## **Economics Group**

### SECURITIES

## Weekly Economic & Financial Commentary

### **U.S. Review**

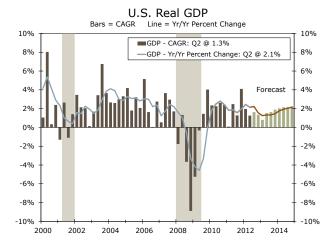
#### Slow Growth for the Foreseeable Future

- This week's third quarter GDP release pointed toward an ongoing moderate pace of economic growth. Growth for the quarter was supported by consumer spending, much slower business spending, residential construction activity, and government spending. Net exports and inventories detracted from growth.
- Durable goods orders bounced back in September; however, the details of the report were less encouraging with weakness in several key areas. The pullback in orders suggests that growth will likely be weaker through the end of the year.

### **Global Review**

#### Central Bank Stimulus and the Global Economy

- Faced with chronic deflation and slow growth, Japan this week announced a ¥750 billion fiscal stimulus to be deployed in tandem with the Bank of Japan's stepped-up asset purchase program.
- The Bank of England's asset purchase program seems to be bearing fruit. The U.K. economy sprung out of recession in Q3, but we explain in this week's Global Review why Britons might want to wait before popping the champagne corks and heading for High Street.
- Eurozone business sentiment signals continued weakness, as PMIs there are still in contraction.





Wells Fargo U.S. Economic Forecast													
	Act	tual			Fore	cast			Act	tual		Forecast	t
		20	12			20	13		2010	2011	2012	2013	2014
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q					
Real Gross Domestic Product <sup>1</sup>	2.0	1.3	2.0	1.3	0.7	1.4	1.6	1.9	2.4	1.8	2.1	1.3	1.9
Personal Consumption	2.4	1.5	2.0	1.7	0.7	1.3	1.4	1.3	1.8	2.5	1.9	1.3	1.3
Inflation Indicators <sup>2</sup>													
PCE Deflator	2.4	1.6	1.4	1.6	1.3	1.5	1.5	1.5	1.9	2.4	1.7	1.4	1.9
Consumer Price Index	2.8	1.9	1.7	2.3	2.2	2.7	2.7	2.3	1.6	3.1	2.2	2.5	2.2
Industrial Production <sup>1</sup>	5.9	2.6	-0.4	0.5	0.7	3.5	4.1	4.1	5.4	4.1	3.6	1.8	3.8
Corporate Profits Before Taxes <sup>2</sup>	10.3	6.7	5.7	5.3	4.8	5.2	5.7	6.3	26.8	7.3	6.9	5.5	7.0
Trade Weighted Dollar Index <sup>3</sup>	72.7	74.5	72.7	72.5	73.0	74.0	75.0	76.0	75.4	70.9	73.1	74.5	73.5
Unemployment Rate	8.3	8.2	8.1	7.6	7.6	7.9	8.1	8.0	9.6	9.0	8.0	7.9	7.7
Housing Starts <sup>4</sup>	0.71	0.74	0.79	0.84	0.90	0.96	1.02	1.08	0.59	0.61	0.77	0.99	1.17
Quarter-End Interest Rates <sup>5</sup>													
Federal Funds Target Rate	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Conventional Mortgage Rate	3.95	3.68	3.50	3.30	3.30	3.30	3.35	3.40	4.69	4.46	3.61	3.34	3.70
10 Year Note	2.23	1.67	1.65	1.60	1.65	1.70	1.75	1.80	3.22	2.78	1.79	1.73	2.10

### **Inside**

U.S. Review 2 U.S. Outlook 3 Global Review 4 Global Outlook 5 Point of View 6 Topic of the Week Market Data

ecast as or: October 26, 2012 Compound Annual Growth Rate Quarter-over-Quarter Year-over-Year Percentage Change Federal Reserve Major Currency Index, 1973=100 - Quarter End

Millions of Units

Source: U.S. Department of Commerce, U.S. Department of Labor, Federal Reserve Board, IHS Global Insight and Wells Fargo Securities, LLC



#### U.S. Review

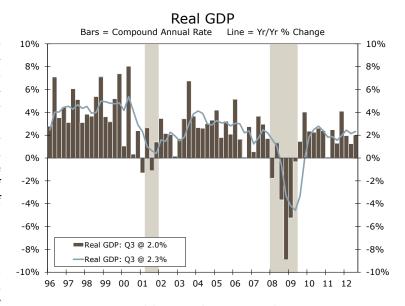
#### **Slow Growth for the Foreseeable Future**

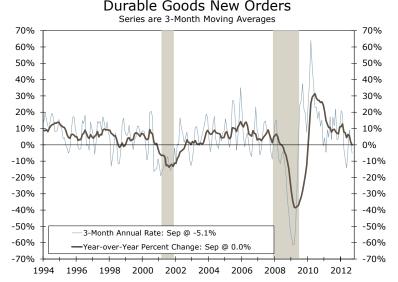
This week's economic data continued to reflect an ongoing modest pace of economic growth. GDP growth in the third quarter expanded at a 2.0 percent pace after posting a 1.3 percent increase in the second quarter. Durable goods orders bounced back in September; however, nondefense capital goods orders excluding aircraft continued to show weakness. The good news remained confined to the housing market where new home sales posted a greater-than-expected 5.7 percent increase in September. Our outlook remains relatively unchanged. We continue to expect growth to remain sluggish through the end of the year as business and consumers pare back spending in light of the uncertainty around the impending fiscal cliff.

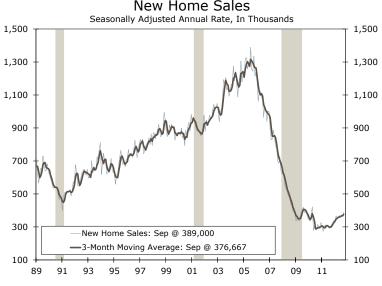
GDP growth came in much stronger than expected at 2.0 percent. The biggest support to third quarter growth came from personal consumption expenditures, which rose 2.0 percent boosted by an 8.5 percent increase in durable goods sales. Business fixed investment contracted for the quarter, declining 1.3 percent after expanding at a 3.6 percent pace in the second quarter. Surprisingly another support to growth was the government sector, which climbed 3.7 percent for the quarter, the first such increase since second quarter of 2010. The big driver of government spending was in the defense category, which jumped 13 percent. With the impending federal budget cuts on the horizon, we do not expect this support to growth to continue. Residential investment also continued to add to growth, rising 14.4 percent. Net exports detracted from growth, as exports fell for the first time since the first quarter of 2009, a reflection of the slowdown in global economic growth.

Durable goods orders posted a nice bounce back in September of 9.9 percent after dropping 13.1 percent in August. While the bounce back in the headline number looks impressive, the details of the report were less than encouraging. Orders for motor vehicle and parts, fabricated metals, and computer and electronics fell for the second consecutive month. A theme reflected in the GDP and durable goods orders numbers this week is a clear downshift in the pace of business investment especially in equipment and software. The downshift from 100 percent to 50 percent "bonus depreciation" deduction on corporate taxes this year can clearly be seen in the data, as firms pare back spending on equipment and software. We expect the downshift in business investment to continue through the end of the year, as ongoing uncertainty around the fiscal cliff keeps business spending restrained.

The housing market data this week continued to point to gradual improvement. New home sales rose 5.7 percent in September after slowing in August. New home sales rose in the Northeast and West but fell sharply in the Midwest. New home inventories remain low at 4.5 months, which is helping support new home prices. However, the gap between new and existing home prices, which began to close earlier in the year, has continued to grow in the second half of this year suggesting that the pace of home building activity, while improving, will continue to be slow.







Source: U.S. Dept. of Commerce and Wells Fargo Securities, LLC

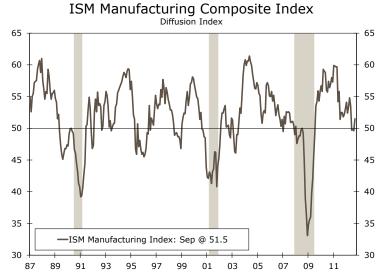
### **Personal Income • Monday**

Personal income growth in recent months has been feeble, increasing a meager 0.1 percent in August and July. Income remains constrained by weak wage gains and only modest payroll additions. We expect personal income growth to improve a bit in September but to remain weak on a real basis. Consumer prices have been rising more quickly than income, cutting into real disposable income. In August, real disposable income fell 0.3 percent and, following a 0.6 percent increase in the CPI, another decline for September is not out of the question.

Despite weak income gains, consumer spending has held up fairly well. Spending in August outpaced income growth for the second consecutive month, rising 0.5 percent. However, much of the increase was driven by a rebound in gasoline prices. Higher "core" retail sales and a further bump in gas prices indicate another strong showing for personal spending in September.

Previous: 0.1% Wells Fargo: 0.3%

Consensus: 0.4%



### **Employment • Friday**

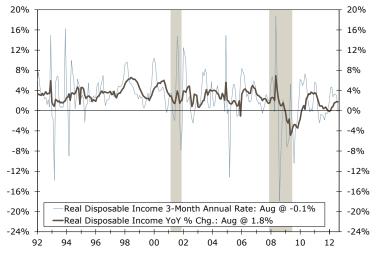
September's employment report showed another month of moderate payroll gains, with employers adding 114,000 new jobs. One of the bright spots in the report was a net positive revision of 86,000 jobs—driven primarily by the government sector—which pushed the third quarter average gain up to 146,000 from 67,000 in the prior period. We look for another modest increase in payrolls in October, with employers adding around 90,000 jobs.

Turning heads last month was a stark decline in the unemployment rate, which fell to 7.8 percent from 8.1 percent in September. We believe the unemployment rate will hold steady in October. However, given the volatility of the household survey and what appear to be issues surrounding the seasonal adjustment of the survey, the October print may surprise to one side or the other. One thing is for certain though—all eyes will be on this number heading into the final days before the 2012 election.

Previous: 114,000 Wells Fargo: 90,000

Consensus: 120,000

### Real Disposable Income



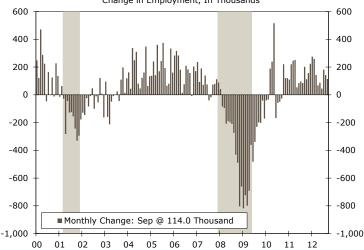
### ISM Manufacturing • Thursday

After three months of sub-50 readings, the ISM manufacturing index broke back into expansion territory in September, rising to 51.5. The forward-looking new orders index crossed the above-50 threshold, as did supplier deliveries. However, the production, orders backlog, export orders and import orders components remained in negative territory as the manufacturing sector is still teetering on the edge of growth. Early readings from the regional PMIs for October tilt toward another month of declining activity. The Empire, Richmond and Kansas City indexes posted negative readings for the month, while the improvement of the Philly Fed survey's headline seemed out of line with its underlying details. Moreover, the new orders component of all four surveys posted negative readings. With weakening growth abroad and concern over the fiscal cliff possibly denting capital spending, it is unlikely we will see a sharp rebound in the ISM index for October.

Previous: 51.5 Wells Fargo: 51.8

Consensus: 51.0

#### Nonfarm Employment Change Change in Employment, In Thousands



Source: U.S. Dept. of Commerce, Institute for Supply Management, U.S. Dept. of Labor and Wells Fargo Securities, LLC

### **Global Review**

#### **Canadian Retail Sales Rise on Price Effects**

With global economic growth facing headwinds from Europe and slower growth in large emerging market economies like China, Canada's economy must transition from reliance on exports to a an economy that is increasingly driven by domestic demand. To that end, we learned this week that Canadian consumer spending in the third quarter continued to firm as retailers there posted back-to-back monthly sales increases in July and August.

While increased fuel costs had something to do with the August increase, retail sales increased in five of the eleven categories. The volatile motor vehicles and parts category slipped 0.2 percent in August, but sales excluding autos gained 0.4 percent on the month. Price dynamics still played a role in August as the volume of retail sales shrank 0.3 percent. Since the Canadian GDP report looks at the inflation-adjusted increase in consumer outlays, this week's report raises some concern about the ability of consumer spending to underpin growth in the third quarter.

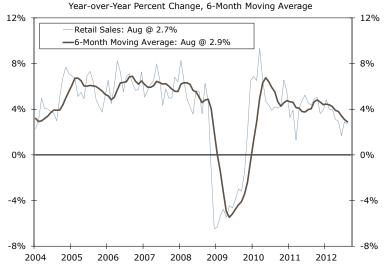
### **Eurozone PMIs: One Step Up and Two Steps Back**

With economic growth negative in two of the past three quarters, the Eurozone economy has slipped back into recession. We do not expect to see economic growth turn positive again in the Eurozone until the first quarter of 2013. The official third quarter growth numbers are not due out until November 15, but we expect to see the Eurozone economy contract further in the quarter, with the largest negative drag on growth coming from a contraction in business spending. Industrial production eked out modest gains in July and August, but is off more than 2.5 percent from year-ago levels. The various purchasing managers' indices (PMIs) were all in contraction territory in September and did not offer much hope for immediate improvement. This week brought the most current readings of business sentiment for October. We learned that service sector sentiment improved somewhat from 46.1 in September to 46.2 in October. Unfortunately, the manufacturing PMI slipped to 45.3 and the composite measure fell to 45.8 suggesting deeper contraction in the months ahead for the Eurozone's factory sector. One potential offset to the weakening PMIs is that business sentiment is holding up somewhat in Germany, the Eurozone's largest economy. The Ifo business climate survey there increased to 101.6 in October from 101.4 in the prior month, although the Ifo current assessment survey fell to 107.3 from 110.3 previously. The expectations measure was unchanged.

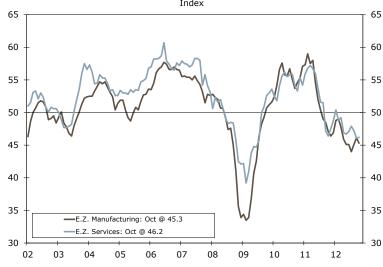
#### Big Jump in U.K. GDP? Keep Calm and Carry On

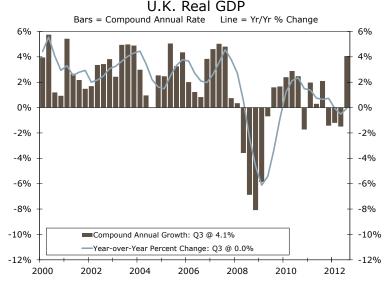
After three straight quarters of economic contraction, total output in the United Kingdom came roaring back in the third quarter, coming in at a scorching pace of 4.1 percent on an annualized basis—the fastest growth rate in more than four years. While we believe that this quarter will mark the period where the United Kingdom emerges from recession, we do not expect to see this torrid pace to be maintained. The spurt in the third quarter was largely a function of low base effects combined with the timing of the Queen's Jubilee, which moved some output to Q3 from Q2.

### Canadian Retail Sales



### Eurozone Purchasing Managers' Indices





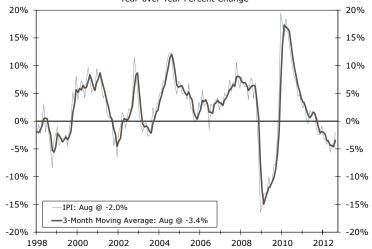
Source: IHS Global Insight and Wells Fargo Securities, LLC

### Germany Unemployment Rate • Tuesday

If we look at what markets are expecting regarding the status of the German economy, it is clear that further deterioration is already baked into the numbers. One such number is the rate of unemployment. After avoiding much of the deterioration in economic activity affecting the rest of the Eurozone region, the German labor market is finally giving signs that the once mighty German worker is starting to feel the pain of the Eurozone crisis. Consensus expectations has unemployment increasing to 6.9 percent in October from 6.8 percent in September, as the German economy continues to adjust to this low economic growth environment, not only coming from its peers in the Eurozone but also from the generalized weakness across the global economy. On the positive side, retail sales are expected to post a decent, 0.5 percent improvement in September from an expected downwardly revised 0.1 percent in August.

Previous: 6.8% Consensus: 6.9%





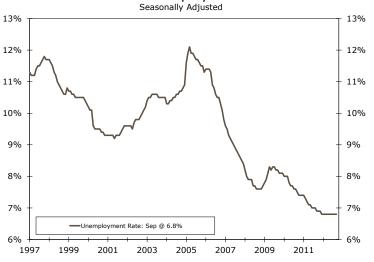
### **U.K. PMI Manufacturing • Thursday**

After surprising on the upside with the release of its third quarter GDP advanced number all eyes will be directed to the release of the PMI manufacturing index on Thursday. Consensus expectations on the manufacturing PMI see a further deterioration to 48.3 in October from 48.4 in September.

The better-than-expected number for third quarter GDP was made possible by the positive effects of the Olympics on the U.K.'s economy. However, this effect is probably more related to the service economy than to the manufacturing economy so our expectation is close to the market in that we should see a further deterioration in the PMI number, albeit a small one. However, if the improvement in GDP is sustainable, a big if, we may see signs of stabilization or even a reversal in the manufacturing sector in the months to come.

Previous: 48.4 Consensus: 48.3

### German Unemployment Rate



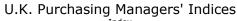
### **Brazil Industrial Production • Thursday**

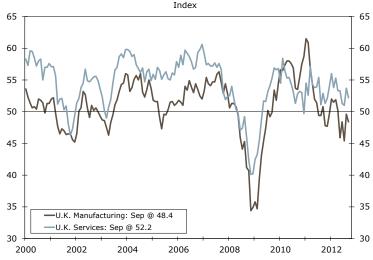
The Brazilian economy has been feeling the pain coming from the Eurozone crisis as well as from the global slowdown. The Eurozone crisis has affected its manufacturing sector, as Europe is one of its major export markets, while the global slowdown has affected commodity prices and thus, commodity exports.

However, there have been signs that the economy has started to recover some strength as the Brazilian central bank has slashed interest rates to incentivize domestic consumption. The success of this monetary expansion will be gauged on Thursday when the country is expected to release its September industrial production index. Markets are expecting a reversal in seasonally adjusted growth, to a 0.5 percent drop in September from an increase of 1.5 percent in August. Needless to say, any positive number will be well received by markets and will strengthen Brazilian analysts' claims that the economy is on a path to recovery.

Previous: 1.5%

Consensus: -0.5% (Month-over-Month)





Source: IHS Global Insight and Wells Fargo Securities, LLC

1.5%

#### **Interest Rate Watch**

#### **Fed Policy Brings Its Own Issues**

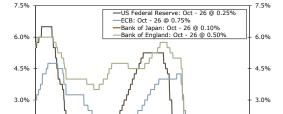
Continued Fed easing is not a one-way path to prosperity. From the perspective of short-run policy and capital markets, Fed easing is justified as an option to avoid a repeat of the Great Depression, for which Chairman Bernanke is considered an expert. From an economic viewpoint, policy influence runs from lower interest rates to higher housing starts, auto sales and business investment. However, when faced with the workings of actual global capital markets and the reality of fiscal policy, the effectiveness of the Fed's easy policy requires reexamination by investors.

#### The Problem of the Risk-free Rate

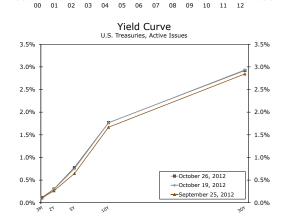
Traditionally, short-term Treasury interest rates were considered a benchmark interest rate to price corporate and other securities. However, current short-term rates are being artificially lowered by the Federal Reserve for a sustained period of time and do not represent the interest rate set in the marketplace by a willing buyer and willing seller. Moreover, current nominal 5-year Treasury yields are below the level of inflation expectations for the same period. Contrary to some perceptions, inflationary expectations reflect the perceptions of investors based upon their experience and their expectations for future economic developments and policy-not pronouncements of policymakers.

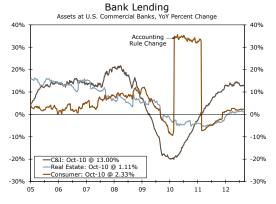
In recent weeks, we have witnessed a rally in equity prices in response to the announcement of QE3, which reflects the expectations of a liquidity effect in the market. Yet, for investors, equity returns reflect expected future profits. This week, we saw the reality that fundamentals, not more liquidity, will set the path for equity valuations.

A policy of lower interest rates for a sustained period of time with the goal of lowering the unemployment rate loses sight of several financial market implications. First, current interest rates are below the pace of inflation and therefore discourage saving. Second, lower interest rates reduce the asset revenue of pension funds and raise the present value of future liabilities. Therefore, there is a shortfall in funding that will require contributions by private and public institutions and thereby, reduce future profits and real investment.



Central Bank Policy Rates





### **Credit Market Insights**

# Mortgage Originations Strong in 2013

The Mortgage Bankers Association's mortgage applications index declined 12.0 percent from a week earlier, marking the third straight weekly decline. Purchase and refinance activity were down on the week as interest rates on mortgages have been creeping higher. However, interest rates on mortgages remain exceptionally low-30-year fixed-rate mortgage rates are around 3.63 percent, compared with rates around 6 percent prior to the recession. Rates have declined precipitously over the past year due to weak global growth and continued quantitative easing. Despite weekly declines, purchase activity has leveled off over the past year and applications for refinancing have maintained a two-year upward march.

This week, the Mortgage Bankers Association announced its expectations for 2013. The MBA expects to see \$1.3 trillion in mortgage originations in 2013, with originations front-loaded in the first half of the year before refinance activity falls off with rate increases. The MBA suspects mortgage rates to remain below 4 percent through mid-2013 with the help of the Fed's ongoing purchases of mortgage-backed securities.

The Association also expects purchases to be stronger in 2013, with purchase originations improving 16 percent over 2012. MBA cites continued, albeit modest, economic growth and "small" increases in home prices as lifting originations in 2013.

Source: IHS Global Insight, Bloomberg LP and Wells Fargo Securities

Credit Market Data				
Mortgage Rates	Current	Week Ago	4 Weeks Ago	Year Ago
30-Yr Fixed	3.41%	3.37%	3.40%	4.10%
15-Yr Fixed	2.72%	2.66%	2.73%	3.38%
5/1 ARM	2.75%	2.75%	2.71%	3.08%
1-Yr ARM	2.59%	2.60%	2.60%	2.90%
Bank Lending	Current Assets (Billions)	1-Week Change (SAAR)	4-Week Change (SAAR)	Year-Ago Change
Commercial & Industrial	\$1,479.2	27.15%	17.28%	13.00%
Revolving Home Equity	\$525.1	-6.57%	-10.86%	-5.12%
Residential Mortgages	\$1,596.9	7.94%	-9.84%	4.81%
Commerical Real Estate	\$1,415.8	3.29%	2.09%	-0.44%
Consumer	\$1,114.9	3.44%	4.92%	2.33%

1.5%

Source: Freddie Mac, Federal Reserve Board and Wells Fargo Securities, LLC

### **Topic of the Week**

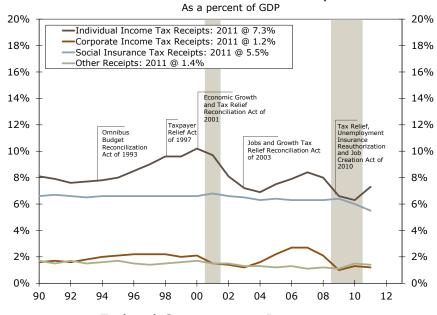
#### **Federal Revenues**

At present, federal revenues are equivalent to roughly 15 percent of GDP, significantly below the 40-year average of 18 percent. Federal revenues grew from around 17.5 percent of GDP in 1990 to roughly 20 percent of GDP by early 2001. However, the effects of the 2001 recession and the subsequent Bush tax cuts led revenues as a percentage of GDP to slump until 2004 before rising anew to around 18 percent as the economy boomed until 2008. The most dramatic shift over the past two decades occurred as a result of the Great Recession, as federal revenues fell to a low of around 14 percent of GDP. Even during the post-recession period, total revenues to the federal government have hovered around 15 percent of GDP.

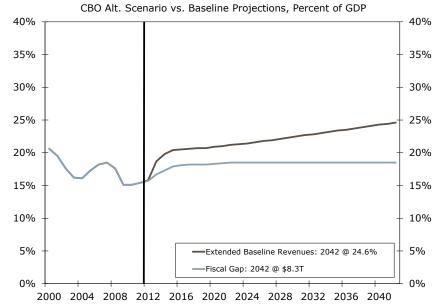
In addition to economic cycles, tax policy changes also play a significant role in affecting federal revenues (top graph). The largest legislatively induced pullback in revenues as a percentage of GDP over the past twenty years began in 2001 with the enactment of the Bush tax cuts. The 2010 extension of the Bush Tax Cuts provided further tax relief and has been a factor in keeping government tax revenues down.

The Great Recession helped swell the size of the U.S. budget deficit over the past few years. Not only did the downturn impart a blow to revenues via reduced tax collections, but legislative changes like the extension of the Bush tax cuts and the reduction in the payroll tax have also helped depress the revenue-to-GDP ratio. Looking forward, the ratio should rise from its current rate of roughly 16 percent. Under the CBO's baseline scenario, individual income tax rates are assumed to revert to their pre-2001 rates in 2013, and the CBO projects that the revenue-to-GDP ratio will trend up to roughly 24 percent over the next 25 years. Under the alternative fiscal scenario, the ratio rises to 18 percent over the next few years as the economy continues to recover. For our full report on federal revenues, please see U.S. Fiscal Primer III: Federal Revenue on our website, or available upon request.

### Federal Government Receipts



#### Federal Government Revenues



Source: Congressional Budget Office and Wells Fargo Securities, LLC

#### **Subscription Info**

Wells Fargo's Weekly Economic & Financial Commentary is distributed to subscribers each Friday afternoon by e-mail.

To subscribe please visit: www.wellsfargo.com/economicsemail

The Weekly Economic & Financial Commentary is available via the Internet at www.wellsfargo.com/economics

Via The Bloomberg Professional Service at WFEC.

And for those with permission at www.wellsfargoresearch.com

## **Market Data ♦ Mid-Day Friday**

U.S. Interest Rates						
	Friday	1 Week	1 Year			
	10/26/2012	Ago	Ago			
3-Month T-Bill	0.11	0.09	0.01			
3-Month LIBOR	0.31	0.32	0.42			
1-Year Treasury	0.21	0.19	0.12			
2-Year Treasury	0.30	0.29	0.29			
5-Year Treasury	0.77	0.75	1.06			
10-Year Treasury	1.78	1.76	2.20			
30-Year Treasury	2.94	2.93	3.22			
Bond Buyer Index	3.68	3.68	4.12			

Foreign Exchange Rates						
	Friday	1 Week	1 Year			
10	/26/2012	Ago	Ago			
Euro (\$/€)	1.292	1.302	1.391			
British Pound (\$/₤)	1.611	1.600	1.598			
British Pound (£/€)	0.802	0.813	0.871			
Japanese Yen (¥/\$)	79.550	79.320	76.180			
Canadian Dollar (C\$/\$)	0.996	0.994	1.004			
Swiss Franc (CHF/\$)	0.936	0.929	0.881			
Australian Dollar (US\$/A\$)	1.036	1.033	1.040			
Mexican Peso (MXN/\$)	13.026	12.885	13.402			
Chinese Yuan (CNY/\$)	6.249	6.254	6.354			
Indian Rupee (INR/\$)	53.575	53.415	49.508			
Brazilian Real (BRL/\$)	2.026	2.027	1.759			
U.S. Dollar Index	80.078	79.621	76.246			

Foreign Interest Rate	es		
	Friday	1 Week	1 Year
1	.0/26/2012	Ago	Ago
3-Month Euro LIBOR	0.13	0.14	1.52
3-Month Sterling LIBOR	0.53	0.53	0.99
3-Month Canadian LIBOR	1.24	1.24	1.26
3-Month Yen LIBOR	0.19	0.19	0.20
2-Year German	0.05	0.11	0.52
2-Year U.K.	0.24	0.25	0.58
2-Year Canadian	1.13	1.09	1.07
2-Year Japanese	0.10	0.11	0.15
10-Year German	1.53	1.59	2.04
10-Year U.K.	1.86	1.88	2.47
10-Year Canadian	1.86	1.85	2.38
10-Year Japanese	0.77	0.79	1.00

Commodity Prices					
	Friday	1 Week	1 Year		
10	/26/2012	Ago	Ago		
WTI Crude (\$/Barrel)	85.97	90.05	90.20		
Gold (\$/Ounce)	1715.10	1721.75	1724.82		
Hot-Rolled Steel (\$/S.Ton)	591.00	592.00	660.00		
Copper (¢/Pound)	356.20	363.75	349.00		
Soybeans (\$/Bushel)	15.69	15.52	12.03		
Natural Gas (\$/MMBTU)	3.38	3.62	3.59		
Nickel (\$/Metric Ton)	16,071	17,251	19,722		
CRB Spot Inds.	504.56	518.21	537.50		

## **Next Week's Economic Calendar**

	Monday	Tuesday	Wednesday	Thursday	Friday
	29	30	31	1	2
	Personal Income	Consumer Confidence	Employment Cost Index	ISM Manufacturing	Nonfarm Payrolls
	August 0.1%	September 70.3	2Q0.5%	September 51.5	September 114K
-	September 0.3% (W)	October 72.0 (W)	3Q 0.5% (W)	October 51.8 (W)	October 90K(W)
ats	Personal Spending			Construction Spending	Unemployment Rate
Α,	August 0.5%			August -0.6%	September 7.8%
C.S	September 0.6% (W)			September 0.5% (W)	October 7.8% (W)

Japan	Germany	Brazil	Eurozone
<b>Industrial Production</b>	Unemployment Rate	Industrail Production	PMI Manufacturing
Previous (Oct) -4.6%	Previous (Sep) 6.8%	Previous (Aug) 1.5%	Previous (Oct) 45.3
		U.K.	U.K.
		PMI Manufacturing	PMI Construction
		Previous (Sep) 48.4	Previous (Sep) 49.5

Note: (W) = Wells Fargo Estimate (C) = Consensus Estimate

Source: Bloomberg LP and Wells Fargo Securities, LLC

### Wells Fargo Securities, LLC Economics Group

Diane Schumaker-Krieg	Global Head of Research, Economics & Strategy	(704) 715-8437 (212) 214-5070	diane.schumaker@wellsfargo.com
John E. Silvia, Ph.D.	Chief Economist	(704) 374-7034	john.silvia@wellsfargo.com
Mark Vitner	Senior Economist	(704) 383-5635	mark.vitner@wellsfargo.com
Jay Bryson, Ph.D.	Global Economist	(704) 383-3518	jay.bryson@wellsfargo.com
Eugenio Aleman, Ph.D.	Senior Economist	(704) 715-0314	eugenio.j.aleman@wellsfargo.com
Sam Bullard	Senior Economist	(704) 383-7372	sam.bullard@wellsfargo.com
Anika Khan	Senior Economist	(704) 715-0575	anika.khan@wellsfargo.com
Azhar Iqbal	Econometrician	(704) 383-6805	azhar.iqbal@wellsfargo.com
Tim Quinlan	Economist	(704) 374-4407	tim.quinlan@wellsfargo.com
Michael A. Brown	Economist	(704) 715-0569	michael.a.brown@wellsfargo.com
Sarah Watt	<b>Economic Analyst</b>	(704) 374-7142	sarah.watt@wellsfargo.com
Kaylyn Swankoski	<b>Economic Analyst</b>	(704) 715-0526	kaylyn.swankoski@wellsfargo.com
Sara Silverman	<b>Economic Analyst</b>	(704) 715-7395	sara.silverman@wellsfargo.com
Zachary Griffiths	<b>Economic Analyst</b>	(704) 715-1030	zachary.griffiths@wellsfargo.com
Peg Gavin	<b>Executive Assistant</b>	(704) 383-9613	peg.gavin@wellsfargo.com
Cyndi Flowe	Administrative Assistant	(704) 715-3985	cyndi.h.flowe@wellsfargo.com

Wells Fargo Securities Economics Group publications are produced by Wells Fargo Securities, LLC, a U.S broker-dealer registered with the U.S. Securities and Exchange Commission, the Financial Industry Regulatory Authority, and the Securities Investor Protection Corp. Wells Fargo Securities, LLC, distributes these publications directly and through subsidiaries including, but not limited to, Wells Fargo & Company, Wells Fargo Bank N.A., Wells Fargo Advisors, LLC, Wells Fargo Securities International Limited, Wells Fargo Securities Asia Limited and Wells Fargo Securities (Japan) Co. Limited. The information and opinions herein are for general information use only. Wells Fargo Securities, LLC does not guarantee their accuracy or completeness, nor does Wells Fargo Securities, LLC assume any liability for any loss that may result from the reliance by any person upon any such information or opinions. Such information and opinions are subject to change without notice, are for general information only and are not intended as an offer or solicitation with respect to the purchase or sales of any security or as personalized investment advice. Wells Fargo Securities, LLC is a separate legal entity and distinct from affiliated banks and is a wholly owned subsidiary of Wells Fargo & Company © 2012 Wells Fargo Securities, LLC.

#### Important Information for Non-U.S. Recipients

For recipients in the EEA, this report is distributed by Wells Fargo Securities International Limited ("WFSIL"). WFSIL is a U.K. incorporated investment firm authorized and regulated by the Financial Services Authority. The content of this report has been approved by WFSIL a regulated person under the Act. WFSIL does not deal with retail clients as defined in the Markets in Financial Instruments Directive 2007. The FSA rules made under the Financial Services and Markets Act 2000 for the protection of retail clients will therefore not apply, not will the Financial Services Compensation Scheme be available. This report is not intended for, and should not be relied upon by, retail clients. This document and any other materials accompanying this document (collectively, the "Materials") are provided for general informational purposes only.

SECURITIES: NOT FDIC-INSURED/NOT BANK-GUARANTEED/MAY LOSE VALUE

