Environmental Regulations and Trade : Conflict or Synergy?

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SDGs AND EU TRADE POLICIES. SITUATION AND CHALLENGES

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Research question

- **What's up?**
- SDGs Agenda 2030 (5 goals out of 17 on environmental issues)
- 37% of the RRF financial resources will be devoted to environmental issues plus 100% RRF " do not significant harm clause"
- The European Council approved a target of -55% GHGs by 2030
- By 2050 climate neutrality for EU countries (European Council Dec. 2019)

- **What is the effect of environmental regulation on trade and competitiveness?**

- **Environmental regulation is becoming more and more stringent**

Traditional versus «new» paradigm

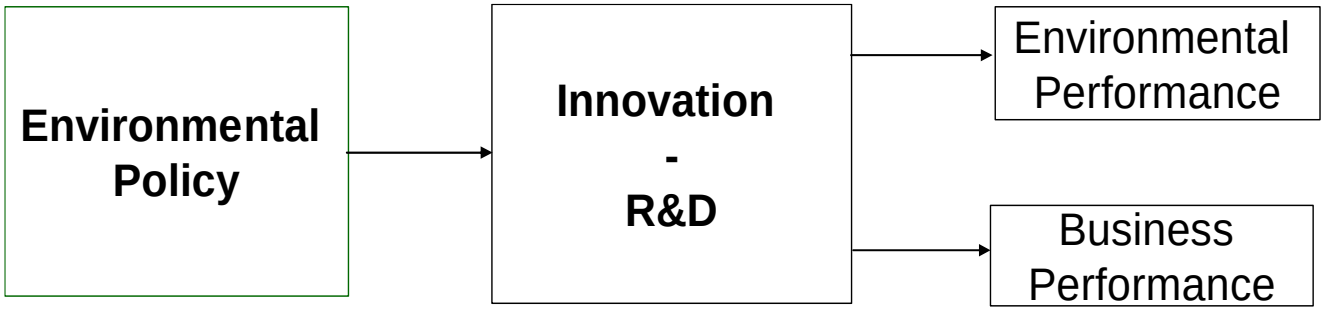
Environmental regulation is an additional cost for firms and damages international competitiveness

Trade-off (TO)

Environmental regulation is an incentive for firms to innovate and improves international competitiveness

Synergy (SYN) – Porter Hypothesis (1995)

The Porter hypothesis and its variants



Three variants of the PH (Jaffe et al, 2005):

- "***weak***": environmental regulation induces innovation, but the opportunity costs of additional innovation offsets competitiveness gains

- "***narrow***": market-based instruments are more likely to foster innovation and competitiveness compared to non-marked based instruments

- "***strong***": the benefits from higher innovation induced by environmental regulation overcome its costs eventually raising the overall competitiveness.

Literature slightly biased in favour of Porter strong hps

- Empirical findings are typically very context-specific, focused on diverse indicators of efficiency and innovation and hardly comparable.

- Few studies adopt a cross-country perspective. Empirical evidence is inconclusive (for a survey Martinez Zarzoso et al. 2019).

- At least in the short-run, higher compliance costs may negatively affect both international competitiveness and productivity growth (Ambec et al. 2013, Dechezleprêtre and Sato 2017).

Literature advancements related to a new indicator

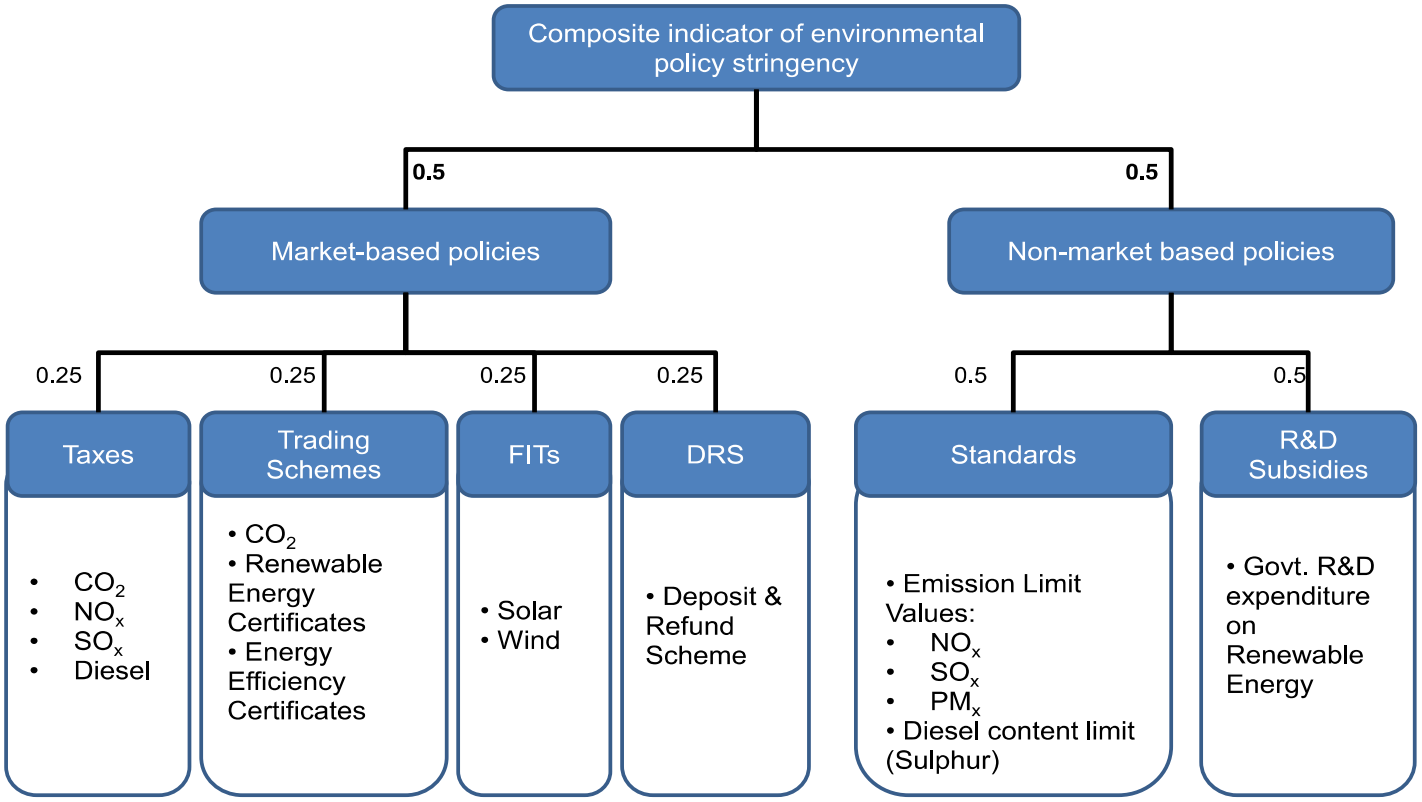
- Botta and Koźluk (2014), developed a composite indicator based on the aggregation of quantitative and qualitative information on selected environmental policy instruments into one comparable, country-specific proxy of Environmental Policy Stringency (EPS)

- De Santis and Jona Lasinio (2016 and 2021), for European countries, found that market based environmental measures are the most suitable instruments to stimulate innovation and productivity growth

- Albrizio et al (2017) indicate that a tightening of environmental policy in the OECD countries is associated with a short-term increase in industry level productivity growth only in the most technologically advanced countries.

EPS indicator

Figure 1. Structure of the Environmental Policy Stringency (EPS) indicator



Source: Botta and Koźluk (2014)

EPS indicator in the 18 OECD sample countries

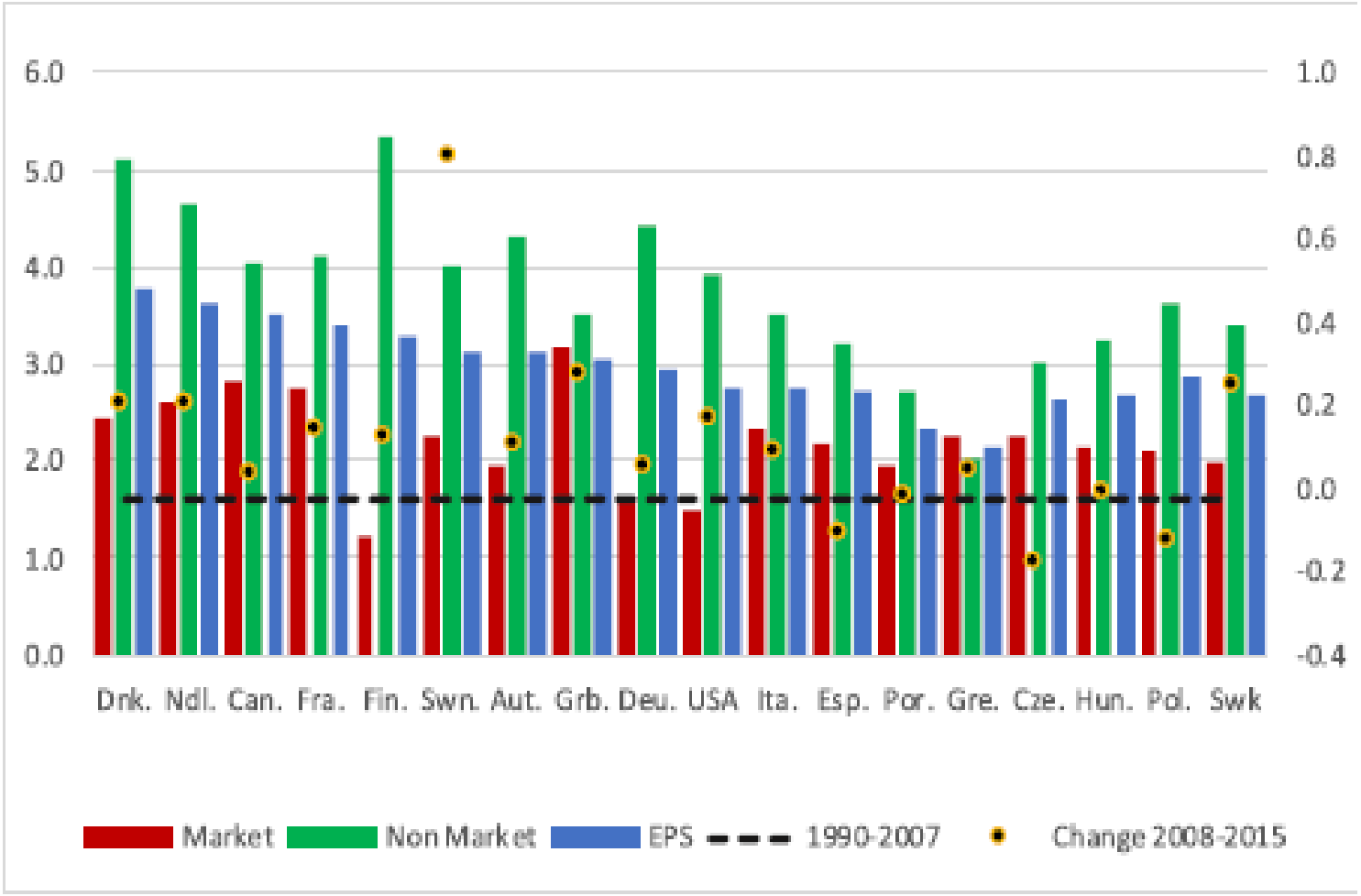


Fig. 1. Environmental policy index 2008–2015.
Source: OECD.Stat

Policy challenges (i)

Policies	Economic effects Porter hp holds	Challenges	Possible solutions
More ambitious targets on EU emissions/renewables/energy efficiency by 2030, EU climate neutral economy by 2050 **Phasing out the use of coal, natural gas and other fossil fuels.**	Increase in innovation and positive spillovers on productivity and trade particularly in ICT intensive countries	Transition process very complex adverse redistributive effects. **Some countries/sectors damaged directly or indirectly**	**Consistency between increased environmental ambition and countries transition effort.** Just transition mechanism in Europe: €150 billion 2021-2027, Recovery plan: EUR 750bn for recovery, of which 37% to be spent on green transition.

Policy challenges (ii)

Policies	Economic effects Porter hp holds	Challenges	Possible solutions
Long term environmental policies	Long-term changes in international competitiveness could occur if environmental policies provide permanent incentives to innovate more	More dynamic types of environmental policies, increasing in stringency .	**Emission caps, increasing environmental tax rates or performance standards with preannounced paths**.

Conclusions and policy remarks

- Porter hps holds in its strong and narrow versions: win win solution for environmental protection and trade

- To trigger the Porter hps mechanism ICT intensity matters

- From the policy point of view given that environmental protection is not anymore “optional” it is important to have:

i. Consistency between increased environmental ambition and countries transition effort: availability of financial resources

ii. More dynamic types of environmental policies both market and non market, increasing in stringency with preannounced path

Thank you for your attention

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