

# U.S. Economics Weekly: Market and Policy Comments

## Strong Economic Bounce Sets Stage For Future Fed Moves

- The harsh winter weather hampered growth in the first quarter, especially for discretionary expenditures. But underlying fundamentals remain healthy, reinforcing our thesis that the sudden weakness was temporary. Indeed, recent data for demand and production imply that the economy already was emerging from the winter freeze in March. Consequently, we expect a sharp bounce in growth in coming quarters.
- Private domestic demand growth likely will top 4% as consumers satisfy pent-up demand for big ticket purchases. Importantly, as consumer spending picks up, we expect that businesses will become more fully committed with substantial increases in investment spending.
- Although wage growth has been extremely soft, labor markets actually may be tighter than is commonly believed. In fact, firms may have to increasingly bid for workers to keep up with demand, which may prod further payroll gains and wage growth. We would view the attendant rise in wage income as a sustaining force for consumer spending that could extend the recovery.
- We anticipate no change in the policy stance at next week's FOMC meeting. QE appears on target to end early this fall, and the latest refinement to forward guidance makes future short-term policy rates completely dependent on future economic developments.
- The Fed's use of a feedback policy rule to control forward guidance implies a willingness to trade off more uncertainty about the future course of the policy rate in return for greater certainty (in their minds) of achieving the ultimate goals of price stability and full employment.
- The next few FOMC meetings may see revisions to the exit strategy and operating procedures necessary for raising the policy rate once economic conditions normalize. As the Fed will likely use term deposits and reverse repos in significant size to drain reserves, such operations may distort money market rates with uncertain consequences.
- As estimates of potential GDP growth ratchet down, it is uncertain how far rates must rise once monetary policy normalizes. It would not be surprising to find that the long-run level of the federal funds rate is no longer 4 percent, but perhaps somewhere in the range of 3-3½ percent.

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## Economy Poised for a Strong Bounce

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**Recent data suggest the economic outlook is brightening.**

**The harsh winter took a bite out of discretionary spending.**

**But fundamentals remained healthy, suggesting the weakness was temporary.**

**There already have been signs of a major rebound in demand...**

It has become increasingly apparent that the first quarter economic weakness was largely caused by the harsh winter weather. Recent data on demand as well as production indicate that activity already is bouncing back from the near stall. However, we think that there is more going on in the outlook than just a weather-related rebound. First quarter weakness masked an underlying pickup in growth, facilitated by diminishing fiscal restraint and extremely favorable financial conditions. In this environment, the Fed will likely continue to scale back the degree of accommodation next week, but importantly will have to begin to face more serious questions about how to normalize policy over the medium term as growth and inflation rise.

We expect that first quarter GDP edged up by just 0.9% at an annual rate (Figure 1), one of the softest readings of the recovery. Consumer spending growth tailed off after a solid gain in the fourth quarter, with much of the weakness in discretionary purchases like motor vehicles, furniture, and household appliances and entertainment expenditures (Figure 2). Extra spending on heating bills reinforced the pullback in spending on discretionary items; we estimate that this passive spending siphoned off about \$30 billion from discretionary income. In addition, we think that housing, exports and equipment investment all stalled in the first quarter likely because of inhospitable weather conditions.

Importantly, this weakness has not been associated with any deterioration in fundamentals. Consumer deleveraging seems to have run its course and consumers experienced an unprecedented \$10 trillion increase in wealth from rising house and equity prices last year, which should continue to enhance their ability to spend going forward. Business expenditures have been moderate to date, but show signs of accelerating. Sluggish gross hiring and modest investment in equipment and structures may be at an inflection point, especially as the sudden weakness in the first quarter recedes.

We expect a major rebound in private domestic demand in the second quarter and beyond. After dropping to an estimated 1.7% gain in the first quarter, we anticipate growth in private demand to top 4% through the summer. We believe that the pullback in discretionary consumer spending has created temporary pent-up demand and that spending on these products will jump in coming months. In fact, motor vehicle purchases increased by a million units in March after three months of

Figure 1. U.S. Economic Outlook Highlights (Annualized Percent Change Unless Noted), 2013-15F

	2013	2014F	2015F	2013	2014				2015		
	4Q/4Q E	4Q/4Q	4Q/4Q	4Q	1Q F	2QF	3QF	4QF	1QF	2QF	3QF
Real GDP	2.6 %	2.7 %	3.1 %	2.6 %	0.9 %	3.2 %	3.8 %	3.1 %	3.2 %	2.8 %	3.2 %
Domestic Demand	1.6	3.0	3.0	1.6	1.8	3.5	3.6	3.0	3.0	2.9	3.0
Consumer Spending	2.3	3.0	3.0	3.3	1.9	3.5	3.5	3.0	3.0	3.0	3.1
Housing	6.9	8.2	12.2	-7.9	0.0	9.3	13.4	10.6	11.2	11.2	12.2
Investment	2.6	4.8	4.5	5.7	1.3	5.8	6.8	5.5	4.9	4.2	4.4
Exports	4.9	2.7	5.3	9.5	-4.6	5.4	5.7	4.7	4.9	5.0	5.5
Imports	2.8	2.8	5.1	1.5	-0.6	3.7	3.6	4.6	5.2	5.3	5.1
Government	-2.4	0.6	0.1	-5.2	1.8	1.0	-0.4	0.0	0.1	0.1	0.0
Inventory (Contrib.)	0.7	-0.3	0.1	0.0	-0.5	-0.5	0.0	-0.4	0.3	0.0	0.1
Net Exports (Contrib.)	0.2	-0.1	-0.1	1.0	-0.5	0.1	0.2	-0.1	-0.2	-0.2	-0.1
Unemployment Rate (Pct.)	7.0	6.1	5.7	7.0	6.6	6.5	6.2	6.1	6.0	6.0	5.9
PCE Deflator	1.1	1.4	1.8	1.0	1.1	1.5	1.5	1.7	1.8	1.8	1.8
Core PCE Deflator	1.2	1.4	1.8	1.2	1.1	1.4	1.5	1.7	1.8	1.9	1.8

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, and Citi Research.

depressed readings. We would not be surprised by another solid print in April. The March retail report completely changed the trajectory of sales (Figure 3). The new data show that retail sales increased by 1.9% in the past two months and the March figure already was 4% above the first quarter average, setting up a powerful rebound in the second quarter. Moreover, this rise was not driven solely by autos. Core sales increased by 1.4% in the past two months and March was 3% above the first quarter. Core capital goods shipments ended the first quarter on a strong note and already was 4% annualized above the first quarter average.

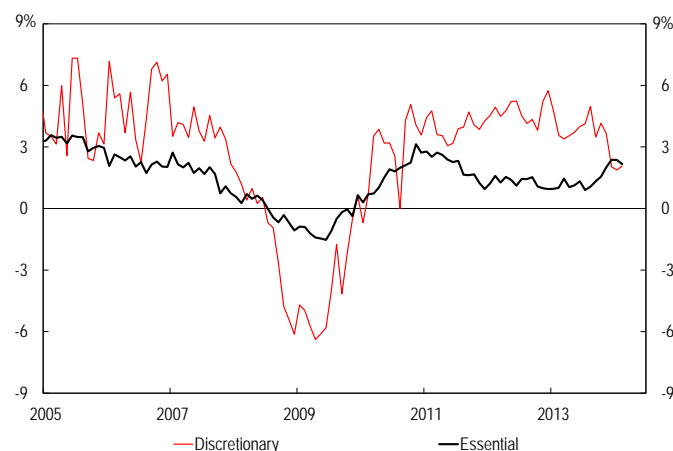
...as well as production, especially in motor vehicles.

Production figures have rebounded sharply as well. Following the bounce back in employment hours worked, industrial production jumped by nearly 2% in the past two months. Much of the rise reflected a turn in motor vehicle assemblies, which was a clear sign that automakers believed the previous sales weakness was temporary. The rise in production likely will feed directly into a gain in second quarter GDP of roughly 3½%. We expect a similar rise in the third quarter as well.

Inventories could dampen second quarter growth.

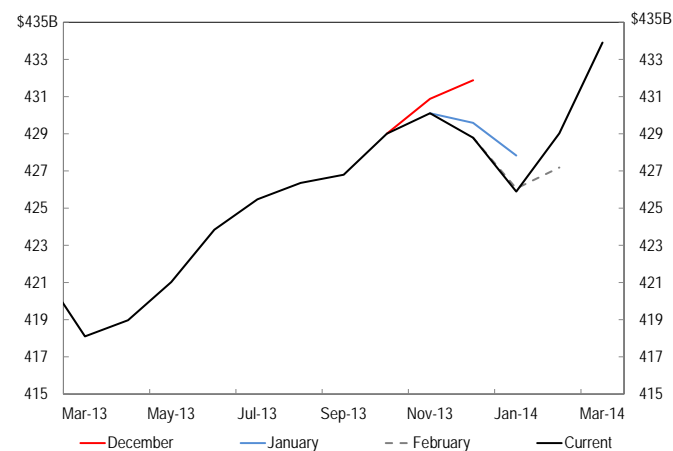
We see two sided risk to our estimate of growth in the middle quarters of this year. As often is the case, economists tend to underestimate large changes in current activity. The bounce back in production and sales to date gives a substantial head-start to the second quarter, which could easily lead to an outsized gain. On the downside, we note that inventory accumulation was extremely robust in the second half of last year. We had expected a drop back to more normal patterns consistent with demand in the first quarter, but the sudden pullback in demand likely caused some unintended inventory accumulation. As a result, inventories probably will temper growth over the balance of the year, and there is a risk that the pullback happens all at once in the spring. Keep in mind, however, that we do not expect inventories to be a major drag over the course of this year because the inventory-to-sales ratio remains extremely low (Figure 4).<sup>1</sup>

Figure 2. Real Discretionary and Essential Personal Consumption (Year-to-Year Percent Change), 2005-February 2014



Note: Discretionary spending includes consumer durables and some services like air travel, restaurants and lodging. All else is called "essential."  
Sources: Bureau of Economic Analysis and Citi Research.

Figure 3. Retail Sales As Reported (Billions of Dollars), March 2013-February 2014



Source: Bureau of Labor Statistics.

<sup>1</sup> While housing expenditures slowed at the end of last year and much of the first quarter, we do not believe this is another downside risk. Much of the slowdown in housing sales may be attributed to there being fewer homes available for sale as the large inventory of homes has been depleted, especially in the aftermath of strong institutional investor interest in recent years. With buyer traffic still strong and home prices rising at a 12% annual rate during the last 6 months, the current slowdown is consistent with supply constraints as buyers face an inadequate supply of high-priced homes for sale.

**Rising domestic demand will be key to the medium term outlook.**

The more important question, especially for Fed policy, is what will happen to the economy over the medium term. We think the key to verifying the outlook underlying the current Fed policy stance will be private domestic demand growth, which had been ramping up in the second half of last year as fiscal drag faded and supportive financial conditions added some lift. The solid rebound in consumer spending as soon as the weather cleared suggests that the underlying strong growth path is reasserting itself, and Fed policy will remain on track (see below).

**Faster wage growth will add to income and could extend the recovery.**

Thus far in the expansion, wage pressures have been nonexistent and wage growth has been extremely soft, with average hourly earnings rising at just a 2% pace. Low wage growth has been a limiting factor in the recovery because it has meant relatively subdued income growth for consumers. However, we suspect that the business sector will increasingly have to bid for labor this year in order to keep up with demand, which may result in faster payroll gains and wage growth. Labor market tightness is evident in the rapid decline in short term unemployment, which has fallen to 4.3% of the labor force. This segment of the labor force seems to be tied most closely to wage setting (Figure 5). With wages rising so slowly, however, we would not view a pickup in wage growth as a sign of inflation pressures yet. Rather, it would be an indication that the economy is entering a new phase of the expansion where rising wage income would be another sustaining force behind consumer spending.

**Business investment is set to accelerate in the middle of the year.**

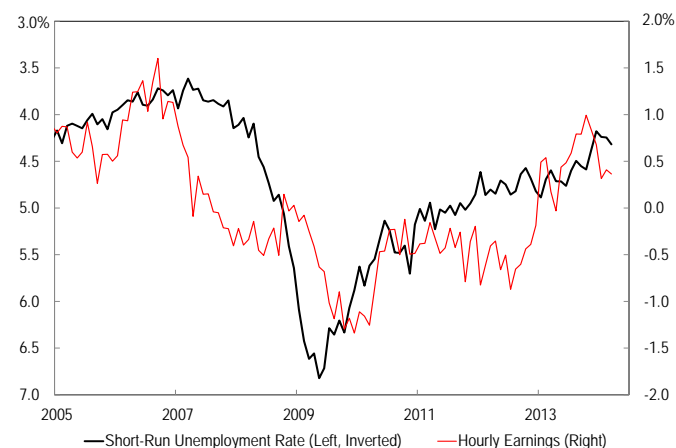
This year, we expect the business sector to follow the lead of consumers and participate more fully in the recovery. Investment spending growth is likely to pick up to a 6% to 7% range as doubts about the durability of final demand and headwinds from policy uncertainty fade.<sup>2</sup> Broadening improvement, including both consumer and business demand, should result in a more sustainable and robust expansion. We anticipate that private domestic demand could run at a 3½% pace through 2015. In addition, demand from abroad may pick up as global weakness subsides. Also, the weakness in state and local government seems to be ebbing. These forces underpin our estimate for 3% growth or better over the medium term.

Figure 4. Ratio of Private Inventories to Final Sales of Goods and Structures, 2004-4Q 2013



Source: Bureau of Economic Analysis.

Figure 5. Short-Run Unemployment Rate and Private Average Production and Nonsupervisory Hourly Earnings (Year-to-Year Difference in the Year-to-Year Percent Change), 2005-March 2014



Note: Short-run unemployment includes those unemployed for 26 weeks or less.  
Sources: Bureau of Labor Statistics and Citi Research.

<sup>2</sup> For a discussion of how policy uncertainty creates headwinds that stall investment spending in the United States and the Euro Area, see William Lee [Global Economics View - Policy Uncertainty and Investment—How Much Lower Must Real Interest Rates Go?](#)

## Fed Watch—Policy Unchanged for Now, But Look Ahead

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**We anticipate no change in the policy stance at next week's FOMC meeting.**

**QE appears on target to end early this fall and the latest refinement to forward guidance makes future short-term policy rates completely dependent on future economic developments.**

**The Fed's use of a feedback policy rule to determine forward guidance implies a willingness to trade off more uncertainty about the future course of the policy rate in return for greater certainty (in their minds) of achieving the ultimate goals of price stability and full employment.**

With the US recovery progressing as anticipated by the Federal Reserve's Summary of Economic Projections (SEP), we expect no change in the monetary policy stance at next week's FOMC meeting. Indeed, the Fed's Beige Book for April confirmed widespread signs of increased activity in 10 of the 12 Federal Reserve districts (St Louis and Cleveland were the outliers).<sup>3</sup> So long as current conditions vindicate the FOMC's brisk recovery baseline, monetary policy will remain on "auto-pilot" for the foreseeable future. In addition, this meeting may also mark the beginning of discussions for redesigning exit strategies for ending this post crisis period of extraordinary policies where short-term rates are stuck at the zero bound.

For near-term monetary policy, QE appears on target to end early this fall, and the latest refinement to forward guidance makes the future path of short-term policy rates completely dependent on future economic developments. As we believe Wednesday's release of 2014Q1 GDP (on the same day as the FOMC meeting) will confirm the Fed's projected recovery trajectory, it is likely that the FOMC decision that day will be to continue with its tapering of asset purchases.<sup>4</sup> However, while Chair Yellen's April 16 speech reinforced the idea that there are no immutable tapering schedules, it would take a significant deviation from the SEP projections to alter the market's presumed steady pace for tapering. She emphasized that the purpose of removing references to specific timetables or threshold levels for policy action was to build into forward guidance (and monetary policy in general) an "automatic stabilizer" effect that operates through private sector [forward] expectations.<sup>5</sup>

We believe Chair Yellen's desire to guide monetary policy with a feedback rule will allow the FOMC to firmly reinforce the idea that the monetary policy stance is conditional. Current policy would adjust only in response to unforeseen economic developments, and with the purpose of dampening their potentially harmful effects. Consequently, **the tradeoff for the Fed is to accept more uncertainty about the future course of the policy rate in return for greater certainty (in their minds) of achieving the ultimate goals of price stability and full employment.** To implement such a strategy with forward guidance, the Fed needs to be fully credible—that it will act in accordance with the expectations it engenders through the FOMC statements. Unfortunately, the surprising delay in the Fed's start to tapering QE purchases last September was not a confidence building moment, and showed the limitations and pitfalls of forward guidance when communications strategies are poorly executed.<sup>6</sup>

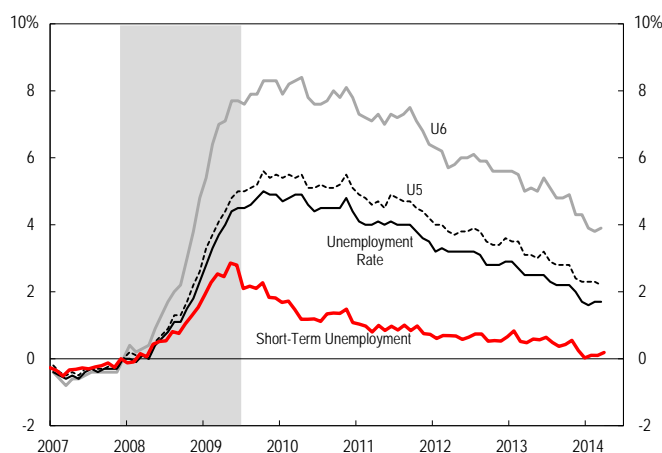
<sup>3</sup> Consumption and manufacturing sprang back as weather conditions improved. Only housing activity showed mixed results, with weakness evident in three Midwestern Districts.

<sup>4</sup> The SEP profile for 2014 GDP growth is consistent with a weak first quarter followed by a strong rebound, similar to the recovery profile in our forecast.

<sup>5</sup> Janet Yellen "Monetary Policy and the Economic Recovery" April 16, 2014 ➡ <http://www.federalreserve.gov/newsevents/speech/yellen20140416a.html>

<sup>6</sup> Although forward guidance is now the Fed's primary policy tool, we have expressed our skepticism about the efficacy of this instrument in theory and in practice. A more detailed analysis of the limits of forward guidance can be found in William Lee [Global Economics View - Some Guidance on Forward Guidance: Not Ready to Solo](#); and Willem Buiter [Global Economics View - Forward Guidance: More than Old Wine in New Bottles and Cheap Talk?](#)

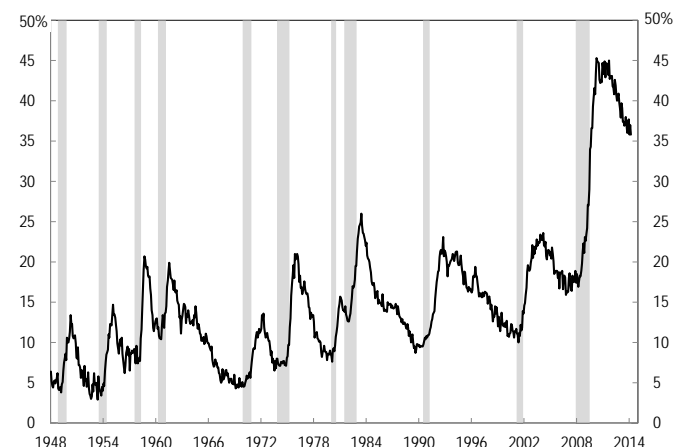
Figure 6. Various Unemployment Rate Measures (Change from December 2007)



Note: U-5 includes marginally attached workers, U-6 includes marginally attached and part time for economic reasons. Short-term unemployment includes only those unemployed for less than 26 weeks.

Sources: Bureau of Labor Statistics and Citi Research.

Figure 7. Long-Run Unemployed as a Share of Total Unemployed, January 1948-March 2014



Note: Long-run unemployed includes those unemployed for 27 or more weeks.  
Source: Bureau of Labor Statistics.

**The key to anticipating a policy shift would be to forecast the likelihood of shocks that would necessitate a “course correction.”**

So if monetary policy is to operate like a futuristic self-driving (autonomous) car with continuous innovations to forward guidance introduced by the FOMC, the key to anticipating a policy shift away from the baseline glide path would be to forecast the likelihood of shocks that would necessitate a “course correction.” Last month’s post-FOMC press conference and the minutes of the last meeting made clear that FOMC members were most vigilant over the degree of economic slack in the economy as a predictor of future wage and price pressures. For now, the core group of FOMC members led by Chair Yellen will likely want to maintain an easy policy stance by emphasizing continued low inflation and persistent headwinds.

**The unprecedented increase in the share of long-term unemployed workers overstates the amount of economic slack as measured by the unemployment rates.**

Notwithstanding the FOMC’s easing bias, we have warned repeatedly that an apparently weak labor market may still be a tight labor market. There may be an incipient buildup of wage pressures despite high rates of unemployment. For this cycle, the unprecedented increase in the share of long-term unemployed workers likely overstates the amount of economic slack as measured by the unemployment rates (Figure 6 and 7). Chair Yellen placed all of us on inflation watch, but we hope that the FOMC will not fall behind the curve in assessing the potential for developments in the labor market to manifest wage pressures.

**The next few FOMC meetings may see revisions to the exit strategy and operating procedures necessary for raising the policy rate once economic conditions normalize.**

Having the policy stance on autopilot would allow opportunity during the next few FOMC meetings to revise the exit strategy and operating procedures necessary for raising the policy rate once economic conditions normalize. With the Fed balance sheet well over \$4 trillion, and the banking system flush with excess reserves, it would be a challenge for policy to raise the fed funds rate now.<sup>7</sup> The first step in the tightening process would be to drain excess reserves to effect a rise in the fed funds rate. The original Fed exit strategy, introduced in 2011, proposed using term deposits and reverse repos as draining instruments.

<sup>7</sup> Bank reserves were \$2.6 trillion in March 2014 compared with \$8.7 billion in January 2008.

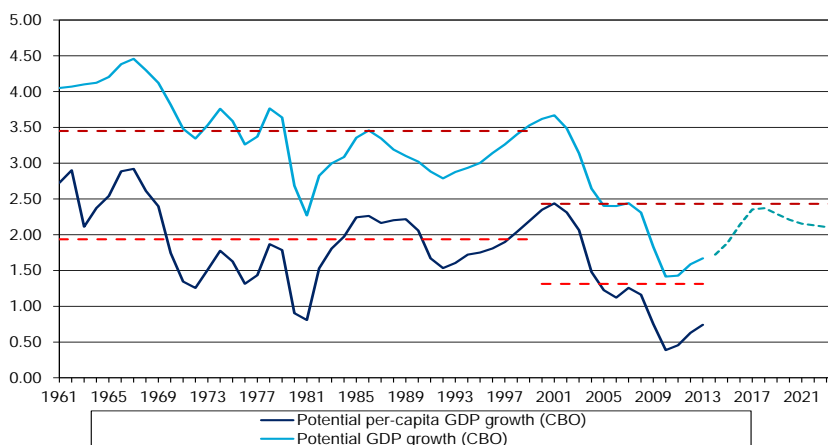


**As the Fed will likely use term deposits and reverse repos in significant size to drain reserves, these operations may distort money market rates with uncertain consequences.**

To drain a sufficient amount of bank reserves, the Fed may have to issue much larger amounts of term deposits and reverse repos. They may also have to pay substantially higher one- or three-month term deposit and reverse repo rates compared to the interest rate on overnight reserves (IOR). As the Fed has never done such draining operations in significant size, the distortions to money market rates may have uncertain consequences. While discussions about tightening may be inappropriate and send the wrong signal in the context of current forward guidance, some planning by the FOMC in the near future will be needed—certainly well before the tightening tools must become operational.<sup>8</sup>

**Figure 8. Potential GDP Growth Slows**

Recent slowdown in potential GDP growth implies lower equilibrium policy rates



Source: CBO, Haver, and Citi Research.

**It is uncertain how far rates must rise once monetary policy normalizes.**

Finally, it is uncertain how far rates must rise once monetary policy normalizes. In the long run, changes in the interest rate are correlated with changes in the rate of growth. Current calibrations of the long-run policy rate are based in part on estimates of the potential rate of growth of GDP. Yet the CBO estimate of the average potential GDP growth rate for the last decade has declined compared with the average for earlier years (Figure 8).<sup>9</sup>

**It would not be surprising to find that the long-run level of the federal funds rate is no longer 4 percent, but perhaps somewhere in the 3% to 3½% range.**

Consequently, the rise in interest rates once policy and economic conditions normalize may be less than currently anticipated. The estimated decline in both potential GDP and per-capita potential GDP between the last four decades of the 20<sup>th</sup> century and the first decade of the 21<sup>st</sup> century was approximately 1 and ½ percentage point, respectively. Therefore it would not be surprising to find that the long-run level of the federal funds rate is no longer 4 percent, but perhaps somewhere in the 3% to 3½% range.

<sup>8</sup> Public discussion by the FOMC may wait for the arrival of Stanley Fischer, whose views will be vital for reshaping the exit strategy.

<sup>9</sup> Estimates of potential GDP by the Congressional Budget Office (CBO) using a production function approach are considered by most economists to be the “gold standard” to which all other estimates are compared.

April-May 2014				
Monday	Tuesday	Wednesday	Thursday	Friday
<b>21</b> Leading Indicators Feb 0.5% Mar 0.8%  Auction 3 & 6 Mth. Bills: \$48.0B	<b>22</b> FHFA (Feb)  Existing Home Sales Feb 4.60M Mar 4.59M  Auction 2-Yr. Note: \$32.0B Auction 1 Mth. Bill: \$25.0B	<b>23</b> Mortgage Applications  New Home Sales Feb 449K Mar 384K  Auction 5-Yr. Note: \$35.0B	<b>24</b> Jobless Claims 4/19 329 Thous Durable Goods Orders <u>Total</u> <u>ExTrans</u> Feb 2.1% 0.1% Mar 2.6% 2.0% Ann 2-Yr. FRN: \$15.0B Auction 7-Yr. Note: \$29.0B	<b>25</b> Reuters/Michigan Sentiment AprP 82.6 AprF 84.1
<b>28</b> Pending Home Sales (Mar)       Auction 3 & 6 Mth. Bills: \$48.0B(E)	<b>29</b> S&P/CaseShiller (Feb)  Consumer Confidence Mar 82.3 Apr(E) 84.0  <b>FOMC Meeting</b>  Auction 2-Yr. FRN: \$15.0B(E) Auction 1 Mth. Bill: \$25.0B(E)	<b>30</b> Mortgage Applications ADP Employment Mar 191K Apr Employment Cost Index <u>Q/Q</u> <u>Y/Y</u> 4Q13 0.5% 2.0% 1Q14(E) 0.5% 2.0% GDP & Chain Price Index 4Q 13 2.6% 1.6% 1Q14A(E) 0.9% 0.8% Chicago Barometer <u>PMI</u> <u>Prices</u> Mar 55.9 55.7 Apr(E) 57.0 Farm Prices (Apr) <b>FOMC Meeting</b> Ann. 3-Yr. Note: \$30.0B(E) Ann. 10-Yr. Note: \$24.0B(E) Ann. 30-Yr. Bond: \$16.0B(E)	<b>May 1</b> Jobless Claims 4/26 310 Thous(E) Personal Income & Consumption Feb 0.3% 0.3% Mar(E) 0.3% 0.6%  Construction PIP Feb 0.1% Mar(E) 0.1%  ISM Manufacturing PMI Prices Mar 53.7 59.0 Apr(E) 54.5  Total Vehicle Sales Mar 16.3M Apr(E) 16.1M	<b>2</b> Employment <u>Mar</u> <u>Apr(E)</u> Payrolls 192K 225K Unemp. Rate 6.7% 6.6% Avg. Hrly. Earn. 0.0% 0.3% Priv. Wrkchk 34.5H 34.4H  Factory Orders <u>Ord.</u> <u>Inv.</u> Feb 1.5% 0.7% Mar(E) 1.5% 0.3%
<b>5</b> ISM Non-Manufacturing <u>PMI</u> <u>Prices</u> Mar 53.1 58.3 Apr(E)  Auction 3 & 6 Mth. Bills: \$48.0B(E)	<b>6</b> International Trade Balance Feb -\$42.3B Mar(E)  Auction 3-Yr. Note: \$30.0B(E) Auction 1 Mth. Bill: \$25.0B(E)	<b>7</b> Mortgage Applications  Nonfarm Productivity <u>Prod</u> <u>ULC</u> 4QR 1.8% -0.1% 1QP(E) Consumer Credit Feb \$16.5B Mar(E) Auction 10-Yr. Note: \$24.0B(E)	<b>8</b> Jobless Claims 5/3   Auction 30-Yr. Bond(r): \$16.0B(E)	<b>9</b> Wholesale Inventories Feb 0.5% Mar(E)
<b>12</b> Federal Budget Balance Apr 13 \$112.9B Apr 14(E)     Auction 3 & 6 Mth. Bills: \$48.0B(E)	<b>13</b> Small Business (Apr)  Import Price Index <u>Total</u> <u>ExPetro</u> Mar 1.1% 0.7% Apr(E)  Retail Sales <u>Total</u> <u>ExAuto</u> Mar 1.1% 0.7% Apr(E)  Business Inventories Feb 0.4% Mar(E)  Auction 1 Mth. Bill: \$35.0B(E)	<b>14</b> Mortgage Applications  Producer Price Index <u>Final Demand</u> <u>ExF&amp;E</u> Mar 0.5% 0.6% Apr(E)	<b>15</b> Jobless Claims 5/10  Consumer Price Index <u>Total</u> <u>ExF&amp;E</u> Mar 0.2% 0.2% Apr(E)  Real Earnings (Apr) Empire State Manufacturing Apr 1.3% May(E) Industrial Prod. & Cap. Util. Mar 0.7% 79.2% Apr(E)  Philly Outlook Survey Apr 16.6% May(E) Housing Market Index Apr 47 May(E) Ann. 10-Yr. TIPS(r): \$13.0B(E)	<b>16</b> Housing Starts and Permits Apr 946K 997K May(E)  Reuters/Michigan Sentiment AprF 84.1 MayP(E)

(E) Indicates Citigroup estimates. (A) Advance. (P) Preliminary. (F) Final. (UNCH) Unchanged. (R) Revised. Contributors: Martha Berasain and Cathy Gaeta.



## Appendix A-1

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