Texas Property Tax Reform

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Overview

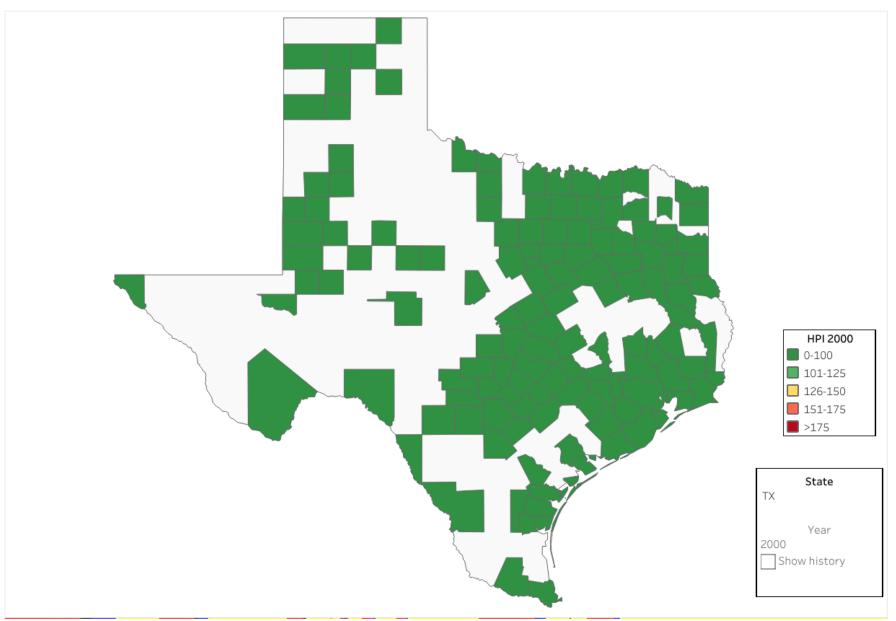
• Texas Housing Market

Policy Proposals

Modeling Overview

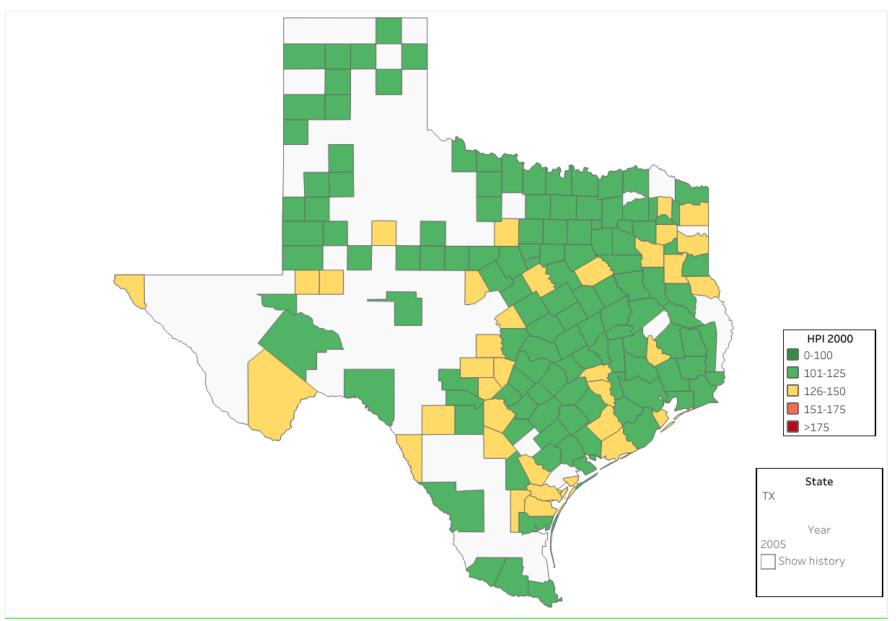
• Economic Impact

HPI (base year 2000) Current View: TX in 2000



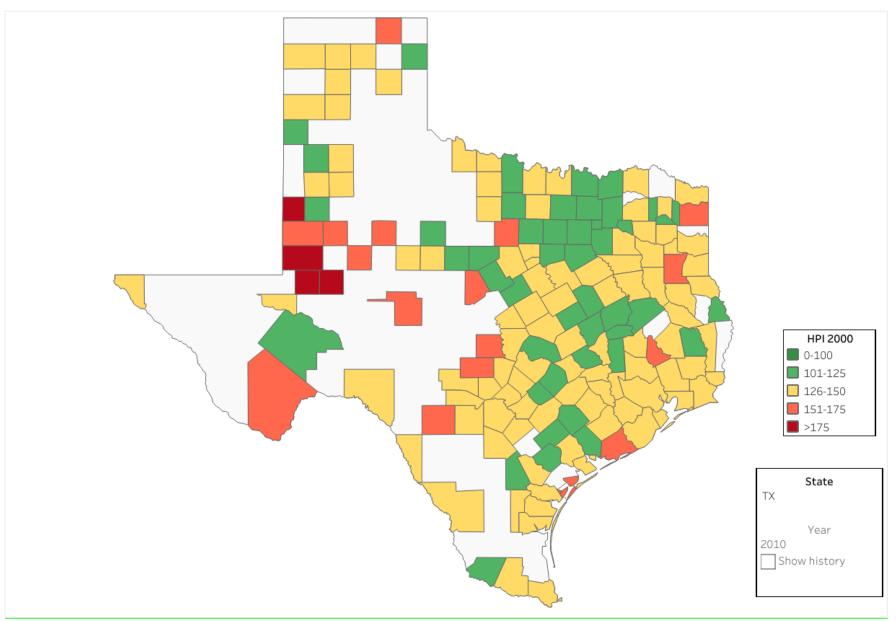
For more information please see our Working Paper 16-01 (https://www.fhfa.gov/papers/wp1601.aspx) or our Frequently Asked Questions (https://www.fhfa.gov/papers/wp1601 FAQs ZIP5 HPIs.pdf).

HPI (base year 2000) Current View: TX in 2005



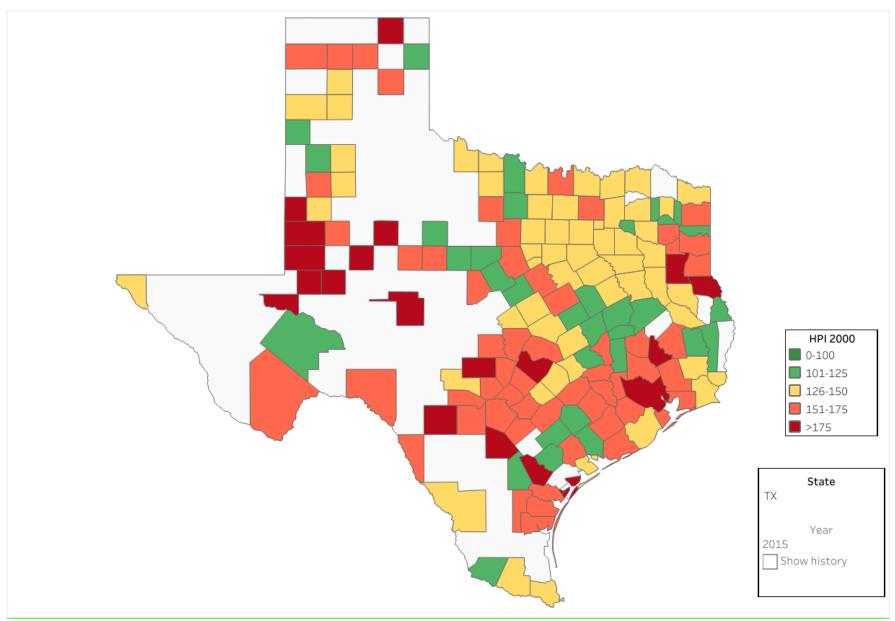
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HPI (base year 2000) Current View: TX in 2010



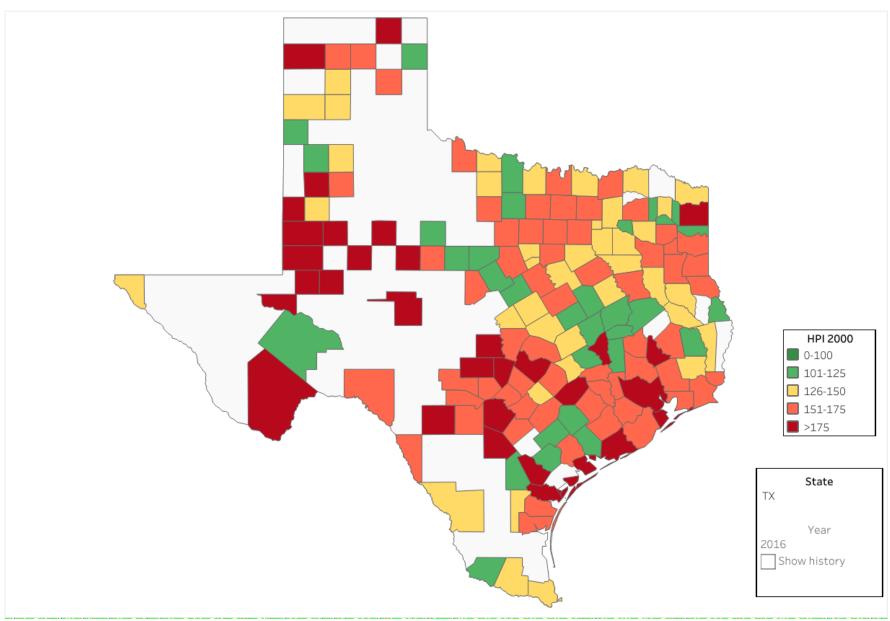
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HPI (base year 2000) Current View: TX in 2015



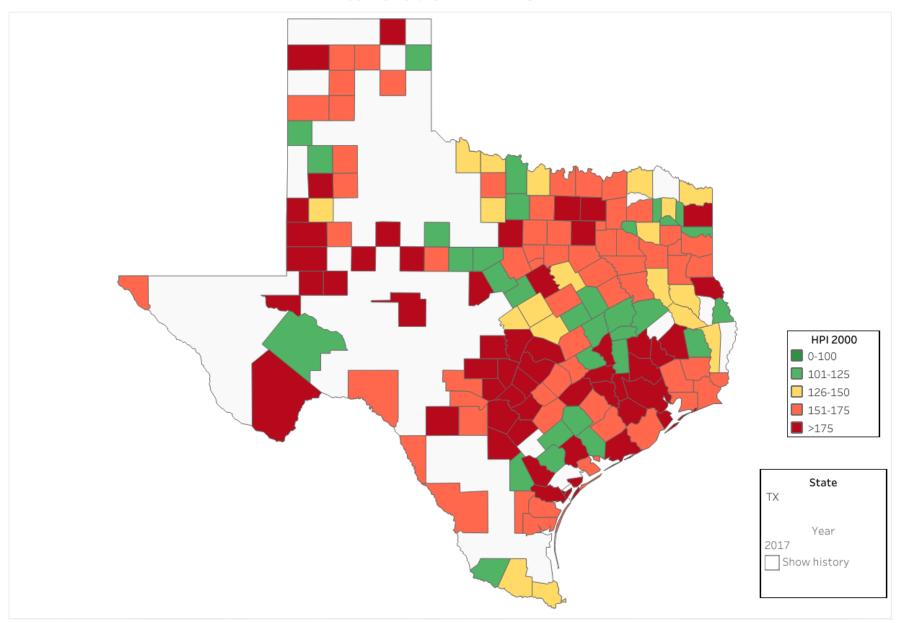
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HPI (base year 2000) Current View: TX in 2016



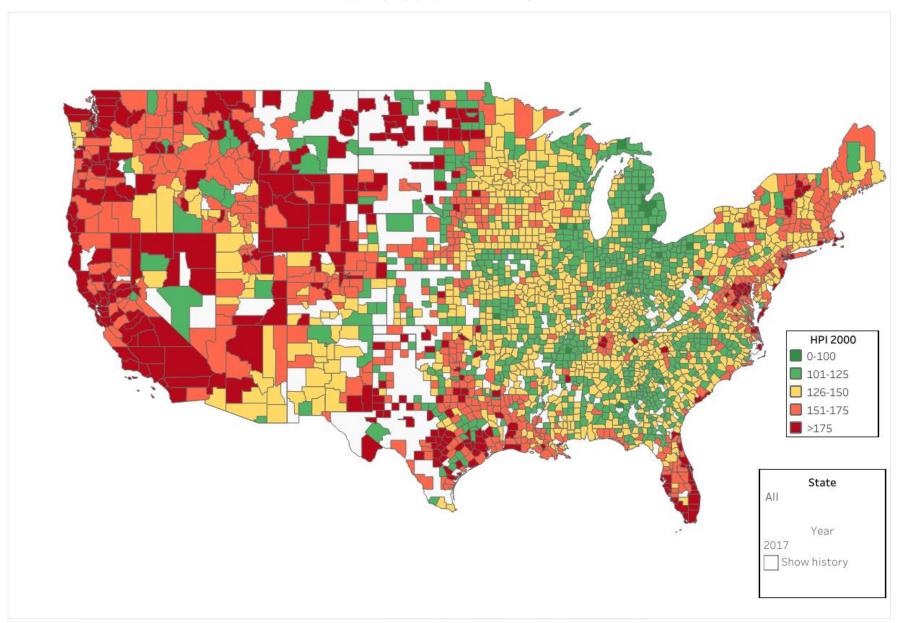
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HPI (base year 2000) Current View: TX in 2017



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HPI (base year 2000) Current View: All in 2017



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Texas Housing Market

- Property values sharply rising
- Several areas well in excess of inflation
 - CPI increased 42.3% between 2000-2017
 - Texas metropolitan areas appreciation in excess of 75%
- Property taxes
 - Revenue increased 70% just from 2007 to 2017 (Forbes)

Property Tax Reform

- Texans seeking property tax relief
- Proposed reforms include
 - Sales for property swap
 - Restricted property tax growth
 - Spending-financed property tax cut
- Most reforms target the M&O component of property taxes

Economics of Property Taxation

• Traditional View:

- Property tax inefficiently drives out capital
- Residents incur the entire burden

• Benefit View:

- Residents migrate towards property taxes/provisions that best suit them
- Efficient user cost of government benefits
- Home appreciation b/c of government provision is in proportion to tax

• Capital Tax View:

• Extends traditional view to account for extensive property taxation abroad

Economics of Property Taxation

• Two taxes in one: Commercial and Residential

• Commercial Property Tax

• Tax on a stock of assets \rightarrow capital tax

• Residential Property Tax

- Tax on a stock of value \rightarrow wealth tax
- Tax on a consumption good → consumption tax

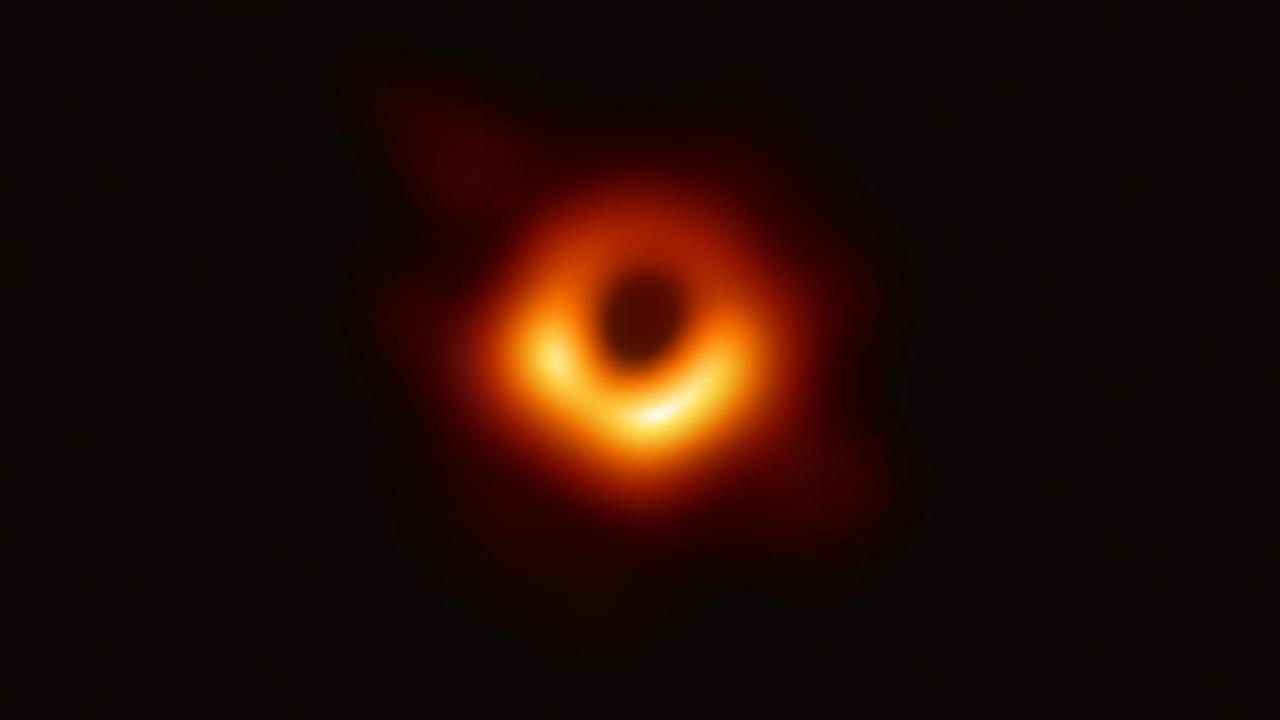
Measuring Economic Impact

Create a theoretical model

• Indirectly infer behavior

• Fit model to observed behavior

• Vary policy parameters, evaluate reforms



Two Fields

- Astrophysics
 - General relativity theory
 - Equations, predictions, indirect inference
- Economics (Structural)
 - General equilibrium theory
 - Equations, predictions, indirect inference

Two Texas Economy Models

- Diamond and Zodrow Model
 - Accounts for business activity and capital flows
 - Simulates a time path of the Texas economy
- Barro Model
 - Rigorous empirical match to the data (indirect inference)
 - "Snap shot" distributional analysis; personal taxation only

Main Results of DZ Model

- Sales for property swap
 - TX GDP ↑ 0.8-1.1% over time
 - Investment ↑ 2.1-2.8% over time
 - Corporate assets and residential housing increase 3-5%
- Spending-financed property tax reduction
 - TX GDP ↑ 0.7-0.8% over time
 - Investment ↑ 0.7-3.1% over time
 - Corporate assets and residential housing increase 2-5%

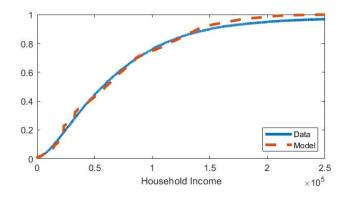
Barro Model

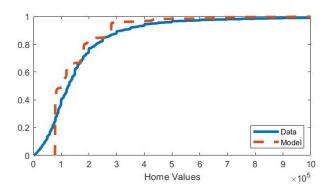
• Simulation model with emphasis on data validation process

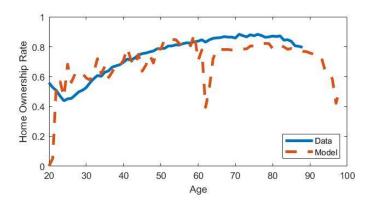
• Fine details of the Texas residential property tax

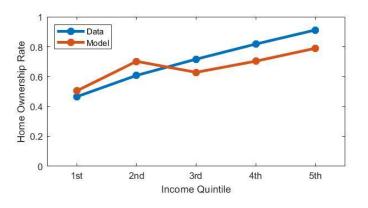
• Broad details of sales tax

Simulation Model vs Data





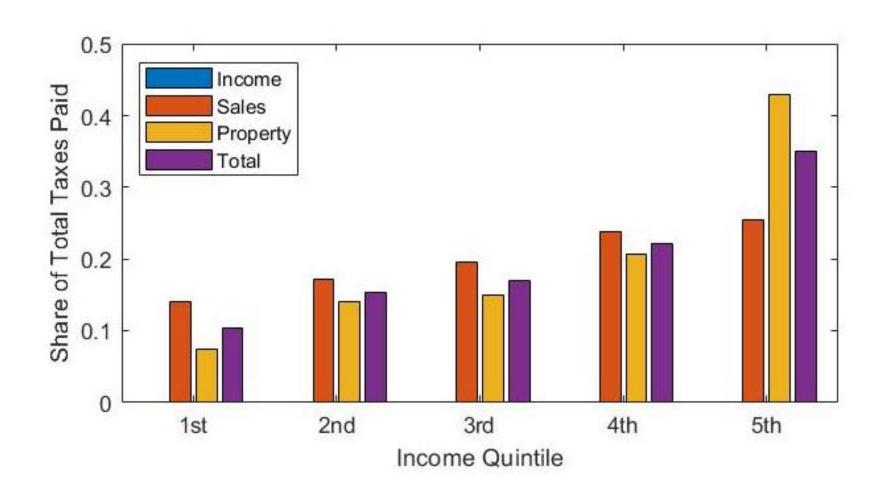




Main Results of Barro Model

- Policy change: 20% ↓ in the M&O rate, 1ppt ↑ state sales tax rate
- Preliminary results:
 - Hours worked: $\uparrow 0.73\%$
 - Average income: ↑ 0.24%
 - Ownership rate: ↑ 0.90 ppt.
 - Home values: $\uparrow 5.11\%$
- Need to model commercial property taxes

Distributional Effects



Sales for Property Swap

• Economic effects mostly positive

Reduces progressivity of the overall tax

Encourages home ownership

Education Finance Reform

• Property tax is local; sales tax (proposed) is state-level

• Schools are locally administered and financed

• Is fiscal centralization of schools idea?

Conclusion

- Texas experiencing accelerated property value growth
- Property tax reform is a political priority
- Academic emphasis on rigorous modeling of Texas economy
- Sales for property tax swap has positive economic benefits
- Reform transfers administration of school financing to state