

July 2014

Global Securitized Products Strategy

## ***State of the Housing Recovery***

MORGAN STANLEY RESEARCH

Morgan Stanley & Co. LLC

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All information as of July 21, 2014,  
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## A Moderating Recovery in US Housing: Revising Down Projections of Existing Home Sales

### 2014 Projections

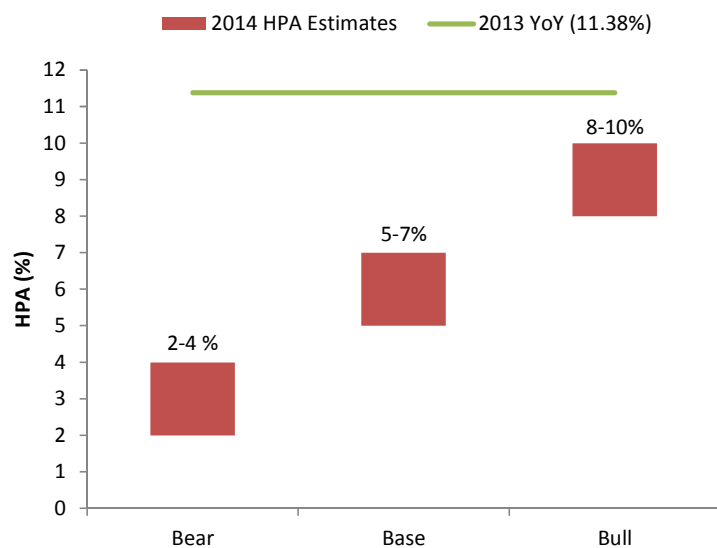
- Housing Prices: + 5-7%
- Existing Home Sales: 4.75 – 5.0 million units
- New Home Sales: 450 – 500 thousand units
- Housing Starts: 1.0 – 1.1 million units

### Home Price Indices

Index	Level	MoM	YTD	YoY	Peak to Current	Peak to Trough	Trough to Current
<b>Case-Shiller<sup>1,2</sup></b> <i>seasonally adjusted</i>	171.39	1.24%	2.87%	12.35%	-17.05%	-33.63%	24.98%
<b>Case-Shiller<sup>1,2</sup></b>	166.80	0.88%	0.71%	12.37%	-19.23%	-35.08%	24.41%
<b>Case-Shiller National<sup>1</sup></b> <i>seasonally adjusted</i>	155.47	NA	2.52%	10.32%	-18.60%	-33.64%	22.66%
<b>FHFA</b>	332.97	NA	0.56%	4.92%	-11.93%	-18.24%	7.72%
<b>CoreLogic</b>	167.46	1.36%	2.39%	11.13%	-16.02%	-32.60%	24.61%

<sup>1</sup> Case Shiller National and FHFA represent 1Q 2014 data, while Case Shiller 20 City Indices consider April 2014 data. Corelogic and Morgan Stanley Index show May numbers.  
<sup>2</sup> Represents Case-Shiller 20 City Index

### Morgan Stanley 2014 Home Price Projections



Source: Morgan Stanley Research estimates

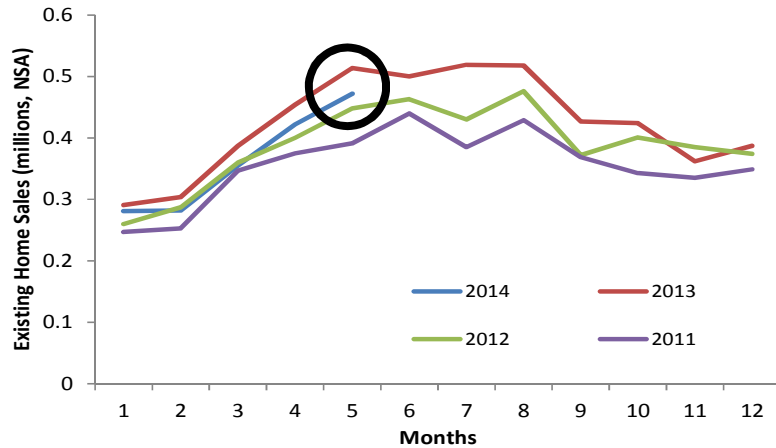
### Morgan Stanley Proprietary Indices

MS Index	Level	MoM	YTD	YoY	Peak to Current	Peak to Trough	Trough to Current
<b>Seasonally Adjusted</b>							
<b>Aggregate</b>	176.07	-0.27%	2.20%	9.79%	-15.70%	-34.29%	28.28%
<b>Non-Distressed</b>	188.54	-0.28%	0.97%	6.11%	-9.45%	-25.34%	21.30%
<b>Distressed</b>	143.48	-0.58%	1.00%	8.33%	-26.67%	-40.83%	23.92%

Source: S&P, Corelogic, Bloomberg, Morgan Stanley Research

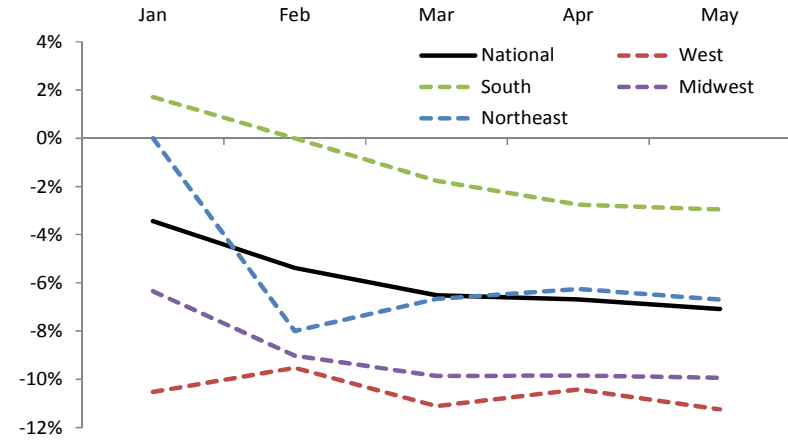
## Putting Context Around Existing Home Sales

Existing Home Sales are down 7.1% through the first five months of the year...



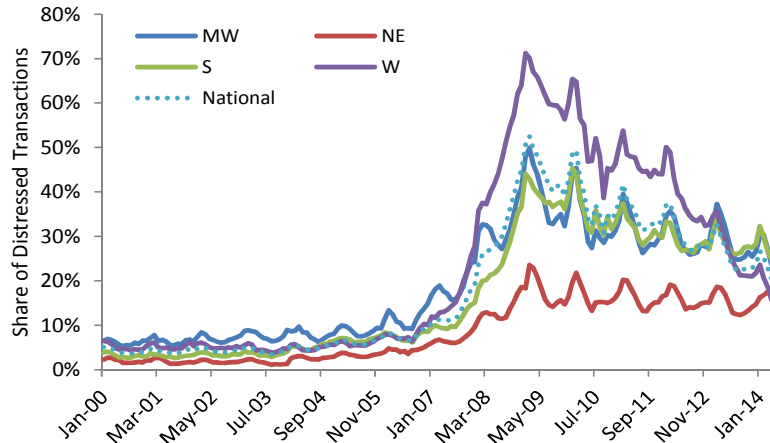
Source: NAR, Morgan Stanley Research

...but the sharper-than-average fall in the West points to factors beyond the weather.



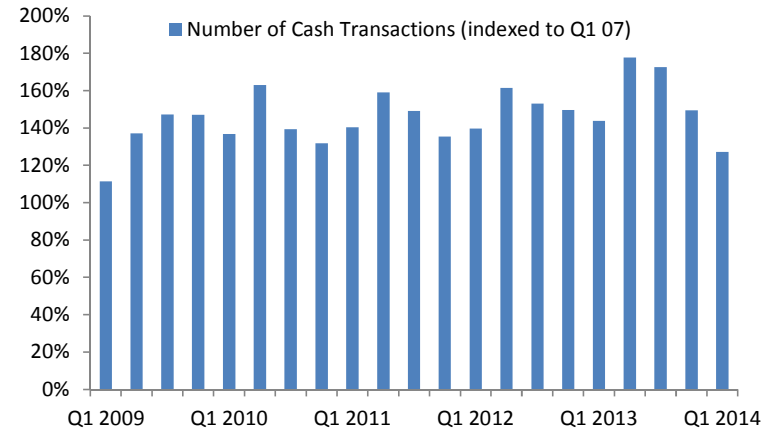
Source: NAR, Morgan Stanley Research

Not only has the share of distressed transactions fallen sharply...



Source: Dataquick, Morgan Stanley Research

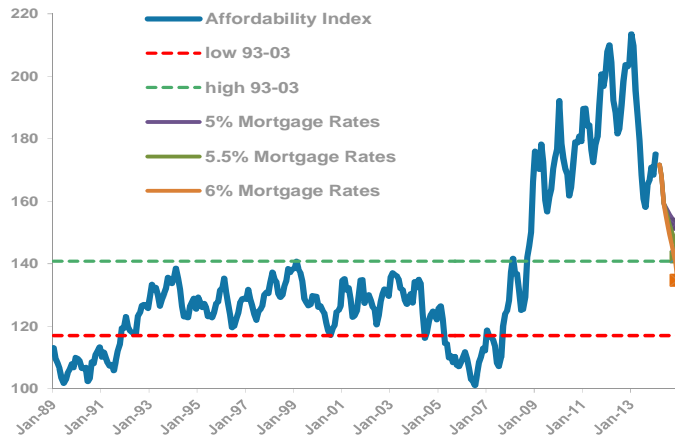
...but the absolute number of transactions is at its lowest level since Q1 2009.



Source: Dataquick, Morgan Stanley Research

## Passing the Baton to Mortgage-Dependent Buyers: Easier Said than Done

Housing remains affordable at the national level...



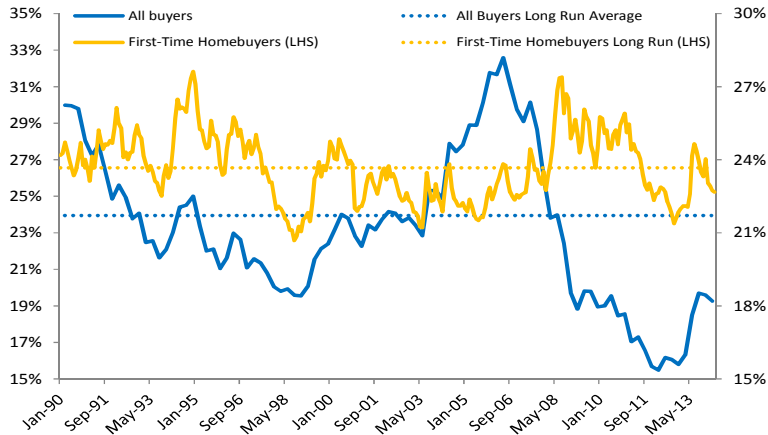
Source: NAR, Morgan Stanley Research

...but existing homeowners might not be able to participate.

- The rise in mortgage rates since mid-2013 could lock borrowers into their current homes
- According to Zillow, 18.8% of homeowners remain underwater as of Q1 2014
- Millions of former homeowners have dented credit after going through foreclosure

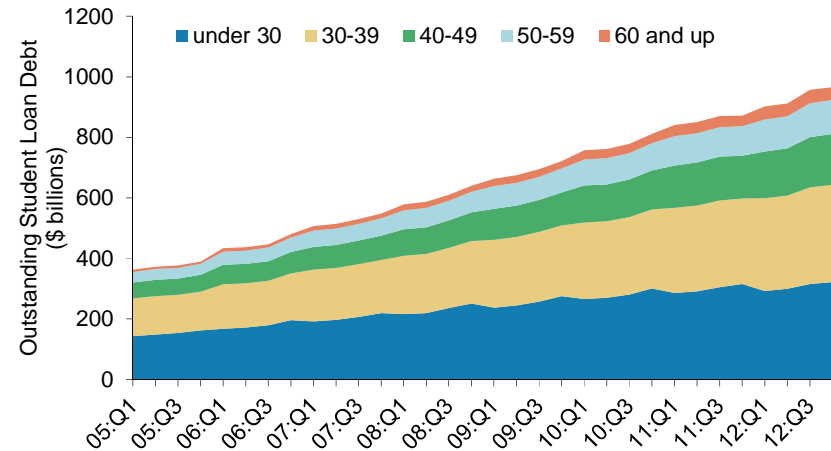
Source: Zillow, Morgan Stanley Research

First time homebuyers not only face affordability issues...



Source: Freddie Mac, Case Shiller, Census Bureau, Morgan Stanley Research

...but credit availability could be a problem as this age group bears the brunt of the increased student debt burden.



Source: Federal Reserve, Morgan Stanley Research

## Mortgage Credit Remains Restrictive but Is Availability Improving for Tail Borrowers?

- The average FICO scores of purchase mortgages guaranteed by the GSEs continues to fall while the share of mortgages issued to borrowers with a FICO score below 720 continues to grow. On its surface, this would seem to imply an easing of mortgage credit standards.
- However, there is a counter argument to this credit box expansion hypothesis that suggests that banks have not eased lending standards significantly, but instead are now retaining loans to borrowers at the higher end of the credit spectrum on their balance sheet and selling the rest to GSE pools.

### New Conventional Mortgages for Purchase

Month	FICO	LTV	DTI	FICO <720	DTI >43	LTV >80	Balance (\$bn)
2012-07	761.58	79.46	32.60	16.01%	12.61%	32.29%	25.34
2012-08	760.87	79.74	32.67	16.48%	12.55%	33.62%	25.06
2012-09	759.37	80.01	32.48	17.49%	11.63%	33.40%	24.73
2012-10	761.87	79.44	32.73	15.61%	12.92%	32.70%	18.78
2012-11	760.52	79.99	32.84	16.64%	12.98%	33.63%	31.58
2012-12	759.36	79.90	32.96	17.83%	13.76%	33.86%	15.19
2013-01	759.90	79.52	32.78	17.31%	13.38%	31.90%	21.46
2013-02	759.60	79.94	33.17	16.96%	13.84%	33.41%	19.26
2013-03	759.25	79.85	33.18	17.19%	13.83%	33.20%	18.27
2013-04	759.12	80.00	33.21	17.43%	13.65%	33.64%	22.92
2013-05	759.26	80.51	33.19	17.25%	13.39%	36.00%	27.63
2013-06	759.29	80.40	33.02	17.50%	12.95%	36.03%	30.30
2013-07	759.23	80.58	33.04	17.32%	12.95%	37.16%	34.35
2013-08	758.24	80.65	33.49	18.08%	13.97%	37.31%	34.82
2013-09	757.14	80.45	33.88	18.92%	14.75%	37.29%	33.11
2013-10	755.88	80.58	34.23	19.77%	15.54%	37.67%	30.88
2013-11	755.16	80.74	34.31	20.50%	15.76%	38.14%	28.71
2013-12	754.41	80.76	34.38	21.24%	15.79%	38.40%	26.42
2014-01	754.05	80.55	34.43	21.62%	16.18%	37.34%	20.85
2014-02	753.46	80.65	34.65	21.96%	16.77%	38.04%	20.25
2014-03	752.48	80.84	34.59	23.09%	15.76%	38.64%	17.41
2014-04	753.92	80.90	34.34	21.66%	14.63%	38.76%	22.23
2014-05	752.16	81.09	34.39	23.76%	15.00%	40.00%	20.88

Source: EMBS, Morgan Stanley Research

### Lending Volumes Down Precipitously

	1H 2014	1H 2013	1H 2014 Y/Y
Wells Fargo	\$ 83.0	\$ 221.0	-62%
Chase	\$ 33.8	\$ 101.7	-67%
Bank of America	\$ 24.5	\$ 51.8	-53%
US Bank	\$ 14.2	\$ 39.5	-64%
Citi	\$ 11.4	\$ 35.2	-68%

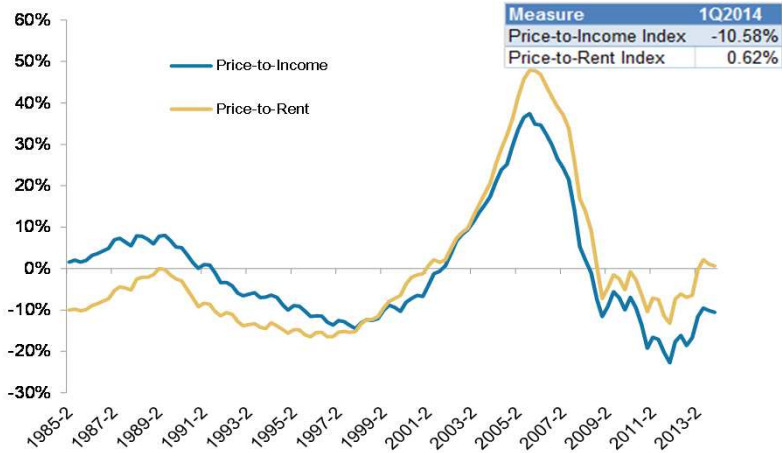
### New Ginnie Mae Mortgages for Purchase

Month	FICO	LTV	DTI	FICO <650	DTI >43	Balance (\$bn)
2013-08	704.05	96.71	39.88	14.49%	37.02%	20.10
2013-09	702.02	96.64	40.23	14.87%	38.46%	18.64
2013-10	700.81	96.54	40.48	18.49%	39.41%	18.20
2013-11	699.04	96.51	40.61	18.87%	39.91%	16.96
2013-12	697.66	96.51	40.30	19.87%	38.61%	13.68
2014-01	697.62	96.47	40.38	20.66%	38.64%	14.08
2014-02	697.24	96.50	40.60	20.53%	38.95%	12.95
2014-03	695.77	96.47	40.45	21.50%	39.37%	10.39
2014-04	694.77	96.47	40.28	22.12%	38.66%	13.75
2014-05	693.55	96.52	40.23	22.75%	38.53%	15.43

Source: EMBS, Company Reports, Morgan Stanley Research

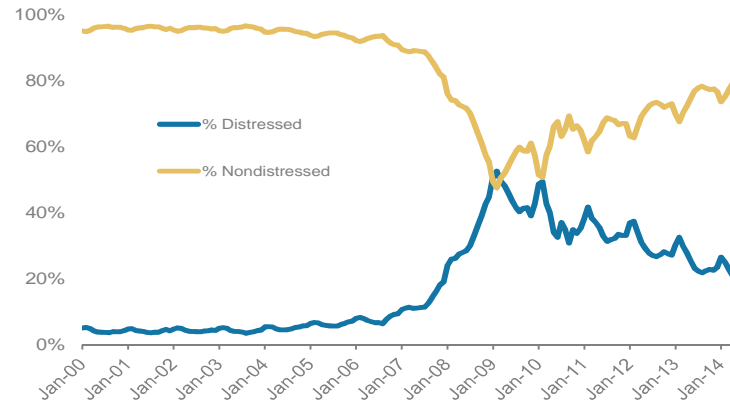
## Housing Prices Still Poised to Appreciate on Valuations, Shift-in-Mix, Limited Supply

While HPA has diluted the valuation argument, home prices remain undervalued on a Price-to-Income basis.



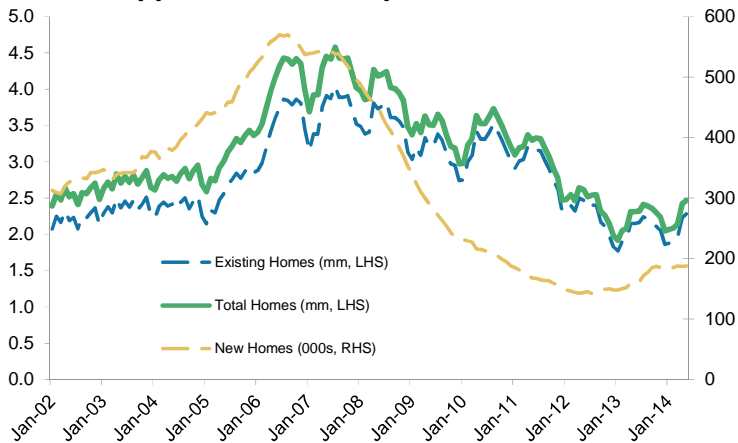
Source: Case Shiller, BLS, BEA, Morgan Stanley Research

A continued shift-in-mix away from distressed towards non-distressed transactions should also drive prices higher.



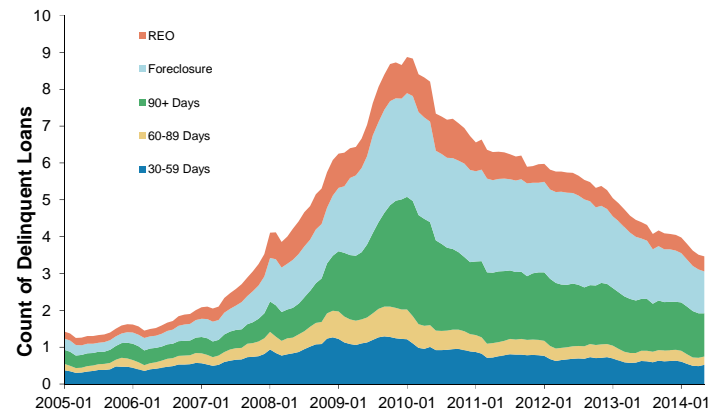
Source: Dataquick, Morgan Stanley Research

While visible inventory has increased, supply remains supportive of home prices...



Source: NAR, Census Bureau, Morgan Stanley Research

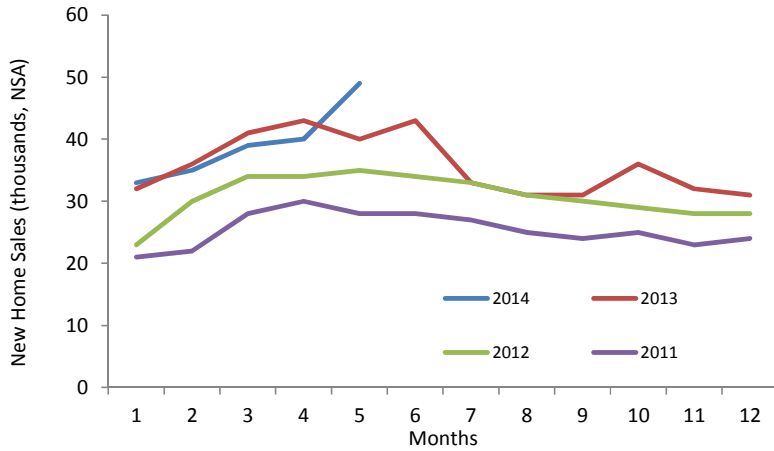
...and substantial declines in the shadow inventory should be positive for home prices going forward.



Source: Black Knight, Morgan Stanley Research

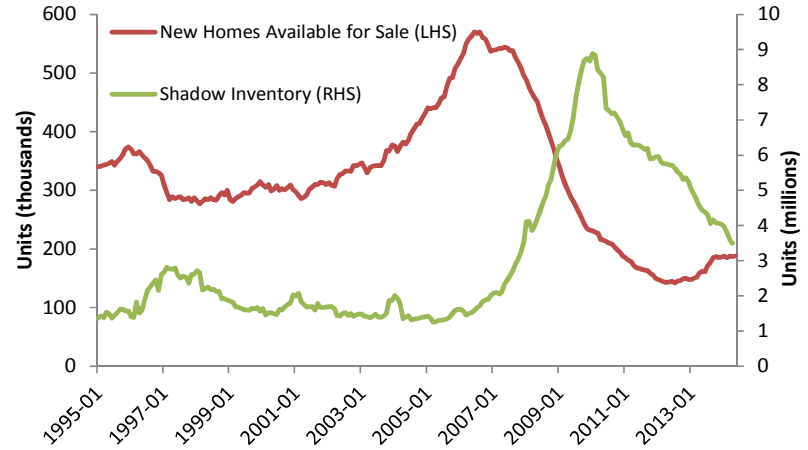
## New Home Sales Outpacing 2013 Year-to-Date

After May's strong print, new home sales are now outpacing 2013 sales figures.



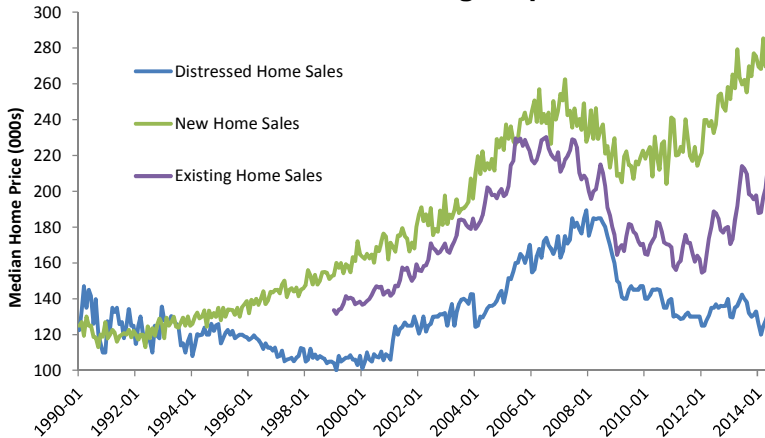
Source: Case Shiller, BLS, BEA, Morgan Stanley Research

Visible inventory of new homes suppressed by glut of shadow inventory.



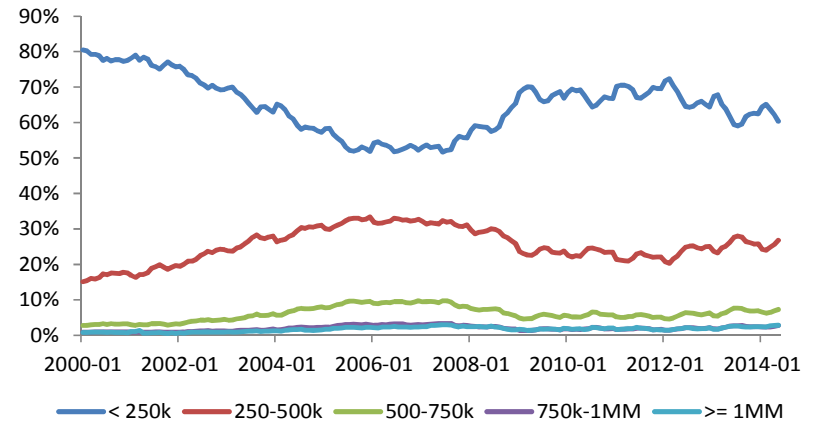
Source: Dataquick, Morgan Stanley Research

Low prices of distressed sales forced construction, and thus new home sales, into higher price tiers...



Source: NAR, Dataquick, Morgan Stanley Research

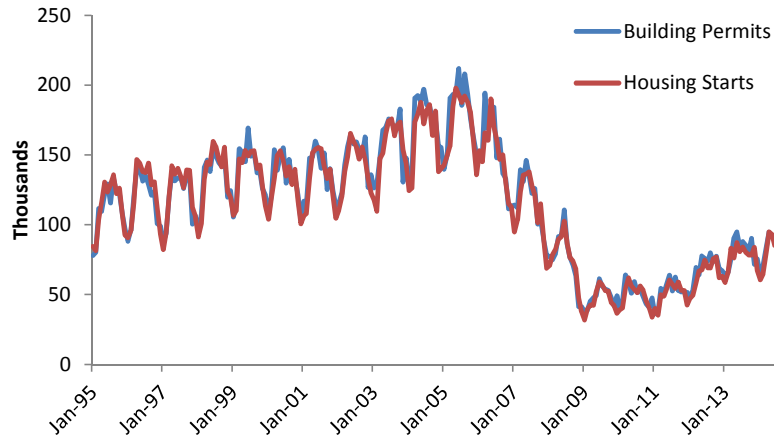
...where action has always been more muted, thus necessitating the lower inventory.



Source: Dataquick, Morgan Stanley Research

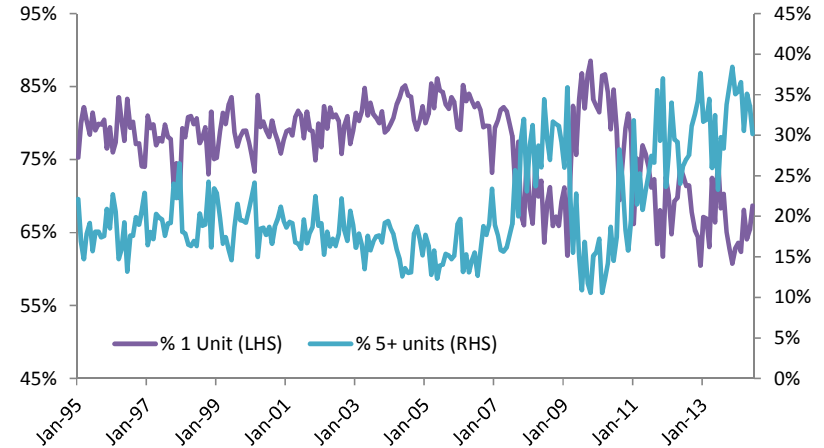
## Starts and Permits Rebounding, but the Composition has Changed

As the shadow inventory has dissipated, building permits and housing starts are rebounding...



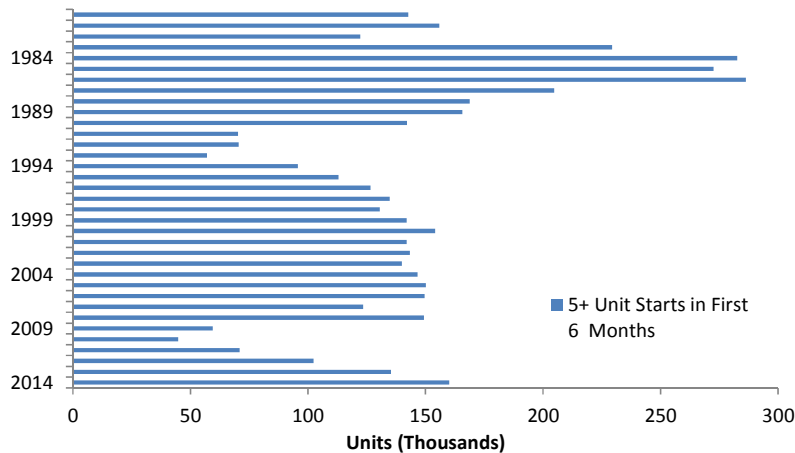
Source: Census Bureau, Morgan Stanley Research

...but the composition of housing starts is shifting towards multifamily construction.



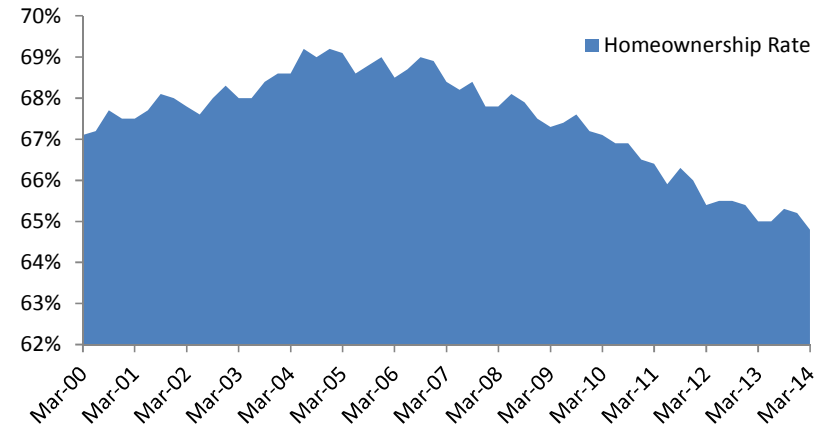
Source: Census Bureau, Morgan Stanley Research

In fact, 5+ unit starts are at the highest levels in over 25 years through the first 6 months.



Source: Census Bureau, Morgan Stanley Research

These dynamics should continue to weigh on homeownership rates.



Source: Census Bureau, Morgan Stanley Research



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	Count	% of Total	Count	% of Total IBC	% of Rating Category
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