Enforcing environmental policies in China -- The "indecisive" role of the market in SO_2 and COD emissions trading

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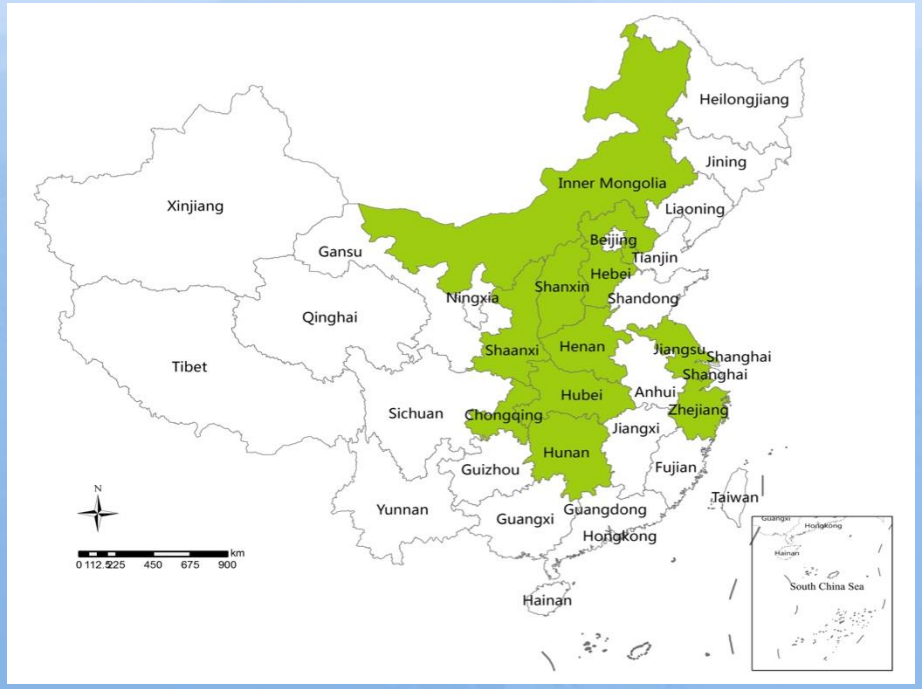
Market and State

- China’s economic reform since 1978
- The Party’s Central Committee in 2013: markets would play a "decisive" role in resource allocation

SO_2 and COD emissions trading pilot schemes

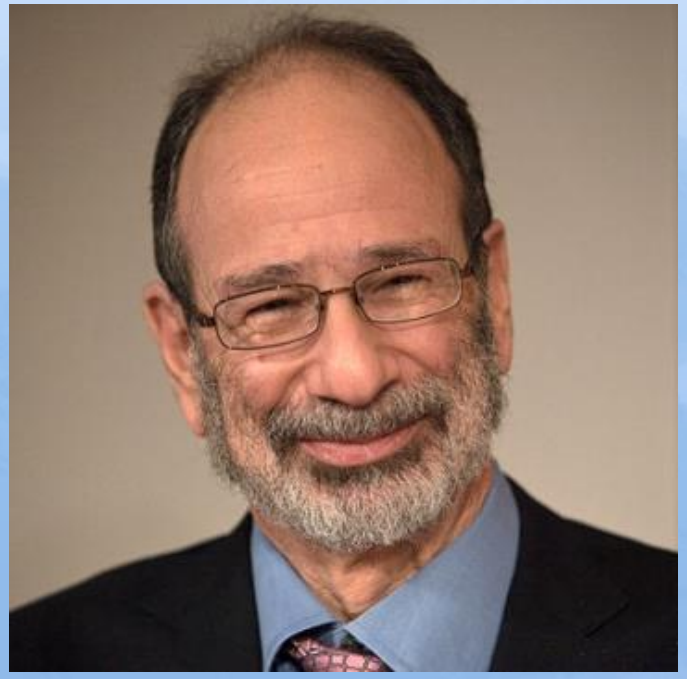


- Five case studies:
  - Jiangyin (Jiangsu)
  - Jiaxing (Zhejiang)
  - Hubei
  - Chongqing
  - Inner Mongolia

Market design theory

- Market thickness
- Market congestion
- Market safety

Alvin E. Roth

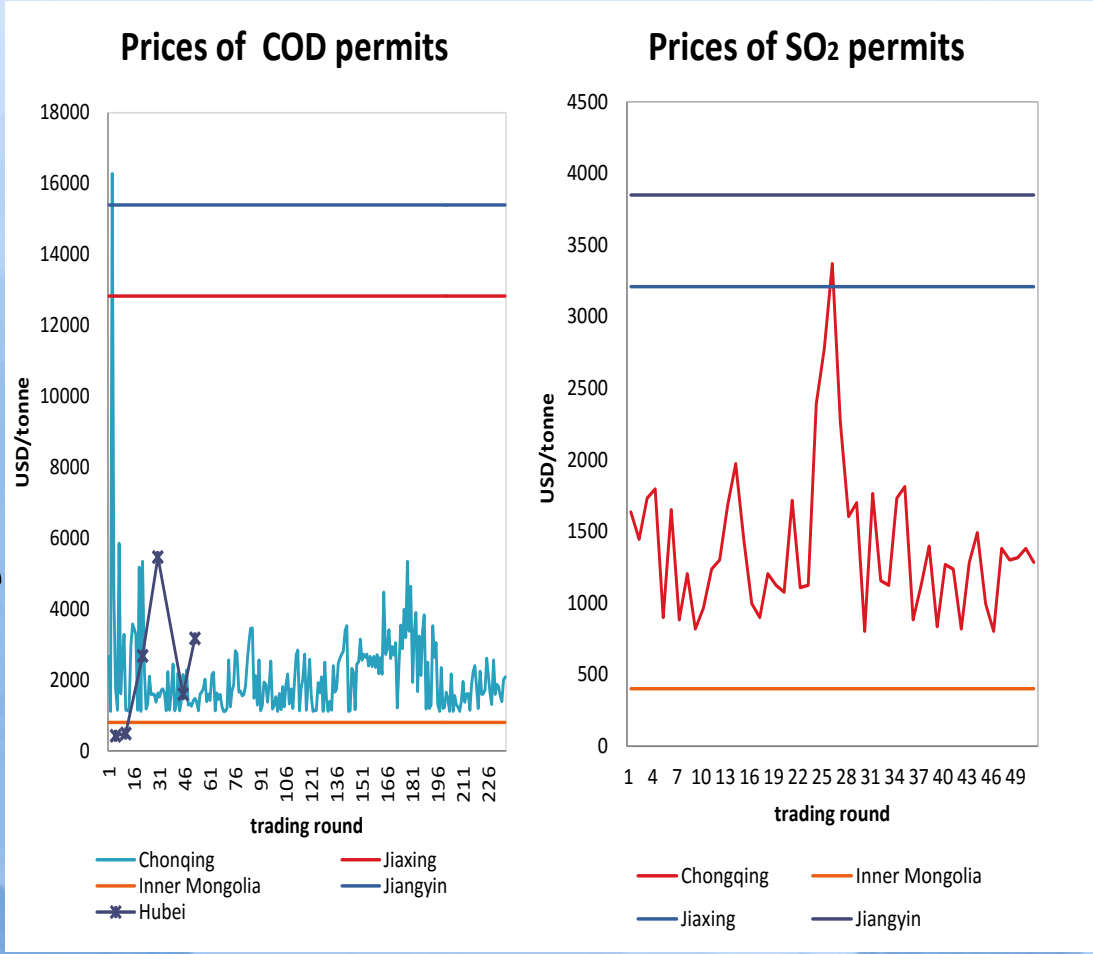


Market thickness: the formation of price signals

- The number of trading participants
  - New firms as buyers, existing firms and the government
  - Market segregation
- Incentives to trade
  - Demand: co-existing policies and relaxed enforcement
  - Supply: uncertainty on future emission caps

Market congestion: the price equilibrium

- Government-firm trading mode
  - All firms must sell permits to or purchase permits from the government
- Firm-firm trading mode
  - Firms can trade permits with each other



Market safety: information on emission permits

- Monitoring, verification and penalty on non-compliance
- Regulatory uncertainty
  - The emissions trading programs are pilot programs that could be easily eliminated

Conclusion

- Flawed design and porous enforcement
  - To diminish market thickness and market safety
- Excessive governmental intervention and lack of sufficient regulatory credibility
  - To create market congestion and upset market safety
- Conflicts with existing policies
  - To prune market thickness