Deutsche Bank
Markets Research

United States | Economics

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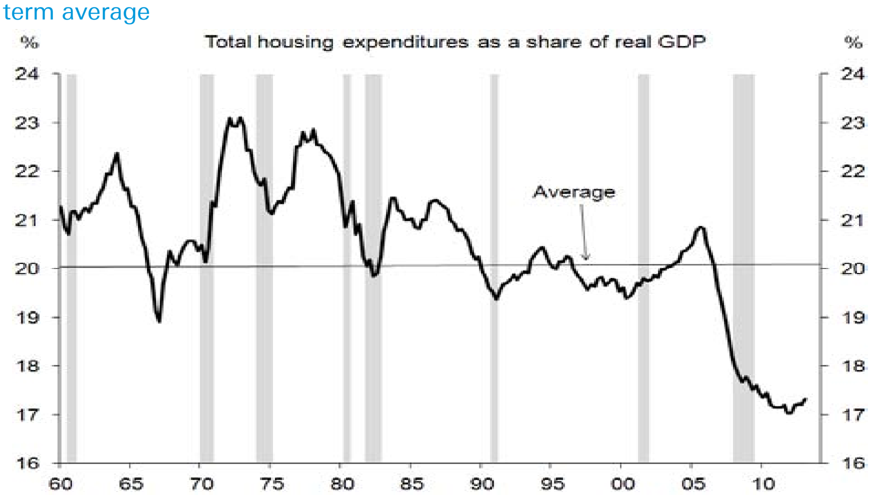
US Economics Weekly

Housing: The best is yet to come

Overview: This week we return to one of our favorite topics, which is the housing market. Based on client conversations, we believe investors still do not fully appreciate the direct positive effects a rejuvenated housing sector will have on the economic outlook. When combing through the GDP accounts, we estimate that total housing-related spending—beyond just residential construction—accounts for a much larger share of the economy than some market participants currently may believe. Consequently, housing and GDP growth could surprise to the upside this year relative to consensus expectations.

H2 hiring outlook: What a difference a point makes (on GDP) Since the end of the recession in mid-2009, real GDP has increased at a 2.1% annualized pace, nonfarm payrolls have increased by an average of 165k per month (176k private) and productivity increased by an annualized 1.6% per quarter. In short, trend-like real GDP growth amidst somewhat below-average productivity growth has resulted in a moderately above-trend pace of job creation. Of course, a more granular analysis shows that in the first half of this period (the first eight quarters after the recession) GDP was similarly close to trend (2.2% per quarter), but productivity growth was higher (2.1%) and hiring gains were considerably less (56k per month). In the latter period, GDP growth was essentially the same (2.1%), but productivity growth was much slower (0.7%) and the pace of hiring was stronger (196k per month). In short, the productivity trend has significant implications for hiring. From recent experience, one can observe that if growth remains constant but productivity slows, the pace of hiring increases. Conversely, this also occurs if productivity remains constant and growth accelerates. We anticipate the latter scenario in the second half of this year; the employment landscape could be materially impacted.

The housing share of the economy is rising but remains well below its long term average



Source: BEA, Haver Analytics & DB Global Markets Research

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Forecasts

	2012 Q3	2012 Q4	2013 Q1	2013 Q2F	2013 Q3F	2013 Q4F
Real GDP (% q/q)	3.1	0.4	2.5	2.3	3.0	3.5
Core CPI (% y/y)	2.0	1.9	1.9	2.0	2.3	2.5
Unemployment rate	8.0	7.8	7.7	7.4	7.2	7.0
Fed funds	0.14	0.16	0.10	0.10	0.10	0.10
10 Yr Treasury*	2.21	1.76	1.86	1.75	2.00	2.25

*Compiled by DB US Economics team; may differ from official 10Yr yield forecasts from DB Fixed Income Strategy team

Overview

Summary: This week we return to one of our favorite topics, which is the housing market. Based on client conversations, we believe investors still do not fully appreciate the direct positive effects a rejuvenated housing sector will have on the economic outlook. When combing through the GDP accounts, we estimate that total housing related spending—beyond just residential construction—accounts for a much larger share of the economy than some market participants currently may believe. Consequently, housing and GDP growth could surprise to the upside this year relative to consensus expectations.

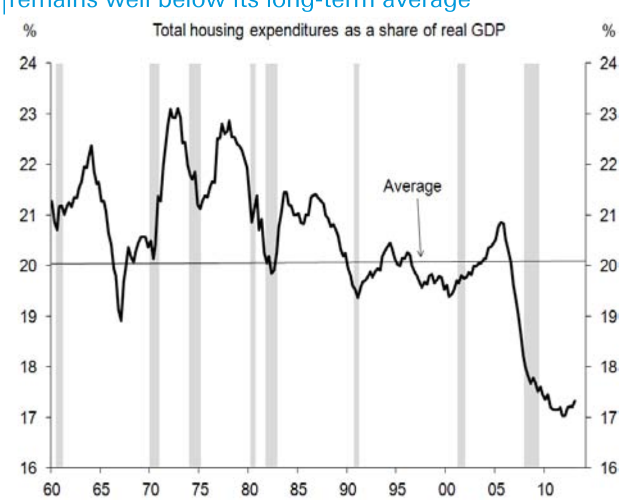
Headwinds are expected to abate in the second half. The economy grew 2.5% last quarter and is currently on track to grow at a similar rate this quarter in which we are projecting an increase of 2.3%. First half economic performance is being weighed down by approximately $180 billion in fiscal drag, which is worth about 150 basis points on full year 2013 real GDP growth.

As the economy gradually acclimates to higher taxes and the budget sequestration, some of which may get softened in light of newly revised budget deficit projections by the Congressional Budget Office, economic activity should improve over the course of the year.[1] To be sure, faster gains in labor income will offset some of this fiscal headwind. We expect that the housing sector in particular will be a key catalyst to mildly above trend real GDP growth in the second half of this year, where we see output gains topping 3%. Specifically, we are forecasting 3.0% growth next quarter and 3.5% in the quarter thereafter. These forecasts are more tenuous than usual owing to the fact that the Bureau of Economic Analysis will release comprehensive benchmark revisions to the national income accounts with the advance Q2 real GDP report on July 31 that could alter the economy's recent performance.

Housing sometimes gets short shrift. Contrary to what some market participants think, housing has a substantial weight in the economy. It is not as small as the roughly 3% share of real GDP that the residential construction sector comprises, a shopworn comment we hear from investors. Rather, when we add up all housing-related spending from residential construction to housing rents to the items that go into a home, such as furniture and appliances, as well as the costs of maintaining a house, such as insurance, we arrive at a significantly larger figure. We calculate that total economy-wide housing spending as a share of GDP is currently 17.3%, which in isolation is pretty substantial, at least relative to what some market participants' incorrectly assume. In actuality, the current reading is pretty depressed, barely above its all-time record low of 17.0% set in Q4 2011 and Q1 2012. We believe that a return to more normalized levels of housing activity relative to the size of the economy will be a very important driver of economic growth over the next several years.

As we can see in the chart below, the current economy-wide housing share of spending is roughly three full percentage points below its 20.4% long-term average, which we calculate from 1959 to 2012. If we remove the period spanning 2002 to 2007, when national home prices were rising at a rapid clip, the long-term average actually rises to 20.9%. For the record, the last housing boom was really not about excessive housing-related spending. We can see in the chart below that housing output was much higher as a share of the economy during the 1960s, 1970s and 1980s. The story in the last business cycle was about the unsustainable, bubble-like surge in home prices, not overbuilding. In addition, we can also see in the chart that housing's share of spending tends to gravitate back toward its long-term average. Based on past performance, the housing share of the economy should peak at close to 22%.

The housing share of the economy is rising but remains well below its long-term average



Source: BEA, Haver Analytics & DB Global Markets Research

[1] "Why this week's updated CBO projections could be a big deal" US Daily Economic Notes May 15, 2013.

For example, the share peaked at 22.4% in 1964, 23.1% in 1972, 22.9% in 1978, 21.4% in both 1983 and 1986, 20.4% in 1994 and 20.9% in 2005. The average for all seven peaks is 21.8%. Consequently, we believe that by any metric, the current ratio of housing related spending to GDP is extraordinarily low and has significant upside potential. The fact that monetary policy is extremely accommodative provides us with an additional level of confidence that the housing market is still in an early stage of recovery.

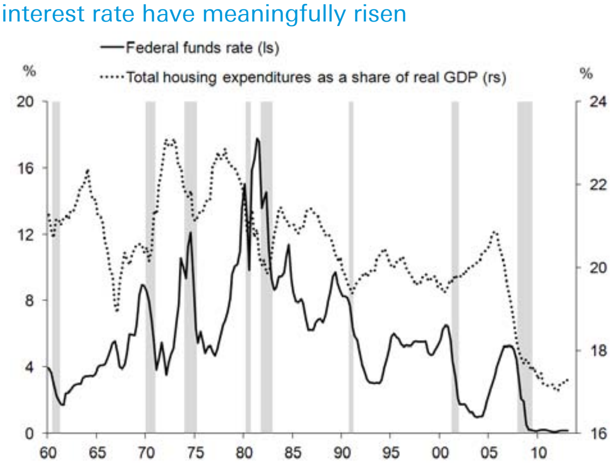
It is noteworthy that every cyclical peak in housing activity has coincided with monetary tightening. In particular, there has never been a peak in the housing cycle that did not correspond with a large cumulative rise in the federal funds rate. This is evident in the chart below which compares the level of the federal funds rate versus the housing-wide share of the economy. (In the last business cycle, official interest rates went up 425 basis points from their previous low.) With the Fed currently pegging short-term interest rates at near zero and purchasing $85 billion per month in mortgage backed and treasury securities, monetary policy remains extraordinarily accommodative. Therefore, we believe the upswing in overall housing activity will persist, if not strengthen, in the quarters ahead. Stronger housing activity should result in a positive feedback loop whereby growth in the sector spurs further labor market gains, which in turn fuels increased demand for housing. We should expect this virtuous cycle to last for some time—at least until monetary policy is significantly tightened.

So how much is housing going to add to growth? In terms of the housing contribution to output, we have assumed in our forecast that the contribution of housing-related activity adds roughly one percentage point to real GDP growth per year over the next three years, which we believe is extremely conservative as this would only return the sector's share of the economy back to its historical norm. Conceivably, a more rapid recovery in housing could take us well above its long-term 20.4% average share of output. An additional one percentage point per annum contribution in housing will lift real GDP growth to around 3% on a sustained basis, which is a noticeable improvement relative to its roughly 2% annualized rate of growth since the recession ended in Q2 2009. (Again, history could change with the impending comprehensive benchmark revisions in July.) Remember, too, that the forecast we have described is comprised of just the direct effects of a modest housing recovery on the overall economy. There are potentially large indirect positive effects as well, which over time would provide upside risks to growth.

Rising home prices provide an upside risk. If housing's share of the economy expands, it is likely to coincide with rising home prices since the latter tend to be highly correlated with a pickup in housing related spending. Last year, the CoreLogic National home price index rose 8.4% and through March, its year-over-year growth rate has increased to 10.5%. Rising home values will lift household net wealth, potentially providing an added stimulant to consumer spending beyond what we expect from a recovering labor market. Furthermore, rising home prices also make it likelier that financial institutions will ease mortgage lending standards, because there will be less fear that the collateral for which the loan is being made will decline in value. According to the Fed Senior Loan Officer's Survey, banks have begun to ease terms for prime mortgage borrowers. As home values trend higher, this should help alleviate the bottleneck in mortgage credit for non-prime borrowers, where standards remain restrictive. No doubt, an easing of residential mortgage lending standards would further buoy housing demand and hence construction and housing-related activity.

Our forecast of mildly above-trend growth later this year and next is based largely on the positive direct effects that a resurgent housing sector is likely to produce, as housing's share of the economy returns to a more normal level. If home prices continue to rise at a double-digit pace over the next few quarters, this could provide further upside surprises to growth. Given the modest economic performance of the past several years, we prefer to take a more conservative approach to the outlook even though history suggests otherwise.

Historically, housing output does not peak until interest rate have meaningfully risen



Source: BEA, FRB, Haver Analytics & DB Global Markets Research

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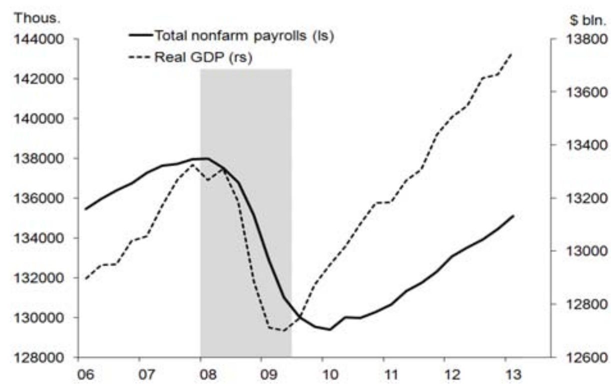
H2 hiring outlook: What a difference a point makes (on GDP)

Summary: Since the end of the recession in mid-2009, real GDP has increased at a 2.1% annualized pace, nonfarm payrolls have increased by an average of 165k per month (176k private) and productivity increased by an annualized 1.6% per quarter. In short, trend-like real GDP growth amidst somewhat below-average productivity growth has resulted in a moderately above-trend pace of job creation. Of course, a more granular analysis shows that in the first half of this period (the first eight quarters after the recession) GDP was similarly close to trend (2.2% per quarter), but productivity growth was higher (2.1%) and hiring gains were considerably less (56k per month). In the latter period, GDP growth was essentially the same (2.1%), but productivity growth was much slower (0.7%) and the pace of hiring was stronger (196k per month). In short, the productivity trend has significant implications for hiring. From recent experience, one can observe that if growth remains constant but productivity slows, the pace of hiring increases. Conversely, this also occurs if productivity remains constant and growth accelerates. We anticipate the latter scenario in the second half of this year; the employment landscape could be materially impacted.

Productivity stuck in low gear may lead to hiring up-shift. While the labor market has stumbled through a few false starts, a sustained improvement is becoming increasingly probable, as long as the economic expansion remains intact. We anticipate that a stronger pace of recovery in the labor market will contribute to a self-reinforcing positive feedback loop later this year. As the following chart illustrates, economic output is well above its pre-recession peak, while employment remains back at early 2006 levels. In fact, real output is up 3.2% from the pre-recession peak, but the April level of employment remains nearly 2.6 million below the January 2008 peak of 138.1 million. In short, the economy is producing more than ever before but with significantly fewer workers. The reason we believe a sustained improvement in the pace of hiring is becoming increasingly inevitable is because the level of output of the existing workforce can only be stretched so far. All else being equal (including productivity), an increase in overall output requires an increase in the quantity of hours worked (aggregate hours). Earlier in the current cycle, producers were able to increase output (and aggregate hours worked) by stretching the length of the average workweek. However, with the workweek essentially back to pre-recession levels—it was 34.5 hours as of Q1 compared to 34.6 hours in 2007—additional output gains increasingly depend on workforce expansion.

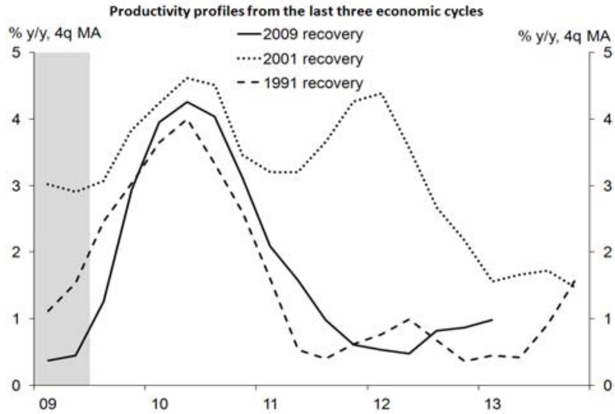
Labor has not kept pace with output



Source: BEA, BLS, Haver Analytics & DB Global Markets Research

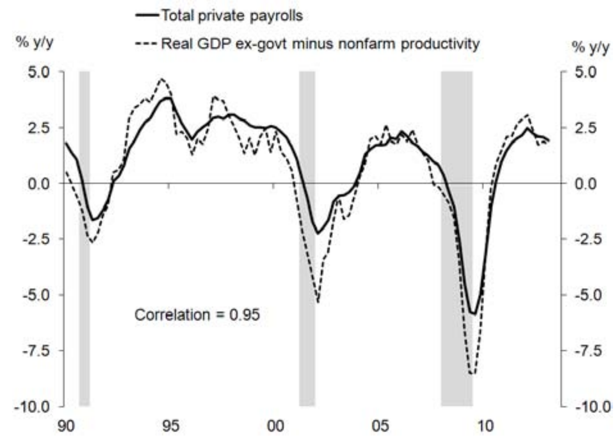
The preceding figure shows output expanding more rapidly than labor since the recovery began, which effectively amounts to productivity growth. This is typical of the early stages of an economic cycle: Productivity accelerates as the economy emerges from recession. This occurs as output begins to recover, but the labor market remains stagnant. Later in the cycle amid continued economic output growth, productivity slows as employment gains become more robust. Case in point, productivity surged to near 6% year-on-year in late 2009 and then decelerated to 0.2% in Q3 2011. It has remained below 1% for six of the past seven quarters and was 0.9% last quarter. The following figure overlays the productivity profile from the last three economic cycles. Note the similar profiles showing the post-recession surge, a subsequent stall and then an eventual return toward trend. (Productivity has averaged 2.0% over the past 50 years.) Higher productivity following the 2001 recession was part of the reason why that cycle was characterized as a "jobless recovery", although subsequent revisions to nonfarm payrolls showed this to be less severe than what was reported in real time. Based on the pattern from recent cycles, a return to trend for productivity on a sustained basis will likely not occur for at least another year.

The productivity profile appears relatively consistent with the last few cycles



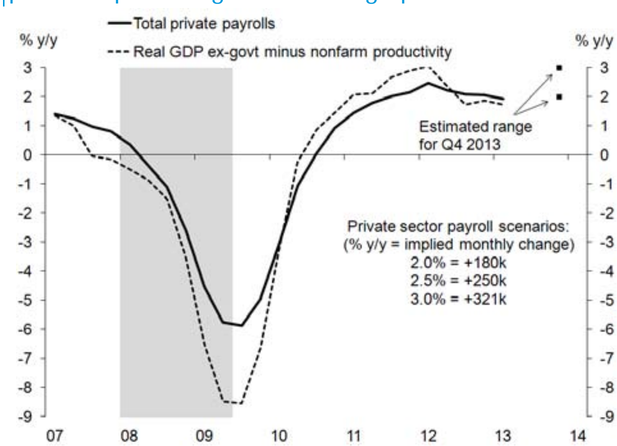
Source: BLS, Haver Analytics & DB Global Markets Research

Productivity-adjusted growth correlates closely with the pace of hiring



Source: BLS, BEA, Haver Analytics & DB Global Markets Research

Under reasonable productivity scenarios, our growth profile implies a significant hiring upshift



Source: BLS, BEA, Haver Analytics & DB Global Markets Research

Sluggish productivity growth could drive H2 hiring. We are forecasting a meaningful pickup in the pace of economic growth in the second half of the year as the sticker shock from the payroll tax increase fades and sequestration anxiety dissipates. While H1 real GDP growth appears likely to average around 2.4%, the second half will be nearly a full percentage point faster at 3.3% due to stronger household consumption, further housing gains and more robust business investment. In turn, the year-on-year rate of growth is poised to accelerate from 1.7% at the end of last year to 2.8% by yearend 2013. The shift from below-trend growth to above-trend growth on a sustained basis will have significant implications on the pace of hiring, particularly if productivity growth remains sluggish. However, the fiscal drag masks an even stronger acceleration in the private sector. We expect private gross domestic product (i.e. GDP ex-government) to accelerate from 2.5% year-on-year as of Q4 2012 to 4.0% by the end of this year. As discussed below, this should drive a meaningful pickup in the pace of private sector job creation.

Holding productivity constant, faster growth should correspond to faster hiring. This is illustrated in the following two figures, which show job creation plotted alongside productivity-adjusted output. (We approximate the latter by subtracting productivity growth from real GDP growth.) Since the productivity data correspond to the nonfarm business sector, we attempt to use consistent metrics by utilizing private sector GDP (GDP ex-government) and private sector employment. The correlation between private sector employment and productivity-adjusted private GDP is extraordinarily high at 95%. Thus, the degree of confidence in our H2 growth and productivity forecasts should translate through to our employment projections.

The extrapolated points in the second chart above reflect our private sector GDP forecast (4.0%) for yearend adjusted for productivity (1.0%). (The lower point represents a more conservative estimate.) Based on the first figure on this page and the associated commentary, it appears unlikely that productivity will significantly reaccelerate later this year, so a likely range is 1.0%-2.0%—although we believe the low end of the range is more likely. Thus, the extrapolated point—which also corresponds to the implied private payroll gain—should end up near 3.0%. (The more aggressive productivity assumption would limit the gain to something closer to 2.0%—the more conservative estimate shown.)

Currently, private payrolls are growing at a 1.9% pace, consistent with the range of 1.9% to 2.1% over the last ten months. If the current pace is maintained, this implies an average monthly private payroll gain of 166k through yearend (2% implies 180k per month). However, our baseline assumption has private payroll growth rising toward 3%, which implies average monthly gains of 321k. A modest downside miss (2.5%) would still achieve an impressive 250k per month. To be sure, we are not anticipating a sustained period of payroll gains in excess of 300k, but based on our economic forecast the risk to the recent trend appears tilted to the upside.

Our conclusion from the accompanying analysis is that under plausible scenarios for both growth and productivity, the pace of private sector hiring is due to accelerate through yearend. Such a development would meaningfully boost the rate of private sector job creation relative to the 6-month (216k) and 12-month (181k) averages. However, since the up-shift will likely occur at the same time that growth accelerates, it is premature to anticipate the hiring up-shift in the immediate term, because growth appears likely to remain near trend in the current quarter and only accelerate in H2.

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Data and Events Calendar

Calendar (May 13 – Jun 7)

May-13	May-14	May-15	May-16	May-17
Retail Sales Total Ex Autos 8:30 AM Feb: +1.1% +1.1% Mar: -0.4 -0.4 Apr: +0.1 -0.1 Business Inventories 10:00AM Jan: +0.9% Feb: Unch Mar: Unch		PPI Total Core 8:30 AM Feb: +0.7% +0.2% Mar: -0.6 +0.2 Apr: -0.7 +0.1 NY Fed Empire State Survey 8:30 AM Mar: +9.2 Apr: +3.1 May: -1.4 Industrial Production Cap. Util. 9:15 AM Feb: +0.9% 78.2% Mar: +0.3 78.3 Apr: -0.5 77.8 NAHB Housing Market Index 10:00 AM Mar: 44 Apr: 41 May: 44	Initial Claims (wk-end) 8:30 AM Apr 27: 327k -15k May 5: 328 +1 May 12: 360 +32 CPI Price Total Core 8:30 AM Feb: +0.7% +0.2% Mar: -0.2 +0.1 Apr: -0.4 +0.1 Housing Starts Permits 8:30 AM Feb: 0.969M 0.952M Mar: 1.021 0.890 Apr: 0.853 1.017 Philadelphia Fed 10:00 AM Mar: +2.0 Apr: +1.3 May: -5.2 10 Yr TIPS Announcement $13B	Consumer Sentiment 9:55 AM Mar: 78.6 Apr: 76.4 Prelim May: 83.7 Leading Economic Indicators 10:00 AM Feb: +0.5% Mar: -0.2 Apr: +0.6

FORECASTS

May-20	May-21	May-22	May-23	May-24
		Existing Home Sales 10:00 AM Feb: 4.95M Mar: 4.92 *Apr: 4.95* Fed Chairman Bernanke testifies before the Joint Economic Committee 10:00 AM FOMC Minutes 2:00 PM	New Home Sales 10:00 AM Feb: 411k Mar: 417 *Apr: 420* 2 Yr Note Announcement *$35B* 5 Yr Note Announcement *$35B* 7 Yr Note Announcement *$29B* 10Yr Tips Auction *$13B*	Durable Goods Orders ExTrans 8:30 AM Feb: +4.3% -1.8% Mar: -5.8 -1.5 *Apr: +2.0 +1.0*

May-27	May-28	May-29	May-30	May-31
	Consumer Confidence 10:00 AM Mar: 61.9 Apr: 68.1 *May: 69.0* 2 Yr Note Auction *$35B*	5 Yr Note Auction *$35B*	Real GDP Deflator 8:30 AM Q312: +3.1% +2.7% Q412: +0.4 +1.0 Adv: Q113: +2.5 +1.2 *Prel. Q113: +2.4 +1.2* Pending Home Sales Index 10:00 AM Feb: -1.1% Mar: +1.5 *Apr: +2.0* 7 Yr Note Auction *$29B*	Personal Income 8:30 AM Feb: Mar: *Apr:* Income +1.1% +0.2 *+0.1* Consump. +0.7% +0.2 *+0.2* Core PCE +0.1% Unch. *+0.1* Chicago PMI 9:45 AM Mar: 52.4 Apr: 49.0 *May: 51.0* Consumer Sentiment 9:55 AM Mar: 78.6 Apr: 76.4 *Final May: 85.0*

Jun-03	Jun-04	Jun-05	Jun-06	Jun-07
ISM Index 10:00 AM Mar: 51.3 Apr: 50.7 *May: 50.0* Construction Spending 10:00 AM Feb: +1.5% Mar: -1.7 *Apr: Unch*	Unit motor vehicle sales Sales: Cars Trucks Total Mar: 5.3 6.7 15.2M Apr: 5.0 6.7 14.9 *May: 5.2 6.7 15.1* International Trade Balance 8:30 AM Feb: -$43.6B Mar: -38.8 *Apr: -42.3*	Nonfarm Productivity Unit Labor Costs 8:30AM 3Q12: +3.1% -1.9% 4Q12: -1.7 +4.4 *Final 1Q13: +0.7 +0.5* Factory Orders 10:00 AM Feb: +1.9% Mar: -4.0 *Apr: +1.0* Nonmfg. ISM 10:00 AM Mar: 54.4 Apr: 53.1 *May: 53.0* Fed's Beige Book	3 Yr Note Announcement *$32B* 10 Yr Note Announcement *$21B* 30 Yr Bond Announcement *$13B*	Employment 8:30 AM Mar: Apr: *May:* Payrolls +138k +165 *+125* Private +154k +176 *+135* UnRate 7.6% 7.5 *7.5* Hrly Erngs Unch. +0.2 *+0.1* Workwk 34.6 34.4 *34.5* Consumer Credit 3:00 PM Feb: +$18.6B Mar: +8.0 *Apr: +10.0*

Source: Deutsche Bank

Appendix 1

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