The economic aspects of linking trading schemes

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Questions

- What are the economic benefits from linking?
- Do differences in the design of trading schemes affect the result of linking?
- How to move ahead?

Preamble

- Distinguish…
  - issues that are related to linking
  - issues that are related to the existence of different systems, which evolve separately

Economic benefits from linking

- Creation of a larger emissions trading market – more “where” flexibility
  - Access to greater range of emissions abatement opportunities
  - → *environmental goals can be met at least cost*
  - More liquid and competitive market
  - → *higher efficiency in allocating resources in most cost-effective way*
  - Less volatility related to shocks on fundamentals
  - → *more stable price signal*
- Realisation of economic benefits depends to some extent on differences in design details of involved schemes

Pre-Requisites

- Legitimacy of tradable units
  - Comparable quantity
  - Verifiability, liability, confidence
- Well-defined boundaries
  - Ensure that double-counting is ruled out
  - The wider the coverage of the system globally, the lower the incentive to relocate
  - Within scope of the scheme, coverage of companies/sectors should be complete
    - *an issue with and without linking*

Design features (1): Coverage of sectors and gases

- Coverage affects abatement cost, but not a barrier to linking
- Various approaches of emissions coverage – accounting problems
  - Upstream – downstream schemes
    - an issue if fuels are used interchangeably
  - Direct – indirect emissions coverage
    - an issue if certain products (electricity) are traded internationally
- Technical fixes available
  - Proper accounting procedures; clear definition of boundaries; specific measures

Design features (2)

- **Mutual recognition of trading units**
  - **Supply of units affects total supply of linked schemes**
  - **Need for clarity on what units are included/excluded (e.g., AAUs, VERs, CERs, ERUs, tCERs,…)**
  - ***Political issue – no obvious technical fixes given fungibility***
- **Allocation rules**
  - **Affect initial transfer of wealth – but no further effect on profitability of companies**
  - **In a linked system, prices are equal for sources across countries – less competitiveness concerns**
  - **Distortions in incentives due to different treatment of new entrants and due to different rules on subsequent allocations (i.e. updating)** ***- exist with or without linking***

Design features (3)

- **Absolute versus relative targets**
  - **Effect on price – “new” mitigation costs might induce entities to relocate (*incentives exist also before linking*)**
  - **Risk of compromising “environmental integrity” ideology of absolute scheme designers**
  - **Risk of barriers to trading/compatibility in registries**
  - ***Technical fixes available (“gateway”)***
- **Stringency of targets**
  - **Different initial wealth allocation, but no effect on operating cost**
  - **Competitiveness concerns related to the change in asset value**
  - ***Political issue, no technical problem***

Design features (4)

- **Banking**
  - Linking allows companies in countries without banking to effectively be able to bank via swaps
  - May lead to concerns on concentration of banking in few countries – *technical fixes available*
    - An issue once in the Kyoto Commitment Period?
- **Borrowing**
  - Linking enables companies in non-borrowing scheme to buy allowances from company that can borrow them
  - May lead to concerns on environmental performance – *technical fixes available*

Design features (5)

- **Monitoring, reporting and verification**
  - Fundamental to ensure confidence in traded units and to underpin their value
  - National-level guidance and good practice guidance exists and should limit differences
  - *Differences no problem as long as they do not undermine legitimacy of currency and market confidence in value of units*
- **Penalty schemes and price caps**
  - Linking is no problem with similar penalty scheme even if level of penalty is different
  - Difficulties if fixed-penalty scheme is linked with price-cap scheme: market likely to split, reducing expected benefits
  - *Technical fixes available, but not efficient*

Concluding comments

- From an economic perspective linking is desirable
  - the market should be enlarged as soon as possible
- Consider the contrary: systems develop in parallel over years, based on market fundamentals that would lead to radically different prices
  - investors use different mitigation choices and have different future price expectations
- If schemes differ in certain design elements, a full flow of allowances could lead to detrimental economic / environmental impacts
  - necessary restrictions on these flows could reduce expected benefits
- None of the problems arising from differences are insuperable; still overall efficiency gains
- <u>But</u>: secondary effects not yet considered