# Discussion on "The Shifting Finance of Electricity Generation"

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2 Time Series Trends/Alternative Explanations







• Ownership of electricity providers have changed over the last 15 years.

- Rise of PE, Institutional owners and foreign corps.
- Decline of mostly domestic corps.
- The "new" owners are more likely to open new plants and to operate in the renewable space.
- Market deregulation is emphasized as an important factor driving these patterns.
- Very interesting paper, with impressive data and a timely topic.



- Aggregate CO<sub>2</sub> emissions peaked in 2007 (p. 3).
  - A broad trend in the economy that your story picks up/is part of/causes?
- Would the plant openings and closures have happened regardless of the events described in this paper?
- General ownership trends in the economy. I.e., general trend of de-listings.



### • Underlying reasons to deregulate?

- "the ISO operated wholesale markets were established before our sample period, mostly around 2000, and before wind and solar technologies became competitive as well as before the shale gas revolution, which reduces concerns regarding reverse causality." (p. 14).
- Could be other reverse causality concerns:
  - States with poor performing domestic corps more likely to deregulate?
  - Differences in growth trends.
  - More on the reasons for the deregulation events.



## State Level Determinants

- Paper written as to explain the ownership change.
  - The strongest evidence is on the role of market deregulation.
  - You control for incentives for renewables and degree of belief that anthropogenic climate change is happening.
- So much many more aspects and nuances:
  - Fossil fuel subsidies (in place and removed).
  - Unused fossil fuel reserves.
  - Underlying potential for different energy sources.
  - The degree to which state/region is impacted by climate change.
- Degree of overlap/correlation of different state characteristics.
  - Do the regulated states also provide the most incentives for renewables and do they have the most climate concerned citizens? (Complements)
  - Not politically feasible to deregulate electricity market so you instead introduce renewables incentives? (Substitutes).
  - Concerned citizens is perhaps enough?



#### • "Overlap" in ownership

- "The differences in contracting terms between institutional investors and private equity are highly relevant as institutional investors supply the vast majority of commitments to private equity funds." (p. 37).
- Would be interesting to know some more about who owns the different ownership categories. In particular the role of institutional owners. Have their preferences shifted away from domestic corps for instance?
- PE and higher prices and shorter duration contracts. Welfare enhancing (or not) for states?
- Outside of the sample: interest rates are up and energy prices are high and volatile.
- It's quite detailed and long.

- You unveil a new dataset well done!
- You have a timely and important topic. I enjoyed reading the paper.
- I hope my suggestions will prove helpful.

