### Summary of International Forecasts

<table>
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<tbody>
<tr>
<td><strong>Real GDP</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
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<tr>
<td>United States</td>
<td>1.8</td>
<td>2.3</td>
<td>2.3</td>
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<td>3.3</td>
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<tr>
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<td>1.7</td>
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<tr>
<td>Eurozone</td>
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<td>1.1</td>
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<tr>
<td>Germany</td>
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<td>0.0</td>
<td>1.1</td>
<td>1.2</td>
<td>1.3</td>
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<tr>
<td>Italy</td>
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<td>-1.2</td>
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<td>1.8</td>
<td>1.8</td>
<td>1.9</td>
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<tr>
<td><strong>Asia</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Japan</td>
<td>-0.5</td>
<td>2.0</td>
<td>0.5</td>
<td>1.7</td>
<td>2.1</td>
<td>1.2</td>
<td>1.6</td>
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<tr>
<td>China</td>
<td>9.3</td>
<td>7.7</td>
<td>8.3</td>
<td>9.0</td>
<td>8.5</td>
<td>8.0</td>
<td>7.7</td>
</tr>
<tr>
<td>India</td>
<td>7.5</td>
<td>5.4</td>
<td>6.0</td>
<td>7.5</td>
<td>7.9</td>
<td>7.8</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>World</strong></td>
<td>2.9</td>
<td>2.3</td>
<td>2.4</td>
<td>3.4</td>
<td>3.7</td>
<td>3.5</td>
<td>3.5</td>
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</tbody>
</table>
In mid 2012, risks were skewed to the downside.

<table>
<thead>
<tr>
<th>US fiscal cliff (10%)</th>
<th>Multiple Eurozone exits (30%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stalemate in the House implies much larger fiscal tightening than in baseline</td>
<td>Fiscal austerity in Greece becomes unbearable; government falls and defaults</td>
</tr>
<tr>
<td>Business and consumer confidence negatively affected</td>
<td>Financial contagion spreads</td>
</tr>
<tr>
<td>Additional QE and weaker US$ to provide only partial offsets</td>
<td>Run on banks in peripherals leading to credit crunch,</td>
</tr>
<tr>
<td>Trade and financial linkages cause global slowdown</td>
<td>Cyprus, Portugal, Spain, Italy &amp; Ireland also forced out of Eurozone.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oxford Forecast (45%)</th>
<th>China hard landing (15%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurozone avoids breakup. ECB and governments take significant steps to ensure Eurozone survival</td>
<td>Commercial property crash &amp; external weakness leads to banking sector stress</td>
</tr>
<tr>
<td>Risk premia fall, and consumer and business confidence gradually recover.</td>
<td>Flight from risk leads to falling share &amp; property prices</td>
</tr>
<tr>
<td>Recovery limited by high debt, weak job growth and fiscal retrenchment</td>
<td>Investment slumps in China as government recapitalises banks</td>
</tr>
<tr>
<td>EMs robust as policy eases and growing middle class support consumer spending and trade</td>
<td>Asian supply chain affected as domestic engine of growth stalls</td>
</tr>
</tbody>
</table>
...but now the risks are much more balanced

<table>
<thead>
<tr>
<th>Middle East tensions (5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Political tensions escalate in Egypt, Syria and Iran</td>
</tr>
<tr>
<td>- Concerns about stability in the region push oil prices to over $200/barrel</td>
</tr>
<tr>
<td>- Business and consumer confidence hit by energy shock</td>
</tr>
<tr>
<td>- Political situation stabilises gradually. Oil prices return to baseline by 2015.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eurozone exits in 2014 (15%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Fiscal austerity in peripheral countries becomes unbearable</td>
</tr>
<tr>
<td>- No growth pushes unemployment yet higher. Pro-exit parties gain popularity.</td>
</tr>
<tr>
<td>- No real progress on banking and fiscal union,</td>
</tr>
<tr>
<td>- 6 countries exit Eurozone in 2014 Q1.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Oxford Forecast (60%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Steps to ensure Eurozone survival are taken, although they are not enough to kick start significant growth.</td>
</tr>
<tr>
<td>- Risk premia fall, and consumer and business confidence gradually recover.</td>
</tr>
<tr>
<td>- Recovery limited by public and private deleveraging and weak job growth</td>
</tr>
<tr>
<td>- EMs robust as policy eases and growing middle class support consumer spending and trade</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faster upturns in US &amp; EMs (15%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Resolution of outstanding fiscal issues encourages investment and hiring in the US.</td>
</tr>
<tr>
<td>- Momentum in EMs builds as trade picks up and accommodating policy feeds through</td>
</tr>
<tr>
<td>- Business and consumer confidence rise as conditions improve.</td>
</tr>
</tbody>
</table>
UK vs US – GDP growth

GDP growth

% year

Source: Oxford Economics/Haver Analytics
As expected, 2012 was a difficult year...
...mainly due to poor export performance

UK: Contributions to GDP growth (2012)

%pts

Consumer spending
Investment
Govt. consumption
Inventories
Net trade

Source: Oxford Economics/Haver Analytics
Little momentum heading into 2013

**UK: Purchasing managers' surveys**

% balance*

- **Services business activity**
- **Manufacturing activity**

*value over 50 indicates rising activity

Source: CIPS/Markit
Predictions for the UK economy in 2013

- Exports to do be better in 2013
UK vs US – Exports

Export volume growth

% year

Source: Oxford Economics/Haver Analytics
Eurozone weakness will constrain export pickup

UK: World trade and exports

% year

Source: Oxford Economics/Haver Analytics
Predictions for the UK economy in 2013

- Exports to do be better in 2013
- Inflation will eventually move back to target….but not until the latter part of the year
Inflation remained stubbornly high in 2012H2

UK: Contributions to CPI inflation

% year

Source: Oxford Economics/Haver Analytics

Transport
Housing costs
Other
Food

2005 2006 2007 2008 2009 2010 2011 2012

Source: Oxford Economics/Haver Analytics
Stable oil prices should help reduce inflation…

World: Oil price
$ per barrel

UK: Unleaded petrol prices
pence per litre

Source: Oxford Economics/Haver Analytics
…but will initially be offset by food and utilities…

UK: Food prices

% year

Source: Oxford Economics/Haver Analytics

UK: Domestic energy prices

% year

Source: Oxford Economics/Haver Analytics

Gas

Electricity

F'cast
…so it will be end-13 before CPI is back at 2%

UK: Inflation relative to target

CPI inflation

2% target

Source: Oxford Economics

Forecast
Predictions for the UK economy in 2013

- Exports will do better in 2013
- Inflation will eventually move back to target….but not until the latter part of the year
- Consumer spending to grow modestly again this year
Real incomes held up surprisingly well in 2012

A sharp rise in employment, plus generous uprating of state benefits more than offset the impact of below-inflation earnings growth.
Consumers are still looking to deleverage

UK: Household debt-to-income ratio
% of household disposable income

Source: Oxford Economics/Haver Analytics

Forecast
Predictions for the UK economy in 2013

- Exports will do better in 2013
- Inflation will eventually move back to target….but not until the latter part of the year
- Consumer spending to grow modestly again this year
- Housing market activity will increase, partly due to FLS. But prices will continue to drift downwards
UK: Mortgage availability

% balance: loosening (+) / tightening (-)

*The single datapoints represent 3 month forecasts, while the columns represent actual data

Source: Bank of England Credit Conditions Survey
…but impact on lending has been small so far…

UK: Housing market activity

Number of loans approved for house purchase (RHS)

Net mortgage lending (LHS)

Source: Haver Analytics

Oxford Economics
UK vs US – Value added in construction

GVA in construction

% year

Source: Oxford Economics/Haver Analytics
Predictions for the UK economy in 2013

- Exports will do better in 2013
- Inflation will eventually move back to target….but not until the latter part of the year
- Consumer spending to grow modestly again this year
- Housing market activity will increase, partly due to FLS. But prices will continue to drift downwards
- Firms will remain reluctant to commit funds to investment because of on-going uncertainty around the outlook
Firms are still awash with cash…

UK: PNFC financial balance

% of GDP, 4QMA

Source: Haver Analytics

OXFORD ECONOMICS
...but remain reluctant to spend...

UK: BoE agents' survey: Investment intentions

% balance

Source: Haver Analytics

Manufacturing
Services
...and investment is likely to continue to lag.

UK: Business investment across cycles
Rebased, cyclical peak = 100

Source: Oxford Economics
Predictions for the UK economy in 2013

- Exports will do better in 2013
- Inflation will eventually move back to target… but not until the latter part of the year
- Consumer spending to grow modestly again this year
- Housing market activity will increase, partly due to FLS. But prices will continue to drift downwards
- Firms will remain reluctant to commit funds to investment because of on-going uncertainty around the outlook
- The Chancellor will continue to follow ‘Plan A’ despite further weak growth and failing to achieve OBR’s fiscal forecasts
UK vs US – Fiscal tightening

Fiscal tightening*

% of potential GDP

*positive value indicates fiscal tightening

Source: IMF

UK

US

2007 2008 2009 2010 2011 2012

-0.5 -0.6
-2.0 -2.2
-2.5 -2.9
1.2
-0.3
1.9
0.8
1.2 1.1

Source: IMF

OXFORD ECONOMICS
UK vs US – Government deficit

Government deficit
% of GDP

Source: Oxford Economics/ Haver Analytics
Boost to capital spending was too timid

Baseline includes £5bn of extra capital spending between 2013-15, paid for by deeper current spending cuts.

Scenario shows impact of £10bn of additional capital spending in both 2013/14 and 2014/15, paid for through additional borrowing.

Source: Oxford Economics
Predictions for the UK economy in 2013

- Exports will do better in 2013
- Inflation will eventually move back to target… but not until the latter part of the year
- Consumer spending to grow modestly again this year
- Housing market activity will increase, partly due to FLS. But prices will continue to drift downwards
- Firms will remain reluctant to commit funds to investment because of on-going uncertainty around the outlook
- The Chancellor will continue to follow ‘Plan A’ despite further weak growth and failing to achieve OBR’s fiscal forecasts
- The MPC appears to have lost faith in QE and looks likely to sit on its hands… at least until the change of Governor
Growth will struggle to get above 1% in 2013

UK: Contributions to GDP growth

Source: Oxford Economics
### UK forecast

#### Forecast for UK

(Annual percentage changes unless specified)

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</thead>
<tbody>
<tr>
<td>Domestic Demand</td>
<td>-0.6</td>
<td>1.0</td>
<td>1.3</td>
<td>1.8</td>
<td>2.1</td>
<td>2.3</td>
<td>2.4</td>
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<tr>
<td>Private Consumption</td>
<td>-1.3</td>
<td>0.9</td>
<td>1.2</td>
<td>2.0</td>
<td>2.4</td>
<td>2.8</td>
<td>3.0</td>
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<tr>
<td>Fixed Investment</td>
<td>-2.9</td>
<td>0.0</td>
<td>2.8</td>
<td>5.6</td>
<td>5.6</td>
<td>5.8</td>
<td>5.8</td>
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<tr>
<td>Stockbuilding (% of GDP)</td>
<td>0.4</td>
<td>0.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
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<tr>
<td>Government Consumption</td>
<td>-0.1</td>
<td>2.8</td>
<td>-0.3</td>
<td>-1.4</td>
<td>-1.3</td>
<td>-1.6</td>
<td>-2.2</td>
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<tr>
<td>Exports of Goods and Services</td>
<td>4.5</td>
<td>-0.4</td>
<td>2.1</td>
<td>4.8</td>
<td>4.9</td>
<td>5.4</td>
<td>5.6</td>
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<tr>
<td>Imports of Goods and Services</td>
<td>0.5</td>
<td>2.3</td>
<td>3.0</td>
<td>3.8</td>
<td>3.7</td>
<td>4.0</td>
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<tr>
<td>GDP</td>
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<td>0.0</td>
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<td>2.1</td>
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<td>2.9</td>
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<tr>
<td>Industrial Production</td>
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<td>1.2</td>
<td>1.1</td>
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<td>1.4</td>
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<td>CPI</td>
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<td>1.6</td>
<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
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<tr>
<td>Current Balance (% of GDP)</td>
<td>-1.3</td>
<td>-3.6</td>
<td>-3.3</td>
<td>-3.1</td>
<td>-2.9</td>
<td>-2.4</td>
<td>-1.9</td>
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<tr>
<td>Short-Term Interest Rates (%)</td>
<td>0.9</td>
<td>0.8</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Long-Term Interest Rates (%)</td>
<td>3.1</td>
<td>1.9</td>
<td>2.1</td>
<td>2.4</td>
<td>2.6</td>
<td>3.0</td>
<td>3.6</td>
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<tr>
<td>Exchange Rate (vs US$)</td>
<td>1.60</td>
<td>1.59</td>
<td>1.58</td>
<td>1.53</td>
<td>1.53</td>
<td>1.54</td>
<td>1.54</td>
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<tr>
<td>Exchange Rate (Euro per £)</td>
<td>1.15</td>
<td>1.23</td>
<td>1.24</td>
<td>1.27</td>
<td>1.31</td>
<td>1.31</td>
<td>1.32</td>
</tr>
<tr>
<td>Output gap (% of potential GDP)</td>
<td>-2.9</td>
<td>-5.0</td>
<td>-5.4</td>
<td>-5.2</td>
<td>-4.6</td>
<td>-4.0</td>
<td>-3.2</td>
</tr>
</tbody>
</table>
Flat GDP and strong employment growth...

UK: Labour market

Source: Haver Analytics
...have left us with a productivity puzzle

**UK: GDP and employment growth (5yr MA)**

GDP growth, % year

Employment growth, % year

Source: Haver Analytics / Oxford Economics

**UK: Output per worker**

2009=100

Source: Haver Analytics
Why could productivity have been so weak?

- Factor substitution – preference of labour for capital?
  
  Not large – little substitutability between labour and capital in most industries

- Labour hoarding, made possible by low earnings growth?
  
  Maybe at the start of the recession, but why would firms be taking new staff on now?

- Zombie companies tying up capital and employing staff?
  
  Again may contribute to some labour hoarding but can’t explain new jobs

- Given the above and comparing UK with other countries suggest that there may well be some under-reporting of GDP
  
  Deflators are probably too high, particularly for services activity
Is the drop in UK productivity plausible?

UK: Output per worker across countries
Index, 2008Q1 = 100

Source: Haver Analytics
Why has the UK recovery been so weak?

<table>
<thead>
<tr>
<th>Decomposing UK GDP in 2012 per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree to which GDP is below the long-term trend</td>
</tr>
<tr>
<td><strong>Impact of the financial crisis on potential output</strong></td>
</tr>
<tr>
<td>Impact on capital stock</td>
</tr>
<tr>
<td>Impact on growth in the labour supply</td>
</tr>
<tr>
<td>Impact on total factor productivity</td>
</tr>
<tr>
<td>Under recording of the current level of GDP</td>
</tr>
<tr>
<td><strong>Spare capacity</strong></td>
</tr>
<tr>
<td><strong>Why are we below capacity?</strong></td>
</tr>
<tr>
<td>Fiscal tightening</td>
</tr>
<tr>
<td>Tight credit conditions</td>
</tr>
<tr>
<td>Weak Eurozone demand</td>
</tr>
<tr>
<td>Slow adjustment</td>
</tr>
</tbody>
</table>

*Note: Figures may not sum due to rounding*

*Source: Oxford Economics*
Thank you
The UK deflators look high.

GDP deflator
2008Q1 = 100

Source: Haver Analytics
UK vs US – Wage inflation

Wage inflation
% year

Source: Oxford Economics/Haver Analytics