# **Economics Group**

# Weekly Economic & Financial Commentary

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

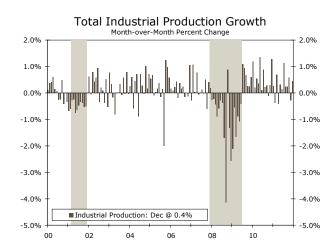
#### Good News on Manufacturing, Inflation and Housing

- The manufacturing sector remains on solid footing. Manufacturing output rose more than expected in December. Furthermore, New York the manufacturing index showed the sector gained strength in January and the outlook improved further.
- Headline inflation continues to moderate. Producer and consumer prices both declined in December on falling food and energy prices. However, the recent rise in core inflation could tie the Fed's hands on monetary policy.
- Existing home sales, the housing market index and mortgage applications rose, while housing starts fell.

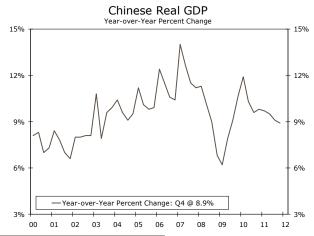
#### **Global Review**

### Is China Coming in for a "Soft Landing"?

- On a year-over-year basis, real GDP growth in China slowed further in the fourth quarter. However, there are some indications that the slowdown may be stabilizing on a sequential basis. In other words, the Chinese economy may be coming in for a "soft landing."
- The slowdown in China reflects, at least in part, tightening measures that were implemented when housing prices were shooting through the roof and inflation was rising. However, froth has come out of the housing market and inflation is receding, which may be leading authorities to ease up on the tightening reins.



SECURITIES



Wells Fargo U.S. Economic Forecast													
		Actual			F	orecast			Ac	tual		Forecast	
		2	011			20	12		2009	2010	2011	2012	2013
	10	2Q	3Q	4Q	10	2Q	3Q	<b>4</b> Q					
Real Gross Domestic Product <sup>1</sup>	0.4	1.3	1.8	3.4	1.3	1.8	2.2	2.4	-3.6	3.0	1.8	2.0	1.9
Personal Consumption	2.1	0.7	1.7	3.4	1.2	1.5	1.7	2.1	-2.0	2.0	2.2	1.7	1.4
Inflation Indicators <sup>2</sup>													
"Core" PCE Deflator	1.1	1.3	1.6	1.7	1.7	1.5	1.4	1.6	1.5	1.4	1.4	1.5	1.6
Consumer Price Index	2.2	3.3	3.8	3.3	2.4	1.9	1.5	1.8	-0.3	1.6	3.2	1.9	2.0
Industrial Production <sup>1</sup>	4.8	0.7	6.1	2.7	2.7	3.7	3.1	2.4	-11.1	5.3	4.1	3.2	2.4
Corporate Profits Before Taxes 2	8.8	8.5	7.5	6.4	6.2	6.0	6.4	6.6	9.1	32.2	7.8	6.3	7.0
Trade Weighted Dollar Index <sup>3</sup>	70.6	69.4	72.8	73.3	74.0	74.5	75.0	76.0	77.7	75.6	70.9	74.9	78.5
Unemployment Rate	9.0	9.0	9.1	8.7	8.4	8.5	8.6	8.5	9.3	9.6	9.0	8.5	8.3
Housing Starts <sup>4</sup>	0.58	0.57	0.62	0.66	0.66	0.70	0.69	0.70	0.55	0.58	0.61	0.69	0.80
Quarter-End Interest Rates 5													
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	4.84	4.51	4.11	3.96	4.00	4.10	4.10	4.20	5.04	4.69	4.46	4.10	4.30
10 Year Note	3.47	3.18	1.92	1.89	1.90	2.00	2.10	2.20	3.26	3.22	2.78	2.05	2.35

#### Inside

U.S. Review	2
U.S. Outlook	3
Global Review	4
Global Outlook	5
Point of View	6
Topic of the Week	7
Market Data	8



Together we'll go far

Forecast as of: January 13, 2012

<sup>1</sup> Compound Annual Growth Rate Quarter-over-Quarter

Year-over-Year Percentage Change

<sup>&</sup>lt;sup>3</sup> Federal Reserve Major Currency Index, 1973=100 - Quarter End <sup>4</sup> Millions of Units

Annual Numbers Represent Averages

#### U.S. Review

#### **Manufacturing on Solid Footing**

Industrial production rose 0.4 percent in December following a 0.3 percent decline in November. Production was driven by a 0.9 percent increase in manufacturing, the biggest increase in a year, supported by strength in motor vehicles and machinery. While production of consumer goods rose only 0.2 percent, production of business equipment rose 0.8 percent and construction supplies jumped 1.0 percent. Overall production would have been stronger if not for a 2.7 percent decline in utilities, which was largely due to a sharp 8.5 percent decline in natural gas output amid unseasonably warm weather. Compared to a year ago, industrial production was up just 2.9 percent, the smallest increase since February 2010, but the slowdown is primarily due to a higher base of comparison. Looking ahead, the rise in the New York Fed Manufacturing Index to 13.5 in January from 8.2 in December suggests that manufacturing remains on solid footing to start the year. Although the Philadelphia Fed survey was not as strong, both surveys showed an improving business outlook, portending continued strength manufacturing in the near term.

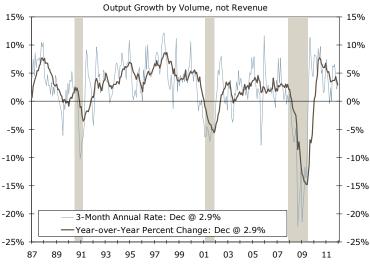
#### **Headline Inflation Continues to Moderate**

In December, the producer price index unexpectedly fell 0.1 percent from the prior month, bringing the year-over-year rate down to 4.8 percent, the smallest increase in a year. Falling prices for food, residential gas and gasoline led the decline. Prices for crude and intermediate goods also fell, suggesting inflation for finished goods is likely to moderate further. However, core inflation rose further to 3.0 percent year over year, the highest rate in two and a half years. On the consumer side, prices were flat in December from the prior month, the third straight month without an increase, and were up 3.0 percent from a year ago, the smallest increase since March. Further declines in gasoline were countered by increases in prices for food, medical care, recreation and rental costs. Similar to core producer prices, the 2.2 percent year-over-year rise in core consumer prices was the highest in over three years. Thus, although headline inflation is moderating, the trajectory of core inflation could tie the Fed's hands in the near term on monetary policy. Still, with price pressures expected to ease further, core inflation will likely begin to subside soon as well, which will eventually give the Fed more policy flexibility.

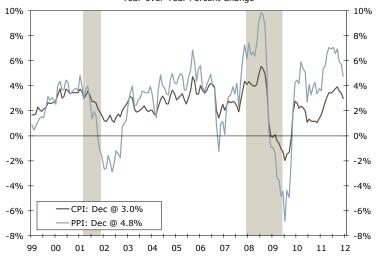
#### **Housing Market Shows Some Encouraging Signs**

Existing home sales rose in December to a 4.61 million unit annual rate and the median single-family home price rose for the second straight month. Record low mortgage rates fueled a 23.1 percent surge in mortgage applications in the latest week. Purchase applications jumped 10.3 percent, suggesting sales could remain on an upward trend, while refinance applications soared 26.4 percent to the highest level since November 2010. In addition, the National Association of Home Builders Housing Market Index rose to 25 in January, the highest since June 2007. However, housing starts fell to a 657,000 unit annual rate in December as multi-family starts plunged following a surge in November, while single-family starts rose further.





# Consumer Price Index vs. Producer Price Index Year-over-Year Percent Change



## NAHB/Wells Fargo Housing Market Index



# **FOMC Meeting • Wednesday**

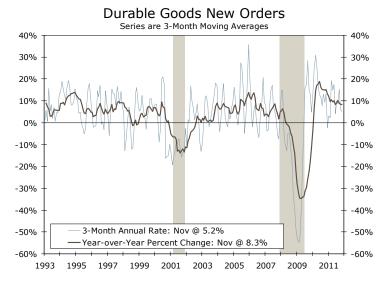
In recent weeks, public comments by regional Fed presidents seem to signal a willingness to ease monetary policy further this year.

The primary triggers of further policy easing would likely be either deterioration in the growth outlook for the United States, or signals of imminent danger with Europe's chronic sovereign debt problem. Fortunately, a string of better-than-expected economic indicators have lifted market expectations for growth prospects here in the U.S. economy, and Europe has not gotten substantively worse in recent weeks.

That does not rule out any action, but it probably pushes any announcement of a major policy move out to a later meeting. Any further quantitative easing would likely take place through a purchase of mortgage-backed securities and therefore work primarily to provide liquidity while lowering the mortgage rate.

Previous: 0.25% Wells Fargo: 0.25%

Consensus: 0.25%



# **GDP** • Friday

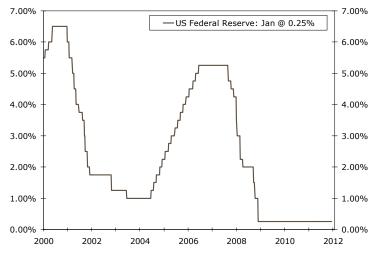
On Friday of next week we will get our first look at how the overall economy fared in the fourth quarter of 2011. We expect the Commerce Department to report that GDP grew at about a three and a half percent pace. A decent turnout for holiday sales likely means a faster pace of consumer spending in the quarter. Capital expenditures at U.S. businesses also contributed to the gain along with a modest lift from inventory building. We do not yet know what the international trade figures are for December, but with no change from November's reported deficit, net exports will shave about 0.1 percentage points off of the overall GDP growth rate in the fourth quarter.

Unfortunately this turnout may mark the fastest pace of expansion we are likely to see for the next couple of years. We look for sequential growth rates of no more than 2.5 percent through 2013.

Previous: 1.8% Wells Fargo: 3.4%

Consensus: 3.0% (Annualized)

#### U.S. Federal Reserve Target Rate



# **Durable Goods Orders • Thursday**

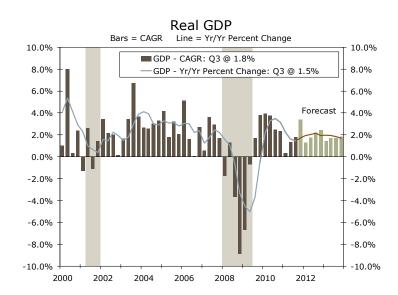
Industrial production for December posted a modest increase, but it is not completely clear whether or not factory output is going to continue to expand in 2012. Factory orders lost ground in September and October before bouncing back somewhat in November thanks to a spike in aircraft orders.

On Thursday of next week, we get a look at the durables portion of the factory orders report for December. Market expectations are looking for another increase. Factory sentiment improved in the final month of the year as evidenced by the gain in the orders component of the ISM report, which increased to 53.2 in December.

Despite the headline gains, what is troubling beneath the surface is a slowing trend in business spending. Shipments of non-defense capital goods ex-aircraft have given up ground for three straight months.

Previous: 3.7% Wells Fargo: 1.8%

**Consensus: 1.8% (Month-over-Month)** 



#### **Global Review**

#### Is China Coming in for a "Soft Landing"?

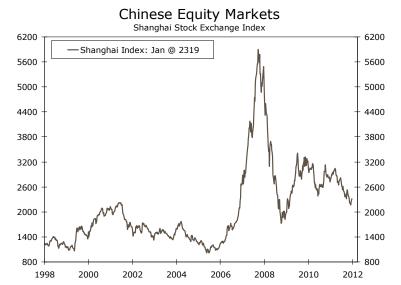
Data released this week showed that the year-over-year real GDP growth rate slowed to 8.9 percent in the fourth quarter of 2011 (see graph on front page). On the surface, this outturn appears disappointing because it represents the slowest real GDP growth rate in more than two years. However, the Chinese stock market rallied strongly on the news, with the Shanghai Stock Exchange Composite index shooting up 4.2 percent, its largest daily increase in nearly four years (top chart). Equity markets in many other countries were also buoyed by the news. What's going on?

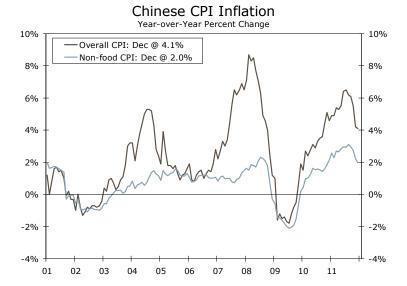
For starters, the GDP growth rate was stronger than many investors had expected, as the market consensus forecast had anticipated a growth rate of 8.7 percent. Moreover, there are signs that the Chinese economy may be coming in for a "soft landing." Growth in industrial production rose to 12.8 percent on a year-ago basis in December from 12.4 percent during the previous month. Growth in retail sales also picked up smartly as the year-over-year growth rate shot up to 18.1 percent in December from 17.3 percent in November.

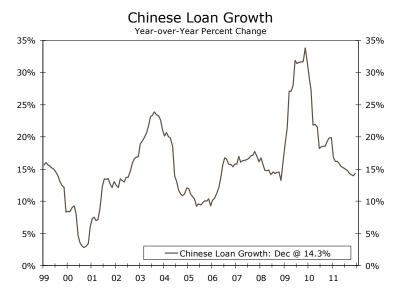
Chinese authorities started to tighten policies in late 2010. Not only were policymakers concerned about the rise in CPI inflation (middle chart), but signs that the housing market was becoming frothy also caught their attention. Consequently, the central bank raised its benchmark lending rate by 125 bps between October 2010 and July 2011. More importantly, it also directed banks to rein in their lending growth, especially to property developers (bottom chart). The slowdown in the Chinese economy over the past few quarters reflects, at least in part, the tightening in economic policies that started more than a year ago.

However, CPI inflation has receded significantly over the past few months. In addition, the housing market is loosing its froth. Year-over-year increases in housing prices have come down significantly in most areas of the county, and prices are starting to decline in some cities. Therefore, policy tightening has come to an end. The central bank has not reduced its benchmark lending rate yet, but it has remained on hold since July and most analysts do not look for any further rate hikes. More importantly, it appears that the central bank may be loosening the monetary reins a bit. Loan growth edged up to 14.3 percent in December from 14.0 in November, the first increase in the year-over-year growth rate since December 2010.

Looking forward, the year-over-year rate of real GDP growth will likely slow further over the next quarter or two. On a sequential basis, however, the slowdown that has been underway in China appears to be stabilizing. In other words, it appears that the Chinese economy may be coming in for a "soft landing". Although a "hard landing" still can not be entirely ruled out, it does not seem to be likely because the Chinese economy is not overly leveraged. For example, household indebtedness as a percent of GDP stands at 90 percent in the United States. The comparable ratio in China is about 30 percent. With the global economy needing every bit of growth it can muster, a "soft landing" in China is in everyone's interest.





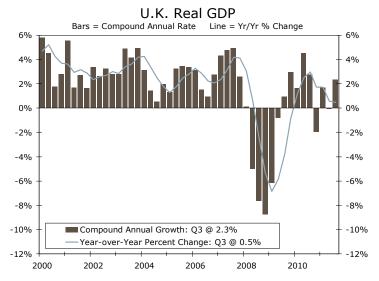


# **Eurozone PMI • Tuesday**

On Tuesday we expect a confirmation of the recessionary environment affecting the Eurozone region with the release of both the manufacturing and the services PMI. The expectation is for both numbers to be lower than 50, which means that the economy is in recession but will show almost no change from the reading for December 2011.

If this is the case, this will confirm our expectation that the Eurozone economy is weak, even in recessionary territory, but that the economic situation has not continued to deteriorate further. Thus, we are projecting two consecutive negative quarters, during the fourth quarter of 2011 and the first quarter of 2012, and a slow recovery in economic activity during the second half of the year. Of course, this assumes that the sovereign debt issue is resolved smoothly and without a major crisis, which is, we know, a big "if".

Previous: Manufacturing: 46.9 Services: 48.8 Consensus: Manufacturing: 47.2 Services: 49.0



# Japanese Retail Sales • Thursday

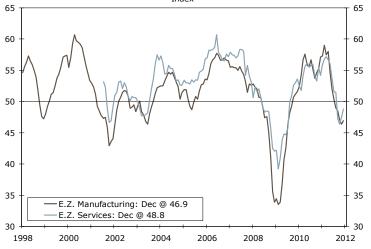
Data on Japanese December retail sales is scheduled to be released on Thursday and markets are expecting a strong rebound, a 2.5 percent growth rate year over year compared to a drop of 2.3 percent during the year ending in November 2011. Furthermore, the expectation is for the month-over-month seasonally adjusted rate to increase by 0.7 percent compared to November after a drop of 2.1 percent the previous month.

Also on Thursday we have the release of January's consumer price index and the expectation is for the deflationary process to continue. Consumer prices are expected to drop by 0.2 percent on a month-to-month basis while dropping by 0.4 percent on a year-over-year basis. Thus, even though retail sales are recovering, business pricing power is still limited. This is clear by looking at the consumer prices index excluding food and energy, which is expected to be down by 1.1 percent, year over year.

**Previous: -2.2%** 

Consensus: 2.0% (Year-over-Year)





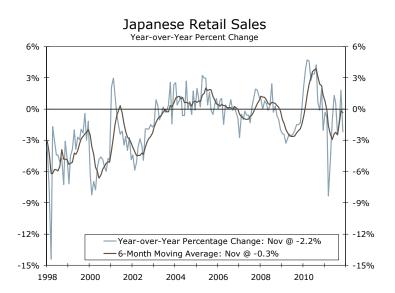
# **U.K. GDP • Wednesday**

The U.K. will release its Q4 2011 GDP number on Wednesday and markets are expecting GDP to decline by 0.1 percent on a quarter-over-quarter basis. Our expectation is for the economy to contract a bit more, by 0.2 percent during the final quarter of last year. Recall that the U.K. economy grew at a relatively strong 0.6 percent during the third quarter of 2011 on a quarter-over-quarter basis, something that, at the time of the release of the information, surprised the markets. We do not think that this time around there will be any surprise as all the indications are that the economy weakened during the last quarter of the year.

However, we are not expecting a recession, as we expect the economy to slowly pull back into positive territory during the first quarter of 2012. This does not mean that we are expecting a strong recovery. We still expect the U.K. economy to continue to grow but at a relatively weak pace for the rest of this year.

**Previous: 0.5%** 

Consensus: 0.8% (Year-over-Year)



# **Interest Rate Watch**

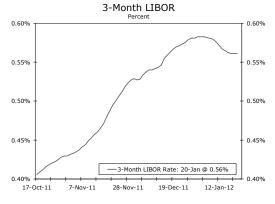
#### **LIBOR Recedes, but Crisis Unsolved**

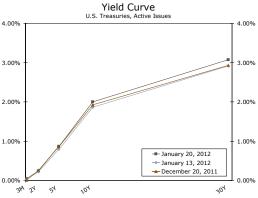
Short-term borrowing rates have moved down in recent weeks, reflecting easing concerns about the ongoing European debt crisis. The three-month LIBOR rate, which is the rate at which banks in London lend to each other, has fallen by a little more than two bps since the start of the year. While this is only a small move, it is still important, considering that LIBOR rates had been steadily rising since the summer.

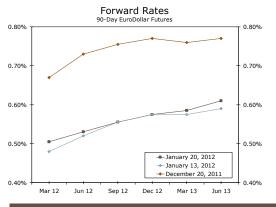
Easing concerns about the European debt crisis are likely related to two important central bank actions. The first came in November, when six central banks around the world announced a plan to reduce the rate that the Fed charges other central banks for swap-line borrowing. This has, in turn, lowered dollar financing costs for European banks that hold significant amounts of European sovereign debt. The second action came in late December, with European Central Bank's (ECB) decision to lend to European banks in three-year terms for only one percent. This policy quickly became an unrefusable offer for many European banks, which have borrowed nearly €500 billion since the ECB's liquidity injection program began.

While these central bank actions have eased concerns about the European debt crisis, they in no way "solve" the crisis. Longer-term borrowing rates for many European governments—most notably, Spain and Ireland—remain elevated. As we noted in a recent report on the European debt crisis (See Europe in 2012: Renaissance or More Dark Ages?), longer-term borrowing rates for Italy in particular need to fall and growth needs to pick up for Italy to stabilize its debt-to-GDP ratio in the coming years. We expect more action from the ECB in 2012 to prevent the crisis from escalating further.

In the United States, all eyes are on the Fed and whether it will pursue a third round of quantitative easing targeted toward the MBS market. Such a move is certainly on the table, as the Fed's recent "white paper" highlighted policymakers' concerns regarding the U.S. housing market. That said, data on the U.S. housing market have shown some improvement in recent weeks.







# **Credit Market Insights**

#### **Low FICO Scores Constrain Housing**

While residential buying activity has improved in recent months, new home sales remain well below its cycle peak and will likely reach a modern-era low in 2011. Moreover, existing home sales continue to be driven by bargain hunting investors who are scooping up deeply discounted homes in select markets. While we will likely continue to see some improvement in sales in 2012, activity will likely languish during the early part of the year and pick up only modestly in the spring and summer.

Much of the slowdown in sales activity continues to be driven by tight lending standards. Indeed, FICO scores show that only 13 percent of borrowers with prime conforming loans had a credit score below 720, while 54 percent were offered mortgages in 2007. While credit standards were excessively lax during the housing boom, the average for borrowers granted a prime conforming loan with a FICO score below 720 is around 40 percent.

In a recent paper, the Fed suggests lenders may be hesitant to ease credit standards due in part to concerns about the high cost of servicing in the event of loan delinquency and the fear that the GSEs could force the lender to repurchase the loan if the borrower defaults in the future.

That said, conditions will not improve on a sustained basis until underwriting standards normalize, which should set the stage for a "true" recovery.

# **Mortgage Data**

_	Current	Week Ago	4 Weeks Ago	Year Ago
Mortgage Rates				
30-Yr Fixed	3.88%	3.89%	3.91%	4.27%
15-Yr Fixed	3.17%	3.16%	3.21%	3.72%
5/1 ARM	2.82%	2.82%	2.85%	3.47%
1-Yr ARM	2.74%	2.76%	2.77%	3.40%
MBA Applications				
Composite	816.1	663.1	659.3	507.0
Purchase	195.4	177.1	181.6	188.8
Refinance	4,500.6	3,560.6	3,516.8	2,390.7

Source: Freddie Mac, Mortgage Bankers Association and Wells Fargo Securities, LLC

# **Topic of the Week**

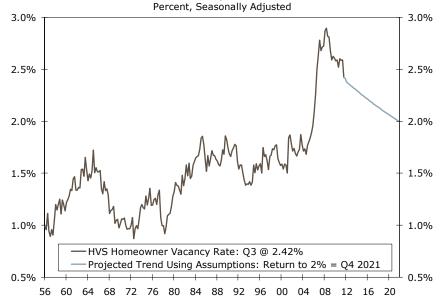
### **Vacancies and the Housing Recovery**

The recent string of positive reports on the housing market has raised hopes that 2012 might finally be the year in which the housing recovery truly begins. Unfortunately, we believe these hopes are a bit premature. The past decade's epic housing boom produced an enormous amount of excess vacant homes. A true national recovery in home sales and new home construction will not likely begin until a significant portion of the excess supply of housing is cleared from the market. We estimate that housing vacancies will likely remain historically elevated until at least the latter part of the decade, restraining home price appreciation over the same period.

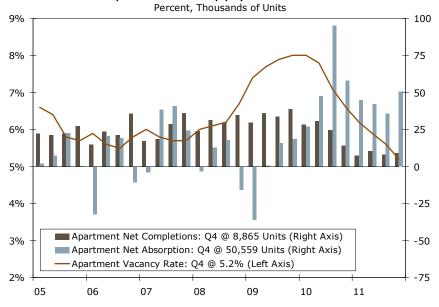
All housing markets, however, are not alike. Much of the overbuilding, overleveraging of home mortgages and credit issues are concentrated in only a handful of markets, including coastal markets such as Florida and Southern California, as well as overbuilt Sunbelt markets such as Atlanta, Phoenix and Las Vegas. Gains in construction activity and in home prices will still likely take place in areas where household formation occurs and where economic growth is the strongest. Such areas could include many of the tech and energy hotspots that have seen gains in recent quarters, including San Jose, Boston and Houston.

The surprisingly long time period required to bring the national housing market back into balance carries significant implications for the economy. Resources are likely to continue to flow out of the homebuilding sector, and more households will remain renters for longer periods of time. The apartment market is already benefitting from this trend. Homebuilders and firms that produce and sell household items, such as building products, household furnishings and furniture, will likely continue to suffer. Many of these businesses will need to reposition their business models for a smaller pool of homeowners in the years ahead. For more about our long-term housing outlook, see *Vacancies and The Housing Recovery: We Still Have Quite a Way to Go.* 

# Homeowner Vacancy Rate Normalization



## Apartment Supply & Demand



#### **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

<b>U.S. Interest Rates</b>			
	Friday	1 Week	1 Year
	1/20/2012	Ago	Ago
3-Month T-Bill	0.04	0.02	0.16
3-Month LIBOR	0.56	0.57	0.30
1-Year Treasury	0.14	0.14	0.24
2-Year Treasury	0.24	0.22	0.63
5-Year Treasury	0.87	0.79	2.04
10-Year Treasury	2.00	1.86	3.45
30-Year Treasury	3.07	2.91	4.61
Bond Buyer Index	3.60	3.62	5.41

Foreign Exchange Rates						
	Friday	1 Week	1 Year			
	1/20/2012	Ago	Ago			
Euro (\$/€)	1.293	1.268	1.347			
British Pound (\$/₤)	1.553	1.532	1.590			
British Pound (£/€)	0.832	0.828	0.847			
Japanese Yen (¥/\$)	77.100	76.970	83.010			
Canadian Dollar (C\$/\$)	1.014	1.023	0.997			
Swiss Franc (CHF/\$)	0.934	0.952	0.967			
Australian Dollar (US\$/A\$)	1.046	1.032	0.987			
Mexican Peso (MXN/\$)	13.236	13.599	12.050			
Chinese Yuan (CNY/\$)	6.336	6.307	6.586			
Indian Rupee (INR/\$)	50.335	51.529	45.535			
Brazilian Real (BRL/\$)	1.763	1.786	1.674			
U.S. Dollar Index	80.209	81.515	78.823			

Foreign Interest Rates				
	Friday	1 Week	1 Year	
	1/20/2012	Ago	Ago	
3-Month Euro LIBOR	1.13	1.17	0.95	
3-Month Sterling LIBOR	1.09	1.09	0.78	
3-Month Canadian LIBOR	1.38	1.36	1.24	
3-Month Yen LIBOR	0.20	0.20	0.19	
2-Year German	0.21	0.15	1.25	
2-Year U.K.	0.40	0.38	1.35	
2-Year Canadian	1.04	0.95	1.72	
2-Year Japanese	0.13	0.13	0.19	
10-Year German	1.93	1.77	3.16	
10-Year U.K.	2.11	1.97	3.69	
10-Year Canadian	2.03	1.92	3.30	
10-Year Japanese	0.99	0.95	1.21	

Commodity Prices					
	Friday	1 Week	1 Year		
	1/20/2012	Ago	Ago		
WTI Crude (\$/Barrel)	98.21	99.10	88.86		
Gold (\$/Ounce)	1658.75	1639.00	1346.28		
Hot-Rolled Steel (\$/S.Ton)	733.00	733.00	724.00		
Copper (¢/Pound)	377.35	364.90	427.20		
Soybeans (\$/Bushel)	11.90	11.65	13.82		
Natural Gas (\$/MMBTU)	2.32	2.70	4.70		
Nickel (\$/Metric Ton)	20,148	19,641	25,643		
CRB Spot Inds.	532.11	526.88	594.76		

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

Monday	Tuesday	Wednesday	Thursday	Friday
23	24	25	26	27
	2012 State of the Union	Home Price Index	Durable Goods Orders	GDP (QoQ Annualized)
		October -0.2%	Nov em ber $3.7\%$	3Q1.8%
_		Nov em ber 0.1% (C)	December 1.8% (W)	4QA3.4%(W)
Data		<b>Pending Home Sales</b>	LEI	Core PCE (QoQ)
		November 7.3%	November 0.5%	3 Q 2.1%
U.S.		December -1.0% (C)	December 0.7% (C)	4QA1.0%(C)
-		<b>FOMC Rate Decision</b>	New Home Sales	Personal Consumption
		Previous 0.25%	Nov em ber 315 K	3 Q 1.7 %
		Expected 0.25% (W)	December 321K (W)	4QA2.5% (C)
	Eurozone	Germany	Japan	
ata	PMI Manufacturing	IFO Business Climate	CPI (YoY)	
Ä	Previous (Dec) 46.9	Previous (Dec) 107.2	Previous (Nov) -0.5%	
<u>ba</u>	Eurozone	U.K.	Japan	
Global Data	PMI Services	GDP (YoY)	Retail Sales (YoY)	
•	Previous (Dec) 48.8	Previous (3Q) $0.5\%$	Previous (Nov) $-2.2\%$	

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

# Wells Fargo Securities, LLC Economics Group

Diane Schumaker-Krieg	Global Head of Research	(704) 715-8437	diane.schumaker@wellsfargo.com
	& Economics	(212) 214-5070	
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
Scott Anderson, Ph.D.	Senior Economist	(612) 667-9281	scott.a.anderson@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	Economist	(704) 715-0575	anika.khan@wellsfargo.com
Azhar Iqbal	Econometrician	(704) 383-6805	azhar.iqbal@wellsfargo.com
Ed Kashmarek	Economist	(612) 667-0479	ed.kashmarek@wellsfargo.com
Tim Quinlan	Economist	(704) 374-4407	tim.quinlan@wellsfargo.com
Michael A. Brown	Economist	(704) 715-0569	michael.a.brown@wellsfargo.com
Joe Seydl	Economic Analyst	(704) 715-1488	joseph.seydl@wellsfargo.com
Sarah Watt	Economic Analyst	(704) 374-7142	sarah.watt@wellsfargo.com
Kaylyn Swankoski	Economic Analyst	(704) 715-0526	kaylyn.swankoski@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.

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

