

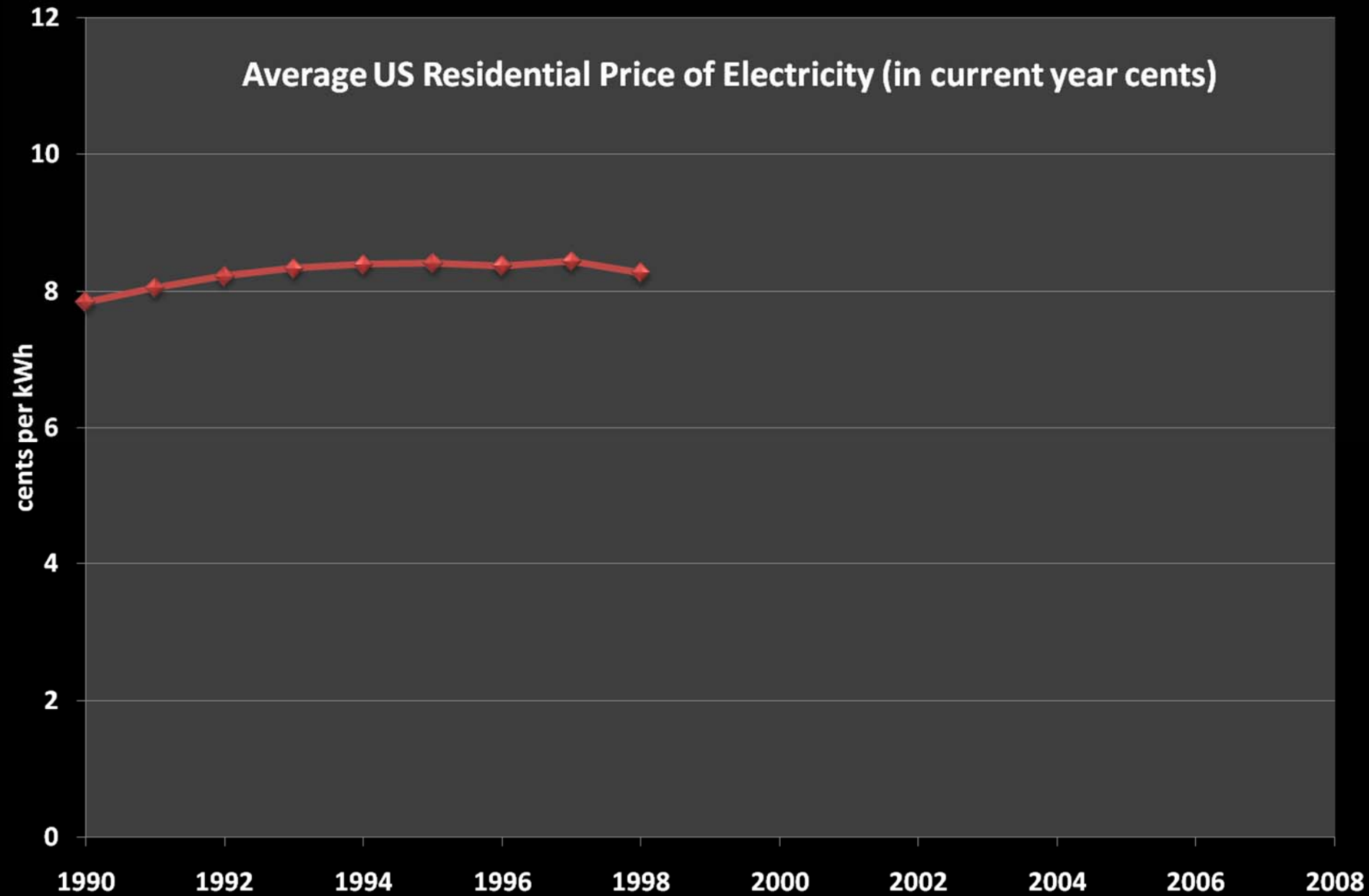
# **Electricity Prices and Costs Under Regulation and Restructuring**

Prof. Jay Apt, Carnegie Mellon University

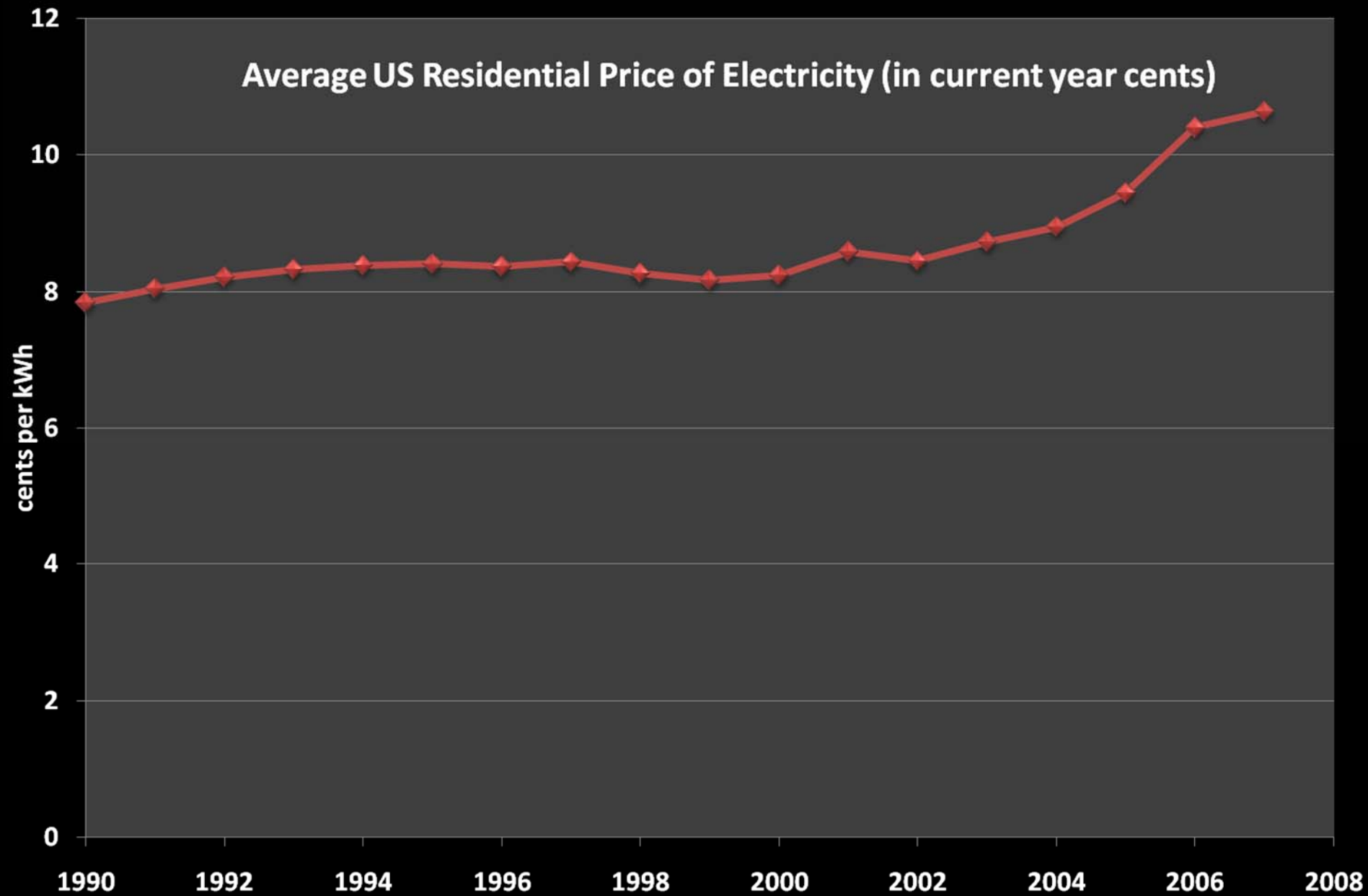
Prof. Seth Blumsack, The Pennsylvania State University

Prof. Lester B. Lave, Carnegie Mellon University

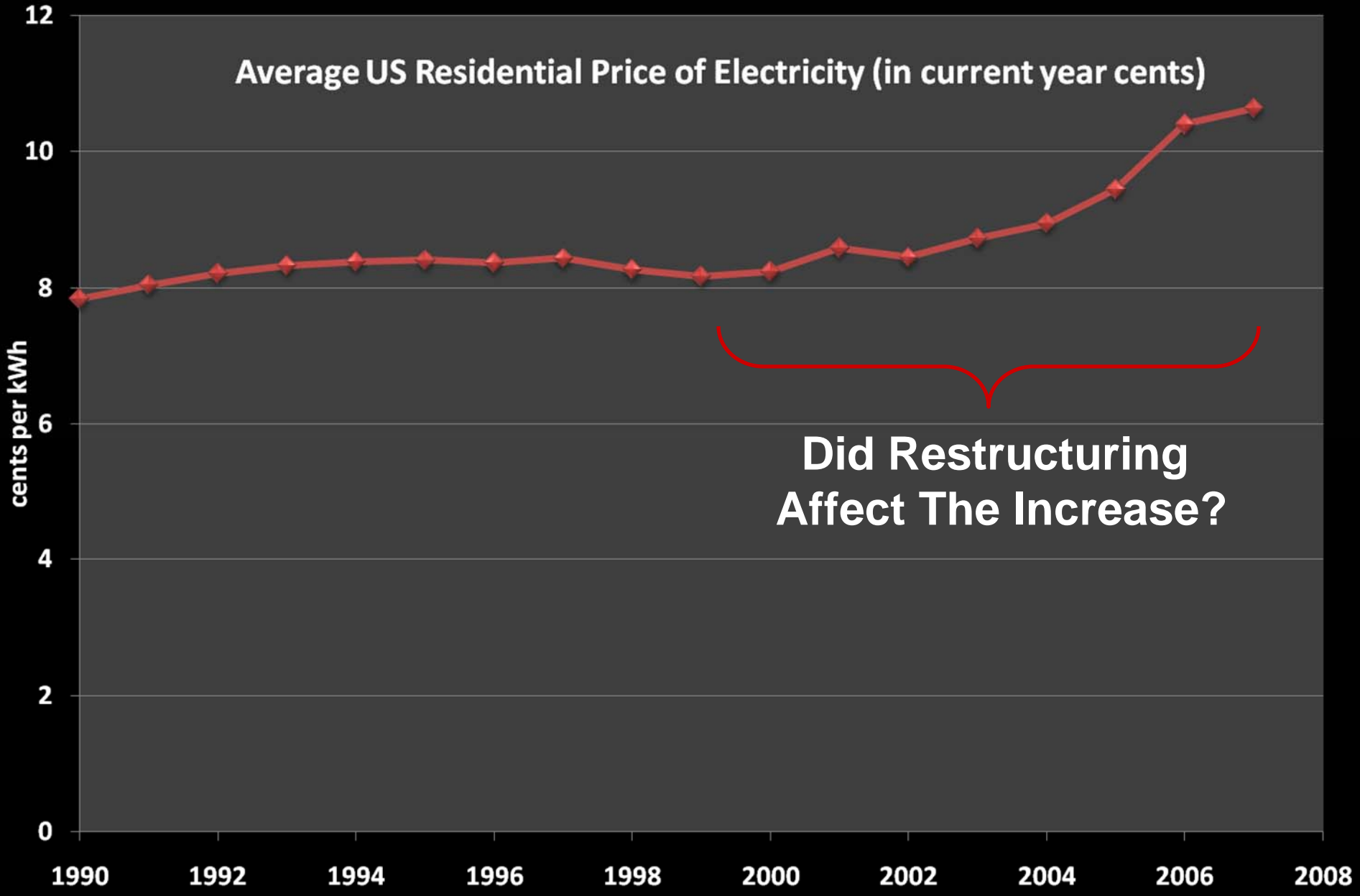
# Average US Residential Price of Electricity (in current year cents)



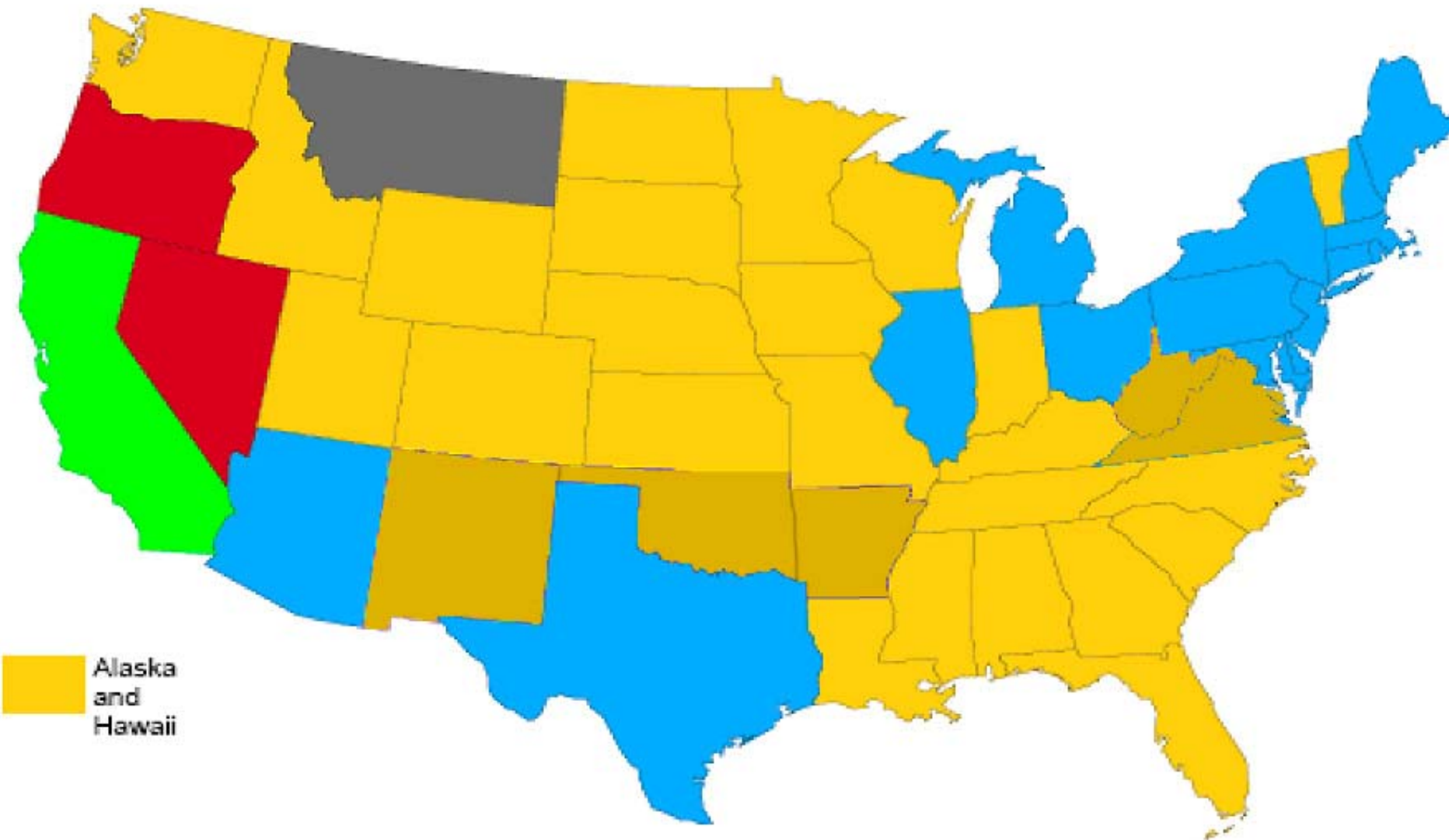
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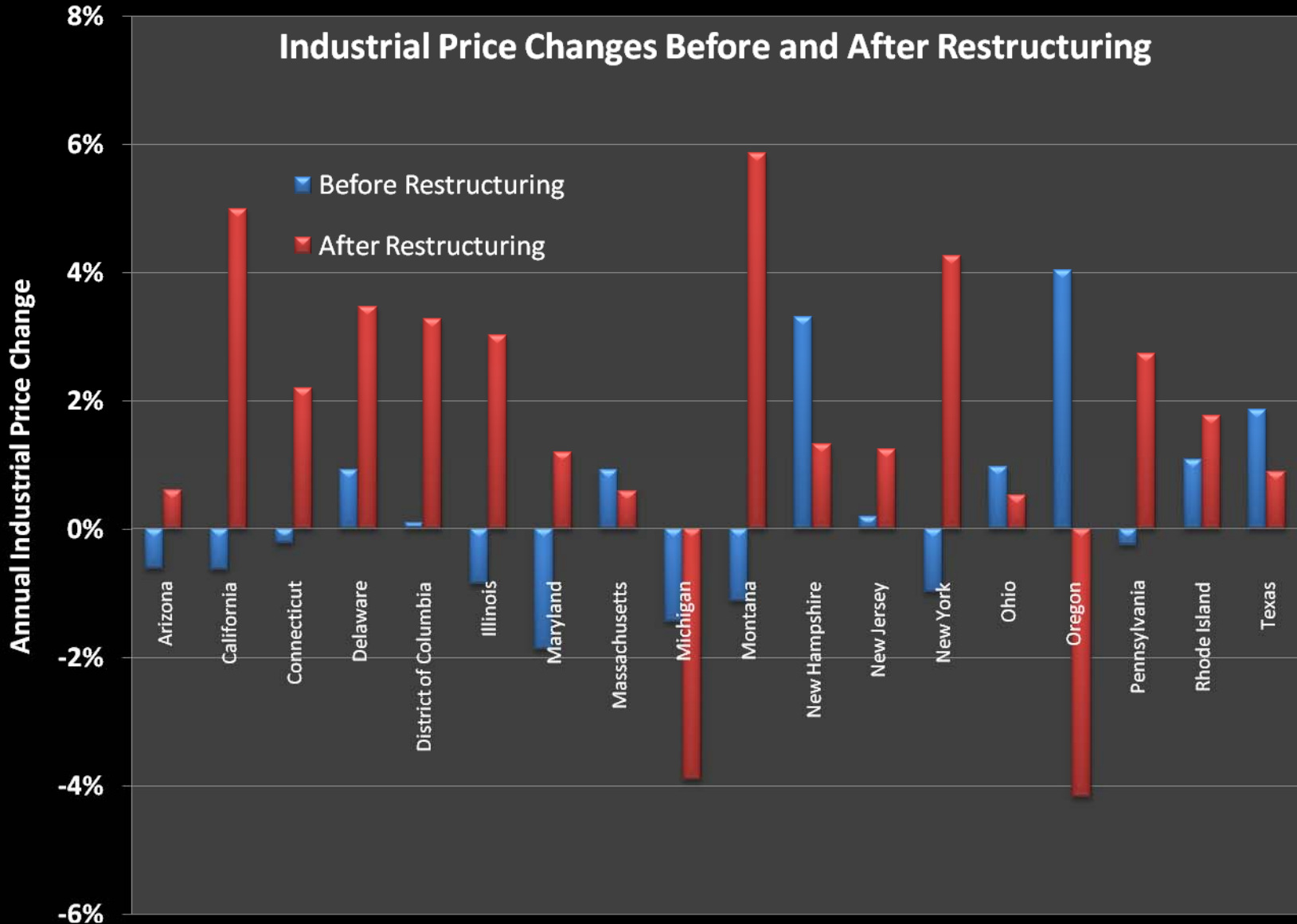
**Did Restructuring  
Affect The Increase?**



Alaska and Hawaii

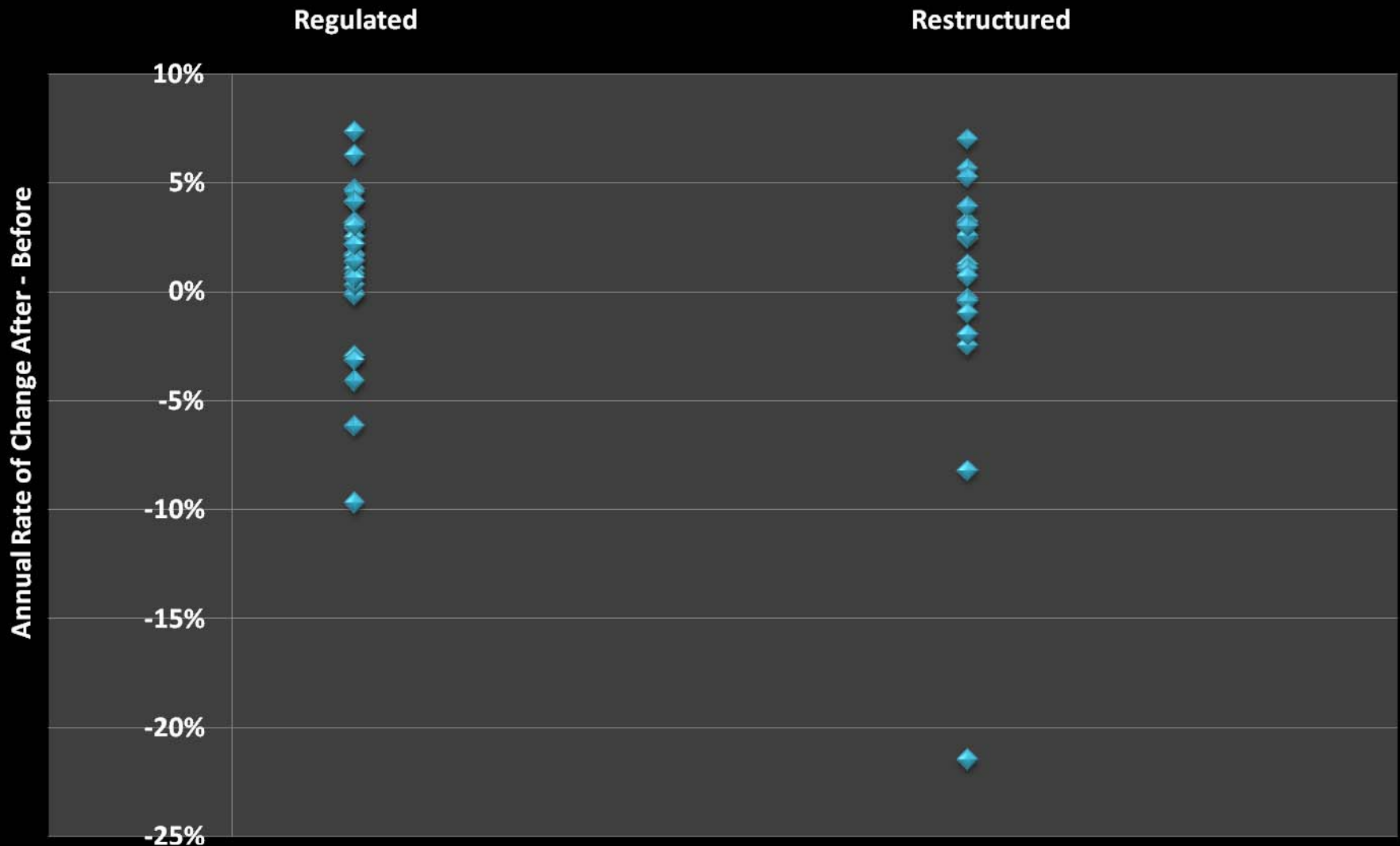
- |   |   |
|---|---|
|  Allow retail access (16+DC)           |  Not considering restructuring at this time (26)     |
|  Restructuring law repealed or delayed |  Retail access suspended (CA)                        |
|  Limited access (2)                    |  Residential transition period extended to 2027 (MT) |

# Industrial Customers Were Supposed To Benefit



# No difference in the pace of rate changes

There is No Correlation of Restructuring with Industrial Price Changes



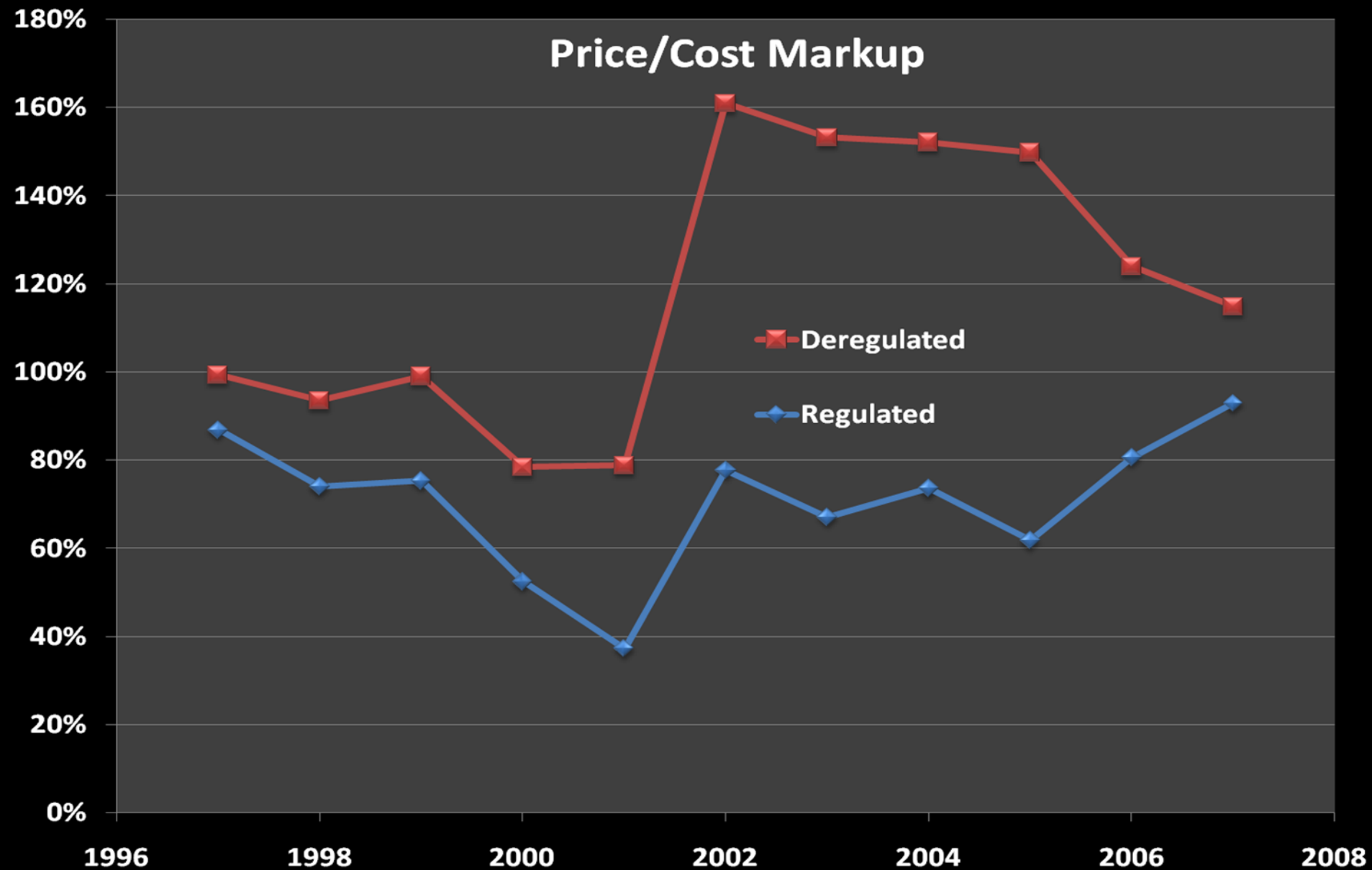
# We studied the markup between cost and price

- Prices: Annual data from 1994 through 2007
  - 71 utilities
  - 37 states
  - Half the utilities participated in restructuring
    - Wholesale competition (joining an RTO/ISO)
    - Retail competition
    - Divesting generation assets
  - Rate data for each utility from detailed data collected every 6 months by EEI and published in “Average Rates and Typical Bills”
  - Cents per kWh for each customer class, including fuel cost adjustment (as permitted by the regulators), less stranded cost recovery allowance (Competitive Transition Charge) = net rate

# We studied the markup between cost and price

- Costs: Annual data from 1994 through 2007 as filed on FERC Form 1
  - Generation cost
  - Transmission & distribution costs
  - Cost of power purchases
  - Sales
- The effect of higher fuel prices are reflected in both the generation cost and the cost of power purchases, for each utility (rather than just a regional average fuel price that may not be what the utility actually pays)
- Retail prices and utility costs have been adjusted for inflation using the consumer and producer price indices
- Markup = Net Rate – Average Cost

# We Would Have Expected Deregulated Markups To Be Less than Regulated



## Results

Rather than examining customer prices, we looked at the markup between the utilities' cost and the price each charged.

We used econometric regressions to investigate if restructuring explains difference in the markup.

1. Simply joining an RTO has had little effect on the markup.
2. Utility divestiture of generation and retail competition have been associated with a larger and more significant increase in the price-cost markup than simply joining an RTO.

The results indicate that any gains from restructuring have, thus far, not appeared for consumers.

**The econometric study confirms our earlier work:  
restructuring has made no substantial difference in prices.**

## For Further Information

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