Emerging Environmental Markets:

The Drivers of Emerging Markets

Associate Professor Ian A. MacKenzie

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Why markets for the environment?

- The idea of using markets originated in the 1960s (e.g., Dales, 1968)
- Shown to be cost effective relative to traditional regulation
- Regulator requires less (firm-specific) information
- Markets work! (usually) prices reflect the true value to the market participants
- Prices provide a dynamic efficiency: robust incentives to change behavior over time
  - Known to spur innovation in abatement technologies

Where have markets been used?

- Air pollution
  - US Acid Rain Program (1990-)
  - NO_X US Budget Trading Program
  - EU-ETS
  - RGGI
  - California program
  - NZ and Australian market
  - China 2021- intensity market
- Fisheries (ITQs)
- Conservation, land use, Clean Development Mechanism (CDM) (offsets)
- Renewables; waste disposal; water pollution

What have been the lessons learnt?

- Markets work best when:
  - The commodity (and damage caused) is homogenous
  - There are many buyers and sellers
  - Compliance regulations are straightforward, transparent and provide the correct incentives
  - Compliance markets easier to regulate than voluntary market

Where are markets going? What are the challenges?

- I observe the same debates today for new markets as we had for the first pollution markets
- Offsets will play a (more) significant role
  - How do we ensure additionality, fungibility, permanence?
  - How do we ensure compliance and verification to track performances (in a systematic and cost effective way)?
  - How do we measure co-benefits?
  - How do we ensure market participation (e.g. evidence from Granite Belt of untapped potential): Aggregation? Flexible contract design?
  - Keeping an eye open for a fully formed CO_2 compliance ACCU market: How do offsets integrate?
  - Offset often work "better" when attached to a compliance market.