Economic Indicators

THE PARTHENON GROUP
Boston • London • Mumbai • San Francisco

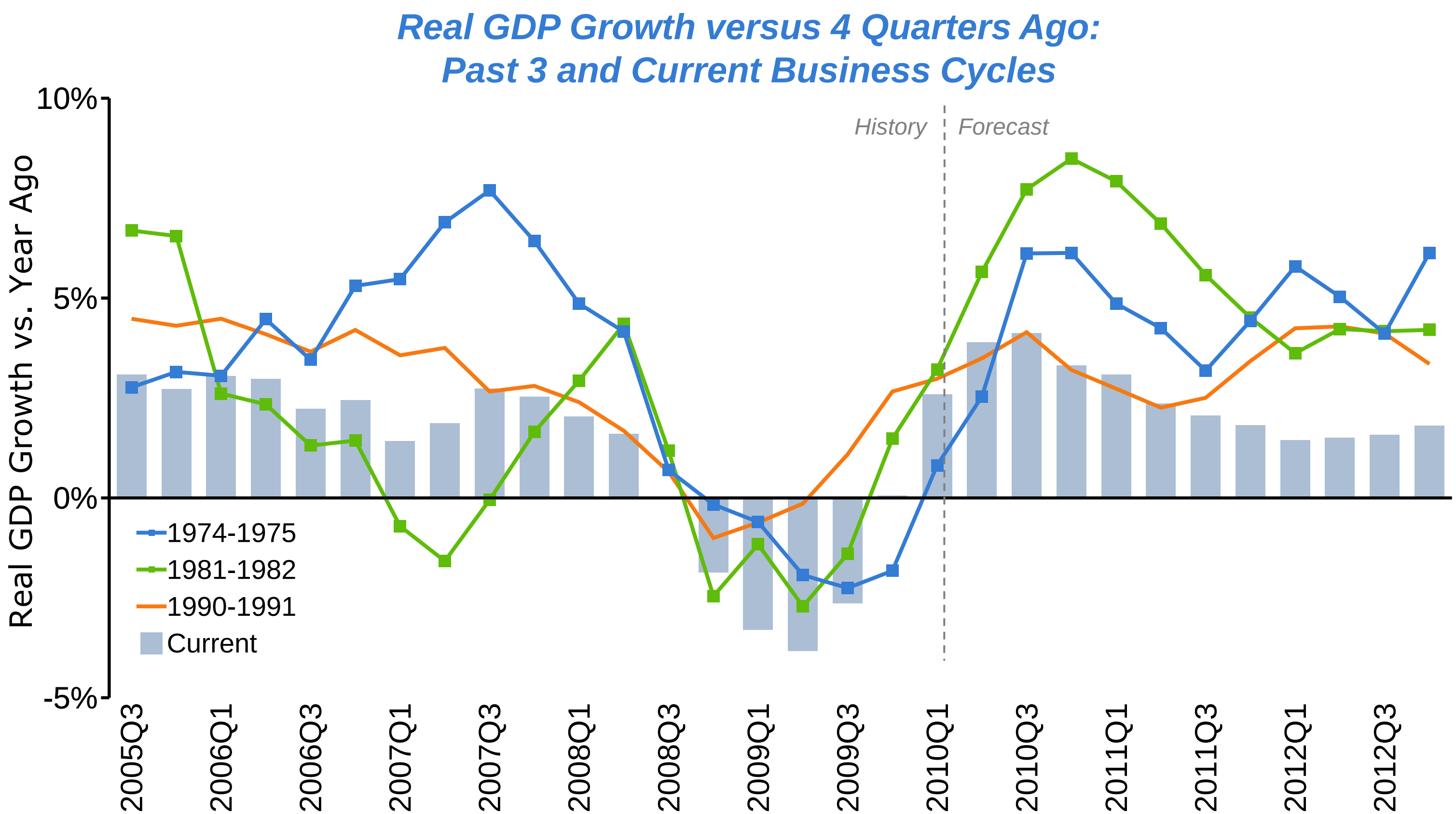
April 2010 | No. 4

Key Topics

- **The "Great Recession" in Historical Perspective**
- The Range of Opinion on the Outlook
- Global Comparison
- Facts and Myths: Consumer Behavior
- Challenges to the Recovery After 2010

Our US Current Forecast Compared to Recent Major Recessions

THE PARTHENON GROUP



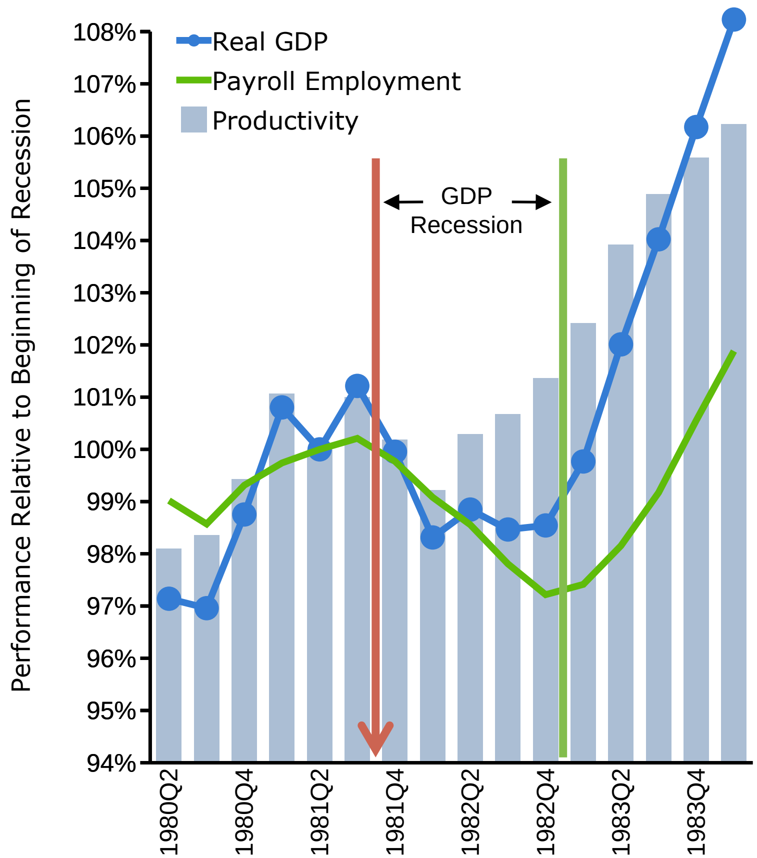
- **This "great recession" will exceed by 2x the severity of the deep 1975 and 1981-82 recessions**
- **Parthenon expects the recovery will be better than the consensus expects in 2010, but run into trouble in 2011 as fiscal and monetary policies are tightened prematurely**

Note: Cycles are aligned on the first quarters of near zero real GDP growth versus a year earlier: The 1990-91 cycle alignment implies 2008 Q3=1990 Q4; the 1980-81 cycle implies 2008 Q3=1981 Q4; and the 1974-75 cycle implies 2008 Q3=1974 Q1.

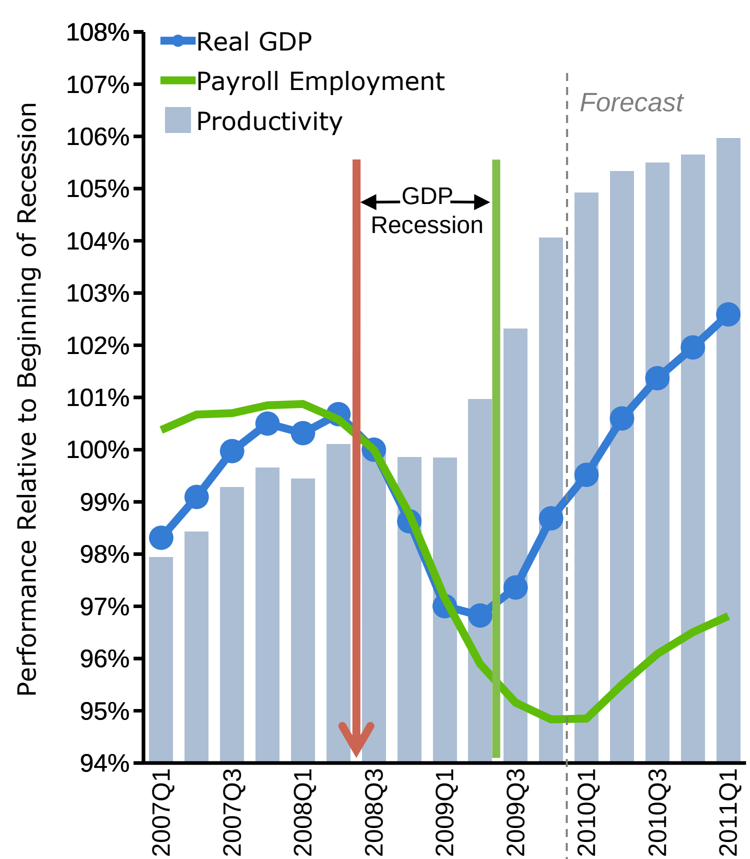
Source: Parthenon Analysis; Bureau of Economic Analysis

A Gradual Employment Recovery Will Begin in Early 2010, a Half-Year Behind GDP Because of Business Conservatism

1981-82 Cycle: Employment Relative to GDP



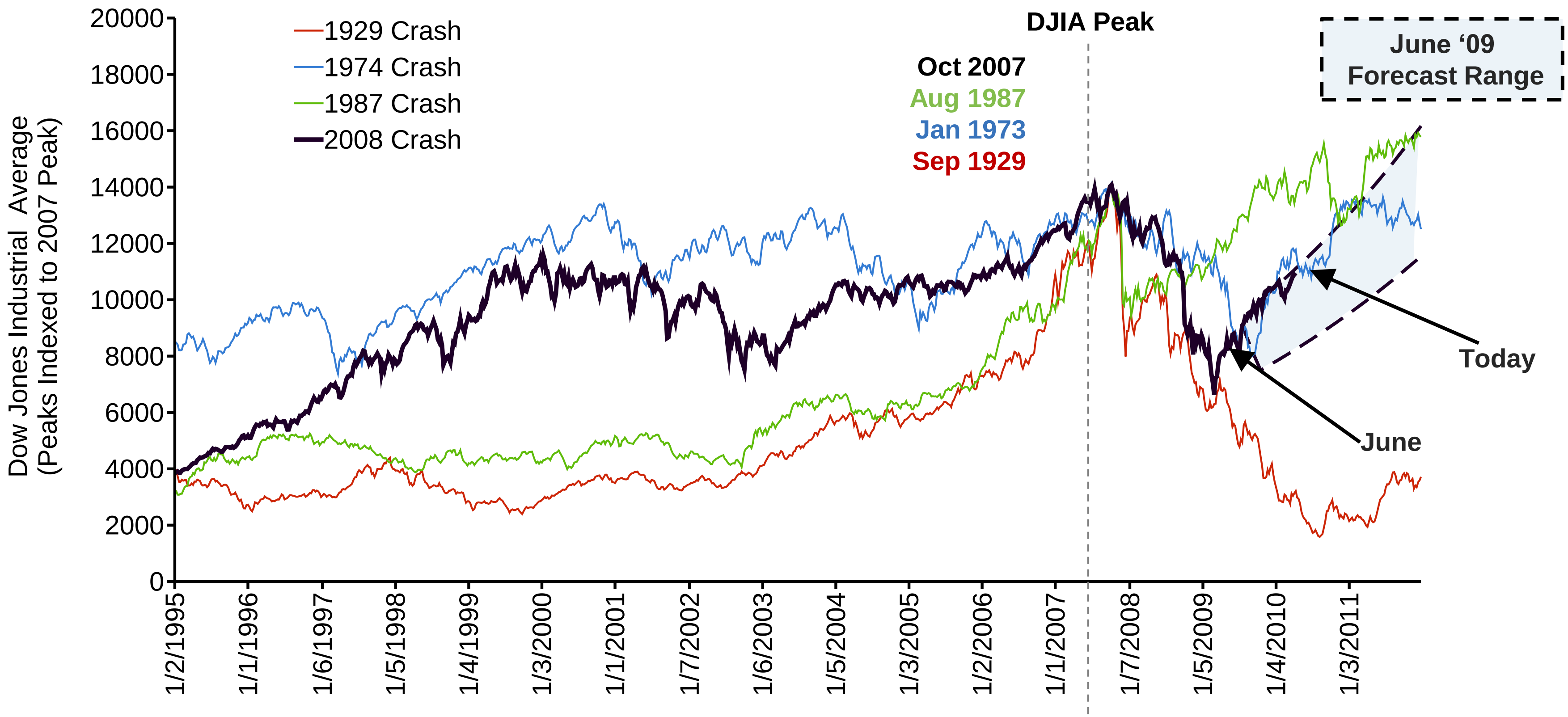
Current Cycle: Employment Relative to GDP



Source: Parthenon Analysis, Bureau of Economic Analysis

Where Is the Stock Market Headed?

US Stock Market in Prior Crashes
(Indexed by Peak Day to Current Levels)



Economic recovery was / is projected to bring a doubling of the market from mid 2009 to late 2011

Key Topics

- The "Great Recession" in Historical Perspective
- **The Range of Opinion on the Outlook**
- Global Comparison
- Facts and Myths: Consumer Behavior
- Challenges to the Recovery After 2010

The Range of Outlook Opinion at Selected Key Dates: Parthenon and the Blue Chip Survey

THE PARTHENON GROUP

Real GDP Growth Forecasts for 2009-2011, By Date of Forecast

Year Being Forecast			Nov 2008	Nov 2009	Apr 2010
	Official 2008	1.4%			
	Official 2009	-2.4%			
2009	Blue Chip Top 10		0.3%		
2009	Blue Chip Average (52)		-0.4%		
2009	Blue Chip Bottom 10		-1.1%		
2009	Parthenon		-2.1%		
2010	Blue Chip Top 10			3.4%	3.5%
2010	Blue Chip Average			2.7%	3.1%
2010	Blue Chip Bottom 10			2.0%	2.7%
2010	Parthenon			3.3%	3.6%
2011	Blue Chip Top 10				3.9%
2011	Blue Chip Average				3.1%
2011	Blue Chip Bottom 10				2.2%
2011	Parthenon				2.3%

Parthenon correct: below bottom

Consensus catching up to Parthenon

Parthenon near top

Parthenon near bottom

Source: Blue Chip Economic Indicators

Parthenon Correctly Anticipated a Much Deeper Global Recession than the Consensus; Today Parthenon Sees a Better 2010 But Problems in 2011

THE PARTHENON GROUP

Calendar Year Forecast:	Calendar Year 2009			CY 2010				CY 2011	
Date Forecast Was Made:	Nov 2008		Current	Nov 2009		Apr 2010		Apr 2010	
Concepts / Forecast Source:	Blue Chip Consensus	Parthenon	US Gov't.	Blue Chip	Parthenon	Blue Chip	Parthenon	Blue Chip	Parthenon
US Real GDP	-0.4%	-2.1%	-2.5%	2.7%	3.3%	3.1%	3.6%	3.1%	2.3%
Consumer Spending	-0.6%	-0.3%	-0.5%	1.8%	2.5%	2.2%	2.4%	2.6%	2.5%
Business Equipment and Structures	-5.2%	-12.4%	-17.9%	0.2%	0.4%	1.5%	2.5%	6.8%	4.7%
Inventory Growth (Contribution to GDP)	-0.1%	-0.5%	-0.7%	0.8%	1.3%	1.0%	1.2%	0.2%	-0.1%
Residential Construction	-7.0%	-11.1%	-20.2%	10.0%	5.5%	3.7%	4.2%	13.5%	15.2%
Exports	-1.0%	-5.5%	-9.6%	5.5%	13.1%	11.8%	15.0%	8.3%	6.7%
Major Trading Partners Growth	0.7%	-0.6%	-3.4%	2.5%	2.7%	2.6%	2.0%	2.8%	2.5%

Source: Parthenon Analysis, Blue Chip Economic Indicators

Key Indicators Spectrum for 2010:
Progress Is Bring Made Toward Full Year Predictions

● *December reading* ● *Most current reading*

Key Indicators	*Norm.*	*2009 Expected Average*	Downside Case	Base Case	Upside Case
			NOV. 2009 FORECAST for CY 2010 Average		
Consumer Sentiment Index	88	67	*65-75*	*80-90*	*90-100*
Mortgage Rate (%)	4.5%+ Inflation	5.1%	*5.5%*	*5.25%*	*5.0%*
Single Family Housing Starts (thousands, at annual rate)	700	450	*450*	*550*	*650*
Credit Risk Premiums: baa corp. bond-Treasury bond	2¼%	2.0%	*2½-3%*	*2¼-2½%*	*2-2¼%*
S&P 500	Currently 1100	965	*1000-1100*	*1250-1350*	*1350-1500*
Business Equipment Spending Growth	6%	-16.6%	*0%*	*10%*	*15%*
US Inflation-Adjusted Goods Export Growth (yr. ago)	6%	-11%	*0-5%*	*10-12%*	*12-15%*

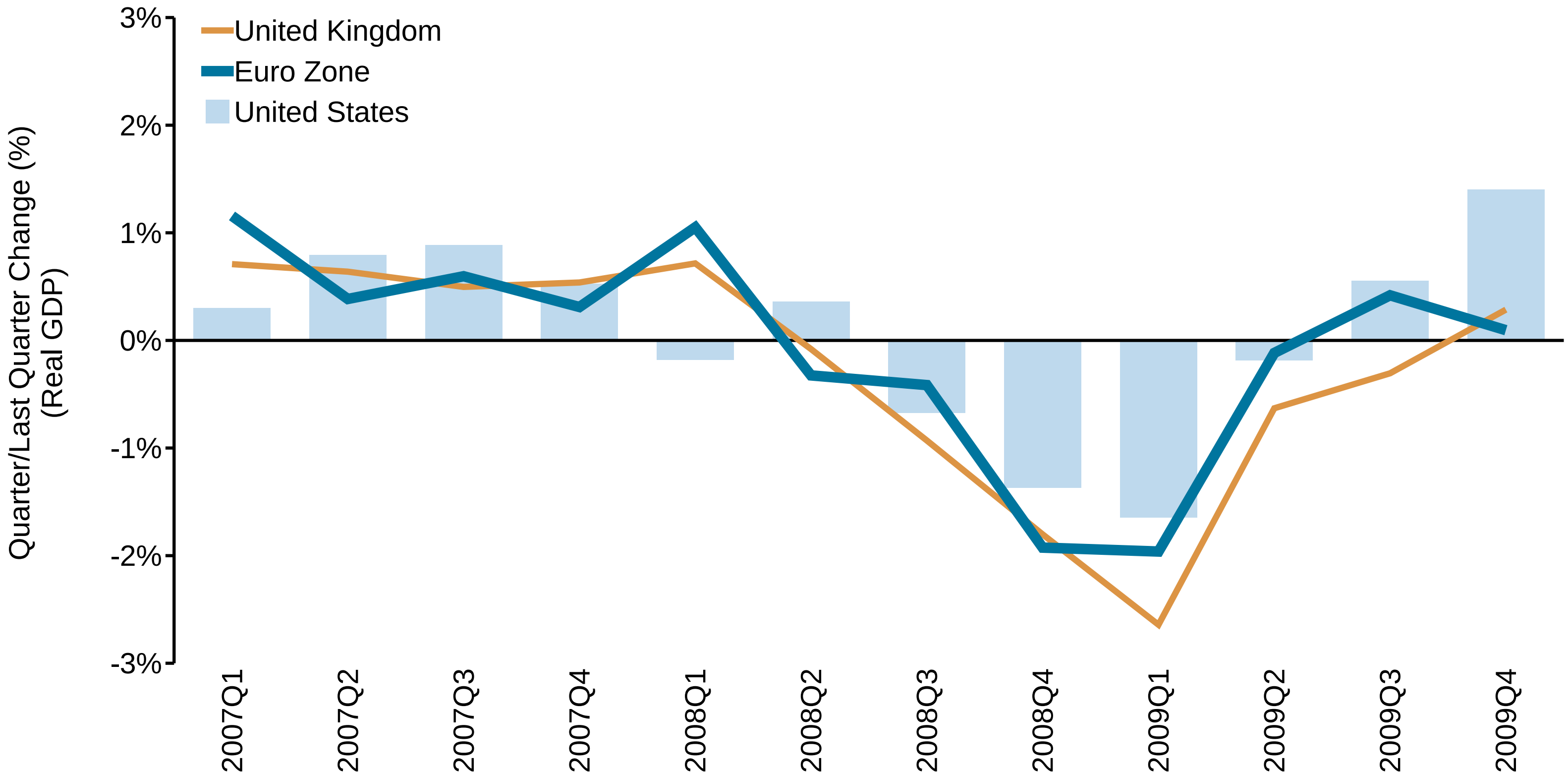
CY2009 Outlook and Implications of Current Indicator Readings	*Norm.*	*2009 Expected Average*	Downside Case	Base Case	Upside Case
Expected Real GDP Growth in 2009					
United States	3.0%	-2.5%	*2-2¾%*	*2¾-3½%*	*3½%-4%*
US Major Trading Partners	2.5%	-3.4%	*1½-2%*	*2-3%*	*3-4%*
Other Important Global Markets	5.0%	-1.5%	*3-4%*	*5-6%*	*6-7%*
US Unemployment Rate	6.5%	9.3%	*10.5-11.5%*	*9.5-10.5%*	*9-9.5%*

Key Topics

- The "Great Recession" in Historical Perspective
- The Range of Opinion on the Outlook
- **Global Comparison**
- Facts and Myths: Consumer Behavior
- Challenges to the Recovery After 2010

Even Though the Crisis Was Assumed to Start in the US Housing Market, the European Recessions Are More Severe

Quarter over Quarter Growth in Real GDP for the UK, the US and the Euro Zone

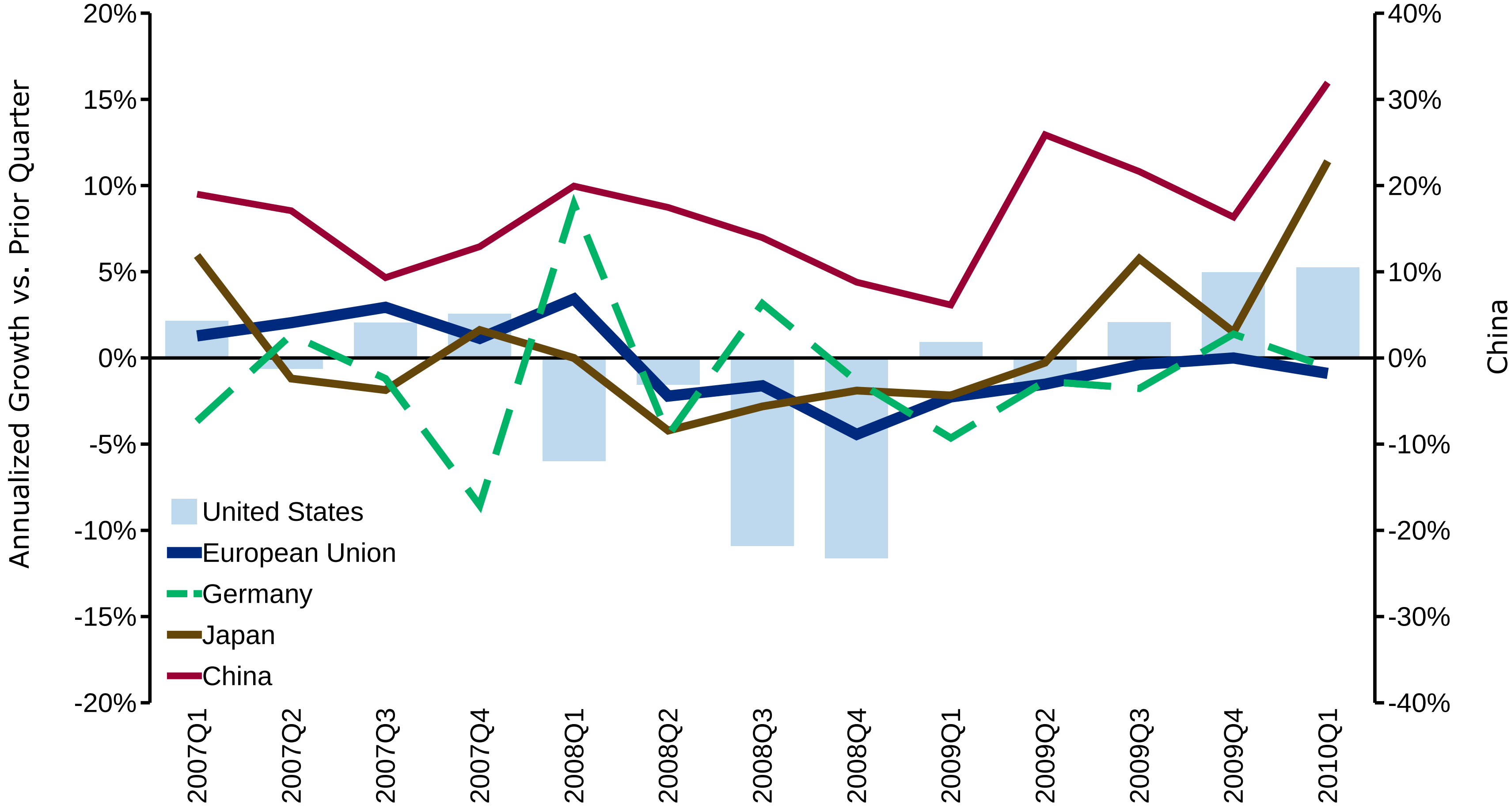


- **Other shared powerful recession forces include monetary policy tightness until 2008 and exceptionally high oil and commodity prices**
- **US monetary and fiscal stimulants have been greater and continue in 2010**

Source: Global Insight

Responding to Late and Tepid Stimulus, Retail Sales Volumes Are Notably Weakest in Europe

Quarter over Quarter Growth in Real Retail Sales for Major Markets



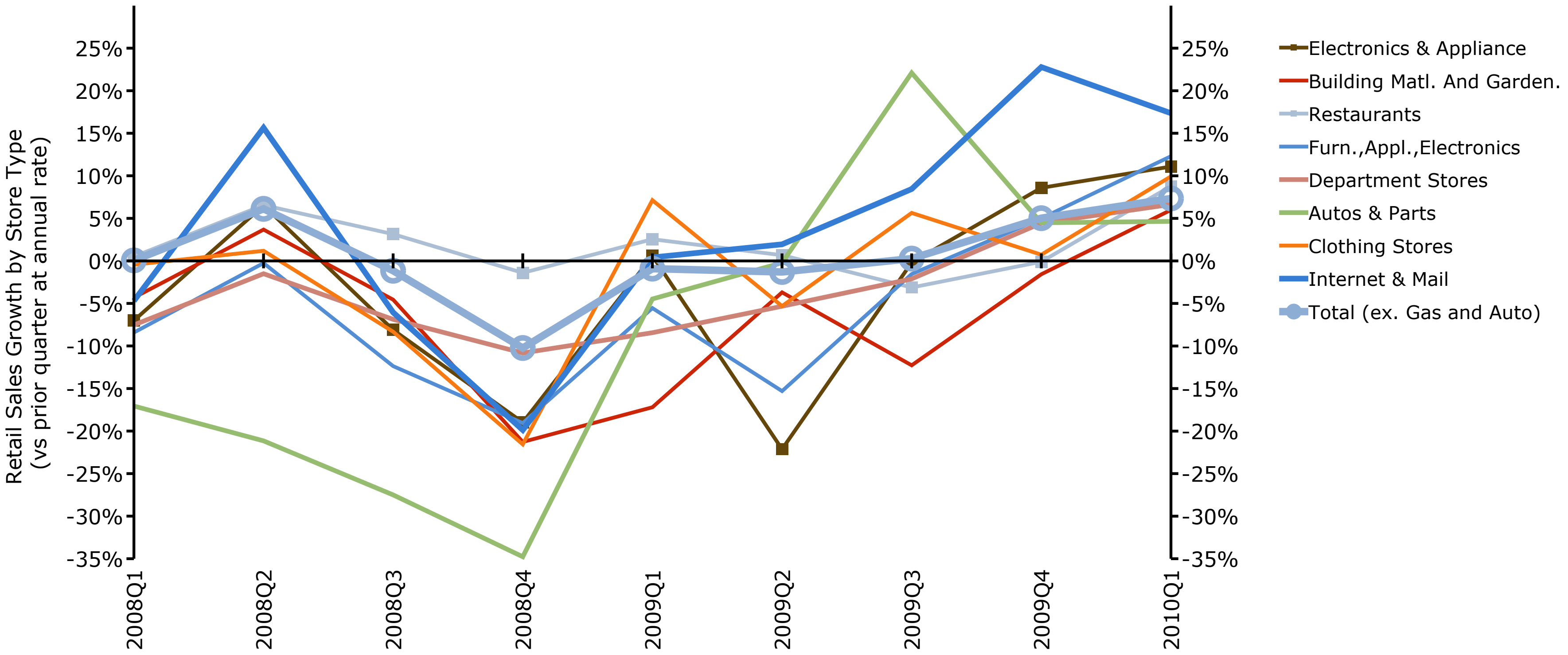
Source: Global Insight

Key Topics

- The “Great Recession” in Historical Perspective
- The Range of Opinion on the Outlook
- Global Comparison
- **Facts and Myths: Consumer Behavior**
- Challenges to the Recovery After 2010

Monthly Evidence On Retail Sales Through March 2010 Shows Good, Accelerating Recovery Beginning Last Autumn

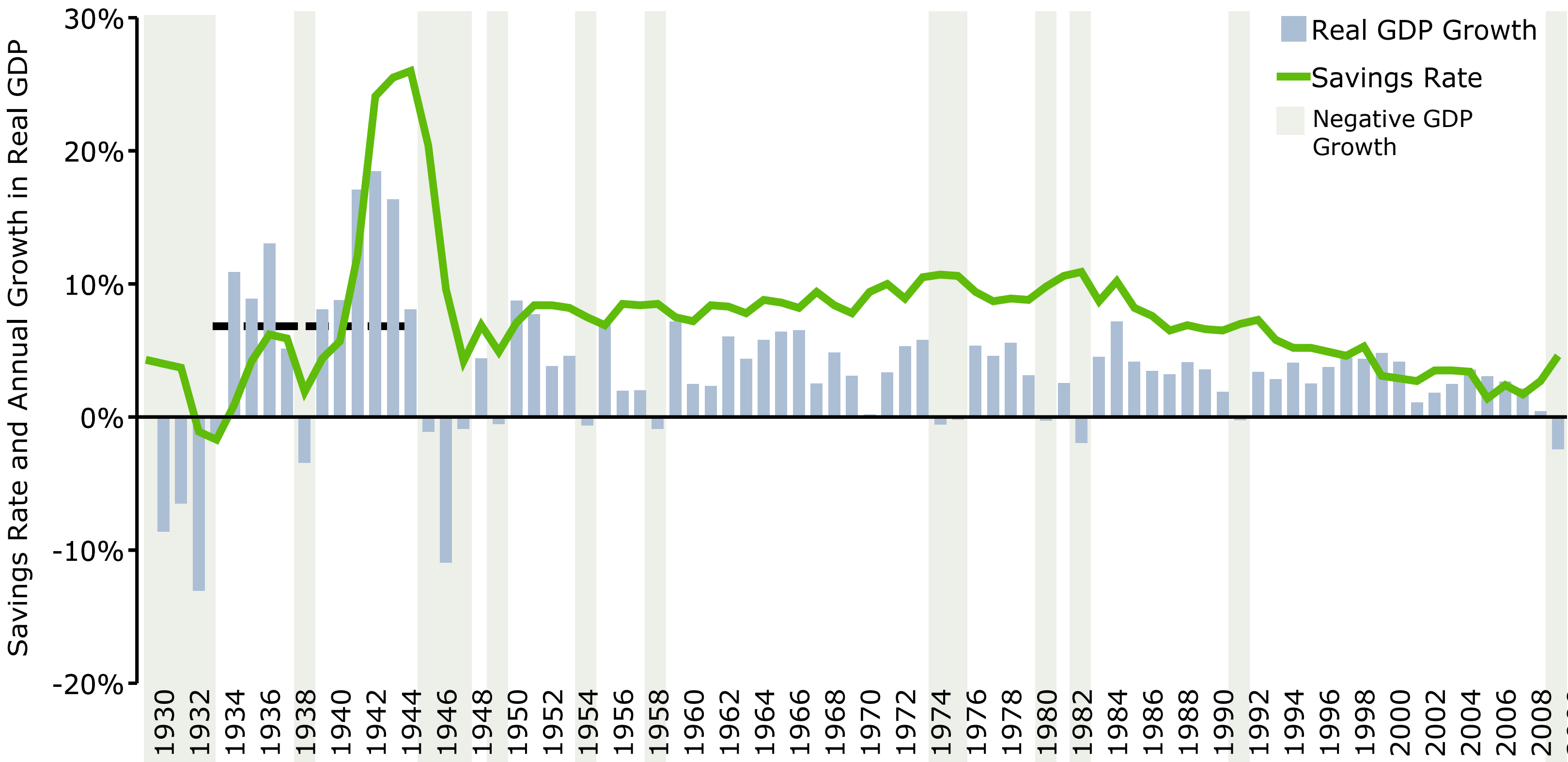
Retail Sales Growth by Store Type vs. Prior Quarter Prior, 2008-2010



Source: Parthenon analysis; Bureau of Economic Analysis

Myth: The Depression Created a Generation of High Savers
Reality: The Personal Saving Rate Fell Early in the Depression Then Recovered to a Normal ~5% Rate

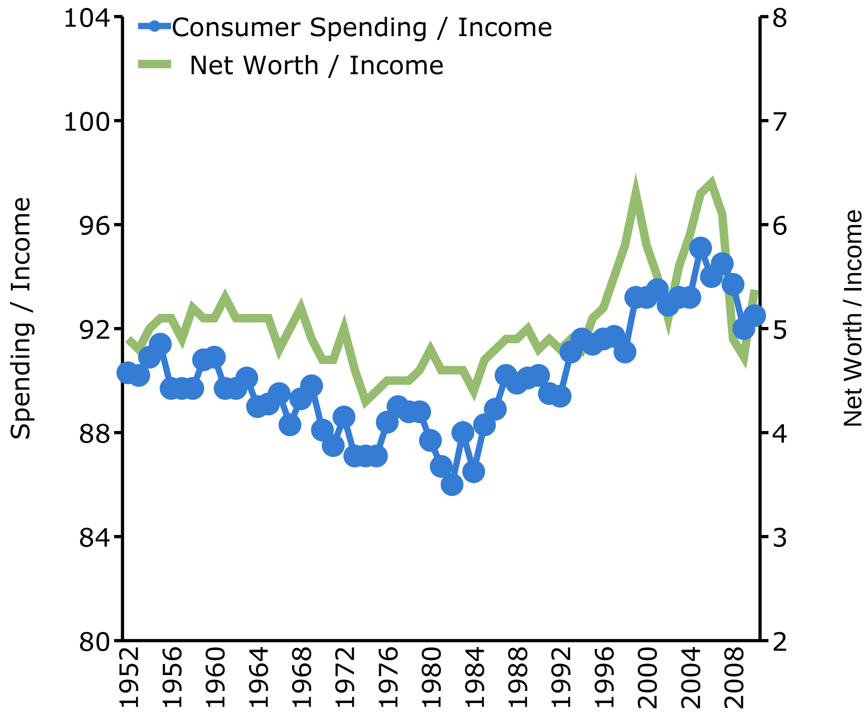
Personal Saving Rate and Periods of Recession, 1929-2009



Rationing Propelled Saving in WW II, Followed by a Gradual Savings Rise Until 1982

Source: Bureau of Economic Analysis

Reality: Since WWII, Movements in Net Worth Have Determined the Personal Saving Rate



This chart demonstrates a clear consumption-to-wealth elasticity or proportional response of 0.2 : 1

(The Net Worth / Income ratio is graphed against the larger right axis compared to the Consumption / Income ratio on the left.

For example as wealth/income increased 25% from 4 to 5, consumption to income. increased 5% from .91 to 96)

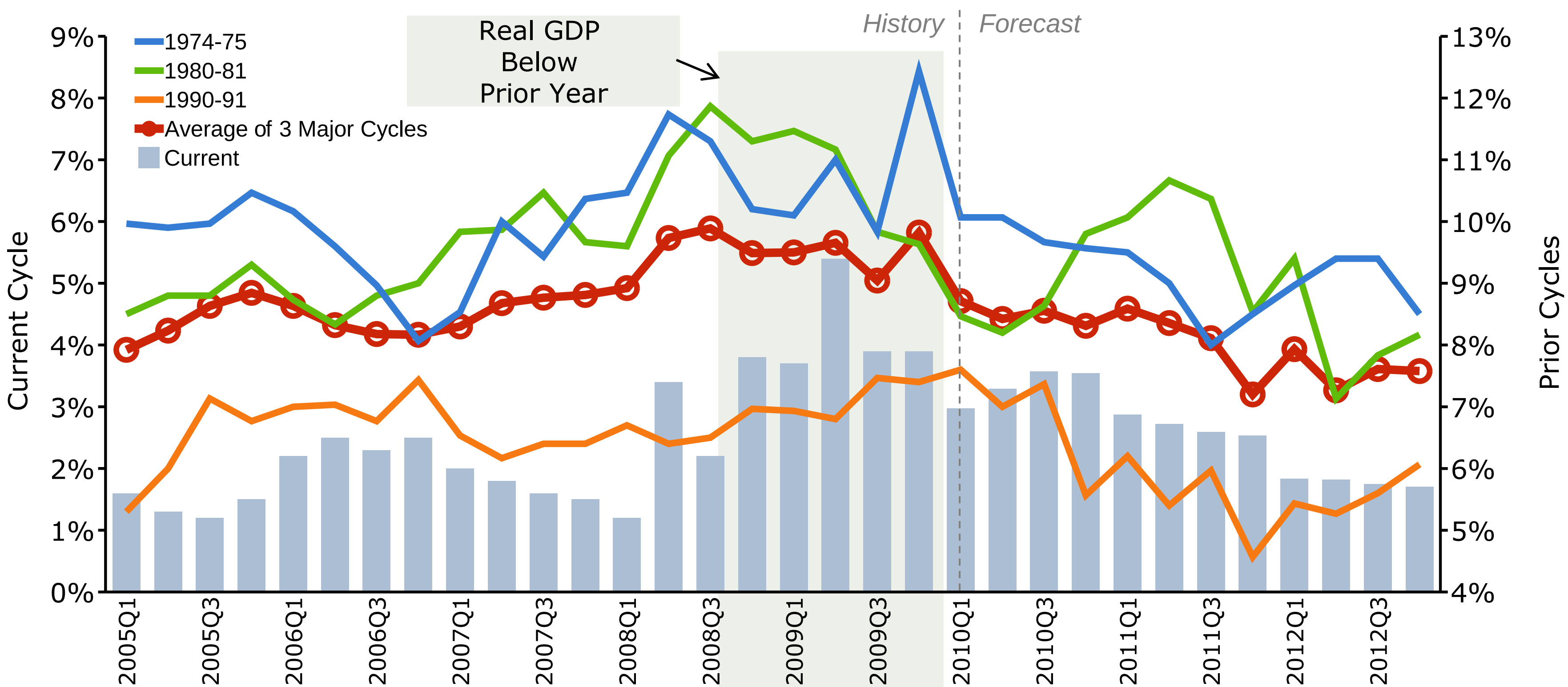
For Americans, it's pretty simple: if wealth is high, there is less need for savings to build "nest eggs" or for other purposes

Note: Income Shown Here Is Official After-tax Personal Income

Source: Bureau of Economic Analysis

Therefore, in Recent Cycles, Saving Rates Have Been High During the Recession and Drifted Lower When Growth Resumed

Personal Savings Rate: Past 3 and Current Business Cycles



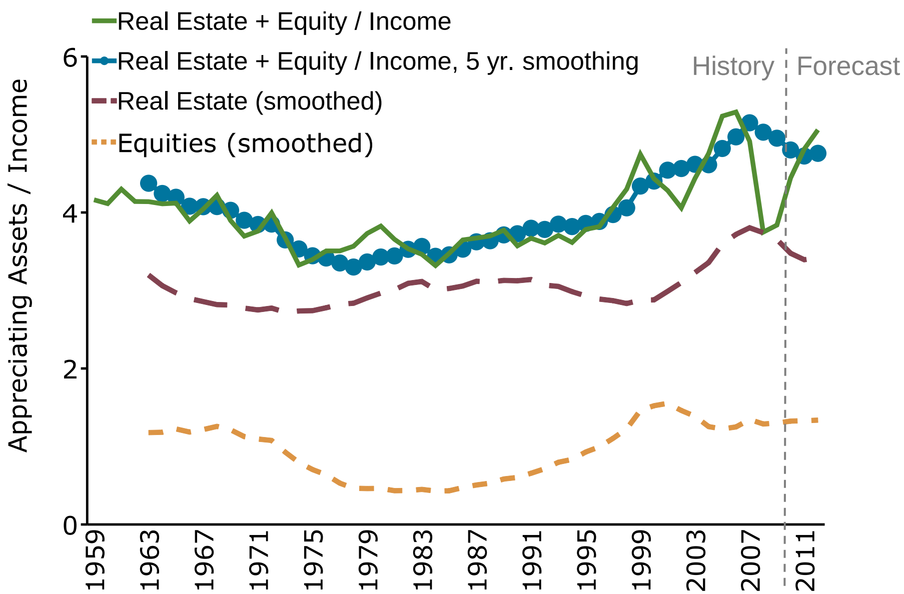
The savings rate rose approximately 3 percentage points in this cycle versus a more typical 1% rise

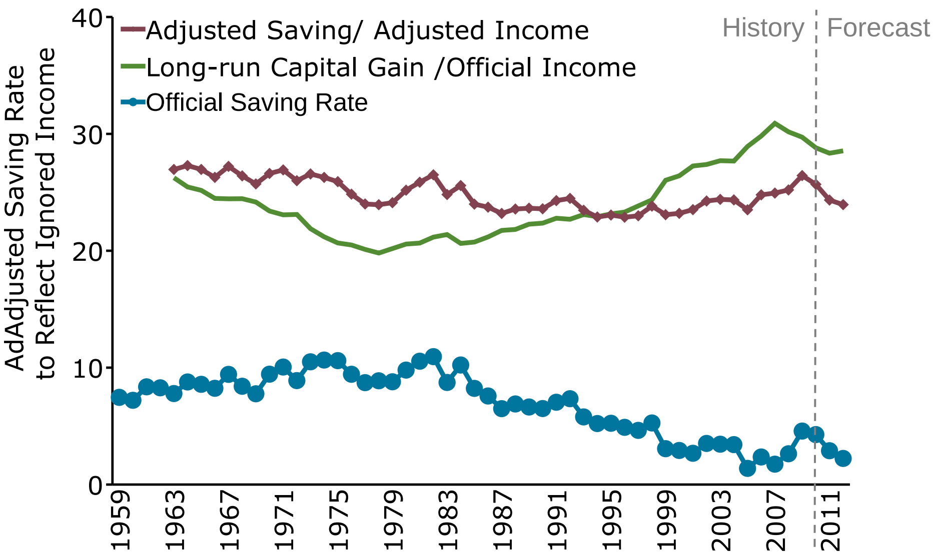
Note: The cycles are aligned on the first quarters of near zero real GDP growth versus a year earlier:
the 1990-91 cycle alignment implies 2008 Q3=1990 Q4;
the 1980-81 cycle alignment implies 2008 Q3=1980 Q2;
the 1974-75 cycle alignment implies 2008 Q3=1974 Q1

Source: Parthenon Analysis; Bureau of Economic Analysis

Appreciation of Equities and Real Estate Assets Should Be Recognized as Income When Computing Saving, But It Is Not => Huge Bias

Correct Rate Is Approx. 24%, Not 4%





	Asset Appreciation				
	S&P 500	Real Estate/Home	Consumer Inflation	S&P – Inflation	Real Estate - Inflation
1959 – 2010	6.2%	5.7%	3.6%	2.6%	2.1%
1959 – 1984	4.2%	6.8%	4.7%	-0.5%	2.1%
1984 – 2010	8.2%	4.5%	2.5%	5.7%	2.0%

If the Assets = 4 x Official Income, and Yield 6% , then Capital Gains = 24% of Official Income, and the Saving Rate is Dramatically Higher than Conventionally Reported

Source: xxx

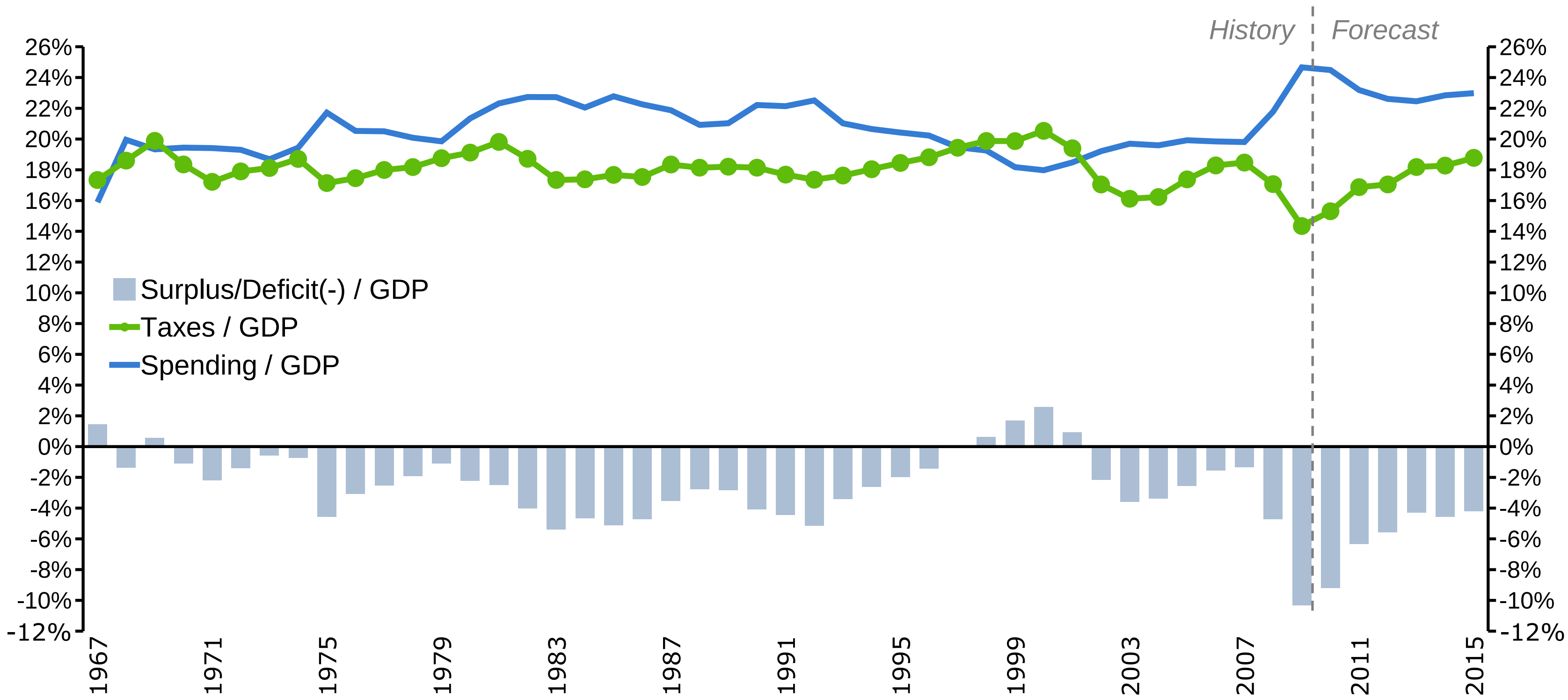
Key Topics

- The “Great Recession” in Historical Perspective
- The Range of Opinion on the Outlook
- Global Comparison
- Facts and Myths: Consumer Behavior
- **Challenges to the Recovery After 2010**

Federal Taxes Are Headed Sharply Higher, While the Spending Stimulus is Fading: Such "Fiscal Restraint" Trims Growth After 2010

THE PARTHENON GROUP

Federal Receipts and Spending Relative to GDP, 1960-2015



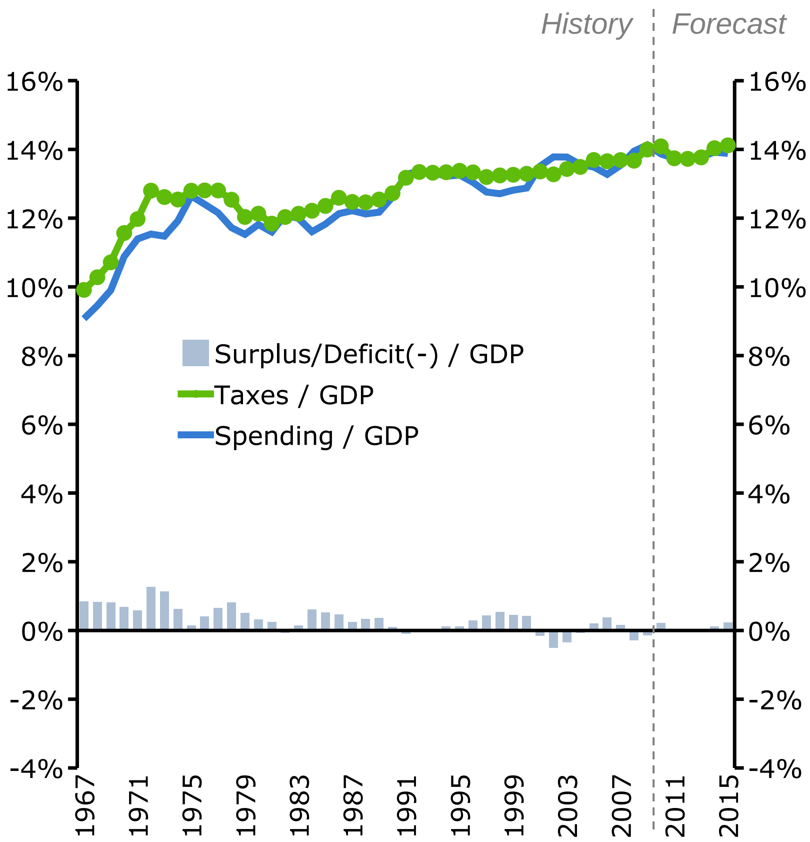
- **Tax rates will rise 10% => Taxes will rise from 17% of GDP pre-recession to 19% in 2015**
- **Even with a return to full employment in 2015, new programs will have raised the spending share of GDP to 23% versus a typical value of 20%**

Source: Parthenon Analysis; Bureau of Economic Analysis

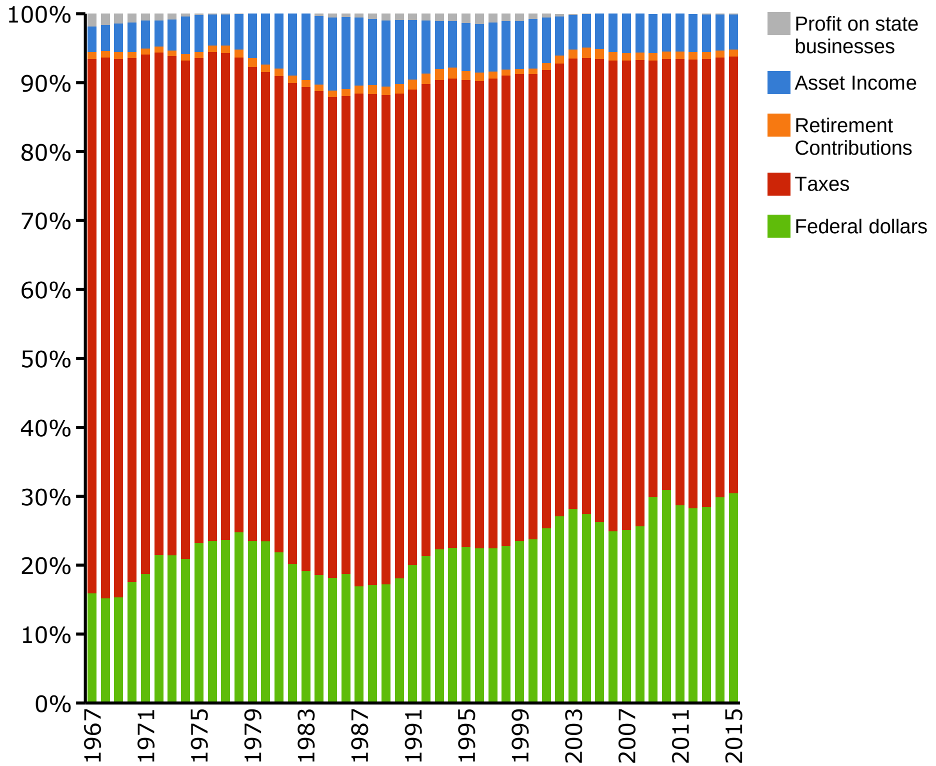
The Economic Scale of State-Local Government Has Also Been Rising, Thanks to Uncle Sam

THE PARTHENON GROUP

State-Local Operating Budgets: Receipts and Spending Relative to GDP, 1967-2015



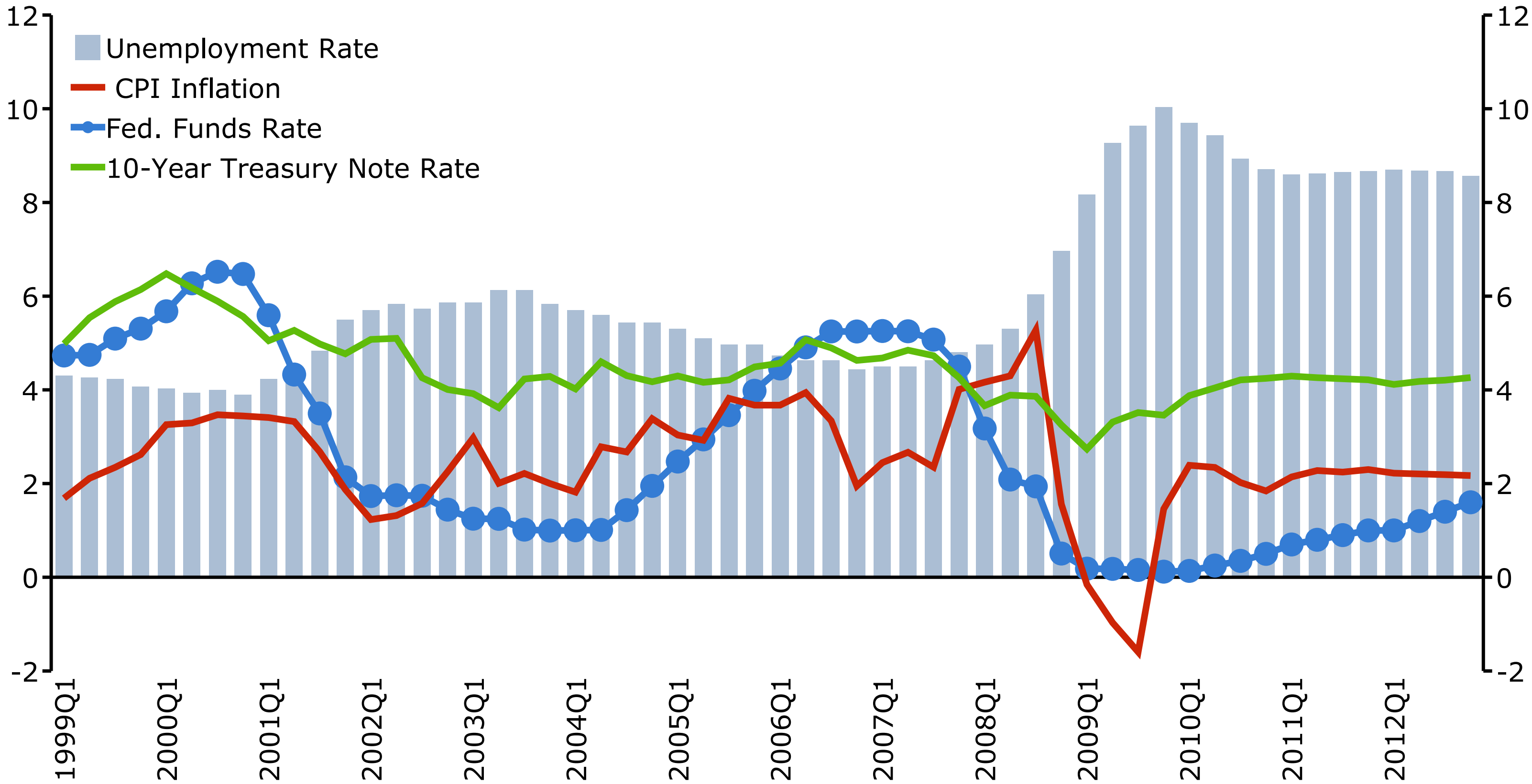
State-Local Fund Sources, 1967-2015



Source: Parthenon Analysis; Bureau of Economic Analysis

The Fed Will Follow the Economy, Pushing Short-Term and Long-Term Rates Higher

Interest Rates versus Inflation and Unemployment, 1999-2012F



OPEC's Production Restrictions Have Brought Oil Back to $80-plus and Cut Real Incomes 1%

THE PARTHENON GROUP

The Energy Price Burden:
Percentage Reduction in Real Income Due to Oil Price > $25 (Real 2000 Prices)