Categorization of Market Issues

UC Market Simulation Group

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What Could Go Wrong?

- Market Power
- Market Manipulation
- Non-strategic Market Frictions

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Confusion Between Market Manipulation and Market Power

- "Market Manipulation" is standard term used when behavior in commodity markets is not competitive
- That's because commodity markets *usually* trade goods produced by sellers with little market power
  - Gold, silver, wheat, corn, oats, natural gas
  - BUT then there's oil or electricity?
- Regulators have at times responded to market power problems with actions meant to control market manipulation
- A poor policy if the real problem is market power

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Distinguishing Strategic Market Behaviors

- Market Power - maintaining price above (or below) competitive levels, usually by changing supply
  - Or, with cap and trade, by changing demand
- Market Manipulation - creating profitable short-run price deviations, usually with (mis)information
- Some differentiating characteristics
  - Physical participant vs trader strategy
  - Supply/demand-based vs information-based strategy
  - Equilibrium vs dis-equilibrium strategy
- Related issue: manipulation vs. arbitrage

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Market Power and Manipulation in California's Electricity Crisis

- Generator withholding/bidding strategies
- El Paso withholding of gas
- Enron memo strategies
- "Round-trip" gas trades and misreporting of transaction prices to bias indices
- Interaction of market power and manipulation
- **Bottom line:** Separate problems that call for different policies

Mitigating Market Power

- Structural Policies
  - concentration controls: e.g., divestitures or merger reviews
  - accommodating entry : e.g., reducing barriers to import supply or transmission capacity
- Operational Policies:
  - price-caps
  - bid controls
  - must-offer requirements

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Mitigating Market Manipulation

Two Schools of Thought in Electricity

- Option 1: crack down on "financial" trading by enforcing more strict and rigid verification of "physical" capabilities and intent
- Option 2: limit ability to manipulate by making markets more deep, liquid, and better informed. Accommodate entry of financial traders. Limit position sizes.

Non-strategic Barriers to Market Efficiency

- Cost/ability of participants to find counterparties in trades
- Cost/ability of participants to be well-informed about price and other market factors
- Bureaucratic barriers to efficient trade
  - Including unclear rules or property rights

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