Price Indices: Variation by Location and Market Segment

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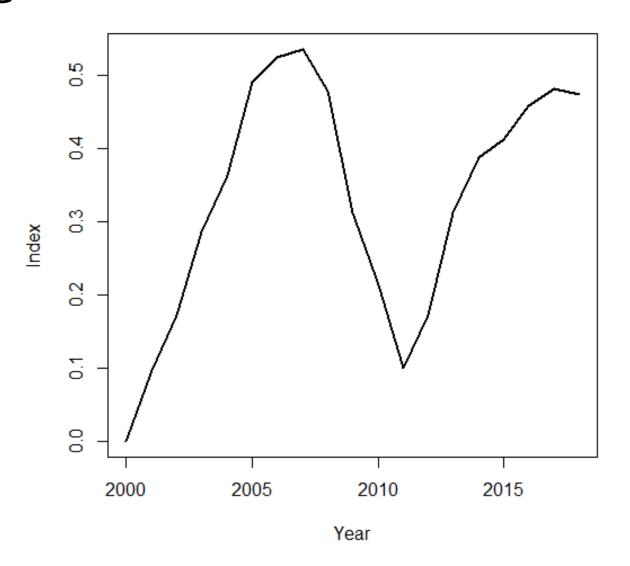
Standard Methods

- What would the sale price be at different times for a property with a given set of characteristics?
- 1. Means or medians over time.
- 2. Hedonic index: Control for property characteristics using regression procedures.
- 3. Repeat Sales: Difference in prices over time for properties that sell more than once. Implicitly controls for property characteristics.

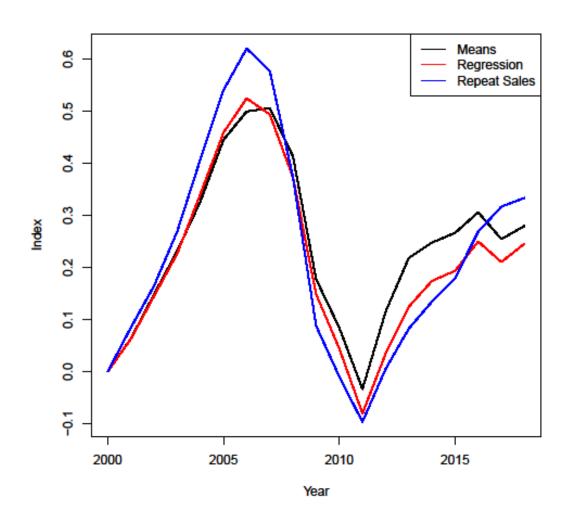
All focus on a single, central tendency – average or median.

Potential bias: are properties that sell in a given time period representative of the entire market?

Index of Average Log Sale Price in Chicago Over Time



Standard Price Indices: Chicago, 2000 - 2018

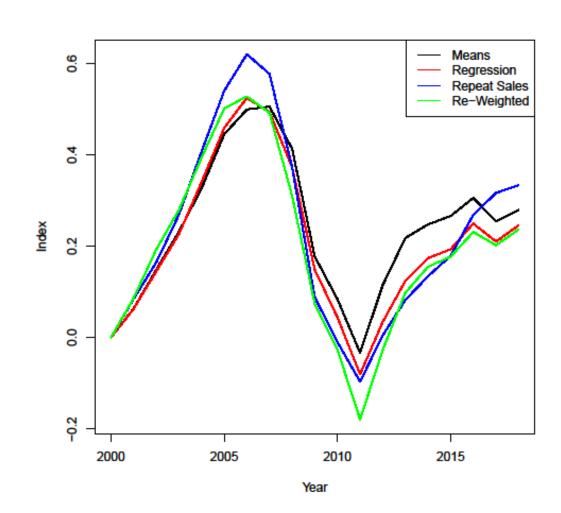


Repeat sales index shows higher appreciation in the boom, followed by larger decline, and then larger rebound.

Only about 8.3% of single-family homes sold more than once during this time.

Only about 24.5% of single-family homes sold at all during this time.

Price indices that place more weight on homes with relatively common property characteristics

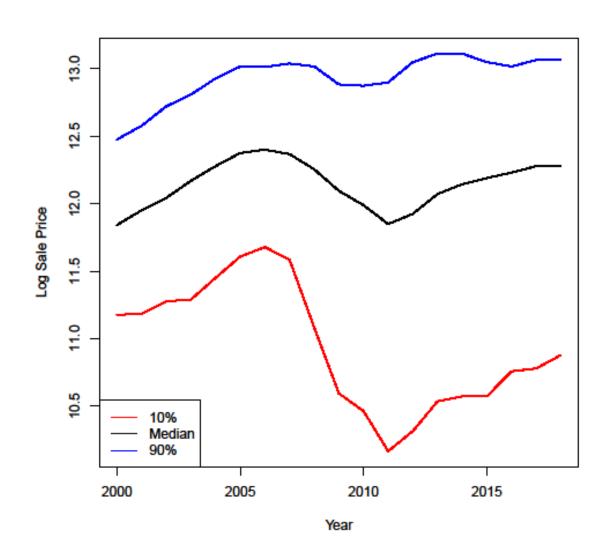


During the boom period, 2000 – 2007, lots of sales of relatively small, low-priced homes that appreciated rapidly.

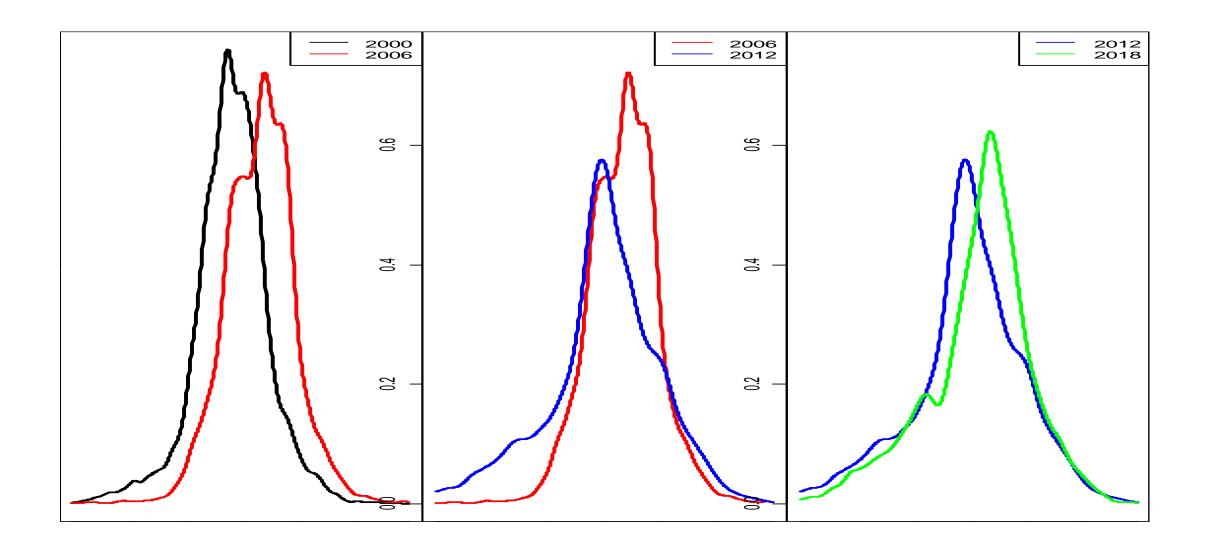
During the crash, had a higher proportion of sales of relatively large, high-priced properties.

During the recovery, transacting properties are more representative of the overall distribution of homes.

High v. Low-Priced Homes



Sale Price Distributions over Time



Median Appreciation Rates by Census Tract

