Retail Electricity Market Restructuring and Retail Rates

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Prior to the 1990s, all U.S. states used a "cost of service (COS)" regulation regime in which investor-owned utilities were allowed to recover prudently incurred costs plus a rate of return on capital expenditures, and retail customers were unable to choose their electricity supplier. From 1996-2000, states passed retail electricity market "restructuring." Retail restructuring reforms at the state level typically targeted generation ownership and remuneration as well as the reform of retail services. State-level reforms often required the separation of generation function, thus transitioning the generation capacity from COS to market-based remuneration.

This empirical research examines the effect of retail restructuring on electricity prices to final consumers. Importantly, and novel to this research, all empirical analyses are based on detailed descriptions of each state's restructuring timeline, including its transition period and date of full retail-restructuring implementation. Properly identifying restructuring states and dates has been a common critique of this literature, which we address seriously in this analysis.

We find that rates increased in restructured states relative to plausible counterfactuals in the years post-restructuring. But by twelve years after retail restructuring, we no longer observe any difference. We investigate plausible mechanisms, finding evidence that retail prices became more responsive to natural gas price in restructured states, the timing of which coincided with increases in natural gas prices nationally. We also test for whether retail restructuring facilitated the growth in renewable energy generation and find no such evidence. In fact, on average, restructured states had slower renewable energy growth than COS states, although we do not attribute any causal effect to this observation. We also test for whether retail restructuring had distributional effects across customer classes and find that in the short-run residential customers benefited relative to industrial customers during transition periods, but that this difference does not persist into full implementation.

We argue that this is altogether the most comprehensive analysis of state level retail restructuring policies, arguably the largest state level change in electricity markets in the United States over the past half century.

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