The global economy is stuck in low gear

World GDP growth
Per cent, seasonally-adjusted annualised rate

Source: Preliminary November 2014 Economic Outlook database.
Trade growth has been weak

**Trade intensity**

Index, 1990=100

---

1. Index of sum of exports and imports as a ratio of GDP.

*Source:* Preliminary November 2014 Economic Outlook database.
Labour market: divergent performance, but overall slack remains

Unemployment rate
Per cent

Number of unemployed persons
Millions

Source: Preliminary November 2014 Economic Outlook database.
Demand patterns are diverging in major advanced economies

Non-residential investment per capita
*Index, 2005 = 100*

Private consumption per capita
*Index, 2005 = 100*

*Source:* OECD national accounts database; Preliminary November 2014 Economic Outlook database; and OECD calculations.
Trends are also diverging among emerging economies.

GDP per capita

Source: OECD National Accounts database; Preliminary November 2014 Economic Outlook database; IMF WEO database; Central Statistical Organisation, India; and OECD calculations.
Growth projections for 2015-16

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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<td>Euro area</td>
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<td>1.7</td>
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<td>Japan</td>
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<td>China</td>
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<td>6.9</td>
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<td>India</td>
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<td>5.4</td>
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<td>Brazil</td>
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<td>Russia</td>
<td>1.3</td>
<td>0.3</td>
<td>0.0</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Source: Preliminary Economic Outlook (EO) projections.
Growth projections for 2015-16

Source: Preliminary November 2014 OECD Economic Outlook database.
The threat of euro area stagnation has risen

**Inflation**

*HIPC, 12-month percentage change*

<table>
<thead>
<tr>
<th>Year</th>
<th>-0.5</th>
<th>0.0</th>
<th>0.5</th>
<th>1.0</th>
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</tr>
</tbody>
</table>

**GDP**

*Year-on-year percentage change*

<table>
<thead>
<tr>
<th>Year</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
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<td>2013</td>
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<td>2014</td>
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<td>2015</td>
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<td></td>
</tr>
</tbody>
</table>

*Note:* Shaded bands show +/- one standard deviation based on past variation.

*Source:* Preliminary November 2014 Economic Outlook database.
The strong net portfolio inflows to emerging economies could reverse

Cumulative net portfolio inflows to BRIICS excluding China

*Per cent of GDP, from Q1 2006*

*Source:* IMF Balance of Payments database; OECD National Accounts database; and OECD calculations.
Advanced economy debt levels are high and credit growth in China is rapid

Debt excluding the financial sector

*Per cent of GDP*

China: credit to non-financial private sector

*Per cent of GDP*

Source: Preliminary November 2014 Economic Outlook database; ECB; OECD Financial accounts; and BIS.
Potential growth rates could fall further

*Potential GDP growth*

*Annual average, per cent*

Source: Preliminary November 2014 OECD Economic Outlook database.
Global growth is modest, with widening differences across countries

Financial risks are rising and volatility is set to increase

Potential growth has slowed, interacting with weak demand

Weakness in the euro area is a major concern

Monetary, fiscal and structural policies must all be employed to address risks and support growth
Monetary, fiscal and structural policies need to support growth

Monetary policy needs to remain accommodative in most countries, and more aggressive QE is needed in the euro area.

Fiscal consolidation has progressed significantly, leaving room in many economies to slow the pace of adjustment.

Ambitious structural reforms are needed to boost investment, trade and job creation.

Significant efforts by G-20 countries to develop comprehensive growth strategies for the Brisbane summit are welcome.
JAPAN
# Short-term economic projections

**Percentage changes**

<table>
<thead>
<tr>
<th>Demand and output (volumes)</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.5</td>
<td>1.5</td>
<td>0.4</td>
<td>0.8</td>
<td>1.0</td>
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<tr>
<td>Consumption</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Private</td>
<td>2.0</td>
<td>2.0</td>
<td>-0.9</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Government</td>
<td>1.7</td>
<td>2.0</td>
<td>0.3</td>
<td>0.3</td>
<td>0.5</td>
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<tr>
<td>Gross fixed investment</td>
<td>3.5</td>
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<td>3.7</td>
<td>-1.0</td>
<td>-0.5</td>
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<td>Public</td>
<td>3.1</td>
<td>11.3</td>
<td>4.8</td>
<td>-6.8</td>
<td>-17.7</td>
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<td>Residential</td>
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<td>8.8</td>
<td>-4.0</td>
<td>-1.5</td>
<td>3.6</td>
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<tr>
<td>Business</td>
<td>3.7</td>
<td>-1.5</td>
<td>5.1</td>
<td>1.0</td>
<td>4.0</td>
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<tr>
<td>Final domestic demand</td>
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<td>2.1</td>
<td>0.3</td>
<td>0.4</td>
<td>0.7</td>
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<tr>
<td>Stockbuilding</td>
<td>0.1</td>
<td>-0.3</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Total domestic demand</td>
<td>2.3</td>
<td>1.9</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>-0.2</td>
<td>1.6</td>
<td>7.8</td>
<td>6.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>5.3</td>
<td>3.4</td>
<td>6.9</td>
<td>3.2</td>
<td>4.6</td>
</tr>
<tr>
<td>Net exports</td>
<td>-0.9</td>
<td>-0.3</td>
<td>-0.1</td>
<td>0.4</td>
<td>0.3</td>
</tr>
</tbody>
</table>

1. Excluding the second tax hike, which was delayed to 2017.
2. Including public corporations.
3. Contribution to GDP growth.

*Source: OECD Analytical Database and OECD estimates and projections.*
Business confidence remains high in the Tankan Survey¹

1. Diffusion index of "favourable" minus "unfavourable" conditions. Large enterprises are capitalised at a billion yen or more and small enterprises at between 20 million yen and a 100 million yen. Numbers for the fourth quarter are companies' projections made in September 2014.

Source: Bank of Japan.
Nominal wage increases have not kept pace with inflation

Year-on-year per cent changes¹

Nominal wage increases have not kept pace with inflation. Year-on-year per cent changes

1. Total cash earnings (including bonuses). Data are three-month moving averages.
### Short-term economic projections

#### In per cent

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP deflator</td>
<td>-0.9</td>
<td>0.6</td>
<td>1.6</td>
<td>1.7</td>
<td>1.4</td>
</tr>
<tr>
<td>CPI&lt;sup&gt;1&lt;/sup&gt;</td>
<td>0.0</td>
<td>0.4</td>
<td>2.9</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Core CPI&lt;sup&gt;1,2&lt;/sup&gt;</td>
<td>-0.5</td>
<td>-0.1</td>
<td>1.9</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>4.3</td>
<td>4.0</td>
<td>3.6</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Output gap</td>
<td>-0.7</td>
<td>0.2</td>
<td>-0.2</td>
<td>-0.2</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Memorandum items:**

| World trade growth                 | 3.0   | 3.3   | 3.0   | 4.5   | 5.5   |
| Net government lending (% of GDP)  | -8.7  | -9.0  | -8.3  | -7.3  | -6.3  |
| Net primary balance (% of GDP)     | -7.8  | -8.1  | -7.2  | -6.2  | -5.4  |
| Gross debt (% of GDP)              | 216.5 | 224.2 | 230.0 | 232.8 | 236.7 |
| Net debt (% of GDP)                | 129.4 | 137.2 | 142.9 | 146.8 | 149.6 |
| Household saving ratio (%)         | 1.3   | 0.4   | 1.8   | 1.9   | 1.8   |
| Current account (% of GDP)         | 1.1   | 0.7   | 0.1   | 0.9   | 1.4   |

1. Including the impact of the consumption tax hike from 5% to 8% in April 2014.
2. The core CPI is the OECD definition, which excludes both food and energy.

Source: OECD Analytical Database and OECD estimates and projections.
The first arrow of Abenomics: bold monetary policy with Quantitative and Qualitative Easing

QQE has boosted inflation expectations and pushed underlying inflation into positive territory in late 2013.

However, inflation, which had risen to 1½ per cent (year-on-year) prior to the tax hike, slowed to around 1% in late 2014 (excluding the tax hike).

The BoJ’s “quantitative and qualitative monetary easing” is now increasing the monetary base at an annual pace of about 80 trillion yen per year.

Source: Datastream; National Central Banks.
Inflation has fallen since early 2014

Year-on-year percentage change

Source: OECD Economic Outlook 96 and Bank of Japan.
The second arrow of Abenomics: flexible fiscal policy

Improvement in underlying primary balance
Per cent of potential output

Despite the 2014 tax hike, there was no fiscal consolidation over 2010-14, in part due to the 2011 Great East Japan earthquake.

A small amount of consolidation is expected in 2015-16, due to spending cuts.

Japan must continue to address its fiscal challenges.

Source: Preliminary November 2014 Economic Outlook database.
Total spending and social welfare spending in Japan

Source: OECD Analytical Database.
Japan's public debt has soared during the past 20 years¹
Primary budget balance on a general government basis

1. OECD estimates for 2014 and projections for 2015-16.
Source: OECD Economic Outlook 96.
Japan's public debt has soared during the past 20 years¹
Gross public debt on a general government basis

1. OECD estimates for 2014 and projections for 2015-16.
Source: OECD Economic Outlook 96.
The third arrow of Abenomics: a growth strategy that encourages private-sector investment
Living standards in Japan have fallen relative to the top half of the OECD.

1. Per capita GDP using 2013 PPP exchange rates.
2. GDP per hour of labour input.
3. Total number of hours worked per capita.

Source: OECD Going for Growth Database.
Japan’s share of world exports has been falling during the past 20 years.
Japan’s potential GDP growth rate has fallen sharply since 2012

1. The 2% target was set in 2009 and maintained by subsequent governments.
2. Average annual GDP growth in real terms in Japan between 1990 and 2012.

Source: OECD Potential Output Database.
Average labour productivity growth\(^1\) in Japan is already near the OECD average

Average annual growth rate over 2000-13

---

1. Real GDP divided by total employment (including self-employed).

Source: OECD Economic Outlook Database.
The level of total factor productivity in non-manufacturing has declined since 1991.

Source: Japan Industrial Productivity Database 2013.
Investment in knowledge-based capital
Per cent of GDP in OECD countries, 2010 or latest year available

Source: Corrado et al. (2012).
1. Annual average growth rate from 1995 to 2007 of output per hour worked.

Source: Corrado et al. (2012).
Policies to boost output growth toward the government’s 2% target

1. Improve framework conditions
   - Corporate governance
   - Product market regulations
   - International competition (FDI, EPAs, TPP)
   - Labour mobility
Japan lags behind frontrunners in overall product market regulation in 2013

The OECD Indicators of Product Market Regulation are a comprehensive and internationally-comparable set of indicators that measure the degree to which policies promote or inhibit competition. Research shows that the indicators have a robust link to performance. The indicator, based on more than 700 questions, ranges from zero (most relaxed) to three (most stringent).

The number of bankruptcies in Japan is falling

The number of bankruptcies in Japan has fallen since 2008 despite two crises.

Credit guarantees for SMEs in Japan are exceptionally high

Stock of guarantees as a per cent of GDP in 2010

1. The OECD Indicators of Product Market Regulation are a comprehensive and internationally-comparable set of indicators that measure the degree to which policies promote or inhibit competition. Research shows that the indicators have a robust link to performance. The indicator, based on more than 700 questions, ranges from zero (most relaxed) to three (most stringent).

Japan’s stock of inward and outward investment is low in 2013

Source: OECD Foreign Investment Database.
It is important to address the factors limiting inflows of foreign direct investment

1. *Low level of corporate mergers and acquisitions (M&As):* the 2007 law to facilitate “triangular mergers” has not been effective.

2. *The tax system:* a high corporate income tax rate and the short “net operating loss period” discourages FDI inflows.

3. *Corporate governance:* Japan’s corporate governance framework lags behind global standards and the lack of clarity and accountability discourages potential investors.

4. *The regulatory environment:* Unclear administrative practices and unique and rigid standards for certifying consumer goods in Japan are a deterrent to FDI inflows.

5. *Employment:* Japan needs to enhance the flexibility of employment as the lack of mid-career mobility makes it difficult for foreign firms in Japan to secure experienced workers.

6. *Entry of foreign workers:* Given that FDI is also facilitated by the movement of people, rules that restrict the entry of workers can discourage foreign investors.
The Producer Support Estimate\(^1\) for Japan is the second highest in the OECD

1. Producer support is the annual monetary value of gross transfers from consumers and taxpayers arising from policies that support agriculture, regardless of their nature, as a per cent of the value of gross farm receipts. Countries are ranked according to their 2011-13 levels. Chile, Israel and Slovenia excluded from the OECD total in 1986-88. The EU figure is the EU12 for 1986-88 and the EU27 for 2011-13.

Source: OECD PSE/CSE Database 2014.
Japan’s farm workforce is elderly
The age distribution of rice farmers in 2010

Source: Ministry of Agriculture, Forestry and Fisheries (2010).
Total factor productivity growth and business R&D intensity
1995-2010

Source: OECD Analytical Database; OECD Long-term Scenario Database; OECD Main Science and Technology Indicators.
2. Improve the innovation framework

- Upgrade the quality of universities
- Expand international linkages
- Enhance the role of universities
Comparative performance of national science and innovation systems in 2014

Note: Normalised index of performance relative to the median values in the OECD, which are set at 100. The top performer is set at 200 and the lowest at zero. The fifth-highest performer in the case of the “Top 500 universities” had a score of 137 relative to the OECD median, while the fifth lowest had a score of 5. Japan, with a score of 43, was in the middle range.

Flows of R&D funds in 2011

### A. R&D funding

Allocation of R&D spending by sector performing it

<table>
<thead>
<tr>
<th>Share of total R&amp;D spending</th>
<th>Government</th>
<th>Universities</th>
<th>Business enterprises</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universities</td>
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<tr>
<td>Foreign sources</td>
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</tbody>
</table>

### B. Sector performing R&D

Funding source for R&D performed

<table>
<thead>
<tr>
<th>Share of total R&amp;D performed</th>
<th>Government</th>
<th>Universities</th>
<th>Business enterprises</th>
<th>Foreign sources</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
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<td></td>
<td></td>
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<tr>
<td>Universities</td>
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<td></td>
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<tr>
<td>Business enterprises</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. Includes private non-profit institutes.

Source: OECD R&D Statistics Database.
Increase in R&D performed in universities in Japan has lagged behind other OECD countries

The increase between 2000 and 2012 (or latest year) in real terms

Source: OECD R&D Statistics Database.
The share of non-regular workers is rising¹

1. Data are for February for each year through 2001 and for the first quarter since 2002. 
*Source: Ministry of Internal Affairs and Communications, Labour Force Survey.*
There are large income gaps between regular and non-regular workers

The fertility rate has fallen while female labour force participation has risen

\[ \ln(Y) = 6.3 - 1.4 \ln(X) \]

\[ R^2 = 0.6 \]

The employment ratio for women with university degrees\textsuperscript{1} in 2012

\begin{figure}
\centering
\includegraphics[width=\textwidth]{chart}
\caption{The employment ratio for women with university degrees in 2012 by country.}
\end{figure}

\textsuperscript{1} Including other types of tertiary education.

Increasing female employment can help avoid looming labour supply shortages

Projected size of the labour force in thousands of people

1. Based on population projections for persons aged 15-64 years and assuming that the labor force participation rate for men remains constant from 2011 to 2030. 
