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Analysing Structural Measures

Building a Structural Reserve to Increase Market Stability in the EU-ETS

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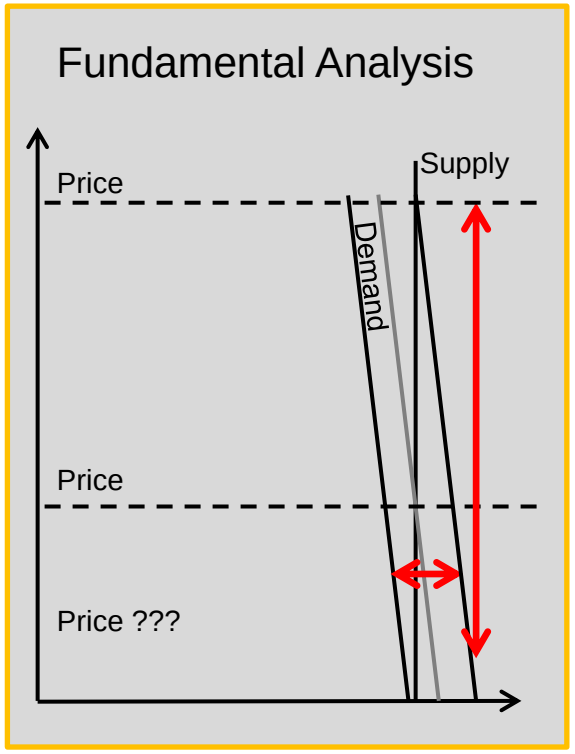
Overview

- Why is action required?
- Presentation of a concept for reform
- Advantages of the concept
- Critical issues of the concept
- Summary

The Underlying Problem

- Carbon markets are special
  - Vertical, inelastic supply function (auctions)
  - Price-inelastic demand function
- Small external shifts of demand volumes lead to very significant price changes
- Putting excessive allowance volumes into a reserve in times of low demand would provide for the option to increase supply (from reserve volumes) in times of high demand that would otherwise yield excessively high carbon prices



- Following: Presentation of one idea how to operationalize such a reserve

Basic Idea

1. Calculate the “required” long position of the carbon market
   - Utility hedging
   - Other aspects to be taken into account? (e.g. industrial banking)
2. Define upper and lower limit for “surplus band”
   (serves as de minimis mechanism)
3. Undertake reserve transactions if required
   - E.g. if market position (including international credits used for compliance) is above upper limit of surplus band, transfer volumes from auctions to reserve

- Excessive oversupply would be taken out of the market
- In times of very high demand (as measured by last year’s position), additional volumes would be auctioned from reserve into the market

Positive Results

1. Supply response to unforeseen developments, e.g.
   - Overall/sectoral economic growth
   - Effects of competing policies
2. Bi-directional supply response, e.g. increased supply in times of high demand (as long as reserve is available)
3. Cap of EU-ETS is achieved in any case
4. High probability of increasing stability of the system and of improving intertemporal efficiency (see below)

Critical Issues

1. Definition of upper / lower limit of surplus band
    - Data source for utility hedging data (?), sustainability of source
    - Data source for other volumes, e.g. industrial banking
    - Methodology for calculation of surplus band
2. Who decides on the specifics?
    - How to interpret utility hedging data?
    - Width of surplus band
3. Transparency
    - Process of securing transparent decision making?
    - Publication of underlying data? Hedging data of utilities that do not publish those?

Potentially Negative Effects

1. Delayed time response (reaction earliest mid of following year)
2. In case of structural demand reduction, yearly (bi-yearly) reserve decision/ transaction necessary
3. No dampening effect of international credits possible any more (use of credits are counted as “regular” supply)
4. If upper limit is much too low, ever declining emissions trend possible
   - If methodology calculates oversupply much higher than true
   - Next year too low upper limit must be met, => “excessive” emission reductions undertaken
   - Due to excessive emission reductions, methodology again calculates “oversupply”
   - Problem can be alleviated by wide surplus band (again: who to decide on that?)
   - ➢ Problem can be alleviated by wide surplus band, kind-of-29a-rules and/or well-designed review mechanism

Summary

1. Presented concept is able to stabilize the carbon market
   - If parameters are set right (see critical issues)
   - Reacts both to changes in economic growth and competing policies
   - Bi-directional reserve transactions
2. Critical issues are
   - Decisions on specifics (when and on what basis)
   - Sources and quality of necessary data
   - Setting of parameters “right” is crucial for success
3. Contains some (but limited) risks
   - Delayed time response in theory could work pro-cyclical
   - Potential downward cycle if upper limit is way too low (see setting of parameters)
4. Find the right balance between fixing rules ex ante and regular reviews

➢ Interesting and promising concept that might however be difficult to implement and to steer through the political process

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