

## Economics

30 March 2012 | 12 pages

# Sterling Weekly

## Persistent Drag from Deleveraging

- Even four years after the financial crisis began, the scale of deleveraging remains modest. The overall private debt/GDP ratio fell to 206% at end-2011 from 212% at end-2010, having peaked at 231% in Q4-08 — but this ratio was just 127% 15 years ago (Q4-1996). Indeed, including the rise in public debt, deleveraging for the UK has barely begun. The sum of private debt and net public debt was 270% at end-2011, little changed from the Q3-09 peak (278% of GDP) — versus 169% of GDP in Q4-96.
- Economic data are weakening again, and we expect that deleveraging will continue to cap the economy for some time. For the public sector, the government's fiscal plans include big multi-year spending cuts, aimed at stabilising and then cutting the public debt/GDP ratio in coming years. For the private sector, pressure to deleverage among lenders and debtors is likely to be mirrored in an extended period of high aggregate savings rates. Household savings probably will rise further over time, catching up with trends in other countries with boom/bust housing cycles. Moreover, the huge corporate sector financial surplus probably is not a precursor to a UK business investment boom: the surplus is largely being invested overseas. We continue to expect that QE will be expanded further, especially given the continued strains in the euro area.

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Figure 1. Citigroup Market Forecasts

	Base Rate	QE Target	10 Year Yield	Spread vs Bunds	\$/£	£/€
Mid 2012	0.50	£375bn	2.50	60bp	1.56	0.83
End Q1 2013	0.50	£500bn	2.30	15bp	1.54	0.81

Source: Citi Investment Research and Analysis

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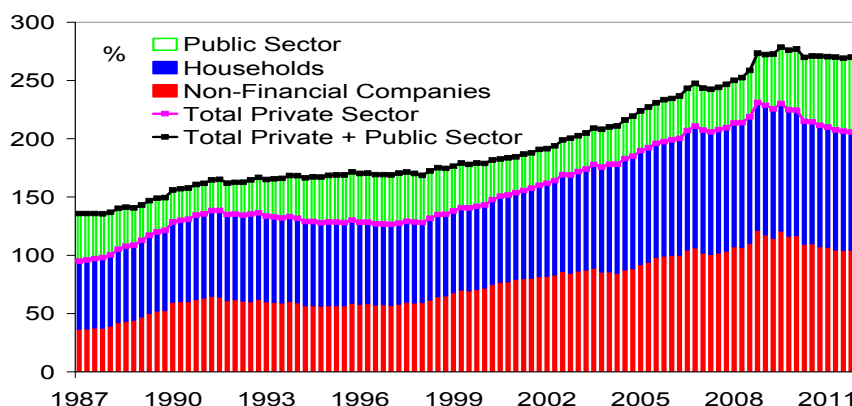
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Figure 2. UK — Debt/GDP Ratios for the Private Sector and Public Sector, 1987-2011



Note: For the public sector, we use the ratio of net public debt/GDP, excluding financial intervention costs. The ratio would be higher using the Maastricht debt total. Sources: ONS, and Citi Investment Research and Analysis

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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## Persistent Drag from Deleveraging

**The aggregate private debt/GDP ratio has fallen only slightly from the peak**

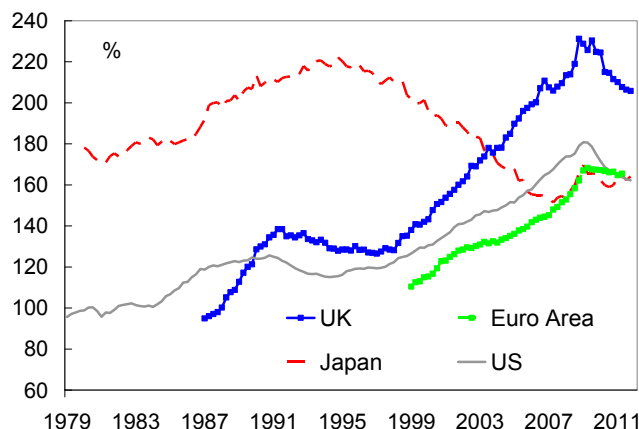
Even four years after start of the financial crisis, the scale and pace of deleveraging remains modest. The overall private debt/GDP ratio fell to 206% at end-2011 from 212% at end-2010, having peaked at 231% in Q4-08<sup>1</sup>. Nevertheless, this ratio remains far higher than 10 years ago (160% in Q4-2001) or 15 years ago (127% in Q4-1996). Within that, the household debt/GDP ratio fell from 104% at end-2010 to 101% at end-2011, having peaked at 111% in Q1-09 — but this ratio was just 69% 15 years earlier. For the non-financial corporate sector, the debt/GDP ratio peaked at 121% in Q4-08, and has fallen to 107% at end-2010 and 105% at end-2011, but also remains much higher than 10 years ago (82%) or 15 years ago (58%). Note that, if we include the surge in pension deficits, corporate liabilities actually rose in 2011: the PPF 7800 Index shows that the corporate sector's aggregate pension funding worsened by 18% of GDP during 2011.

**The rise in the private debt/GDP ratio in the UK in the boom was large compared with historic and recent cases of major boom/bust credit cycles...**

International comparisons of debt levels are slightly uncertain, but the UK level of the private debt/GDP ratio, and the rise since the late 1990s, both appear unusually large compared with other countries.

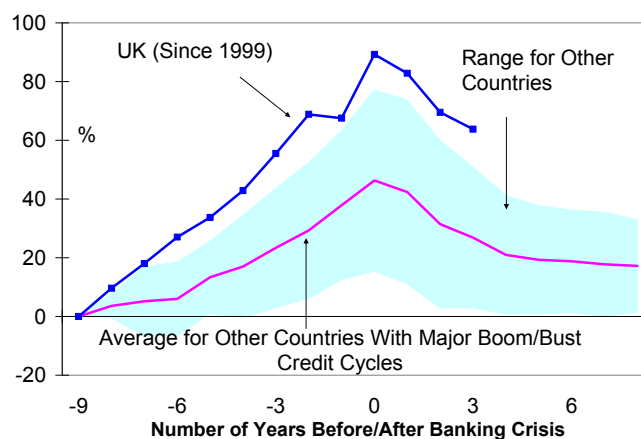
- A recent BIS study<sup>2</sup> identified 17 major boom/bust credit cycles over recent decades, and estimated that in those countries on average the private debt/GDP ratio rose by 44% in the boom, followed by a crisis and an extended period of deleveraging which on average took the private debt/GDP ratio back down close to its starting point. Using roughly comparable data, we calculate that, from Q1-99 to Q4-08, the private debt/GDP ratio rose by 52% in the US and euro area (a little above the historic norm for other boom/bust countries), whereas it rose by just over 90% in the UK (far above the norm for boom/bust countries).

**Figure 3. UK, US, EMU and Japan — Private Debt/GDP Ratios, 1979-2011**



Note: We exclude debt of non-bank financial companies.  
Sources: ONS, Datastream and Citi Investment Research and Analysis

**Figure 4. UK and Selected Countries — Change in Private Debt/GDP Ratios During Boom/Bust Cycles, 1970-2011**



Note: The previous countries used are as defined by the BIS, excluding a small number due to data limitations. For those countries, private debt is measured by domestic private sector debt and private sector net external bank debt.  
Sources: BIS, ONS, Datastream and Citi Investment Research and Analysis

**...and has left the debt/GDP ratio well above levels in the euro area and US**

- The private debt/GDP ratios in the US, euro area and Japan currently are 160-170% of GDP (versus 206% for the UK). The recent Q4-08 peak of 231% in this ratio for the UK was even above the early 90s peak for Japan (222% in Q4-

<sup>1</sup> Note that we exclude debt of non-bank financial companies, in order to avoid double counting (because they largely borrow to lend on to households and non-financial companies).

<sup>2</sup> See "Debt reduction after crises", BIS Quarterly Review, September 2009.

Including public debt, the aggregate UK debt/GDP ratio has not fallen significantly at all

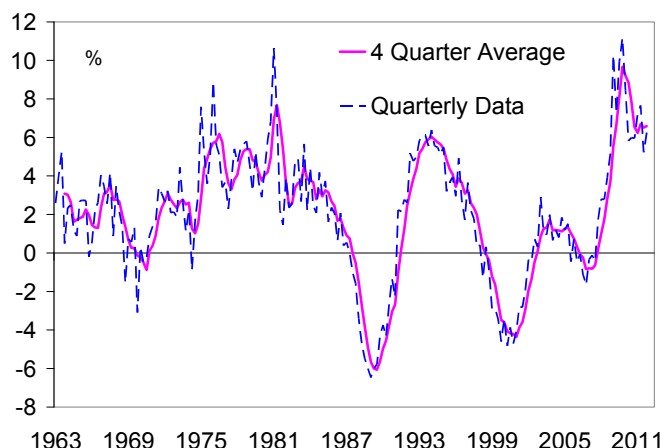
Pressure for deleveraging is likely to lead to a persistent period of relatively high aggregate private savings

1994). Among EMU countries, only Portugal, Spain and Ireland have higher private debt/GDP ratios than the UK. The UK private debt/GDP ratio is now similar to the end-98 Japan level — and Japan's private sector continued to deleverage (ie falling private debt/GDP ratio) for a further 10 years or so.

Indeed, at an aggregate level, including the rise in public debt, deleveraging for the UK has barely begun. Including net public debt (which rose to 64% of GDP at end-2011 from 59% at end-2010), we estimate that the aggregate debt/GDP ratio for the UK was 270% at end-2011, similar to the level of a year earlier (271%) and little changed from the peak (278% of GDP in Q3-09) — and far above levels of 10 years ago (191% in Q4-01) or 15 years ago (169% of GDP in Q4-96). The UK ratio would be 16-20 percentage points higher if we use the Maastricht debt measure, which was 82.9% of GDP at end-2011. The mix of falling private debt and rising public debt ratios also is similar to that seen in Japan, for which the aggregate ratio of private and public debt is now about 400% of GDP.

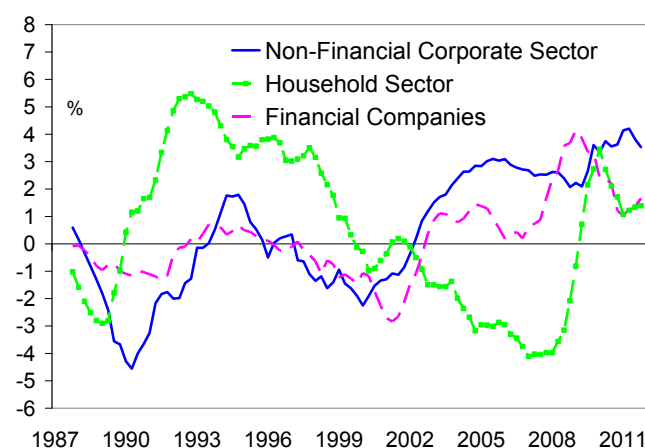
We expect that deleveraging will remain a substantial drag on the economy for some time. Of course, for the public sector, the government's fiscal plans include large multi-year spending cuts, aimed at cutting the fiscal deficit and hence stabilising and then reducing the public debt/GDP ratio in coming years. For the private sector, pressure to deleverage among both lenders and debtors is likely to be mirrored in an extended period of high aggregate savings rates, especially among households<sup>3</sup>.

Figure 5. UK — Private Sector Financial Surplus As Pct of GDP, 1963-2011



Sources: ONS and Citi Investment Research and Analysis

Figure 6. UK — Split of Private Sector Financial Surplus (as Pct of GDP), 4-Quarter Averages, 1987-2011



Sources: ONS and Citi Investment Research and Analysis

Private savings are now running at a high aggregate level, split between very high corporate savings and modest household savings

To be sure, the private sector already has swung from financial deficit (0.8% of GDP) in 2006 to huge recent financial surpluses (3.7% of GDP in 2008, 9.7% of GDP in 2009, 6.5% of GDP in 2010, 6.6% of GDP in 2011), the longest sustained run of high savings over the last 50 years. Within the private sector, there is an unusual split between very high corporate savings and far more modest household savings. The household sector ran huge financial deficits in the boom, hitting 4% of

<sup>3</sup> The BoE recently estimated (see the March 2012 *Quarterly Bulletin*) that the UK economy's net worth is negative in a forward looking sense, and judges this is "unsustainable", with particular worry over the low level of household savings. This balance sheet fragility also implies a bias to higher savings, especially among households.

Growth optimists assume lower private savings will fuel recovery; we expect private savings will stay high, restraining recovery

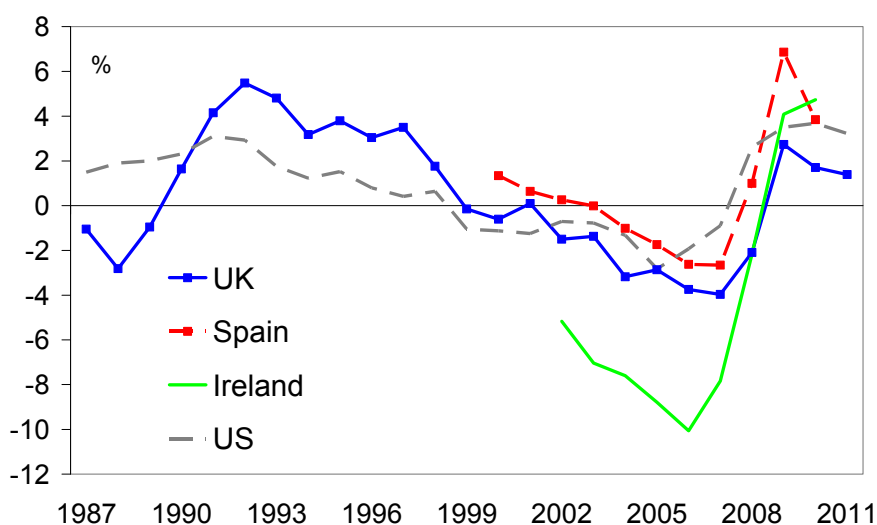
UK household savings have risen, but less than in other boom/bust countries...

GDP in 2007, and now (via the plunge in consumer spending) has moved into a modest financial surplus of 1.4% of GDP in 2011 as a whole. At the same time, the non-financial corporate sector continues to run huge financial surpluses, averaging 2.4% of GDP in 2002-08, and about 3½% of GDP per year since then. Financial companies also remain in financial surplus, of 1.7% of GDP in 2011, with the proceeds used in particular to rebuild capital.

A key issue for the economy is the evolution of these private financial balances going forward. The optimists (eg the OBR and, we believe, the MPC<sup>4</sup>) expect the household financial surplus will rise only a little further and then fall (supporting consumer spending), while companies will use their huge financial surplus to finance a major surge in UK business investment. In this case, the negative effect on growth from fiscal drag would be offset by lower private saving, hence producing a solid upturn. We are more sceptical. We believe that most of the rise in private savings has already occurred but, unlike the OBR (and, we believe, the MPC) we expect that private savings will stay high for several years (as typically occurred after previous boom/bust cycles in other countries). We doubt that the corporate sector financial surplus will translate into a UK investment boom, and anticipate further upward pressure over time on household savings. Hence, in our outlook, the simultaneous deleveraging of the public and private sectors implies a much more extended period of economic weakness and disinflationary pressure.

The UK household financial deficit in the boom was similar to the average of Spain, Ireland and the US (which also had big housing boom/bust cycles), but the swing into surplus has been less pronounced in the UK. For example, the household financial surplus exceeds 3½% of GDP in Spain, Portugal, Ireland and the US. The UK household financial surplus also remains well below the early 90s levels when, after a smaller credit boom than the recent one, the household financial surplus hit 5.5% of GDP in 1992 and stayed above 3% of GDP until 1997.

Figure 7. UK, Ireland, Spain and US — Household Sector Financial Surplus as Pct of GDP, 1987-2011



Sources: ONS, Datastream and Citi Investment Research and Analysis

<sup>4</sup> See the latest *Inflation Report* and recent speech by Ben Broadbent of the MPC.

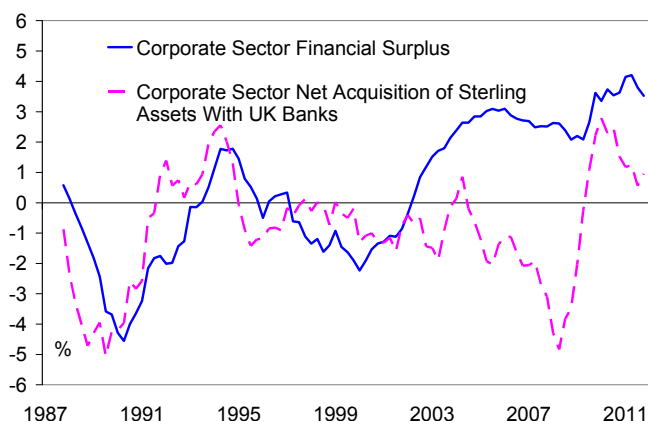
...and the BoE recently acknowledged that household savings are unsustainably low

It used to be the case that a high financial surplus would be mirrored in rapid debt repayment and build-up of corporate deposits in the UK

The BoE recently estimated that the household sector financial surplus would need to rise to 3½% of GDP merely to stabilise household net worth (at a level which the BoE believes is probably unsustainably low)<sup>5</sup>. We believe that the upward pressure in UK household savings in recent quarters was partly offset by a desire among households to smooth consumption in the face of the extraordinary plunge in incomes (down 1.2% YoY) in 2011, the biggest drop since 1977. We expect real incomes will fall slightly again this year, but household savings are likely to rise again if and when incomes eventually start to grow again — hence capping spending for several years.

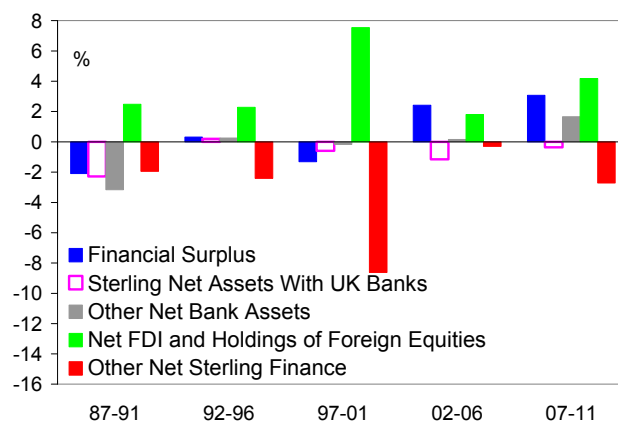
For the non-financial corporate sector, a common assumption is that the financial surplus currently is unsustainably high and eventually will spill over into investment and jobs in the UK rather than persistent accumulation of financial assets. To be sure, until end-2001, there was a fairly close link between the UK corporate sector's financial balance and the UK corporate sector's net acquisition of sterling bank assets at UK banks (ie change in deposits less change in debts). In other words, when the UK corporate sector ran a large financial deficit (eg 1988-91), it was financed by a rundown of deposits or rise in sterling bank lending. Conversely, when the corporate sector ran a large financial surplus (eg 1994-95), this produced large repayments of sterling bank debt and build-up of sterling deposits. Hence, it was reasonable to assume that persistent large corporate financial surpluses would eventually be reflected in a sharp improvement in companies' sterling balance sheets — a rapid drop in debts and excess build-up of cash holdings — which would then fuel economic expansion in the UK<sup>6</sup>.

Figure 8. UK — Corporate Sector Financial Surplus and Change in Companies' Net Sterling Assets at UK Banks, Pct of GDP, 1987-2011



Note: The net sterling assets of UK companies is the gap between their sterling bank deposits and their sterling bank loans.  
Sources: ONS and Citi Investment Research and Analysis

Figure 9. UK Corporate Sector Financial Balance and Counterparts, Pct of GDP, 1987-2011



Source: BoE, ONS and Citi Investment Research and Analysis

However, since 2002, massive corporate sector financial surpluses have gone alongside a drop in companies' net assets at UK banks...

We believe this assumption no longer holds, in particular because of the increased globalization of the UK corporate sector. The previous link between the corporate sector financial surplus and net acquisition of banking assets has broken over the last decade. The corporate sector has run persistent financial surpluses since the start of 2002, averaging 2.4% of GDP in 2002-06 and 3.1% of GDP in 2007-11.

<sup>5</sup> See the March 2012 *Quarterly Bulletin*.

<sup>6</sup> Conversely, the big overseas expansion of UK firms in 1997-01 was financed by capital issuance (bonds and equities) in the UK.

Over 2002-11 as a whole, the corporate sector financial surplus totaled £367bn. However, over 2002-11, the rise in UK companies' sterling deposits at UK banks (£98bn) was markedly outpaced by the rise in their sterling bank debts (£193bn). The large corporate sector financial surplus went alongside a £95bn drop in the corporate sector's net sterling assets at UK banks.

**...and the corporate surplus has been recycled into overseas assets**

The corporate sector's huge financial surpluses have been recycled into colossal net purchases of foreign equities (as part of FDI and M&A transactions), totaling £443bn over 2002-11. In addition, UK companies have markedly increased their net assets at foreign banks (deposits up £314bn, debts up £119bn, hence a £194bn net acquisition of financial assets), and these funds presumably will be used to finance overseas subsidiaries. These flows to overseas have been financed by the large financial surplus plus other net sterling finance (chiefly bond and equity issuance).

**We believe the corporate sector is constraining investment and jobs in the UK in order to generate surpluses which are invested elsewhere**

Hence, in aggregate, it appears that the UK corporate sector has become a 'cash cow', with companies recycling surpluses earned in the UK into overseas expansion. The huge corporate financial surpluses of recent years are not, by and large, sitting waiting to be invested in the UK, but have already gone overseas, following the same path as many other investors. Hence, whereas some argue that the large financial surpluses are unsustainable and likely to fuel investment and jobs in the UK, we believe that the corporate sector could stay in a large financial surplus for many years without ever having 'too much cash' in the UK. Indeed, unless relative rates of return between the UK and other countries shift markedly, companies probably will continue to constrain jobs and investment in the UK in order to achieve financial surpluses that are then invested overseas. Seen in this light, the UK government's emphasis on supply-side reform (lower corporate tax rate, reform of planning laws, greater regional pay disparities) has a lot to commend it. But, we suspect that unless the Government goes much further, a sizeable share of the UK corporate sector's financial surplus will probably continue to flow overseas, especially to high-growth and low-cost emerging markets.

**We expect that ongoing household deleveraging and corporate expansion overseas will continue to cap domestic demand**

The implications of all this for the UK economy are gloomy. Hopes of a solid recovery amidst fiscal austerity rest on the private sector saving less but, in our view, such a path seems unlikely given the overhang of high household debts and (for companies) the lure of attractive investment opportunities overseas. We continue to expect that recovery will undershoot consensus and MPC expectations, hence producing a further rise in unemployment from the current high levels. Against this backdrop, and with EMU worries, we continue to expect extra QE.

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## Economic Indicators

Mon 2 Apr	<b>Manufacturing PMI (Mar)</b>	<b>Forecast: 50.5</b>	<b>Prior: 51.2</b>
The manufacturing PMI slipped back in February after gains in the prior three months, and we expect another slight dip this month. Such a figure would suggest that manufacturing output is just expanding, but only barely.			
Thu 4 Apr	<b>Services PMI (Mar)</b>	<b>Forecast: 54.2</b>	<b>Prior: 53.8</b>
The services PMI fell quite sharply in February, by more than 2 points, and we expect little change either way in the March data. The longrun average for this series is about 55, and hence a reading below that would indicate subtrend output growth.			
Fri 5 Apr	<b>Industrial Production (Feb)</b>	<b>Forecast: -0.1% MoM, -3.1% YoY</b>	<b>Prior: -0.4% MoM, -3.8% YoY</b>
	<b>Manufacturing Output (Feb)</b>	<b>Forecast: -0.2% MoM, -0.2% YoY</b>	<b>Prior: 0.1% MoM, 0.3% YoY</b>
Industrial production in January was hit by continued weakness in oil and gas output, plus weather-related weakness in utilities output. For the February data, we expect that manufacturing output fell back a bit, roughly offsetting a rebound in utilities output from the low January figure. Such a figure would leave industrial production in January-February about 0.4% below the Q4 average.			
Thu 12 Apr	<b>Trade Balance – Goods &amp; Services (Feb)</b>	<b>Forecast: £-2.5 billion</b>	<b>Prior: £-1.8 billion</b>
The trade deficit fell quite sharply in January but, while trends in the deficit are likely to improve, we suspect there may be occasional months of slippage – including, perhaps, this month.			
Fri 13 Apr	<b>Producer Input Prices (Mar)</b>	<b>Forecast: 0.6% MoM, 3.9% YoY</b>	<b>Prior: 2.1% MoM, 7.3% YoY</b>
Recent gains in food and oil commodity prices may cause input prices to tick higher this month, but base effects from the outsized rise in input prices a year ago probably will pull the YoY rate down to the lowest since late-2009.			
Fri 13 Apr	<b>Producer Output Prices (Mar)</b>	<b>Forecast: 0.4% MoM, 3.4% YoY</b>	<b>Prior: 0.6% MoM, 4.1% YoY</b>
	<b>Output Prices Ex Tax (Mar)</b>	<b>Forecast: 0.1% MoM, 3.0% YoY</b>	<b>Prior: 0.5% MoM, 4.0% YoY</b>
	<b>Excluding Food, Drink, Tobacco, Energy (Mar)</b>	<b>Forecast: 0.1% MoM, 2.5% YoY</b>	<b>Prior: 0.5% MoM, 3.0% YoY</b>
The February data showed an unusually large rise in the core output price series (excluding food, drink, tobacco, energy) of 0.5% MoM. We regard that as an outlier and expect a far more subdued reading this month, hence keeping the YoY rate heading sharply down.			
Tue 17 Apr	<b>Consumer Prices (Mar)</b>	<b>Forecast: 0.2% MoM, 3.3% YoY</b>	<b>Prior: 0.6% MoM, 3.4% YoY</b>
	<b>CPI Ex Food, Drink, Tobacco, Energy (Mar)</b>	<b>Forecast: 0.3% MoM, 2.3% YoY</b>	<b>Prior: 0.6% MoM, 2.4% YoY</b>
	<b>Retail Prices (Mar)</b>	<b>Forecast: 0.3% MoM, 3.7% YoY</b>	<b>Prior: 0.8% MoM, 3.7% YoY</b>
	<b>RPIX – Excludes Mortgages (Mar)</b>	<b>Forecast: 0.3% MoM, 3.5% YoY</b>	<b>Prior: 0.8% MoM, 3.8% YoY</b>
The continued rise in oil prices probably will continue to limit the decline in inflation, although we expect a small further decline in the YoY rate this month. The YoY rate is likely to fall further next month.			
Wed 18 Apr	<b>Claimant Count Unemployment (Mar)</b>	<b>Forecast: +5,000 MoM, 5.0% Rate</b>	<b>Prior: +7,200 MoM, 5.0% Rate</b>
	<b>LFS Unemployment (Dec-Feb)</b>	<b>Forecast: -49,000 QoQ, 8.2% Rate</b>	<b>Prior: +28,000 QoQ, 8.4% Rate</b>
The monthly LFS data have shown marked declines in unemployment in December and January after the very high November figure. Even if unemployment in February picks up from the January level, the 3-month average (which is the headline LFS rate) is likely to fall as that high November figure drops out of the 3-month average. We doubt this drop in unemployment will continue.			

Economic Calendar, 26 March — 13 April 2012

26 March	27 March	28 March	29 March	30 March
<i>(During the Week)</i> <b>Nationwide House Prices</b> (Mar, 07:00)	<b>BoE Quarterly Bulletin</b>	<b>Balance of Payments (Q4)</b> Q3 £-10.5bn Q4 £8.5bn <b>GDP (Q4, 3<sup>rd</sup> Release)</b> Q3 0.6% QoQ, 0.3% YoY Q4 -0.3% QoQ, 0.5% YoY	<b>Nationwide House Prices (Mar)</b> Feb 0.4% MoM, 0.9% YoY Mar -1.0% MoM, 0.9% YoY <b>Service Sector Output (Jan)</b> Dec 0.2% MoM, 2.4% YoY Jan 0.2% MoM, 1.8% YoY <b>Consumer Credit (Feb)</b> Jan £0.2bn MoM, 2.3% YoY Feb £0.4bn MoM, 2.2% YoY <b>Mortgage Approvals for House Purchase (Feb)</b> Jan 57,899 MoM, 28.7% YoY Feb 48,986 MoM, 7.0% YoY <b>MPC's Paul Fisher speaks at National Asset Liability Management Conference</b>	<b>GfK Consumer Confidence (Mar, 00:01)</b> Feb -29 Mar -31  <b>UK Deficit (Maastricht)</b> 2010 10.1% of GDP 2011 8.3% of GDP  <b>UK Debt (Maastricht)</b> 2010 75.7% of GDP 2011 82.9% of GDP  <b>Informal EcoFin Meeting of EU-27 Finance Ministers</b> (Copenhagen, Mar 30-31)
2 April	3 April	4 April	5 April	6 April
<b>Manufacturing PMI (Mar)</b> Feb 51.2 MarE 50.5  <b>BoE Housing Equity Withdrawal (Q4)</b>	<i>(During the Week)</i> <b>Halifax House Prices</b> (Mar, 09:00)	<b>Services PMI (Mar)</b> Feb 53.8 MarE 54.2 <b>Profitability of UK Companies (Q4)</b>  <b>ECB Meeting:</b> 12:45 Outcome 13:30 Press Conference	<b>Industrial Production (Feb)</b> Jan -0.4% MoM, -3.8% YoY FebE -0.1% MoM, -3.1% YoY <b>Manufacturing Output (Feb)</b> Jan 0.1% MoM, 0.3% YoY FebE -0.2% MoM, -0.2% YoY  <b>MPC Meeting Ends: Outcome At Noon</b>	<b>Good Friday Holiday</b>
9 April	10 April	11 April	12 April	13 April
<b>Easter Monday Holiday</b>	<b>RICS House Price Survey</b> (Mar, 00:01)		<b>Trade Balance – Goods &amp; Services (Feb)</b> Jan £-1.8bn FebE £-2.5bn	<b>Producer Input Prices (Mar)</b> Feb 2.1% MoM, 7.3% YoY MarE 0.6% MoM, 3.9% YoY <b>Prod. Output Prices (Mar)</b> Feb 0.6% MoM, 4.1% YoY MarE 0.4% MoM, 3.4% YoY <b>Excluding Tax (Mar)</b> Feb 0.5% MoM, 4.0% YoY MarE 0.1% MoM, 3.0% YoY <b>Ex Food, Drink, Tobacco &amp; Energy (Mar)</b> Feb 0.5% MoM, 3.0% YoY MarE 0.1% MoM, 2.5% YoY <b>Construction Output (Feb)</b>
16 April	17 April	18 April	19 April	20 April
	<b>Consumer Prices (Mar)</b> Feb 0.6% MoM, 3.4% YoY MarE 0.2% MoM, 3.3% YoY <b>CPI Ex Food, Drink, Tobacco, Energy (Mar)</b> Feb 0.6% MoM, 2.4% YoY MarE 0.3% MoM, 2.3% YoY <b>Retail Prices (Mar)</b> Feb 0.8% MoM, 3.7% YoY MarE 0.3% MoM, 3.7% YoY <b>RPIX – Ex Mortgages (Mar)</b> Feb 0.8% MoM, 3.8% YoY MarE 0.3% MoM, 3.5% YoY	<b>Claimant Count Unemployment (Mar)</b> Feb +7,200 MoM, 5.0% Rate MarE +5,000 MoM, 5.0% Rate <b>LFS Unemployment (Dec-Feb)</b> Nov-Jan +28,000K QoQ Dec-FebE -49,000K QoQ <b>LFS Unemployment Rate</b> Nov-Jan 8.4% Dec-FebE 8.2% <b>MPC Minutes (Apr 5)</b> <b>BoE Agents' Summary of Business Conditions (Apr)</b> <b>Riksbank Outcome (08:30)</b>		<b>Retail Sales Volumes (Mar)</b>

E Citi estimate. B Billion. P Provisional. R Revised. Note: All data are released at 9.30 a.m., except those marked otherwise.

Sources: BoE, CBI, CML, ONS, national sources and Citi Investment Research and Analysis.



## Appendix A-1

### Analyst Certification

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