Is Something Wrong with Texas Home Prices?

Finding Shelter: Affordability Squeeze in a Tight Texas Housing Market

Dallas Federal Reserve
February 23, 2018
Constrained supply plus strong demand = accelerated price gains

House Price Index
(Index 1Q2007=100)

United States
Texas
Austin-Round Rock
Dallas-Plano-Irving
Fort Worth-Arlington
Houston-The Woodlands-Sugar Land
San Antonio-New Braunfels

Note: Seasonally adjusted.
Sources: Federal Housing Finance Agency and Real Estate Center at Texas A&M University.
Since 2012, Texas housing prices have been rising faster than incomes.

Ratio Texas Personal Disposable Income Per Capita to House Prices
(Index 1Q1975=100)

Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author’s calculations.
Fundamentals influence price movements in housing markets

Supply side:
- Building permits
- Housing starts
- Land costs
- Construction costs
- Regulation

Demand side:
- Demographics
- Income growth
- Employment growth
- Interest rates
- Locational characteristics (schools, work centers, and transportation)
Comparing estimated values to actual prices might show price misalignments

- The Federal Housing Finance Agency (FHFA) house price index.

- Methodology used by Case-Shiller (2003) applied to Texas and major MSAs (Austin, Dallas-Fort Worth, Houston, and San Antonio).

- Methodology was one of first to point out formation of a housing bubble in U.S. housing market.
Estimates confirm Case-Shiller results from 1Q 2004 to 2Q 2011 leading to housing boom and subsequent bust.

Case-Shiller U.S Home Price Estimates
(Index 1Q1975=100)

Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author’s calculations.
Misalignment since 1Q 2015 suggests recent price changes cannot be explained by Supply and Demand.

**Case-Shiller Texas Home Price Estimates**  
(Index 1Q1975=100)

Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author’s calculations.
Same misalignment observed in Austin since 2Q 2014...

Case-Shiller Austin Home Price Estimates
(Index 1Q1975=100)

Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author’s calculations.
Case-Shiller DFW Home Price Estimates
(Index 1Q1975=100)

Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author’s calculations.
in Houston since 4Q 2014

Case-Shiller Houston Home Price Estimates
(Index 1Q1975=100)

Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author’s calculations.
... in San Antonio since 2Q2015 Possible overvaluation of home prices at state and MSA levels

Case-Shiller San Antonio Home Price Estimates
(Index 1Q1975=100)

San Antonio: Actual FHFA Price Index
San Antonio: Estimated value FHFA Price Index

Sources: Federal Housing Finance Agency (FHFA), U.S. Bureau of Economic Analysis, and author’s calculations.
Housing starts represent supply fundamentals

- Are they capturing the supply constraints faced by homebuilder?

- In aftermath of 2008–09 Great Recession, housing supply held back by lack of developed land resulting in upward pressures on land costs for homebuilders.

- Other constraints:
  - high costs of labor and materials
  - reduced profit margins
  - incentive to construct homes priced more than $300,000.
Single-family construction has not recovered causing low inventories

Texas Single Family Permits Per Capita and Months of Inventory
(Index Jan2005=100, Months)

Note: Seasonally adjusted and detrended.
Source: Bureau of Economic Analysis and Real Estate Center at Texas A&M University.
Months of inventory for housing: less than $250,000, at historical lows

Texas Months of Inventory by Price Cohort
(Months)

- Blue: $0-$199,000
- Red: $200,000-$299,999
- Green: $300,000-$399,999
- Black: $400,000-$499,999
- Purple: $500,000+

Note: Seasonally adjusted and detrended.
Source: Real Estate Center at Texas A&M University.
Identifying home price misalignments: not easy and even more difficult “bubbles”

- No sure way of knowing what prices “should be”

- No single methodology offers complete confidence.

- No certainty to say home prices overvalued or undervalued or if price bubble is forming.

- Various methodologies can be used to complement each other.
Evidence regarding Texas' 25 MSAs record episodes of “explosive behavior” in house price
Map indicates a misalignment in North Texas home prices relative to their fundamental-based normative values.
During U.S. housing bubble, homebuyers motivated to invest by strong expectations in future price changes

- Homebuyers generally perceived little risk of a possible fall in housing prices.

- Emotional, casual word-of-mouth factors played important roles in home-purchasing decision.

- These conditions difficult to measure and based on feedback and comments of housing market participants.
Purchasing home for investment purposes, perceived little risk of falling home prices, etc.

- Seem not to be present currently in Texas housing market or in major Texas MSAs.

- At same time, market did not face a significant supply constraint causing sale inventory levels to fall to historical low.

- Major contributor to current possible misalignment in home prices appears to be significant supply constraint in Texas housing market.

- RECenter will continue to monitor and analyze.
Please visit our webpage

www.recenter.tamu.edu