

Collateral Risk

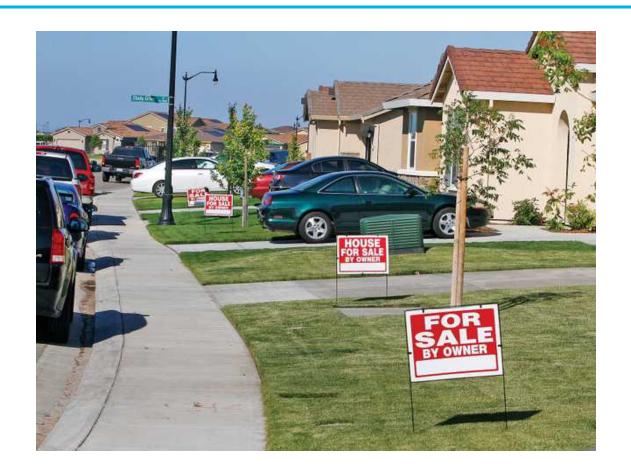
Collateral Risk Network

June 27, 2017

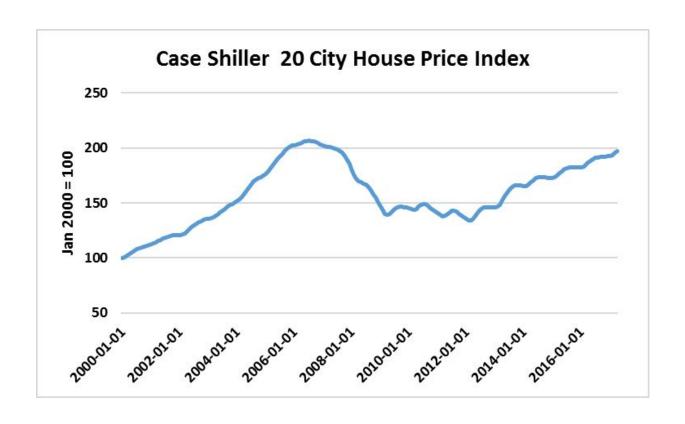
Richard Koss

International Monetary Fund

Flavors of collateral risk: I. Market risk

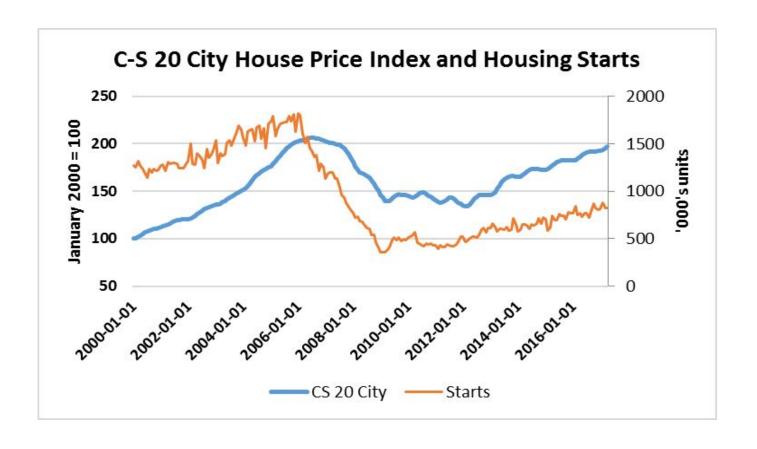


Most house price indexes are back near their peak. Are we in a new bubble?



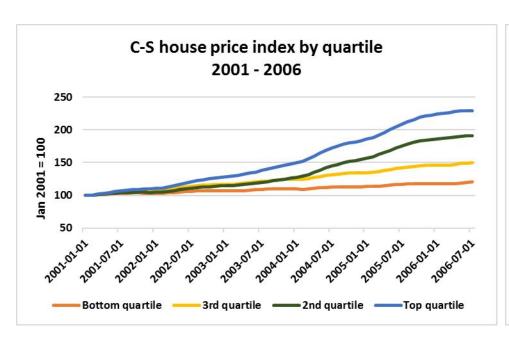
Source: S&P Case Shiller

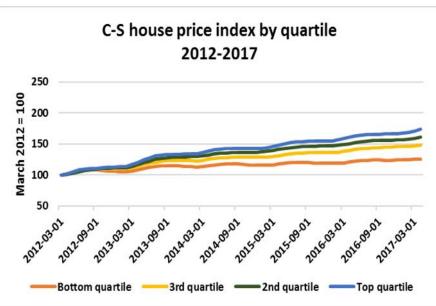
It doesn't seem like 2006



Source: S&P Case Shiller, Census Bureau

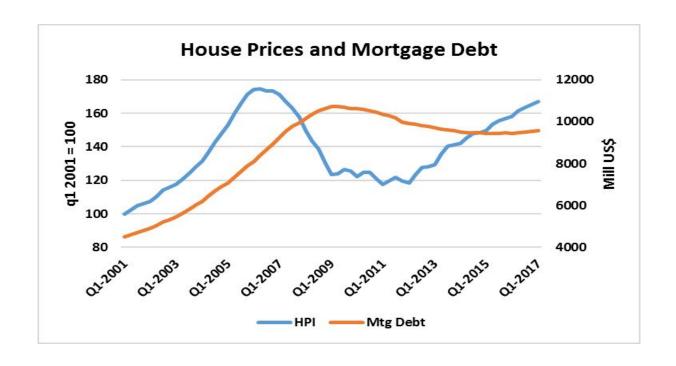
It doesn't seem like 2006





Source: S&P Case Shiller

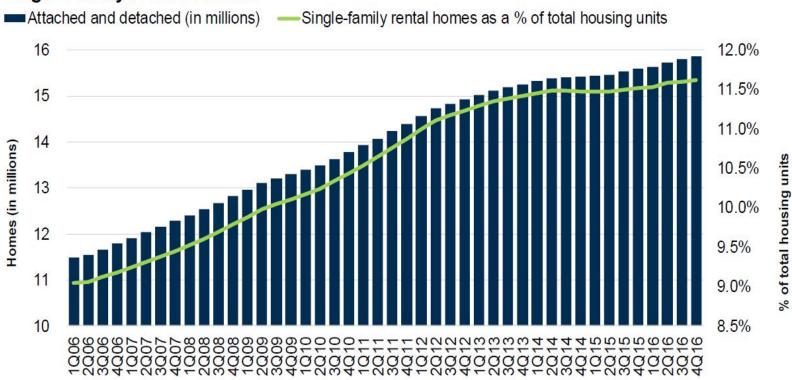
It doesn't seem like 2006



Source: Core Logic, Federal Reserve

Technology and innovation are changing market dynamics A. Buy to Rent

Single-Family Rental Homes

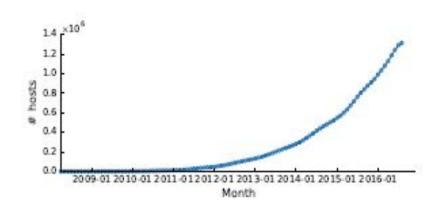


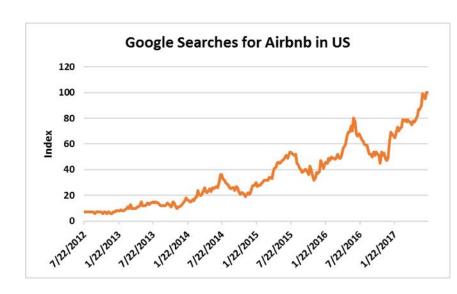
JBREC estimates using 2010 Census figures and trending data from ACS / HVS.

Sources: U.S. Census Bureau ACS; John Burns Real Estate Consulting, LLC estimates for 2014 and 2015 data. Data is a rolling 4-qtr. average (Data: 4Q16, Pub: Mar-17)

Technology and innovation are changing market dynamics B. Buy to host

Cumulative number of Airbnb global hosts*

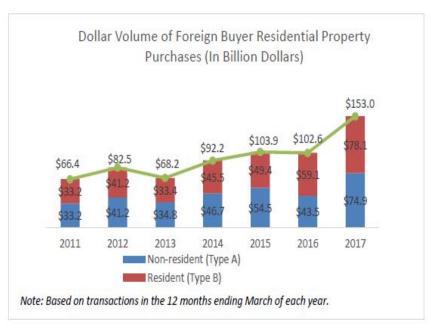


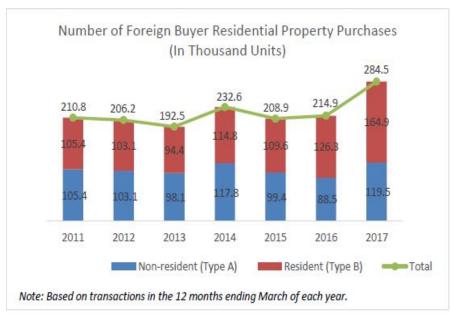


Source: Google Trends

^{*} Qing Ke, Sharing Means Renting?: An Entire-marketplace Analysis of Airbnb, Websci 17 June 2017

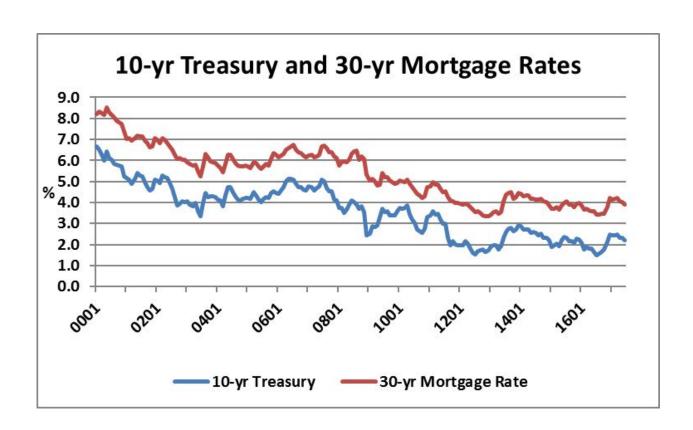
Buy to leave



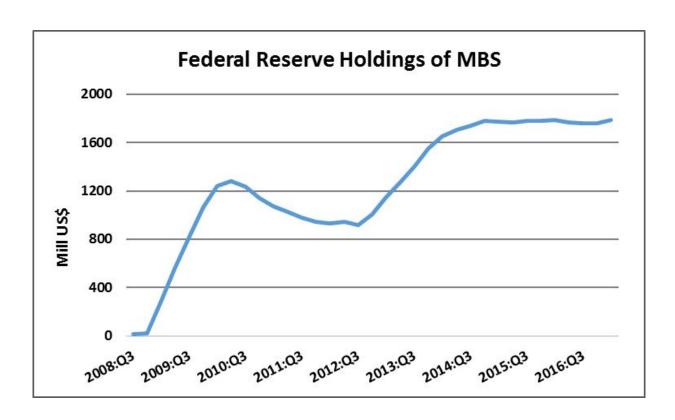


Source: National Association of Realtors

Low interest rates have been a key support for housing, will they ever rise?

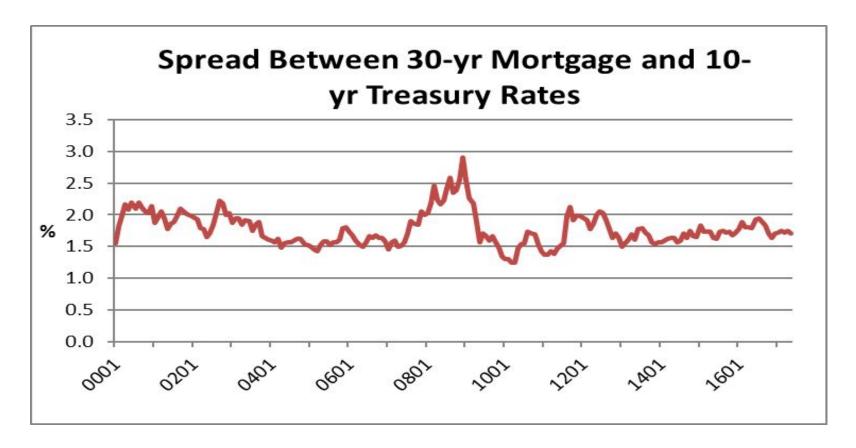


A key factor is the market response to a reduction in Federal Reseve holdings of MBS



Source: Federal Reserve

The spread between mortgage costs and Treasury yields is near pre-crisis levels



Source: FRBNY

The relative stability in the mortgage spread reflects two offsetting trends

Upward pressure from higher G-fees and servicing costs



Change from 2007 = +60 bps

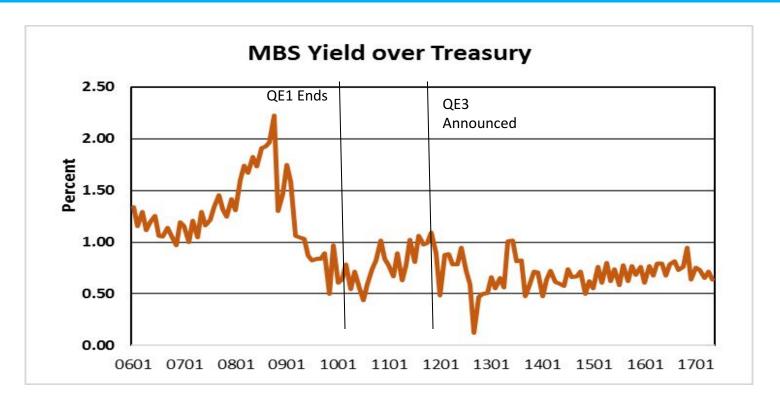
Downward pressure from QE and low market volatility



Change from 2007 = -75 bps

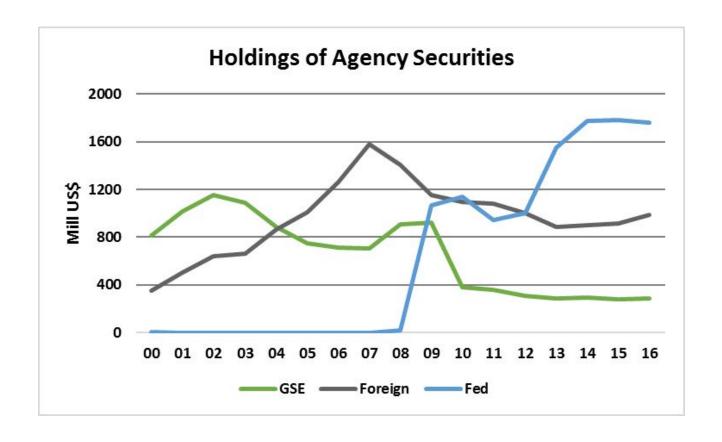
Source: Author's calculations

The excess return investors earn over Treasuries is historically very low



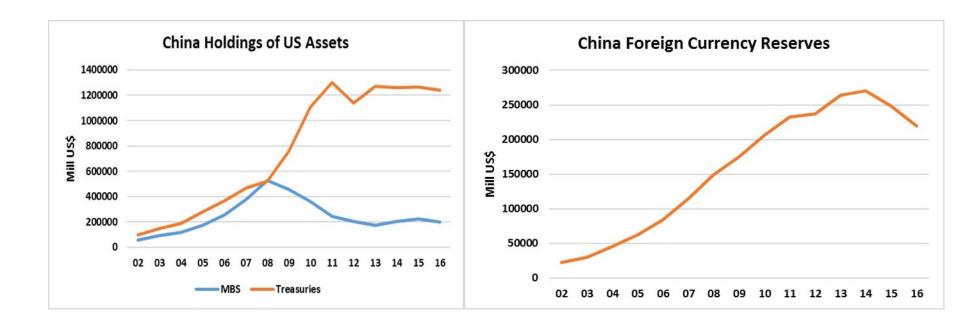
Source: FRBNY, Bloomberg

The Fed will soon start to shrink its MBS holdings – who will buy? At what price?



Source: Federal Reserve

Focus on China



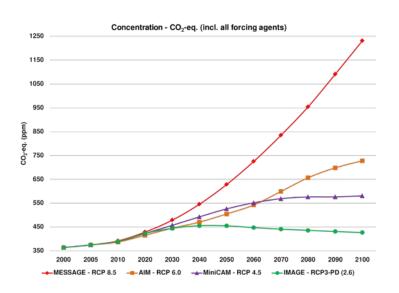
Source: US Treasury, People's Bank of China

Flavors of collateral risk: II. Property condition

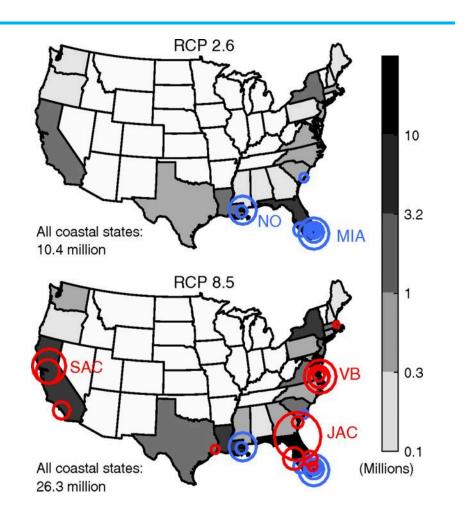


Climate change impacts are being carefully mapped out around the world

Cities with majority of populations estimated to fall under high tide lines

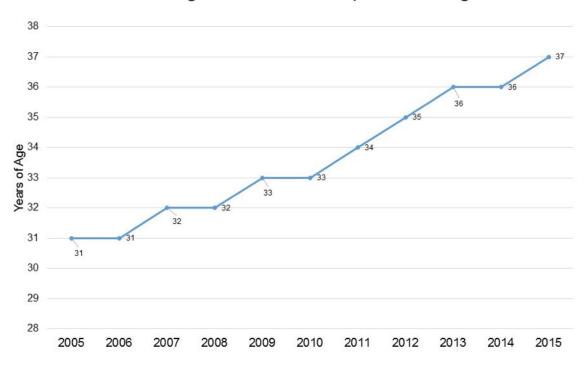


Source: Benjamin H. Strauss et al. PNAS 2015



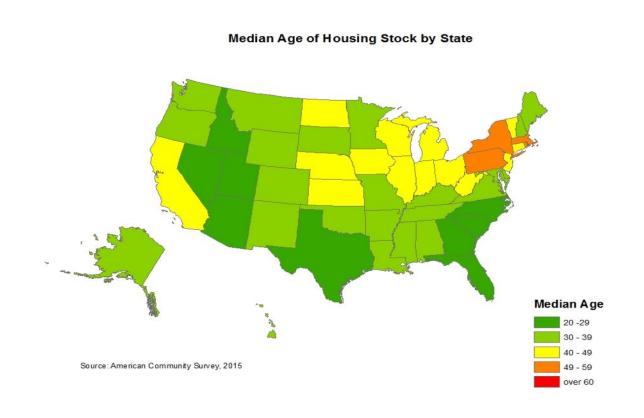
And the housing stock is aging

Median Age of Owner-Occupied Housing



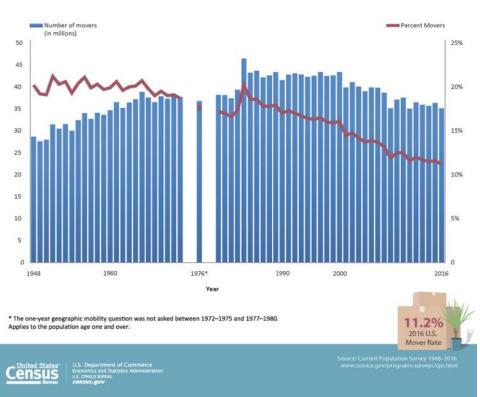
Source: 2015 1-year ACS Estimates

Houses in the Midwest, California and Northeast are quite old

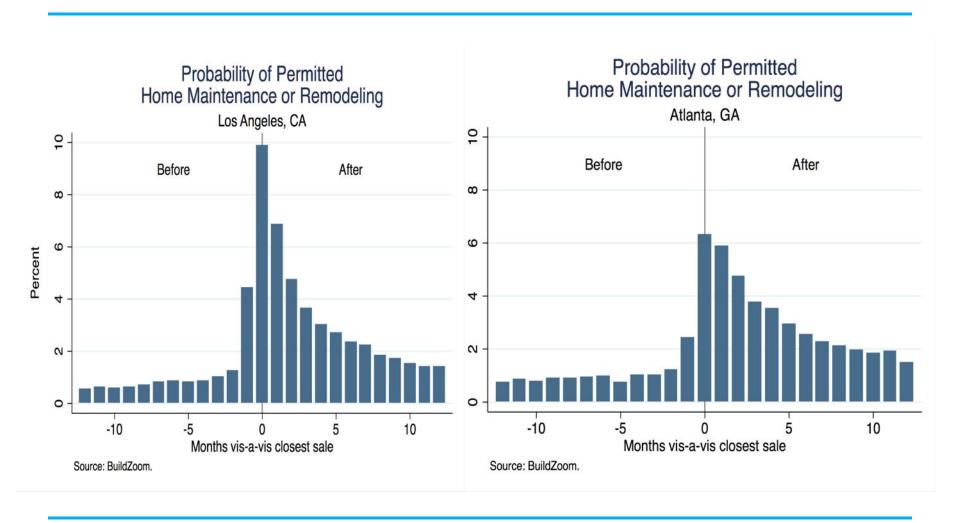


People aren't moving





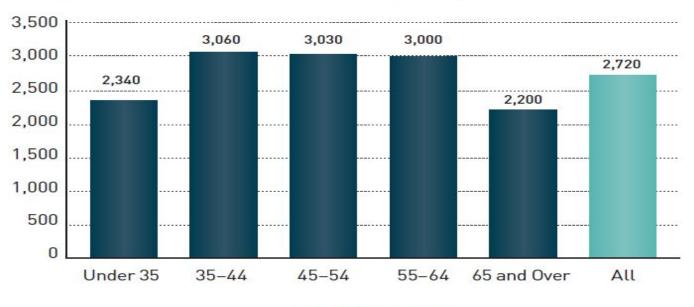
Once again it comes down to millennials



Once again it comes down to millennials

Outlays for Home Renovations Increase Sharply After Owners Reach Their Mid-30s

Average Annual Per Owner Improvement Spending, 2011–2015 (2015 dollars)



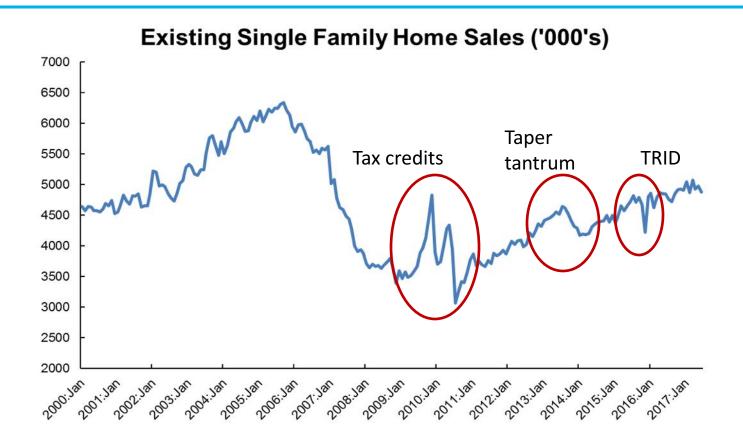
Age of Homeowner

Source: JCHS tabulations of HUD, American Housing Surveys.

Flavors of collateral risk: III. Regulatory Uncertainty

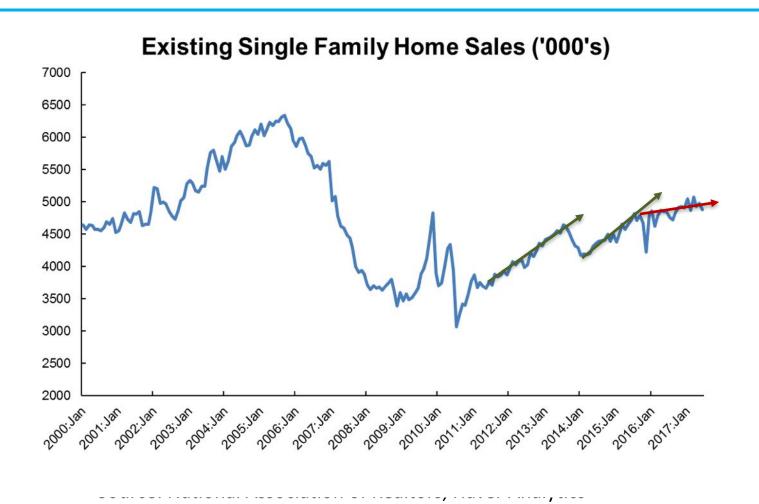


The US housing market has experienced a modest, choppy recovery since the crash



Source: National Association of Realtors, Haver Analytics

The developing trend is worrisome



Appraised values are seldom below contract

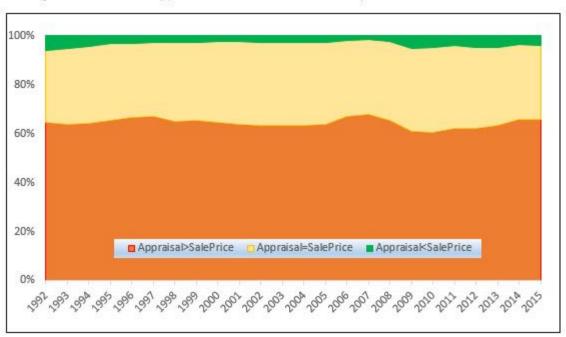


Figure 1. Percent of Appraisals at or Above Sales Price per Year from 1992 until 2015

Source: Fannie Mae

Appraisals pre- and post-contract

FIGURE 4. PROBABILITY THAT FINAL APPRAISED VALUE IS GREATER THAN AVERAGE OF ADJUSTED SALES PRICE OF COMPARABLE PROPERTIES





Source: Eriksen, Fout, Palim and Rosenblatt, "Contract Price Confirmation Bias" Fannie Mae, 10/2016

Conclusions and lessons

- Focus on interest rates
- Physical condition is an increasing challenge
- Embrace the change

Prospects for comprehensive GSE reform remain highly uncertain.

Questions?