The U.S. Housing Market: Where Is It Heading?

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Sul Ross State University, Alpine TX 29 October 2014

The views expressed are those of the author and do not reflect the views of the Federal Reserve Bank of Dallas or the Federal Reserve System.

Outline

- The U.S. economy:
 - o The slow economic recovery from the Great Recession
 - The outlook for the U.S. economy is quite good...despite weak growth abroad and market jitters
- The housing market:
 - Recent housing market developments
 - o The outlook for housing?
- Why is the housing market recovery so uneven?
 - o "Missing" first time buyers and
 - Changing attitudes to home-ownership
 - High student debt
 - Tight mortgage credit standards

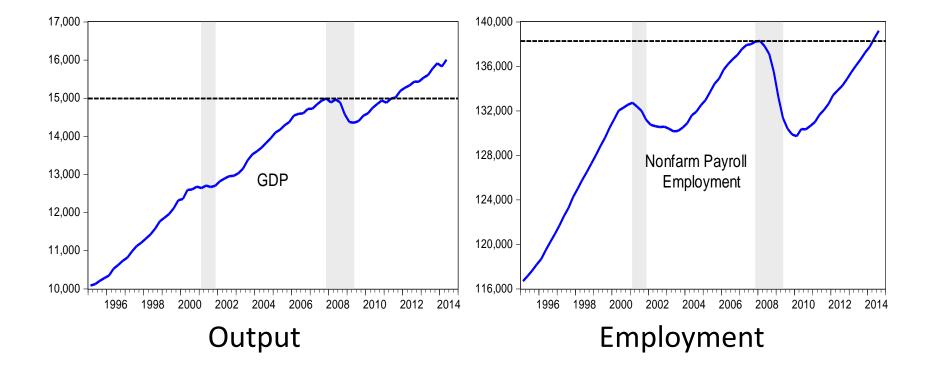
U.S. Economic Outlook is Quite Good

- Economic activity expanding at moderate pace
 - Labor market conditions improved somewhat further ... significant underutilization remains
 - Consumer spending appears to be rising moderately
 - \odot Business fixed investment is advancing
 - Recovery in housing sector remains slow
- Inflation running below 2% long run target
- Inflation expectation stable
- Highly accommodative monetary policy remains appropriate

 Likely to maintain 0 to 1/4 percent Fed funds rate for a
 considerable time, especially if projected inflation is below 2%

Sept 17th FOMC Statement

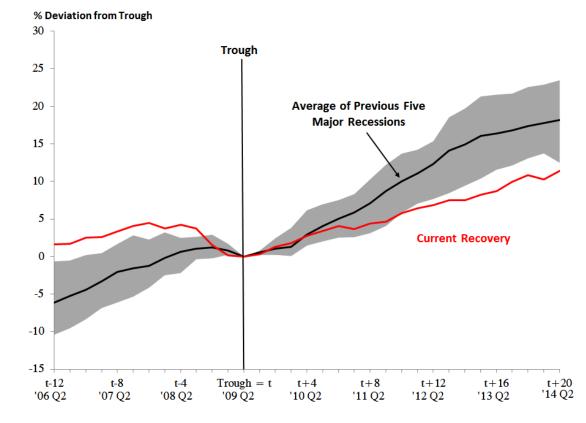
Recovery from the "Great Recession" of 2007-09 ... Very Slow and Uneven



Note: Shaded areas indicate recessions. Sources: BEA and BLS.

Much Slower Recovery in GDP than in Previous Recessions

- Various negative shocks sequester & fiscal cliff, Euro, Middle East etc.
- In addition, balance sheet recessions have long lasting effects



Source: BEA and author's calculations

Economic Forecasts



The Economic Outlook is Quite Good

Economic			Forecasts	
Indicator		2014	2015	2016
Real GDP Growth	Blue Chip	2.2%	3.1%	2.9%
	FOMC	2.0% to 2.2%	2.6% to 3.0%	2.6% to 2.9%
Unemployment	<mark>Blue Chip</mark>	5.9%	5.4%	5.4%
Rate, Q4	FOMC	5.9% to 6.0%	5.4% to 5.6%	5.1% to 5.5%
PCE Inflation	<mark>Blue Chip</mark>	1.7%	1.7%	1.9%
Rate	FOMC	1.5% to 1.7%	1.6% to 1.9%	1.7% to 2.0%
Core PCE Inflation Rate	FOMC	1.5% to 1.6%	1.6% to 1.9%	1.8% to 2.0%

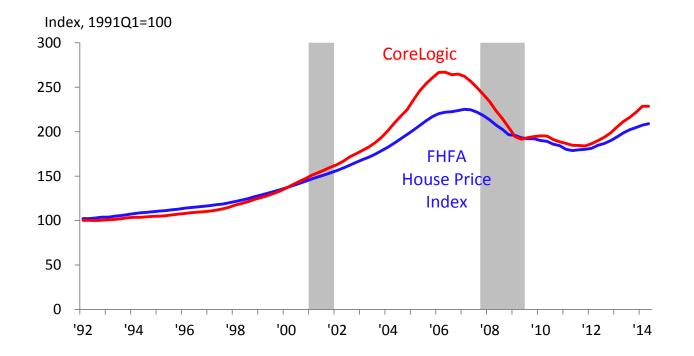
Sources: Blue Chip Economic Indicators, 10 Oct 2014 and FOMC Economic Projections, 17 Sept 2014. Note: Implied Blue Chip PCE inflation forecast = Blue Chip CPI inflation forecast – 0.3%.

The Housing Market ... Lagging the Economic Recovery?

Contrasting Signals

House prices	Rising, albeit at slower rate
Affordability	Still good
Multi-family permits, starts	Strong
Mortgage delinquency rates	Falling (2.3% of loans 90 days delinquent in Q2)
Foreclosure rates	Falling (2.5% of loans in foreclosure in Q2)
Incidence of negative equity	Falling (10.7% of mortgaged homes in Q2;
	14.9% in 2013 Q2; 22.3% in 2012 Q2)
Single family permits, starts	Low, rising gradually but very variable
New & existing home sales	Low, rising gradually but very variable
Supply of homes for sale	Low – Why? Neg. equity, expect higher future
	prices etc.
Owner vacancy rate	High - Ditto
Mortgage originations	Low – Fewer refis and first time buyers than in
	the past

Boom, Bust and Rebound in House Prices

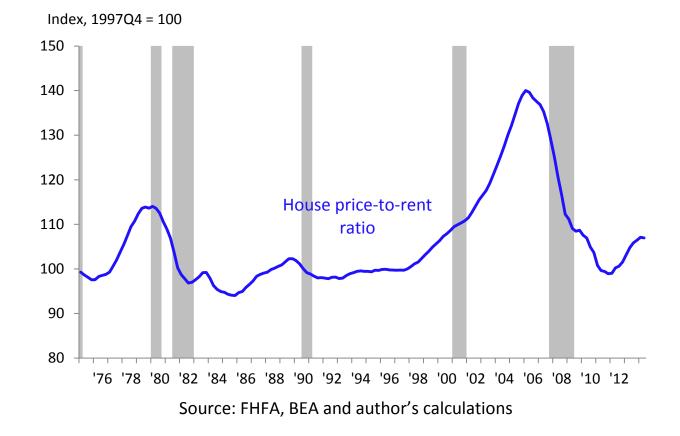


Source: FHFA, CoreLogic and Haver.

House Drice Index	Boom	Bust	Rebound
House Price Index	2001-06	2007-10	2011-14 H2
FHFA	+55%	-18%	+13%
CoreLogic	+82%	-29%	+22%

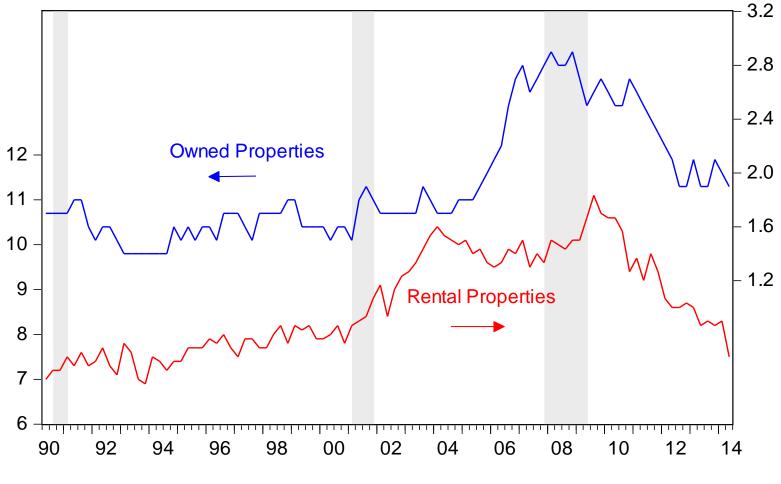
House Price-to-Rent Ratio

- Widely used metric of over or undervaluation
- Reasonably consistent with mortgage interest rates and credit standards



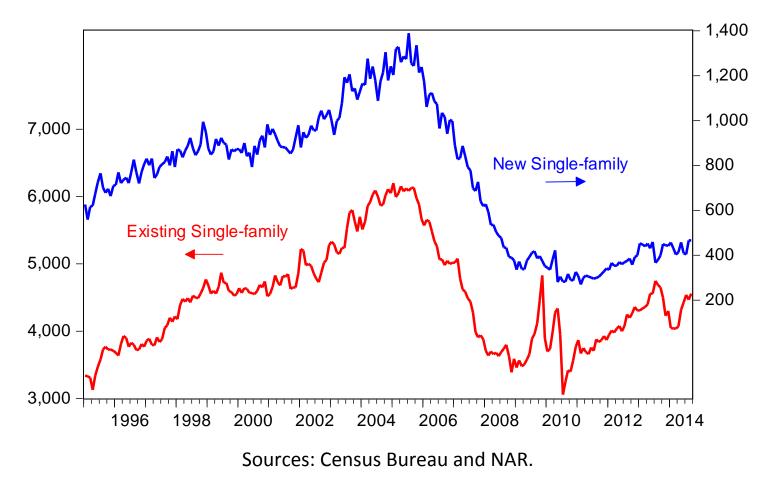
High Homeowner Vacancy Rate

Why? Negative equity; holding out for higher prices; poor credit etc.

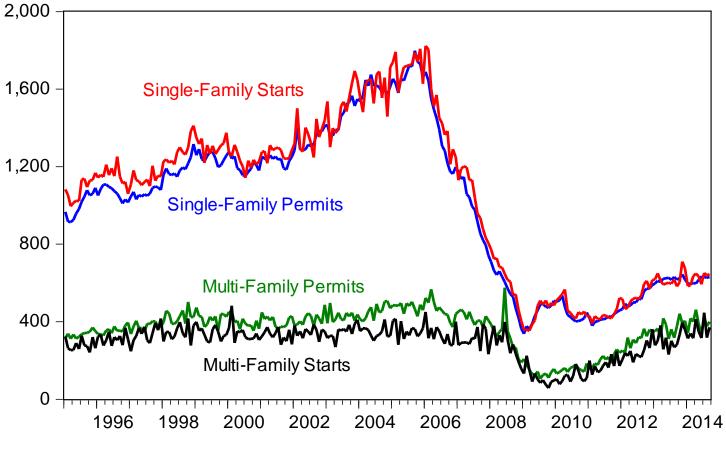


Source: Census Bureau HVS.

Sluggish Home Sales



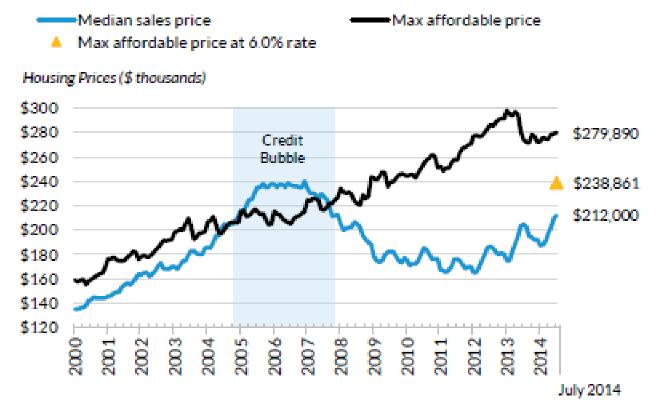
Disappointing Levels of Single Family Permits & Starts



Source: Census Bureau.

Housing Affordability is Still Good

- Home prices are still very affordable by historical standards
- They will remain affordable even if mortgage rates rise to 6 percent



Source: Urban Institute. Note: The maximum affordable price is the house price that a family can afford putting 20 percent down, with a monthly payment of 28 percent of median family income, at the Freddie Mac prevailing rate for 30-year fixed-rate mortgage, and property tax and insurance at 1.75 percent of housing value.

Why Is The Housing Market Recovery So Sluggish?

Plethora of suggested explanations including:

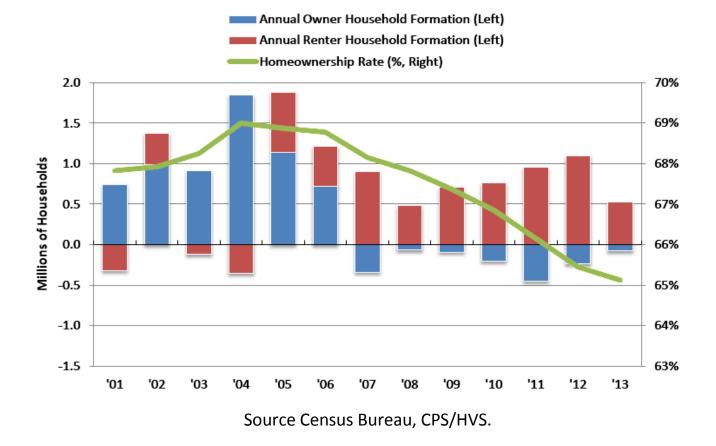
- Slow pace of economic recovery
- Harsh winter weather
- New QM and other regulations (as well as issues with reps & warranties etc.)
- Change in attitudes of the young toward home-ownership
- Burden of student debt
- Tight mortgage credit conditions

Young first time buyers are the key group to look at

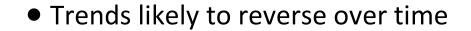
Missing First Time Home Buyers

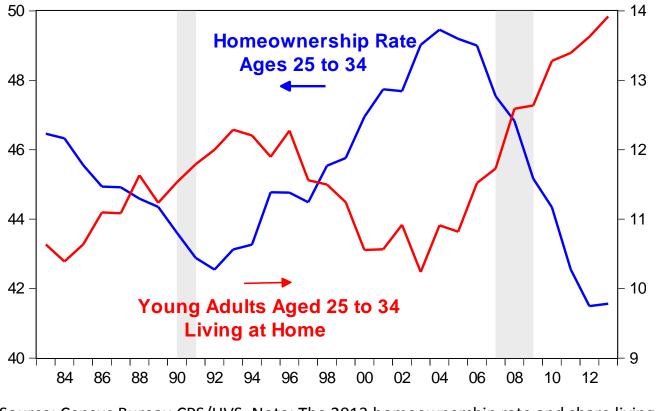
Peak in Homeownership Rate in Mid-2000's

- Number of renter households increasing; number of owner households declines
- Likely large pent-up demand for owner occupied housing



More Young Adults are Renting or Living at Home





Source: Census Bureau CPS/HVS. Note: The 2013 homeownership rate and share living at home are 41.6% and 13.9% respectively.

Have Attitudes To Owning A Home Changed?

... No, According to the Survey Evidence

Why Aren't More Renters Become Homeowners?

Do not want to rent because of changed attitude towards housing?

OR

Prevented from entering homeownership by factors such as:

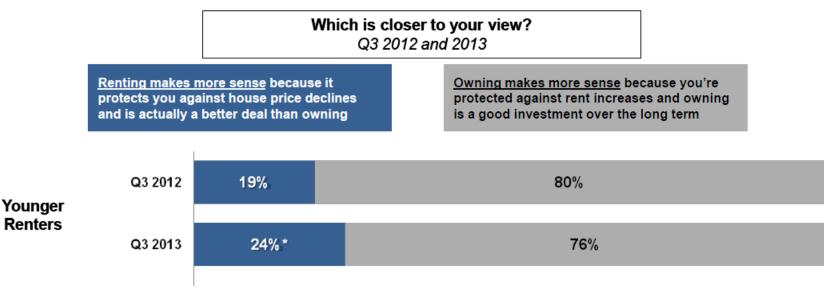
- Low incomes
- Weak personal finances
- Difficult access to credit

Look at survey evidence

- Housing module in NY Fed Survey of Consumer Expectations. Survey conducted in March 2014. Sample size ≈ 1200, of which 72% are owners
- Fannie May National Housing Survey. Quarterly survey with a sample size ≈ 3000. Approx. 600 young (18-39 years old) renters in 2013 Q3.

Young Renters' Home Buying Intentions

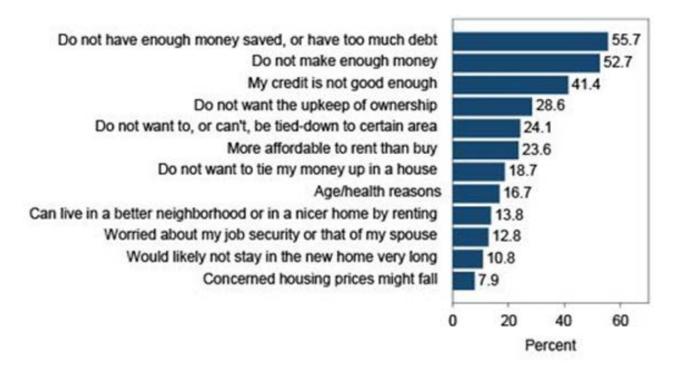
- Typical younger renter has only a 45% chance of buying a home if they moved in the next three years
- However, almost 90 percent plan to buy at some point in the future
- Most thing owning makes more sense for both financial and lifestyle reasons



Source: Fannie Mae, National Housing Survey, 2013. Young renters are renters aged 18 to 39.

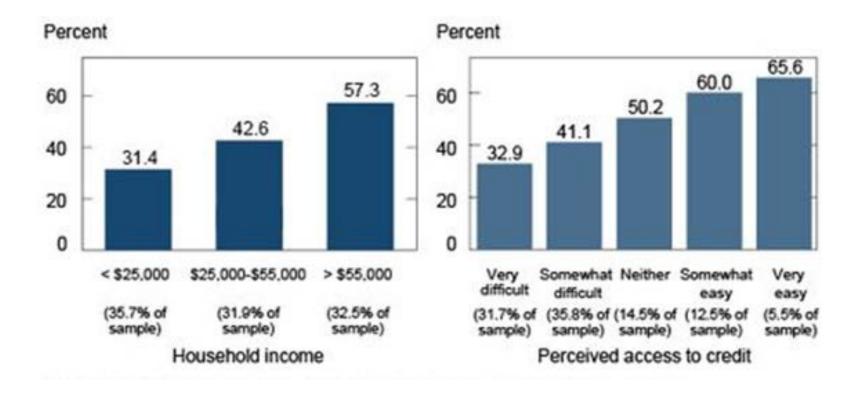
Why Rent Rather Than Buy?

Main reasons are weak balance sheets (low savings or high debt), low income and lack of access to credit, as opposed to lack of desire to own



Source: NY Fed Survey of Consumer Expectations, 2014 Q1. Respondents are renters with below 60 percent probability of buying if moving.

Renters' Probability of Buying Systematically Related to Income and Perceived Access to Credit



Source: NY Fed Survey of Consumer Expectations, 2014 Q1. Respondents are renters with below 60 percent probability of buying if moving.

Conclusion

Survey evidence suggests that more renters will become homeowners as:

- The economy strengthens
- Tight mortgage credit standards are relaxed

Caveat: potential buyers with low credit scores may be discouraged

Latent desire to own home consistent with 2010 Pew survey, and recent Wells Fargo survey results

Burden of Student Debt ... Overstated

Fewer Young Adult Households with Debt

- Look at households with head aged 25 to 34
- More educated households have more debt
- Incidence of debt has fallen since 2007

Completed Level of Education of Head of Household	2001	2004	2007	2010	2013
No HS Diploma or GED	64%	62%	63%	48%	50%
HS Diploma or GED	83%	72%	84%	74%	73%
Some College	90%	87%	93%	86%	86%
College Degree	91%	92%	96%	90%	88%
All Young Adult Households	85%	82%	88%	81%	80%

Households with Debt (%)

Source: FRS Survey of Consumer Finances, SDA files at The University of California, Berkley and author's calculations

Lower Debt-to-Income Ratio of Young Adult Households

- Debt-to-income ratio rose, then retreated
- Payment burden lower because interest rates lower

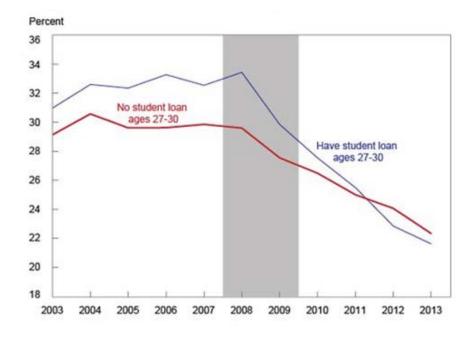
Median Debt-to-Income Ratio (%) of Households with Debt

2001	2004	2007	2010	2013
93%	95%	44%	34%	34%
71%	62%	120%	81%	80%
81%	97%	97%	102%	84%
107%	171%	173%	192%	156%
86%	124%	120%	135%	116%
	93% 71% 81% 107%	93%95%71%62%81%97%107%171%	93% 95% 44% 71% 62% 120% 81% 97% 97% 107% 171% 173%	93% 95% 44% 34% 71% 62% 120% 81% 81% 97% 97% 102% 107% 171% 173% 192%

calculations

Homeownership and Student Debt

- Home ownership rates for young adults with student loan debt fell relatively more than for those without student loan debt
- Those with student loan debt have lower homeownership

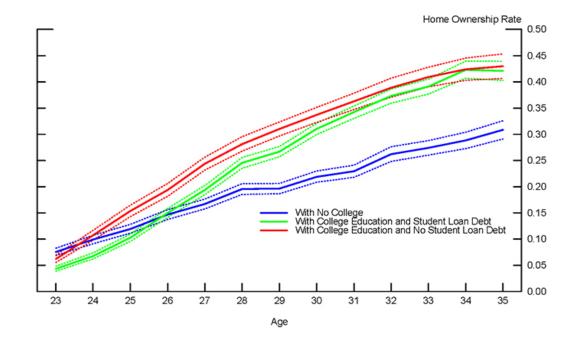


Homeownership Rate for 30 Year-Olds

Source: Brown , M. et al (2014), "Young Student Loan Borrowers Remained on the Sidelines of the Housing Market in 2013", NY Fed Liberty Street Economics Blog, 13 May.

Homeownership and Student Debt

- Previous analysis is incomplete not really comparing like with like
- Looking only at those who went to college, student loan debt more likely affects the timing of homeownership than people's eventual attainment of it



Home Ownership Rate for 23 to 35 Year Olds

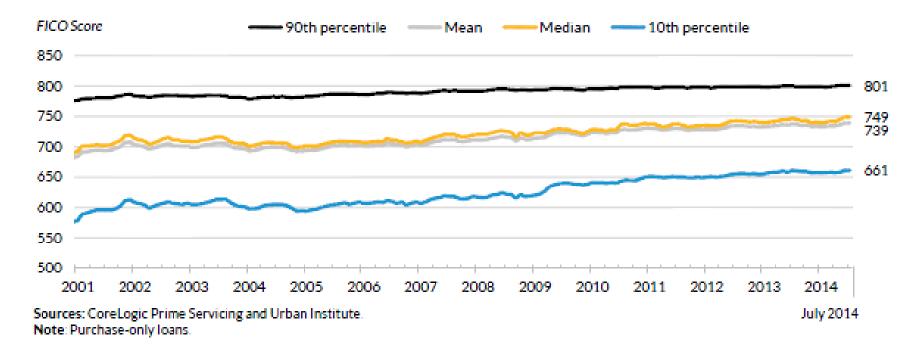
Source: Mezza et al., "Student Loans and Homeownership Trends", Feds Note, Board of Governors of the Federal Reserve.

Mortgage Credit Standards ... Still Tight

Mortgage Credit Standards Are Still Tight

- Average FICO score has drifted up by about 40 in past decade
- Pre-crisis 10th percentile / threshold was 600; now 660

FICO Score at Origination (Purchase Loans)



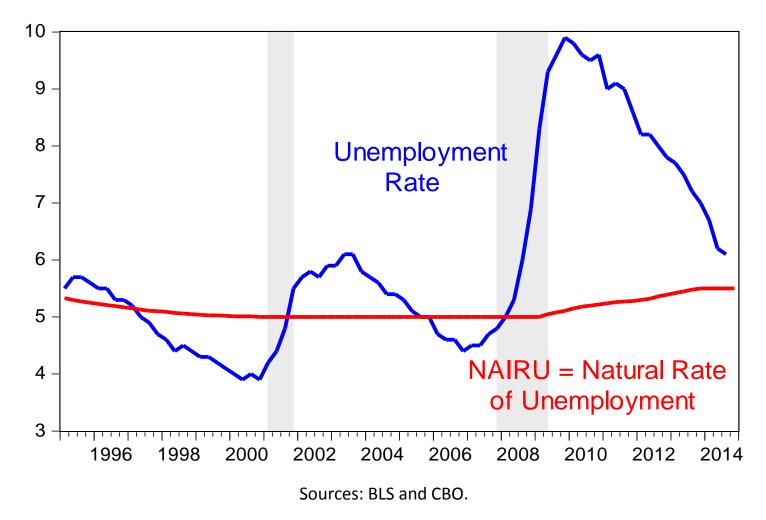
Lending Standards May Be Loosening Slightly

	Average Score	Closed	Closed Loans		Denied Loans	
Loan Type	or Ratio	2012 H1	2014 Q3	2012 H1	2014 Q3	
	FICO	701	6824	668	664	
FHA Purchase	LTV	95%	95%	95%	95%	
	DTI front end	28%	31%	31%	31%	
	DTI back end	41%	41%	47%	47%	
	FICO	763	7554	729	725	
Conventional	LTV	78%	80%	80%	81%	
Purchase	DTI front end	21%	23%	25%	26%	
	DTI back end	33%	34%	41%	42%	

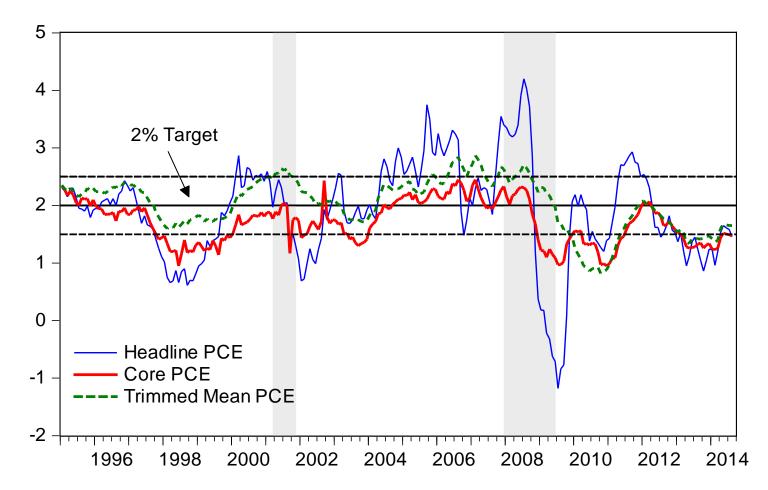
Source: Ellie May, Origination Insight Report, Oct 2014.

Additional Slides

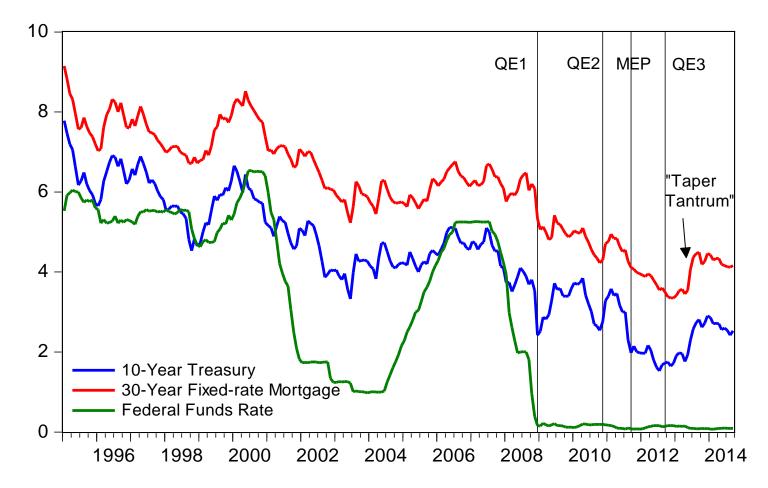
(1) The Labor Market is Improving ... Still Some Slack



Inflation is Still Low and Inflation Expectations are "Well Anchored" → Little Inflation Risk



Interest Rates are Still Relatively Low ... But Expected to Rise Somewhat Next Year*



* E.g. Blue Chip (Oct 2010) forecasts of 10 year Treasury Note yield - 2.5% in 2014 Q3 and 3.3% in 2015 Q3

(2) Rather Lackluster Housing Market Forecasts

		2011	2012	2013	2014 Forecast	2015 Forecast
Housing Starts (Total, 000's)	Blue Chip Fannie Mae Freddie Mac MBA NAHB	609	78	924	1,010 995 1,020 999 991	1,190 1,170 1,200 1,163 1,182
Single Family Home Sales (Total, 000's)	Fannie Mae Freddie Mac MBA	4,583	5,127	5,503	5,342 5,310 5,322	5,660 5,600 5,760
Originations (\$bn)	Fannie Mae Freddie Mac MBA	\$1,495	\$2,120	\$1,890	\$1,112 \$1,250 \$1,007	\$1,056 \$1,125 \$1,130
Refi Share (%)	Fannie Mae Freddie Mac MBA	65%	71%	63%	39% 40% 43%	26% 23% 35%

(3) Is Housing (Still) A Good Investment? Yes

Is Buying Property A Good Investment?						
Tenure Very		Somewhat	Neutral	Somewhat	Very	
	Good	Good	Neutral	Bad	Bad	
Renters	17.2%	41.9%	29.1%	9.6%	2.3%	
Owners	14.2%	44.4%	29.6%	10.7%	1.0%	

"If someone had a large sum of money that they wanted to invest, would you say that relative to other possible financial investments, buying property in your zip code is a very good / somewhat good etc. investment?"

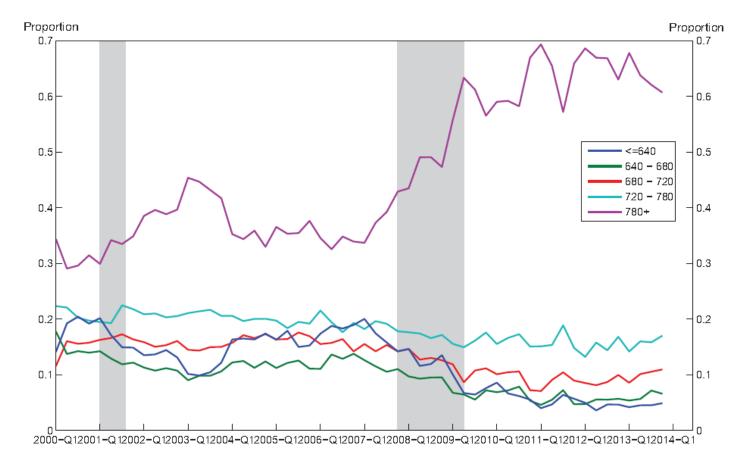
Source: NY Fed Survey of Consumer Expectations, 2014 Q1.

Expected House Price Growth? Renters Are As Bullish As Owners

Horizon	Tenure	th for Average Zip Code	age Home		
		Mean	1 st Quartile	2 nd Quartile	3 rd Quartile
Next Year	Renters	5.4%	0.0%	3.7%	8.3%
	Owners	3.8%	0.0%	3.1%	5.7%
Next 5 Years (Ave)	Renters	3.6%	1.4%	3.1%	5.4%
	Owners	3.9%	1.4%	2.4%	4.1%

Source: NY Fed Survey of Consumer Expectations, 2014 Q1.

(4) Mortgage Lending Standards Are Tight

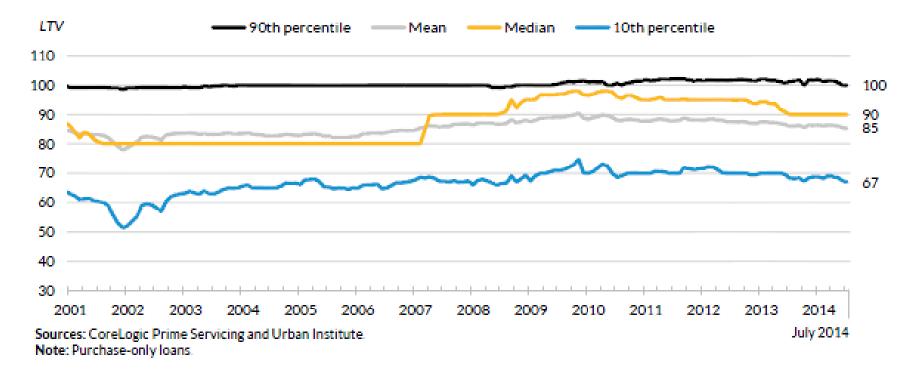


Fannie May and Freddie Mac First Mortgage Originations by FICO Score

Source: FRB New York Consumer Credit Panel and McAndrews, J. (2014), "Rising Household Borrowing", speech to CFA Society of Stanford, March 5th.

Loan to Value (LTV) Ratios Are Still Relatively High

• Why? Higher share of FHA originations



Combined LTV at Origination

What If Mortgage Lending Standards Hadn't Changed?

- Interesting, albeit crude, back of the envelope calculation
- Assume borrowers with FICO scores above 660, or above 750 are not credit constrained → lower and upper bound estimates
- Tighter lending standards account for between 270,000 and 1,200,000 fewer first lien, purchase mortgages

	No. of	No. of Loans			
Loan Category	2001	2012	Change		
CoreLogic Loans, FICO < 660	521,400	154,500	-70%		
CoreLogic Loans, FICO 660-750	971,600	525,000	-46%		
CoreLogic Loans, FICO > 750	667,600	548,700	-18%		
CoreLogic Loans, Total	2,151,600	1,228,170	-43%		
HMDA Loans, Total	4,932,800	2,741,600	-44%		

Source: L. Goodman, J. Zhu and T. George (2014), "Where Have All the Loans Gone? The Impact of Credit Availability on Mortgage Volume", *Journal of Structured Finance*, 20(2).