

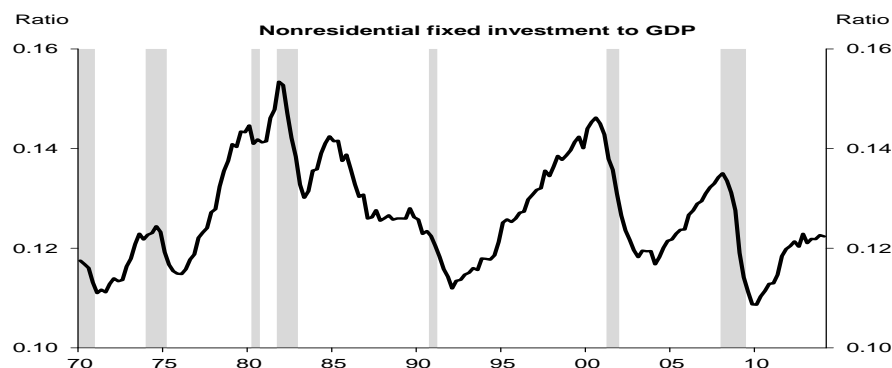


Global Economic Perspectives

Capex about to turn up: The missing link in the US recovery

- Questions about prospects for the US economy and the pace of Fed exit focus increasingly on when or whether business fixed investment (BFI) will begin to contribute substantially to the expansion of aggregate demand. This week's GEP provides an empirical assessment of the outlook for BFI.
- Early in the recovery, BFI expanded rapidly from a deep downturn, following the pattern seen in previous cyclical recoveries. But the depth of the decline was unusually large this time, and the recovery has not followed the usual pattern more recently. BFI growth has slowed and its share of GDP remains well below levels consistent with this stage of the recovery.
- But prospects appear good for a rebound: Survey indicators of business spending, along with orders for capital goods, have picked up nicely. From a top-down perspective, factors such as the aging of the existing capital stock, rising capacity utilization, the ample funding available in the corporate sector, and reduced uncertainty about economic policy and macro growth prospects all point to a healthy climate for increased BFI.
- From a sector perspective, prospects remain good for both an acceleration in spending on non-residential structures from unusually depressed levels and a continuation of the longer-term up-trend in IPP spending.
- Our empirical analysis for equipment spending tempers the overall view on BFI somewhat. While conditions seem good for a moderate acceleration of equipment spending, structural downtrends in spending on IP equipment, among other factors, will be a restraining factor. It seems unlikely, therefore, that BFI growth will return all the way to the double digit rates seen in the initial stages of this recovery. Rather, we expect it to settle into the lower end of the more normal growth pattern of two to three times overall GDP growth seen in the mid-stages of self-sustaining economic recoveries.
- Pulling together the various strands of our analysis, we conclude that BFI spending is likely to accelerate in the near term, helping to drive a solid upturn in GDP growth, though not a booming one. Because the pickup in BFI we envision would tend to confirm that the recovery has reached a self-sustaining stage, we believe that it will help move the Fed toward signaling a more hawkish policy stance later this year.

BFI should turn up from still depressed level



Source: BEA, Haver Analytics, Deutsche Bank Research



Key Economic Forecasts

	Real GDP % growth ^b			CPI % growth ^c			Current a/c % GDP ^d			Fiscal balance % GDP		
	2013	2014F	2015F	2013	2014F	2015F	2013F	2014F	2015F	2013F	2014F	2015F
US	1.9	2.3	3.8	1.5	2.0	2.3	-2.3	-2.5	-2.6	-4.0	-2.9	-2.6
Japan	1.5	1.2	1.5	0.4	2.7	1.7	0.7	0.5	1.8	-9.1	-6.8	-5.7
Euroland	-0.4	1.1	1.5	1.3	0.8	1.3	2.4	2.4	2.1	-3.1	-2.5	-2.1
Germany	0.4	1.8	2.0	1.6	1.1	1.7	7.5	7.1	6.8	0.0	0.2	0.1
France	0.4	1.0	1.4	1.0	1.0	1.1	-1.3	-1.5	-1.3	-4.3	-3.6	-3.1
Italy	-1.8	0.3	1.1	1.3	0.7	1.2	1.0	1.2	1.2	-3.0	-2.9	-2.6
Spain	-1.2	0.7	1.5	1.5	0.5	1.1	0.8	2.1	2.5	-7.1	-5.8	-4.5
UK	1.7	3.1	2.5	2.6	1.6	1.8	-4.4	-2.7	-2.6	-5.8	-4.7	-3.8
Sweden	1.6	2.7	3.0	0.0	0.5	1.8	6.5	5.6	5.5	-3.6	-1.6	-0.8
Denmark	0.4	1.4	1.5	0.8	1.4	1.8	7.3	6.5	6.5	0.0	-1.5	-2.0
Norway	2.1	2.5	2.6	2.1	1.9	2.1	11.1	11.5	11.5	7.6	9.5	10.5
Poland	1.6	3.3	3.7	0.9	0.9	2.3	-1.3	-2.0	-1.8	-4.4	4.3	-3.1
Hungary	1.1	2.7	2.8	1.7	0.5	2.8	2.9	1.5	1.1	-2.2	-2.9	-2.7
Czech Republic	-0.9	2.3	2.6	1.4	0.8	2.0	-1.4	-1.5	-1.4	-1.4	-2.6	-2.5
Australia	2.4	3.5	3.3	2.4	2.8	2.6	-2.9	-3.0	-2.7	-2.1	-2.3	-1.4
Canada	2.0	2.6	2.9	0.9	1.8	2.3	-3.0	-2.5	-1.9	-1.0	-0.8	-0.1
Asia (ex Japan)	6.1	6.3	6.8	4.3	3.5	4.0	1.7	1.9	1.6	-2.8	-2.8	-2.4
India	4.7	5.0	6.5	10.1	7.0	7.0	-2.6	-2.0	-2.9	-7.0	-7.0	-6.7
China	7.7	7.8	8.0	2.6	2.2	3.0	2.0	2.3	2.5	-2.1	-2.1	-1.5
Latin America	2.5	1.6	2.7	9.0	11.8	10.6	-2.5	-2.3	-2.3	-3.2	-3.6	-3.3
Brazil	2.5	1.2	1.2	6.2	6.3	6.1	-3.6	-3.6	-3.6	-3.2	-3.9	-3.6
EMEA	2.3	2.0	3.1	4.9	5.7	5.0	0.8	1.1	0.5	-1.2	-0.1	-1.2
Russia	1.3	0.6	2.2	6.8	7.5	5.0	1.5	2.2	1.6	-0.6	0.6	0.3
G7	1.3	2.0	2.8	1.3	1.8	2.0						
World	2.8	3.2	3.9	3.2	3.5	3.6						

Forecasts: G7 quarterly GDP growth

% qoq saar/annual: %yoy	Q1 13	Q2 13	Q3 13	Q4 13	Q1 14	Q2 14F	Q3 14F	Q4 14F	2013	2014F	2015F
US	1.1	2.5	4.1	2.6	-1.0	4.2	3.5	3.7	1.9	2.3	3.8
Japan	5.3	2.9	1.3	0.3	6.7	-7.0	3.3	1.8	1.5	1.2	1.5
Euroland	-0.8	1.3	0.5	1.0	0.7	1.2	1.5	1.2	-0.4	1.1	1.5
Germany	0.0	2.9	1.3	1.5	3.3	0.7	2.0	1.4	0.4	1.8	2.0
France	0.1	2.4	-0.2	0.7	0.1	1.2	1.8	1.3	0.4	1.0	1.4
Italy	-2.2	-1.3	-0.6	0.5	-0.5	1.2	1.1	1.1	-1.8	0.3	1.1
UK	1.4	3.1	3.4	2.7	3.3	3.2	2.8	2.4	1.7	3.1	2.5
Canada	3.0	1.9	3.0	2.7	1.2	3.0	3.5	2.9	2.0	2.6	2.9
G7	1.5	2.4	2.8	1.9	1.1	1.7	3.0	2.7	1.3	2.0	2.8

a) Euroland forecasts as at the last forecast round on 28/03/14. Bold figures signal upward revisions, bold, underlined figures signal downward revisions. (b) GDP figures refer to working day adjusted data, except Germany. For the euro area and the Big 4 member states we update the 2014 forecasts for the new carry-over effects following the release of the Q2 2013 data (c) HICP figures for euro-zone countries and the UK (d) Current account figures for Euro area countries include intra regional transactions.
Sources: National authorities, Deutsche Bank Research



Capex about to turn up: The missing link in the US recovery

Introduction¹

Questions about prospects for the US economy and the pace of Fed exit ahead focus increasingly on when or whether business real investment spending will begin to contribute substantially to the expansion of aggregate demand. This event is typically seen as a clear sign that the economy has moved into a self-sustaining recovery. Business fixed investment (BFI) was initially a key driver of growth as the economy began to pull itself out of the deep hole created by the great recession. Real BFI expanded at roughly an 8-10 percent rate during 2010 through mid-2012, consistent with patterns seen during previous expansion phases. Over the past two years, however, spending in this sector has disappointed, with growth falling back into the 2-3 percent range, barely staying ahead of overall GDP growth and hardly playing its usual role as a key cyclical driver of activity.

Is this disappointment merely a transitory setback, or is business spending facing more significant structural headwinds that are not about to dissipate any time soon? The answer to this question has important implications for the outlook for economic growth in both the near term (the cyclical recovery) and the longer term (the secular trend or potential). It also has important implications for the prospects for Fed policy, including the lift-off and pace of Fed rate hikes, and the endpoint or neutral level of rates. It is therefore also central to assessing the longevity of the recent rally in the bond market.

This week's GEP provides an empirical assessment of the outlook for business spending. In what follows, we begin with a review of the recent behavior of BFI and its near-term indicators. We then turn to a more granular analysis of what has driven recent BFI dynamics. Continuing this granular analysis, we then discuss the outlook for the different components of BFI. Next, we turn to the outlook for BFI from a macro perspective, including prospects for the cyclical drivers of BFI and predictions gleaned from an empirical model of equipment investment. Finally, we conclude with a discussion of the implications of our analysis for the economy, Fed, and markets.

Taking stock on where we stand with BFI

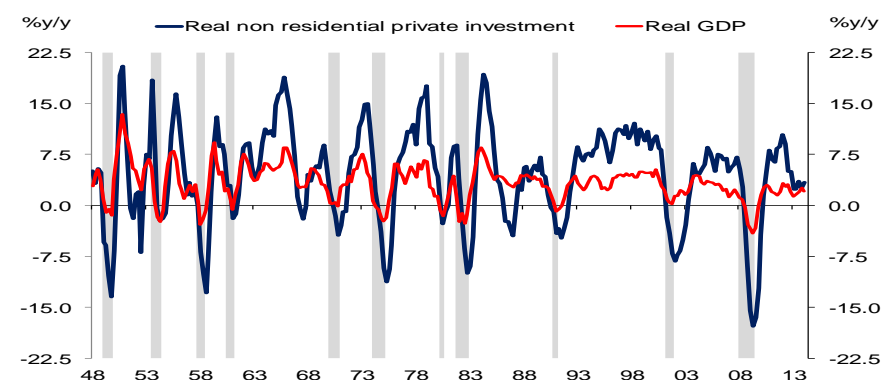
Early on in the recovery, BFI expanded rapidly from a deep downturn, following the pattern seen in previous cyclical recoveries (Chart 1). But the depth of the decline was unusually large this time, and the recovery has not followed the usual pattern more recently. BFI contracted by 20 percent during the downturn – the most severe contraction since the inception of the national income and product accounts. It then expanded more than 17 percent during the first two years of the recovery, but has fallen back to only a 2-3 percent annual rate of growth since.

BFI growth has been slow recently, after rebounding strongly following the crisis

¹ We would like to thank Sourav Dasgupta and Rajsekhar Bhattacharyya for their contributions to this research piece.



Chart 1: BFI growth has slowed significantly

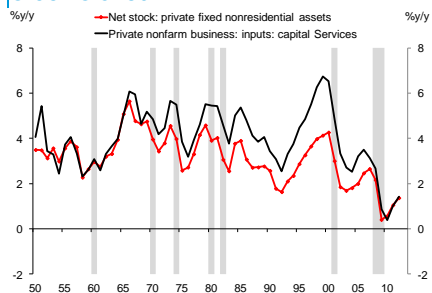


Source: BEA, Haver Analytics, Deutsche Bank Research

The collapse and partial recovery in BFI around the crisis has had three important effects on economic activity (besides its direct contribution to GDP growth). First, growth of the business capital stock slowed to and remains at historically low rates despite some recovery (Chart 2). Second, the average age of the capital stock (including both non-residential structures and equipment) has risen significantly (Chart 3). Third, as a result of these developments, the growth of the flow of capital services derived from the business capital stock has slowed to record low rates, and this development has been a key factor causing a decline in the growth of labor productivity to well below longer-term averages (Chart 4).

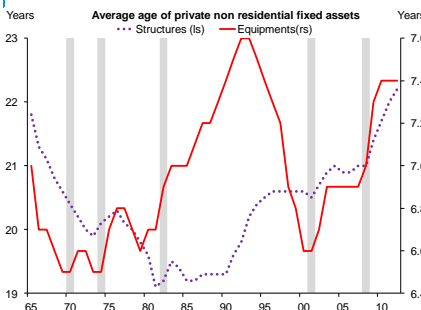
Slow BFI growth has led to (1) slow growth of the capital stock, (2) capital stock aging, and (3) weak growth in capital services and productivity

Chart 2: As BFI fell, growth of capital stock stalled...



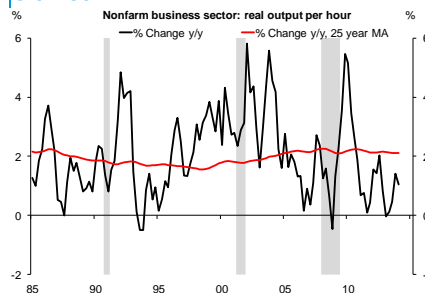
Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 3: ...The capital stock aged...



Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 4: ...And productivity growth slowed

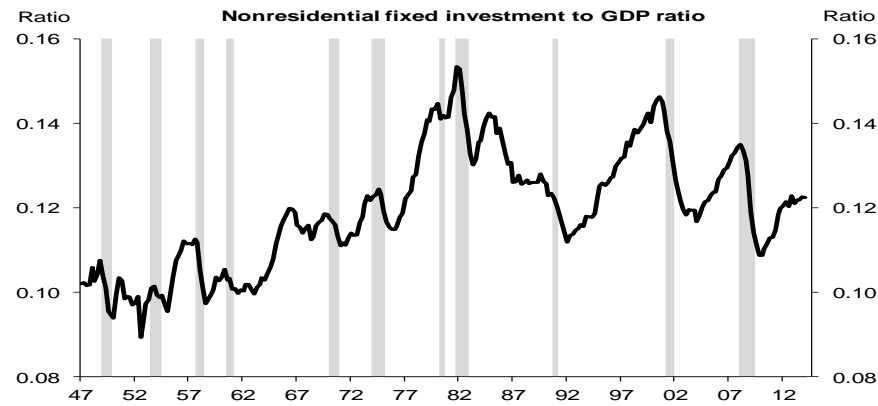


Source: BLS, Haver Analytics, Deutsche Bank Research

These dynamics resulted in BFI's share of GDP falling to multi-decade lows during the crisis (Chart 5). And despite the snapback in BFI early in the recovery, BFI's share of GDP remains well below historical averages. The lower share of BFI is at least partially structural. Total BFI peaked as a share of GDP in the early 1980s, and has since exhibited a broad downward trend that has been interrupted temporarily with the tech boom and other cyclical fluctuations. But we believe there are also good reasons to believe that much of this weakness is due to cyclical factors that have improved more recently, suggesting that spending on BFI should accelerate. We discuss these factors in more detail later in the piece.



Chart 5: BFI's share of GDP remains depressed

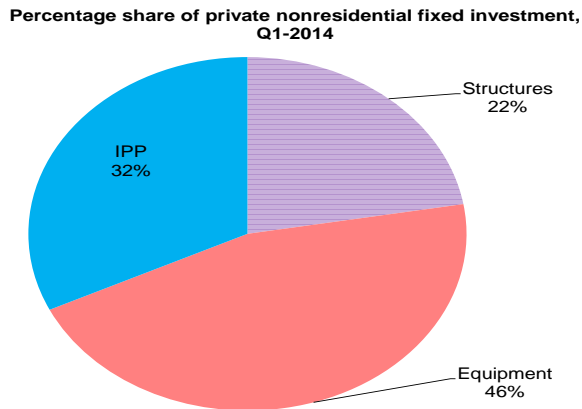


Source: BEA, Haver Analytics, Deutsche Bank Research

Within this aggregate trend are divergent trends for BFI's major components: non-residential structures, equipment and intellectual property products (IPP).² Currently, equipment spending accounts for almost 50 percent of overall BFI, while IPP accounts for almost one-third, and spending on non-residential structures accounts for the remainder (Chart 6).

Equipment accounts for nearly 1/2 of BFI, IPP another 1/3, and structures the rest

Chart 6. Breakdown of BFI into its major components



Source: BEA, Haver Analytics, Deutsche Bank Research

These shares have undergone significant changes over time. Spending on non-residential structures as a share of GDP peaked in the early 1980s at nearly 6 percent and has since appeared to settle into a lower share of GDP at about half the peak level (Chart 7). Following the financial crisis, structures' share of GDP fell to record low levels and has risen modestly since, remaining well below levels consistent with this stage of the recovery. This fact suggests that there is likely pent up demand for investment in non-residential structures going forward. Spending on IPP, on the other hand, has exhibited a clear uptrend as a share of GDP over the past several decades – a trend that has been relatively undisturbed by cyclical factors (Chart 8). While spending on IPP was only about 0.8 percent of GDP in the early 1950s, its share has nearly quintupled to almost 4.0 percent of GDP more recently. Much of the rise through the late 1990s was driven by more rapid spending on software, while

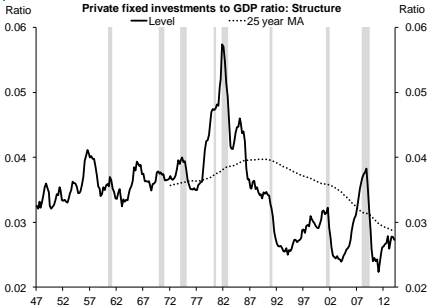
Structures spending has been depressed from a historical perspective, while IPP spending has continued to trend up strongly

² IPP is composed of spending on software, research and development, and entertainment, literary, and artistic originals.



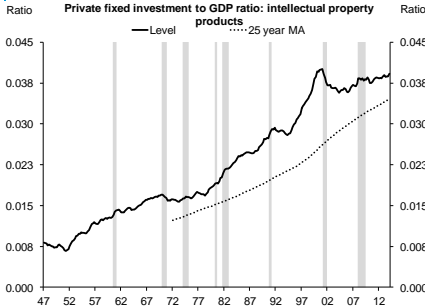
the rise in IPP's share of GDP since the tech bust has been driven by an acceleration in spending on R&D.

Chart 7: Structures spending near historical average share of GDP...



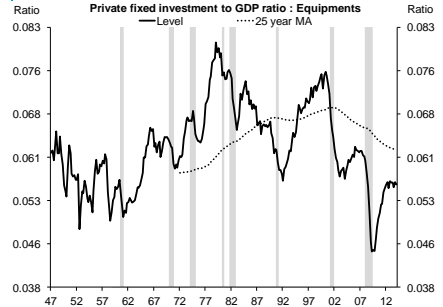
Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 8: ...IPP's share of GDP has trended upward...



Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 9: ...But equipment spending is well below average share



Source: BEA, Haver Analytics, Deutsche Bank Research

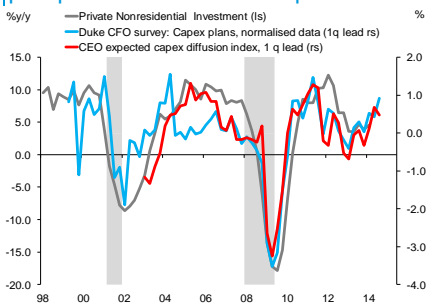
Finally, similar to spending on non-residential structures, spending on equipment peaked as a share of GDP in the early 1980s (Chart 9). The rapid expansion of equipment spending during the 1990s tech boom saw equipment spending as a share of GDP approach the record highs of the 1980s. Since that time, however, this share has declined relative to GDP. This downtrend accelerated during the financial crisis, as equipment's share of GDP fell to record low levels, and has only recovered modestly, remaining well below historical peaks during previous recoveries. Equipment's share of GDP is well below the 25-year moving average, perhaps suggesting that pent up demand remains for equipment. The longer-term downtrend in this series may suggest, however, that historical averages are not the most appropriate reference point.

Equipment spending remains at depressed levels despite bounceback from extreme lows

Most recently, survey indicators and durable goods orders do point to somewhat improved prospects for BFI going forward. Several survey indicators that have served as leading indicators for BFI over the past several cycles have turned up (Charts 10 and 11). And following a sharp slowdown during the harsh winter weather, orders for non-defense capital goods ex-aircrafts, which have been highly correlated with equipment investment historically, have picked up (Chart 12).

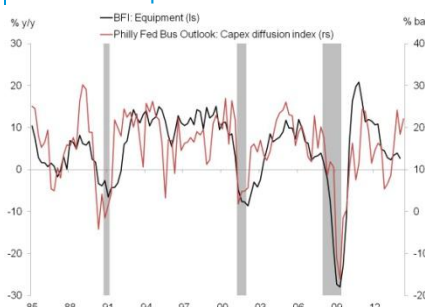
Recent readings on survey indicators and durable goods orders point to improved prospects for BFI in coming months

Chart 10: Survey indicators suggest prospects for BFI have improved...



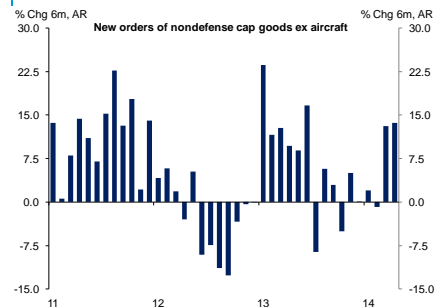
Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 11: ...Philly Fed capex outlook has turned up...



Source: FRB Phil, BEA, Haver Analytics, Deutsche Bank Research

Chart 12: ... Durable goods orders bounced back from the harsh winter



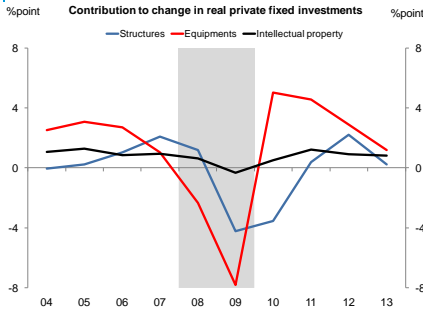
Source: Census, Haver Analytics, Deutsche Bank Research



What has driven these post-crisis BFI dynamics?

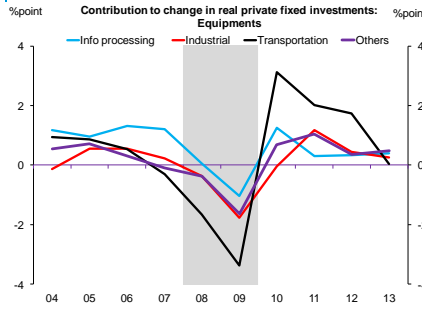
During and immediately following the financial crisis, spending on equipment was the primary driver of changes in BFI (Chart 14). Spending on equipment fell sharply during the financial crisis and rebounded quickly in 2010. Of the major components of equipment spending, the transportation subcomponent was the primary driver of the sharp contraction and strong rebound in equipment spending during this period (Chart 15).

Chart 14: Equipment spending has driven BFI dynamics...



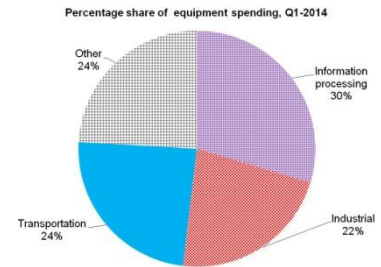
Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 15: ...And transportation equipment was a key driver



Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 13: Breakdown of equipment

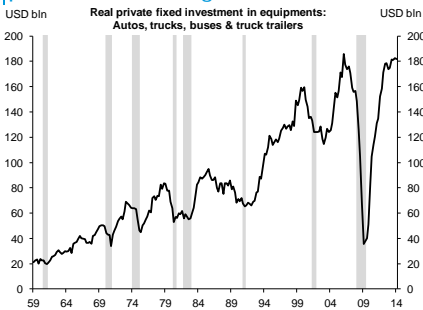


Source: BEA, Haver Analytics, Deutsche Bank Research

Within transportation equipment, spending on autos, trucks, and buses, plummeted during the financial crisis both in real terms and relative to GDP. Spending on these categories was about \$180bn per quarter in real terms prior to the crisis and contracted by more than 75 percent by 2009, as spending fell to less than \$40bn, reaching levels that had not been observed since the early 1970s (Chart 16). However, spending on these items rebounded rather quickly, reversing the sharp decline during the financial crisis, and soon reaching record high levels. As a share of GDP, spending on these transportation items fell to record low levels during the crisis, and has since returned to levels consistent with its long-term trend (Chart 17).

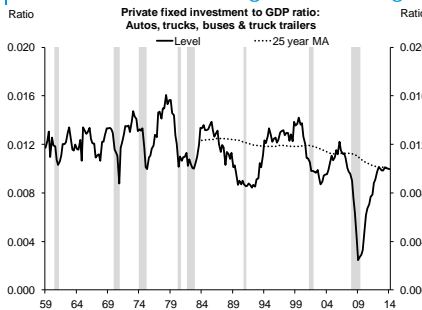
Transportation equipment accounted for most of the dynamics in BFI around the crisis, but has since returned to longer-term averages

Chart 16: Spending on vehicles plummeted during crisis



Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 17: Relative to GDP, spending is consistent with long-term average



Source: BEA, Haver Analytics, Deutsche Bank Research

Thus, much of the contraction and sharp rebound in BFI around the financial crisis is attributable to the collapse and strong rebound in spending on autos, trucks and buses. Spending on these items has since reached longer-term trends, perhaps suggesting that they are unlikely to act as a primary driver of BFI going forward.

In the following sections we present an assessment of the outlook for BFI. We begin first with a discussion of the outlook for the three major components of BFI and then turn to the outlook for the cyclical drivers.



The outlook for BFI's components

Non-residential structures: Outlook is good for stronger spending

Spending on non-residential structures fell to unusually depressed levels following the financial crisis and has remained weak during this recovery. Similar to residential investment, much of this weakness can be attributed to a need to work through the overbuilding that occurred during the run up to the financial crisis, as structures share of GDP rose rapidly from 2004 through 2008. There are some indications that this excess supply has diminished materially and that pent up demand for non-residential structures should lead to stronger spending going forward. For example, the vacancy rate for office space nationally has declined steadily over the past four years toward historically more normal levels (Chart 18). In addition, in response to the shale energy boom in the US, investment in energy-related structures has been notably strong. This supports the outlook for a pickup in investment in commercial structures.

Spending on non-residential structures should turn up given pent up demand

Chart 18: Office vacancy rate falling



Source: CB Richard Ellis, Haver Analytics, Deutsche Bank Research

IPP: Uptrend should continue

Spending on IPP – composed of spending on software, R&D, and entertainment, literary and artistic originals – has displayed a steady uptrend as a share of GDP over the past several decades, which has been relatively impervious to cyclical factors. Recent strength in IPP spending has been driven primarily by the R&D component. IPP spending may also benefit from a shift away from investment in information processing (IP) equipment.

Spending on IPP should continue its strong longer-term uptrend

Equipment: IP equipment has been notably weak

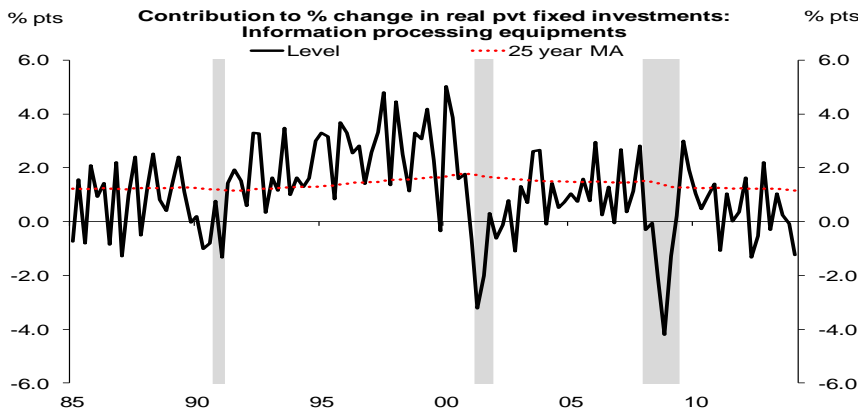
Equipment spending as a share of GDP remains well below historical averages for this point of the recovery. In this section we take a more granular look at equipment's components to analyze the underlying causes of this weakness. We have already determined that transportation equipment is near longer-term averages. We also find that recent contributions to BFI from industrial equipment and the "other" equipment category appear to be in line with longer-term averages.

Conversely, IP equipment appears to be the component driving much of the softness in total equipment spending.³ Spending on IP equipment has been consistently below its longer-term average contribution to overall fixed investment during this recovery (Chart 19).

³ IP equipment includes computers and peripheral equipment, as well as communication equipment, instruments, photocopy and related equipment and office and accounting equipment.



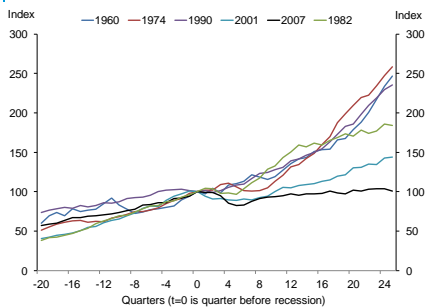
Chart 19: Spending on IP equipment has been soft



Source: FRB, Haver Analytics, Deutsche Bank Research

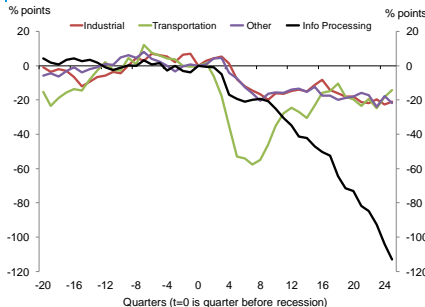
How depressed is spending on IP equipment relative to past recoveries? Chart 20 depicts the historical experience around past recessions. All data is indexed to equal 100 in the quarter prior to the start of the recession. During the recovery from past recessions, spending on IP equipment rebounded rapidly, typically at least doubling over the next six years. The weakest performance for spending on IP equipment prior to the financial crisis was following the tech bust, in which spending expanded by only about 50 percent relative to pre-recession levels over the following six years.

Chart 20: Spending on IP equipment has lagged earlier recoveries...



Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 21: ...While spending on all equipment has been weak, IP has been an outlier



Source: BEA, Haver Analytics, Deutsche Bank Research

The weakness in spending on these equipment items following the financial crisis is striking. Spending on IP equipment has not grown in real terms since the start of the recession. This is about 50 percentage points below the previous weakest experience during a recovery and more than 100 percentage points below the average historical experience at this point during the recovery. Spending on IP is truly an outlier in this regard. Chart 21 compares the shortfall in spending on different types of equipment relative to historical experience during recoveries. Specifically, this chart depicts the difference between the recovery from the financial crisis and the average recovery from past recessions. While all categories of equipment spending were consistent with historical experience prior to the crisis (i.e. all lines fluctuate around zero before the crisis), this similarity diverges sharply following the crisis. Spending on industrial, transportation, and other equipment are all about 20 percentage points below levels that would be expected at this point during an average historical recovery. Conversely, spending on IP equipment is more than 100 percentage points below levels that would be expected during an average recovery. The lack of spending on IP equipment has been a clear driver of weakness in overall BFI during this recovery.

Spending on information processing (IP) equipment has been remarkably weak during this recovery



A crucial question for the outlook for equipment is thus to what extent the slowdown in IP equipment spending is cyclical versus structural. There appear to be some clear structural headwinds. First, since the aftermath of the tech boom, there is a longer-term downtrend in spending on IP equipment relative to GDP. Second, while growth of IP equipment prices was substantially below the growth of broader price measures through the late 1990s, this trend has since reversed, and the growth rate of IP equipment prices has converged gradually toward broader price measures. Finally, the introduction and increased usage of cloud computing services has reduced equipment spending for many businesses.⁴ While this trend means that at least some of the investment on IP equipment has shifted from individual businesses with core competencies outside of technology to cloud computing service providers, this shift is unlikely to be one-for-one, as the latter are able to invest more efficiently. As a result, individual firms likely invest less in IP equipment and hire less in labor for workers that support and maintain this equipment.

IP equipment spending has been held back by some structural headwinds, including emergence of cloud computing

Although there are some clear structural headwinds to IP equipment investment, it is difficult to argue that recent weakness is completely structurally driven. Indeed, the fact that IP equipment spending prior to the financial crisis tracked similar historical episodes so closely suggests that there is a significant cyclical component to this weakness. In the next section we consider the prospects for the cyclical drivers of BFI.

But IP equipment weakness also reflects cyclical factors

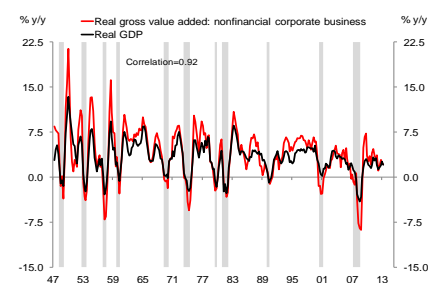
Outlook for cyclical drivers of BFI

Traditional macroeconomic models of BFI typically specify investment spending as a function of several cyclical drivers, including the momentum in the overall economy and the relative cost of capital goods items.⁵ In addition, we consider several additional drivers of BFI spending, including: (1) measures of uncertainty about both economic policy and the overall economic trajectory, which have garnered significant attention during this recovery, and (2) capacity utilization as a gauge of how much spare capacity there is, at least in the industrial sector of the economy.

Aggregate demand: Expected to turn up and support BFI

The accelerator model suggests that BFI should be positively related to the outlook for growth in aggregate demand and business output. As output accelerates, all else equal, businesses have to increase investment at a faster pace to satisfy growing demand. Historically, business output growth has been highly correlated with growth in the overall economy as measured by real GDP (Chart 22). As such, the upbeat assessment of prospects for the US economy embodied in both our own expectations and consensus expectations supports the case for a faster pick up in business spending later this year and into next year.

Chart 22: Upbeat GDP prospects point to faster growth in business output and BFI



Source: BEA, Haver Analytics, Deutsche Bank Research

⁴ For more on these trends see: Scribner, Sherri and Joakim Mahlberg (April 10, 2014), "Cross currents provide an ocean of opportunity for next-gen winners." *Deutsche Bank IT Hardware* note.

⁵ This formulation is sometimes called an accelerator model of BFI.



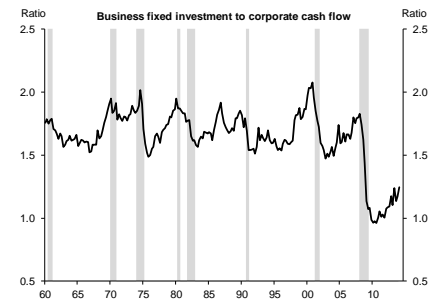
Financing conditions are supportive/balance sheets in good shape

Financing conditions should also affect business investment decisions. For example, if businesses have to raise external resources to expand their capacity through BFI, then the cost and availability of this funding should affect BFI growth. Moreover, the extent to which businesses have to turn to external resources depends to an important extent on the capacity to fund investment through internally generated funds. Finally, the extent to which businesses increase BFI rather than expand capacity through M&A activity depends on the relative attractiveness of each option.

These financing considerations appear supportive of acceleration in BFI. Corporate bond yields are at low levels. In addition, BFI as a share of corporate cash flow remains at very low levels from a historical perspective, suggesting that firms in the aggregate have ample room to fund expansions in capacity through internal means (Chart 23). Moreover, the low level of this statistic appears to be very much cyclically-driven – prior to the crisis it had held relatively steady and only fell following the crisis. As such, as aggregate demand continues to improve, BFI should improve, and this metric should increase back toward its longer-term average.

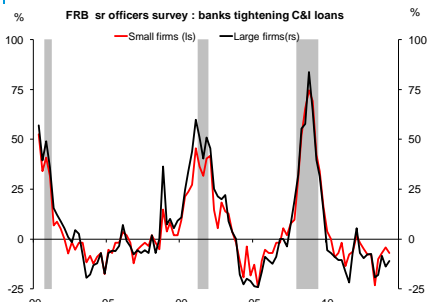
Financing terms for small- and medium- sized businesses also appear to be moving in a supportive direction. Data from the FRB Senior Loan Officer Survey suggest that banks have been loosening standards and reducing spreads on commercial and industrial loans (Charts 24 and 25). This development is positive for the outlook for small business investment.

Chart 23: BFI very low relative to corporate cash flow



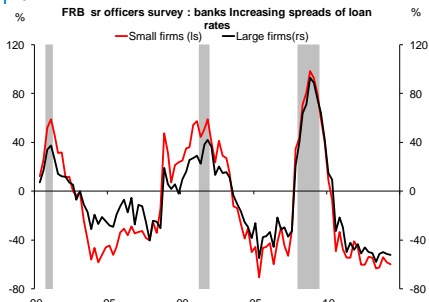
Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 24: Banks are loosening standards on C&I loans...



Source: FRB, Haver Analytics, Deutsche Bank Research

Chart 25: ...And also reducing spreads on these loans



Source: FRB, Haver Analytics, Deutsche Bank Research

Uncertainty has fallen

The adverse impact of uncertainty about economic policy has garnered substantial attention during this recovery given the prominence of debt ceiling debates, the fiscal cliff, the US government shutdown, changes to tax and spending policies, in addition to various uncertainties related to geopolitical risks and crises abroad. This uncertainty may be particularly important for longer-term business decisions, of which BFI is certainly one.

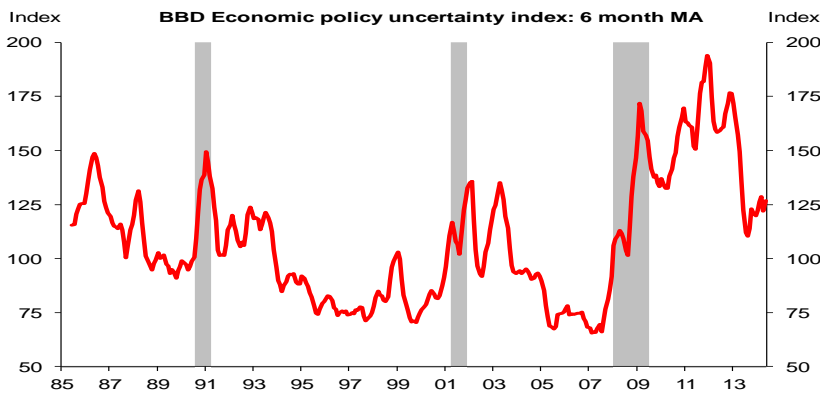
The post-crisis rise in uncertainty is evident from the Baker, Bloom and Davis economic policy uncertainty index (Chart 26).⁶ Economic policy uncertainty rose to historically high levels following the crisis and remained elevated for a protracted period thereafter. More recently, however, economic policy uncertainty has declined meaningfully, although it remains well above pre-crisis lows and not far below earlier highs. To the extent that economic policy uncertainty has deterred business investment, the decline in uncertainty should be supportive of BFI going forward.

Economic policy uncertainty has fallen and should be less of a drag on BFI spending

⁶ See Baker, Scott R., Nicholas Bloom and Steven Davis (2012), "Measuring economic policy uncertainty." *Stanford mimeo*.



Chart 26: Economic policy uncertainty down significantly

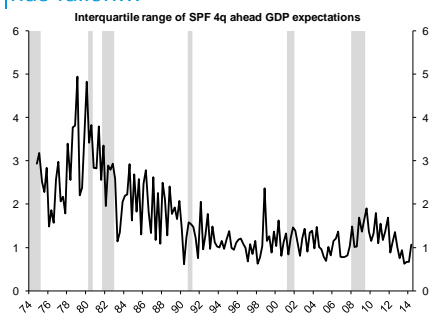


Source: Baker, Bloom, and Davis (2012), Haver Analytics, Deutsche Bank

In addition to economic policy uncertainty, our sense is that more general uncertainty about the underlying strength of the economic recovery has also been an impediment to investment spending. In this context, it is notable that as professional forecasters have become more sanguine about growth prospects, the level of disagreement/uncertainty about these projections has fallen. We measure this uncertainty as the interquartile range (the difference between the 75th and 25th percentiles of the forecast distribution) of forecasts from the Philly Fed’s Survey of Professional Forecasters (SPF). These data show that the degrees of disagreement about 4-quarter ahead growth in GDP, personal consumption and corporate profits have all moved to quite low levels recently (Charts 27-29). Rising confidence in, and declining uncertainty about, the future prospects of the economy should support BFI prospects going forward.

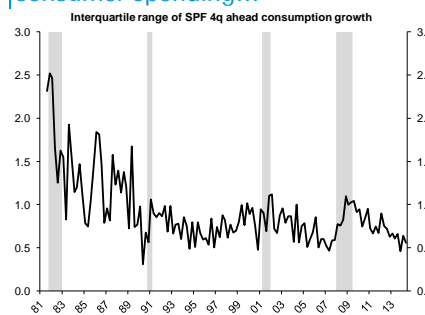
Uncertainty about the outlook for the economy has also receded

Chart 27: GDP forecast dispersion has fallen...



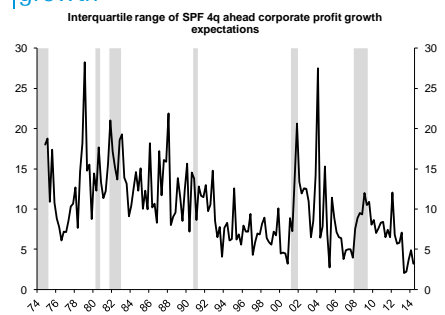
Source: FRB Philadelphia, Haver Analytics, Deutsche Bank Research

Chart 28: ...Same is true for consumer spending...



Source: FRB Philadelphia, Haver Analytics, Deutsche Bank Research

Chart 29: ...And corporate profit growth



Source: FRB Philadelphia, Haver Analytics, Deutsche Bank Research

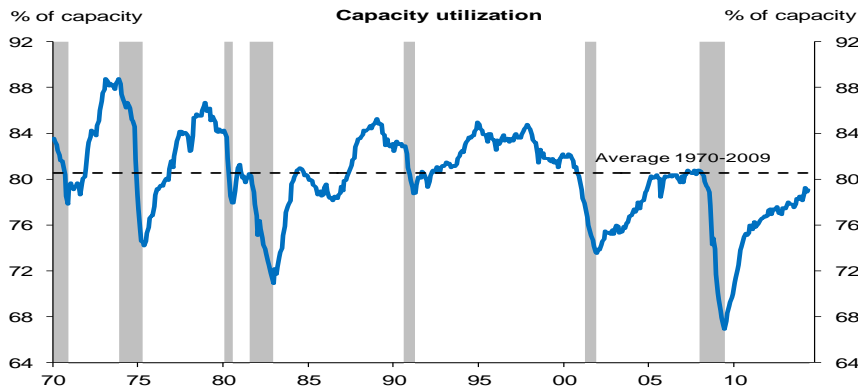
Capacity utilization approaching pre-crisis average

Recent trends in industrial capacity utilization have been supportive of a pickup in BFI spending as well. Following the crisis, capacity utilization rates fell to multi-decade lows (Chart 30). With ample spare capacity, businesses were able to meet rising demand by increasing utilization rates rather than by expanding capacity through BFI. As capacity utilization rates have approached historical average levels recently, businesses will have to turn increasingly to BFI to expand capacity to meet rising demand.

Capacity utilization rates are approaching longer-term averages, suggesting more BFI will be needed to expand capacity



Chart 30: Capacity utilization approaching historical average



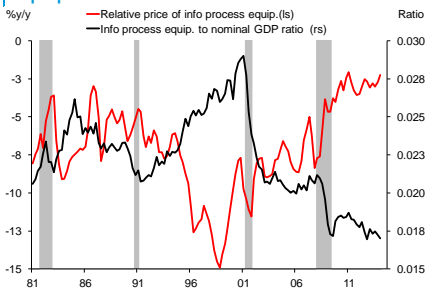
Source: FRB, Haver Analytics, Deutsche Bank Research

Relative prices of capital goods rising, less supportive of BFI

While activity and financing indicators appear supportive of faster BFI growth, recent developments in the relative price of capital equipment have been adverse. Over the past several decades, the prices of equipment in general, and IP equipment in particular, have trended downward both absolutely and relative to the overall price level. This downtrend accelerated in the 1990s with the tech boom and helped to incentivize businesses to increase investment in IP equipment. However, these trends reversed in the late 1990s, with both the rate of decline in the relative price of IP equipment slowing substantially and the share of IP equipment investment in GDP declining significantly since that time (Charts 31 and 32).

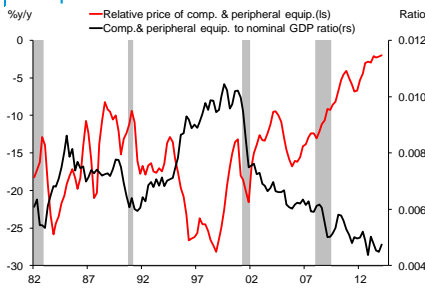
The relative price of IP equipment has risen over the past 15 years, raising the cost of investing in it

Chart 31: Relative price of IP equipment has risen...



Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 32: ...Same is true for computers



Source: BEA, Haver Analytics, Deutsche Bank Research

Quite intuitively, these relative price movements have been highly negatively correlated with spending on these equipment items relative to GDP. That is, the share of GDP going toward spending on IP equipment rose substantially as the relative price of these goods declined, but reversed sharply as the discount of these goods diminished following the late 1990s. We highlighted this trend of rising relative equipment prices as a structural headwind to IP spending earlier in this piece.

To sum up, most cyclical drivers of BFI have clearly improved recently: Current and prospective growth in aggregate demand is picking up, and capacity utilization has risen, nearing pre-crisis averages. Uncertainty about the overall economy and the economic policy environment has declined meaningfully. Business balance sheets remain in good shape and funding for investment does not appear to be a significant constraint. On the other hand, the rise in the relative price of IP equipment has been and will continue to be negative for BFI in equipment.

In general, the cyclical drivers of BFI have improved meaningfully recently, and support a pickup in spending



An empirical model of equipment spending

In this section we present an empirical model of BFI in equipment, the key driver of the recent cyclical swing in overall BFI, and use it to forecast growth in equipment spending through 2015. In doing so, we adopt a modeling approach used recently by the Fed staff.⁷ Under this specification, year-over-year growth in equipment spending is a function of its lagged values and two of the cyclical drivers just outlined: year-over-year growth in business output and the relative price of capital equipment. We augment the Fed’s model to also include economic policy uncertainty, and we estimate the model on quarterly data from 1985 to the present.

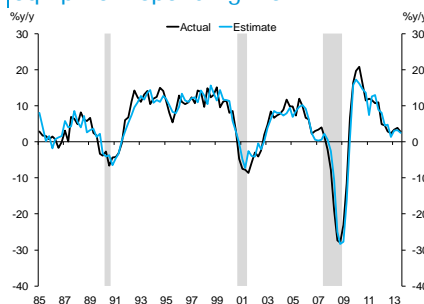
The model estimates are shown in Chart 33. The results are intuitive. Equipment spending is persistent and is positively related to business output growth, with some mean reversion built into the dynamics. As the relative price of equipment goods rises, this tends to act as a drag on equipment spending. Finally, while uncertainty negatively affects equipment spending concurrently, the impact is transitory and tends to be reversed in the following quarter. The model has tracked actual equipment spending quite well over the past several decades (Chart 34).

Chart 33: Equipment spending model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant	-2.96	1.71	-1.73	0.09
Equipment (-1)	0.79	0.06	13.27	0.00
Business output	0.86	0.19	4.65	0.00
Business output (-1)	0.28	0.27	1.05	0.30
Business output (-2)	-0.77	0.19	-4.00	0.00
Relative price	-0.49	0.21	-2.32	0.02
Uncertainty	-0.03	0.02	-1.91	0.06
Uncertainty (-1)	0.04	0.02	2.79	0.01
R-squared	0.90			
Adjusted R-squared	0.89			

Source: Deutsche Bank Research

Chart 34: Model has tracked actual equipment spending well



Source: BEA, Haver Analytics, Deutsche Bank Research

To forecast equipment spending growth, we project business output growth based on a couple different scenarios for real GDP growth. We also consider several alternative scenarios for the relative price of equipment goods. Finally, we assume that uncertainty gradually returns to its pre-crisis average by end-2015 in all forecast scenarios.

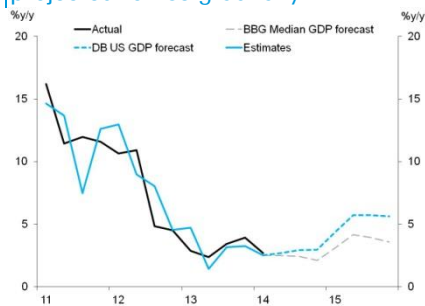
Chart 35 shows the implied forecasts under two alternative assumptions about business output growth, assuming that the relative price of equipment goods remains constant at its most recent value. The higher forecast uses the DB house forecast for real GDP growth, which is above consensus; the lower forecast uses the Bloomberg median GDP forecast. These scenarios foresee a moderate pickup in equipment spending, from 2-3 percent over the past year to 4-6 percent in 2015.

Model forecasts suggest equipment spending growth should pick up from 2-3 percent over the past year to 4-6 percent in 2015

⁷ See Pinto, Eugenio and Stacey Tevlin (May 21, 2014), “Perspectives on the Recent Weakness in Investment.” *FEDS Notes*. (<http://www.federalreserve.gov/econresdata/notes/feds-notes/2014/perspectives-on-the-recent-weakness-in-investments-20140521.html>)



Chart 35: Equipment spending projected to rise gradually



Source: BEA, Haver Analytics, Deutsche Bank Research

Chart 36: Forecast is somewhat sensitive to relative price trend



Source: BEA, Haver Analytics, Deutsche Bank Research

Given the difficulty with forecasting movements in relative equipment prices, we also assess the sensitivity of these projections to different assumptions about these price paths. Chart 36 depicts the implied forecasts from the model under three scenarios for relative equipment prices. For all three scenarios we use DB's US GDP forecast. In one scenario we assume a faster decline in relative prices, where the downtrend in relative equipment prices returns to the average value from 2001 to 2006 of about -3.5 percent. A second scenario assumes that the ratio continues to diminish along its path in recent years, rising to close to zero by end-2015 (at which point, equipment prices are rising almost as fast as the overall GDP deflator). An intermediate scenario holds the rate of decline in the relative price constant as in the scenarios discussed above. In these scenarios, equipment growth ranges between 4 percent and 7 percent during 2015, with the faster decline in relative prices inducing the faster growth in equipment spending. It is noteworthy that even under the most favorable set of assumptions, including our above-consensus GDP growth forecast and a return to a faster rate of decline in relative prices, equipment spending growth is projected to remain well below the double digit pace recorded during the early stages of this economic recovery.

Even under most optimistic assumptions, our forecast for equipment spending growth is well below growth rates observed early in this recovery

Conclusions

Pulling together the various strands of our analysis, we conclude that BFI spending is likely to accelerate in the near term. Various survey indicators of business spending, along with orders for capital goods, have picked up nicely in recent months. From a top-down perspective, factors such as the aging of the existing capital stock, rising capacity utilization, the ample funding available in the corporate sector, and reduced uncertainty about economic policy and macro growth prospects all point to a healthy climate for increased BFI. From a sectoral perspective, prospects remain good for both an acceleration in spending on non-residential structures from unusually depressed levels and a continuation of the longer-term impressive up-trend in IPP spending.

Our analysis suggests that BFI should accelerate in the near term with structures bouncing back robustly and IPP continuing a strong uptrend...

Our empirical analysis for equipment spending tempers the overall view on BFI somewhat. While conditions seem good for a moderate acceleration of equipment spending, which still accounts for nearly half of total BFI, structural downtrends in spending on IP equipment, among other factors, will be a restraining factor. It seems unlikely, therefore, that BFI growth will return all the way to the double digit rates seen in the initial stages of this recovery. Rather, we would expect to see it settle into a growth rate at the lower end of the normal range of two to three times total GDP growth seen in the mid-stages of self-sustaining economic recoveries.

...But slower growth in equipment spending relative to history suggest overall BFI should grow at around 2 times real GDP growth



As a result, our analysis suggests that BFI should help drive a solid upturn in GDP growth, though not a booming one. The improvement in BFI spending should have positive implications beyond the near-term GDP growth figures. Stronger business investment should raise unusually depressed growth in capital services, helping to improve prospects for productivity growth going forward. Finally, because the pickup in BFI we envision would tend to confirm that the recovery has reached a self-sustaining stage, we believe that it will help move the Fed toward signaling a more hawkish policy stance later this year.

This outlook should be enough to confirm a self-sustaining recovery, and help move the Fed to signal a more hawkish policy stance later this year

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Central Bank Watch

G3

US

Prospects for Fed policy will be driven by the data. On our current projections (and the Fed's) we expect the tapering of QE to be completed at the current pace in October or possibly December. While we expect growth to bounce back in the current quarter and wage and price inflation to move higher, perhaps slightly faster than the Fed is projecting, it is unlikely that the Fed's policy message will be changed meaningfully until we have seen at least a few more months of good labor market and inflation data. Ultimately, we see rate hikes commencing around mid-2015, and proceeding slightly faster thereafter than the FOMC (median) currently projects.

Japan

The BoJ is confident that a proper wage/price spiral is emerging as inflation and inflation expectations continue to rise and tightening labor market conditions push wages higher. Consumer prices rose a little more than expected in April as firms seem to have taken the opportunity of the consumption tax increase to raise ex-tax prices a little. This suggests some confidence in pricing power. But with weaker-than-expected IP and household spending in April suggest the post-tax pullback in demand could be worse than expected. These conflicting influences on inflation expectations will take some time to be resolved.

Euroland

The ECB met expectations with aggressive easing on 5 June. Beyond the downward shift in the policy rate corridor – entailing a deposit rate at -0.1%, compounded by the end of SMP sterilization, a 4 year loosely-conditional LTRO which will significantly reduce banks' funding costs and trigger more spread compression in the periphery.

Other European countries

UK

With unemployment back below the 7% threshold guidance has lapsed; spare capacity, price and wage pressures are now the focus. Following recent comments by Mark Carney, we now expect the first rate rise to be delivered in November this year – brought forward from our previous view of May 2015.

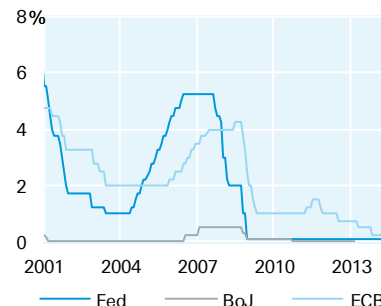
Sweden

The Riksbank left rates on hold in April, but revised down its profile for the repo rate – suggesting a 40% risk of a further cut which we expect on 3 July.

Switzerland

The Swiss National Bank (SNB) is maintaining its minimum exchange rate of CHF 1.20 per euro. The Swiss franc is still high. With a three-month Libor close to zero, the minimum exchange rate continues to be the right tool to avoid an undesirable tightening of monetary conditions in the event of renewed upward pressure on the Swiss franc. The SNB will continue to enforce the minimum exchange rate with the utmost determination. Next meeting will be on 18 Sep.

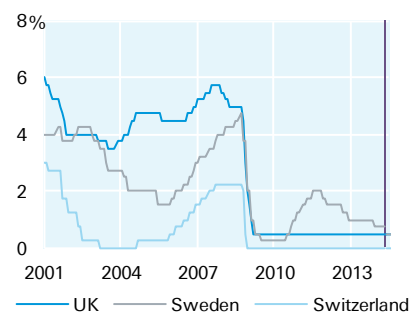
Figure 1: G3 policy rates



%	Current	Jun-14	Sep-14	Dec-14	Mar-15
Fed	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25
BoJ	0-0.10	0-0.10	0-0.10	0-0.10	0-0.10
ECB	0.15	0.15	0.15	0.15	0.15

Source: Deutsche Bank Research

Figure 2: Key European policy rates



%	Current	Jun-14	Sep-14	Dec-14	Mar-15
BoE	0.50	0.50	0.50	0.50	0.50
SRB	0.75	0.50	0.50	0.50	0.50
SNB	0.00	0.00	0.00	0.00	0.00

Source: Deutsche Bank Research



Dollar bloc

Canada

BoC holds at 1% after the June meeting as was widely expected. In light of the weaker-than-expected gain in Q1 GDP, it is quite understandable that the Bank discounted the higher-than-(it)-expected headline inflation and maintained its very neutral policy stance.

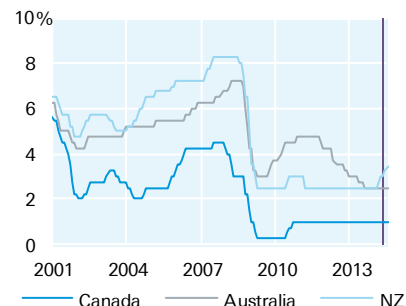
Australia

According to the RBA Board Meeting Minutes (May 2014), the board considered that the current accommodative stance of policy was likely to be appropriate for some time yet. Looking through the minutes we find little to get 'excited' about. This should not be surprising though.

New Zealand

The RBNZ announced the outcome of its latest policy review and released its updated MPS. As was very widely expected, the OCR was increased by 25 bps to 3.25% and is still hawkish. This move was essentially fully priced by markets. A further hike of another 25 bps on 24 July meeting is likely.

Figure 3: Dollar bloc policy rates



%	Current	Jun-14	Sep-14	Dec-14	Mar-15
BoC	1.00	1.00	1.00	1.00	1.00
RBA	2.50	2.50	2.50	2.50	2.50
RBNZ	3.25	3.25	3.50	3.50	3.50

Source: Deutsche Bank Research

BRICs

China

With CPI inflation subdued and PPI still in deflation, and the recent weakness in the real estate sector posing a serious albeit cyclical downside risk, we believe there could be more "targeted" monetary easing policies in the next a few quarters, e.g. in the form of a relaxation of the LDR rule. But recovery in sequential GDP growth in the coming quarters will be mainly driven by strong external demand.

India

Rates were left unchanged in the June RBI meeting, but the policy statement was slightly dovish. The combination of weakening growth momentum and recent CPI/WPI disinflation would help the RBI pause for an extended period. In the second half of this year we see sufficiently benign inflation dynamic to justify 50 bps rate cuts.

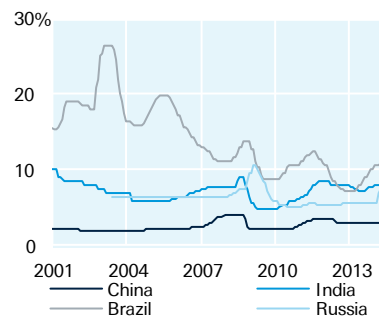
Brazil

Although inflation remains above the target, economic activity has weakened significantly and the BCB has signaled a pause in the tightening cycle to watch the effects of the cumulative 375bp hike in interest rates on the economy. Thus, we expect no more rate changes before 2015.

Russia

On 16 June 2014; the Bank of Russia decided to maintain the key rate at 7.5%. In case existing inflation risks materialize and threats to medium-term inflation targets emerge, the Bank will continue increasing the key rate. The CBR is unlikely to lower the key rate in the next several months. Accordingly, the authorities reserve the possibility of using higher rates in case capital outflows intensify in the near term. We expect the rates to moderate by 100bps by the middle of the year as intensity of capital outflows declines.

Figure 4: BRICs policy rates



%	Current	Jun-14	Sep-14	Dec-14	Mar-15
PBoC	3.00	3.00	3.00	3.00	3.00
RBI	8.00	8.00	8.00	7.50	7.50
BCB	11.00	11.00	11.00	11.00	11.50
CBRF	7.50	7.50	7.50	7.50	7.50

Source: Deutsche Bank Research



Global data monitor :Recent developments and near term forecasts

	B'bergcode	Q3-13	Q4-13	Q1-14	Q2-14	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14
OECD leading indicators											
(6M change, %, ann.)											
OECD		2.2	2.4	2.1		2.2	2.1	2.1			
US	OLE3US	2.7	2.5	2.1		2.2	2.1	2.0			
Euro area	OLE3EURA	1.3	1.9	1.9		2.0	1.9	1.9			
Japan	OLE3JAPA	2.5	2.9	2.1		2.5	2.1	1.7			
China	OLE3CHIN	10.6	10.0	9.1		9.3	9.1	9.0	9.2		
India	OLE3INDI	4.8	4.8	4.9		4.8	4.9	5.0			
Russia	OLE3RUSS	2.2	2.5								
Brazil	OLE3BRAZ	1.1	0.8	0.8		0.8	0.8	0.9			
Purchasing manager indices											
Global (manufacturing)		53.5	53.3	53.5	53.5	54.0	53.1	53.5	52.8	54.3	
US (manufacturing ISM)	NAPMPMI	55.7	56.7	52.7	55.2	51.3	53.2	53.7	54.9	55.4	55.0
Euro area (composite)	ECPMICOU	51.4	51.9	53.1	53.8	52.9	53.3	53.1	54.0	53.5	
Japan (manufacturing)	SEASPMI	51.8	54.8	55.3	49.7	56.6	55.5	53.9	49.4	49.9	
China (manufacturing)	EC11CHPM	49.3	50.7	48.7	48.8	49.5	48.5	48.0	48.1	49.4	
India (manufacturing)	EC16INPM	49.4	50.5	51.7	51.3	51.4	52.5	51.3	51.3	51.4	
Russia (manufacturing)		49.3	50.0	48.3	48.7	48.0	48.5	48.3	48.5	48.9	
Other business surveys											
US dur. goods orders (%pop1)	DGNOCHNG	-1.2	-0.5	1.3		-2.5	2.6	3.7	0.6	-0.5	
Japanese Tankan (LI)	JNTSMFG	12.0	16.0	17.0							
Euro area EC sentiment	EUESEMU	95.3	99.1	101.6	102.4	101.0	101.2	102.5	102.0	102.7	
Industrial production (%pop1)											
US	IP_CHNG	2.5	4.9	4.5	3.9	-0.19	1.1	0.8	-0.3	0.6	
Euro area	EUITEMUM	0.0	2.2	1.0		0.1	0.1	-0.4	0.8		
Japan	JNIPMOM	7.0	7.6	12.5		3.9	-2.3	0.7	-2.8		
Retail sales (%pop1)											
US	RSTAMOM	4.0	3.5	0.9	8.1	-0.9	0.9	1.5	0.5	0.3	
Euro area	RSSAEMUM	2.2	-1.8	2.8		1.0	0.2	0.1	0.4		
Japan (household spending)		-0.4	2.7	15.4		1.6	-1.5	10.8	-13.3		
Labour market											
US non-farm payrolls2	NFP_TCH	172	198	190	250	144	222	203	282	217	225
Euro area unemployment (%)	UMRTEMU	12.0	11.9	11.8		11.8	11.8	11.8	11.7		
Japanese unemployment (%)	JNUE	4.0	3.9	3.6		3.7	3.6	3.6	3.6		
CP inflation (%yoy)											
US	CPICHNG	1.6	1.2	1.4	1.9	1.6	1.1	1.5	2.0	2.1	
Euro area	ECCPEMUY	1.3	0.8	0.7	0.6	0.8	0.7	0.5	0.7	0.5f	
Japan	JNCPIYOY	0.9	1.4	1.5		1.4	1.5	1.6	3.4		
China	CNCPIYOY	2.7	2.9	2.3	2.3	2.5	1.9	2.3	1.8	2.5	
India		9.7	10.4	8.4	7.7	8.8	8.0	8.3	8.6	8.3	
Russia	RUCPIYOY	6.4	6.4	6.4	7.2	6.0	6.2	6.9	7.3	7.6	
Brazil		6.1	5.8	5.8	6.2	5.6	5.7	6.2	6.3	6.4	
Current account (USD bn)3											
US (trade balance, g+s)	USTBTOT	-40.4	-37.5	-42.3		-40.1	-42.6	-44.2	-47.2	-45.0	
Euro area (EUR bn)	XTSBEZ	11.9	14.6	14.7		13.6	15.1	15.4	15.8		
Japan		1.9	0.0	-4.5		-5.6	-0.4	-7.7	1.3		
China (trade in goods)											
Russia (trade in goods)		14.3	15.7								
Other indicators											
Oil prices (Brent, USD/b)	EUCRBRDT	110.3	109.3	108.2	108.6	108.1	109.1	107.5	107.8	109.5	
FX reserves China (USD bn)	CNGFOREX	3662.7	3821.3	3948.1							

Quarterly data in shaded areas are quarter-to-date. Monthly data in the shaded areas are forecasts.
%pop=%change in this period over previous period. Quarter on quarter growth rates is annualized.

Pop change in '000, quarterly data averages of monthly changes.

Quarterly data are averages of monthly balances.

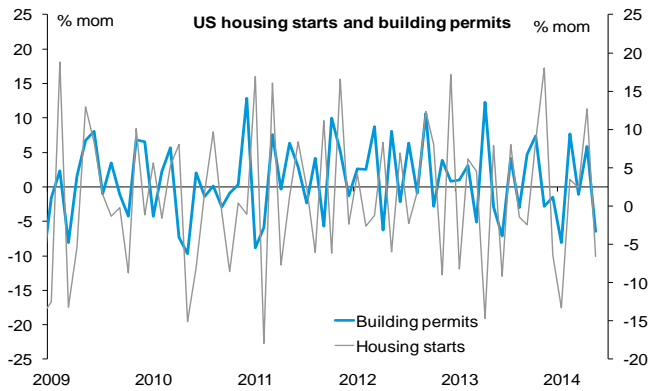
f stands for flash estimate

Source: Bloomberg Finance LP, Reuters, Eurostat, European Commission, OECD, Bank of Japan, National statistical offices, Markit/J.P. Morgan, Deutsche Bank Research



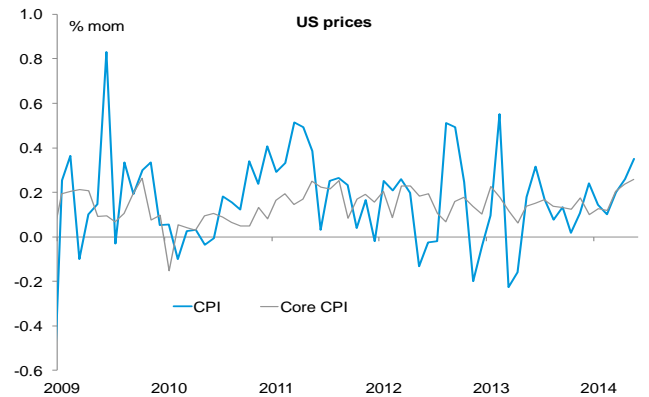
Charts of the Week

Chart 1. In the US, housing starts and building permits data fell in May ...



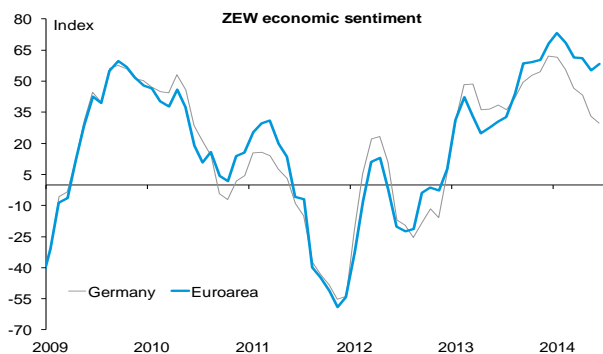
Source : Census, Haver Analytics , Deutsche Bank Research

Chart 2...while the May CPI came out stronger than expected with the headline series rising by 0.4% mom



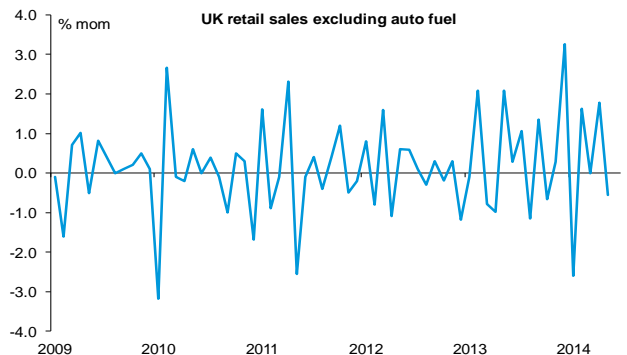
Source: BLSat, Haver Analytics, Deutsche Bank Research

Chart 3. In Euro area, ZEW economic expectations index came out mixed in June ...



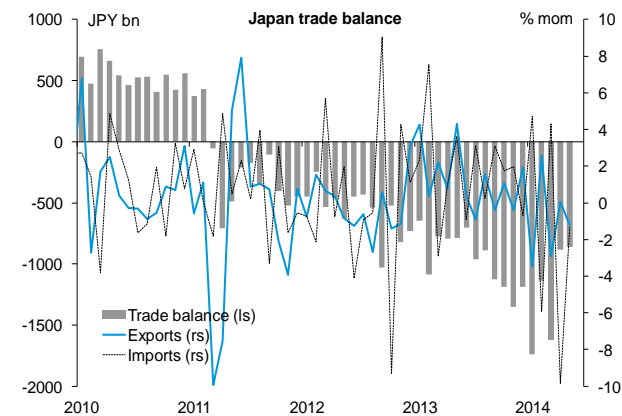
Source: ZEW, Haver Analytics, Deutsche Bank Research

Chart 4. ...while in UK, retail sales dropped 0.5% in May, the first time since January



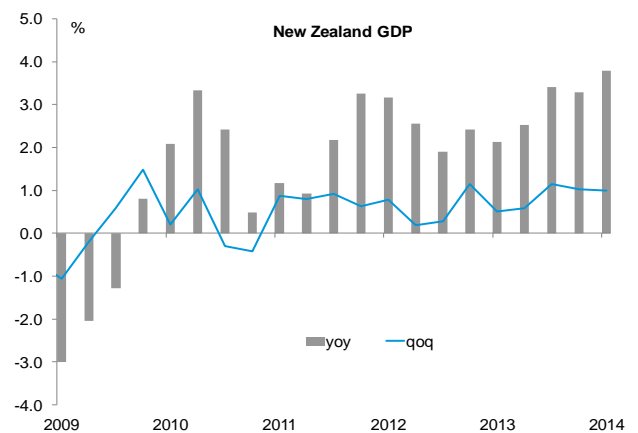
Source: ONS, Haver Analytics, Deutsche Bank Research

Chart 5. In Japan, trade balance improved unexpectedly due to drop in imports...



Source : MoFJ, Deutsche Bank Research

Chart 6. ...while in New Zealand, real production based GDP was up 1.0% qoq in Q1



Source: SNZ, Haver Analytics, Deutsche Bank Research



Global Week Ahead: Friday, 20 June – Friday, 27 June

- Dollar Bloc:** In the **US**, all eyes will be on the final Q1 GDP estimate- we are projecting Q1 GDP to fall by 1.5% qoq. The house price index along with data on existing and new home sales will reflect the housing sector condition in the economy. In addition, durable goods and personal income data will be the other important releases. Among the survey data, consumer confidence and UoM consumer sentiment data is expected to be on the brighter side. In **Canada**, CPI and retail sales data will be printed next week.
- Europe:** In the **Eurozone**, flash PMI release for the region as a whole along with Germany and France will be the focus of markets. In addition French INSEE & Belgian BNB will highlight the business climate, while Euro-area, French & Italian consumer confidence will reflect the household sentiments. German IFO is also queued up for next week's release. In hard data, French Q1 GDP data along with Italian and Spanish retail sales will be important. In the **UK**, Q1 GDP data will be the most important release of the week. In addition, CBI distributive trades survey, public sector borrowing and current account data is also due. In **CEE**, Czech and Hungarian central banks will announce their policy rates.
- Asia incl. Japan:** In **Japan**, CPI data will highlight the inflationary trend in the economy while unemployment data will throw light on the labour market conditions.

Country	GMT	Release	DB Expected	Consensus	Previous
Friday, 20 Jun					
DENMARK	07:00	Retail sales (May)		0.3%	0.1% (2.6%)
EUROLAND	08:00	Current account (Apr)			EUR18.8bn
ITALY	08:00	Industrial orders (Apr)	0.7%	1.0%	1.3% (2.8%)
ITALY	08:00	Industrial sales (Apr)			0.3% (2.7%)
UK	08:30	PSNB (May)		GBP12.0bn	GBP9.6bn
UK	08:30	PSNCR (May)		GBP1.0bn	-GBP10.6bn
CANADA	12:30	Retail sales (Apr)	1.0%	0.6%	-0.1%
CANADA	12:30	CPI (May)	0.3%	0.3% (2.0%)	0.3% (2.0%)

Events and meetings: **JAPAN:** BoJ's Kuroda to hold speech in Tokyo – 06:36 GMT. **EUROLAND:** EU finance ministers (EcoFin) to meet in Brussels – 07:00 GMT. **EUROLAND:** ECB's Mersch to hold speech in Brussels – 08:15 GMT. **POLAND:** National Bank of Poland to publish minutes of its June rate setting meeting – 12:00 GMT. **EUROLAND:** EU's Rompuy to hold speech in Brussels – 12:00 GMT.

Monday, 23 Jun					
FRANCE	07:00	PMI composite, flash (Jun)			49.3
FRANCE	07:00	PMI manufacturing, flash (Jun)			49.6
FRANCE	07:00	PMI services, flash (Jun)			49.1
GERMANY	07:30	PMI composite, flash (Jun)			55.6
GERMANY	07:30	PMI manufacturing, flash (Jun)		52.4	52.3
GERMANY	07:30	PMI services, flash (Jun)		55.8	56.0
EUROLAND	08:00	PMI composite, flash (Jun)			53.5
EUROLAND	08:00	PMI manufacturing, flash (Jun)		52.0	52.2
EUROLAND	08:00	PMI services, flash (Jun)		53.3	53.2
US	14:00	Existing home sales (May)	4.7	4.7	4.6

Events and meetings: **JAPAN:** BoJ's Kuroda to hold speech in Tokyo – 06:00 GMT. **EUROLAND:** ECB's Constancio to hold speech in Frankfurt – 07:00 GMT. **EUROLAND:** ECB's Nouy to hold speech in Dublin – 08:25 GMT. **EUROLAND:** ECB's Mersch to hold speech in Sopot – 12:00 GMT. **EUROLAND:** ECB's Nowotny to hold speech in Vienna – 15:30 GMT.

Tuesday, 24 Jun					
GERMANY	08:00	IFO - business climate (Jun)		110.1	110.4
TURKEY	11:00	MPC meeting (Jul)	9.00%	9.00%	9.50%
HUNGARY	12:00	MPC meeting (Jul)	2.30%	2.3%	2.40%
BELGIUM	13:00	BNB business confidence (Jun)	-6.0		-6.8
US	13:00	House price index (Apr)		0.6%	0.7%
US	14:00	Consumer confidence (Jun)	85.0	83.5	83.0
US	14:00	New home sales (May)	460.0k	440.k	433.0k
US	14:00	Richmond fed (Jun)		6.0	7.0



Country	GMT	Release	DB Expected	Consensus	Previous
Tuesday, 24 Jun contd.					
Events and meetings: TURKEY: Central Bank of Turkey to announce interest rate decision – 11:00 GMT. HUNGARY: National Bank of Hungary to announce interest rate decision – 12:00 GMT. US: Fed's Plosser to hold speech in New York – 12:05 GMT. EUROLAND: ECB's Coeure to hold speech in Frankfurt – 13:50 GMT. US: Fed's Williams to hold speech in Stanford – 22:30 GMT.					
Wednesday, 25 Jun					
FRANCE	06:45	Business confidence (Jun)			94.0
FRANCE	06:45	INSEE manufacturing confidence (Jun)		99.0	99.0
FRANCE	06:45	Personal production outlook (Jun)			4.0
FRANCE	06:45	Production outlook indicator (Jun)			-13.0
ITALY	08:00	Retail sales (Apr)	0.2%		-0.2% (-3.5%)
ITALY	08:00	Consumer confidence (Jun)	106.0		106.3
UK	10:00	CBI distributive trades survey (Jun)			16.0
US	12:30	Corporate profits (Q1)			9.2% (6.2%)
US	12:30	GDP deflator (Q1)	1.3%		1.6% (1.4%)
US	12:30	GDP final estimate (Q1)	-1.5%		2.6% (2.6%)
US	12:30	Durable goods (May)	-0.5%		0.8% (7.1%)
US	12:30	Durable goods ex transport (May)	0.5%		0.1% (4.8%)
Events and meetings: AUSTRALIA: RBA's Lowe to hold speech in Melbourne – 03:00 GMT.					
Thursday, 26 Jun					
FRANCE	06:45	Consumer confidence (Jun)			85.0
POLAND	08:00	Retail sales (May)		(6.7%)	(8.4%)
POLAND	08:00	Unemployment rate (May)		12.5%	13.0%
CZECH REPUBLIC	11:00	CNB board meeting (Jul)	0.05%	0.05%	0.05%
US	12:30	PCE (May)	0.4%	0.4%	-0.1% (4.3%)
US	12:30	PCE deflator (May)		0.2%	0.2% (1.6%)
US	12:30	Core PCE deflator (May)	0.2%	0.2% (1.6%)	0.2% (1.4%)
US	12:30	Personal income (May)	0.4%	0.4%	0.3% (3.6%)
JAPAN	23:00	National CPI (May)		(3.7%)	1.9% (3.4%)
JAPAN	23:30	Unemployment rate (May)		3.6%	3.6%
Events and meetings: UK: BoE's Carney to hold speech in London – 09:30 GMT. CZECH: Czech National Bank to announce rate decision – 11:00 GMT. US: Fed's Lacker to hold speech in Virginia - 12:30 GMT. US: Fed's Bullard to hold speech in New York - 17:05 GMT.					
Friday, 27 Jun					
FRANCE	06:45	Consumer spending (May)			-0.3% (-0.5%)
FRANCE	06:45	GDP (Q1)			0.3% (0.8%)
SPAIN	07:00	HICP flash estimate (Jun)			(0.2%)
SPAIN	07:00	Retail sales (May)			(0.1%)
SWEDEN	07:30	Retail sales (May)		-0.3%	0.3% (5.7%)
ITALY	08:00	ISAE business confidence (Jun)			99.7
UK	08:30	Current account (Q1)	-GBP19.2bn		-GBP22.4bn
UK	08:30	GDP (Q1)	0.8% (3.1%)		0.7% (2.7%)
EUROLAND	09:00	Consumer confidence (Jun)			-7.1
EUROLAND	09:00	Economic confidence (Jun)			102.7
GERMANY	12:00	HICP preliminary (Jun)			-0.3% (0.6%)
US	13:55	Consumer sentiment (Jun)	82.0	82.0	81.9

Events and meetings: No Significant events scheduled.

Source: Australian Bureau of Statistics; Bank of Canada; Bank of Japan; BEA; BLS; Bundesbank; Bureau of Labor Statistics, U.S. Department of Labor; Cabinet Office, Government of Japan; ECB; Eurostat; Indian Central Statistical Organization; INE; INSEE; ISTAT; ISTAT.IT; Ministry of Finance Japan; National Association of Realtors; National Bureau of Statistics; National Statistics Office; OECD - Composite Leading Indicator; People's Bank of China; Reserve Bank of Australia; Reserve Bank of New Zealand; Statistics Canada; Statistics Netherlands; Statistics of New Zealand; U.S. Census Bureau; U.S. Department of Labor, Employment & Training Administration; U.S. Department of the Treasury; U.S. Federal Reserve.

Note: Unless otherwise indicated, numbers without parenthesis are either % month-on-month or % quarter-on-quarter, depending on the frequency of release, while numbers in parenthesis are % year-on-year. * on the release time means indicative release time. * on indicator name means indicative/earliest release date

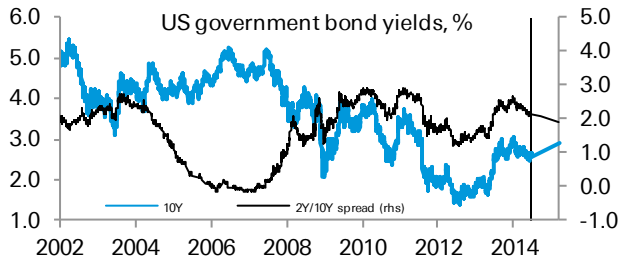


Financial Forecasts

		US	Jpn	Euro	UK	Swe*	Swiss*	Can*	Aus*	NZ*
3M Interest Rates ¹	Actual	0.23	0.21	0.22	0.55	0.75	0.00	1.00	2.50	3.25
	Jun-14	0.35	0.20	0.30	0.52	0.50	0.00	1.00	2.50	3.25
	Sep-14	0.35	0.20	0.20	0.52	0.50	0.00	1.00	2.50	3.25
	Mar-15	0.35	0.20	0.20	0.52	0.50	0.00	1.25	2.50	3.75
10Y Gov't ² Bond/Yields	Actual	2.62	0.60	1.33	2.73	1.82	0.82	2.26	3.57	4.50
	Jun-14	2.50	0.60	1.40	2.90	2.40	1.10	3.00	4.50	5.00
	Sep-14	2.65	0.70	1.60	3.00	2.55	1.25	3.30	4.50	5.00
	Mar-15	2.90	0.80	2.00	3.30	2.80	1.45	3.80	4.50	5.00
Exchange Rates	Actual	EUR/USD 1.36	USD/JPY 102.2	EUR/GBP 0.80	GBP/USD 1.69	EUR/SEK 9.00	EUR/CHF 1.22	USD/CAD 1.09	AUD/USD 0.93	NZD/USD 0.87
	Jun-14	1.35	105.0	0.81	1.67	8.85	1.22	1.15	0.94	0.88
	Sep-14	1.33	109.0	0.82	1.62	8.70	1.26	1.15	0.94	0.82
	Mar-15	1.20	116.0	0.80	1.50	8.35	1.27	1.20	0.81	0.77

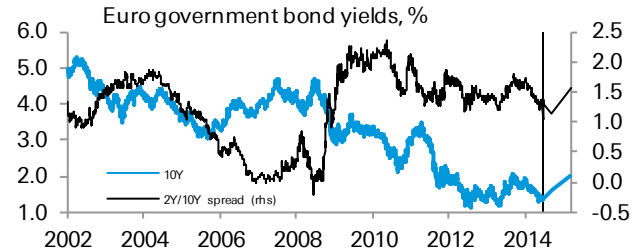
(1) Forecasts are the same dates. * indicates policy rates.
 (2) Forecasts in this table are produced by the regional fixed income strategists.
 (3) US 10Y Govt. bond yield forecasts has been taken from US Fixed Income Weekly.
 Sources: Bloomberg Finance LP, Deutsche Bank Research. Revised forecasts in bold type.

US 10Y rates



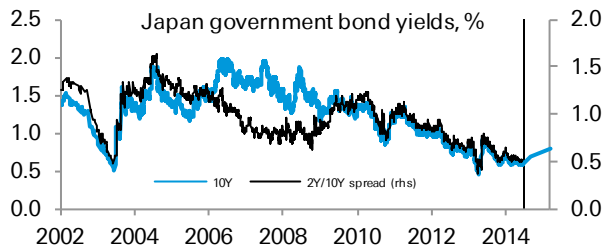
Source: Deutsche Bank Research, Bloomberg Finance LP

Euroland 10Y rates



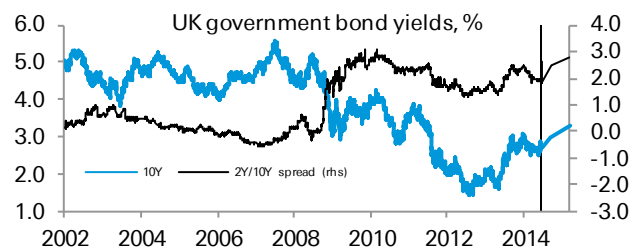
Source: Deutsche Bank Research, Bloomberg Finance LP

Japan 10Y rates



Source: Deutsche Bank Research, Bloomberg Finance LP

UK 10Y rates



Source: Deutsche Bank Research, Bloomberg Finance LP



Appendix 1

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