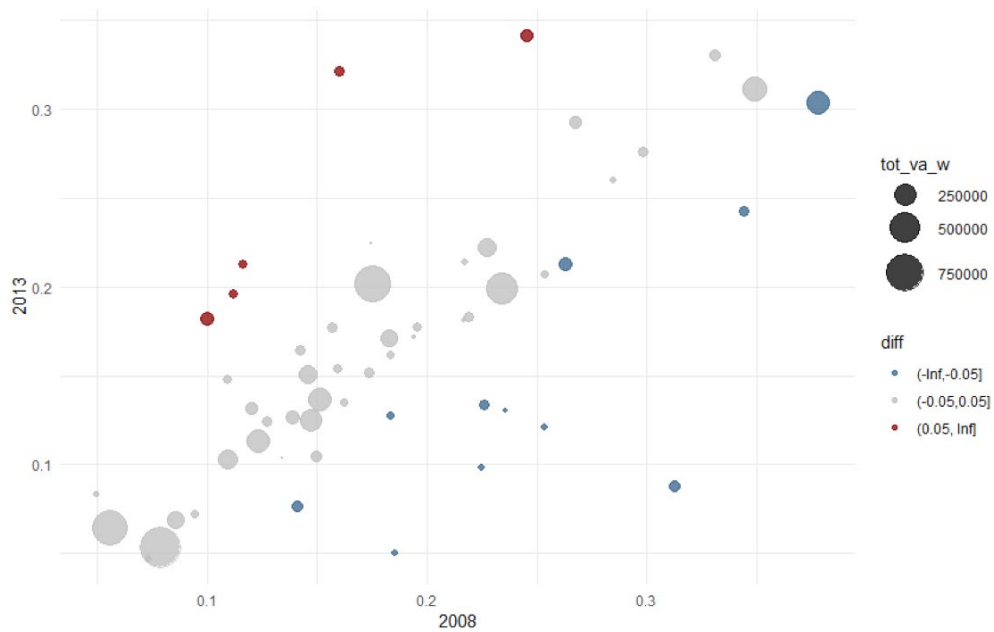
## LATVIA

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



Source: CompNet, authors' calculations.

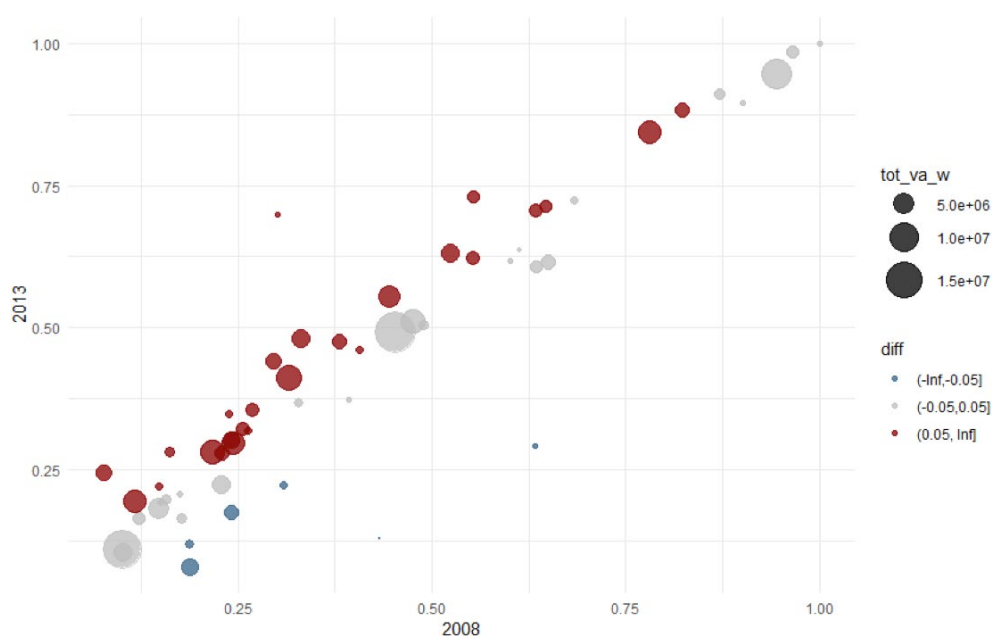
**FIGURE A1.12: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))**



Source: CompNet, authors' calculations.

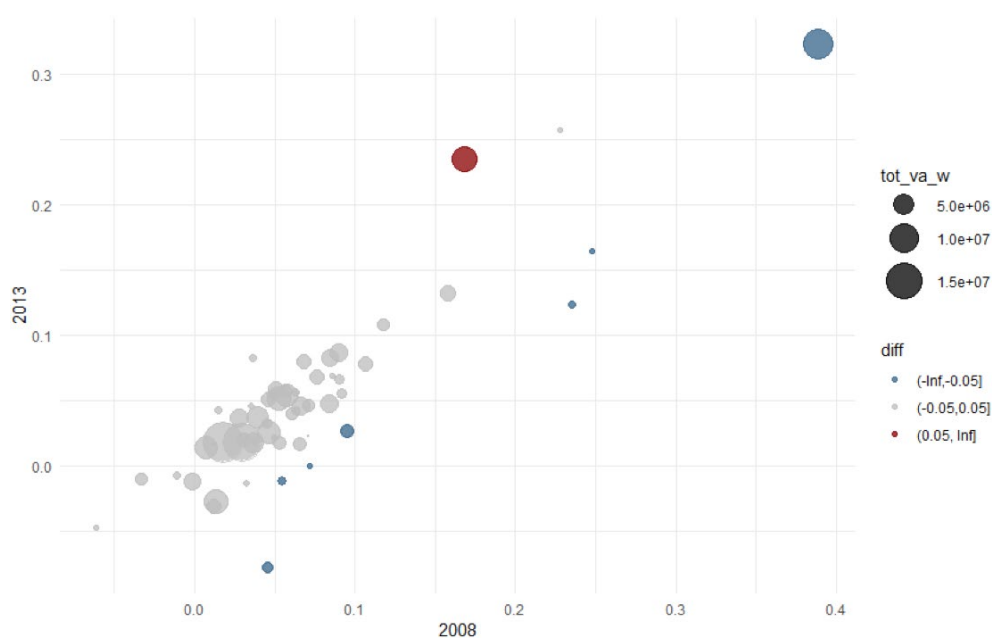
## SPAIN

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



Source: CompNet, authors' calculations.

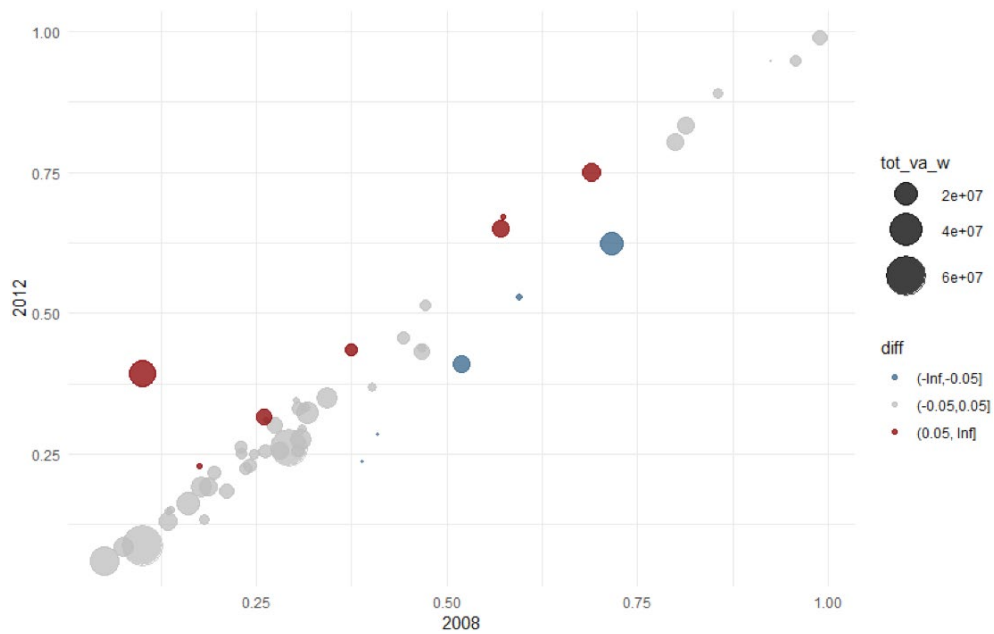
FIGURE A1.14: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

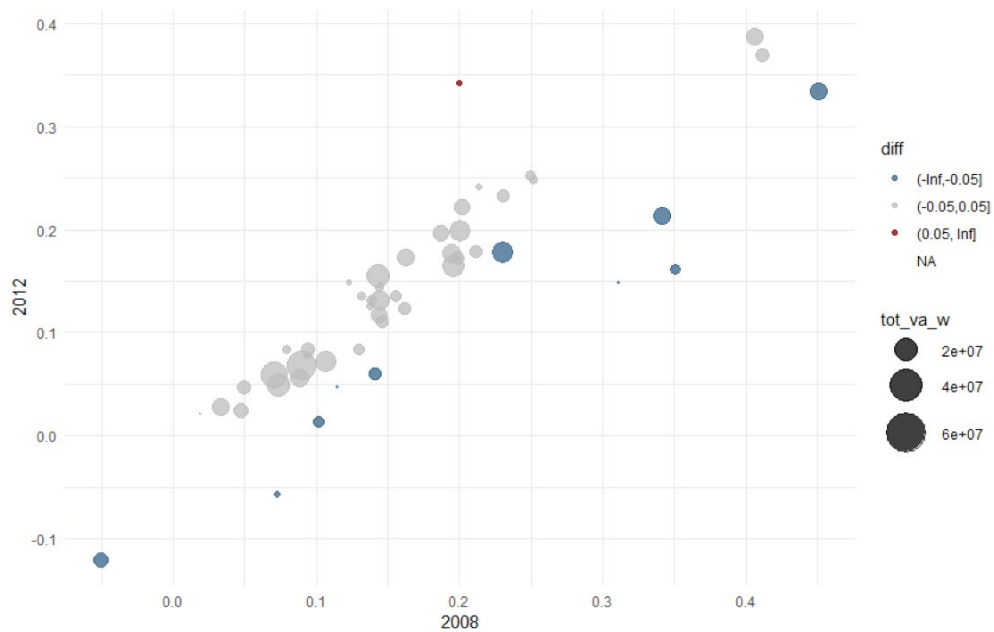
## FRANCE

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



Source: CompNet, authors' calculations.

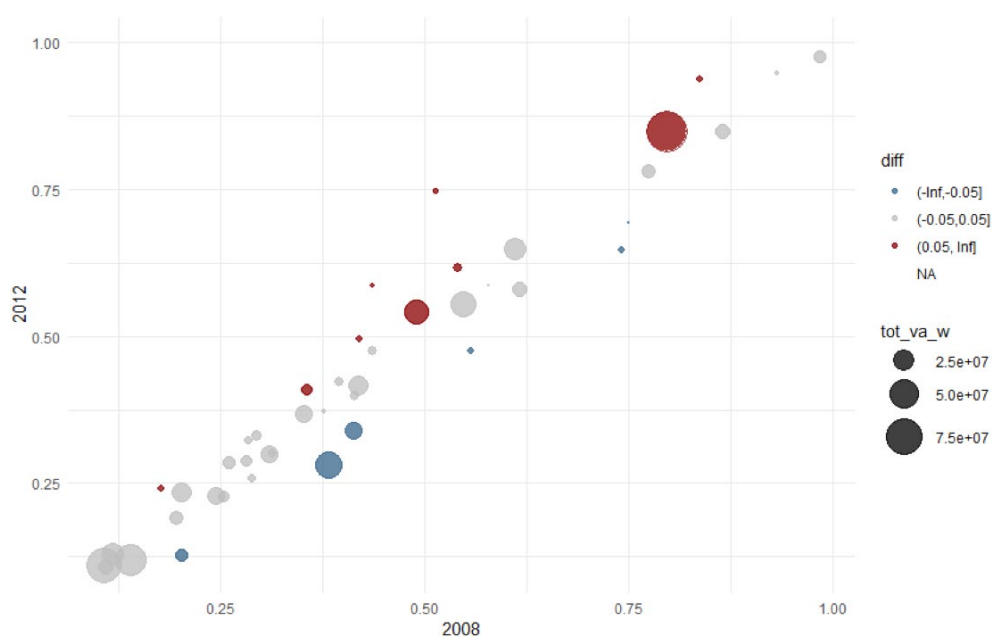
FIGURE A1.16: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

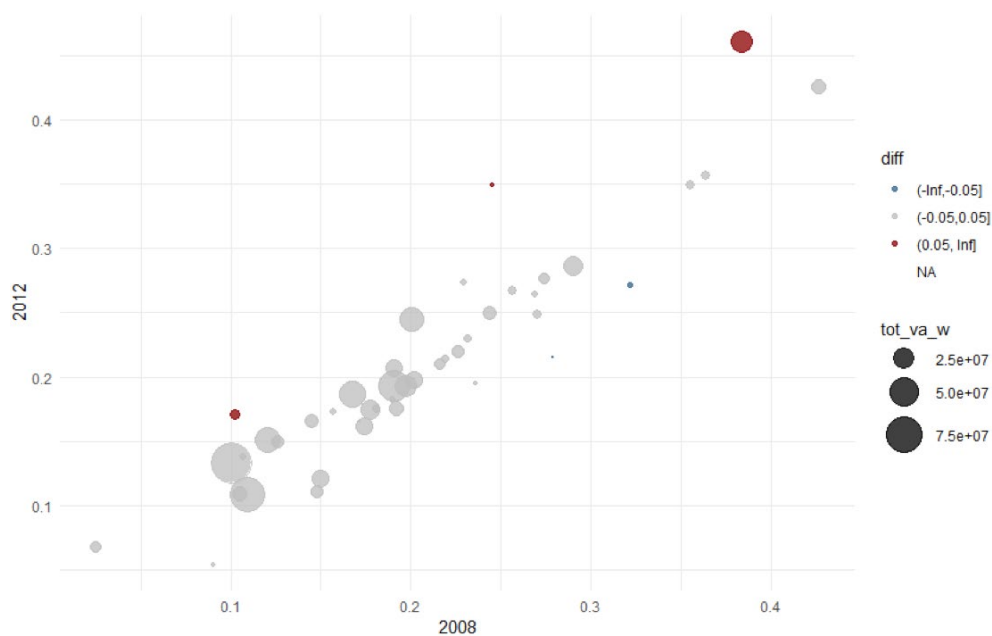
## GERMANY

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



Source: CompNet, authors' calculations.

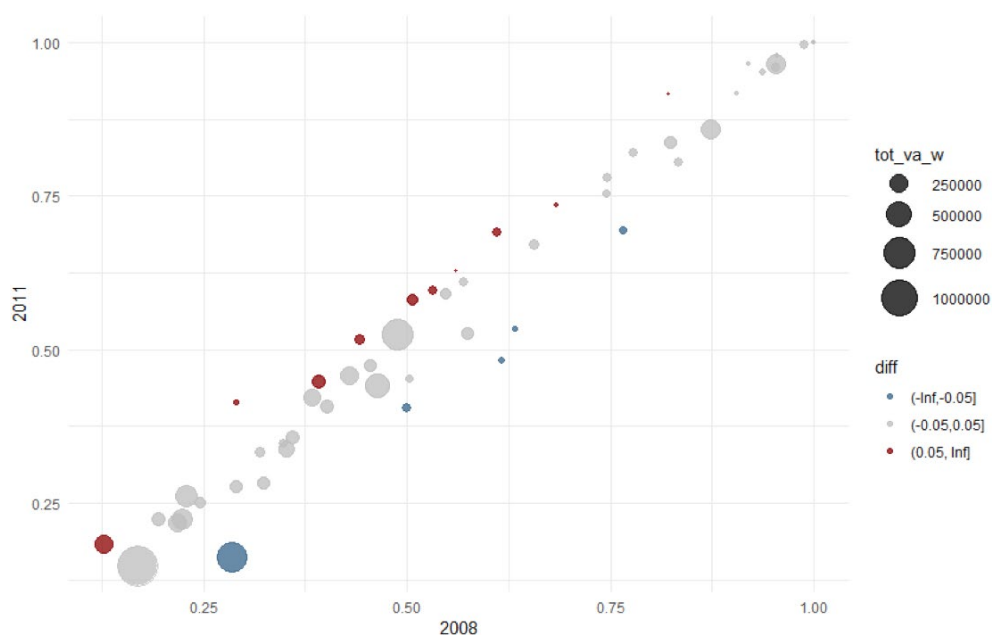
FIGURE A1.18: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

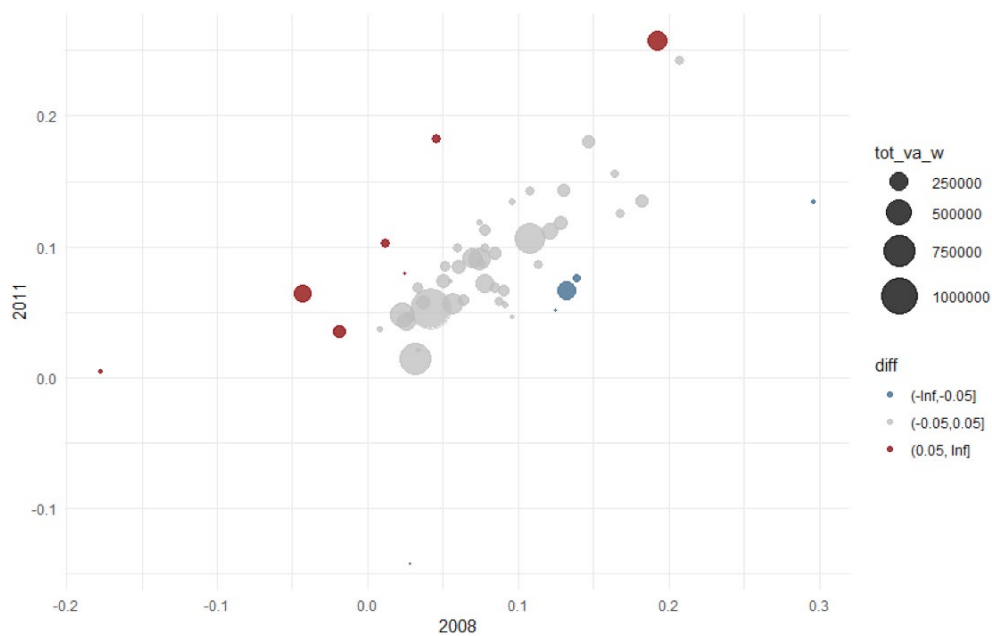
## LITHUANIA

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



Source: CompNet, authors' calculations.

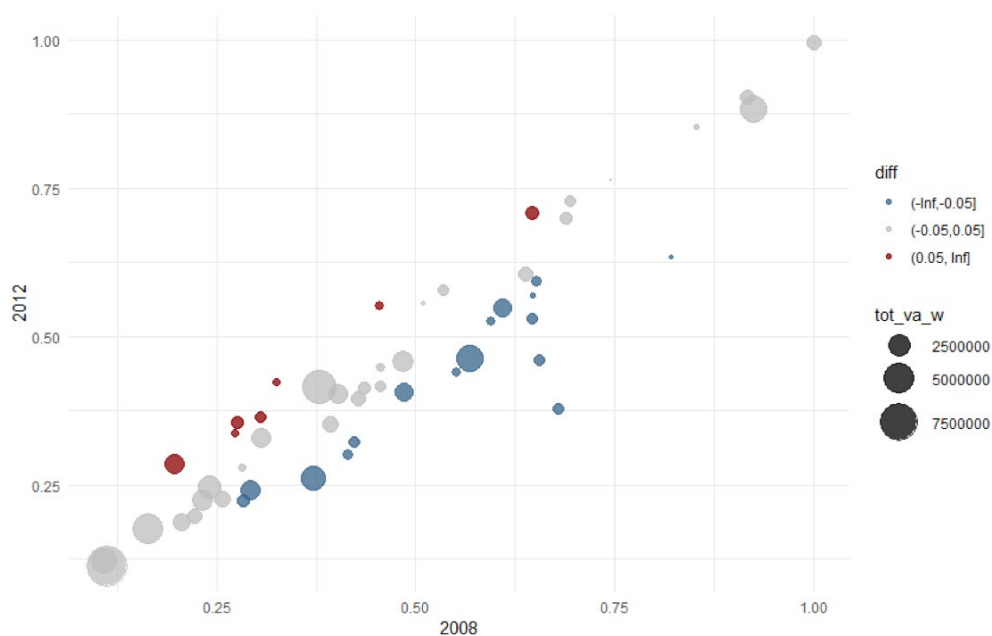
FIGURE A1.20: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

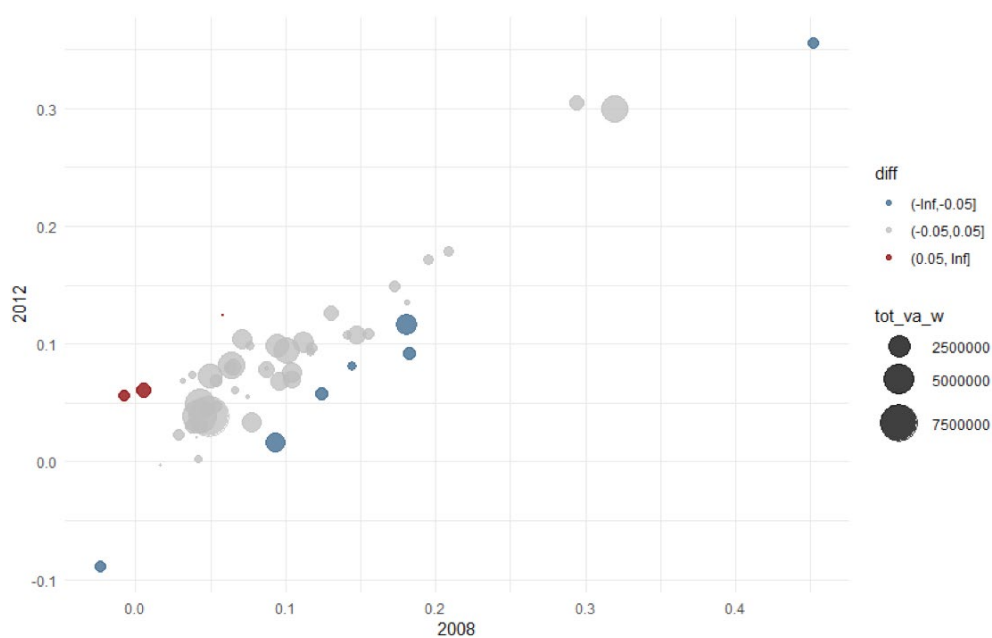
## POLAND

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



Source: CompNet, authors' calculations.

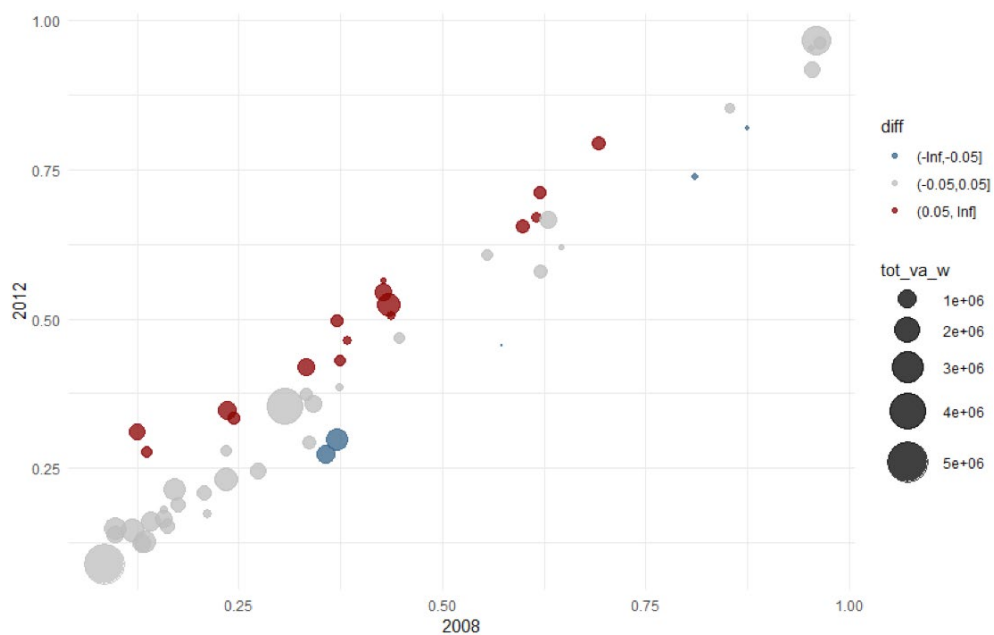
FIGURE A1.22: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

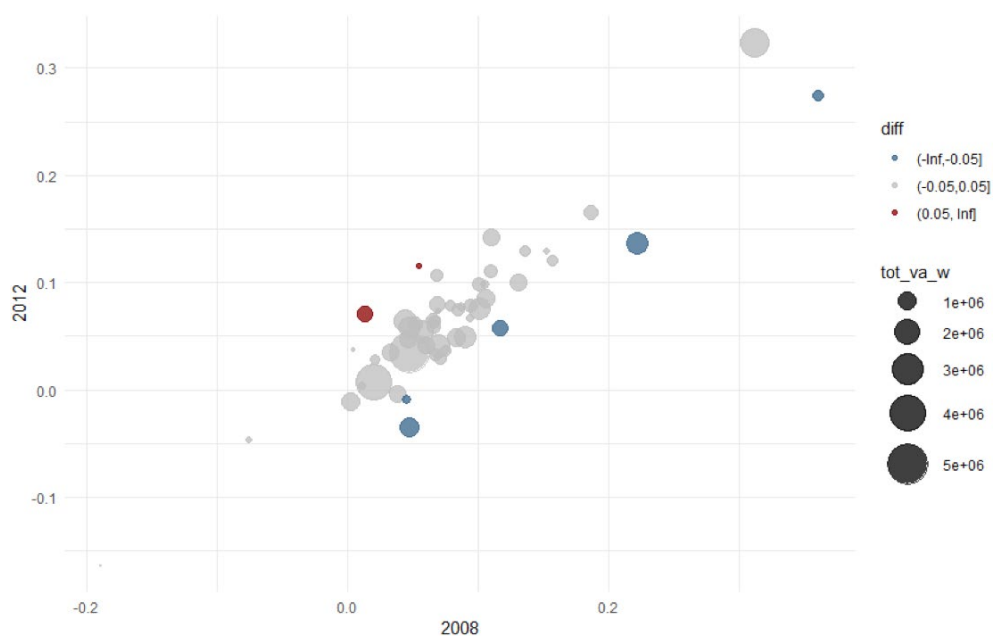
## PORTUGAL

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



Source: CompNet, authors' calculations.

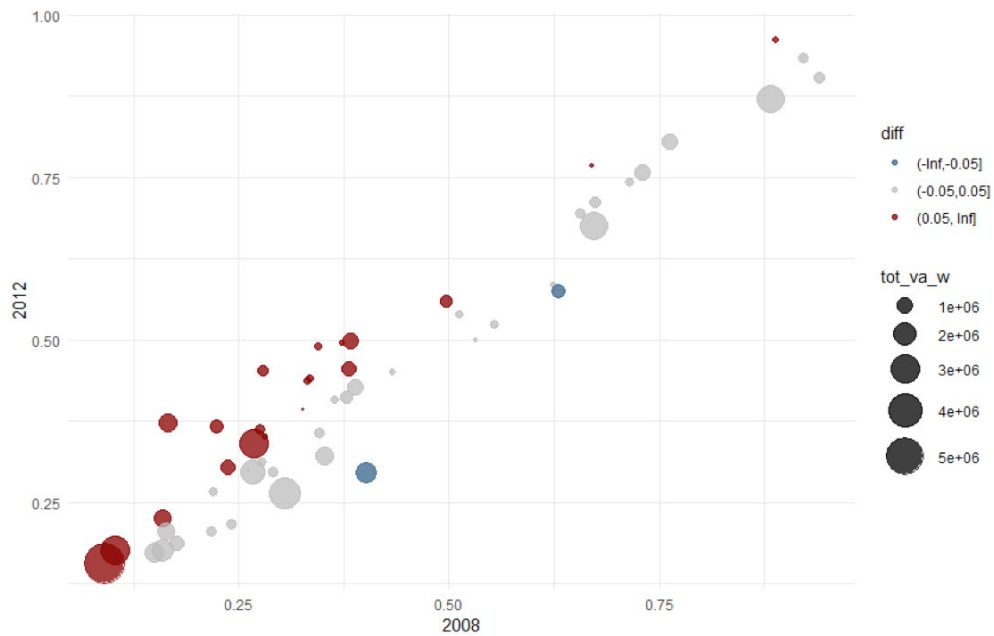
FIGURE A1.24: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

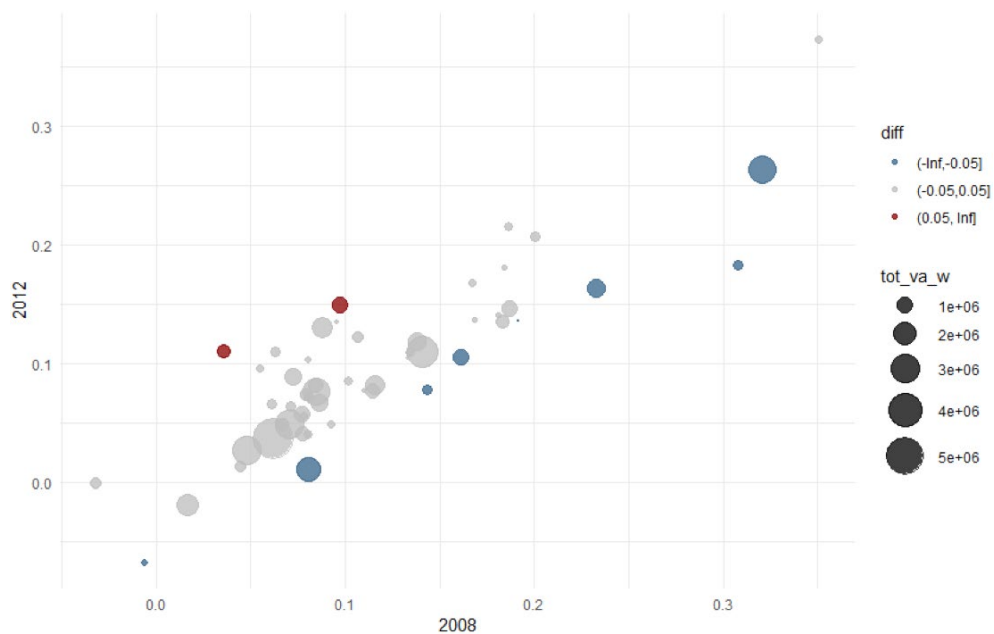
## ROMANIA

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



Source: CompNet, authors' calculations.

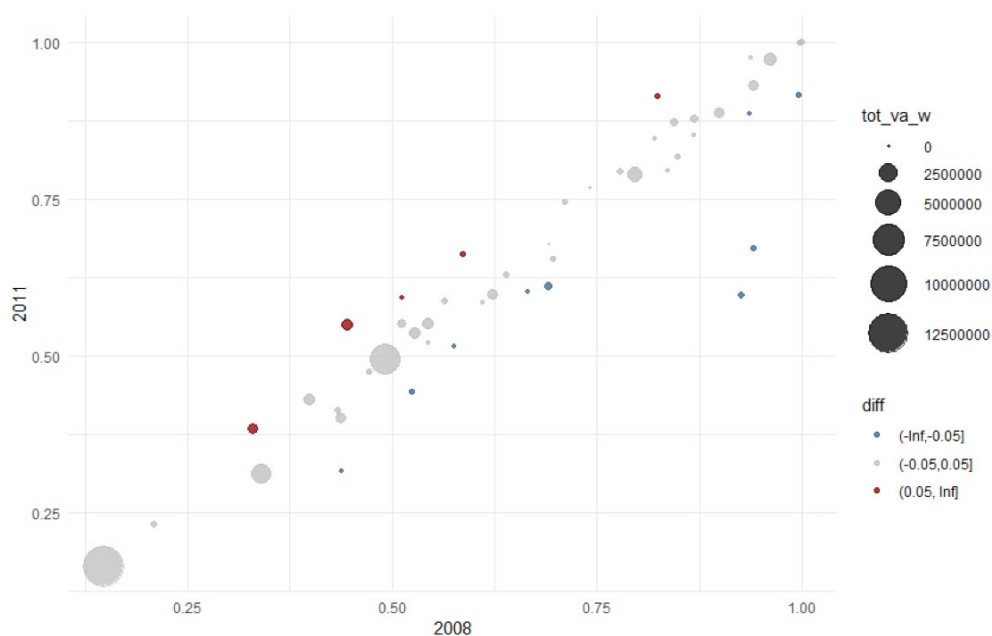
FIGURE A1.26: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

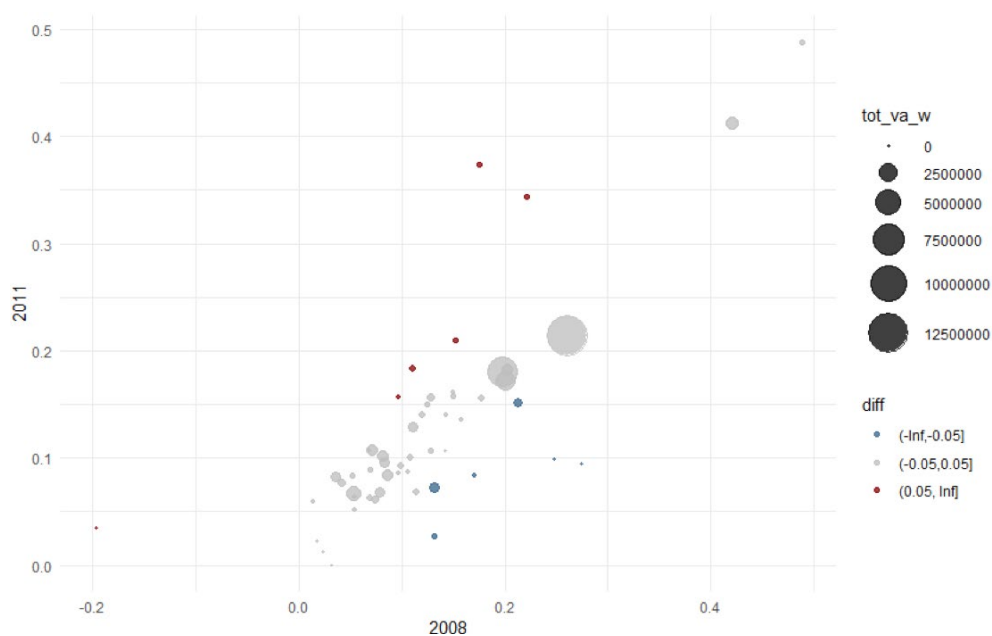
## SLOVAKIA

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



Source: CompNet, authors' calculations.

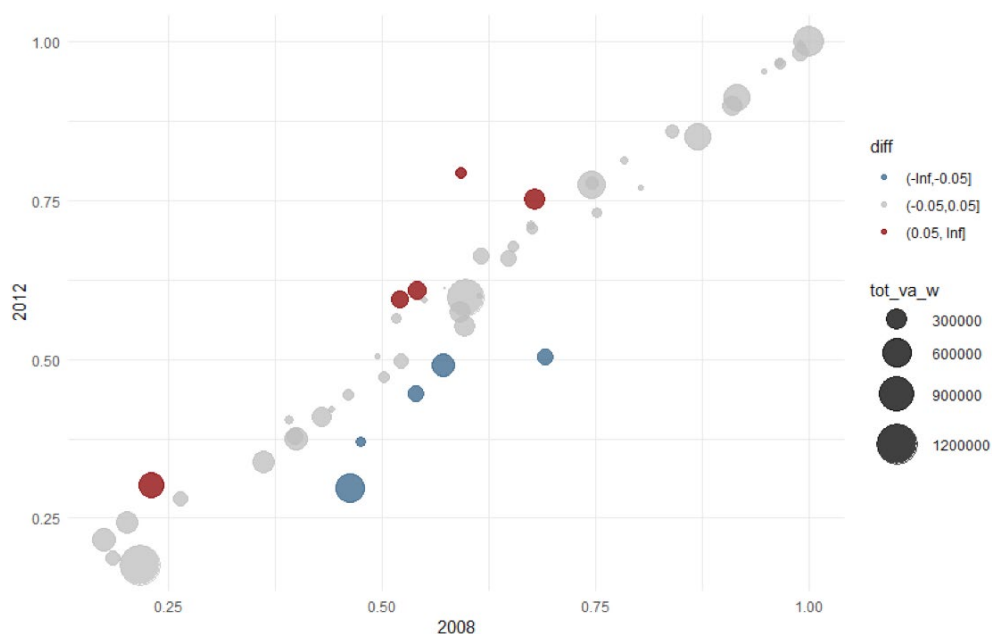
FIGURE A1.28: MARKET CONCENTRATION (HERFINDAHL-HIRSCHMAN INDEX (HHI))



Source: CompNet, authors' calculations.

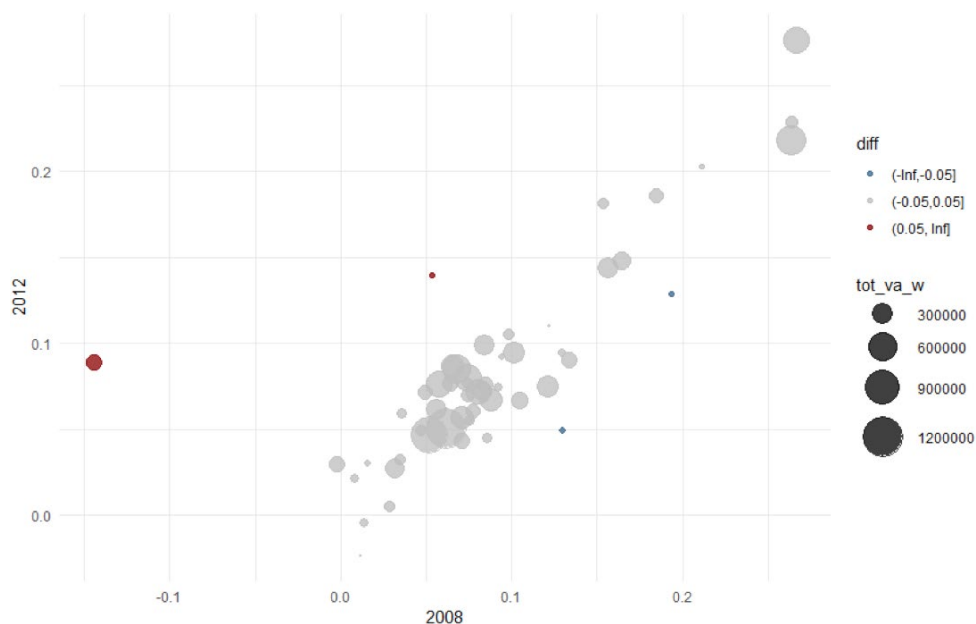
## SLOVENIA

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))

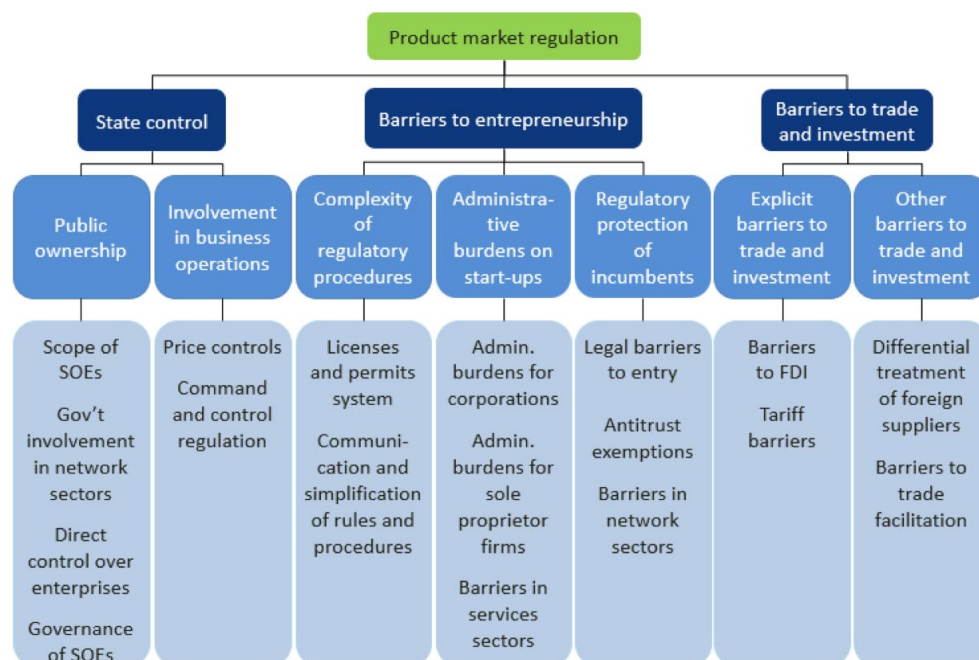


Source: CompNet, authors' calculations

**ANNEX 2: COMPNET MACRO-SECTORS AND SECTOR DESCRIPTION**

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

### 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 concentration	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

$$(7) \text{Regulatory Barriers}_{it} = \beta_0 + \beta_1 \text{Market power}_{it} + \varepsilon_{it}$$

$$(8) \text{Regulatory Barriers}_{it} = \beta_0 + \beta_1 \text{Market concentration}_{it} + \varepsilon_{it}$$

$$(9) \text{Regulatory Barriers}_{it} = \beta_0 + \beta_1 \text{Profitability}_{it} + \varepsilon_{it}$$

	(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.