PIMCO

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INSIDEPIMCO

PIMCO's Outlook for the U.S. Economy, U.S. Monetary Policy, and Global Investment Strategy

Tony Crescenzi

May 2014

MORNINGSTAR Awards 2013

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Morningstar named Dan Ivascyn and Alfred Murata the 2013 Fixed Income Manager of the Year (US). The Morningstar Fixed Income Fund Manager of the Year (2013) award is based on the strength of the manager, performance, strategy, and firm's stewardship.

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Agenda: Discussion of PIMCO's outlook for:

- The U.S. economy
- The Federal Reserve
- U.S. interest rates
- Fixed-income investment strategy
- The global economy and financial markets

PIMCO cyclical forum economic forecasts

	REAL GDP		HEADLINE INFLATION	
	CURRENT[1]	PIMCO FORECAST Q1 '14 – Q1 '15	CURRENT[1]	PIMCO FORECAST Q1 '14 – Q1 '15
U.S.	2.5%	2.5% to 3.0%	1.5%	1.75% to 2.25%
Eurozone	0.5%	1.0% to 1.5%	0.8%	0.75% to 1.25%
U.K.	2.7%	2.5% to 3.0%	2.0%	1.75% to 2.25%
Japan	2.7%	0.5% to 1.0%	1.1%	0.75% to 1.25%
China	7.7%	6.5% to 7.5%	3.0%	2.5% to 3.5%
BRIM[2]	2.3%	2.5% to 3.5%	6.8%	5.5% to 6.5%
World[3]	**2.9%**	**2.5% to 3.0%**	**2.4%**	**2.25% to 2.75%**

As of 10 March 2014
SOURCE: Bloomberg, PIMCO calculations

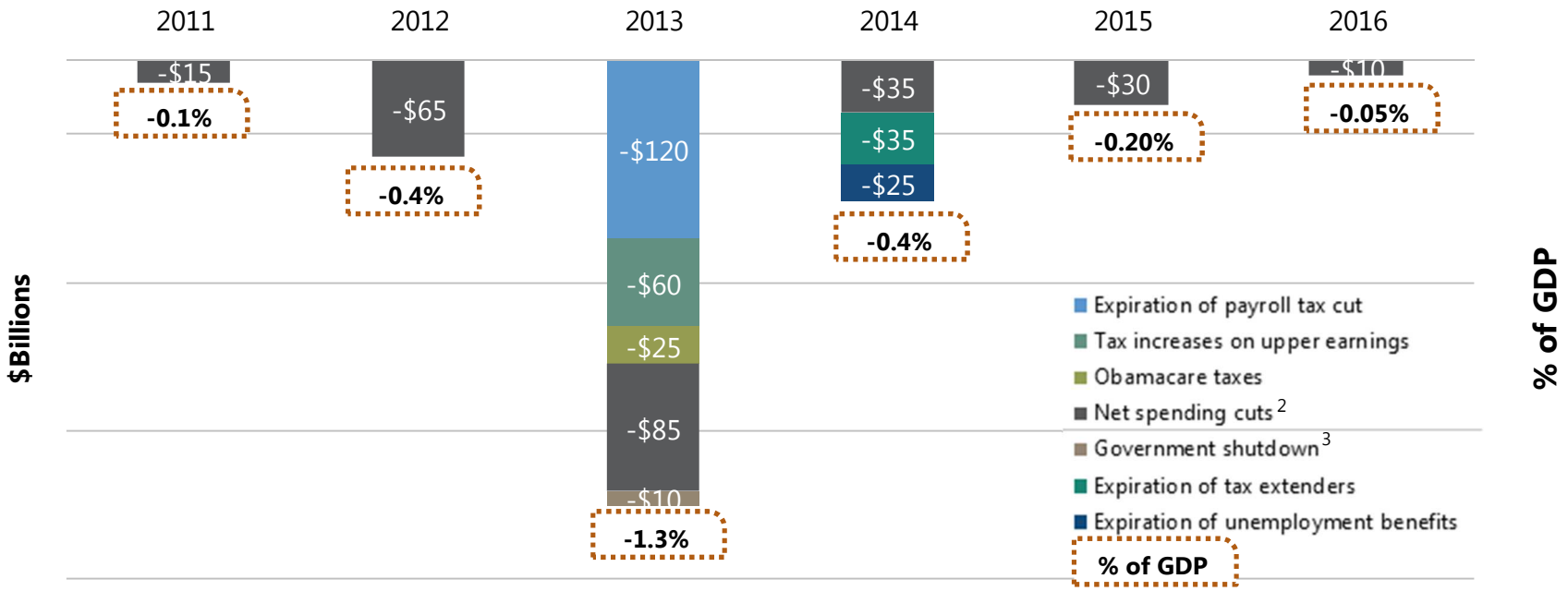
1 Current data for real GDP growth and inflation is actual and represents four quarters ending Q4 2013
2 Brazil/Russia/India/Mexico
3 World is weighted average sum of countries listed in table above
Refer to Appendix for additional forecast and risk information.

The U.S. Economic Outlook – View from the Optimists

Fiscal headwinds are diminishing

- A reduction in fiscal drag is at the heart of the optimist's view for 2014
- Given the lack of fiscal stimulus, perhaps the reduction in drag is best seen as "addition by the elimination of subtraction"

Estimated fiscal drag (calendar years)[1]



SOURCE: Congressional Budget Office (CBO), Council of Economic Advisors, Moody's, PIMCO

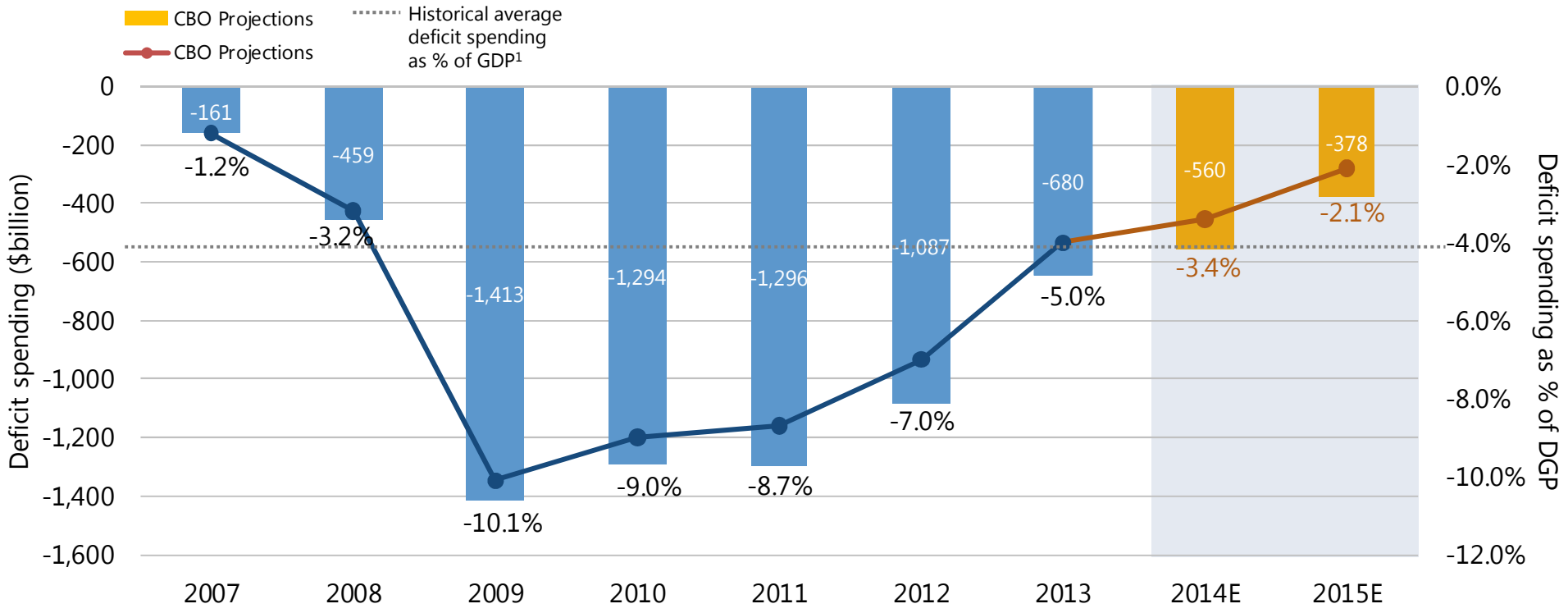
1 Includes multiplier effects. Assumes a fiscal multiplier of 0.9 for payroll tax cut, 0.4 for taxes on upper earners and tax extenders, and 1 for spending cuts and unemployment benefits

2 As measured by changes in discretionary spending, which include the net collective impact from the sequester, spending caps and changes in war spending; includes impact of 2013 budget agreement

3 Council of Economic Advisors estimate

The U.S. budget deficit is falling…

– The falling deficit is reducing efforts at further fiscal restraint

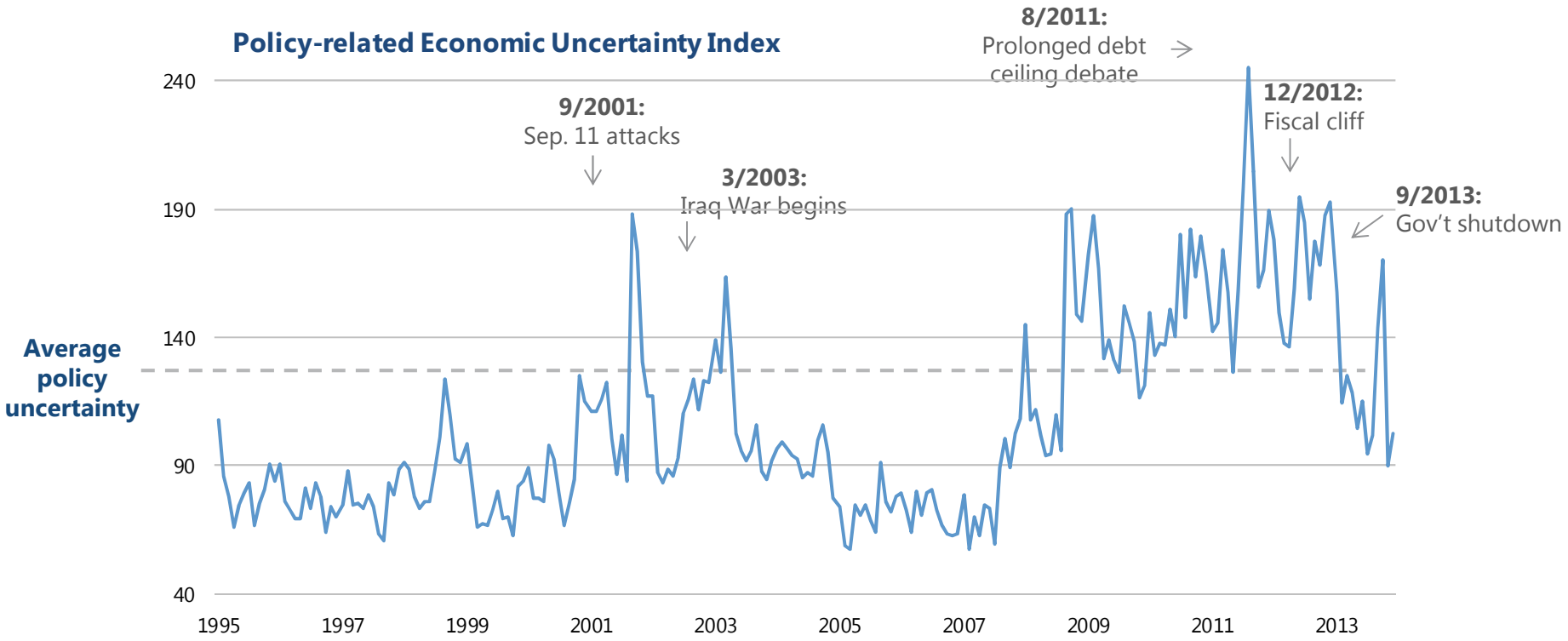


SOURCE: Congressional Budget Office (CBO)
All years shown are fiscal year (October – September)

[1] Average since 1973-2012

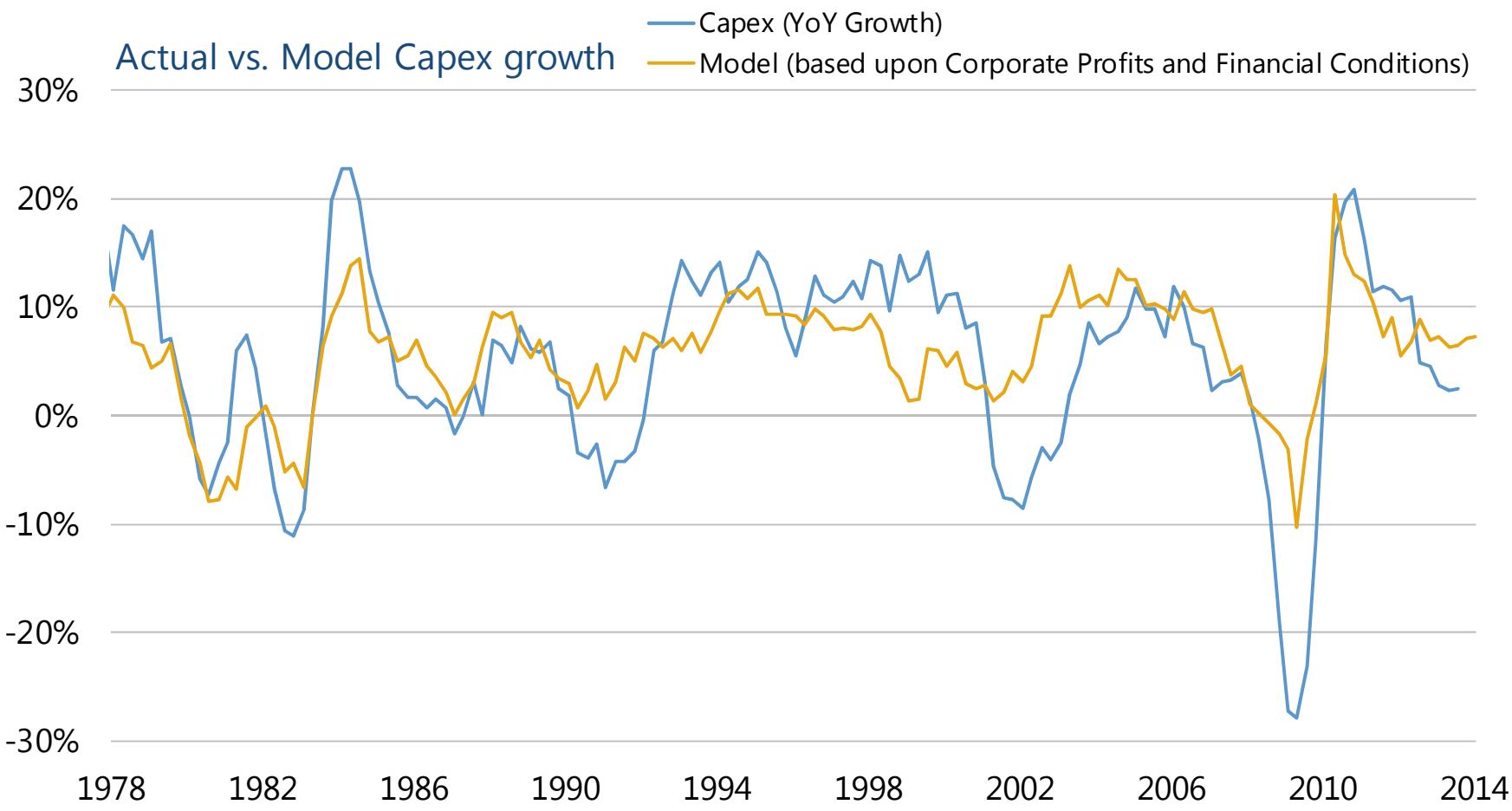
Fiscal-policy uncertainty has dissipated

- Governing from crisis-to-crisis led to heightened policy uncertainty in recent years
- While we expect continued acrimony in Washington, we expect brinksmanship to decrease perhaps into 2016.

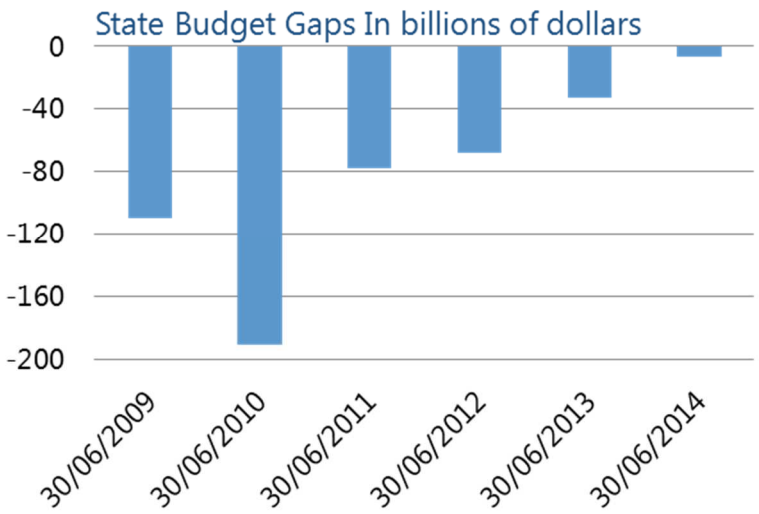


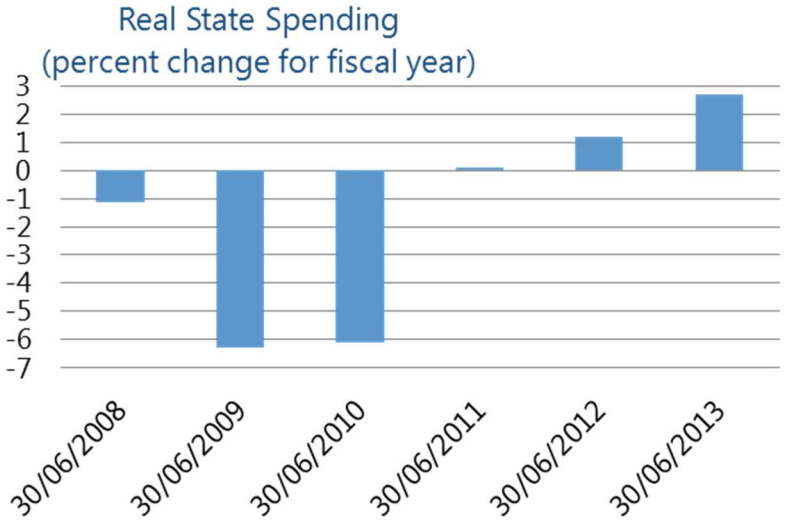
As of 31 December 2013
SOURCE: policyuncertainty.com

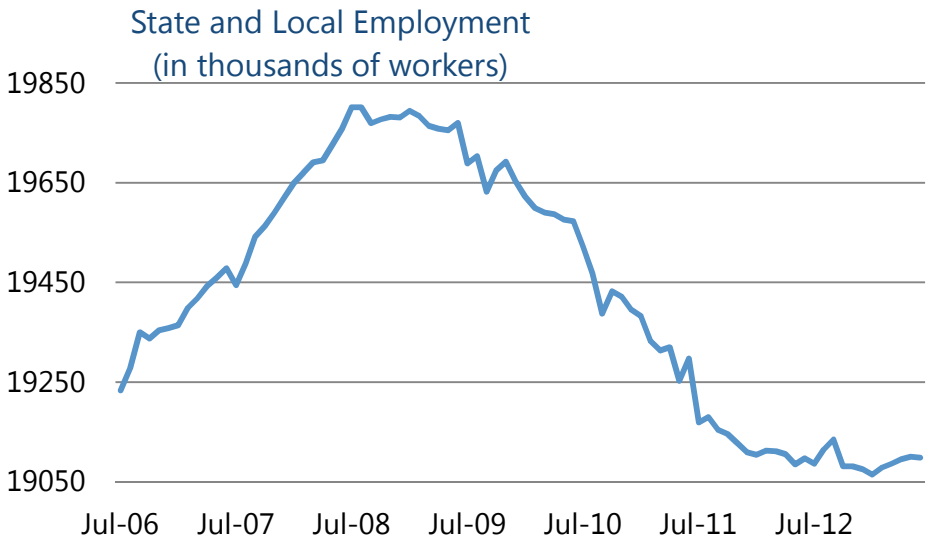
Decline in policy uncertainty might boost capital spending



Diminishing drag – state and local government

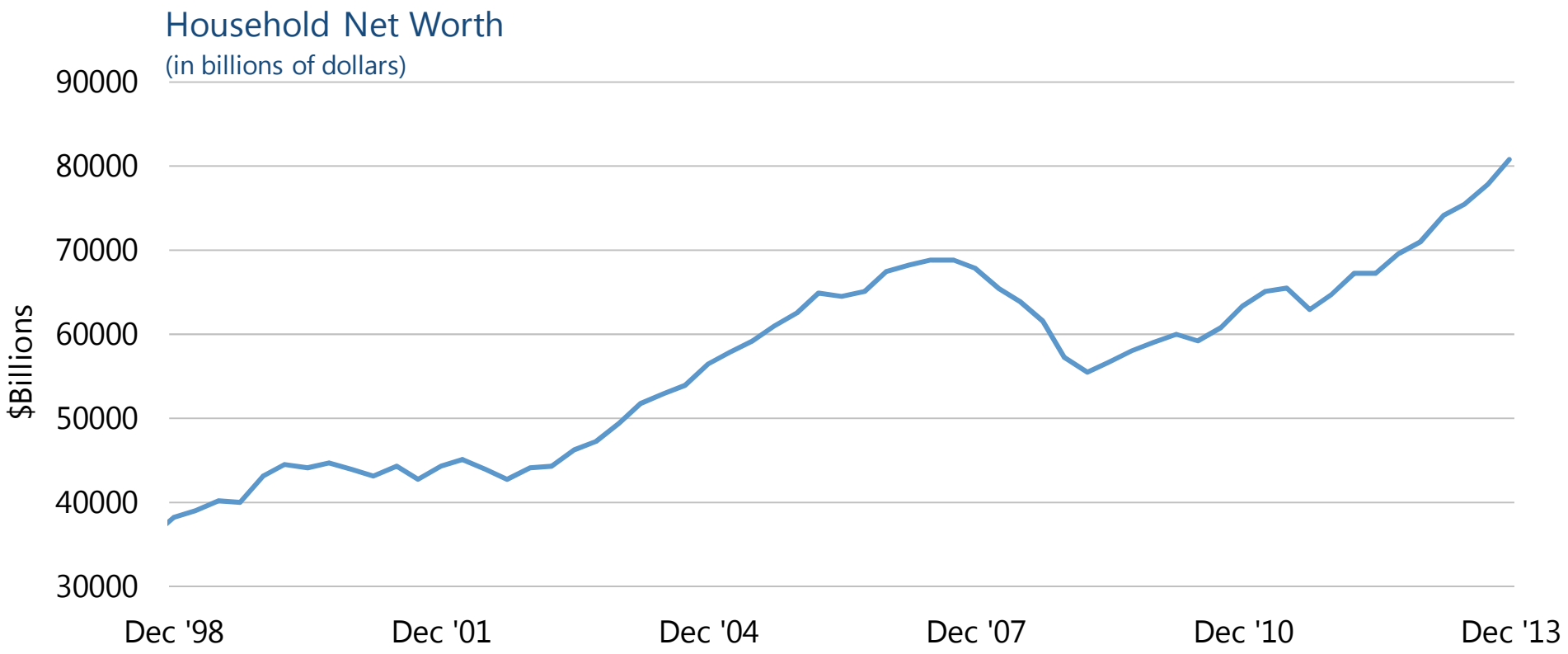






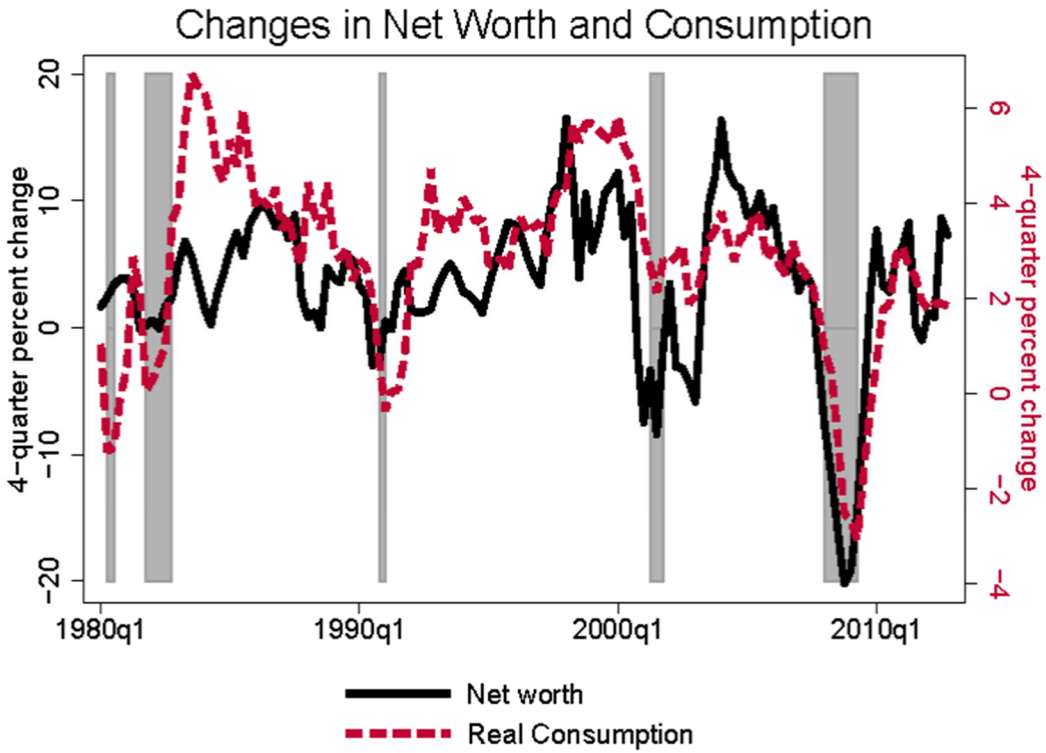
As of August 2013
SOURCE: National Association of State Budget Officers, Bureau of Labor Statistics
Refer to Appendix for additional outlook and risk information.

Household net worth has rebounded to record highs



As of 31 December 2013
SOURCE: Federal Reserve

Household net worth has rebounded but there is debate over potential wealth effects



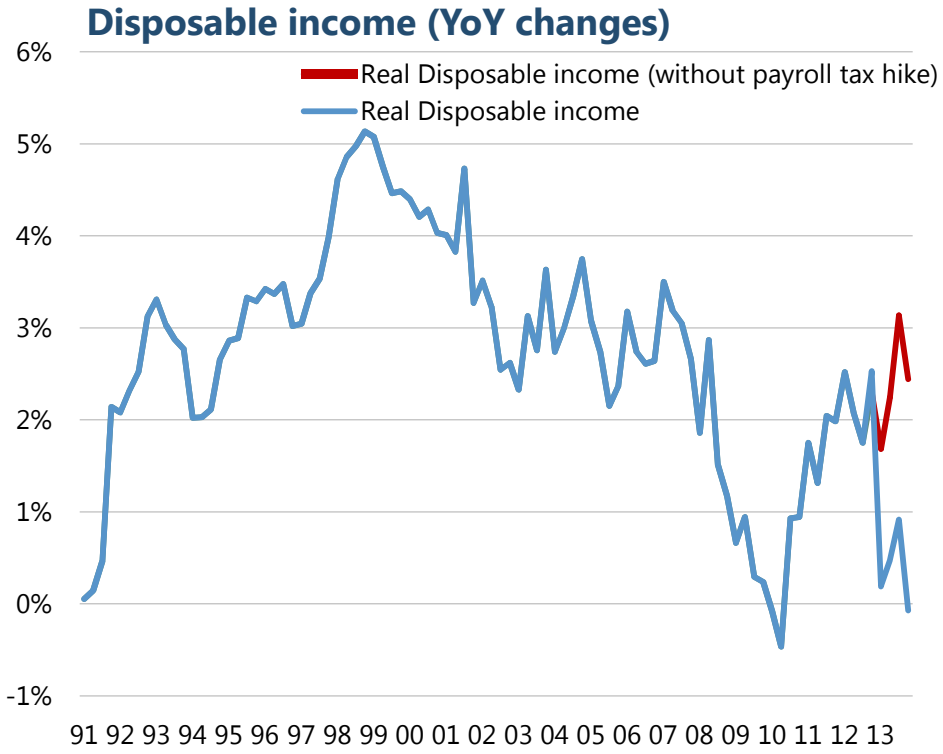
Thirteen academic studies from 2001 – 2005 on wealth effects:
Housing: Range of estimates is 0-17%, average 5.7% and median is 6%
Financial: Range of estimates is 0-9%, average 2.9% and median is 2%

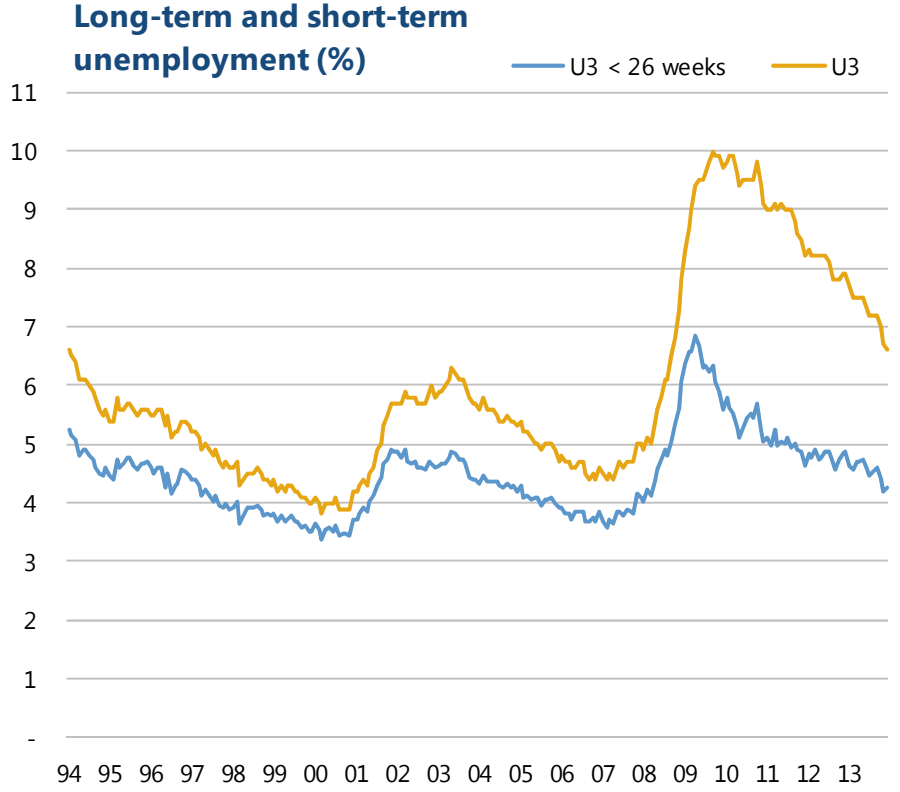
Using a pessimistic assumption of 2% housing and 2% equity wealth effect, GDP impact estimated at +0.38%

Using an optimistic assumption of 6% housing and 3% equity wealth effect, GDP impact estimated at +0.81%

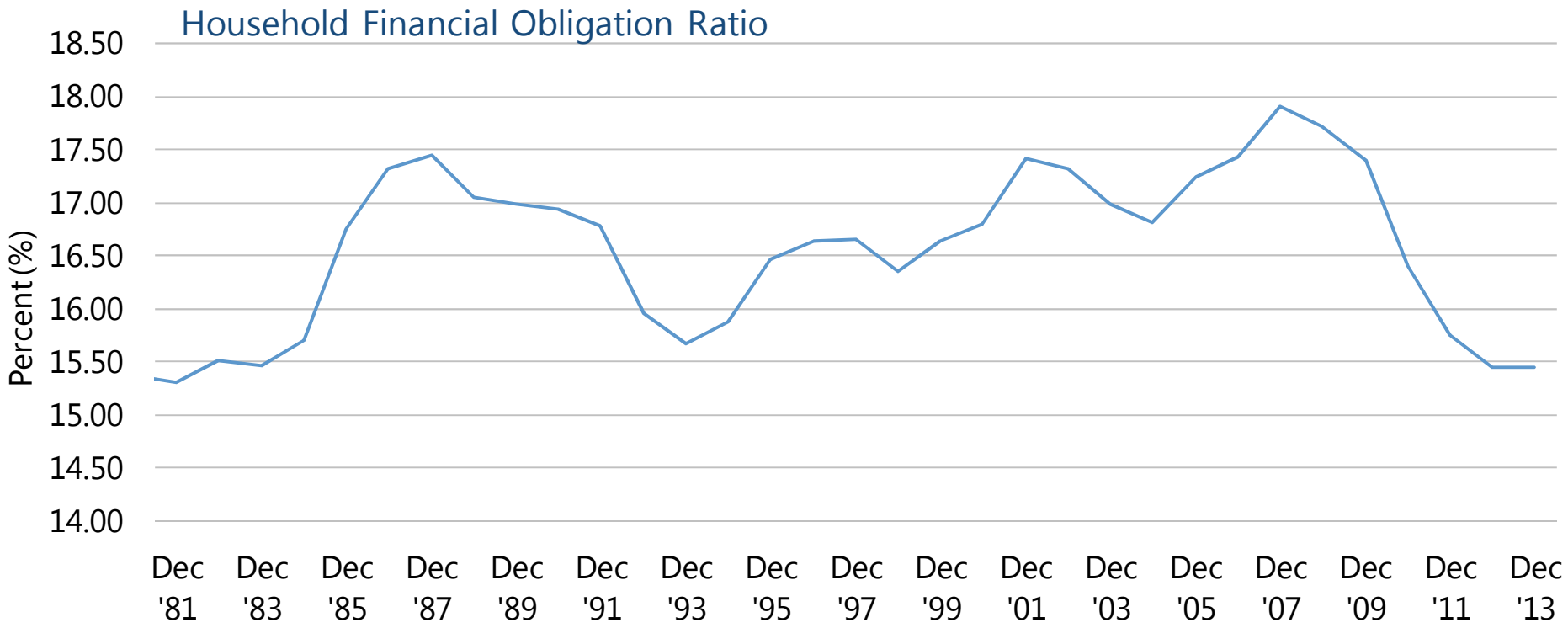
Disposable income trending well and wage growth may pick up

- In 2013, personal consumption grew 2.3% despite flat disposable income. With tax increases now past, disposable income may move to 2% or higher.
- Improving labor market could boost wages



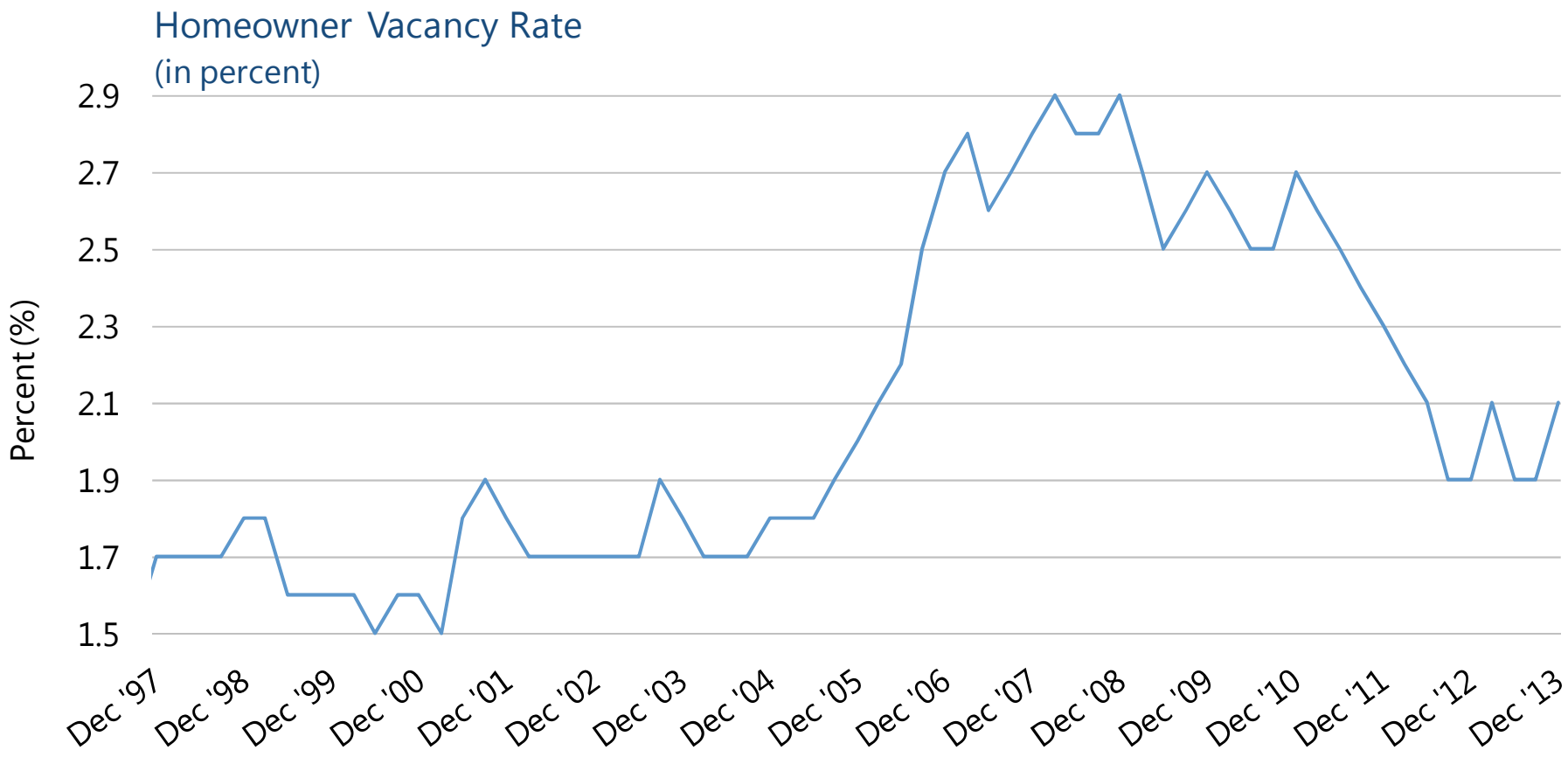


Household payment obligations are at their lowest in 30 years



As of 31 December 2013
SOURCE: Federal Reserve

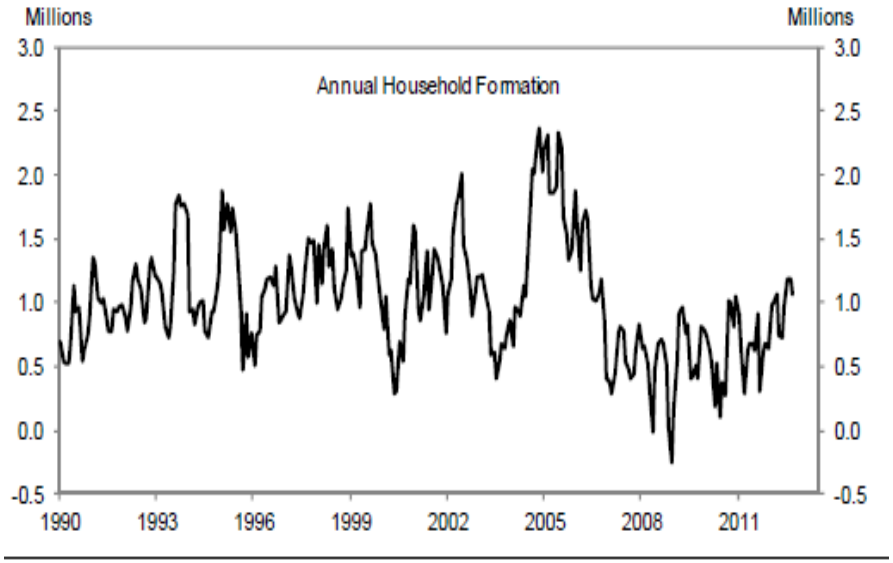
Housing is recovering – empty space if filling up!



As of 31 December 2013
SOURCE: Federal Reserve

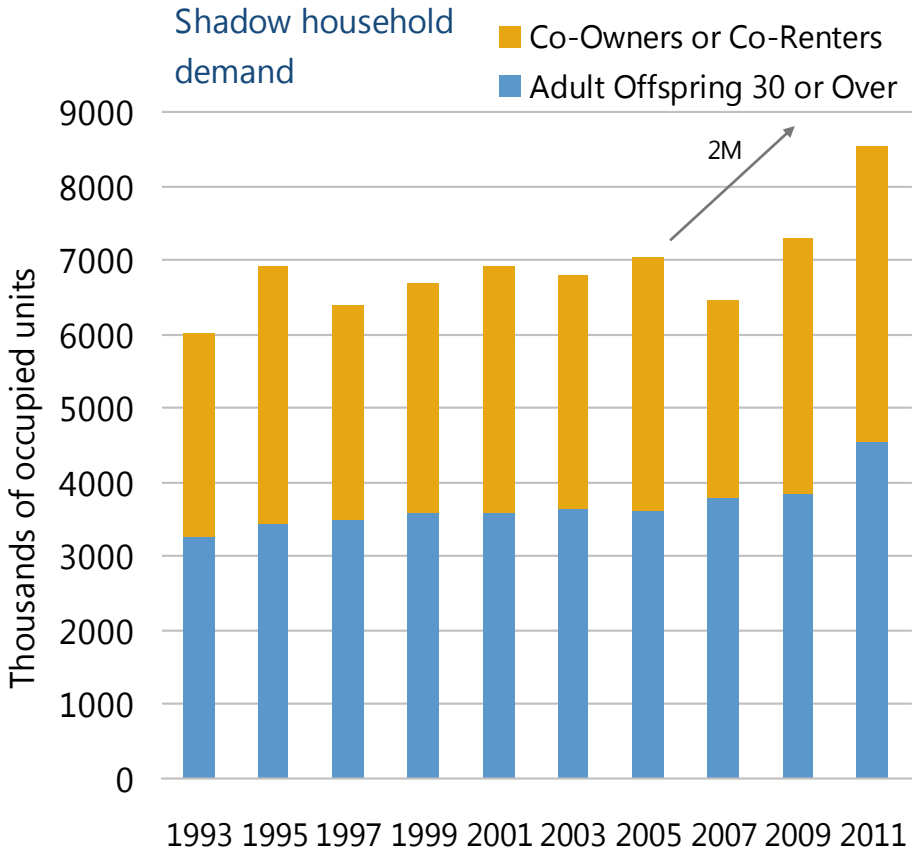
Housing: Fundamentals favor increased demand for shelter, including from "mama's boys"

- Household formation is reverting back to its pre-crisis level of 1.0M -1.5M per year



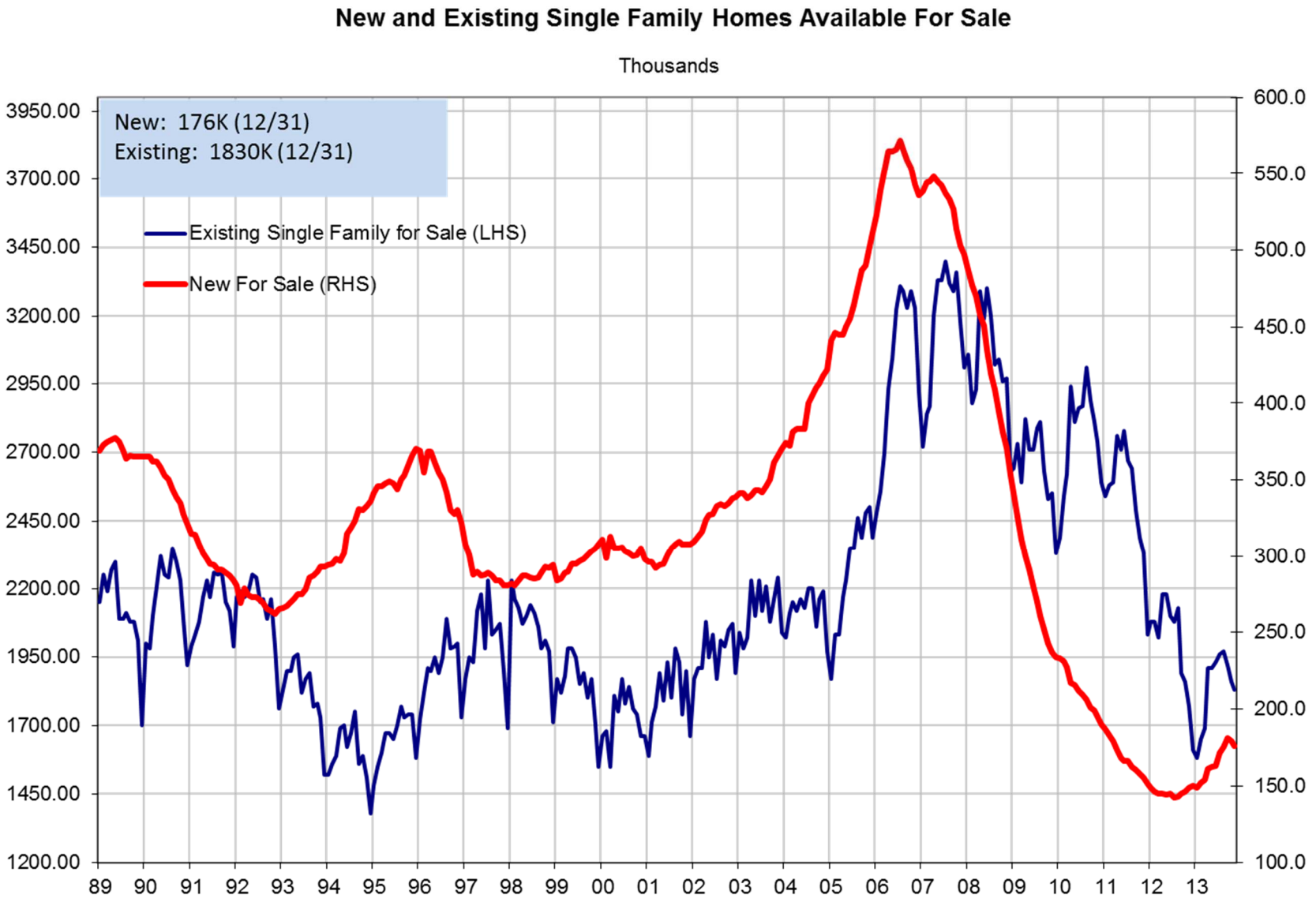
Source: Department of Commerce.

- The financial crisis created an additional 800k new households with adult offspring older than 30 years old living with parents, and 1.2M new co-owner or co-renter households



As of 31 December 2011
Source: Census, American Housing Survey

Housing supply has shrunk

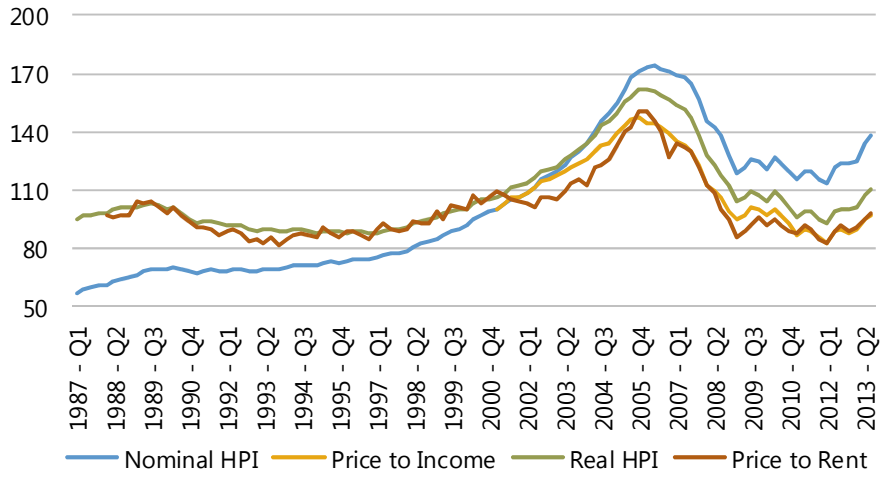


Source: BEA data, PIMCO Calculations

Housing scorecard

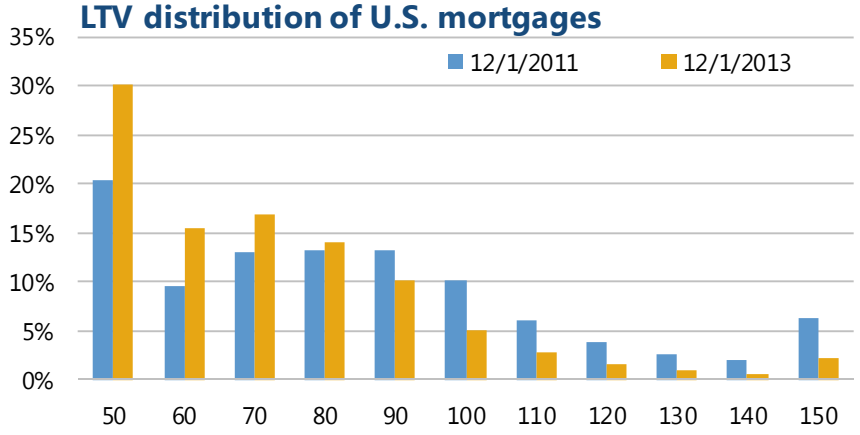
- **Home prices** still look attractive

Normalized Case-Shiller Quarterly HPI (2000=100)



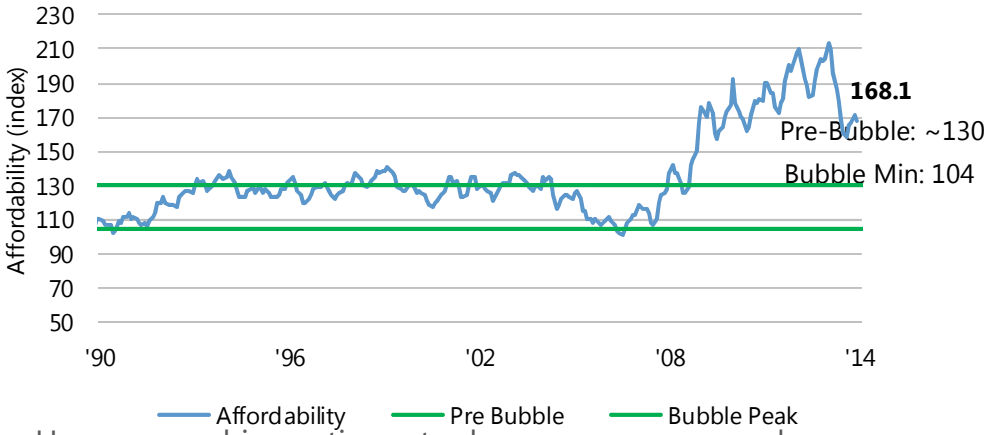
- **LTV distributions** of US mortgages improving

LTV distribution of U.S. mortgages



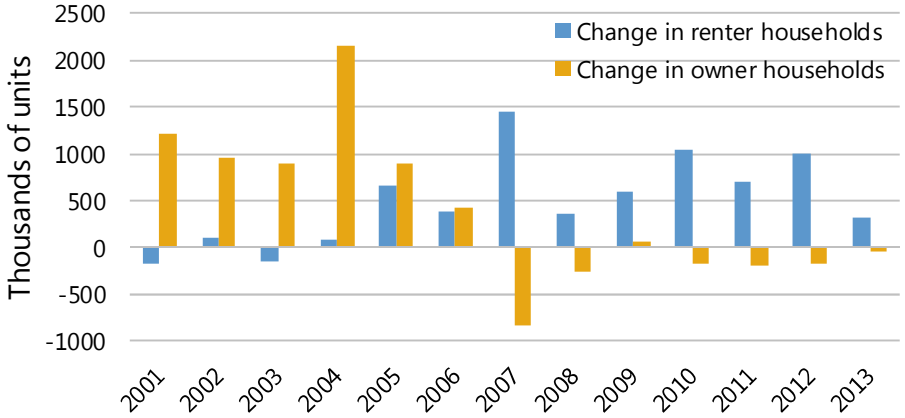
- **Affordability** index remains high

National Affordability Index



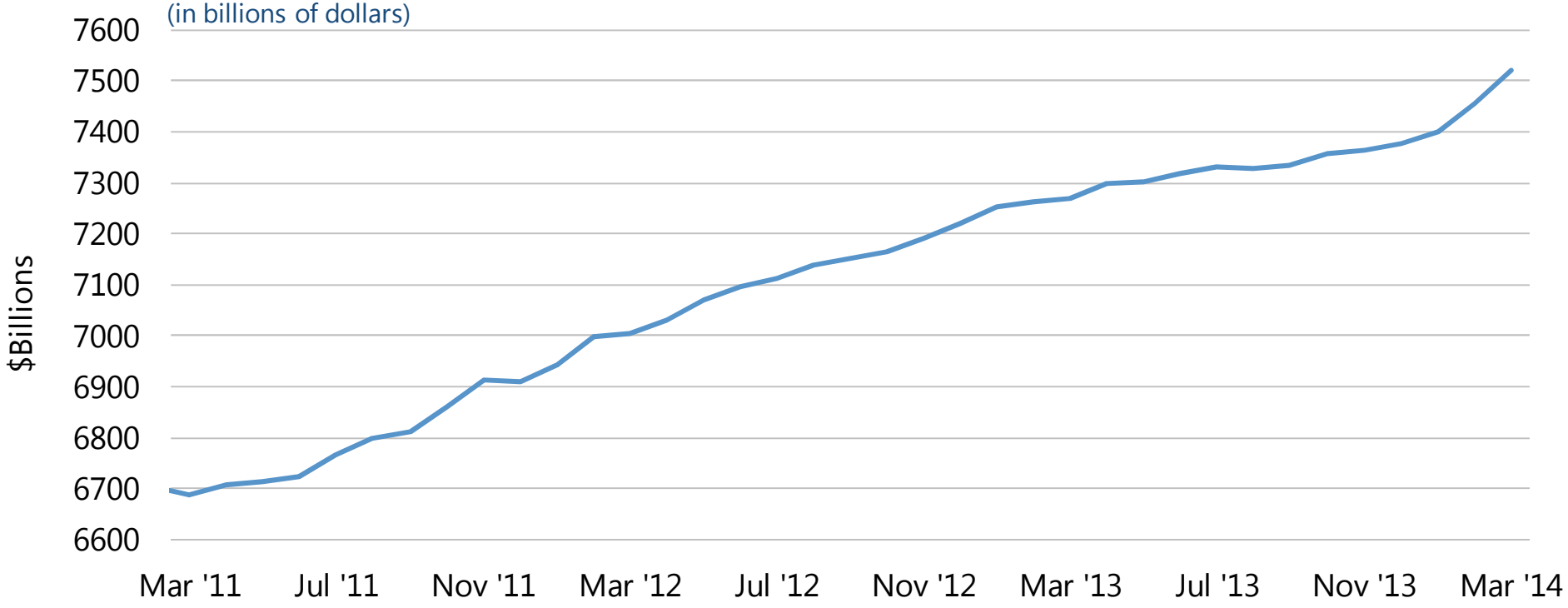
- Homeownership continues to decrease, as more newly-forming households are renters

Annual change in households by tenure



Banks are lending and the upward trend *may* be accelerating

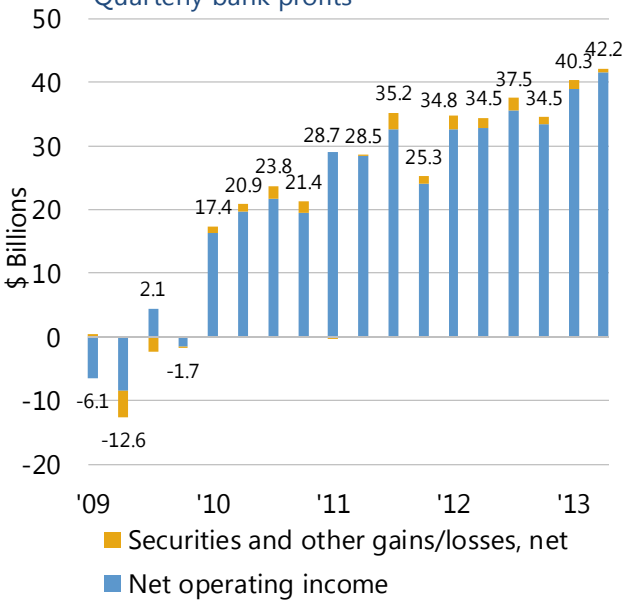
All Loans & Leases at U.S. Commercial Banks
(in billions of dollars)



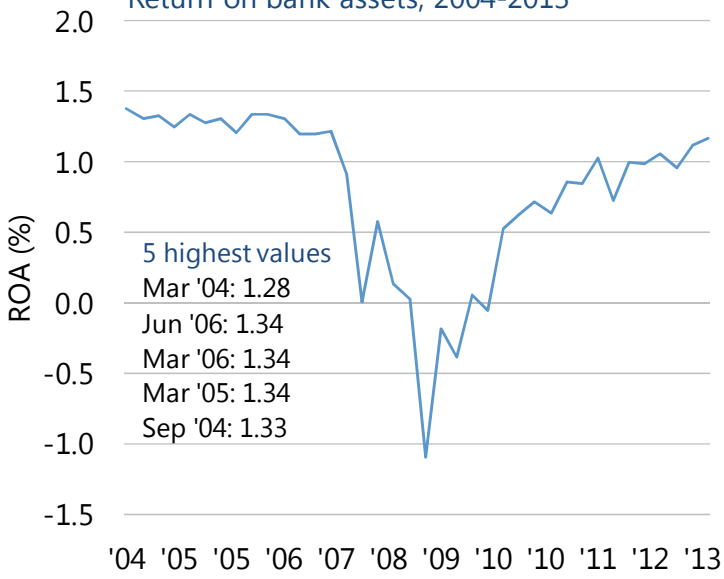
As of March 2014
SOURCE: Federal Reserve

Private-sector deleveraging has advanced

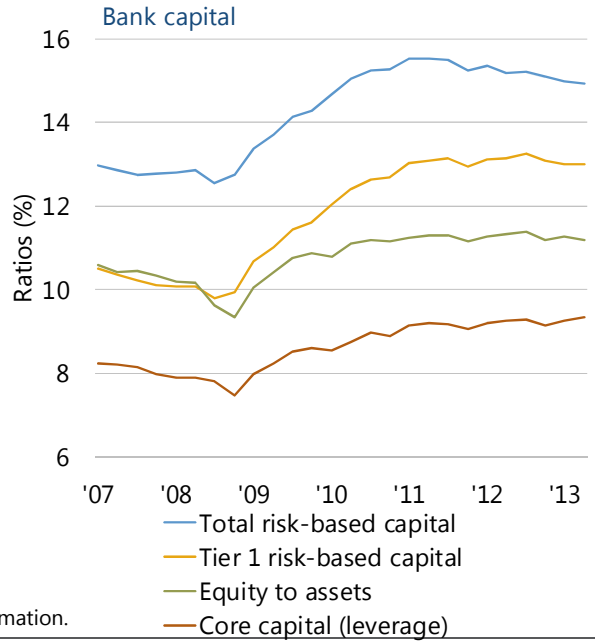
Quarterly bank profits



Return on bank assets, 2004-2013



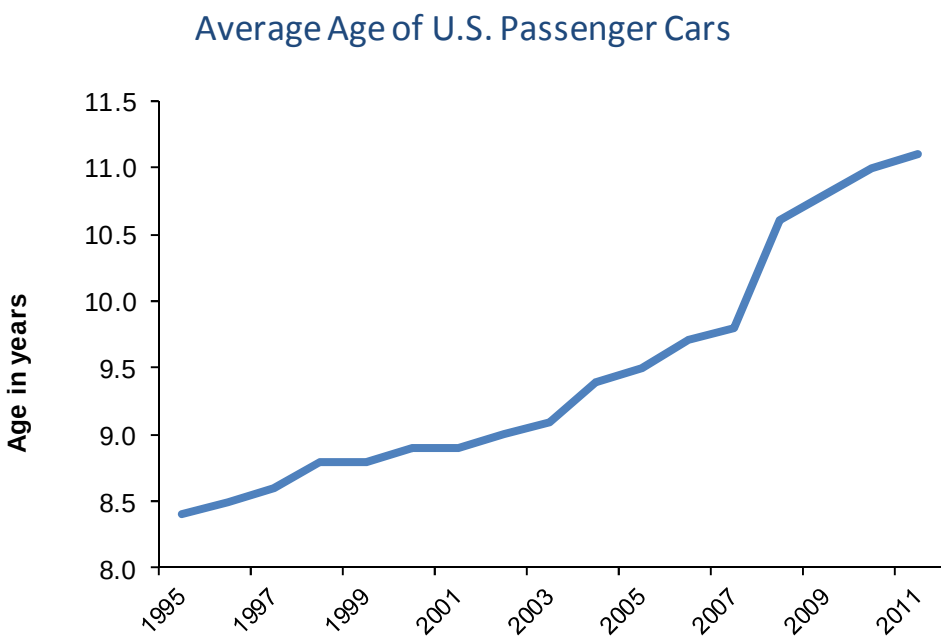
Bank capital



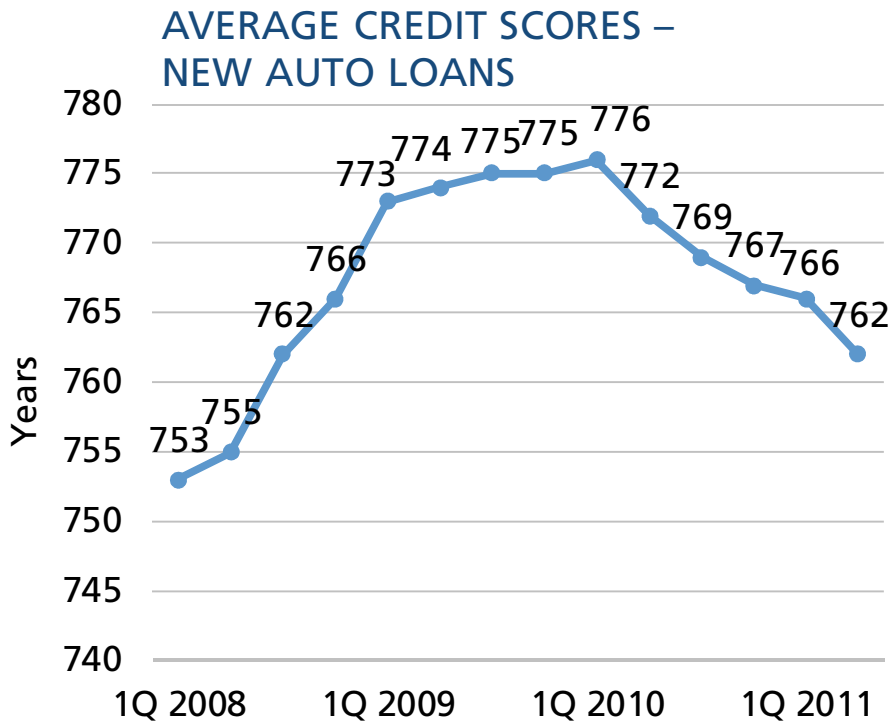
As of June 2013
SOURCE: FDIC Quarterly Banking Report
Refer to Appendix for additional outlook and risk information.

Time for a new car?

CARS ARE OLDER

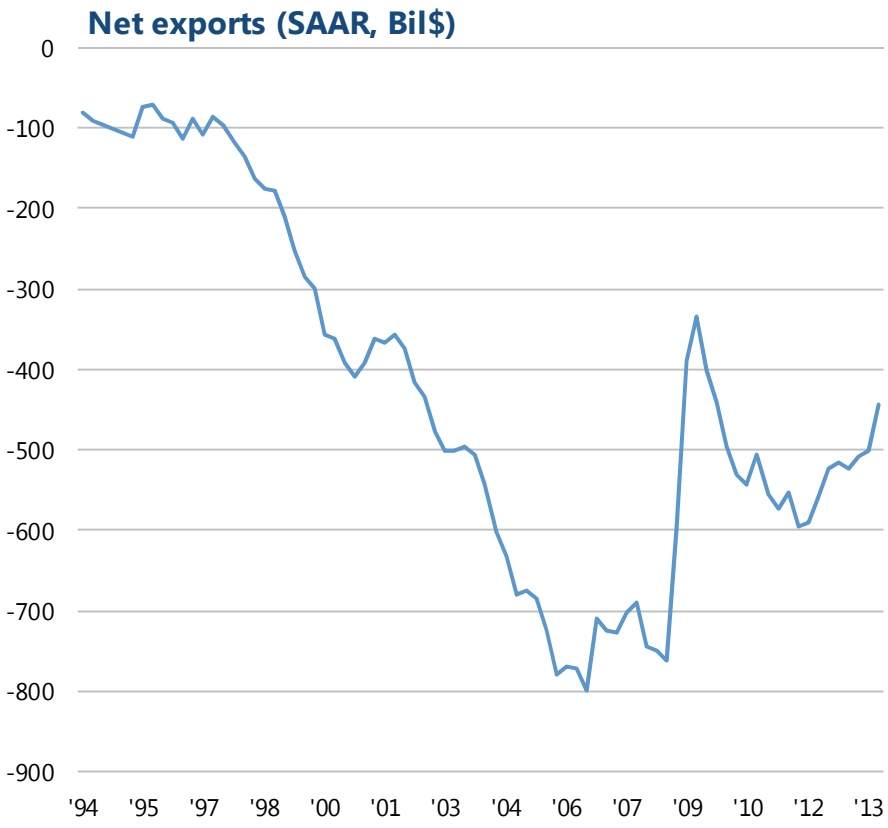


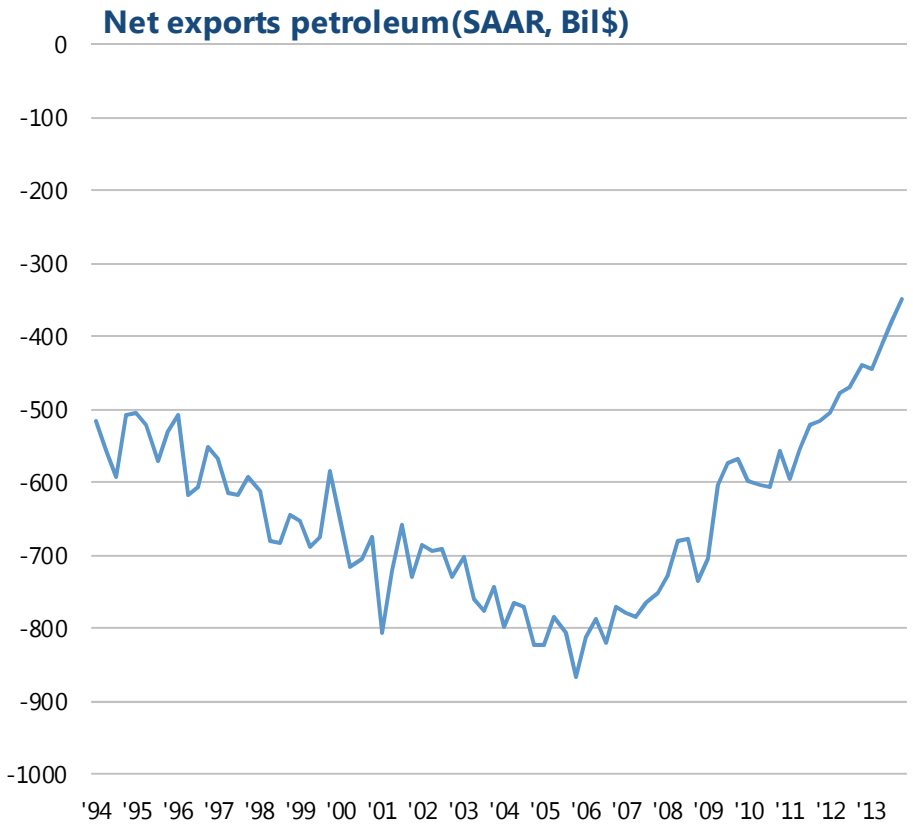
CREDIT CONDITIONS HAVE IMPROVED



As of 30 September 2012
SOURCE: R.L. Polk, Experian Automotive © Edmunds.com, Inc.

U.S. trade data are improving, contributing to GDP



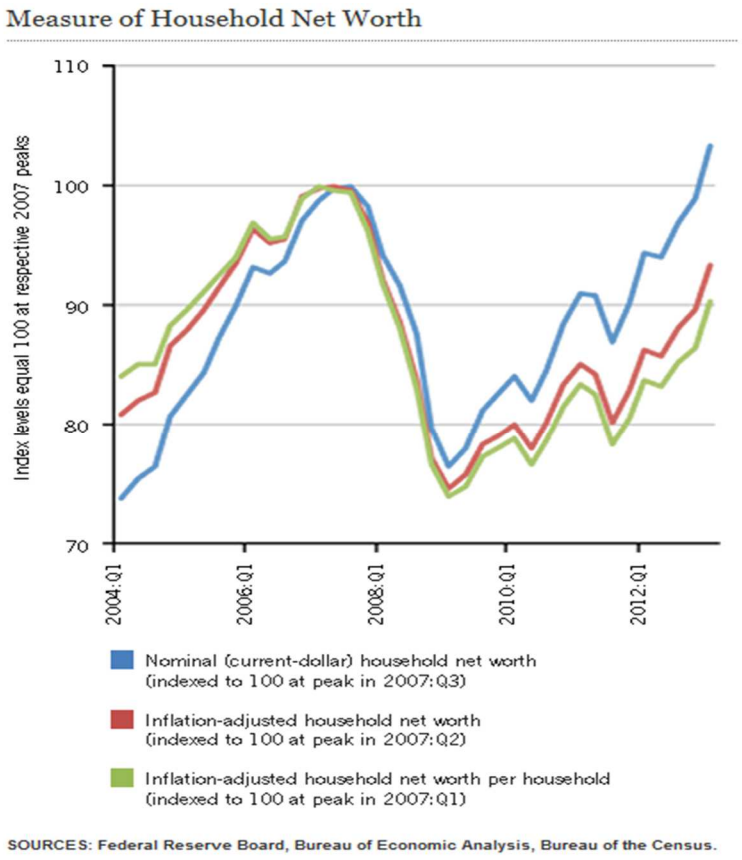


Headwinds to Economic Activity

Headwinds to U.S. growth

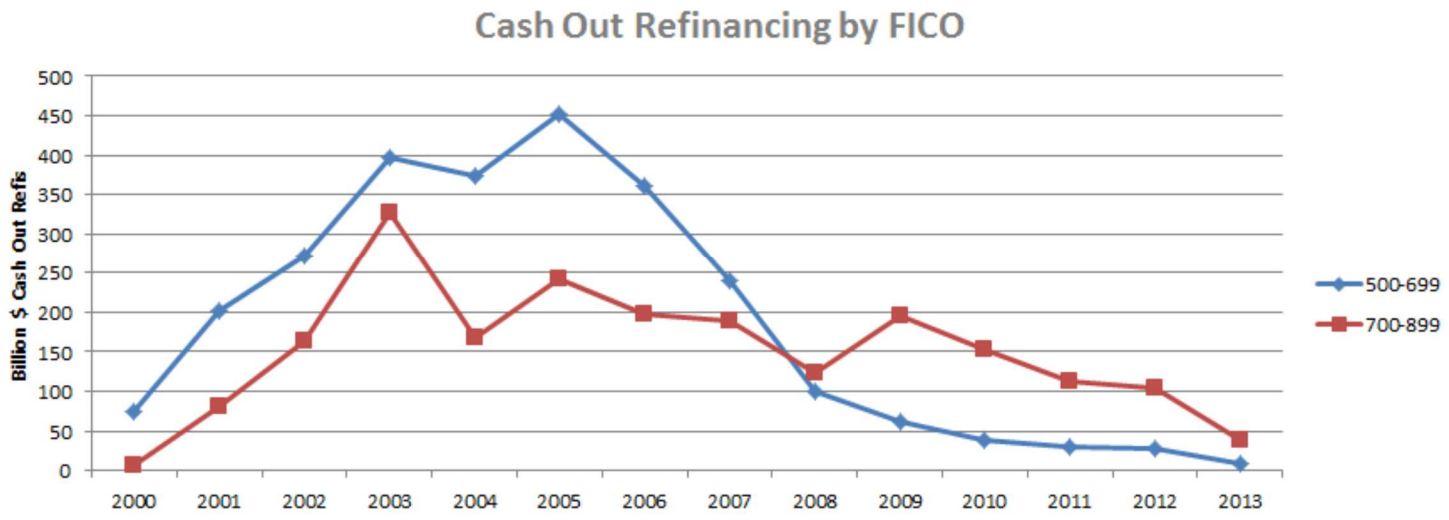
Household net worth has not fully recovered when considering population growth and inflation

WEALTH DESTRUCTION



Wealth effect reduced by lowered equity withdrawals

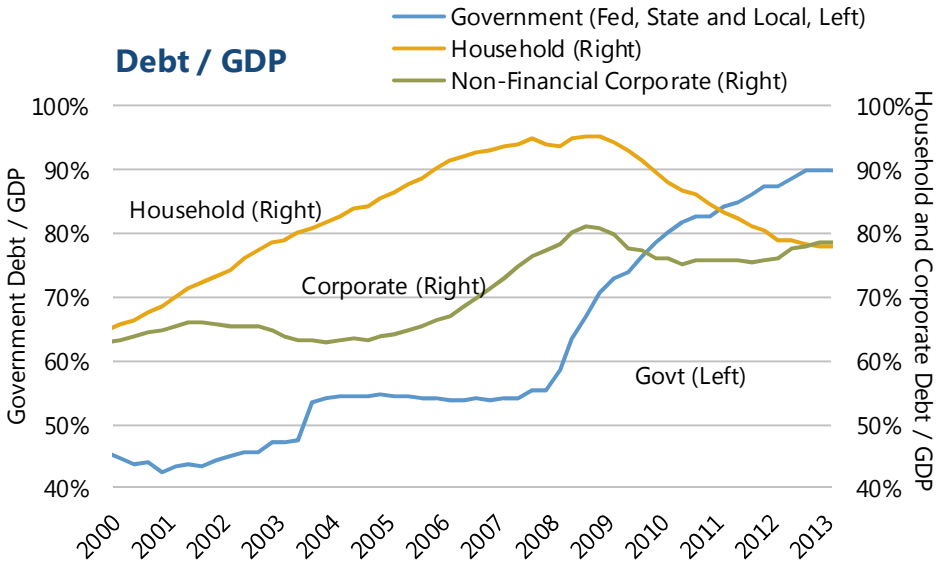
Cash-out refinancing is now primarily driven by high FICO borrowers, a group that may less likely to favor equity extraction

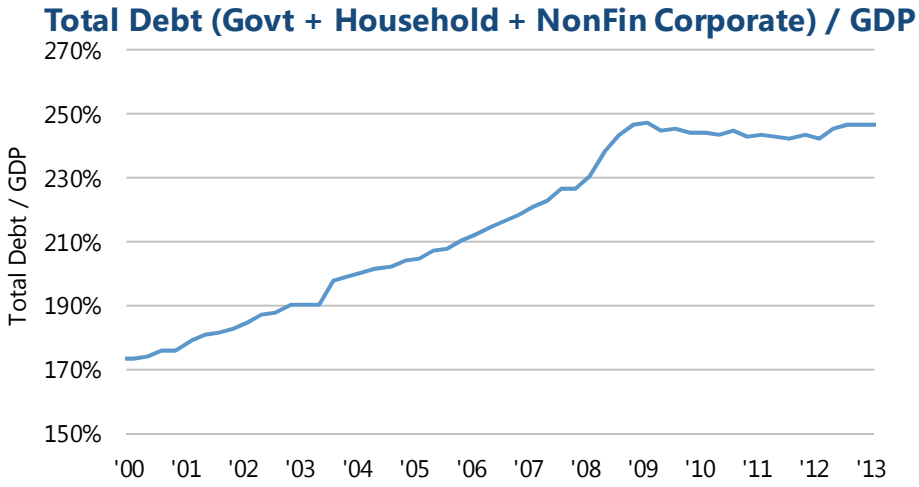


As of 31 Dec 2013
SOURCE: Mian, Rao, and Sufi (2013), CoreLogic, PIMCO

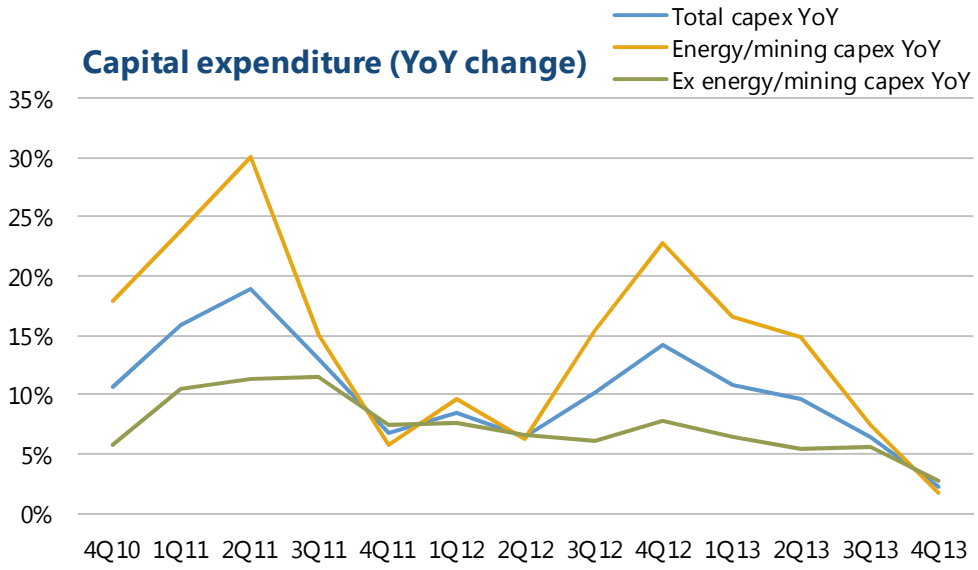
Household deleveraging has advanced, but the quality of the improvement is debatable, with it aided by government re-levering

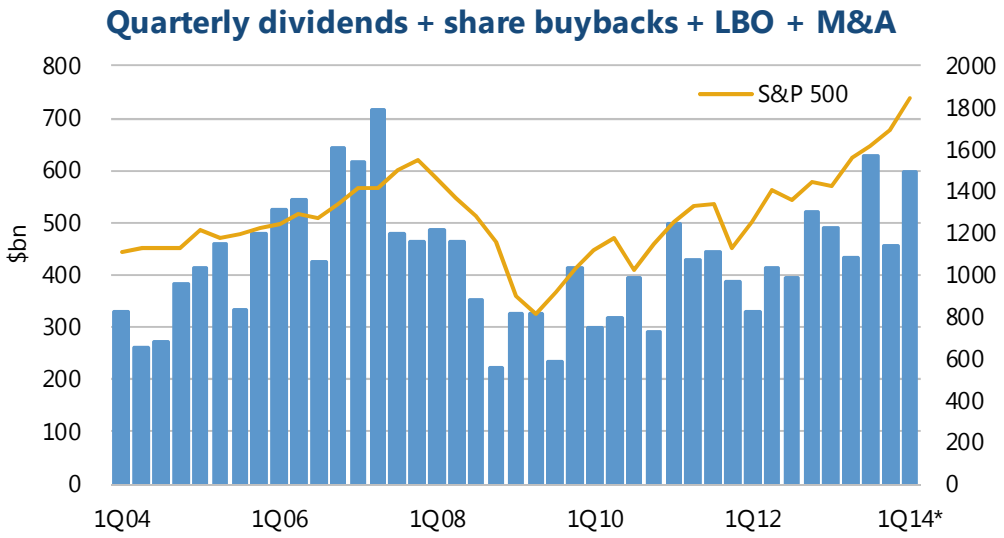
- Of the $1trn decline in nominal consumer debt, $1.2trn has come from defaults
- Net of defaults, consumers appear to have added net $200bn of debt
- While household leverage has decreased, overall U.S. indebtedness hasn't





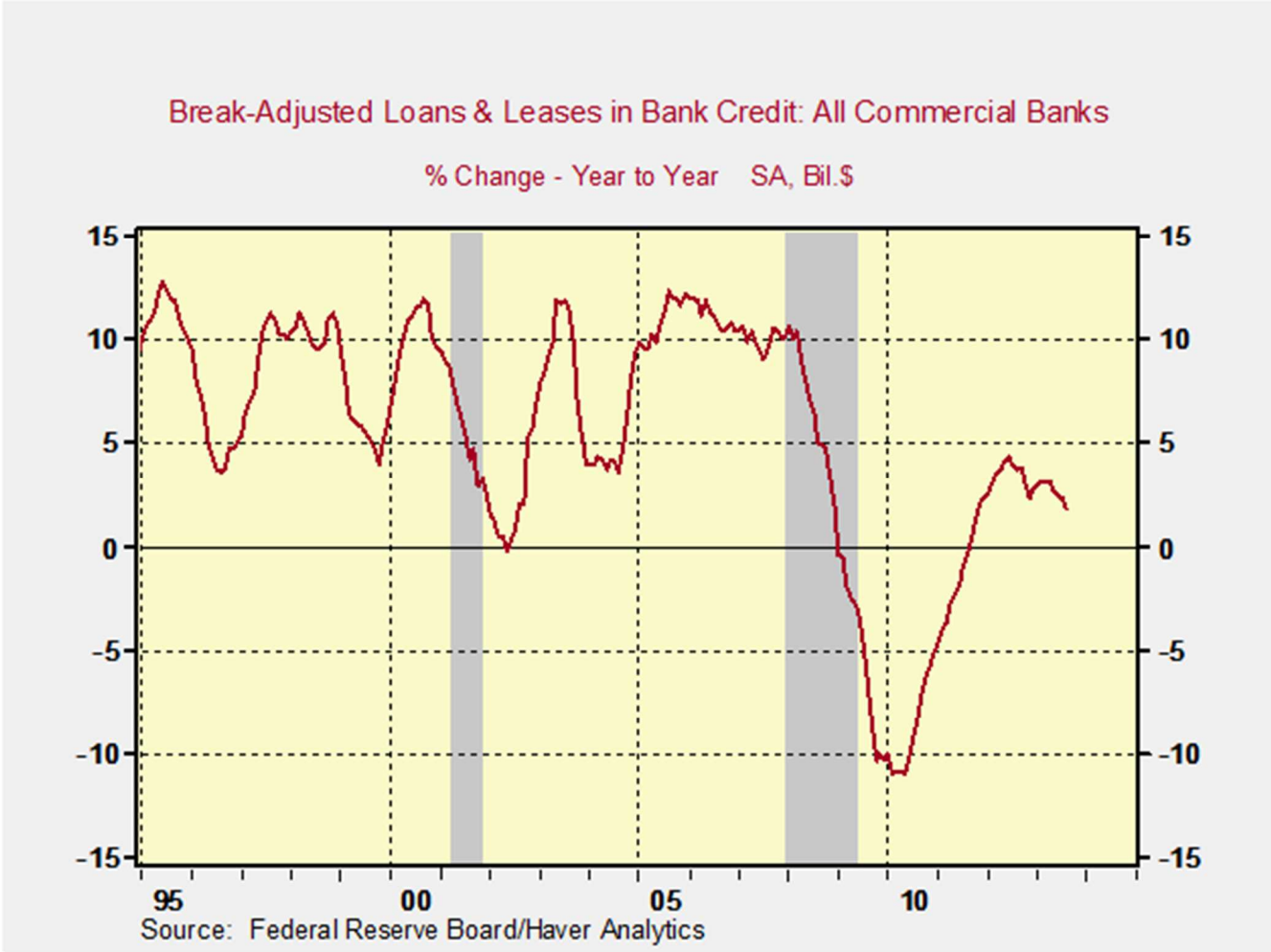
PIMCO's *bottom's up* analysis suggests 2014 CapEx growth of 2.9% versus consensus expectations of 7.6%



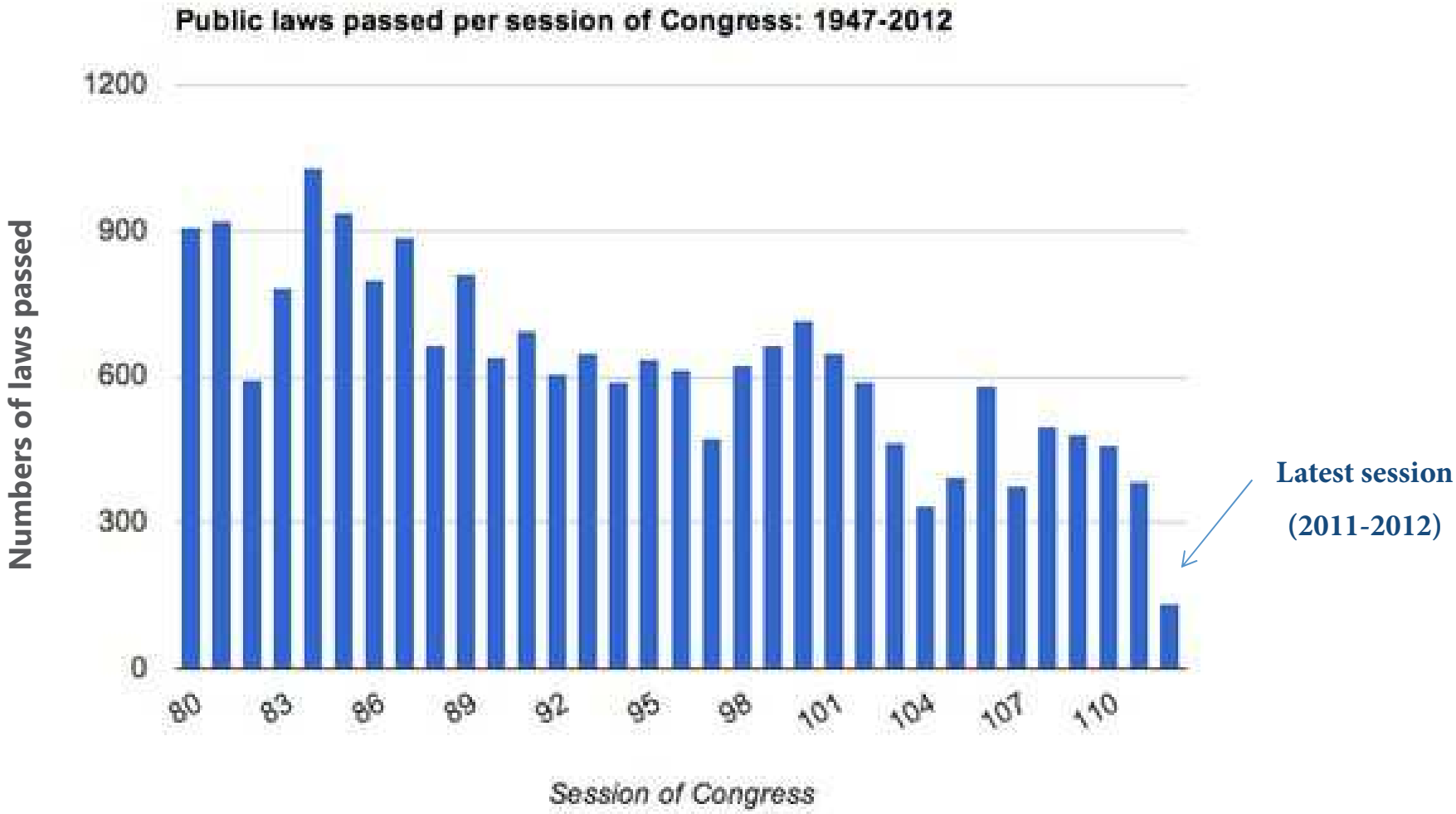


- CapEx growth has been primarily energy driven, which has plateaued
- Cash continues to be used on share buybacks – financial engineering

Credit growth – yes – but it is impaired



The Do-Nothing Congress



*Note: The 80th session of Congress was in 1947

SOURCE: Washington Post

The Outlook for Monetary Policy

The Fed projects its policy rate will remain well below neutral for some time

- *Despite* projecting full employment *and* inflation at its 2.0% target in 2016, the Fed projects its policy rate will be *below neutral* at the end of 2016
- Powerful influences are at play: Demographics and a new epoch for bank lending are two of them

Variable	Central tendency for the end of 2016, percent	Longer run, percent
Unemployment	5.2 to 5.6	5.2 to 5.6
Personal consumption expenditures inflation	1.7 to 2.0	2.0
Federal funds rate[1]	2.3	4.0

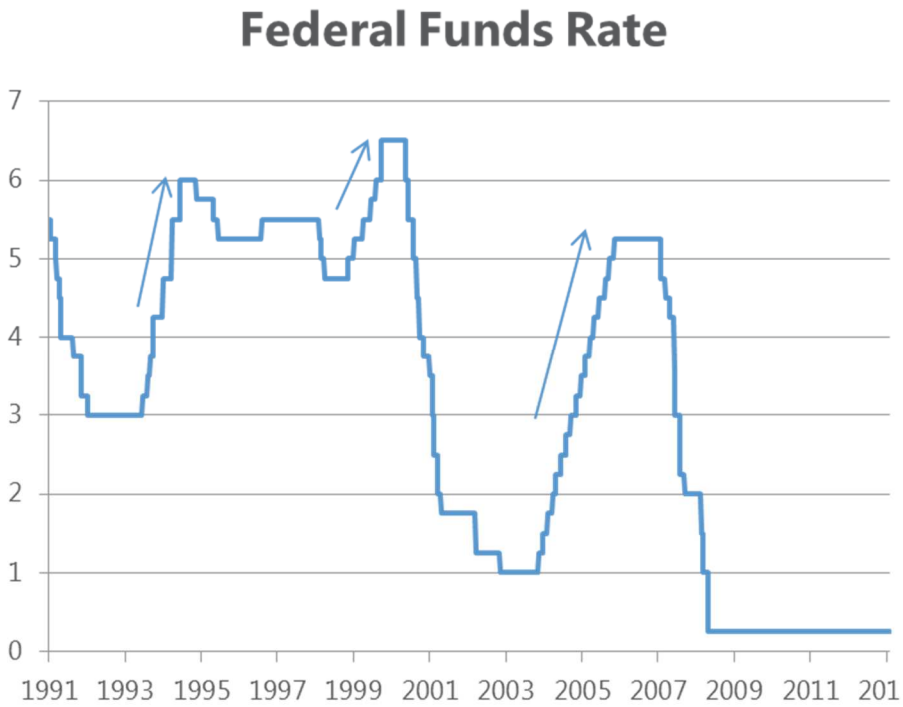
The Fed cites five reasons why the neutral level of its policy rate may have fallen[1]

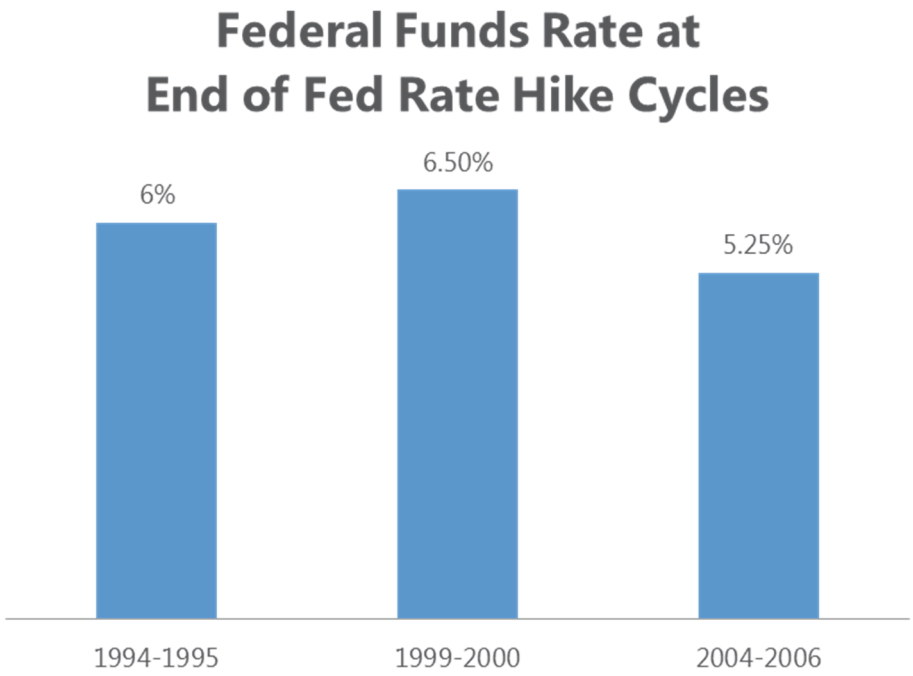
1. Higher precautionary savings by U.S. households
2. Higher global savings
3. Demographics
4. Slower growth in potential output
5. Restrained credit growth

[1] Source: Minutes to the March 19th meeting of the Federal Open Market Committee

It's a New Normalization – For Fed Policy

The Fed's projection for a 2.2% policy rate at the end of 2016 contrasts sharply with past rate hike cycles

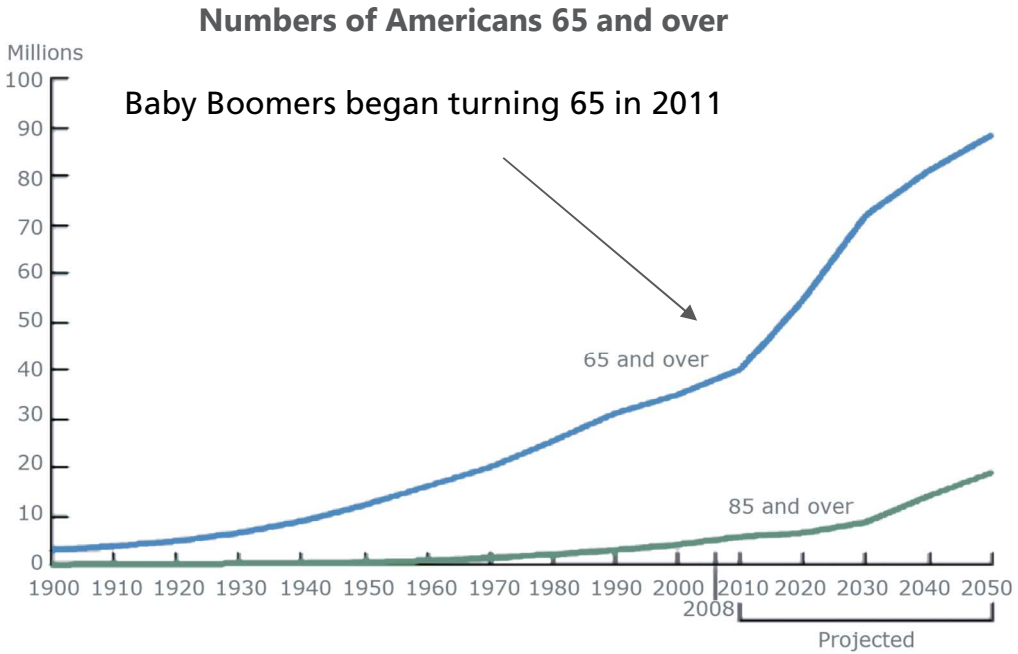


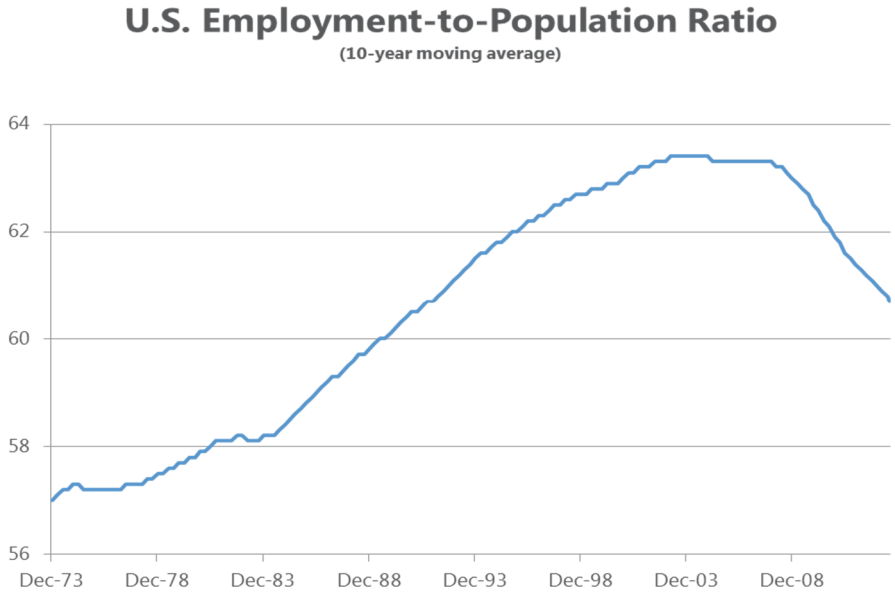


As of 20 September 2013
SOURCE: Bloomberg
Refer to Appendix for additional forecast and outlook information.

Interest Rate Outlook

The older people get, they more they tend to favor low volatility in their investments. The working-age population will also grow more slowly and reduce the economy's growth potential

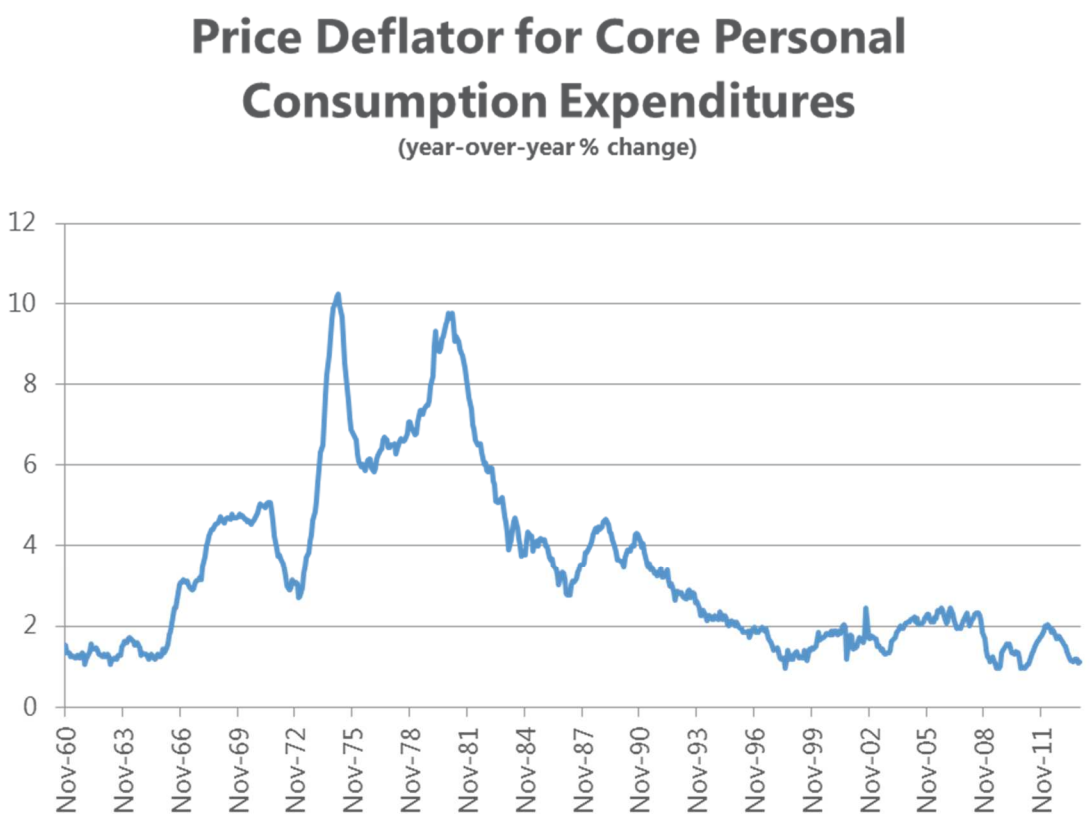




As of 31 December 2012
Source: U.S. Census Bureau, Decennial Census

Low inflation allows the Fed to be patient on rates

"The Committee now anticipates, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate well past the time that the unemployment rate declines below 6-1/2 percent, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal." FOMC Statement, December 18, 2013



Why the Fed is ending the implementation of its emergency policies

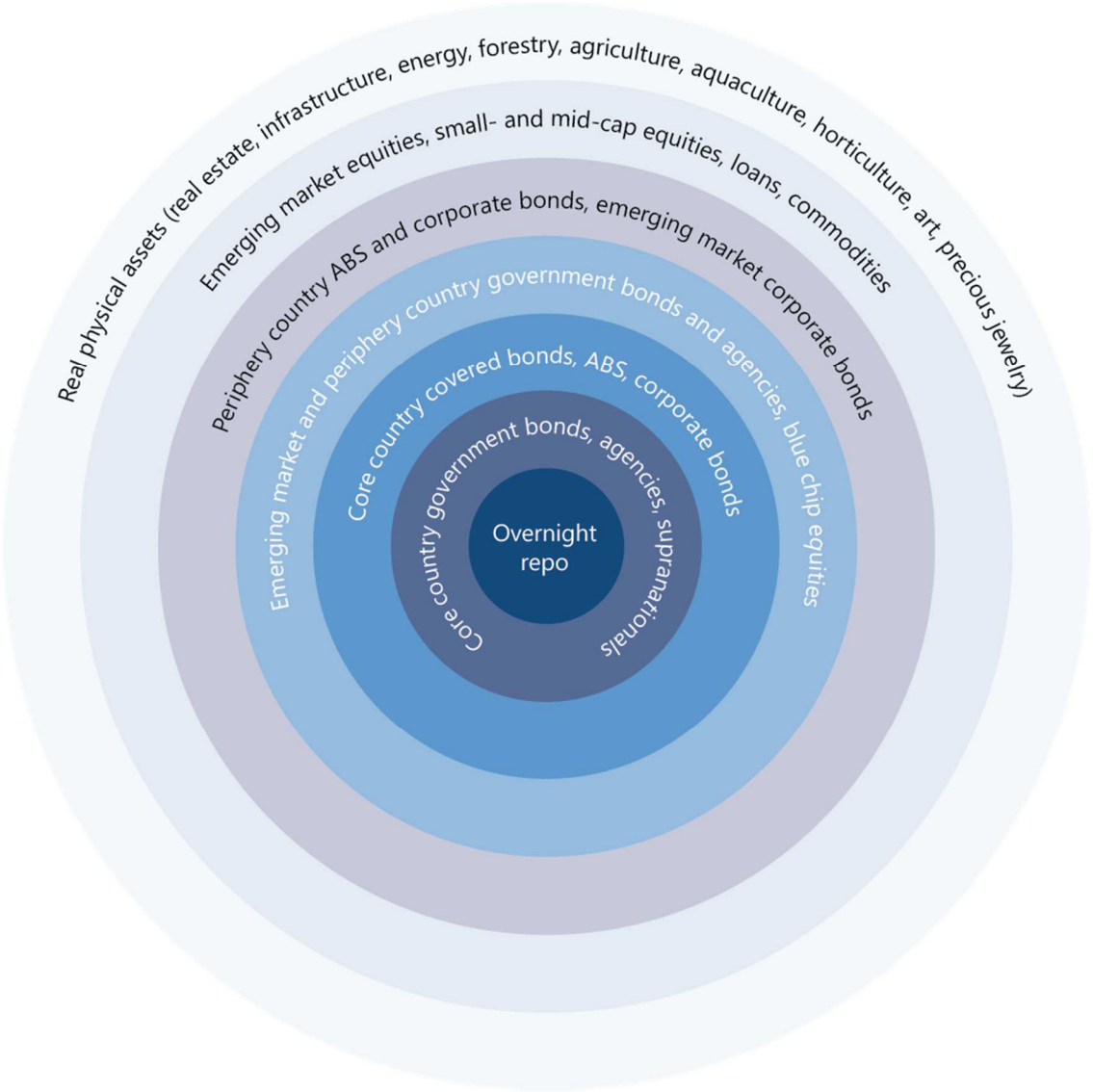
The Fed cites three risks in particular tied to QEIII

1. Remittances
2. Market functioning
3. Financial stability

It is the third risk that is leading the Fed to begin it exit from its extraordinary policy accommodation

First stage: End quantitative easing
Second stage: Increase its policy rate

Unconventional monetary policies compel investors to take risk



The Fed's hope:

Large scale asset purchases

↓

Lower bond yields/higher discount factors

↓

Higher net present value of cash flows

↓

Increased wealth

↓

Higher investment and consumption

The Fed's exit strategy

The Fed's exit strategy, as published by the Fed in June 2011[1]. The steps are:

1. Determine the timing and pace of policy normalization
2. Stop reinvesting some or all payments of principal on securities held in the SOMA
3. Modify the forward guidance and begin draining reserves
4. Raise the target for the federal funds rate. This then becomes the main means of adjusting monetary policy
5. Sell agency securities out of SOMA, with the timing and pace communicated to the public in advance
6. Once asset sales begin the pace of sales will be aimed at eliminating holdings of agencies in the SOMA over a 3-5 year period, in order to minimize the extent of market impact

[1]Source: Federal Reserve, minutes to its June 21-22, 2011 meeting

PIMCO's Outlook for U.S. Interest Rates

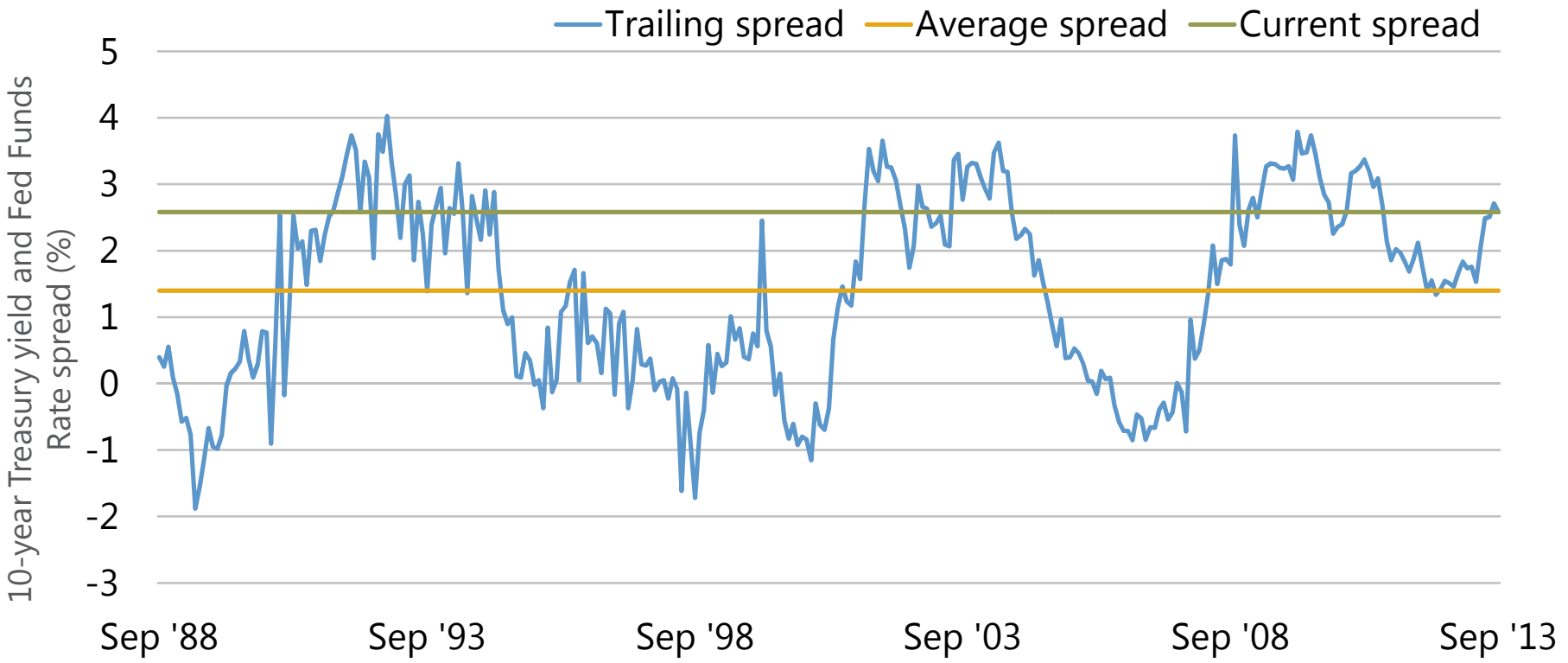
Interest Rate Outlook

PIMCO's assessment of fair value, yield range forecast, and fundamentals driving 10-year yields

4.0%	Ceiling based on 0% fed funds rate
-1.0%	Impact of Fed purchasing programs and forward guidance
-0.8%	Impact of potentially diminished GDP growth related to: • Demographic influences • Global debt dynamics • Economic and political uncertainty throughout the world
=2.2%	**Fair value. Yields are likely to fluctuate in a range between 2.5% to 3.0% until a clearer picture emerges on economic growth in 2014**

As of June 2013
SOURCE: PIMCO
Refer to Appendix for additional forecast information.

Yields historically anchored by fed funds rate



As of 30 September 2013
SOURCE: Bloomberg
Trailing and average spreads compared using month-end data

The shrinking pool of safe assets

Country	Year of First Rating	1970	1975	1980	1985	1990	1995	2000	2005	2010	2011	2012 (End-January)
Austria	1975	NR	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AA+
Belgium	1988	NR	NR	NR	NR	AA+	AA+	AA+	AA+	AA+	AA	AA
Canada	1949	AAA	AAA	AAA	AAA	AAA	AA+	AA+	AAA	AAA	AAA	AAA
Denmark	1981	NR	NR	NR	AA+	AA	AA+	AA+	AAA	AAA	AAA	AAA
Finland	1972	NR	AAA	AAA	AAA	AAA	AA-	AA+	AAA	AAA	AAA	AAA
France	1975	NR	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AA+
Germany	1983	NR	NR	NR	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Greece	1988	NR	NR	NR	NR	BBB-	BBB-	A-	A	BB+	CC	CC
Iceland	1989	NR	NR	NR	NR	A	A	A+	AA-	BBB-	BBB-	BBB-
Ireland	1988	NR	NR	NR	NR	AA-	AA	AA+	AAA	A	BBB+	BBB+
Italy	1988	NR	NR	NR	NR	AA+	AA	AA	AA-	A+	A	BBB+
Japan	1959	NR[1]	AAA	AAA	AAA	AAA	AAA	AAA	AA-	AA	AA-	AA-
Luxembourg	1994	NR	NR	NR	NR	NR	AAA	AAA	AAA	AAA	AAA	AAA
Netherlands	1988	NR	NR	NR	NR	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Norway	1958	NR[1]	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Portugal	1988	NR	NR	NR	NR	A	AA-	AA	AA-	A-	BBB-	BB
Spain	1988	NR	NR	NR	NR	AA	AA	AA+	AAA	AA	AA-	A
Sweden	1977	NR	NR	AAA	AAA	AAA	AA+	AA+	AAA	AAA	AAA	AAA
Switzerland	1988	NR	NR	NR	NR	AAA	AAA	AAA	AAA	AAA	AAA	AAA
Turkey	1992	NR	NR	NR	NR	NR	B+	B+	BB-	BB	BB	BB
United Kingdom	1978	NR	NR	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA
United States	1941	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AAA	AA+	AA+

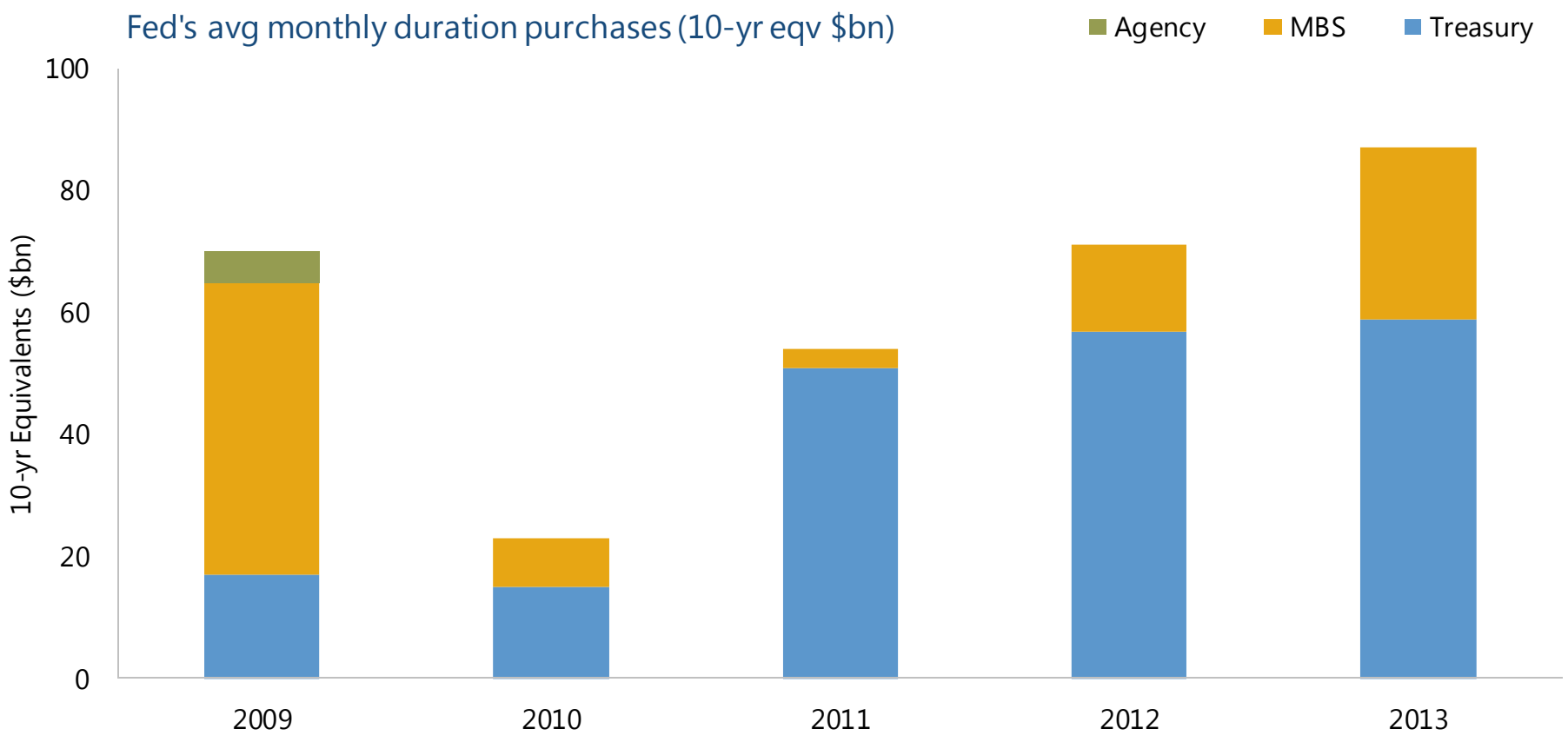
AAA
AA
A
BBB
Noninvestment grade

Sources: Standard & Poor's, and IMF staff estimates.

Note: The Organization for Economic Cooperation and Development (OECD) was established in 1961. Countries selected constituted the OECD membership in 1970. Ratings shown are S&P's long-term foreign currency ratings. NR = not rated.

[1]Sovereign rating suspended; see Bhatia (2002).

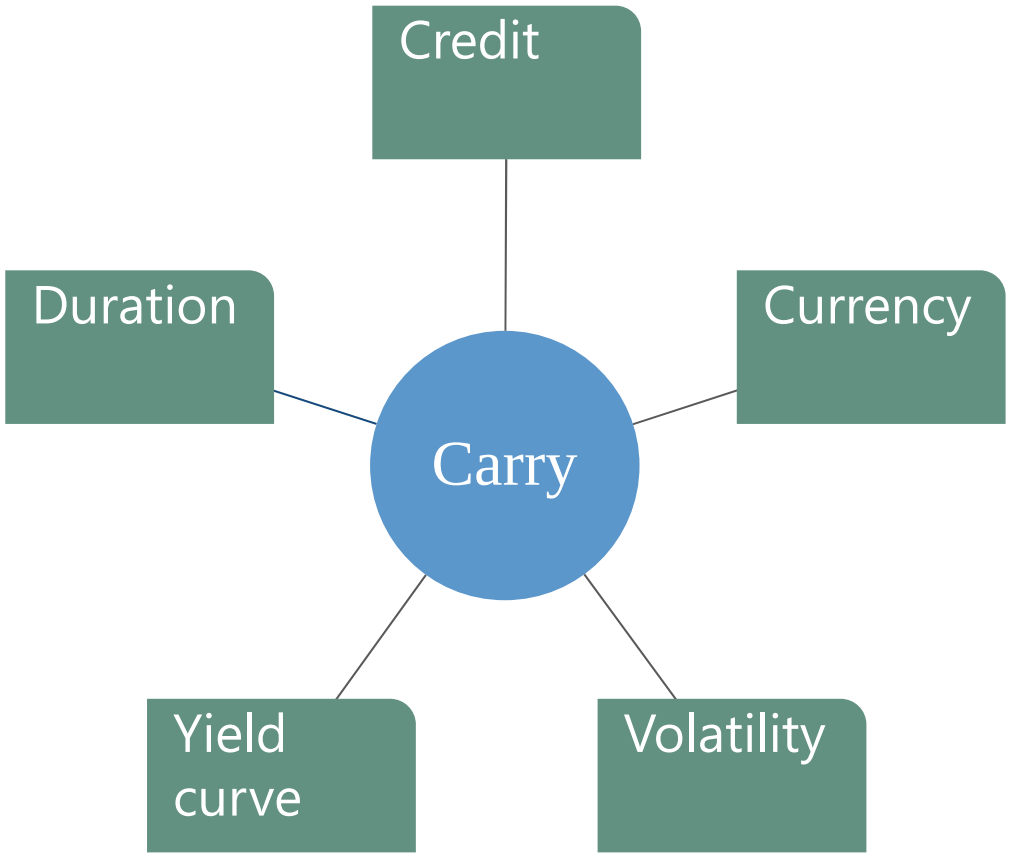
When the Fed's bond buying stops, who will absorb all of this bond duration?



As of 30 June 2013
SOURCE: Morgan Stanley
Duration is the measure of a bond's price sensitivity to interest rates and is expressed in years.

The Investment Outlook

Beyond duration: Diversified sources of carry



"This may be the most important conceptual change I have ever written about in an *Investment Outlook*."

– BILL GROSS

Carry is the rate of return earned by holding the respective securities.

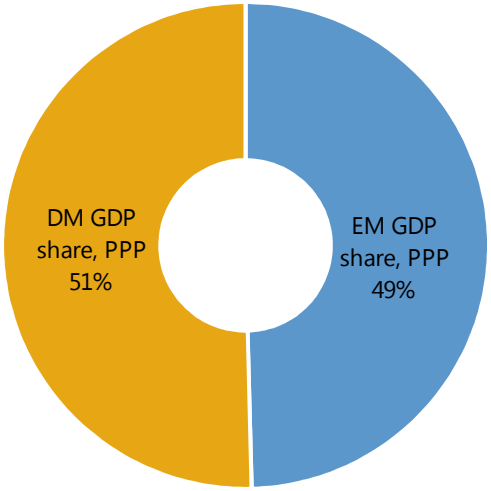
Investment strategy by risk factor

Risk Factor	Investment Strategy	Investment Rationale
Duration	**Underweight relative to bogey**. Diversify sources of duration into foreign markets and instruments relatively less interest rate sensitivity than U.S. Treasuries. Underweight mortgage DWE.	Market interest rates will likely continue the normalization that began almost two years ago until the Fed raises rates. Expect the trading range for the U.S. 10-year to shift from the recent 2.50% to 3.0%, to 2.75% to 3.25. For MBS, any stock effect (apparent of late) will be overwhelmed at some point by a flow effect. Rate hikes will also mean end to reinvestment of principal payments by Fed.
Curve	**Reduce U.S. curve strategies having dependency on stable short rates**, and shift some front-end duration to Europe..	The yield curve will remain steep for some time. Nevertheless, with rate hikes likely by the end of 2015, short-term rates may become more volatile. The Fed's vigilance on inflation risks and secular restraints to nominal GDP growth will limit movement in long rates.
Volatility	**Reduce theta sales and diversify away from interest rate strategies toward credit and FX**	Nine months of stable rates has lowered implied volatility to unusually low levels ahead of a period when realized volatility seems likely to increase as a result of accelerating growth and steady reduction in monetary accommodation. Yet rate volatility ultimately will be limited by longer-term influences, so lean against sharp volatility increases.
Credit	**Overweight** by choosing non-agency mortgages, sovereign, and corporate credit relative to bogeys. Favor shorter maturities.	Accelerating economic growth and steady increases in bank lending will support aggregate demand, cash flow, and asset prices. Stay up in credit quality and favor shorter maturities, because the Fed's liquidity window is slowly closing.
FX	**Favor USD, short JPY. Neutral on the Euro** except against JPY. Tactically add to positions in EM local bonds, being mindful of scaling and timing.	The U.S. deleveraging cycle is further along than other developed markets and U.S. growth rate is relatively strong. Moreover, the world of safe assets has shrunk materially since 2007, a benefit to dollar-based assets.

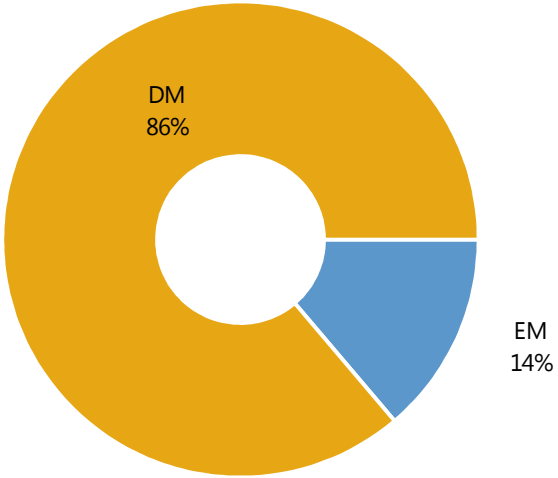
Emerging Markets: Secular flows likely persist to address chronic underweights

- EM provides almost half of world output…
- …and is increasing as a portion of the global debt supply…
- ….and yet investors remain significantly underweight

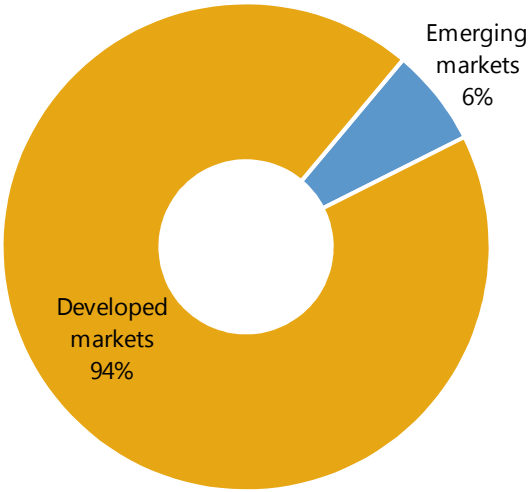
2012 share of global GDP per capita (PPP adjusted)*



Total amount of EM debt outstanding compared to world debt (USD, billions)**



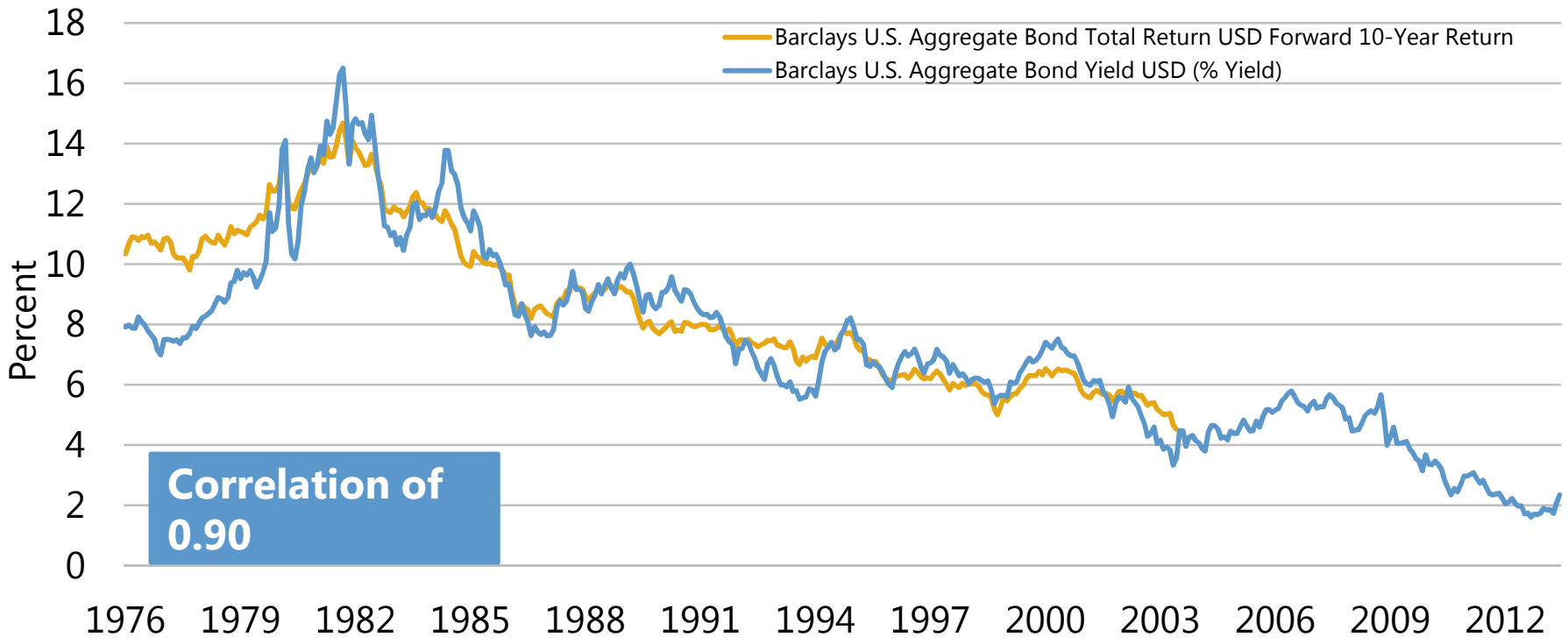
Regional distribution of bond mutual fund investments



As of 31 December 2013
* As of 8 October 2013
** As of 30 June 2013
SOURCE: EPFR, NCSE, BIS, BofA Merrill Lynch, International Monetary Fund (IMF) calculations, World Economic Outlook (WEO) October 2013
Refer to Appendix for additional outlook information.

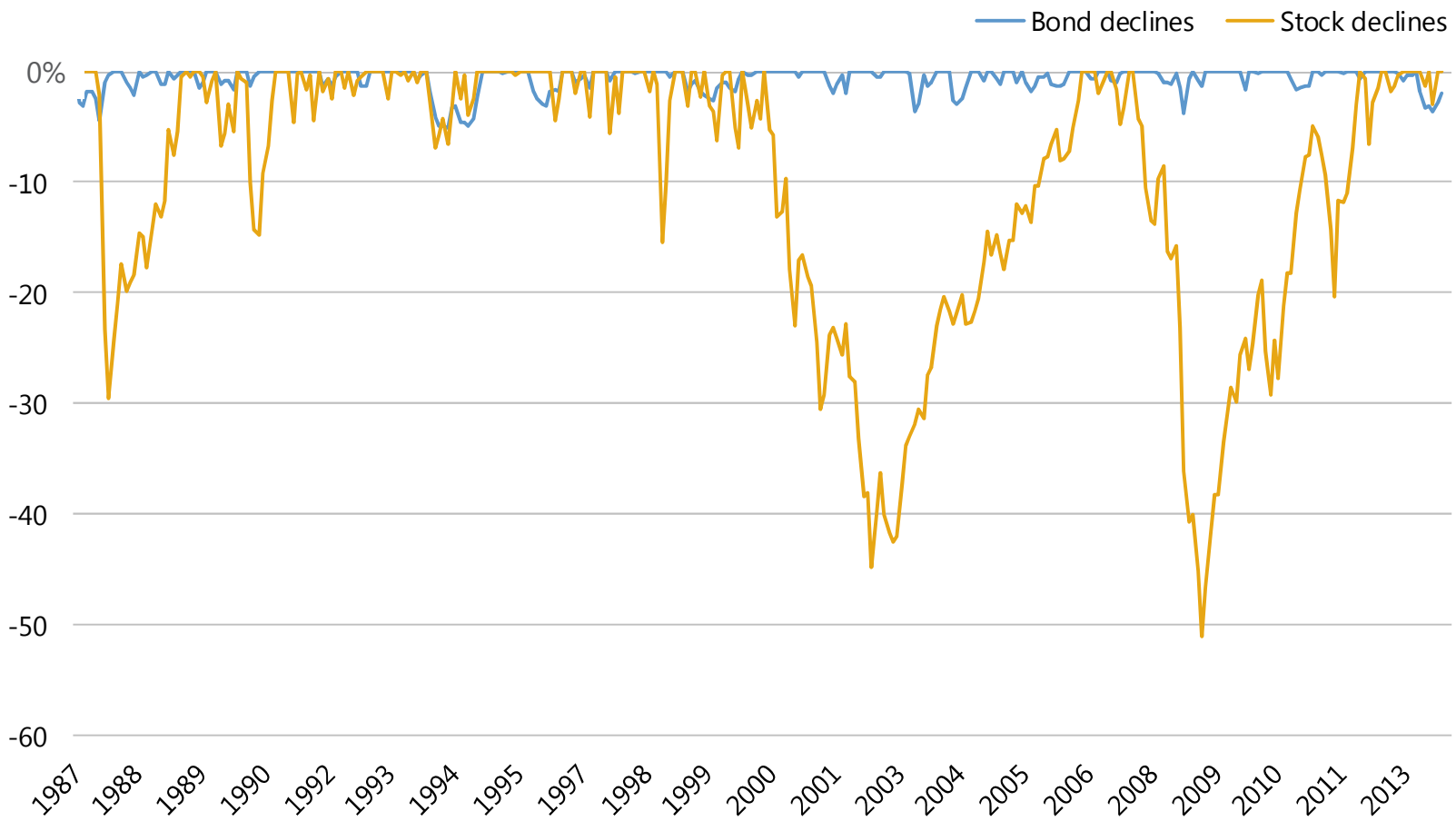
Starting yield drives returns …

Last 30-year annualized return for core U.S. bonds*: 7.8%



As of 30 June 2013
SOURCE: Ibbotson and Barclays
* Barclays U.S. Aggregate Bond Index
Refer to Appendix for additional correlation, index and risk information.

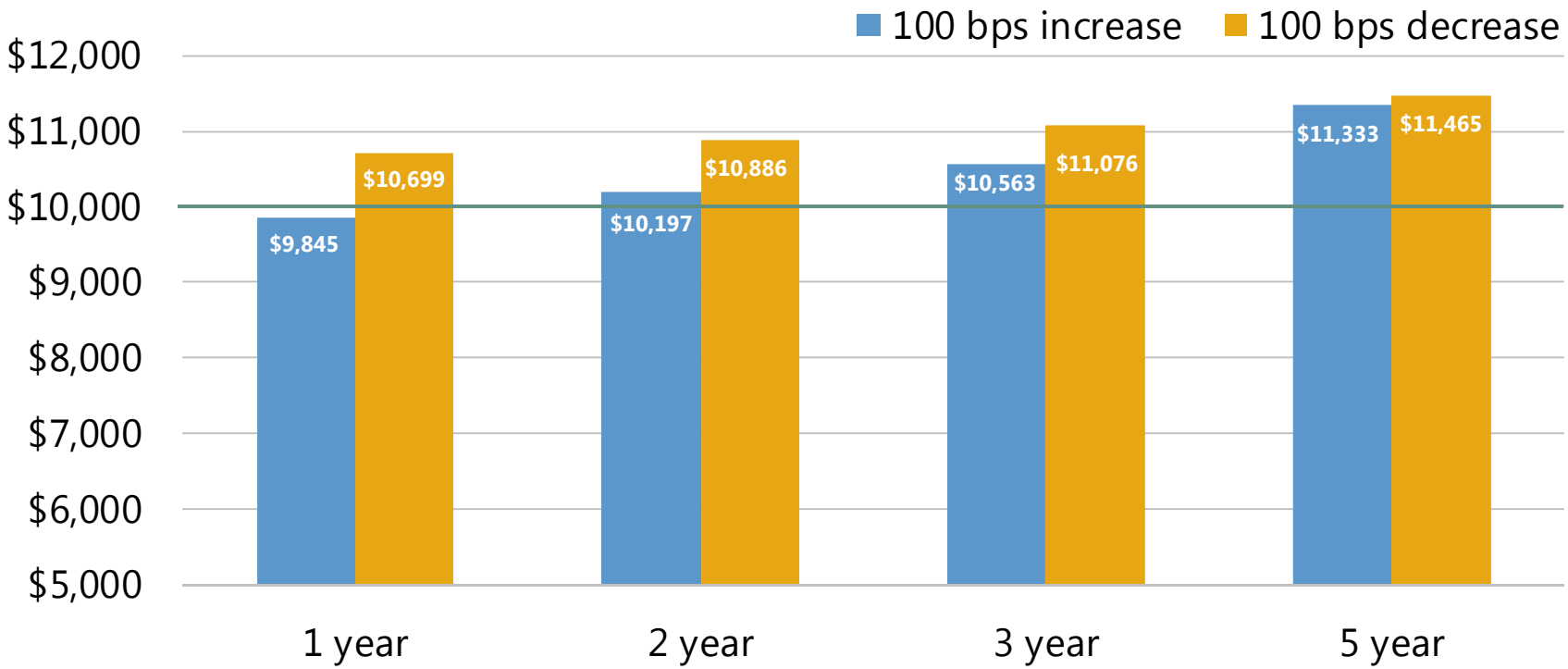
Bond market declines have been small and short-lived compared to stock market declines



SOURCE: Zephyr
Chart shows U.S. stocks and bond declines beginning March 1987 and ending December 2013.
Stocks represented by S&P 500, bonds represented by Barclays U.S. Aggregate Index.

Shocks can be painful, but bond investors gain over time

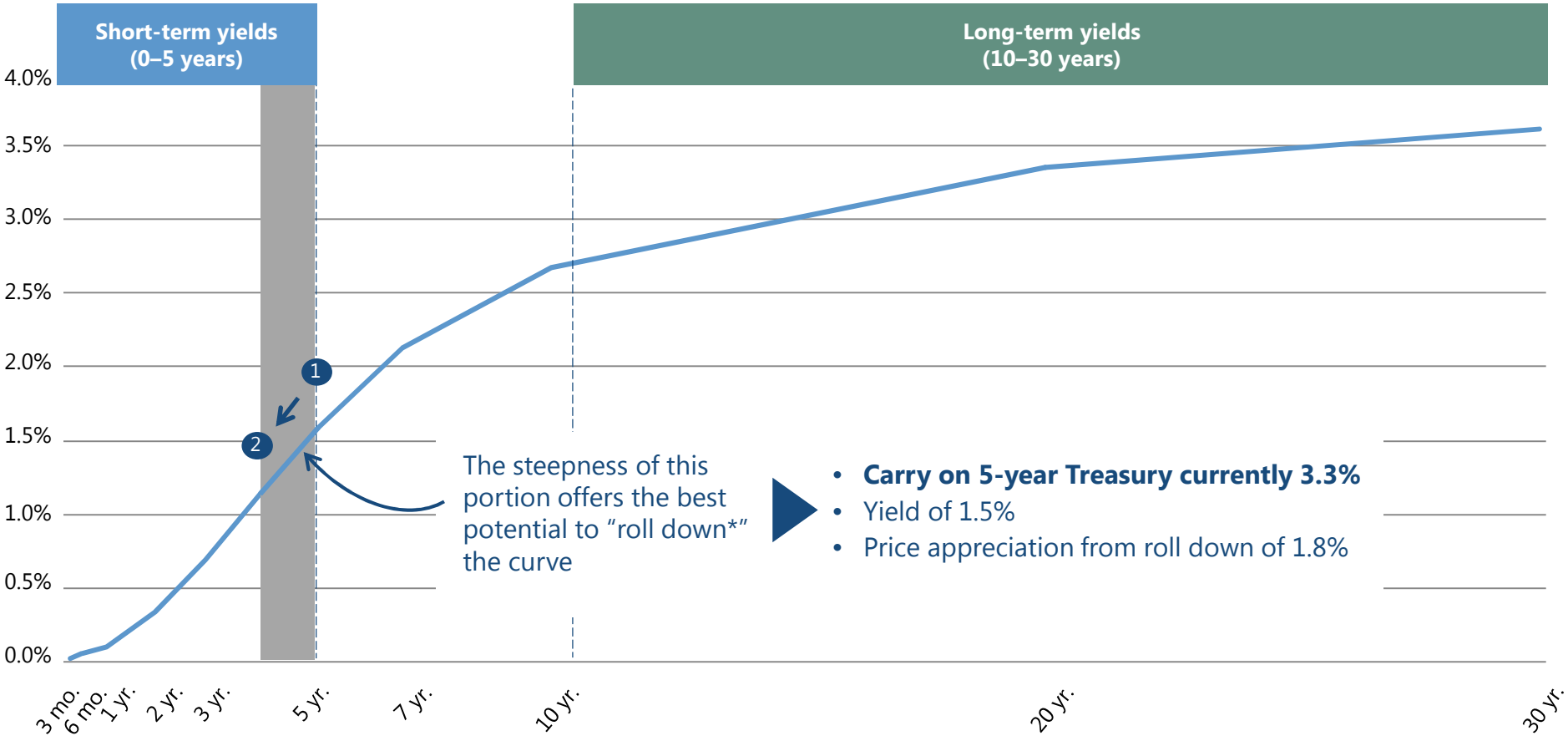
Growth of $10,000 in various interest rate scenarios



Hypothetical example for illustrative purposes only. Growth scenario assumes a $10,000 investment in the Barclays U.S. Aggregate Bond Index.
It is not possible to invest directly in an index. Past performance does not guarantee or indicate future results.
SOURCE: Barclays, PIMCO
As of 30 September 2013
Refer to Appendix for additional index and hypothetical example information.

Rolling down the yield curve

U.S. Treasury yields as of 31 January 14



SOURCE: treasury.gov, as of 31 January 2014

* Roll down is a form of return that is realized as a bond approaches maturity, assuming an upward sloping yield curve.
Roll down calculation assumes no change in curve.
Roll down calculation: yield of 5 yr.=1.5%; yield of 4 yr.=1.1%; price appreciation 1 yr. from today =1.8%; total return for 1 yr. (1.5%+1.8%)=3.3%
Past performance is no guarantee of future results. Charts are provided for illustrative purposes only and are not indicative of the past or future performance of any PIMCO product.
Refer to Appendix for additional investment strategy and risk information.

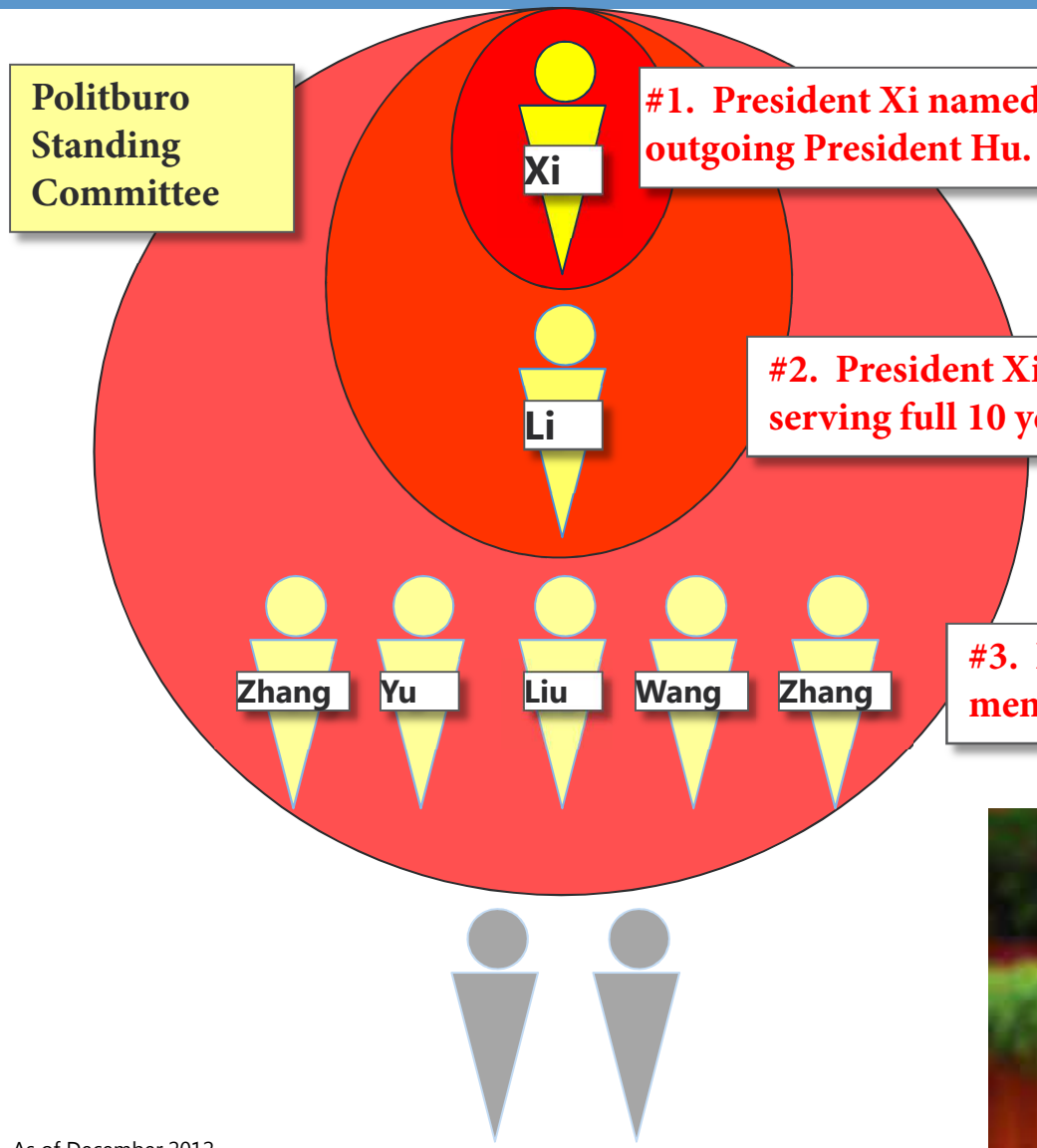
Overview of expectations for China, Japan, and Europe

China's growth rate is strong but slowing

A new model of growth is emerging and it is necessary for China to avoid the "**middle-income trap**"

As of 31 March 2014
SOURCE: China National Bureau of Statistics

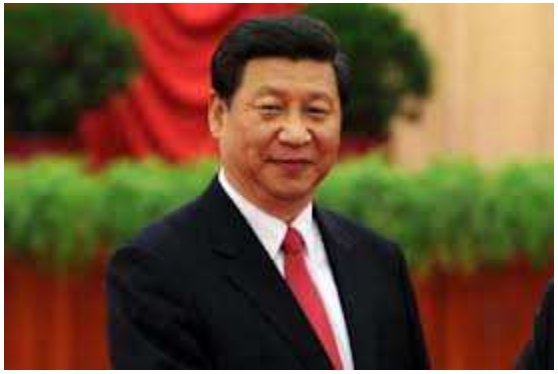
China's transition from an export-oriented economy is on a grand scale. President Xi is very focused on this effort.



#1. President Xi named military commander-in-chief vs. outgoing President Hu.

#2. President Xi & Premier Li poised to be only members serving full 10 year term.

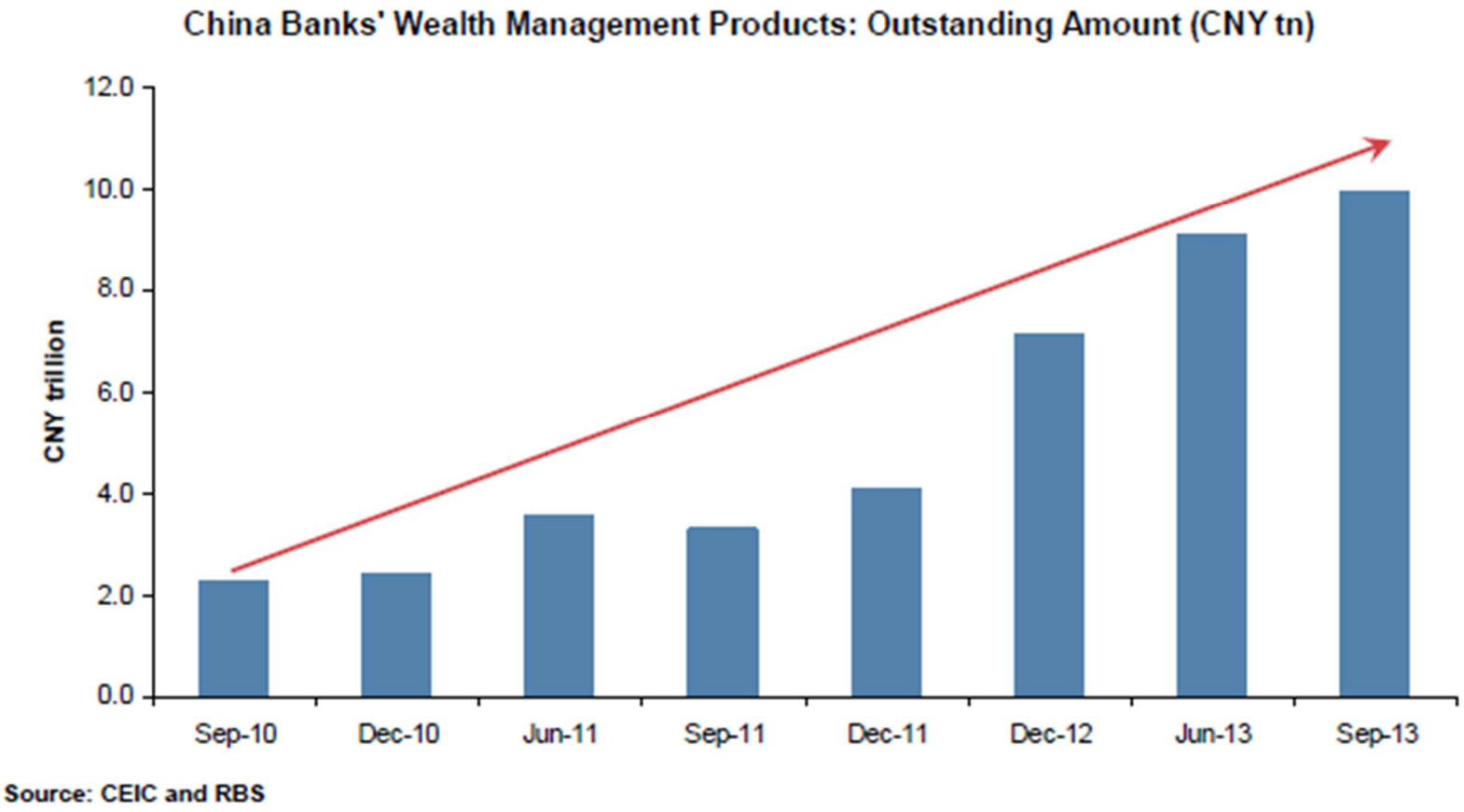
#3. Politburo Standing Committee reduced from 9 to 7 members.



President Xi

As of December 2012
SOURCE: Recent announcements by China

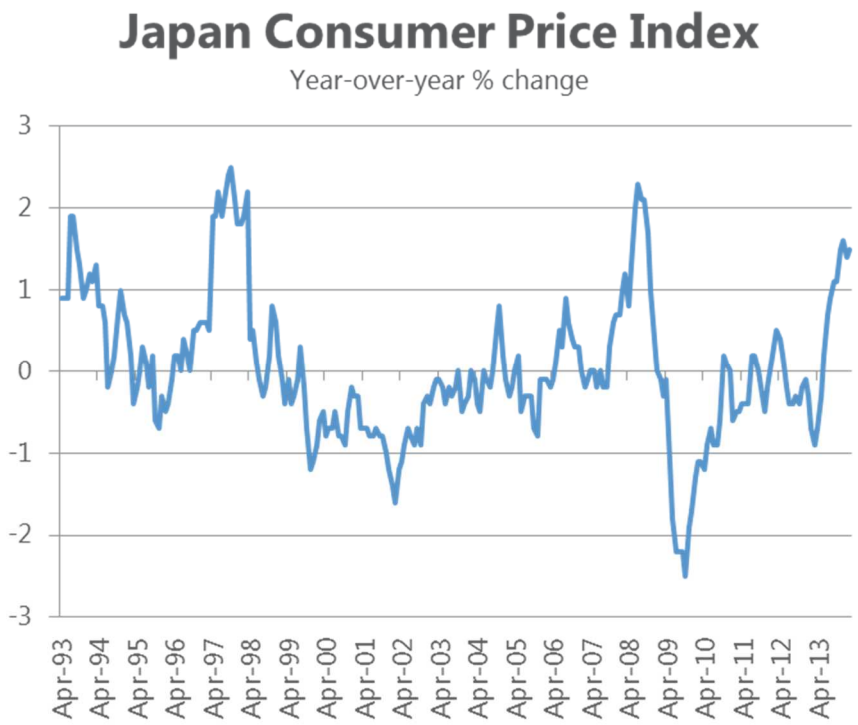
China aims to control the growth of its shadow banking system. We see more economic than financial risks.



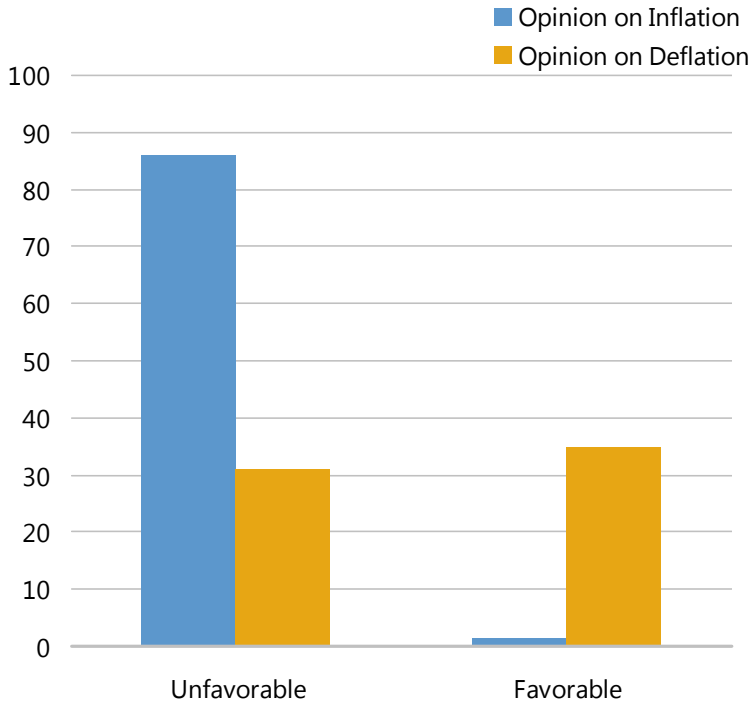
Source: CEIC and RBS

Japan joins the money-printing reflation bandwagon

Japan moving from deflation tolerance to inflation targeting, but there are challenges



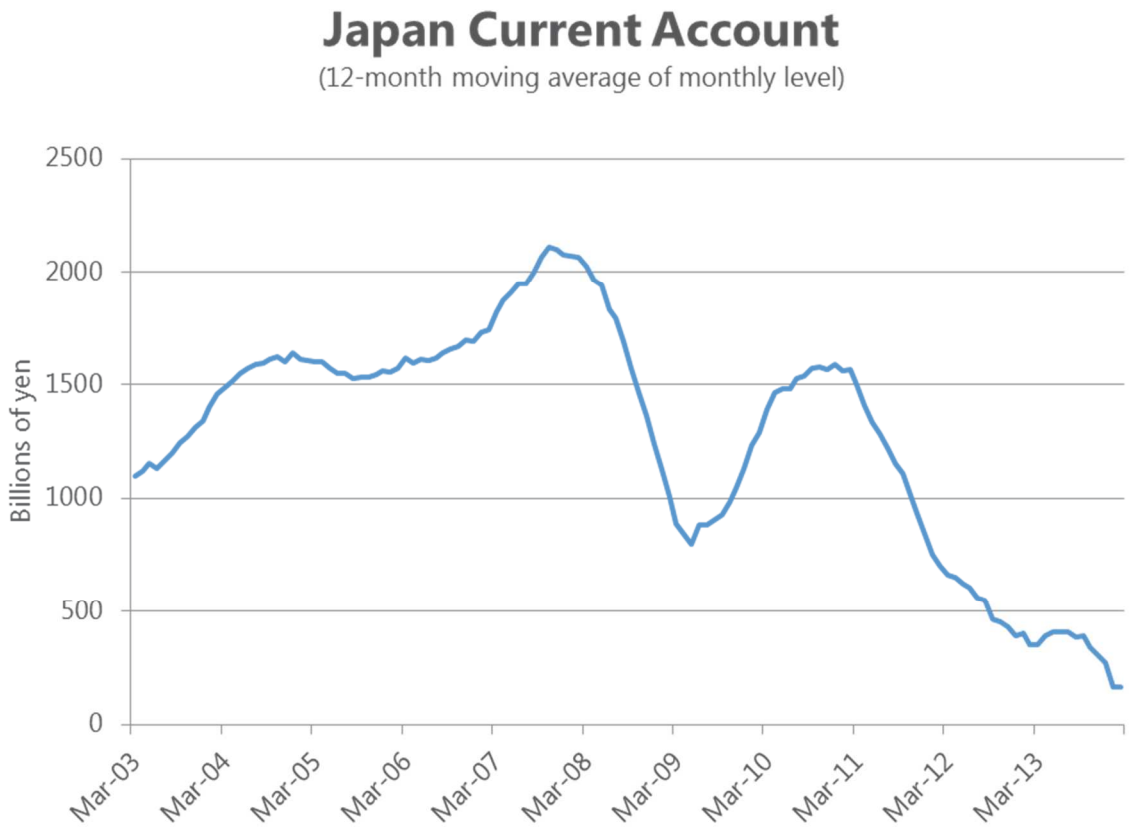
BoJ's Household Survey: Opinions on Inflation vs. Deflation



As of 31 March 2014
Source: Japan Ministry of Internal Affairs, Bloomberg

Japan's current account is shrinking

Japan need avoid a current-account deficit to maintain its ability to self-finance

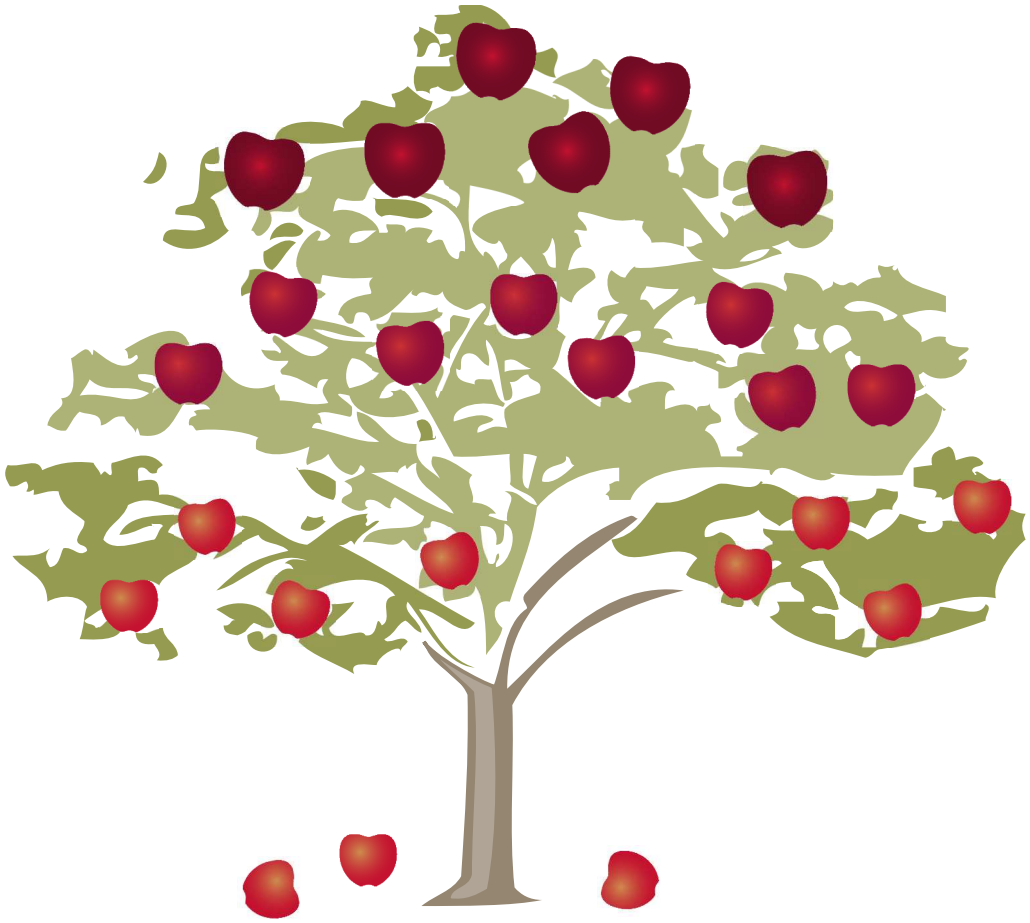


As of 31 March 2014
Source: Japan Ministry of Internal Affairs, Bloomberg

Japan: Uncertainty over third arrow

- Immigration policy
- Relax strict employment protection
- Aggressive corporate tax cut
- Allow flexible working hours/style
- Re-open nuclear plants proactively
- Signing trade pact (TPP)
- Favorable tax treatment on Capex
- Financial sector reform

"Tree of growth"



Thus far only "micro" reforms have been embraced as policy makers focus on low-hanging fruit

As of 31 December 2013
SOURCE: PIMCO

Europe

The ECB's money printing has alleviated Europe's debt problem but it can't solve it

To create debt sustainability, Europe must address its cash flow problem by implementing structural reforms and restoring its:

- Growth
- Competitiveness
- External balance

Absent actions taken to restore the above, Europe faces continuous risk from these three "R's":

- Rating
- Rollover
- Restructuring

Refer to the Appendix for additional outlook information.

Appendix

Past performance is not a guarantee or a reliable indicator of future results.

RISK
Inflation-linked bonds (ILBs) issued by a government are fixed income securities whose principal value is periodically adjusted according to the rate of inflation; ILBs decline in value when real interest rates rise.

All investments are subject to risk including possible loss of principle

FORECASTS
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Hypothetical and simulated examples have many inherent limitations and are generally prepared with the benefit of hindsight. There are frequently sharp differences between simulated results and the actual results. There are numerous factors related to the markets in general or the implementation of any specific investment strategy, which cannot be fully accounted for in the preparation of simulated results and all of which can adversely affect actual results. No guarantee is being made that the stated results will be achieved.

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