

November 2013 Housing Commentary



Urs Buehlmann

Department of Sustainable Biomaterials

Virginia Tech

Blacksburg, VA

540.231.9759

buehlmann@gmail.com

and

Al Schuler

Economist (retired)

Princeton, WV

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November 2013

Housing Scorecard

	M/M	Y/Y
Housing Starts ^A	△ 22.7%	△ 29.6%
Single-Family Starts ^A	△ 20.8%	△ 26.2%
Housing Permits ^A	▽ 3.1%	△ 7.9%
Housing Completions ^A	▽ 0.1%	△ 21.6%
New Single-Family House Sales ^A	▽ 2.1%	△ 16.6%
Existing House Sales ^B	▽ 4.3%	▽ 1.2%
Private Residential Construction Spending ^A	△ 1.9%	△ 16.6%
Single-Family Construction Spending ^A	△ 1.8%	△ 18.4%

M/M = month-over-month; Y/Y = year-over-year

New Housing Starts

	Total Starts*	Single-Family Starts	Multi-Family 2-4 unit Starts	Multi-Family 5 or more unit Starts
November	1,091,000	727,000	10,000	354,000
October	889,000	602,000	6,000	281,000
2012	983,000	576,000	18,000	256,000
M/M change	22.7%	20.8%	66.6%	26.0%
Y/Y change	29.6%	26.2%	-55.5%	38.3%

* All start data are presented at a seasonally adjusted annual rate (SAAR)

New Housing Permits and Completions

	Total Permits*	Single-Family Permits	Multi-Family 2-4 unit Permits	Multi-Family 5 or more unit Permits
November	1,007,000	634,000	27,000	346,000
October	1,039,000	621,000	27,000	391,000
2012	933,000	574,000	29,000	330,000
M/M change	-3.1%	2.1%	0.0%	-11.5%
Y/Y change	7.9%	10.5%	-6.9%	4.8%
	Total Completions*	Single-Family Completions	Multi-Family 2-4 unit Completions	Multi-Family 5 or more unit Completions
November	823,000	596,000	6,000	221,000
October	824,000	616,000	12,000	196,000
2012	677,000	520,000	9,000	148,000
M/M change	-0.1%	-3.2%	-50.0%	12.8%
Y/Y change	21.6%	14.6%	-33.0%	49.3%

New and Existing House Sales

	New Single-Family Sales*	Median Price	Month's Supply	Existing House Sales ^{B*}	Median Price ^B	Month's Supply ^B
November	464,000	270,900	4.3	4,900,000	\$196,300	5.1
October	474,000	259,200	4.5	5,120,000	\$197,500	4.9
2012	398,000	245,000	4.5	4,660,000	\$179,400	4.8
M/M change	-2.1%	-4.5%	-4.4%	-4.3%	-0.6%	4.1%
Y/Y change	16.6%	-0.5%	-4.4%	-1.2%	9.4%	6.3%

* All sales data are SAAR

Existing House Sales

National Association of Realtors (NAR®)^B

November 2013 sales data:

Distressed house sales: 14% of all sales –
(9% foreclosures and 5% short-sales)

Distressed house sales: 14% in October
and 22% in November 2012

All-cash sales: increased to 32%; 31% in October

Investors are still purchasing a substantial portion
of “all cash” sale houses – 19%;
19% in October 2013 and 19% in November 2012

First-time buyers: unchanged at 28% (28% in October 2013)
and 30% in November 2012

November 2013 Construction Spending

November 2013 Private Construction: \$345.53 billion (SAAR)

1.9% greater than the revised October estimate of \$339.23 billion (SAAR)

16.6% greater than the November 2012 estimate of \$296.40 billion (SAAR)

November SF construction: \$174.76 billion (SAAR)

1.8% greater than October: \$171.69 billion (SAAR)

18.4% greater than November 2012: \$147.58 billion (SAAR)

November MF construction: \$35.24 billion (SAAR)

1.8% greater than October: \$34.94 billion (SAAR)

36.3% greater than November 2012: \$25.84 billion (SAAR)

November Improvement^D construction: \$135.53 billion (SAAR)

2.2% greater than October: \$132.59 billion (SAAR)

29.6% greater than November 2012: \$104.59 billion (SAAR)

^D The US DOC does not report improvements directly, this is an estimation. All data is the SAAR and is reported in nominal US\$.

Conclusions

The housing market exhibits stagnation; permits decreased slightly and existing home sales marginally decreased. Construction spending data improved somewhat. November's new home sales also decreased.

As in previous months, the near-term outlook on the U.S. housing market remains unchanged – there are potentially negative macro-factors or headwinds at this point in time for a robust housing recovery (based on historical long-term averages).

Why?

- 1) a lack of well-paying jobs,
- 2) a “sluggish” economy
- 3) declining real median annual household incomes,
- 4) strict home loan lending standards, and
- 5) new banking regulations.

Housing comments – January, 2014

U.S. economy seems to be getting better –

Demand , Debt and Uncertainty are still nagging issues -

Two major concerns –

- (1) can the economy (and housing) stand on its own (without Fed stimulus)? We should get some indications this year.
- (2) Uncertainty is a key reason holding back job creating investments – also holding back consumer spending – but, uncertainty is diminishing, finally.

This is the 1st time since 2006 that I'm getting more optimistic about the economy, and housing. In the past, housing led the recovery from a recession, but this time, I think the economy will recover 1st, and this will create jobs, and people will buy houses again. Why this scenario? Interest rates are already low, so the FED can't lower them anymore to jump start the economy (this is how we got out of most prior recessions). The economy will improve 1st because of so much "pent up demand". As the job market improves, this will fuel demand, and the cycle continues. And, Congress seems to be getting its act together.

Why the economy will do better in 2014 – some drivers

- Less deleveraging at state and household levels
- Less dysfunctional “Washington”
- Health care costs showing some improvement – this is important because health care is about 17% of GDP and Medicare/Medicaid are biggest debt problems facing the federal government
- Inflation not a problem (for now) – in fact, this is the big unknown – inflation, disinflation (slower rate of inflation), or deflation. My bet is disinflation. What happens when Central banks unwind balance sheets is anyone’s guess.
- Stronger dollar – as U.S. economy improves and trade deficit shrinks, investment dollars flow to USA – this supports the dollar and job creation
- Job improvement will come from GDP growth – Household formation will follow – that is key to more housing starts

Some additional questions going forward:

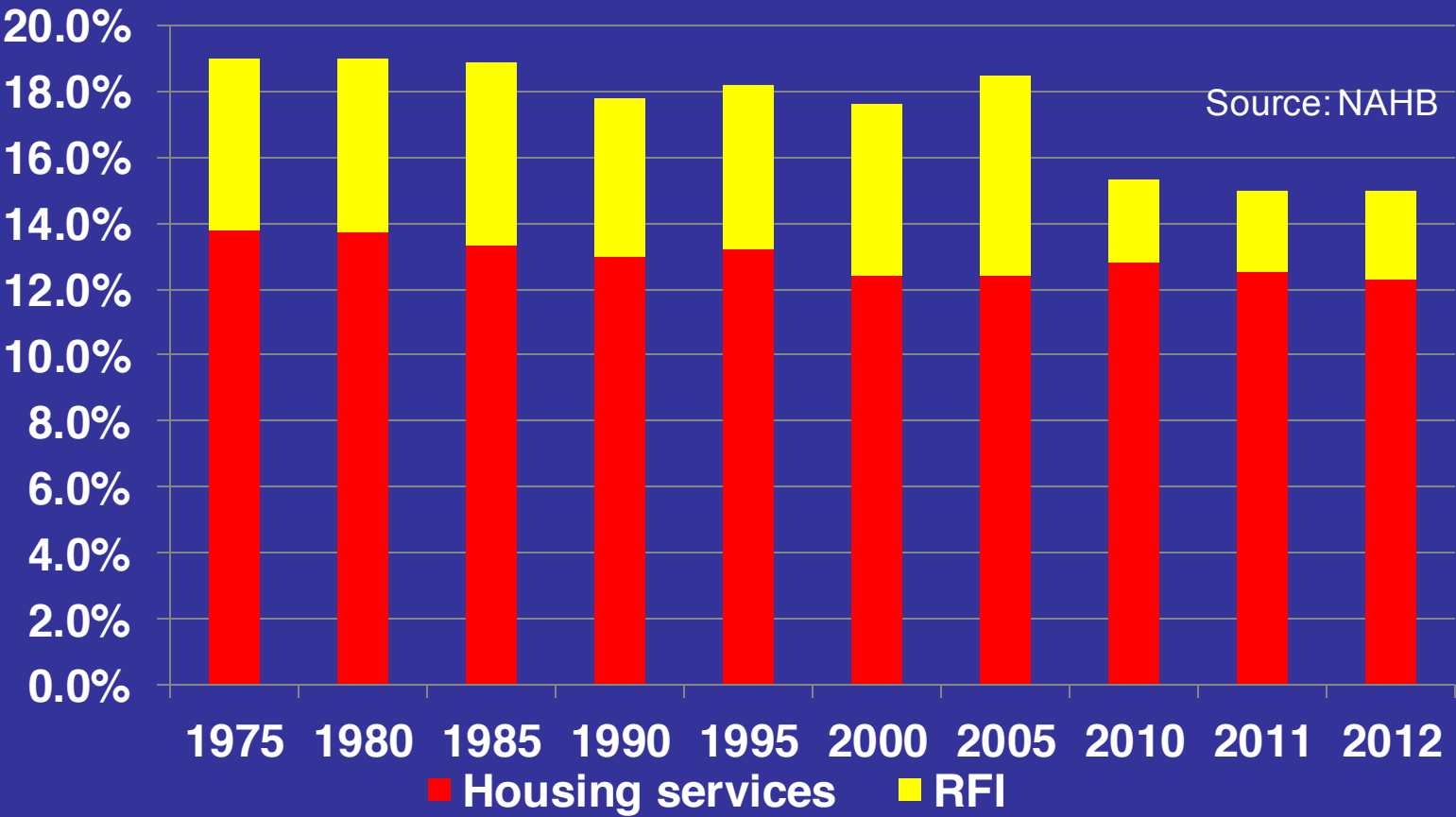
- (1) Sustainable housing recovery? Keeps looking better. But, there are still almost 10 million households that are seriously underwater as of Dec 2013.
- (2) Job recovery remains the main problem – without good jobs with benefits, housing and the economy will remain relatively weak!!!
- (3) **Longer term, we need to deal with three major issues:
(a) tax reform, (b) entitlements, and (c) debt. They are related! Hopefully, “Washington” gets the message and deals with these issues.**

Housing, Economy, and wood products

They are “joined at the hip”

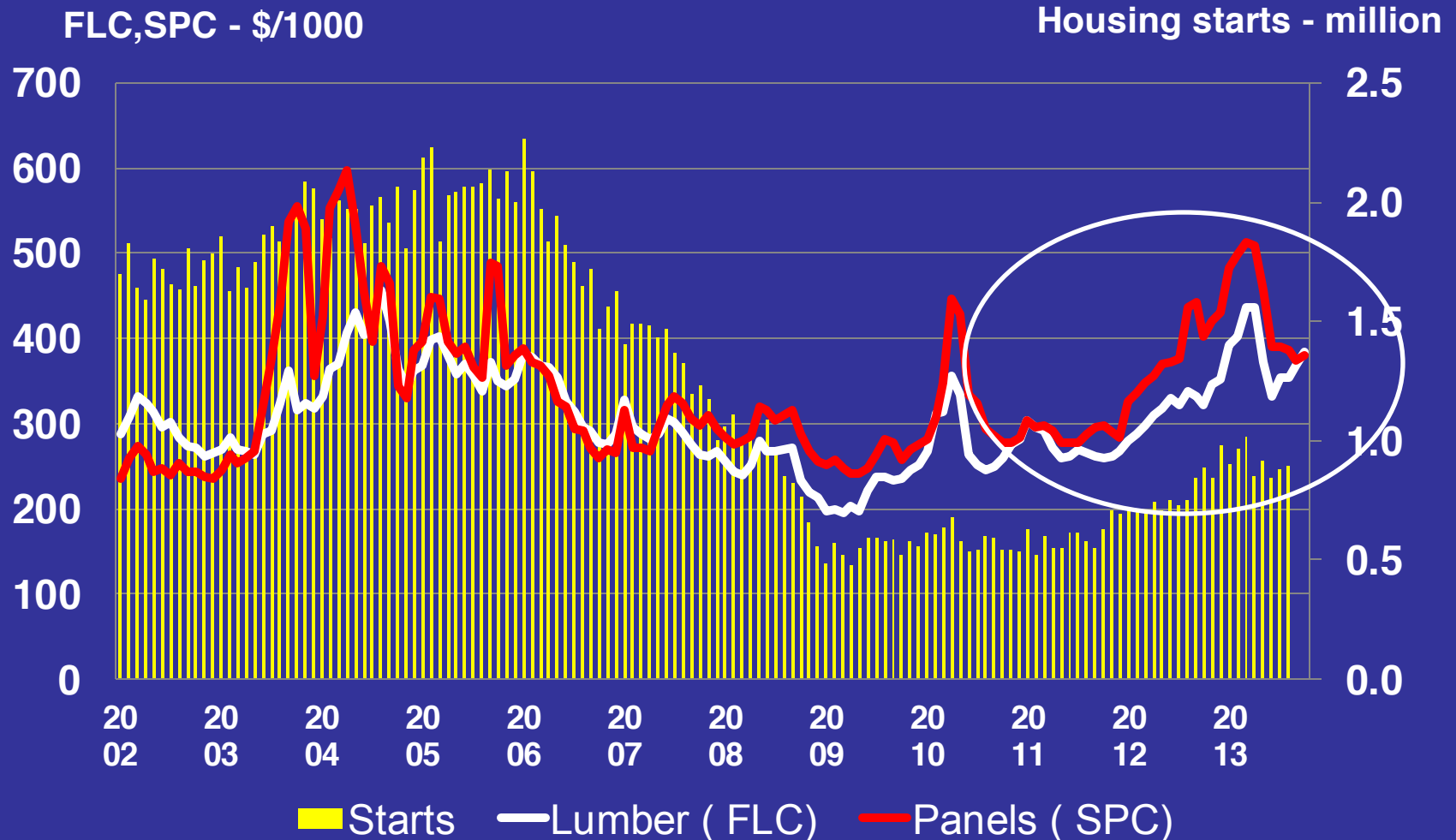
Housing’s contribution to GDP (%) – historically, it is almost 20% of the economy when you include housing services and fixed investment, but today it is down to 15%. In reality, it is even more important when you include purchased furniture, landscaping, general maintenance, etc.

Housing services = gross rents paid by renters (incl utilities) + owner’s imputed rent (how much it would cost to rent owner occupied homes) plus utility payments
RFI (residential investment) = construction of new SF and multifamily structures, remodeling, manufactured homes , plus broker’s fees



Housing starts and wood product prices – Economics 101

Following housing bust in 2008, wood prices fell and production capacity was reduced. So, when housing starts increased, there was an imbalance between demand and supply of wood products. The price mechanism brings demand and supply into balance. Initially, prices fell almost 50% - this instigated production cutbacks of 50% or more – then, as housing begins to turn around, prices increase - this encourages Production increases for wood products – and the cycle starts over.



Sources: Prices – Random Lengths (<http://www.randomlengths.com/>); starts (Bureau of Census (<http://www.census.gov/construction/nrc/>)

Job situation is getting better – we're creating about 180,000 per month (net basis) and approximately 25% are part time jobs with little or no benefits (health care, retirement, etc.), and poor pay. And, it will only get more challenging as baby boomers retire. This will put more stress on government services like Social Security and Medicare. Where will we get the money to invest in the future?

As long as this scenario continues, demand for goods and services will remain weak. There are no “quick fixes” – government stimulus(QE, etc.) helps, but is not enough. Long term solution is R&D, education, infrastructure investment, fix the tax system to encourage investment/discourage consumption, and fix health care.

OK – here is one more plug for focusing more on education. The U.S. ranks poorly with other countries regarding math and science scores - Our reading comprehension is not all that great either. Making quality education available to everybody should be a high priority. I don't know how it can be done, but I do know our standard of living will continue to worsen if we don't become more competitive. Education is key to achieving a better competitive position.

Employment situation - our biggest problem - it's getting better, but the jobs recovery remains weak by past standards, and many jobs
Don't include health care or retirement benefits (because they are
Often part time jobs) – those kinds of jobs don't encourage people to buy houses

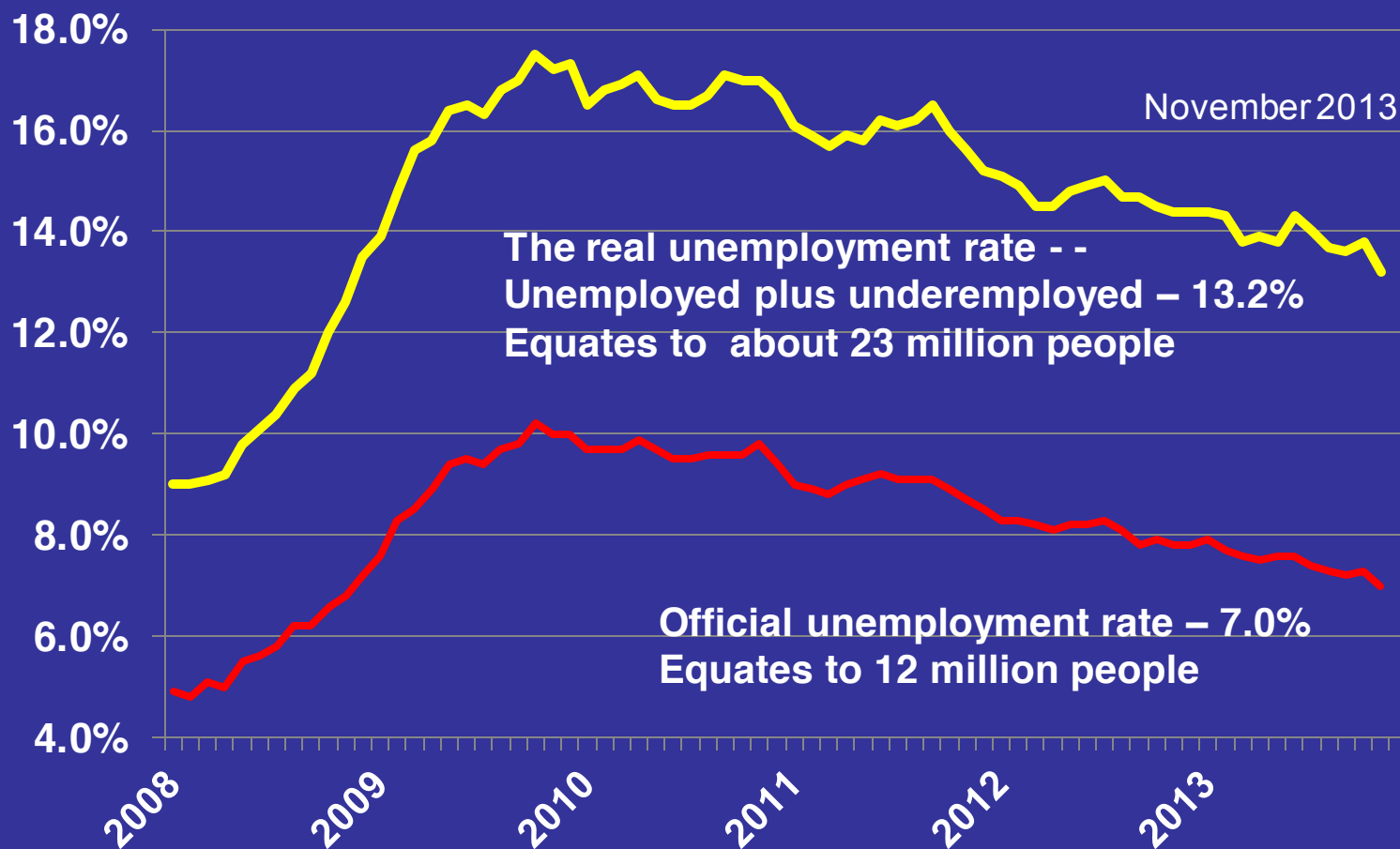
Net change in non farm payrolls – monthly, thousands



Source: U.S. BLS (www.bls.gov)

Unemployment remains high and will remain relatively high for another year or two – but, it's getting better “slowly”

There are about 19 million people either unemployed , underemployed, or stopped Looking – **they are not buying houses



Source - - BLS: <http://www.bls.gov/news.release/pdf/empst.pdf>; <http://data.bls.gov/cgi-bin/surveymost?ln>

Employment - - We're still 2.0 million below pre recession levels



Source: marketwatch : (<http://www.marketwatch.com/Story/story/print?guid=5C9788D6-FB68-11E2-A97E-002128040CF6>)

Where the growth is - -

30% of jobs created in past 5 years are “temporary jobs” – little

Or no health care, retirement, salary – i.e., these people don’t buy

Houses, cars, eat out, etc. --- - again, underemployment is a big problem

Professionals in demand, so are temps



Source: marketwatch : (<http://www.marketwatch.com/Story/story/print?guid=5C9788D6-FB68-11E2-A97E-002128040CE6>)

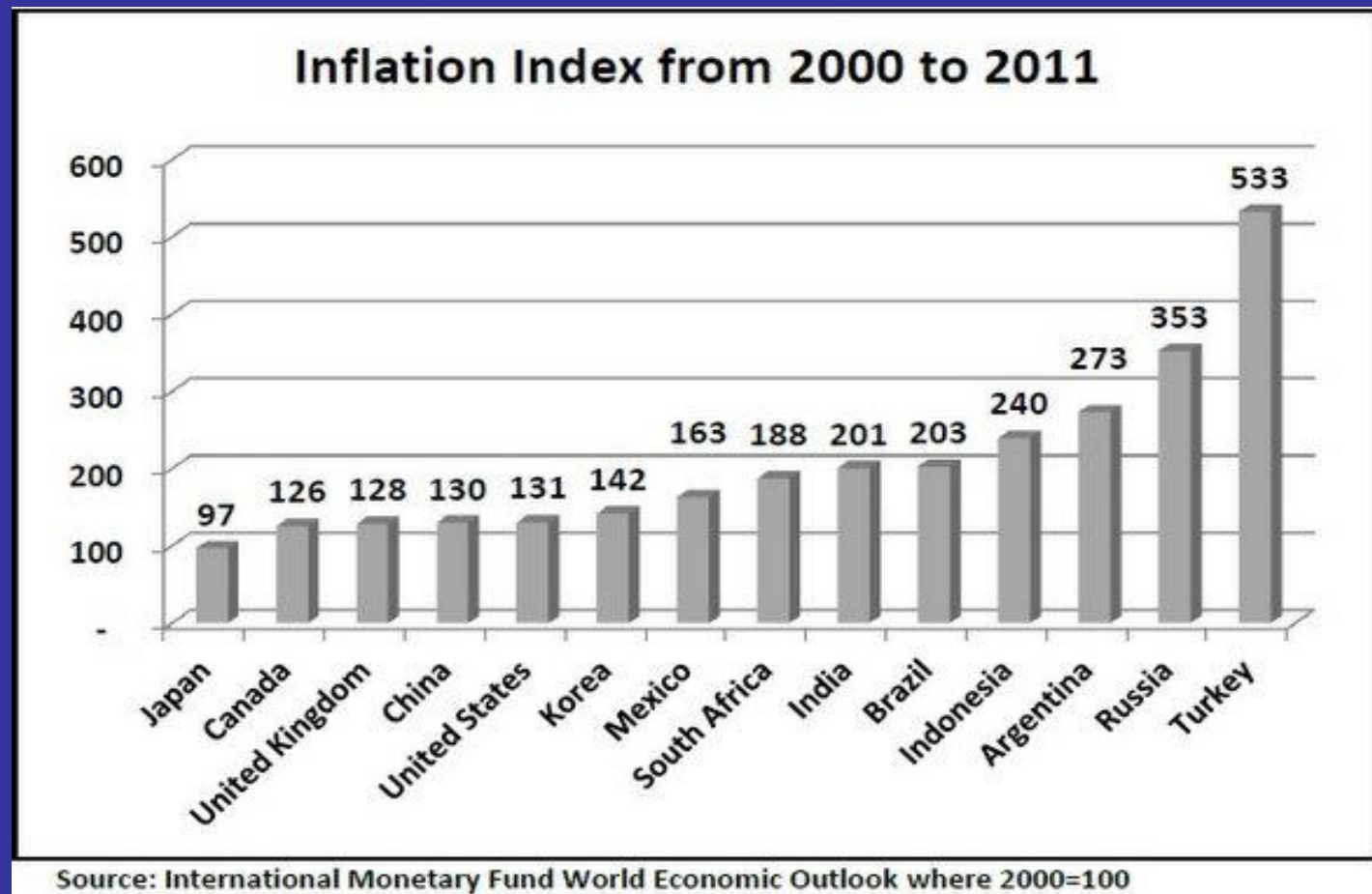
Labor force participation rate is shrinking -

Major problems for social programs with our aging population – fewer people paying taxes, but more people collecting SSI, Medicare, etc. Also, demand for goods and services /GDP will remain relatively weak.



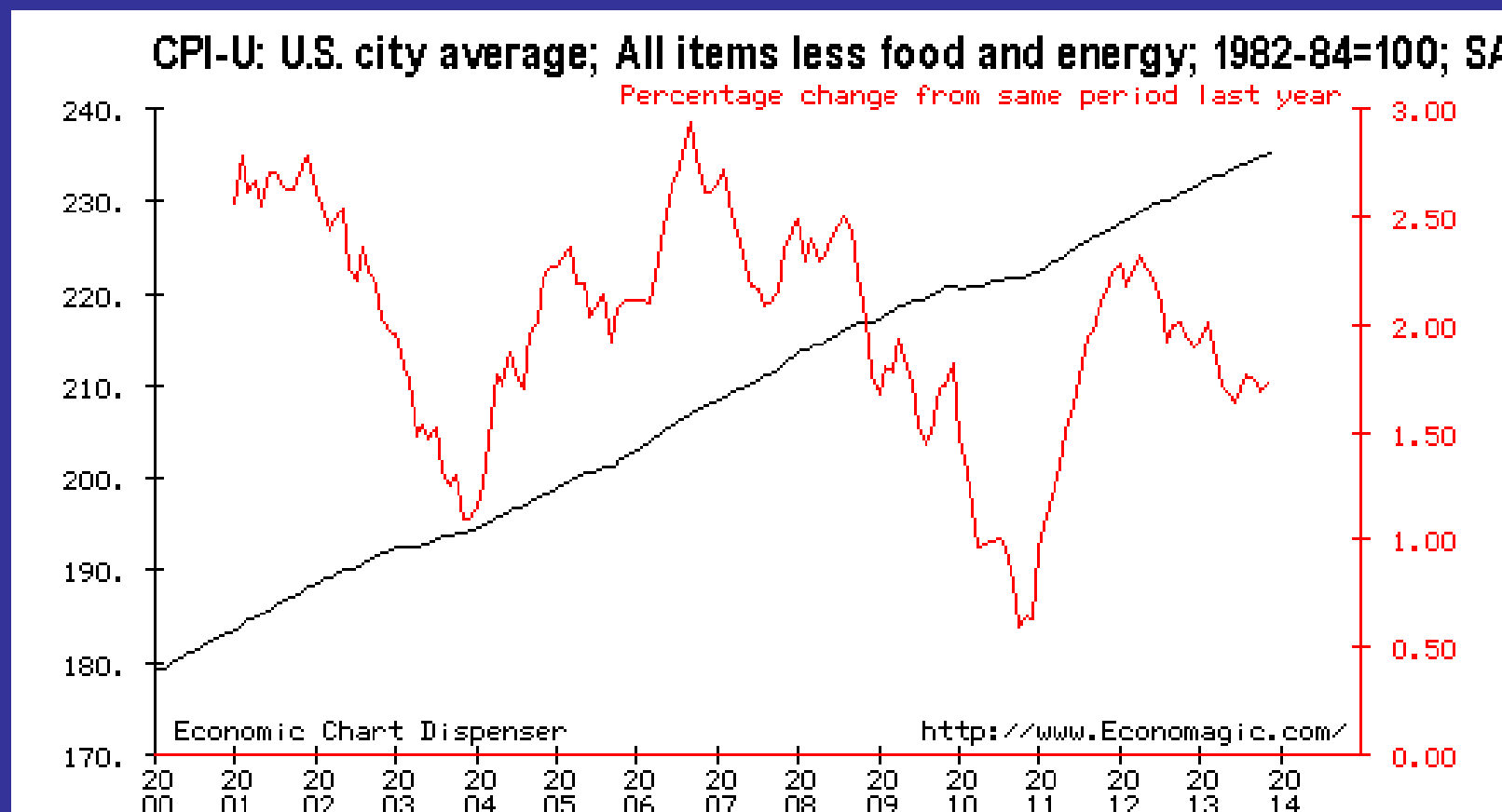
Source: BLS

Some inflation is good – shows demand and a healthy Economy - -
However Japan, had deflation and no growth
While Brazil had 9.4% per year which is too much inflation which eventually slows the economy. The job of the central bank is to maintain “healthy level of inflation” – major concern today is potential deflation in Europe



**Recent U.S. inflation trends are alarming -
With latest below 2% despite “free money” for the past 4 years
--- Europe is also facing potential deflationary trends**

Annual rate



Recent Housing statistics

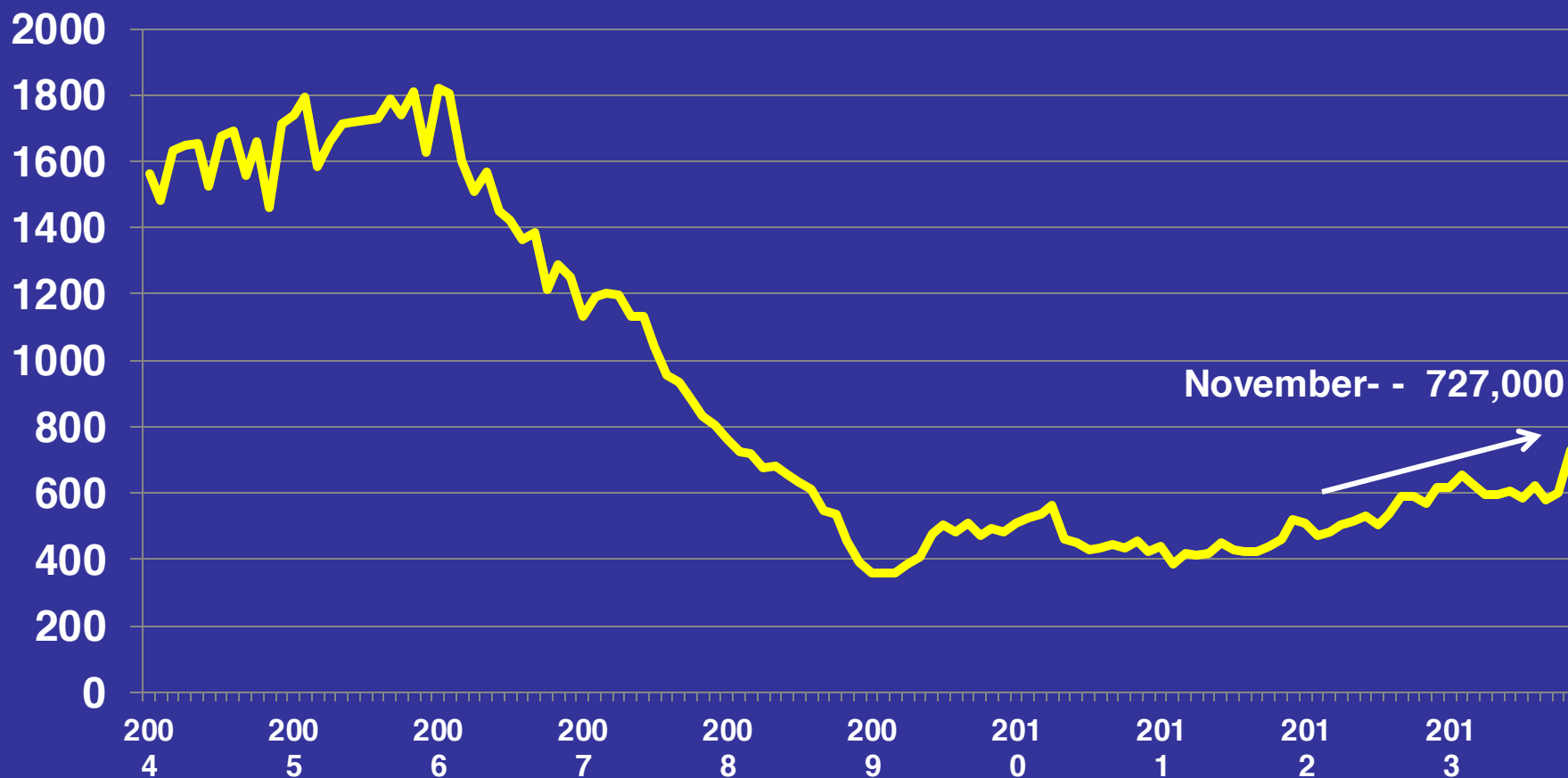
Background:

Markets are getting better –

Have we turned the corner? – I think so!

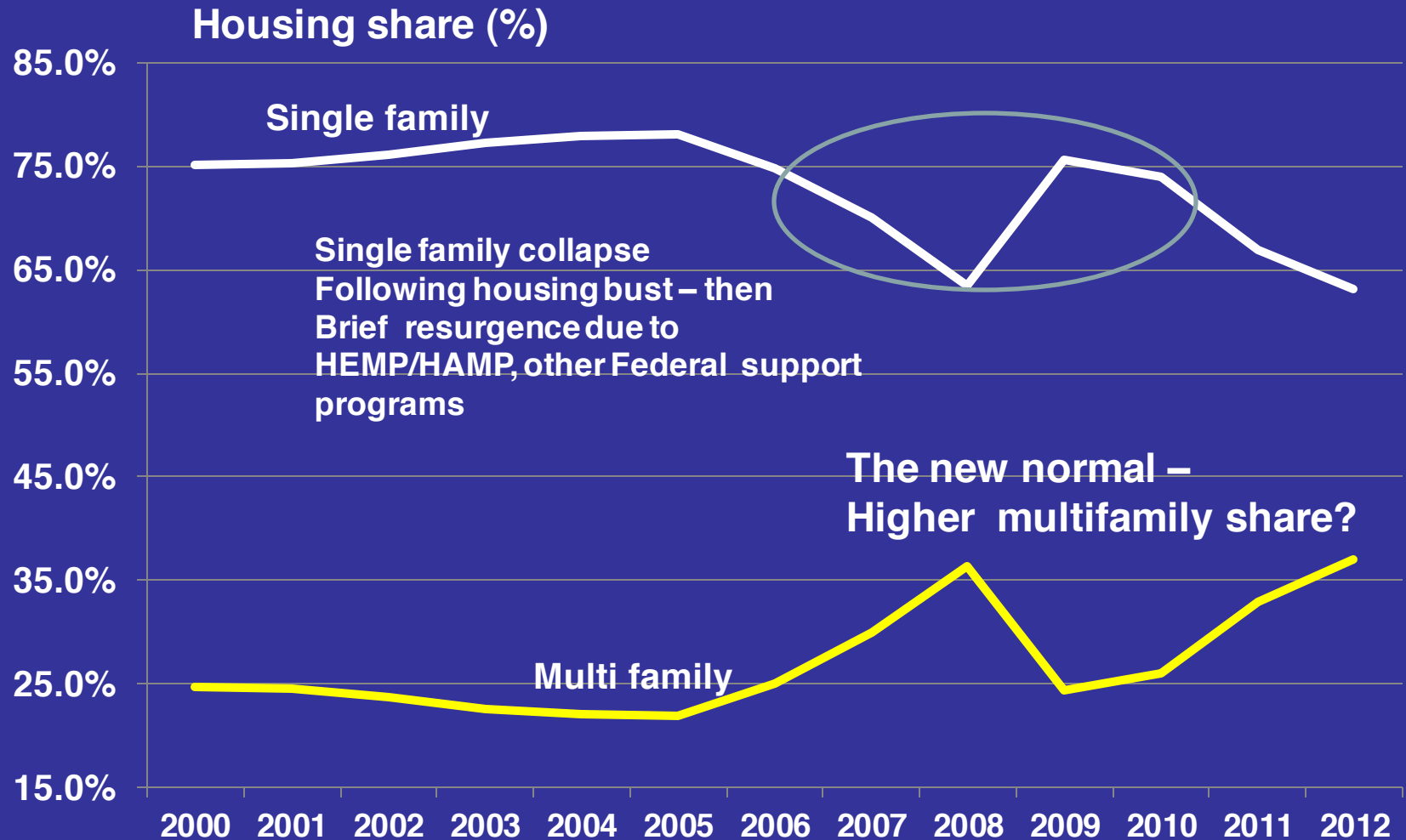
Starts are finally turning the corner

Single family starts, Thousand units, SAAR



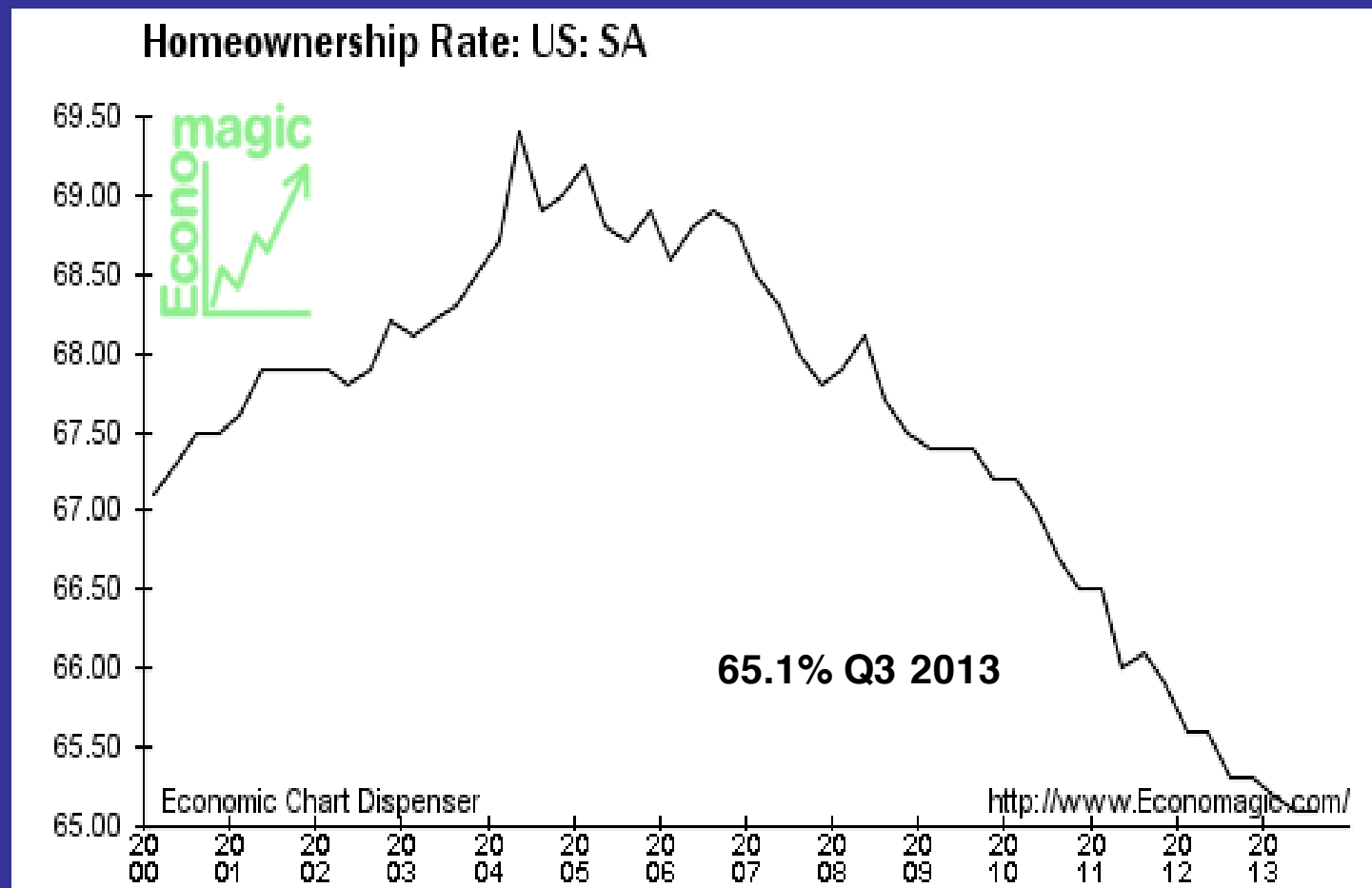
Source: Census (<http://www.census.gov/const/www/newresconstindex.html>)

Multi family share is increasing – will it continue?
I believe it will!!



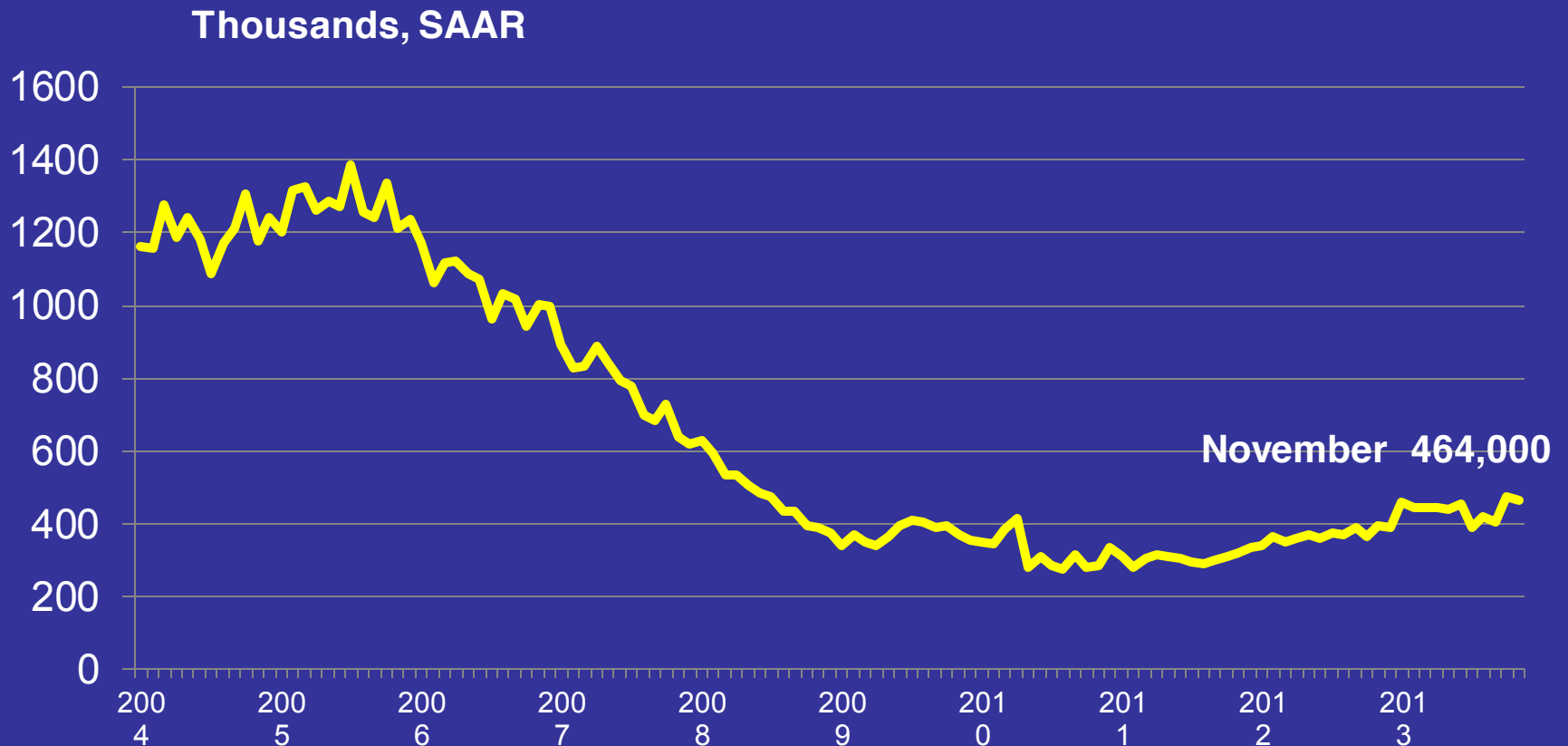
Source: Census (<http://www.census.gov/construction/nrc/>)

Homeownership rates have been falling for the past seven years – big question – when the economy gets back to normal, will people go back to single family or will we see more multi family?? To date, the “recovery” has been mainly multifamily



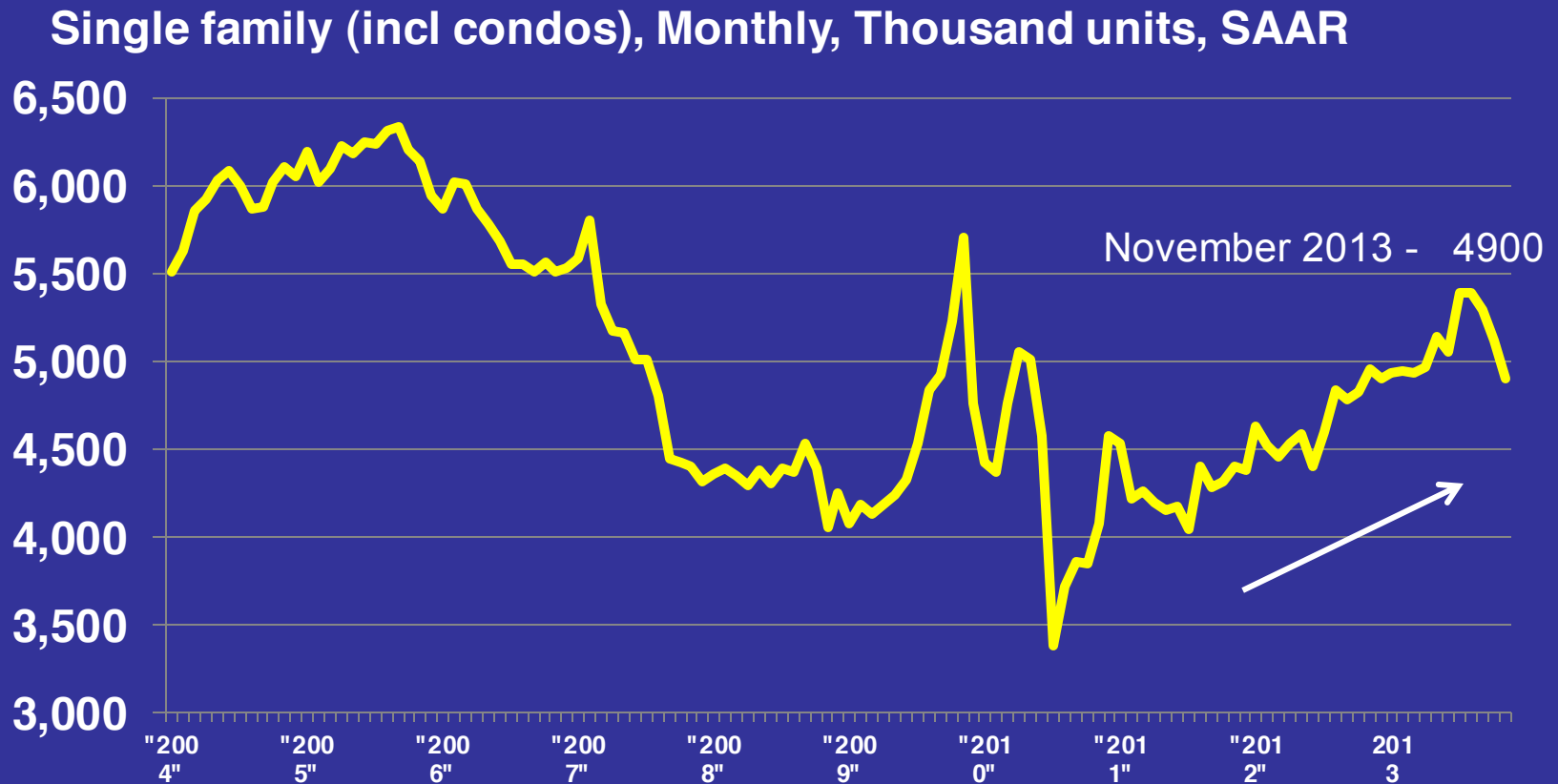
Source: Census (<http://www.census.gov/housing/hvs/files/qtr412/q412press.pdf>)

New Single Family Home sales is the key statistic to watch – Sales drive housing starts – this drives demand for wood products!!! Getting better, but so slowly



Source: Census (<http://www.census.gov/const/www/newressalesindex.html>)

Resale market getting better



Source: NAR (<http://www.realtor.org/research>)

Some comments on recent house price increases - -

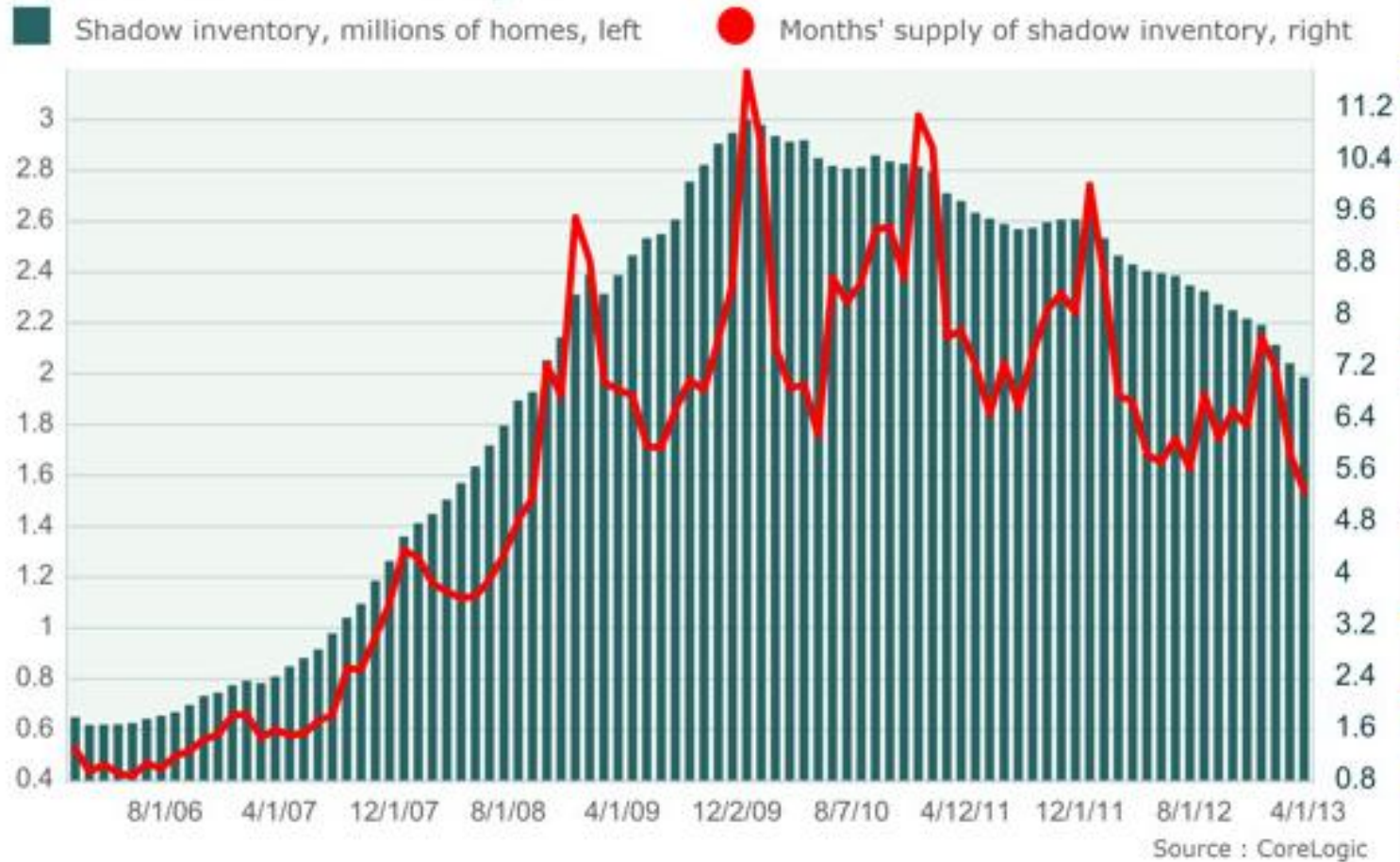
Let's hope they keep increasing because higher prices will encourage builders to build more homes –

- - in addition - -

- (1) higher prices are needed to slow foreclosures;
- (2) enable people with negative equity to sell homes and move to better jobs;
- (3) apply for refinancing - -
- (4) this will turn housing market around along with improving economy

Shadow inventory coming down – a good sign

Shadow inventory of troubled homes



(<http://www.marketwatch.com/Story/story/print?guid=9F9C304A-FF17-11E2-922F-002128040CF6>)

Good News - -

- (1) Household formations are key to the housing recovery
 - - - there is a growing “pent up demand”
- (2) Formations are improving – but, further improvement depends on a stronger economy – 2014 will see stronger economy!!!
- (3) Remodeling is expected to improve through 2014 according the Harvard JCHS (<http://www.jchs.harvard.edu/remodeling-gains-expected-continue-2014j>)

Good news is that household formations exceed starts - -
Plus, when you include demolitions, there is considerable
“pent up demand” for shelter – again, demand exceeds supply –
A good thing



Household (HH) formations Shortfall*

Facts:

- (1) 1995 - 2007: 1.5 million HH formed per year
2008 – 2010: 500,000 HH formed per year (1/3 of normal)
- (2) During 1995 – 2007, population increased 2.9 million annually
2008 – 2010, the increase was 2.7 million annually

HH formation Shortfall(cumulative) *

2008 – 600,000
2009 – 1.7 million
2010 – 2.5 million
2011 – 2.6 million - this is the shortfall

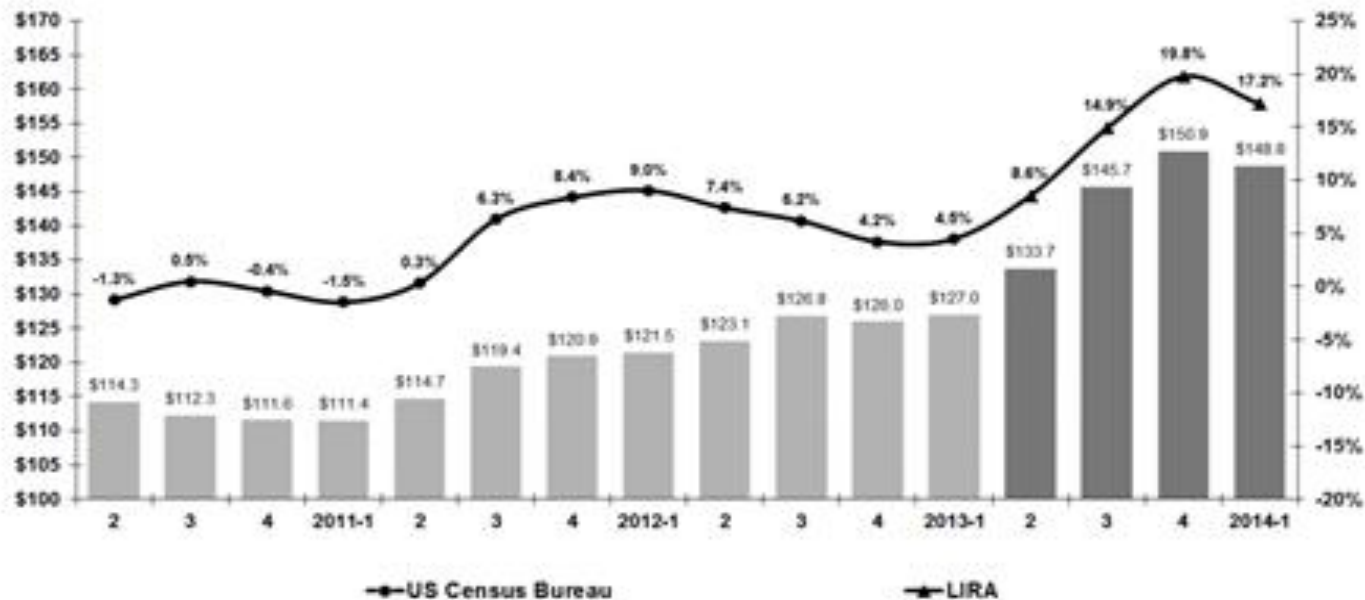
* Shortfall based on model developed by Tim Dunne of the Cleveland Fed
Based on historical relationship between economy, headship rates, population increase,
Social norms, etc. (<http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm>)

Remodeling to pick up as confidence improves, prices
Increase, and the economy picks up

Leading Indicator of Remodeling Activity – Second Quarter 2013

Homeowner Improvements
Four-Quarter Moving Totals
Billions of \$

Four-Quarter Moving
Rate of Change



Note: The second quarter 2013 estimate is calculated using preliminary Census Bureau data and LIRA projections.
Source: Joint Center for Housing Studies of Harvard University.

Bottom line – when economy returns to normal, demand for shelter will strengthen. That should happen in 2014

Question – what will the mix be between detached single family and multi family housing and what are the implication for the wood products industry? Also, implications if house size gets smaller??

Most of you have seen this article by Craig Adair and myself and it is three years old, but there is some material there that addresses the question posed above as it relates to the wood products industry

(<http://www.nxtbook.com/nxtbooks/naylor/EWAB0110/index.php?startid=16#/16>)

Another issue to ponder – the role of the federal government in housing. There is a huge federal presence – more than in any other country. Federal agencies (Fannie, Freddie, FHA, VA, etc.), control over 90% of the residential mortgage market. That means there is too much temptation to drive housing according to political whims. Fannie, and Freddie are still in “conservatorship” – i.e., wards of the state., and therefore depending on taxpayer support.

The real key to a housing recovery is the return of mortgage purchase business – i.e., owner occupant buyers in lieu of “REFI” business and speculators paying cash for distressed sales which are then rented.

Again, that requires JOBS!

Some conclusions – housing continues to improve –

- (1) Economy should see 3% GDP in 2014. Question – can the economy “stand on its own” without Fed stimulus?**
- (2) What will housing look like in the future? My guess – smaller homes; higher percentage of renters; and more people moving back to the city**
- (3) We’re in “uncharted waters” territory right now (i.e., massive money printing) to date, it has helped prevent worsening of economy, but, certainly hasn’t had the impact the FED had hoped for (i.e., jump start the economy)**
- (4) Housing will continue to improve. Prices are increasing (this is a good sign). Housing affordability is a function of: price, interest rates and jobs/income factor. As long as people have decent income, they will be able to afford a house despite higher mortgage rates and higher house prices. Jobs are the single most important factor to better housing demand. E.G., despite recent record low interest rates and low prices, housing demand was only 1/3 of pre recession highs. Why – without a job (or part time/low paying jobs), people can’t make the payments. Furthermore, they are not forming households, getting married, **JOBS, JOBS – JOBS****

U.S. Wood Markets - a focus on Housing

Coating Wood and Wood Composites Conference
October 29-30, 2013
Charlotte, North Carolina



Delton Alderman

USDA Forest Service – NRS 01
Princeton, WV
304.431.2734
dalderman@fs.fed.us

Urs Buehlmann

Department of Sustainable Biomaterials
Virginia Tech
Blacksburg, VA
540.231.9759
buehlmann@gmail.com



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United States Housing

Overview

Opening Comments

United States Housing Indicators

Construction Spending

Housing Barometers

Residential Remodeling

Housing Permits, Starts, and Completions

Existing and New House Sales

Future Housing Indicators

Projections

Demographics

Hardwood and Softwood Markets

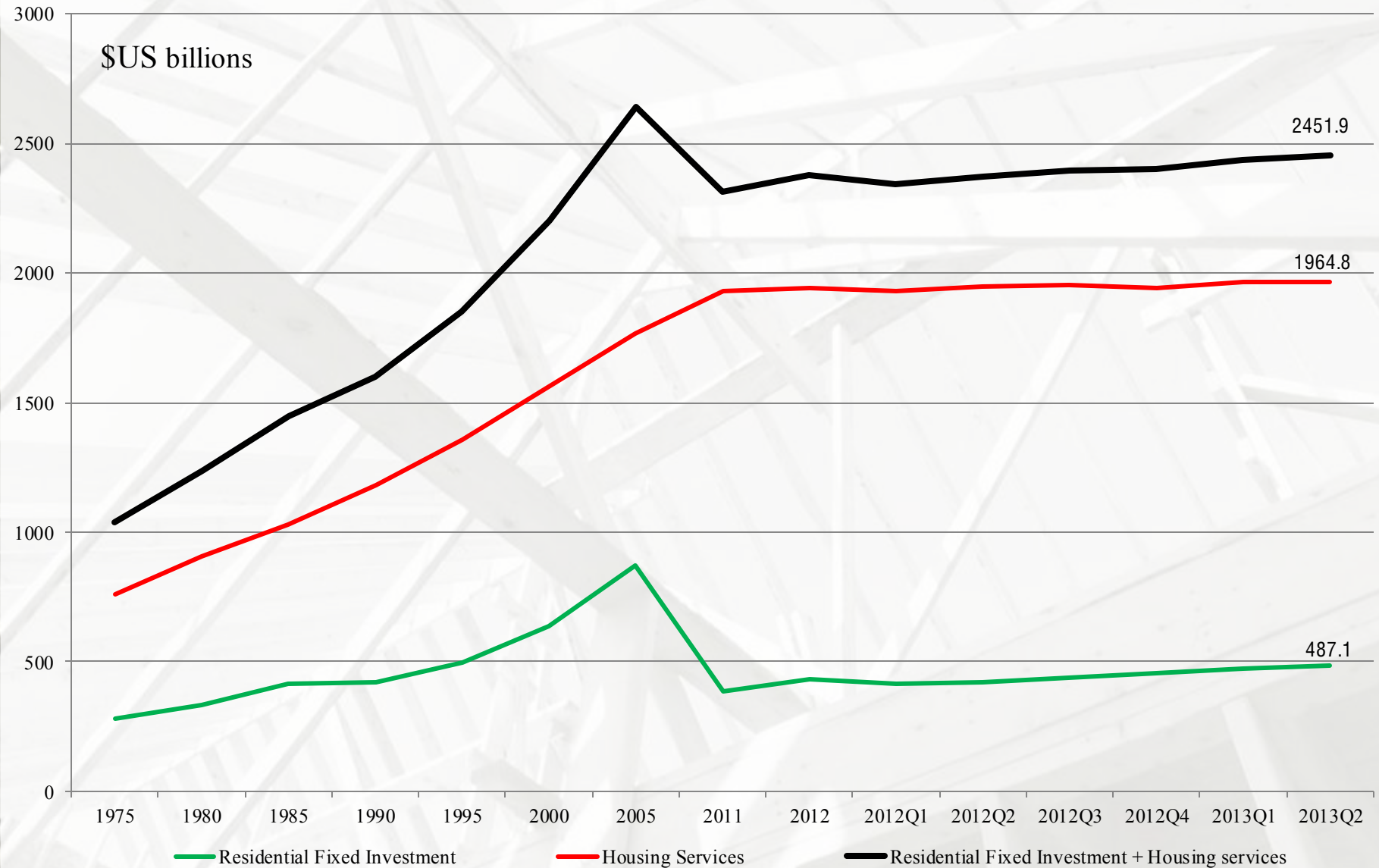
United States Economic Indicators

Threats

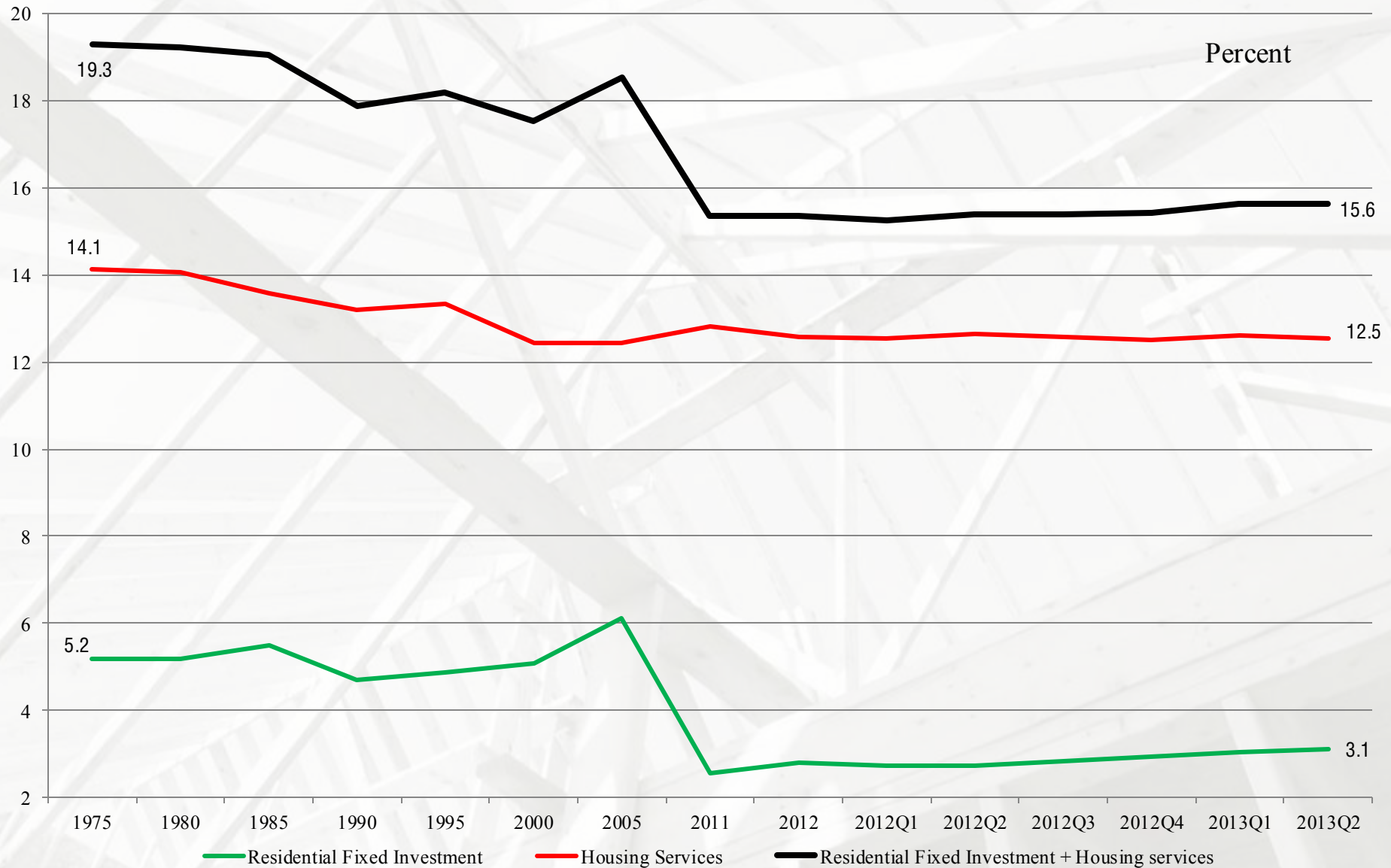
New Markets

Conclusions

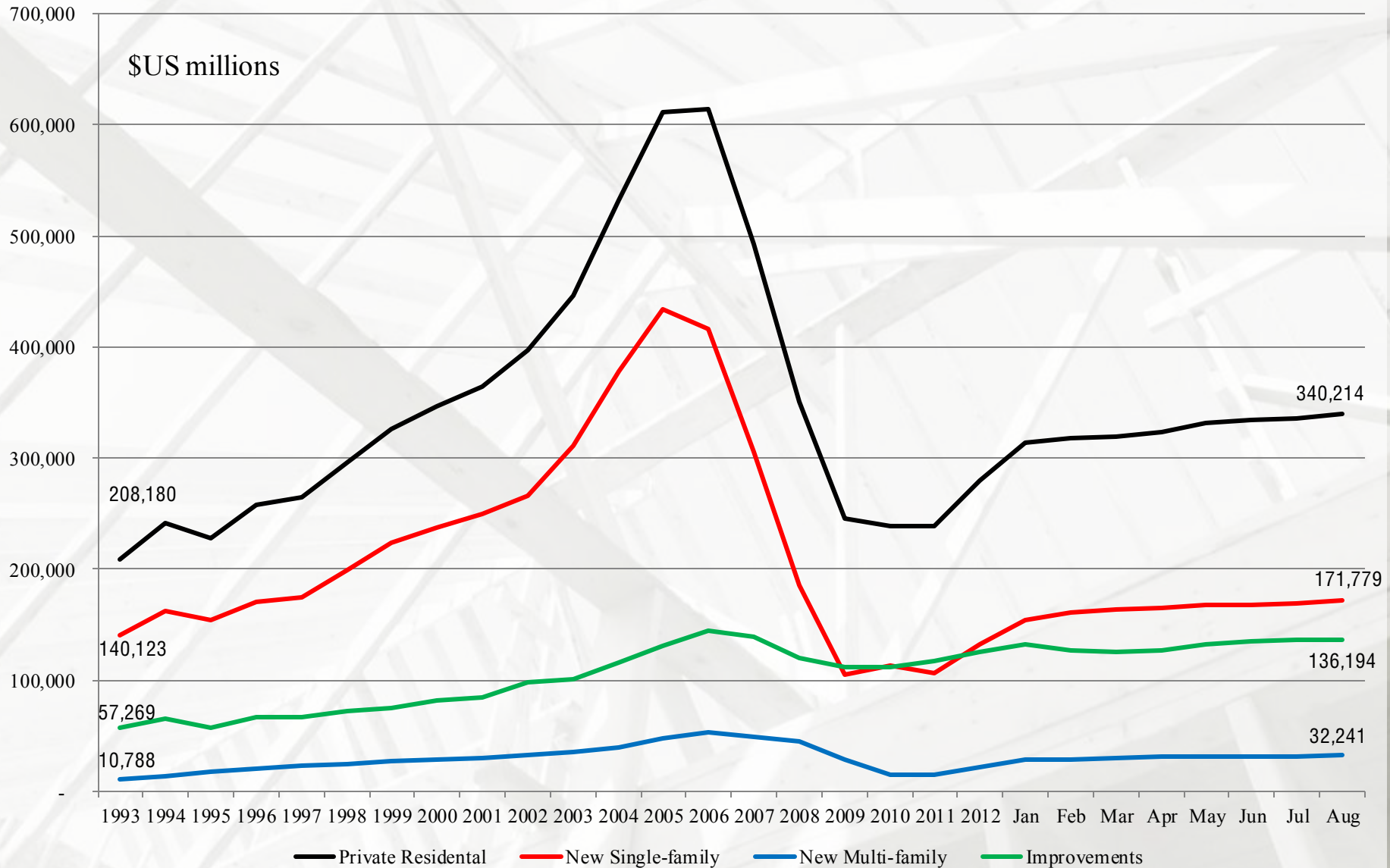
Housing's Contribution to GDP: 1975 - 2013



Housing's Contribution to GDP: 1975 - 2013



Construction Spending: 1993 - 2013



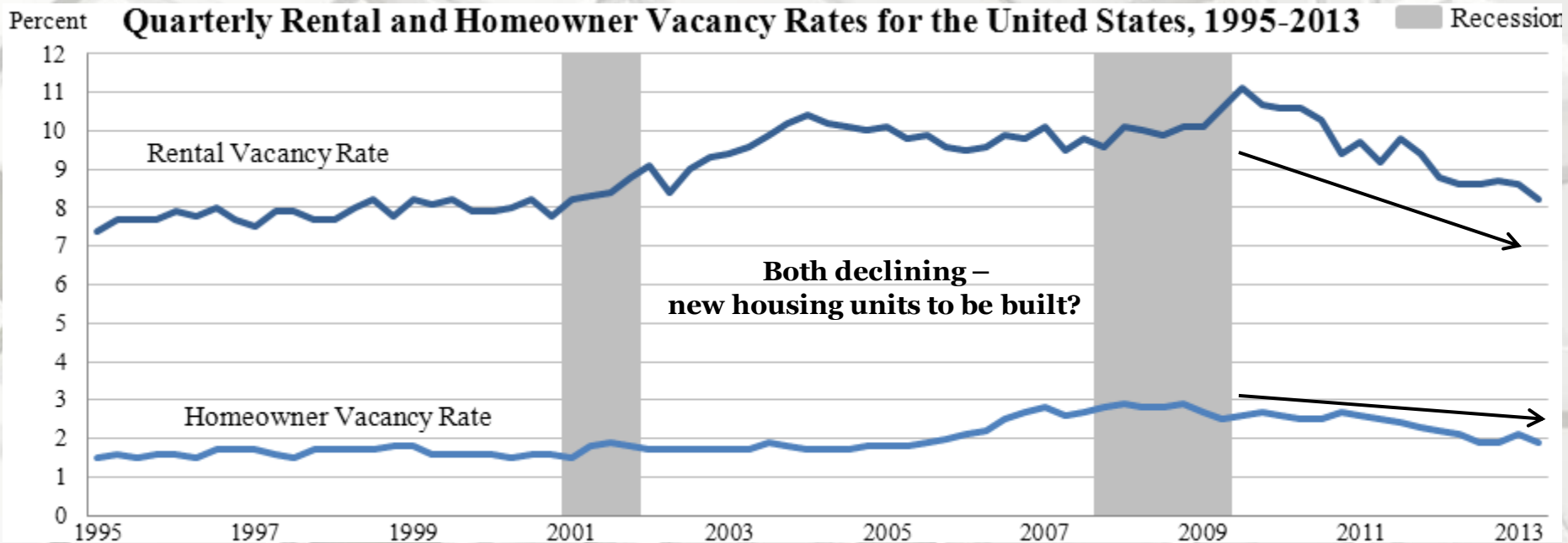
August/September 2013

Housing Scorecard

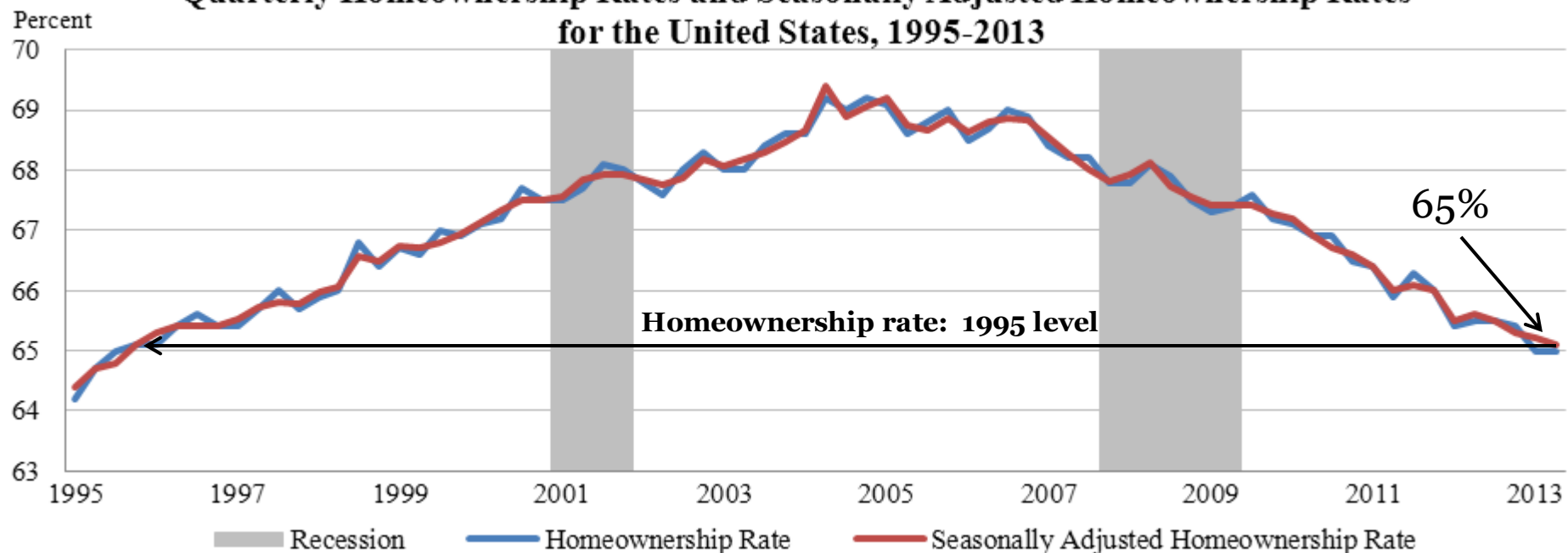
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Housing Completions ^A	△0.3%	△12.1%
New Single-Family House Sales ^A	▽13.4%	△6.8%
Existing House Sales ^B	△1.7%	△13.2%
Private Residential Construction Spending ^A	△0.7%	△18.7%
Single-Family Construction Spending ^A	△1.6%	

△28.2%

M/M = month-over-month
Y/Y = year-over-year



Quarterly Homeownership Rates and Seasonally Adjusted Homeownership Rates for the United States, 1995-2013



U.S. Housing: 67% Back to Normal

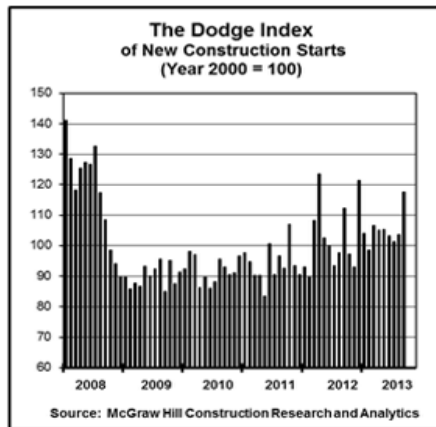


Construction starts increased a bit, but still far from normal. Starts were at an 891,000 seasonally adjusted annualized rate – up 1% from July and 19% year-over-year. Still, construction starts are 40% off the way back to normal – the slowest recovering measure of Trulia’s Housing Barometer.

Existing home sales have returned to normal. Sales rose in August to a seasonally adjusted annualized rate of 5.48 million – that’s up 13% year-over-year, and up 29% year-over-year when foreclosures and short sales are excluded. Overall, existing home sales are 99% back to normal, even though foreclosures and short-sales still make up roughly one-eighth of all existing home sales.

The delinquency + foreclosure rate continued its downward march. The share of mortgages in delinquency or foreclosure dropped to 8.66% in August, the lowest level in over 5 years. The combined delinquency + foreclosure rate is 60% back to normal..

U.S. Housing Indicators



MONTHLY SUMMARY OF CONSTRUCTION STARTS

Prepared by McGraw Hill Construction Research & Analytics

MONTHLY CONSTRUCTION STARTS
Seasonally Adjusted Annual Rates, In Millions of Dollars

	September 2013	August 2013	% Change
Nonresidential Building	\$182,759	\$147,078	+24
Residential Building	203,247	215,231	-6
Nonbuilding Construction	169,949	127,728	+33
TOTAL Construction	\$555,955	\$490,037	+13

THE DODGE INDEX
(Year 2000=100, Seasonally Adjusted)
September 2013...118
August 2013.....104

YEAR-TO-DATE CONSTRUCTION STARTS
Unadjusted Totals, In Millions of Dollars

	9 Mos. 2013	9 Mos. 2012	% Change
Nonresidential Building	\$119,577	\$119,058	-0-
Residential Building	154,656	122,376	+26
Nonbuilding Construction	105,076	131,030	-20
TOTAL Construction	\$379,309	\$372,463	+2

NATIONAL

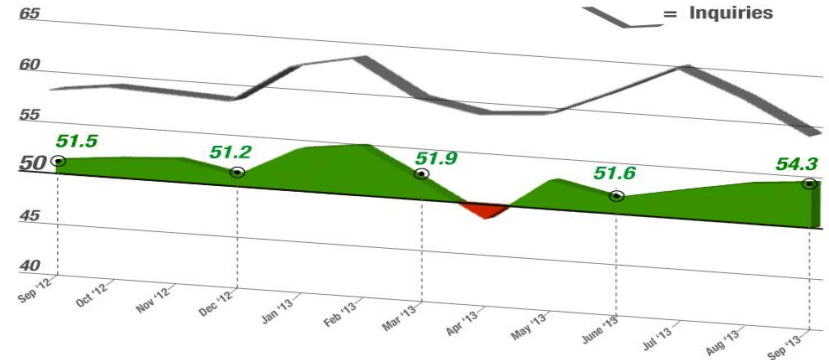
Business Conditions at Architecture Firms Continued to **Improve** in September

Graphs represent data from September 2012 – September 2013.

Above 50 = Below 50 =

50 = No change from previous period

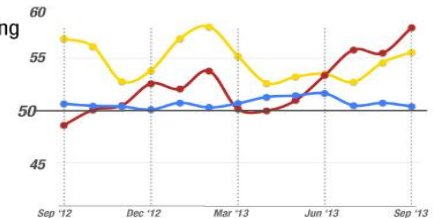
= **Inquiries**



SECTOR

Firms of All Specializations Are Still Seeing **Billings Growth**

Graph represents data from September 2012 – September 2013 across the three sectors. 50 represents the diffusion center. A score of 50 equals no change from the previous month. Above 50 shows increase; Below 50 shows decrease. 3-month moving average.



Commercial/Industrial: 57.9



Institutional: 50.4

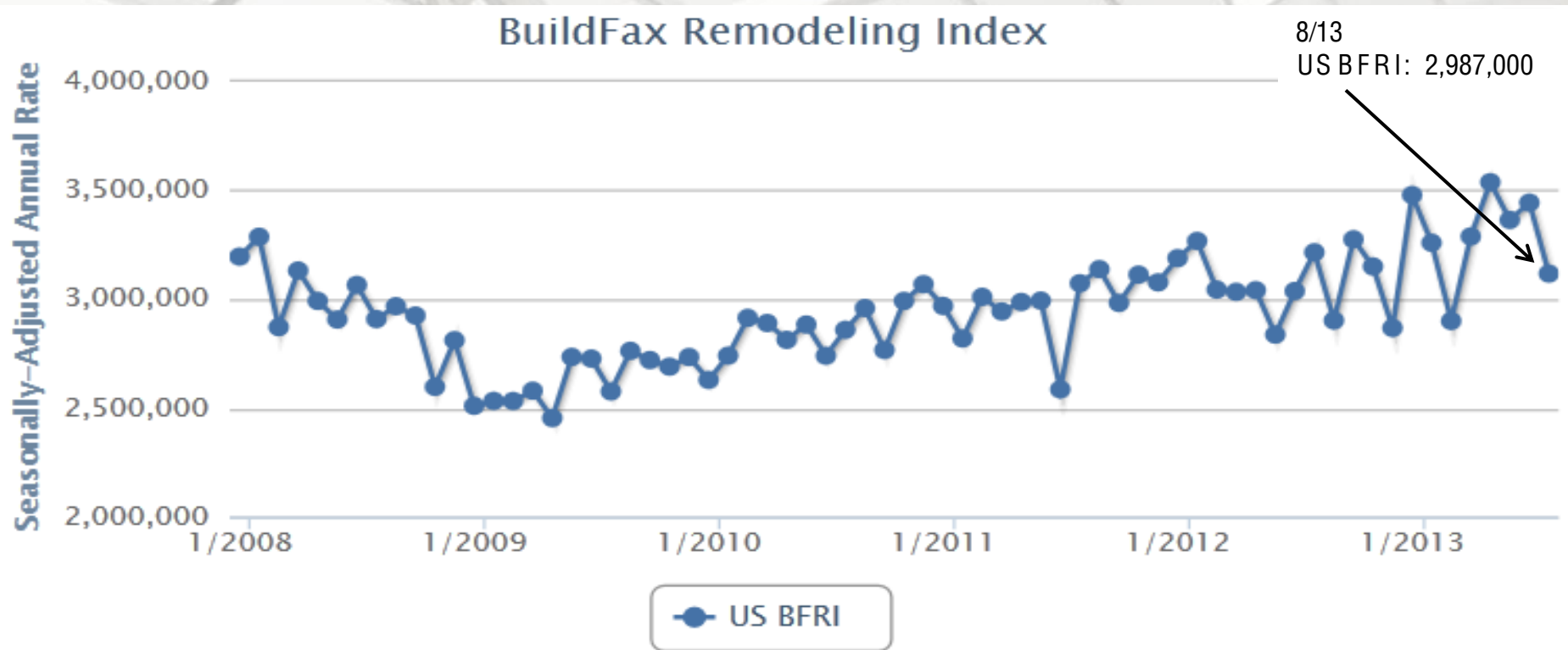


Residential: 55.6

“Residential building, at \$203.2 billion (SAAR), dropped 6% in September. Single family housing in September slipped 3%, registering its first month-to-month decline in dollar terms since January. Multifamily housing fell 14%, pulling back after rising by the same percentage during August.”^C

“Growth has softened slightly from earlier in the year at firms with a residential specialization... .”^D

United States Remodeling Indicators



Residential Remodeling in July 2013

Residential remodels authorized by building permits in the U.S. in August were at a SAAR of 2,987,000.

This is 13% below the revised July rate of 3,434,000 and is 5% below the August 2012 estimate of 3,140,000.

Viewing the Economic Recovery through Remodeling

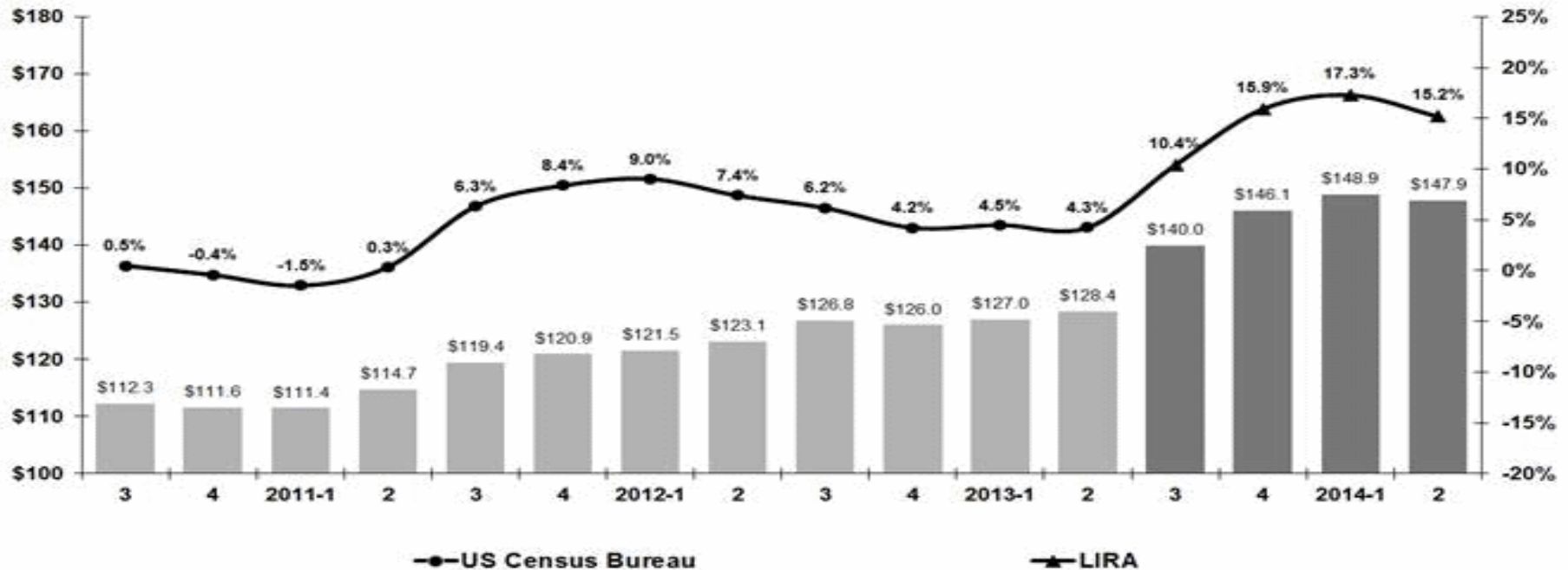
“The end-of-summer drop this year was both earlier and more severe than last year but overall residential remodeling activity in 2013 still remains higher than it was in 2012.” - - Joe Emison, Chief Technology Officer, BuildFax.

United States Remodeling Indicators

Leading Indicator of Remodeling Activity – Third Quarter 2013

Homeowner Improvements
Four-Quarter Moving Totals
Billions of \$

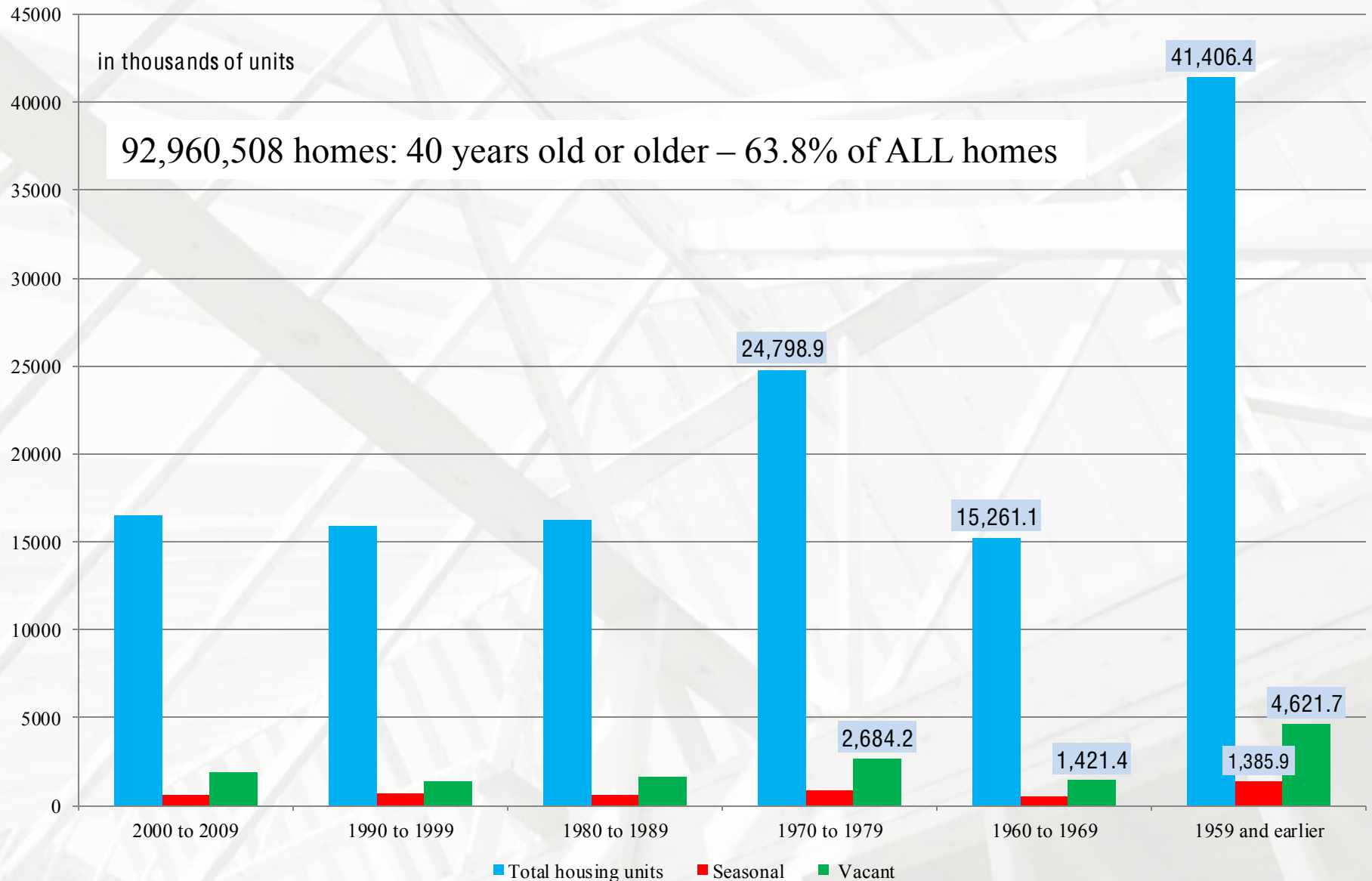
Four-Quarter Moving
Rate of Change



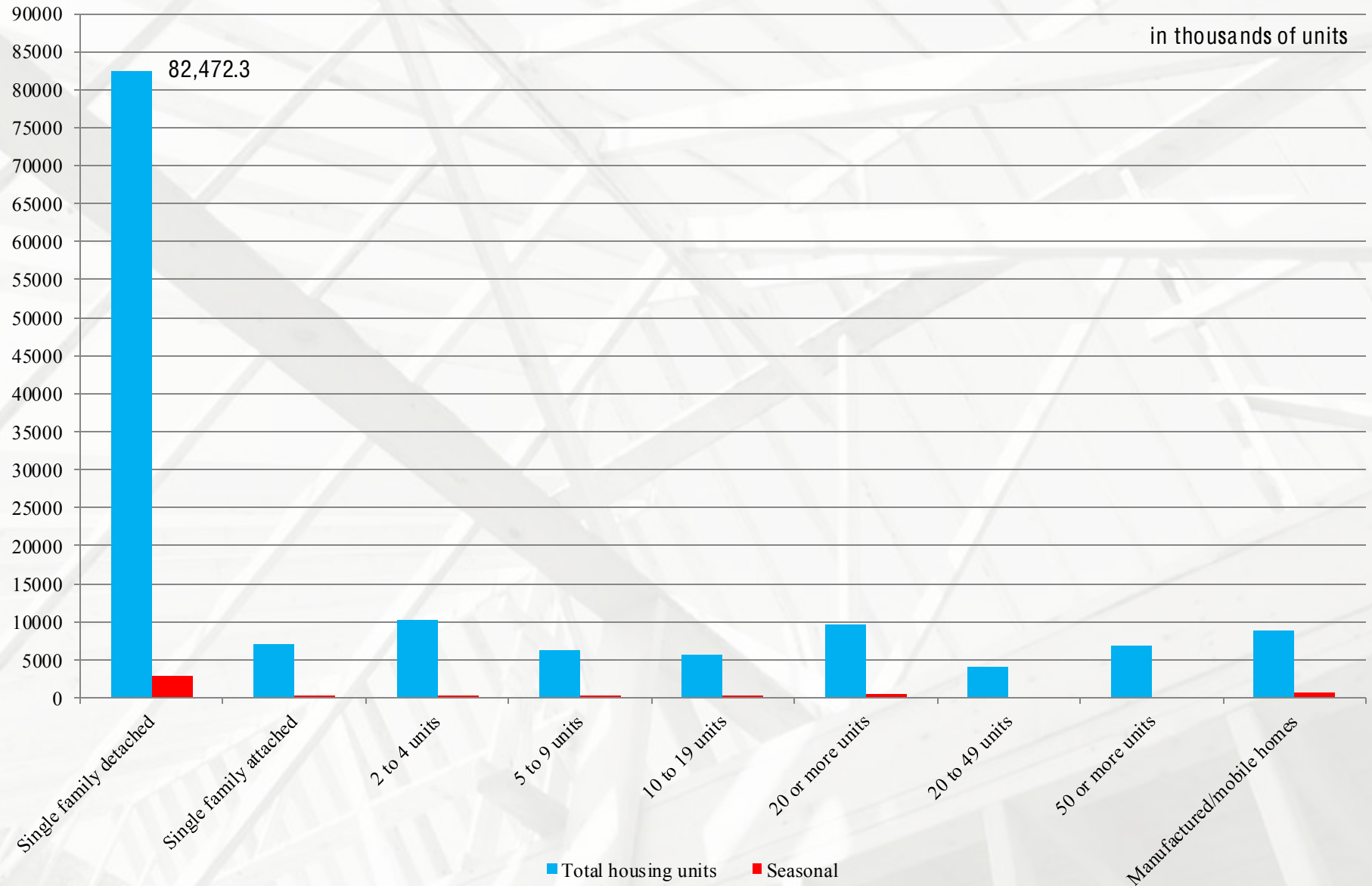
Note: The third quarter 2013 estimate is calculated using preliminary Census Bureau data and LIRA projections.
Source: Joint Center for Housing Studies of Harvard University.

“The soft patch that home building has seen in recent months, coupled with rising financing costs, is expected to be reflected as slower growth in home improvement spending beginning around the middle of next year. However, even with this projected tapering, remodeling activity should remain at healthy levels.” -- Eric Belsky, Managing Director, Joint Center for Housing Studies.

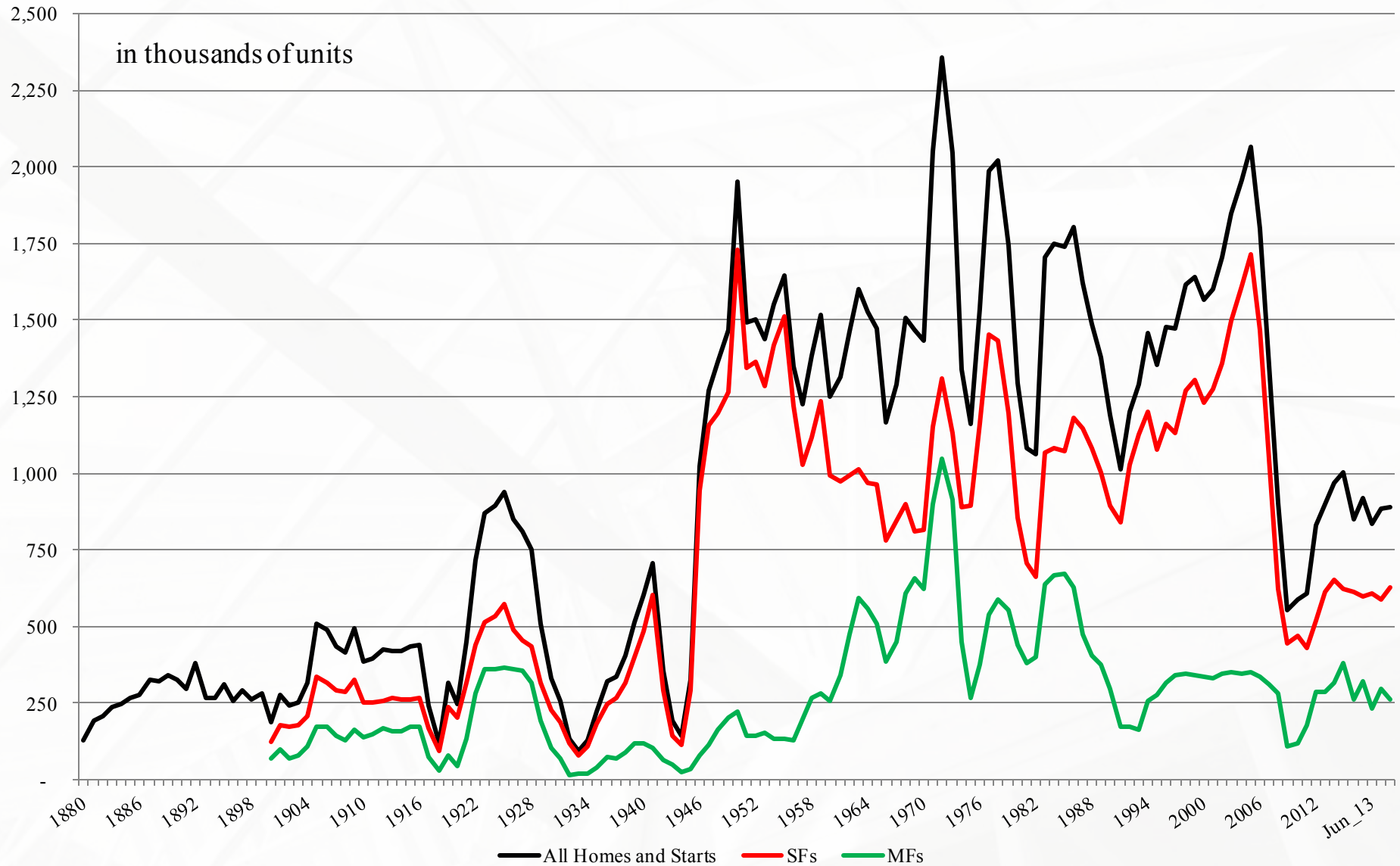
United States Remodeling Opportunity?



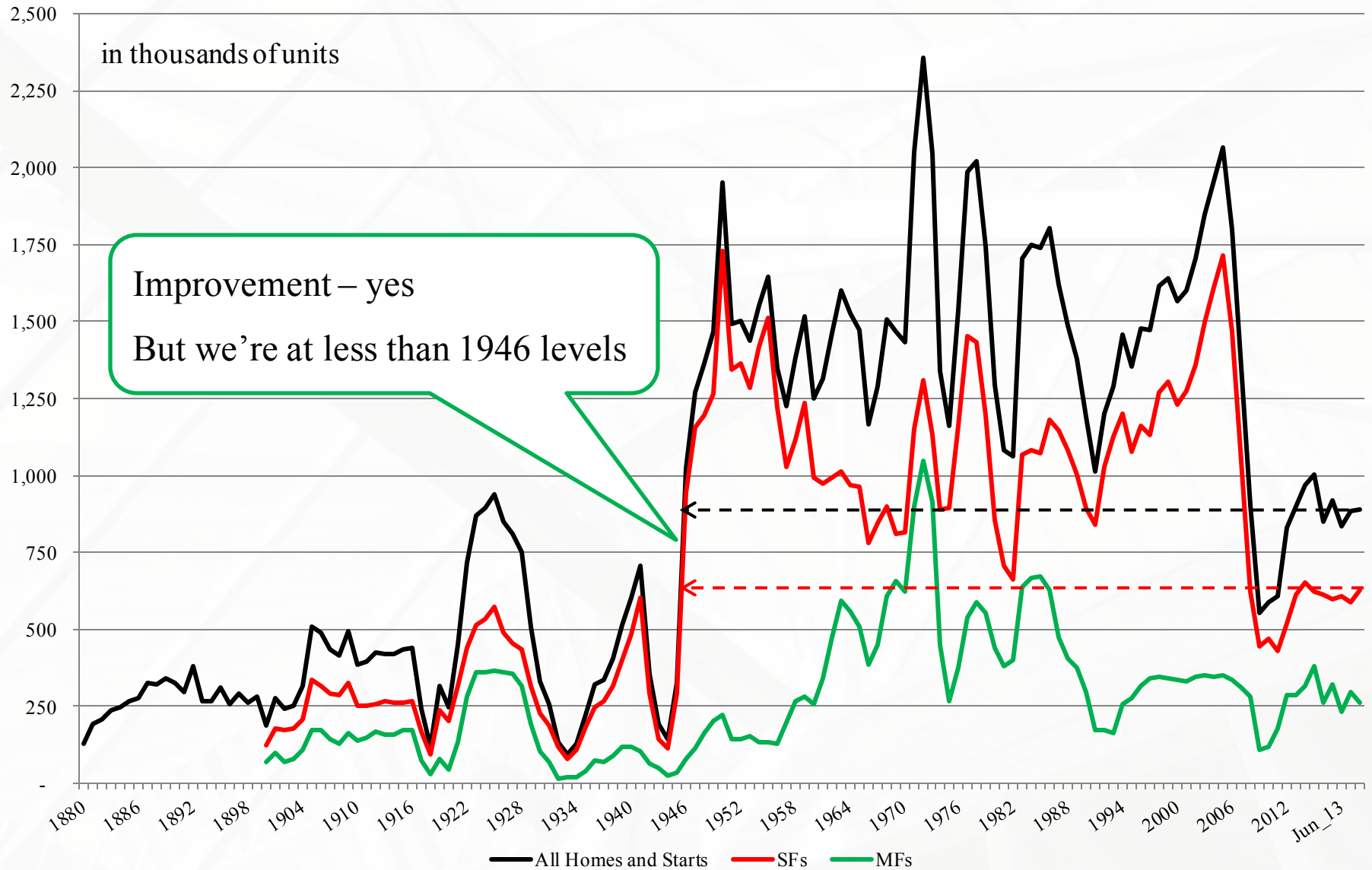
United States Remodeling Opportunity?



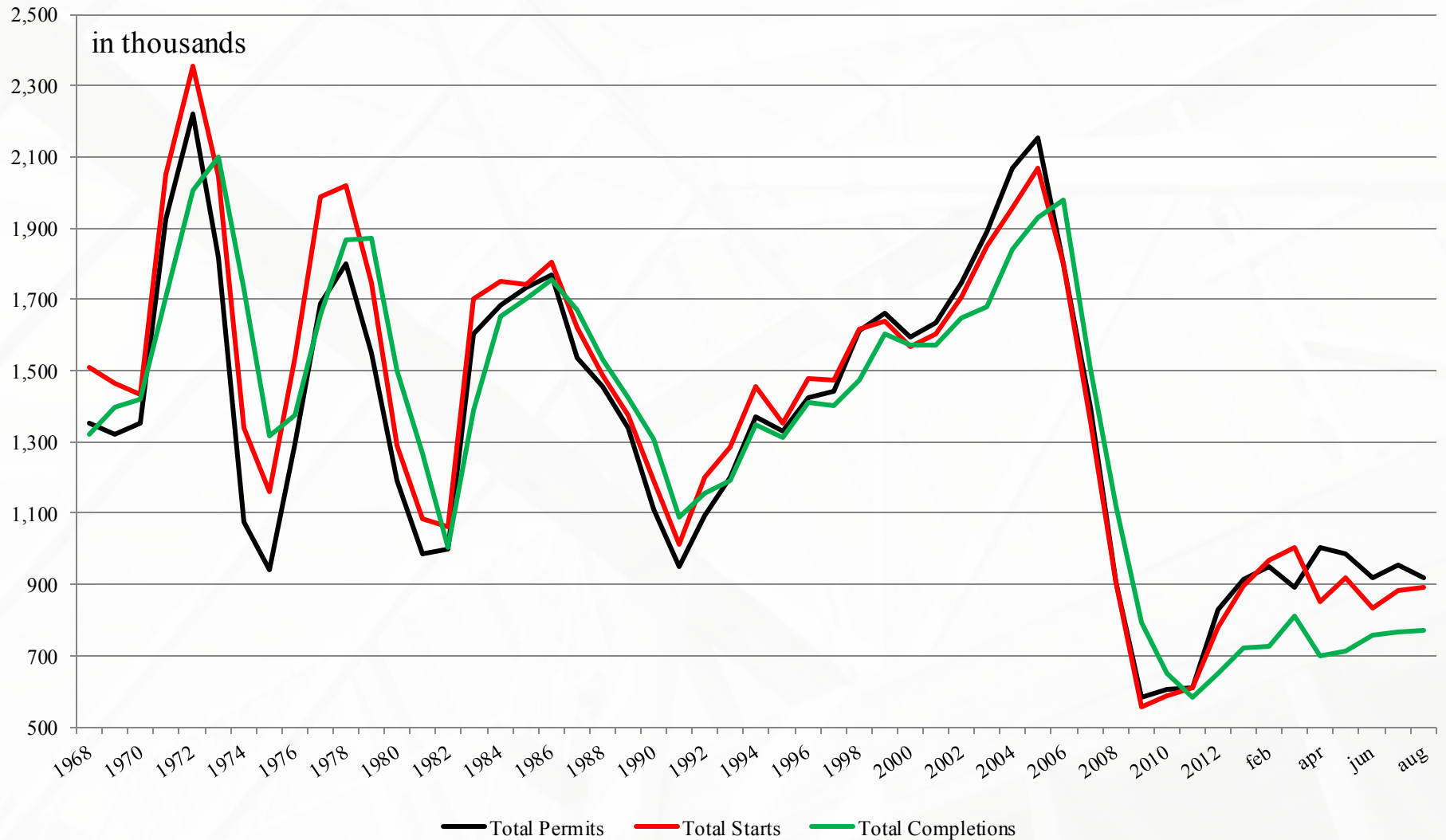
Housing Units and Starts: 1880 to 2013



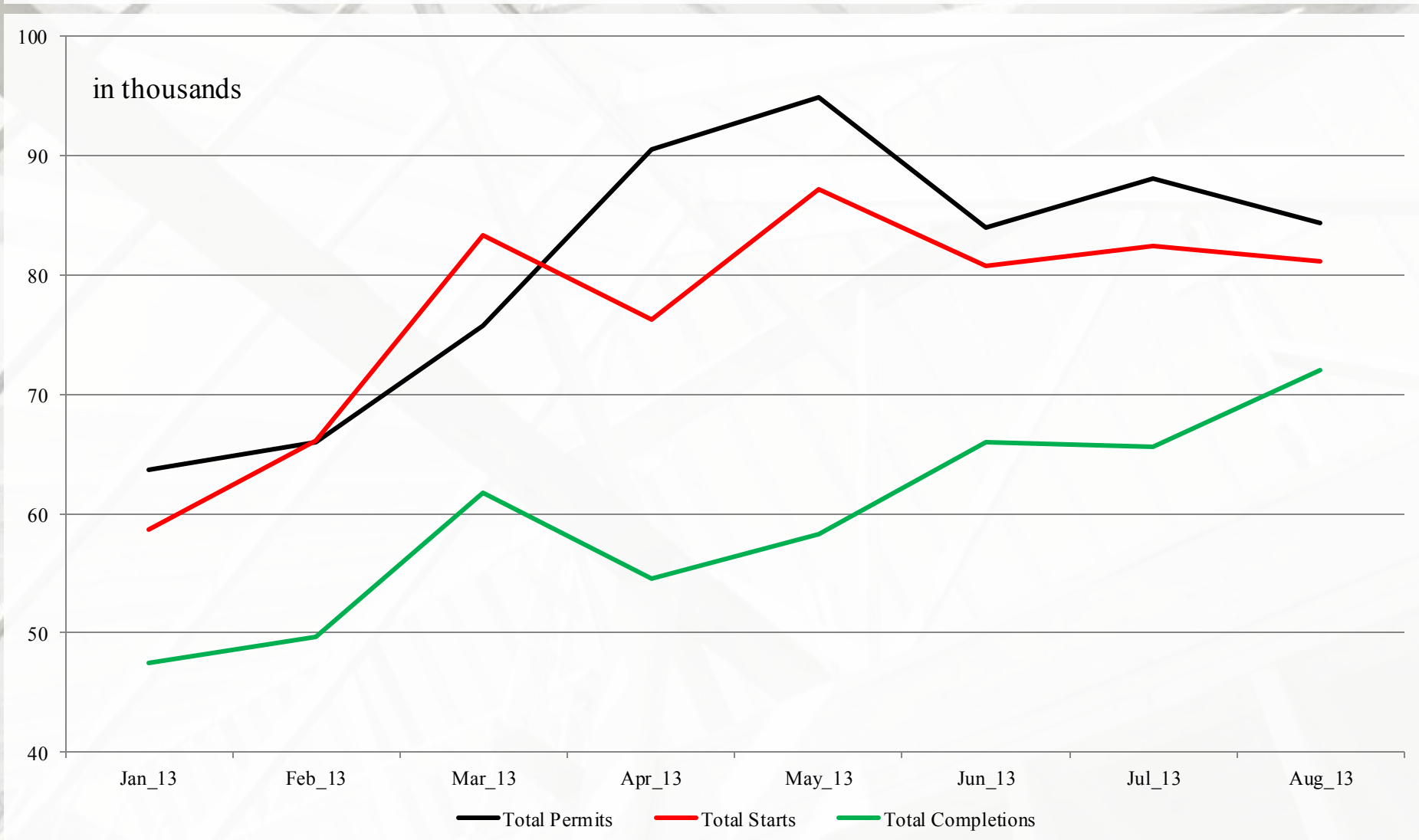
Housing Units and Starts: 1880 to 2013



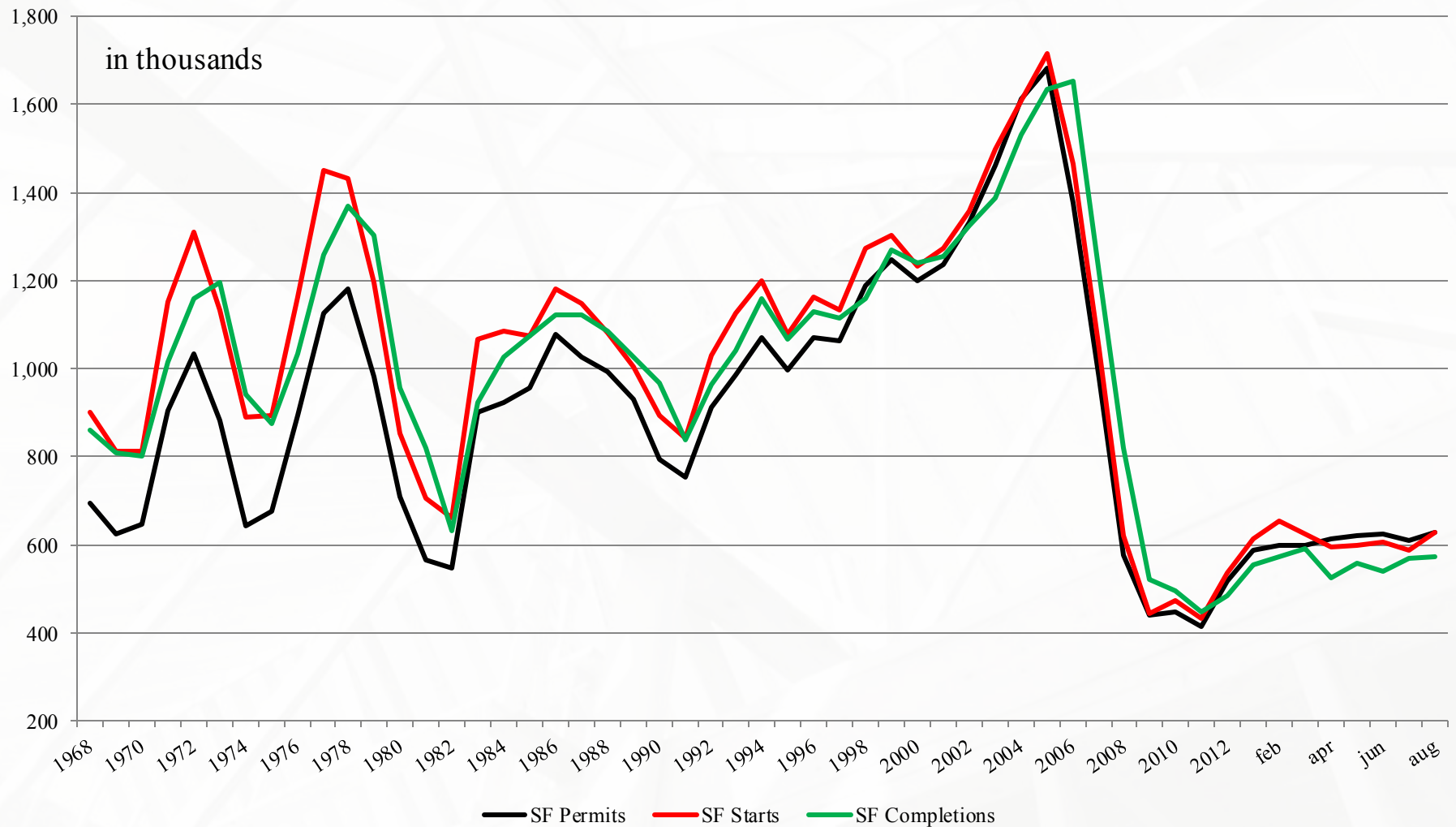
Total Housing Permits, Starts, and Completions: 1968 - 2013



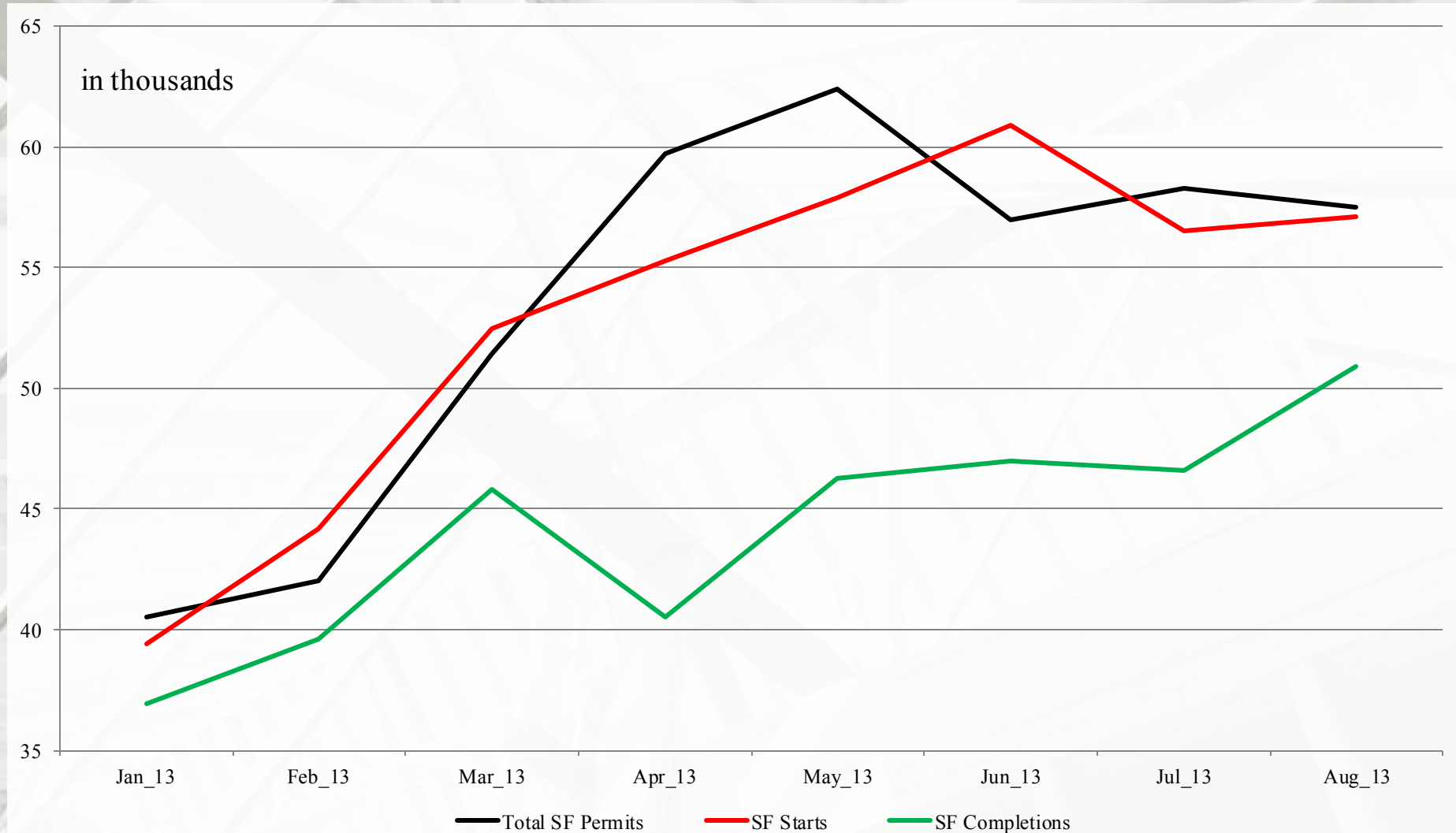
Total Housing Permits, Starts, and Completions – Raw and Unadjusted Data: 2013



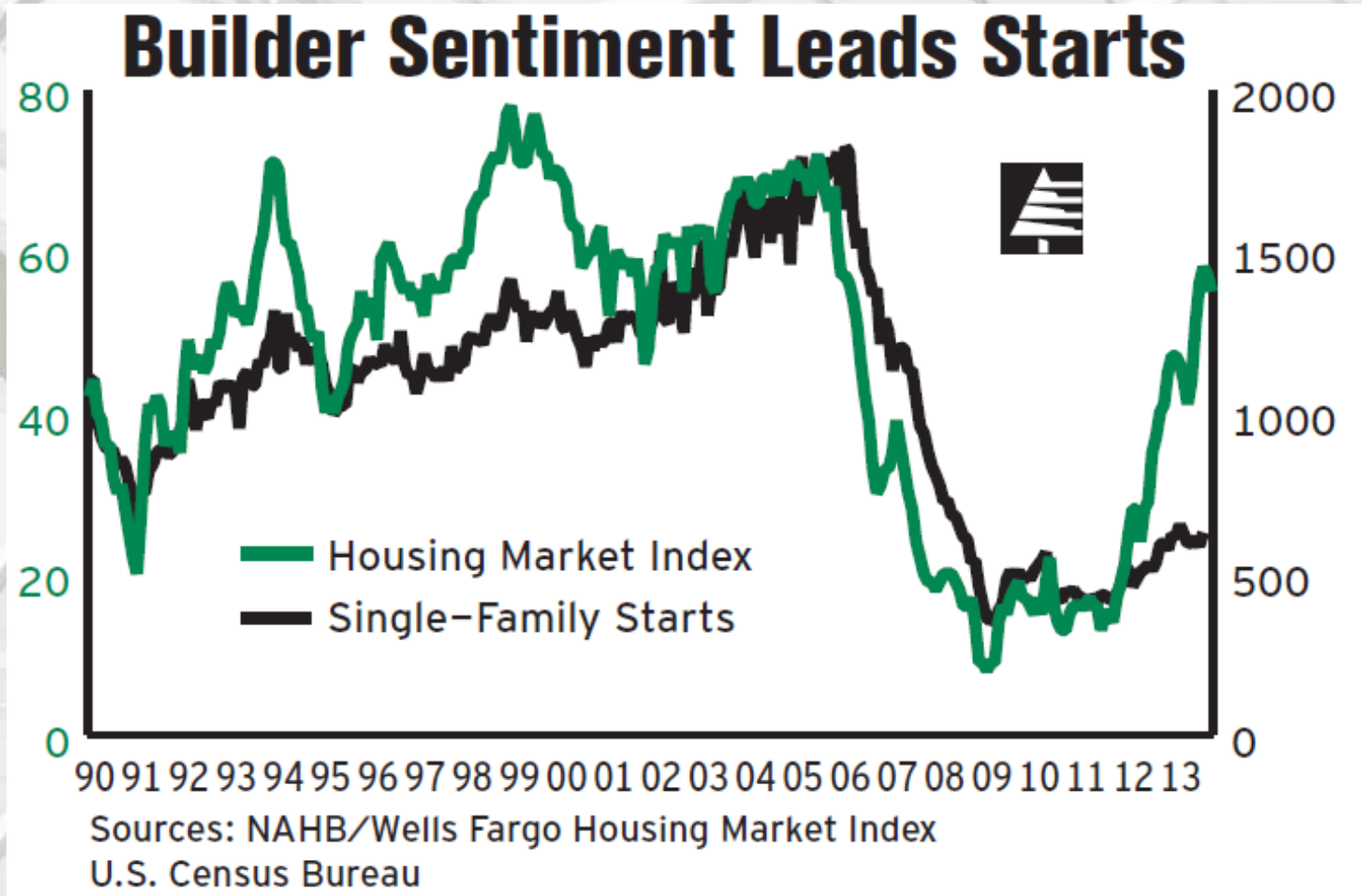
Single-Family Permits, Starts, and Completions: 1968 - 2013



SF Housing Permits, Starts, and Completions – Raw and Unadjusted Data: 2013

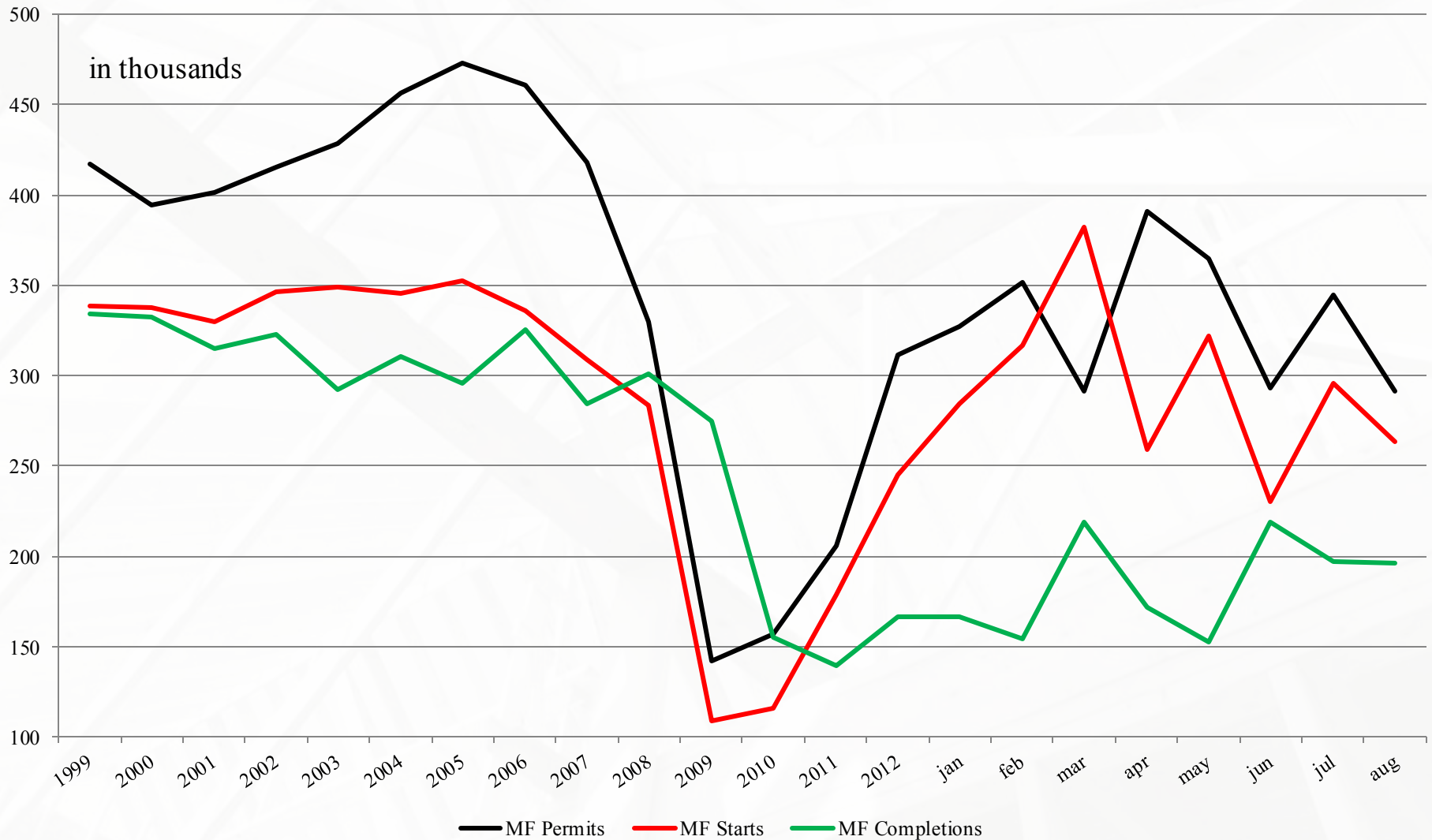


“Builder index outpaces single-family starts” ^E

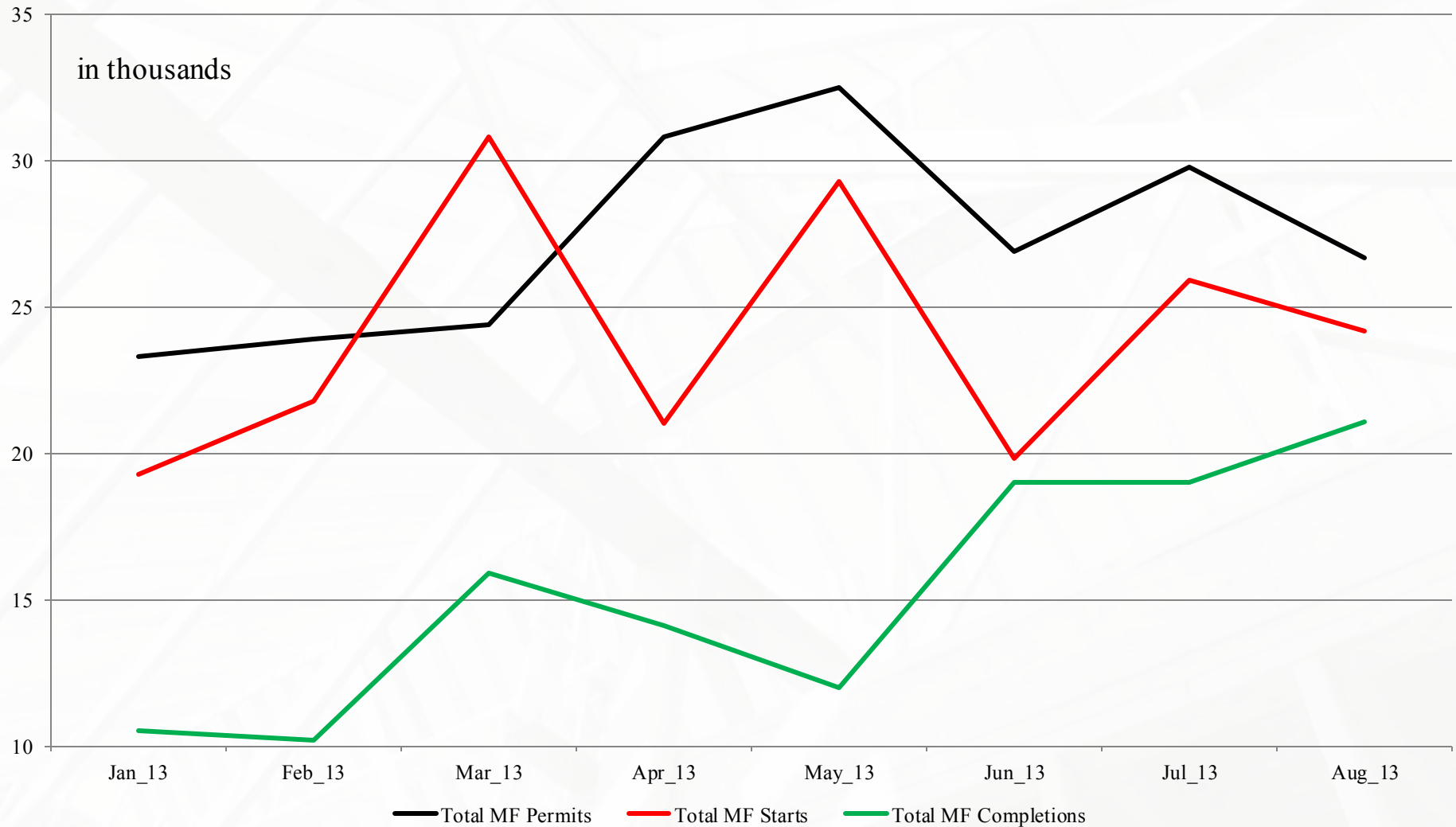


“...has prompted some market watchers to question whether builders are overenthusiastic about what has been a slow-going recovery, or if the market is poised for a surge of new-home construction.”

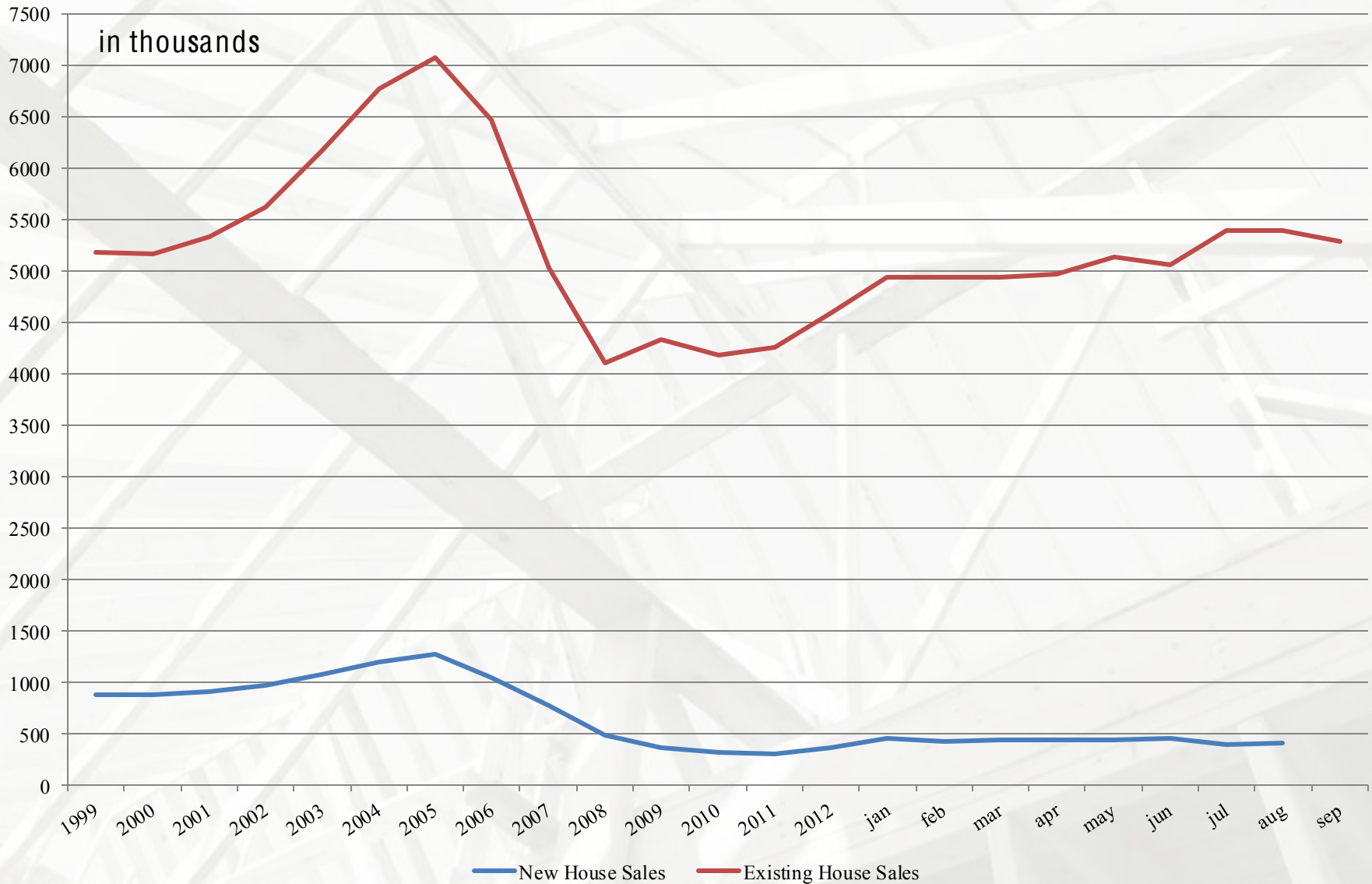
Multi-Family Permits, Starts, and Completions: 1999 - 2013



MF Housing Permits, Starts, and Completions – Raw and Unadjusted Data: 2013



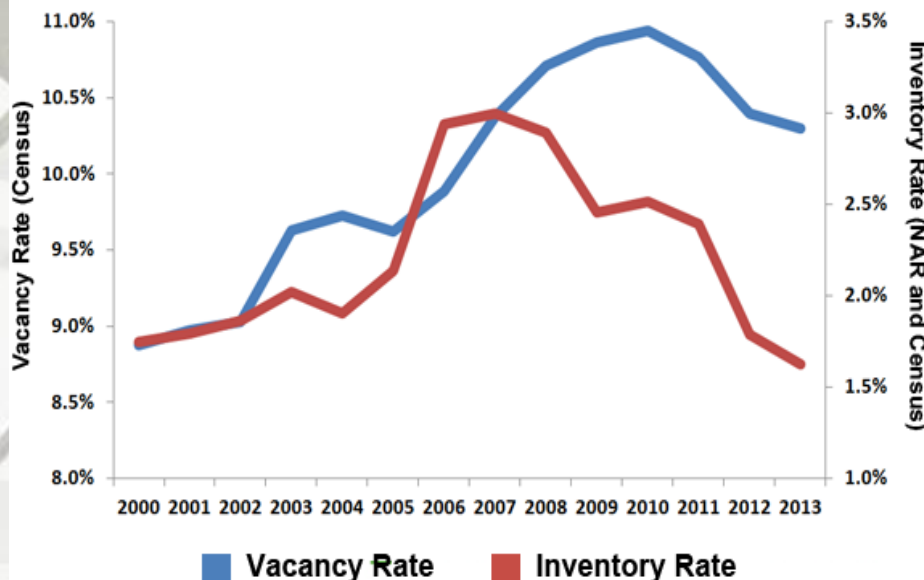
New and Existing Sales: 1999 - 2013



Existing Sales and New Home Construction

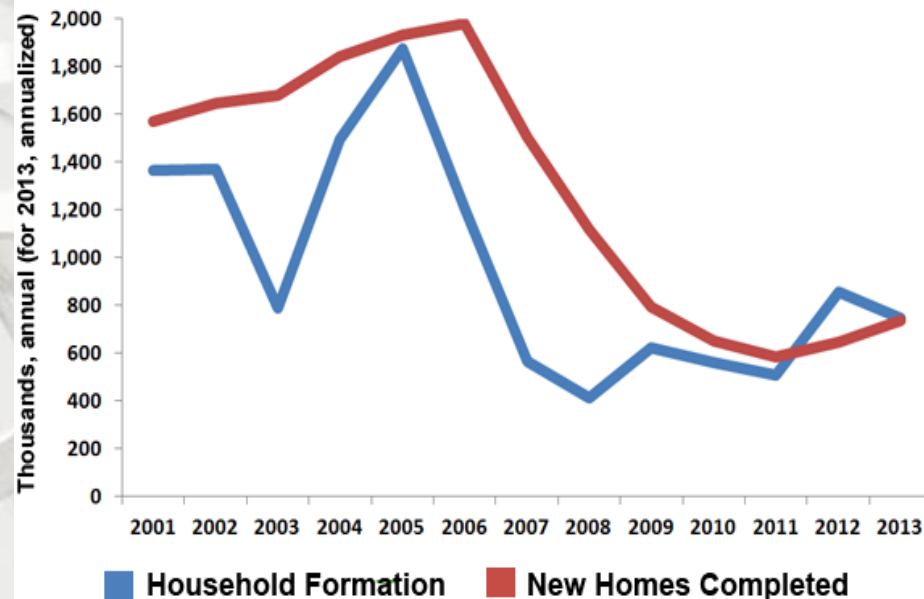
trulia

Inventory Shortage, Not Housing Shortage



trulia

New Households and New Homes (Census HVS, Census New Construction)



“...there’s an inventory shortage, not a housing shortage. Despite the shortage of listed inventory, there are plenty of vacant homes NOT listed for sale.”

“Household formation is lagging. As of 2013 Q2, annual household formation was 746 m according to the Census, and household formation since 2007 has averaged +/- 560 m – which is roughly half the normal rate of household formation of 1.1 mm.”

“When a long-term normal rate of +/- 1.1 mm household formations occur annually -- builders build more new homes; and then we need to start worrying about a future housing shortage.”

-- Jed Kolko, Chief Economist, Trulia

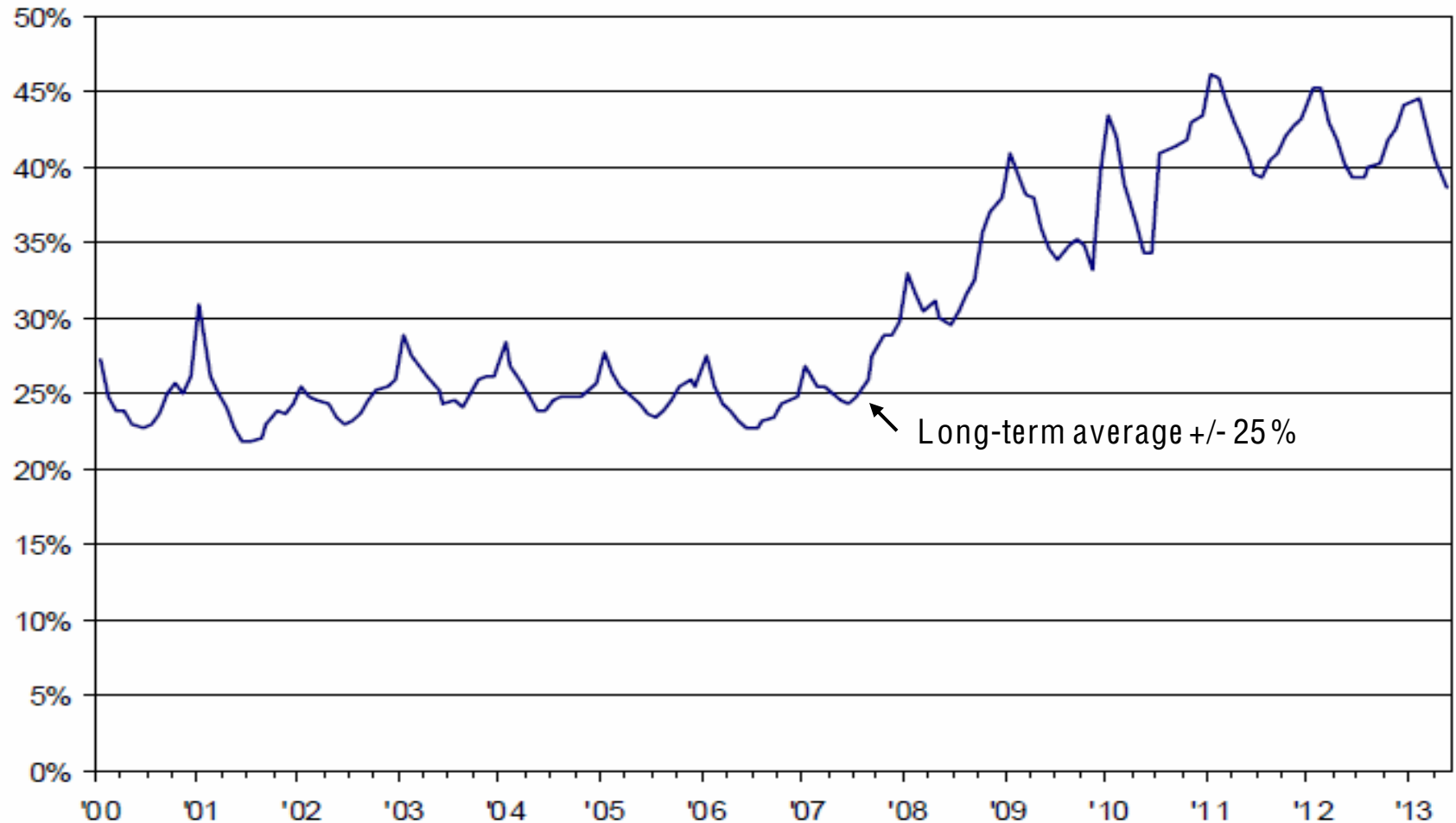
Source: <http://trends.truliablog.com/2013/09/why-construction-still-so-low/>, 9/17/13

Return to C

Investor Purchases: 2000 - 2013

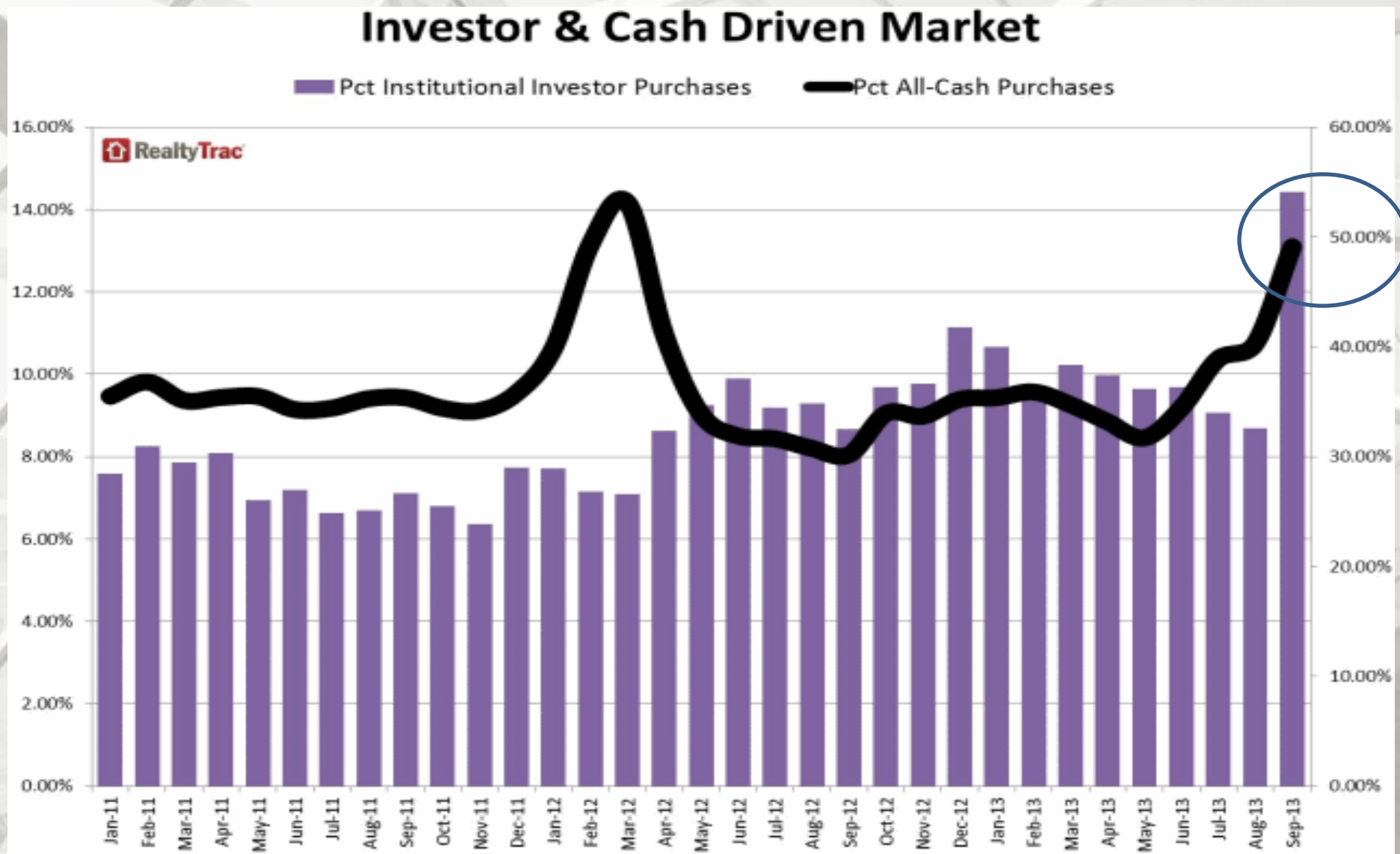
Share of Cash Sales Remains Elevated

Cash Sales as a Share of Total Home Sales (%)

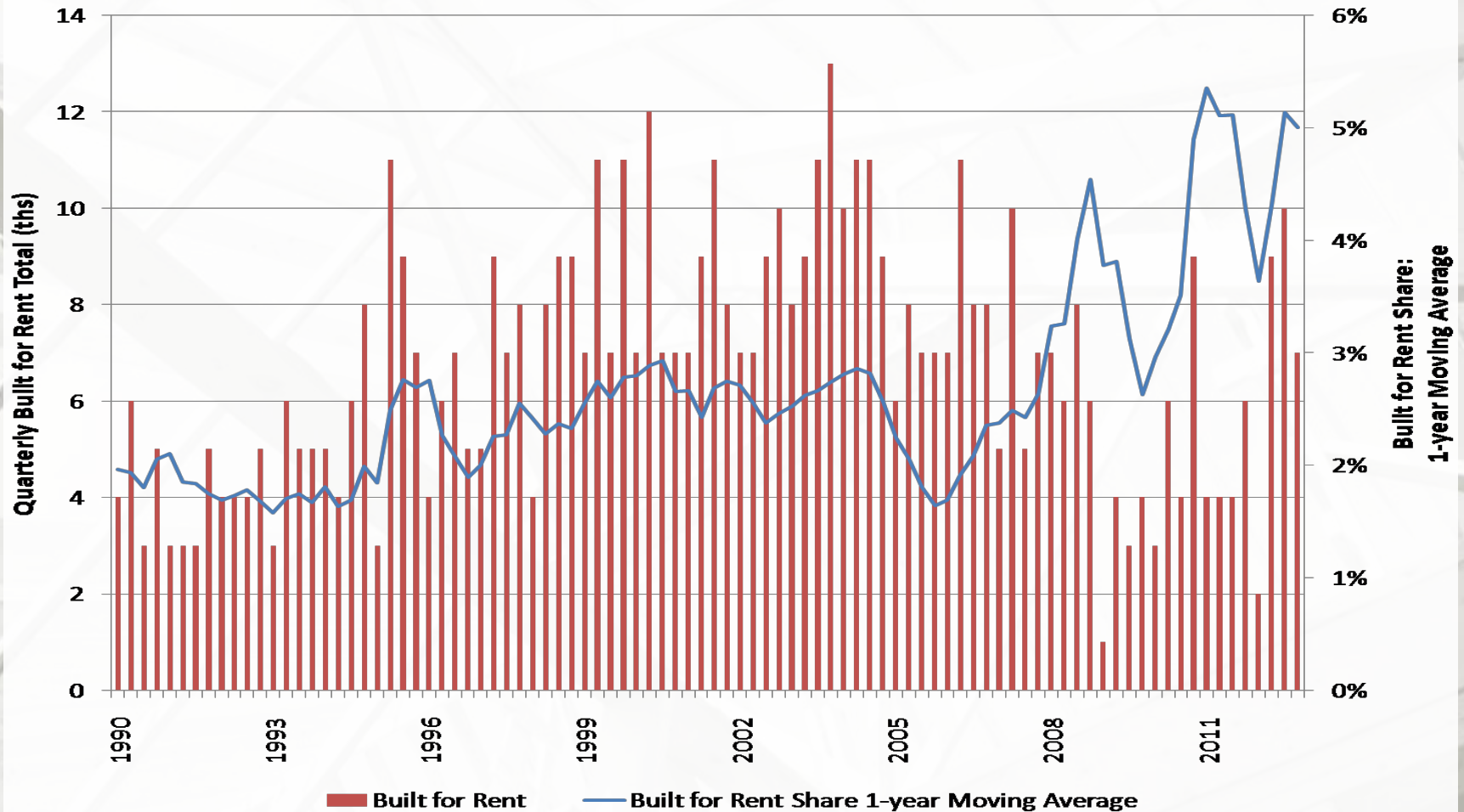


Source: CoreLogic

Investor Purchases: 2011 - 2013



Single-Family Starts: Built for Rent



Single-family homes built-for-rent = 5%, Q4 2012
Somewhat less than the peak of 5.35%; Q1 2011
Nearly double the 20-year average of 2.7%

Multi-Family Housing

**Multifamily Rental Properties by
Number of Buildings on Property**



Source: Rental Housing Finance Survey: U.S. Census Bureau and HUD

**Multifamily Rental Properties by
Current Market Value of Property**



Source: Rental Housing Finance Survey: U.S. Census Bureau and HUD

“While the desire to own a home remains a bedrock principle in American life, this survey demonstrates that the American **public’s views about housing are changing**, in part due to the hangover from the housing crisis, but importantly, also because of changes in our lifestyles. The dynamic is no longer **simply ‘renting versus owning’** -- perspectives are more complex, and people are viewing housing in a more holistic way.”

-- Peter Hart, Hart Research Associates

Multi-Family Housing

Will there be a mass move to the Urban center?

Are suburbs dying a slow death?

Leigh Gallagher, Managing Editor, Fortune Magazine

Gallagher argues more and more Americans are choosing urban living over the suburbs. The trend so profound it's causing mall operators to change business models.

Author: *The End Of The Suburbs: Where The American Dream Is Moving*

<http://video.cnbc.com/gallery/?play=1&video=3000186284>; 8/5/13

Why are young adults returning to the city?

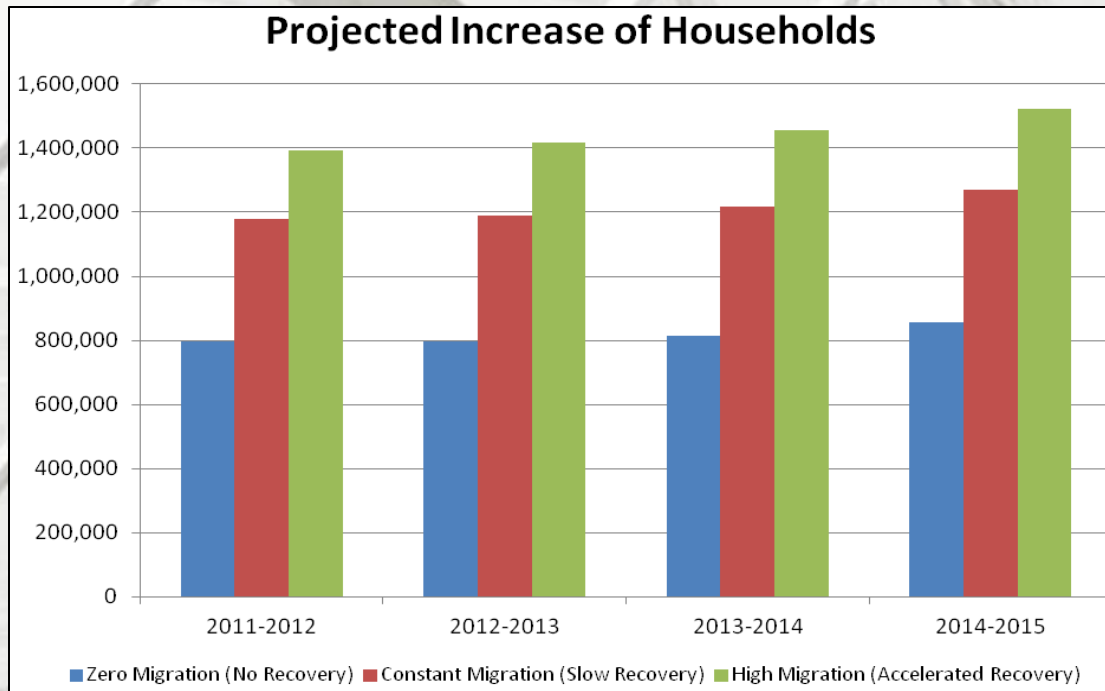
Robert Steuteville, Editor and Publisher, Better! Cities & Towns

Much has been said about Millennials— the generation born from 1980 through the late 1990s, sometimes called Gen Y and Echo Boomers — choosing downtown living.

<http://bettercities.net/article/why-are-young-adults-returning-city-20345>; 8/13

Demographic Trends

Population Forecasts Scenario	Population Increase 2011-2015
Zero International Migration	5.6M
Constant International Migration	10.6M
High International Migration	13.3M



“A key driver of household formation and rental demand is demographic trends.

U.S. population growth leads to an increase in the number of households.

... going back to World War II the U.S. population average growth rate is 1.2% annually.

In the last recession, population growth dropped to its lowest rate in five decades.

International migration is a key element to overall population growth.

Net migration is influenced by economic growth.

Without a strong economy, immigration also slows dramatically.”

Housing Supply

Single- and multi-family 1-4 building permits: 30-year average = 1 million permits

It will take time for single-family construction to catch up with the long run average of One million new units per year. For our forecasting and scenario analysis, we assume the following new single-family housing supply volumes from 2012 to 2015:

1. **No recovery scenario:** a constant 450,000 new single-family units.
2. **Slow recovery scenario:** new single-family units rising from the current level of 450,000 units to 750,000 units in 2015, with an average of 600,000 units per year from 2012 to 2015.
3. **Accelerated growth scenario:** new single-family units rising from the current level of 450,000 units to 1,000,000 units in 2015, with an average of 750,000 units per year from 2012 to 2015.

Housing Forecast

“...most industry practitioners, including us, expect overall economic growth to be slower than the long-run average. ...

we forecast that the homeownership rate will continue to decline to around 65% level, which implies 3.1 million new families or more than half of total new households will move into rental units.

...multifamily demand: a total of 1.7 million net new renters from 2011-2015.

Pessimistic scenario, homeownership will dip from 65.5% to 64.1% in 2015.

In this scenario, the single-family rental sector is relatively competitive with the multifamily sector due to low house prices and the high foreclosure rate. Total new multifamily demand will still reach 1.6 million from 2011 to 2015.

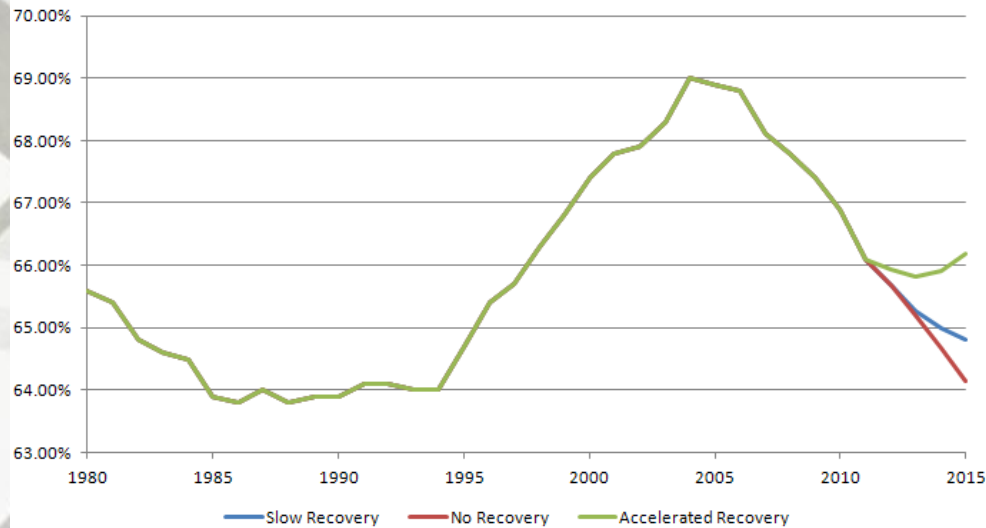
If the overall economy strengthens, ... a rebound in homeownership.

Unless there is a major jump in multifamily new construction, the multifamily market will still be balanced.

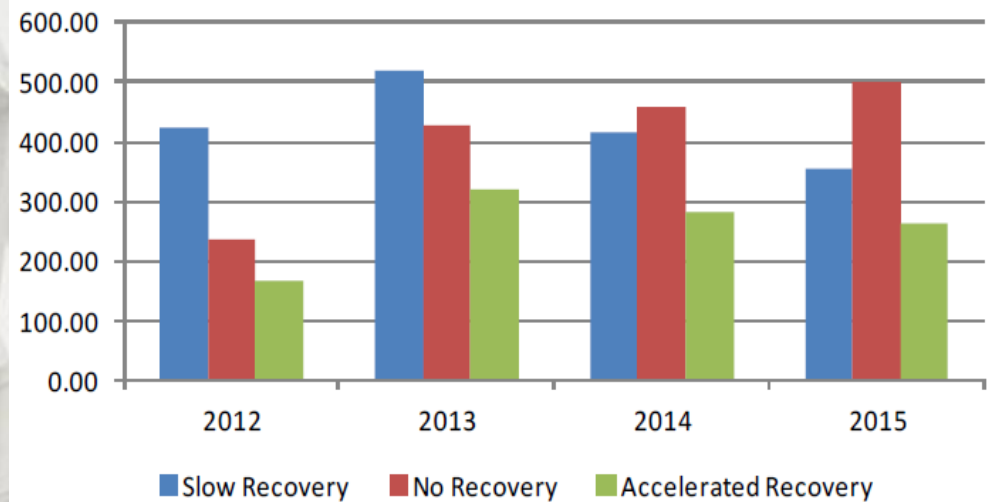
... the single-family rental market will see a significantly smaller increase of an estimated 800,000 households compared to 4 million growth in the ownership market.”

Housing Forecast

US Homeownership Rate



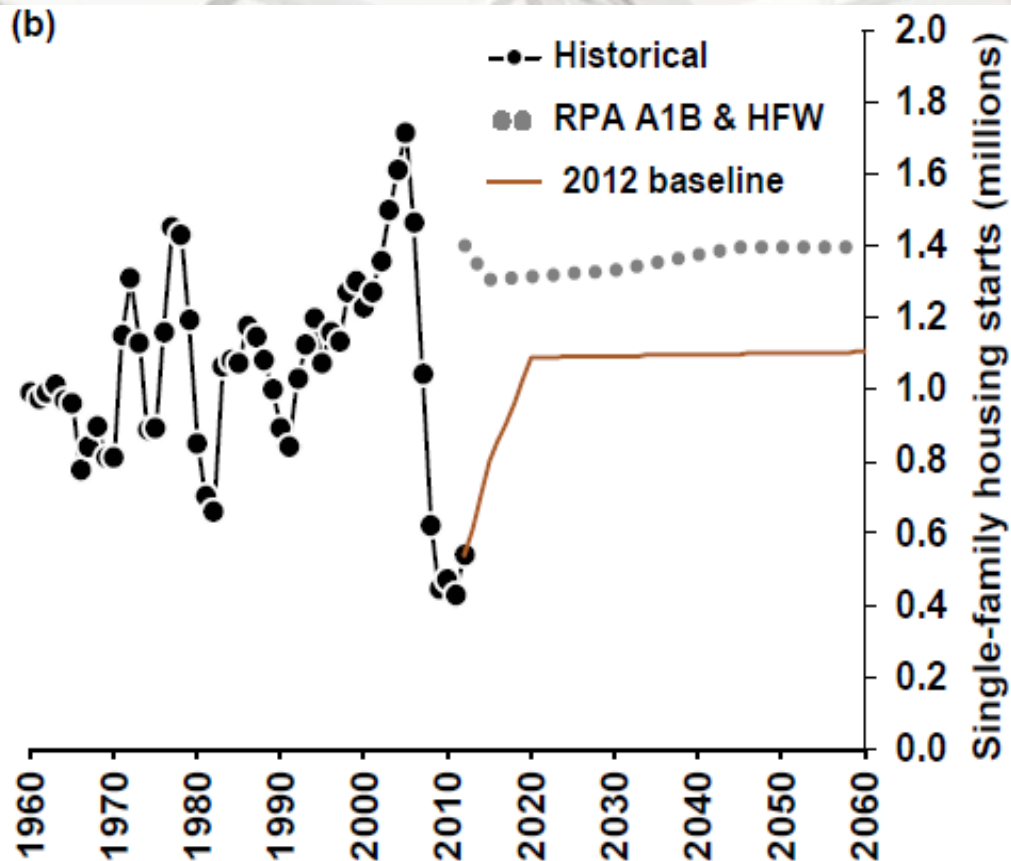
New Multifamily Demand (in thousands unit)



Housing Forecast

Scenarios	Increase of Homeowners (2012-2015)	Increase of single-Family Renters (2012-2015)	Increase of Multifamily Renters (2012-2015)
Base Scenario	1.7M	1.4M	1.7 M
No Recovery	-0.1M	1.7M	1.6M
Accelerated Recovery	4.0M	0.8M	1.0M

Forecasted U.S. Single-Family Starts



“... a gradual rebound in single-family housing starts, reaching the logarithmic trend line by 2020:

1.1 million

close to the long-run historical norm and within the range of current housing expectations

but much lower than recent RPA scenarios with similar or higher population growth.”

Structural change in the housing market include:

- a dramatic correction in median wealth of U.S. households as home values declined
- declining home ownership rates.

Future United States Housing Starts

The Forecasts of the Analysts 2013 Housing Starts (thousands)

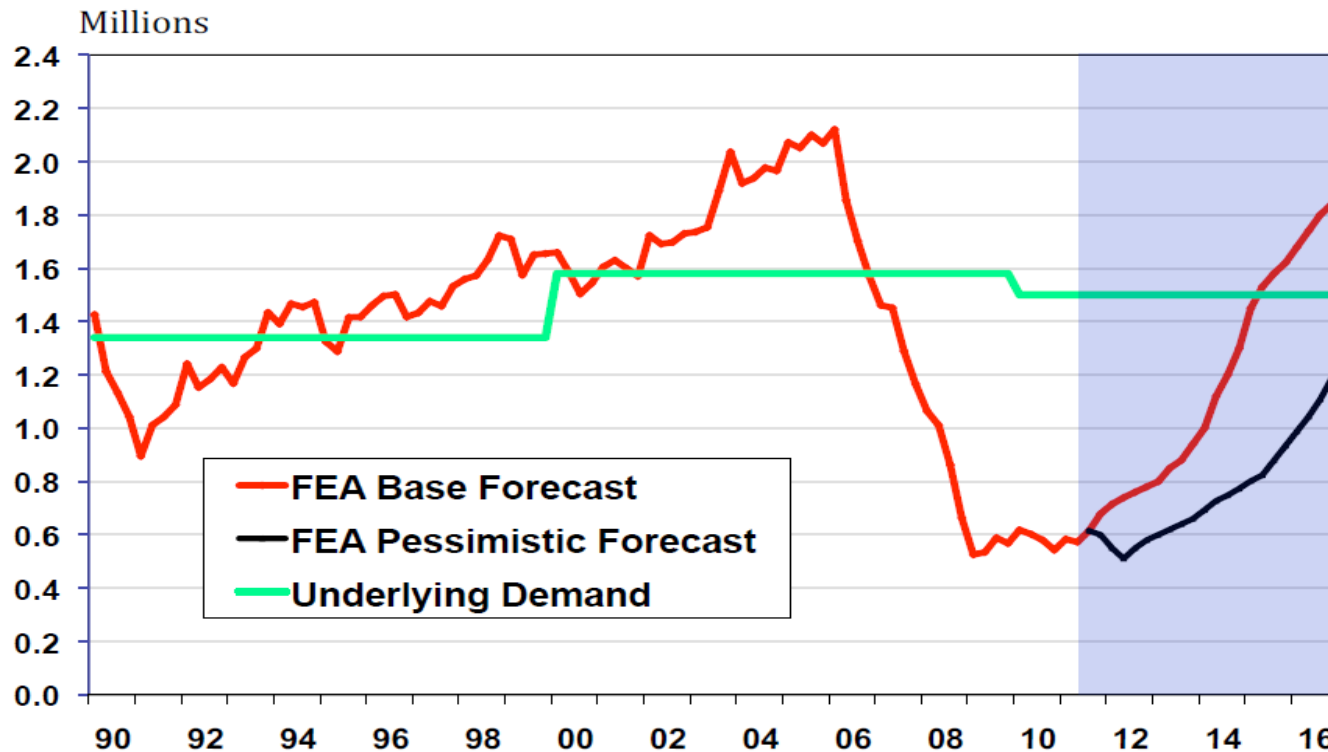
	Single-Family	Multi-family	Total
APA - The Engineered Wood Assn	645	330	975
Forest Economic Advisors	639	332	971
National Assn of Home Builders	644	311	955
Mortgage Bankers Assn	635	325	959
Fannie Mae	659	318	977
Average	644	323	967
% change from average of the analysts' projections for 2013 in January	+0.3	+12.5	+4.1

Since July, the NAHB has lowered its forecast to 629 m single-family starts in 2013 (from 672 m in April) and decreased the forecast for 2014: 826 m from 858 m.^F

In 2015, the NAHB projects 1.16 mm single-family starts.^G

Future United States Housing Starts

Housing Starts Will Remain Way Below Underlying Demand in Pessimistic Scenario



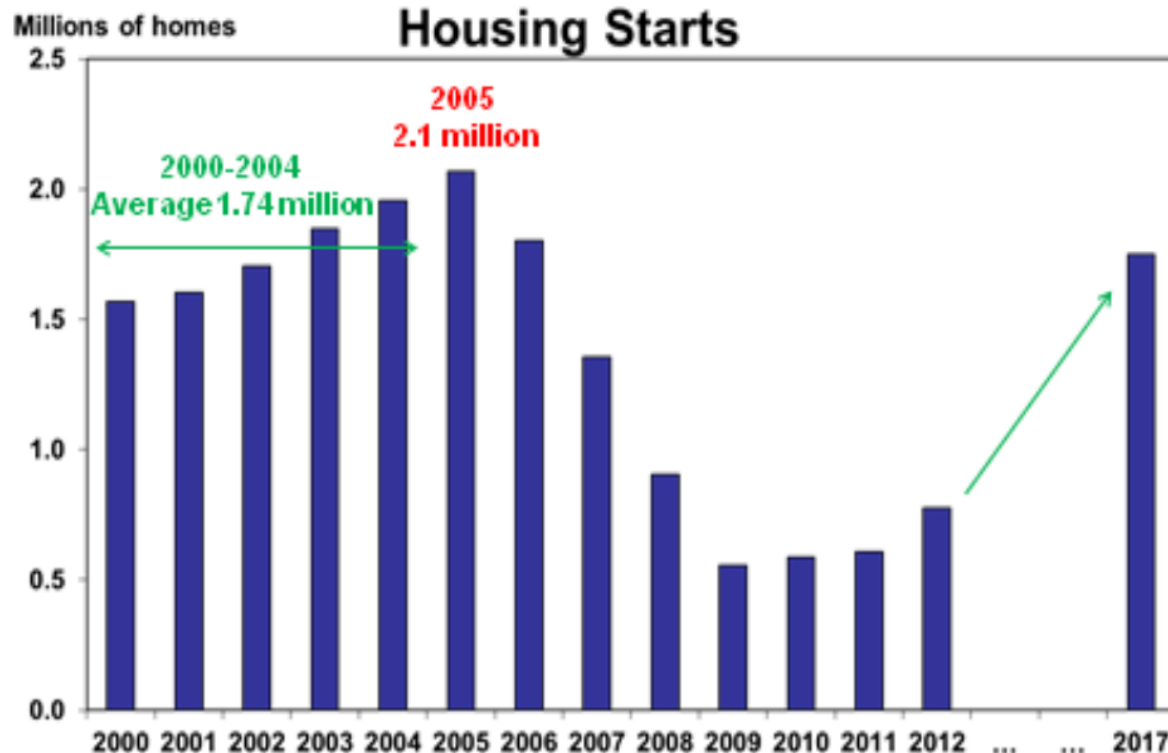
<http://www.getfea.com>

“...for the next 15 years, and then we would get an average of 1,660,000 housing starts.
... worst-case scenario = 800,000 to 900,000 starts...for the next fifteen years”

Projected U.S. Single-Family Starts



Healthy Housing Construction Has Annual Starts
Back to 1.7 to 1.8 Million by 2017



Source: U.S. Census Bureau. Data for 2012 through September (annualized)

Office of the Chief Economist

“... the market's recovery will be tempered by continued high unemployment, modest income growth, and a subdued pace of household formations. In other words, the patient is on the way back to health, but don't expect the housing market to wake up to 98.6 degrees tomorrow morning.”

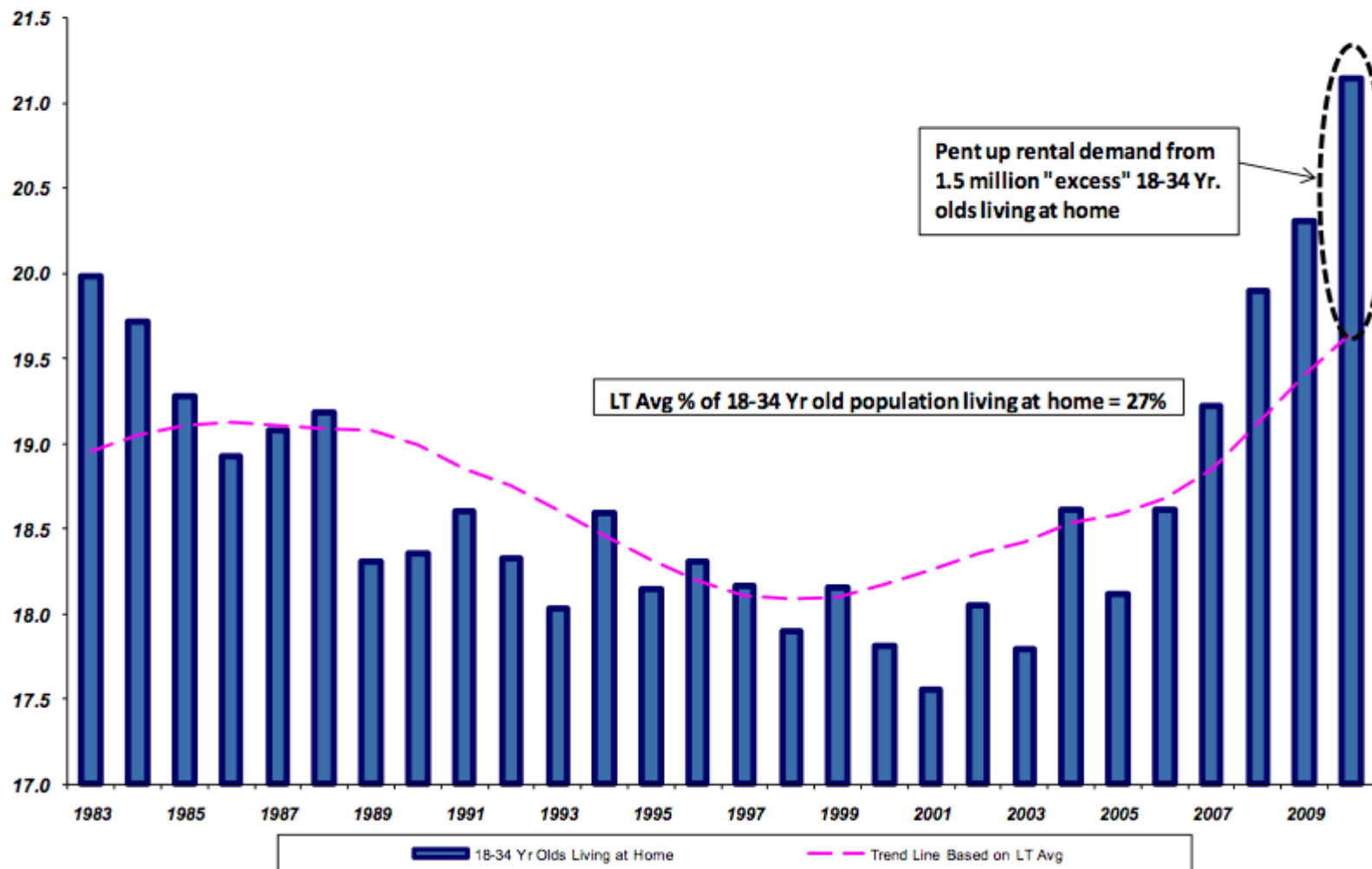
-- Frank Nothaft, Chief Economist, Freddie Mac Source: www.freddiemac.com/news/blog/frank_nothaft/20121107_98_degrees.html

Future U.S. Housing Demand

Deferred Renters/Owners Will Drive Demand

HARVEST
CAPITAL STRATEGIES

18-34 Year Olds, in millions



The background of the slide is a grayscale photograph of a complex wooden roof truss system. The image shows numerous wooden beams and joists intersecting at various angles, creating a dense, geometric pattern. The lighting is soft, highlighting the textures of the wood.

United States Housing

Forest Products and Markets

Forest Products Markets – Hardwoods

Bill Luppold, Research Economist,
USDA Forest Service - Princeton

- Hardwood lumber production has declined by 40% between 1999 and 2010, and has only increased modestly since
- We have permanently lost as much as a third of our hardwood lumber production capacity in the past 5 years – Liquidated or abandoned

United States Hardwood Log and Lumber Markets

Hardwood Lumber Production and Consumption

1999 – 12.9 BBF

2005 – 11.6 BBF

2009 – 6.65 BBF

2012 – ≥ 7.3 BBF

2013 – somewhat greater

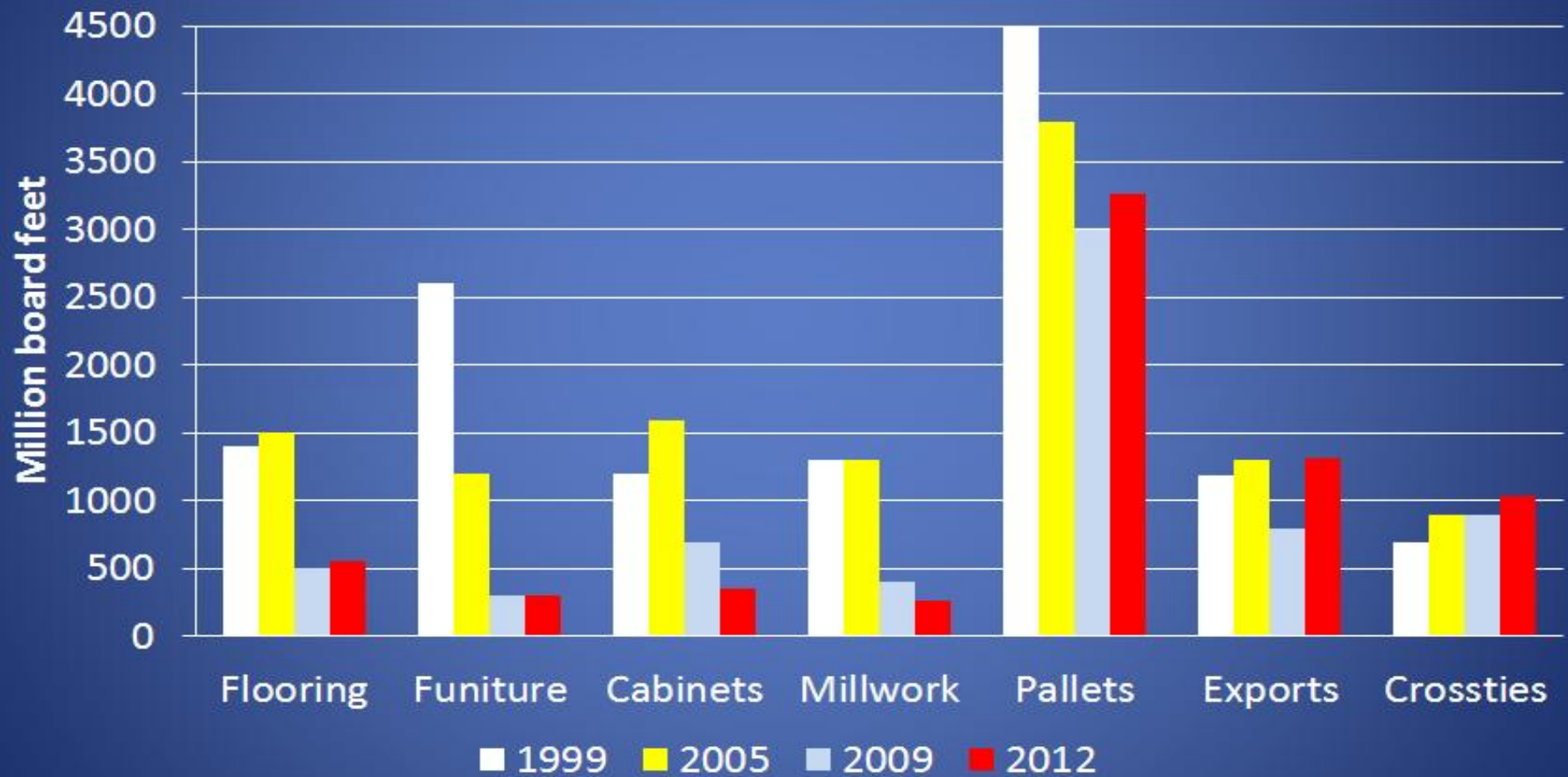
United States Log and Lumber Markets: Hardwoods

Eastern Hardwood Lumber Production



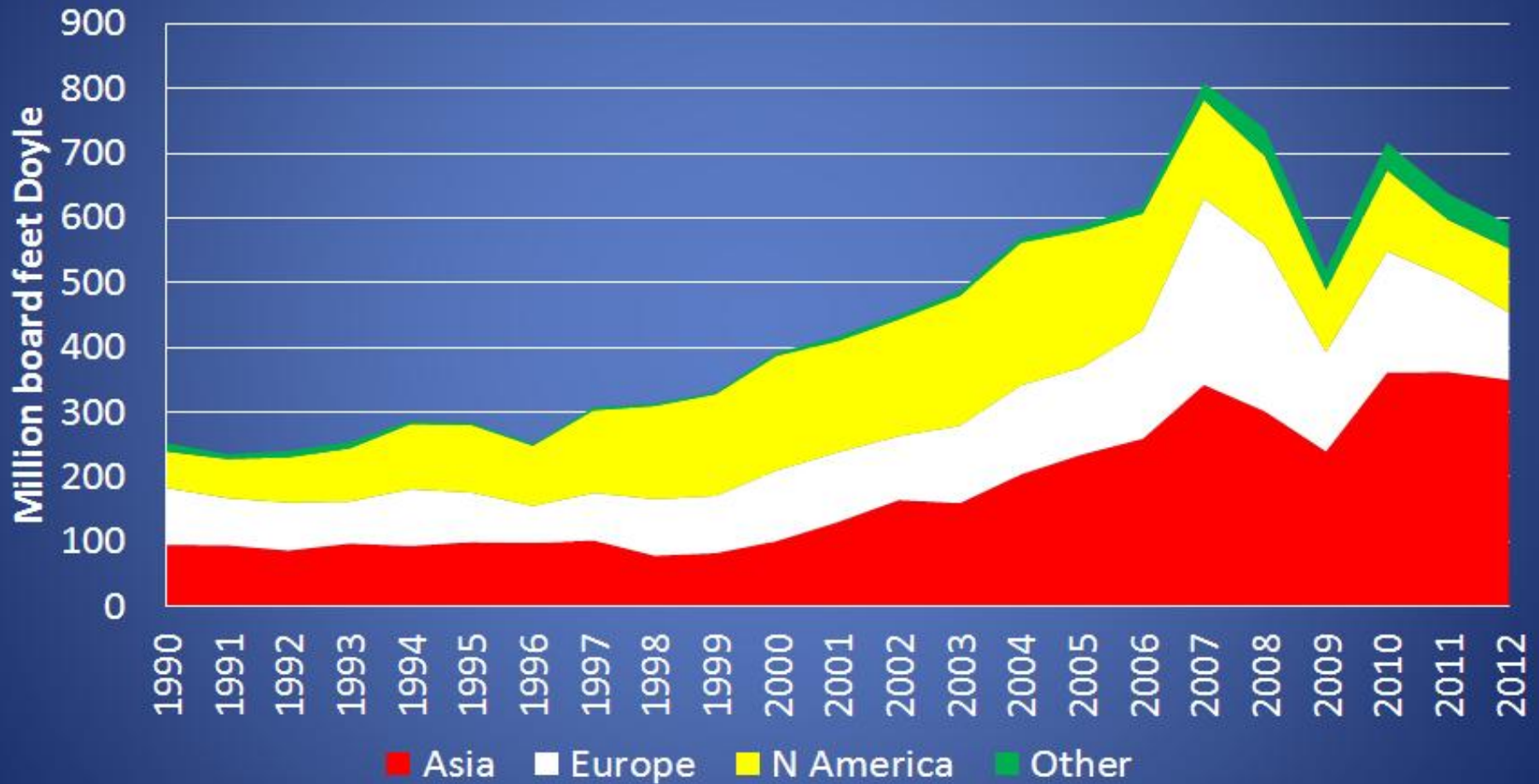
United States Log and Lumber Markets: Hardwoods

Hardwood Lumber Consumption 1999, 2005, 2009, 2012



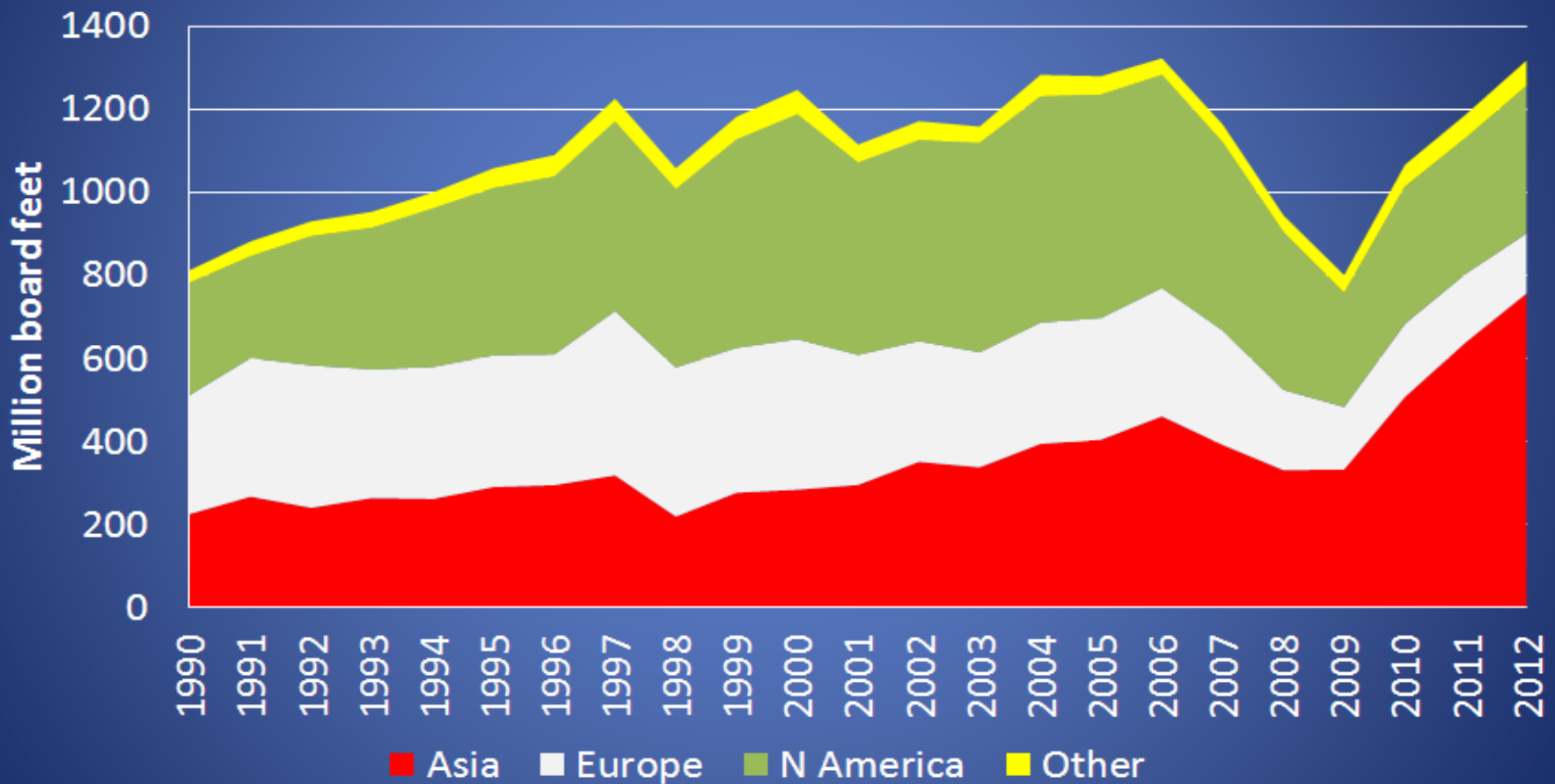
United States Log and Lumber Markets: Hardwoods

Hardwood log exports



United States Log and Lumber Markets: Hardwoods

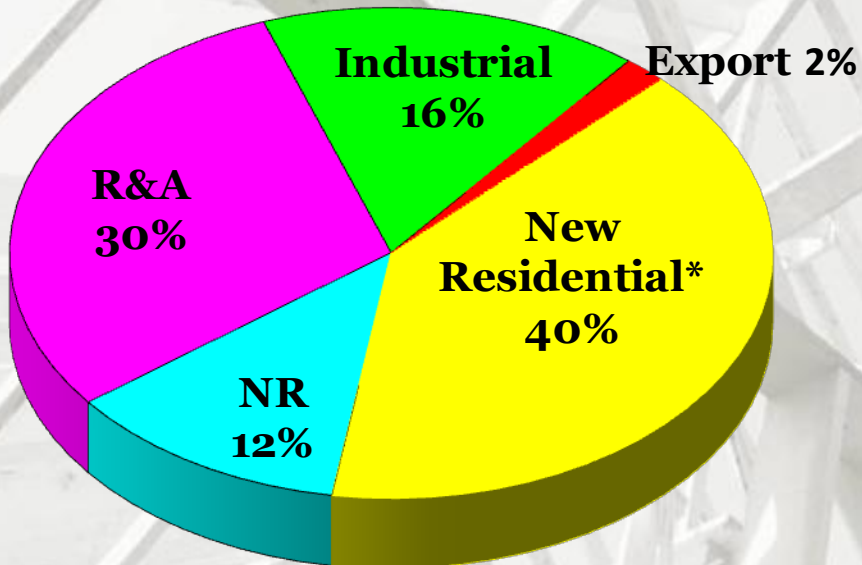
Hardwood Lumber Exports 1990 to 2012 by Region



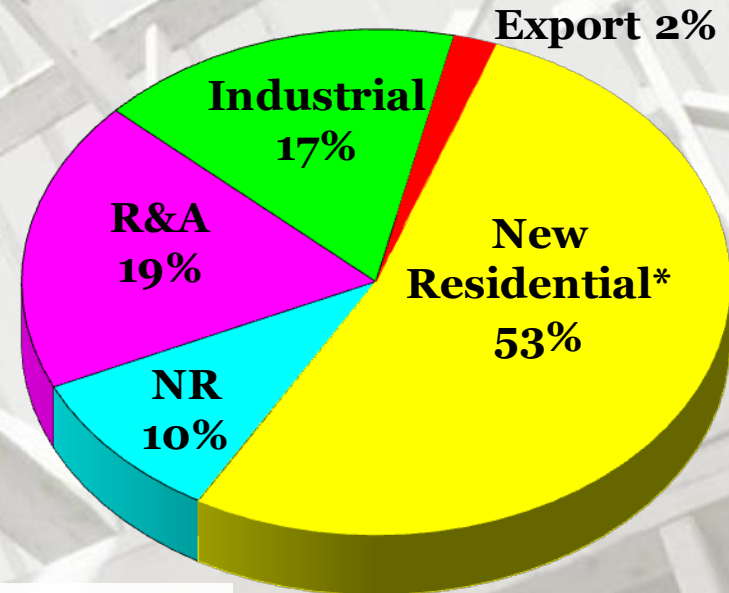
United States Housing

Softwood Market Shares: Average 1998 – 2007

U.S. Softwood Lumber



U.S. Structural Panels



*New Residential incl. SF, MF, and Mobile Homes

United States Softwood Lumber Markets

RISI: Residential Construction Markets

Lumber consumed in residential construction increased 25%: 10.1 BBF – 2012

Forecast: increase to 28% in 2013 – 12.9 BBF and to 16.4 BBF – 2014

RISI: Residential Repair and Remodeling, and Industrial Markets

Lumber consumed in the repair and remodeling grew 8% to 12.6 BBF – 2012

Projected to grow at an average of 4% per year in 2013-2014

Growth in the industrial market increased 3% to 12.5 BBF – 2012

The industrial market is expected to slow to 1% per year in 2014

RISI: Nonresidential Construction End-Use Market

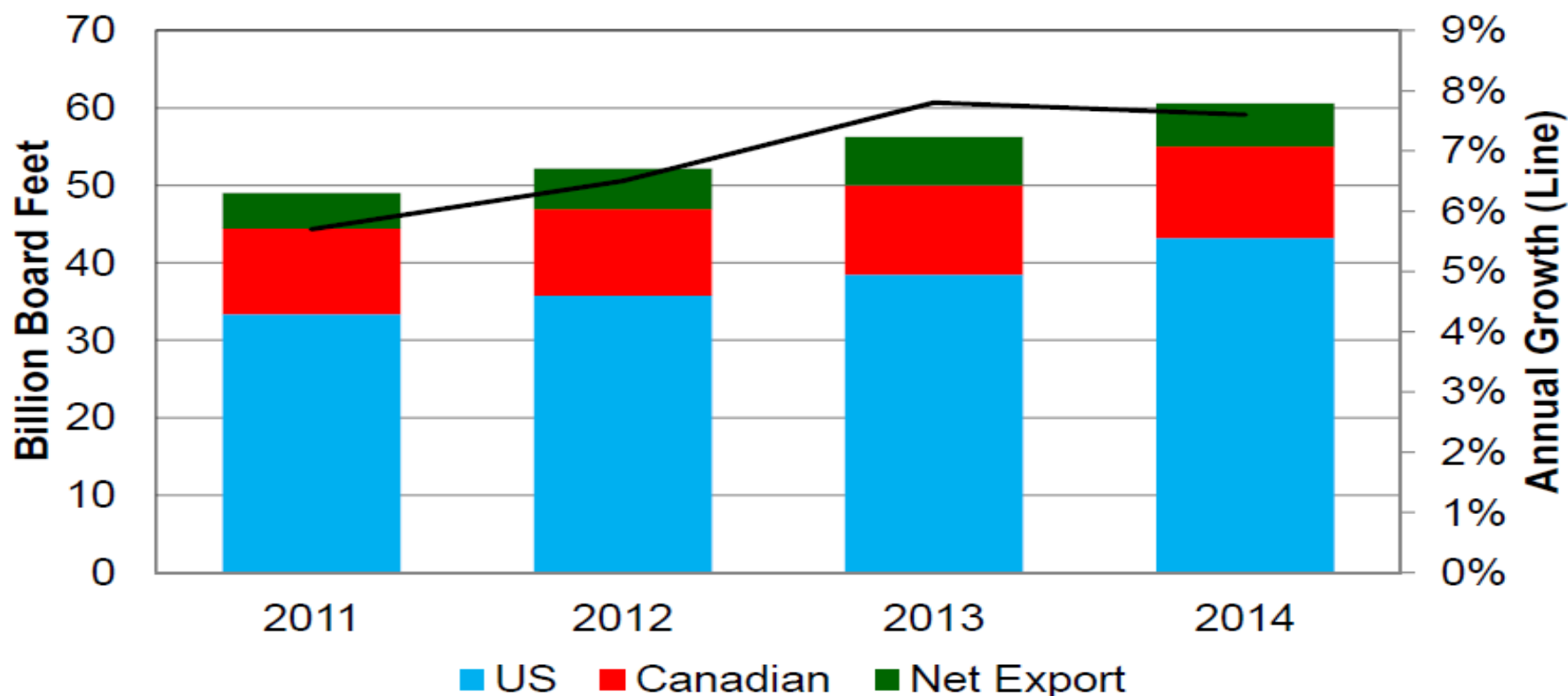
Deteriorated in 2012, decreasing another 12% to 1.3 BBF – 2012

Edge up 2% to 1.4 BBF – 2013; increasing 11% to 1.5 BBF – 2014

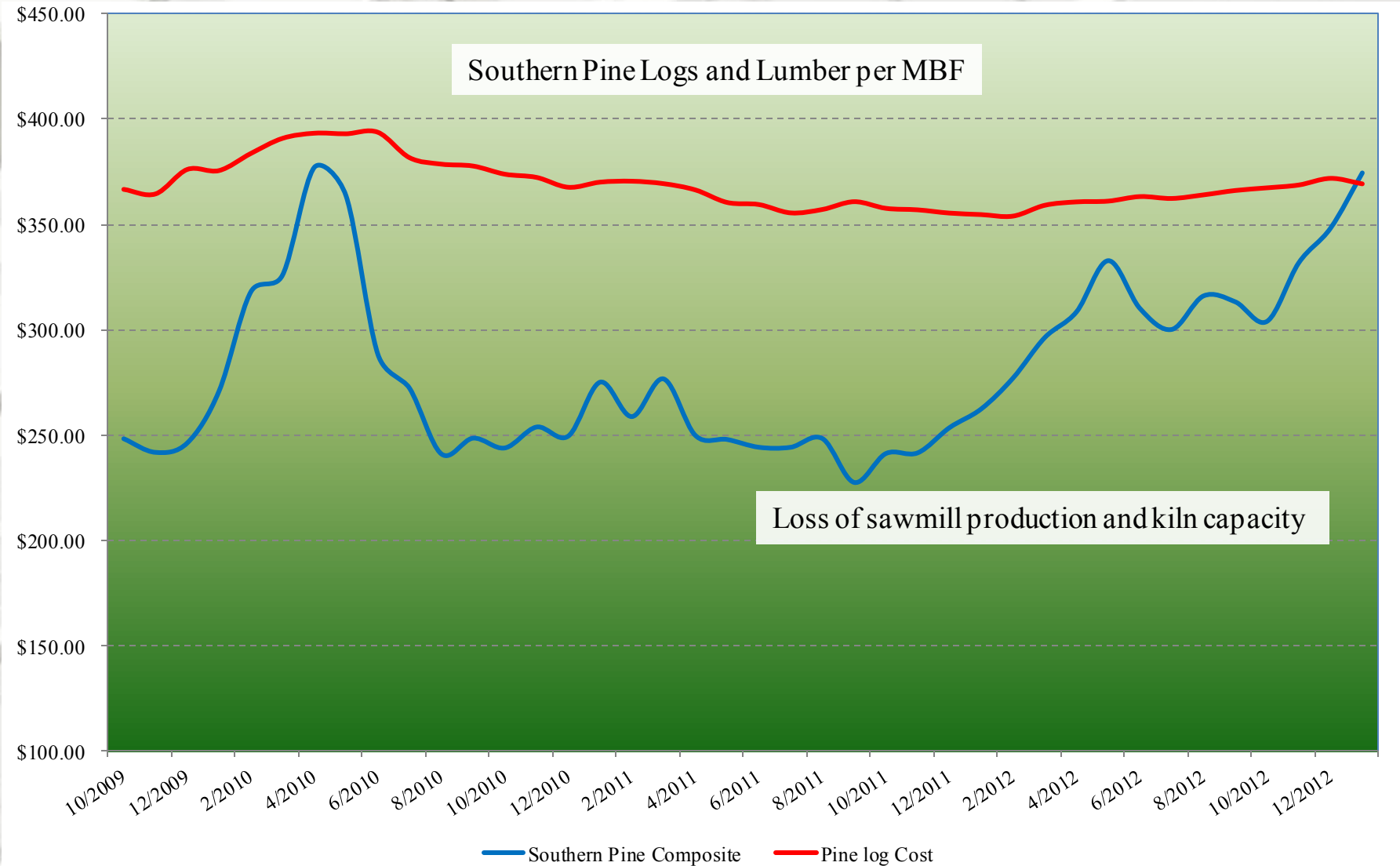
United States Softwood Lumber and Panel Markets

Modest Growth Will Push Demand for North American Softwood Lumber up by 8.4 BBF from 2012 to 2014.

Demand for North American Softwood Lumber

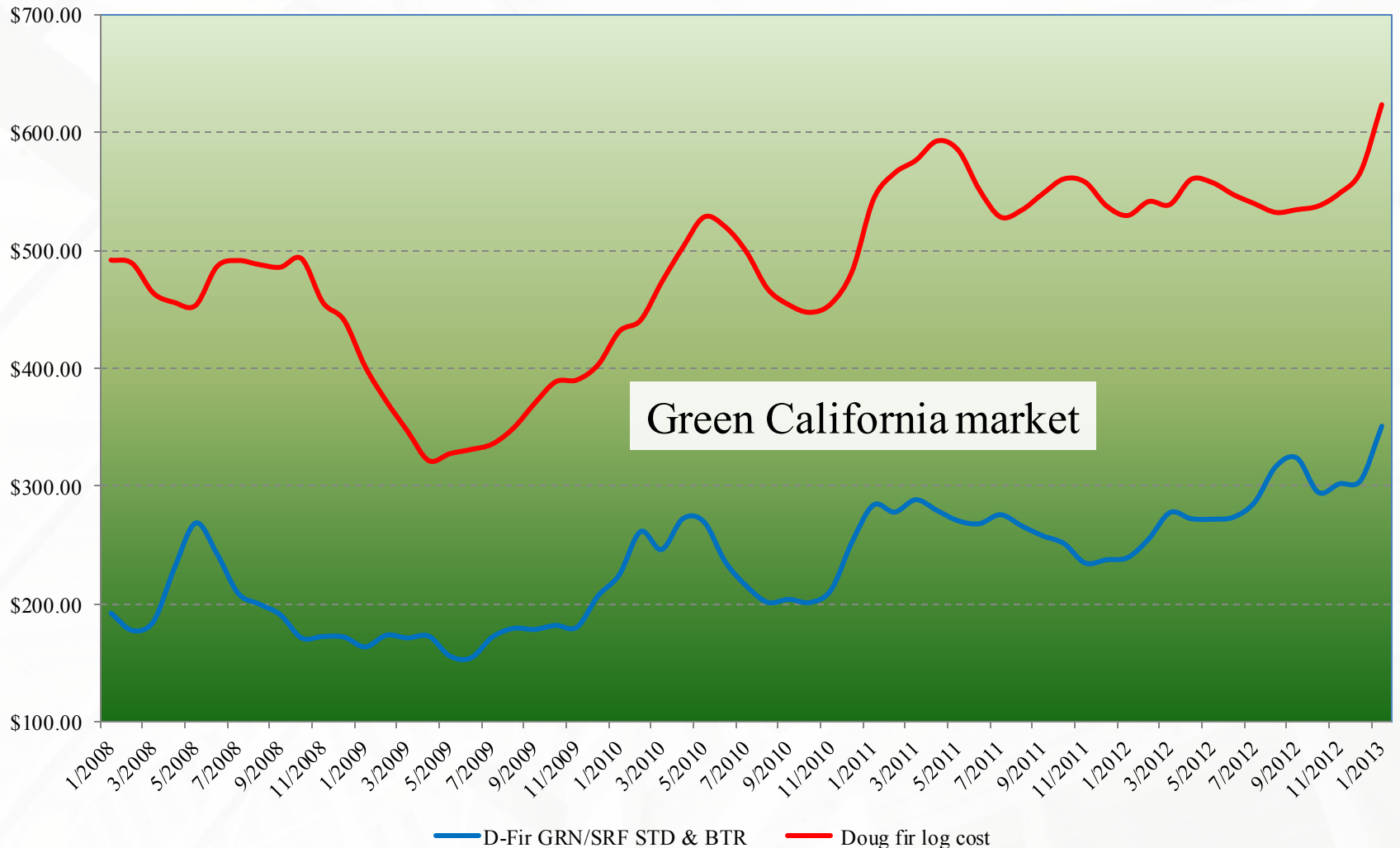


Southern Pine



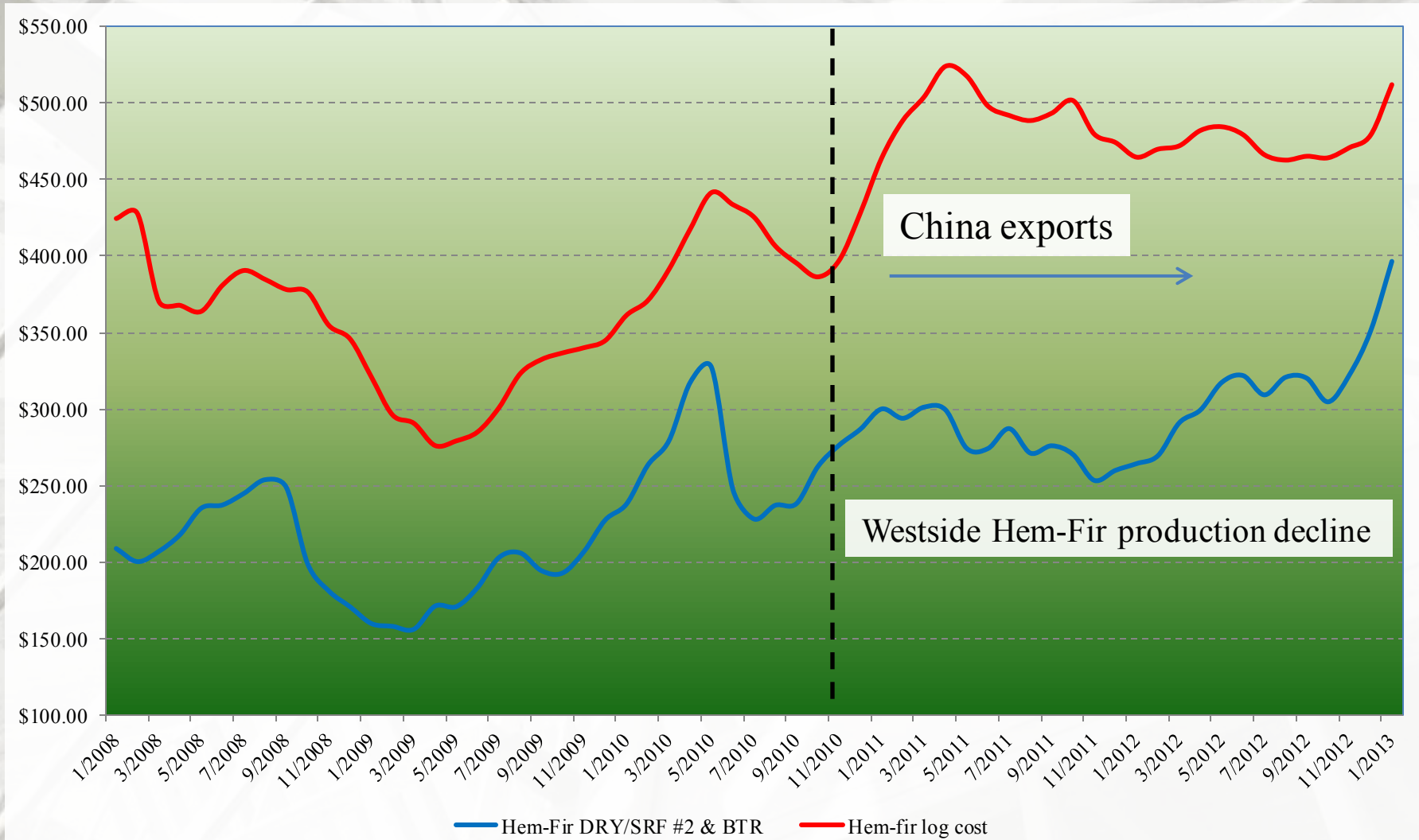
Green Douglas Fir:

Doug Fir Logs and Lumber price per MBF



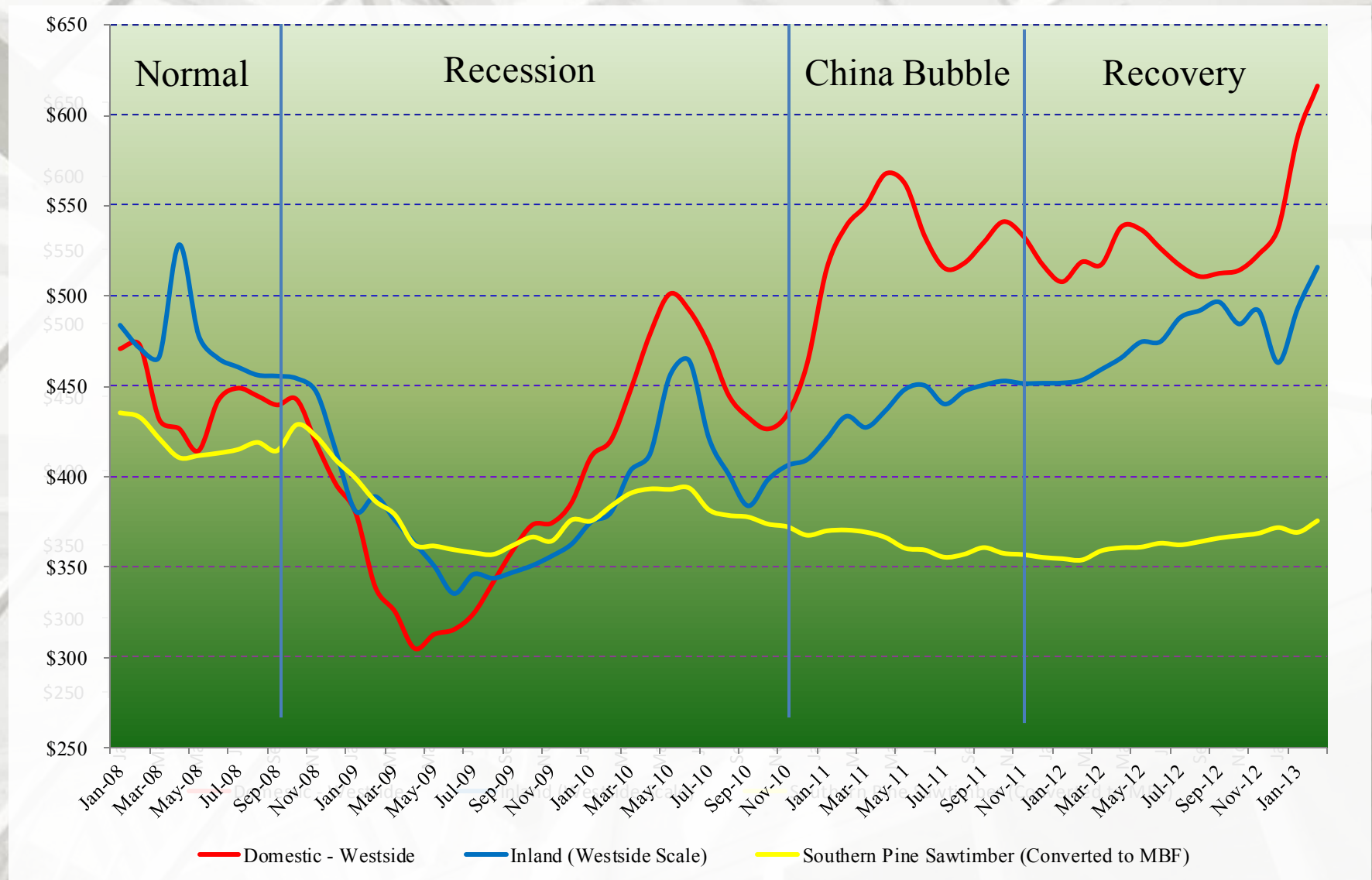
West Coast KD Hem-Fir:

Hem-Fir Logs and Lumber price per MBF



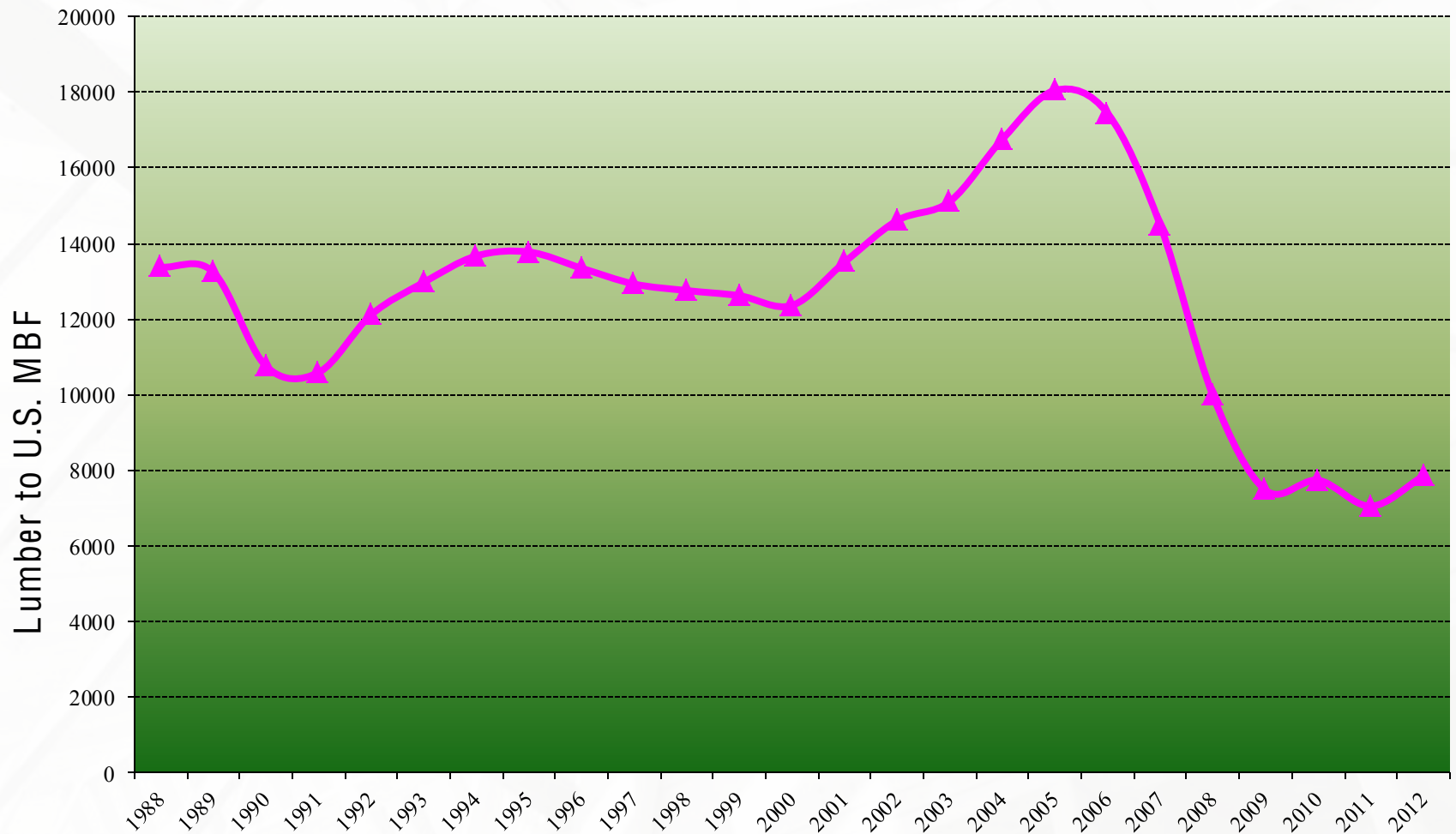
Coastal Northwest is the High Log Cost Region

Regional sawmill log prices (DF, Hem-Fir and Pine) compared by MBF



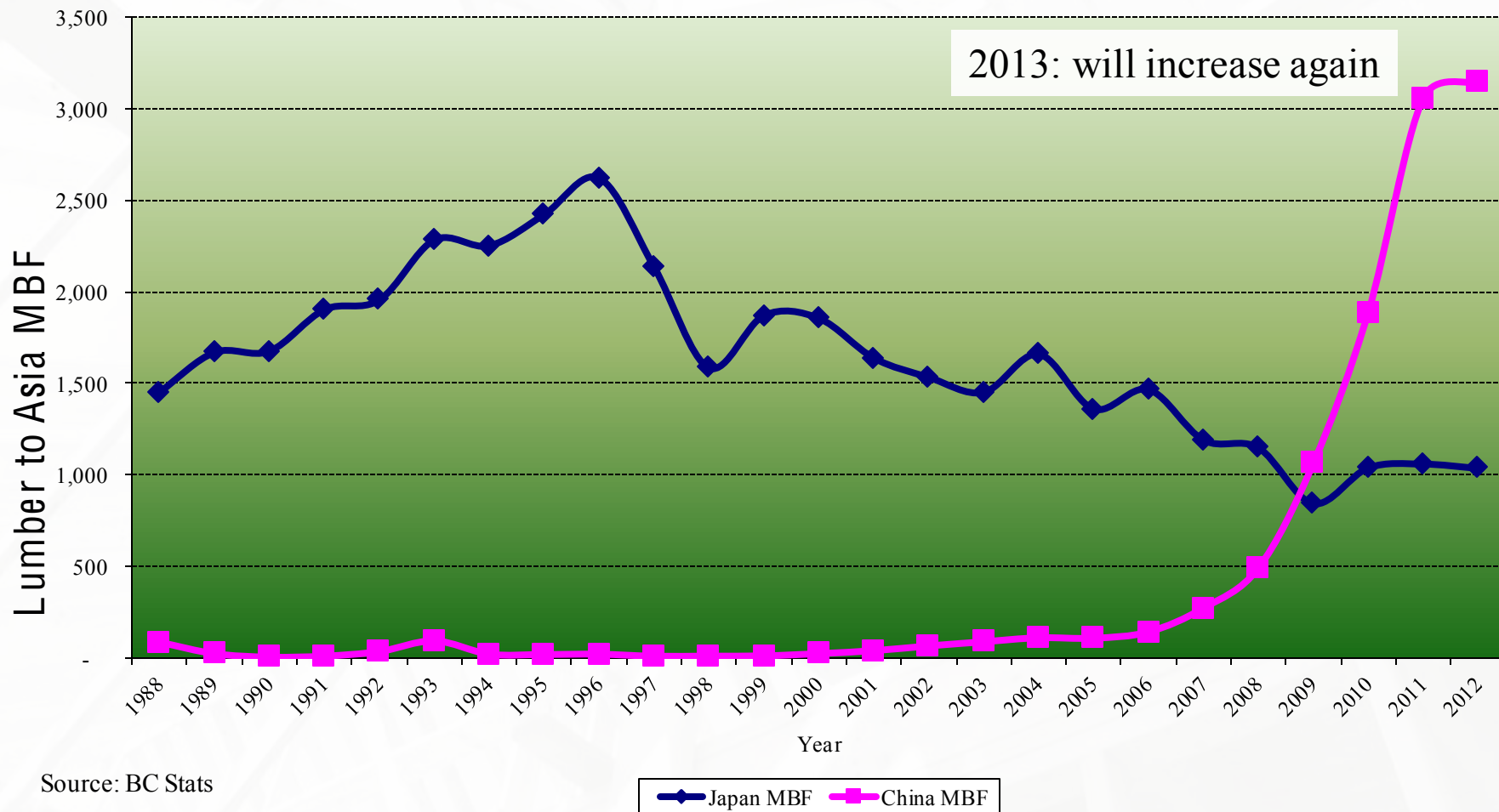
Housing Crash Left Canadian Lumber Homeless

BC lumber exports to U.S. 1988-2012

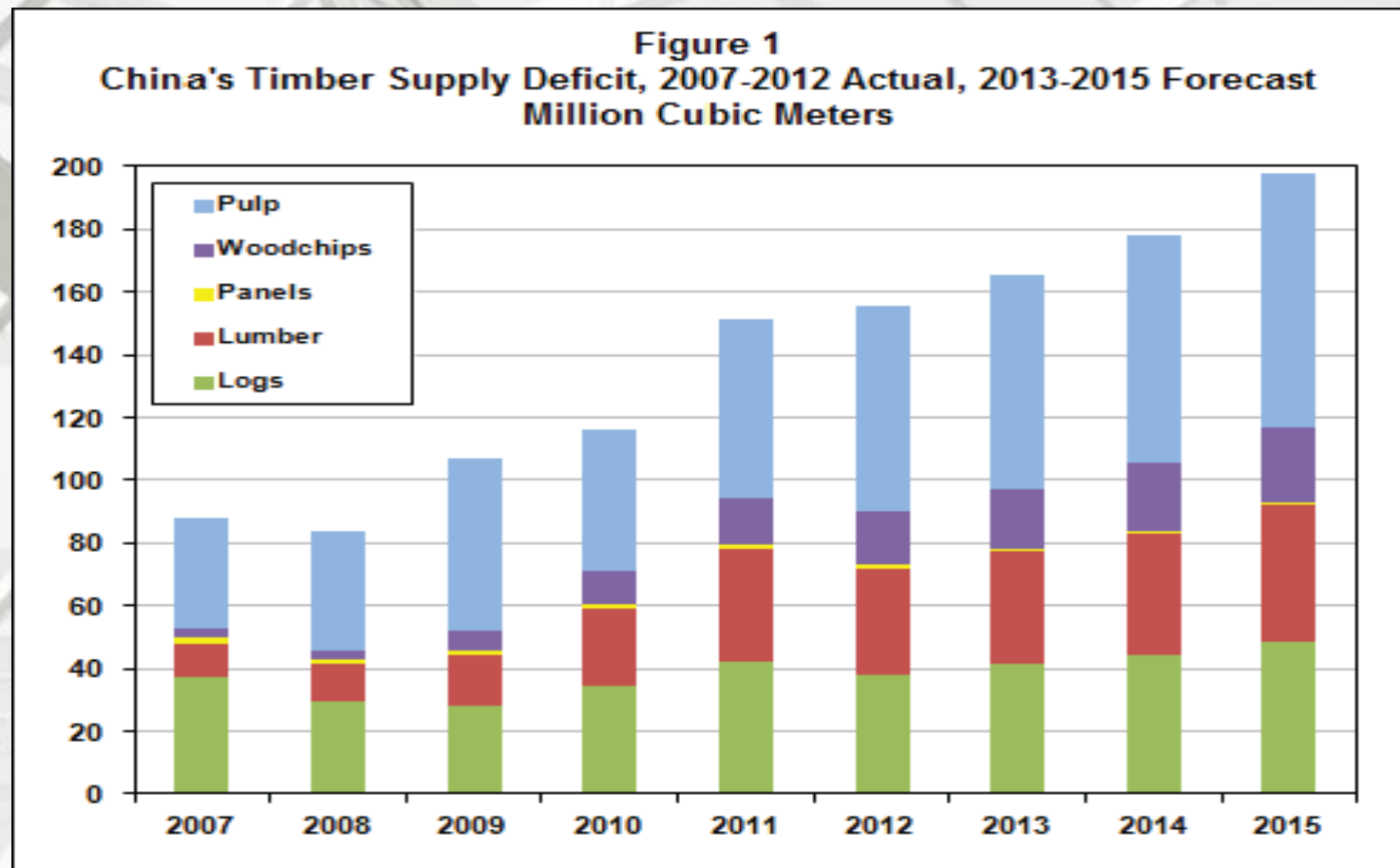


British Columbia Lumber Exports

BC lumber exports to Asia 1988-2012



Chinese Wood Products Demand Increasing



“As of mid-2013, we are now projecting that the 2015 timber supply deficit in China will be even higher than we had previously forecast, at nearly 198 million m³, or 8.8% higher than we had projected in April 2011. ...in 2012 the wood products sector in China (lumber, plywood, blockboard, MDF, particleboard and OSB) consumed approximately 230 million m³ of wood, net of sawmill residues.”



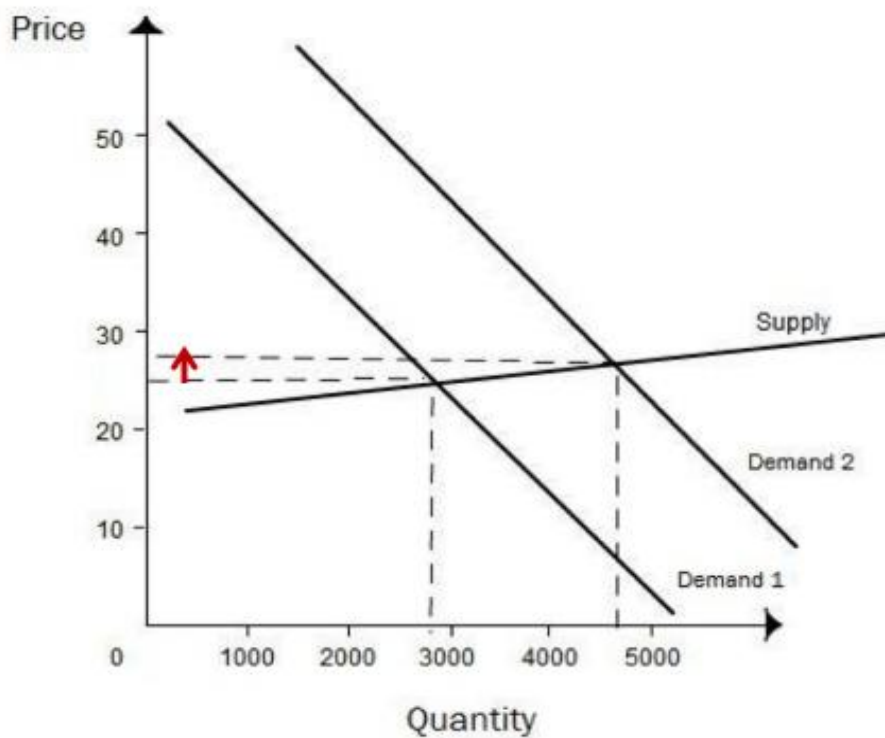
United States Economy

United States Economy

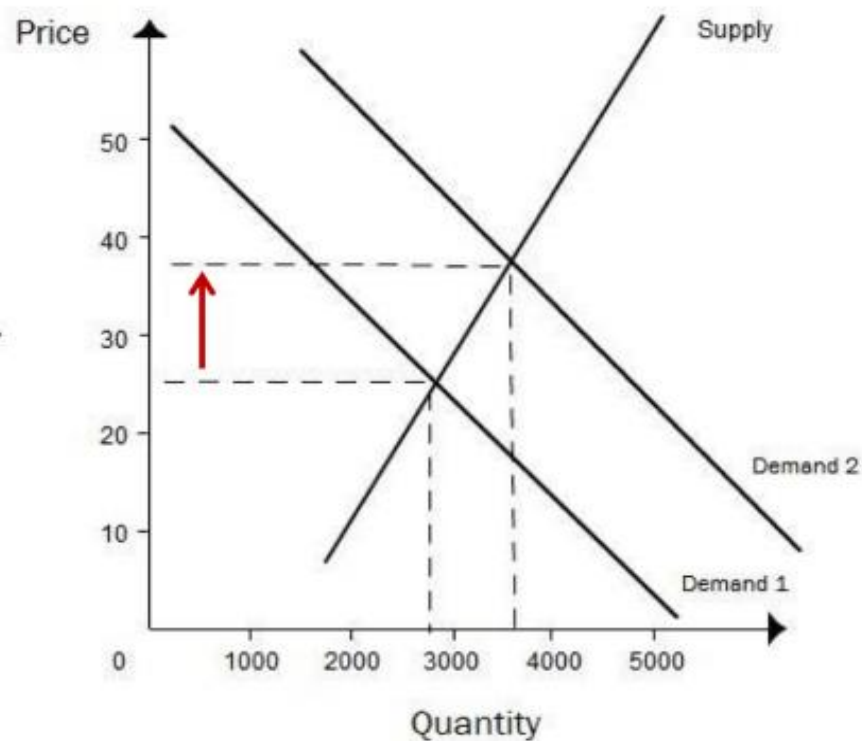
Moves in the prices aren't encouraging moves in quantity.

SUPPLY CURVE BECOMING INELASTIC

1980-90's Elastic Supply Curve



Today's Inelastic Supply Curve



United States Economy

Threats to growth are looming for forest, paper & packaging CEOs

***Economic
uncertainty***

87% of sector CEOs say uncertain or volatile economic growth could threaten their prospects.

***Over-
regulation***

76% of forest, paper & packaging CEOs think over-regulation could hurt growth.

***Energy
and raw
material
costs***

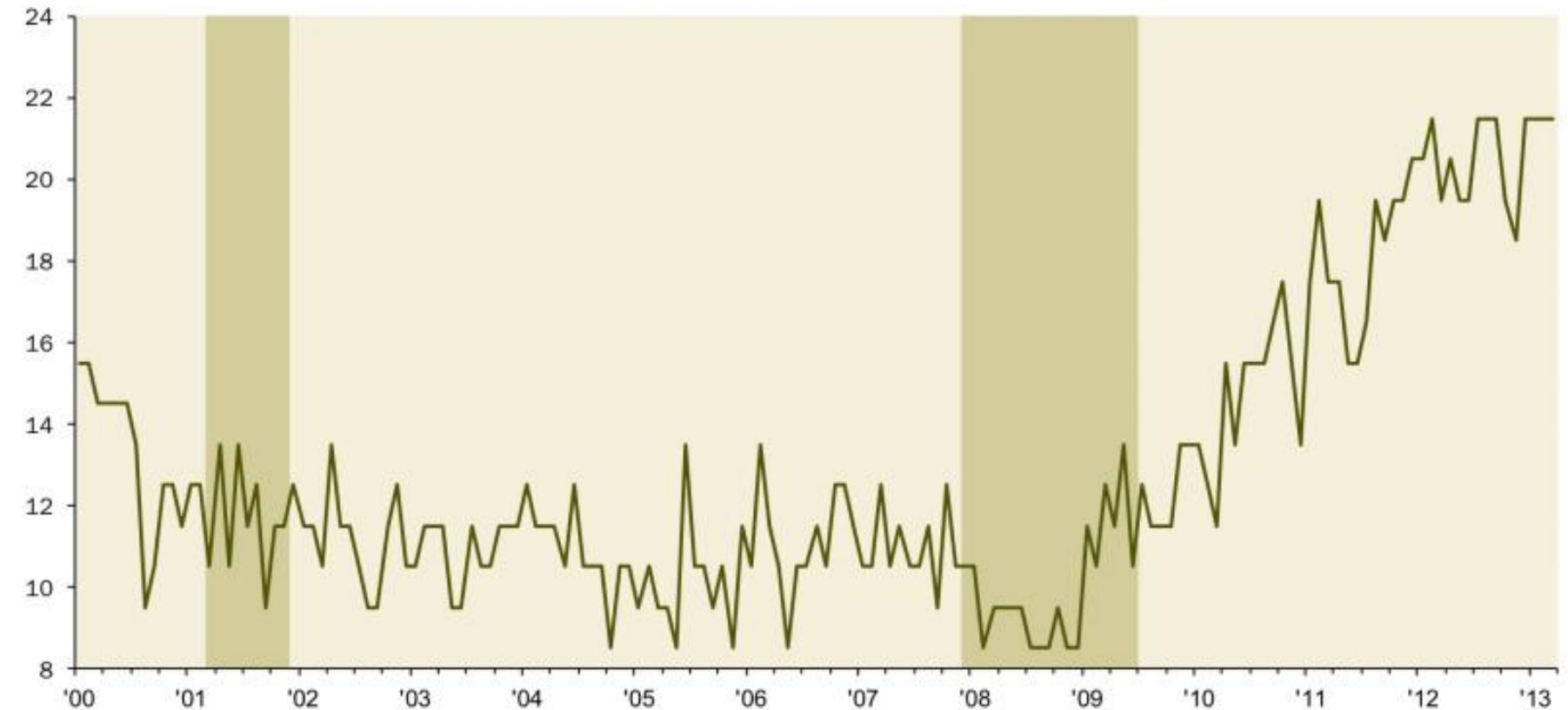
76% see them as a concern, compared to just 52% of the overall sample.

United States Economy

GOVERNMENT REGULATION GETS IN THE WAY

United States: NFIB: Government Requirements as the Top Problem

(percent of respondents)

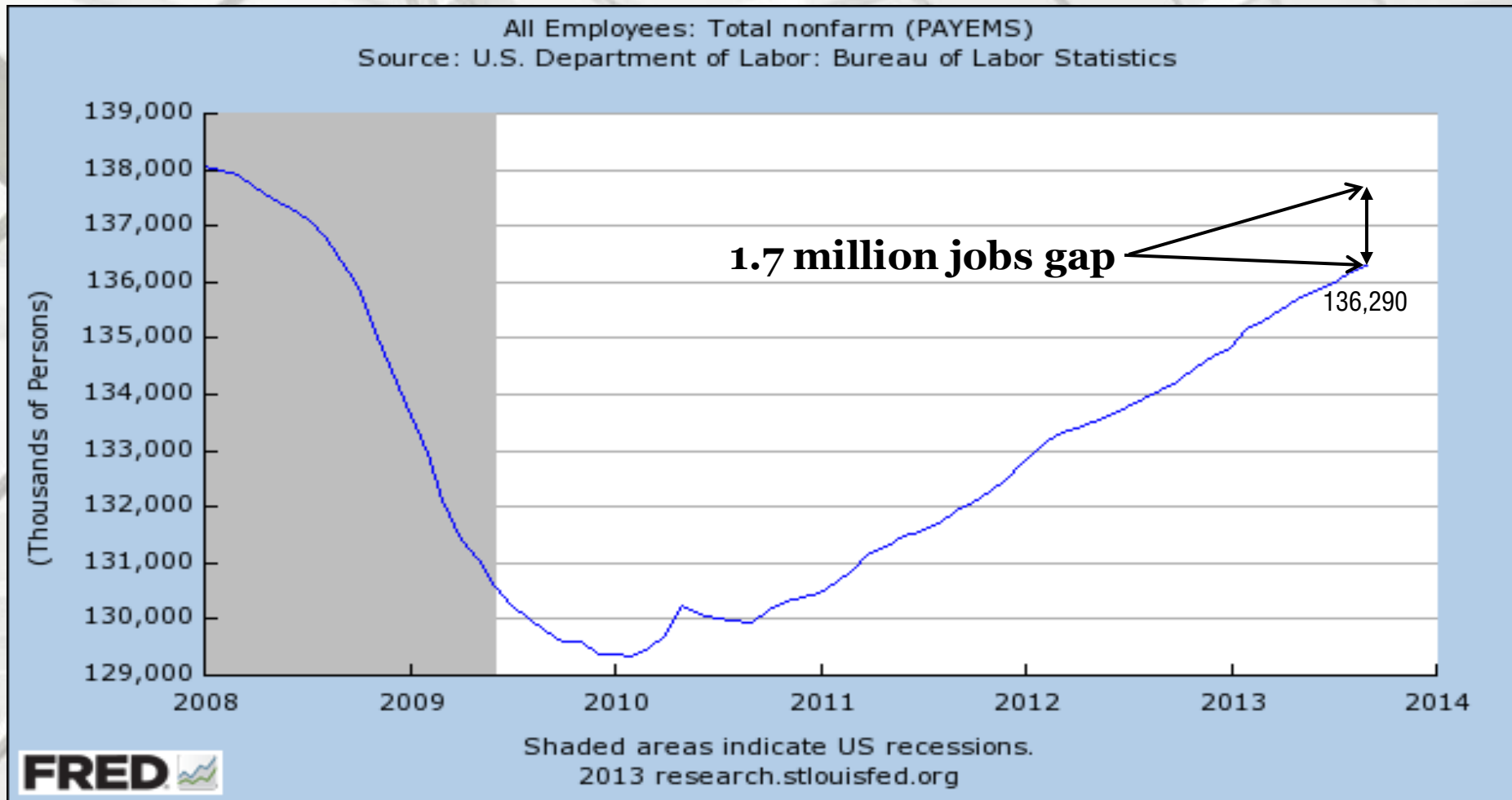


Notes:

Shaded regions represent periods of U.S. recession

Source: National Federation of Independent Business

United States Economy



Consistent job growth, but 1.7 million jobs below the total establishment job peak in '08

The problem -- slow pace of growth, job types, and many months below 200,000 jobs/month

“...the nation needs 8.3 million jobs to fully recover from the recession.” ^G

United States Economy

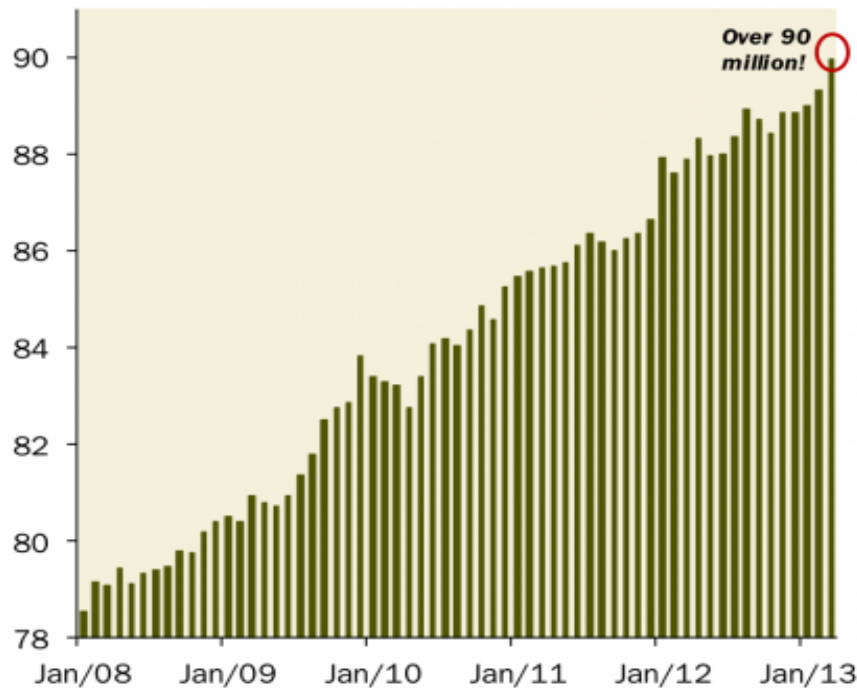
Tens of millions of people are just giving up.

A RECORD NUMBER OF AMERICANS HAVE LEFT THE LABOUR FORCE

United States

People Not in Labor Force

(millions)



Note:

Source: Bureau of Labor Statistics

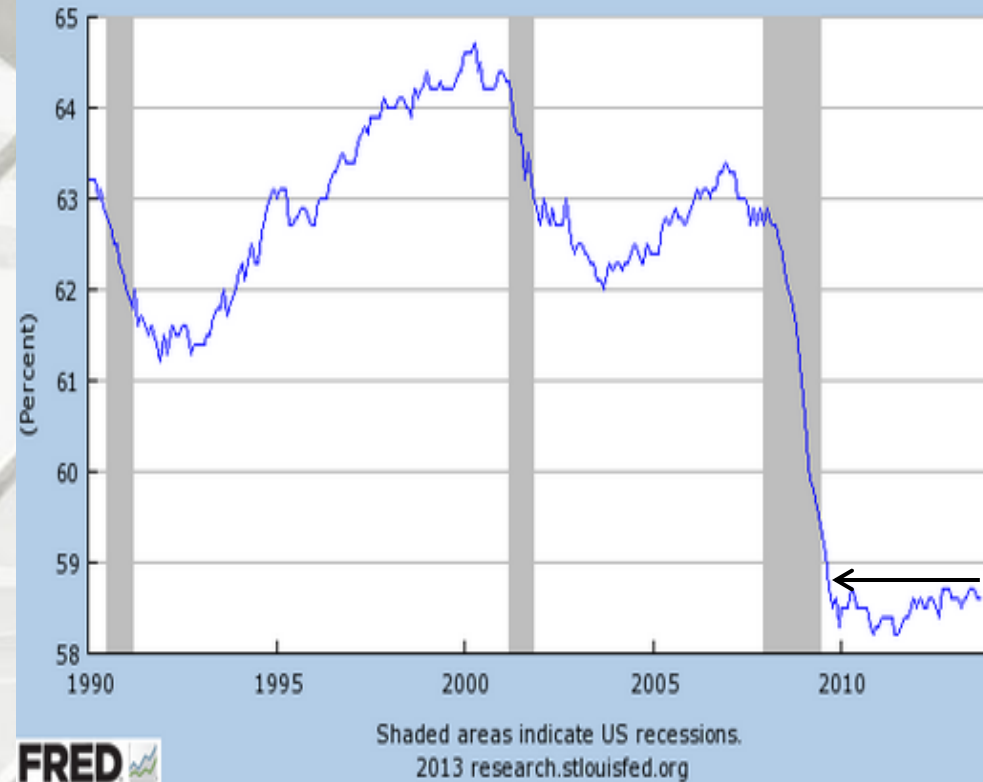
Share of population not in Labour Force

(percent)



United States Economy

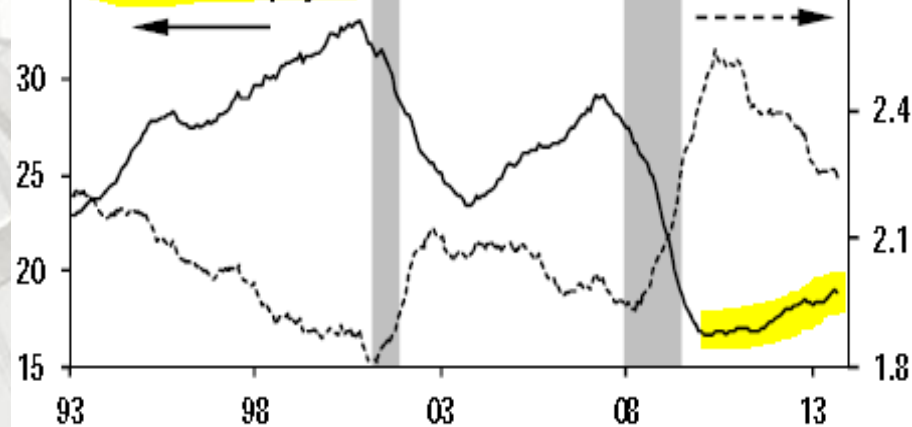
Civilian Employment-Population Ratio (EMRATIO)
Source: U.S. Department of Labor: Bureau of Labor Statistics



Labor flows, unemployed to employed

% per month, 12mma

Share of unemployed

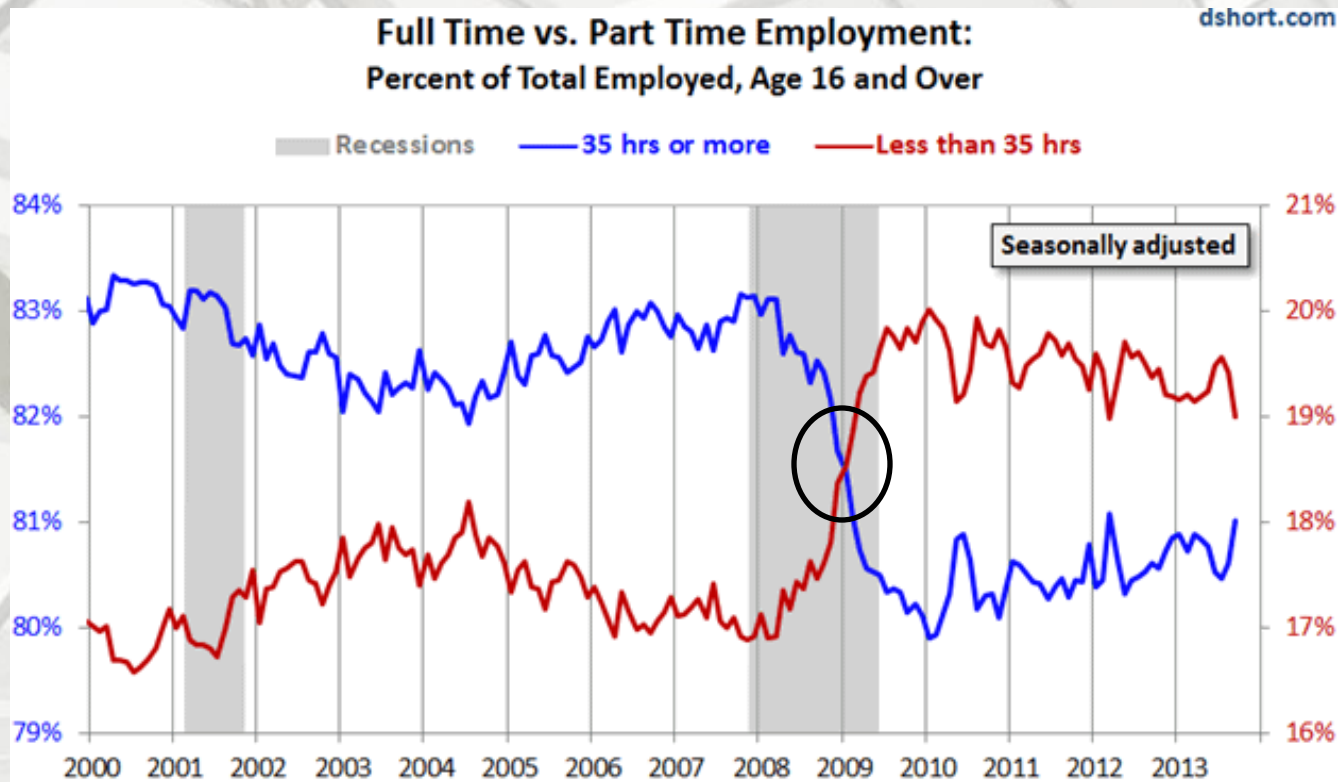


Has the Great Recession created behavioral changes in the labor markets?

The proportion of the US working-age population that is employed (part time or full time) continues to stagnate. Why?

JPMorgan: The labor flow data show that the chance of an unemployed worker finding a job in a given month fell dramatically during the last recession and has remained near its lows since.

United States Economy



The Trend Toward Part-Time Employment: A Closer Look

“13.5% of US employees were part-timers in 1968; 20% in January 2010; 19% in August 2013.

The big question: is the ratio shift the result of structural change triggered by the Great Recession but now driven a combination of several factors, not least of which are workplace demographics and increased productivity driven by technology.”

-- Doug Short, Vice President of Research, Advisor Perspectives

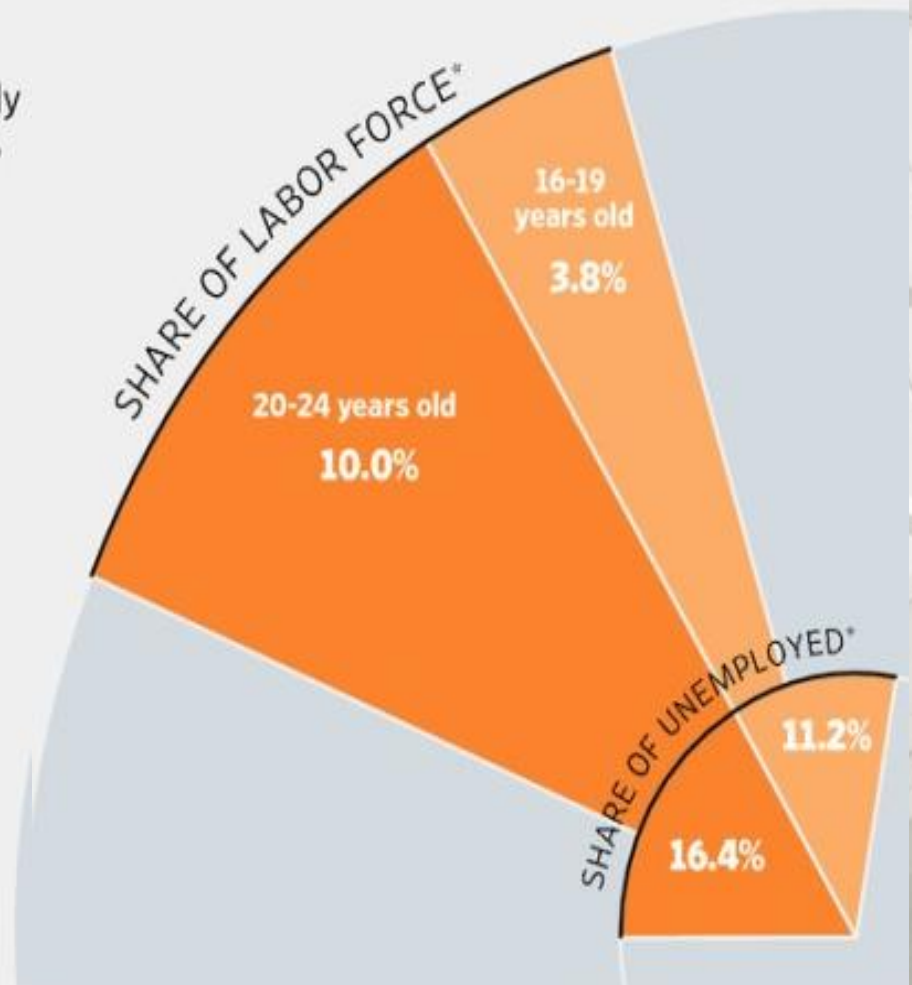
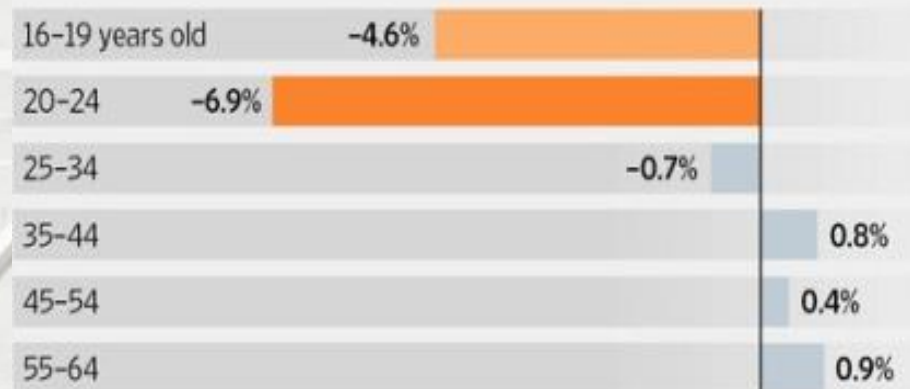
United States Economy

The Young and the Jobless

The financial crisis and its aftermath have taken a particularly heavy toll on younger workers. Americans under 25 make up a disproportionately large number of the unemployed relative to their share of the population. Many are staying in school to avoid the harsh job market. And those who are employed are working fewer hours and making less money than before the recession.

Losing Ground

Change in median weekly earnings, adjusted for inflation, 2007–2012



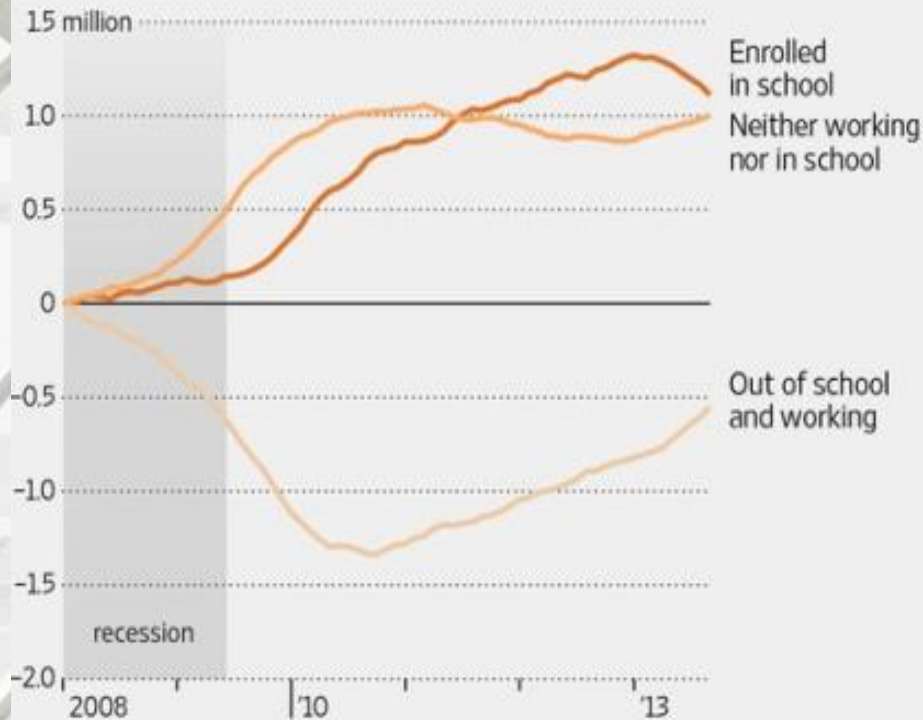
284,000: Number of U.S. college graduates working in minimum-wage jobs in 2012

United States Economy

Late Start

Young Americans are much less likely to have jobs than before the recession...

Change since December 2007 in number of Americans age 20-24 who are*:

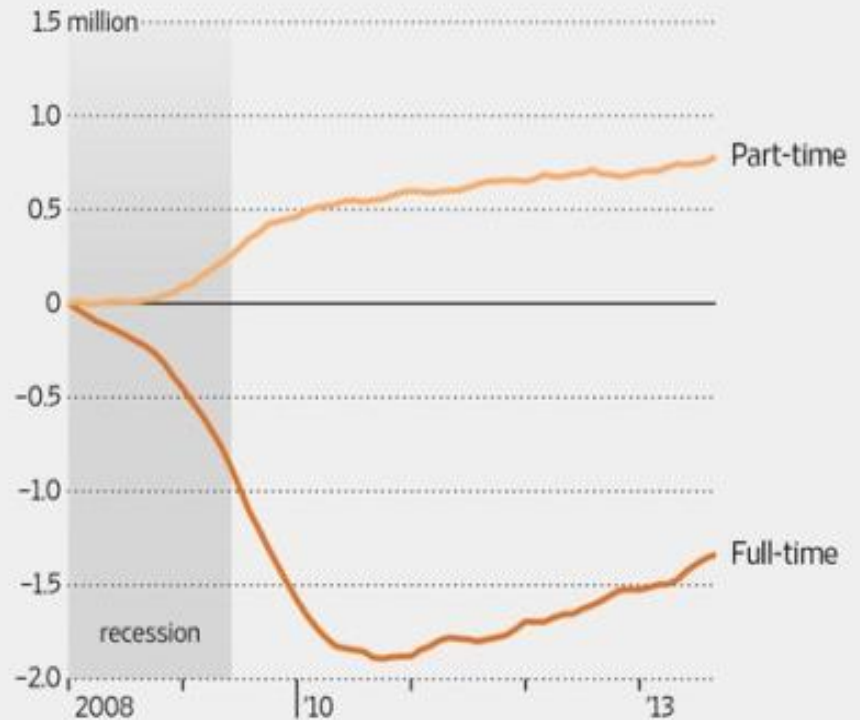


*2012, ages 16 and older †based on a 12-month rolling average

Source: Labor Department

...and those who do, are more likely to be working part time.

Change since December 2007 in number of Americans age 20-24 who aren't in school and are working†:

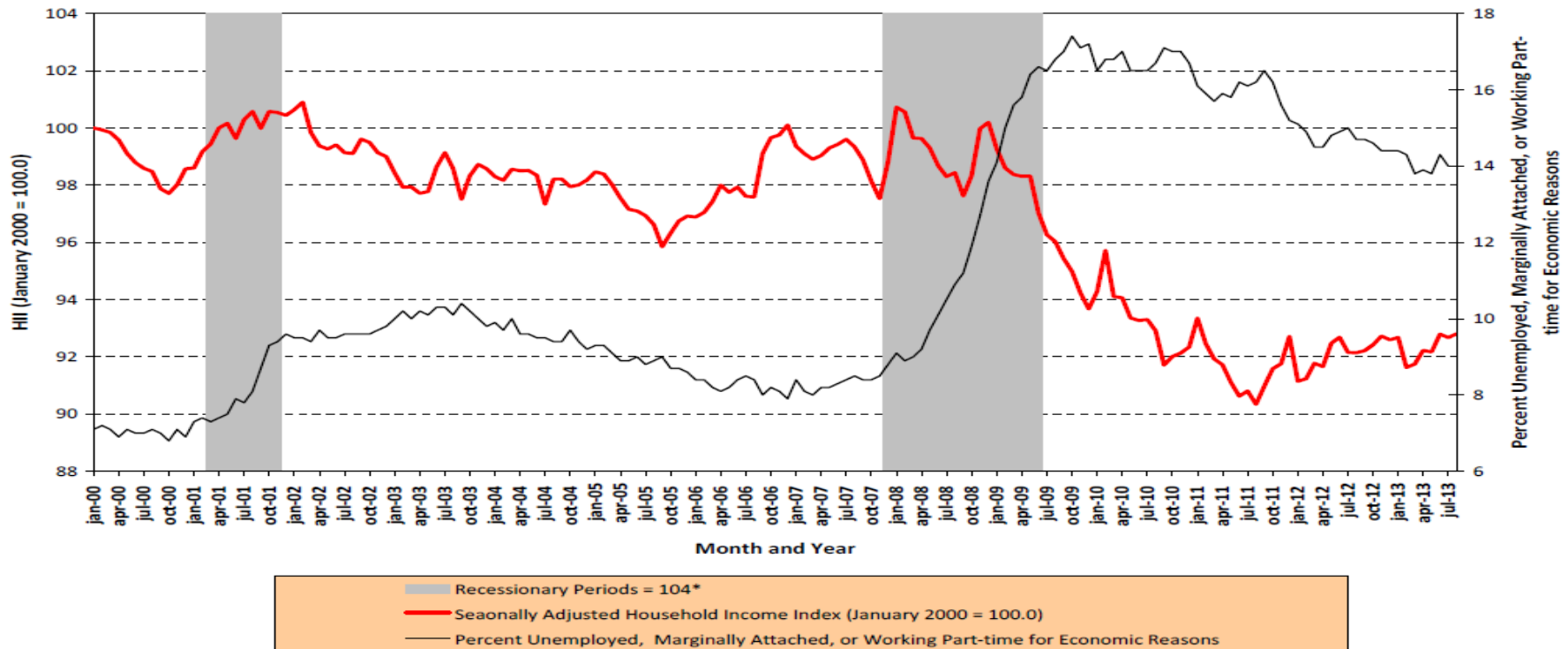


Erik Brynildsen, Ben Casselman and Pat Minczeski/The Wall Street Journal

“...the recovery has left many young people behind. The official unemployment rate for Americans under age 25 was 15.6% in August, down from a peak of nearly 20% in 2010 but still more than 2½ times the rate for those 25 and older — a gap that has widened during the recovery.”

United States Economy

Median Household Income Index (HII) and Percent Unemployed, Marginally Attached, or Working Part-time for Economic Reasons by Month, January 2000 to August 2013



Sources: For income data: Sentier Research, LLC estimates of annual household income derived from the monthly Current Population Survey (CPS) conducted by the U.S. Census Bureau; for the percent unemployed, marginally attached, or working part-time for economic reasons and the CPI-U: the U.S. Bureau of Labor Statistics.

Median annual household income in August 2013 -- \$52,236

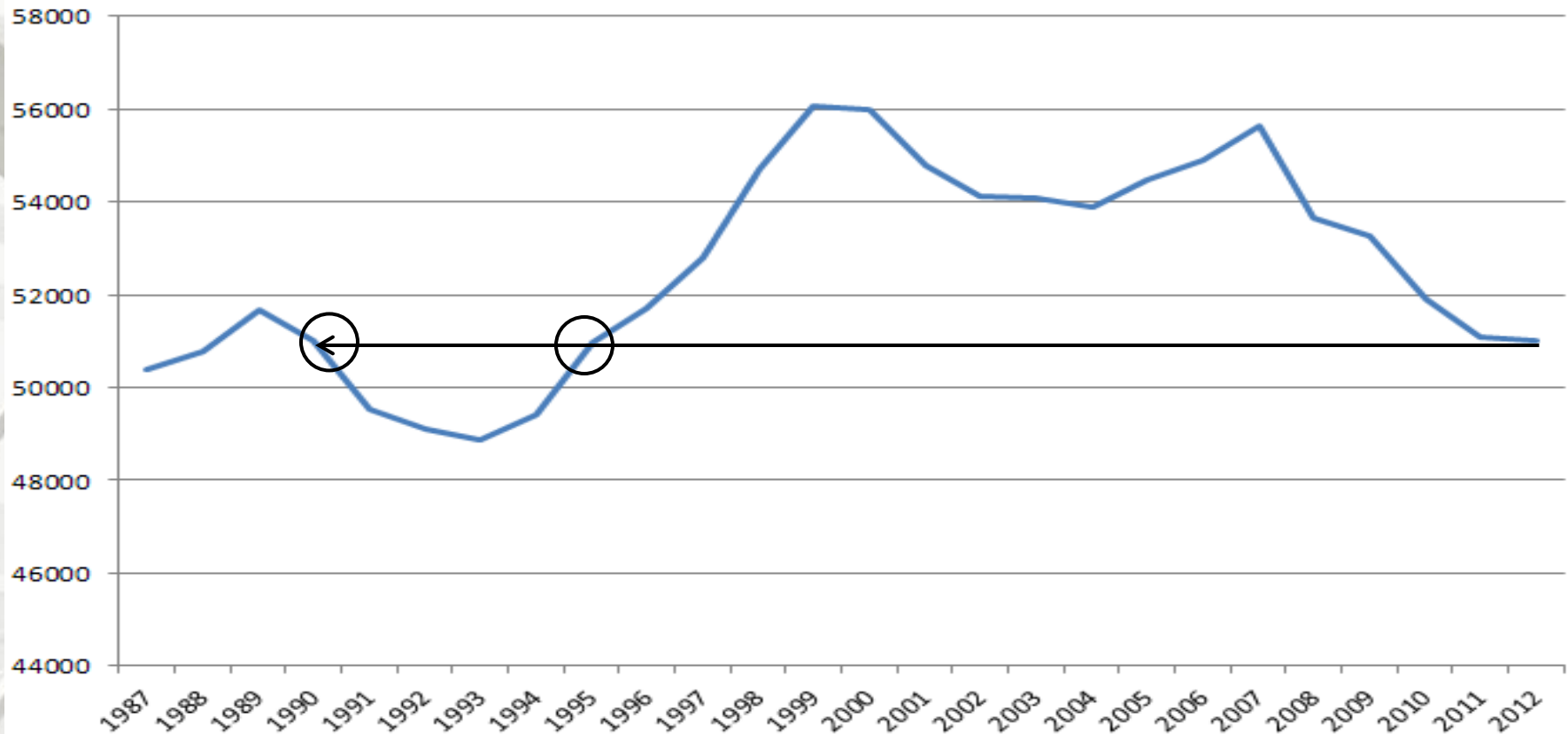
4.4% lower than the median of \$54,614 in June 2009

7.2% lower than the median of \$56,283 in January 2000

“These comparisons demonstrate how significantly real median annual household income has fallen over the past decade, and how much ground needs to be recovered to return to a median income level that existed more than ten years ago.” -- Gordon Green and John Coder, Sentier Research, LLC

United States Economy

Median household income, in 2012 dollars



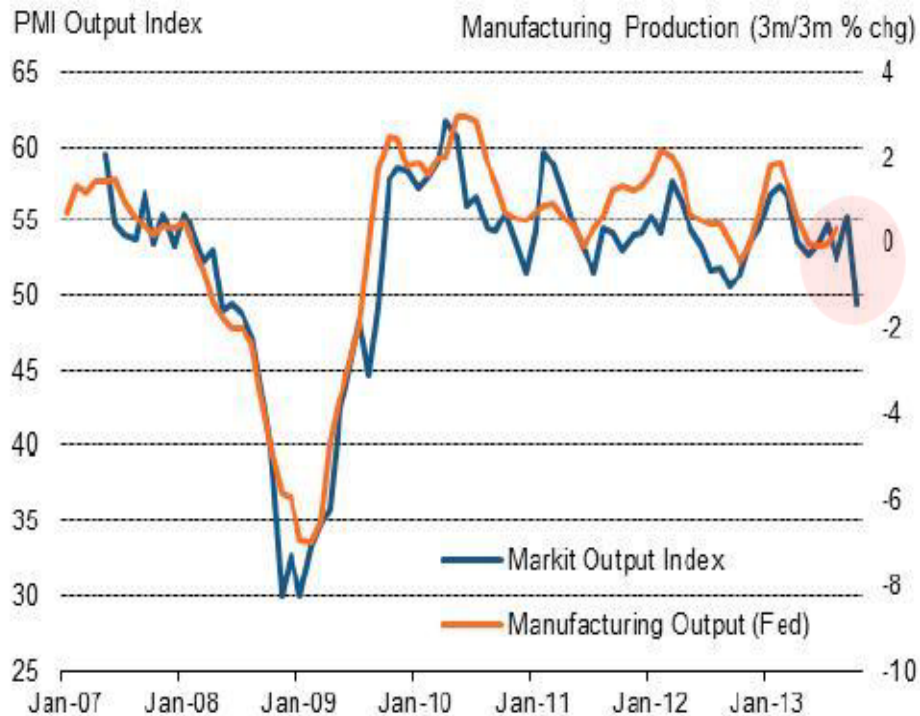
The typical American family makes less than it did in 1995 and 1989

“In 1989, the median American household made \$51,681 in 2012 dollars —
\$51,017 in 2012”

“This isn't a lost decade for economic gains for Americans. It is a lost generation.”
-- Neil Irwin, Columnist and Economics Editor, The Washington Post

United States Economy

Manufacturing output



Sources: Markit, U.S. Federal Reserve.

Eurozone PMIs - Output



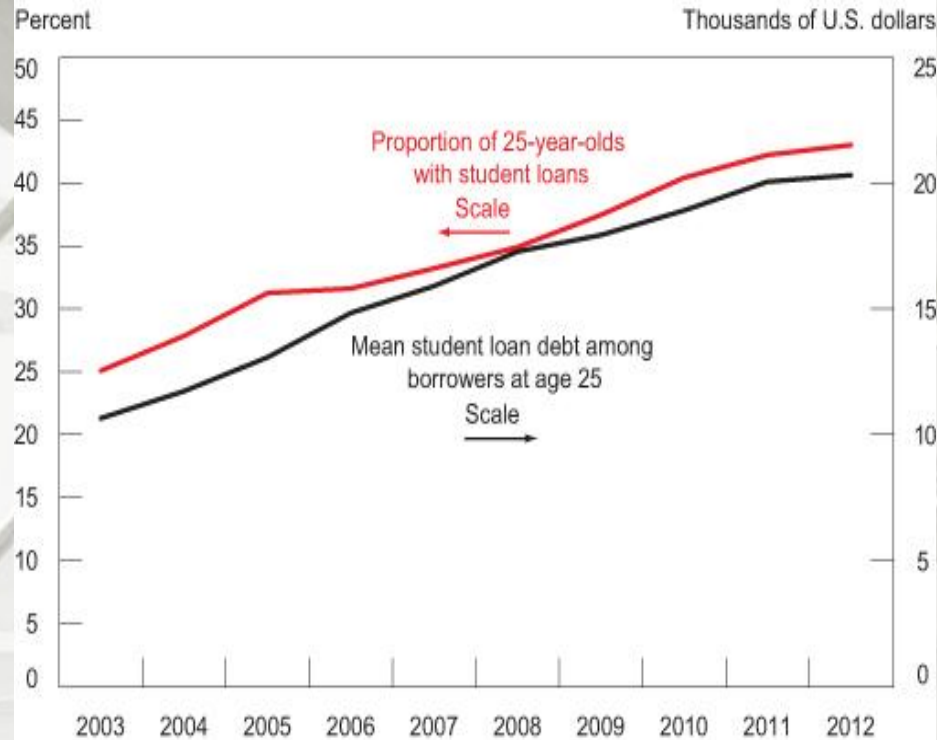
First fall in US manufacturing output since 2009 as the Eurozone pulls ahead

“The flash PMI provides the first insight into how business fared against the backdrop of the government shutdown in October, and suggests that the disruptions and uncertainty caused by the crisis hit companies hard. The survey showed the first fall in manufacturing output since the height of the global financial crisis back in September 2009.”

-- Chris Williamson, Chief Economist, Markit

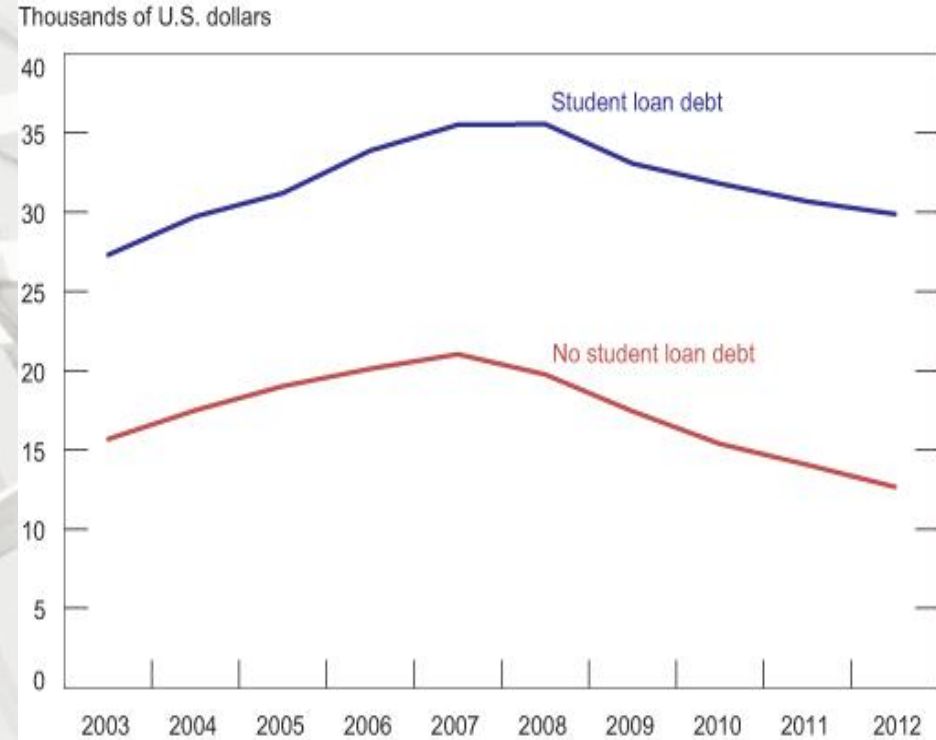
Student Debt – Another Headwind for Housing?

Growth of the Student Loan Market



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

Average Total Debt of Borrowers at Age 25

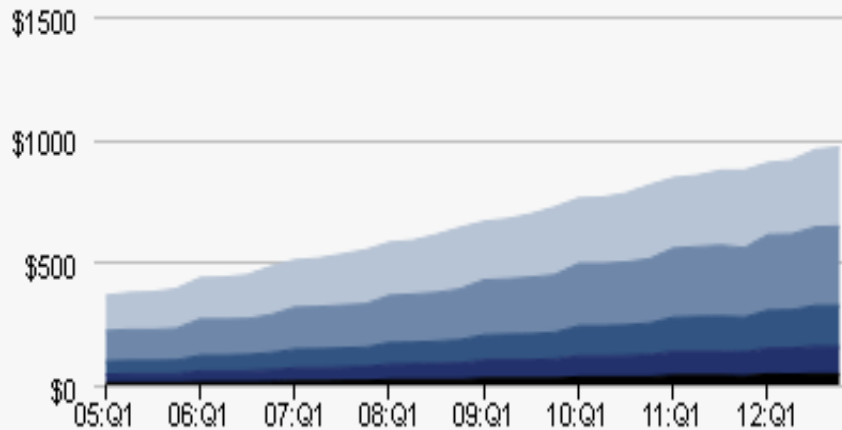


Source: Federal Reserve Bank of New York Consumer Credit Panel/Equifax.

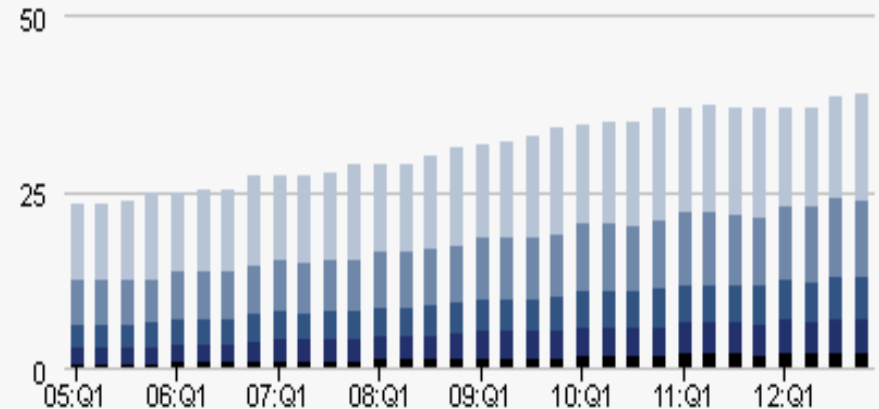
“... share of 25-year-olds with student debt has increased from just 25% in 2003 to 43% in 2012.
... average student loan balance among those 25-year-olds with student debt grew by 91% over the period, from \$10,649 in 2003 to \$20,326 in 2012.
...for the first time in at least 10-years, 30-year-olds with no history of student loans are more likely to have home-secured debt than those with a history of student loans.”

Student Debt – Another Headwind for Housing?

Total Student Loan Debt, billions (all age groups)



Number of Borrowers, millions (all age groups)



“... tighter underwriting standards, higher delinquency rates, and lower credit scores
...these factors — lowered expectations of future earnings and more limited access to credit

— may have broad implications for the ongoing recovery of the housing and vehicle markets, and of U.S. consumer spending more generally.

While highly skilled young workers have traditionally provided a vital influx of new, affluent consumers to U.S. housing and auto markets, unprecedented student debt may dampen their influence in today’s marketplace.”

Threats

European Sovereign Debt Crisis

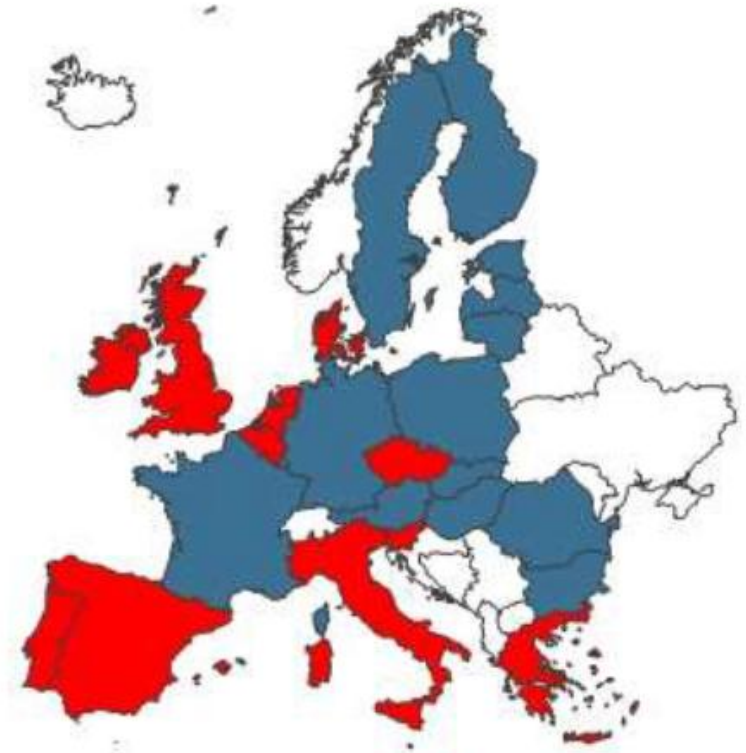
United States Sovereign Debt

State and Local debt

Threats

European economy

- **Recession in euro-zone (17 countries, not all in recession) + UK**
- **Construction decline 5% 2013**
 - -3.5% residential (not wood-based)
 - -4% non-residential
 - -8 civil engineering
- **Record unemployment**
 - EU 10.7%
 - Greece and Spain 27%

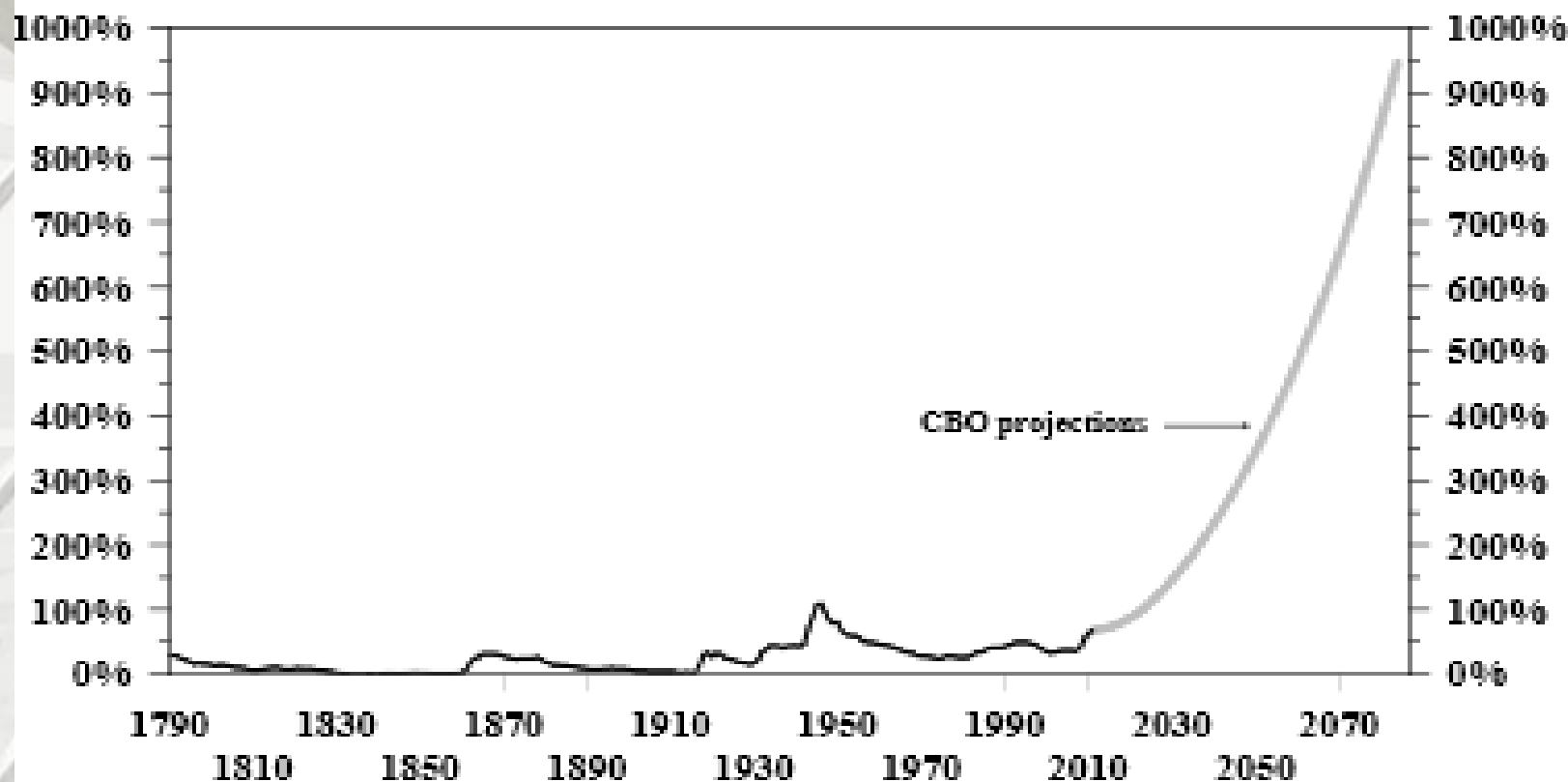


Sources: Euroconstruct,
Reuters, 2013

Threats

Federal Debt Held by the Public as a % of GDP 1790-2084

annual



Sources: Congressional Budget Office, Office of Management and Budget. Through 2037. Projections: beyond 2037 from the CBO report, *Projected Long-Term Spending and Revenues*, June 2010.



Threats

State and Local Debt

Detroit, Stockton CA, Jefferson County AL, and....?

Future Wood Markets – New Products

Cross-Laminated Timber



Future Wood Markets – New Products

High-Rise Timber Structures



Conclusions

The housing market has improved – yet;

Is the market plateauing at an increased level – or will it go higher?

August total starts: 45 - 50% less than historical average – 1.6 mm

August SF starts: about 45% less than historical average – 1.1 mm

Household formation numbers are still weak: The share of those aged 25 to 34 living with their parents, which surged at the onset of the last recession, continued to edge higher to 13.6% in 2012.^H

Potential Headwinds:

Global economy

European debt crisis – it's still with us

U.S. student debt

Have U.S. housing prices rose too quickly?

Conclusions

The near-term outlook on the U.S. housing market remains unchanged – there remain too many potential negative and/or lackluster macro-factors at this point in time for a robust housing recovery. Why?

- 1) Consumer confidence – initial September reading decreased and many report that confidence is fragile,
- 2) a lack of well-paying jobs being created,
- 3) a sluggish economy,
- 4) declining real median annual household incomes,
- 5) strict home loan lending standards, and
- 6) new bank lending regulations in Q4 2013.

“The housing crisis has been successfully contained, but I don't think we're seeing a recovery that's robust and fundamentally sound.”

- Daren Blomquist, Vice President, RealtyTrac®

Questions?



Delton Alderman

USDA Forest Service – NRS 01
Princeton, WV
304.431.2734
dalderman@fs.fed.us



Urs Buehlmann

Dept of Sustainable Biomaterials-Virginia Tech
Blacksburg, VA
540.231.9759
buehlmann@gmail.com

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