

The European Union's Emissions Trading System in Perspective



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- An Up-front Conclusion
- Key Features of the EU ETS
- Distinguishing Conditions
- Controversies and Issues
- Lessons for the U.S. debate

- A technical and political success
 - Not perfect, of course, but most criticism based on misunderstanding of goals, conditions, or basic design decisions
 - More than any other nations have done to control GHG emissions
- What has it achieved?
 - A price on CO₂ that affects business decisions & consumer prices
 - A mechanism for long-term control of GHG emissions
 - Abatement in line with modest initial ambition

- Classic cap-and-trade system covering 12,000 facilities in the EU
- Covers CO₂ emissions from large stationary sources
- Sequential trading periods: 2005-07, 2008-12, post-2012
 - 1st period is “trial” or “pilot” period
 - Long-term caps not known; decided sequentially
- Inspired by but independent of the Kyoto Protocol
 - A cap within a cap

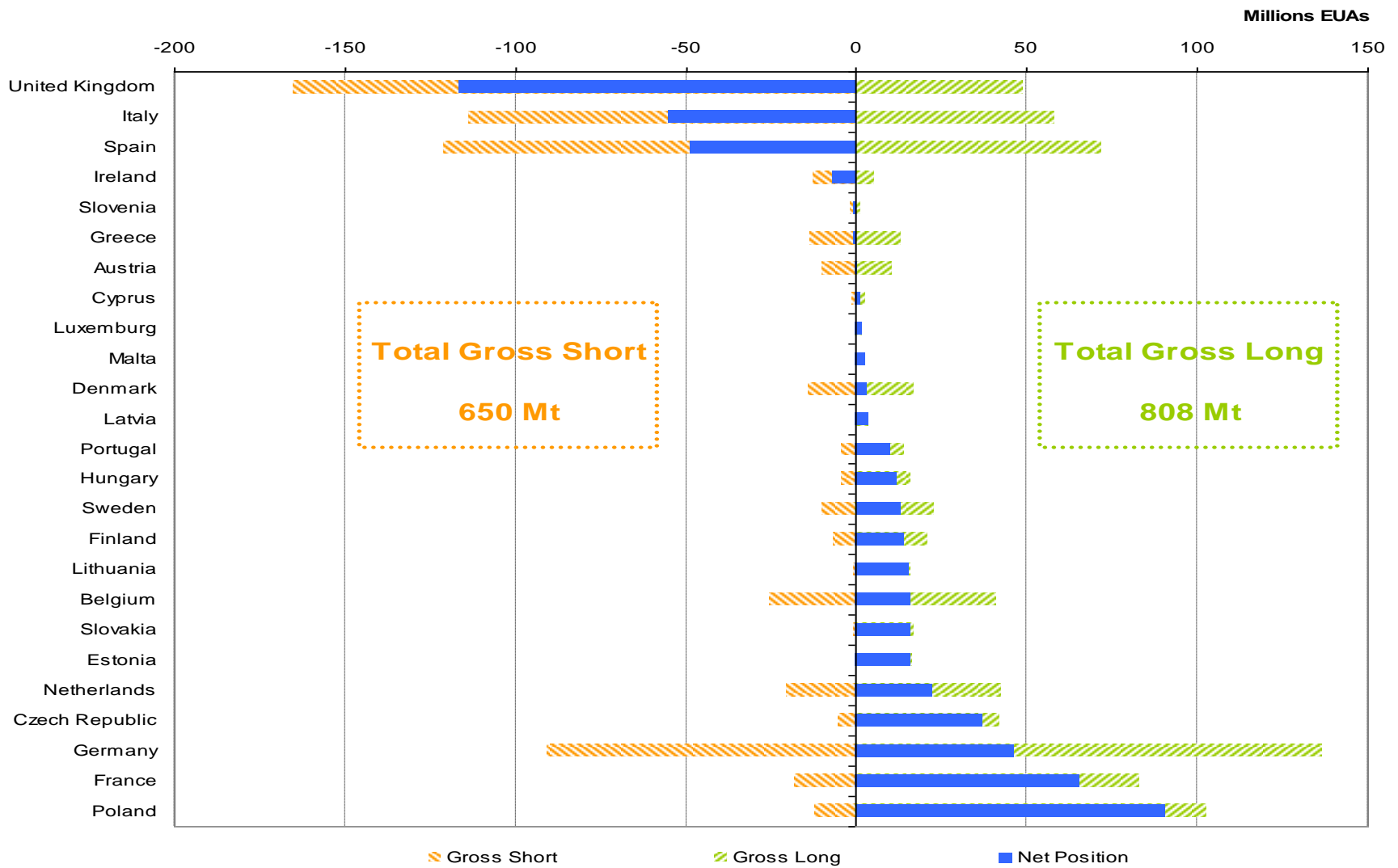
- CDM/JI credits allowed up to specified limit
 - Not a factor in first period
- Complete intra-period banking and borrowing
 - But no banking/borrowing between 1st and 2nd periods
- Allocation by “grandfathering” for 95%/90% of Member State total
 - Relatively little auctioning
 - Benchmarking failed; instead recent historical emissions

- Decentralized implementation
 - Caps and allocations proposed by Member States following guidance & subject to approval by the Commission
 - Similar structure for registries, reporting, enforcement
 - Reflects political reality of the EU
- Highly compressed time schedule
 - Compounded data problems in cap setting & allocations
- Leakage concerns restricted to industry

- Failure to understand effects of creating scarcity
- Electricity price increases attributed to CO₂ price
 - Mostly caused by higher energy prices
- Free allocation seen as the culprit and auctioning as the remedy
 - Mainly changing identity of the rent recipient
- Confusion of effects when electricity markets are regulated and deregulated
- There will be a price effect and a rent is created

- A post-April 2006 and ex-post critique
- What is over-allocation?
 - More than simply being long at end of period (graph)
 - Source of problem is poor data, not complaisance
 - Ambition always modest; large BAU uncertainty
- Also, this critique taken to imply no abatement
 - Modest abatement in line with ambition
 - Most evidently in the power sector (intra-fuel substitution, improved efficiency, biomass)

Who is Over-allocated?



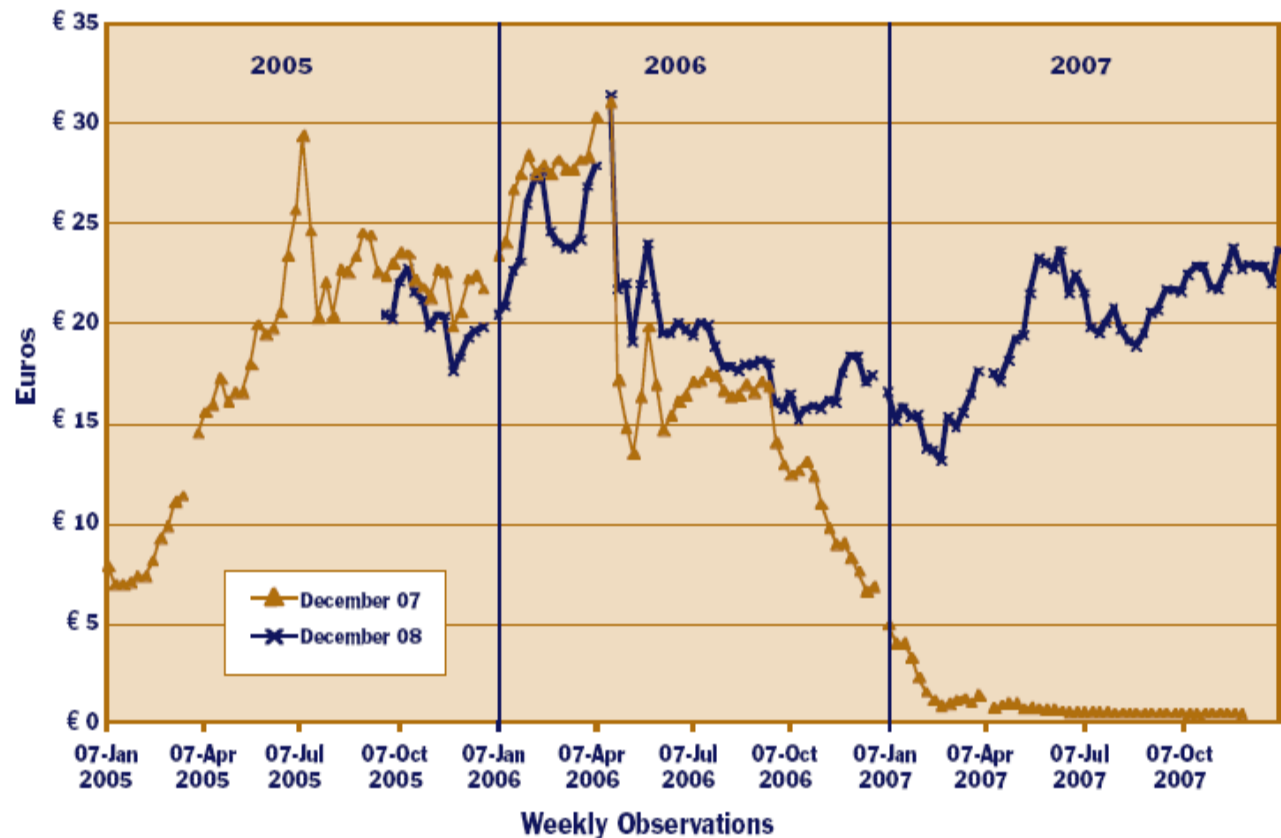
- Most mis-understood aspect of cap-and-trade
 - A “piñata”? Or, political expediency, prior use, higher public purposes, etc...
- Novel features of EU ETS (or carbon?)
 - New entrant and closure provisions
 - Trade effects as a justification for allocation
- Radical changes proposed in Jan 23 amendments
 - Rapid phase-out of free allocation by 2020
 - Harmonized residual free allocation for 2013-20

- Much commented price evolution

- Causes:

- Poor data
- Inter-period banking constraint
- 2008 price notably less erratic

Evolution of EUA Prices 2005-2007



Source: Point Carbon as compiled by the authors.

- Good data is a prerequisite
- Allocation will be more contentious than for SO₂
 - And made more so by partial electricity sector reform
- Provide long horizons with banking and borrowing
 - No evidence of abuse of limited borrowing in EU ETS
- Downstream monitoring and reporting by small sources is costly

- Differentiation in obligations
 - EU ETS: Initially low but increasing with stringency of cap
- Cap inflation
 - Brussels as coordinator and “bad guy”
- Harmonization
 - Necessary at least for trading and registries
 - Also for free allocations??

- Highly decentralized multi-national/state systems can be constructed
- Economic impact is imperceptible
 - European economy has not been “wrecked”
 - No evidence of carbon leakage through trade
 - Rather, adjustments in operations and investment
 - Why? One price among many, all of which matter
- Everything doesn’t have to be perfect at the start
- And of course, keep it as simple as possible

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