Deutsche Bank
Research

Global | Economics

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Joseph LaVorgna
Chief US Economist
(+1) 212 250-7329
joseph.lavorgna@db.com

Brett Ryan
Economist
(+1) 212 250-6294
brett.ryan@db.com

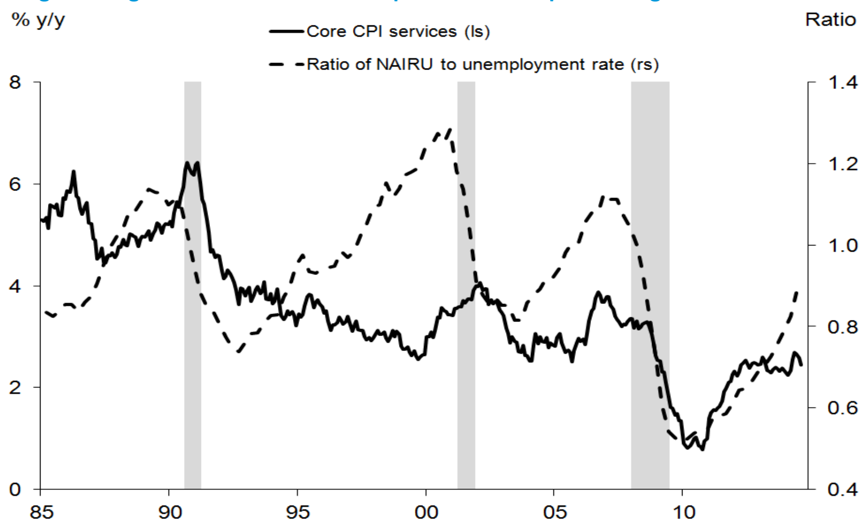
US Economics Weekly

Deflation fears are overdone

Overview: Over the last three months, inflation has fallen significantly, rekindling fears of deflation. Moreover, the fact that energy prices have collapsed—in part because of a stronger dollar—has caused the breakeven inflation rate to roll over. In turn, financial markets have pushed out the timing of Fed tightening and substantially reduced expectations for the terminal fed funds rate. Our analysis shows that core inflation is likely to trend higher over time, led by higher services prices. Goods prices have been soft, but there is little evidence to suggest they are likely to turn sharply lower. Finally, the dollar needs to appreciate significantly further to have any noticeable impact on core inflation.

Lower energy prices will not sink capex: Financial market participants are fretting the impact of falling energy prices on capital expenditures within the energy sector. In our view, these fears are overblown as oil- and gas-related investment is only about 10% of total nonresidential investment in equipment and structures, which is where business spending is captured in the GDP accounts. In total, business investment accounts for roughly 9% of real GDP. Hence, while energy-related capital spending could slow if oil prices remain depressed for a significant period of time, this may be worth only a tenth or two on inflation-adjusted output growth, which is not very much. In fact, as we recently highlighted, the positive effects from a boost to consumer spending should more than outweigh any negative impact from lower capital expenditures.

A tightening labor market should push service prices higher over time



Source: BLS, Haver Analytics & DB Global Markets Research

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Forecasts

	2014				2015	
	Q1	Q2	Q3F	Q4F	Q1F	Q2F
Real GDP (% q/q)	-2.1	4.6	4.0	4.2	3.1	3.3
Core CPI (% y/y)	1.6	1.9	1.8	2.1	2.2	2.3
Unemployment rate	6.7	6.2	6.1	5.8	5.7	5.5
Fed funds	0.09	0.09	0.13	0.13	0.13	0.50

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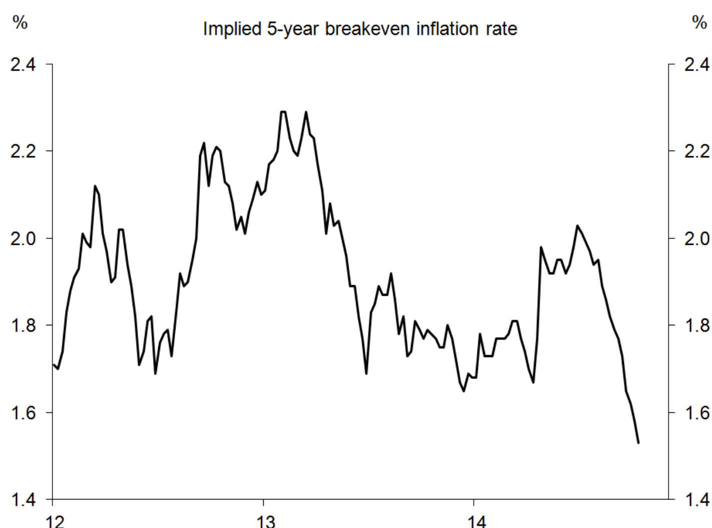
DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MCI (P) 148/04/2014.

Overview

Summary: Over the last three months, inflation has fallen significantly, rekindling fears of deflation. Moreover, the fact that energy prices have collapsed—in part because of a stronger dollar—has caused the breakeven inflation rate to roll over. In turn, financial markets have pushed out the timing of Fed tightening and substantially reduced expectations for the terminal fed funds rate. Our analysis shows that core inflation is likely to trend higher over time, led by higher services prices. Goods prices have been soft, but there is little evidence to suggest they are likely to turn sharply lower. Finally, the dollar needs to appreciate significantly further to have any noticeable impact on core inflation.

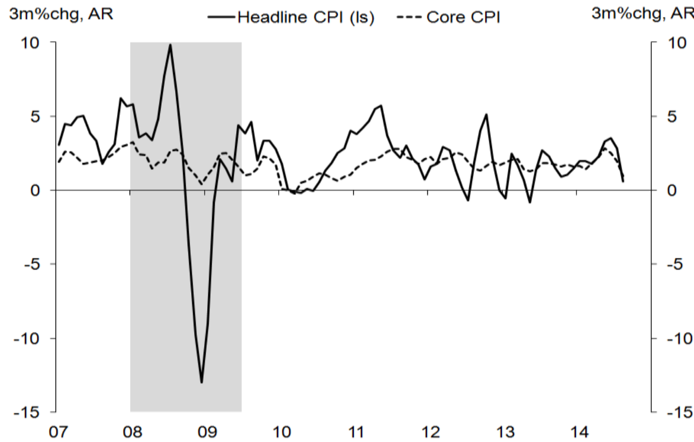
Inflation expectations have declined dramatically over the past 5 months



Source: FRB, Haver Analytics & DB Global Markets Research

We focus on the consumer price index (CPI) because it is timelier than the personal consumption expenditures (PCE) deflator and does not get revised. Moreover, the correlation between the growth rates in the two series is around 0.90 so generally, the trend in the PCE deflator mirrors the trend in the CPI. September CPI data will be released next Wednesday. Over the last three months, the annualized change in headline CPI has been just 0.6%. This is down from a 3%-plus rate as recently as June. The pattern is the same for the core CPI. Over the last three months, the annualized change in the core CPI is up 1.0%. This is down from a near 3% rate as recently as May. However, as we can see from the chart on the following page, the three-month rates of change can be quite volatile. The last time both measures of inflation were growing under 1% over a three-month period was in June 2010. At that time, the headline rate was flat, and the core was up just 0.9%. However, within nine months of those lows, the three-month annualized changes improved to 4.7% and 2.0%, respectively. Therefore, we need to be mindful that gyrations in inflation are the norm not the exception. There are compelling reasons why core inflation should trend higher over time.

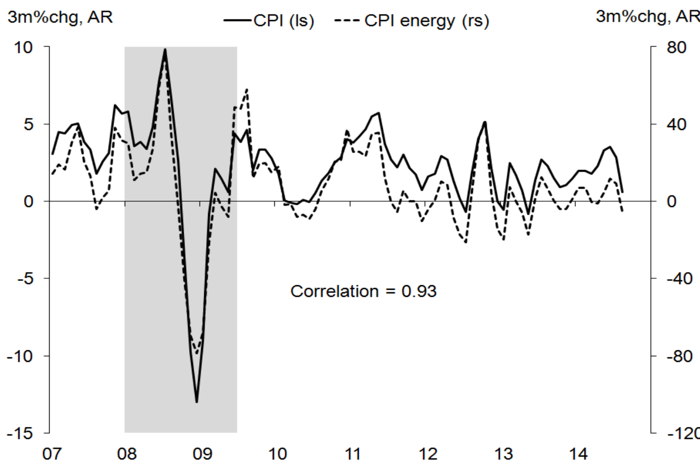
Short-term movements in inflation are extremely volatile



Source: BLS, Haver Analytics & DB Global Markets Research

In the near term, headline CPI will continue to be dominated by energy prices. However, the trend in core CPI will be determined primarily by the trend in service prices rather than goods prices because the former have a much larger weight at 75% compared to just 25% for the latter. Over the last three months, the growth rate in core CPI has noticeably slowed, but we believe this is payback from elevated readings earlier this year. For example, in May the three-month annualized change in the core was 2.8% but over the last three months, the growth rate has slowed to 1.0%. The year-over-year change in core services within the CPI has been consistently running well in excess of 2%, and as we discuss below, this trend should accelerate over time.

Swings in energy prices are likely to continue to dominate headline CPI

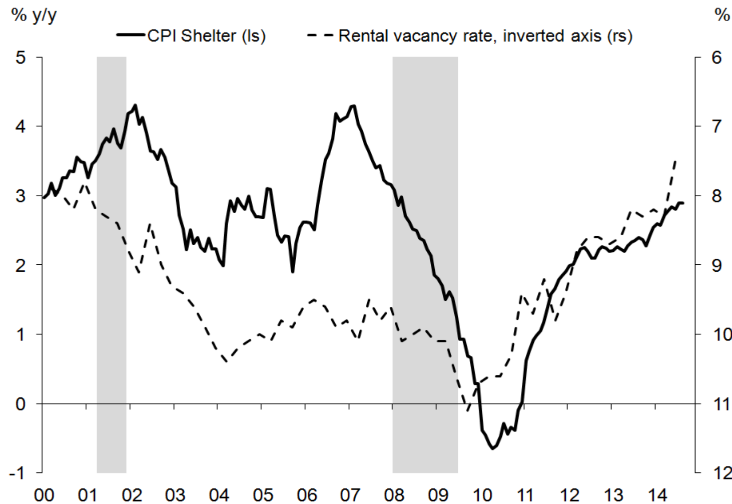


Source: BLS, Haver Analytics & DB Global Markets Research

Core CPI is dominated by housing. Shelter accounts for 42% of the core CPI, and its growth rate continues to rise because of lack of available housing supply. This is most evident from the nationwide rental vacancy rate, which fell to 7.5% in Q2 (the latest available data) to its lowest reading since Q1 2007. Based on the current vacancy rate, the growth rate in shelter costs, currently running at 2.9% over the last 12 months, should approach 4% over the next year. This alone would add 50 basis points (bps) to the underlying rate of core inflation. A tightening labor market should also put upward pressure on other categories within the services

sector such as education, medical care and recreation. In general, when the job market strengthens, the prices of services tend to increase, reflecting the fact that labor is the key input in service sector production.

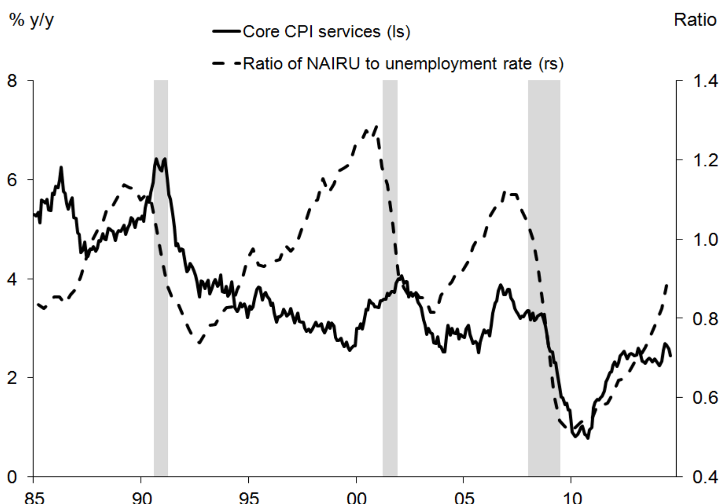
The plunge in the rental vacancy rate points to larger gains in shelter costs



Source: BLS, Haver Analytics & DB Global Markets Research

As shown in the chart below, price trends within the services sector increase when the unemployment rate approaches the non-accelerating inflation rate of unemployment (NAIRU). While NAIRU is not known until after the fact, our research has found that cost pressures build when the unemployment rate falls below 6%. At present, we are at 5.9% and poised to head substantially lower over the next few quarters given record low readings on initial jobless claims.[1]

A tightening labor market should push service prices higher over time

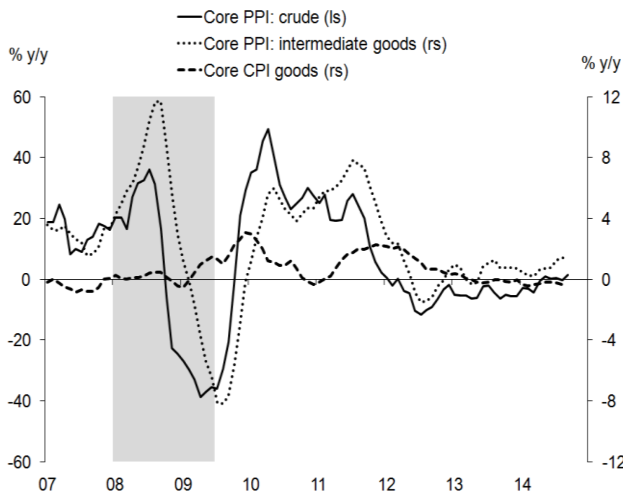


Source: BLS, Haver Analytics & DB Global Markets Research

[1] "How low does unemployment have to go before compensation accelerates?" US Economics Weekly October 10, 2014.

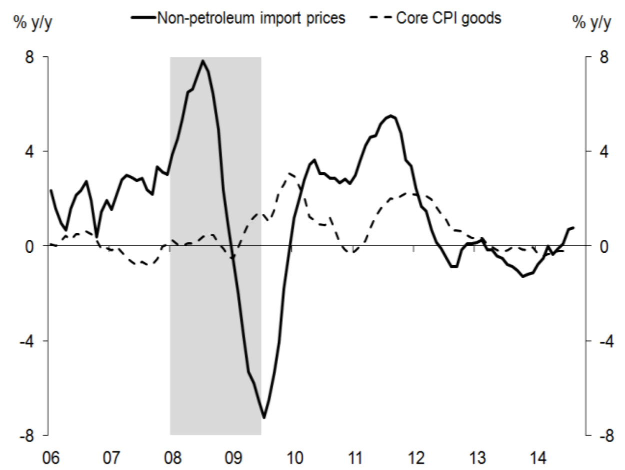
Whither goods prices? While services prices are set to accelerate, the price of goods continues to decline at a relatively steady -0.4% year-over-year rate. For goods prices to weigh further on core inflation, prices would have to decline at an even faster pace. However, the data suggest this scenario is unlikely. This is apparent from the earlier stages of processing within the producer price index (PPI), which measures inflation in the wholesale sector. Price trends in the wholesale sector often foreshadow the trends in the retail sector. More specifically, changes in core crude prices tend to lead the trend in core intermediate prices, which in turn tend to lead changes in core CPI goods prices. This is illustrated in the chart below. While the growth rates in core crude and core intermediate prices are only slightly positive, they are nonetheless running at their highest pace in over two years. This suggests the rate of deflation in the retail goods sector is unlikely to pickup in any meaningful way. What about the dollar?

The earlier stages of processing do not show any pipeline deflation



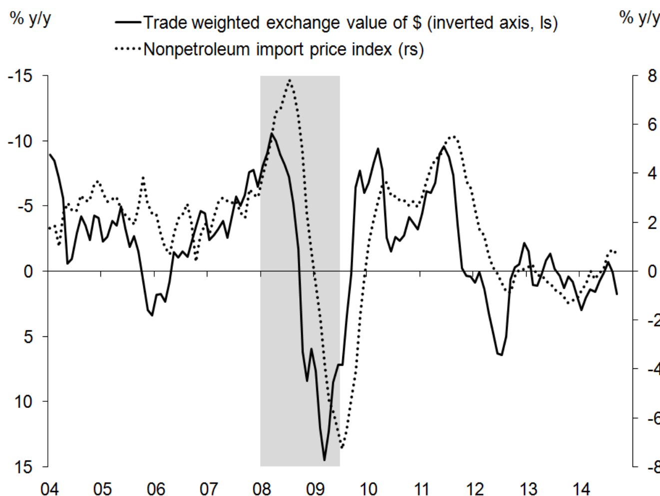
Source: BLS, Haver Analytics & DB Global Markets Research

Core CPI goods prices are down slightly compared to a year ago



Source: BLS, Haver Analytics & DB Global Markets Research

The real broad trade-weighted dollar is up only modestly from its record low



Source: BLS, Haver Analytics & DB Global Markets Research

The dollar has had a negligible impact on import prices thus far. Financial markets and some monetary policymakers, in particular New York Fed President Dudley and Governor Fischer, are worried about a strengthening dollar and its potential to put further downward pressure on goods prices through lower import prices. At the moment, the rise in the dollar has had little discernible impact on goods inflation. This is evident in the chart on the previous page. The reason for this is simple: In inflation-adjusted broad trade-weighted terms, the dollar has not increased that much. In point of fact, the real broad trade-weighted dollar is up less than 2% over the last 12 months and is up just under 8% from its all-time record low set more than three years ago in July 2011. This should have little impact on nonpetroleum import prices, which are currently rising at nearly a 1% year-over-year rate. But what if the dollar strengthens significantly further?

According to our calculations, every one percentage point increase in the trade-weighted dollar reduces non-petroleum import prices by 60 bps, which in turn lowers core goods prices by 15 bps. However, the effect on the overall core CPI is less given the fact that the weight of goods prices is two-thirds smaller than the weight of services prices in the core CPI. Thus, the impact turns out to be just 4 bps, which is negligible.

What is the bottom line? Above-trend economic activity will further weigh on unemployment, which will put further upward pressure on services prices. This means that unless pipeline inflation pressures moderate or the real, broad trade-weighted dollar appreciates significantly, core inflation should grind higher in the months ahead, notwithstanding normal intra-year gyrations.

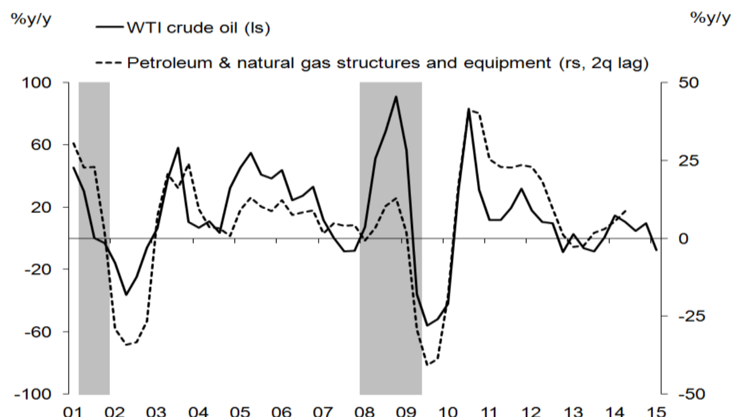
Joseph A. LaVorgna (212) 250-7329

Lower energy prices will not sink capex

Summary: Financial market participants are fretting the impact of falling energy prices on capital expenditures within the energy sector. In our view, these fears are overblown as oil- and gas-related investment is only about 10% of total nonresidential investment in equipment and structures, which is where business spending is captured in the GDP accounts. In total, business investment accounts for roughly 9% of real GDP. Hence, while energy-related capital spending could slow if oil prices remain depressed for a significant period of time, this may be worth only a tenth or two on inflation-adjusted output growth, which is not very much. In fact, as we recently highlighted, the positive effects from a boost to consumer spending should more than outweigh any negative impact from lower capital expenditures.

Oil and gas investment is only a small portion of overall capex. As the chart below illustrates, oil and gas capex is highly correlated with oil prices. The latter tends to lead the former by approximately two quarters. This makes sense because as prices rise, more expensive production becomes economically viable so firms invest in equipment to extract oil, and vice versa when prices decline. Since the lag between oil prices and capex spending is substantial, producers would have to anticipate a sustained downtrend in crude prices to meaningfully curtail investment. At around $80 per barrel, WTI crude prices are down 20% compared to a year ago. Given the aforementioned relationship between prices and energy-related capital expenditures, this would imply a roughly 8% year-over-year decline in oil and gas capex. In turn, this would subtract a little less than a tenth from real GDP.

Crude oil prices tend to lead the trend in oil & gas capital spending by two quarters



Source: EIA, BEA, Haver Analytics & Deutsche Bank

In general, the outlook for business spending remains constructive because outside of energy, capacity constraints are beginning to develop. For example, the capacity utilization rate of durable goods manufacturing is currently 77.6%, which is about half of a percentage point above its long-term average. Typically, as capacity utilization rises, companies need to invest in order to keep pace with rising demand and depreciating equipment. Moreover, the capital expenditures outlook in the Philadelphia Fed survey, which is highly correlated with capex spending in the GDP accounts, remains at an elevated level. In short, we highly doubt lower energy costs will be a negative for the US economy.

Brett Ryan (212) 250-6294

Data and Events Calendar

Calendar (Oct 13 – Nov 7)

Oct-13	Oct-14	Oct-15	Oct-16	Oct-17
Columbus Day Holiday		**PPI** Total Core 8:30AM Jul: +0.1% +0.2% Aug: Unch +0.1 Sep: -0.1 Unch **Retail Sales** Total Ex Autos 8:30AM Jul: +0.3% +0.3% Aug: +0.6 +0.3 Sep: -0.3 -0.2 **NY Fed Empire State Survey** 8:30AM Aug: +14.7 Sep: +27.5 Oct: +6.2 **Business Inventories** 10:00 AM Jun: +0.4% Jul: +0.4 Aug: +0.2 **Fed's Beige Book**	**Initial Claims (wk-end)** 8:30AM Sep 27: 288k -7k Oct 04: 287 -1 Oct 11: 264 -23 **Industrial Production** Cap. Util. 9:15AM Jul: +0.2% 79.1% Aug: -0.2 78.7 Sep: +1.0 79.3 **Philadelphia Fed** 10:00AM Aug: +28.0 Sep: +22.5 Oct: +20.7 **NAHB Housing Market Index** 10:00AM Aug: 55 Sep: 59 Oct: 54 **30 Yr TIPS Announcement** $7B	**Housing** Starts Permits 8:30AM Jul: 1.098M 1.057M Aug: 0.957 1.003 Sep: 1.017 1.018 **Consumer Sentiment** 9:55 AM Aug: 82.5 Sep: 85.0 Prelim Oct: 86.4 **Fed Chairwoman Yellen** speaks on inequality in Boston
FORECASTS				
Oct-20	Oct-21	Oct-22	Oct-23	Oct-24
	Existing Home Sales 10:00 AM Jul: 5.14M Aug: 5.05 *Sep: 5.10*	**CPI Price** Total Core 8:30AM Jul: +0.1% +0.1% Aug: -0.2 Unch *Sep: Unch +0.2*	**Leading Economic Indicators** 10:00AM Jul: +1.1% Aug: +0.2 *Sep: +0.8* **2 Yr FRN Announcement** *$15B* **2 Yr Note Announcement** *$29B* **5 Yr Note Announcement** *$35B* **7 Yr Note Announcement** *$29B* **30Yr TIPS Auction** *$7B*	**New Home Sales** 10:00 AM Jul: 427k Aug: 504 *Sep: 510*
Oct-27	Oct-28	Oct-29	Oct-30	Oct-31
Pending Home Sales Index 10:00 AM Jul: +3.2% Aug: -1.0 *Sep: +1.0*	**Durable Goods Orders** ExTrans 8:30 AM Jul: +22.5% -0.6% Aug: -18.4 +0.4 *Sep: +1.5 +1.0* **Consumer Confidence** 10:00 AM Aug: 93.4 Sep: 86.0 *Oct: 88.0* **2 Yr Note Auction** *$29B* **FOMC Meeting** 1st day	**2 Yr FRN Auction** *$15B* **5 Yr Note Auction** *$35B* **FOMC Meeting** 2nd day	**Real GDP** Deflator 8:30 AM Q114: -2.1% +1.3% Q214: +4.6 +2.1 *Advance: Q314: +4.0 +1.0* **7 Yr Note Auction** *$29B*	**Personal Income** 8:30 AM Jul: Aug: *Sep:* Income +0.2% +0.3 *+0.4* Consump. Unch +0.5 *+0.2* Core PCE +0.1% +0.1 *+0.1* **Employment Cost Index** 8:30AM Q114: +0.3% Q214: +0.7 *Q314: +0.5* **Chicago PMI** 9:45 AM Aug: 64.3 Sep: 60.5 *Oct: 61.0* **Consumer Sentiment** 9:55 AM Aug: 82.5 Sep: 84.6 *Final Oct: 86.4*
Nov-03	Nov-04	Nov-05	Nov-06	Nov-07
ISM Index 10:00 AM Aug: 59.0 Sep: 56.6 *Oct: 55.0* **Construction Spending** 10:00 AM Jul: +1.2% Aug: -0.8 *Sep: +1.0* **Unit motor vehicle sales** Sales: Cars Trucks Total Aug: 6.2 7.9 17.5M Sep: 5.6 7.5 16.4 *Oct: 5.7 7.6 16.6*	**International Trade Balance** 8:30 AM Jul: -$40.3B Aug: -40.1 *Sep: -40.0* **Factory Orders** 10:00 AM Jul: +10.5% Aug: -10.1 *Sep: +1.0*	**ADP Employment Report** 8:15 AM Aug: +202k Sep: +213 *Oct: +220* **Nonmfg. ISM** 10:00 AM Aug: 59.6 Sep: 58.6 *Oct: 58.0* **3 Yr Note Announcement** *$27B* **10 Yr Note Announcement** *$24B* **30 Yr Bond Announcement** *$16B*	**Productivity** **Unit Labor Costs** 8:30AM 1Q14 -4.5% 11.6% 2Q14 +2.3 -0.1 *Prelim: 3Q14 +1.2 +1.7*	**Employment** 8:30 AM Aug: Sep: *Oct:* Payrolls +180k +248 *+225* Private +175k +236 *+220* UnRate 6.1% 5.9 *5.9* Hrly Erngs +0.3% Unch *+0.2* Workwk 34.5hrs 34.6 *34.5* **Consumer Credit** 3:00 PM Jul: +$21.6B Aug: +13.5 *Sep: +12.0*

Source: Deutsche Bank

Appendix 1

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David Folkerts-Landau
Group Chief Economist
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Asia Pacific Research

Ralf Hoffmann
Regional Head
Deutsche Bank Research, Germany

Andreas Neubauer
Regional Head
Equity Research, Germany

Steve Pollard
Regional Head
Americas Research

International Locations

Deutsche Bank AG
Deutsche Bank Place
Level 16
Corner of Hunter & Phillip Streets
Sydney, NSW 2000
Australia
Tel: (61) 2 8258 1234

Deutsche Bank AG
Große Gallusstraße 10-14
60272 Frankfurt am Main
Germany
Tel: (49) 69 910 00

Deutsche Bank AG
Filiale Hongkong
International Commerce Centre,
1 Austin Road West,Kowloon,
Hong Kong
Tel: (852) 2203 8888

Deutsche Securities Inc.
2-11-1 Nagatacho
Sanno Park Tower
Chiyoda-ku, Tokyo 100-6171
Japan
Tel: (81) 3 5156 6770

Deutsche Bank AG London
1 Great Winchester Street
London EC2N 2EQ
United Kingdom
Tel: (44) 20 7545 8000

Deutsche Bank Securities Inc.
60 Wall Street
New York, NY 10005
United States of America
Tel: (1) 212 250 2500

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