

April 2012 Housing Notes



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Executive Summary

This presentation provides information and commentary about April 2012s housing data and the intention is to provide an review of the current conditions in the United States housing market. This report includes data for new home starts, new and existing sales, building permits, housing completions, and construction spending. Also included are comments concerning existing home sales, foreclosures and distressed homes, economy and employment, housing demographics and trends, the Eurozone, and conclusions.

April housing data reports included a small rise in housing starts and multi-family housing. New home sales are still staggering; while building permits, housing completions, and residential construction spending increased.

Existing home sales are still “bottom-bouncing” and the number of available existing homes increased slightly from March. Existing home prices posted a small monthly increase; however, Case-Shiller® reported declining year-over-year prices. Private investors remain key purchasers of foreclosures, bank REO homes, and existing and new home sales - - but their purchases declined in April.

Lastly, the Eurozone sovereign debt and bank solvency crisis is getting uglier and more problematic with Spain still being the biggest concern (at the moment). This month we provide analysis on Germany. Germany is the key player in the Eurozone as its businesses drive the Eurozone – with all due respect to the other nations.

Commentary on Housing

Opening Comments

Economic deterrents to a meaningful recovery are unchanged

- Federal and some State governments' debt → still increasing
- Personal debt → Americans continue to deleverage
- Student loan debt → US \$1 trillion and increasing
- European sovereign debt and banking crisis → a continued drag on the world's economy
- China → most all financial news proclaims a slowing economy

New Housing Starts

Commentary

March 2012: Total starts remain distressed

717,000 starts SAAR: 2.6% increase from a revised March estimate of 699,000

From March 2011 to March 2012 – an increase of 29.9%

Overall Starts:

Total starts are up 50% from the 2009 low

New Housing Starts

April 2012: Single-family (SF) starts

492,000 starts (SAAR): increased 2.3% from the
March estimate of 481,000

From April 2011 to April 2012 – a decrease of 4.4%

SF Starts:

SF starts are up 39% from the low
and about 39% of the way back to normal
– assuming 1.2 to 1.3 million SF starts

New Housing Starts

April 2012 Multi-family (MF) starts:

217,000 starts SAAR: 5+ MF units: increased 4.3%
from a revised March estimate of 208,000

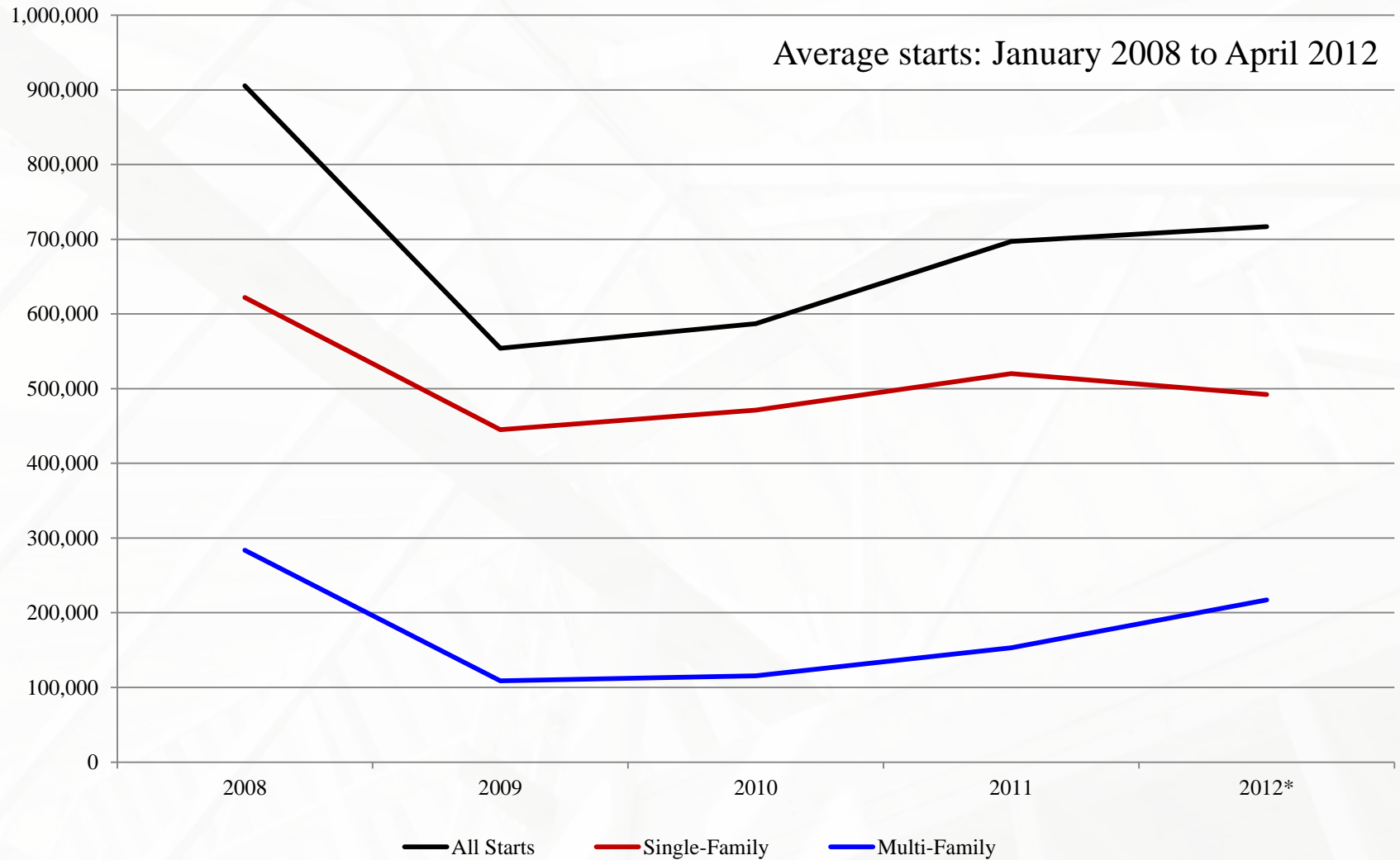
From April 2011 to April 2012 – an increase of 75.0%

8,000 starts SAAR: 2-4 MF unit estimate for April

MF housing is still critical for overall housing starts

MF units consume only about 1/3 of the lumber
used to construct a SF home

New Housing Starts



Housing Permits

April Building Permits – privately-owned housing:
715,000 units (SAAR)

7.0% below the revised March rate of 769,000
23.7% above the March 2011 estimate of 578,000

SF authorizations

445,000 SAAR: 1.9% above the revised March figure of 466,000

MF authorizations

5 units or more: 217,000 SAAR in April
2-4 units: 8,000 SAAR in April

Housing Completions

April Completions – privately-owned:
651,000 units (SAAR)

10.0% above the revised March rate of 592,000

20.1% above the March 2011 estimate of 542,000

SF completions

489,000: 11.4% above the March estimate of 439,000

MF completions

158,000: 11.3% above the March estimate of 142,000

New Single-Family Home Sales

April 2012 new SF home sales: 343,000 (SAAR)

3.3% above the downwardly revised March rate of 332,000

9.9% above the March 2011 estimate of 312,000

April's new home sales were depressed and
are still bottom-bouncing

...similar to April's housing starts

New Single-Family Home Sales

Median new house sale price in March : \$235,700

Average March house sale price: \$282,600

- Average sales price decreased 1.1% month-over-month

Estimate of new homes available for sale at April's end:
146,000 (SAAR)

April 2011s available number was 174,000 –
both can be considered a “thin” quantity of
homes in a historical context

Existing House Sales

April Existing Sales

National Association of Realtors (NAR) April 2012 sales data:

4.62 million (SAAR): An increase of 3.4% from a downwardly revised 4.47 million in March

Existing housing inventory increased 9.5% to 2.54 million homes → a 6.6-month supply at the current sales pace

Listed inventory is 20.6% below April 2011

\$177,400 median existing-house price, up 10.1% from April 2011¹

“... the median price is impacted by the change in mix, and there are fewer low-end foreclosures for sale this year and that pushes up the median price.”² - - Calculated Risk

Existing House Sales

April Existing Sales

Distressed houses: 28% of sales - -
(17% foreclosures and 11% short-sales)

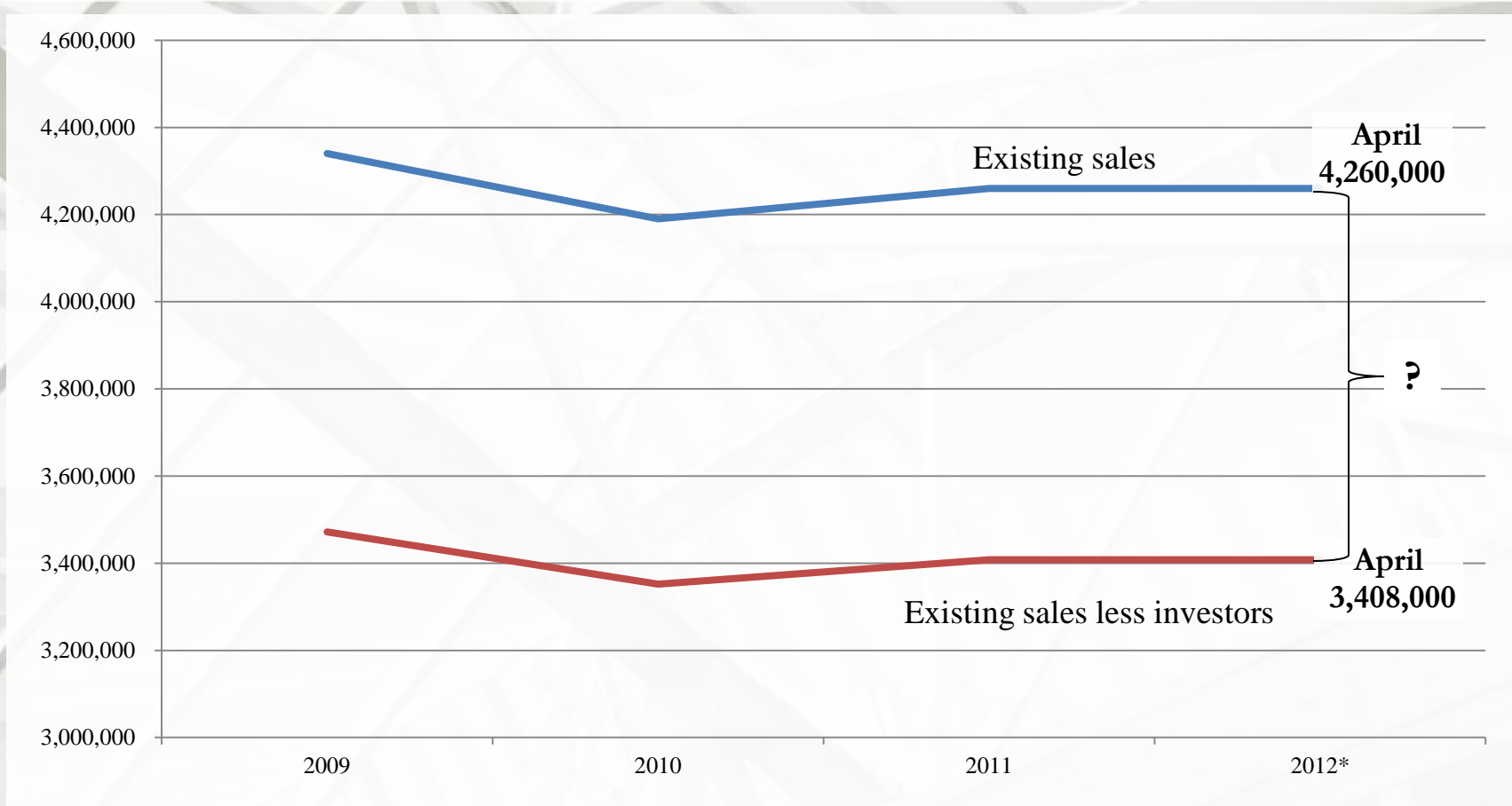
Distressed house sales: down from 29% in March
and 37% in April 2011

All-cash sales: decreased to 29% (32% in March)

Investors account for the majority of cash purchases: 20%;
21% in March 2012 and 20% in April 2011

First-time buyers: increased to 35% from 33% in March;
decreased year-over-year: 36% in April 2011¹

Existing House Sales



The question: Is there a housing “bottom” or can there be a housing “recovery” if private investors pull out of the market and/or reduce their purchases?

Construction Spending

April Private Construction: \$256.1 billion (SAAR)

2.8% above the revised March estimate of \$249.1 billion

April SF construction: \$119.42 billion (SAAR)

March SF construction: \$117.35 billion (SAAR)

April MF construction: \$18.00 billion (SAAR)

March MF construction: \$17.30 billion (SAAR)

April Improvement ^A construction: \$118.65 billion (SAAR)

March Improvement ^A construction: \$114.43 billion (SAAR)

Private residential spending: increased 14% from the 2009 low
but is 62% less than 2006s maximum

^A The US DOC does not report improvements directly, this is an estimation.

Construction Spending

“Residential building in April grew 1% to \$148.0 billion (SAAR). SF housing continued to edge upward, rising 2%, and revised statistics show that it has now registered modest improvement in 10 of the past 12 months.

...SF housing in April was up 21% relative to its average monthly pace for 2011. MF housing ... settled back 1% after its 6% gain in the previous month. ...MF housing in April was up 9% relative to its average monthly pace for 2011.

Residential building year-to-date advanced 18%, with SF housing climbing 21% while MF housing rose 7%.

Useful perspective comes from looking at twelve-month moving totals, in this case the twelve months ending April 2012... residential building up 13%”³ - - McGraw-Hill Construction

APRIL 2012 CONSTRUCTION STARTS

MONTHLY SUMMARY OF CONSTRUCTION STARTS

Prepared by McGraw-Hill Construction Research & Analytics

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

	<u>April 2012</u>	<u>March 2012</u>	<u>% Change</u>
Nonresidential Building	\$137,732	\$121,306	+14
Residential Building	148,035	146,157	+1
Nonbuilding Construction	<u>245,565</u>	<u>213,323</u>	<u>+15</u>
TOTAL Construction	\$531,332	\$480,786	+11

THE DODGE INDEX (Year 2000=100, Seasonally Adjusted)

April 2012.....112

March 2012.....102

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

	<u>4 Mos. 2012</u>	<u>4 Mos. 2011</u>	<u>% Change</u>
Nonresidential Building	\$38,995	\$52,014	-25
Residential Building	43,905	37,167	+18
Nonbuilding Construction	<u>55,255</u>	<u>44,191</u>	<u>+25</u>
TOTAL Construction	\$138,155	\$133,372	+4

Residential Remodeling: March 2012

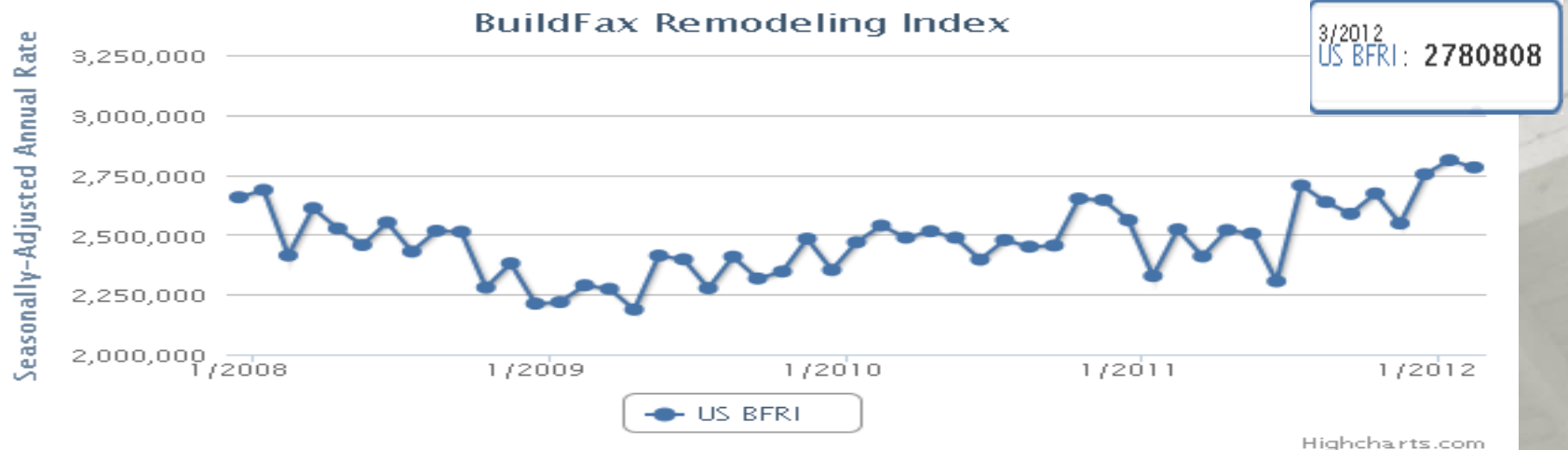
March Residential Remodeling Permits: 2,780,808 SAAR

1% below the revised March estimate: 2,811,000 and is
10% above February 2011's 2,552,000 permits

“Overall, March 2012 had lower remodeling activity than February, which saw significantly greater-than-expected activity, likely due to the unseasonably warm winter weather.”⁴ - - Joe Emison, BuildFax, VP-R&D

Latest BFRI Release

BuildFax Remodeling Index



Residential Remodeling

Rise in Residential Investment May Help Home Depot-Lowe's

“Private-residential fixed investment, which includes major replacements such as new roofs and improvements like finishing a basement, rose 9.1% from a year earlier to an annualized \$360.7 billion for the three months ended March 31.

...the fourth consecutive quarter of nominal increases and was the fastest pace of yearly growth since 2006...

Private-residential spending -- which accounts for about 2.3% of GDP -- is highly correlated with comparable-store sales for Home Depot and Lowe's, the two largest US home-improvement retailers...”⁵

Standard & Poor's/Case-Shiller Home Price Indices

“S&P/Case-Shiller Home Price Indices Pace of Decline in Home Prices Moderates as the First Quarter of 2012 Ends”

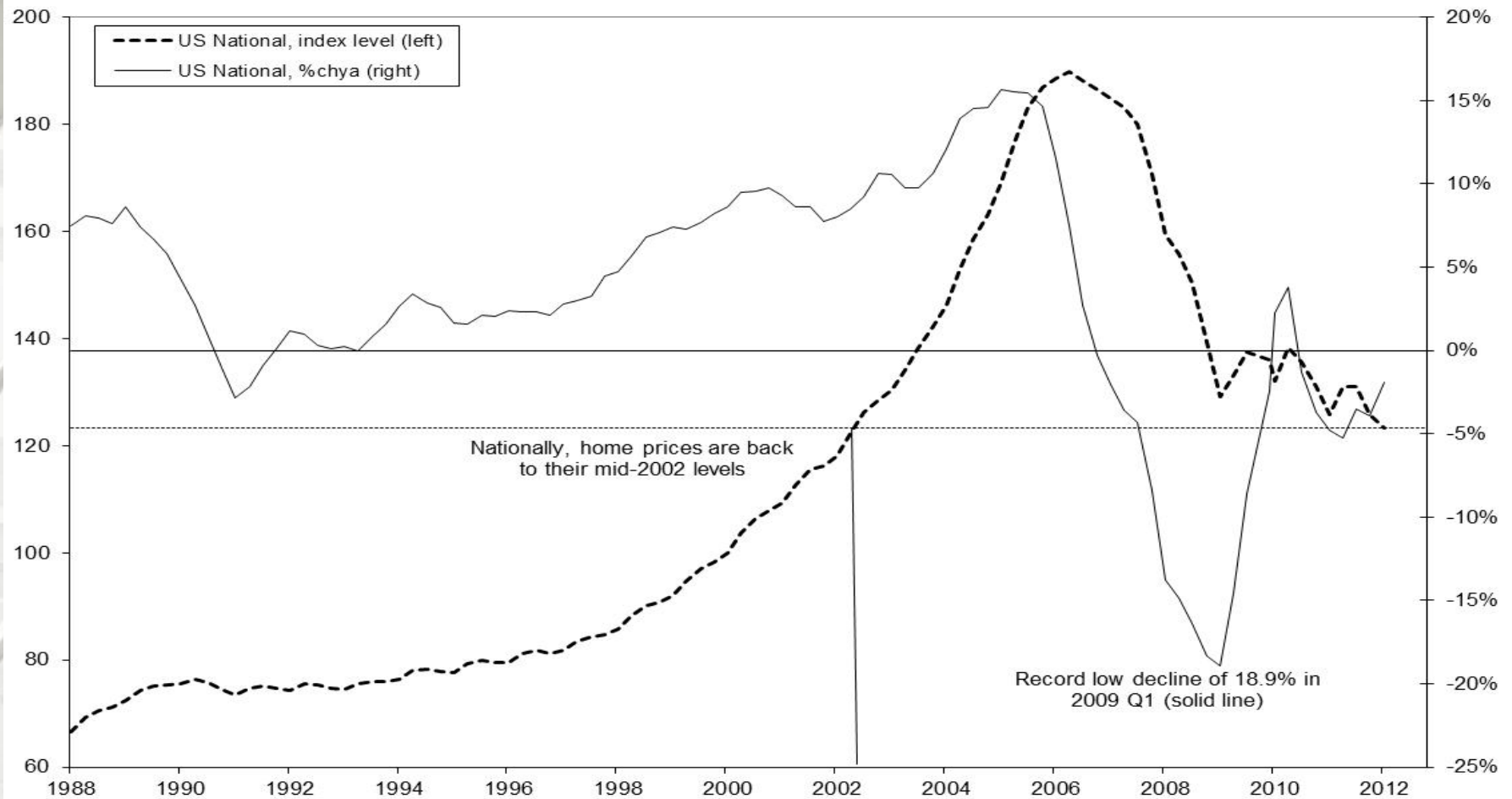
National composite: decreased by 2.0% in the 1st quarter of 2012 and down 1.9% vs. the 1st quarter of 2011

“...all three headline composites ended the 1st quarter of 2012 at new post-crisis lows... .”

“The National Composite...is down 35.1% from its 2nd quarter 2006 peak, in addition to recording a new record low. The 10- and 20-City Composite mimic these results; also down about 35% from their relative peaks and hit new lows. While there has been improvement in some regions, housing prices have not turned”⁶ -- David Blitzer, Chairman of the Index Committee at S&P Indices

Standard & Poor's/Case-Shiller

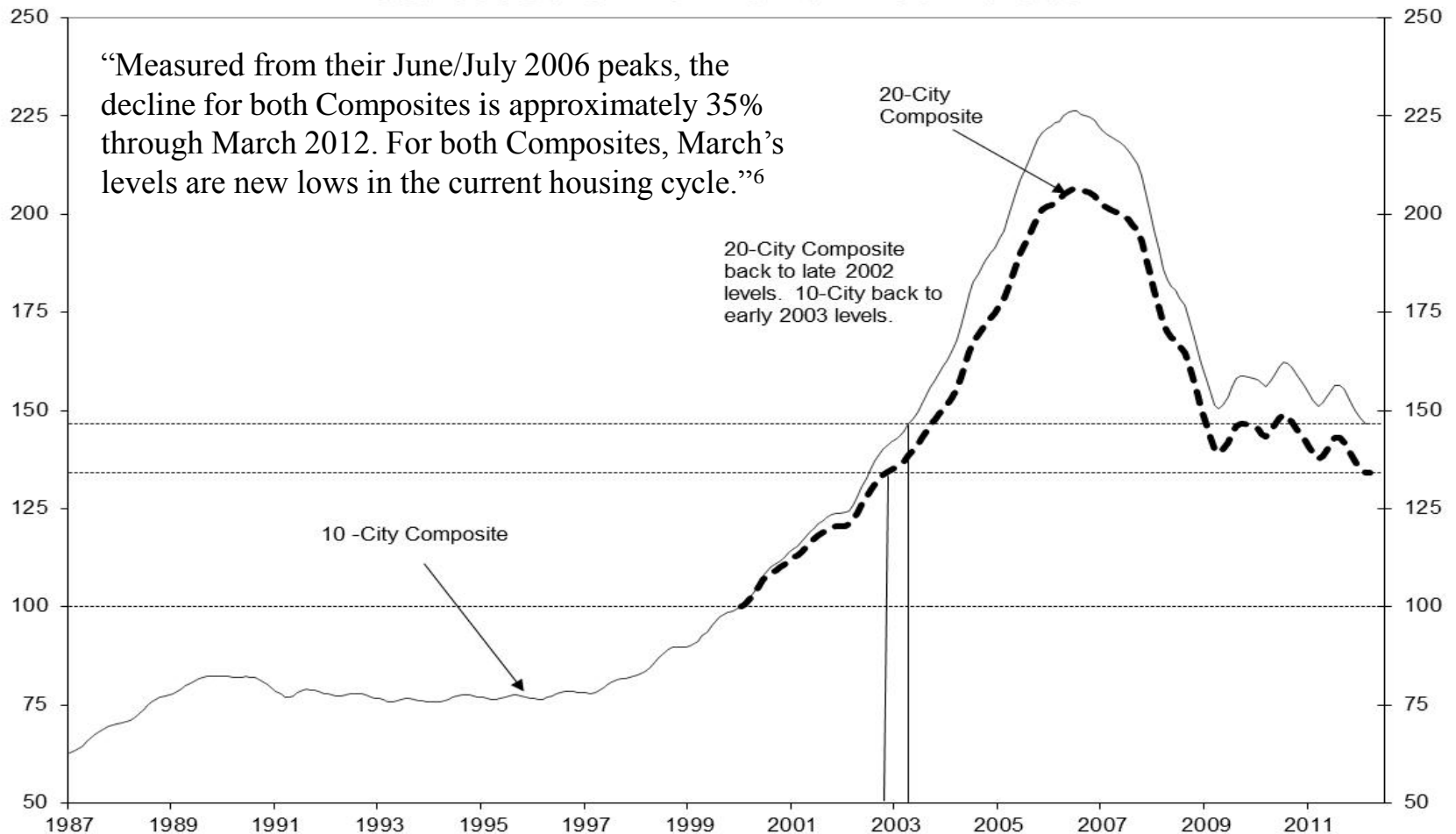
S&P/Case-Shiller U.S. National Home Price Index



May's report indicates that the National Index level hit a new low, a decrease of 2.0% over the 1st quarter of 2012 and 1.9% below the 1st quarter of 2011⁶.

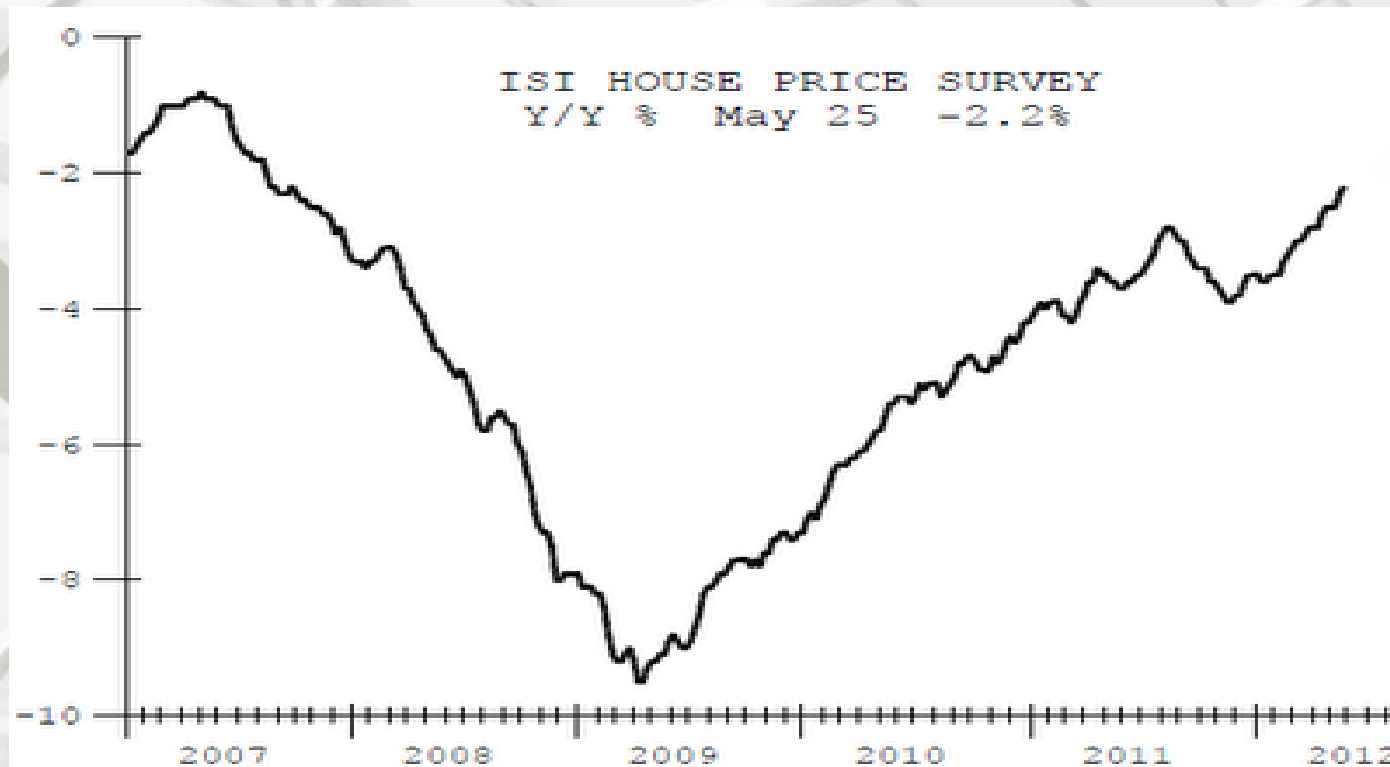
Standard & Poor's/Case-Shiller

S&P/Case-Shiller Home Price Indices



“In March 2012, the 10- and 20-City Composites recorded annual rates of decline of 2.8% and 2.6%, respectively”⁶.

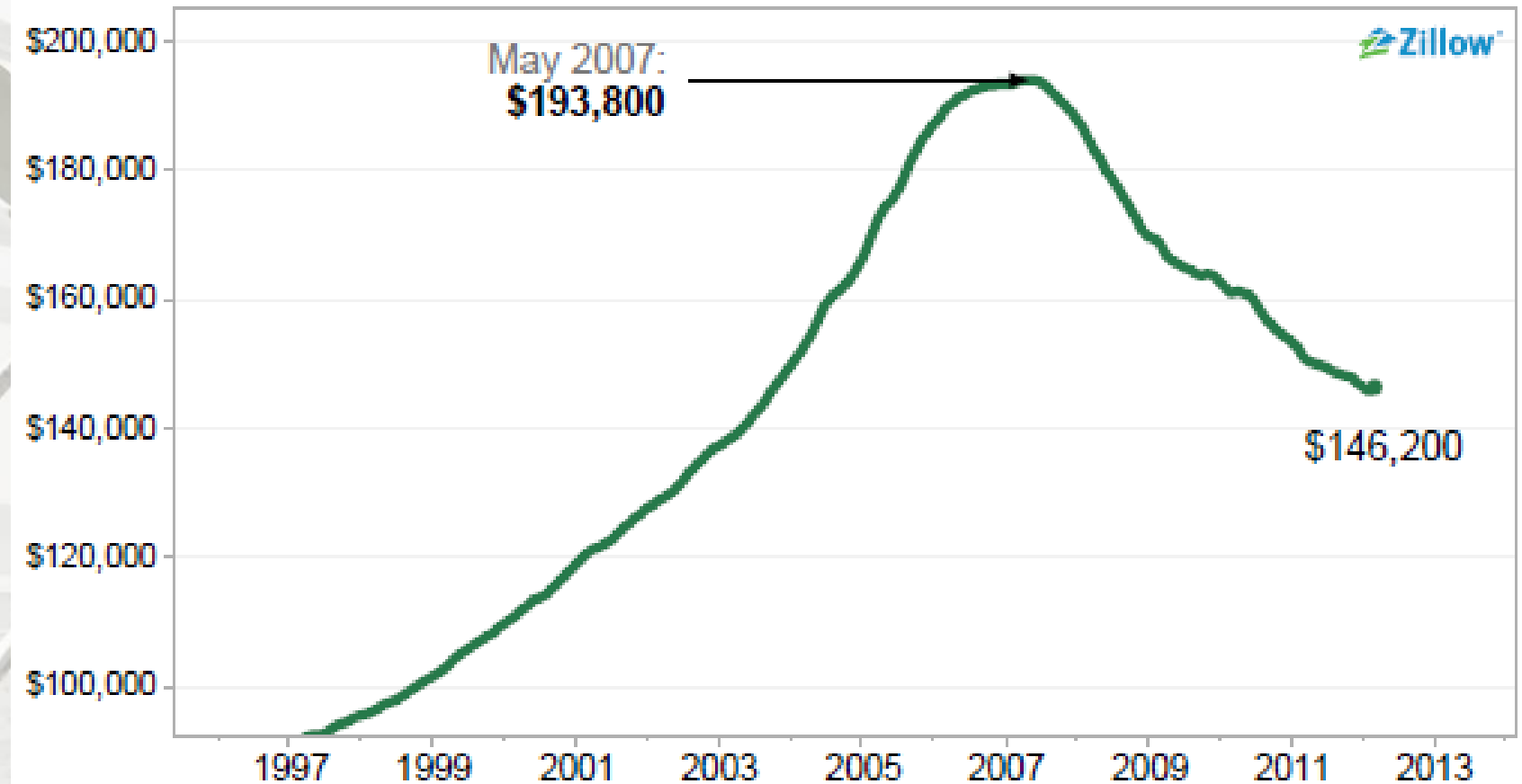
Contrarian Views of Housing Prices



“ISI Group: House prices are continuing to improve in May. ISI's house price survey, which covers over 40 residential real estate agents around the country, continued to improve this week, suggesting existing house prices, which surged in April, improved further in May.”⁷

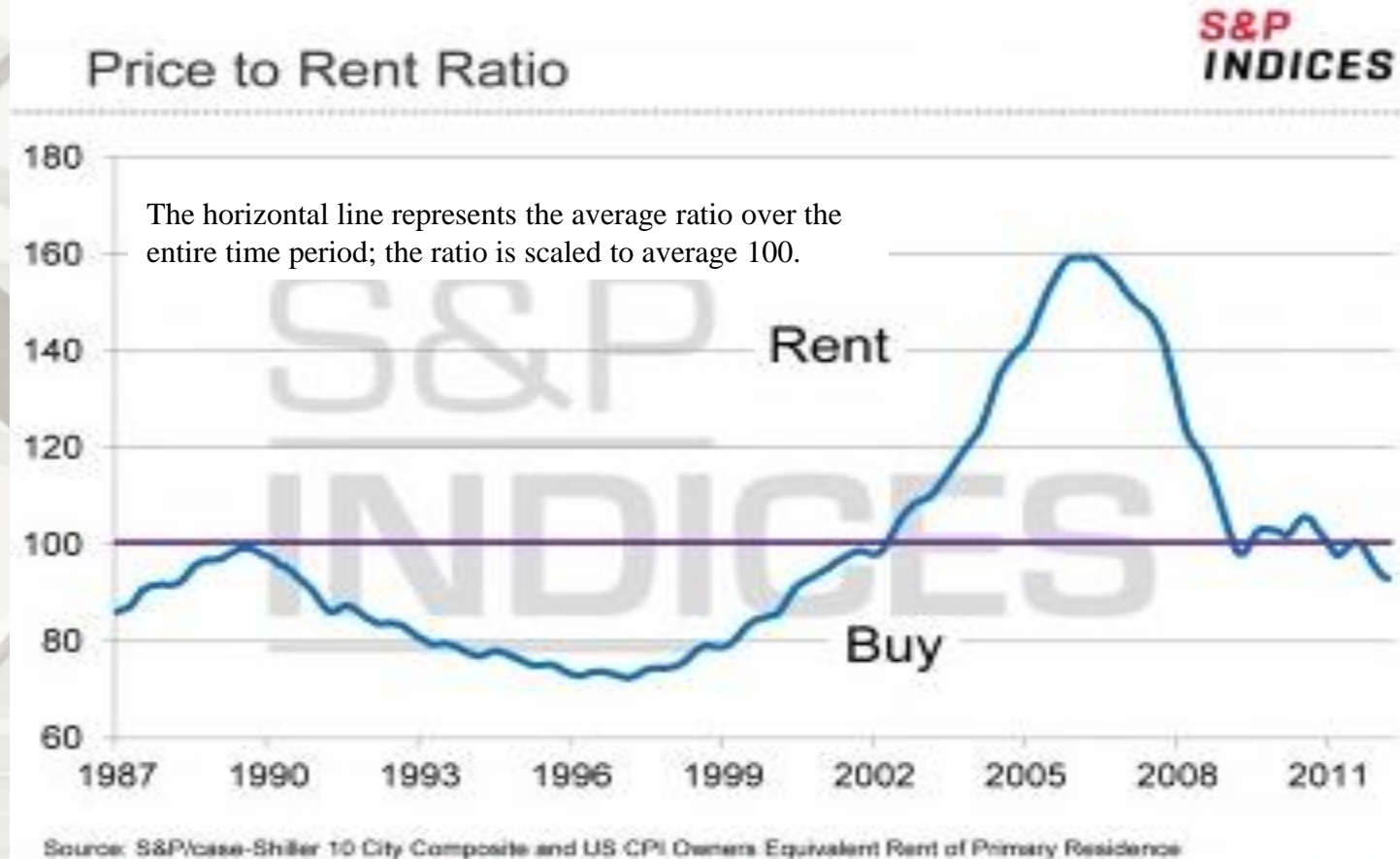
“We still expect a national bottom in home values later this year, but there is now additional upside risk in this forecast as tight inventory of for-sale homes, fueled in part by high negative equity which is preventing many homeowners from selling, is creating acute imbalances of supply and demand in some markets. Job growth and negative equity remain major factors in the housing market and ones that will cast long shadows over the recovery.”⁸ - - Dr. Stan Humphries, Chief Economist-Zillow

U.S. Zillow Home Value Index March 2012



“...we expect national home values to fall 0.4% over the next year. While we are encouraged by strong data in March, it is too early to call rising home values a trend as we still expect some modest declines in national home values this year with a definitive national bottom later this year or early 2013.”⁹ - - Zillow Home Value Forecast

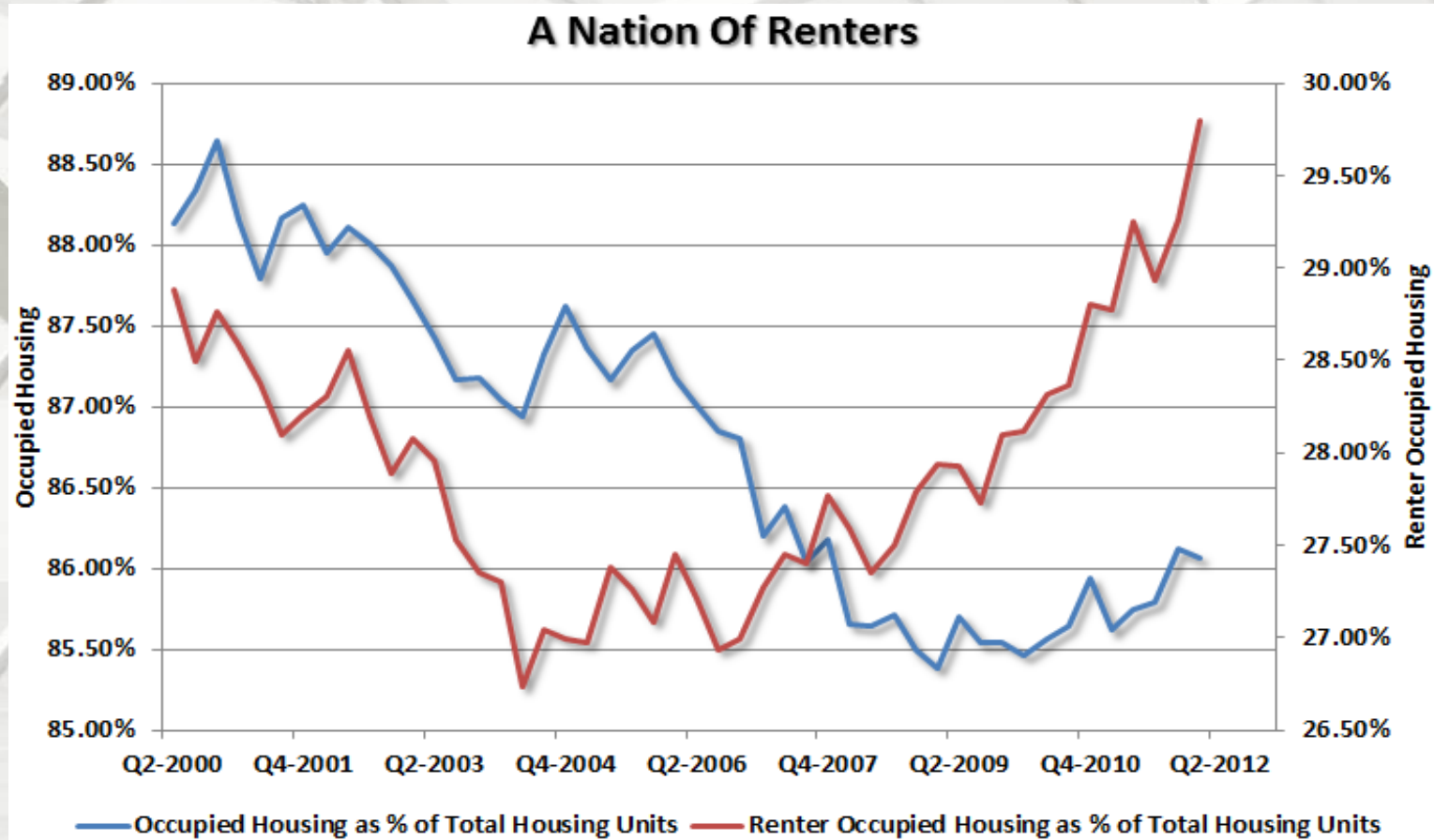
Home Price-to-Rent Ratio



“A comparison of price to rents suggests that prices are moving towards where buying is favored over renting. The background is that while prices are back to the levels of 2002, the decline has not erased all of the gains since prices began climbing rapidly in the 1998-2000 period.

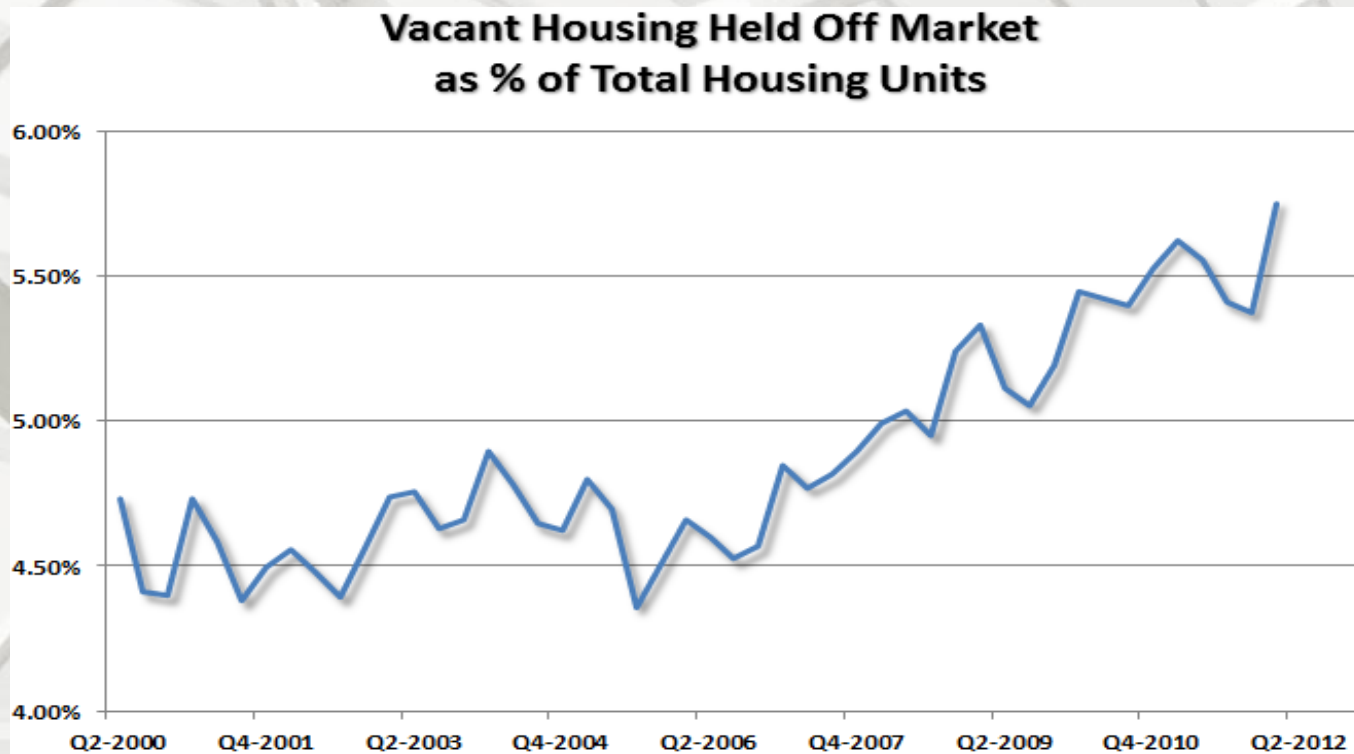
A bigger factor in the current market is the availability of mortgages. While currently very low interest rates combine with falling home prices to make buying a house easier to afford than a few years ago, buyers still need to qualify for a mortgage. However, data from the Federal Reserve’s Senior Loan Officer Survey for the first quarter show that few banks have eased their qualification guidelines in the last few years.”¹⁰ Source: ¹⁰<http://www.housingviews.com>, June 7 2012

Renter Nation



“There are two important issues in this chart. The first, and most obvious, is surge in homes being rented versus owned. The second is that home occupancy rates are only 1/2% higher today than they were during the recession. As I stated before — you must look very hard to find a housing recovery here.”¹¹ -- Lance Roberts

Housing Vacancy

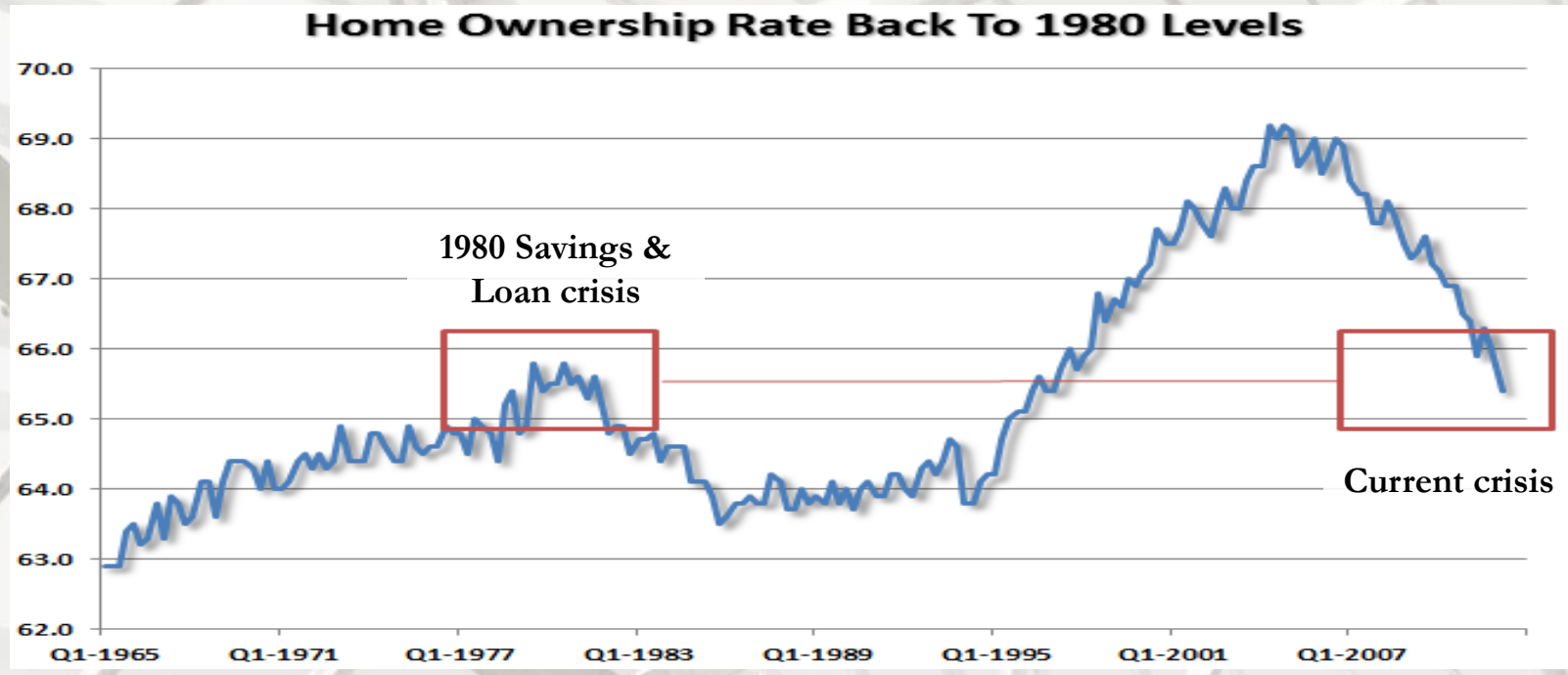


“One issue that will continue to confound the real estate market in the near term is the level of inventory that is being held off market for various reasons. This does not include the shadow inventory held by banks, which is an additional issue.

Today, roughly 1/3 of all homeowners are underwater on their mortgages. Therefore, it is no surprise that many are holding homes as long as possible hoping for a price recovery. However, at some point these “vacant” houses, along with the excess shadow inventory and trapped homeowners, will come to market either due to force or desperation. The excess supply will continue to pressure home prices, more supply than demand, in the future further exacerbating the problem for those already drowning in their home.”¹¹ -- Lance Roberts

Source: ¹¹ www.streettalklive.com/daily-x-change/935-housing-recovery-hope-and-reality.html; May 29 2012

Housing Bottom and Recovery



“Ultimately there is only one truth to whether there is really a housing recovery or not. How many people own a home? If new and existing home activity, as seen in recent reports, is truly on the rise then we should see the number of individuals that are “home owners” on the rise as well. While the level of home ownership “bottomed” in the early 80's it took more than a decade before housing, and consequently home “ownership” truly began to recover. While there is a tremendous amount of hope for a housing recovery in 2012, just as there has been during the last 3 years, the simple reality is that a “real recovery” may be a very long time away.

Is there a bottom in housing? It is entirely possible. However, for all the reasons stated herein, both financial, economic and psychological; the “calls” for a housing recovery may be a bit premature. This is particularly true if our estimation of an economic recession in the next 18 months comes to fruition. The strains on the housing market caused by a recession will cause a secondary decline in housing. The reality of a recession is not a question of “if” — it is only a question of “when” and how bad will it be?.”¹¹ -- Lance Roberts

Housing Bottom and Recovery

The following slides are excerpted from recent presentation by James Bullard.

Mr. Bullard is the CEO and President of The Federal Reserve Bank of St. Louis. He is known for being quite frank on economic matters and is privy to data that very few individuals in the US have access.

He gives a very sober assessment of the US housing market and what the Federal Reserve Bank can or cannot do to stimulate it.

The Aftermath of the Housing Bubble

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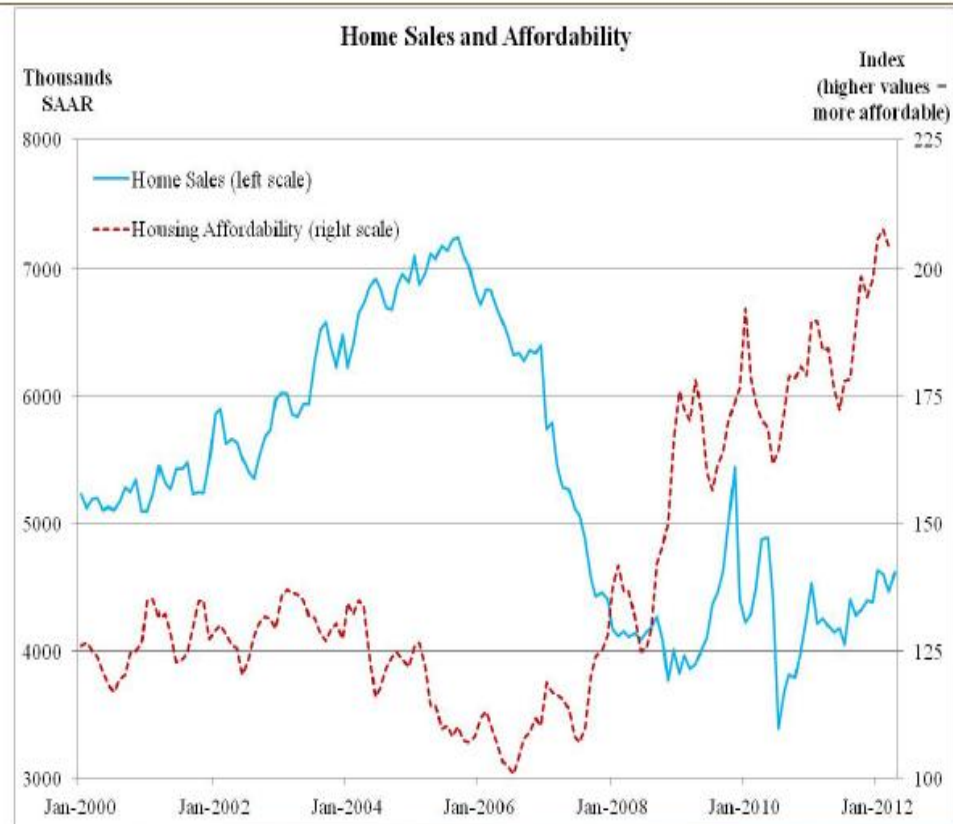
“It is neither feasible nor desirable to attempt to re-inflate the housing bubble. The bubble did a lot of damage and should not be repeated.

Policy should be directed to encouraging market-based adjustment as quickly as possible. Allocating losses to one group or another is not helpful in a macroeconomic sense.

The collapse of the housing bubble may have shifted preferences for home ownership.

In particular, the rent-versus-own decision has shifted decidedly in favor of renting.”¹²

Scaring off a generation of potential homeowners?



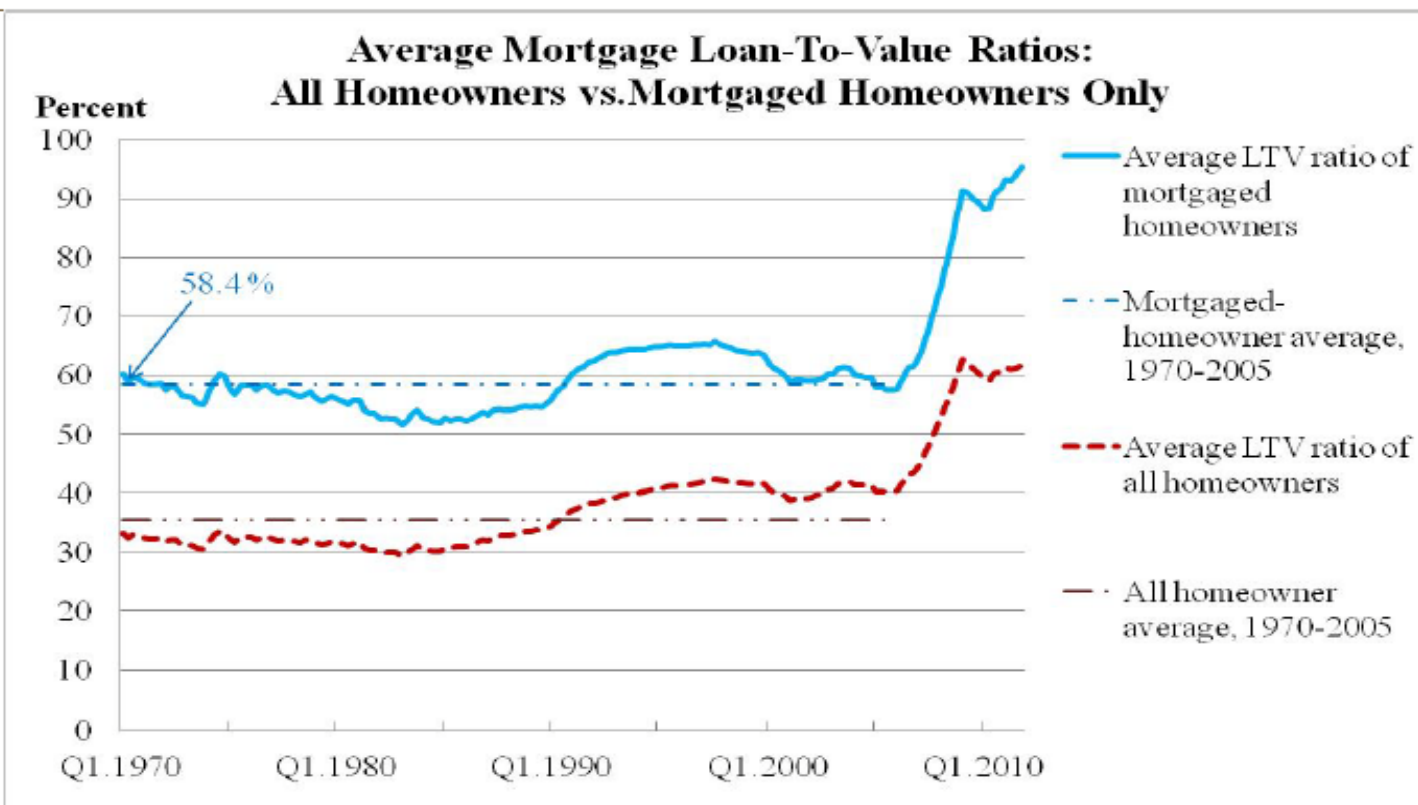
JAMES BULLARD

Source: National Association of Realtors. Last observation: April 2012 and March 2012.

Source: ¹²<http://research.stlouisfed.org/econ/bullard/pdf/BullardBipartisanPolicyCenter5June2012Final.pdf>; May 29 2012

Housing Bottom and Recovery

Average LTV ratios remain far above historical norms



JAMES BULLARD

Source: *Federal Reserve Flow of Funds Accounts and Survey of Consumer Finances; author's calculations.*
Last observation: Q4-2011.

Too much debt

“The crisis has saddled U.S. households with much more debt than they intended to take on. This is the first U.S. recession in which deleveraging has played a key role.”¹²

Housing Bottom and Recovery

Reducing high LTV ratios

Relationship between house-price appreciation and mortgage rate in reducing LTV from 90% to 60%

<i>How long does it take to cut LTV from 90% to 60%?</i>		Mortgage rate		
		4%	5%	6%
Annual house-price appreciation	0%	15 years	15 years	17 years
	2%	10 years	10 years	11 years
	4%	7 years	7 years	8 years

Assumptions

- Fixed-rate, level-payment, fully amortizing mortgage.
- No partial prepayments.
- Simple annual house-price appreciation rates.

“Suppose we think of 58.4% as the “normal” loan-to-value ratio.

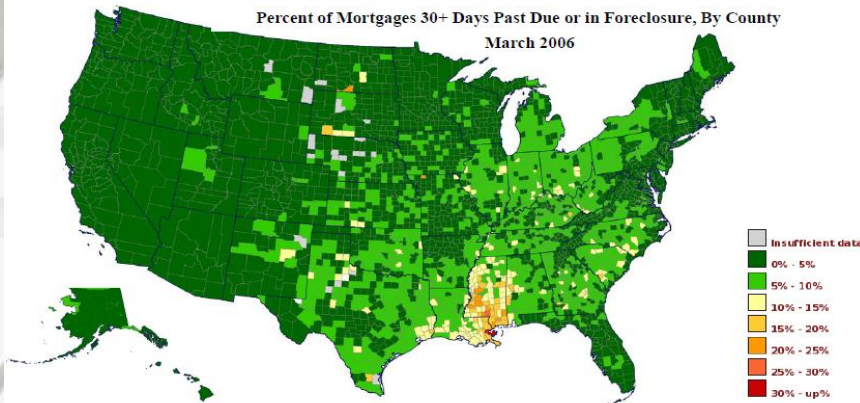
U.S. homeowners have about \$9.8 trillion in debt outstanding against \$490 billion of equity. To get back to the normal LTV, households would have to pay down mortgage debt by about \$3.8 trillion, about one-quarter of one year’s GDP.

This will take a long time. It is not a matter of business-cycle frequency adjustment.”¹²

Geographic Aspects of the Housing Bubble

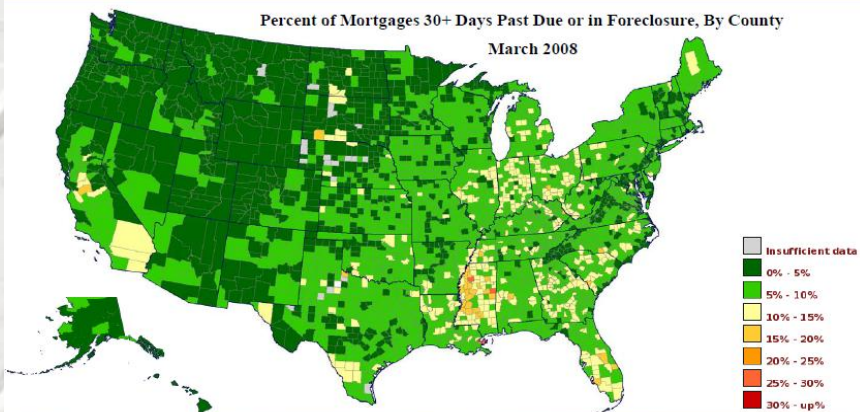
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At the peak, mortgage conditions pristine



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Financial crisis is underway

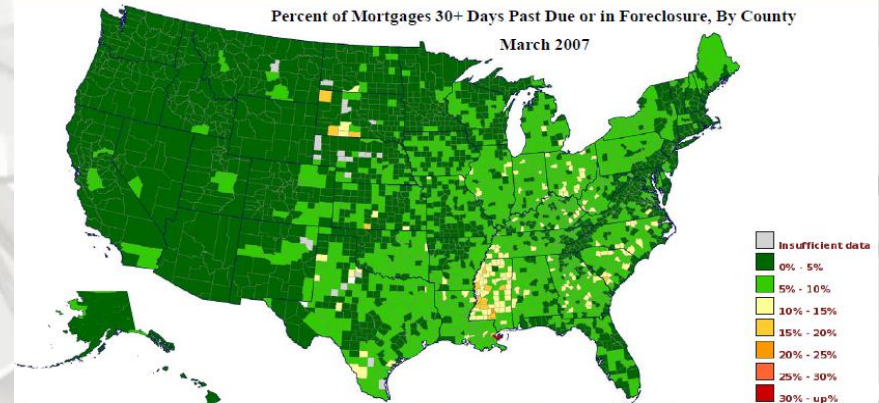


JAMES BULLARD

Source: Lender Processing Services.

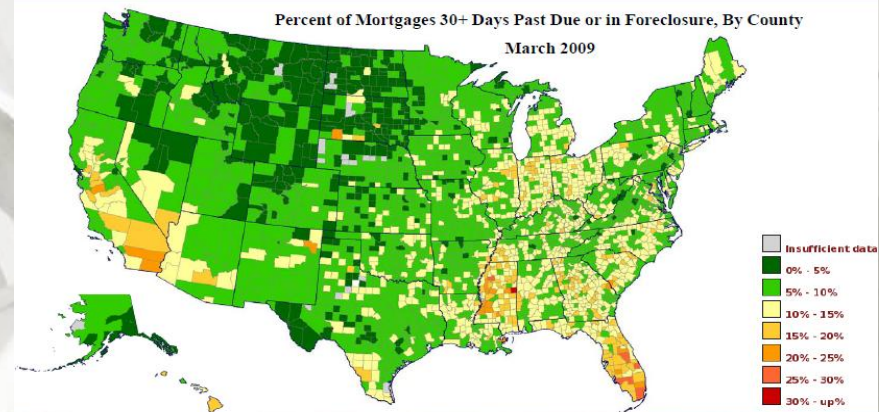
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Falling house prices, slowing economy



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Mortgage distress concentrated



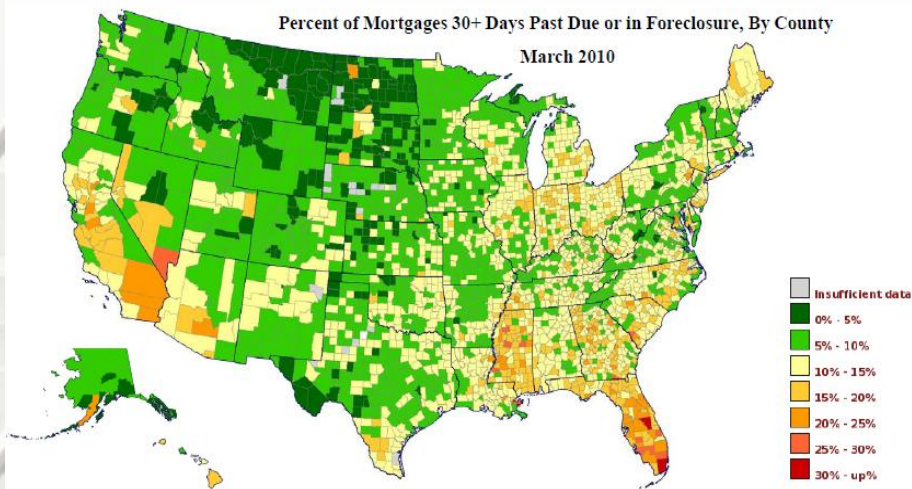
JAMES BULLARD

Source: Lender Processing Services.

Geographic Aspects of the Housing Bubble

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Peak mortgage distress

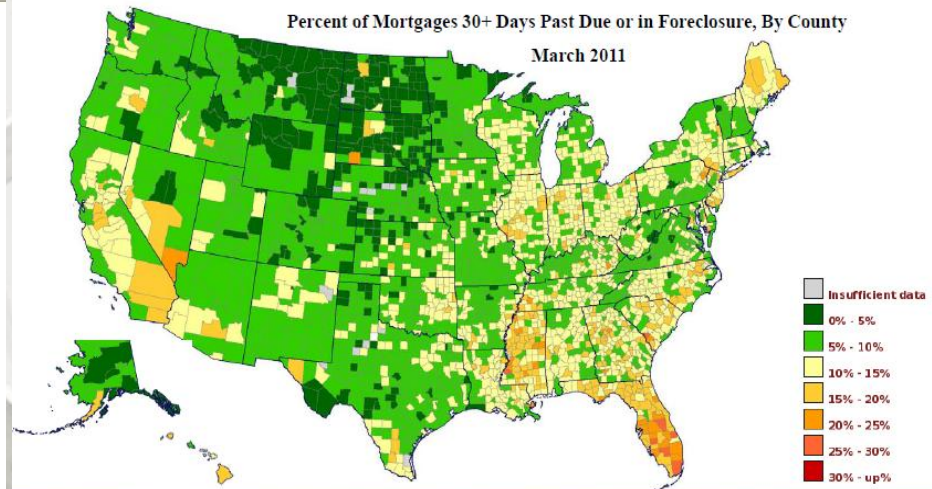


JAMES BULLARD

Source: Lender Processing Services.

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Mortgage distress remains elevated



JAMES BULLARD

Source: Lender Processing Services.

Geographic Aspects of the Housing Bubble

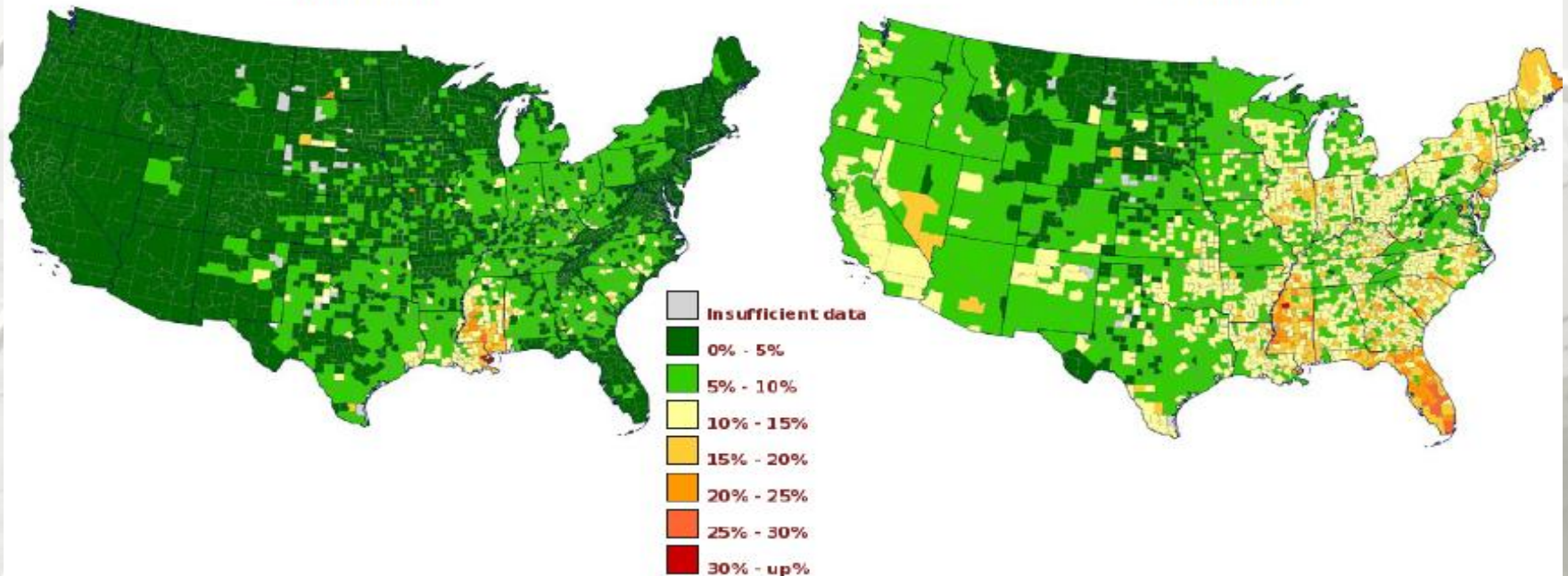
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Mortgage conditions remain distressed

Percent of Mortgages 30+ Days Past Due or in Foreclosure, By County

March 2006

March 2012



JAMES BULLARD

Source: Lender Processing Services.

The Aftermath of the Housing Bubble

Conclusions

“The US economy had a bubble in housing which collapsed. Recovery from this event is ongoing and will ultimately take many years.

In particular, households are saddled with far too much mortgage debt compared with historical norms.

Monetary policy has been ultra-easy during this period, but cannot reasonably encourage additional borrowing by households with too much debt.”¹²

- - James Bullard, CEO and President of The Federal Reserve Bank of St. Louis

Rental Housing Boom Set to Explode

Single-Family Renter Growth

New Households	0.4 million	(8.4% of 4.3MM new renter households)
Owners Displaced	3.0 million	(78.0% of 3.9MM owners displaced by mortgage distress)
MF Moving into SF	1.1 million	(3.0% of 37.7MM total current renters)
TOTAL	4.5 million	

Apartment Renter Growth

New Households	3.9 million	(91.6% of 4.3MM new renter households)
Owners Displaced	0.9 million	(22.0% of 3.9MM owners displaced by mortgage distress)
MF Moving into SF	-1.1 million	(-3.0% of 37.7MM total current renters)
TOTAL	3.7 million	

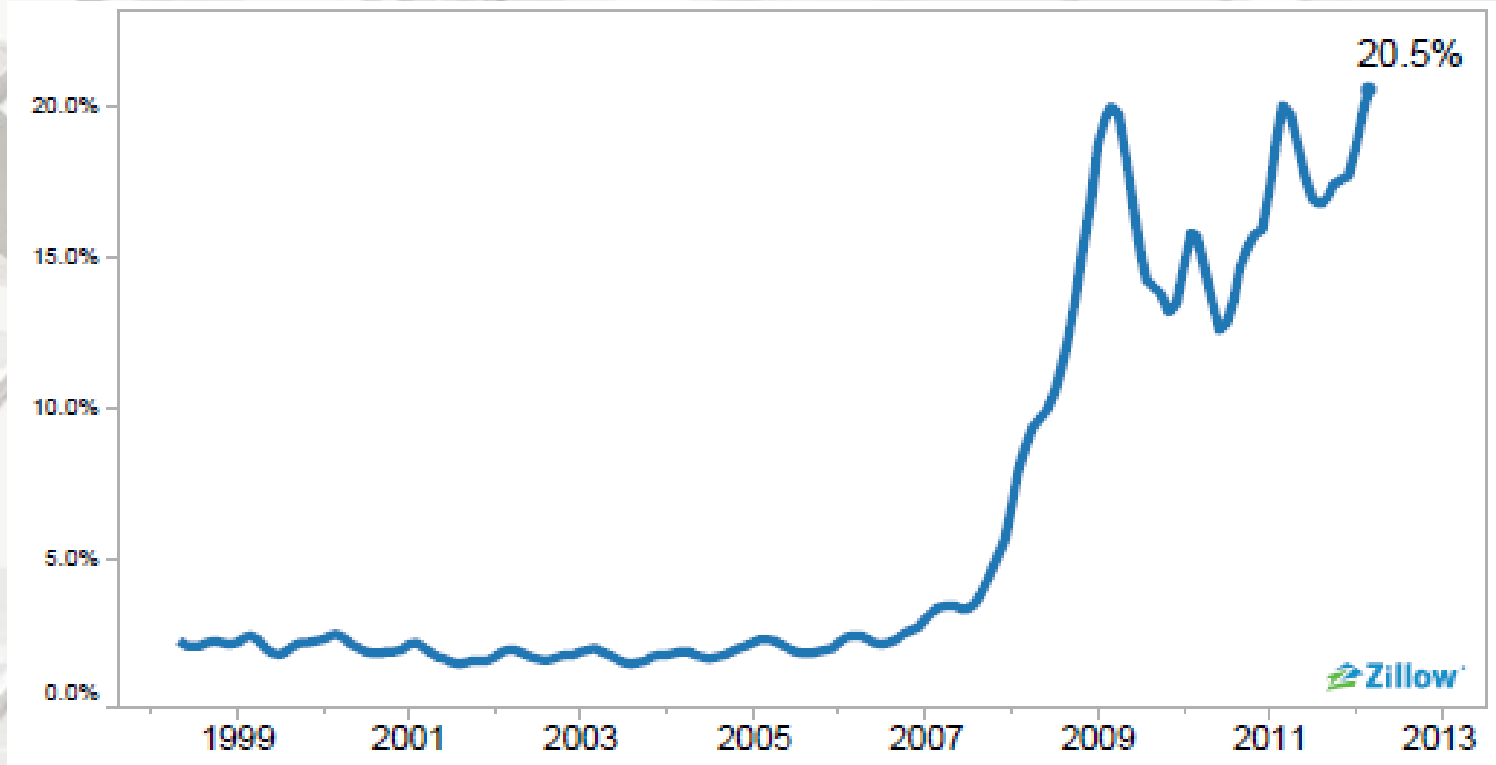
Source: John Burns Real Estate Consulting, Apartment Analysis & Forecast, March 2012

“Rental households comprise 34% of the housing stock

...only 20% of renters live in large buildings (20+ units), and the remaining 80% of renters live in alternative types of housing

+/-55% of new renters rent SF homes, 45% rent apartments.”¹³

Shadow Houses & Foreclosures



“Nationally, foreclosure re-sales increased to a new high making up 20.5% of all sales in March ...the rate of homes foreclosed significantly decreased in March with 7.4 out of every 10,000 homes in the country being liquidated. Despite this month’s dip in the foreclosure liquidation rate, we expect foreclosure re-sales to continue their steady increase that we’ve seen over the last several months. While the heavy volume of foreclosures will put downward pressure on prices, this is an inevitable step on the road of housing market recovery.”¹⁴

Shadow Houses & Foreclosures

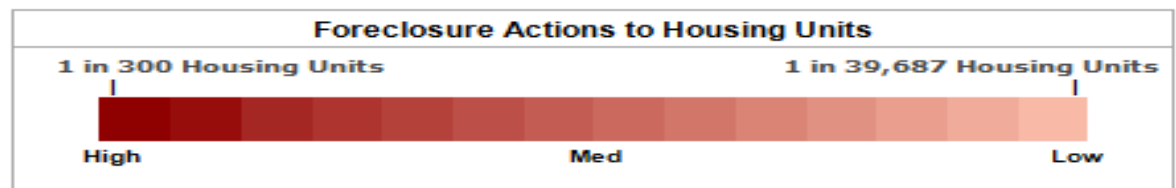
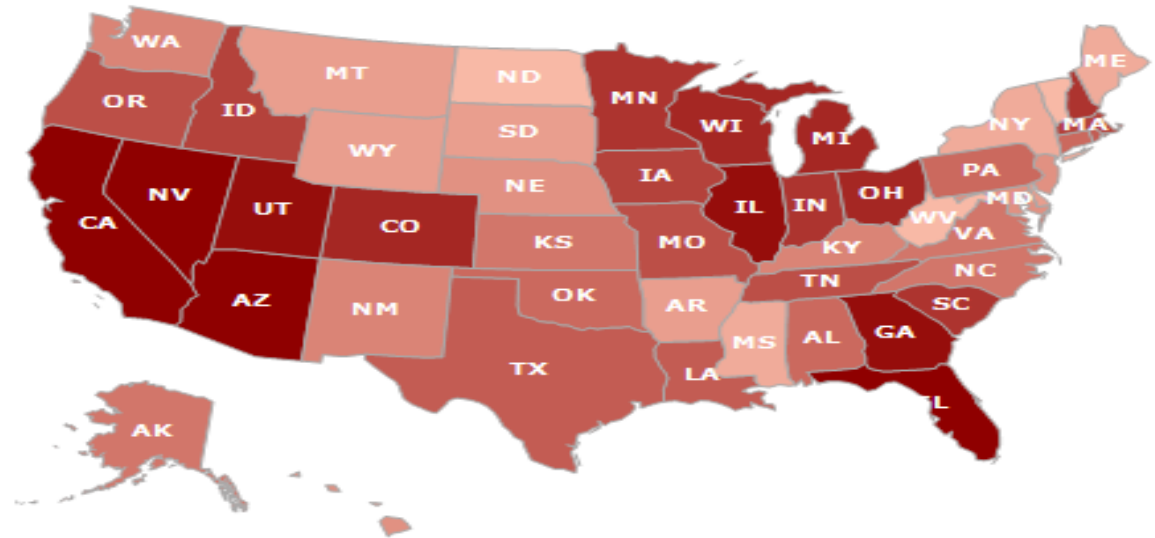
RealtyTrac®: Sales of homes that were in some stage of foreclosure or bank owned accounted for 26% of all U.S. residential sales during the 1st qtr — up from 22% of all sales in the 4th qtr and up from 25% of all sales in the 1st qtr of 2011.¹⁵

Third parties purchased a total of 123,778 bank-owned (REO) homes in the 1st qtr

Pre-foreclosure sales increased 25% from a year ago

“Foreclosure-related sales picked up in the first quarter, particularly pre-foreclosure sales where a distressed homeowner is selling to avoid foreclosure — typically via short sale”¹⁵ - - Brandon Moore, CEO, RealtyTrac

1 in every 698 housing units received a foreclosure filing in April 2012



Shadow Houses & Foreclosures

First-Quarter 2012 Shadow Inventory Update: National Liquidation Rates Moderate, While Regional Differences Widen

“U.S. non-agency residential mortgages remained extremely high at \$354 billion in the 1st qtr...

...represents slightly less than 1/3 of the outstanding non-agency residential mortgage-backed securities market in the US

Standard & Poors estimates it will take 46 months to clear the supply of distressed homes or shadow inventory at the current sales rate

Differences in liquidation rates between states are creating a large and growing difference in regional estimates of the months-to-clear.

The U.S. monthly first default rate fell to 0.67% in March 2012, the lowest level since May 2007.”¹⁶

Delinquencies

Subprime delinquency rates increased in April to 28.9% from 28.6% last period, but down from 2011 (32.2%)

Prime delinquencies rose last period, 3.9% from 3.8%, but declined from 2011s 4.3%.

FHA delinquency rates increased from last period, rising to 11.6% from 11.4%, and rose from 2011s 11.1%.

Seriously delinquent subprime mortgages increased in this period from last, increasing to 1,609,000 from 1,607,000, but declined from 1,632,000 in 2011.

Seriously delinquent FHA mortgages are up from one year ago, increasing to 707,000 from 576,000, but are down slightly from last period when there were 708,000.

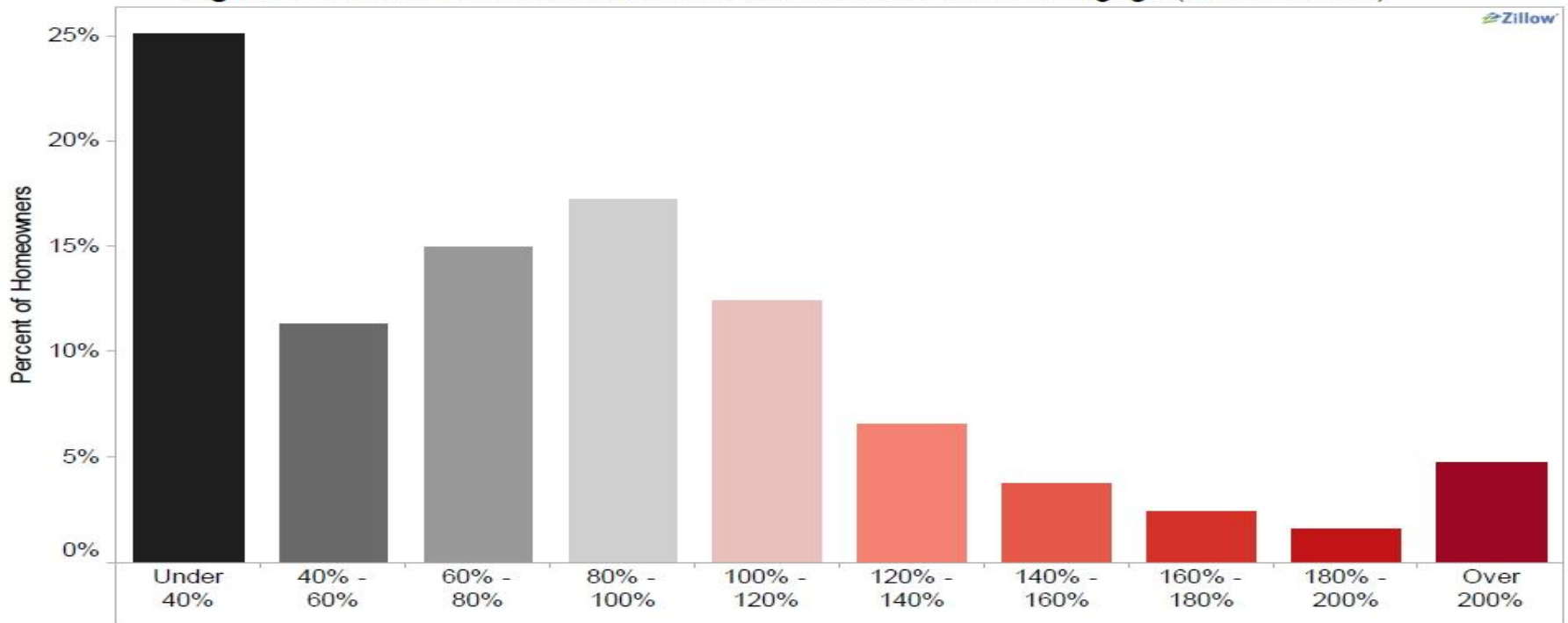
Seriously delinquent prime mortgages were 1,395,000 for the period, down from 1,404,000 last period and 1,512,000 in 2011.¹⁷

Underwater Homeowners

Despite Home Value Gains, Underwater Homeowners Owe \$1.2 Trillion More than Homes' Worth

“Zillow Negative Equity Report: 31.4% of U.S. homeowners with a mortgage are underwater
U.S. homeowners owe \$75,644 more than what their house is worth or 44.5% on average
Almost 5% of home mortgages owe more than twice what their house is worth.”¹⁸

Figure 2: Loan to Value Distribution for Homeowners with a Mortgage (United States)



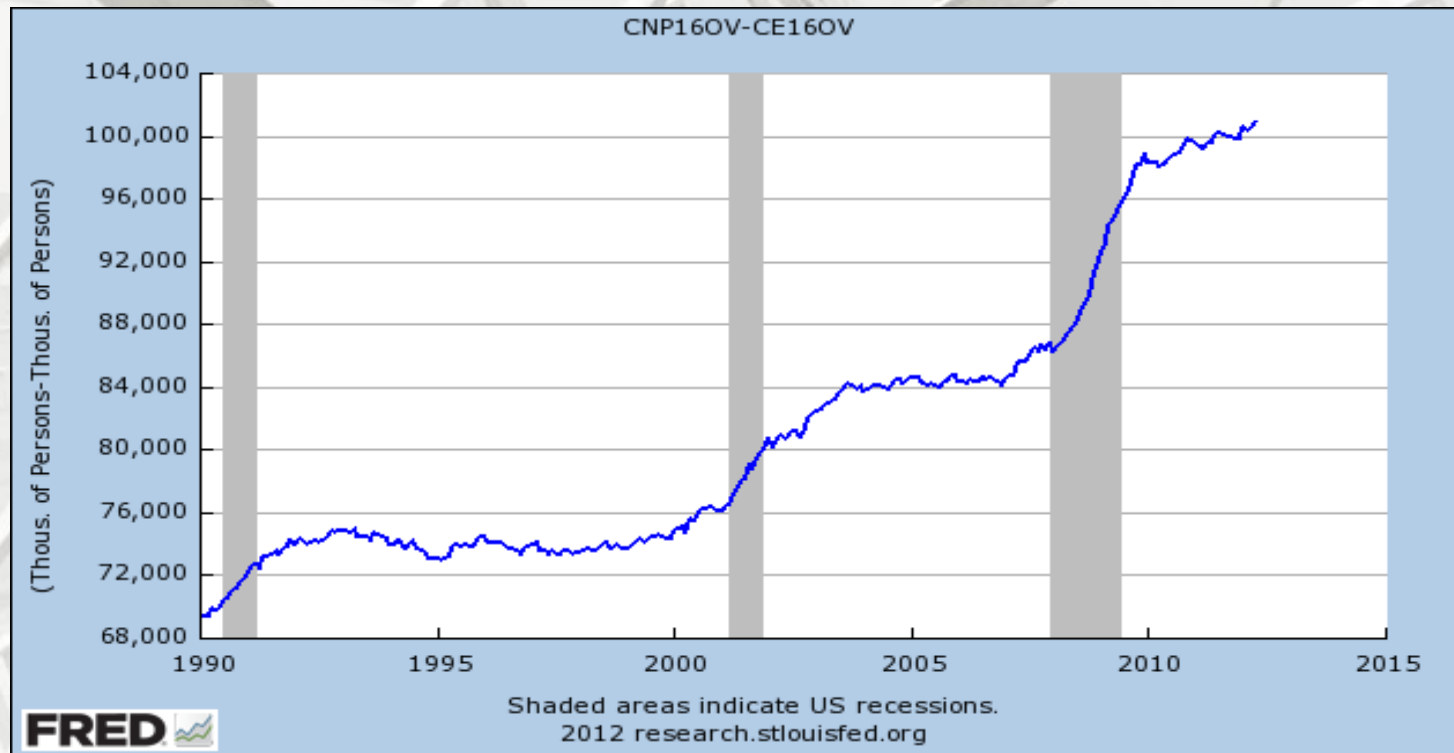
Economy

100 Million Americans without Jobs

“...people who are part of the civilian over-16 non-institutional population who are either unemployed or not part of the workforce

April jobs report: Number of jobless American stood at 100.9 million.

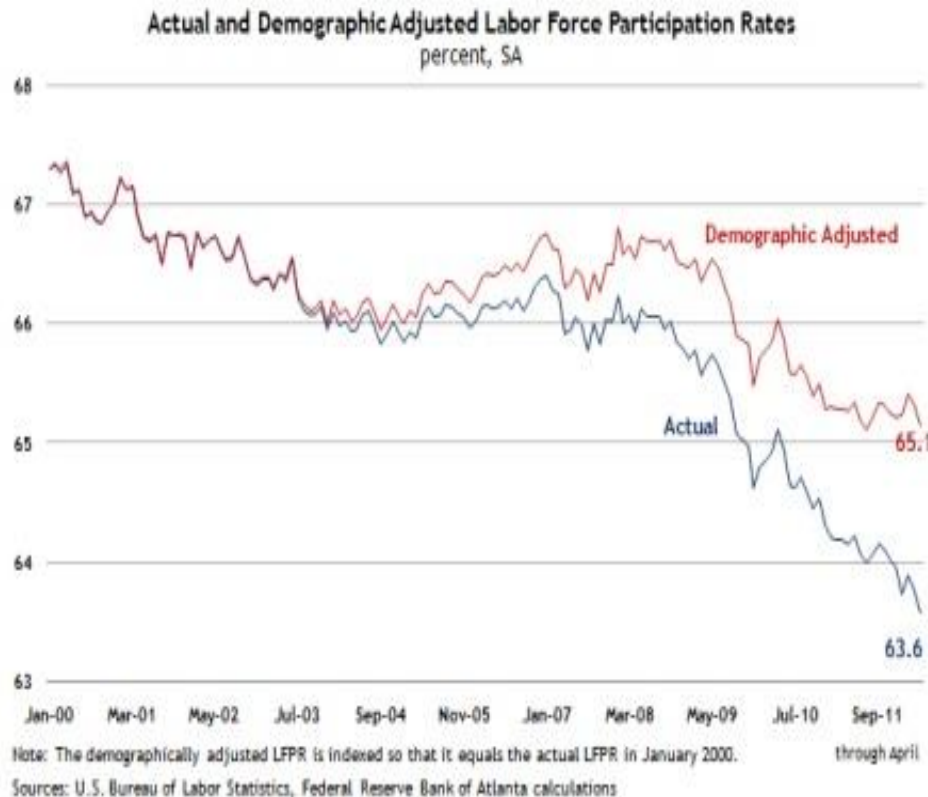
The jobs-to-population ratio peaked 12 years ago - - to have the same ratio today, we would need 15.3 million more jobs, or 23.7 million fewer people. ”¹⁹ - - Eddy Elfenbein, Editor, Crossing Wall Street



Employment

A Take on Labor Force Participation and the Unemployment Rate or the: Number of jobs it will take for 7.5% unemployment²⁰

Demographic changes—"population aging"—account for about 40 percent of the decline in participation since 2000

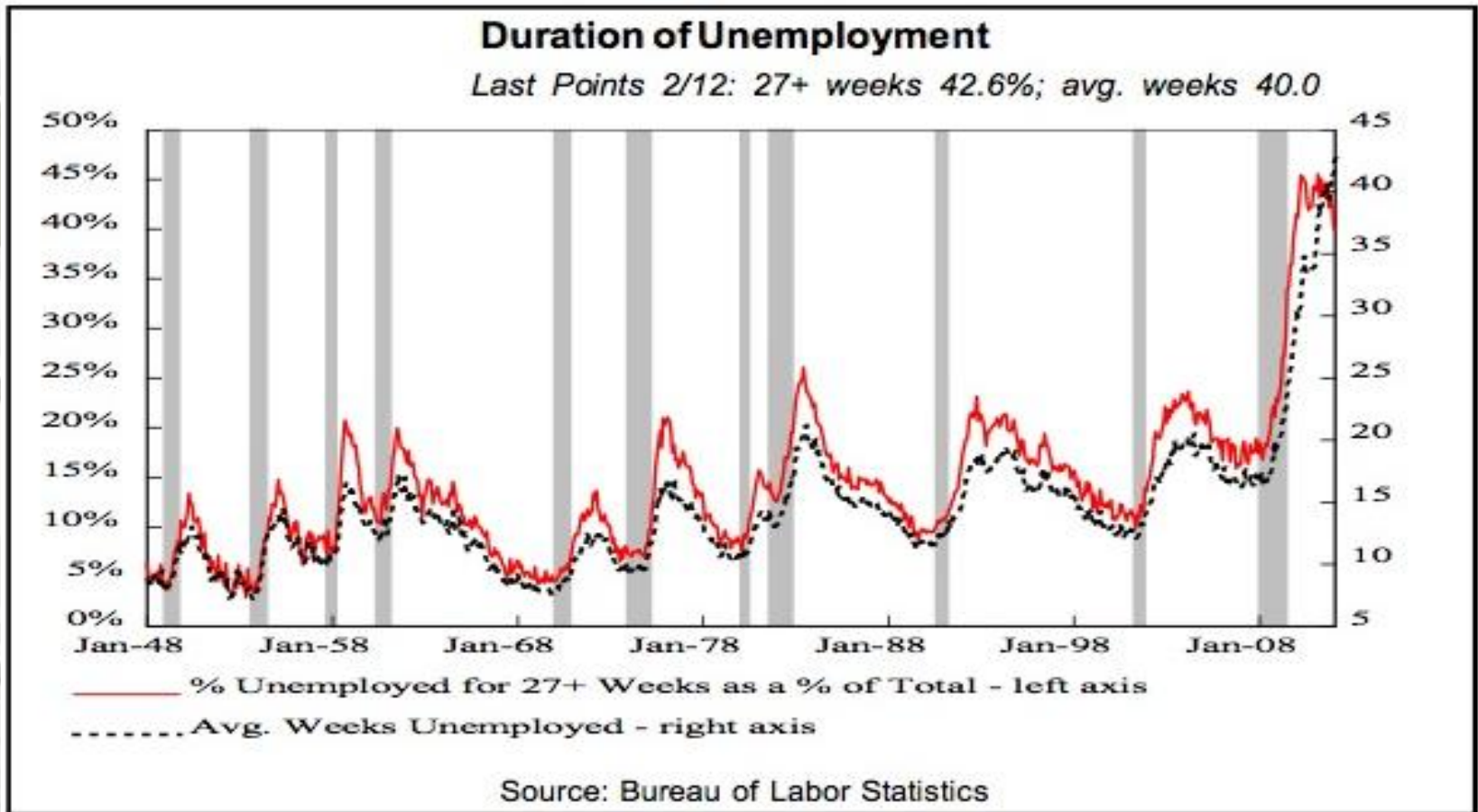


How many jobs have to be created to reach unemployment rate 7.5 by the end of 2013?

... if the labor force participation rate is	... the economy needs to create about how many jobs per month?
63.6% (current level)	144,036
64.3%	218,808
65.1%	304,260

Sources: U.S. Bureau of Labor Statistics and FRBA calculations

Employment



“Contrary to Chairman Bernanke's belief that high unemployment is mainly a cyclical problem that will be solved by economic growth, we believe a big part of it is structural. Employers may have jobs available for software engineers or skilled machinists, but unemployed residential construction carpenters probably don't have the necessary skills. Employment for college graduates is up 5.8% so far in the recovery but jobs held by high school dropouts, generally with low skills, are down 3.9%. And the skills of those out of work for extended periods, as is true of many today tend to erode.” - A. Gary Shilling.

Source: *INSIGHT* April 2012

Housing Demographics

U.S. Demographics and the Likelihood of a Housing Recovery

“A way to look at housing demand is to estimate the size of the population of people who are likely home buyers”

“75% to 80% of home buyers are in the 30 to 60 age bracket.

Remaining 20% to 25% of buyers are < 30 or > 60 - - generally buyers of smaller homes.

In terms of dollar value, the 30-60 bracket may represent as much as 90%+ of the residential real estate market.

This bracket now has about 125 million people but it has stopped growing (excluding new immigration) in 2005 and will not resume its growth until after 2020.

If the overall pool of likely home buyers is not growing, then people are just trading homes amongst themselves without any significant net gain in overall demand for new homes. Upsizing by growing families could be largely matched by downsizing from older couples whose children have left home.

Thus, if you assume no demand from existing residents and demand of 294,000 homes from new immigrants, the total net demand in the next 10-years is +/- 3 million units (new homes constructed per year/10). Total home construction will probably exceed this 3 million figure because of some demolition of older homes and because supply and demand are often not in the same location.”²² - -

Sami Karam

Eurozone

In past commentaries, we have focused on the debt burdened Eurozone nations – mainly the Club Med countries and Ireland.

A question being asked by many is, “Who is going to fund the sovereign debt, bailouts and/or recapitalization of the struggling banks?”

“Where is the money going to come from? Half-measures are not going to work at this stage and it is not clear that the funding is available.” - - Simon Derrick, BNY Mellon

“The risk is too big, and the return too low” - - Lou Jiwei, Chairman, China Investment Corporation

Many think the Germans will be the primary source for funding.

Eurozone

This month, we focus on Germany.

Germany, by all accounts, is the “engine” that pulls the Eurozone train – with all due respect to the other EU members.

Germany also is considered to be the “villain” or “hero” in the current austerity drive. We cannot confirm either moniker – it is well above our pay grade.

What we do know is that Germany matters, from both a political and economic perspective.

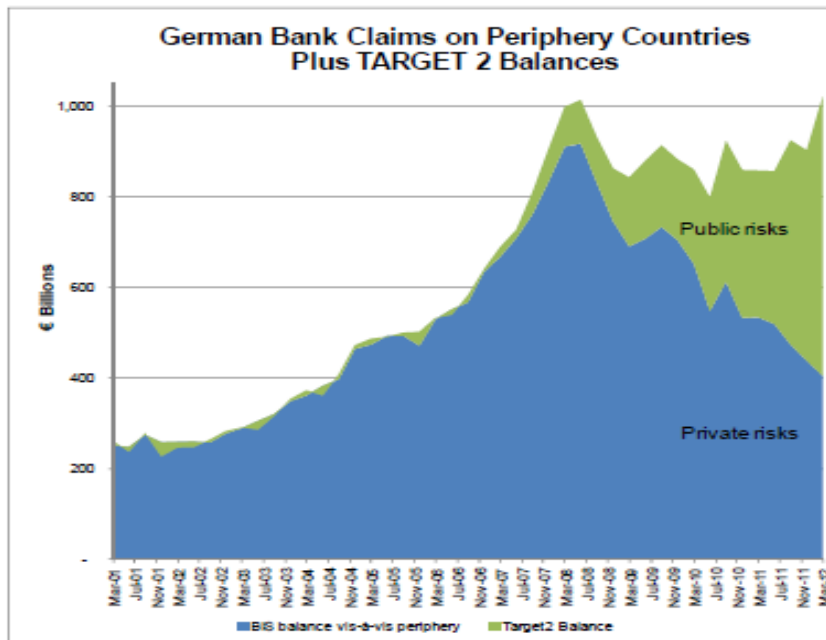
What Germany does and how it fares in the outcome of this crisis has direct ramifications on the US economy – not indirect.

Eurozone - Germany

“If you owe the bank \$100, that’s your problem. If you owe the bank \$100 million, that’s the bank’s problem.” – J. Paul Getty

Weaker Eurozone Countries Owe Germany Money on a Massive Scale²³

Germany Made Bad Loans but Still Wants its Money Back



Source: Bank for International Settlements and Bundesbank.

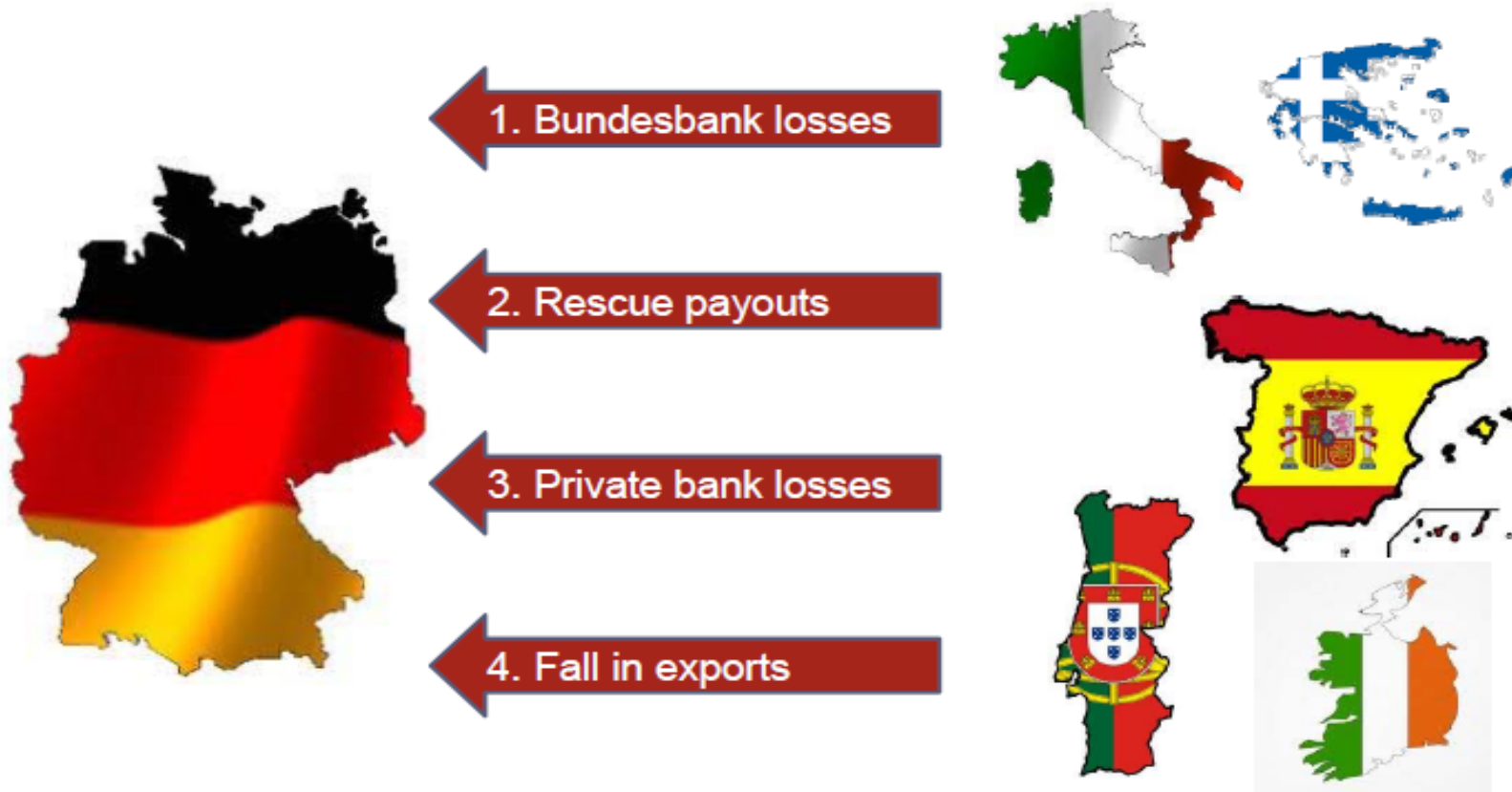
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1. Germany becomes an export powerhouse because of the Euro
 - The effective exchange rate was set far too low vs. other Euro countries
2. German banks financed the export boom
 - Financed the current account deficits of the periphery
 - Lent German excess savings into periphery housing bubbles
3. The Bundesbank has replaced the exposure to peripheral debt that the German banks reduced
 - Periphery debt is now the Federal Republic of Germany's problem

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Eurozone - Germany

Transmission Mechanisms Bring Periphery Debt Back to Germany



Eurozone - Germany

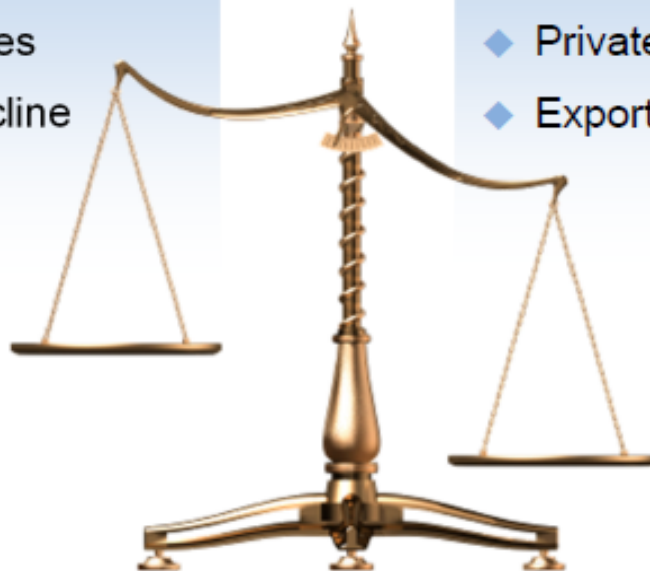
Germany Weighs Its Two Choices

Let the Euro Break Apart

- ◆ Bundesbank Losses
- ◆ Private Bank Losses
- ◆ Severe Export Decline

Save the Euro

- ◆ Pay for Rescue Programs
- ◆ Private Bank Losses
- ◆ Export Decline



Eurozone - Germany

The Market Doesn't Understand the Magnitude of Germany's Future Losses

Transmission Mechanism	Euro Stays Together	Euro Breaks Apart
Bundesbank Losses Through TARGET2 Balances	€0	€637 Billion
Germany's Share of the Rescue Funds (ESM/EFSF/EFSD)	€419 Billion	€94 Billion
Private Bank Losses from Exposure to Periphery Debt	€80 Billion	€200 Billion
Fall in Exports Over The Next 5 Years	€80 Billion	€375 Billion
Total Estimate	€579 Billion	€1.31 Trillion
Estimated Total Debt-to-GDP	103% Debt-to-GDP	131% Debt-to-GDP

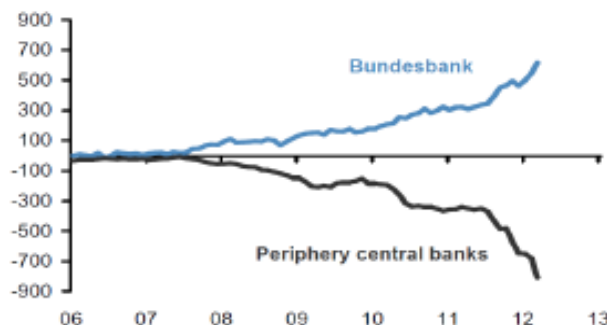
The Cost to Save the Euro is Much Less Than to Let It Fall Apart, but Do the Germans Have the Political Will?

Eurozone - Germany

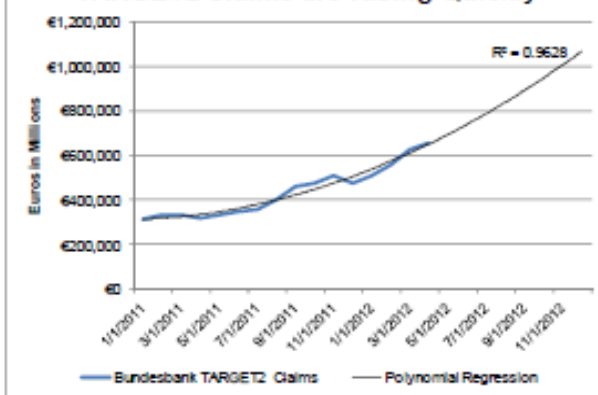
1. Periphery Will Owe the Bundesbank €1 Trillion by the End of 2012

Chart 2: Intra-Eurosystem TARGET2 balances

€bn, periphery includes Italy, Greece, Ireland, Portugal and Spain



TARGET2 Claims are Rising Quickly



7 Source: National Central Banks, J.P. Morgan and Bundesbank.

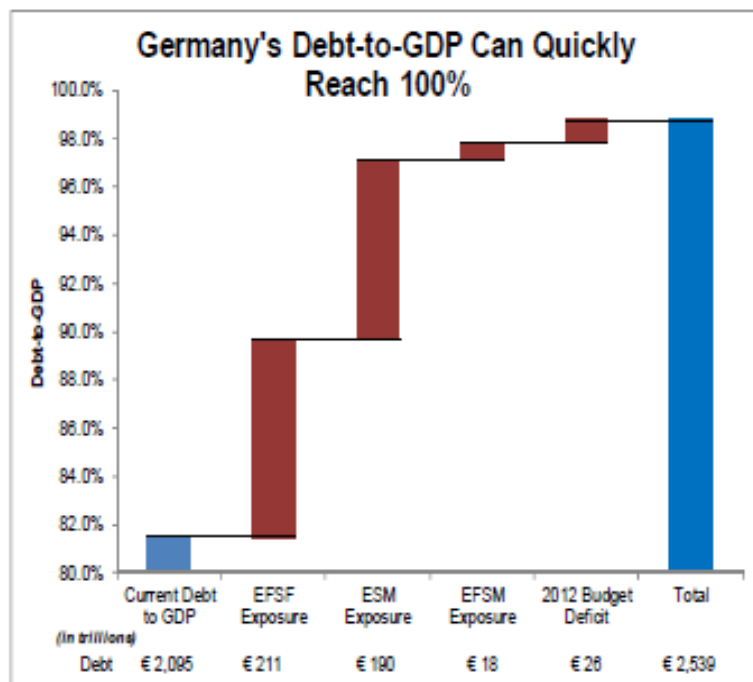
- Periphery banks had to replace funding as the interbank market froze in 2007
- They were forced rely on their own central banks as the funder of last resort
 - Since mid-2011 the need for this type of funding has accelerated
- The Bundesbank has large exposures to the ECB and other central banks
 - German claims are on pace to increase from current amount of €657 billion to €1.1 trillion by end of 2012
- If a member leaves the Euro the amount owed to the ECB becomes a loss for the remaining members

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Eurozone - Germany

2. Germany's Obligation for Rescue Programs Is €419 Billion and Could Increase



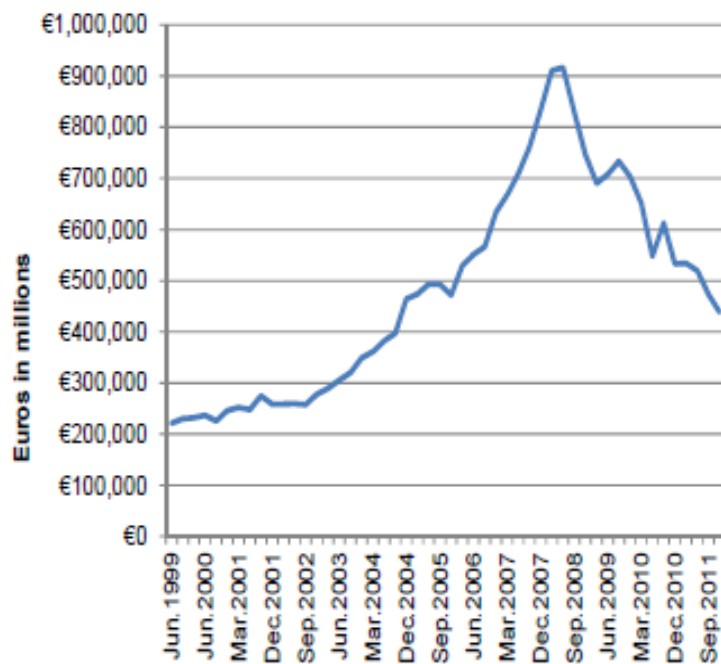
Source: JPMorgan and CAM estimates.

- Germany's debt-to-GDP would reach 100%
 - Well above the 90% that Reinhart and Rogoff suggest as slowing GDP growth
- Cost for saving the Euro is approximately €579 billion
 - This compares with the estimated €1.4 trillion to reunify East and West Germany
- Any movements towards a fiscal not just monetary union will involve more explicit transfers

Eurozone - Germany

3. German Banks Could Lose Substantial Portions of Their Current Equity

German Bank Exposure to GIIPS

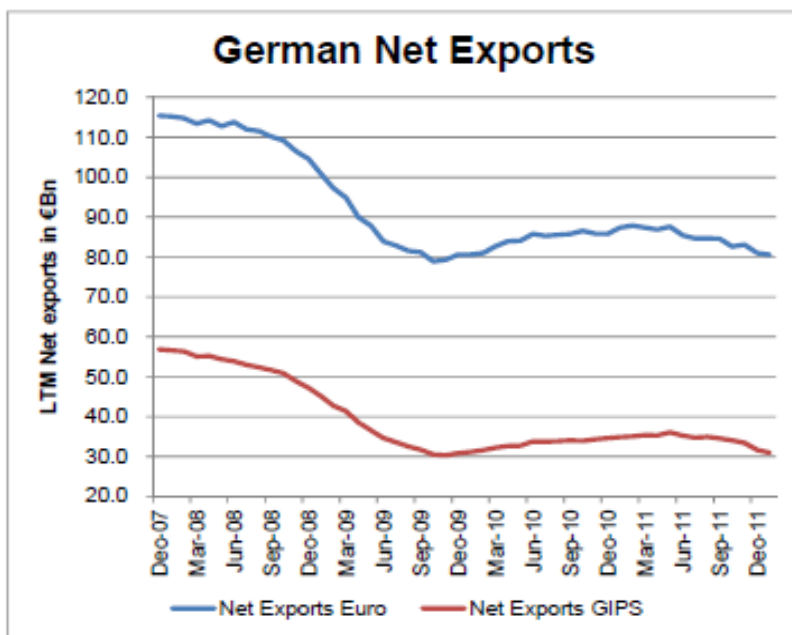


Source: Bank for International Settlements.

- The €438 billion of exposure is still 40% greater than the estimated €310 billion of German bank equity
- As late as December 2011, German banks had €33 billion of exposure to Greece
 - This does not count the CDS on Greece that German Banks have written
- Should the Eurozone split, German banks would likely suffer both large credit losses and currency losses

Eurozone - Germany

4. Exports Will Fall in the Next Several Years

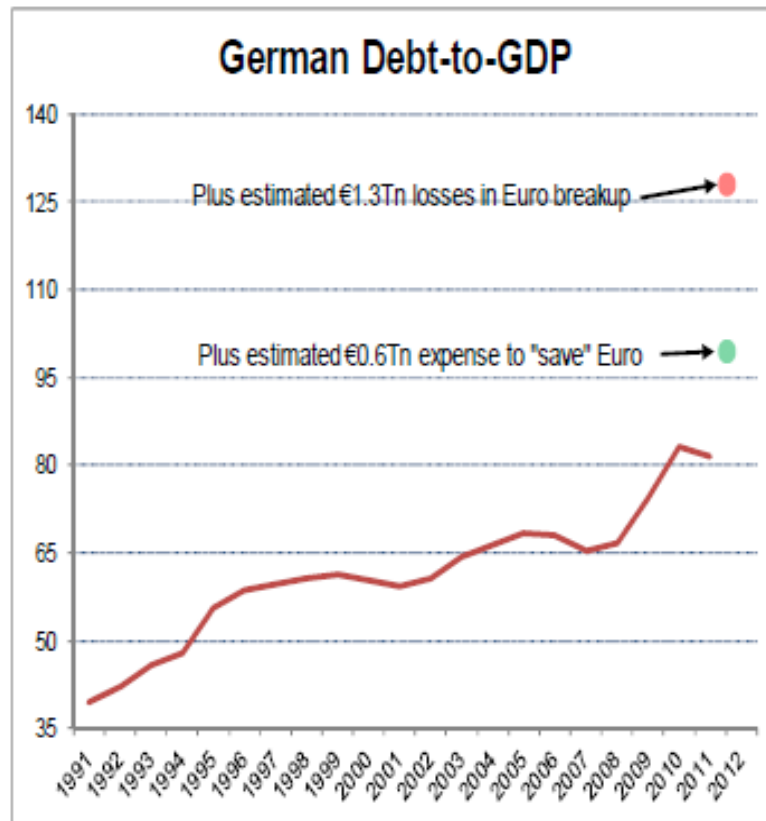


Source: German Federal Statistics Office.

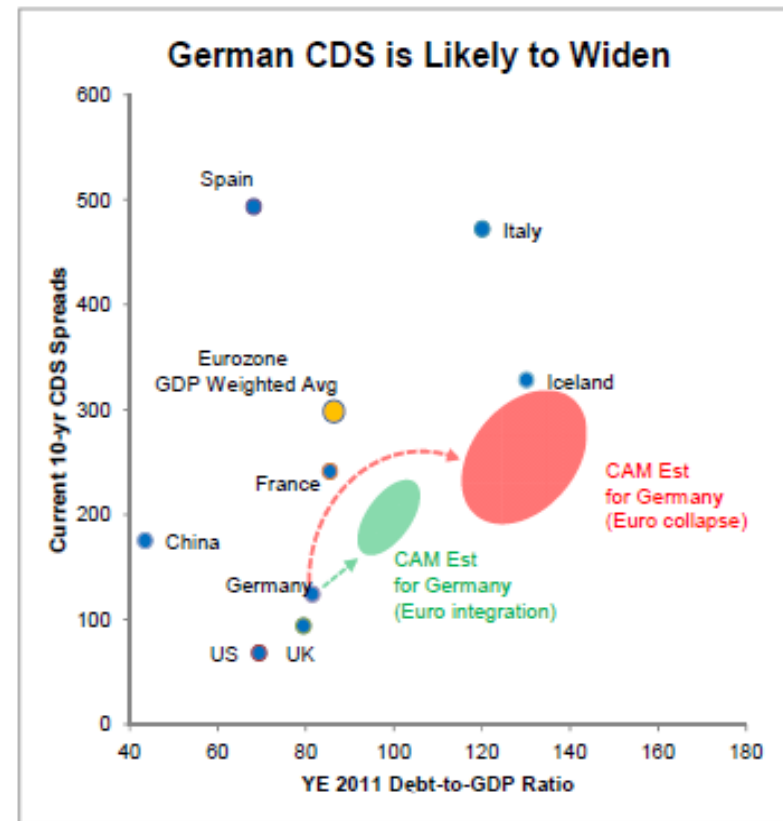
- For the twelve months ending Jan 2012, Eurozone countries were 57% of net exports
 - This figure has been as high as 81%
- Should the Euro dissolve, we would expect that net exports would fall to at least where they were at the beginning of the Euro (1999)
- Germany could become a net importer as exports become more expensive in neo-Pesetas or neo-Drachmas and imports in neo-Deutsche Marks fall in price
- Exports are currently ~40% of the German economy

Eurozone - Germany

Debt-to-GDP Will Rise and German Credit Default Will Widen



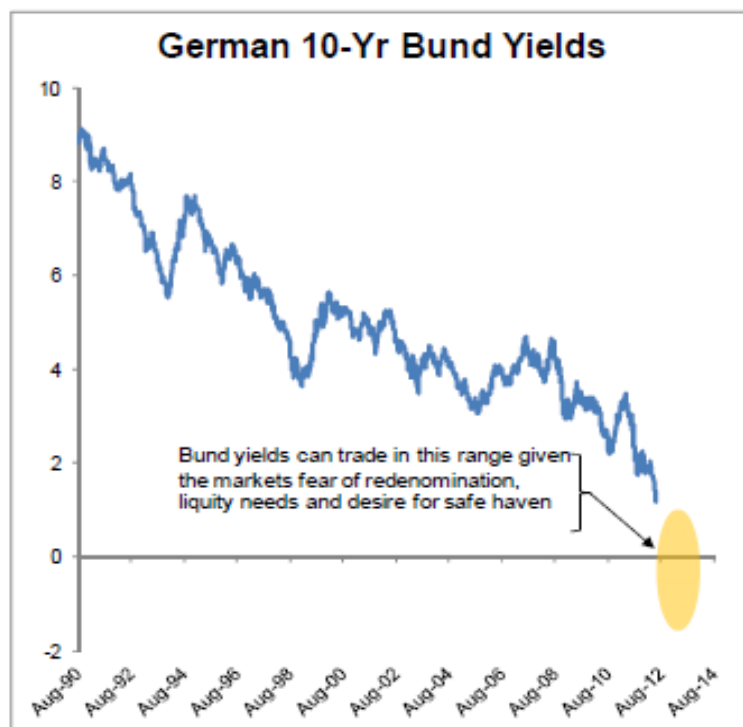
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Eurozone - Germany

10-Year Bund Yields Could Go Negative



Source: Bloomberg.

- Inherent currency option in Bunds
 - If bonds are redenominated into Deutsche Marks, currency gain can offset the yield loss
- For the currency, we used the European Commission's own estimates of Real Effective Exchange Rates
- For liquidity, we examined the moves in the US Treasury post Lehman Brothers default
- For where rates should be, we used the Taylor rule
 - We added the average shape of the yield curve and made an adjustment for the need to keep the markets liquid

Eurozone - Germany

The market under estimates the risk to Germany posed by its exposure to periphery debt²³

As with Spain, Italy, Greece, Portugal, Ireland and France in the future...

we suggest paying close attention to Eurozone events

Conclusions

New home sales are still declining and existing sales are bottom bouncing - - even with near record low interest rates. As noted previously – we have the least quantity of available new and existing homes since 2005.

As we wrote last month; there are three primary factors impeding sales: 1) Consumer confidence, 2) a shortage of well-paying jobs, and 3) strict home loan lending standards. Also, distressed homes, foreclosures, and the Shadow Inventory are still problematic.

New housing starts are still being bolstered by MF starts and several analysts believe this will be the trend for some years to come. Remodeling, rentals, and rental building are the attractive sub-sectors in construction.

As we previously wrote - - JOBS still are the most critical factor for a robust housing recovery – and again, well-paying Jobs.

Concerns about the developments in the Eurozone and a softening of the Chinese economy also cast a shadow about the U.S. economy.

Lastly, our position on a meaningful housing recovery is unchanged; as many experts have voiced concern that a “muddle along” housing market will continue for quite some time. This was echoed by Mr. Bullard in his recent housing presentation.

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