Teetering on the brink: is the world heading for another financial crisis?

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Oxford Economics

- Founded in 1981 as a joint venture with Templeton College in Oxford University, Oxford Economics has since grown into one of the world’s foremost independent providers of global economic research and consulting.

- The rigor of our analysis, calibre of staff and links with Oxford University make us the most trusted resource for decision makers seeking independent thinking and evidence-based research.

- Over 60 in-house economists.

- Extensive experience in industry and public-sector analysis.

- Unique Global Economic Model.

- Links to Oxford University and other leading research institutes.
Global recovery initially stronger than expected...

World: GDP growth

% year

Source: Oxford Economics
…but no longer

World: GDP growth

% year

January 2010 forecast

Now

Forecast

Source: Oxford Economics

OXFORD ECONOMICS
Points to remember in an interconnected world

- Companies have driven the cycle and will be vital for recovery
- Currency stories are the key policy background
- Government debt worries driving policy
Companies are cash-rich

World: Corporate sector* financial balance

% of GDP, 4-quarter average

Source: Oxford Economics

*Non financial sector
Currency areas are creating tensions

- Some euro area countries have current account deficits with offsetting capital flows financed by ECB, IMF and surplus governments.

- The deficit countries have weak growth but monetary policy is tightening and confidence is fragile.

- All member countries want to maintain the euro but still not clear that they will take the necessary measures to do so.

- The US has a large current account deficit with China financing it by buying treasuries.

- The US has weak growth but monetary policy is set to remain expansionary and fiscal policy has tightened but...

- China etc has inflationary problems but is resisting any exchange rate changes.

- The US Fed wants the policy to change?
Debt worries driving government policy

General government debt as % of GDP

Source: Oxford Economics
So why is growth slowing?

- Some slowdown inevitable after inventory-driven rebound in 2010
- Special factors – eg Japanese earthquake/tsunami
- Policy tightening
- High oil and commodity prices
- Household and corporate caution – now compounded by financial market volatility
An age of fiscal austerity...

change in cyclically-adjusted structural balance (sign reversed),
% of potential GDP

Source: Oxford Economics/Haver Analytics

IMF Forecast
...extreme in Europe

Discretionary fiscal tightening, 2010-13

% of GDP, total 2010-2013

- Germany
- France
- Eurozone
- Italy
- Spain
- Portugal
- Ireland
- Greece

Source: Oxford Economics/Haver Analytics
Policy tightening also in emerging markets…

<table>
<thead>
<tr>
<th>Change since Jan 2010</th>
<th>Policy rate</th>
<th>Reserve requirements</th>
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<tbody>
<tr>
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<td>Brazil</td>
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<tr>
<td>Russia</td>
<td>-50bp</td>
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<td>India</td>
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<td>Turkey</td>
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...and having some bite

Emerging Asia: Retail sales & consumption

Source: Haver Analytics

Volumes (3 month moving average)

Korea (Wholesale/Retail)

China

Thailand

1997 1999 2001 2003 2005 2007 2009 2011
% year

Source: Haver Analytics

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Emerging Asia: Retail sales & consumption

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Korea (Wholesale/Retail)

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Thailand
Commodity prices have acted like tax rise for AEs

World: Commodity prices
2007=100 (rebased)

October figures are month average to date

Source: Haver Analytics

Source: Haver Analytics
Our central forecast is for world to stabilise…

G7 & Emerging Markets: GDP growth

% year

Emerging Markets

G7

F’cast

Source: Oxford Economics
…considering the following

- Assume Eurozone governments will manage an orderly resolution of the sovereign debt crisis
- Further ‘unconventional’ monetary policy loosening in advanced economies
- Stimulus measures in emerging markets
- Improved real income growth for consumers as inflation falls
- Growing middle class in emerging markets
Holding Eurozone together

- Our central forecasts assumes Greece defaults on its sovereign debt, with haircuts of around 50%.

- Default may happen around the turn of the year, possibly when negotiations about the next tranche of IMF and EU loan take place.

- But – critically - we assume Eurozone governments prepare for it to happen in an orderly fashion:
  - ECB aggressive in buying peripheral government bonds
  - Greek banks supported by ECB in the short term, and government by the IMF and EU for a longer period.
  - Other EU governments inject capital in banks most hit by Greek default
  - Renegotiation of the aid packages granted to Portugal and Ireland with less of a focus on immediate fiscal targets and more focus on structural reforms
But so much could go wrong!

**Oxford forecast**
- Eurozone avoids disorderly default and steps taken to shore up banks
- Risk premia fall, and consumer and business confidence gradually recover
- But recovery in AEs limited by high debt, weak job growth and fiscal retrenchment
- EMs robust as policy gradually eases and growing middle class support consumer spending and regional trade
Downside risks to Oxford Economics’ forecast

**Eurozone financial contagion**

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The Oxford Global Economic Model – Overview

- The Oxford Global Economic Model is the most widely used commercial International Macro Model, with clients including international institutions, Ministries of Finance and central banks around the world, and a large number of blue-chip companies.

- It provides a rigorous and consistent structure for forecasting and scenario analysis.

- The Model covers 46 economies in detail, including many emerging markets, and provides headline forecasts for another 30 countries.

- Forecasts 5, 10 and 25 years ahead are updated each month.

- Oxford Economics’ powerful user-friendly software is very easy to use.

- Oxford Economics provides telephone and e-mail support, and runs regular training workshops for clients.
Linkages between country models

- Trade
- Competitiveness
- Interest Rates and Exchange Rates
- Commodity Prices:
  - World Price of Manufactured Goods
- Capital flows
Time running out for the Eurozone…

Eurozone: Credit spreads
% spread of 10-year bonds over German bunds

Source: Oxford Economics/Haver Analytics
...and it’s looking a lot like 2008

Euro: 3 month libor spread over swap rate

Source: Oxford Economics; Haver Analytics
Disparities in Europe compound the problems

Unemployment rate, %

Germany

Eurozone (excluding Germany)

US

Source: Oxford Economics

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Risk that EFSF is overwhelmed

Eurozone: Financing needs 2011-2015

€b

Total of maturing government debt and forecast budget deficit

<table>
<thead>
<tr>
<th>Country</th>
<th>Financing Needs (€b)</th>
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<td>Ireland</td>
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<td>Italy</td>
<td>923</td>
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</table>

Source: Oxford Economics
But exposure not restricted to European banks

Exposure to peripheral-5 by sector
US$ bn 2011Q1

- Germany
- France
- UK
- Italy
- Japan
- US
- ROW

Source: Oxford Economics/Haver Analytics

Legend:
- Government
- Banks
- Private sector
- Other
Government stress

- Eurozone financial contagion
  - Greek debt restructuring happens without agreement on how to protect banks and Portugal and Ireland
  - Pressure intensifies to cut budget deficits rapidly in all major economies
  - Rising unemployment and business failures feed back into banking
  - New wave of loan losses for global banks leads to tighter credit conditions

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Corporate stress
Impact of disorderly Greek default

Eurozone: GDP
% year


Forecast
Baseline
Eurozone default

Source: Oxford Economics/Haver Analytics
Impact of disorderly Greek default

US: GDP
% year

Baseline
Eurozone default
Forecast

Source: Oxford Economics/Haver Analytics

World: GDP
% year

Baseline
Eurozone default
Forecast

Source: Oxford Economics/Haver Analytics
Impact of disorderly Greek default

Eurozone: CPI
Source: Oxford Economics/Haver Analytics

US: CPI
Source: Oxford Economics/Haver Analytics
**Downside risks to Oxford Economics’ forecast**

- **Recession in USA**
  - Continued political deadlock between Democrats and Republicans leads to fiscal paralysis
  - Companies increasingly cautious, so unemployment rises further and investment delayed
  - Consumers retrench further
  - Confidence globally deteriorates and trade tensions intensify

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US recovery fragile...

Source: Oxford Economics/Haver Analytics
...and risk of sustained high unemployment

Change in US employment by sector since end-2007 (000s)

Source: Bureau of Labor Statistics
How tight will US fiscal policy be?

US: Change in cyclically-adjusted structural balance (sign reversed), % of potential GDP

Source: Oxford Economics/Haver Analytics
Impact of a US double-dip

US: GDP
% year

Baseline
Forecast
US recession

Source: Oxford Economics/Haver Analytics
Impact of a US double-dip

Eurozone: GDP
% year

Baseline
Forecast
US recession

World: GDP
% year

Baseline
Forecast
US recession

Source: Oxford Economics/Haver Analytics
But resources are significant to support growth
Downside risks to Oxford Economics’ forecast

**Government stress**

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- **China hard landing**
  - Commercial property crash & external weakness leads to banking sector stress
  - Flight from risk leads to falling share & property prices
  - Investment slumps in China as government recapitalises banks
  - Asian supply chain effected as domestic engine of growth stalls

**Corporate stress**
China’s growth boosted by construction boom

China: Building Investment

% year, 3mma

Source: CEIC, Oxford Economics' estimates
Is China heading for property market crisis?

Emerging Asia: Residential property prices

Index (2006=100, quarterly)

Source: Haver Analytics
And risks from rising wage inflation?

Labour Market Conditions: All Industries

% year

Nominal wage per employee
Unit Labour Cost
Employment

Source: Oxford Economics/CEIC
What if the property crash turn banking sector sour?

China: Non-performing loans
% GDP

Forecas
Banking crisis
Base

Source: Oxford Economics
Impact of a China hard landing

China: GDP (% year)

Source: Oxford Economics/Haver Analytics

Baseline
China hard landing
Forecast
Impact of a China hard landing

**US: GDP**

Source: Oxford Economics/Haver Analytics

- Baseline
- China hard landing
- Forecast

**World: GDP**

Source: Oxford Economics/Haver Analytics

- Baseline
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- Forecast
Implications for oil prices

World: Oil price
USD/barrel

Source: Oxford Economics/Haver Analytics
Implications for oil prices

World: Oil price
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Forecast
Baseline
US recession

Source: Oxford Economics/Haver Analytics
Implications for oil prices

**World: Oil price**

USD/barrel

- **Baseline**
- **Eurozone default**
- **Forecast**

Source: Oxford Economics/Haver Analytics
Oxford Economics’ forecast

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<tr>
<th>Alternative GDP growth forecasts</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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# Oxford Economics’ forecast

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