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Enforcing environmental policies in China -- The “indecisive” role of the market in SO₂ and COD emissions trading

Yuan Xu

The Chinese University of Hong Kong

Zhang, B. *, H. Fei, P. He, **Y. Xu***, Z. Dong, O. R. Young, 2016. The Indecisive Role of the Market in China's SO₂ and COD Emissions Trading Markets, *Environmental Politics*.

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Market and State

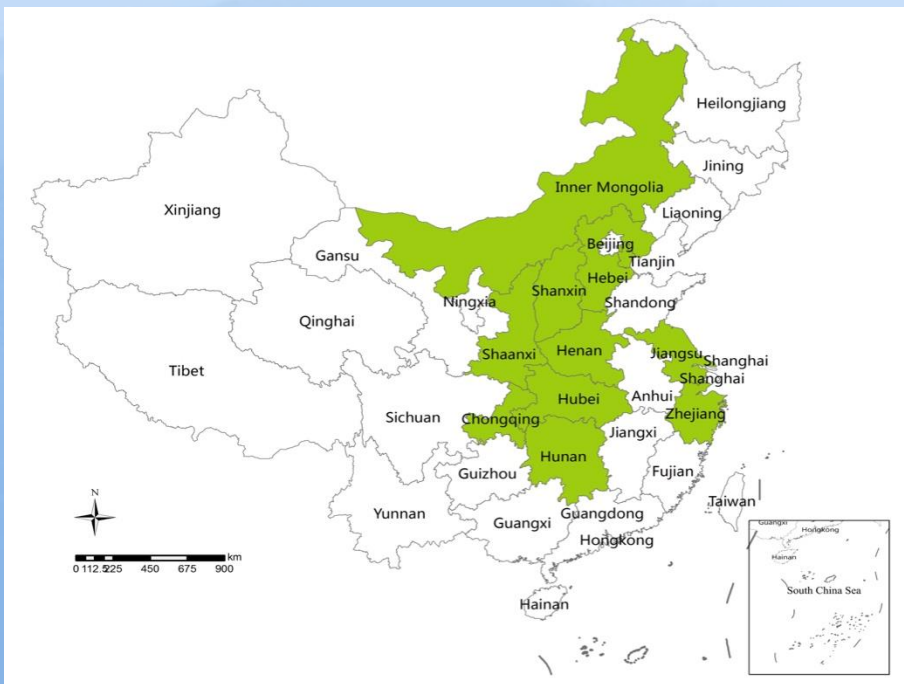
- China's economic reform since 1978
- The Party's Central Committee in 2013: markets would play a "decisive" role in resource allocation



SO₂ and COD emissions trading pilot schemes

■ Five case studies:

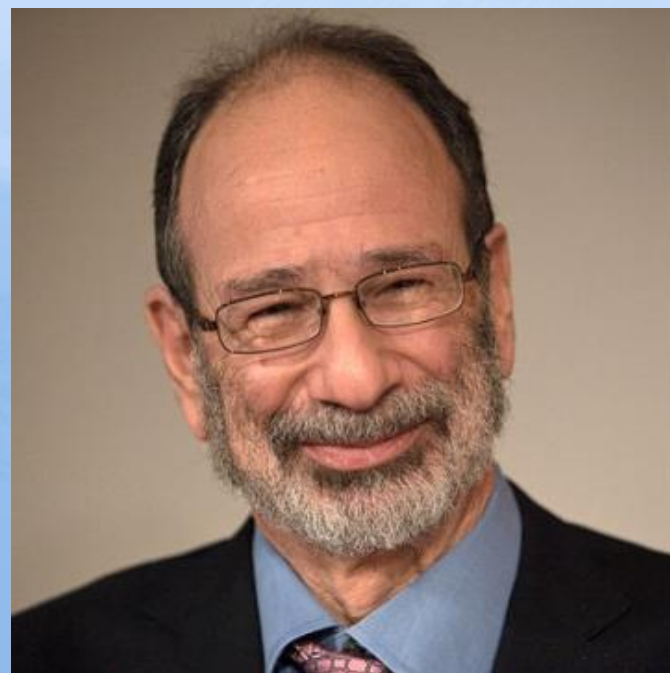
- Jiangyin (Jiangsu)
- Jiaxing (Zhejiang)
- Hubei
- Chongqing
- Inner Mongolia



Market design theory

- ▣ Market thickness
- ▣ Market congestion
- ▣ Market safety

Alvin E. Roth



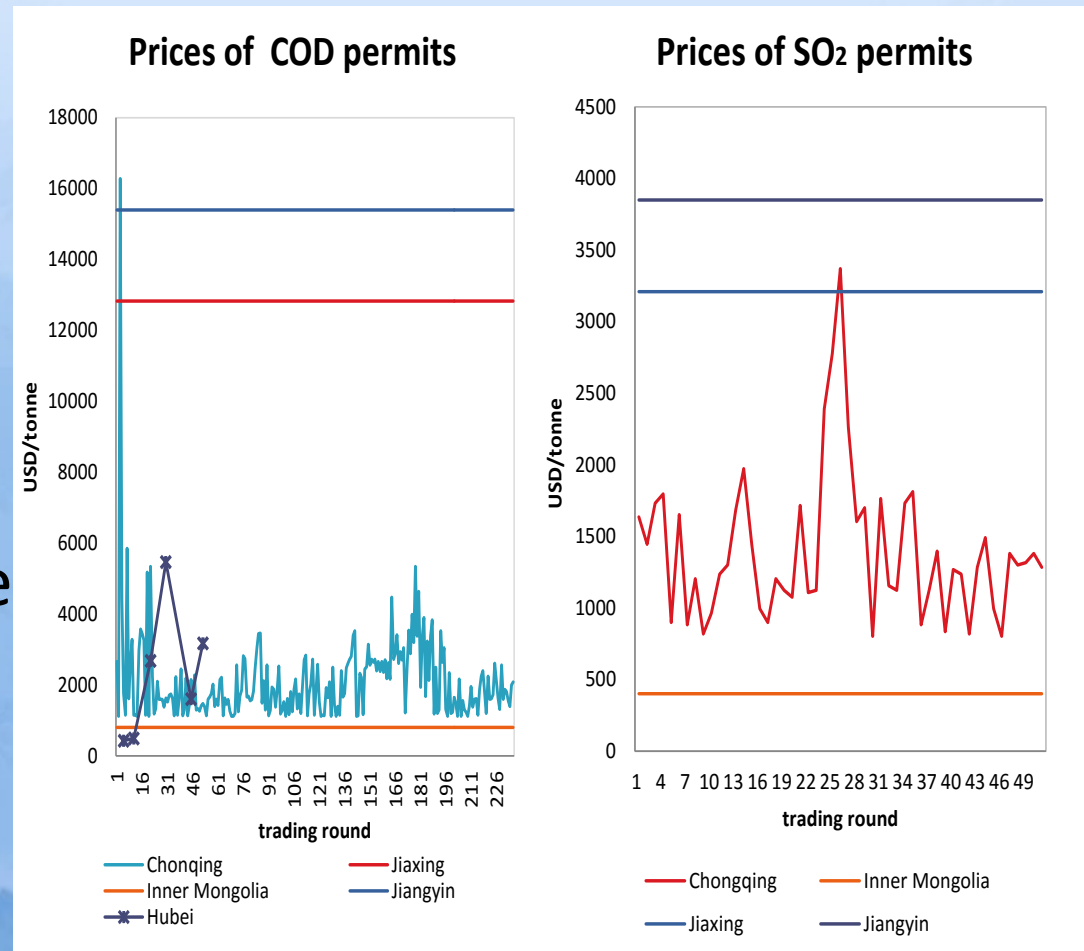
Market thickness: the formation of price signals

- 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