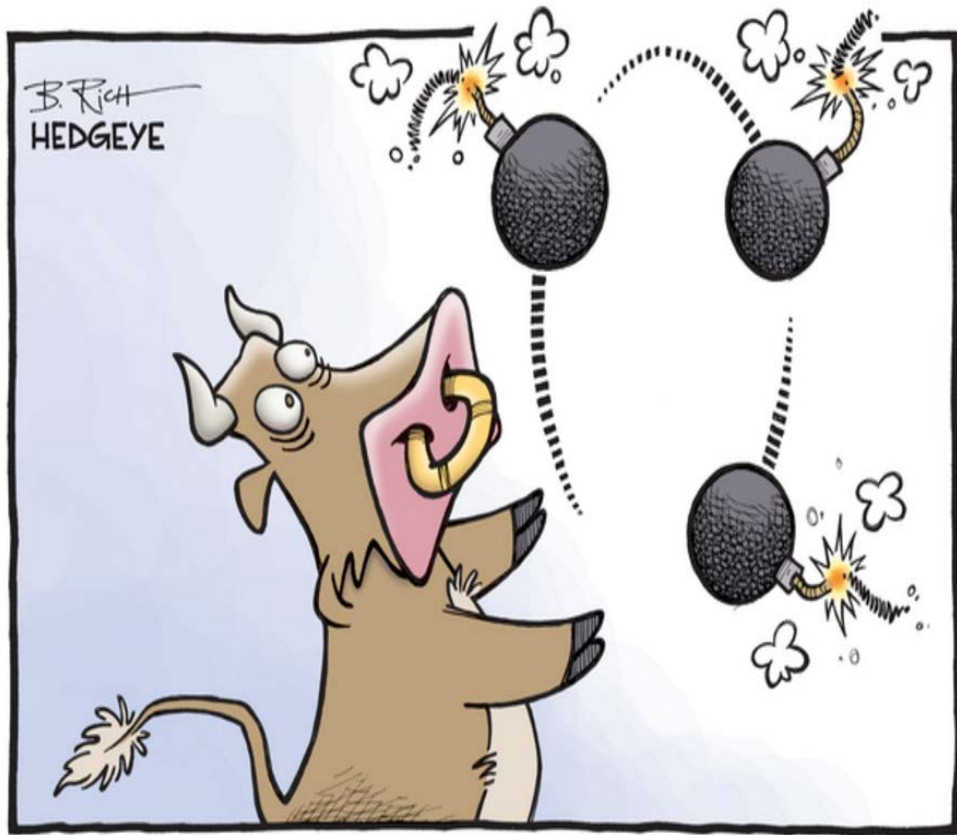




HOUSING: 2Q16 THEMES

HORSESHOES & HAND GRENADES

APRIL 8, 2016



DISCLAIMER

DISCLAIMER

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PLEASE SUBMIT QUESTIONS* TO

QA@HEDGEYE.COM

**ANSWERED AT THE END OF THE CALL*

HORSESHOES & HAND GRENADES

1

1Q16 – A LOOK BACK AT WHAT HAPPENED

Our main call at the start of 1Q16 was that the headwinds that began in 4Q would persist and grow stronger in 2016. We expected volume comps to be a challenge and HPI to decelerate. Moreover, recession risk was emergent, and poised to keep the group under pressure.

2

2Q16 – A LOOK AHEAD AT WHY WE'RE BEARISH

Volume growth continues to slow in both the new and existing market. Home prices, meanwhile, are in a bitter tug-of-war between lagged demand trends and supply constraints, while supply has emerged as the big conundrum this cycle. The economy and housing market will continue to juggle the hand grenades of risk as both global and domestic growth decelerate, credit begins to tighten, overvaluation and affordability challenges emerge in select geographies and housing equities traverse their weakest six months stretch of the year

3

THEMATIC INVESTMENT CONCLUSIONS

We continue to like defensive positioning in REITs and Home Improvement, while we see Homebuilders and Building Products as stretched on valuation with negative headwind dynamics across the intermediate term.

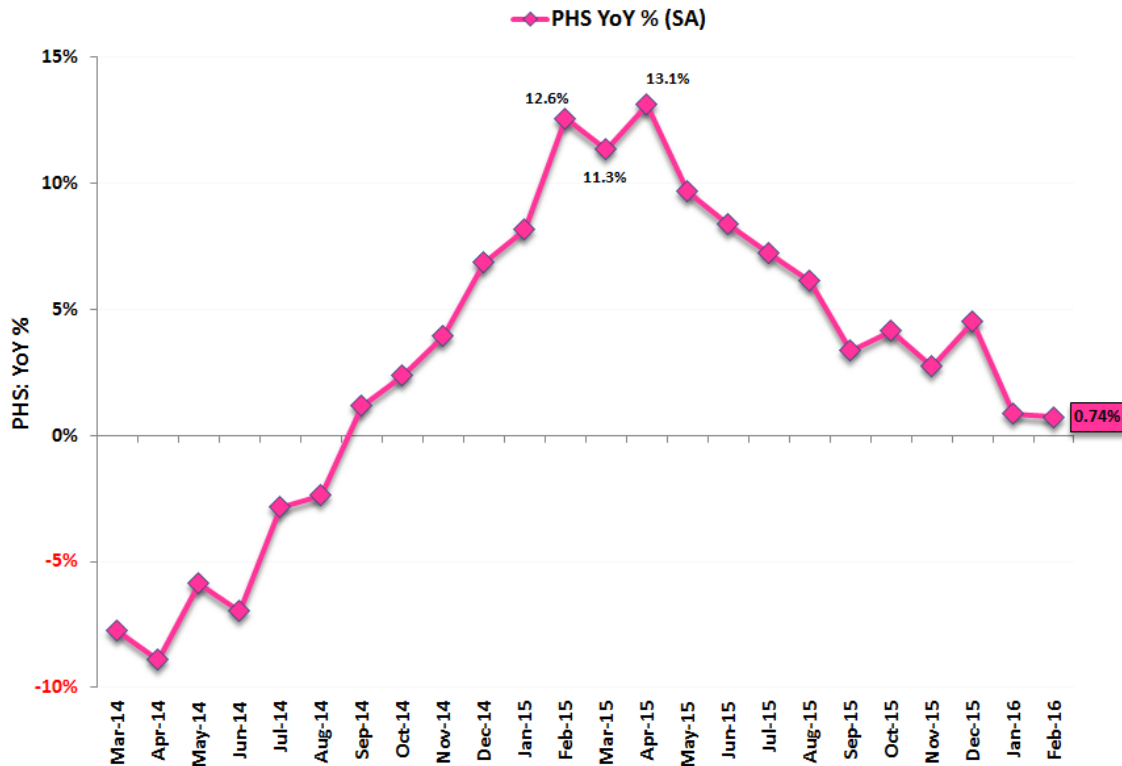


1Q16 – A QUICK LOOK BACK



1Q16: DECELERATING VOLUME - PHS

PENDING HOME SALES

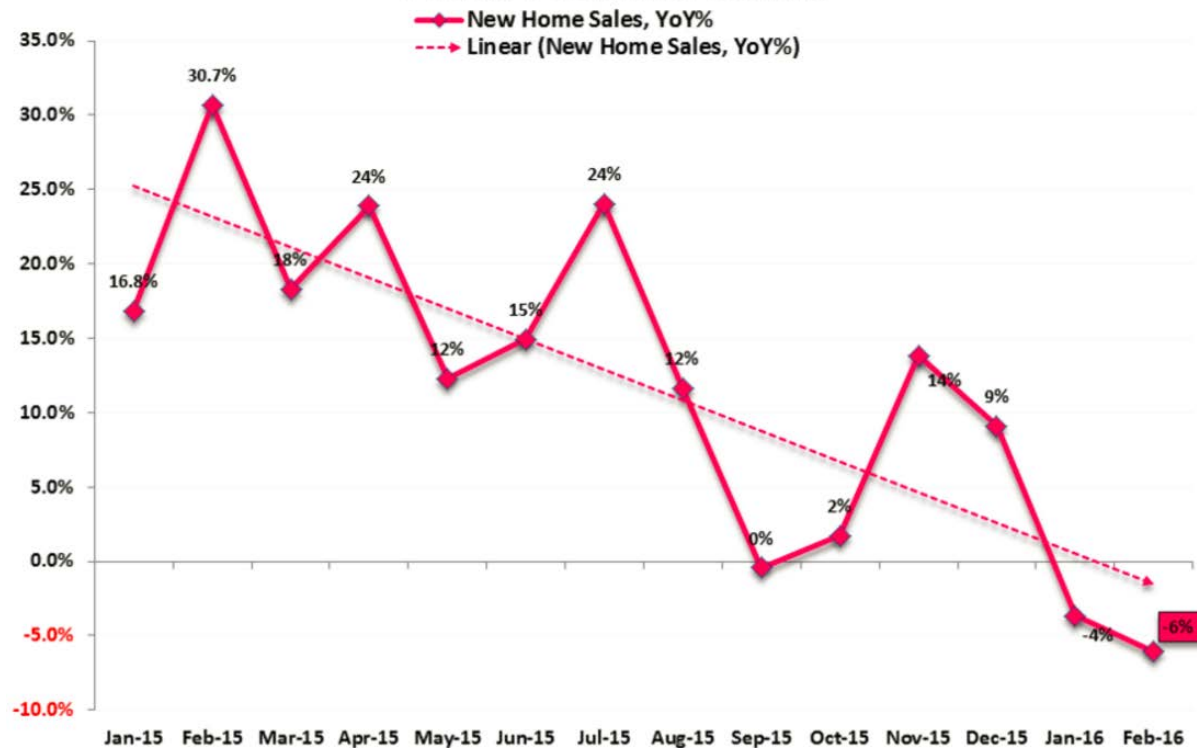


DATA SOURCE: BLOOMBERG, NATIONAL ASSOCIATION OF REALTORS

We are now in month 11 of deceleration off the April 2015 (absolute and rate of change) peak in activity

1Q16: DECELERATING VOLUME - NHS

New Homes Sales



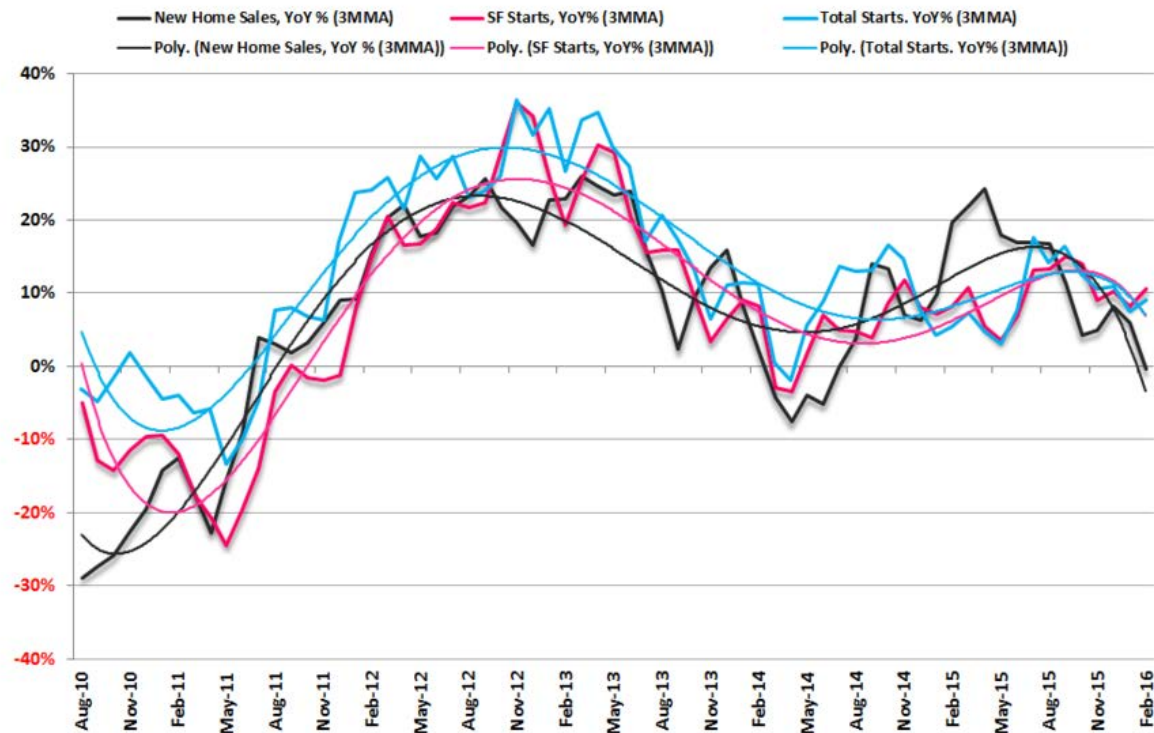
DATA SOURCE: BLOOMBERG, CENSUS BUREAU

Growth in NHS went negative over the last two months as sales activity has trended flat to down over the last year.

March is an easy comp and the long-term setup remains compelling but there is a dearth of catalysts for a sustained pickup over the nearer term

1Q16: DECELERATING VOLUME - STARTS

NEW HOME SALES & STARTS



DATA SOURCE: BLOOMBERG, CENSUS BUREAU

The rate-of-change wave of activity in the new home market (Sales & Starts) remains one of deceleration.

1Q16: BUILDER CONFIDENCE FLAGGING

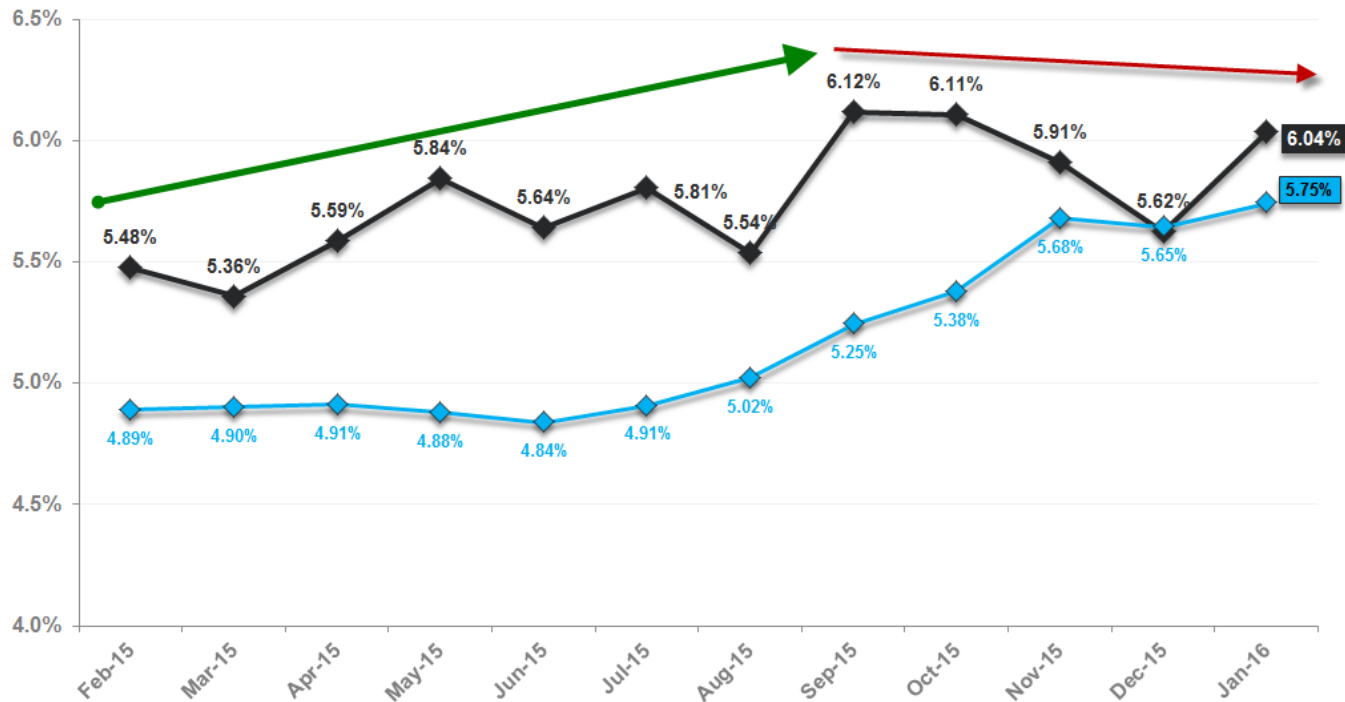
BUILDER CONFIDENCE: NAHB HMI



Builder Confidence – both Headline & Forward Expectations - peaked in October and has declined steadily over the past 5 months.

1Q16: STALLING HPI – 2ND DERIVATIVE

HPI: FHFA & CASE-SHILLER



DATA SOURCE: BLOOMBERG

Home price growth remains healthy in the mid-single digits but the 2nd derivative trend has shown a notable flattening in recent months.

1Q16: HOUSING PERFORMANCE

HOUSING: SUBSECTOR PERFORMANCE

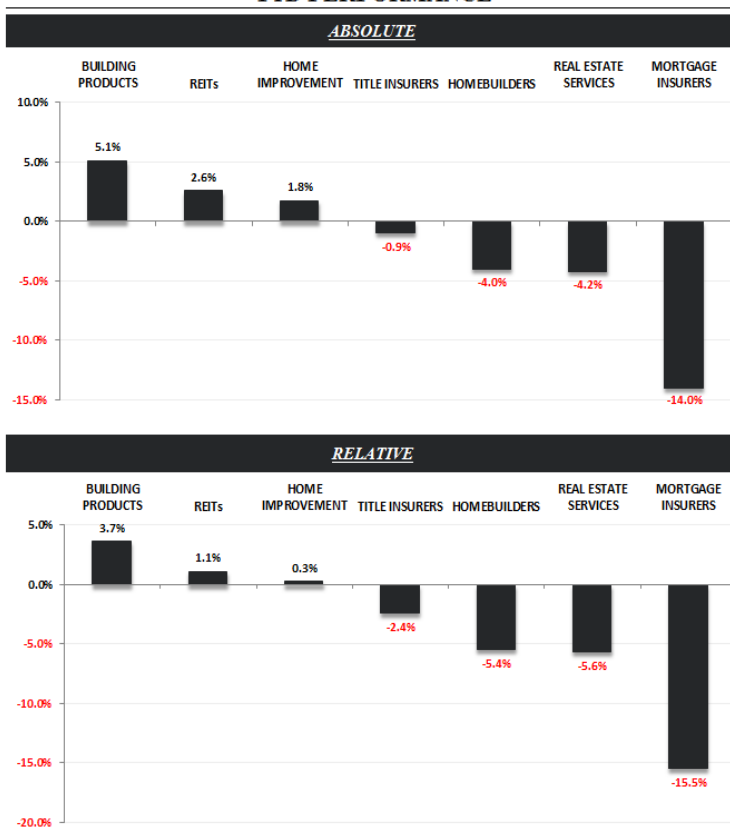
HEDGEYE HOUSING

INDEX	Ticker	5D % Chg	1M % Chg	3M % Chg	6M % Chg	YTD % Chg
S&P 500	SPX	1.8%	3.7%	3.0%	6.3%	1.5%
HOMEBUILDERS						
S&P Homebuilder Index	\$15HOME	0.5%	3.8%	0.1%	-4.3%	-4.0%
	Relative	-1.3%	0.2%	-2.9%	-10.5%	-5.4%
BUILDING PRODUCTS						
S&P Building Products Index	\$15BUILX	2.8%	6.7%	7.1%	17.9%	5.1%
	Relative	1.0%	3.0%	4.1%	11.6%	3.7%
HOME IMPROVEMENT						
S&P Home Improvement Index	\$SHOMI	2.8%	8.0%	2.7%	13.0%	1.8%
	Relative	1.0%	4.3%	-0.3%	6.8%	0.3%
REITs						
Apartment REITs*	REIT U Index	2.2%	6.4%	4.0%	7.8%	2.6%
	Relative	0.4%	2.7%	0.9%	1.5%	1.1%
REAL ESTATE SERVICES						
Real Estate Services*	RESRVCS U Index	3.9%	4.3%	-2.7%	-2.5%	-4.2%
	Relative	2.1%	0.6%	-5.8%	-8.8%	-5.6%
MORTGAGE INSURERS						
Mortgage Insurers*	MI U Index	3.4%	1.1%	-12.4%	-22.6%	-14.0%
	Relative	1.6%	-2.6%	-15.4%	-28.9%	-15.5%
TITLE INSURERS						
Title Insurers*	TI U Index	5.1%	4.8%	2.1%	-5.3%	-0.9%
	Relative	3.3%	1.1%	-0.9%	-11.6%	-2.4%
SUBSECTOR AVE						
	Abs	3.0%	5.0%	0.1%	0.6%	-1.9%
	Relative	1.2%	1.3%	-2.9%	-5.7%	-3.4%

*Equal Weighted Composites: REITs: AIV, AVB, CPT, EQR, ESS, MAA, PPS, UDR; RE Services: RLG, RMAX; MI: ESNT, MTG, NMH, RDN; TI: FNF, FAF, STC, BKF

Source: Bloomberg, HEDGEYE

YTD PERFORMANCE



REITs, Building Products and Home Improvement outperformed in 1Q16 while MI, TI, and Builders lagged.

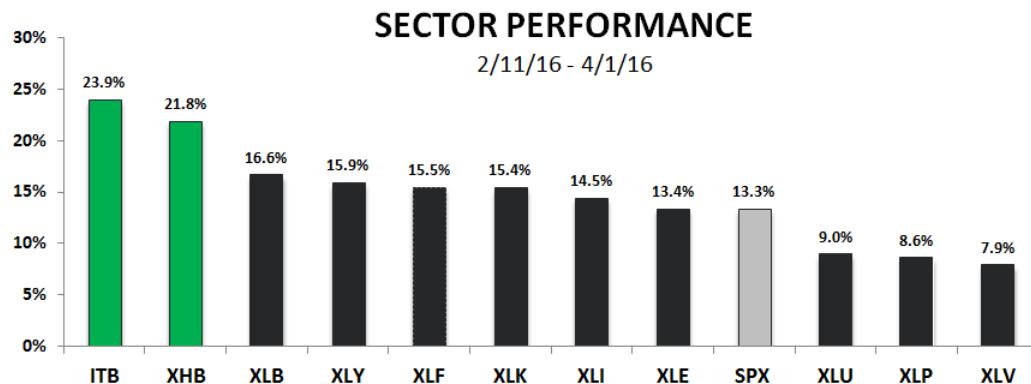
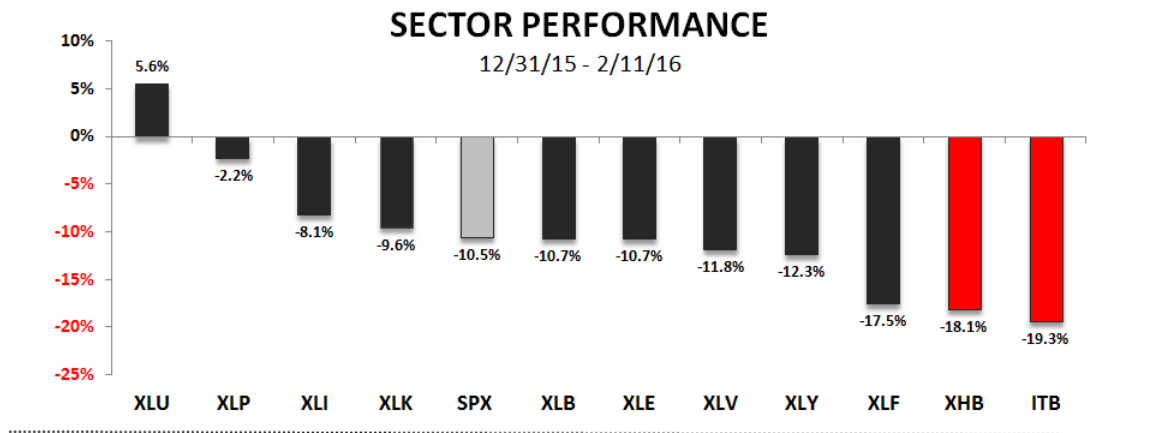
We missed the call on Building Products but our favored sector exposures for 1Q fared well:

Long: REIT's & Home Improvement

Short: Title Insurers & Builders

1Q16: HOUSING PERFORMANCE

Housing underperformed the market by 8-9% in the 1st six weeks of the year but recaptured most of that performance over the balance of the quarter alongside the bounce in beta and across high beta cyclicals in particular



1Q16: HOUSING PERFORMANCE

Homebuilders: 1Q Absolute Return By Company By Year (2010-2015)

	BZH	KBH	MTH	RYL	DHI	HOV	PHM	LEN	TOL	MDC	NVR	Overall	S&P 500	Relative
2010	-6%	22%	9%	14%	16%	13%	13%	35%	11%	12%	2%	13%	5%	8%
2011	-15%	-8%	9%	-7%	-2%	-14%	-2%	-3%	4%	-12%	9%	-4%	5%	-9%
2012	31%	32%	17%	22%	20%	69%	40%	38%	17%	46%	6%	31%	12%	19%
2013	-6%	38%	25%	14%	23%	-18%	11%	7%	6%	0%	17%	11%	10%	1%
2014	-18%	-7%	-13%	-8%	-3%	-29%	-6%	0%	-3%	-12%	12%	-8%	1%	-9%
2015	-8%	-6%	35%	26%	13%	-14%	4%	16%	15%	8%	4%	8%	0%	8%
2016	-24%	16%	7%	na	-6%	-14%	5%	-1%	-11%	-2%	5%	-2%	1%	-3%
Average	-7%	13%	13%	10%	9%	-1%	9%	13%	5%	6%	8%	9%	5%	3%
Median	-8%	16%	9%	14%	13%	-14%	5%	7%	6%	0%	6%	10%	5%	4%
STDEV	18%	19%	15%	15%	12%	33%	15%	17%	10%	20%	5%	14%	5%	11%

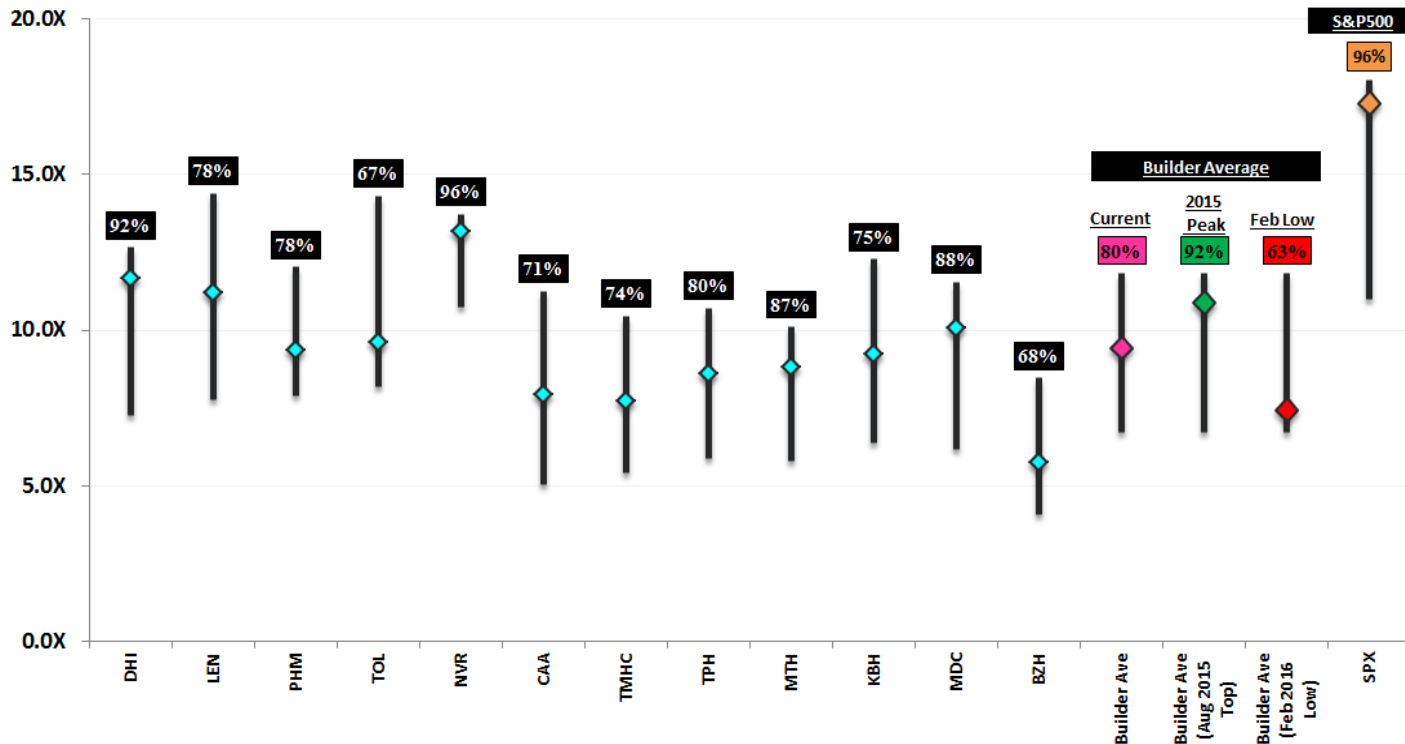
Source: Factset

The 1st quarter is a seasonally strong period for the builders with average absolute and relative performance across the group of +9% and +5%, respectively, over the past 6 years.

That compares with absolute and relative performance of -2% and -3%, respectively, in the latest quarter

BUILDER VALUATION IN CONTEXT

BUILDERS: Forward P/E, % of 5Y Max



Homebuilder valuations are currently sitting at 80% of the peak of their trailing 5Y range. They have +12% upside to their Aug 2015 peaks and -17% downside to their Feb 2016 lows.

B. Rich
HEDGEYE



2Q16 – WHY WE'RE BEARISH



2Q16: WHY WE'RE BEARISH

1

FUNDAMENTAL DECELERATION

Volume growth is slowing in the new and existing market. Home prices, meanwhile, are in a bitter tug-of-war between lagged demand trends and supply constraints.

2

SUPPLY SIDE ECONOMICS

Supply has emerged as the big conundrum this cycle. Many of the underlying reasons are structural/secular in nature and unlikely to resolve over the nearer-term. While tight supply, in isolation, augurs strength in HPI it should continue to constrain upside in transaction volume.

3

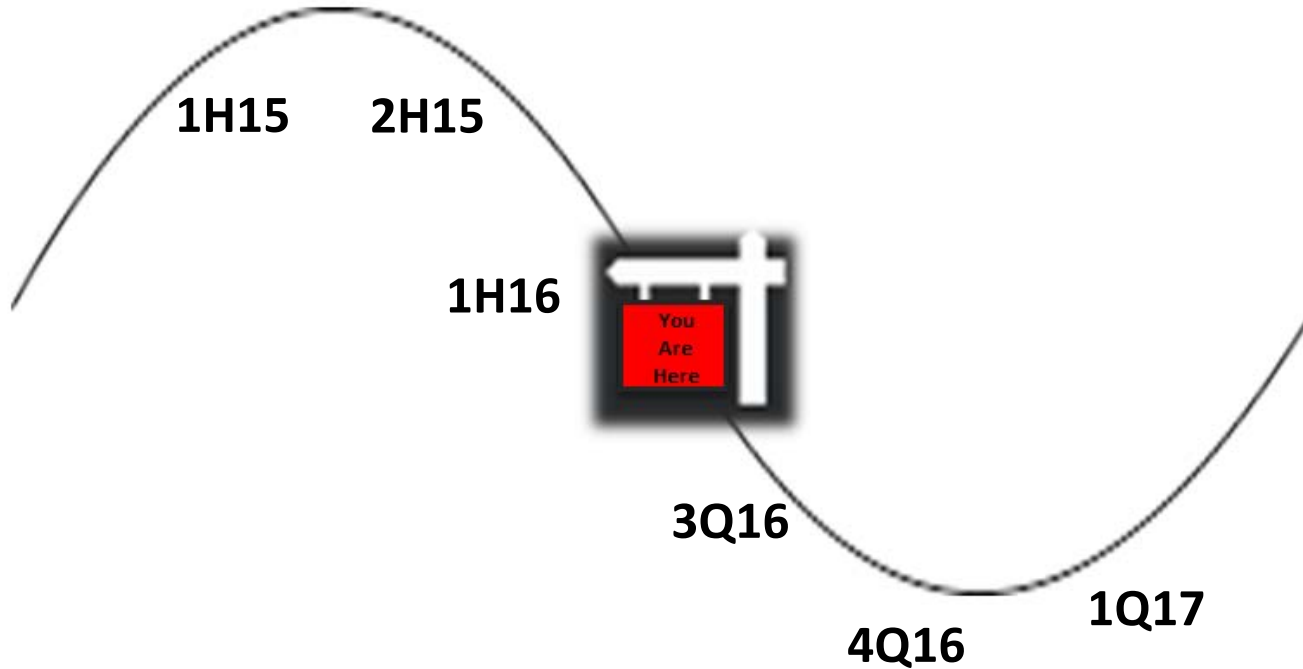
SEASONALITY / SAN FRAN / BIG CITIES / CRE

The economy and housing market will continue to juggle hand grenades of risk as both global and domestic growth decelerate, credit begins to tighten, overvaluation and affordability challenges emerge in select geographies and housing equities traverse their weakest six months stretch of the year



FUNDAMENTAL DECELERATION

FUNDAMENTAL DECELERATION



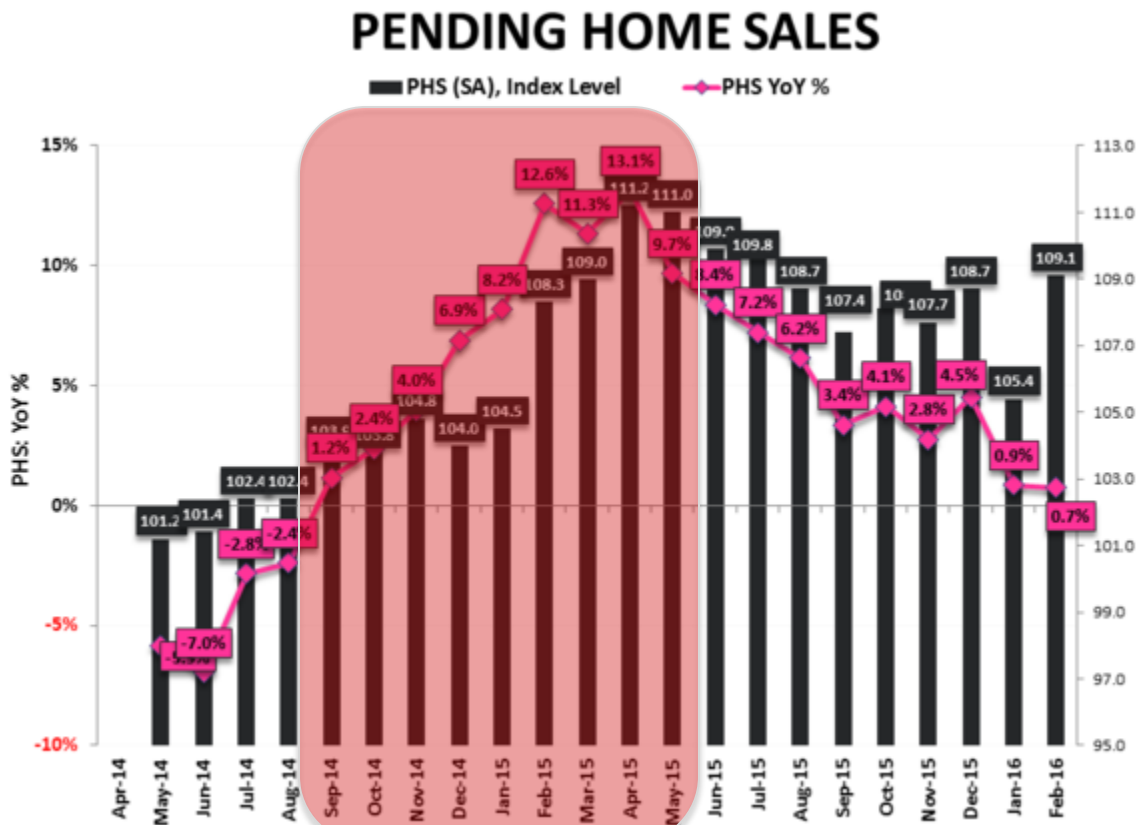
The Sine Wave of reported Housing data over the last year and the outlook for the year ahead.



1. VOLUME DECELERATION



PHS: 11 MONTHS OF DECELERATION



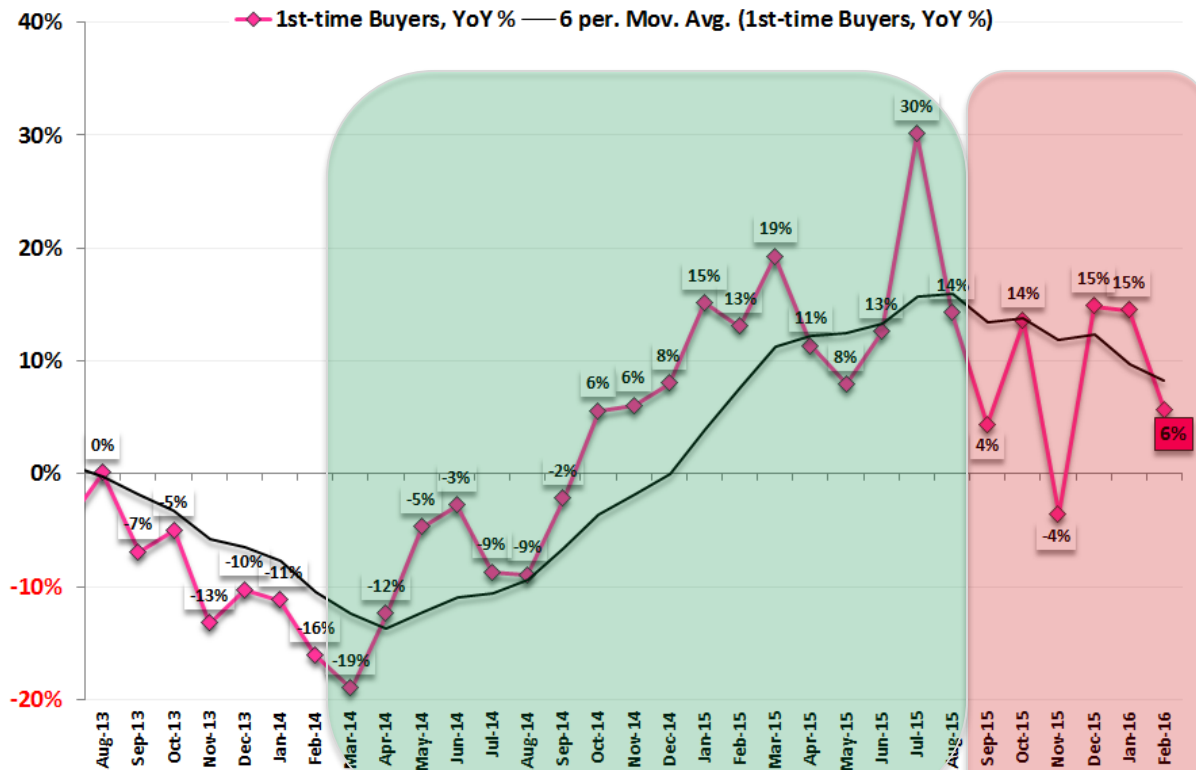
DATA SOURCE: BLOOMBERG, NATIONAL ASSOCIATION OF REALTORS

Pending Home Sales have been slowing for 11 months and face the hardest comps of the cycle over the next three months.

Current levels of activity imply negative low-to-mid single digit YoY growth in April/May

1ST TIME BUYERS: PAST PEAK?

EHS: 1st-Time Buyer Sales

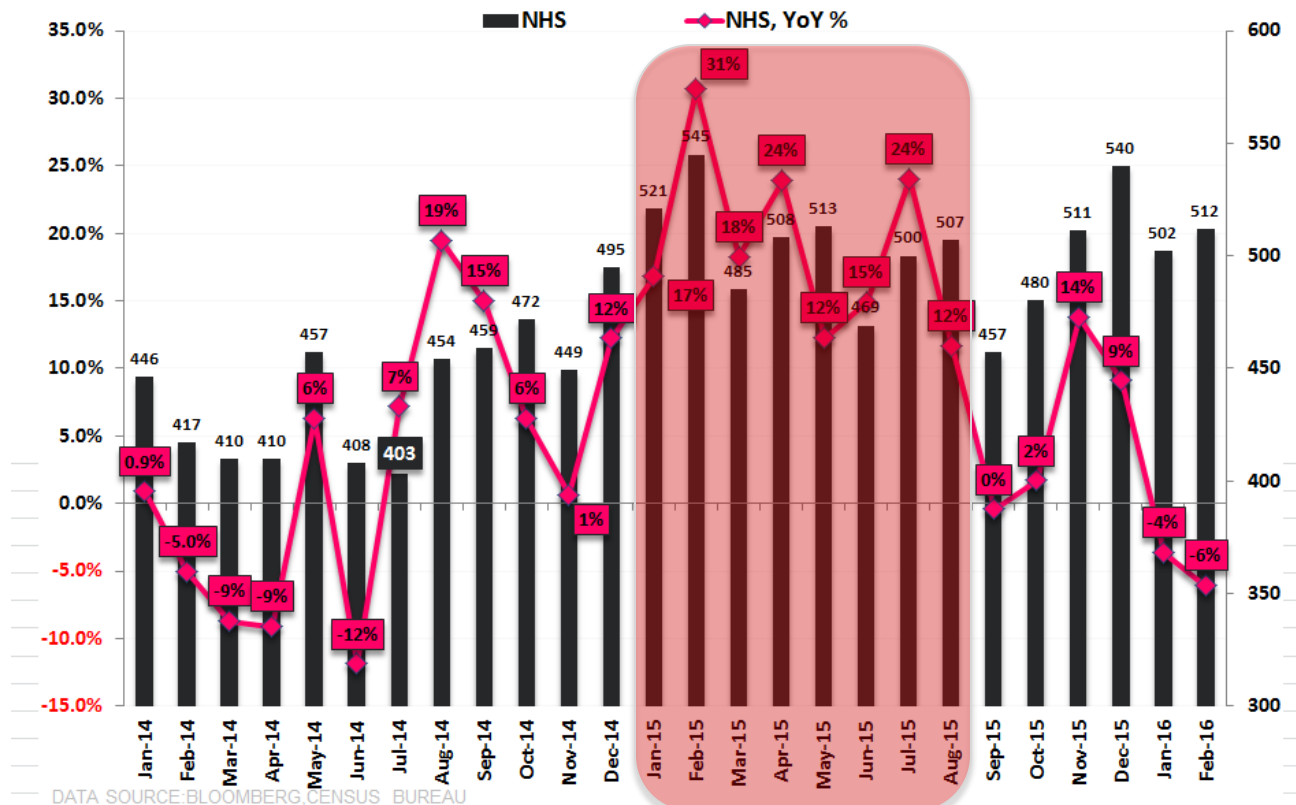


Rising 1st time buyer demand has helped fill the gap left by declining investor and distressed sales but the pace of improvement has stalled over the last six months.

Affordability, low and declining supply and credit availability will remain hurdles to full renormalization on housing's lower rung.

NHS: COMPING NEGATIVE

New Homes Sales

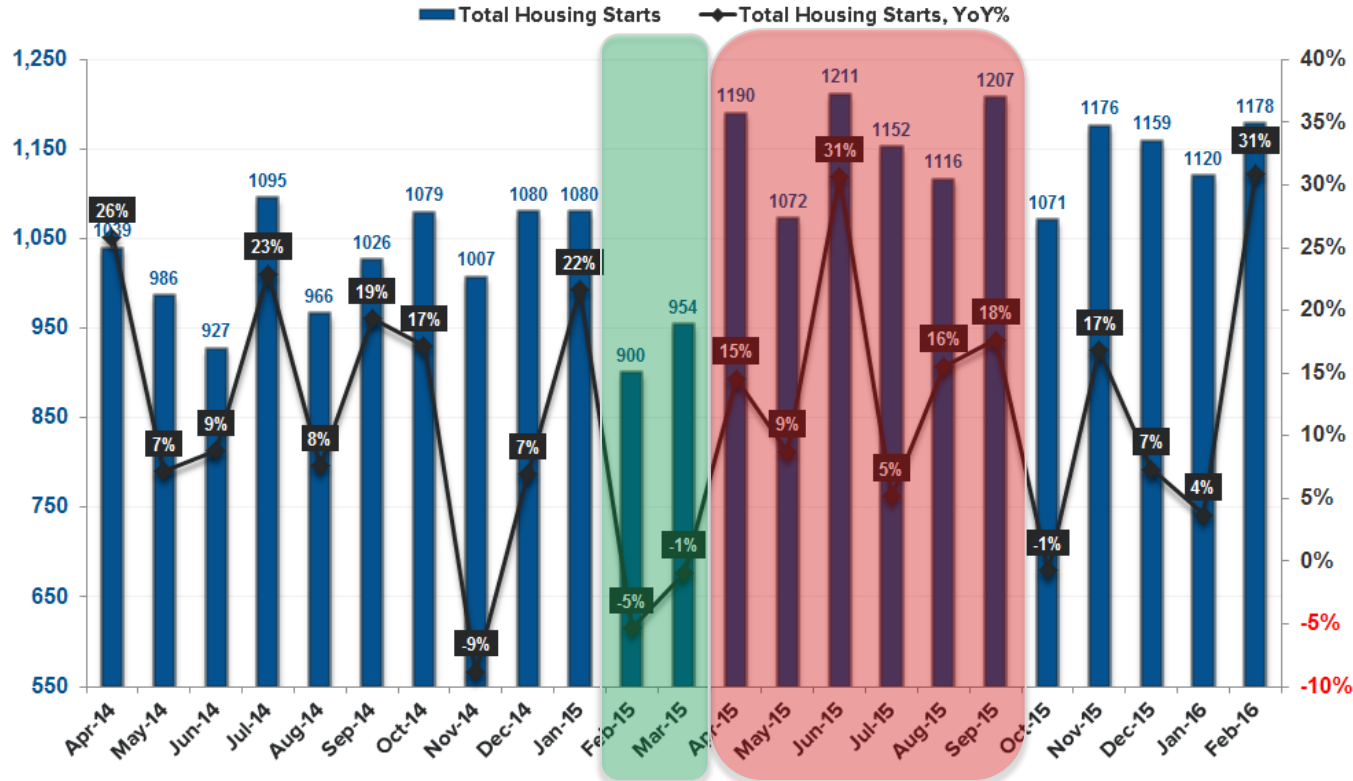


NHS growth comps remain challenging over the next 6 months.

While we're likely to get a bounce in the reported March data we could continue to comp negative if the flat trend in activity observed over the last twelve months continues

STARTS: STALLING

TOTAL HOUSING STARTS

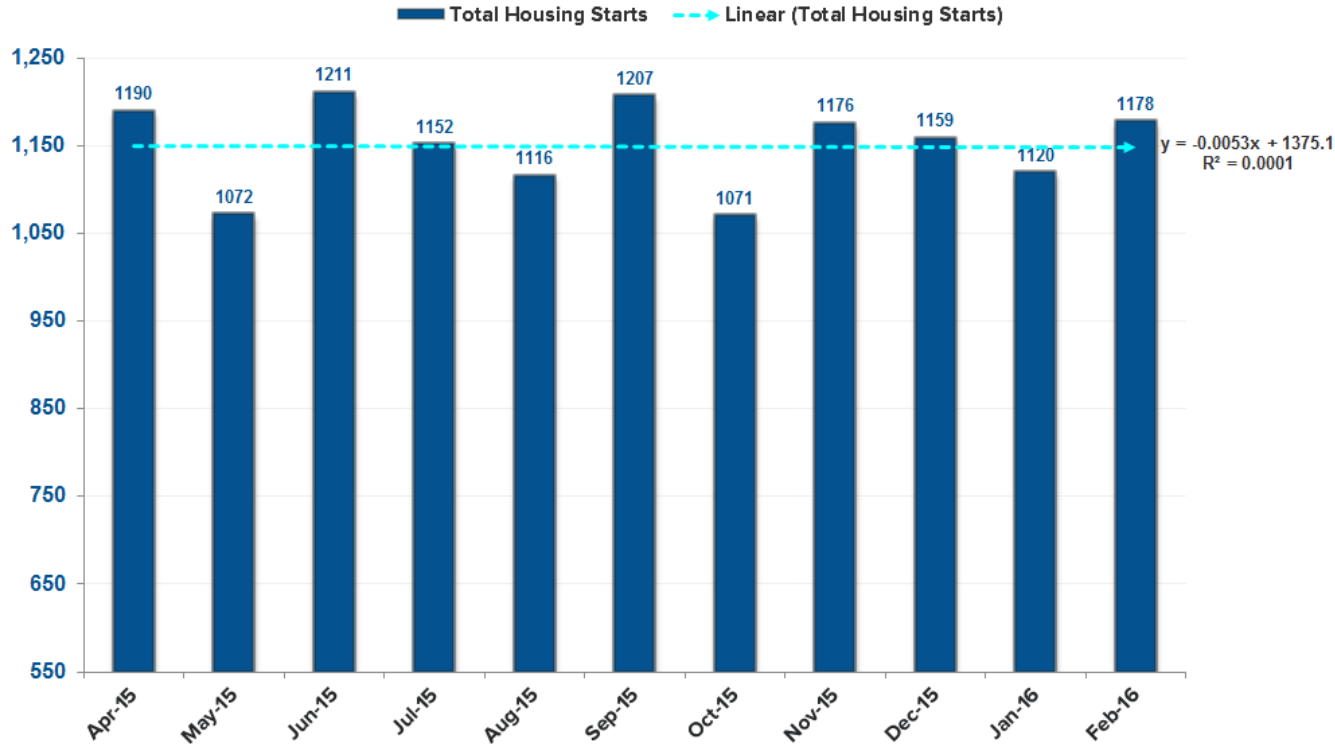


DATA SOURCE: BLOOMBERG, CENSUS BUREAU, HEDGEYE

Total Housing starts have essentially moved sideways for the bulk of the past year. There is one more easy comp, March, before the Y/Y rate of change collapses to near zero.

THE BEST CHART IN HOUSING

TOTAL HOUSING STARTS

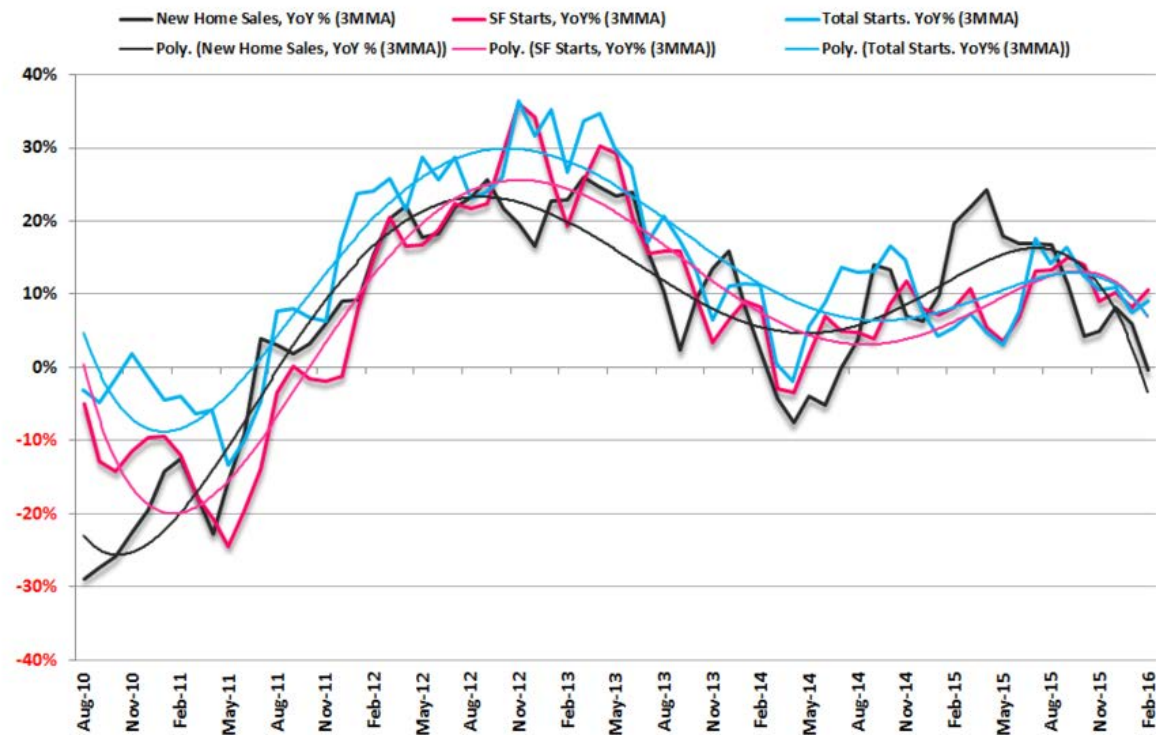


DATA SOURCE: BLOOMBERG, CENSUS BUREAU, HEDGEYE

Single Family Starts have continued to improve but Total Housing Starts have been dead flat (slope coefficient = 0.00) over the last year.

NEW SALES & STARTS: DECELERATING

NEW HOME SALES & STARTS



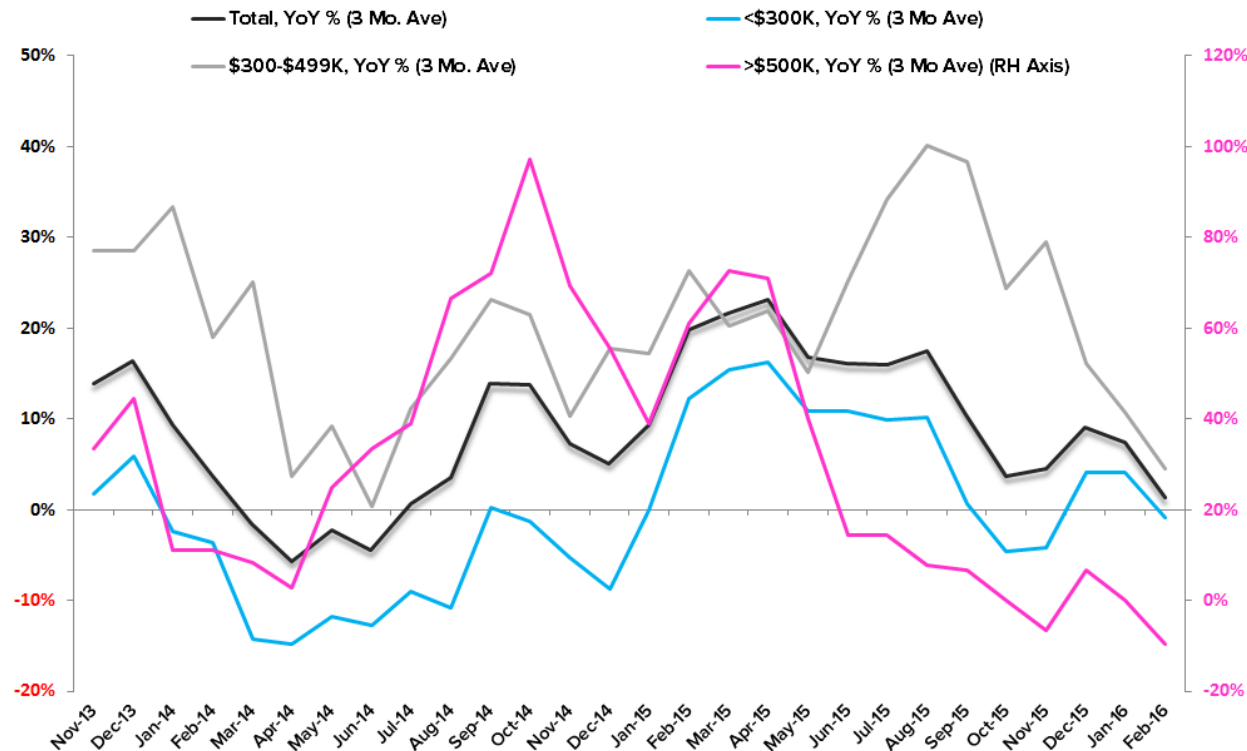
DATA SOURCE: BLOOMBERG, CENSUS BUREAU

When viewed as 3-month rolling averages, all three new home series (NHS, SF Starts and Total Starts) are showing recent deceleration trends with NHS close to zero and SF and Total Starts ~10% growth and falling.

NHS: ACROSS THE BOARD ↓

NEW HOME SALES BY PRICE TIER

2013-Present, Monthly

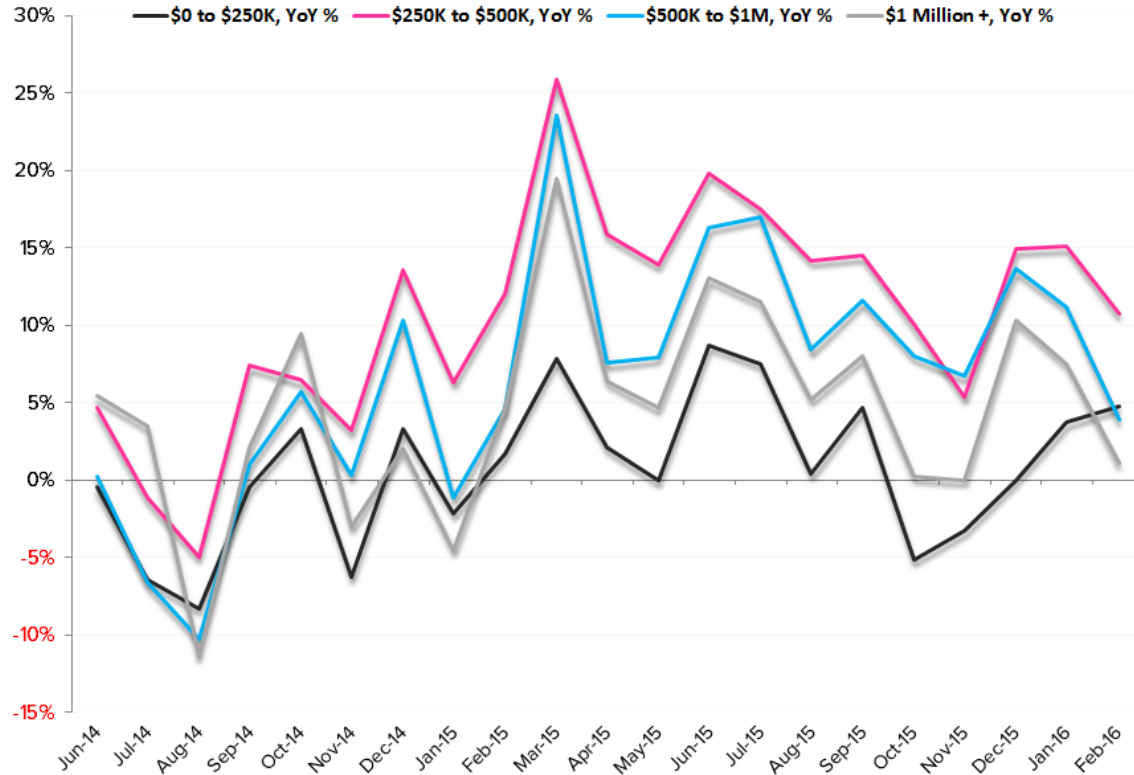


Source: Census Bureau, Hedgeye

New Home Sales continue to show deceleration/weakness across all price categories. Meanwhile, the sub-\$300k segment has slowed to 0% growth. Only the middle-market is growing, but it's barely tracking above zero.

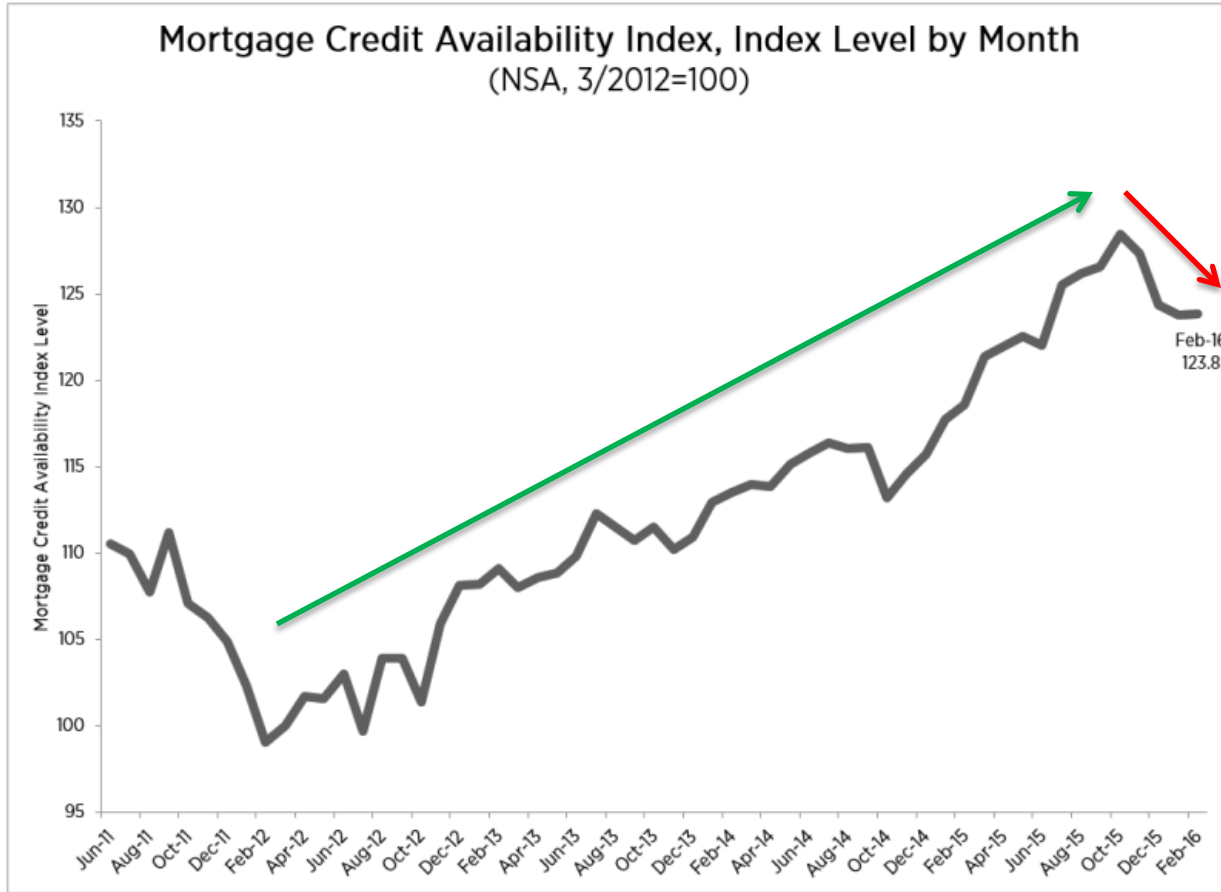
EHS: ALL BUT THE LOW END ↓

EXISTING HOME SALES BY PRICE TIER, YoY %



Existing home sales by price tier look similar to New Home Sales with the sole exception of the low end, entry-level home, which has bounced a bit in the last 2 quarters.

MCAI ↓: TRADE OR TREND?



Meanwhile, mortgage credit availability, which had been on a long-term upswing, recently negatively inflected.

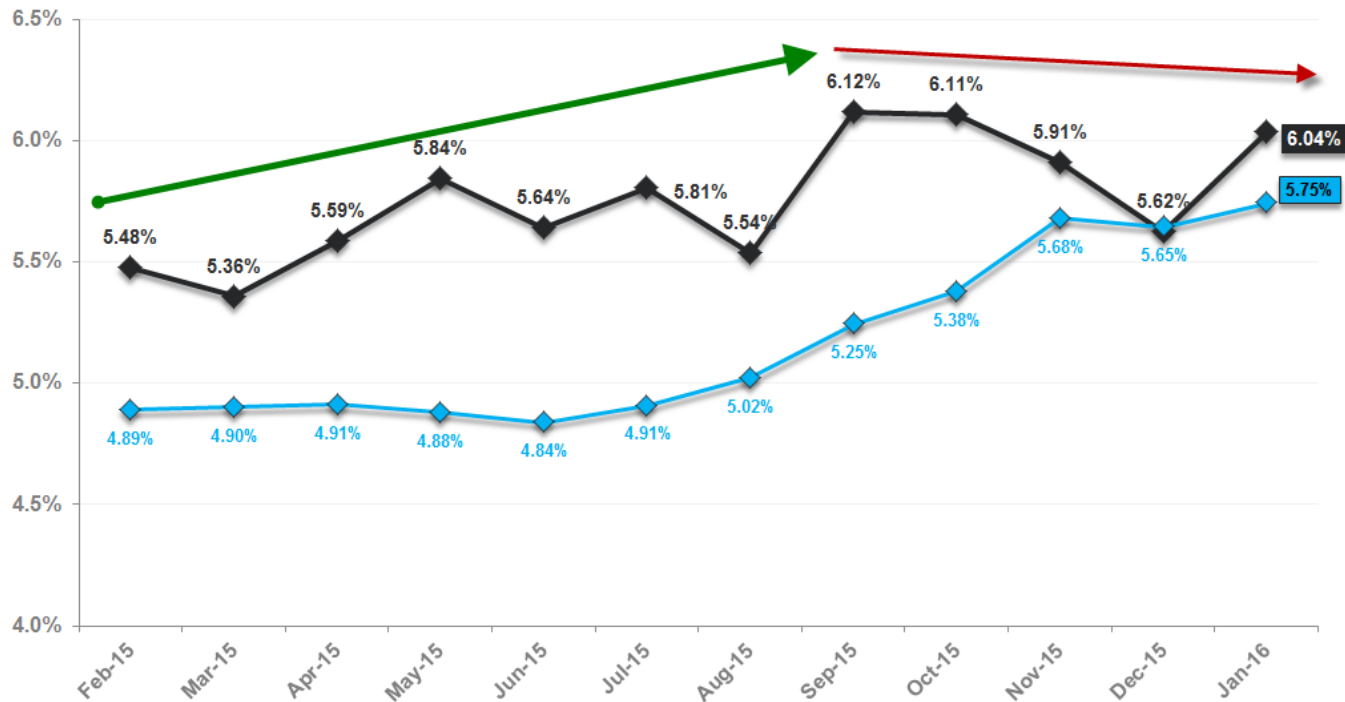


2. HOME PRICE TUG-OF-WAR



1Q16: STALLING HPI – 2ND DERIVATIVE

HPI: FHFA & CASE-SHILLER



DATA SOURCE: BLOOMBERG

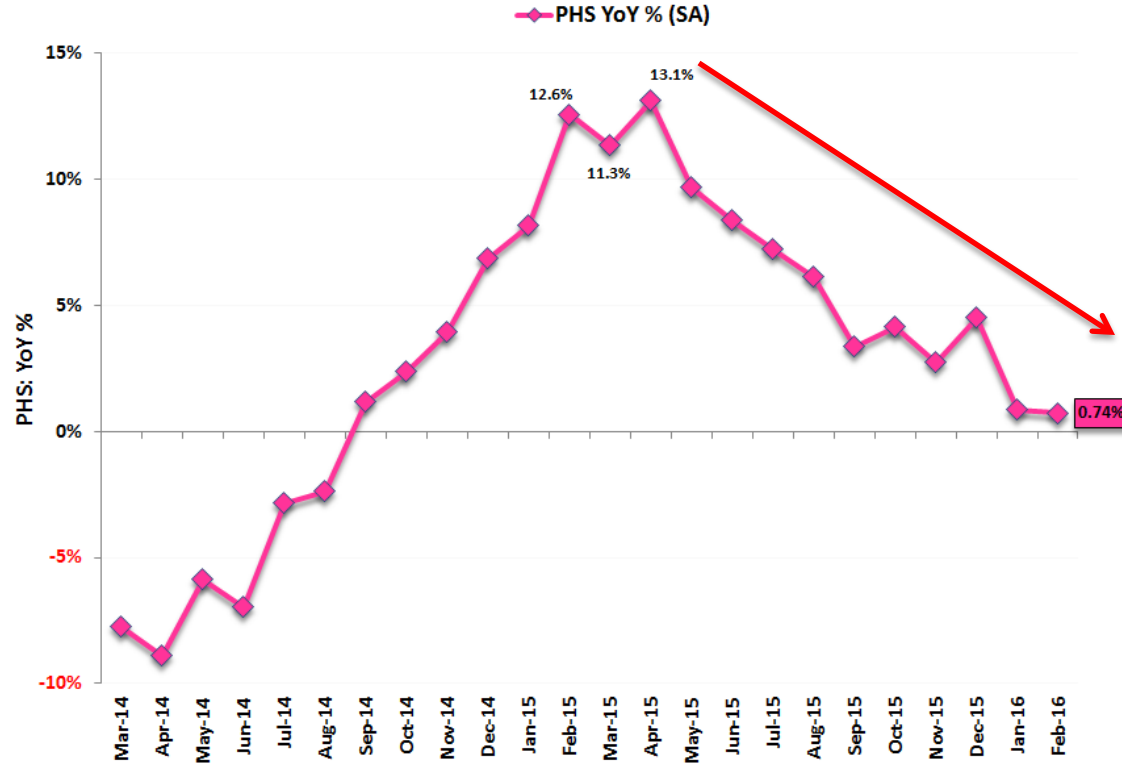
Home price trends have flattened out in RoC terms. FHFA has essentially moved sideways for the last year, while Case-Shiller has shown a decelerating RoC for the last ~3mos.

DATA SOURCE: BLOOMBERG

HEDGEYE 30

PHS ROC ↓ → HPI ROC ↓

PENDING HOME SALES



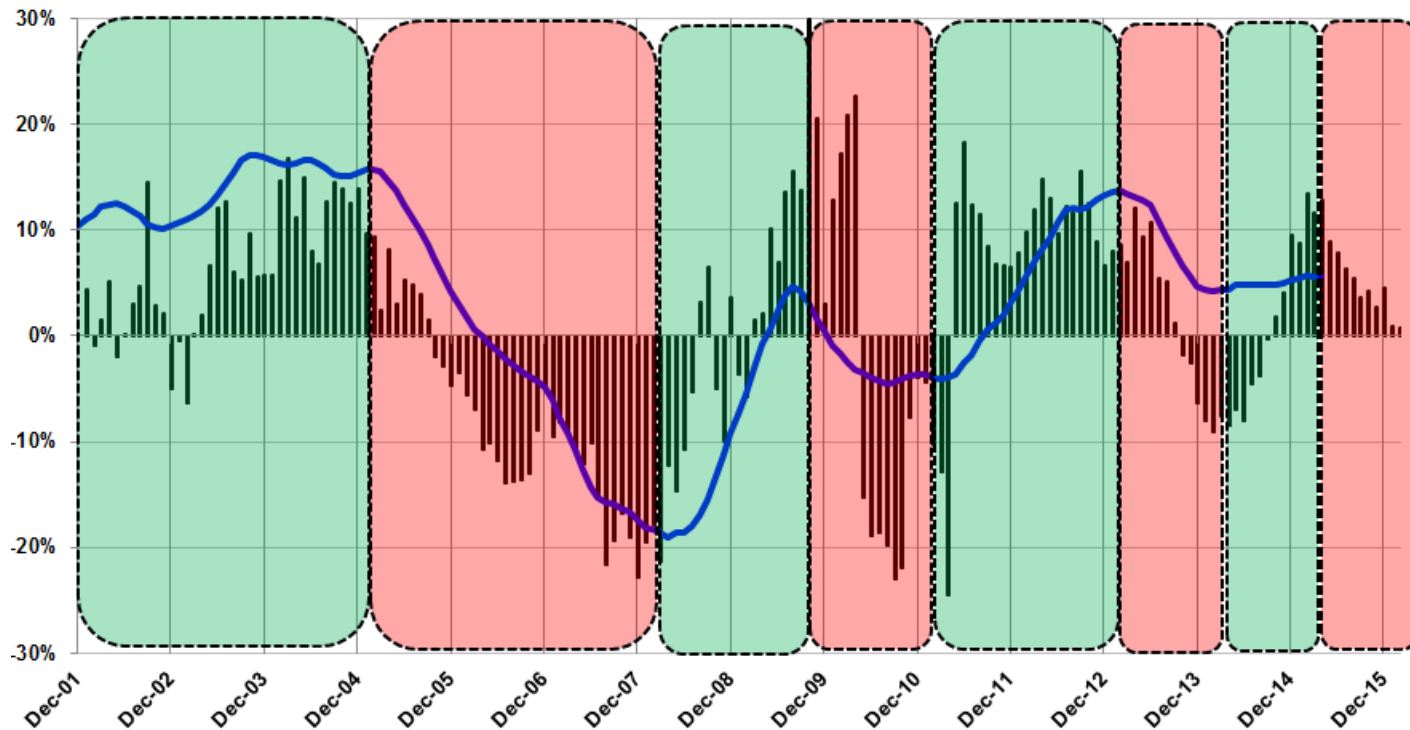
DATA SOURCE: BLOOMBERG, NATIONAL ASSOCIATION OF REALTORS

Demand growth has decelerated by ~1200 bps in the last 11 months and is likely to decelerate by a further 300-500 bps over the next 3-6 months.

NEGATIVE INFLECTION LOOKS LIKELY

DEMAND GROWTH LEADS PRICE GROWTH BY ~ ONE YEAR

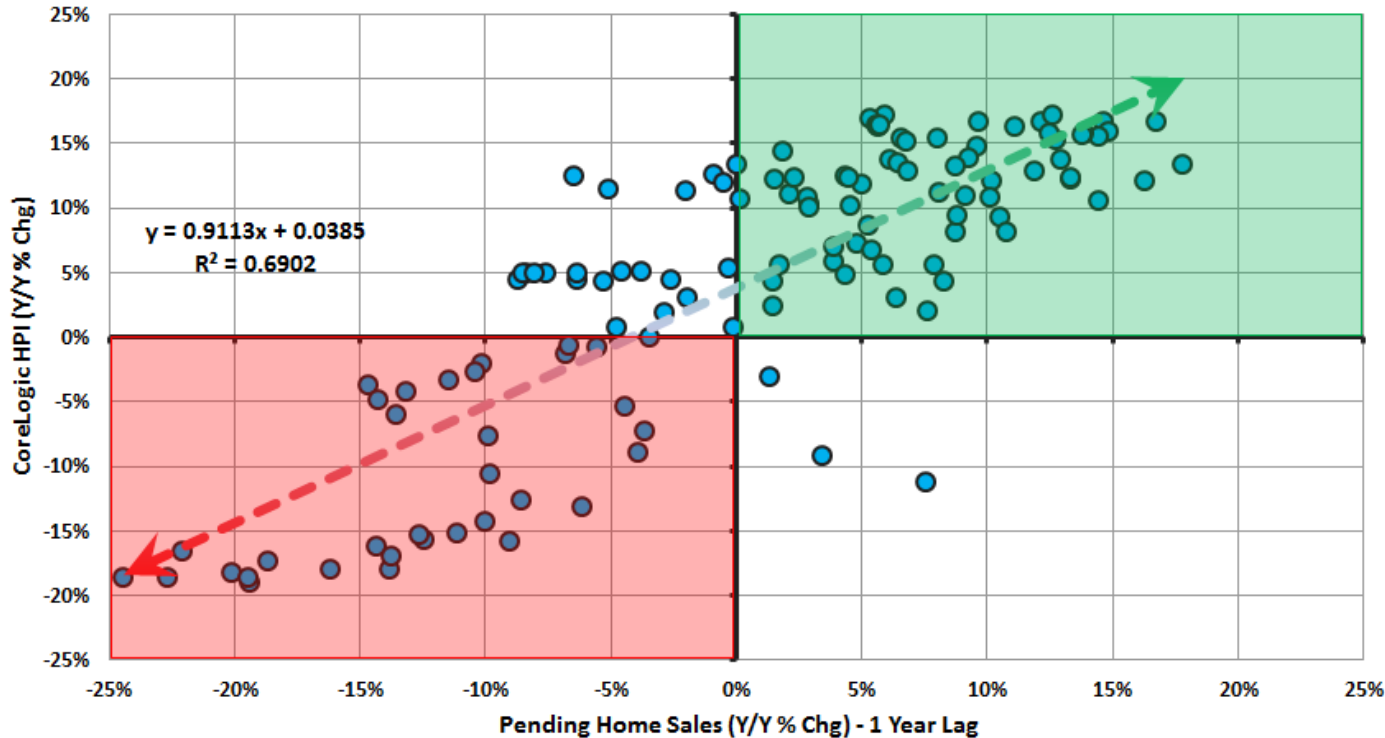
■ Y/Y % Chg in Demand (PHS) - 9Mo Lead — Case-Shiller 20 City HPI YoY NSA



The past fifteen years have seen demand growth lead price growth by 9-12mos. This historical relationship suggests that HPI is on cusp of a negative inflection.

THE CASE FOR DOWNSIDE TO HPI

Pending Home Sales Y/Y Growth (12-Mo Lag) vs. CoreLogic HPI Y/Y Growth
Last 10 Years of Monthly Data



The slope of the relationship between demand growth and price growth is almost one to one, meaning that a 1% deceleration in demand growth has historically correlated with a 91 bps deceleration in HPI.

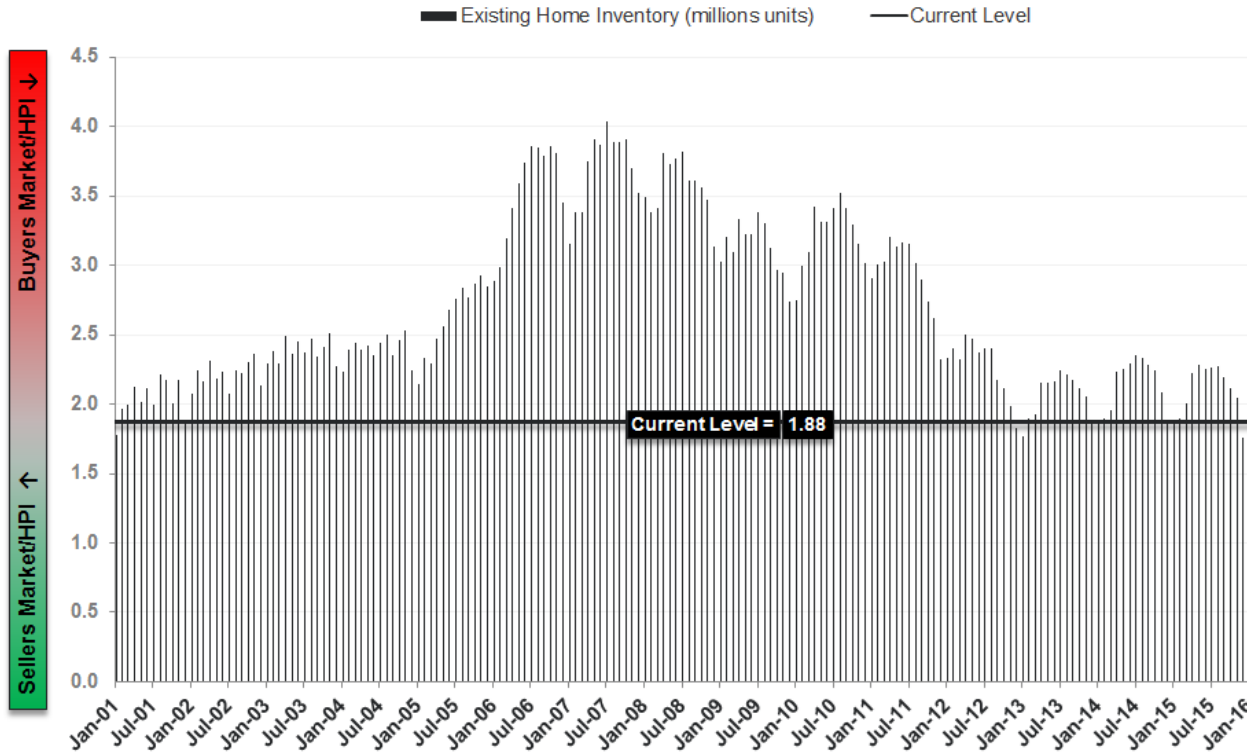
Data Source: CoreLogic, NAR

* Excludes Periods Just Before & After Late-2009 & Early-2010 Tax Credits

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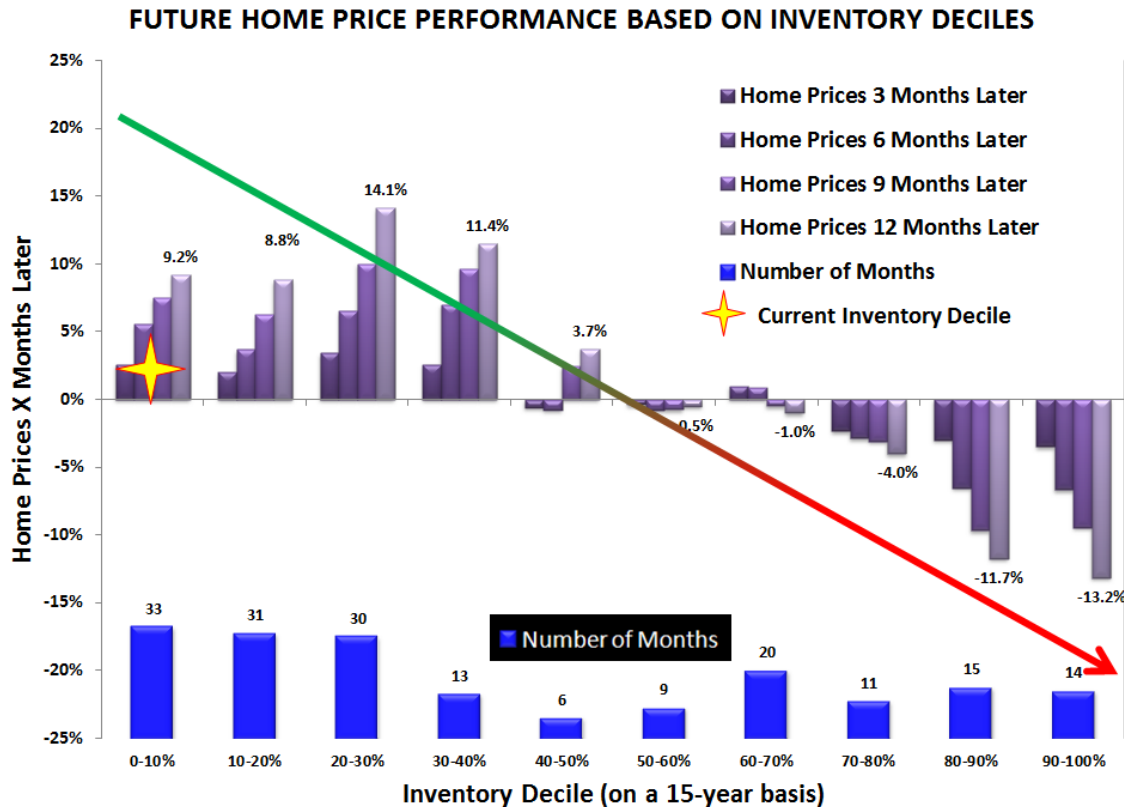
INVENTORY: ON THE LOWS

EXISTING HOME INVENTORY: UNITS



Inventory, however, is at/near all-time tights. The current 1.88mn units in the existing market is on par with the lows seen back in 2000-2001.

RECORD LOW INV → HPI ROC ↑



DATA SOURCE: NAR, CASE SHILLER, HEDGEYE

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When inventory of existing homes for sale has been in the bottom decile (last 15 years of data), as it is currently, the average subsequent NTM home price change has been +9% with 3% standard deviation.



SUPPLY SIDE ECONOMICS

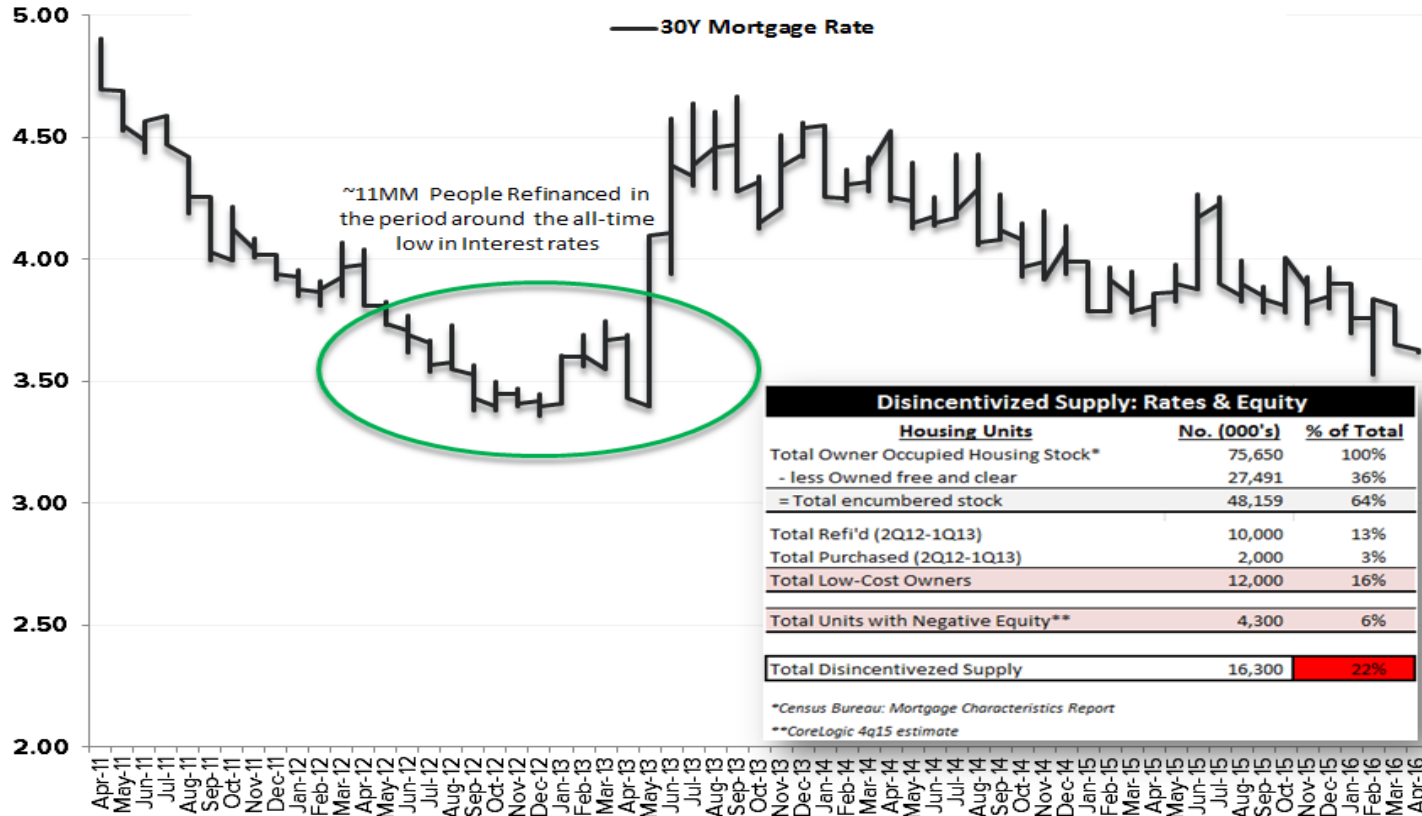


INVENTORY: THE WHY OF SUPPLY

- **Low Rates**
- **Negative/Low Equity**
- **Tighter Credit**
- **Home Price Spreads**
- **Demographics**
- **Investors**

SUPPLY: RATE RETICENCE

30Y Mortgage Interest Rate



The 30yr bull market in rates has come to an end, meaning that people with low rates locked in are now, on the margin, disincentivized from moving.

SUPPLY: EQUITY OVERHANG

Under Equity

Properties with less than 20 percent equity



UNDERWRITING
CONSTRAINTS MAY
MAKE IT MORE DIFFICULT
FOR UNDER-EQUITIED
BORROWERS TO OBTAIN
NEW HOME FINANCING.

18.9%

of mortgaged residential
properties are under-equity

Borrowers with less than 20-percent home equity are referred to as under-equity. Of the 46.3 million properties with a mortgage currently with equity, approximately 9.5 million, or 18.9 percent, have less than 20-percent equity.

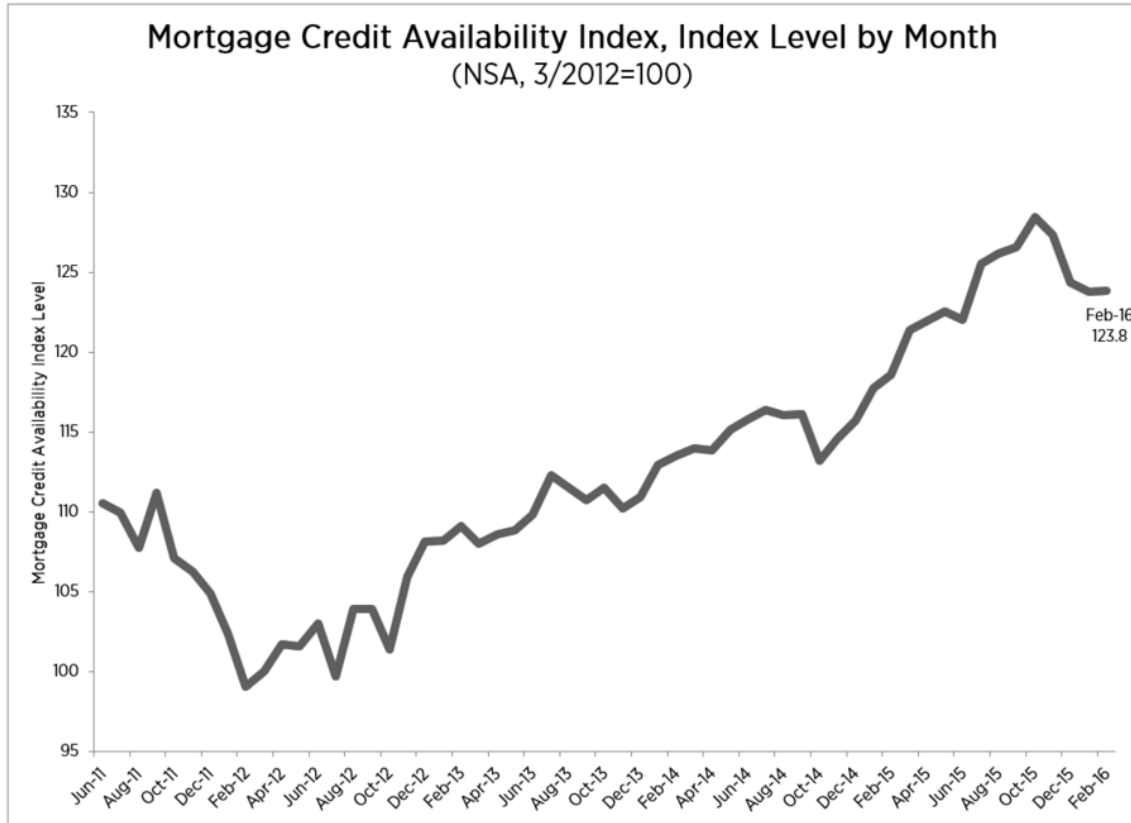
2.3%

of residential properties are
near-negative equity

Additionally, at the end of the fourth quarter, 1 million homes, or 2.3 percent, had less than 5 percent equity. This is referred to as near-negative equity, which puts these properties at risk should home prices fall.

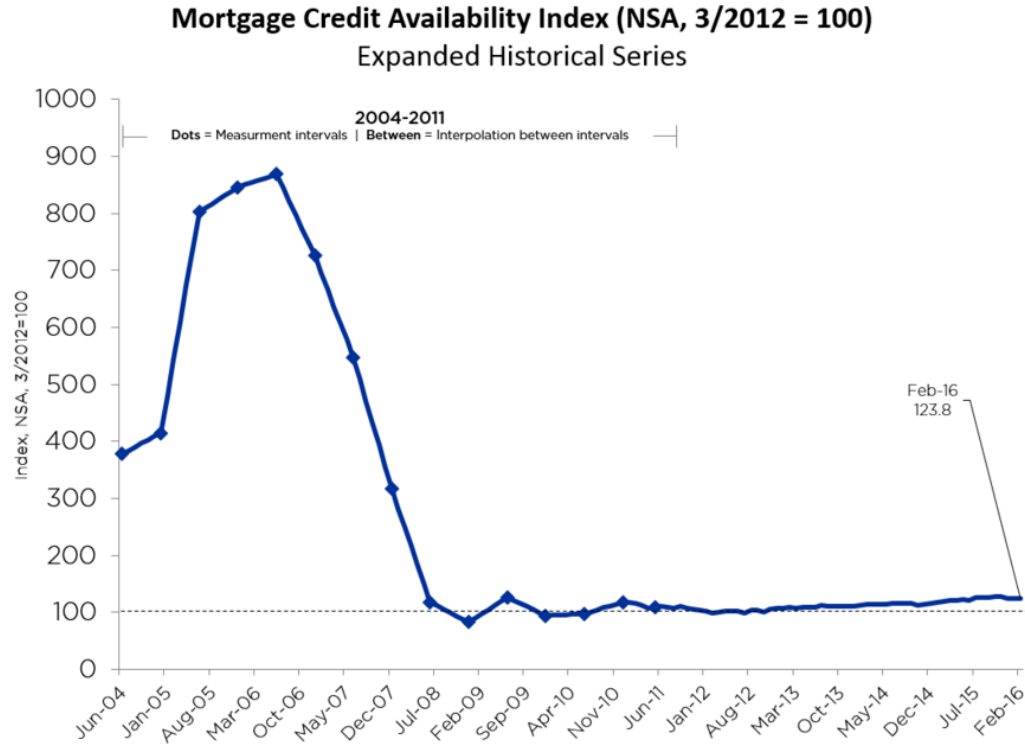
Beyond the aforementioned 16mn in supply, there's a further 9mn owners who have sub-20% equity from a combination of low down payment recent buyers and those who've recently emerged from negative equity positions.

SUPPLY: CREDIT CONSTRAINTS



Meanwhile, mortgage credit availability, which had been on a long-term upswing, recently negatively inflected.

SUPPLY: CREDIT CONSTRAINTS

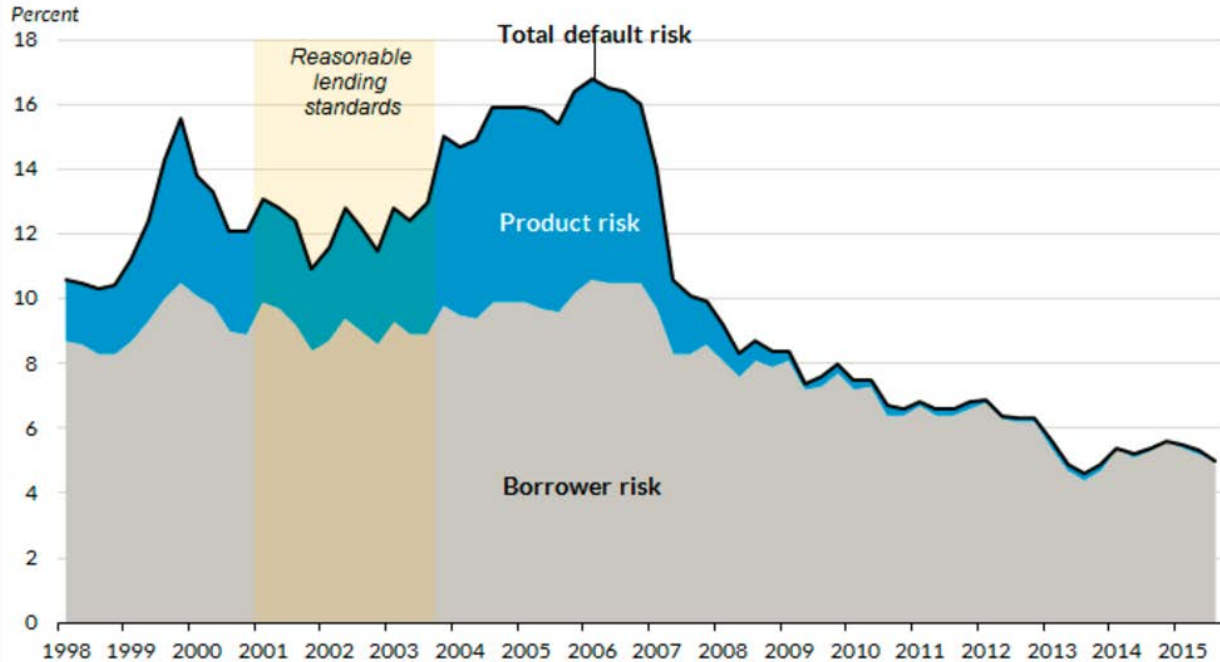


This is simply a longer-term snapshot of credit availability for some added perspective.

Source: Mortgage Bankers Association; Powered by Ellie Mae's AllRegs® Market Clarity®

SUPPLY: CREDIT CONSTRAINTS

Default Risk Taken by the Mortgage Market, Q1 1998–Q3 2015



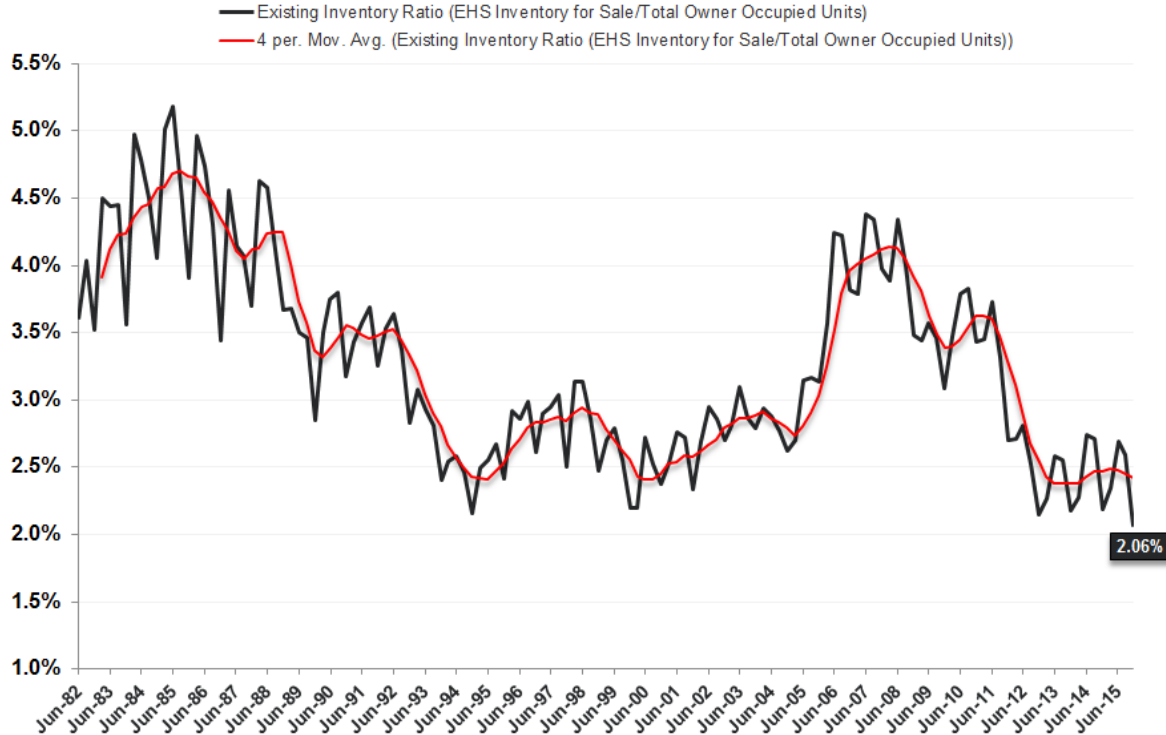
Sources: eMBS, CoreLogic, Home Mortgage Disclosure Data (HMDA), Inside Mortgage Finance (IMF), and Urban Institute.

URBAN INSTITUTE

Standards remain well below long-term equilibrium.

SUPPLY: LONG-TERM LOWS

EXISTING MARKET: SINGLE-FAMILY INVENTORY RATIO

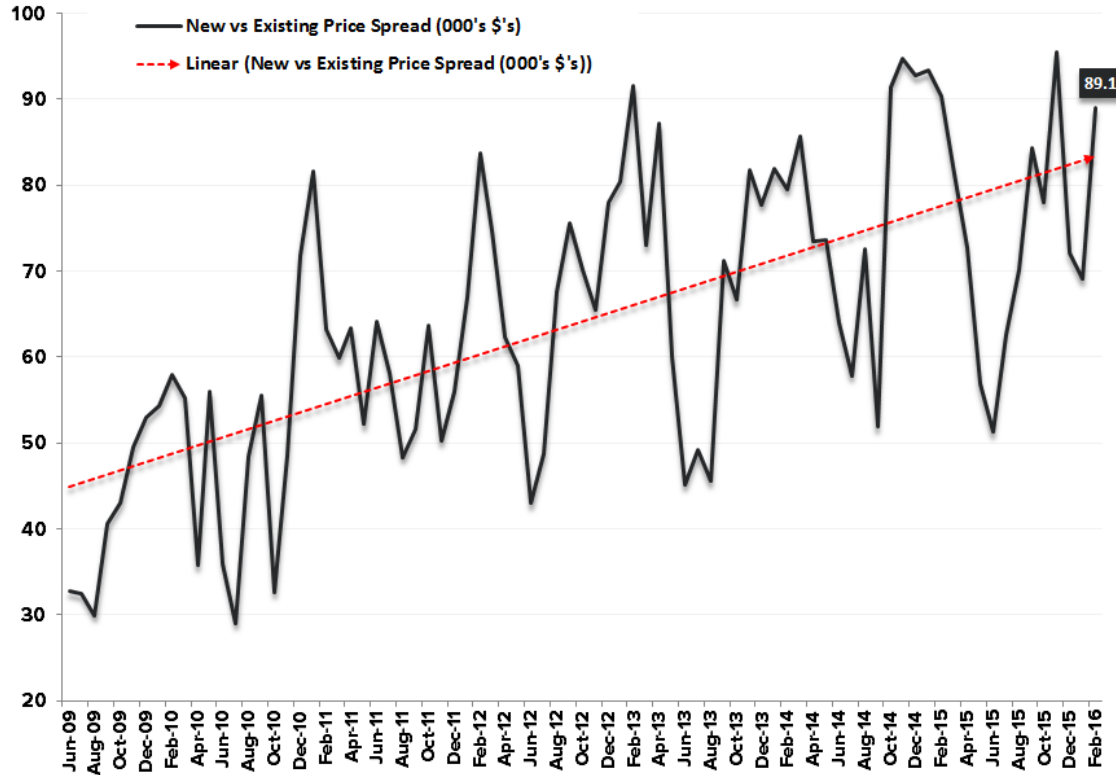


DATA SOURCE: NAR, BLOOMBERG

If we look back even further to 1982, we find that inventory is the tightest its been in almost 40 years.

SUPPLY: PREMIUM SPREADS

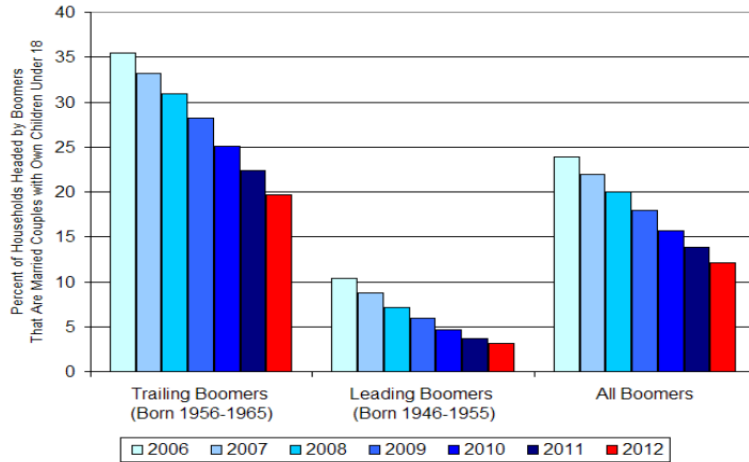
MEDIAN PRICE SPREAD: NEW vs EXISTING HOMES



New home price premiums over existing homes have increased 70-80% since 2009 vs. a ~25% price increase in existing homes. This makes it harder for entry level buyers to get in or would be trade-up buyers.

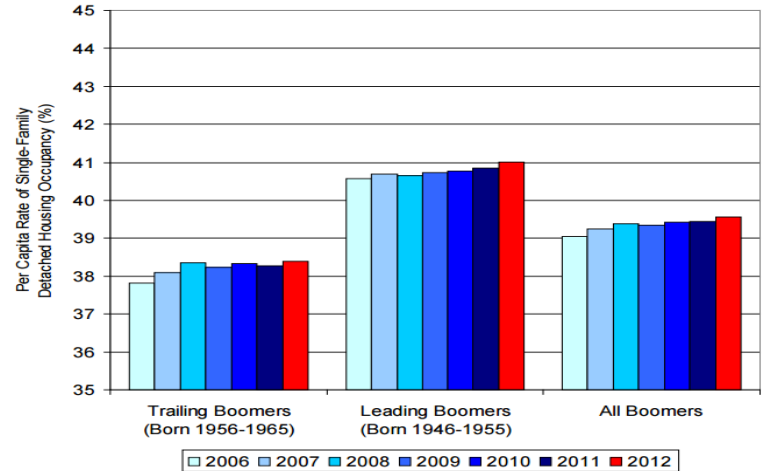
BOOMERS → AGING IN PLACE

Exhibit 1. The Nuclear Family Household Has Become Much Less Common Among Boomers



Source: U.S. Census Bureau, American Community Survey Public Use Microdata Sample

Exhibit 2. So Far, Boomers Are Staying in Single-Family Detached Homes



Source: U.S. Census Bureau, American Community Survey Public Use Microdata Sample

**BOOMERS' FAMILIES ARE
GETTING SMALLER...**

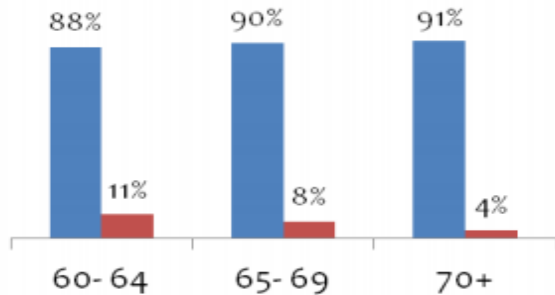


**BUT THE SHARE LIVING IN
SINGLE-FAMILY DETACHED
HOMES IS UNCHANGED**

BOOMERS → AGING IN PLACE

- Close to nine in 10 older Americans intend to continue living in their current homes for the next five to 10 years

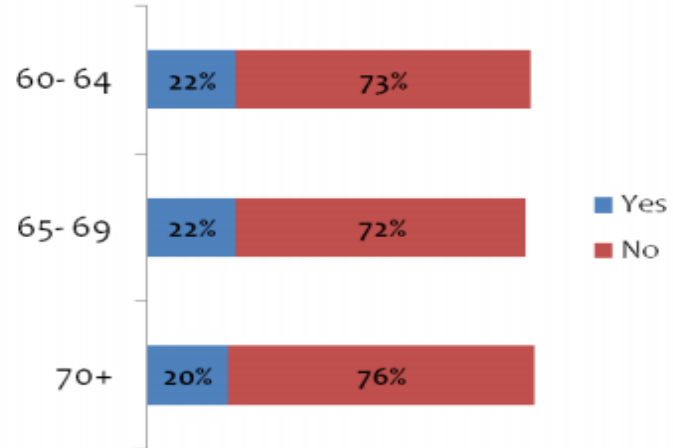
Do you intend to continue living in your current home for the next five to 10 years?



■ Yes
■ No

If yes...

IF YES: Do you plan to make any modifications to your home to help you age in place? (N= 903)

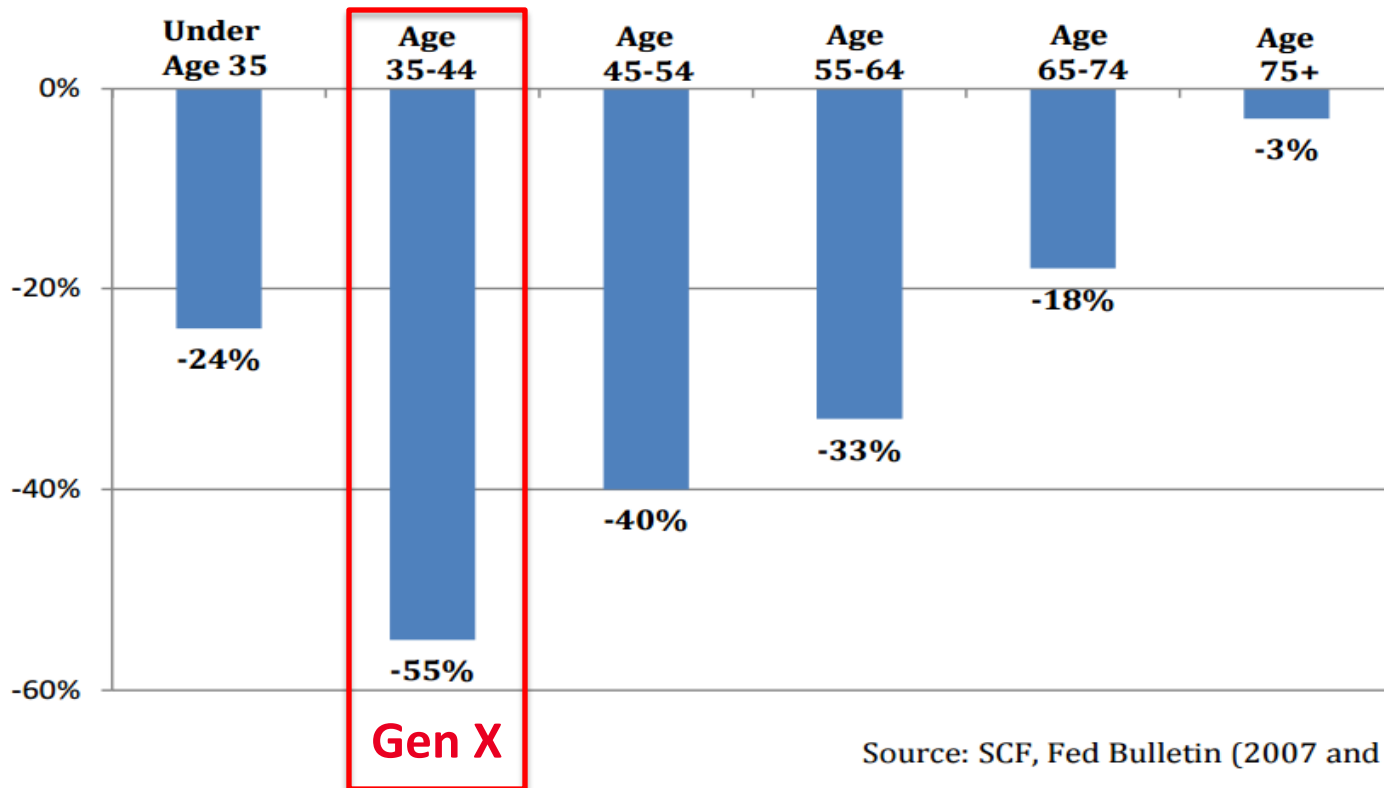


■ Yes
■ No

SOURCE: AARP (2012)

GEN X IN TROUBLE

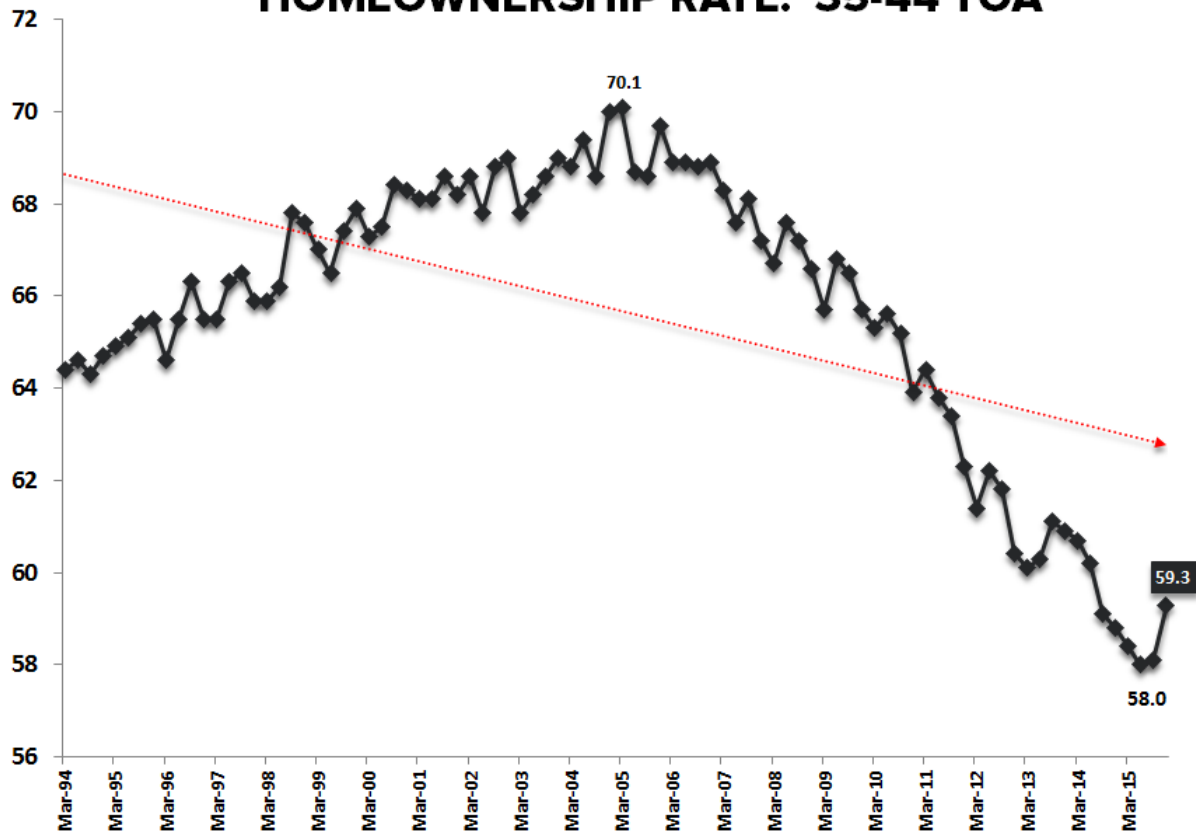
Figure 9: Change in Real Median Household Net Worth, by Age: 2007 to 2010



Source: SCF, Fed Bulletin (2007 and 2010)

GEN X IN TROUBLE

HOMEOWNERSHIP RATE: 35-44 YOA

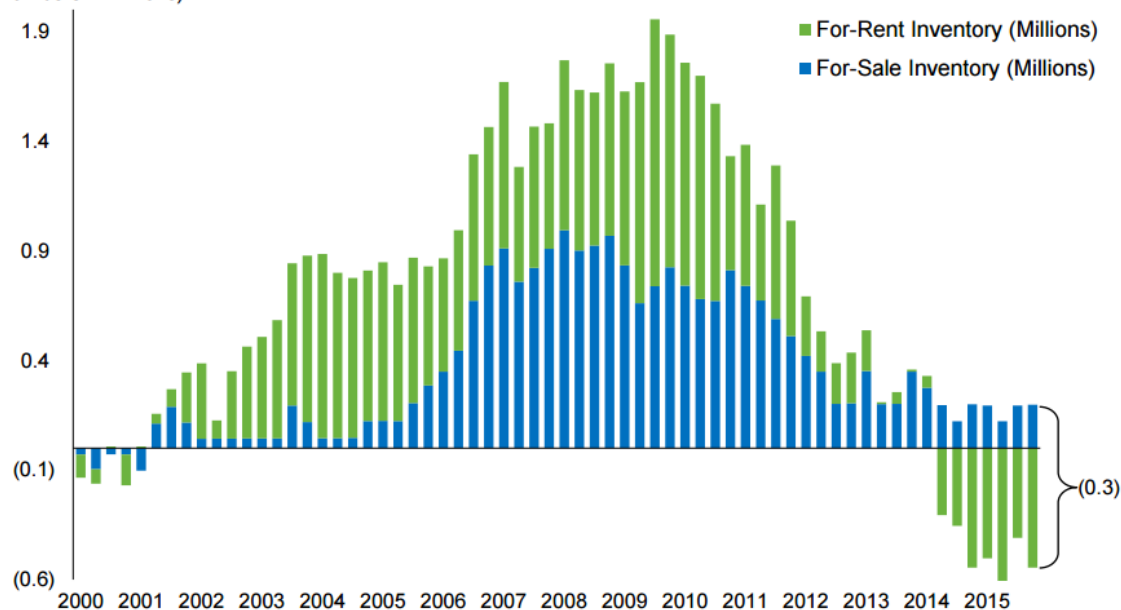


RENTAL INVENTORY → STILL NEGATIVE

Vacant housing over/undersupply



Surplus/Shortage of Vacant Homes
(Numbers in Millions)



Source: Freddie Mac calculations using U.S. Census Bureau data. Negative values reflect shortage or undersupply relative to the historical benchmark. The over/undersupply of vacant housing was estimated based on the average vacancy rate from 1994Q1 to 2003Q4. 2015 data as of December 31, 2015.

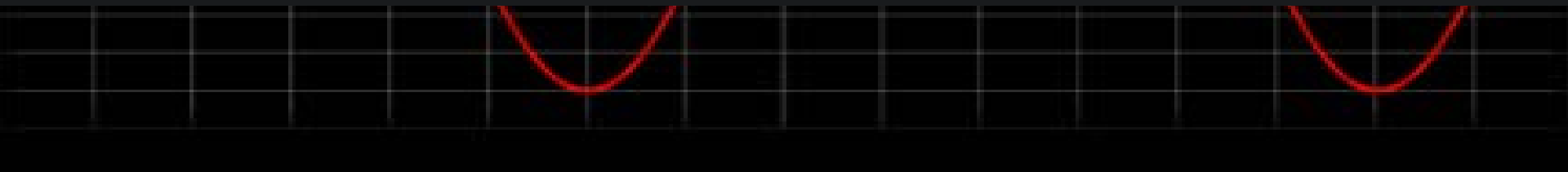
Stepped up investor activity and the conversion of single family owner occupied to rental units has created a longer-term shortage in for-rent inventory that has yet to show signs of inflecting.



SEASONALITY / SF / BIG CITIES / CRE



SEASONALITY



QUARTERLY SEASONALITY

Housing Seasonality				
Average Performance by Quarter				
<u>Average Absolute Performance, Trailing 6Y</u>				
Security	1Q	2Q	3Q	4Q
ITB	9.5%	-2.3%	-3.6%	13.6%
XHB	9.9%	-3.0%	-2.0%	11.6%
S5HOME	11.7%	-1.8%	-3.6%	16.2%
<u>YTD</u>				
Security	1Q	2Q	3Q	4Q
ITB	-0.1%	?	?	?
XHB	-1.0%	?	?	?
S5HOME	-1.6%	?	?	?

Here's how the seasonality looks on a quarterly basis. It's pretty clear which quarters generate positive P&L and which don't.

SEASONALITY → THE LAST 6 YEARS

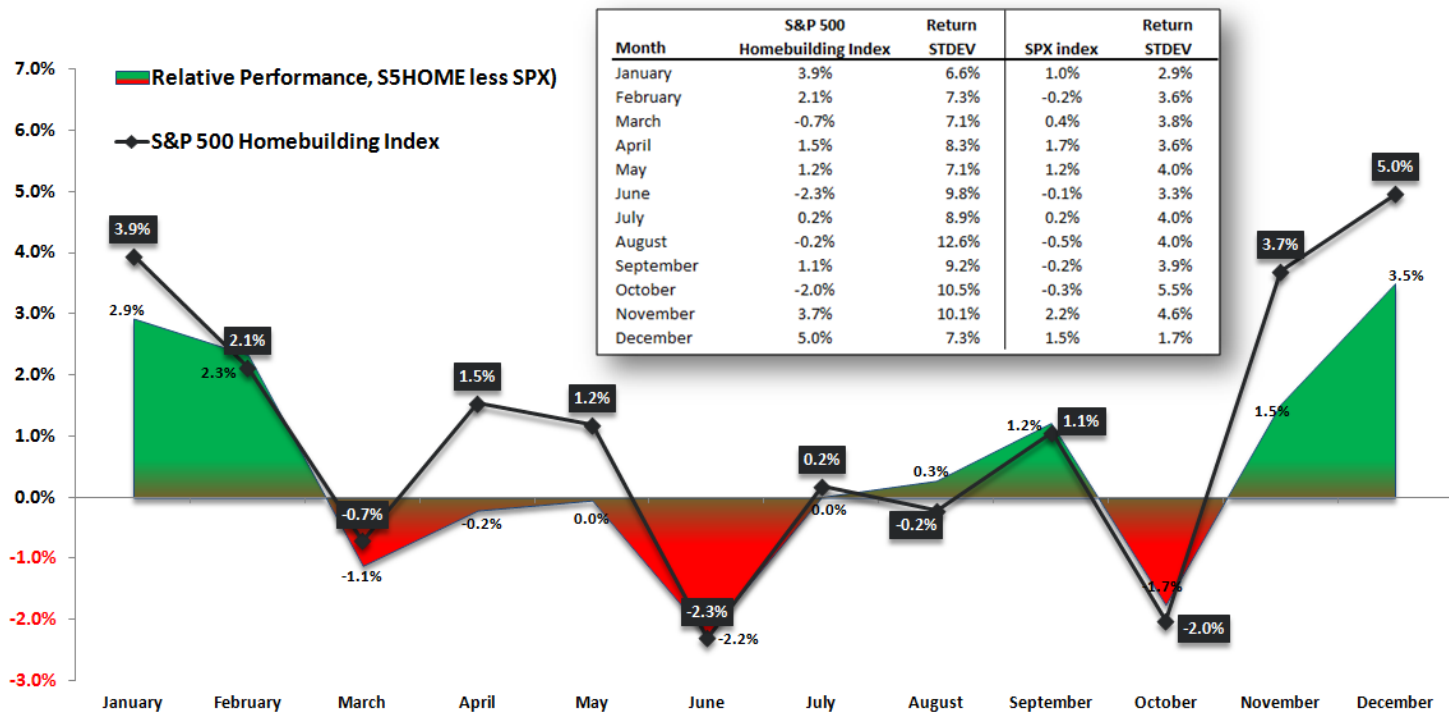
ITB has seen average second quarter losses of -2-3% over the last six years.



BUILDER SEASONALITY (20 YEARS)

HOMEBUILDER SEASONALITY

Ave Performance by Month, 1996-2014

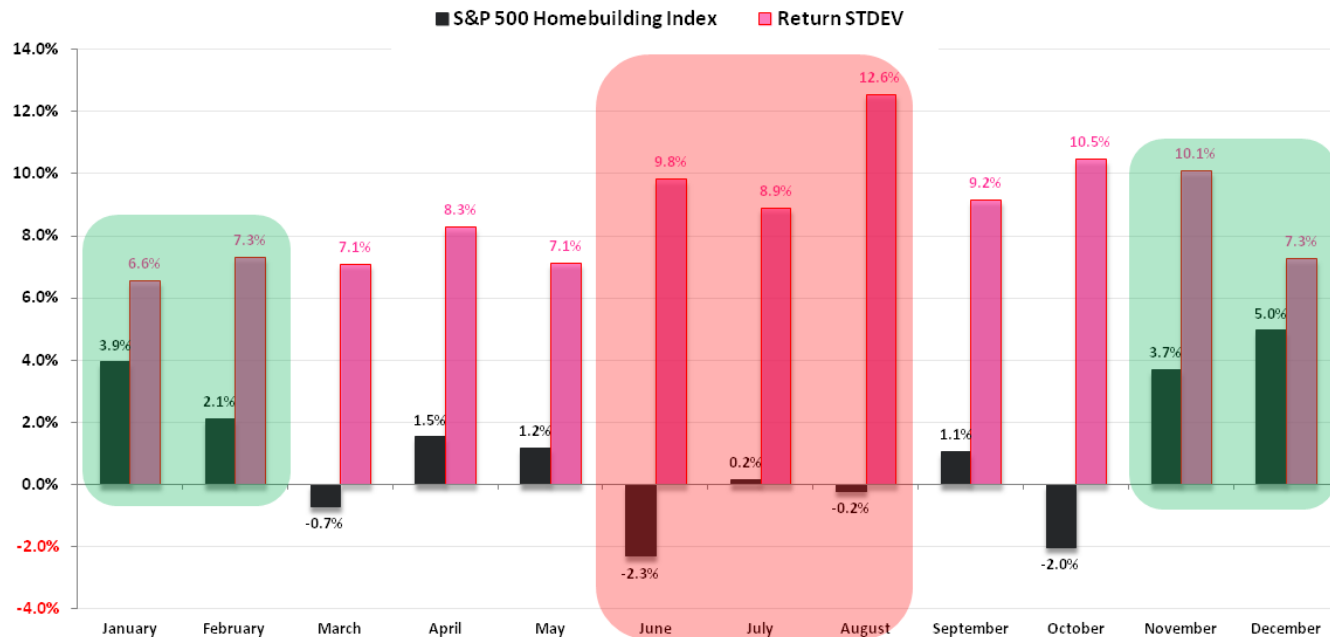


Incidentally, the last 20 years of housing data show similar seasonal patterns.

VOLATILITY IS SEASONAL AS WELL

HOMEBUILDER SEASONALITY

Ave Performance by Month, 1996-2014



*Performance calculated using average monthly price; sample period = 1996-2014

Seasonality isn't just pronounced in the returns, but also in the volatility of returns.



SAN FRANCISCO



SAN FRAN: BUBBLE SIGNS

\$965 a month for this tent

Backyard Tent Renting for \$899/Month Sums Up Everything That's Wrong with the Bay Area

BY LAMAR ANDERSON · JUN 25, 2015, 5:03P

SOLD: \$700,000

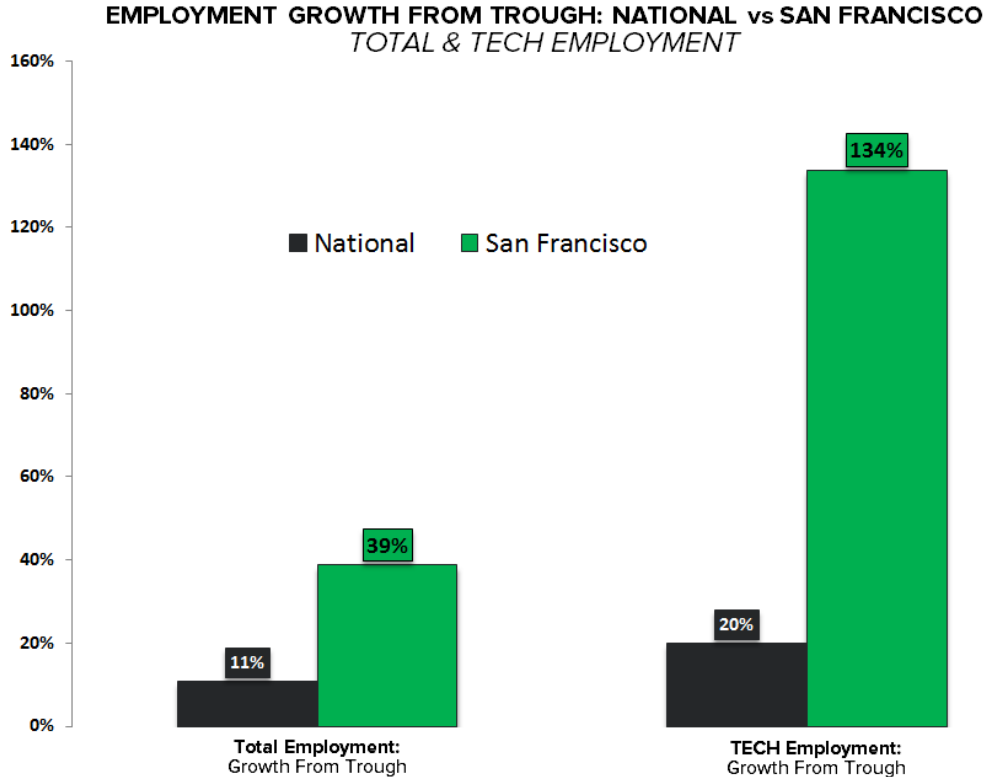
Illegal shipping containers, \$1,000 a month

San Francisco man pays \$400 a month to live in a wooden box

By Christian Gollayan

March 30, 2016 | 6:36pm

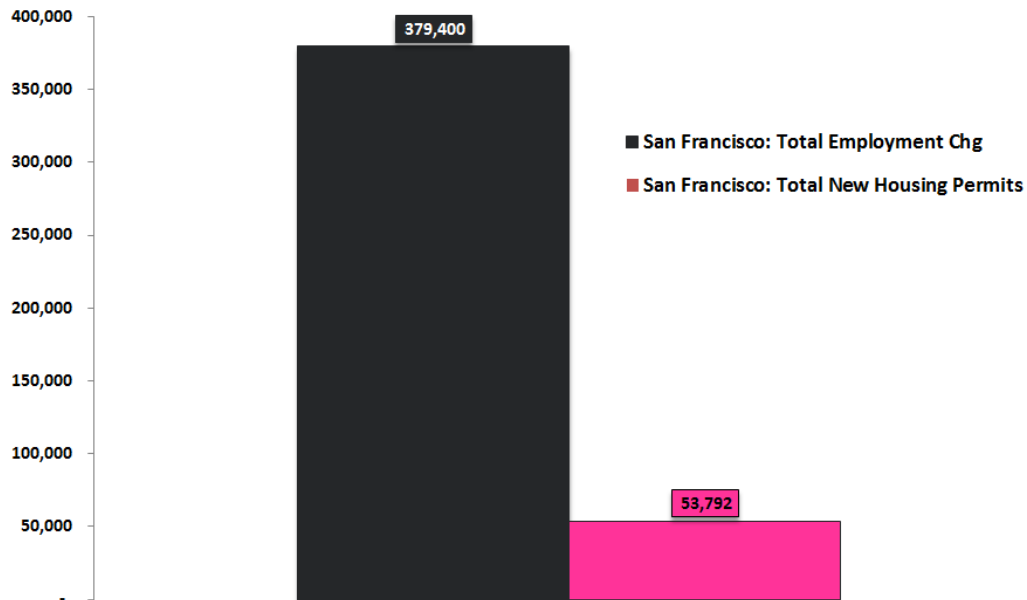
SAN FRAN: EMPLOYMENT



Employment growth has clearly been supportive of housing demand in San Francisco.

SAN FRAN: DEMAND > SUPPLY

CHANGE IN EMPLOYMENT vs. TOTAL HOUSING PERMITS
2010-Present



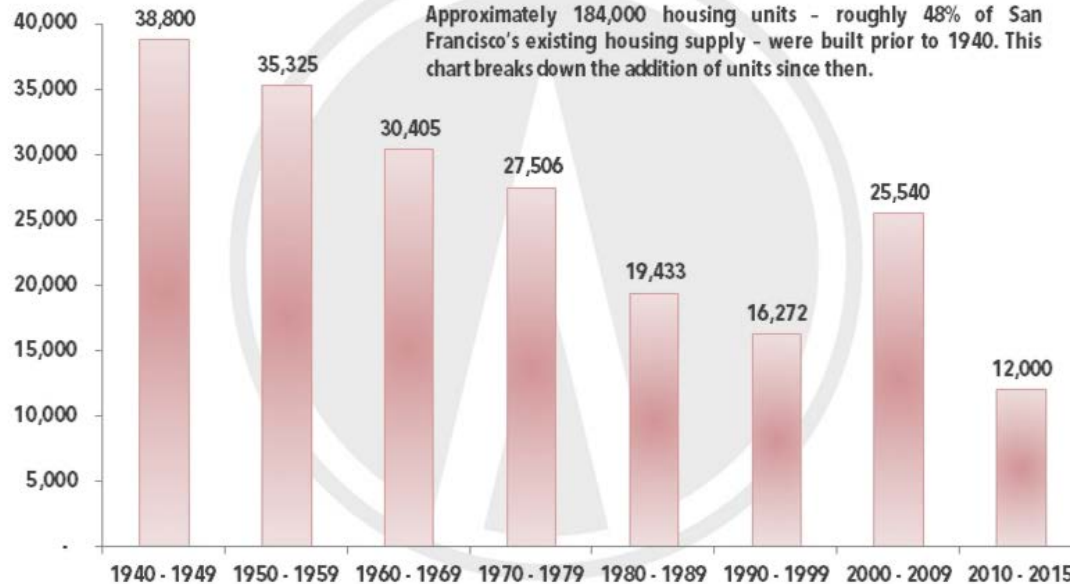
There have been 379k new jobs added in San Francisco over the past half decade with only 53k incremental housing units.

SAN FRAN: CONSTRUCTION TRENDS

San Francisco New Home Construction Trends

Housing Units Built by Decade - Approximate Numbers

Based on U.S. census figures for era of existing SF housing as of 2013 and SF Planning Dept. data.



Housing units of all types. Data from sources deemed reliable but may contain errors and subject to revision. All numbers should be considered general approximations.

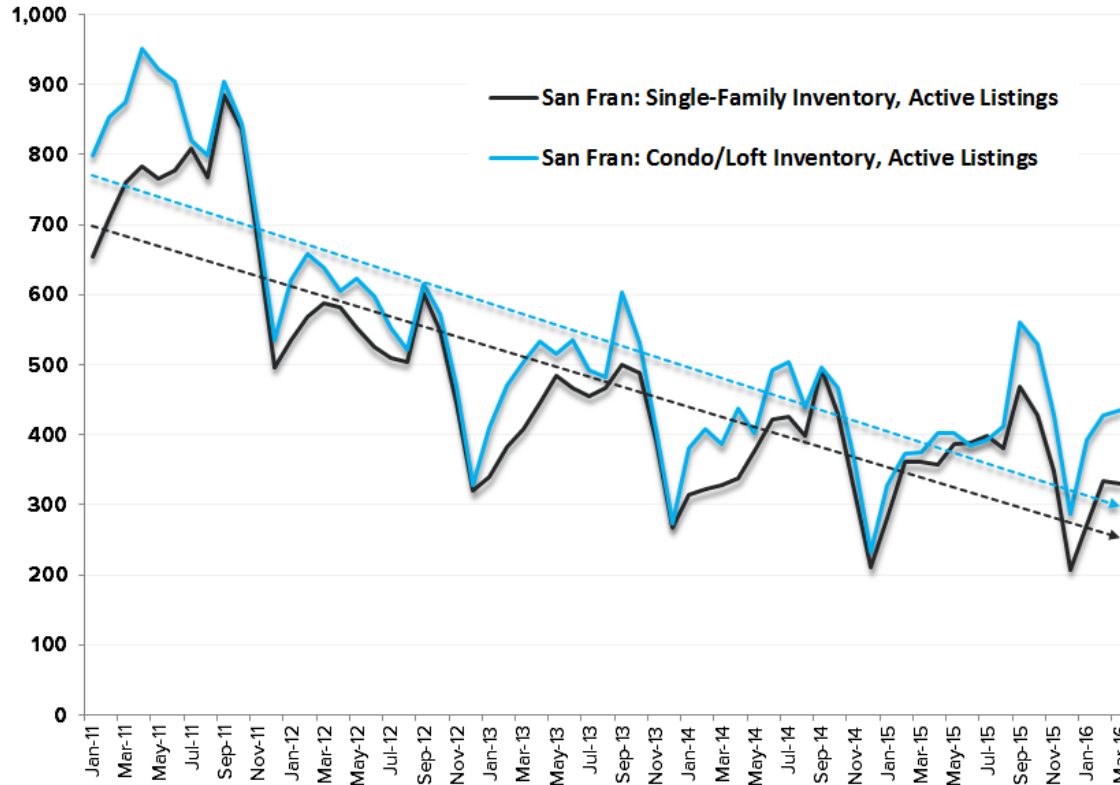


PARAGON
REAL ESTATE GROUP

The last half decade has seen construction activity levels well below long-term trend, despite the stronger-than-usual employment growth.

SAN FRAN: SUPPLY ↓ ↓ ↓

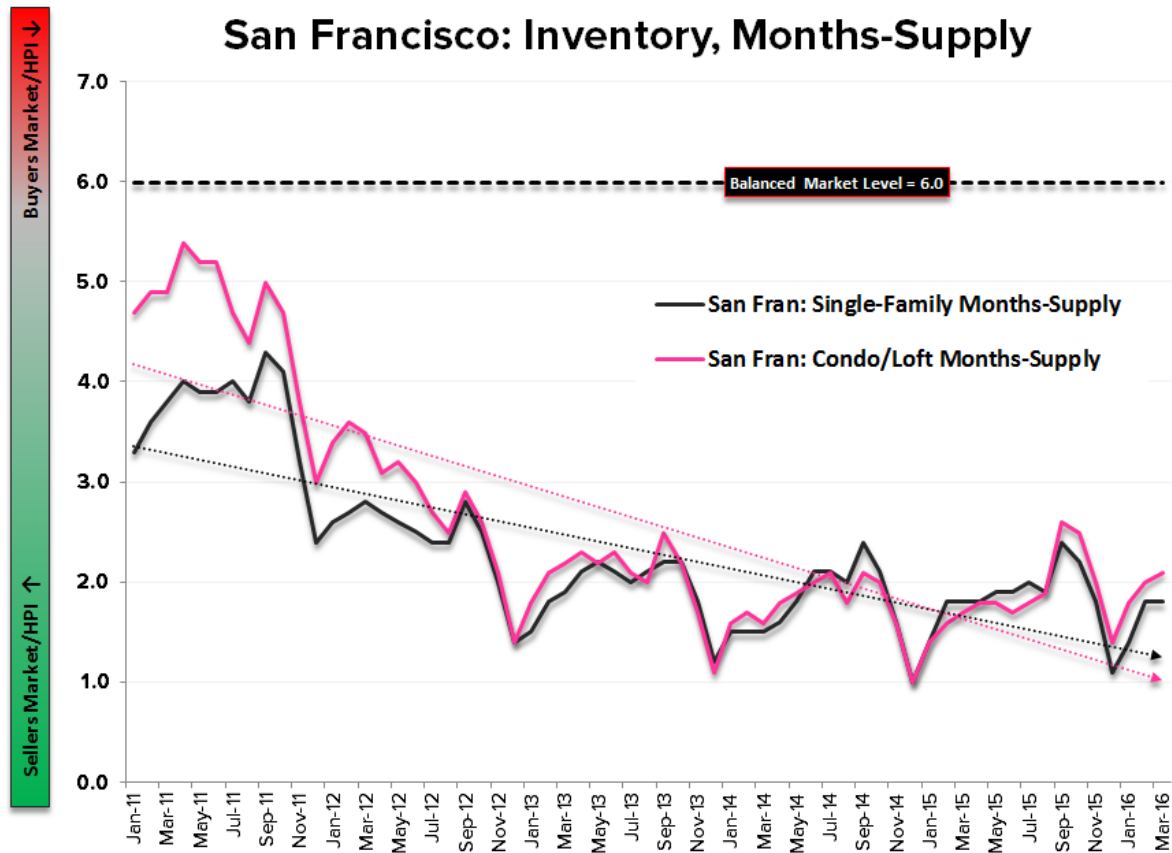
San Francisco: Inventory, Active Listings



DATA SOURCE: SFARMLS, PARAGON REAL ESTATE GROUP

As a result of stepped up employment and income and reduced construction, supply of home for sales has been in secular retreat for the last 4 years.

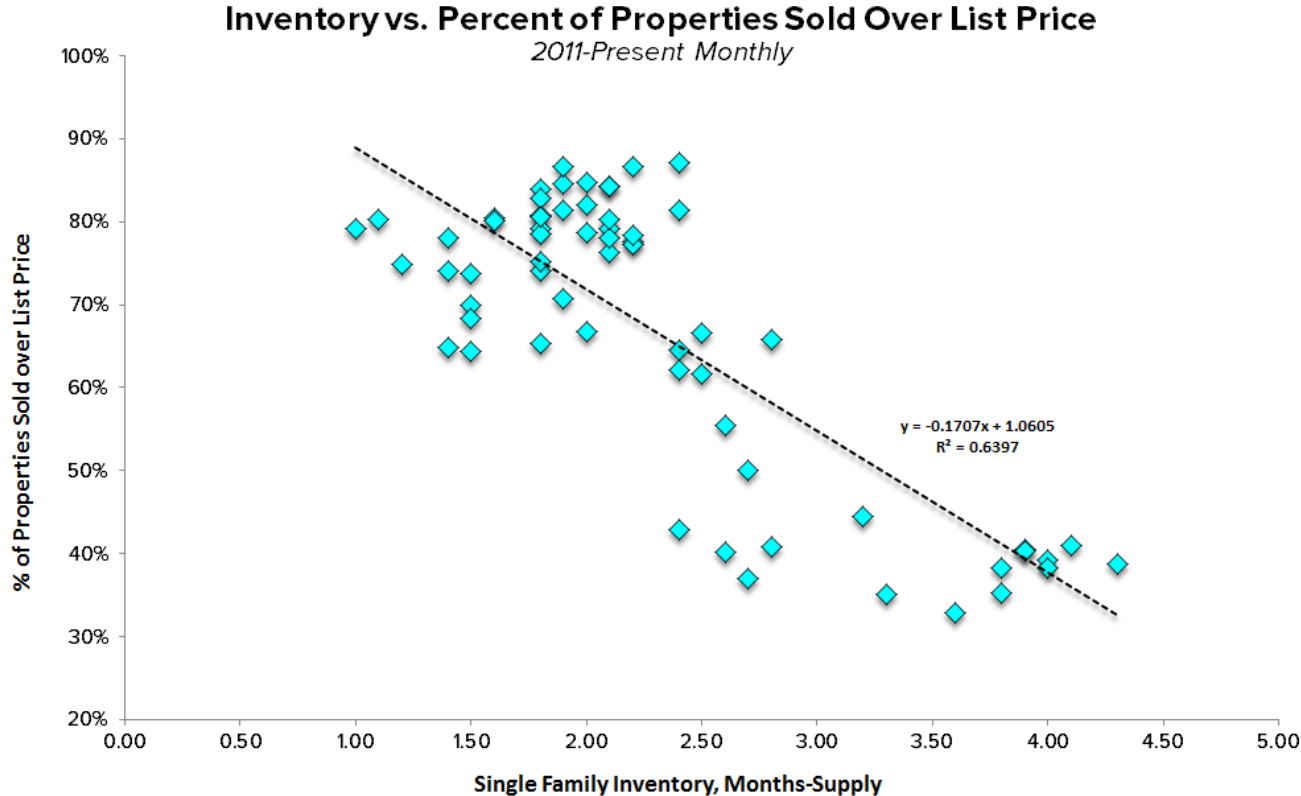
SAN FRAN: MONTHS SUPPLY ~2MOS



DATA SOURCE: SFARMLS, PARAGON REAL ESTATE GROUP

The San Fran market has tightened to just 1-2 months of supply over the last few years. It doesn't get much tighter than that.

SAN FRAN: SUPPLY ↓ PRICE ↑

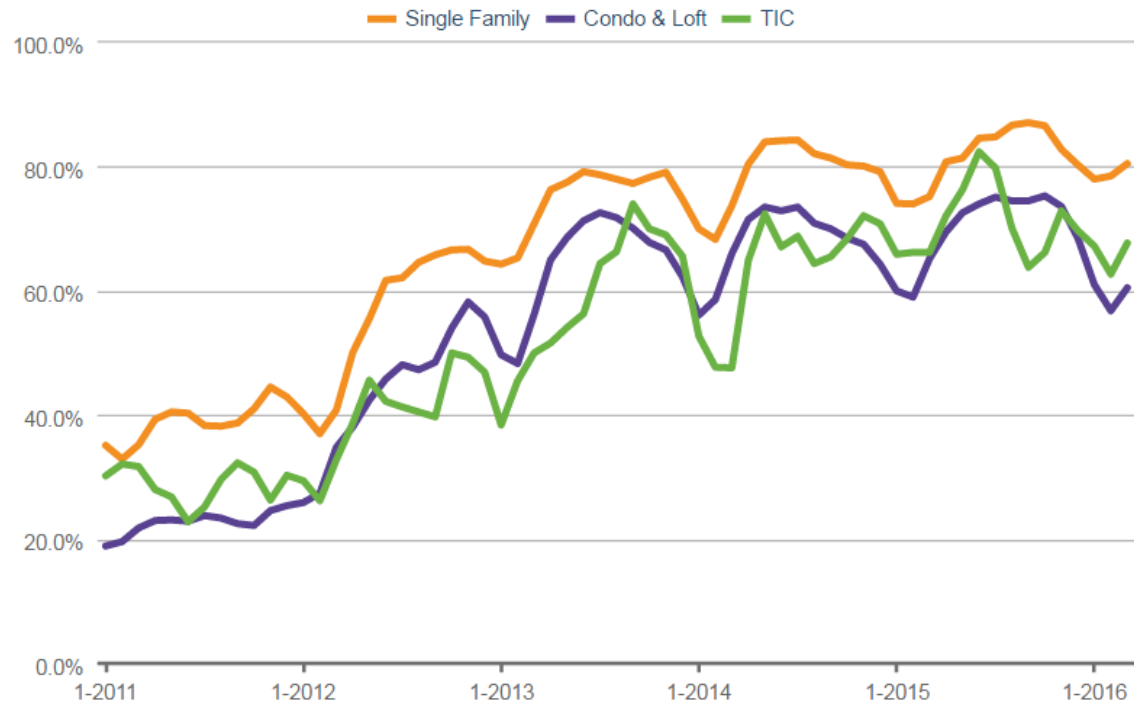


Over 80% of SF homes have sold over list price in recent quarters.

DATA SOURCE: SFARMLS, PARAGON REAL ESTATE GROUP

SAN FRAN: SUPPLY ↓ PRICE ↑

Percent of Properties Sold Over List Price - By Property Type



San Francisco County

Each data point is three months of activity. Data is from April 6, 2016.

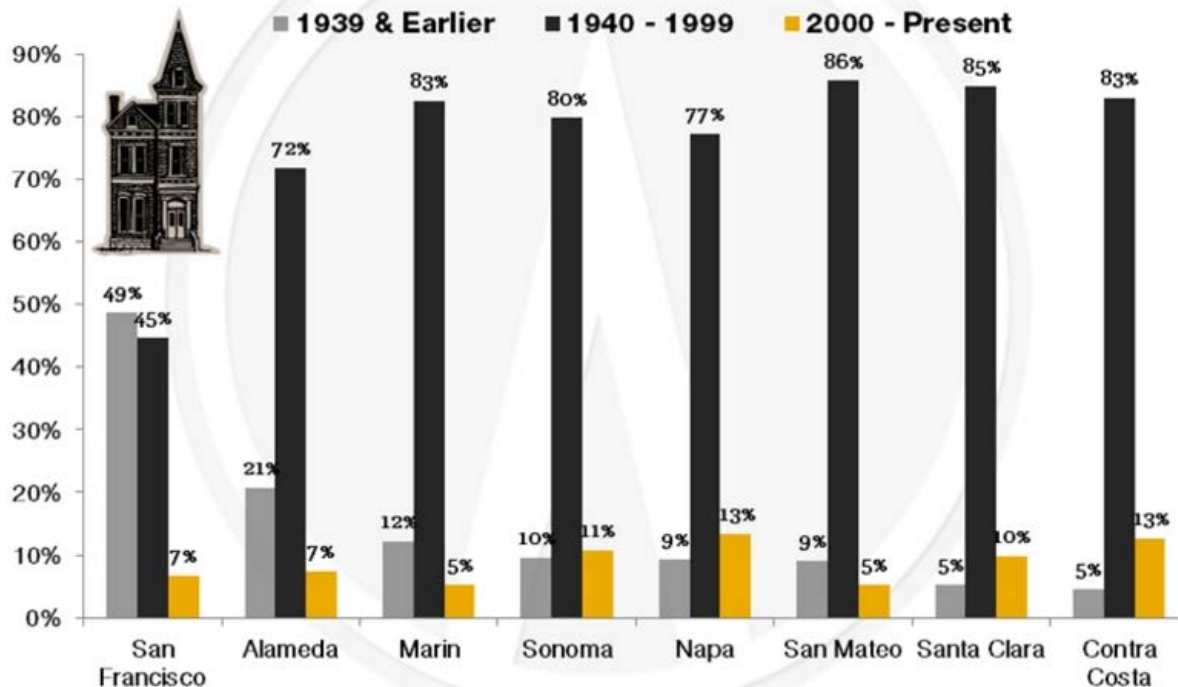
Data from SFARMLS. Powered by 10K.

Pricing trends have not shown any signs of weakening of late.

SAN FRAN: OLD & INACTIVE

Era of Home Construction
Bay Area Housing Construction Periods

U.S. census data and
estimates 2010-2013



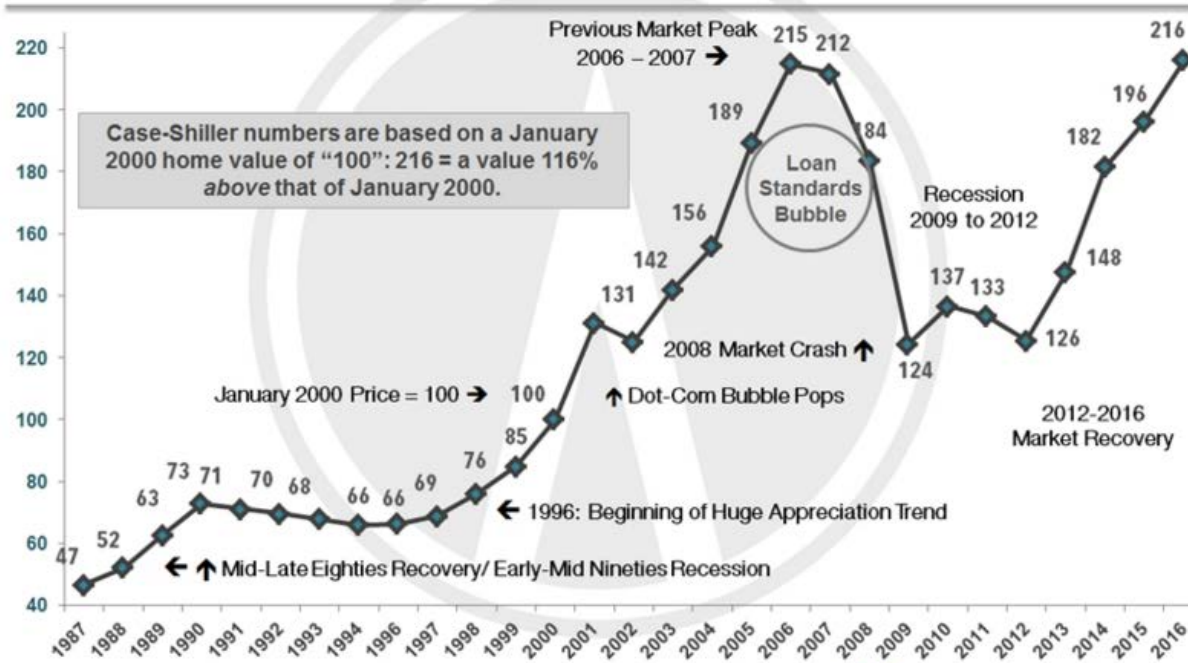
These analyses were performed in good faith with data derived from sources deemed reliable, but they may contain errors and are subject to revision. All numbers should be considered approximate.



The housing stock of San Fran is notably older than that of neighboring areas.

SAN FRAN: HPI BACK AT PRIOR PEAKS

S&P Case-Shiller Home Price Index (Aggregate)
1987 – Present Real Estate Cycles, SF Bay Area
San Francisco 5-County Metro Area* – January Data Points – All Price Points



Price changes based on January 2000 value = 100. Data points above are for January of each year, except as noted. *The C-S Index 5-county San Francisco Metro Statistical Area includes San Francisco, Marin, San Mateo, Alameda and Contra Costa counties. Different price segments experienced very different magnitudes of bubble in 2004-2008.

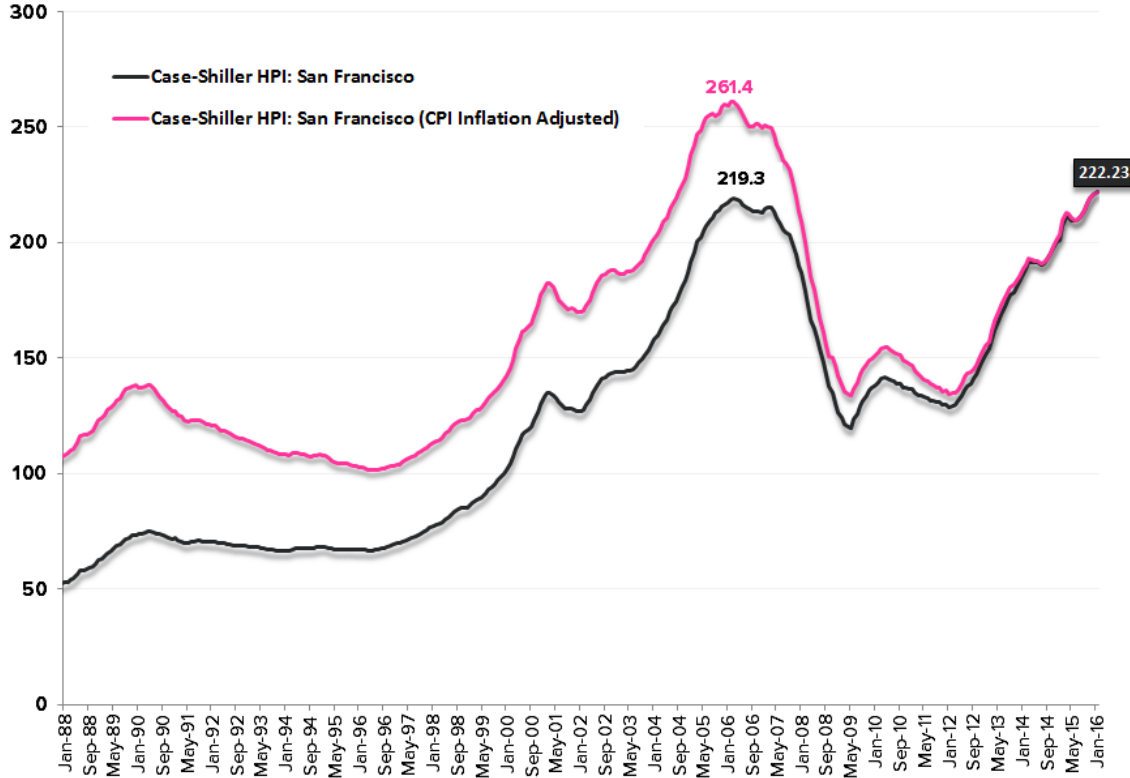


PARAGON
REAL ESTATE GROUP

Home prices in San Francisco have recently eclipsed their prior bubble peaks.

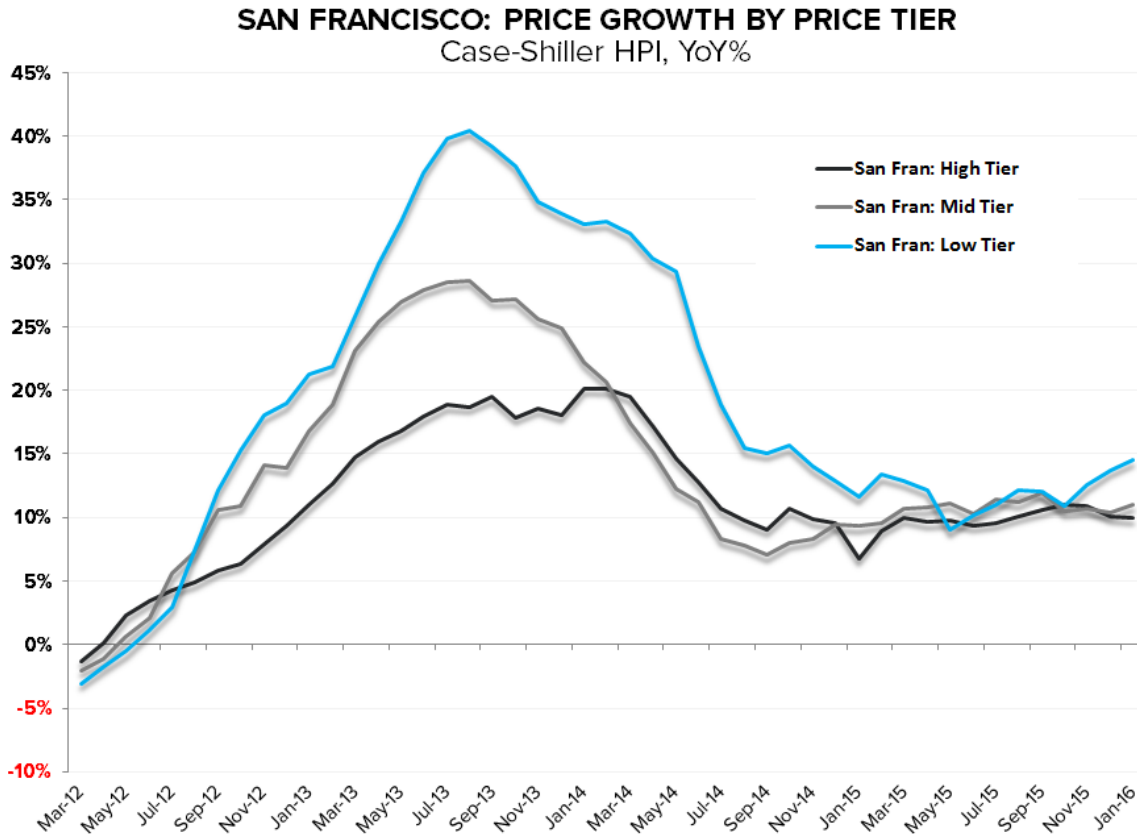
SAN FRAN: STILL ROOM TO RUN?

Case-Shiller HPI: San Francisco Real & Nominal Prices



Nominal prices have taken out their prior highs, but real prices remain slightly below their all-time highs.

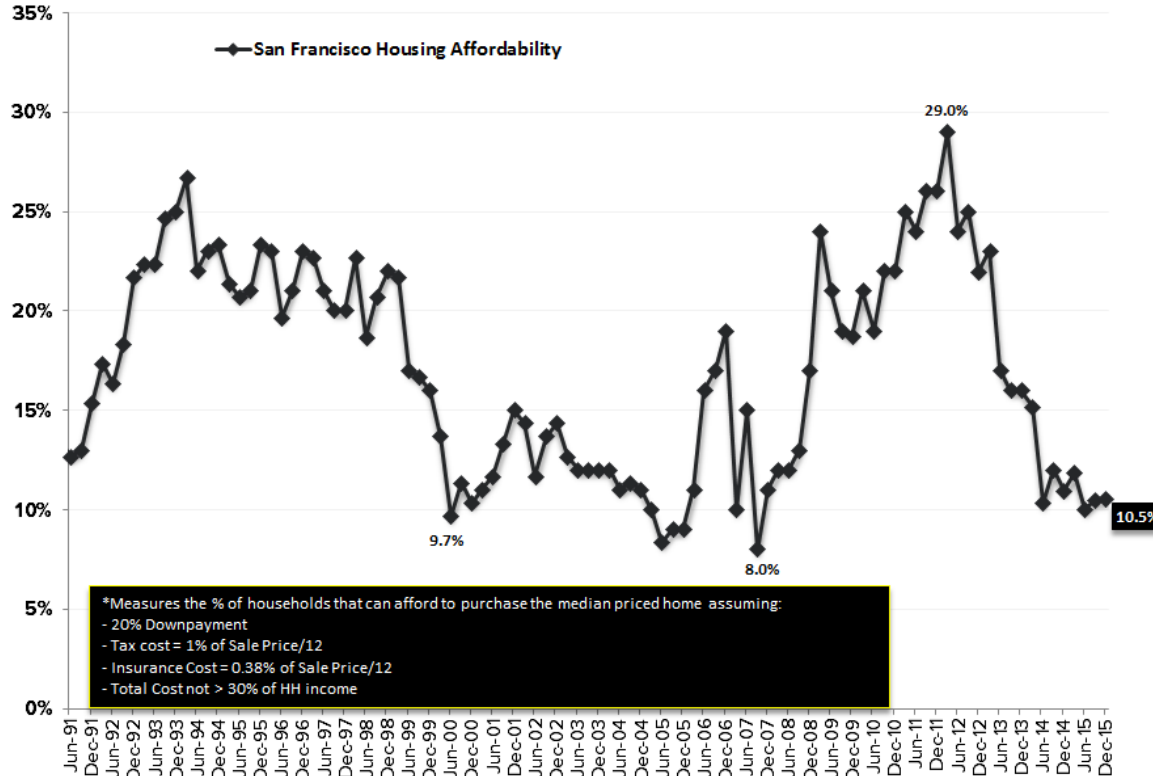
SAN FRAN: PRICES BY TIER



The low end of the market has actually seen the strongest growth, partly due to that segment being hit the hardest from 2008-2011.

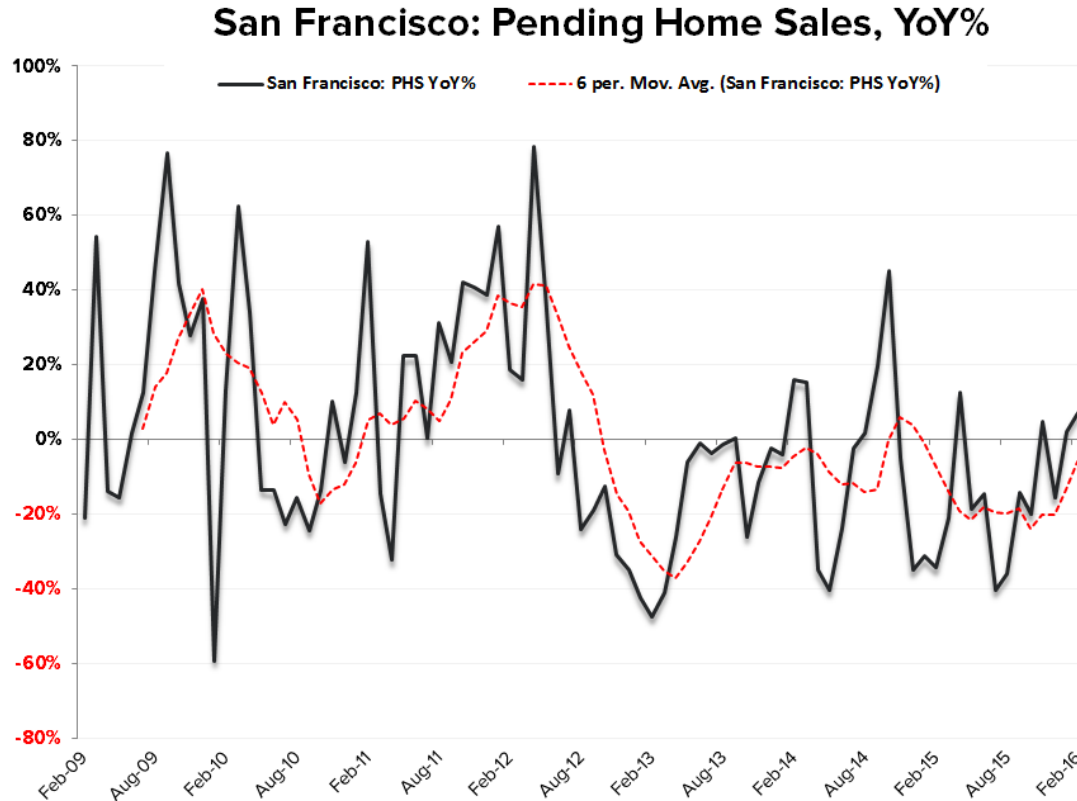
SAN FRAN: AFFORDABILITY WATCH

San Francisco Housing Affordability*



Affordability in San Francisco is back at its prior cyclical low watermark. Just 10% of San Francisco families can currently afford the median priced SF home, in line with the lows seen in 1990 and 2006/2007.

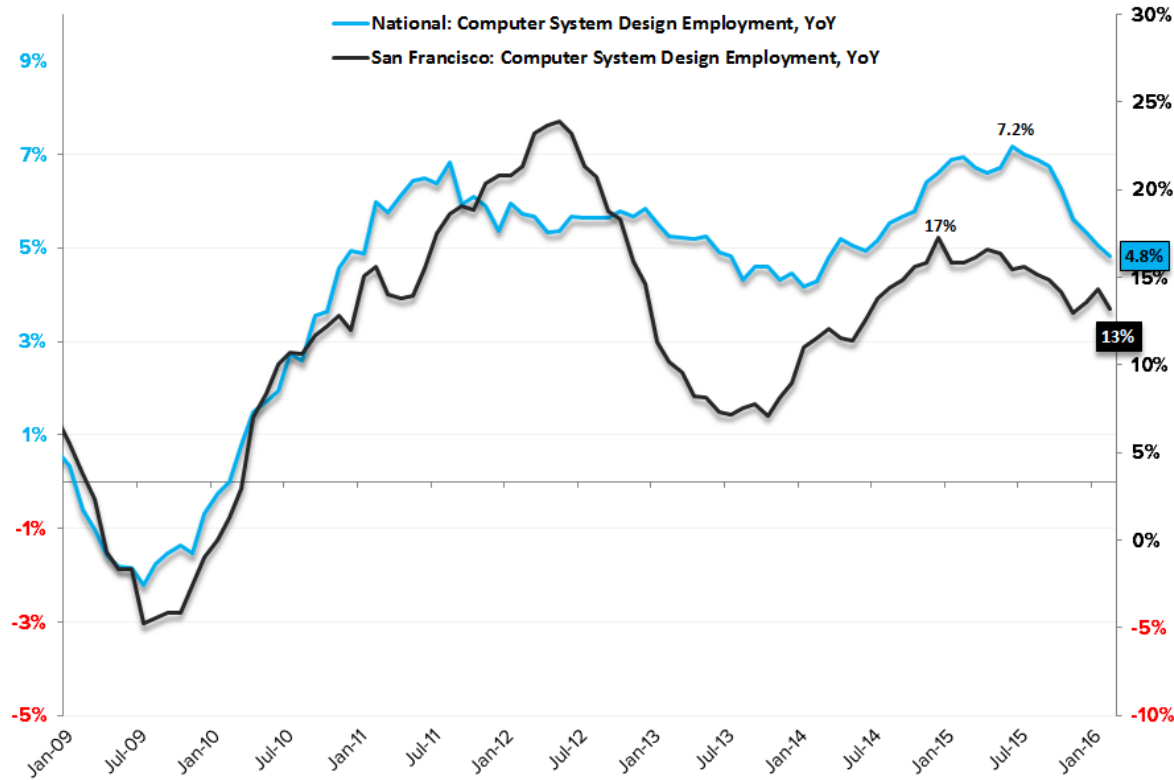
SAN FRAN: VOLUME



Sales volume in San Fran has been declining for a few years, but this has more to do with tight supply than reduced demand.

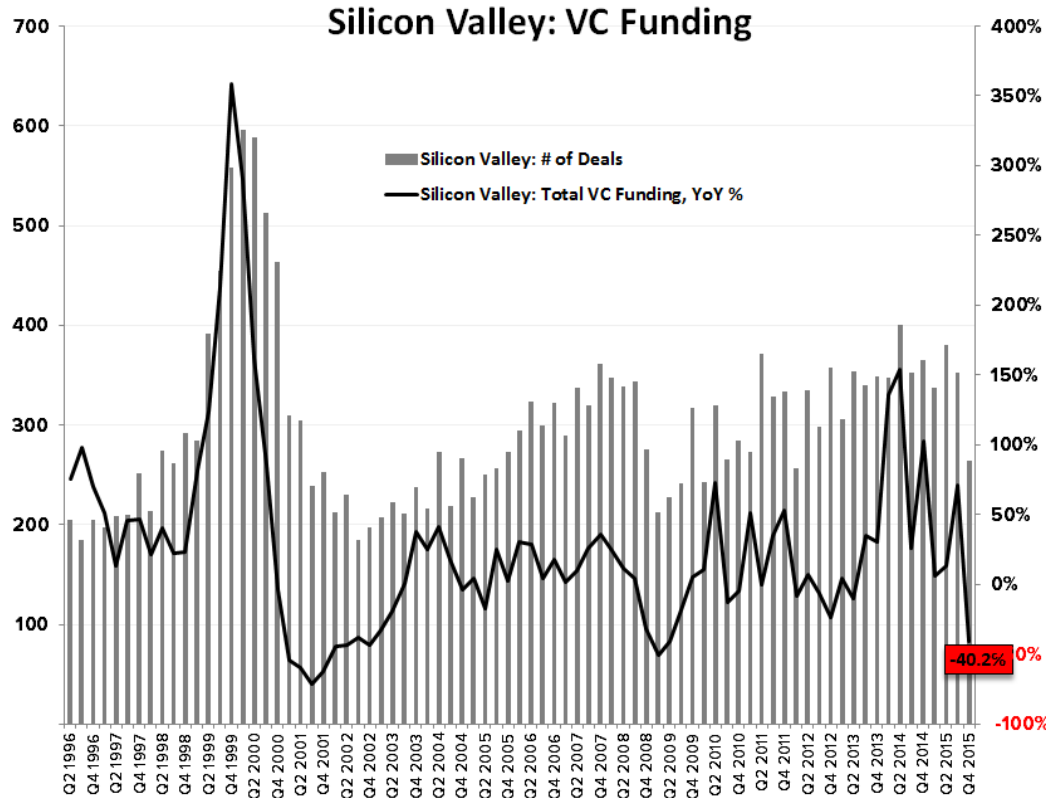
SAN FRAN: LABOR TRENDS

The "App Economy": Employment Growth



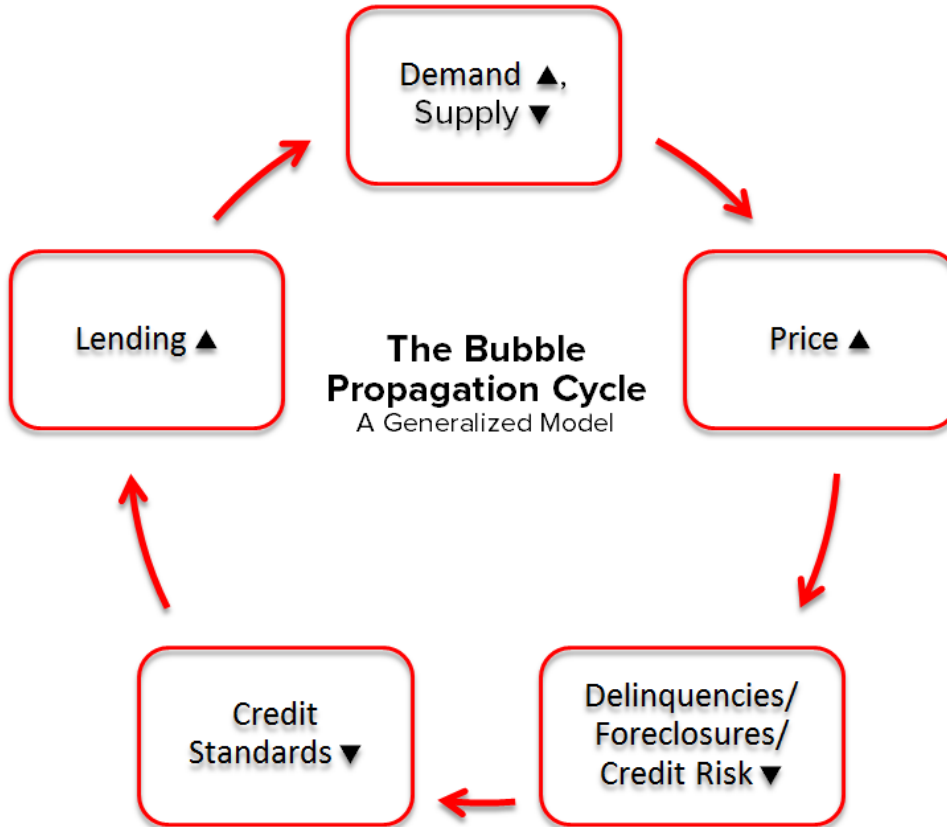
Labor growth in San Fran's information economy remain strong, but are decelerating on the margin.

SAN FRAN: VC FUNDING SLOWING



Venture Capital funding volume is slowing as of the latest data.

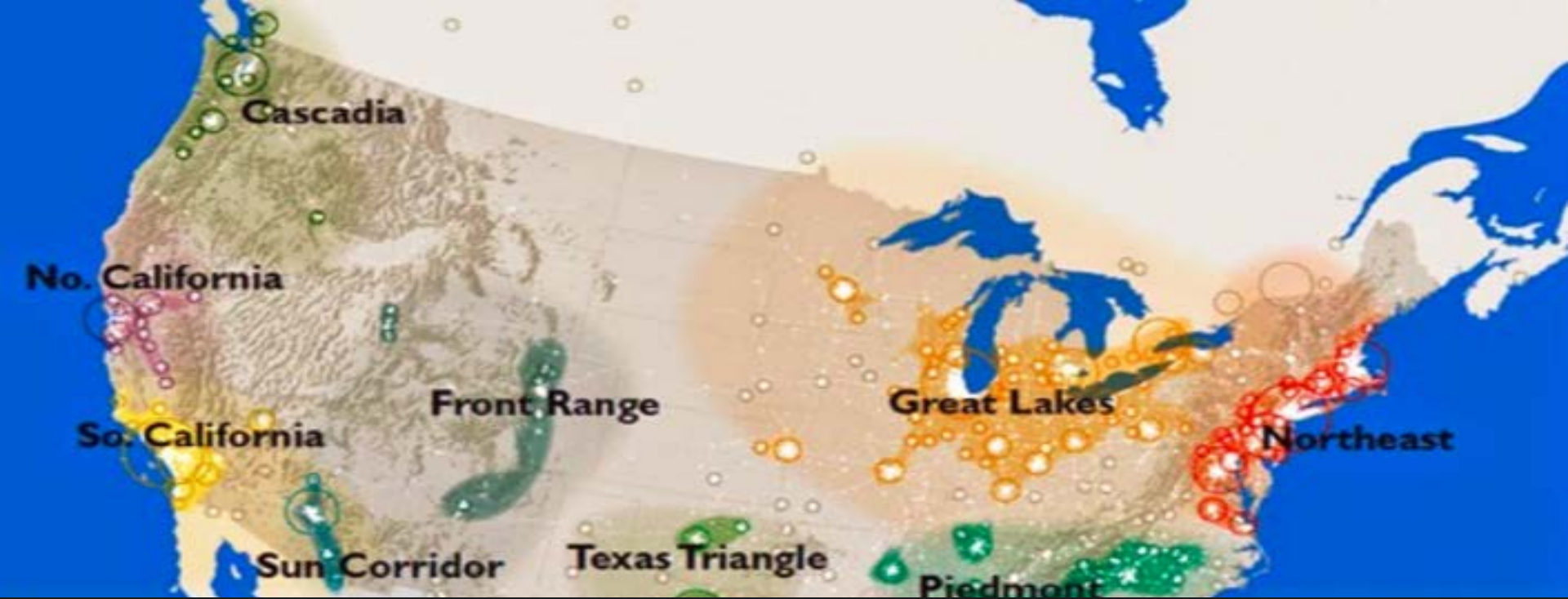
SAN FRAN: BUBBLE REQUIREMENTS



Here's what you need to have a certified bubble.

SO, IS SAN FRANCISCO A BUBBLE?

- **Affordability → Extremely Stretched**
- **Employment → Strong, but Slowing**
- **Tech Economy → Toppy/Late Cycle**
- **Credit Conditions → Stable/Reasonable**
- **Supply/Demand → Still Supportive**
- **Conclusion: Deceleration Probable, Some
Downside Possible, but Crash Unlikely**

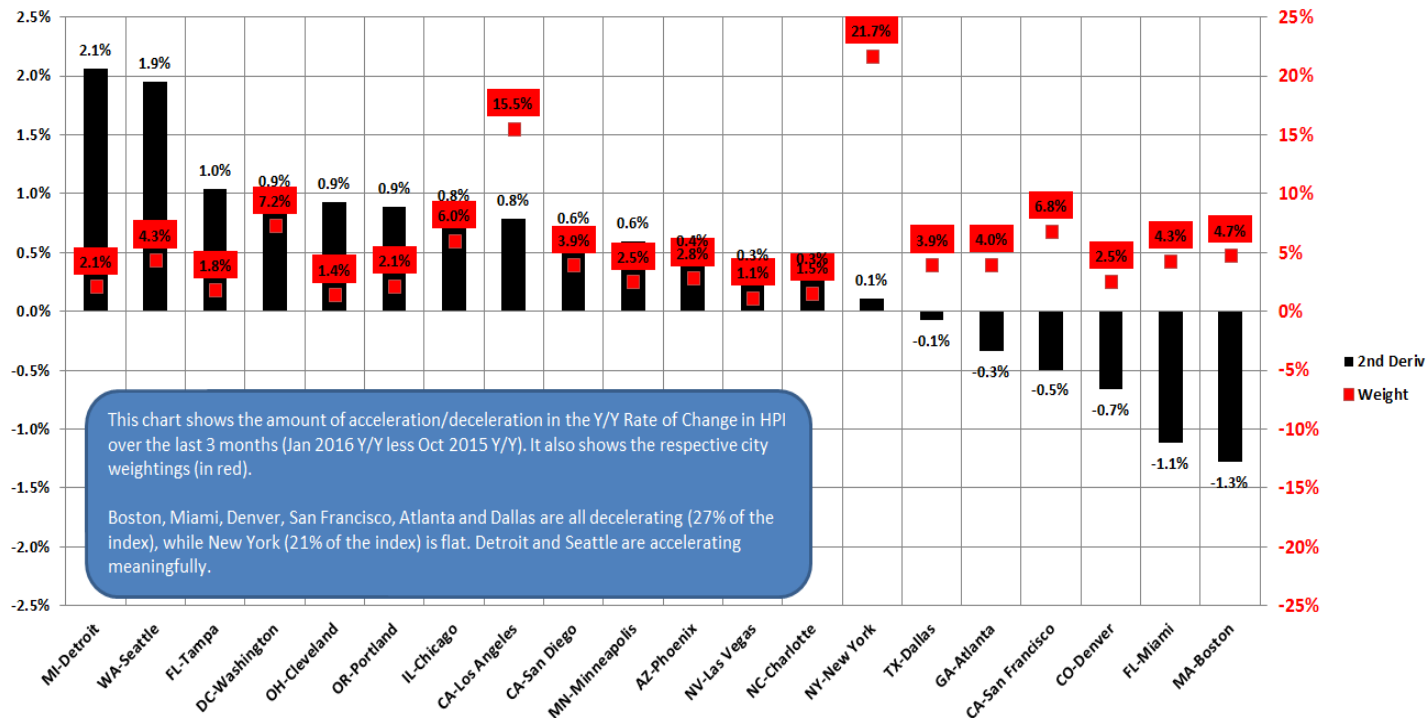


BIG CITIES



BIG CITIES: WHERE'S THE GROWTH?

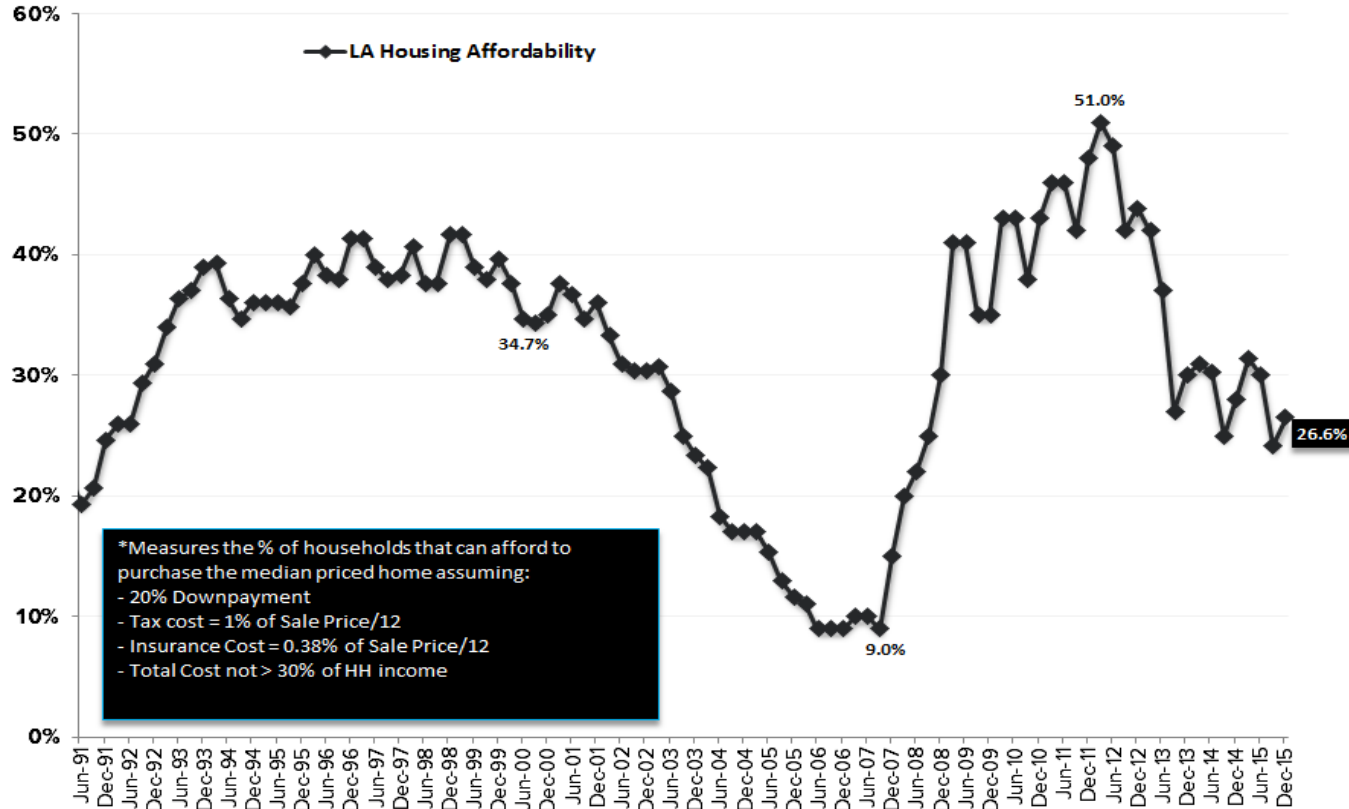
Recent Second Derivative HPI Trends by City & City Weights in CS Index



This shows the recent acceleration/deceleration trends by major US city as well as those cities respective sizes. San Fran, Miami, Denver, Boston and Atlanta are all showing deceleration.

BIG CITIES: LOS ANGELES

Los Angeles Housing Affordability*



Currently at 26.6%, LA's long-term affordability benchmark has averaged 31.7%. In 1991 and 2006, affordability reached -1.3 and -2.4 standard deviations below trend, and currently sits at -0.6 below trend.

BIG CITIES: MIAMI RISK

Another Condo Bust Looms in Miami

Developers, seeing sharp drop in sales, inventory surge, take steps to avoid a 'bloodbath'

By [LAURA KUSISTO](#)

March 29, 2016 11:43 a.m. ET

Miami is facing a condo bust—again.

Foreign investors have pulled back as the value of their currencies has dropped versus the dollar. Brazilians, for example, have seen the value of their currency against the dollar slip nearly 42% since 2014, while Argentines have seen their purchasing power in the U.S. decline more than 40%, according to Integra Realty Resources.



Miami appears to be on the cusp of a material slowdown.

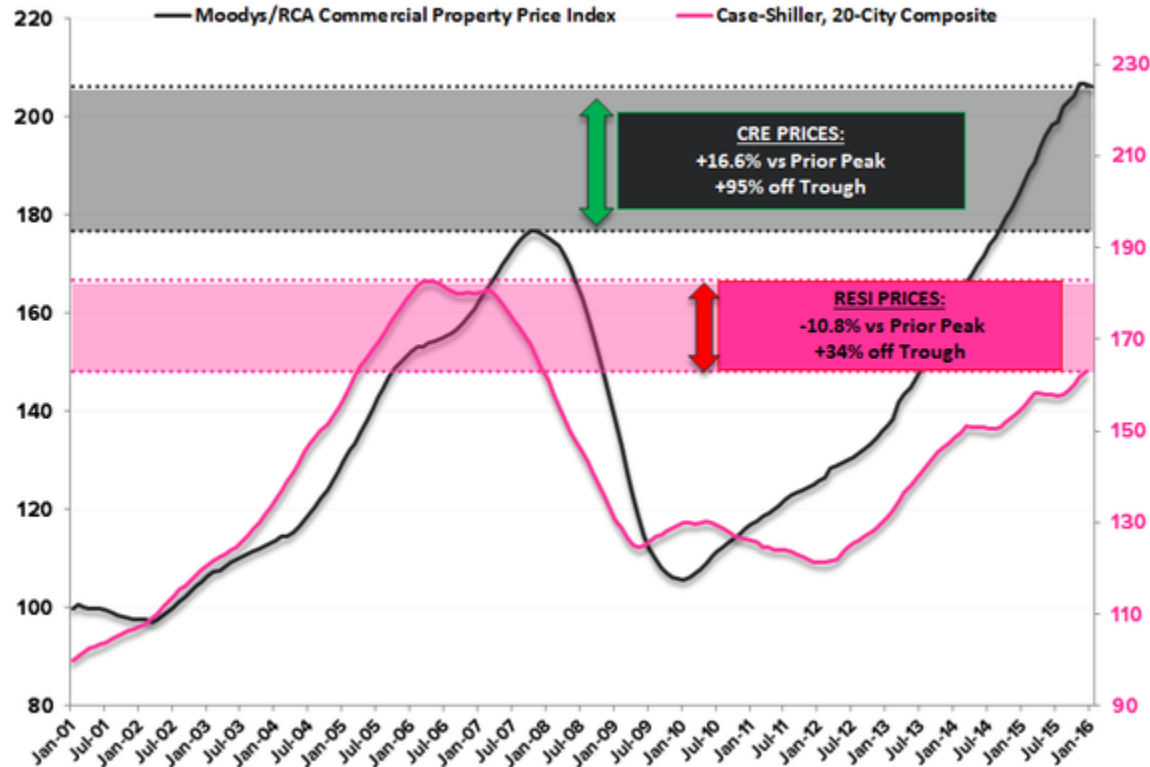


COMMERCIAL REAL ESTATE



CRE: SIX YEARS OF STRENGTH

COMMERCIAL vs RESIDENTIAL PRICING

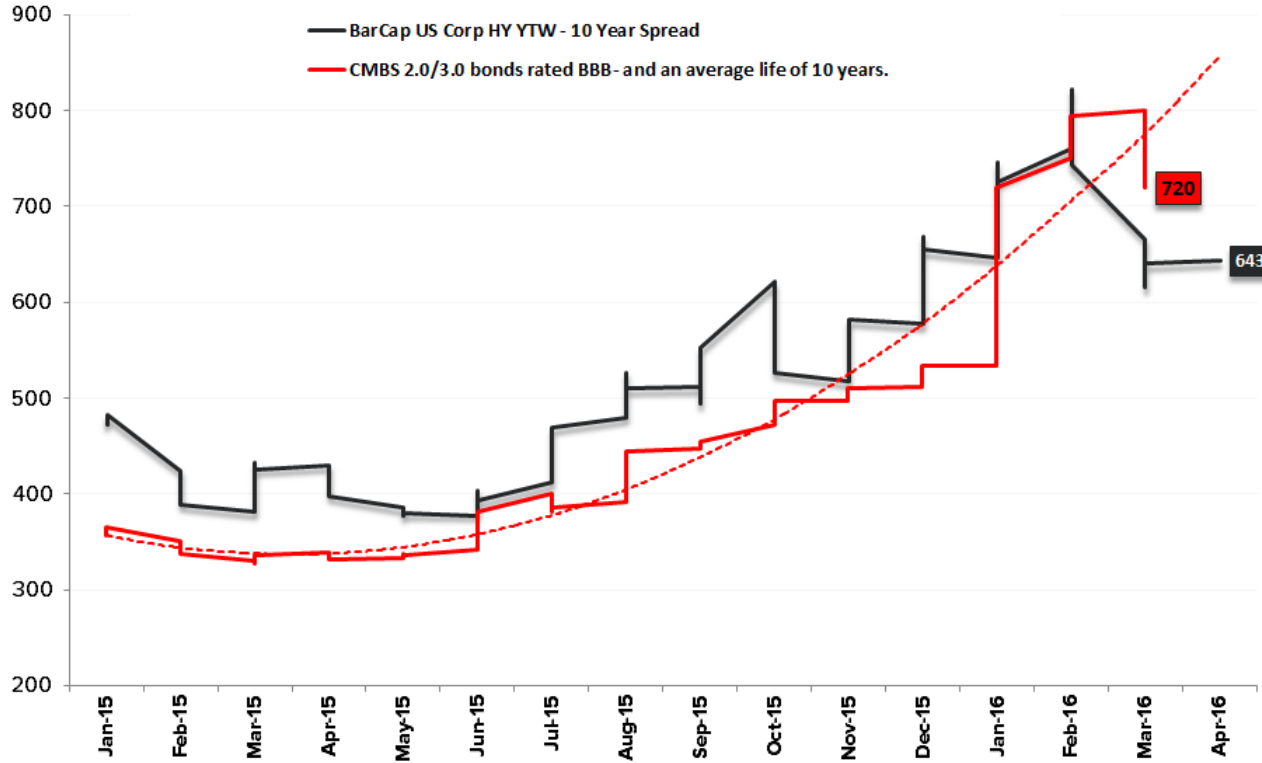


Source: Bloomberg

Commercial real estate price growth has been torrid since the 2010 bottom.

CMBS: YIELD WATCH

HIGH YIELD vs CMBS BBB- SPREADS



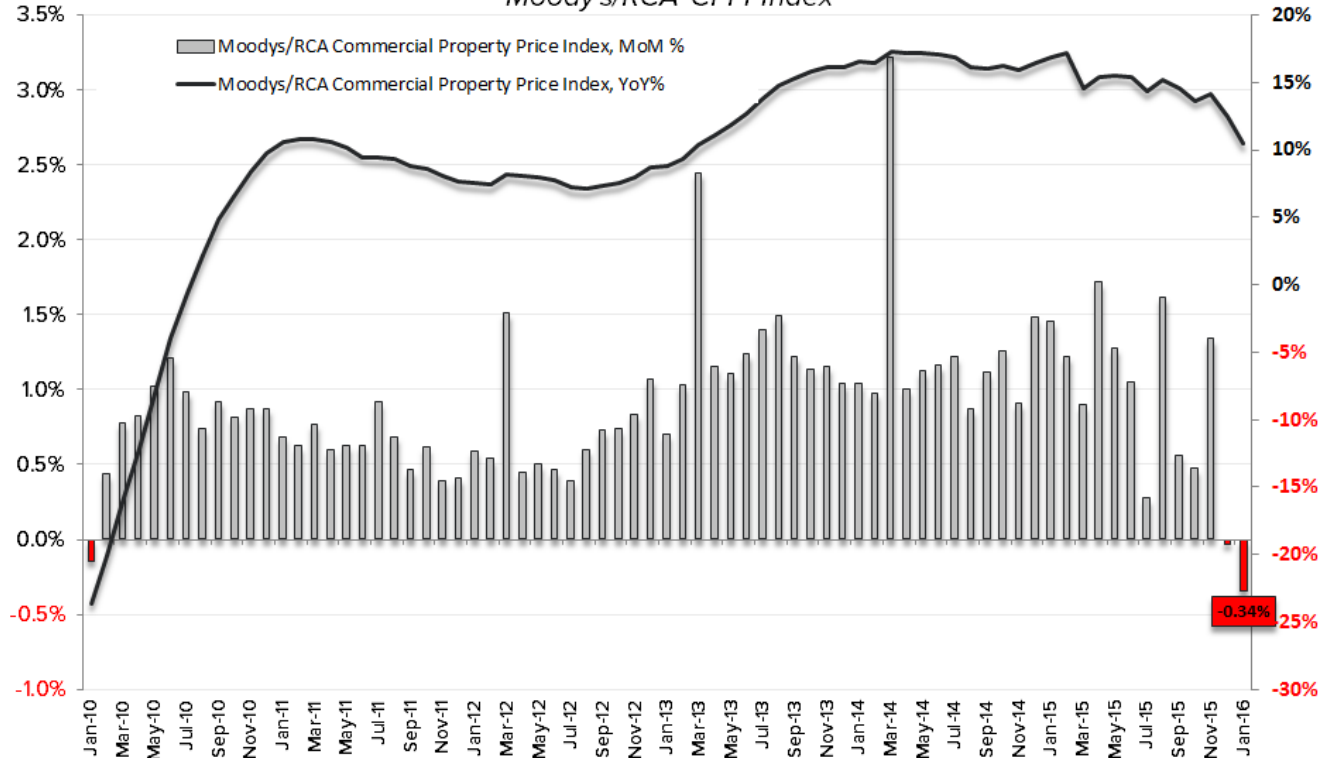
Source: Bloomberg

BBB- spreads in CMBS have been on a steady ascent since last Fall. While they've come in a bit recently, they remain extremely elevated.

CRE: PRICES STALLING

COMMERCIAL PROPERTY PRICES

Moody's/RCA CPPI Index



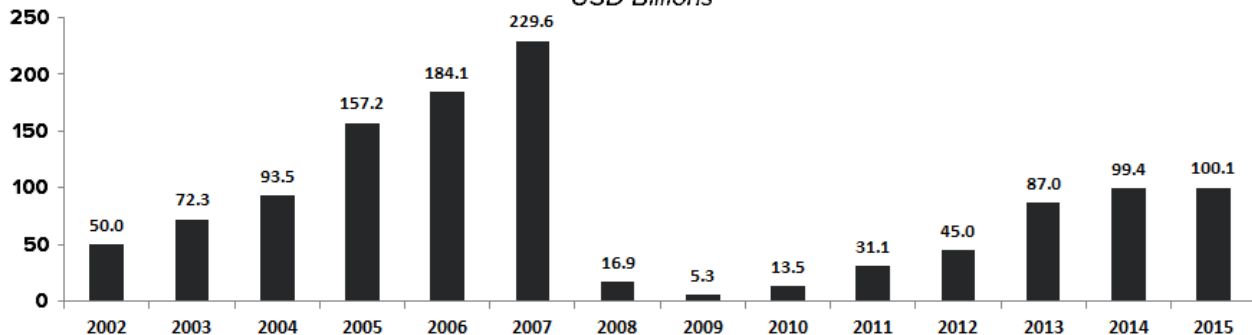
Source: Bloomberg, Census Bureau

After 70 consecutive months of M/M price growth, CRE prices have recently begun to go the other way.

CMBS: ISSUANCE SLIPPING

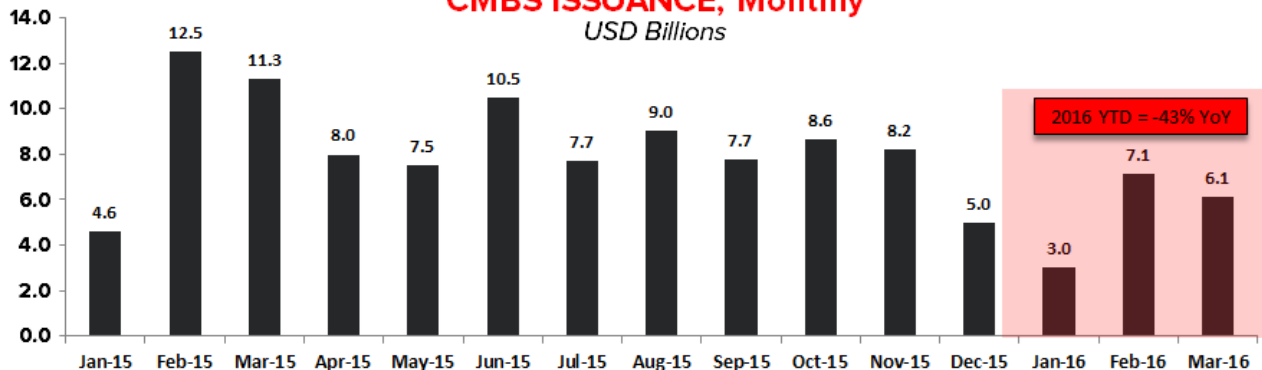
CMBS ISSUANCE, Annual

USD Billions



CMBS ISSUANCE, Monthly

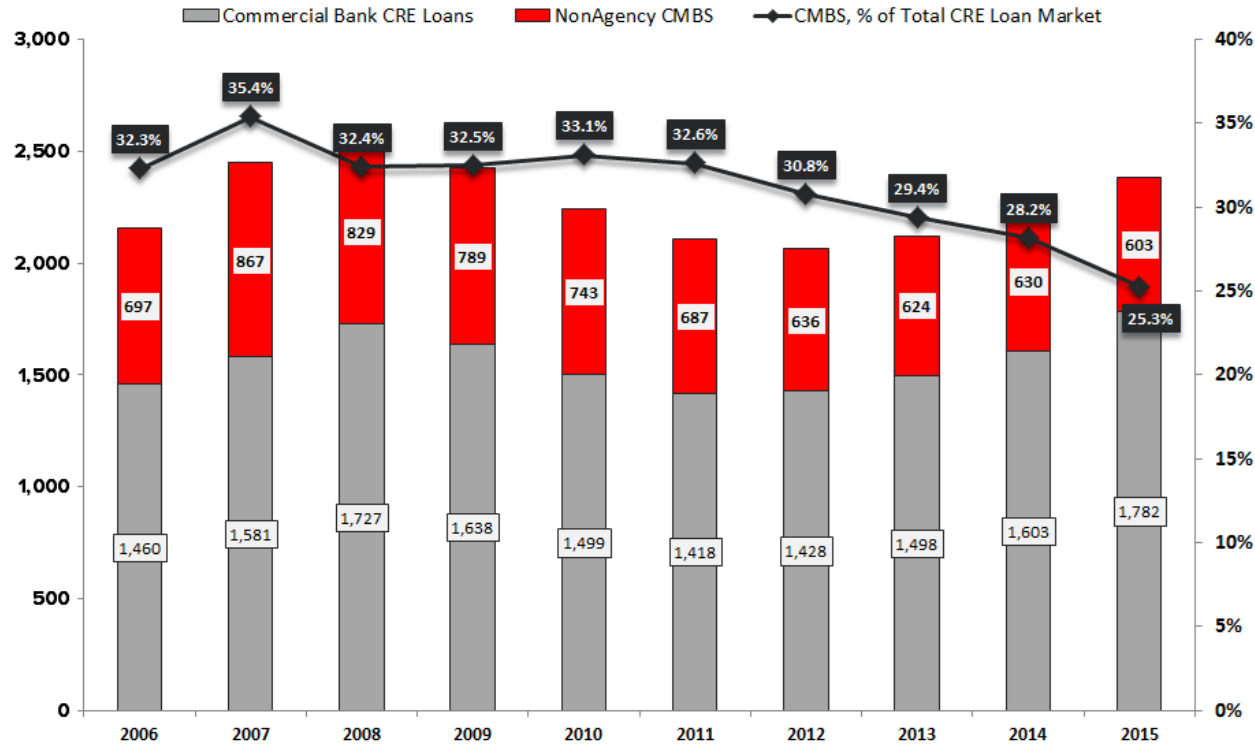
USD Billions



The credit stress emerging, issuance is down 43% year-over-year in the first quarter.

CMBS: A LARGE SHARE OF THE MKT

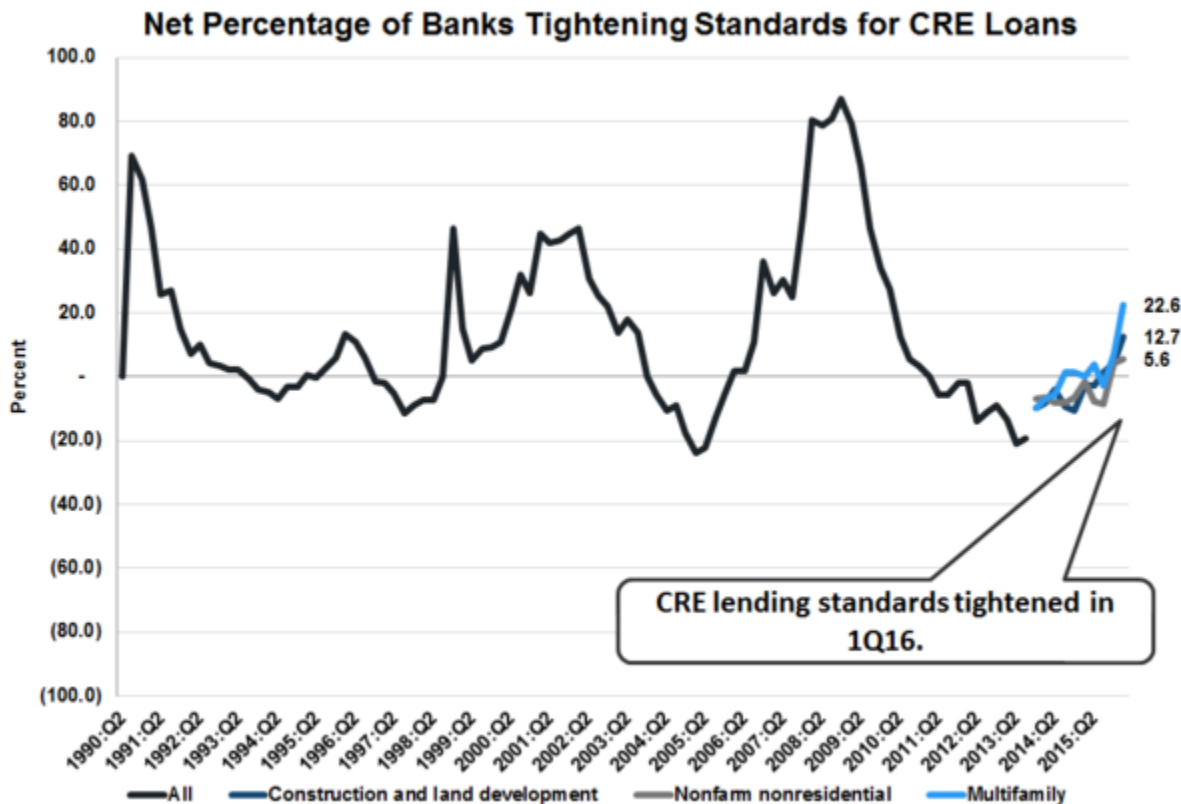
THE CRE FUNDING MARKET: CMBS & COMMERCIAL BANK CRE LOANS
USD Billions



Source: Federal Reserve, SIFMA, Hedgeye

CMBS funding accounts for roughly a quarter of CRE funding.

CRE: LOAN STANDARDS TIGHTENING



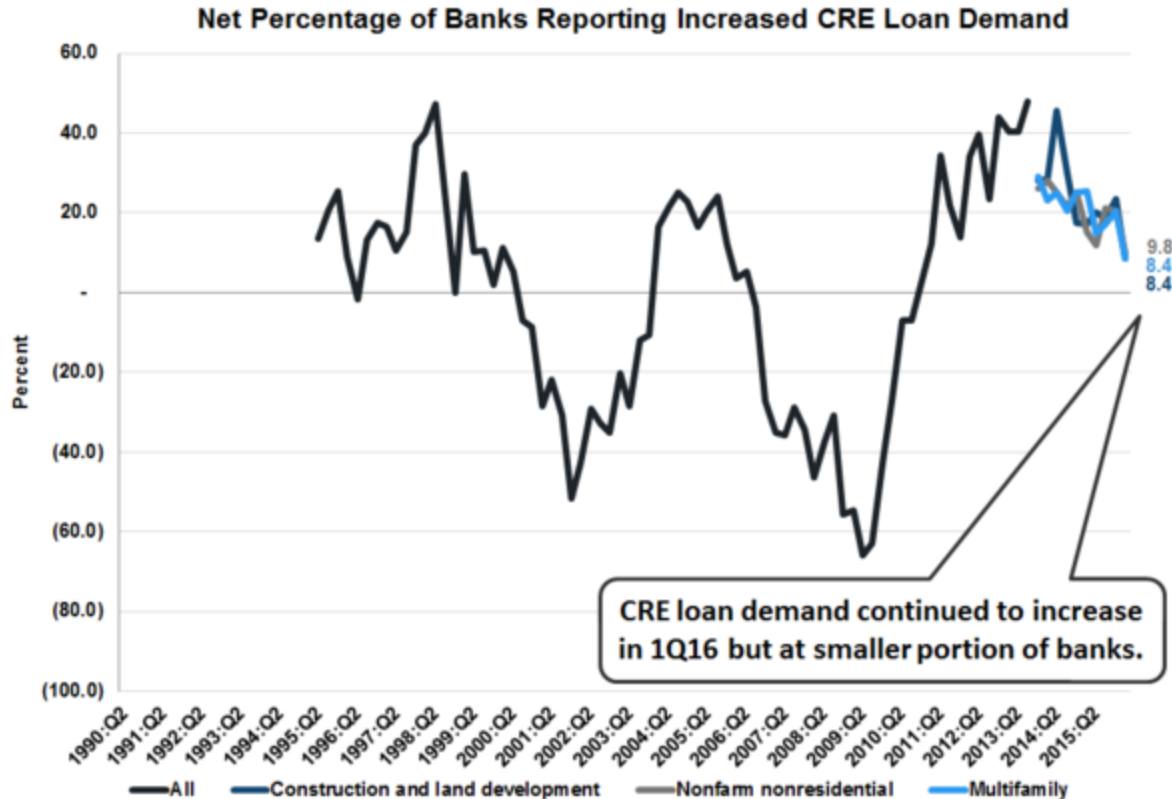
DATA SOURCE: FEDERAL RESERVE

©2016 HEDGEYE RISK MANAGEMENT

Loan standards are tightening at the bank level just as CMBS funding is getting more difficult.

CRE: LOAN DEMAND

Loan demand for commercial real estate is also beginning to decelerate.



DATA SOURCE: FEDERAL RESERVE

©2016 HEDGEYE RISK MANAGEMENT

CRE: OUTLOOK ↓



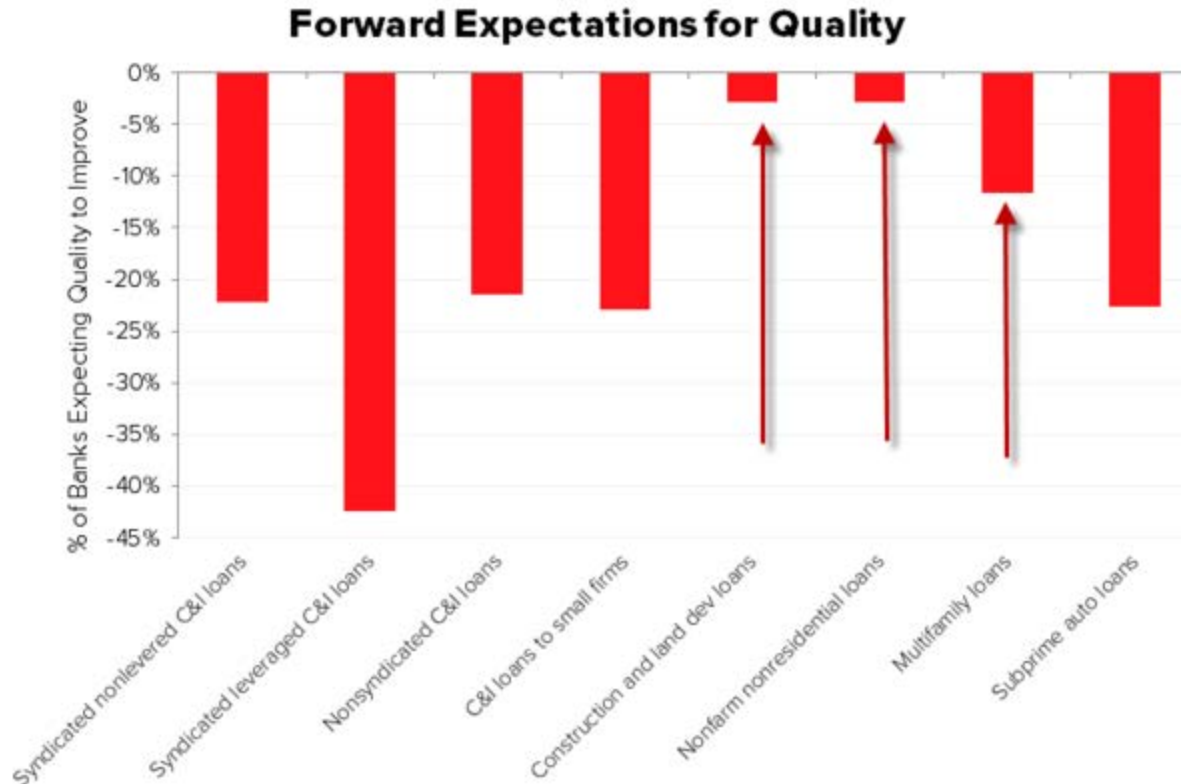
DATA SOURCE: FEDERAL RESERVE

©2016 HEDGEYE RISK MANAGEMENT

Loan officers expect further tightening of standards for CRE loans in the coming year, higher spreads, and reduced demand.

CRE: CREDIT QUALITY POISED TO

Expectations for loan quality are also negative.

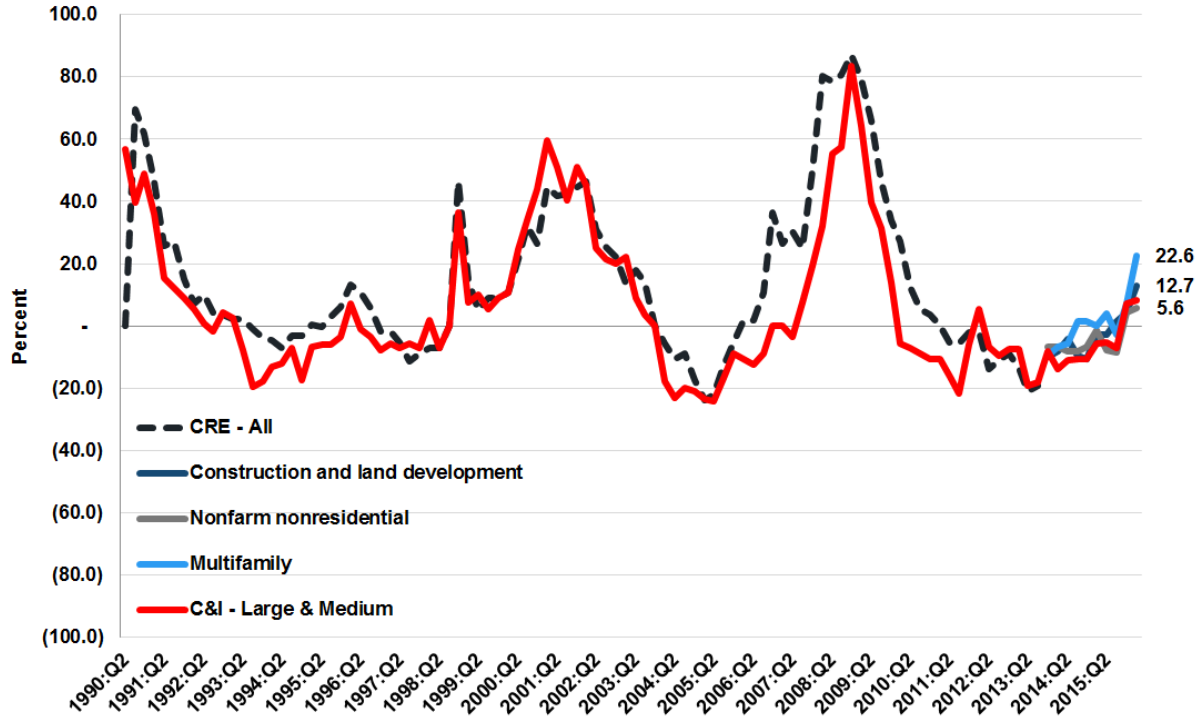


DATA SOURCE: FEDERAL RESERVE

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CRE: SYMPATICO WITH C&I

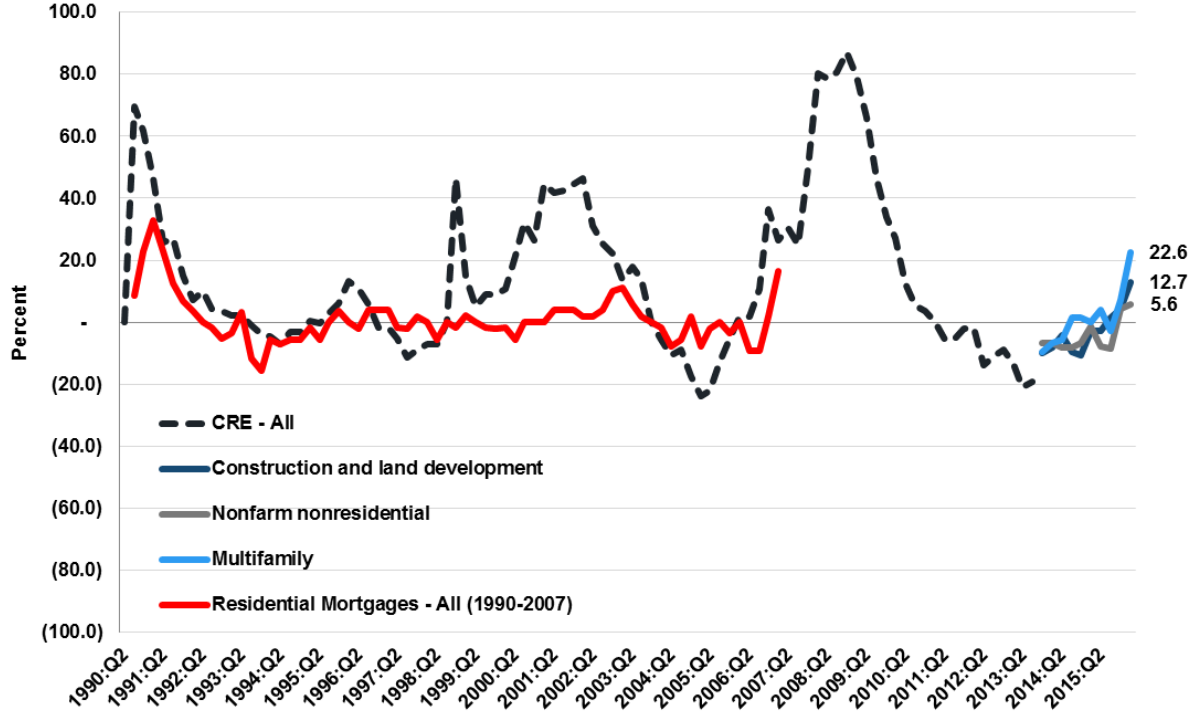
Net Percentage of Banks Tightening Standards
for CRE & C&I Loans



CRE & C&I lending standards have historically moved in tandem across cycles.

CRE: MIXED RELATIONSHIP WITH RESI

Net Percentage of Banks Tightening Standards
for CRE & Resi Loans

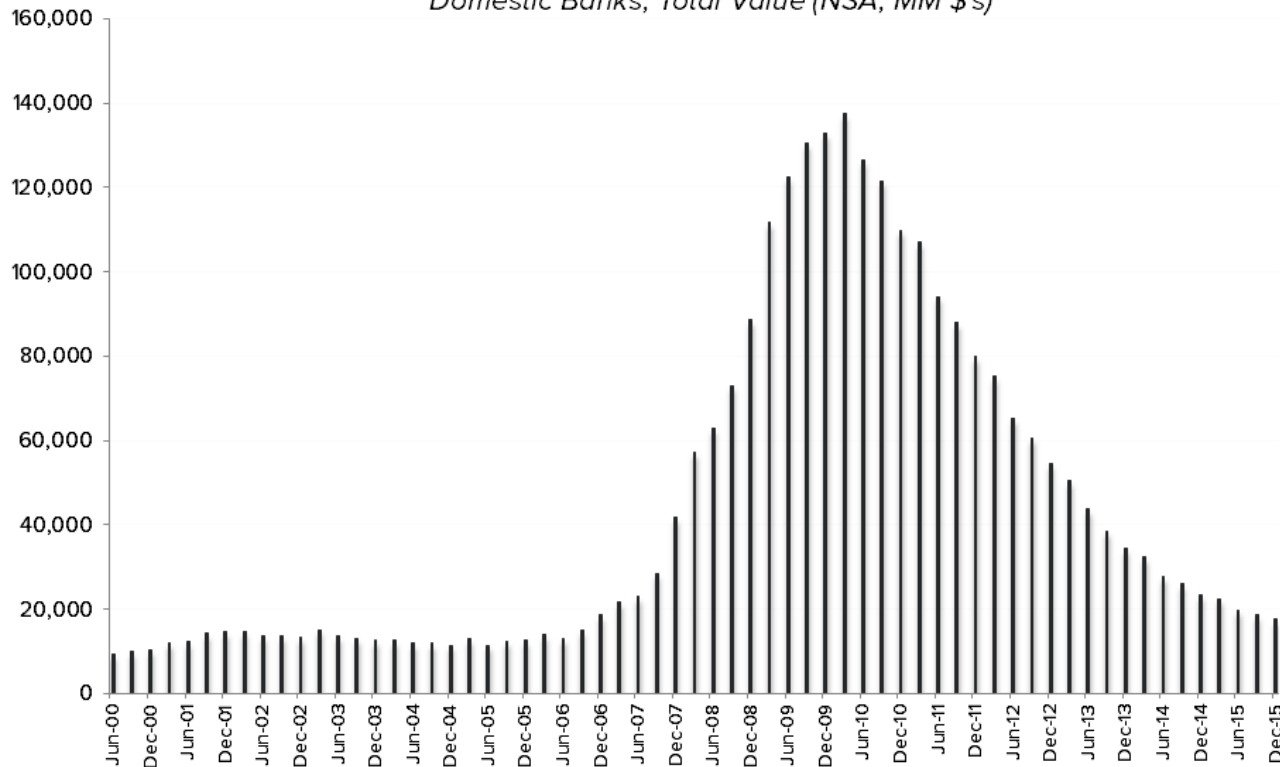


Two of the last three cycles have seen CRE and Resi lending standards move in concert with one another. The exception was 2001, when resi was in the early stages of entering a 100-year bull market.

CRE: DQ'S HAVE YET TO MATERIALIZE

DELINQUENT COMMERCIAL REAL ESTATE LOANS

Domestic Banks, Total Value (NSA, MM \$'s)

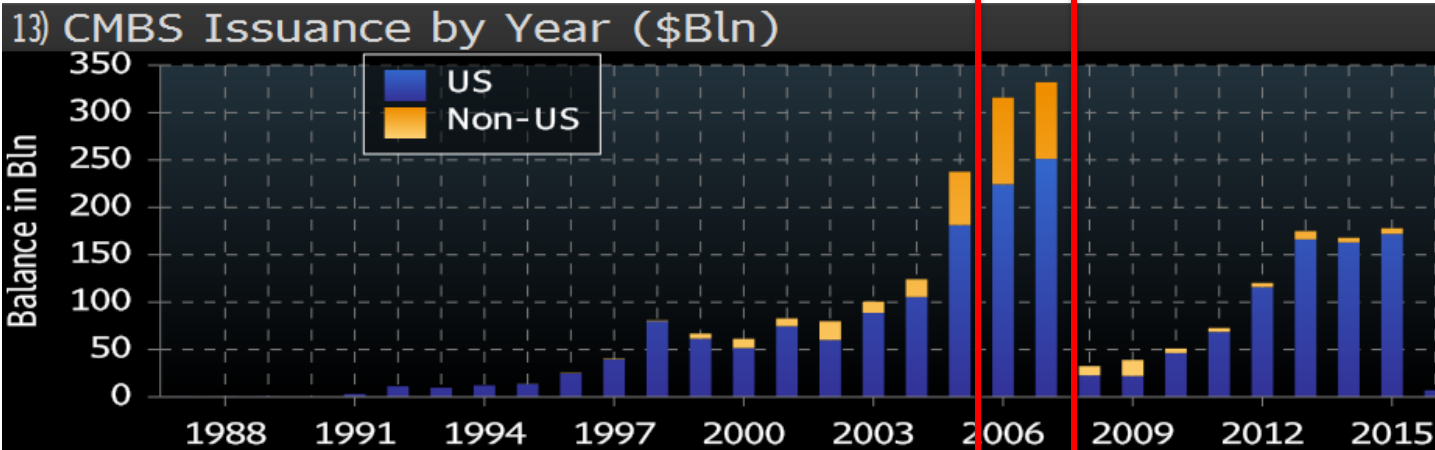


Source: Bloomberg, Federal Reserve

CRE loan quality has not yet begun to deteriorate.

CMBS: COMING MATURITY WAVE

CMBS terms are typically 10yr, meaning that 2016/2017 will see the steepest volume of refi activity since the end of the last crisis.



CRE: THE ZELL BELL?

Sam Zell: I'm Not a Big Buyer of Real Estate Today

9:15 AM EST
December 16, 2015

Sam Zell, chairman at Equity Group Investments, talks about his approach to the current real estate market and examines his deal with Barry Sternlicht. He speaks on

Real Estate Developer and 'Grave Dancer' Sam Zell: 'It's All about Supply and Demand'

Sep 19, 2007

North America Podcasts, Real Estate

Blackstone acquires trust in largest buyout - Business - International Herald Tribune

By Andrew Ross Sorkin and Terry Pristin
Published: Friday, October 20, 2006

Blackstone Group's \$36 billion acquisition of Equity Office Properties Trust marks the largest leveraged buyout in history, and illustrates how private equity firms continue to gobble up corporate America.

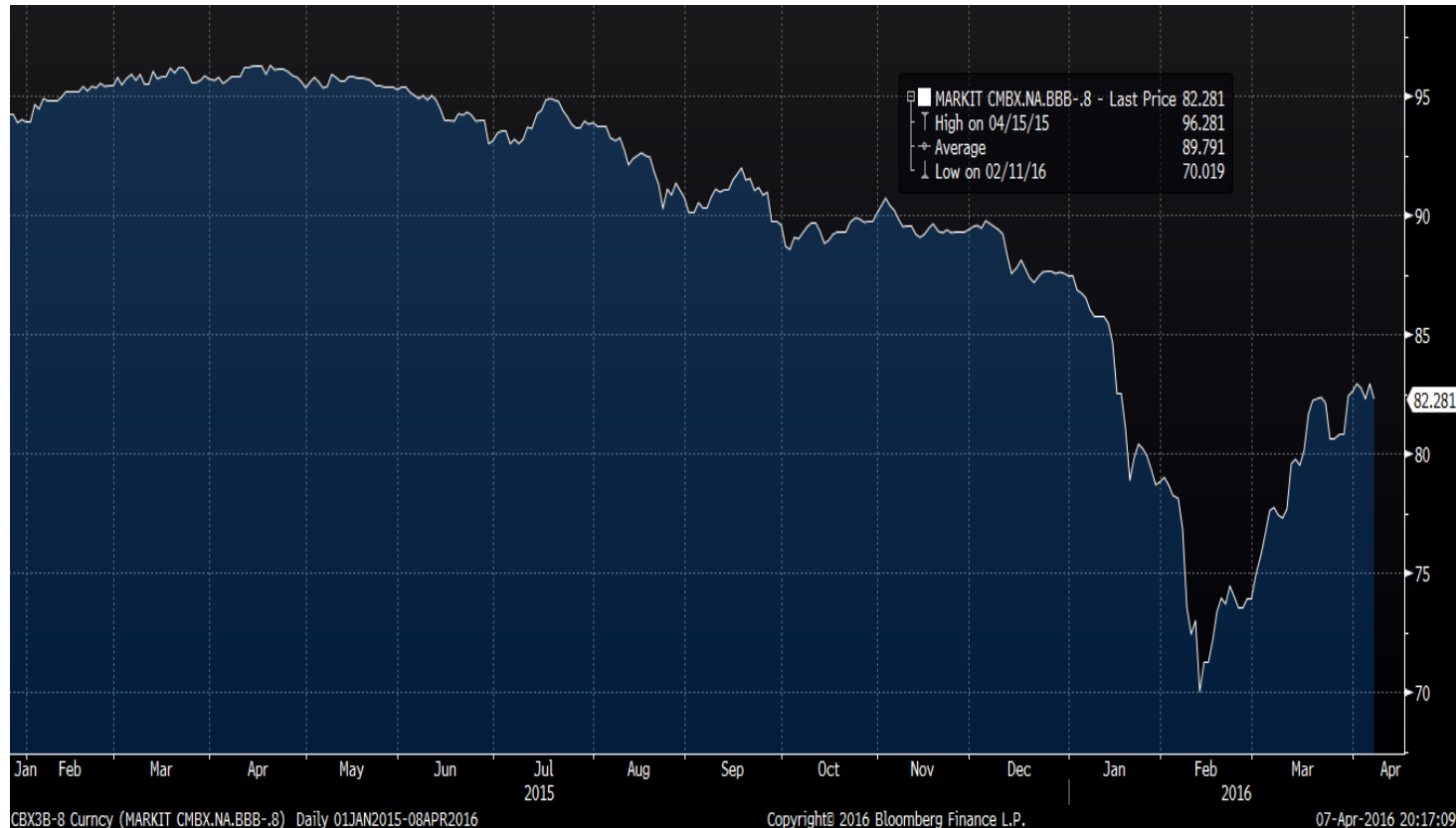
TWITTER

LINKEDIN

PRINT

Sam Zell is ringing the alarm bell. His track record speaks for itself.

CMBS: A BOUNCE?



The BBB- CMBX index has bounced since the Feb 11 lows alongside basically everything high beta, but the broader trend remains cyclical decline.

The background features a large, stylized, grey letter 'D' on the left side. To its right is a grey fence with five vertical pickets, each topped with a pointed roof and secured with a horizontal rail and a small square bracket. The entire scene is set against a light grey background.

3. TOP IDEAS

THEMATIC INVESTMENT CONCLUSIONS

1

UNDERWEIGHT → BUILDERS & BLDG PRODUCTS

The homebuilders and building products companies face a bevy of headwinds over the intermediate term ranging from weakening volume to labor cost pressures, seasonal headwinds and inflated valuations, not to mention cyclical sensitivity in the even of a bigger downturn.

(Homebuilders: BZH, DHI, HOV, KBH, LEN, MDC, MTH, MHO, NVR, PHM, TMHC, TOL)

(Building Products: PGEM, MHK, AWI, USG, IBP)

2

LONGS → HOME IMPROVEMENT

Home Improvement is how you play a secular constraint in supply, as it should continue to benefit from a tight new construction market.

(Home Improvement: HD, LOW)

3

LONGS → APARTMENT REITS

Apartment REITs are the utilities of the housing sector, and tend to fare relatively well vs the rest of the complex in down periods.

(Apartment REITs: AIV, AVB, CPT, EQR, ESS, MAA, PPS, UDR)

1Q16: HOUSING PERFORMANCE

HOUSING: SUBSECTOR PERFORMANCE

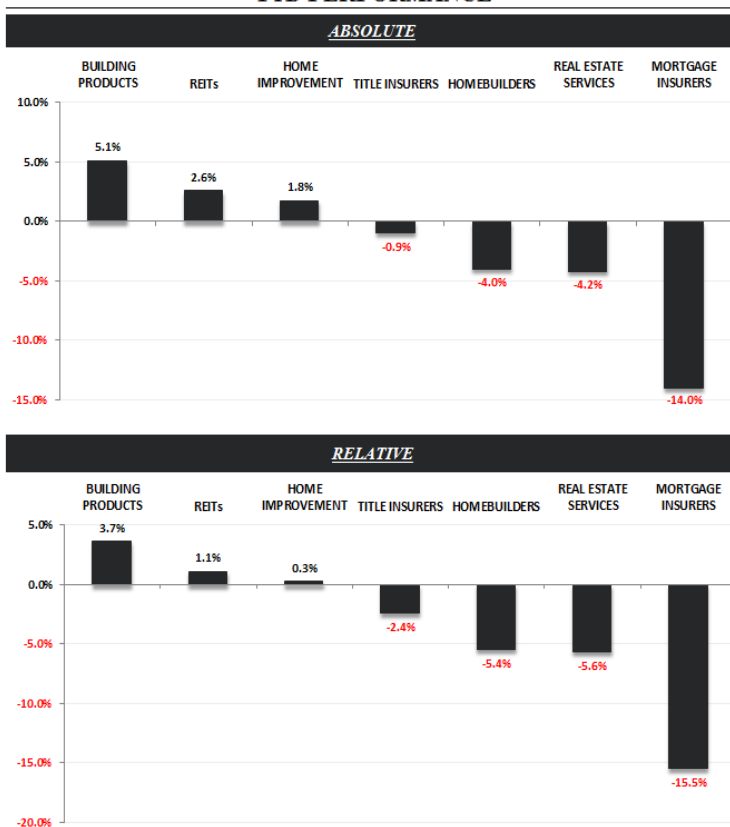
HEDGEYE HOUSING

INDEX	Ticker	5D % Chg	1M % Chg	3M % Chg	6M % Chg	YTD % Chg
S&P 500	SPX	1.8%	3.7%	3.0%	6.3%	1.5%
HOMEBUILDERS						
S&P Homebuilder Index	\$15HOME	0.5%	3.8%	0.1%	-4.3%	-4.0%
	Relative	-1.3%	0.2%	-2.9%	-10.5%	-5.4%
BUILDING PRODUCTS						
S&P Building Products Index	\$15BUILX	2.8%	6.7%	7.1%	17.9%	5.1%
	Relative	1.0%	3.0%	4.1%	11.6%	3.7%
HOME IMPROVEMENT						
S&P Home Improvement Index	\$SHOMI	2.8%	8.0%	2.7%	13.0%	1.8%
	Relative	1.0%	4.3%	-0.3%	6.8%	0.3%
REITs						
Apartment REITs*	REIT U Index	2.2%	6.4%	4.0%	7.8%	2.6%
	Relative	0.4%	2.7%	0.9%	1.5%	1.1%
REAL ESTATE SERVICES						
Real Estate Services*	RESRVCS U Index	3.9%	4.3%	-2.7%	-2.5%	-4.2%
	Relative	2.1%	0.6%	-5.8%	-8.8%	-5.6%
MORTGAGE INSURERS						
Mortgage Insurers*	MI U Index	3.4%	1.1%	-12.4%	-22.6%	-14.0%
	Relative	1.6%	-2.6%	-15.4%	-28.9%	-15.5%
TITLE INSURERS						
Title Insurers*	TI U Index	5.1%	4.8%	2.1%	-5.3%	-0.9%
	Relative	3.3%	1.1%	-0.9%	-11.6%	-2.4%
SUBSECTOR AVE						
	Abs	3.0%	5.0%	0.1%	0.6%	-1.9%
	Relative	1.2%	1.3%	-2.9%	-5.7%	-3.4%

*Equal Weighted Composites: REITs: AIV, AVB, CPT, EQR, ESS, MAA, PPS, UDR; RE Services: RLG, RMAX; MI: ESNT, MTG, NMH, RDN; TI: FNF, FAF, STC, BKF

Source: Bloomberg, HEDGEYE

YTD PERFORMANCE



REITs, Building Products and Home Improvement outperformed in 1Q16 while MI, TI, and Builders lagged.

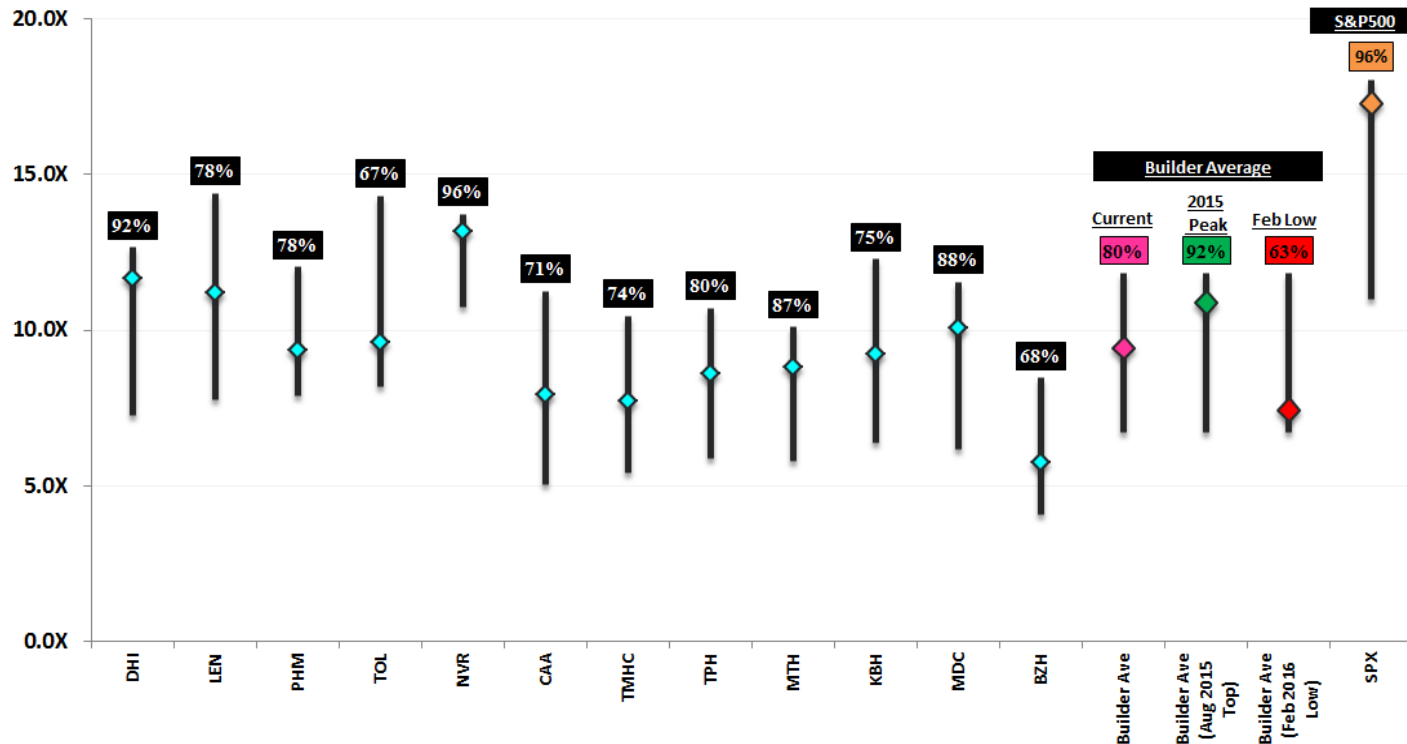
We missed the call on Building Products but our favored sector exposures for 1Q fared well:

Long: REIT's & Home Improvement

Short: Title Insurers & Builders

BUILDER VALUATION IN CONTEXT

BUILDERS: Forward P/E, % of 5Y Max

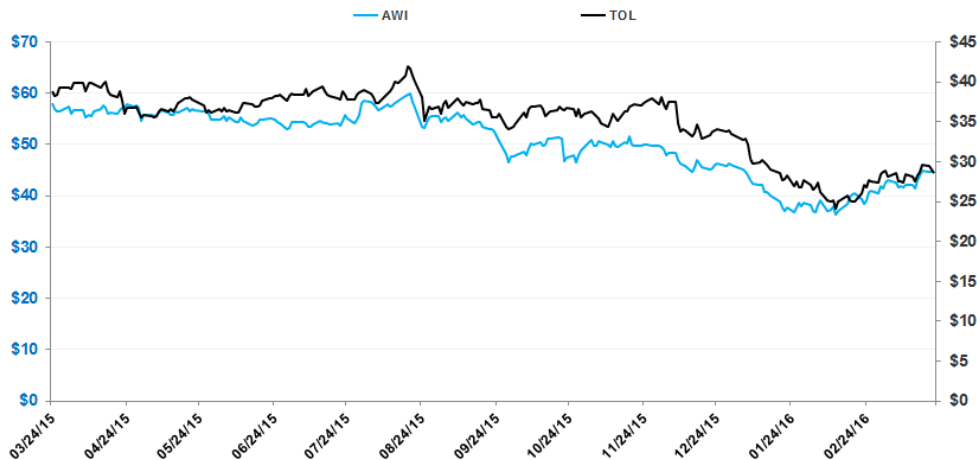


Homebuilder valuations are currently sitting at 80% of the peak of their trailing 5Y range. They have +12% upside to their Aug 2015 peaks and -17% downside to their Feb 2016 lows.

BUILDERS & BUILDING PRODUCTS

1YR Correlation Coefficients											
	PGEM	MHK	AWI	USG	IBP	SWK	SHW	OC	FBHS	AMWD	MAS
XHB	0.84	0.84	0.91	0.87	0.63	0.64	0.38	0.01	(0.06)	(0.17)	(0.15)
ITB	0.85	0.86	0.79	0.76	0.68	0.64	0.34	0.24	0.17	0.05	0.05
LEN	0.81	0.88	0.75	0.75	0.73	0.62	0.22	0.25	0.13	0.06	0.03
DHI	0.42	0.64	0.09	0.21	0.60	0.46	(0.22)	0.80	0.78	0.74	0.67
PHM	0.80	0.58	0.88	0.79	0.50	0.22	0.46	(0.18)	(0.30)	(0.43)	(0.38)
TOL	0.81	0.73	0.92	0.84	0.52	0.55	0.35	(0.09)	(0.19)	(0.26)	(0.32)
HB Basket Avg	0.71	0.71	0.66	0.65	0.59	0.46	0.20	0.19	0.11	0.03	0.00
Avg R-val Housing	0.76	0.75	0.72	0.70	0.61	0.52	0.25	0.17	0.09	(0.00)	(0.02)
S&P 500	0.63	0.50	0.70	0.52	0.18	0.71	0.74	(0.11)	(0.08)	(0.26)	(0.16)
XLF	0.73	0.67	0.83	0.71	0.38	0.78	0.57	(0.07)	(0.11)	(0.21)	(0.21)

LTM STOCK PRICE: AWI & TOL



DATA SOURCE: FACTSET

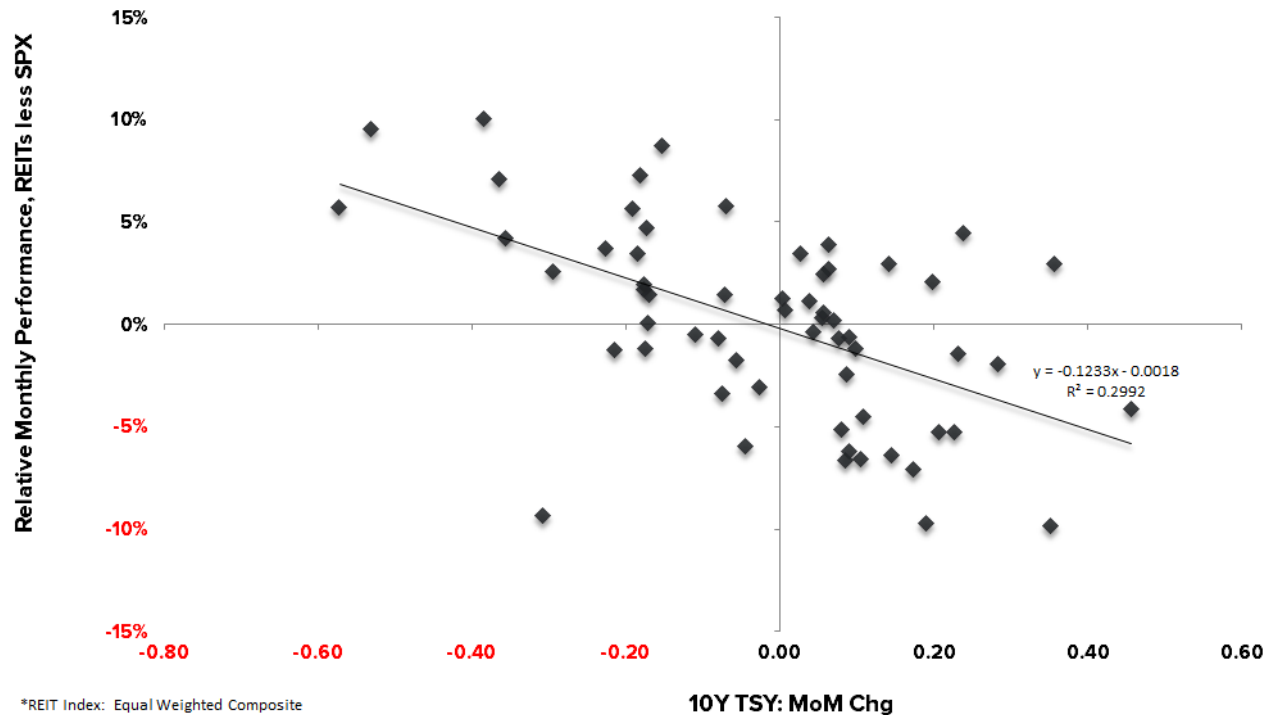
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Roughly half the building products complex correlates strongly with the homebuilder universe, suggesting its vulnerable to the same weakening drivers.

REITS VS RATES

*REITs vs Rates

2011-Present, Monthly



*REIT Index: Equal Weighted Composite
(AIV, AVB, CPT, EQR, ESS, MAA, PPS, UDR)

REITs are pretty sensitive to rates and our view is that long rates aren't going higher.

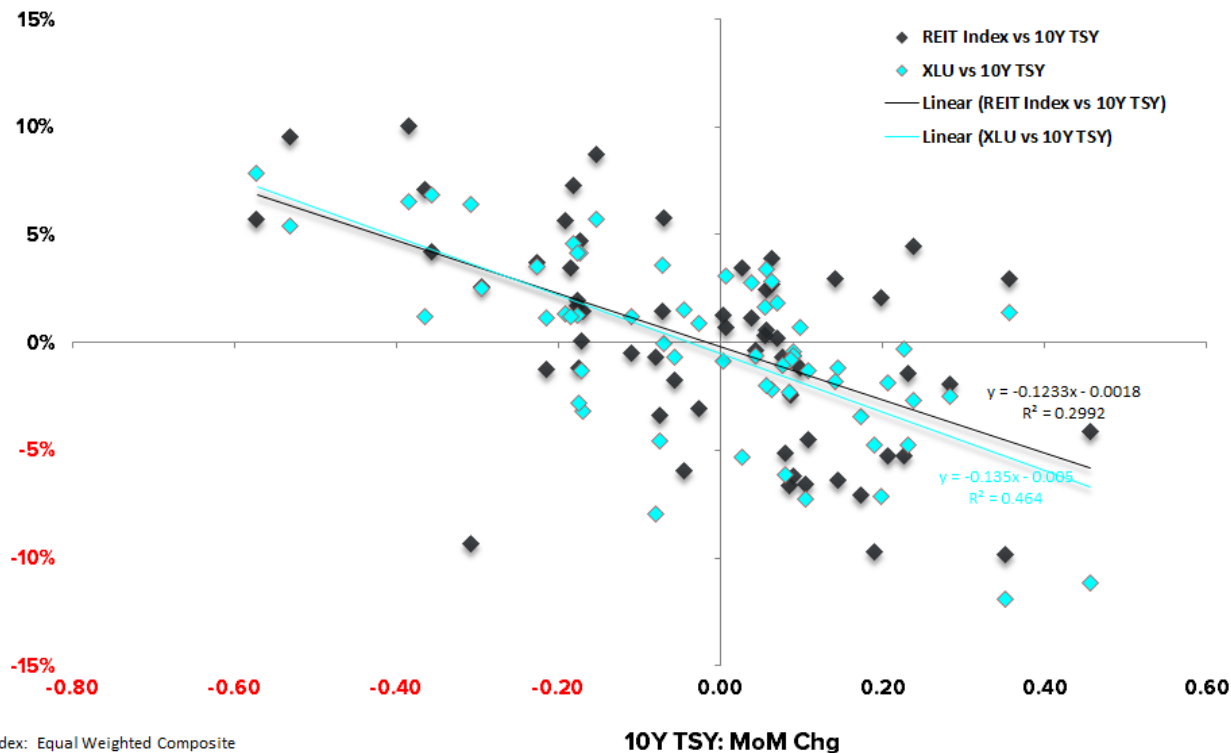
*Monthly returns plotted reflect price only

REITS LOOKS LIKE UTES

*REITs vs. Utes vs Rates

2011-Present, Monthly

Relative Monthly Performance, REITs/XLU less SPX



*REIT Index: Equal Weighted Composite
(AIV, AVB, CPT, EQR, ESS, MAA, PPS, UDR)

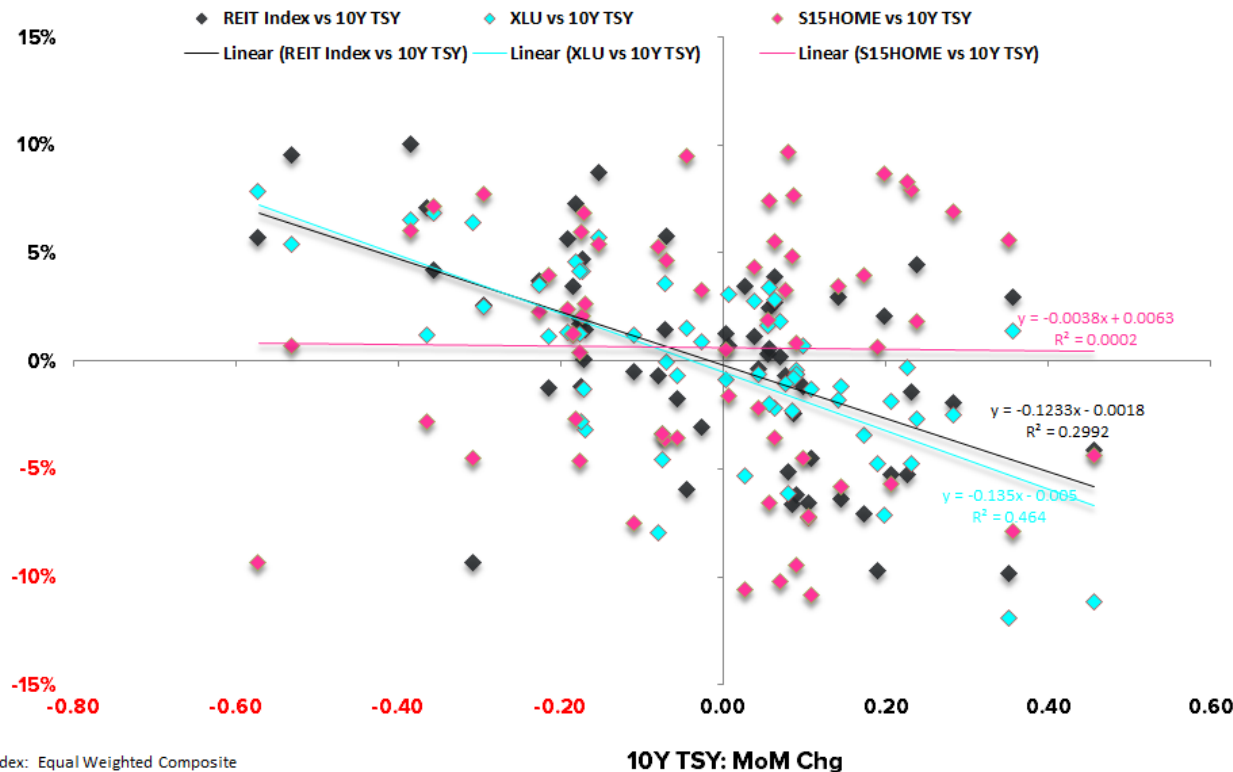
REITs perform very similarly to utilities from a rate standpoint.

HOMEBUILDERS NOT SO MUCH

*REITs/Utes/Builders vs Rates

2011-Present, Monthly

Relative Monthly Performance, REITs/XLU/S15HOME less SPX

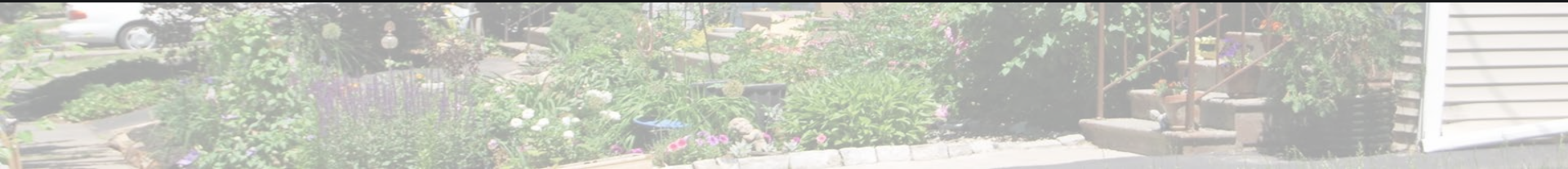


*REIT Index: Equal Weighted Composite
(AIV, AVB, CPT, EQR, ESS, MAA, PPS, UDR)

Homebuilders tend to co-integrate with rate trends, but they don't correlate well on a short or intermediate term basis.

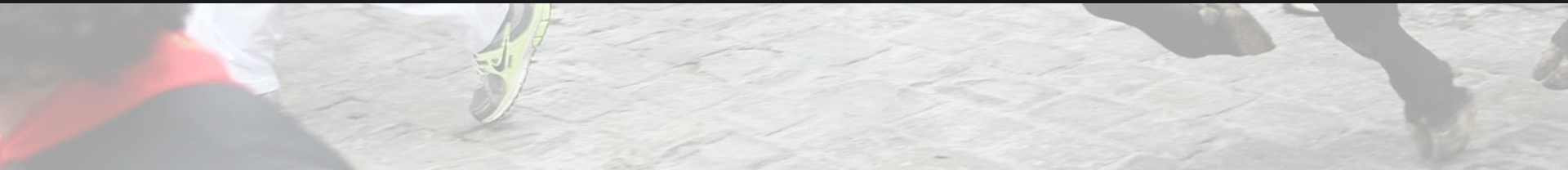


APPENDIX



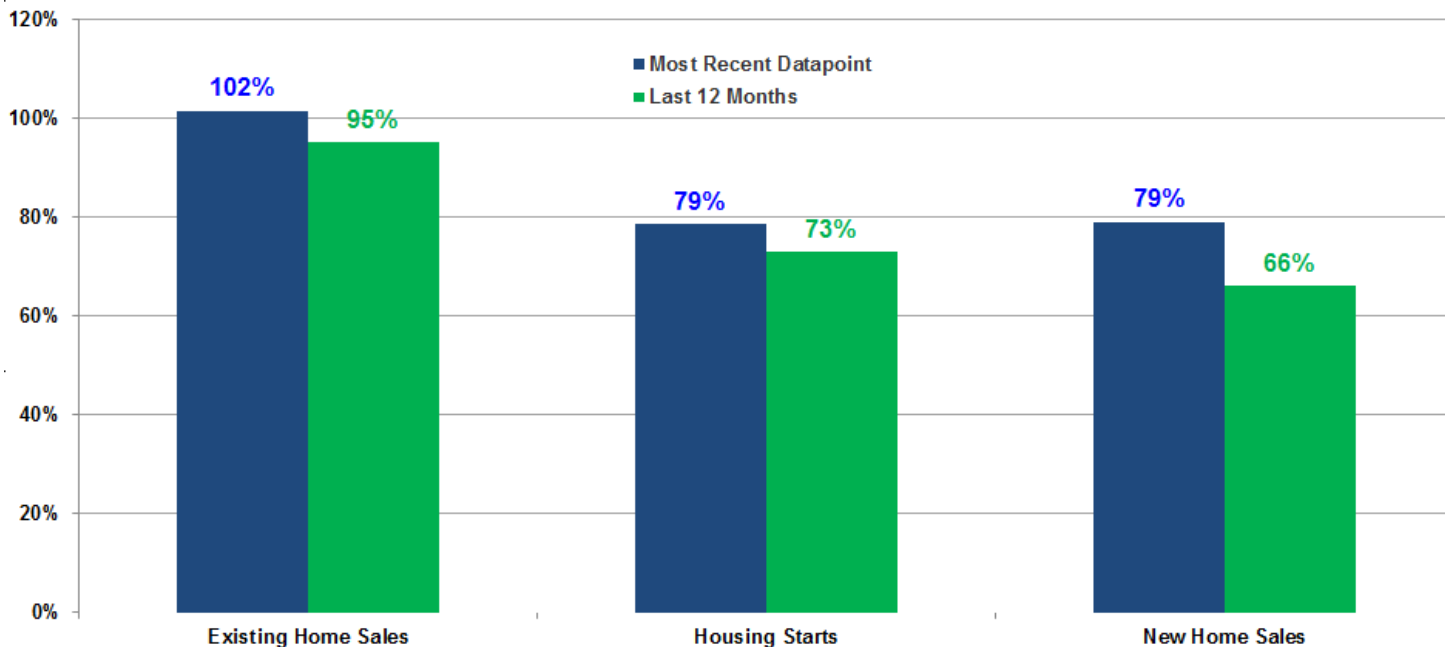


LONGER-TERM → STILL BULLISH



BACK TO BASELINE

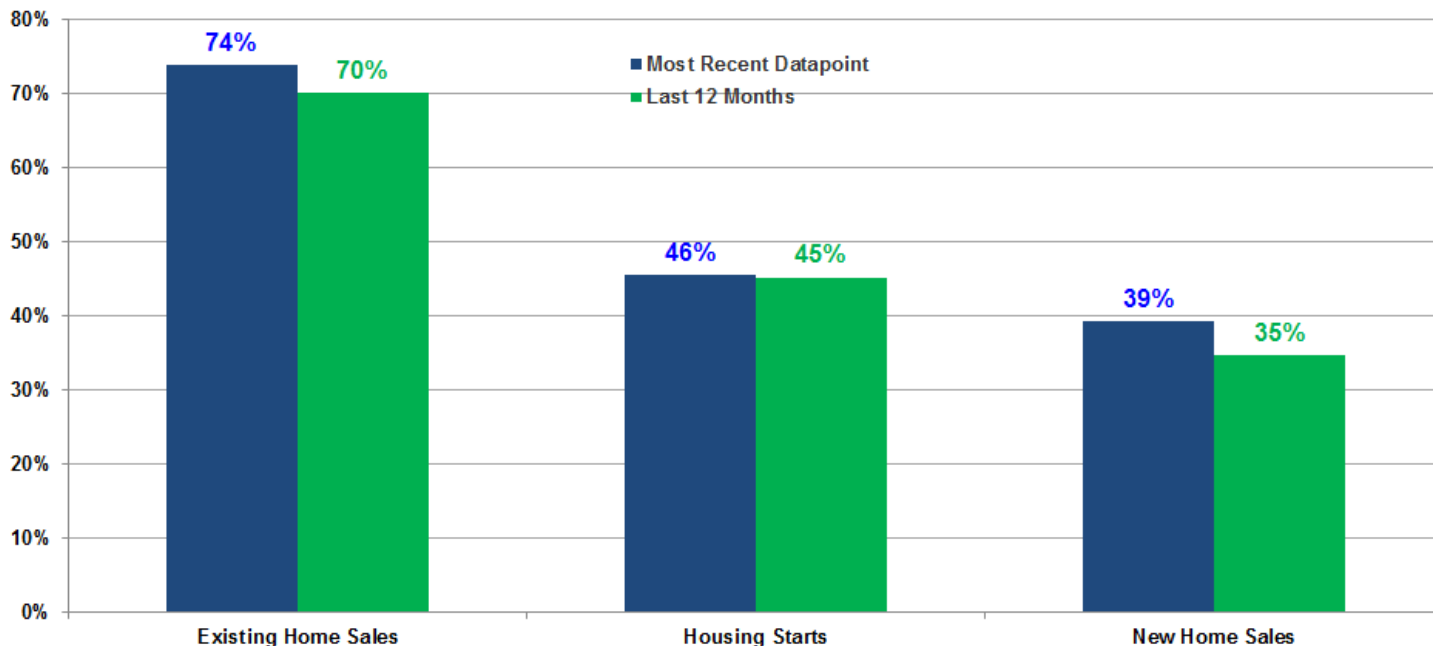
Mean Reversion Potential: EHS, Starts & NHS vs. Avg Since 1998



Taking a step back, here's how Existing Home Sales, Housing Starts and New Home Sales compare with the averages since 1998.

ONWARD TO PEAK

Prior Peak Potential: EHS, Starts & NHS vs. Peak Since 1998



DATA SOURCE: NAR, CENSUS, HRM

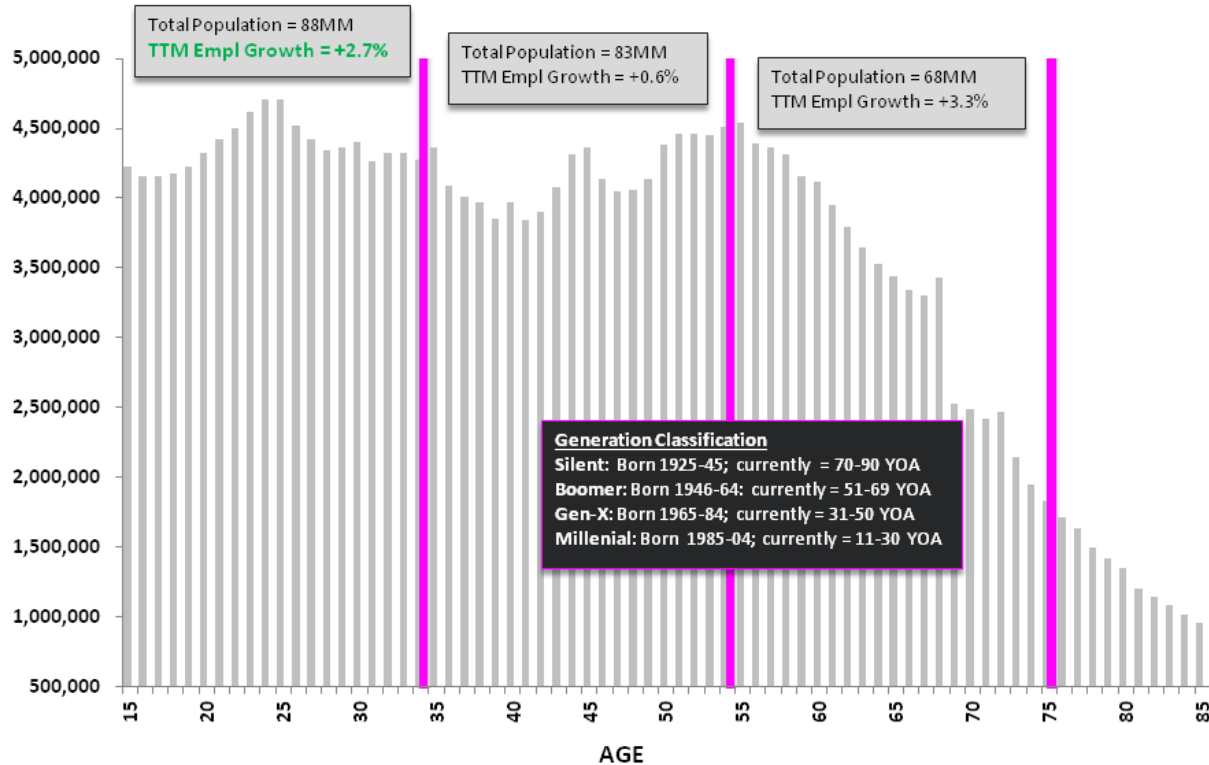
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And here's how they compare with the prior peak since 1998.

For reference, we chose 1998 because that's how far back EHS goes and we wanted to show things on an apples-to-apples basis.

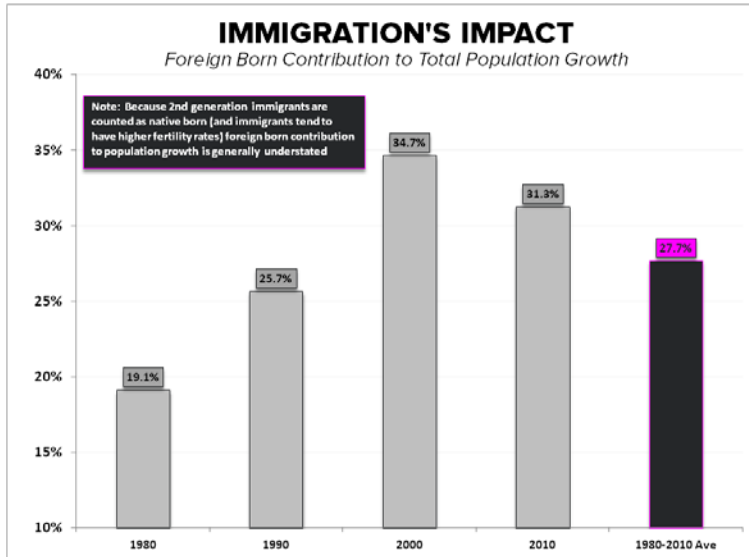
DEMOGRAPHICS OF DEMAND

POPULATION DISTRIBUTION & CLASSIFICATION



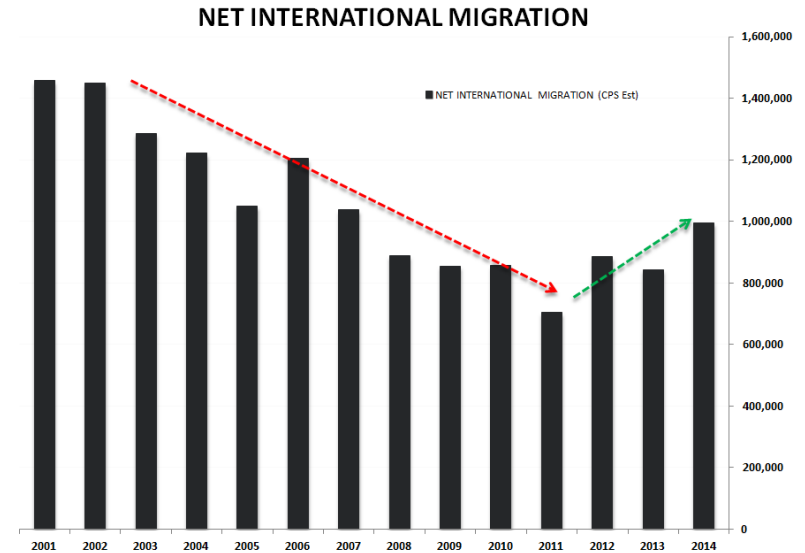
The Millennial wave has been well advertised but that doesn't diminish the economic gravity associated with it.

IMMIGRATION MATTERS & IT'S INFLECTING



Secular Support

Immigration has accounted for ~30% of total population growth over the last three decades.



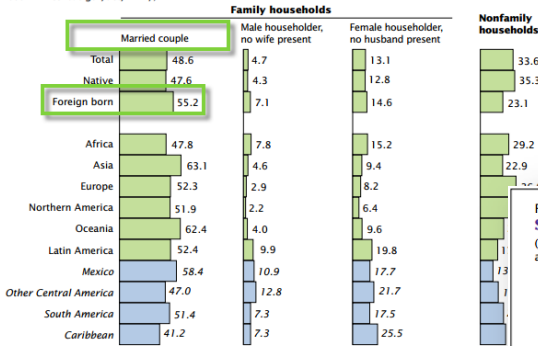
Cyclical Strengthening

Initial 2014 immigration estimates show a return to 1MM for the first time since 2007.

THE DEMOGRAPHIC TURN HAS A LONG TAIL

Figure 10.
Household Type: 2010

(Percent distribution. Households are classified by nativity and region of birth of the householder. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)



Note: Some percentages do not sum to 100.0 due to rounding.
Source: U.S. Census Bureau, American Community Survey, 2010.

Figure 6.
Fertility: 2009-2010

(Based on women aged 15 to 50 years. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)

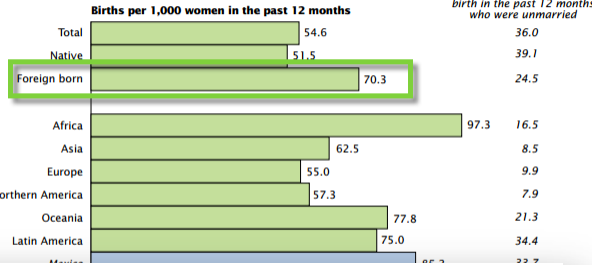
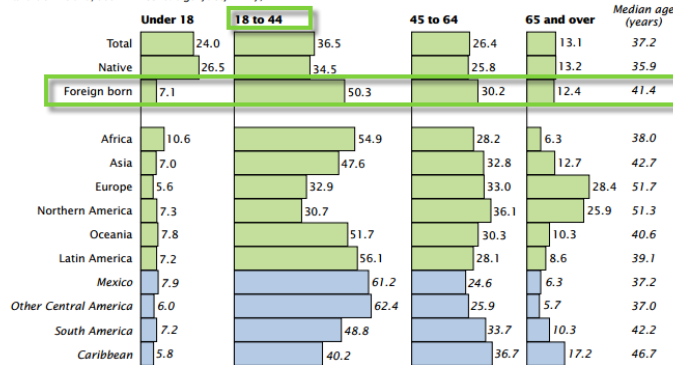


Figure 3.
Selected Age Groups and Median Age: 2010

(Percent distribution. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)



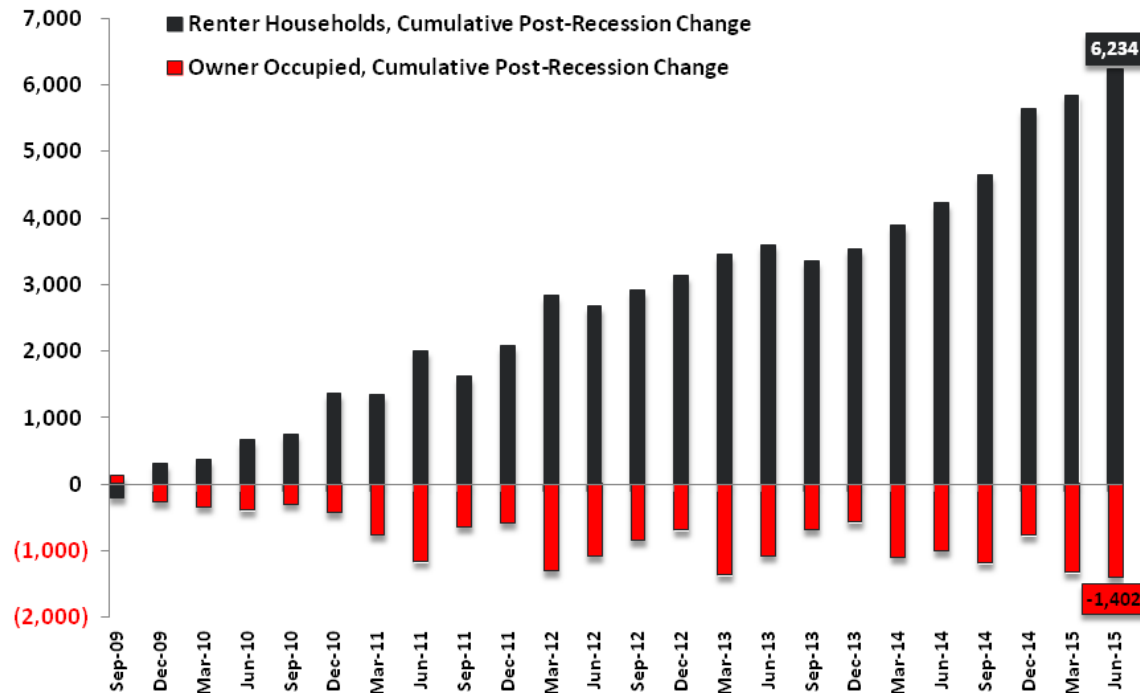
Note: Some percentages do not sum to 100.0 due to rounding.
Source: U.S. Census Bureau, American Community Survey, 2010.

Foreign born residents are young, carry higher fertility rates and are more likely to be married – all characteristics supportive of household formation.

RENTAL DEMAND HAS PREDOMINATED

U.S. HOUSEHOLD FORMATION

Cumulative Change in Households by Type, Post-Recession Period (3Q09-Present)



DATA SOURCE: CENSUS BUREAU, BLOOMBERG

The formation of renter households has driven positive net HH formation as creation of owner occupied households remains net negative in the post-recession period... at least according the Census Bureau's HVS Survey.

DRIVING EXCESS RENTAL SUPPLY NEGATIVE

RENTAL VACANCY RATE



DATA SOURCE: CENSUS BUREAU

RENTAL VACANCY

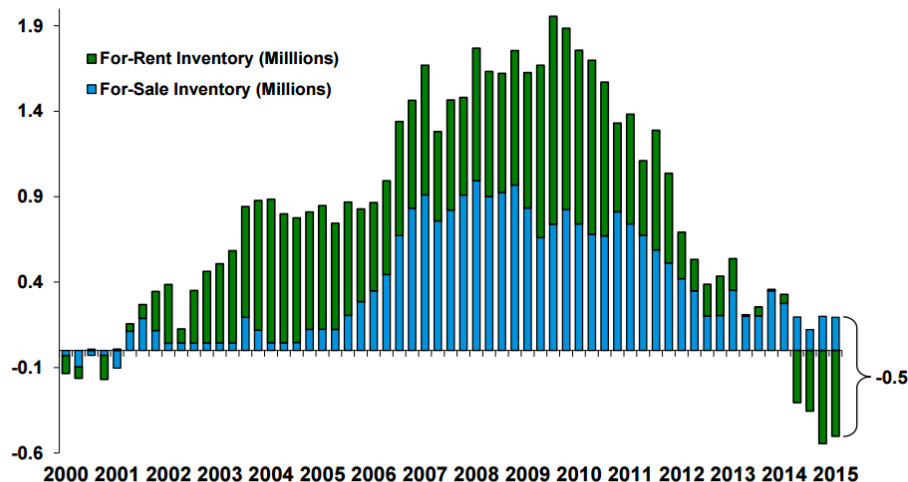
After peaking at 11.1% in 3Q09, the Rental Vacancy Rate stood at 6.8% in 1Q15 according to Census Data.

DATA SOURCE: BLOOMBERG, CENSUS BUREAU, FREDDIE MAC

Vacant housing over/undersupply



Surplus/Shortage of Vacant Homes (Numbers in Millions)



Source: Freddie Mac calculations using U.S. Census Bureau data. Negative values reflect shortage or undersupply relative to the historical benchmark. The over/undersupply of vacant housing was estimated based on the average vacancy rate from 1994Q1 to 2003Q4. 2015 data as of June 30, 2015.

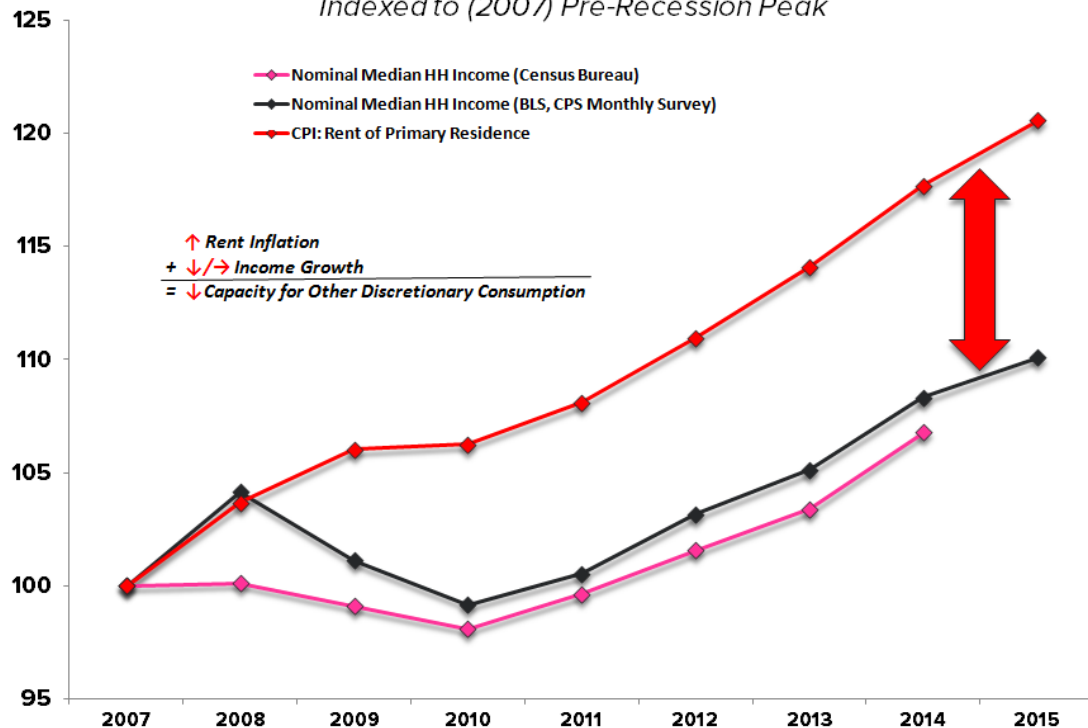
SHORTAGE IN FOR-RENT INVENTORY

For-Rent inventory remains in deficit to the tune of ~0.5mm units relative to historical (non-bubble) averages.

RENTAL COST PRESSURE HAS BEEN REAL

HOUSEHOLD INCOME & RENT COST INFLATION

Indexed to (2007) Pre-Recession Peak



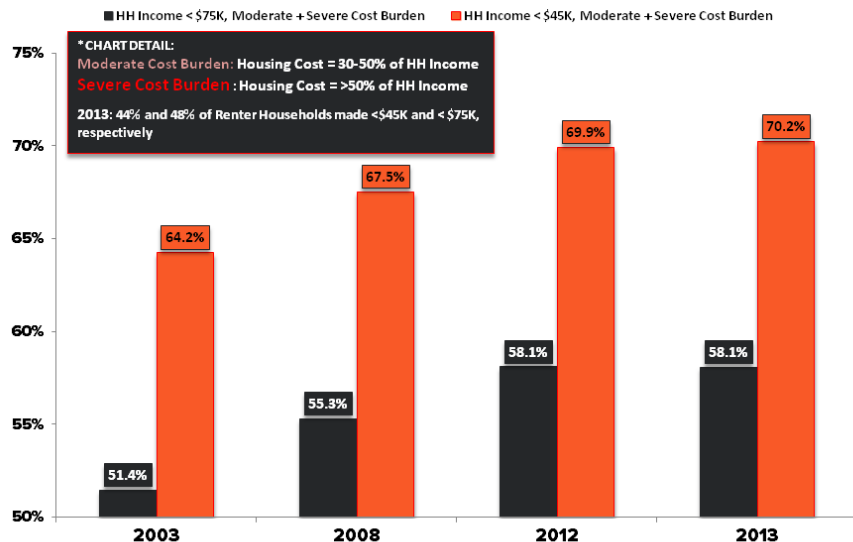
Household income growth has been negative on a real basis across all the primary survey's for most of the post-crisis period and rental cost inflation continues to grow at a premium to nominal wages.

*Rent of Shelter carries a ~32% weight in the CPI Index with Owners Equivalent Rent (OER) carrying a ~24% weight in the basket .

THE BURDEN VS THE BASEMENT

RENTER COST BURDEN*

% of Renter Households with Moderate & Severe cost Burdens



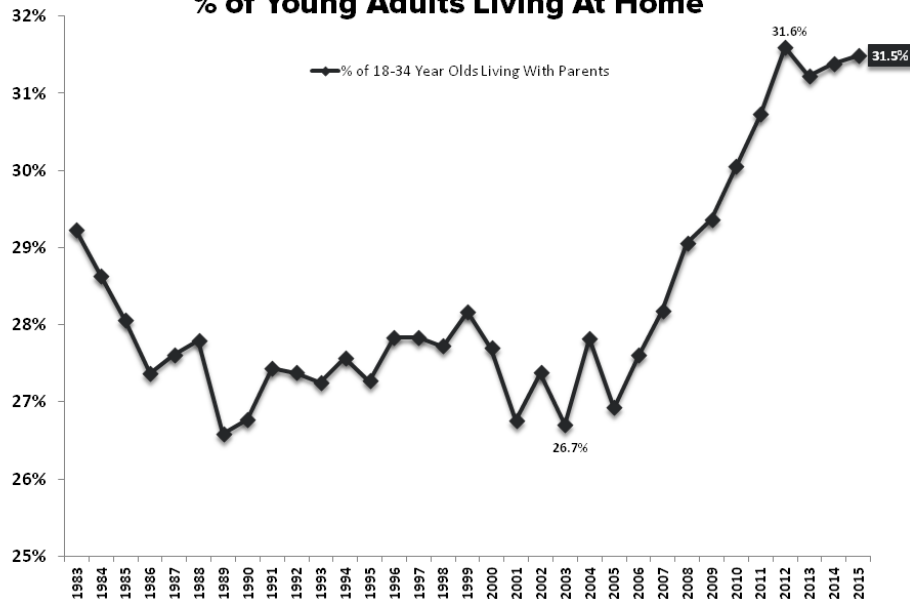
DATA SOURCE: CENSUS BUREAU, ACS SURVEY, JCHS CALCULATIONS

RENTER COST BURDENS

As of 2013, ~41% of Households making < \$45K paid more than 50% of income towards housing costs while over 70% of households paid more than 30% of income towards rent.

DATA SOURCE: BLOOMBERG, CENSUS BUREAU, JCHS CALCULATIONS

% of Young Adults Living At Home

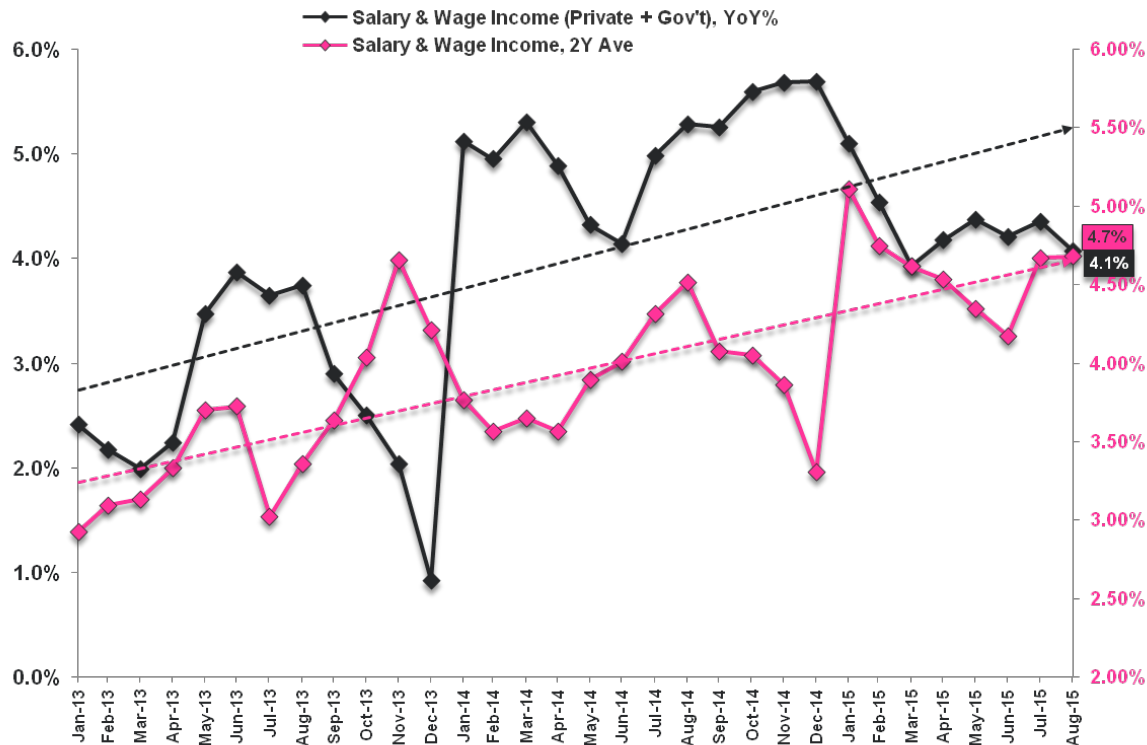


BASEMENT DWELLING HAS PEAKED

Rising incomes and the maturation of the employment recovery for 20-34 year olds should drive an ongoing recover in headship rates from here.

INCOME GROWTH IS ACCELERATING

AGGREGATE SALARY & WAGE INCOME

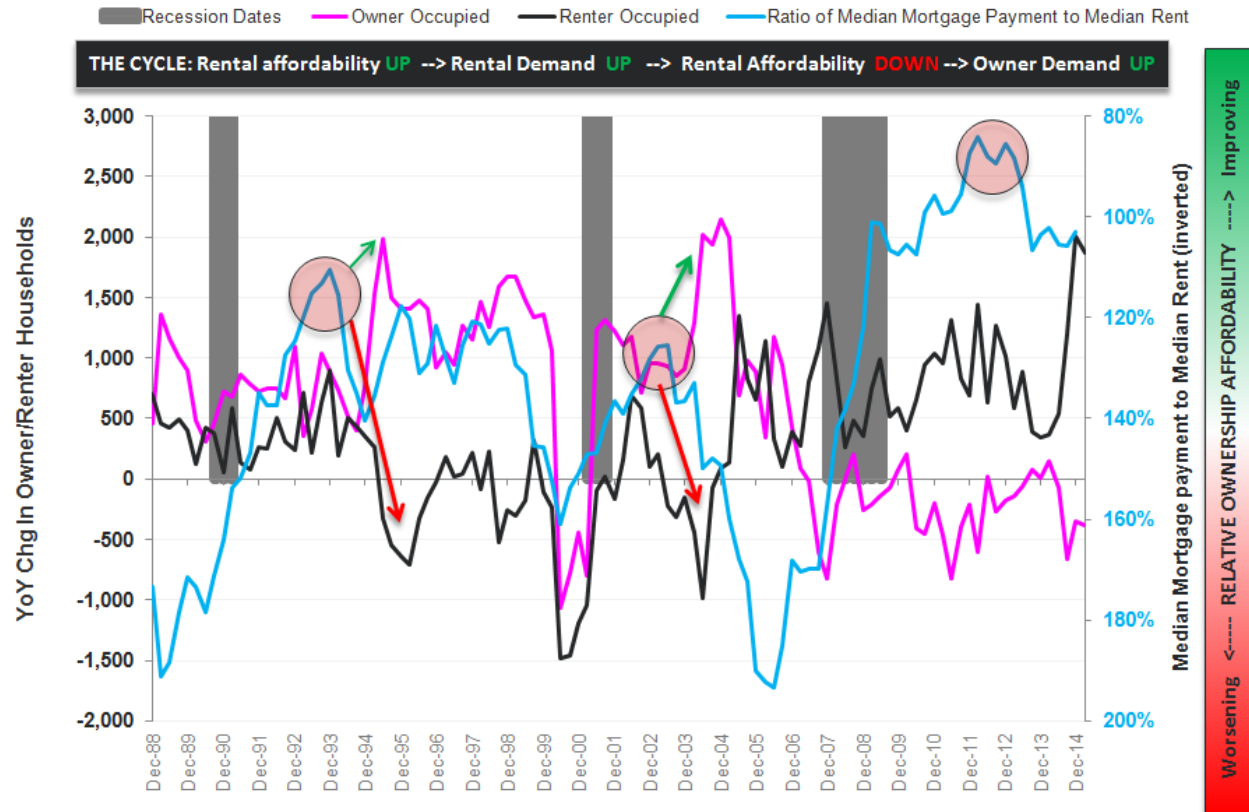


DATA SOURCE: BLOOMBERG, BEA

Accelerating employment growth and positive mix have supported acceleration in salary & wage growth and aggregate income.

RENTAL AFFORDABILITY ↓, OWNERSHIP ↑

US HOUSEHOLD FORMATION



DATA SOURCE: BLOOMBERG, BEA, BLS

Historically, declines in rental affordability have driven households towards home ownership



ELECTION CYCLE: GROUNDHOG DAY

DEEP SIMPLICITY → UNDERPINNING

THE ELECTION CYCLE:

A POLITICO-BEHAVIORAL PHENOMENON

PROMISE THE WORLD

Year 4 (Election Year)



HONEYMOON/DO NO HARM

Year 1



UNLEASH HELL

Year 2



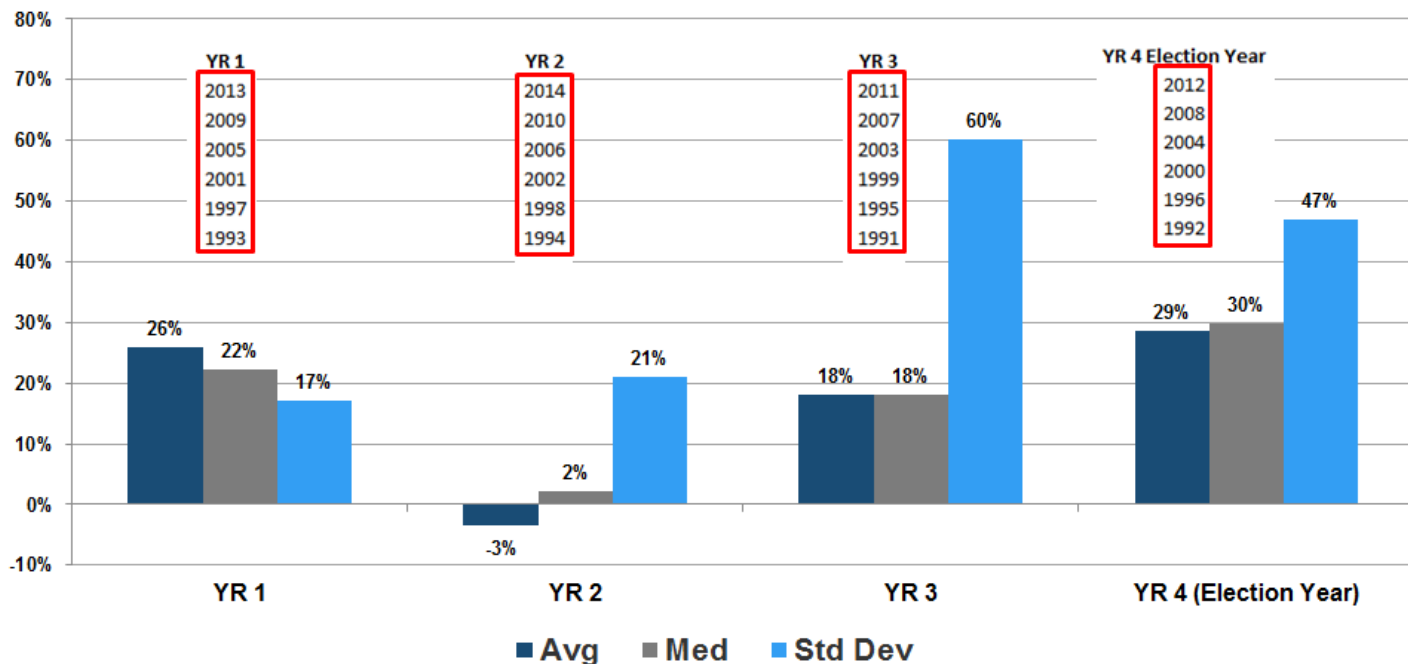
COMPING THE COMP

Year 3



HOUSING: ELECTION YR 4 + YEAR 1 = ↑

HOUSING: LAST 6 ELECTION CYCLES PERFORMANCE ANALYSIS
AVERAGE ABSOLUTE RETURNS (1991-2014)



DATA SOURCE: FACTSET

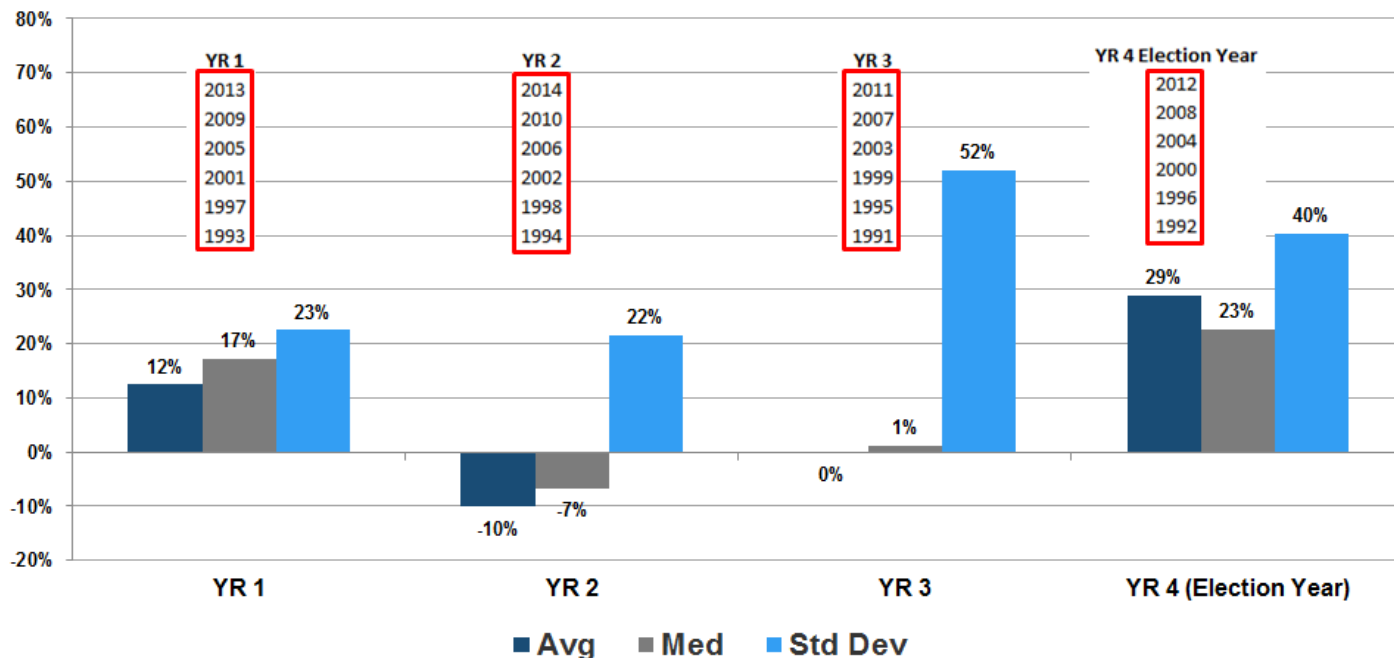
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Housing performance has followed a distinct, recurrent pattern over the last 6 election cycles.

Absolute performance is consistently (very) strong in Election Years and Year 1.

ABSOLUTE + RELATIVE PERFORMANCE

HOUSING: LAST 6 ELECTION CYCLES PERFORMANCE ANALYSIS
AVERAGE RELATIVE RETURNS VS S&P 500 (1991-2014)



DATA SOURCE: FACTSET

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It's not just beta – Housing outperforms meaningfully on a relative basis in years 4 and 1 as well.

CYCLE BY CYCLE

Here's a look at Housing stock performance by year since 1990. Election years are bordered with the averages at the bottom of the table.



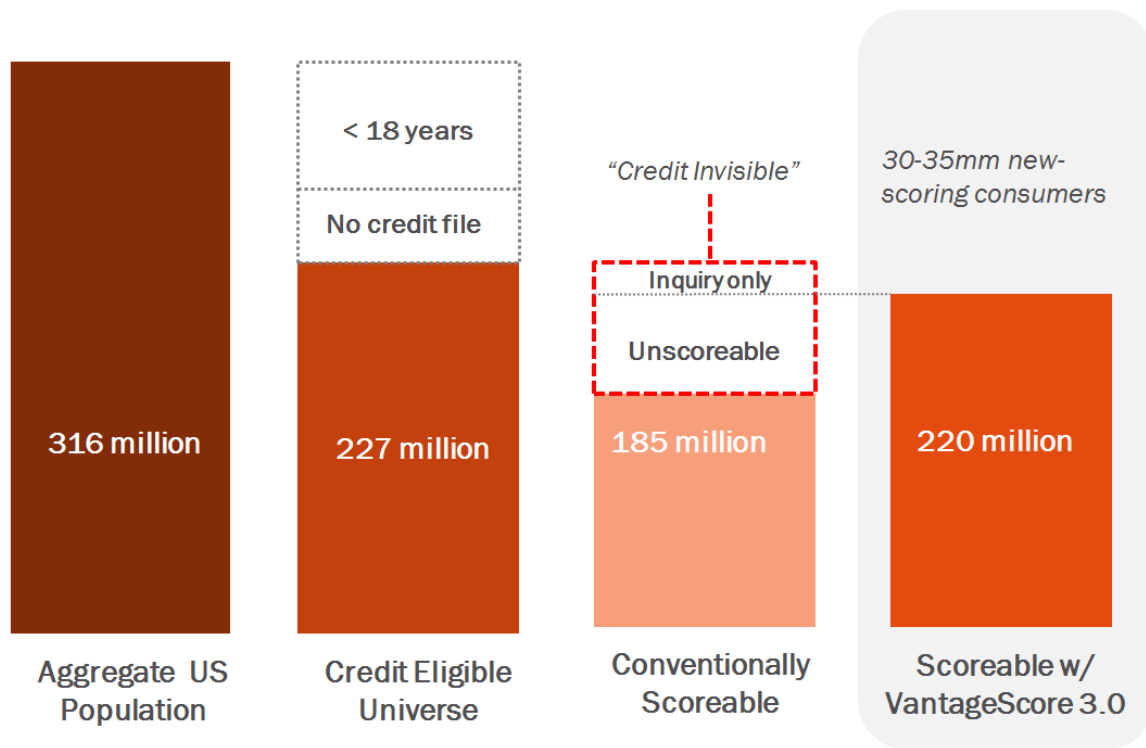
		Price				Y/Y Change in Price (%) - Absolute				Relative Performance vs S&P 500		
		S&P 500	XHB	ITB	Builder Index	S&P 500	XHB	ITB	Builder Index	XHB	ITB	Builder Index
12/31/1990	+2	330.22	na	na	61.15							
12/31/1991	+3	417.09	na	na	102.70	26.3%			67.9%			41.6%
12/31/1992	Election Year	435.71	na	na	130.73	4.5%			27.3%			22.8%
12/31/1993	+1	466.45	na	na	155.10	7.1%			18.6%			11.6%
12/31/1994	+2	459.27	na	na	100.00	-1.5%			-35.5%			-34.0%
12/31/1995	+3	615.93	na	na	137.19	34.1%			37.2%			3.1%
12/31/1996	Election Year	740.74	na	na	138.49	20.3%			0.9%			-19.3%
12/31/1997	+1	970.43	na	na	218.93	31.0%			58.1%			27.1%
12/31/1998	+2	1,229.23	na	na	264.71	26.7%			20.9%			-5.8%
12/31/1999	+3	1,469.25	na	na	176.72	19.5%			-33.2%			-52.8%
12/31/2000	Election Year	1,320.28	na	na	274.75	-10.1%			55.5%			65.6%
12/31/2001	+1	1,148.08	na	na	348.96	-13.0%			27.0%			40.1%
12/31/2002	+2	879.82	na	na	345.46	-23.4%			-1.0%			22.4%
12/31/2003	+3	1,111.92	na	na	681.10	26.4%			97.2%			70.8%
12/31/2004	Election Year	1,211.92	na	na	905.03	9.0%			32.9%			23.9%
12/31/2005	+1	1,248.29	na	na	1,138.92	3.0%			25.8%			22.8%
12/31/2006	+2	1,418.30	37.39	42.37	900.98	13.6%			-20.9%			-34.5%
12/31/2007	+3	1,468.36	19.35	17.63	363.61	3.5%	-48.2%	-58.4%	-59.6%	-51.8%	-61.9%	-63.2%
12/31/2008	Election Year	903.25	11.98	9.81	217.14	-38.5%	-38.1%	-44.4%	-40.3%	0.4%	-5.9%	-1.8%
12/31/2009	+1	1,115.10	15.11	12.01	254.48	23.5%	26.1%	22.4%	17.2%	2.7%	-1.0%	-6.3%
12/31/2010	+2	1,257.64	17.39	13.18	267.89	12.8%	15.1%	9.7%	5.3%	2.3%	-3.0%	-7.5%
12/31/2011	+3	1,257.60	17.10	11.88	265.74	0.0%	-1.7%	-9.9%	-0.8%	-1.7%	-9.9%	-0.8%
12/31/2012	Election Year	1,426.19	26.60	21.16	539.02	13.4%	55.6%	78.1%	102.8%	42.1%	64.7%	89.4%
12/31/2013	+1	1,848.36	33.30	24.82	587.06	29.6%	25.2%	17.3%	8.9%	-4.4%	-12.3%	-20.7%
12/31/2014	+2	2,058.90	34.12	25.88	648.92	11.4%	2.5%	4.3%	10.5%	-8.9%	-7.1%	-0.9%
Averages:	Election Year					-0.2%	8.7%	16.9%	29.9%	21.3%	29.4%	30.1%
	+1					13.5%	25.7%	19.9%	25.9%	-0.9%	-6.7%	12.4%
	+2					6.6%	8.8%	7.0%	-3.5%	-3.3%	-5.1%	-10.0%
	+3					13.9%	-13.7%	-17.1%	11.8%	-10.7%	-14.1%	-2.1%
Averages:	All Years					9.5%	4.6%	2.4%	17.6%	-2.4%	-4.6%	8.1%

Source: Factset



MORTGAGE MARKET EXPANSION?

35MM NEW SCOREABLE CONSUMERS



VantageScore3.0 scores 98% of consumers with credit files – credit scoring innovation capable of scoring 35mn more individuals than legacy models

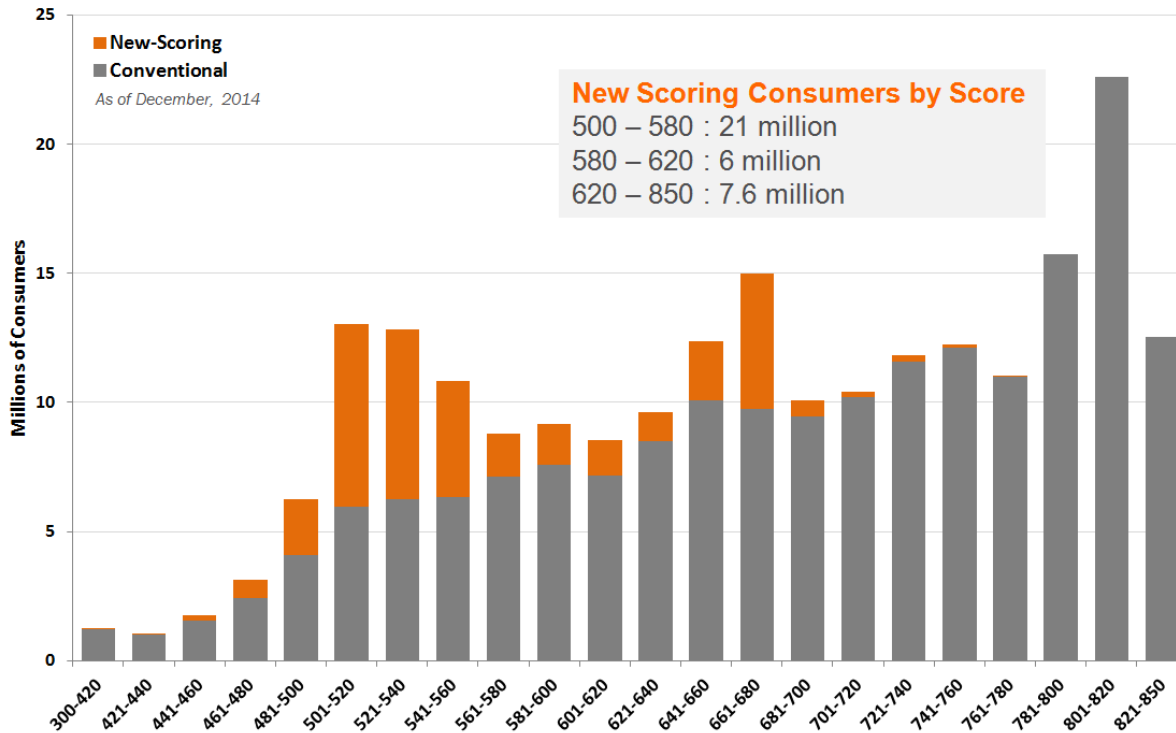
VantageScore3.0 is on the 2015 GSE scorecard.



VantageScore Solutions, LLC © 2015

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7.6MM > CURRENT HUD & GSE CUTOFFS



VantageScore Solutions, LLC © 2015

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Of the 35mn newly scoreable consumers, 7.6mn score above 620, making them eligible for mortgage financing based on current HUD and GSE cutoffs.

500K-1.0MN NEW BORROWERS

	Math:	Assumption:
1	7,589,899	Increase in population of consumers with a score of 620 or above
2	÷ 1.95	Number of adults in the average household
3	× 65%	Estimated preference to own (rather than rent)
4	× 20%	Assume 1 in 5 meet income, down payment, and other requirements
5	÷ 7	Average life of a mortgage loan (they don't pile in all at once...)
6	= 72,285	Increase, number of creditworthy households served every year
7	× \$175,000	Average principal balance
8	= \$12.65 billion	Increase in annual loan volume
9	2.50%	Average gain on sale margin
10	= \$316.3 million	Annual mortgage banking industry revenues
11	0.75%	Up-front fees: 75bps loan level adjustment
12	2.40%	Present value of 60bps guarantee fees
13	(1.00%)	Present value of 25bps credit losses
14	= \$272 million	Annual GSE revenues, net of credit losses

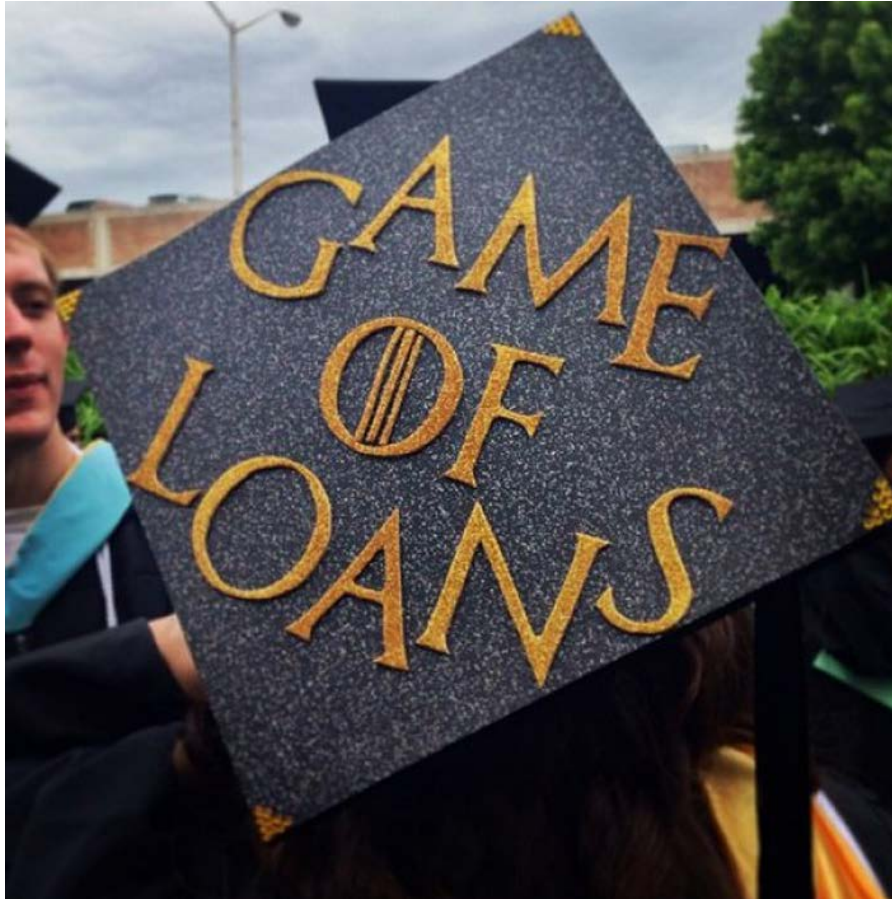


VantageScore Solutions, LLC © 2015

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VantageScore's waterfall analysis attempts to frame the lower bound of the probable range in terms of impact on household formation. Shifting to more moderate assumptions takes the annual increase in households up to ~340k/yr.

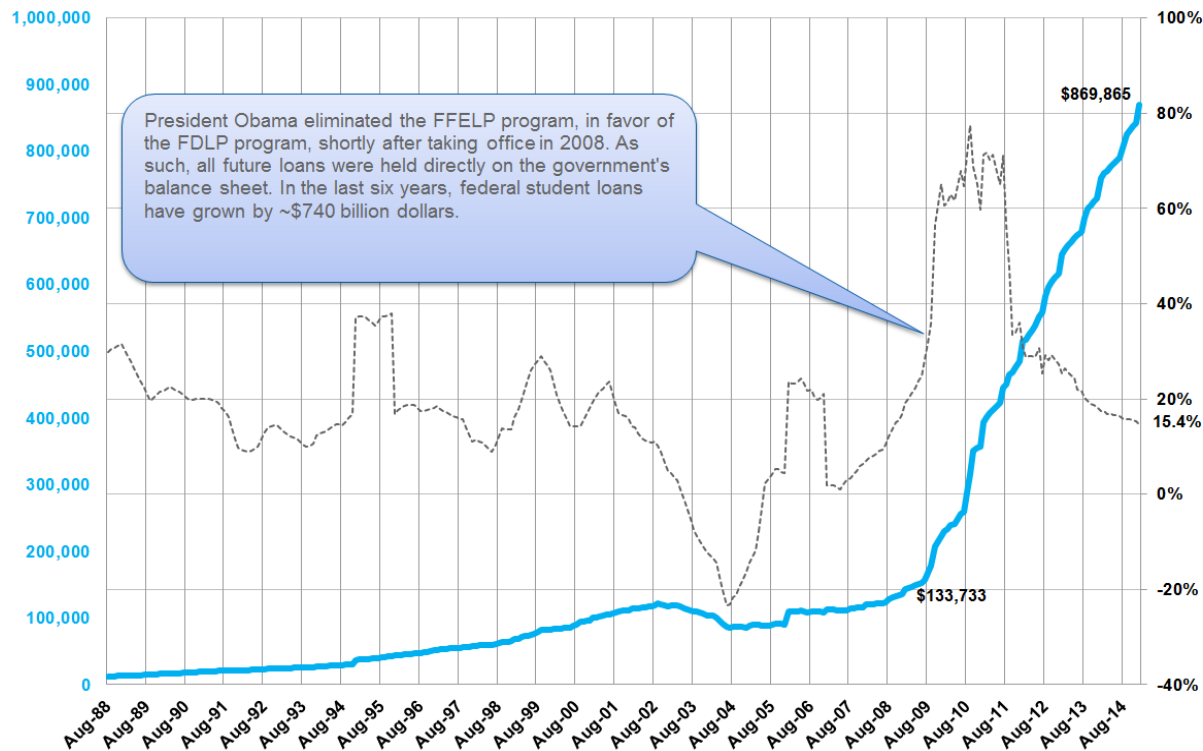
STUDENT LOAN HEADWINDS



Student loan debt is a major headwind to the recovery of housing. Much of what sounds like media hyperbole is, in fact, real.

STUDENT DEBT: STRUCTURAL OVERHANG

Government-held Loans (Student Loans, \$M)

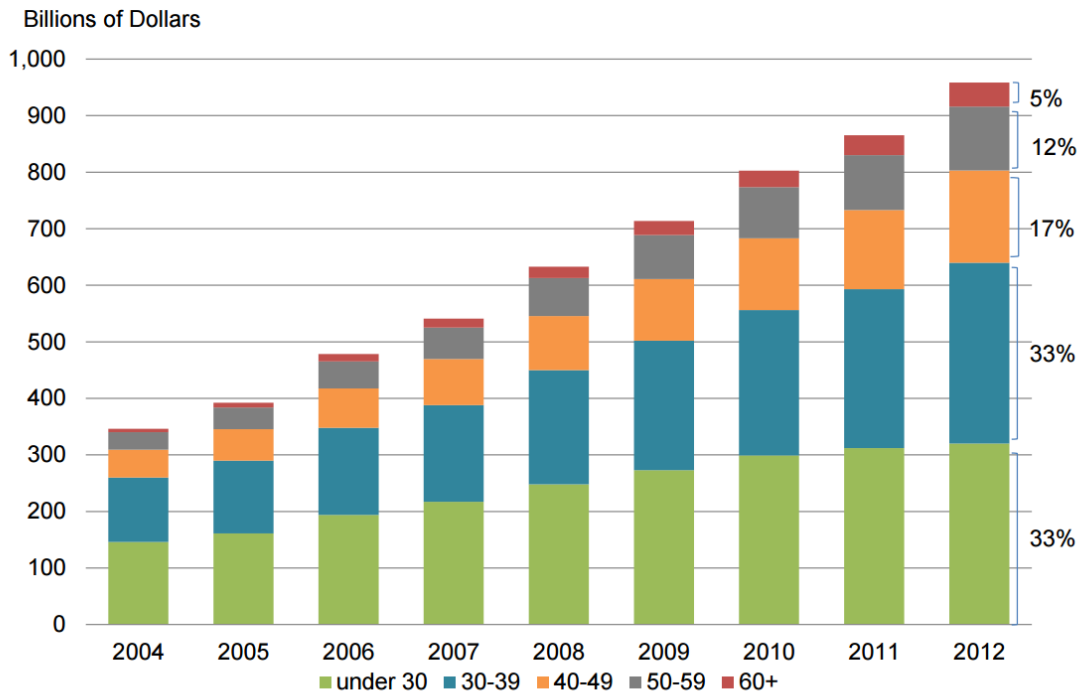


The meteoric ascent in student debt will remain a secular constraint to a sustained acceleration in purchase demand, particularly for 1st time buyers.

Source: Federal Reserve

STUDENT DEBT: STRUCTURAL OVERHANG

Total student loan balances by age group increasing across all age groups

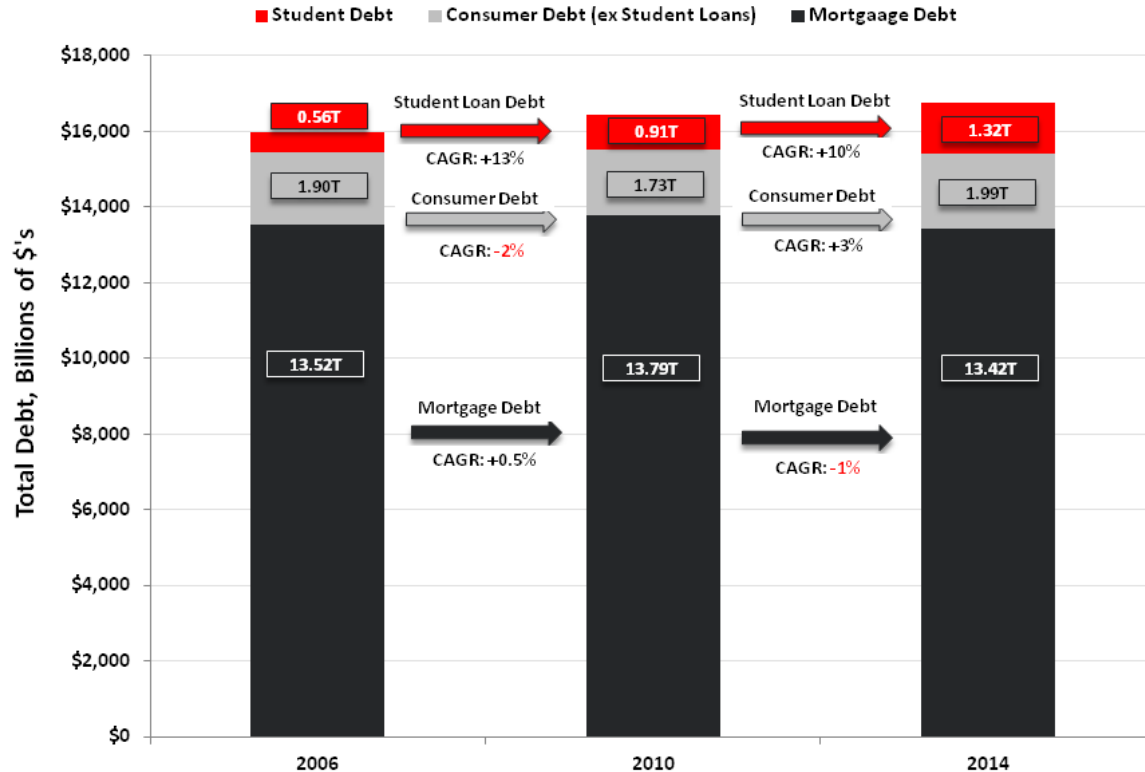


Source: FRBNY Consumer Credit Panel / Equifax

Between 2004 and 2012, total US student loans almost tripled, growing from \$364 billion to \$966 billion. This works out to a ~14% CAGR over 8 years. Currently, total student loan debt stands at \$1.32 trillion and is still growing at a mid-teens % rate.

STUDENT DEBT = \$1.32T

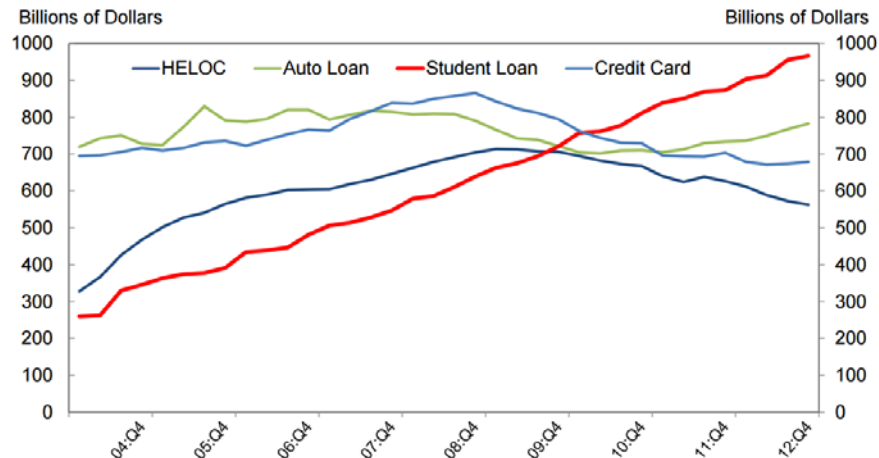
PERI-CRISIS EVOLUTION OF HOUSEHOLD DEBT



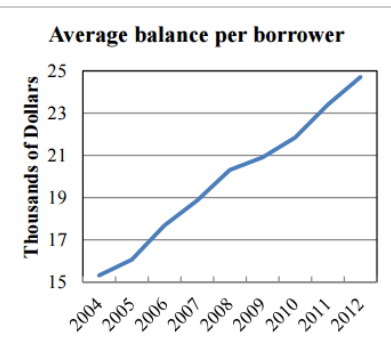
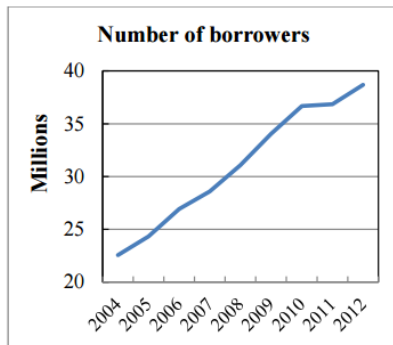
Student loan debt was the only major credit category to record positive growth in the peri-crisis period and now sits above credit card debt as the second largest category of household debt.

STUDENT DEBT: JUGGERNAUT

Non-mortgage balances



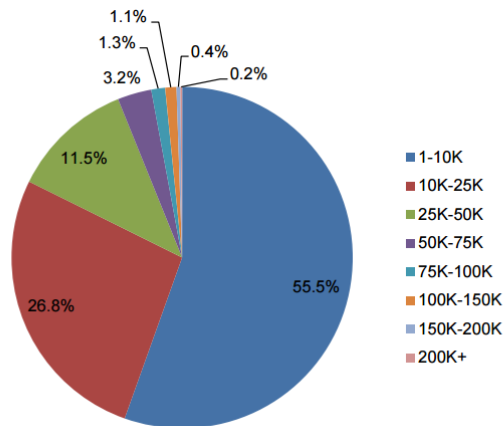
Source: FRBNY Consumer Credit Panel / Equifax



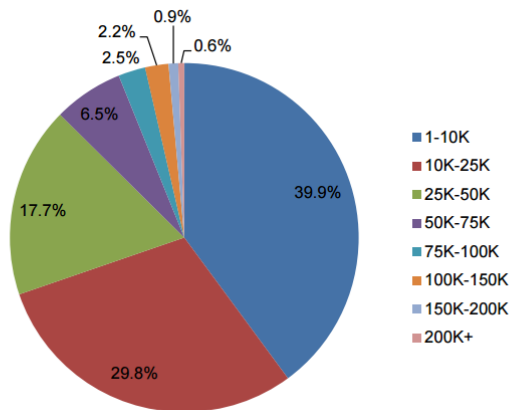
The 2004-2012 near tripling in student loans comes from both a 70% increase in borrowers (23mn → 39mn) and a 70% increase in average loan balances (\$15k → \$25k).

STUDENT DEBT: STRUCTURAL OVERHANG

Distribution of Student Debt
balance, 4Q:2005



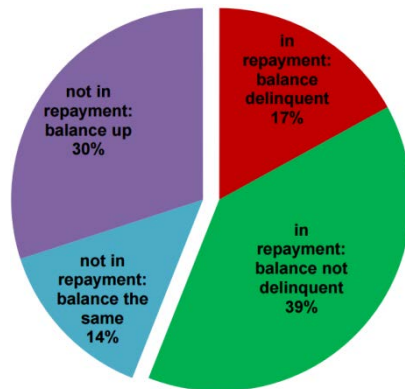
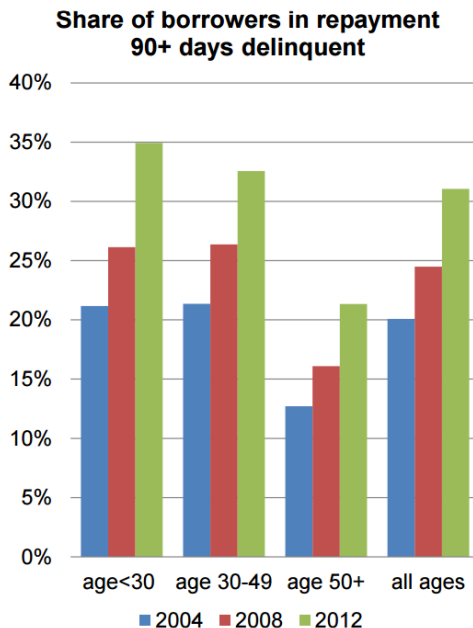
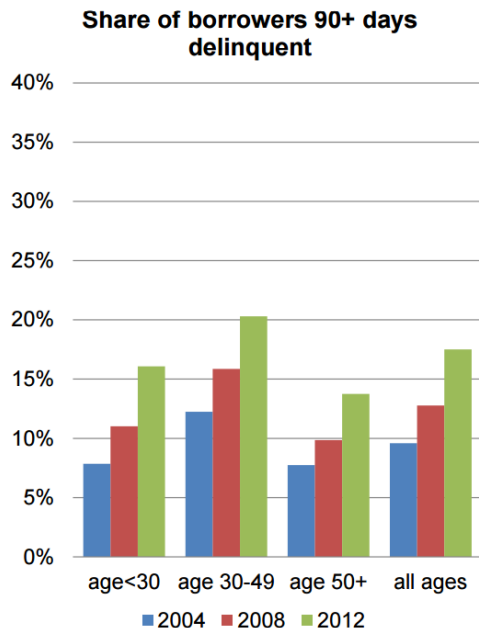
Distribution of Student Debt
balance, 4Q:2012



While student loans have become more common, there is still a lot of variation. 40% of borrowers owe less than \$10k, while 70% of borrowers owe less than \$25k. On the other end, just 12-13% owe \$50k or more.

STUDENT DEBT: STRUCTURAL OVERHANG

Delinquency rates higher among borrowers in repayment

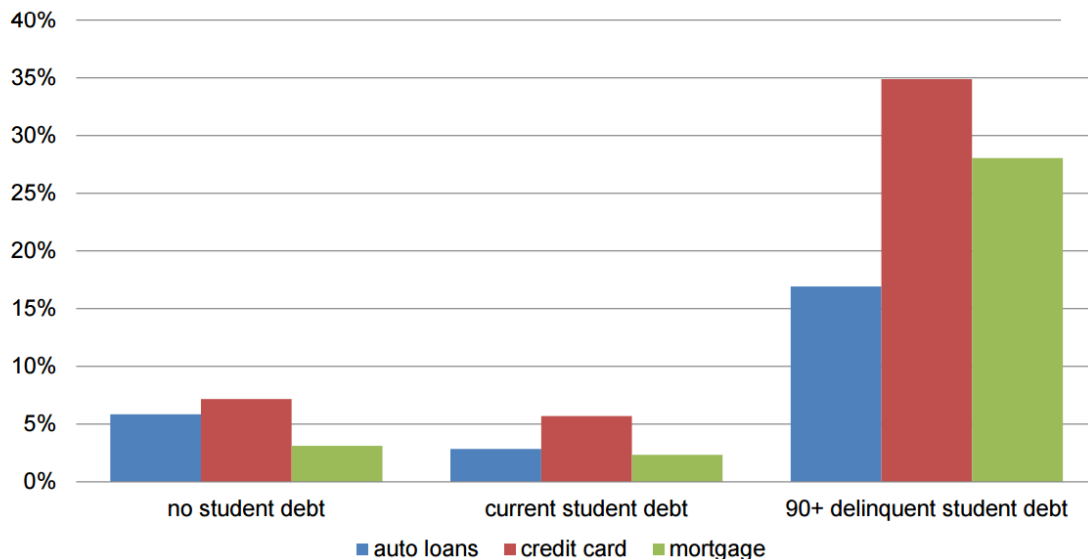


The delinquency rates on student loans are mind-boggling. 17% of borrowers are over 90 days late, but if you exclude the 44% of borrowers not in repayment, the actual DQ rate jumps to over 30%, and 35% for those under 30 years old.

Source: FRBNY Consumer Credit Panel / Equifax

STUDENT DEBT: STRUCTURAL OVERHANG

Non-student debt 90+ days delinquent, age 25-30, 12:Q4



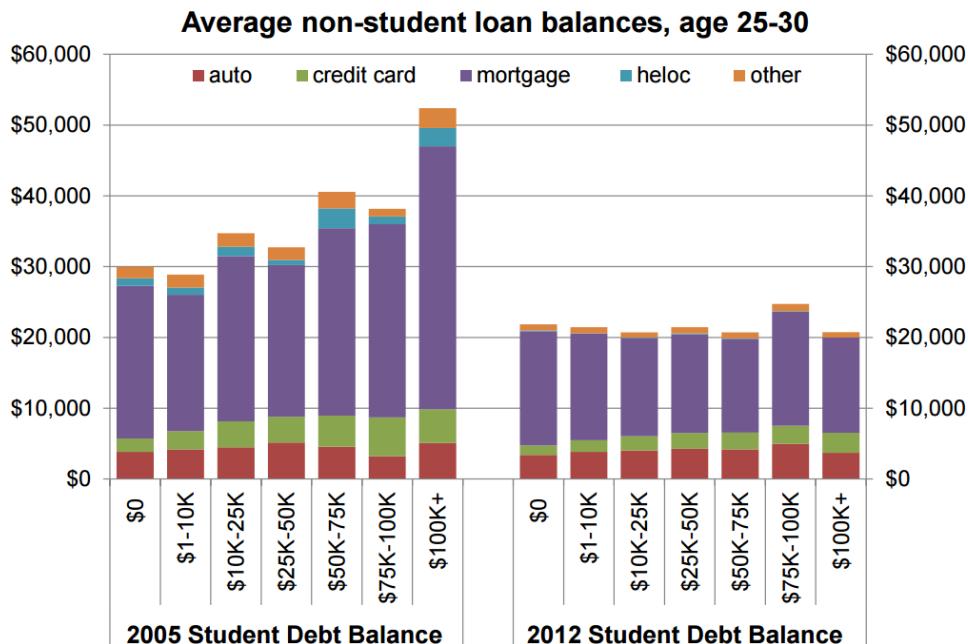
Not surprisingly, if a borrower is 90+ DQ on a student loan, they're very likely to be delinquent on other types of loans as well.

Source: FRBNY Consumer Credit Panel / Equifax

STUDENT DEBT: STRUCTURAL OVERHANG

Non-student debt declined for all borrowers age 25-30

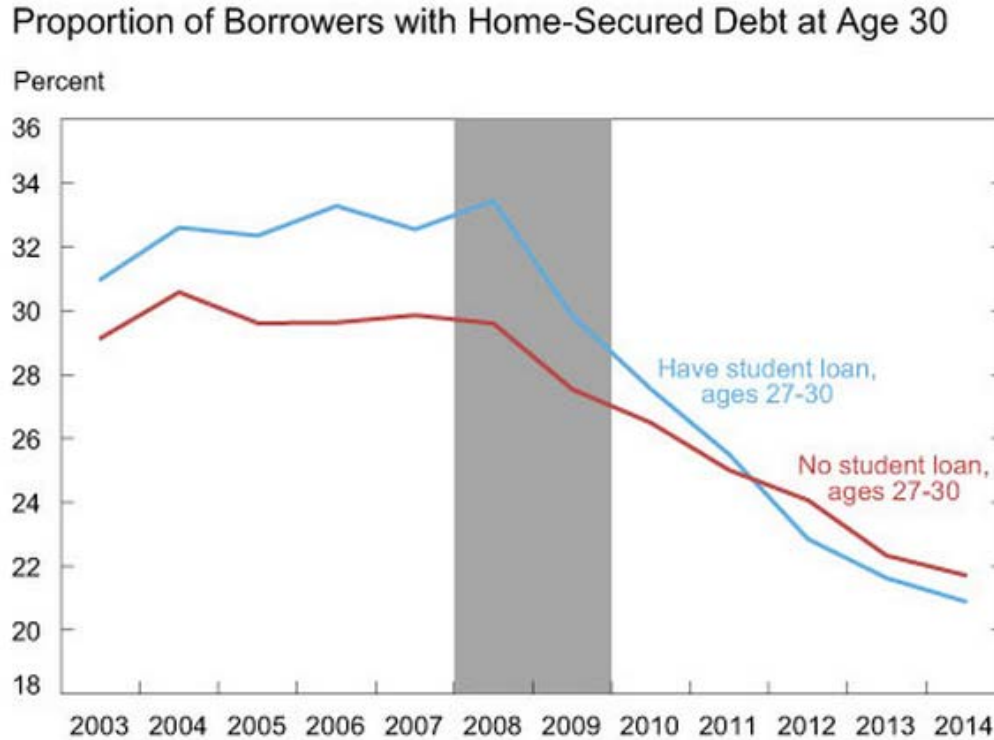
Decline particularly pronounced for borrowers with larger student debt



Source: FRBNY Consumer Credit Panel / Equifax

For all these reasons (higher % of borrowers with balances, higher balances per borrower, higher DQ rates and stricter underwriting rules), there has been an enormous decline in mortgage loans among those 25-30 years old.

STRUCTURAL IMPEDIMENT: STUDENT LOAN DEBT

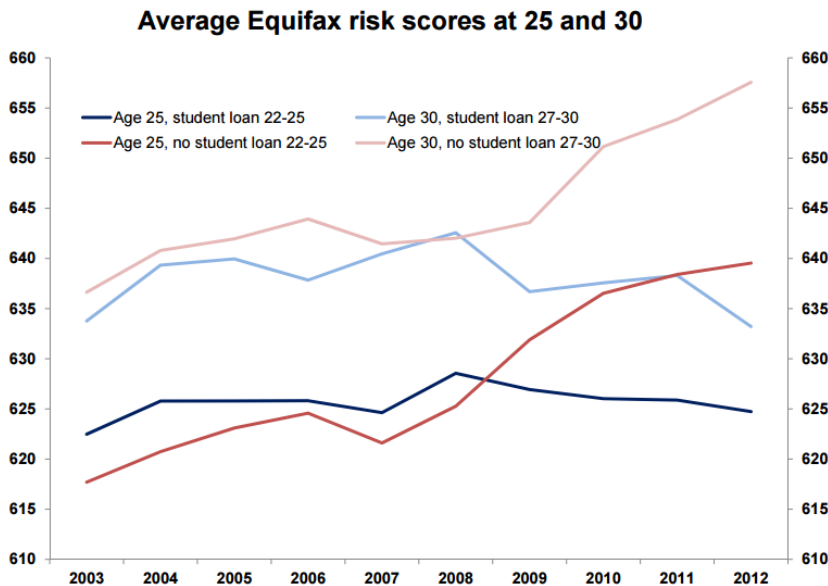


Source: Federal Reserve Bank of New York Consumer Credit Panel / Equifax.

Prior to the recession, those with student loans were more likely to be homeowners by ~3% vs those without student loans. Today, they're less likely by ~1%. Student loans have created a ~400 bps drag on the homeownership rate.

STUDENT DEBT: STRUCTURAL OVERHANG

Declining relative credit scores of student borrowers



Source: FRBNY Consumer Credit Panel / Equifax

One troubling aspect of the student loan dynamic is that it is preventing the upward migration in credit scores, on average, that are the norm for those without student loans. It is this upward migration that enables home ownership.

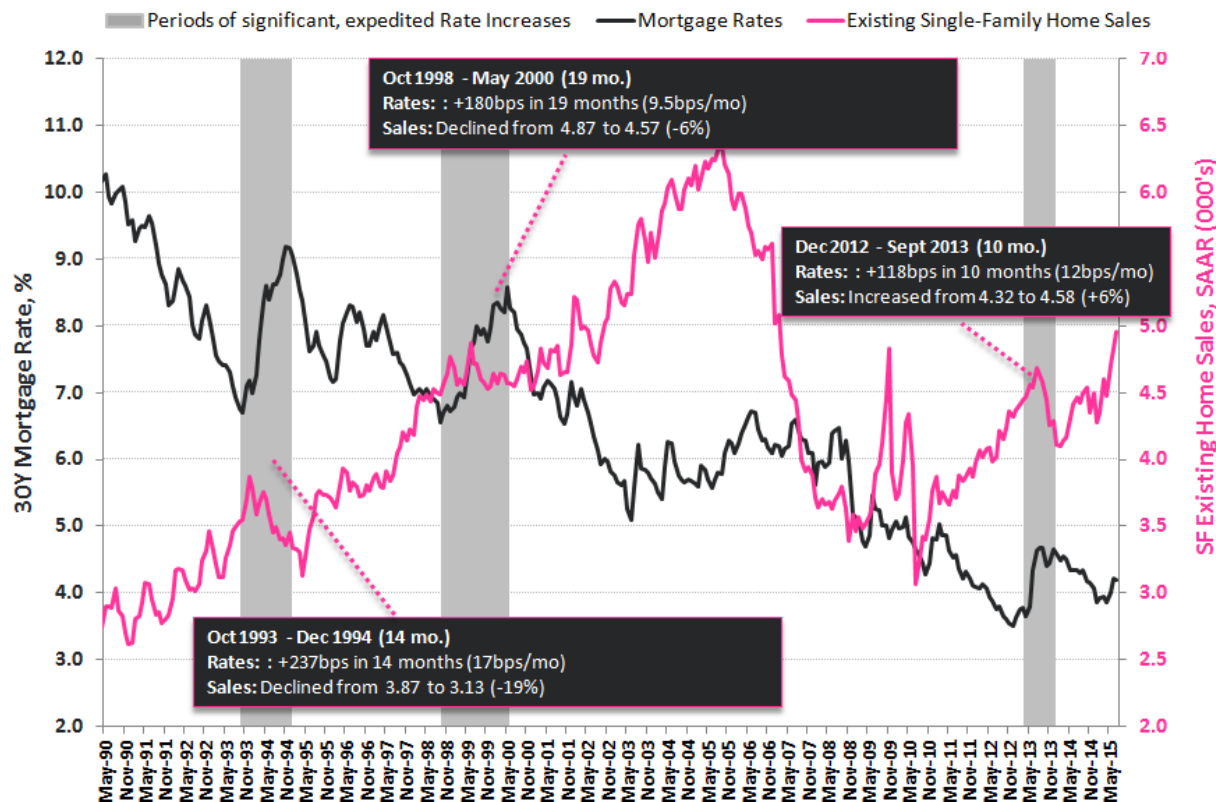


2. RATES RISK



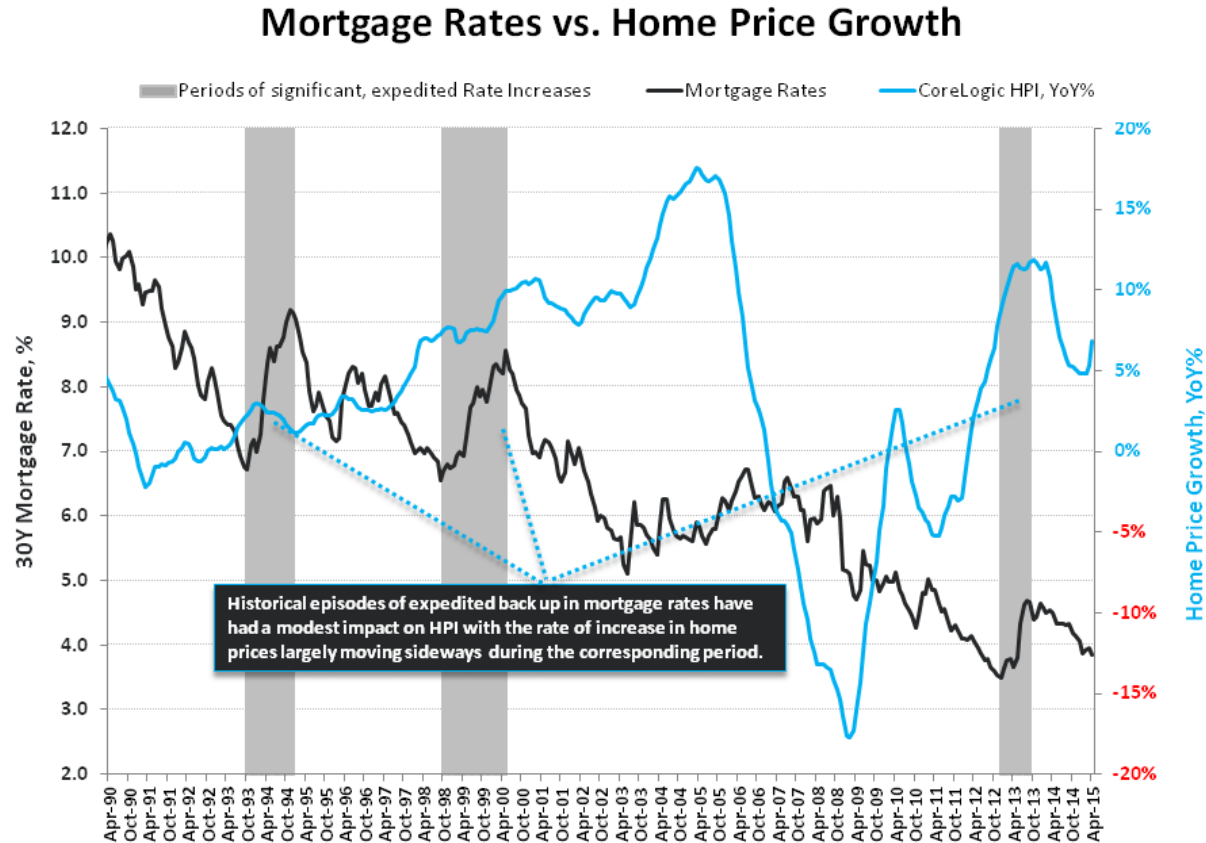
MORTGAGE RATES VS HOME SALES

Mortgage Rates vs. Home Sales



Mortgage rates rose by an average of 180 bps over an average of 14 months in the 3 historical periods of rapid rate rise. In the current instance, mortgage rates have not moved (yet).

MORTGAGE RATES VS HPI



Historically, Home Prices have stabilized from a rate of change perspective during periods of expedited rate increase.

THREE CASE STUDIES IN RISING RATES

1

OCTOBER 1993- DECEMBER 1994

Mortgage Rates rose +240 bps over the span of 14-months. **The S&P 500 Homebuilding index lost 33% of its value over that 14 month span.** By contrast, the S&P 500 was flat over the corresponding period.

2

OCTOBER 1998 - MAY 2000

Mortgage Rates rose +180 bps over the span of 19-months. **The S&P 500 Homebuilding index lost 29% of its value over that 14 month span,** but the S&P 500 was up 44% making the **relative underperformance a whopping 73%.**

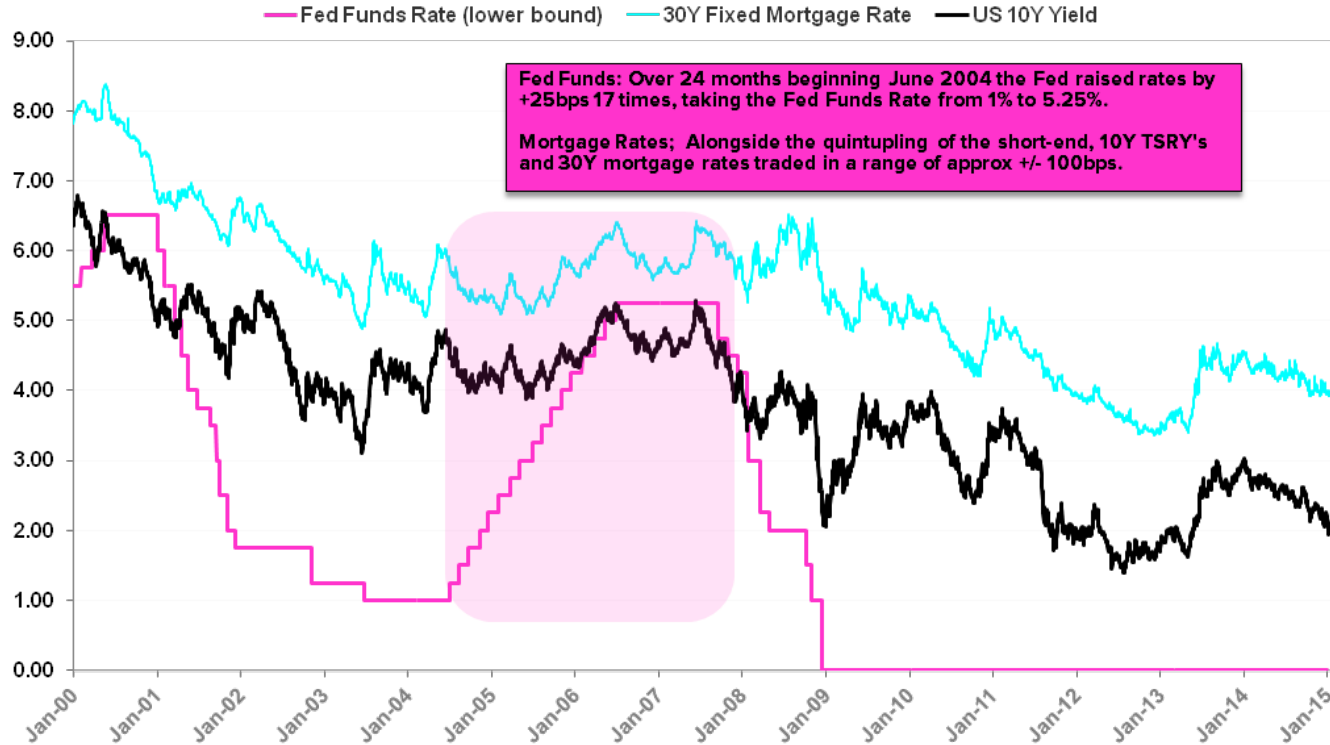
3

DECEMBER 2012 – SEPTEMBER 2013

Mortgage Rates rose +120 bps over the span of 10-months. **The S&P 500 Homebuilding index lost 3% of its value over that 14 month span.** By contrast, the S&P 500 was up 19% over the corresponding period so the **relative underperformance was 22%.**

WHAT IF THE FED TIGHTENS?

POLICY NORMALIZATION: A NON-CATALYST FOR THE LONG END?



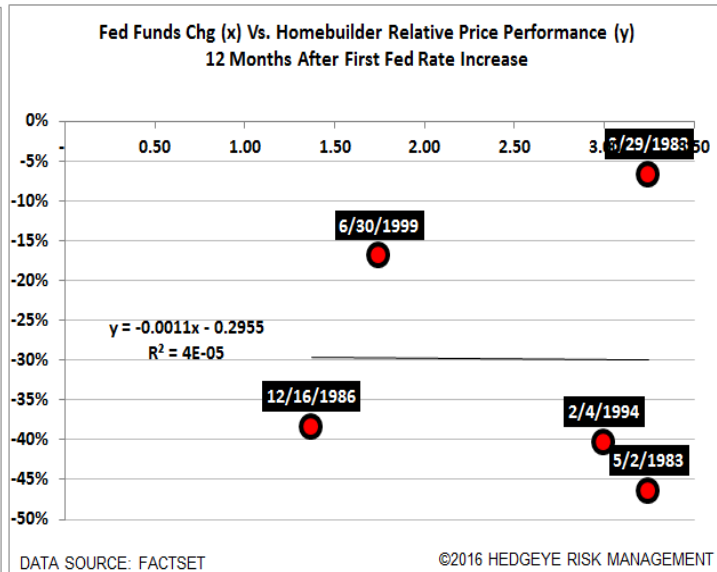
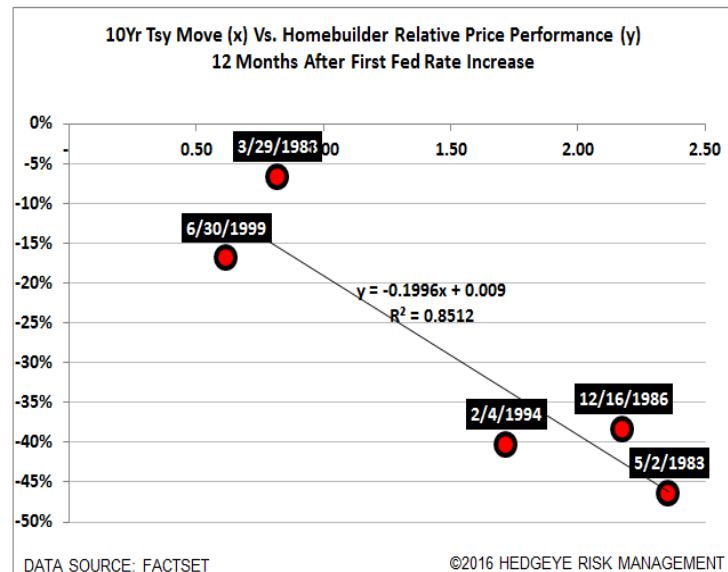
DATA SOURCE: BLOOMBER, HRM

In the last period of Fed tightening, the Fed raised rates 25 bps every meeting for 17 straight meetings. The mortgage rate, however, essentially went sideways during this period.

HOMEBUILDERS

Rate Hike Cycle			Fed Funds			10YR Tsy			The Curve?		Homebuilders / Absolute Performance								Homebuilders / Relative Performance							
Start	End	Mo	Start	End	Change	Start	End	Change	Delta	Direction	T-6	T-3	T-1	T-0	T+3	T+6	T+12	T-6	T-3	T-1	T-0	T+3	T+6	T+12		
6/30/2004	6/29/2006	24	1.00	5.25	4.25	4.62	5.20	0.58	(3.67)	Much Flatter	4%	-11%	0%	0%	14%	38%	86%	1%	-12%	-2%	0%	16%	32%	82%		
6/30/1999	5/16/2000	11	4.75	6.50	1.75	5.81	6.43	0.62	(1.13)	Flatter	-7%	13%	2%	0%	-17%	-19%	-12%	-19%	7%	-4%	0%	-10%	-25%	-17%		
2/4/1994	2/1/1995	12	3.00	6.00	3.00	5.94	7.66	1.72	(1.28)	Flatter	22%	17%	3%	0%	-18%	-28%	-39%	17%	15%	3%	0%	-14%	-26%	-40%		
3/29/1988	2/24/1989	11	6.50	9.75	3.25	8.56	9.38	0.82	(2.43)	Much Flatter	-28%	13%	-6%	0%	5%	-6%	6%	-7%	8%	-5%	0%	1%	-10%	-7%		
12/16/1986	9/4/1987	9	5.88	7.25	1.37	7.12	9.30	2.18	0.81	Much Steeper	-4%	21%	1%	0%	52%	20%	-39%	-6%	14%	-1%	0%	36%	-1%	-38%		
5/2/1983	8/21/1984	16	8.50	11.75	3.25	10.26	12.62	2.36	(0.89)	Near Parallel	60%	22%	13%	0%	-13%	-29%	-47%	47%	8%	7%	0%	-13%	-30%	-46%		
Average:		14	2.81			1.38			(1.43)		8%	13%	2%	0%	4%	-4%	-7%	5%	7%	0%	0%	3%	-10%	-11%		
Median:		11	3.13			1.27			(1.21)		0%	15%	1%	0%	-4%	-13%	-25%	-3%	8%	-1%	0%	-4%	-17%	-28%		

Source: Factset

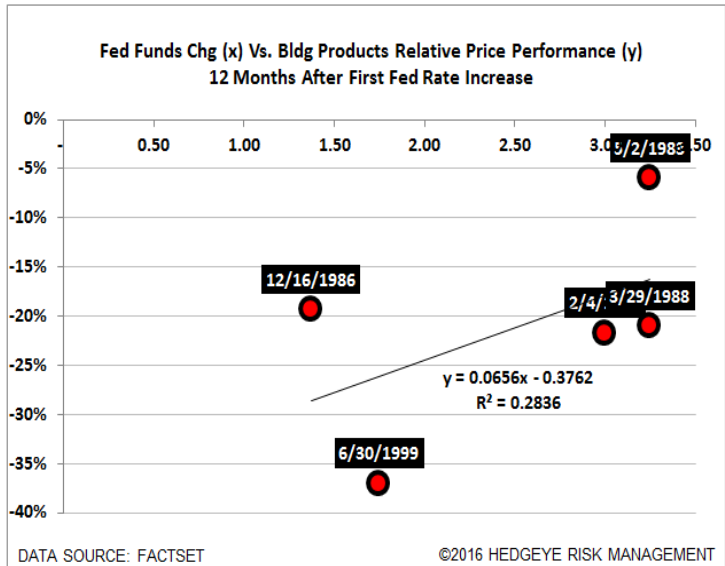
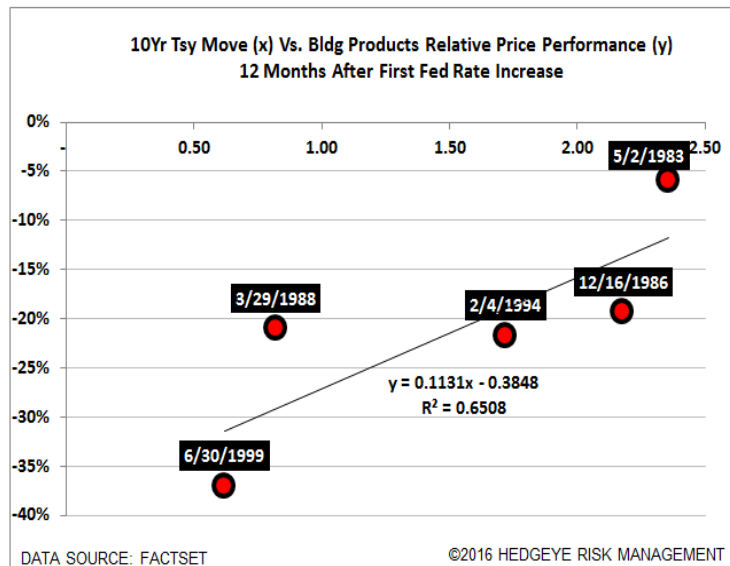


Not surprisingly, homebuilders hate rate hikes, and the strong negative slope (RSQ 0.85) to increases in the 10Yr Tsy show just how sensitive they are. The good news is that small increases in rates have historically produced small decreases in share prices.

BUILDING PRODUCTS

Rate Hike Cycle			Fed Funds			10YR Tsy			The Curve?		Building Products / Absolute Performance								Building Products / Relative Performance							
Start	End	Mo	Start	End	Change	Start	End	Change	Delta	Direction	T-6	T-3	T-1	T-0	T+3	T+6	T+12		T-6	T-3	T-1	T-0	T+3	T+6	T+12	
6/30/2004	6/29/2006	24	1.00	5.25	4.25	4.62	5.20	0.58	(3.67)	Much Flatter	12%	-1%	8%	0%	6%	37%	28%		9%	-2%	6%	0%	9%	32%	24%	
6/30/1999	5/16/2000	11	4.75	6.50	1.75	5.81	6.43	0.62	(1.13)	Flatter	-1%	7%	-2%	0%	-21%	-20%	-32%		-12%	1%	-7%	0%	-14%	-26%	-37%	
2/4/1994	2/1/1995	12	3.00	6.00	3.00	5.94	7.66	1.72	(1.28)	Flatter	33%	16%	7%	0%	-9%	-18%	-20%		29%	14%	6%	0%	-6%	-17%	-22%	
3/29/1988	2/24/1989	11	6.50	9.75	3.25	8.56	9.38	0.82	(2.43)	Much Flatter	-21%	16%	4%	0%	5%	-16%	-9%		0%	11%	5%	0%	2%	-20%	-21%	
12/16/1986	9/4/1987	9	5.88	7.25	1.37	7.12	9.30	2.18	0.81	Much Steeper	-3%	12%	1%	0%	20%	13%	-20%		-6%	4%	-1%	0%	5%	-8%	-19%	
5/2/1983	8/21/1984	16	8.50	11.75	3.25	10.26	12.62	2.36	(0.89)	Near Parallel	24%	22%	-3%	0%	-9%	-7%	-6%		11%	9%	-9%	0%	-10%	-8%	-6%	
Average:		14	2.81			1.38			(1.43)		7%	12%	2%	0%	-1%	-2%	-10%		5%	6%	0%	0%	-2%	-8%	-14%	
Median:		11	3.13			1.27			(1.21)		6%	14%	3%	0%	-2%	-12%	-14%		5%	6%	2%	0%	-2%	-12%	-20%	

Source: Factset

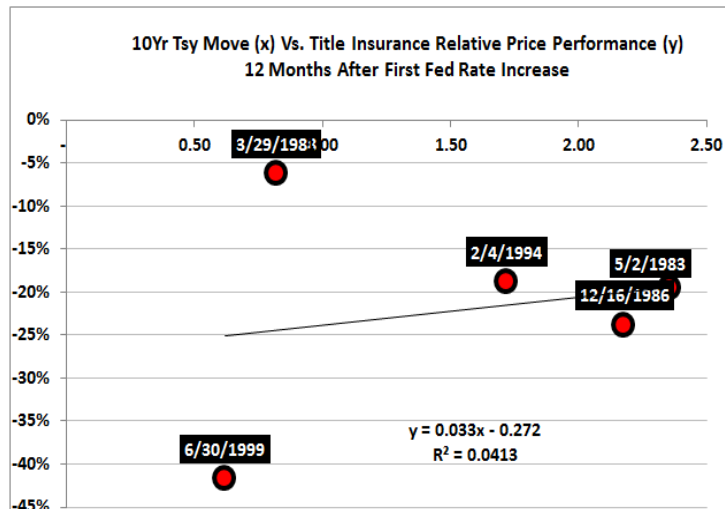


Building products companies consistently underperform when rates rise just like homebuilders. However, the slope is positive, which makes no sense. We take it on face value that there's an adverse relationship here, but that's about it.

TITLE INSURANCE

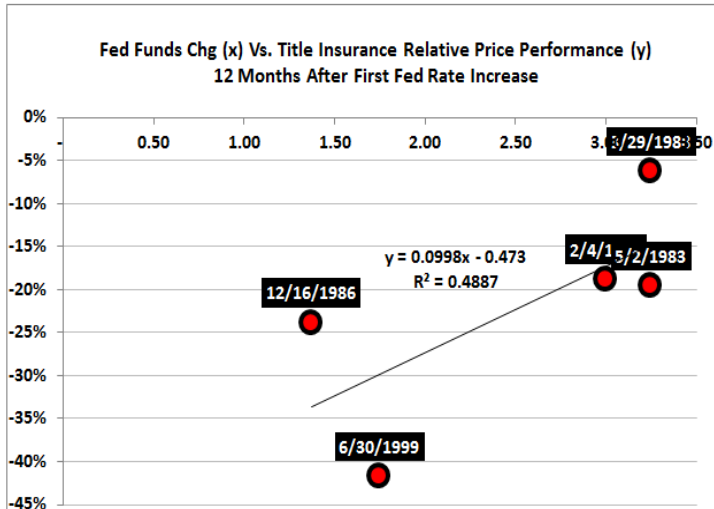
Rate Hike Cycle			Fed Funds			10YR Tsy			The Curve?		Title Insurance / Absolute Performance								Title Insurance / Relative Performance							
Start	End	Mo	Start	End	Change	Start	End	Change	Delta	Direction	T-6	T-3	T-1	T-0	T+3	T+6	T+12	T-6	T-3	T-1	T-0	T+3	T+6	T+12		
6/30/2004	6/29/2006	24	1.00	5.25	4.25	4.62	5.20	0.58	(3.67)	Much Flatter	-17%	-16%	-1%	0%	15%	24%	24%	-20%	-16%	-3%	0%	18%	18%	20%		
6/30/1999	5/16/2000	11	4.75	6.50	1.75	5.81	6.43	0.62	(1.13)	Flatter	-27%	27%	9%	0%	-24%	-33%	-37%	-39%	21%	3%	0%	-18%	-40%	-42%		
2/4/1994	2/1/1995	12	3.00	6.00	3.00	5.94	7.66	1.72	(1.28)	Flatter	15%	3%	-3%	0%	-2%	-15%	-17%	10%	1%	-3%	0%	2%	-13%	-19%		
3/29/1988	2/24/1989	11	6.50	9.75	3.25	8.56	9.38	0.82	(2.43)	Much Flatter	-10%	16%	10%	0%	0%	1%	6%	11%	11%	11%	0%	-3%	-3%	-6%		
12/16/1986	9/4/1987	9	5.88	7.25	1.37	7.12	9.30	2.18	0.81	Much Steeper	-22%	4%	-12%	0%	16%	0%	-25%	-25%	-4%	-14%	0%	1%	-21%	-24%		
5/2/1983	8/21/1984	16	8.50	11.75	3.25	10.26	12.62	2.36	(0.89)	Near Parallel	82%	58%	37%	0%	6%	0%	-20%	68%	44%	32%	0%	6%	0%	-20%		
Average:		14				2.81			1.38	(1.43)	3%	15%	7%	0%	2%	-4%	-11%	1%	9%	4%	0%	1%	-10%	-15%		
Median:		11				3.13			1.27	(1.21)	-14%	10%	4%	0%	3%	0%	-18%	-5%	6%	0%	0%	1%	-8%	-19%		

Source: Factset



DATA SOURCE: FACTSET

©2016 HEDGEYE RISK MANAGEMENT



DATA SOURCE: FACTSET

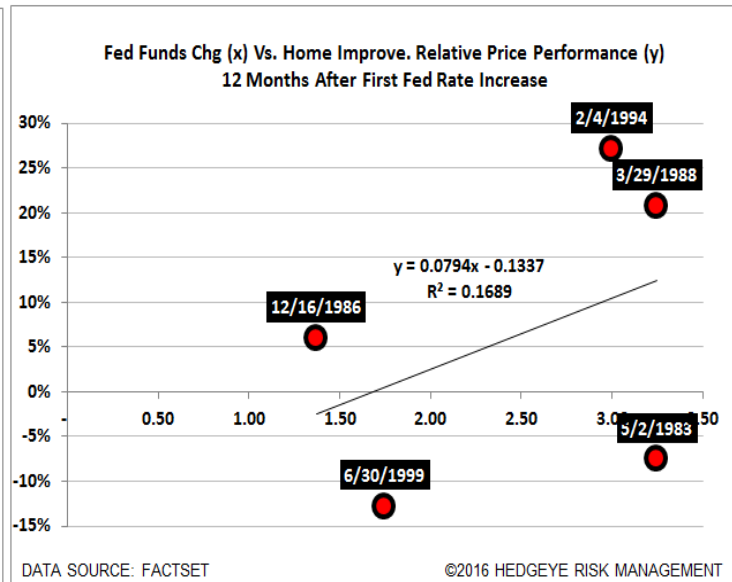
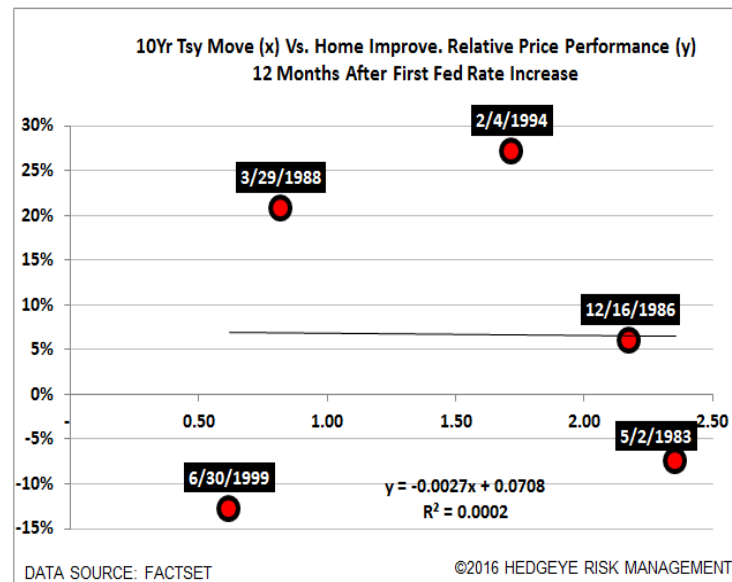
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Title insurers also underperform amid rising rates, but like building products companies they do so in a non-linear, low-RSQ way.

HOME IMPROVEMENT CHAINS

Rate Hike Cycle			Fed Funds			10YR Tsy			The Curve?		Home Improvement / Absolute Performance							Home Improvement / Relative Performance						
Start	End	Mo	Start	End	Change	Start	End	Change	Delta	Direction	T-6	T-3	T-1	T-0	T+3	T+6	T+12	T-6	T-3	T-1	T-0	T+3	T+6	T+12
6/30/2004	6/29/2006	24	1.00	5.25	4.25	4.62	5.20	0.58	(3.67)	Much Flatter	-1%	-5%	-2%	0%	6%	14%	11%	-4%	-6%	-4%	0%	9%	8%	6%
6/30/1999	5/16/2000	11	4.75	6.50	1.75	5.81	6.43	0.62	(1.13)	Flatter	8%	-1%	12%	0%	-8%	28%	-8%	-4%	-8%	6%	0%	-1%	22%	-13%
2/4/1994	2/1/1995	12	3.00	6.00	3.00	5.94	7.66	1.72	(1.28)	Flatter	21%	9%	0%	0%	19%	16%	29%	16%	7%	-1%	0%	23%	18%	27%
3/29/1988	2/24/1989	11	6.50	9.75	3.25	8.56	9.38	0.82	(2.43)	Much Flatter	-10%	21%	5%	0%	12%	9%	33%	11%	16%	5%	0%	9%	5%	21%
12/16/1986	9/4/1987	9	5.88	7.25	1.37	7.12	9.30	2.18	0.81	Much Steeper	-13%	12%	4%	0%	22%	42%	5%	-16%	4%	2%	0%	7%	21%	6%
5/2/1983	8/21/1984	16	8.50	11.75	3.25	10.26	12.62	2.36	(0.89)	Near Parallel	75%	26%	13%	0%	30%	3%	-8%	61%	13%	7%	0%	30%	2%	-8%
Average:	14				2.81			1.38	(1.43)		13%	10%	5%	0%	14%	19%	10%	11%	4%	3%	0%	13%	13%	7%
Median:	11				3.13			1.27	(1.21)		4%	11%	4%	0%	15%	15%	8%	3%	6%	4%	0%	9%	13%	6%

Source: Factset

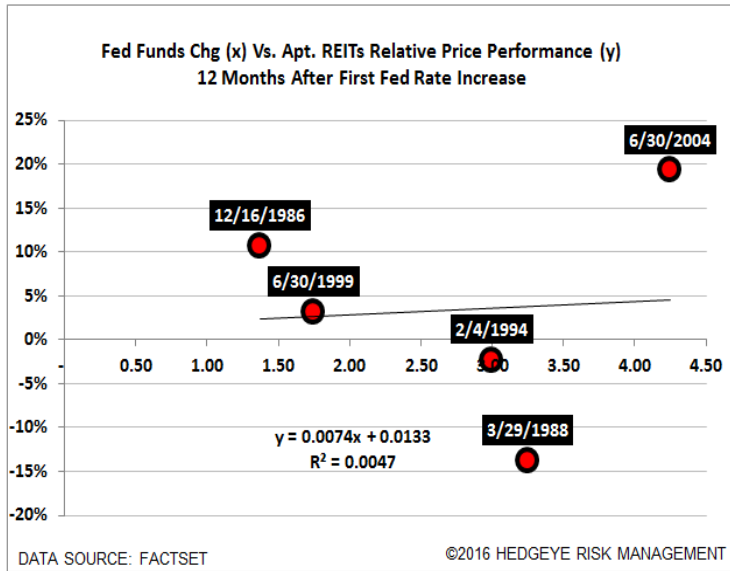
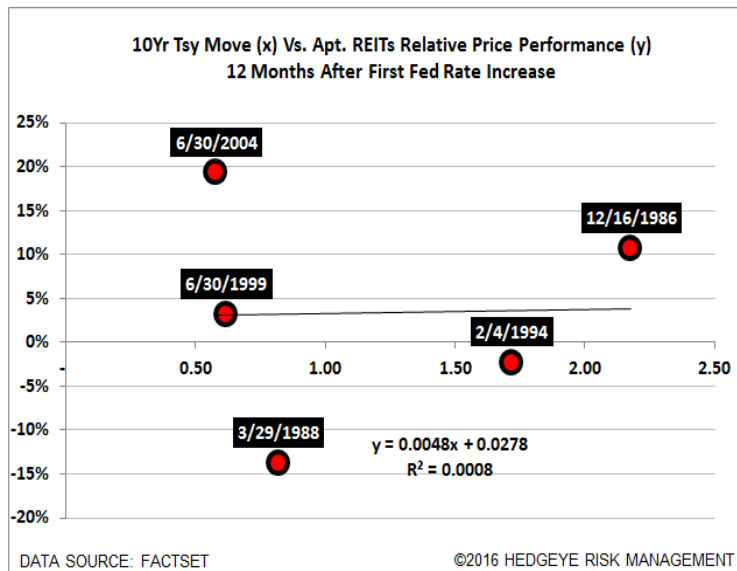


Home improvement chains also tend to perform respectably during higher rate periods.

APARTMENT REITS

Rate Hike Cycle			Fed Funds			10YR Tsy			The Curve?		Apartment REITs / Absolute Performance							Apartment REITs / Relative Performance						
Start	End	Mo	Start	End	Change	Start	End	Change	Delta	Direction	T-6	T-3	T-1	T-0	T+3	T+6	T+12	T-6	T-3	T-1	T-0	T+3	T+6	T+12
6/30/2004	6/29/2006	24	1.00	5.25	4.25	4.62	5.20	0.58	(3.67)	Much Flatter	4%	1%	2%	0%	3%	19%	24%	1%	0%	0%	0%	6%	13%	19%
6/30/1999	5/16/2000	11	4.75	6.50	1.75	5.81	6.43	0.62	(1.13)	Flatter	10%	16%	3%	0%	-7%	-9%	8%	-2%	10%	-3%	0%	0%	-15%	3%
2/4/1994	2/1/1995	12	3.00	6.00	3.00	5.94	7.66	1.72	(1.28)	Flatter	2%	-9%	-1%	0%	6%	1%	0%	-3%	-11%	-2%	0%	10%	2%	-2%
3/29/1988	2/24/1989	11	6.50	9.75	3.25	8.56	9.38	0.82	(2.43)	Much Flatter	-3%	4%	0%	0%	-4%	1%	-1%	18%	-1%	1%	0%	-8%	-3%	-14%
12/16/1986	9/4/1987	9	5.88	7.25	1.37	7.12	9.30	2.18	0.81	Much Steeper	9%	0%	-2%	0%	20%	16%	10%	6%	-8%	-4%	0%	4%	-4%	11%
5/2/1983	8/21/1984	16	8.50	11.75	3.25	10.26	12.62	2.36	(0.89)	Near Parallel	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Average:		14				2.81				(1.43)	4%	2%	0%	0%	3%	6%	8%	4%	-2%	-1%	0%	2%	-1%	3%
Median:		11				3.13				(1.21)	4%	1%	0%	0%	3%	1%	8%	1%	-1%	-2%	0%	4%	-3%	3%

Source: Factset



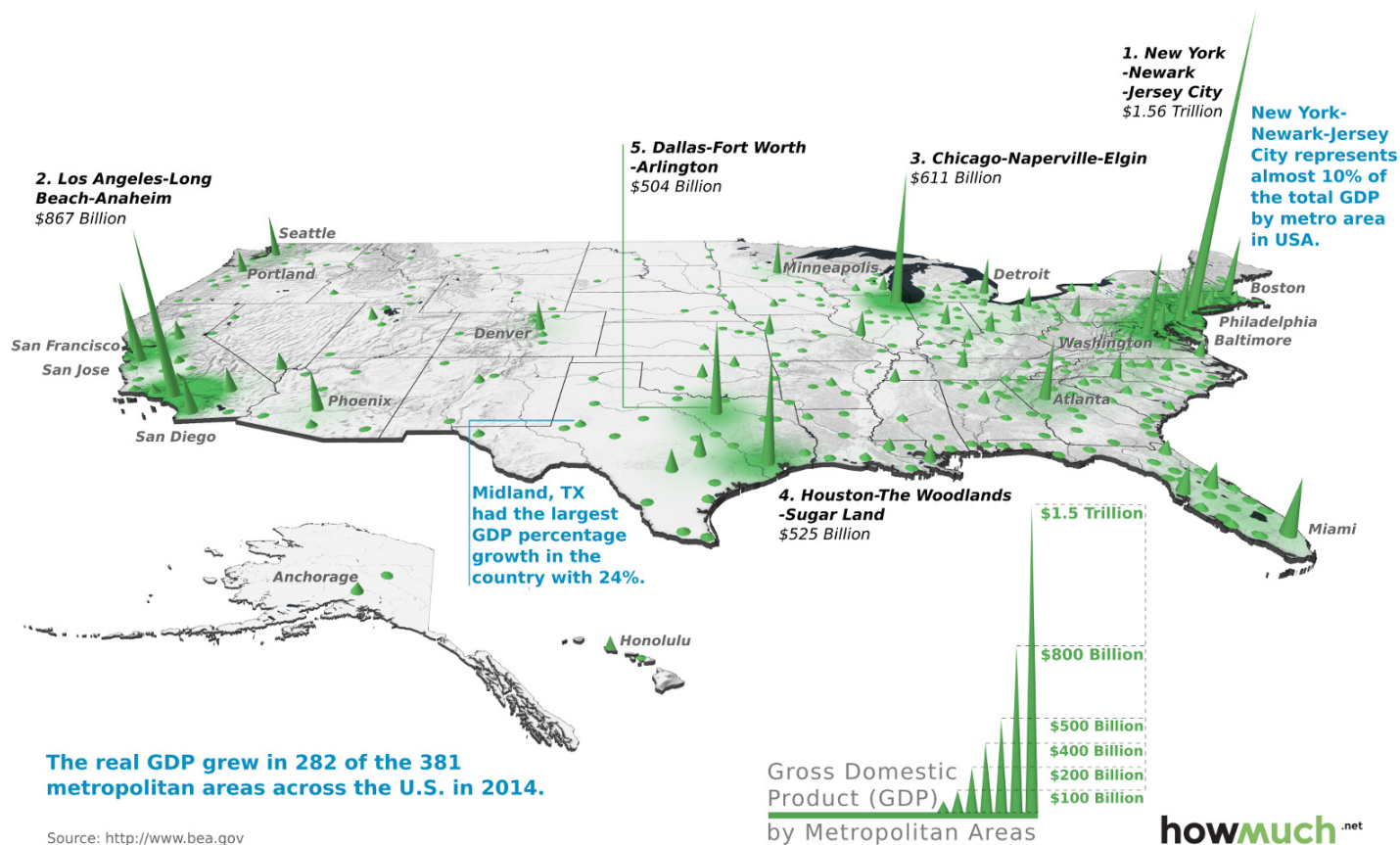
Apartment REITs tend to be much better relative performers when rates rise. What's more, these tables and charts don't reflect total return so the dividend would be in addition to this performance.



HOUSTON, WE HAVE A PROBLEM



HOUSTON IS BIGGER THAN YOU THINK



The Houston Metro area has the fourth largest GDP in the US, behind only New York, L.A. and Chicago.

HOUSTON HAS A LOT OF PEOPLE

Rank	Metropolitan Statistical Area	2014 Estimate	2010 Census	% Chg	Rank	Change	Rank
1	New York-Newark-Jersey City, NY-NJ-PA Metropolitan Statistical Area	20,092,883	19,567,410	2.69%	16	525,473	3
2	Los Angeles-Long Beach-Anaheim, CA Metropolitan Statistical Area	13,262,220	12,828,837	3.38%	14	433,383	4
3	Chicago-Naperville-Elgin, IL-IN-WI Metropolitan Statistical Area	9,554,598	9,461,105	0.99%	18	93,493	16
4	Dallas-Fort Worth-Arlington, TX Metropolitan Statistical Area	6,954,330	6,426,214	8.22%	2	528,116	2
5	Houston-The Woodlands-Sugar Land, TX Metropolitan Statistical Area	6,490,180	5,920,416	9.62%	1	569,764	1
6	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Area	6,051,170	5,965,343	1.44%	17	85,827	17
7	Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area	6,033,737	5,636,232	7.05%	4	397,505	5
8	Miami-Fort Lauderdale-West Palm Beach, FL Metropolitan Statistical Area	5,929,819	5,564,635	6.56%	6	365,184	6
9	Atlanta-Sandy Springs-Roswell, GA Metropolitan Statistical Area	5,614,323	5,286,728	6.20%	7	327,595	7
10	Boston-Cambridge-Newton, MA-NH Metropolitan Statistical Area	4,732,161	4,552,402	3.95%	13	179,759	12
11	San Francisco-Oakland-Hayward, CA Metropolitan Statistical Area	4,594,060	4,335,391	5.97%	8	258,669	9
12	Phoenix-Mesa-Scottsdale, AZ Metropolitan Statistical Area	4,489,109	4,192,887	7.06%	3	296,222	8
13	Riverside-San Bernardino-Ontario, CA Metropolitan Statistical Area	4,441,890	4,224,851	5.14%	10	217,039	11
14	Detroit-Warren-Dearborn, MI Metropolitan Statistical Area	4,296,611	4,296,250	0.01%	20	361	20
15	Seattle-Tacoma-Bellevue, WA Metropolitan Statistical Area	3,671,478	3,439,809	6.73%	5	231,669	10
16	Minneapolis-St. Paul-Bloomington, MN-WI Metropolitan Statistical Area	3,495,176	3,348,859	4.37%	12	146,317	14
17	San Diego-Carlsbad, CA Metropolitan Statistical Area	3,263,431	3,095,313	5.43%	9	168,118	13
18	Tampa-St. Petersburg-Clearwater, FL Metropolitan Statistical Area	2,915,582	2,783,243	4.75%	11	132,339	15
19	St. Louis, MO-IL Metropolitan Statistical Area	2,806,207	2,787,701	0.66%	19	18,506	19
20	Baltimore-Columbia-Towson, MD Metropolitan Statistical Area	2,785,874	2,710,489	2.78%	15	75,385	18

Source: US Census Bureau, HRM

Richard Beckwitt
President

A

With regard to Houston, I'll start off by saying that it's the largest market in the country, delivering about 28,000 homes, and that in spite of the oil pressures there it's still a pretty solid market. It's got good fundamentals. On the new home side, there's about a two-month supply of homes, which is good compared to the rest of the country. On the resale side, it's about the same amount of supply, about two months' homes are staying on the market. And compared to what Houston has been historically and the rest of the nation, it's a strong market.

The Houston Metro population is the fifth largest in the US with ~6.5 million residents. More interestingly, it was the fastest growing metro from 2010-2014 both in rate of change terms and by the number of new people.

HOUSTON HAS A LOT OF JOBS AT RISK

Mon Dec 14, 2015 12:55pm EST

With oil hedges rolling off, U.S. shale producers face stiff test

NEW YORK | BY CATHERINE NGAI



An oil pumping machine is seen as non-usable gases are being burnt behind it in Sakir, south of Manama, October 11, 2014.

REUTERS/HAMAD I MOHAMMED

"Producers have survived 2015 as they benefited from large reductions in service costs while having a significant amount of production hedged at high prices," said **John Arnold**, the Texas billionaire formerly at hedge fund Centaurus Advisors.

"Come Jan. 1, revenues will experience a pronounced decline for many companies, coinciding with a time of severe stress for balance sheets across the industry," he told Reuters.

"As we move through 2016 and 2017, both E&P volumes hedged and average hedge prices will move lower. The reduction in cash flows from hedge gains will result in lower capital expenditures and production, and an increase in leverage ratios. In reflexive fashion, distress in the E&P sector will increase in 2016 and 2017."

**- Kevin Kaiser,
Hedgeye Energy MD**

ENERGY COMPANIES ARE IN TROUBLE

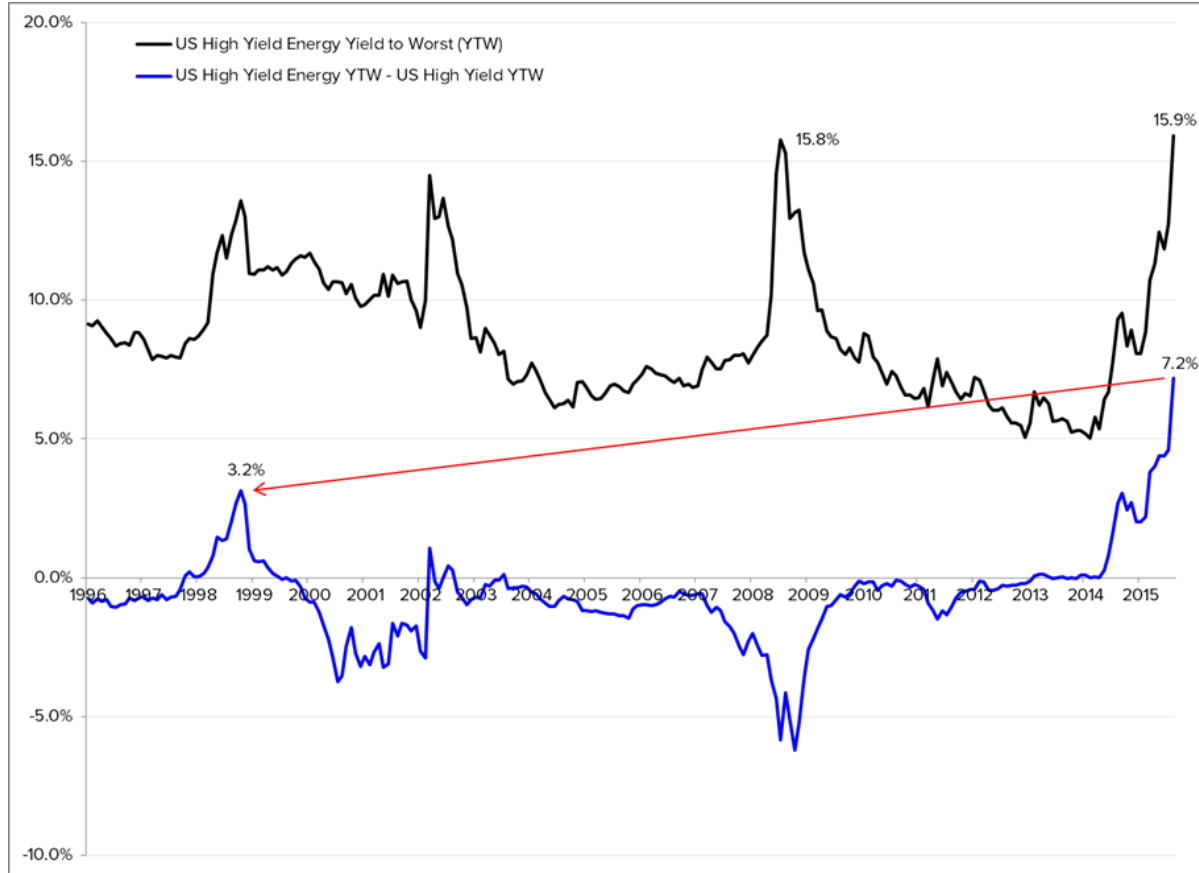
E&P OIL HEDGING: % of PRODUCTION HEDGED

	<u>4Q15</u>	<u>1H16</u>	<u>2H16</u>	<u>2017</u>
<u>Bakken Leveraged E&P's</u>				
Continental Resources	10%	3%	3%	0%
Halcon Resources	95%	80%	82%	12%
Northern Oil & Gas	84%	37%	36%	0%
Oasis Petroleum	66%	37%	36%	2%
Whiting Petroleum	52%	45%	46%	7%
<u>Permian-Basin Leveraged E&P's</u>				
Approach Resources	82%	15%	16%	0%
Parsley Energy	81%	111%	94%	23%
Cimarex Energy	0%	0%	0%	0%
Clayton Williams Energy	62%	0%	0%	0%
Concho Resources	70%	59%	49%	20%
Diamondback Energy	41%	2%	0%	0%
Laredo Petroleum	110%	70%	69%	33%
Pioneer Natural Resources	88%	88%	79%	21%
Average	65%	42%	39%	9%
Period/Period Chg		-23%	-3%	-30%

Source: Bloomberg

The hedges are continuing to roll off through the first half of this year. 65% of production was hedged at the end of 2015, but that ratio will fall by 23% to 42% by mid-2016 raising pressure on companies to reduce headcount.

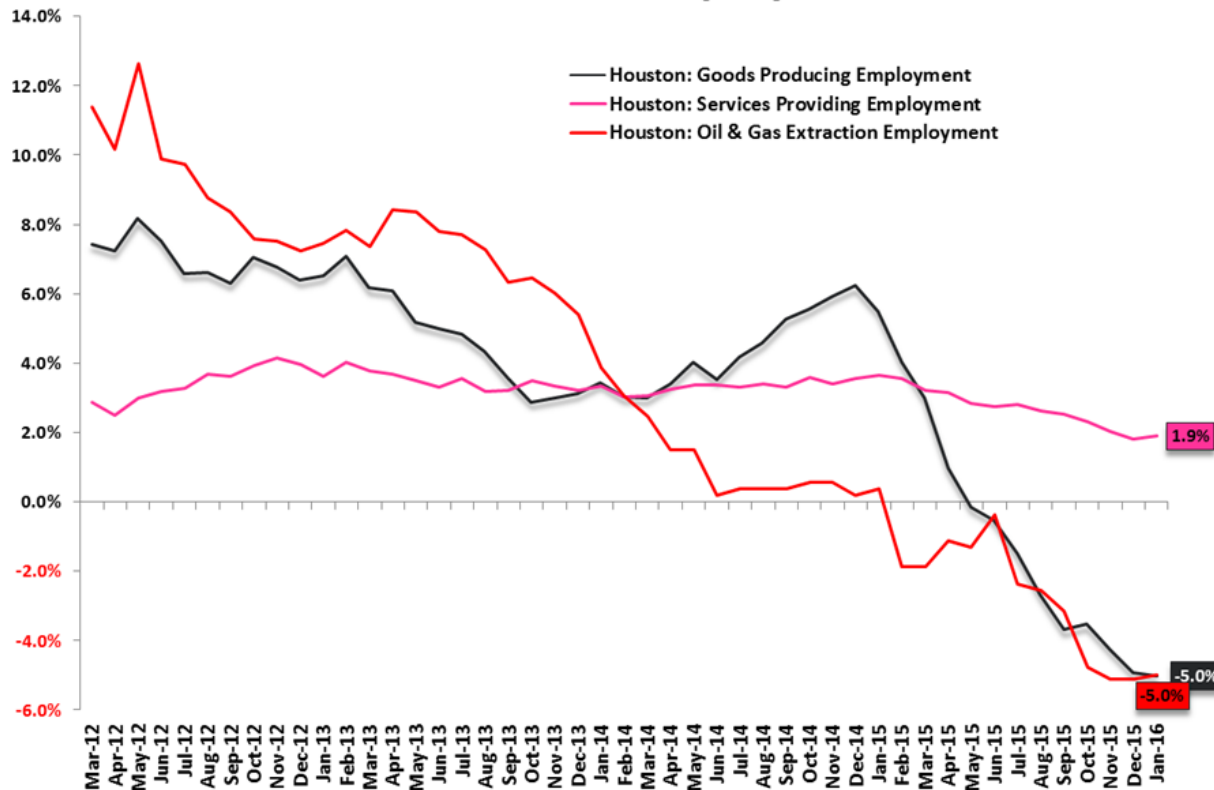
PRICING IN DEFAULT RISK



Energy companies are pricing in enormous default risk as energy sector YTW is trading at a 720 bps premium to the rest of the high yield space.

HOUSTON JOBS ARE EVAPORATING

Houston: NFP Employment



Source: Bloomberg, BLS

While Houston still talks a big game, the reality is that the trends are negative. Services employment growth has slowed from +4% to +1.9% and Goods employment has slowed from +2% to -5%.

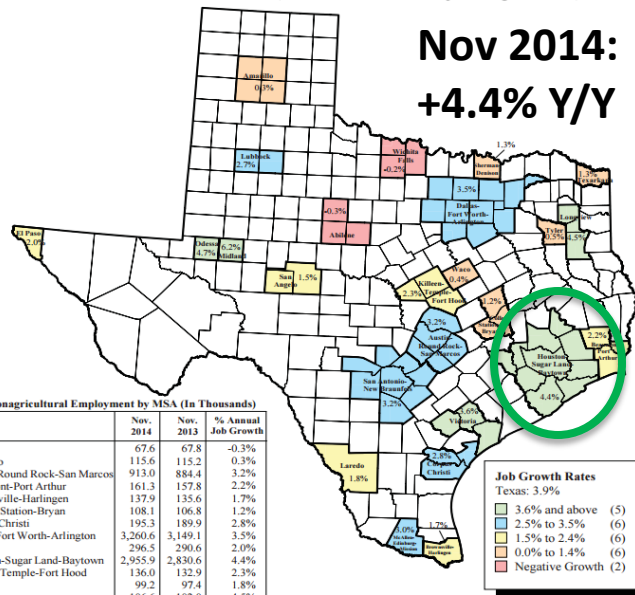
HERE'S A VISUAL:

TEXAS LABOR MARKET REVIEW

DECEMBER 2014

Annual Job Growth Rates by MSA November 2014 (Not Seasonally Adjusted)

**Nov 2014:
+4.4% Y/Y**



Total Nonagricultural Employment by MSA (In Thousands)

MSA	Nov. 2014	Nov. 2013	% Annual Job Growth
Ahlene	67.6	67.8	-0.3%
Amarillo	115.2	115.2	0.3%
Austin-Round Rock-San Marcos	913.0	884.4	3.2%
Beaumont-Port Arthur	161.3	157.8	2.2%
Brownsville-Harlingen	137.9	135.6	1.7%
College Station-Bryan	108.1	106.8	1.2%
Corpus Christi	195.3	189.9	2.8%
Dallas-Fort Worth-Arlington	3,260.6	3,149.1	3.5%
El Paso	296.5	290.6	2.0%
Houston-Sugar Land-Baytown	2,955.9	2,830.6	4.4%
Killeen-Temple-Fort Hood	136.0	132.9	2.3%
Laredo	99.2	97.4	1.8%
Longview	106.6	102.0	4.5%
Lubbock	139.3	135.7	2.7%
McAllen-Edinburg-Mission	245.4	238.2	3.0%
Midland	93.0	87.6	6.2%
Odessa	77.6	74.1	4.7%
San Angelo	48.9	48.2	1.5%
San Antonio-New Braunfels	944.9	915.8	3.2%
Sherman-Denison	45.5	44.9	1.3%
Texarkana	56.2	55.5	1.3%
Tyler	98.9	98.4	0.5%
Victoria	56.9	54.9	3.6%
Waco	107.9	107.5	0.4%
Wichita Falls	57.7	57.8	-0.2%

CES - A Bureau of Labor Statistics program that relies on employer surveys to estimate monthly, nonagricultural payroll employment.

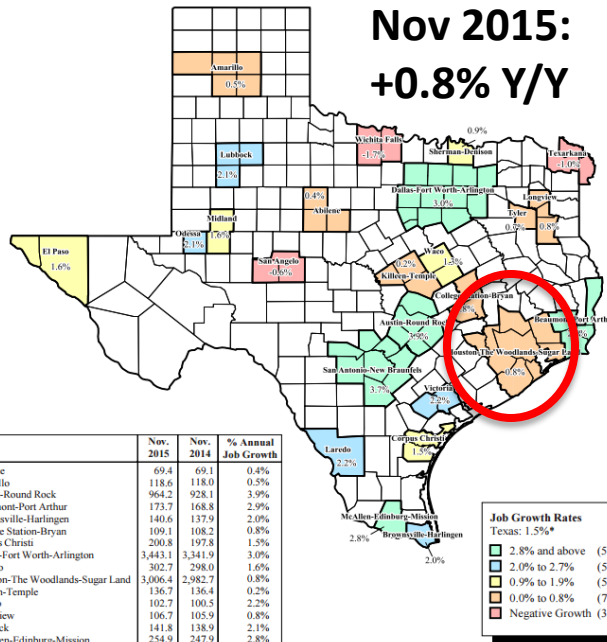
Source: Current Employment Statistics. Estimates produced by the Bureau of Labor Statistics, U.S. Department of Labor are disseminated in cooperation with the TWC. Prepared by the Labor Market and Career Information Department, TWC. (12/19/2014)

TEXAS LABOR MARKET REVIEW

DECEMBER 2015

Annual Job Growth Rates by MSA November 2015 (Not Seasonally Adjusted)

**Nov 2015:
+0.8% Y/Y**



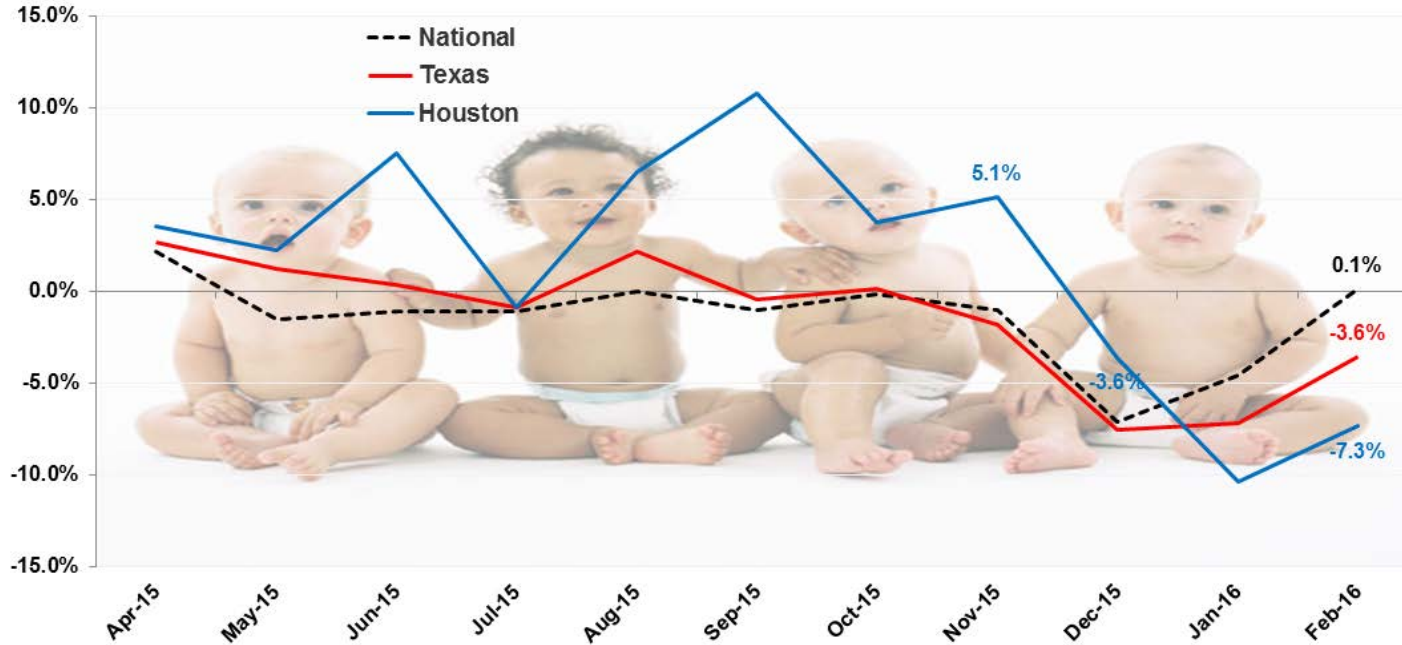
MSA	Nov. 2015	Nov. 2014	% Annual Job Growth
Ahlene	69.4	69.1	0.4%
Amarillo	118.6	118.0	0.5%
Austin-Round Rock	964.2	928.1	3.9%
Beaumont-Port Arthur	173.7	168.8	2.9%
Brownsville-Harlingen	140.6	137.9	2.0%
College Station-Bryan	109.1	108.2	0.8%
Corpus Christi	200.8	197.8	1.5%
Dallas-Fort Worth-Arlington	3,443.1	3,341.9	3.0%
El Paso	302.7	298.0	1.6%
Houston-The Woodlands-Sugar Land	3,006.4	2,982.7	0.8%
Killeen-Temple	136.7	136.4	0.2%
Laredo	102.7	100.5	2.2%
Longview	106.7	105.9	0.8%
Lubbock	141.8	138.9	2.1%
McAllen-Edinburg-Mission	254.9	247.9	2.8%
Midland	100.2	98.6	1.6%
Odessa	83.4	81.7	2.1%
San Angelo	49.5	49.8	-0.6%
San Antonio-New Braunfels	999.5	964.2	3.7%
Sherman-Denison	46.1	45.7	0.9%
Texarkana	58.9	59.5	-1.0%
Tyler	100.9	100.2	0.7%
Victoria	46.5	45.5	2.2%
Waco	113.7	112.2	1.3%
Wichita Falls	57.5	58.5	-1.7%

Source: Current Employment Statistics. Estimates produced by the Bureau of Labor Statistics, U.S. Department of Labor are disseminated in cooperation with the Texas Workforce Commission. *Not Seasonally Adjusted. Prepared by the Labor Market and Career Information Department, TWC. (12/18/2015)

Houston's overall job market has slowed from +4.4% growth in November, 2014 to +0.8% growth in November, 2015.

BABIES ARE IN A BEAR MARKET

BIRTH TRACKER: USA, TEXAS & HOUSTON - Y/Y RATE OF CHANGE



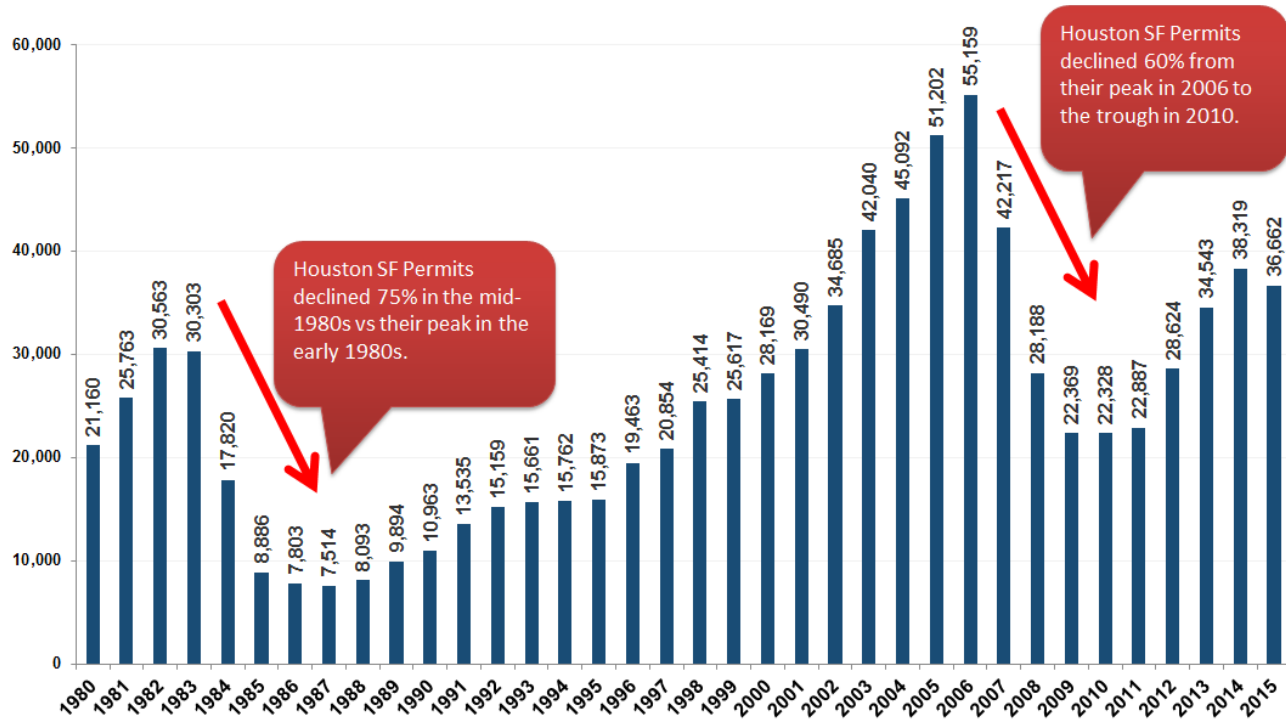
DATA SOURCE: HEDGEYE MATERNITY TRACKER

©2016 HEDGEYE RISK MANAGEMENT

This data comes from our Healthcare team. Babies being born in Houston began to decline sharply in November /December, but bear in mind that that decision was made 9 months earlier.

HOUSTON → THE LONG VIEW

HOUSTON SINGLE FAMILY PERMITS BY YEAR (1980-2015)



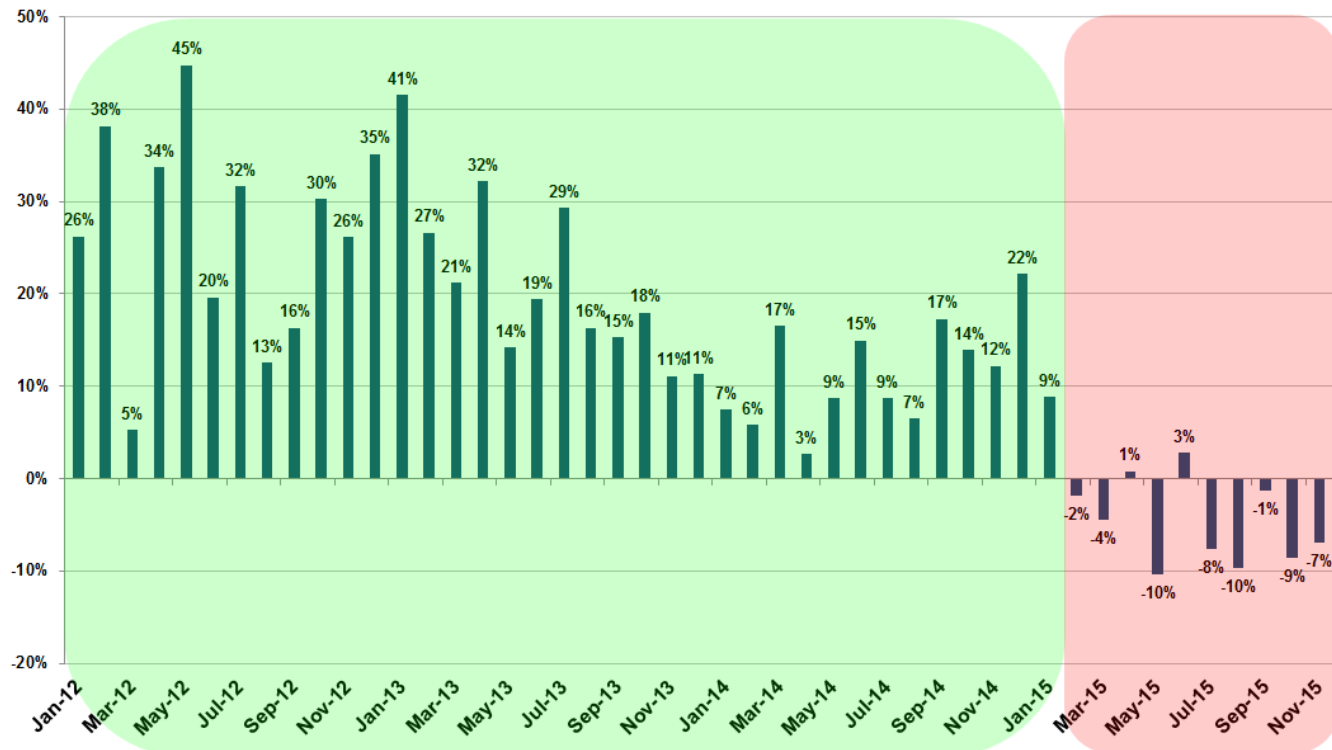
DATA SOURCE: TEXAS A&M REAL ESTATE CENTER, HRM

©2016 HEDGEYE RISK MANAGEMENT

The oil bust of the mid-1980s saw housing starts collapse 75% from their peak. The more recent decline saw a 60% drop. In 2015, however, starts are only down ~4%.

ZOOMING IN

Y/Y % CHANGE IN HOUSTON SINGLE FAMILY PERMITS BY MONTH
(2012 TO 2015)



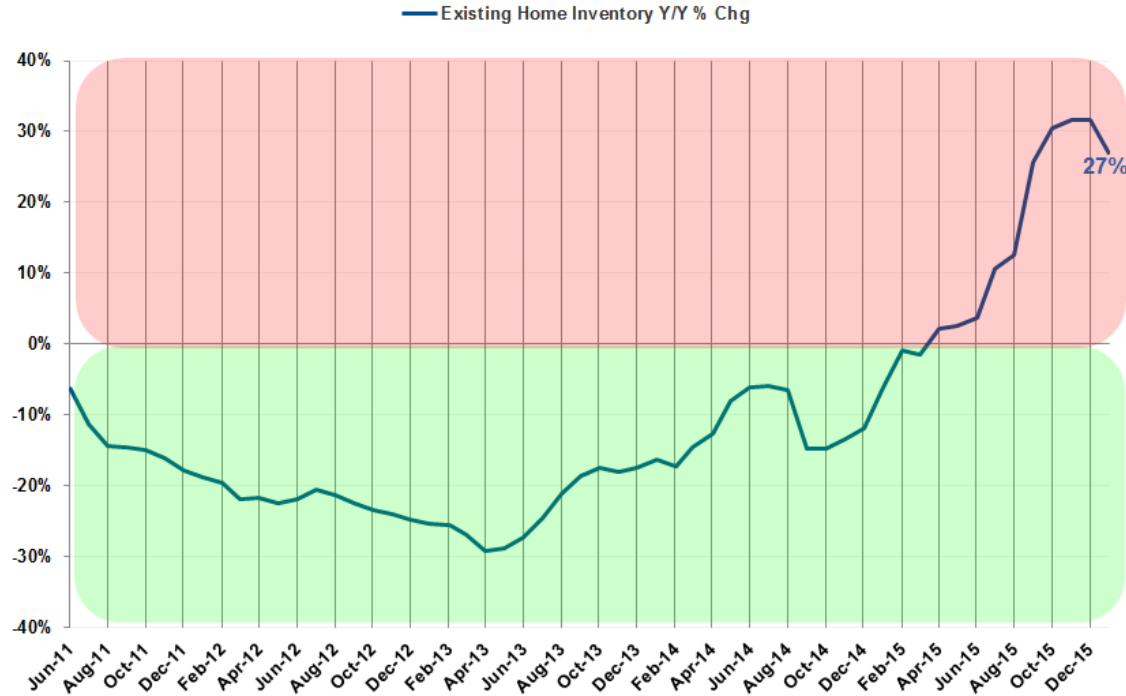
DATA SOURCE: TEXAS A&M REAL ESTATE CENTER, HRM
* 2015 IS AN ESTIMATE (11 MONTHS ACTUAL + DECEMBER ESTIMATE)

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More recently, however, starts have begun to wane. The latest readings are down 7-10% Y/Y.

THE EXISTING MARKET IS NOT GOOD

EXISTING HOMES FOR SALE IN HOUSTON - Y/Y % CHG



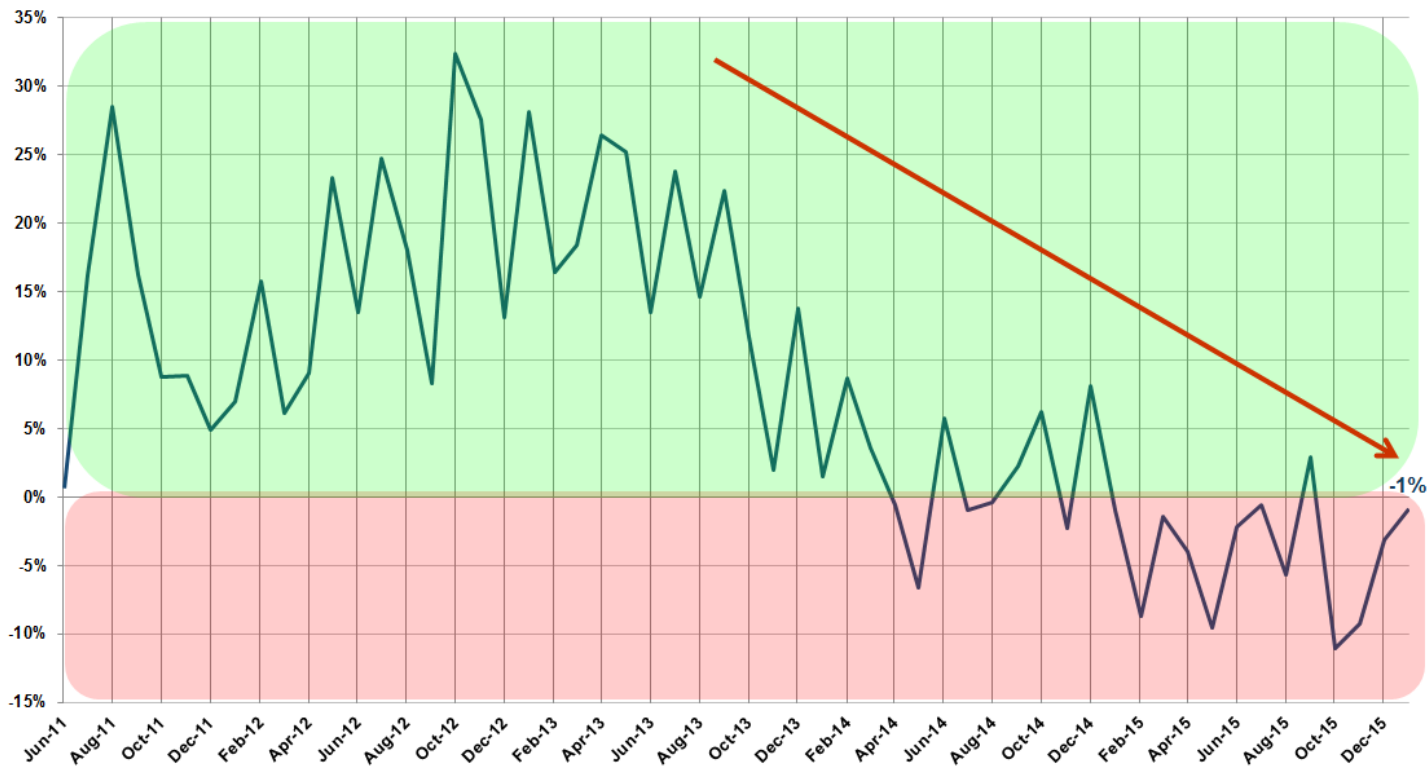
DATA SOURCE: TEXAS A&M REAL ESTATE CENTER, HRM

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The inventory of existing homes for sale in Houston is beginning to surge. The latest data showed it +27% Y/Y.

DEMAND IS WANING

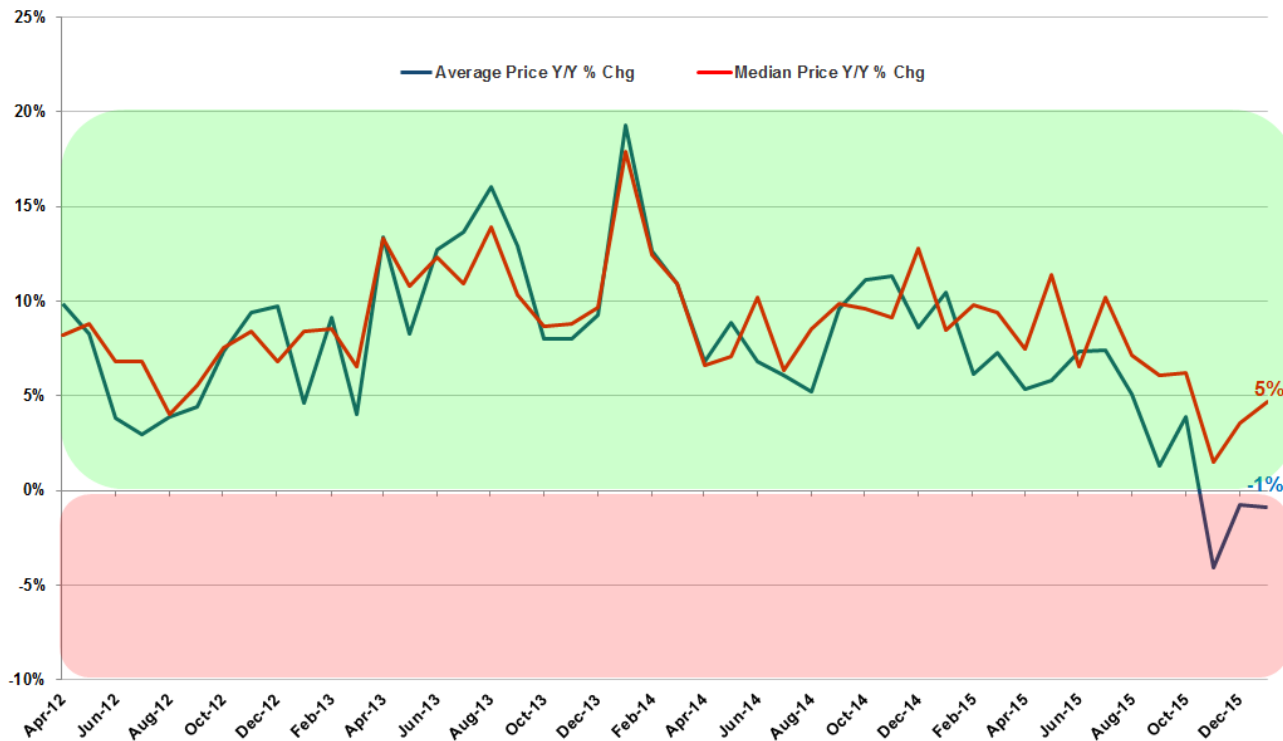
EXISTING HOME SALES IN HOUSTON - Y/Y % CHG



Demand growth for existing homes has turned negative and is steadily dropping.

PRICES ARE BEGINNING TO SLOW

EXISTING HOME PRICES IN HOUSTON - Y/Y % CHG


















DATA SOURCE: TEXAS A&M REAL ESTATE CENTER, HRM

©2016 HEDGEYE RISK MANAGEMENT

Prices have only just begun to respond. This will hit builder margins in earnest in 2016.

LENNAR AS A CASE STUDY

As the largest builder in Houston, Lennar also happens to be the only builder to consistently report Houston as a standalone segment; therefore, we use them as a proxy. Things aren't good.

Name		2015 Q4	2015 Q3	2015 Q2	2015 Q1	2014 Q4	2014 Q3	2014 Q2	2014 Q1	2013 Q4	2013 Q3
■ Orders											
■ Texas			-9.4%	3.1%	14.0%	12.0%	11.4%	15.8%	13.6%	34.8%	4.0%
■ KB Home		3.1%	9.8%	8.4%	14.9%	-1.7%	0.3%	12.1%	15.9%	36.7%	-2.9%
Central (TX, CO, NM)		3.1%	9.8%	8.4%	14.9%	-1.7%	0.3%	12.1%	15.9%	36.7%	-2.9%
■ Lennar Corp		-20.4%	-12.0%	-9.2%	-7.1%	9.4%	14.8%	5.2%	8.3%		12.1%
Houston		-20.4%	-12.0%	-9.2%	-7.1%	9.4%	14.8%	5.2%	8.3%		12.1%
■ DR Horton Inc			7.9%	15.5%	33.4%	25.9%	27.7%	27.3%	12.7%	14.5%	9.1%
South Central (TX, LA, OK)			7.9%	15.5%	33.4%	25.9%	27.7%	27.3%	12.7%	14.5%	9.1%
■ PulteGroup Inc			-5.0%	-12.8%	-4.7%	6.6%	-9.6%	15.3%	8.5%	-24.6%	-16.9%
Texas			-5.0%	-12.8%	-4.7%	6.6%	-9.6%	15.3%	8.5%	-24.6%	-16.9%
■ Meritage Homes Corp			-15.8%	-11.6%	-12.1%	-8.2%	-1.5%	12.0%	26.0%	12.3%	28.2%
Texas			-15.8%	-11.6%	-12.1%	-8.2%	-1.5%	12.0%	26.0%	12.3%	28.2%
■ Ryland Group Inc/The				3.1%	-6.3%	-10.0%	7.5%	-22.0%	30.3%		8.4%
Texas				3.1%	-6.3%	-10.0%	7.5%	-22.0%	30.3%		8.4%
■ Standard Pacific Corp				-4.2%	31.5%	44.8%	33.8%	66.2%	-2.9%	38.8%	16.7%
Texas				-4.2%	31.5%	44.8%	33.8%	66.2%	-2.9%	38.8%	16.7%

LENNAR UNDER THE MICROSCOPE

LENNAR CORPORATION AND SUBSIDIARIES

Summary of Deliveries and New Orders

(Dollars in thousands, except average sales price)

(unaudited)

Three Months Ended November 30,

	2015	2014	2015	2014	2015	2014
Deliveries:	Homes		Dollar Value		Average Sales Price	
East	3,053	2,609	\$ 901,520	740,763	\$ 295,000	284,000
Central	1,100	904	368,453	269,632	335,000	298,000
West	1,555	1,374	738,562	600,412	475,000	437,000
Southeast Florida	885	915	298,734	294,164	338,000	321,000
Houston	670	768	192,637	206,383	288,000	269,000
Other	394	380	170,883	172,279	434,000	453,000
Total	7,657	6,950	\$ 2,670,789	2,283,633	\$ 349,000	329,000

New Orders:	Homes		Dollar Value		Average Sales Price	
East	2,315	2,150	\$ 698,299	605,032	\$ 302,000	281,000
Central	970	726	322,993	221,667	333,000	305,000
West	1,251	1,120	587,476	476,271	470,000	425,000
Southeast Florida	685	575	224,344	190,145	328,000	331,000
Houston	510	641	145,781	173,615	286,000	271,000
Other	322	280	154,051	116,159	478,000	415,000
Total	6,053	5,492	\$ 2,132,944	1,782,889	\$ 352,000	325,000

Years Ended November 30,

	2015	2014	2015	2014	2015	2014
Deliveries:	Homes		Dollar Value		Average Sales Price	
East	9,251	7,824	\$ 2,737,608	2,234,086	\$ 296,000	286,000
Central	3,719	3,156	1,191,456	908,195	320,000	288,000
West	5,245	4,141	2,383,432	1,775,587	454,000	429,000
Southeast Florida	2,264	2,086	790,004	686,994	349,000	329,000
Houston	2,452	2,482	696,671	675,927	284,000	272,000
Other	1,361	1,314	584,435	578,295	429,000	440,000
Total	24,292	21,003	\$ 8,383,606	6,859,084	\$ 345,000	327,000

New Orders:	Homes		Dollar Value		Average Sales Price	
East	9,347	8,068	\$ 2,808,537	2,303,916	\$ 300,000	286,000
Central	4,128	3,473	1,358,374	1,021,839	329,000	294,000
West	5,608	4,516	2,617,393	1,956,157	467,000	433,000
Southeast Florida	2,232	2,055	761,959	685,536	341,000	334,000
Houston	2,320	2,643	678,965	720,453	293,000	273,000
Other	1,471	1,274	663,247	522,411	451,000	410,000
Total	25,106	22,029	\$ 8,888,475	7,210,312	\$ 354,000	327,000

November 30,

	2015	2014	2015	2014	2015	2014
Backlog:	Homes		Dollar Value		Average Sales Price	
East	2,308	2,212	\$ 741,528	672,204	\$ 321,000	304,000
Central	1,370	961	477,674	310,726	349,000	323,000
West	1,354	991	671,524	437,492	496,000	441,000
Southeast Florida	544	576	186,570	214,606	343,000	373,000
Houston	698	830	208,076	225,737	298,000	272,000
Other	372	262	192,379	113,563	517,000	433,000
Total	6,646	5,832	\$ 2,477,751	1,974,328	\$ 373,000	339,000

Houston represents 8.4% of LEN's backlog, 6.8% of new orders (MRQ) and 7.2% of deliveries (MRQ).

LENNAR'S RECENT COMMENTARY

Richard Beckwitt
President

Yeah. I would tell you on an overall pricing standpoint, we're probably anticipating somewhere in the mid-single digits range about 5% – 4%, 5%, 6% and that will definitely move by market. Certainly, we haven't underwritten any deals with any inflations to the extent that we get some upwardly moving price, we'll benefit from that on a performance standpoint.

With regard to Houston, I'll start off by saying that it's the largest market in the country, delivering about 28,000 homes, and that in spite of the oil pressures there it's still a pretty solid market. It's got good fundamentals. On the new home side, there's about a two-month supply of homes, which is good compared to the rest of the country. On the resale side, it's about the same amount of supply, about two months' homes are staying on the market. And compared to what Houston has been historically and the rest of the nation, it's a strong market.

While job growth has de-accelerated, primarily in the energy related sector, it's still net positive for the year with technology hiring, with the shipping sector being strong, and with the medical sectors bringing in employment.

New home sales were definitely down year to date for us and the rest of the market. The market is being more sluggish on the higher price points, but anything below \$300,000 – \$250,000, it's an extremely strong market. We are positioned in the market below the \$300,000 price point, and in better located communities in the higher price points.

Lennar Corp. (LEN)
Q4 2015 Earnings Call

Corrected Transcript
18-Dec-2015

Q4 Earnings Transcript 12/18/2015

Got it. And I guess just to follow up on region-specific, tying in Houston to this, I guess this has been a market where the margins have been quite high relative to what builders would typically see in this market over time and you made the comment around regulating pace and pushing price and some others have noted – started to talk about maybe some slippage on price. So I just wanted to get your sense of market dynamics around price there, how should we think about margins and even if margins are holding up you're mixing away from Houston and so from a mix perspective, seems like that might be a headwind to overall margins, any color there?

Richard Beckwitt
President

Margins in Houston are going – are down year-over-year, given the decline in the market. There's still good margins for us as a company, but they're not as strong as they were a year ago.

While LEN management was still fairly bullish on Houston as recently as ~4 weeks ago, there are growing top line and margin pressures.

TEXAS EXPOSURES BY BUILDER

TEXAS EXPOSURE, % of Closings	
<u>Company</u>	<u>TX, % of Closings</u>
LGIH	66.9%
MTH	37.9%
KBH*	37.1%
HOV	32.8%
DHI*	28.8%
BZH	22.4%
PHM	21.8%
LEN	20.6%
CCS	20.6%
CAA	19.9%
TPH	18.1%
MHO	16.6%
TOL	10.2%
MDC	0.0%

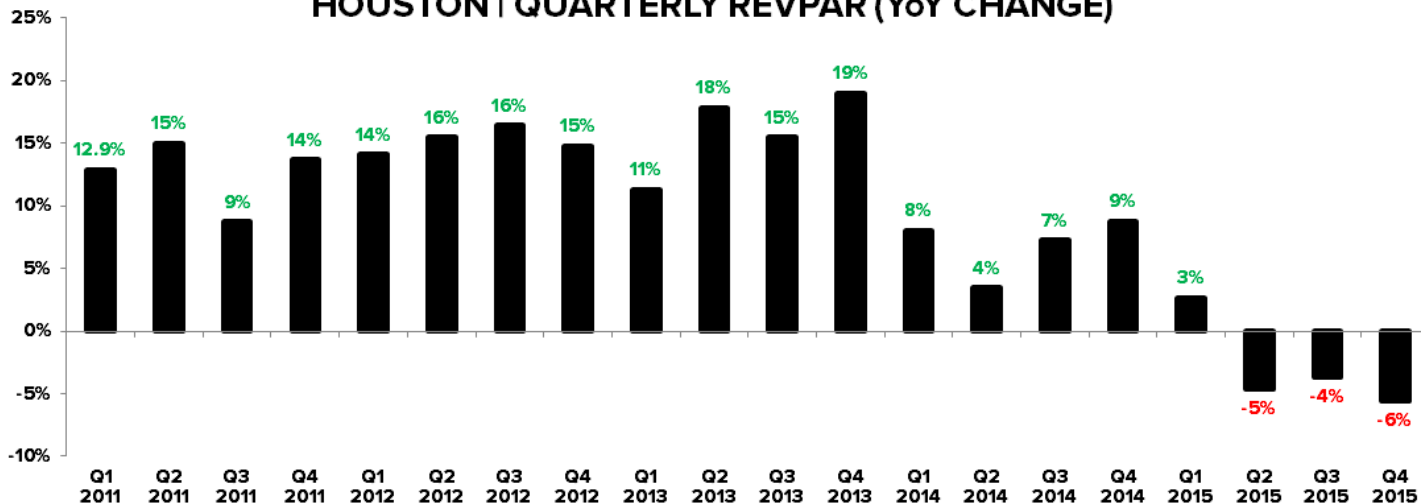
*South Central Region

Source: Bloomberg

While Houston level disclosures are inconsistent, TX-level disclosures are generally available. A reasonable frame of reference is that Houston typically accounts for +/- 1/3 of TX exposure.

MORE SIGNS OF HOUSTON TROUBLE

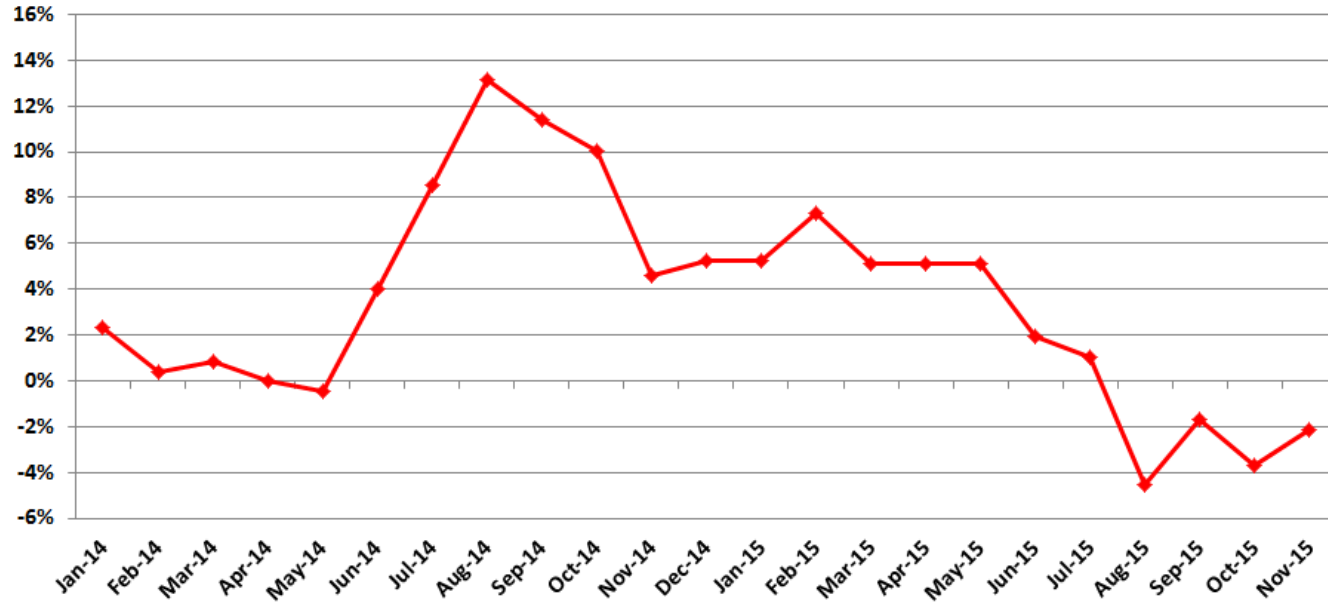
HOUSTON | QUARTERLY REVPAR (YoY CHANGE)



This chart comes from our GLL team. It shows hotel revenue per average room in Houston.

GAMBLING REVENUES ARE DOWN IN LA

LOUISIANA SSS GAMING REVENUE YOY CHANGE
3-MONTH ROLLING AVERAGE



Also from our GLL team, this chart shows Louisiana same-store gaming revenue trends, which is heavily dependent on Houston customers.

HOUSTONIANS ARE DINING OUT LESS

The screenshot shows the Twitter profile of Howard Penney (@HedgeyeHWP). The profile picture is a headshot of a middle-aged man with grey hair, smiling. The header image is a blurred photo of a restaurant interior with chandeliers. The bio identifies him as a Consumer Analyst at Hedgeye Risk Management, located in Stamford Ct, with a link to hedgeye.com. The statistics show 9,067 tweets, 648 following, 5,482 followers, 41 likes, and 1 list. A tweet from 1m ago is visible, mentioning \$DFRG and Double Eagle Steakhouse, with a red arrow pointing to it from the right.

Home Moments Notifications Messages Search Twitter

Howard Penney
@HedgeyeHWP FOLLOWS YOU
Consumer Analyst at Hedgeye Risk Management
Stamford Ct
hedgeye.com

TWEETS 9,067 FOLLOWING 648 FOLLOWERS 5,482 LIKES 41 LISTS 1

Tweets Tweets & replies Photos & videos

Howard Penney @HedgeyeHWP · 1m
\$DFRG talking about double digit negative sales in Houston and the Double Eagle Steakhouse @HedgeyeFIG

And from our Restaurants team ... (1/13/16)

FOR MORE INFORMATION, CONTACT US AT:

SALES@HEDGEYE.COM

(203) 562-6500