

EU Emissions Trading Scheme: First evidence

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- ETS is a key instrument in European Climate Policy
 - Covers 40% of EU CO₂-emissions and four industrial sectors
 - Data on allocation and verified emissions on installation level available for two years
 - The analysis covers appr. 9.900 installations

Evidence on three issues:

- Stringency of the allocation cap
 - allocation differences among Member States
 - allocation differences among emission intensive sectors
- Distribution of the size of installations with respect to share of emissions
- Spread of long/short positions with respect to size of installation

Calculating net positions

1. Long / short position on installation level

$$\text{Allocation}_{\text{Installation}} - \text{Verified Emissions}_{\text{Installation}}$$

2. Gross long / short position aggregated on country / sectoral level

$$\sum \text{Long position}_{\text{Installation}} = \text{Gross long position}_{\text{Sector/Country}}$$

$$\sum \text{Short position}_{\text{Installation}} = \text{Gross short position}_{\text{Sector/Country}}$$

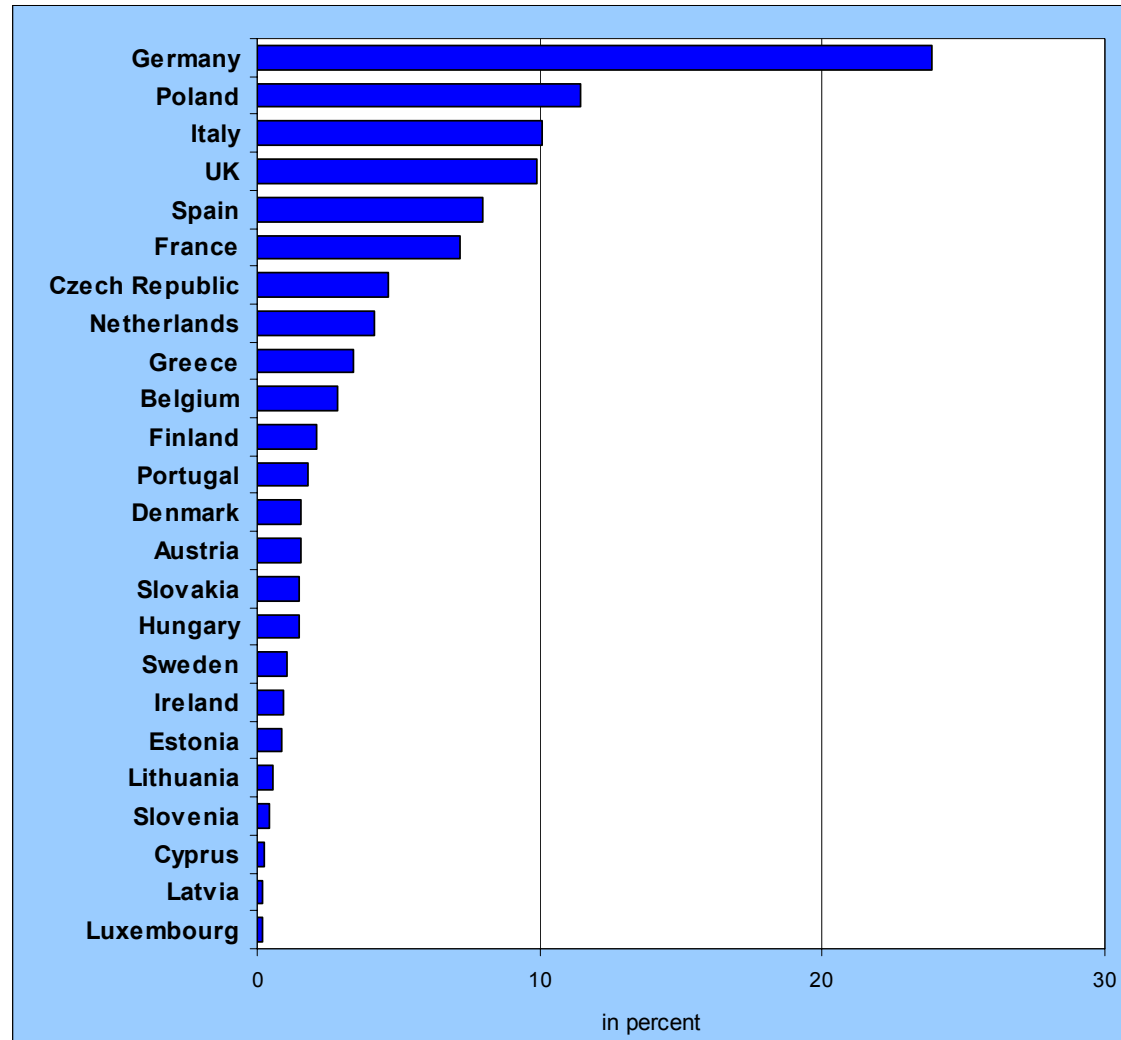
3. Net long / short position on country / sectoral level

$$\sum \text{Gross long position}_{\text{Sector/Country}} - \text{Gross short position}_{\text{Sector/Country}}$$

$$= \text{Net long / short position}_{\text{Sector/Country}}$$

Share depends on:

- Industry structure
- Size of the country

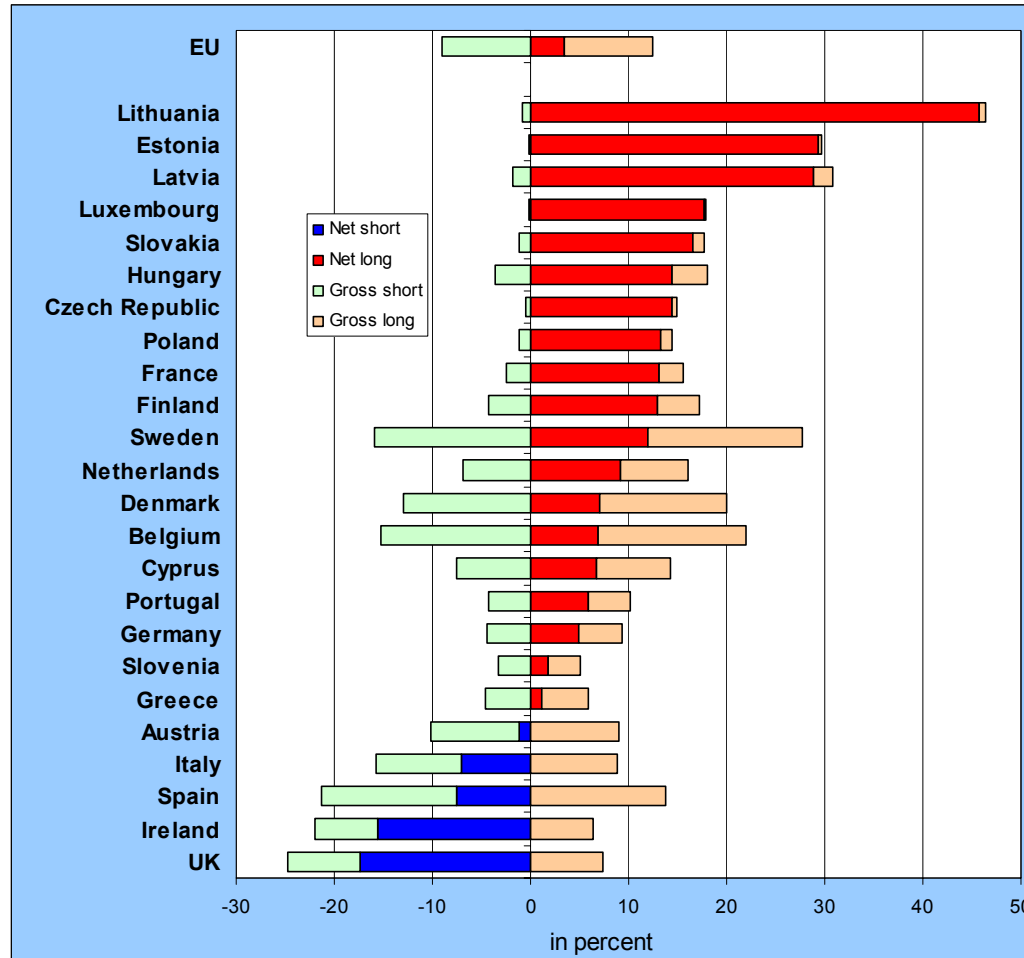


Source: CITL; WIFO calculations

Short and long positions by countries

EU net long position of 3.4%:

Balance of a 12.4% gross long and a 9% gross short position



Source: CITL; WIFO calculations

Net long position

- In most Member States
- In all new Member States

Net short position

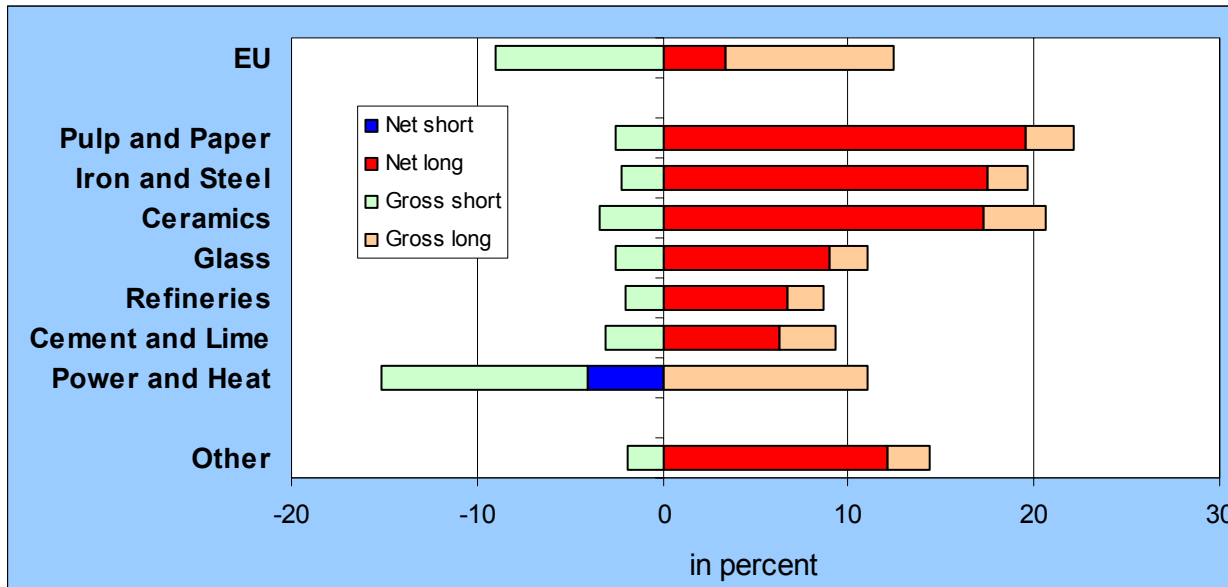
- In Austria, Ireland, Italy, Spain, UK

Highest net long position

- In Lithuania (38.8%) and Poland (31 m tons)

Highest short position

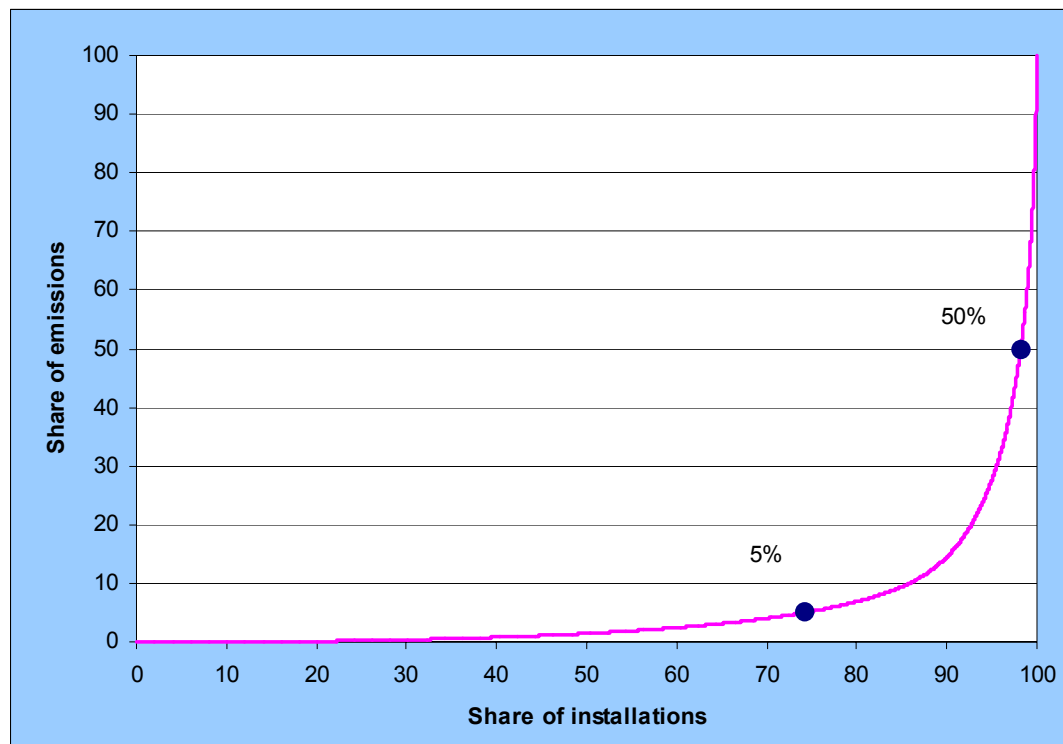
- In UK (17.4%) and UK (36 m tons)



Source: CITL; WIFO calculations

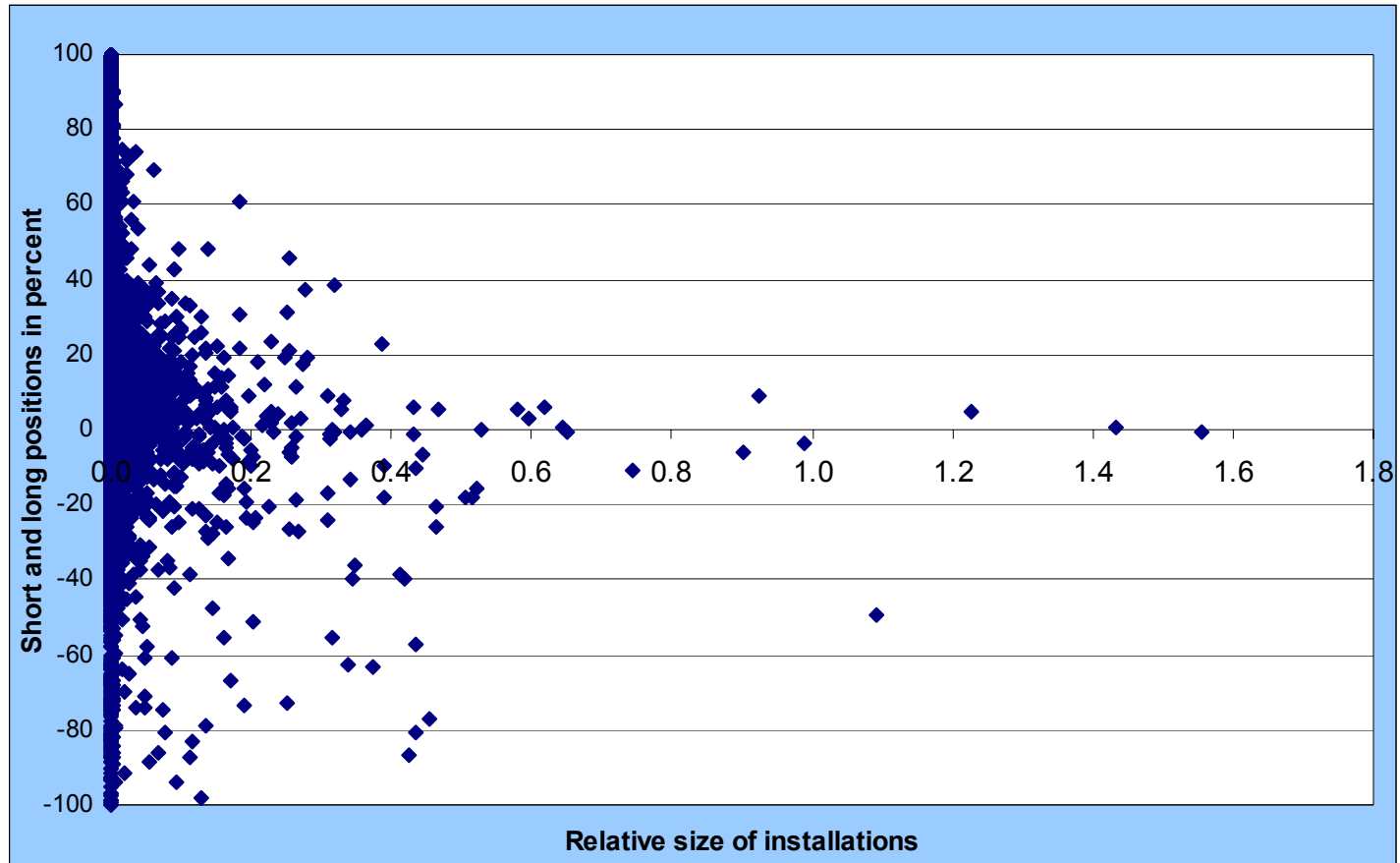
Many small installations with respect to emissions in the EU ETS

- The smallest 75% of installations account for 5.2% of emissions
- The biggest 1.8% of installations account for 50% of emissions
- The 500 biggest installations account for 72.4% of emissions
- The 1000 biggest installations account for 85.6% of emissions



Source: CITL; WIFO calculations

Allocation discrepancy and size of installation



Source: CITL; WIFO calculations

EU	All installations			Accumulated verified emissions									
	Number of installations	Net position		Normalized mean abs. dev. in %***	less than 5 %			between 5 % and 50 %			more than 50 %		
in tons		in %**	Number of installations		Net position in %**	Normalized mean abs. dev. in %***	Number of installations	Net position in %**	Normalized mean abs. dev. in %***	Number of installations	Net position in %**	Normalized mean abs. dev. in %***	
Total*	9,934	71,235,647	3.4	14	7,370	33.5	47	2,385	7.7	20	179	-5.8	18
Power and Heat	2,920	-52,759,498	-5.1	29	2,404	35.4	56	445	-1.4	25	71	-16.0	19
Other	6,012	86,998,133	11.6	20	3,608	30.1	42	2,254	11.1	18	150	9.6	14

* Since a distinction between power and heat and other sectors is not possible for all countries, total figures do not equal the sum of the sectoral breakdown

** Net position in percent of allocated allowances.

*** Mean absolute deviation of allocation discrepancies normalized by the mean size of installations

Source: CITL; WIFO calculations

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- Final conclusions about long /short positions possible in 2008
 - Possible other reasons for short / long positions than generous or stringent allocation
 - Thorough analysis on competitiveness effects necessary
 - Vague evidence on abatement activities

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- Large differences in long / short positions within and between sectors and between Member States
 - On EU level „power and heat“ is the only sector exhibiting a net short position
 - Large number of small installations account for small share of emissions
 - Spread of allocation discrepancies varies according to size of installations and sectors

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