

U.S. Economy: Still Struggling, But Help is on the Way

October 2012

Chris P. Varvares

Senior Managing Director and Co-Founder
Macroeconomic Advisers, LLC

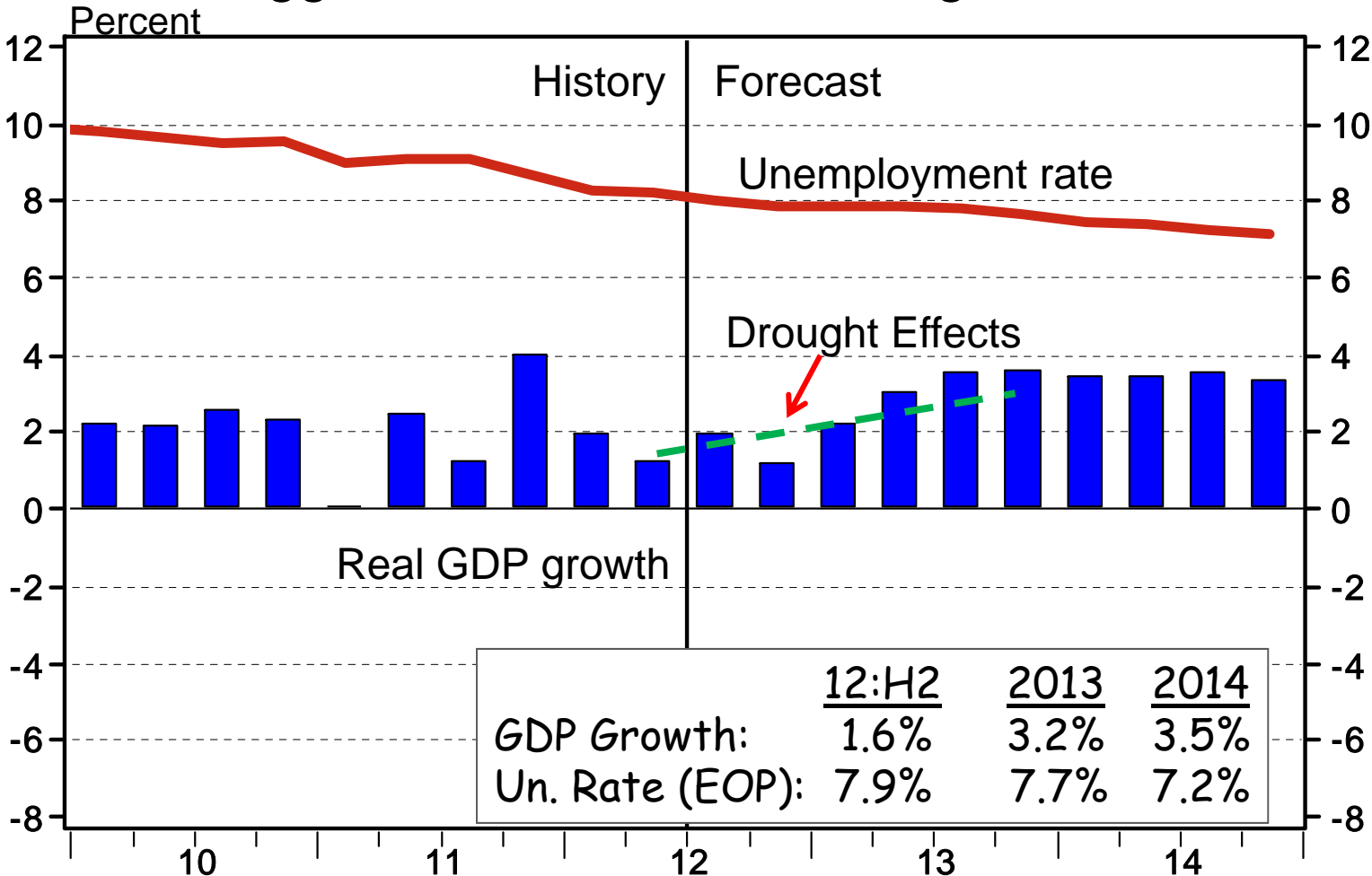
www.macroadvisers.com • blog.macroadvisers.com • varvares@macroadvisers.com

The Macroeconomic Advisers' Forecast

- **Growth in 2012:H2 hurt by drought, firms in 2013 and 2014:**
 - Real GDP: 2012:H2 = 1.6%, 2013 (4/4) = 3.2%, 2014 (4/4) = 3.5%
- **Forces of restraint weigh against usual cyclical dynamics:**
 - High uncertainty largely related to the euro area – assume benign outcome
 - Still-impaired bank and household balance sheets
 - On-going fiscal contraction
 - Drought damage to U.S. crops reducing 2012:H2 GDP growth, boosts 2013
- **Slow growth implies slow decline in unemployment rate:**
 - 7.9% in 2012.4, falling to 7.7% by 2013.4, and 7.2% by 2014.4
- **Consumer price inflation to stabilize below 2%:**
 - Core PCE inflation: 2012(4/4)=1.7%, 2013(4/4)=1.8%, and 2014(4/4)=1.9%
- **Fed taking more aggressive action to spur growth:**
 - Open-ended QE3 program announced at the September meeting to last about one year and cumulative purchases to total \$850 billion, with some Treasuries
 - We assume funds rate remains unchanged until at least mid-2015
 - Difference in policy from last month had only a very small effect on our forecast

Most-Likely Scenario: Muddle Through

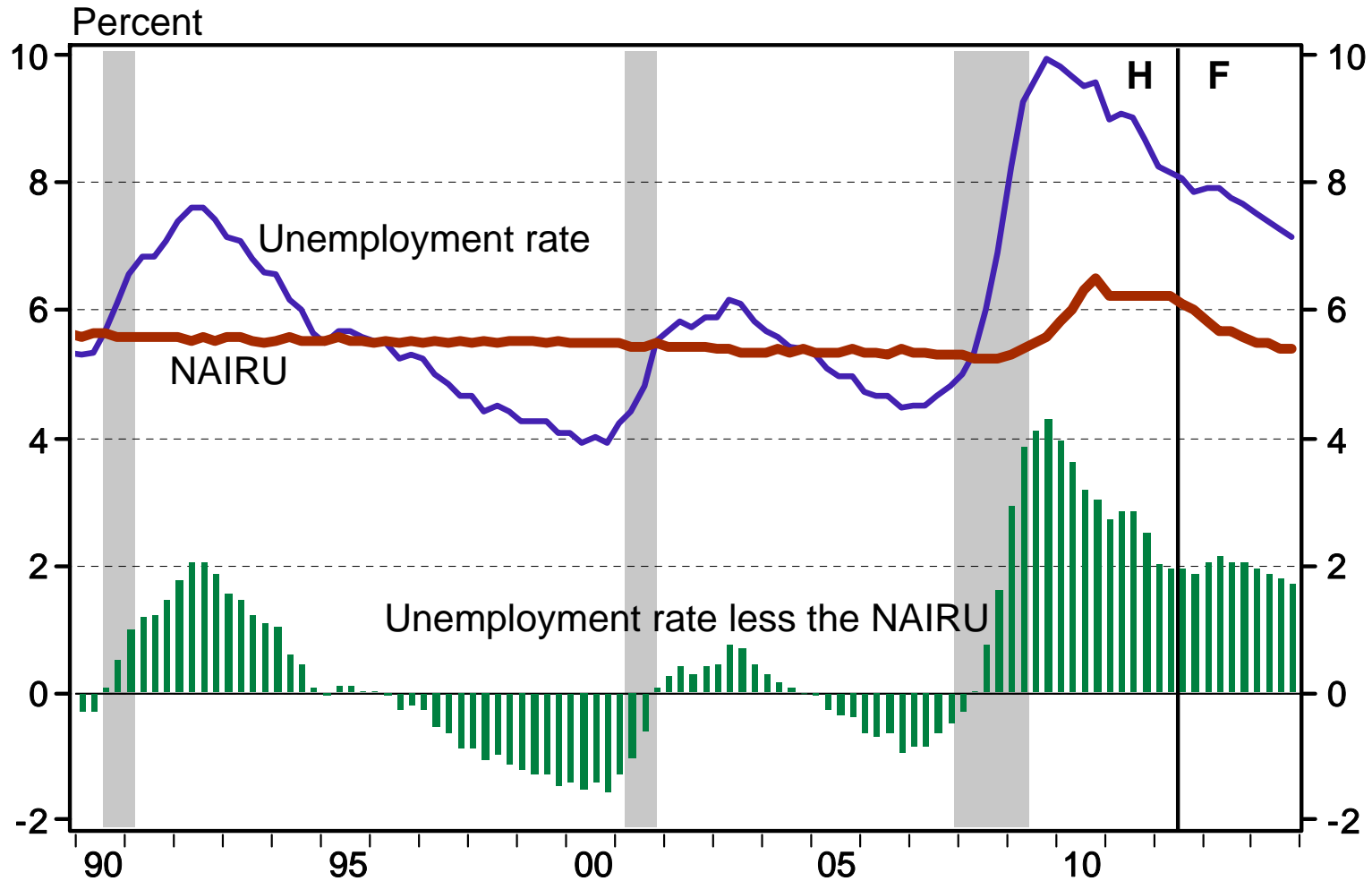
Sluggish GDP Growth, Firming Next Year



Source: Bureau of Economic Analysis, Macroeconomic Advisers, LLC; Forecast published on October 5, 2012.

Slack Keeps Downward Pressure on Inflation

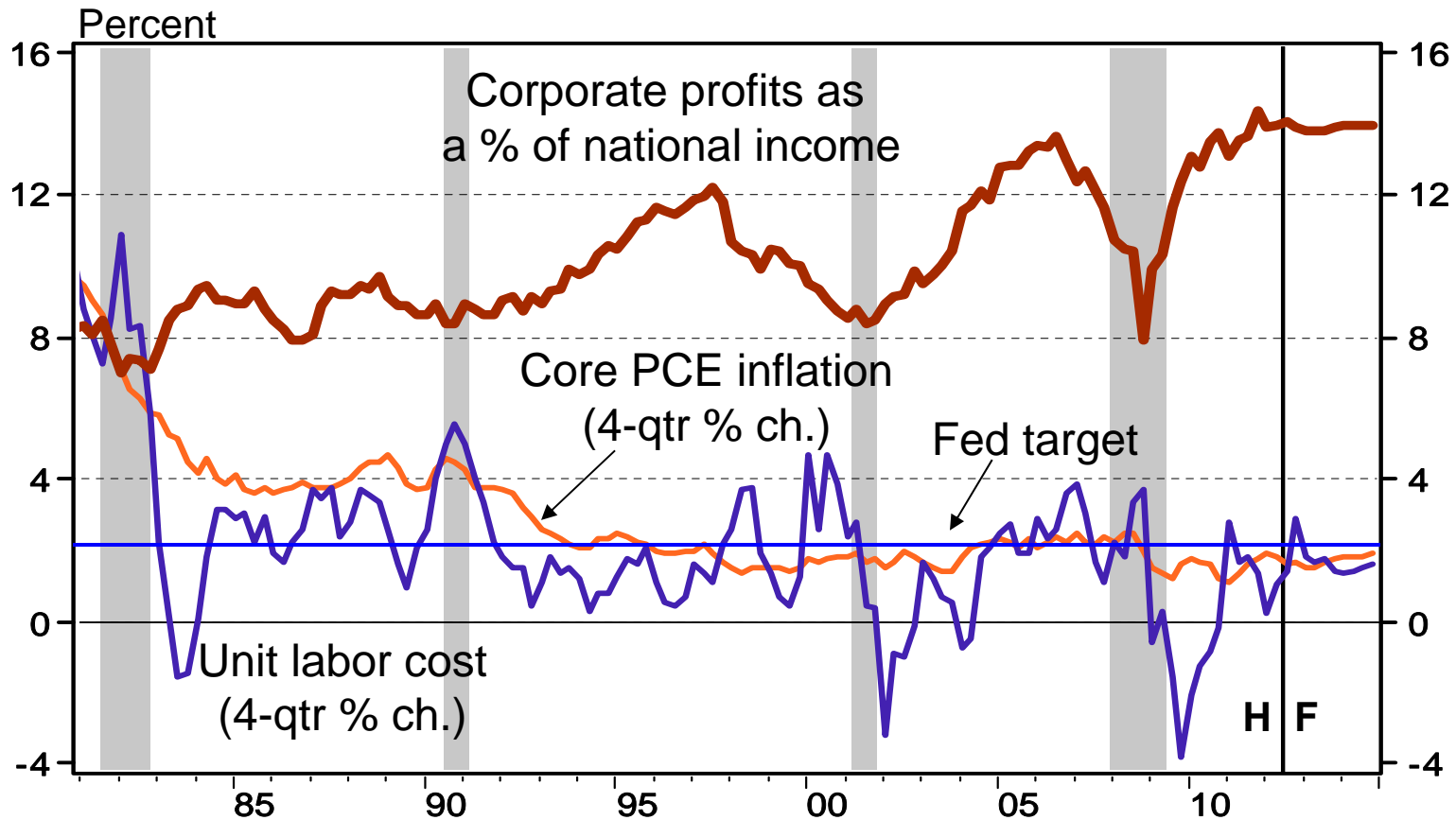
Elevated Slack Lingers Despite Decline in Unemployment



Source: BLS, Macroeconomic Advisers; Forecast published on October 5, 2012

Core Inflation Settles Back Below 2%

Labor Costs, Prices & Profits



Note: The core PCE index is the Personal Consumption Expenditures Index excluding food and energy prices; the unit labor cost is the compensation paid per unit of output produced in the nonfarm business sector.

Source: U.S. Department of Labor, Bureau of Economic Analysis, Macroeconomic Advisers, LLC;

Forecast published on October 5, 2012.

Fed to Provide More Accommodation

- **Failure of GDP growth to move sustainably above trend**
 - **Expecting fiscal austerity in the U.S. – more near-term drag**
 - **Employment growth too slow to lower unemployment rate**
 - Fear of more permanent damage to potential GDP
 - Skill erosion; departure from labor force
 - **Inflation now subsiding below “mandate-consistent” level**
 - Target of 2% for PCE inflation
 - Core PCE inflation slipped under 2%; headed for 1½%?
 - **Elevated downside risks from Europe**
-
- **QE3 of \$850 billion of Treasuries and MBS**
-

Fed to Provide More Accommodation

Quantitative Easing: Fed Purchases Treasuries & MBS

Interest Rates

Directly forces down real interest rates, esp. LT

Lowers cost of capital, induces stronger credit demand

Portfolio Balance

Lower yields --> lower discount rates; raise risky asset prices

Higher priced assets increase loan collateral; easier credit

Wealth effects

Foreign Exchange

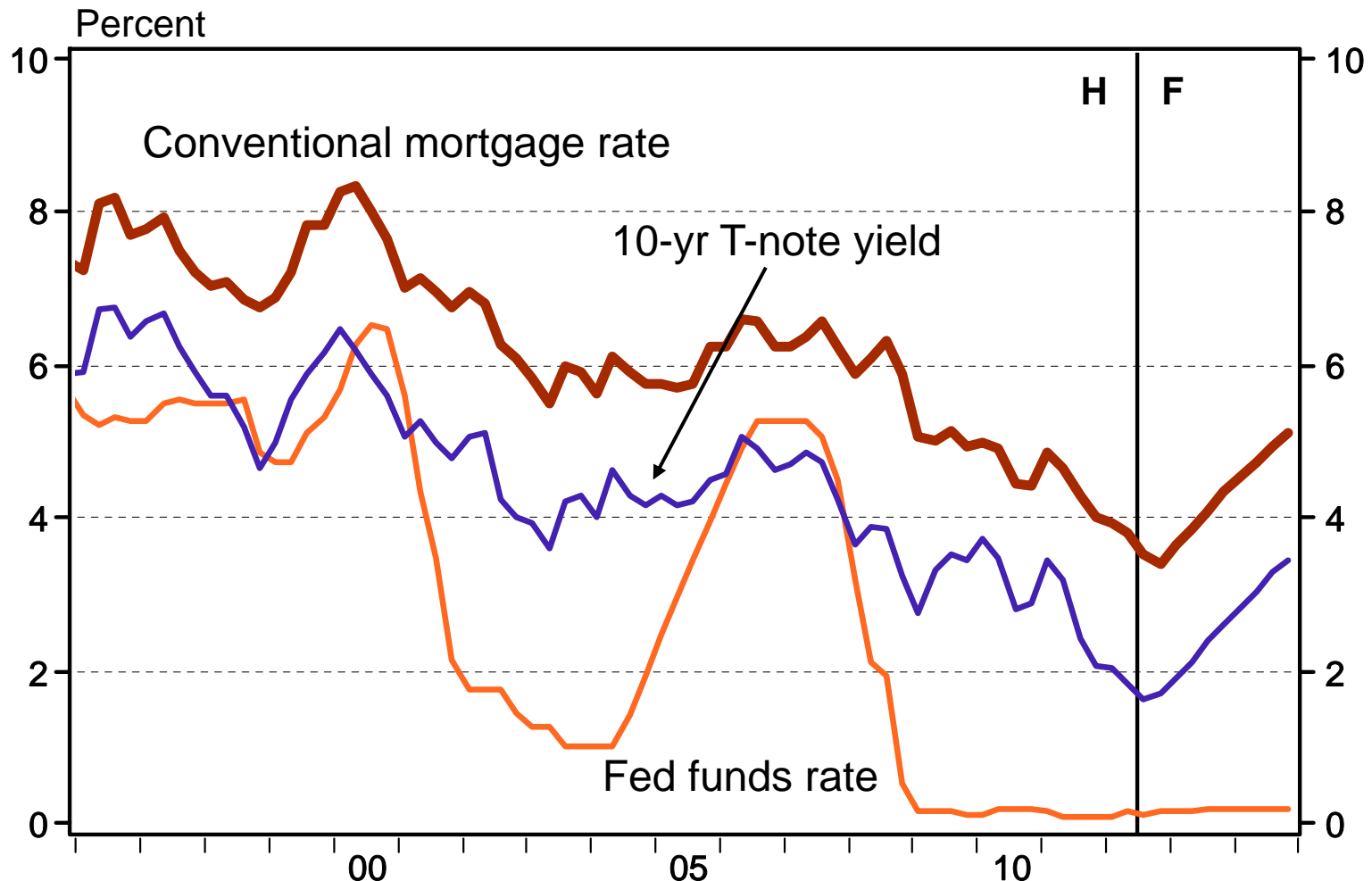
Lower yields --> dollar depreciation

Weaker dollar boosts exports
restrains imports

Negative feedback loop via commodity prices

Post QE3/Ext. Rate Guidance...Yields Still Rise

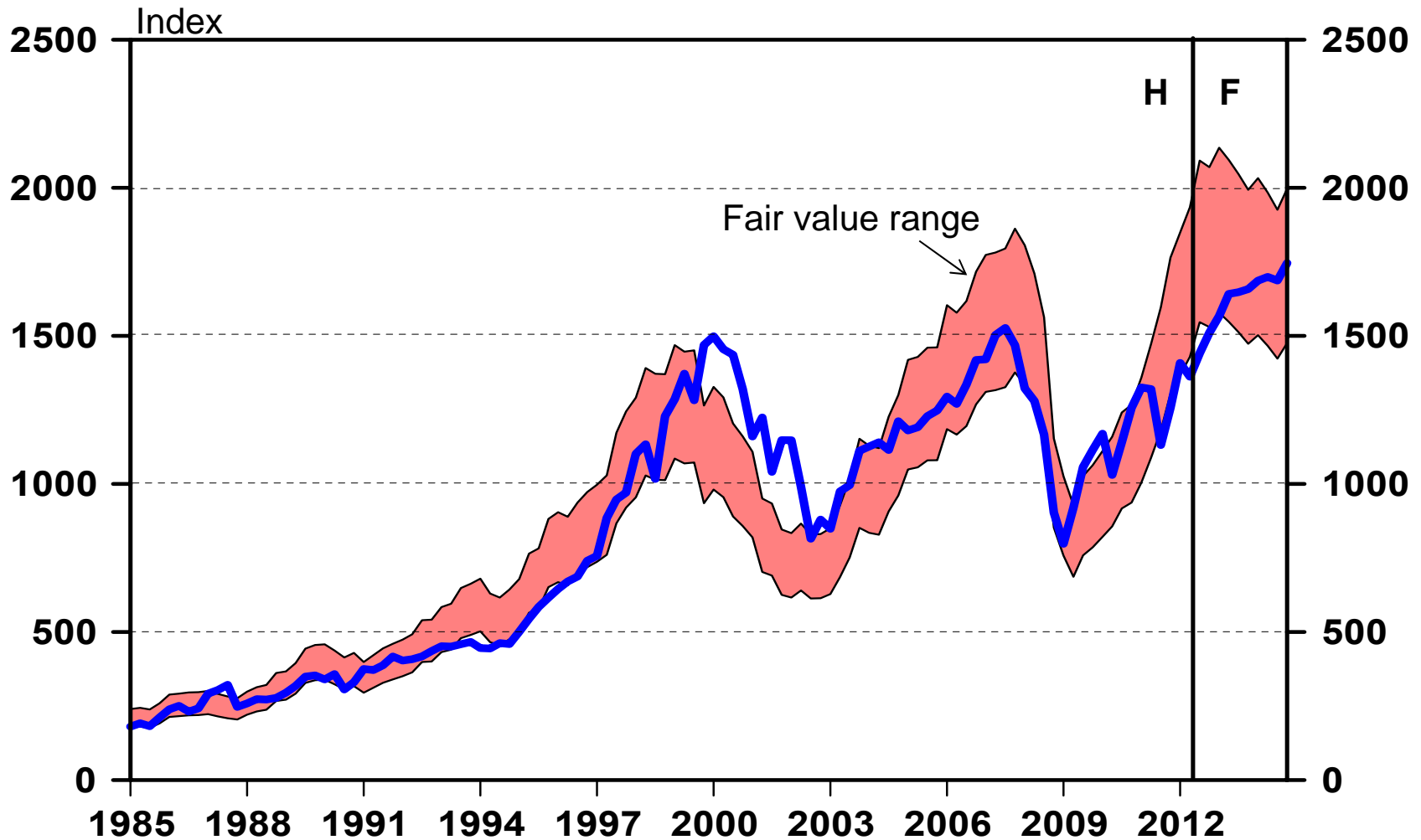
Fed Anticipates Zero Rates thru **Mid-2015!**



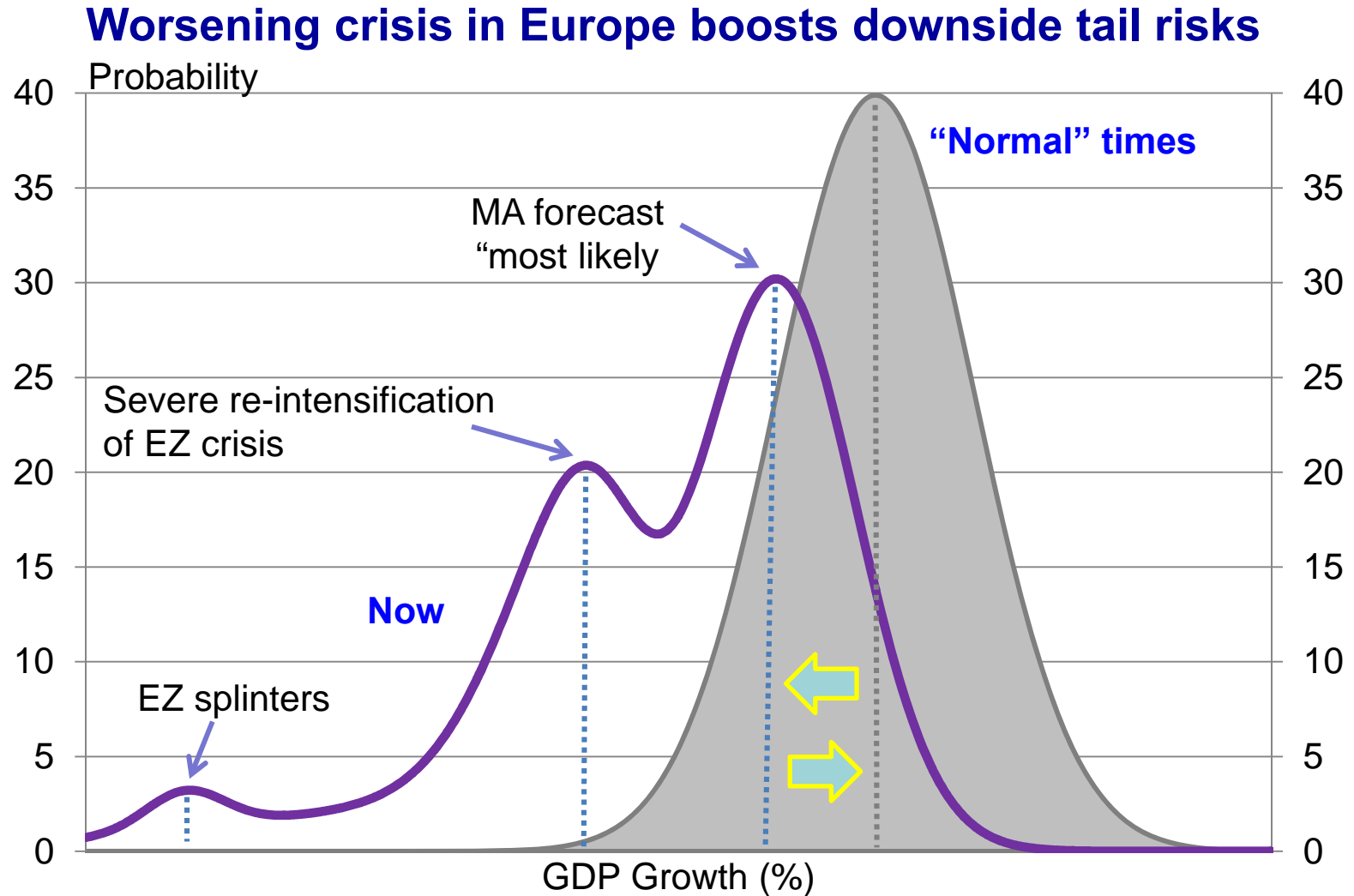
Source: Federal Reserve Board, Macroeconomic Advisers, LLC; Forecast published on October 5, 2012.

U.S. Equity Markets Poised for Solid Gains

Equities – S&P 500



The Macroeconomic Advisers' Forecast in Context



The Macroeconomic Advisers' Forecast in Context

Probability of outcomes* qualitatively similar to:

- **MA base (muddle-thru) w/ QE3** **55% (50-60)**
- **Upside – Exit before mid 2015** **15% (10-20)**
- **Further intensification of EZ crisis** **25% (20-30)**
- **Splintering of Euro – global recession** **5% (0-10)**

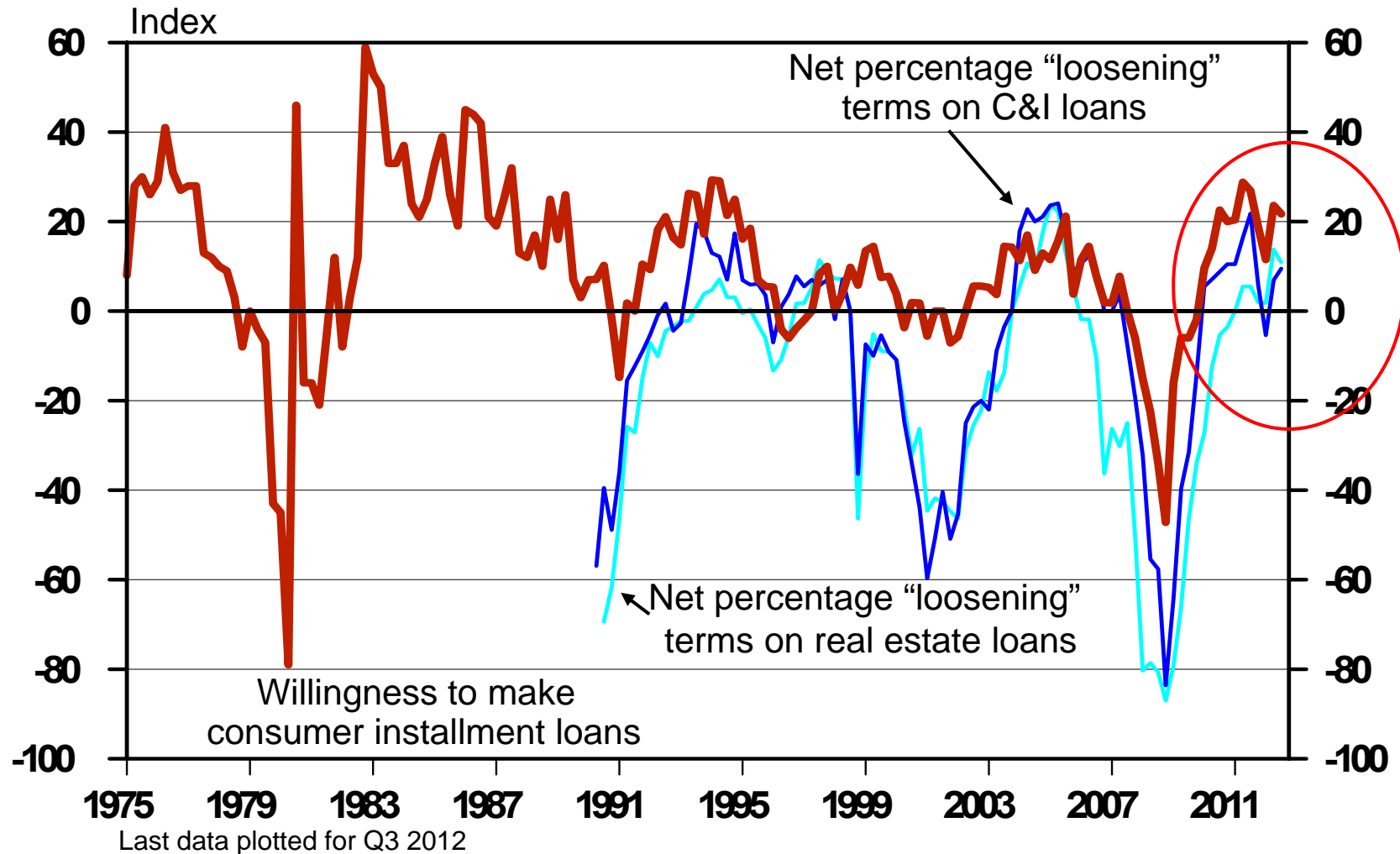
*** For U.S. GDP growth, employment, inflation, rates and equities**

What Drives the Muddle-Through Scenario

- **Normal cyclical dynamics & receding headwinds**
 - Release of pent-up demand, investment upturn, e.t.c.
 - Receding uncertainty & return of risk appetite
- **Uneven improvement in financial conditions. Less of a negative...is a positive for growth**
 - Easing credit terms
 - Improving equities & shrinking credit spreads
 - Slowing pace of de-leveraging
- **Rising home prices and favorable demographics**
- **Low/easing energy prices, especially natural gas**
- **Eventual recovery of EZ & global growth; falling dollar**

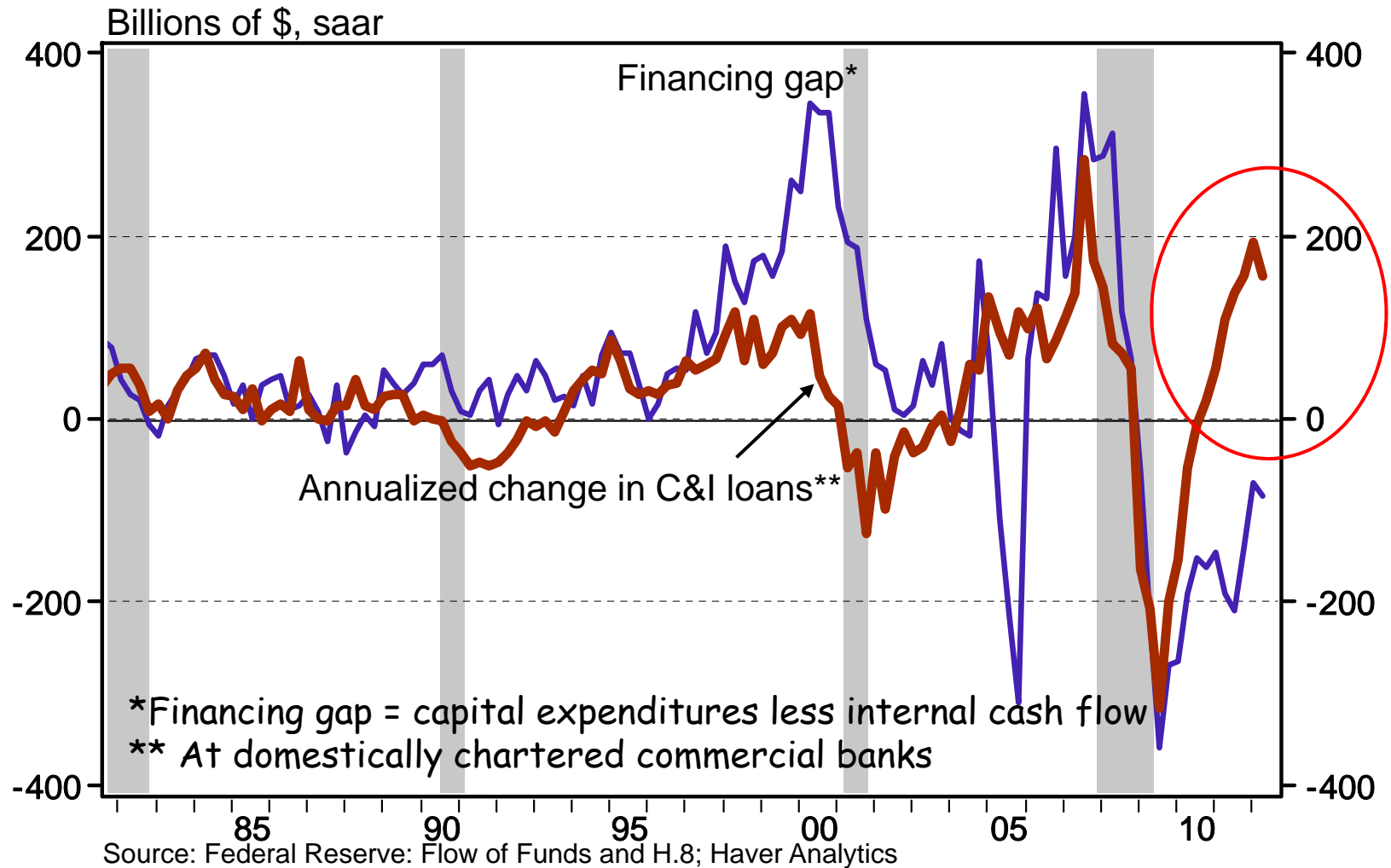
The Drivers: Improving Financial Conditions

Senior Bank Loan Officer Survey Diffusion Indexes



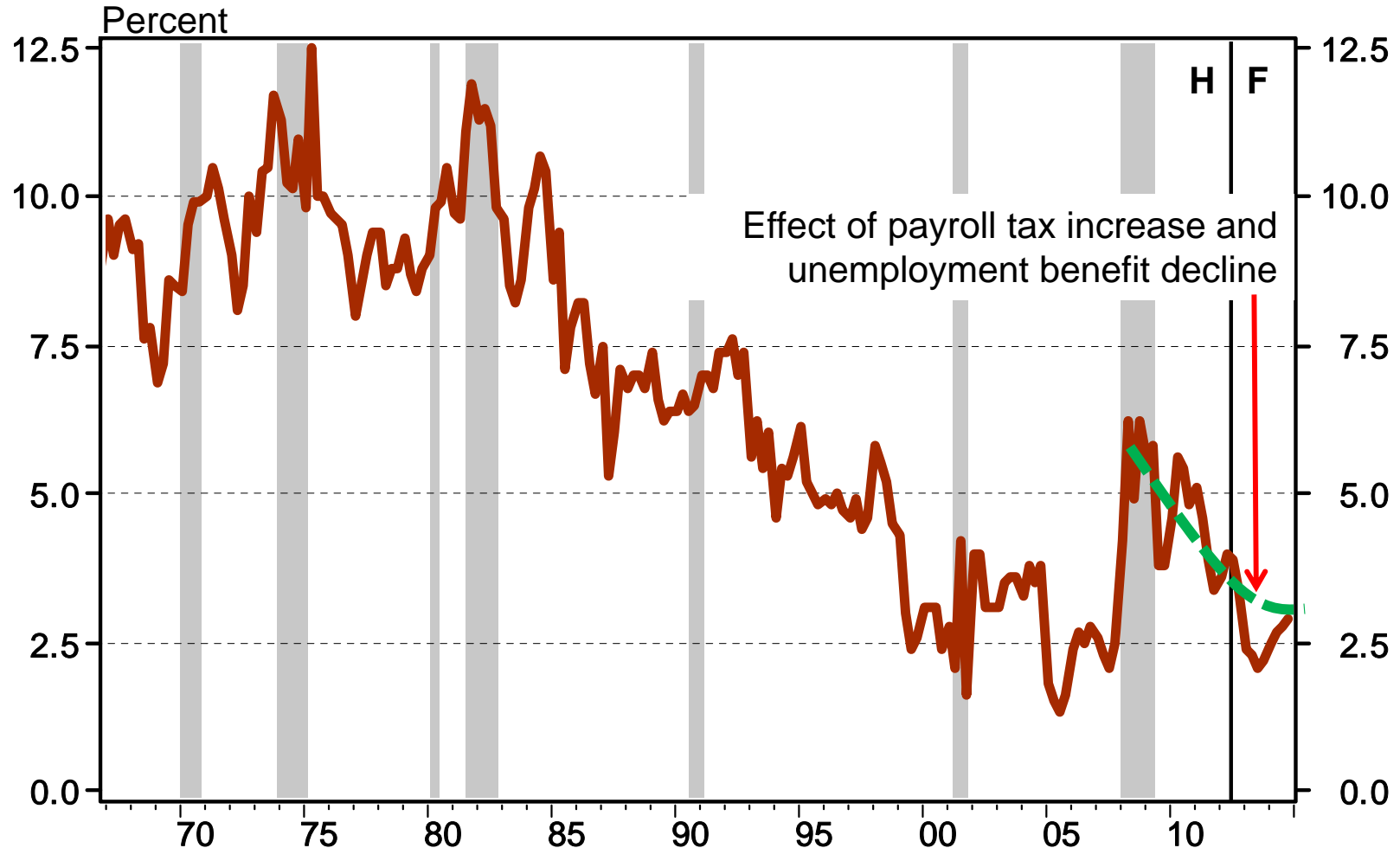
The Drivers: Improving Financial Conditions

Nonfarm Non-Financial Financing Gap & C&I Loans



The Drivers: Pace of Deleveraging Slows

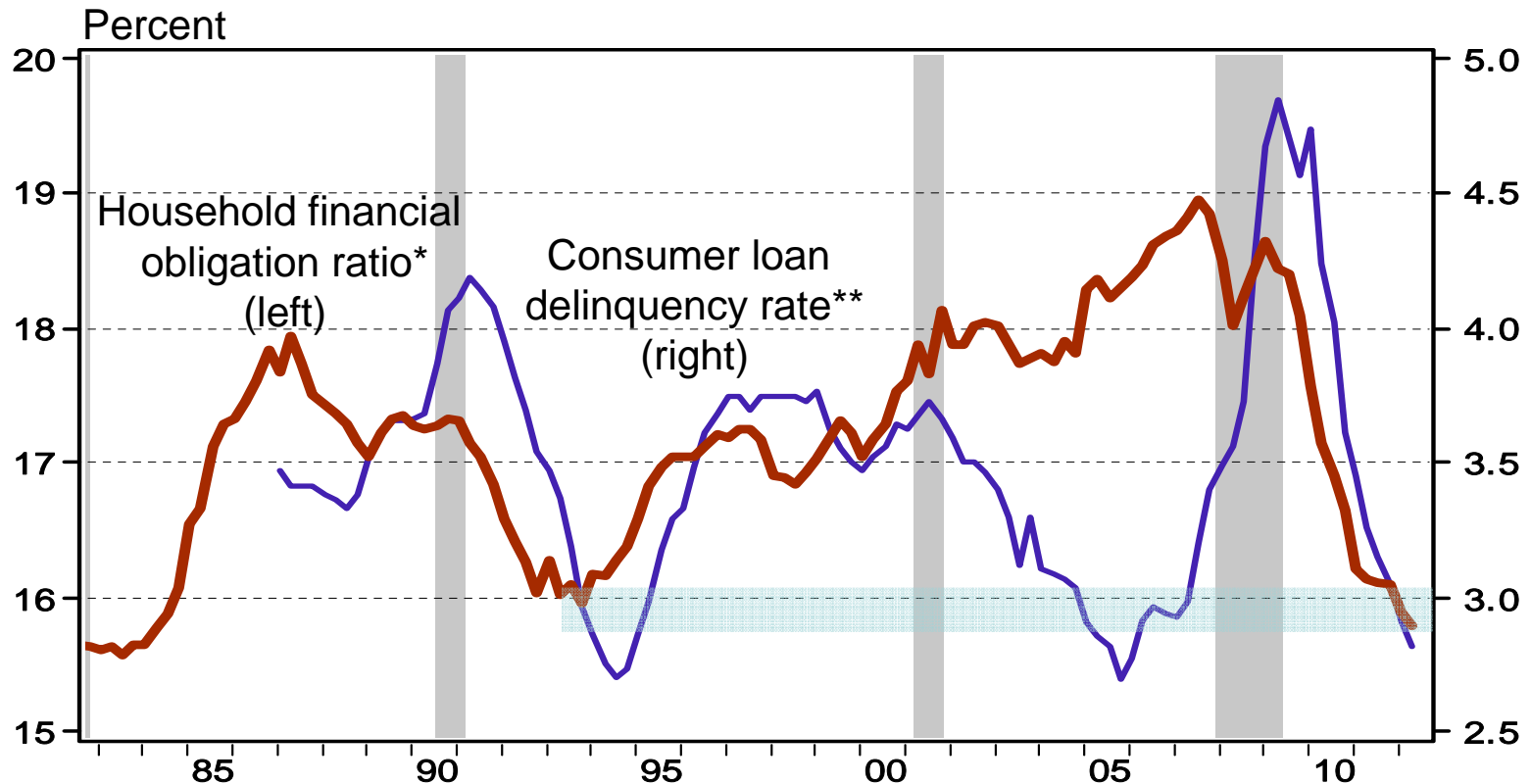
Personal Saving Rate



Source: Bureau of Economic Analysis, Macroeconomic Advisers, LLC; Forecast published on October 5, 2012.

The Drivers: Improving Financial Conditions

Households Reduce Financial Obligations



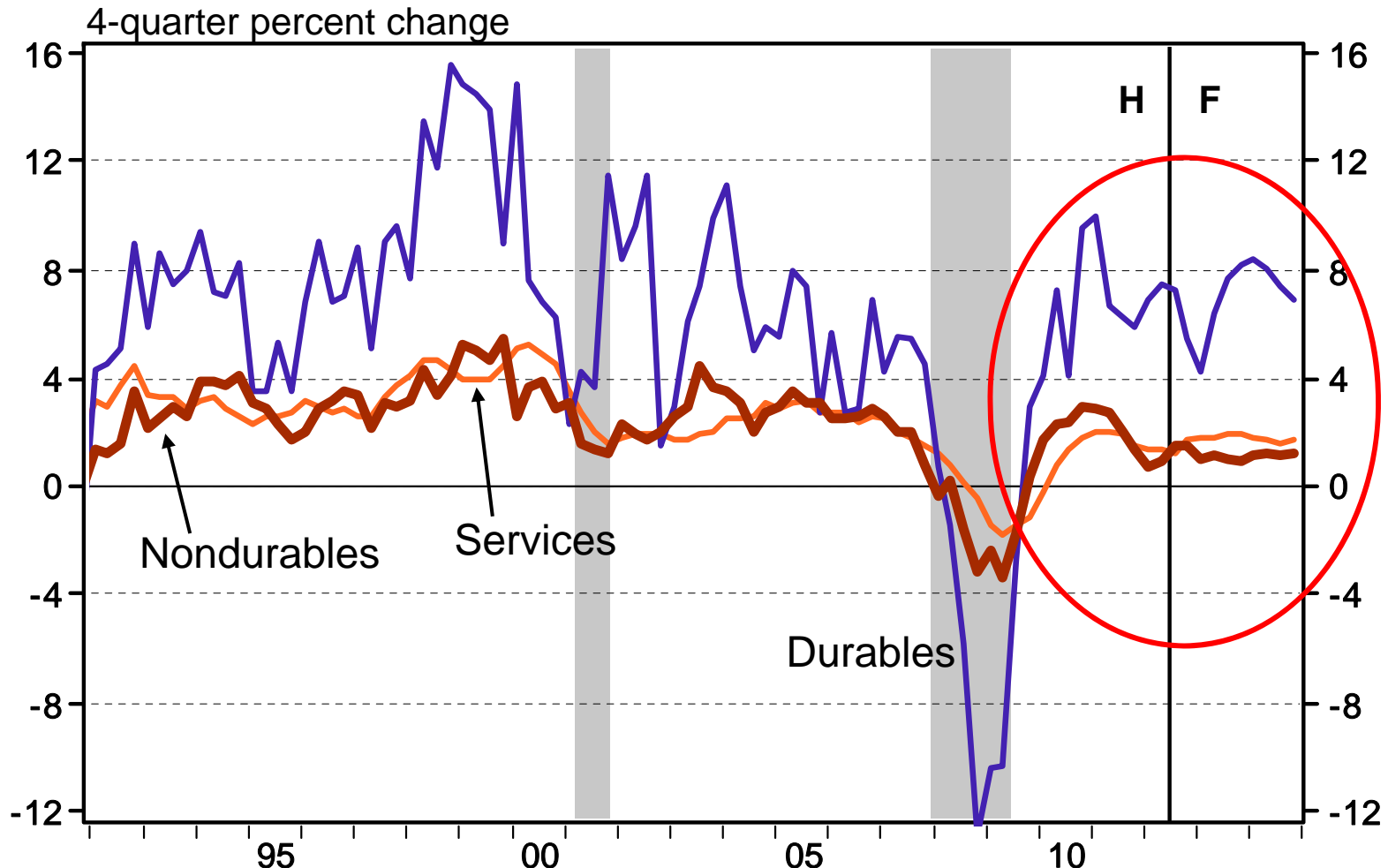
* The ratio of debt-service pmts, to disposable personal income, where debt-service includes estimated req'd pmts. on outstanding mortgage and consumer debt, plus auto lease pmts., rental pmts. on tenant-occupied property, homeowners' insurance, and property tax pmts.

** Nonaccrual loans and loans past due 30 days or more and still accruing interest.

Source: Federal Reserve Board; Last data plotted for Household financial obligation ratio is Q2-2012 for Consumer loan delinquency rate is Q2-2012.

Rising Wealth & Income Unlock Pent-up Demand

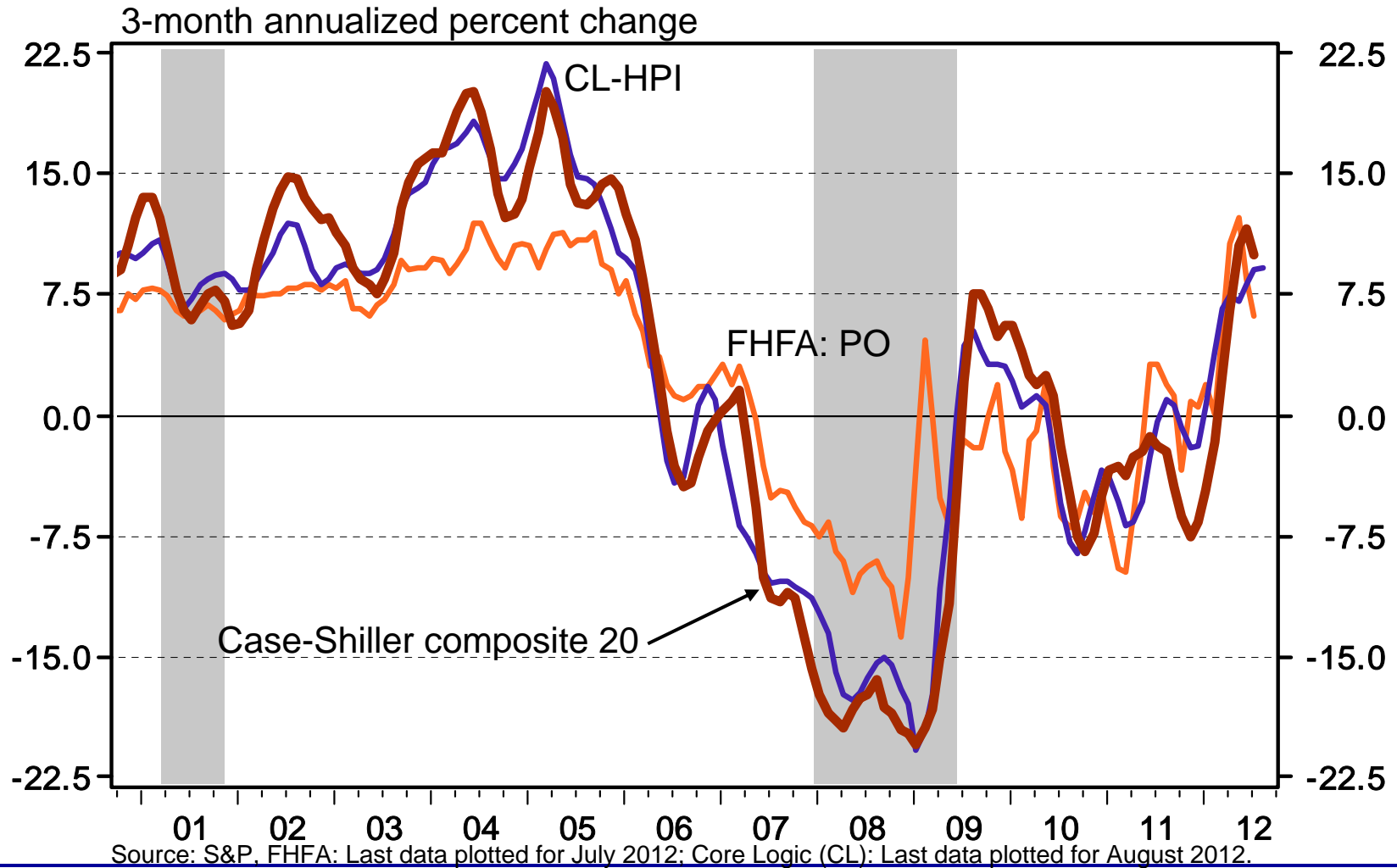
Growth of Personal Consumption Expenditures



Bureau of Economic Analysis, Macroeconomic Advisers, LLC; Forecast published on October 5, 2012.

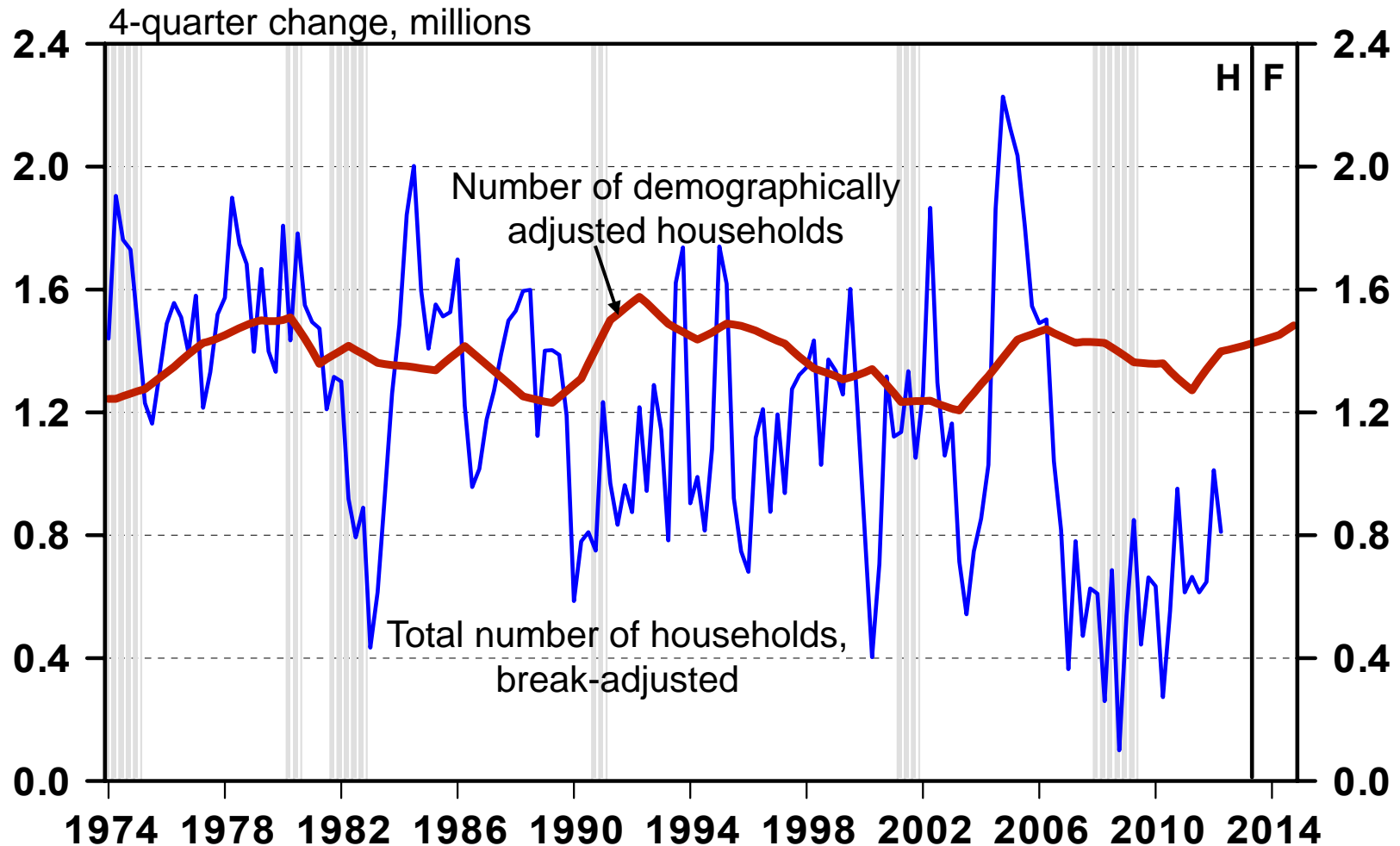
The Drivers: Home Prices Begin to Rise

House Prices



Latent Demand for Housing Building?

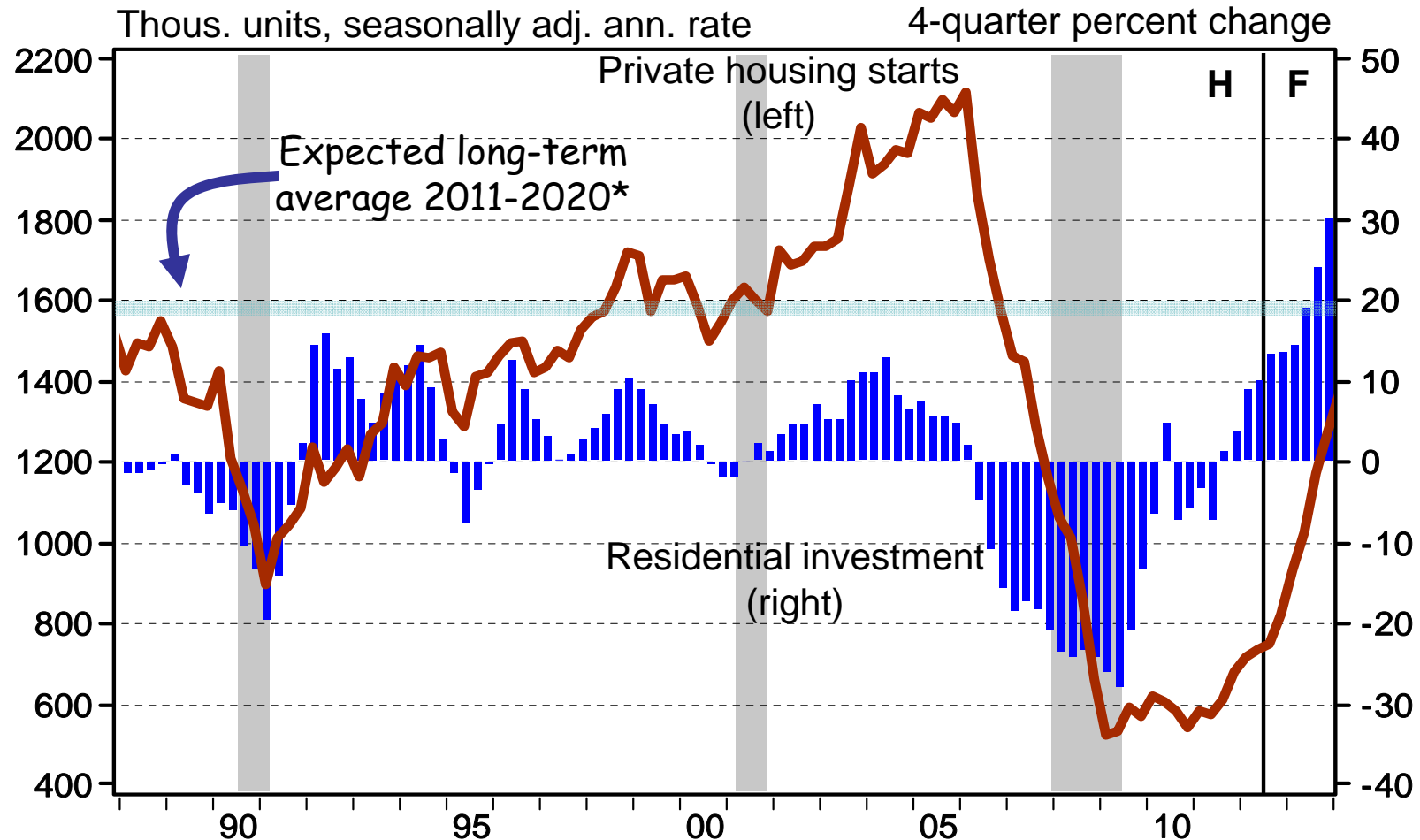
Household Formation Depressed, but Turning Up



Source: Census Bureau; Macroeconomic Advisers, LLC; Forecast published on October 5, 2012

Housing Recovery- Finally Underway?

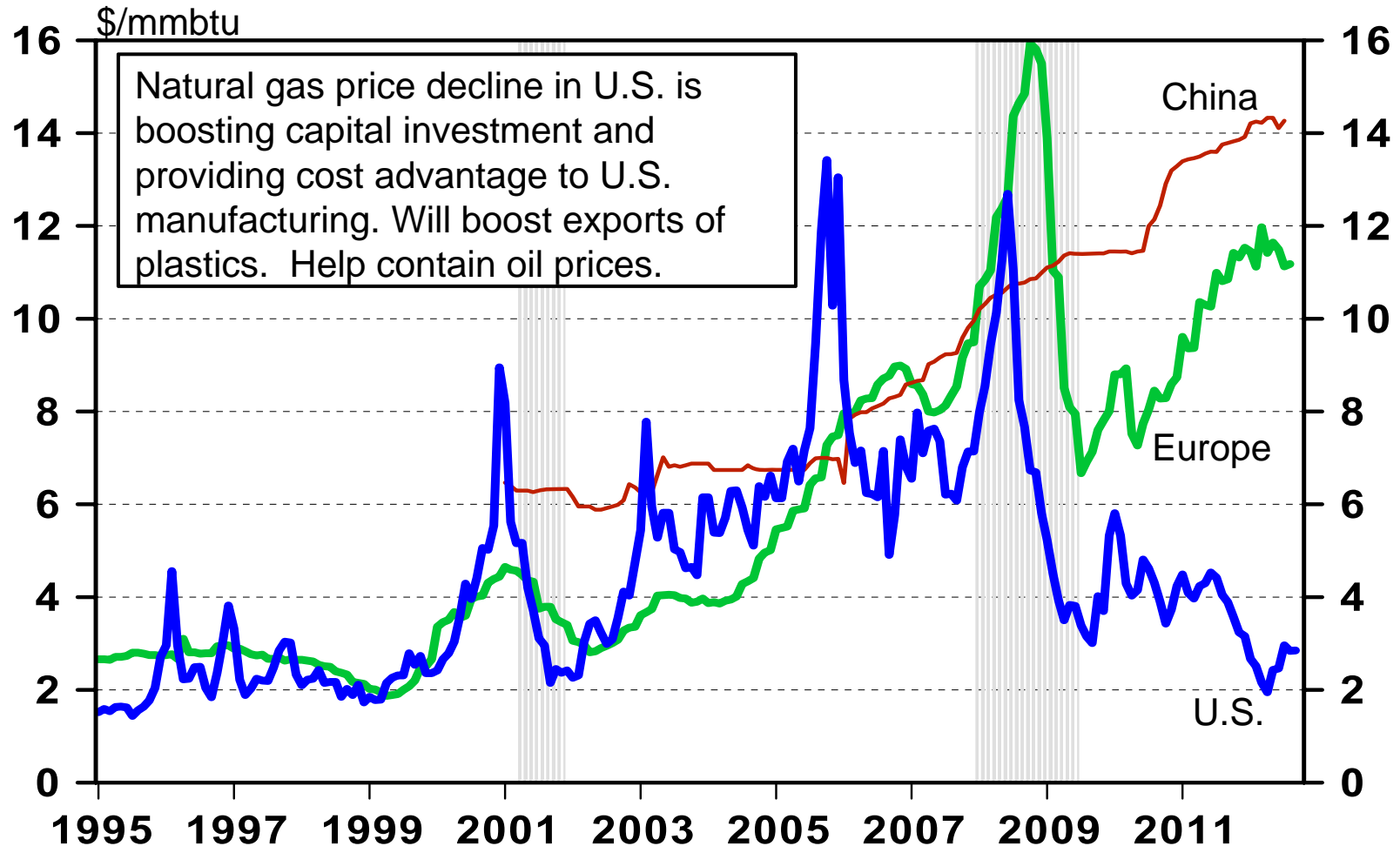
Housing Starts & Residential Investment Turn Up



Source: U.S. Census Bureau; U.S. Department of Commerce; Macroeconomic Advisers, LLC;
Forecast published on October 5, 2012.

The Drivers: Low/Declining Energy Prices

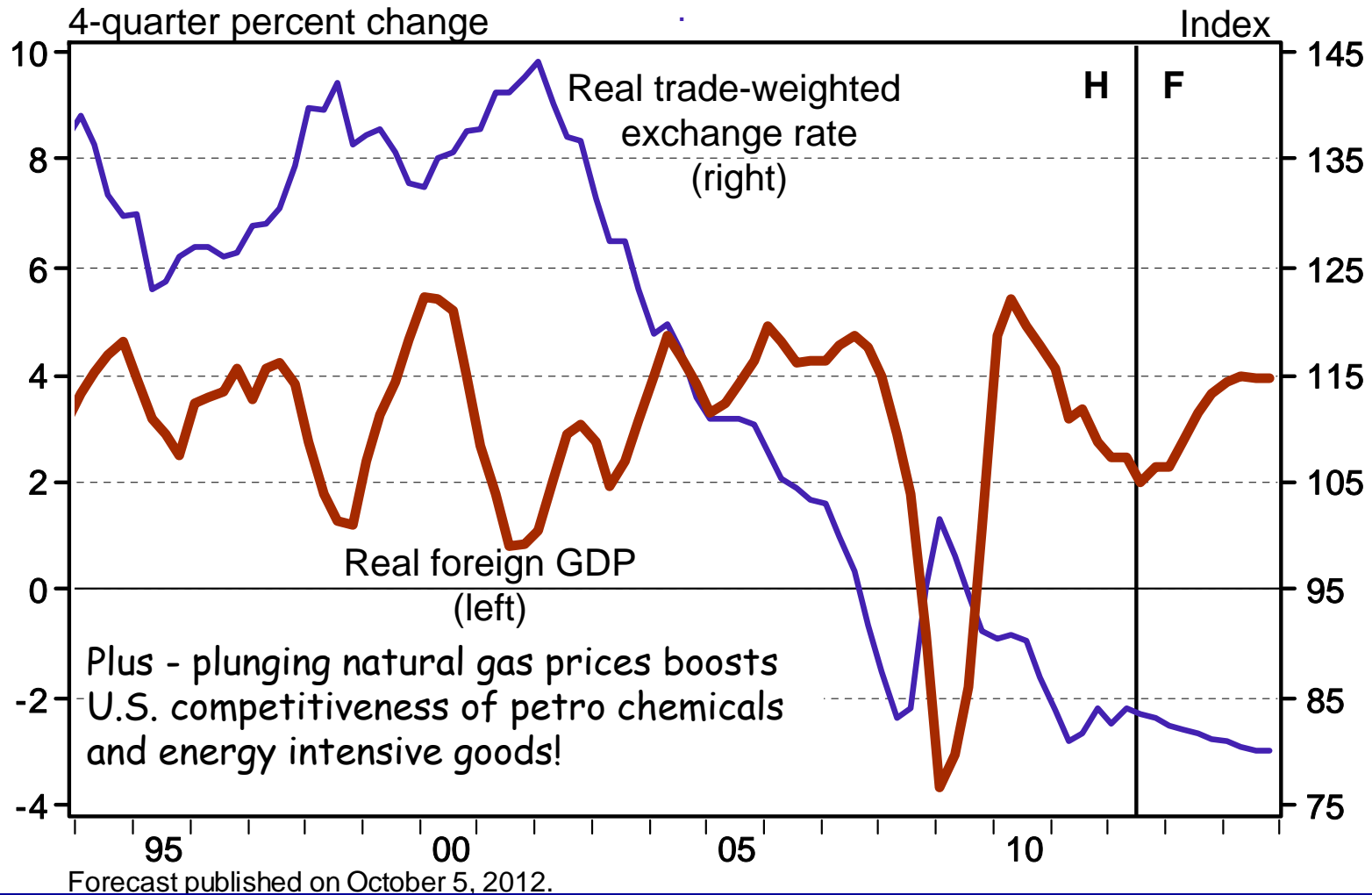
Shale Gas Revolution Lowers U.S. Natural Gas Prices



Source: Wall Street Journal; China Price Information Center; Federal Reserve Board; Macroeconomic Advisers, LLC;

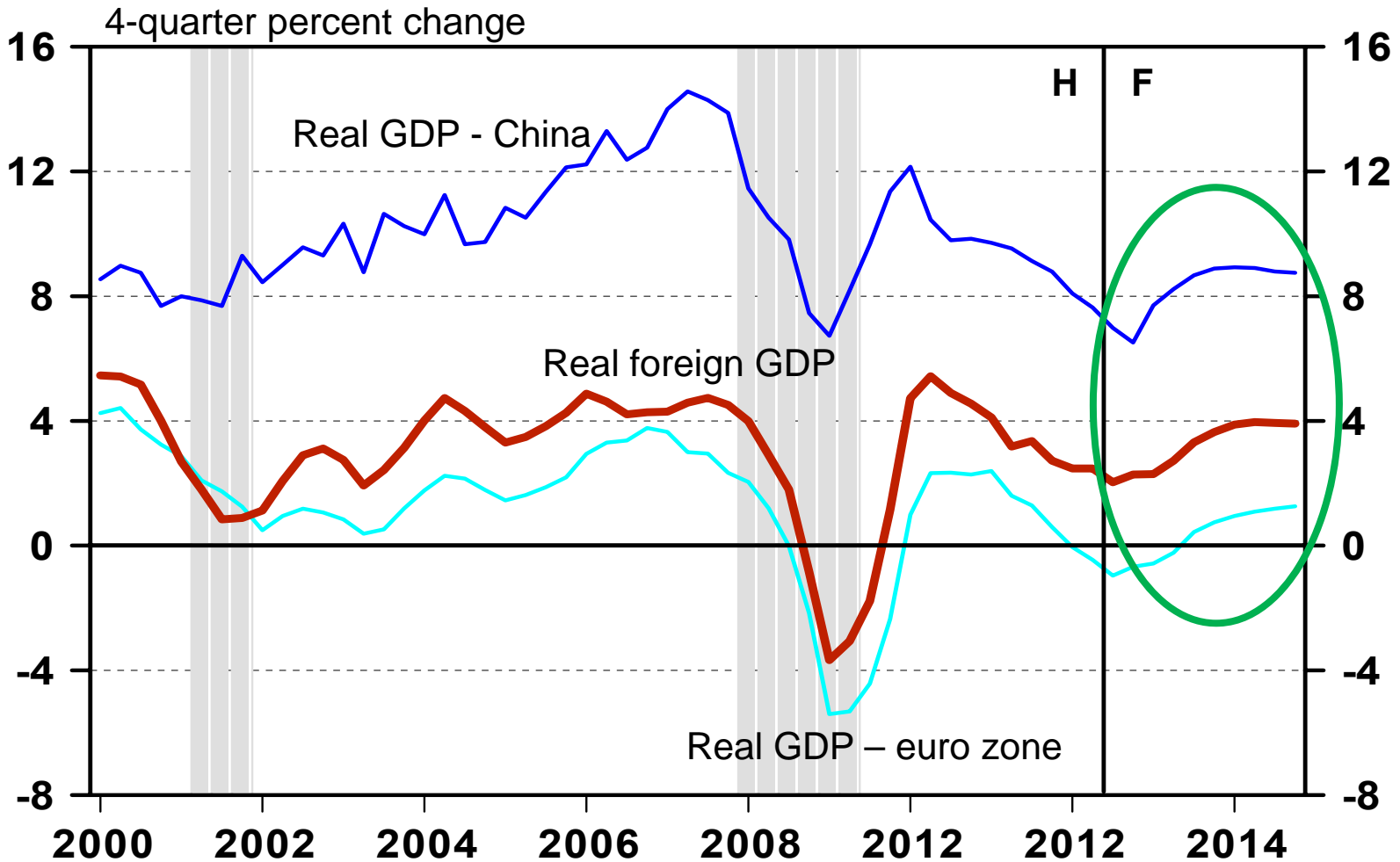
The Drivers: Eventual Global Recovery

Foreign Growth and the Dollar



The Drivers: Eventual Global Recovery

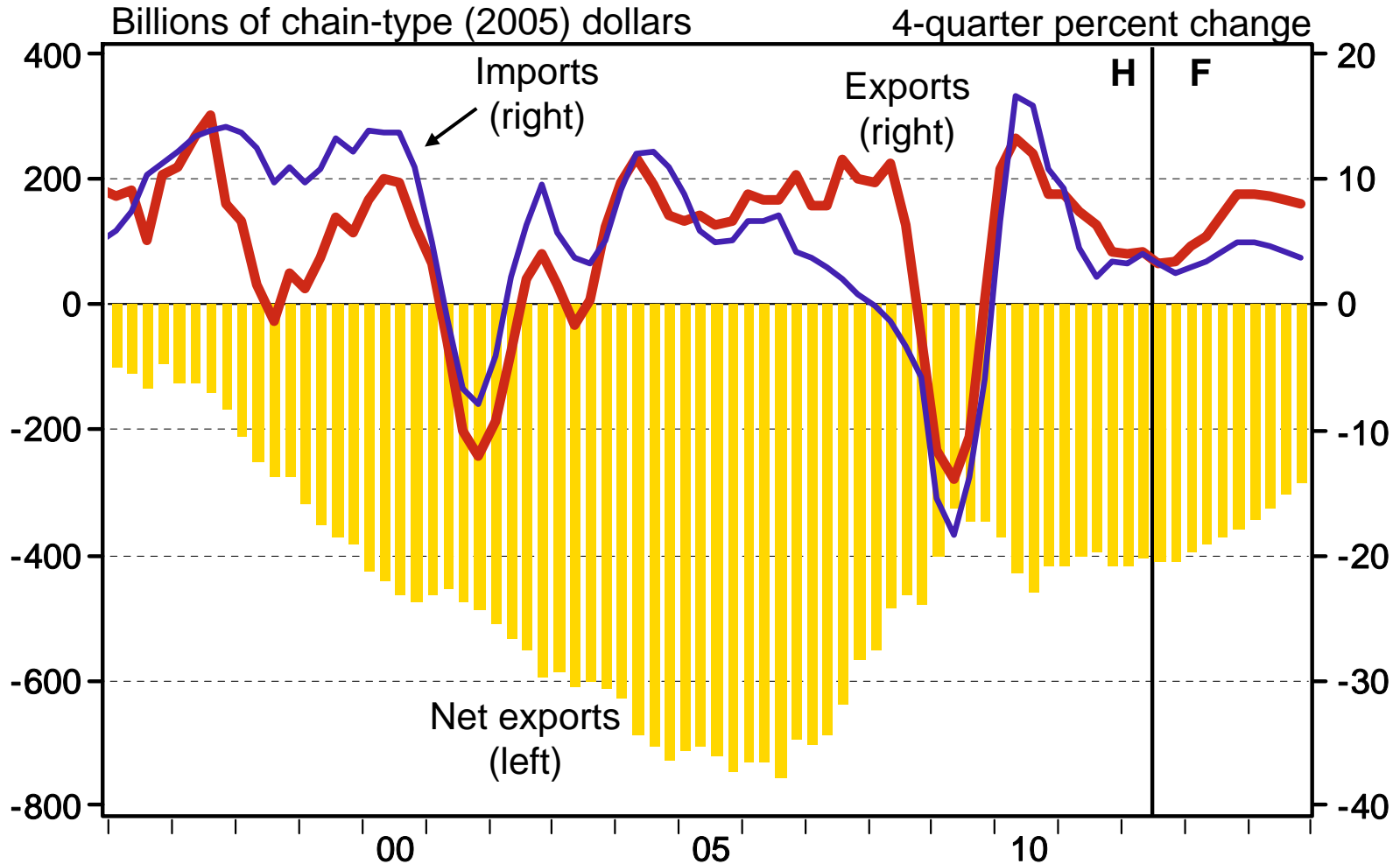
Sources of Foreign Growth



Source: Macroeconomic Advisers forecast published on October 5, 2012; Oxford Economics forecast prepared September 2012

Global Recovery, Real Dollar Decline “Help”

Exports, Imports, and Net Exports



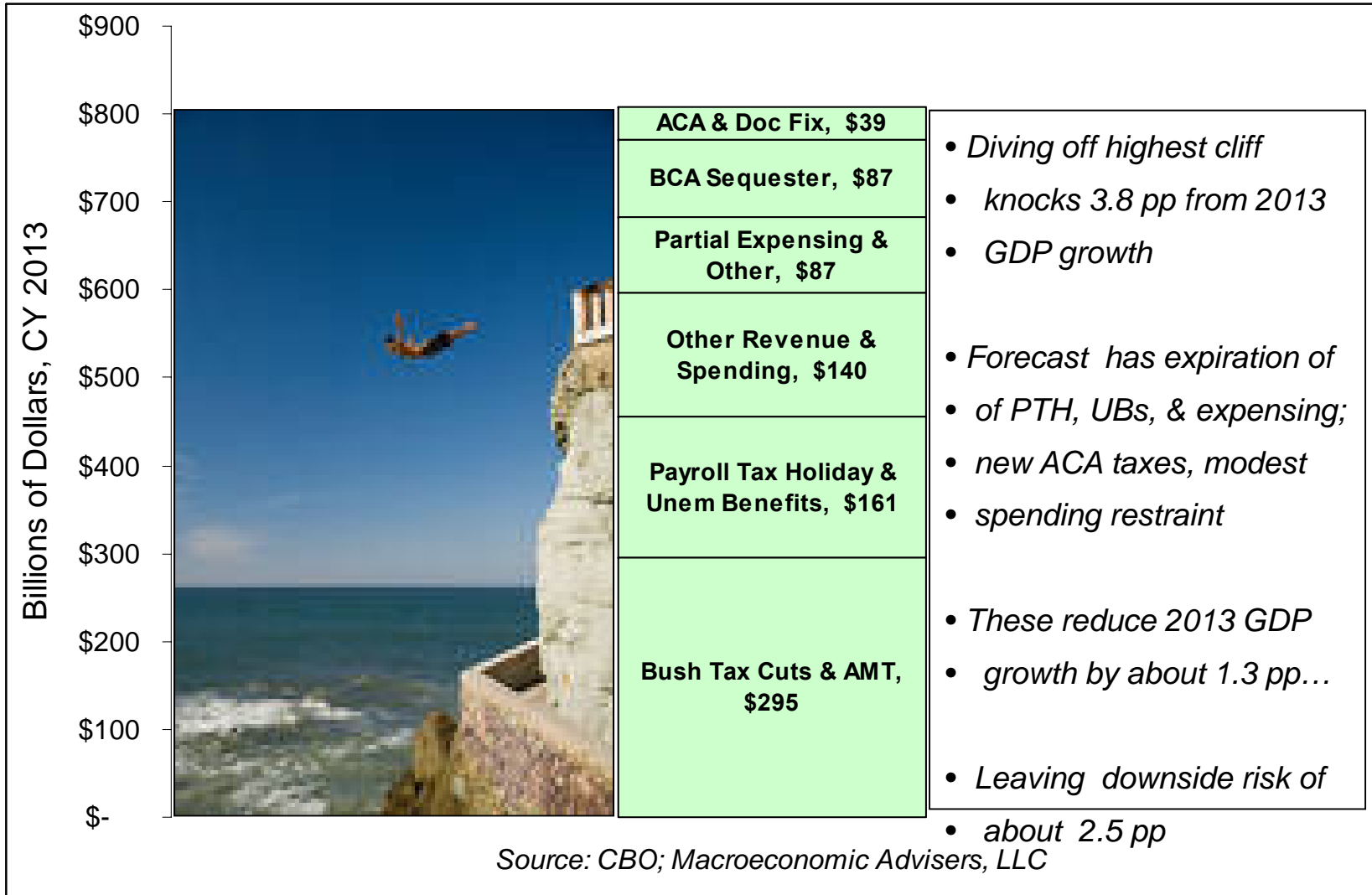
Source: Bureau of Economic Analysis. Macroeconomic Advisers, LLC: Forecast published on October 5, 2012.

Restraint & Risks: Fiscal Austerity in the U.S.

- **Drag from falling real gov't consumption and gross investment**
 - Direct drag of 0.6 pp in 2011, 0.2 pp in 2012 and 0.1 pp in 2013
 - Plus multiplier effects
 - **Payroll tax holiday and emergency unemp. benefits expire in 2013**
 - Dynamically trims ½ pp from growth
 - **All in implies roughly 1 percentage point of drag in 2013**
-
- **“Fiscal Cliff”**
 - **Sun-setting Bush/Obama tax cuts;**
 - **Sequestration as required by the Budget Control Act**
 - **Drag could rise to 3 percentage points of GDP Growth!**

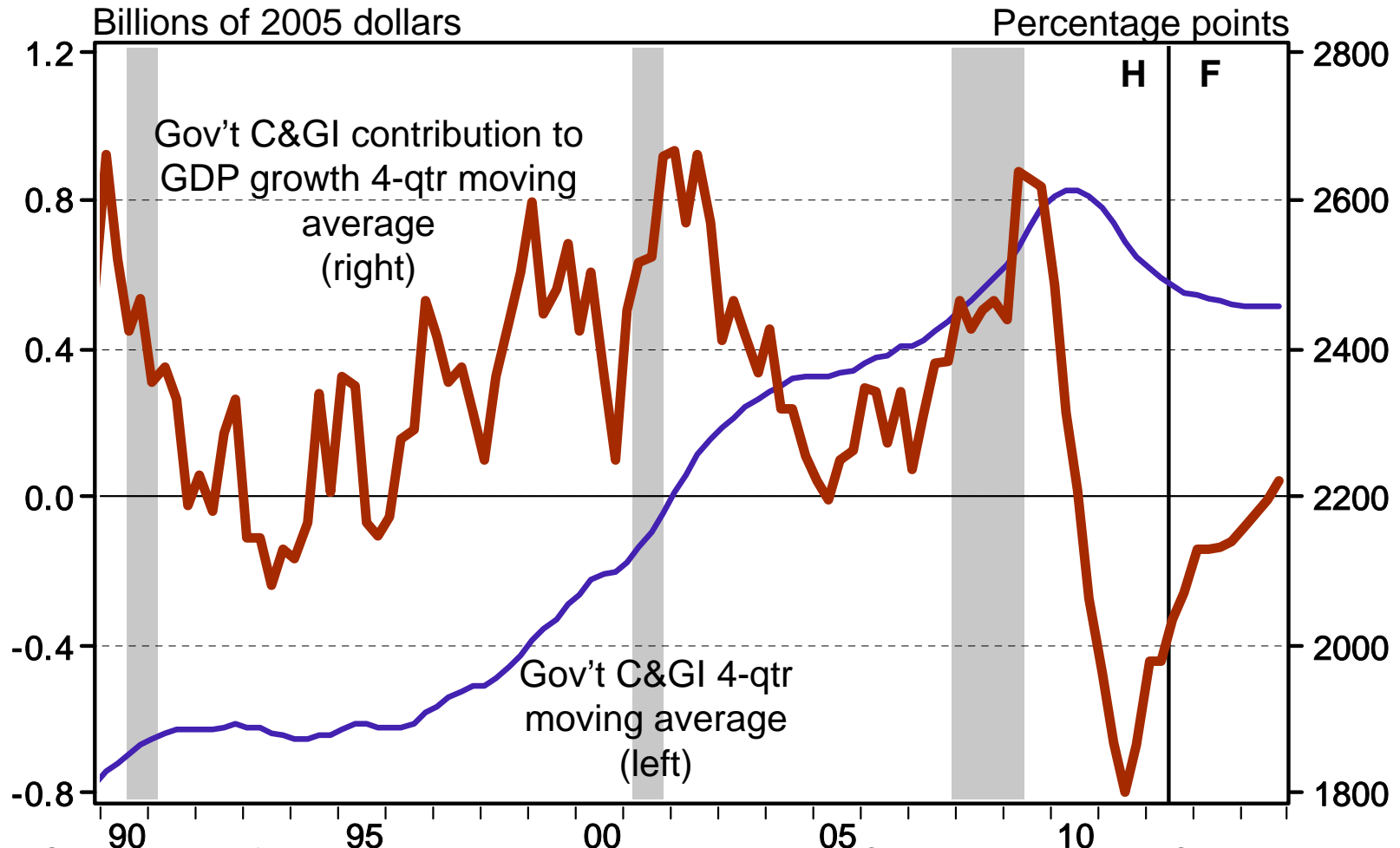
Note: We do not include the doc fix and AMT patch in fiscal cliff calculations

The Fiscal Cliff



Fiscal Contraction is a Drag on Growth

Government Consumption and Gross Investment



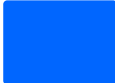


Potential Election & Fiscal Outcomes?

White House	D	D	R	R	R	R
Senate	D*	D	D*	D	R	R*
House	R	R	R	R	R	R

* Super-majority in the Senate

Potential Outcomes

Shape of tax reform & fiscal fix: balance of spending cuts versus revenue increases

-  “Simpson-Bowles” 1/3 T & 2/3 G
-  More difficult compromises – more cuts in G
-  Ryan budget and the gold standard? NO!

Key +/- Risks to the Outlook

- Europe's "fix" fails, markets & growth slumps...
...could turn out better than markets expect...time heals
- China slows too sharply...
...or maybe some stimulus will prevent too sharp a slowing
- Home prices (and housing construction) relapse...
...signs of firming could hold and surprise to the upside
- Soaring commodity (oil!) prices...
...potential for gas/oil prices to keep dropping
- More fiscal restraint, too much, too early...“fiscal cliff”
...possible a (short-term) agreement could buoy markets
- Iran nuclear stance unnerves financial/commodity markets...
...tensions would ease if sanctions win concessions

The Macroeconomic Advisers' Forecast

- **Growth in 2012:H2 hurt by drought, firms in 2013 and 2014:**
 - Real GDP: 2012:H2 = 1.6%, 2013 (4/4) = 3.2%, 2014 (4/4) = 3.5%
- **Forces of restraint weigh against usual cyclical dynamics:**
 - High uncertainty largely related to the euro area – assume benign outcome
 - Still-impaired bank and household balance sheets
 - On-going fiscal contraction
 - Drought damage to U.S. crops reducing 2012:H2 GDP growth, boosts 2013
- **Slow growth implies slow decline in unemployment rate:**
 - 7.9% in 2012.4, falling to 7.7% by 2013.4, and 7.2% by 2014.4
- **Consumer price inflation to stabilize below 2%:**
 - Core PCE inflation: 2012(4/4)=1.7%, 2013(4/4)=1.8%, and 2014(4/4)=1.9%
- **Fed taking more aggressive action to spur growth:**
 - We expect the open-ended QE3 program announced at the September meeting to last about one year and cumulative purchases to total \$850 billion
 - We assume funds rate remains unchanged until at least mid-2015
 - Difference in policy from last month had only a very small effect on our forecast

Back-up Slides

MA Forecast Details

	2012.1	2012.2	2012.3	2012.4	2013.1	2013.2	2013.3	2013.4	2014.1	2014.2	2014.3	2014.4	Q4/Q4 % change or annual avg.			
													2011	2012	2013	2014
Key Indicators of Real Activity																
Real gross domestic product*	2.0	1.3	2.0	1.2	2.3	3.1	3.6	3.7	3.5	3.5	3.6	3.4	2.0	1.6	3.2	3.5
Contributions to growth:																
Final sales	2.4	1.7	1.3	2.2	2.5	3.1	3.6	3.5	3.3	3.3	3.4	3.3	1.7	1.9	3.2	3.3
To domestic purchasers	2.3	1.5	1.5	2.2	2.1	2.8	3.4	3.2	2.9	2.8	2.9	2.7	1.8	1.9	2.9	2.8
Net exp. of goods & services	0.1	0.2	-0.1	0.0	0.4	0.4	0.3	0.3	0.4	0.5	0.5	0.6	0.0	0.0	0.3	0.5
Change in private inventories	-0.4	-0.5	0.7	-1.0	-0.2	-0.1	0.0	0.2	0.2	0.2	0.1	0.1	0.2	-0.3	0.0	0.2
Major components of real GDP:																
Personal consumption expend.*	2.4	1.5	1.8	2.3	2.0	2.5	2.7	2.2	2.0	2.2	2.3	2.3	1.9	2.0	2.4	2.2
Nonres. fixed investment*	7.5	3.6	0.1	3.8	2.7	4.1	6.3	7.1	6.6	5.7	5.8	6.0	10.2	3.7	5.0	6.0
Residential investment*	20.5	8.5	14.1	12.9	23.1	28.6	34.3	35.0	28.9	20.8	16.8	9.4	3.9	13.9	30.2	18.8
Change in private inventories**	56.9	41.4	61.6	31.1	25.6	22.8	21.4	28.9	36.6	44.5	49.3	54.2	31.0	47.7	24.7	46.1
Exports of goods & services*	4.4	5.3	2.2	2.5	8.8	8.7	9.0	8.7	8.4	8.3	8.0	7.5	4.3	3.6	8.8	8.0
Imports of goods & services*	3.1	2.8	2.6	1.9	4.3	4.7	5.6	5.3	4.5	3.8	3.3	2.9	3.5	2.6	5.0	3.7
Gov't consump. & gross invest.*	-3.0	-0.7	-0.7	-0.7	-0.8	-0.6	-0.5	-0.4	-0.2	0.1	0.4	0.6	-3.3	-1.3	-0.6	0.2
Pvt. housing starts (thous. units)	715	736	753	820	930	1030	1173	1277	1368	1412	1458	1501	612	756	1103	1435
Light vehicle sales (mil. units)	14.1	14.1	14.5	14.9	15.2	15.2	15.4	15.6	15.8	16.1	16.3	16.5	12.7	14.4	15.3	16.2
Industrial production, total*	5.9	2.6	-0.1	-1.2	2.8	4.7	5.9	6.7	6.8	6.5	6.3	5.9	4.1	1.7	5.0	6.4
Industrial production, mfg*	9.8	1.0	0.1	-0.8	2.8	5.0	6.4	7.4	7.4	7.1	6.8	6.3	4.2	2.4	5.4	6.9
Capacity utilization (mfg, %)	77.6	77.5	77.2	76.6	76.7	77.2	78.0	78.9	79.7	80.5	81.2	81.7	75.0	77.2	77.7	80.8
Nonfarm payroll employ. (mil.)	132.7	133.0	133.4	133.7	134.1	134.5	135.0	135.7	136.4	137.2	138.0	138.8	131.4	133.2	134.8	137.6
Average monthly chg. (thous.)	232	108	124	111	127	139	180	225	242	253	261	265	147	144	167	255
Private nonfarm hours*	3.2	0.1	1.5	1.9	1.1	1.5	2.1	2.5	2.5	2.5	2.4	2.3	1.9	1.7	1.8	2.4
Civilian unemployment rate (%)	8.2	8.2	8.1	7.9	7.9	7.9	7.8	7.7	7.5	7.4	7.3	7.2	8.9	8.1	7.8	7.3
Prices, Productivity, & Costs																
GDP chain-type price index*	2.0	1.6	2.3	1.7	1.0	1.3	1.3	1.4	1.8	1.5	1.5	1.5	2.0	1.9	1.3	1.6
CPI, all items (all urban)*	2.5	0.8	2.2	2.8	0.6	1.8	1.8	1.8	1.7	1.7	1.7	1.7	3.3	2.1	1.5	1.7
CPI excl food & energy (all urb)*	2.1	2.6	1.5	1.7	1.6	1.8	1.8	1.9	1.8	1.9	1.9	1.9	2.2	2.0	1.8	1.9
PCE price index*	2.5	0.7	2.0	2.6	0.9	1.8	1.8	1.8	1.7	1.8	1.8	1.7	2.5	1.9	1.6	1.7
PCE price excl food & energy*	2.2	1.7	1.3	1.6	1.6	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.7	1.7	1.8	1.9
PPI (finished goods)*	1.9	-3.3	5.3	1.1	-0.2	0.9	1.0	1.2	1.1	1.2	1.2	1.1	5.5	1.2	0.7	1.1
Compensation per hour*	5.8	3.7	1.4	1.6	2.6	3.4	3.4	4.1	4.0	3.9	3.9	3.8	2.0	3.1	3.4	3.9
Output per hour*	-0.5	1.9	-16.3	-0.4	0.5	1.6	2.0	1.9	1.7	1.7	1.8	1.7	0.6	-4.1	1.5	1.7
Unit labor cost*	6.4	1.8	21.1	2.0	2.1	1.7	1.4	2.2	2.2	2.1	2.1	2.0	1.4	7.5	1.9	2.1
Refiners' cost of imported oil (\$/b)	108.1	101.5	103.3	104.2	101.2	99.2	97.5	96.1	94.9	93.7	92.5	91.4	102.8	104.3	98.5	93.1
Selected Financial Variables																
Federal funds rate	0.10	0.15	0.14	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.14	0.19	0.19
10-year Treasury note yield	2.04	1.82	1.62	1.70	1.91	2.12	2.37	2.61	2.83	3.04	3.26	3.44	2.79	1.80	2.25	3.14
Baa corporate bond yield	5.20	5.09	4.87	4.76	4.88	5.00	5.13	5.34	5.55	5.75	5.96	6.07	5.66	4.98	5.09	5.83
Broad trade-weighted US\$	98.9	100.6	99.0	99.1	99.2	99.0	98.9	98.6	98.3	98.0	97.9	97.8	97.2	99.4	98.9	98.0
Value of corp. equities (eop)***	11.5	-5.4	5.5	5.0	3.9	5.0	0.3	0.6	1.7	0.7	-0.8	3.6	-3.0	16.8	10.0	5.2
Incomes & Related Measures																
Corporate profits w/ IVA & CCAAdj*	-10.4	4.7	11.1	0.6	0.4	2.8	6.5	3.4	3.9	2.5	4.2	4.2	9.2	1.2	3.2	3.7
Real disposable personal income*	3.7	3.1	0.7	-0.3	-2.0	2.2	2.2	3.1	3.5	3.2	3.1	3.1	0.3	1.8	1.4	3.2
Personal saving rate (%)	3.6	4.0	3.8	3.2	2.2	2.2	2.1	2.3	2.7	2.9	3.2	3.3	4.3	3.6	2.2	3.0
Fed. surplus (unified, FY, bil. \$)	-1829	-501	-1067	-1142	-1154	-587	-793	-858	-1047	-483	-699	-777	-1297	-1171	-919	-772
* Percent change at annual rate																
** Billions of chained (2005) dollars																
*** Quarterly percent change not annualized																

Key "Assumptions" of the MA Forecast

- **Fiscal policy:**
 - Payroll tax and emergency unemp. benefits expire January 2013
 - Assumed automatic “across-the-board” sequestration will be avoided
 - Bush/Obama tax cuts extended
- **Home prices** ↑ 5.5% in 2012, ↑ 2.4% in 2013, and ↑ 3.0% in 2014
- **Equity prices** ↑ ~17% in 2012, ↑ ~10% in 2013, and ↑ 5.2% in 2014
- **Risk spreads** to narrow (Baa spread narrows 60 bps thru 2014.4);
- **Slow foreign growth** in 2012.2 and 2013.3, but expected to rise to average about 3.6% in 2013, and 3.9% in 2014
- **Trade-weighted *real* \$** declines about 4% through 2014.4; ***nominal* \$** to fall slightly from ~99 in 2012.4 to ~98 in 2014.4
- **Oil prices** fall ~\$16 through end of 2014
- **Fed** extends rate guidance thru mid-2015 & adds QE3
- **Inflation expectations** expected to slowly return to 2.0% from 2.2%

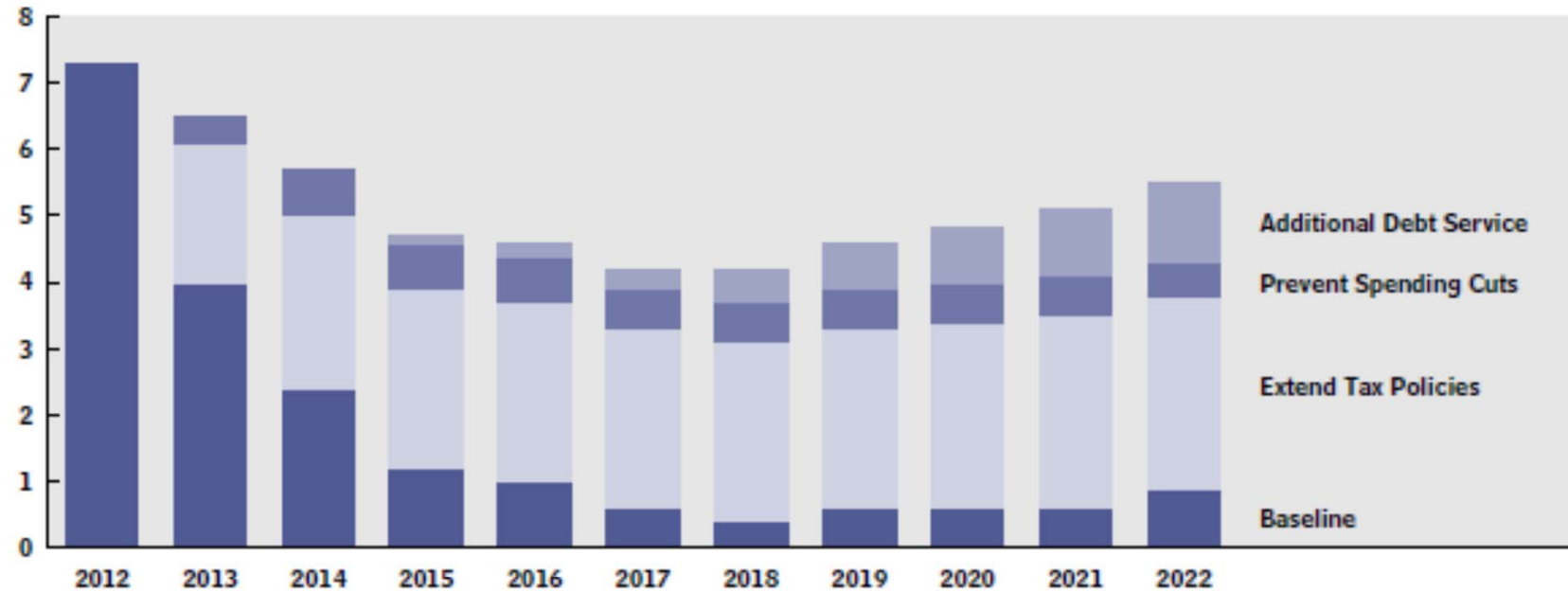
MA vs. Blue Chip Forecast Comparison

	<u>12Q2</u>	<u>12Q3</u>	<u>12Q4</u>	<u>13Q1</u>	<u>2012</u>	<u>2013</u>
GDP Growth					Q4/Q4	
Macro Advisers (Oct 5)	1.3	2.0	1.2	2.3	1.6	3.2
Blue Chip (Oct 10)	1.3	1.7	1.8	1.7	1.7	2.3
			FOMC CT (Sep.)		1.7-2.0	2.5-3.0
PCE Growth					Q4/Q4	
Macro Advisers	1.5	1.8	2.3	2.0	2.0	2.4
Blue Chip	1.5	1.9	1.9	1.6	1.9	2.1
Unemployment Rate					Q4 Average	
Macro Advisers	8.2	8.1	7.9	7.9	7.9	7.7
Blue Chip	8.2	8.1	8.1	8.1	8.1	7.8
			FOMC CT (Sep.)		8.0-8.2	7.6-7.9
GDP Price Inflation					Q4/Q4	
Macro Advisers	1.6	2.3	1.7	1.0	1.9	1.3
Blue Chip	1.6	1.9	1.9	1.8	1.8	1.9
Fed Funds Rate					Q4 Average	
Macro Advisers	0.2	0.1	0.2	0.2	0.2	0.2
Blue Chip	0.2	0.1	0.1	0.2	0.1	0.2
10-yr Note Yield					Q4 Average	
Macro Advisers	1.8	1.6	1.7	1.9	1.7	2.6
Blue Chip	1.8	1.6	1.7	1.8	1.7	2.3

Deficits in CBO's Baseline and Alternative

Deficits Projected in CBO's Baseline and Under an Alternative Fiscal Scenario

(Percentage of gross domestic product)



Source: Congressional Budget Office.

Note: "Additional Debt Service" is the amount of interest payments on the additional debt issued to the public that would result from the policies in the alternative fiscal scenario. "Prevent Spending Cuts" involves holding Medicare's payment rates for physicians' services at their current level (rather than permitting them to drop, as scheduled under current law) and preventing the cuts to federal spending that will occur under the automatic enforcement procedures of the Budget Control Act of 2011 from taking effect (but leaving in place the original caps on discretionary appropriations in that legislation). "Extend Tax Policies" reflects the assumptions that expiring tax provisions (other than the payroll tax reduction) are instead extended and that the alternative minimum tax is indexed for inflation.