This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Executive summary

- Unemployment is low but productivity growth has weakened
- Demographic ageing and a large refugee inflow pose challenges
- Investment is subdued and key social infrastructure needs to be developed further

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EXECUTIVE SUMMARY

Unemployment is low but productivity growth has weakened

The economy has steadily recovered from the 2008 global crisis and, thanks to past reforms, the labour market has proved strong. Labour productivity growth has weakened and productivity is low in services. Germany has high material living standards, low income inequality and scores well in most dimensions of well-being. Despite substantial progress, there still are gaps in childcare and full-day schooling. Disincentives to work full-time in the tax system also contribute to low earnings of women as many work part-time. In recent years many low-income households have not benefited from economic growth and investment.

Demographic ageing and a large refugee inflow pose challenges

Labour supply is set to shrink faster than the population as a consequence of ageing. This can be offset by improving employment opportunities for women and older workers. Immigration, including the recent inflow of refugees, will also add to the labour force, but their integration requires additional efforts and spending which may exceed the currently available fiscal room. Some well-being outcomes decline with age, and therefore better prevention of health risks could raise income and well-being. Further reforms in the pension system are needed to ensure its long-term sustainability.

Investment is subdued and key social infrastructure needs to be developed further

Investment and productivity growth are held back by weak demand growth in emerging economies and also the euro area as well as restrictive regulation in services. Public investment has been low, although recently the government has provided more funds to improve maintenance of transport infrastructure. There is scope to improve efficiency in the procurement and management of public investment projects. Investment in formal childcare has increased. However, provision of childcare, early childhood education and full-day primary schooling still fall short of needs.
Main findings and key recommendations

| Integrate refugees and migrants to limit fiscal costs and improve their productivity |
|---|---|
| The inflow of refugees is large. They lack German language and recognised professional skills. | Improve training and the recognition of immigrants’ skills. |
| Most asylum-seekers can only be hired within the first 15 months if a labour market test shows that no suitable EU national is available. | Ease labour market testing requirements for asylum seekers who are judged likely to stay and include them in active labour market programmes. |

| Strengthen investment and productivity |
|---|---|
| Regulation barriers, such as rules on exclusive activities, hamper competition in some services. | Reduce restrictive regulation in the professional services. |
| Regulatory biases and government ownership in business sector activities hold back the reallocation of resources, hampering investment in knowledge-based capital. | Improve governance or privatise government stakes in the Landesbanken, car manufacturing, telecommunications and postal services. |
| Government investment remains weak, especially in poor municipalities. | The administration should strengthen the analysis of the economy-wide impact of regulation. |
| Lower hours worked by women reduce well-being and economic activity. Income earned by secondary earners faces high taxation. | Lower the tax burden on the second earner in personal income taxation for example by introducing a separate tax-free allowance for second earners. |
| Exemptions from energy taxation and tax advantages for environmentally harmful activity weaken environmental policy. | Gradually adjust energy tax rates according to carbon intensity. |
| Enroll all individuals in occupational pension schemes by default, allowing them to opt out. | Introduce taxation of NOx emissions. |

| Address challenges posed by demographic change |
|---|---|
| Some aspects of the pension system penalise those who choose to work beyond 65 years of age or combine employment with the receipt of an old-age pension, holding back incomes and well-being. | Raise the pension premium for starting to draw old-age pensions later in life and do not reduce pensions for old-age pensioners who work. |
| The generosity of the public pensions is falling and coverage of private supplementary pensions is low, especially among low-income households. | Enroll all individuals in occupational pension schemes by default, allowing them to opt out. |
| Rising life expectancy will raise pension spending. | Index the pensionable age to increases in life expectancy. |
Assessment and recommendations

- Economic growth has been modest and business investment is recovering slowly
- Euro area monetary conditions have eased further
- Risks from the low interest rate environment have so far been limited
- The current account surplus remains large
- The labour market has tightened, but a large gender pay gap and rising immigration pose challenges
- Fiscal policy must address several challenges
- Raising investment and productivity
- Well-being and demographic change
Economic growth has rebounded quickly since the global financial crisis of 2009. A competitive manufacturing sector and euro depreciation have driven strong export performance. Reflecting past labour market reforms, the unemployment rate has continued to fall and is now the lowest in the European Union (Figure 1, Panels A, B and C). Private household demand has risen on the back of a robust labour market and the recent

Figure 1. **Key economic indicators**

1. Euro area countries which are OECD members.
2. Includes Denmark, Sweden, Switzerland and the United Kingdom. They are weighted on the basis of GDP at 2011 purchasing power parities.
3. Growth in exports relative to the growth of the country’s export markets.
4. Includes Denmark, Sweden, Switzerland and the United Kingdom.
5. Includes Denmark, Sweden, Switzerland and the United Kingdom. They are weighted on the basis of investment spending in 2011.

Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), and OECD calculations based on OECD Economic Outlook: Statistics and Projections (database) and on Main Economic Indicators Database.

StatLink: [http://dx.doi.org/10.1787/88893345313](http://dx.doi.org/10.1787/88893345313)
introduction of a minimum wage, which significantly increased the benefits of working at the lower end of the labour market. Decisive action by the European Central Bank (ECB) provided monetary support and helped to stabilise the euro area. Germany’s status as a safe haven for financial investors has also supported activity while euro area membership prevented appreciation vis-à-vis most key European trading partners. An effective fiscal rule resulting in a solid fiscal position and overall competition-friendly product market regulation are key factors which sustain a high level of productivity and confidence.

However, growth and business investment have recently been weaker than in high income countries outside the euro area (Figure 1, Panels A and D). Labour productivity growth has weakened and has been low in the services (Figure 2). Stronger productivity growth will be critical to ensure rising living standards in the medium and long-term, as the labour force is set to fall more strongly than the population as a result of ageing. The recent large inflow of refugees may help damp the impact of demographic change on productivity growth.

**Figure 2. Productivity growth has weakened and is relatively low in the services**

A. Gross value added per hour worked, constant prices

B. Ratio of value-added per hour worked in business sector services relative to manufacturing, 2014


http://dx.doi.org/10.1787/88893345329
labour supply in the medium term, but comprehensive policies will be needed to integrate the newly arrived immigrants into German society and the labour market. A large current account surplus contributes to global imbalances.

Well-being outcomes for Germany are above the OECD average and particularly strong for social connections, work-life balance, education and environmental quality (Figure 3). However, well-being evolves less favourably with age than in other OECD countries (Unger and Schulze, 2013; Schöllgen et al., 2010; Wetzel, Huxhold and Tesch-Römer, 2015). Education outcomes continue to depend strongly on socio-economic background, although less so than in the past (OECD Economic Survey of Germany 2014, OECD, 2014a). Life expectancy and subjective health outcomes vary considerably with socio-economic background and inequality in well-being outcomes tends to increase with age. While income inequality is one of the lowest among large OECD economies, disposable incomes of the poorest households have not grown in real terms over the past decade, despite lower unemployment.

Figure 3. Well-being in Germany

Note: Each well-being dimension is measured by one to four indicators from the OECD Better Life indicator set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 according to the following formula: (indicator value – minimum value)/(maximum value – minimum value).
Source: OECD (2015), OECD Better Life Index.

Against this backdrop the key messages of the Survey are:

- Effective integration policies for immigrants are critical for Germany to meet its humanitarian commitments, improve economic outcomes of the refugee inflows and ensure social cohesion.
- Higher investment will be key to raise productivity and living standards. There is particular scope to raise productivity in services through regulatory reform. Reforms to foster investment in knowledge-based capital and unleash the potential of key services
and would also boost competitiveness of manufacturing, fostering the transition to "Industry 4.0", which requires close integration of manufacturing and services. Investing in key education and social services would enhance inclusive growth.

- Much potential lies in removing barriers for women to develop their professional careers. There is also scope to further remove barriers to employment and well-being of older workers. Indexing the statutory retirement age would improve the sustainability of the pension system.

**Economic growth has been modest and business investment is recovering slowly**

Economic growth in 2015 was sustained by exports and private household demand (Table 1). Export performance has been impressive over the past 10 years, keeping the share of industry in domestic value-added at an unusually high level of 22%. Exporters continued to gain substantial market shares in part owing to the depreciation of the euro. Exports of transport, electronic and optical equipment as well as chemicals, for which Germany has a longstanding comparative advantage, were particularly strong. Empirical evidence suggests that decentralised management, with significant worker involvement, has provided incentives for product improvements, helping exporters to compete on quality, while offshoring production to low wage countries has reduced costs of intermediate inputs (Marin et al., 2015). However, weakening growth in emerging economies has started to weigh on exports.

Demand is therefore shifting from external sources to private households, which are projected to remain the main driving force for growth in the near-term (Table 1). Household consumption will be supported by strong real wage growth, as cheap oil has damped consumer prices, while a tight labour market and the introduction of the national minimum wage have pushed up nominal wages. Demand for housing continues to rise, pushing up housing rents and prices in urban centres and spurring construction. Loose monetary conditions and expansionary fiscal policy, in part reflecting government spending for the needs of newly arrived refugees, provide further stimulus to domestic demand. Wage growth has raised unit labour costs somewhat, but price competitiveness remains strong (Figure 4) and inflation is still very low. Mortgage lending to households has picked up somewhat, while lending to non-financial businesses remains subdued.

Overall, GDP growth is projected to remain solid in 2016 and 2017, as domestic consumption remains strong and the demand for German exports in the euro area recovers and compensates emerging economies' weakness. The newly arrived humanitarian immigrants will start looking for jobs only gradually and immigration is assumed to diminish. The cyclical unemployment rate is expected to remain low, but the natural rate will rise because of the inflow of large numbers of refugees with a long distance from employability. Consumer price inflation is projected to rise, as wage growth has picked up, there is little remaining economic slack, and as the effect of the fall in oil prices will wear off (the projection assumes, as a technical matter, that oil prices and exchange rates remain constant going forward). Weaker export growth, robust domestic demand growth and lower net foreign capital income are projected to reduce the current account surplus somewhat.

A sharper slowdown of activity in emerging markets and renewed weakness of activity in the euro area could weaken exports more strongly than projected, damp investment, and spill over to consumer confidence. The German economy depends more on world trade than
most because of the high weight of exports in GDP and the relatively high share of investment goods exported to emerging economies. Other potential shocks could result from a further increase in immigration or turbulence in the euro area (Box 1). On the other hand, steps to strengthen confidence in the euro area would boost the attractiveness of Germany as a location to invest. Adopting policies to deal with domestic long-term challenges, notably to deal with population ageing, could also boost investment in the near term.

Table 1. Macroeconomic indicators and projections
Annual percentage change in volume terms unless specified otherwise

<table>
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<tr>
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<tbody>
<tr>
<td>Working-day adjusted GDP</td>
<td>2 756</td>
<td>0.4</td>
<td>1.6</td>
<td>1.4</td>
<td>1.3</td>
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<td>Private consumption</td>
<td>1 532</td>
<td>0.8</td>
<td>1.0</td>
<td>1.9</td>
<td>1.8</td>
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<tr>
<td>Government consumption</td>
<td>523</td>
<td>0.8</td>
<td>1.7</td>
<td>2.4</td>
<td>2.9</td>
<td>2.3</td>
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<td>Gross fixed capital formation</td>
<td>557</td>
<td>-1.3</td>
<td>3.5</td>
<td>1.7</td>
<td>3.1</td>
<td>3.6</td>
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<tr>
<td>Housing</td>
<td>160</td>
<td>-0.9</td>
<td>3.3</td>
<td>1.0</td>
<td>2.8</td>
<td>3.1</td>
</tr>
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<td>Business</td>
<td>335</td>
<td>-1.7</td>
<td>4.5</td>
<td>1.9</td>
<td>2.5</td>
<td>4.0</td>
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<tr>
<td>Government</td>
<td>62</td>
<td>0.3</td>
<td>-1.6</td>
<td>1.8</td>
<td>7.7</td>
<td>3.1</td>
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<td>Final domestic demand</td>
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<td>1.7</td>
<td>1.9</td>
<td>2.3</td>
<td>2.4</td>
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<td>Stockbuilding2</td>
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<td>-0.3</td>
<td>-0.5</td>
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<tr>
<td>Total domestic demand</td>
<td>2 888</td>
<td>0.9</td>
<td>1.3</td>
<td>1.4</td>
<td>2.4</td>
<td>2.4</td>
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<td>Exports of goods and services</td>
<td>1 270</td>
<td>1.8</td>
<td>3.9</td>
<td>4.8</td>
<td>1.6</td>
<td>3.6</td>
</tr>
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<td>Imports of goods and services</td>
<td>1 101</td>
<td>3.2</td>
<td>3.7</td>
<td>5.4</td>
<td>4.2</td>
<td>5.6</td>
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<tr>
<td>Net exports2</td>
<td>169</td>
<td>-0.5</td>
<td>0.3</td>
<td>0.1</td>
<td>-0.9</td>
<td>-0.5</td>
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Other indicators (growth rates, unless specified)

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<tr>
<td>GDP without working day adjustment</td>
<td>2 755</td>
<td>0.3</td>
<td>1.6</td>
<td>1.7</td>
<td>1.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Potential GDP</td>
<td>..</td>
<td>1.1</td>
<td>1.1</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Output gap4</td>
<td>..</td>
<td>-1.4</td>
<td>-0.9</td>
<td>-0.8</td>
<td>-0.8</td>
<td>-0.4</td>
</tr>
<tr>
<td>Employment</td>
<td>..</td>
<td>1.0</td>
<td>0.9</td>
<td>0.6</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Unemployment rate5</td>
<td>..</td>
<td>5.2</td>
<td>5.0</td>
<td>4.6</td>
<td>4.6</td>
<td>4.7</td>
</tr>
<tr>
<td>GDP deflator</td>
<td>..</td>
<td>2.1</td>
<td>1.7</td>
<td>2.1</td>
<td>1.5</td>
<td>1.4</td>
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<tr>
<td>Harmonised index of consumer prices</td>
<td>..</td>
<td>1.6</td>
<td>0.8</td>
<td>0.1</td>
<td>0.5</td>
<td>1.4</td>
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<td>Core HICP</td>
<td>..</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
<td>1.4</td>
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<tr>
<td>Household saving ratio, net3, 6</td>
<td>..</td>
<td>9.1</td>
<td>9.5</td>
<td>9.7</td>
<td>9.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Export performance3</td>
<td>..</td>
<td>-1.0</td>
<td>0.9</td>
<td>2.0</td>
<td>..</td>
<td>..</td>
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<tr>
<td>Current account balance3, 7</td>
<td>..</td>
<td>6.5</td>
<td>7.4</td>
<td>8.3</td>
<td>8.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Government financial balance3, 7</td>
<td>..</td>
<td>-0.1</td>
<td>0.3</td>
<td>0.6</td>
<td>0.2</td>
<td>0.4</td>
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<tr>
<td>General government underlying balance</td>
<td>..</td>
<td>0.4</td>
<td>0.7</td>
<td>0.8</td>
<td>0.6</td>
<td>0.6</td>
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<tr>
<td>Underlying government primary balance4</td>
<td>..</td>
<td>2.0</td>
<td>2.1</td>
<td>2.0</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Government gross debt (Maastricht definition)3, 7</td>
<td>2 057</td>
<td>77.2</td>
<td>74.8</td>
<td>71.5</td>
<td>68.6</td>
<td>66.0</td>
</tr>
<tr>
<td>Government gross debt (national accounts definition)3, 7</td>
<td>2 146</td>
<td>81.4</td>
<td>82.1</td>
<td>78.8</td>
<td>75.9</td>
<td>73.3</td>
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<tr>
<td>Government net debt3, 7, 8</td>
<td>1 232</td>
<td>45.1</td>
<td>45.9</td>
<td>43.7</td>
<td>42.4</td>
<td>40.8</td>
</tr>
<tr>
<td>Three-month money market rate, average</td>
<td>..</td>
<td>0.2</td>
<td>0.2</td>
<td>0.0</td>
<td>-0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Ten-year government bond yield, average</td>
<td>..</td>
<td>1.6</td>
<td>1.2</td>
<td>0.5</td>
<td>0.5</td>
<td>0.8</td>
</tr>
</tbody>
</table>

1. OECD projections.
2. Contribution to changes in real GDP.
3. OECD projections for 2015.
4. As a percentage of potential GDP.
5. As a percentage of the labour force.
6. As a percentage of household disposable income.
7. As a percentage of GDP.
8. Gross debt (national accounts definition) minus assets.
**Figure 4. Inflation remains low and competitiveness strong**

- **A. Inflation and unit labour costs**
  - Unit labour costs¹ (right axis)
  - Headline inflation² (left axis)
  - Core inflation² (left axis)

- **B. Price competitiveness with respect to euro area and non-euro area economies**
  - Prices of manufacturing in Germany relative to trading partners³, average since 1991 = 100
  - Euro area trading partners⁴
  - Trading partners outside the euro area

---

1. Per unit of turnover at constant prices on an hourly basis.
2. Harmonised consumer price index (HICP). Core HICP excludes energy, food, alcohol and tobacco.
3. Based on the deflators of manufacturing sales.

Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database) and Deutsche Bundesbank.

StatLink: http://dx.doi.org/10.1787/88893345341

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**Box 1. Shocks that might affect economic performance**

<table>
<thead>
<tr>
<th>Vulnerability</th>
<th>Possible outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro area turbulence and prolonged weak growth in the euro area</td>
<td>Financial and trade ties to other euro area countries remain substantial. The low leverage ratios in systemically important European banks could aggravate the consequences of turbulence. Weak demand in the euro area would harm exports and investment. It would also keep long-term interest rates low, with adverse consequences for household interest and pension income and risks for financial stability.</td>
</tr>
<tr>
<td>Further increase of migrant flows</td>
<td>Integrating large numbers of refugees with low qualifications and language skills will involve costs and could raise unemployment. Integration measures could fail if applied under restrictive regulatory circumstances or if there are inadequate public services, like housing, health, education and in particular active labour market policies. Fading political support for refugees and increasing tensions with other EU member states could lead to the re-introduction of border controls which will increase business costs, hitting Germany’s export oriented economy. Transit countries on the Balkans may refuse refugees at their borders, eventually leading to a new economic and humanitarian crisis with considerable contagion risks.</td>
</tr>
</tbody>
</table>
Euro area monetary conditions have eased further

While the European Central Bank kept policy rates higher than the monetary authorities of the UK and the US until 2013, its policy stance has been highly expansionary recently (Figure 5). The European Central Bank (ECB) reduced policy rates further and has engaged in unconventional measures since June 2014, including a large asset purchase programme and targeted longer-term refinancing operations (TLTROs) for banks. As a result, the Eurosystem’s balance sheet has expanded strongly. To encourage commercial banks to use the additional liquidity to boost lending, the ECB introduced negative interest rates on their deposits at the ECB. It announced an extension of its asset purchase programme by 6 months and reduced the deposit rate further below zero in December 2015.

These steps contributed to a substantial depreciation of the euro against the dollar, boosting competitiveness, including in Germany’s export-oriented economy. Credit to the private sector in the euro area has been gradually recovering. Banks have begun relaxing lending standards, in particular in countries where these standards were tight (OECD, 2015m), and lending interest rates have fallen. The impact on lending in Germany has been relatively small, in part because conditions for access to credit have been good throughout in recent years (Ifo Business Survey, 2015). Credit growth remains modest. Strong profitability and subdued business investment plans are holding back the demand for bank loans. Nevertheless, euro area monetary conditions are relatively loose for the cyclical position of the Germany economy, as economic growth and employment have been stronger than elsewhere in the euro area, and the output gap in Germany is now likely to be small.
**Risks from the low interest rate environment have so far been limited**

Easy monetary conditions do not appear to have led to excessive asset prices or lending. Increases in house prices have been broadly aligned with rising household income and rental prices (Deutsche Bundesbank, 2015a), although in some of the largest cities with highest population density housing prices have grown significantly faster than rents (Kholodilin and Michelsen, 2015). In any case, growth of lending to private households for housing purchases remains moderate (Deutsche Bundesbank, 2016b). The large internationally active banks have downsized their large exposures to derivatives, which were identified as a substantial systemic risk in the 2014 OECD Economic Survey of Germany. They have improved capital buffers, which also reduces systemic risk. The ratio of Tier 1 capital to risk-weighted assets of Germany’s banking sector is relatively high. However, the ratio of total book capital to unweighted assets remains is low (Figure 6).

![Figure 6. The capital to assets ratio remains low](http://dx.doi.org/10.1787/888933345369)

Low interest rates are primarily affecting profit margins of small and medium-sized banks which depend the most on deposits for funding. Most of these institutions will be able to withstand the strains caused by the low interest rates, as they are relatively well capitalised (Deutsche Bundesbank, 2015b). The government reformed life insurance regulation in 2014, allowing insurance companies to reduce their long-term payment commitments which they had contracted when interest rates were higher. However, the credit institutions foresee a fall of pre-tax profit by around 25% by 2019 and insurers’ resilience is uncertain should market interest rates remain low (Deutsche Bundesbank, 2015a). If interest rates stay low financial institutions may choose to take on more risk to protect returns. For example, life insurance companies have increased the share of equities in their portfolios. Low interest rates make it more difficult to expand private pension schemes, as intended by the government.
The current account surplus remains large

The current account surplus is expected to be about 8% of GDP in 2016, as lower oil prices limit the import bill and euro depreciation boosts exports. The current account surplus vis-à-vis other euro area countries has also risen since 2013 reflecting the gradual recovery of activity in the euro area (Figure 7), although it remains substantially lower than before the global economic and financial crisis. There is, however, no mono-causal explanation to the German current account surplus. There are a variety of underlying transitory factors, in particular, real exchange rate effects and low commodity prices as well as more fundamental factors such as the ongoing demographic change, the widening gap between productivity in manufacturing and services (Coricelli, Ravasan and Wörgötter, 2013) and a substantial increase in net foreign assets and related revenues. The large surplus reflects in part the reversal of the saving-investment balance in the corporate and government sectors (Figure 8). The remarkable increase in the saving-investment balance of the corporate sector reflects subdued growth in non-residential investment, which has not kept pace with higher profits. Household saving is high and has increased somewhat since the early 2000s, as households raised precautionary saving in response to low growth and high unemployment in the early half of 2000s and to reductions in public pension entitlements (Deutsche Bundesbank, 2015c).

Policies which reduce the current account surplus by strengthening domestic demand and making the services sector more attractive for investment would have positive spillovers in the context of subdued economic growth in the euro area and world-wide, supporting adjustment in deficit countries at a lower cost in terms of output foregone. Addressing the structural reform priorities set out below would not only increase Germany's potential growth but also reduce its external imbalance to some extent. This is particularly the case for policies that stimulate investment, such as regulatory reforms that reduce barriers to entry in service sectors. Removing barriers for full-time employment of women would reduce poverty risks and could thereby lower precautionary household saving. Pension reforms which lengthen working lives would also lower saving as

Figure 7. The current account surplus with countries outside the euro area has risen

Source: Deutsche Bundesbank.

StatLink © 2016 http://dx.doi.org/10.1787/88893345376
households would have more years to accumulate wealth for their retirement (Kerdrain et al., 2010). Energy tax exemptions for energy-intensive, export-oriented manufacturing firms have protected profitability (see below).

The labour market has tightened, but a large gender pay gap and rising immigration pose challenges

Employment has continued to grow, mostly in services. So far the minimum wage does not appear to have had significant negative employment effects overall, and even had a positive employment impact in sectors and regions with a high incidence of low pay. Transitions of workers from employment to unemployment appear not to have increased as a result of the minimum wage (IAB, 2016). The minimum wage appears to have led to a shift of employment towards standard employment contracts, away from minijobs, which are taxed at low rates and are not covered by unemployment insurance (BMWi, 2015).

The minimum wage now has been almost fully phased in, with exceptions in some sectors, mostly in East Germany, in which it will be phased in by end-2017. The government has introduced an independent minimum wage commission, which includes employers, trade unions and independent experts, to make recommendations about future adjustments. Its objective is to ensure employment outcomes are not harmed. The effectiveness of the minimum wage commission could also be strengthened by giving the independent experts voting rights. It is important that future evaluations take into account the impact of immigration on the supply of labour.

The gender earnings gap in Germany is large, because many women work part-time (Figure 9). It is particularly large among the highly educated. 43% of men, but only 11% of women, with a university degree earn more than twice the median income (OECD, 2012). The part-time employment rate is particularly high among young women in families with young children. In 2013 two thirds of women with children worked 30 hours a week or less (BMAS, 2015). The lack of full-day childcare and schools for young children constrains many women's

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Figure 8. The current account surplus is large
Investment-saving balances by sector and current account balance, % of GDP

Source: OECD (2015), OECD National Accounts Database.

1. Includes non-profit institutions serving households.

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labour market choices. Women who work part-time are also more limited in the choice of job, reducing their prospects for pay. Low working hours among young women undermines subsequent career and earnings prospects, even if they move to full-time jobs eventually.

The government is preparing legislation to promote equal pay conditions for men and women. If the legislation is implemented, large companies will be required to provide information on how they promote gender balance in pay and career opportunities. Each employee will have the right to be informed by their employer on equal pay for men and women. Firms will be called upon to follow prescribed steps to remove any discriminatory practices. The government has also made it easier to combine work with family life by making the parental leave regulations more flexible, allowing an easier combination of parental leave and part-time work. Recent legislation requires large listed companies to fill a minimum of 30% of posts in supervisory boards with women from 2016 onwards. These steps will increase women’s incentives to develop their careers.

Figure 9. The gender earnings gap is wide because many women work few hours

A. Gender earnings gap\(^1\) for all workers

B. Decomposition of the gender earnings gap\(^2\)

1. Defined as the difference between male and female median labour earnings (not adjusted for hours worked) divided by male median labour earnings.
2. Countries are arranged from left to right in descending order of the proportion of the unexplained gender earnings gap.

Source: OECD (2012), Closing the Gender Gap: Act Now.

StatLink: [http://dx.doi.org/10.1787/88893345391](http://dx.doi.org/10.1787/88893345391)
The ongoing expansion of childcare facilities has improved the compatibility of work and family life. Nonetheless, insufficient provision of full-day childcare and schooling as well as disincentives in the tax system continue to create barriers for full-time employment that mostly affect women (see below). Experience across OECD countries shows that a smaller gender pay gap reduces poverty risks in households markedly (OECD, 2015a). Indeed, at the household level, job loss and household reconstitutions are key triggers of poverty risk. If both partners in a couple work, resulting poverty risks are reduced.

**Integrating immigrants effectively**

Immigration has risen strongly since 2011, at first mostly on account of inflows from east and southern Europe in the context of the euro area debt and economic crisis. It accelerated sharply in 2015 with the arrival of around 1 million humanitarian immigrants seeking asylum (1.2% of the German population). This is considerably more than the number of registered asylum requests shown in Figure 10, reflecting the time lag between their arrival and the application for asylum. In the first half of 2015, 30% of asylum seekers were youth or children while 50% are adults below 35 years. Most asylum seekers are from the Middle East and east Africa, and are expected to stay. But they are getting jobs only slowly.

Figure 10. **The number of immigrants and registered asylum seekers has risen**

In response to the large inflow of asylum seekers in 2015 the government has undertaken a major logistical effort to provide for basic needs and housing. It is also accelerating administrative procedures to clarify asylum seekers’ status and is focussing support on those who can be expected to stay. The asylum process takes 5 months on average in Germany, less than in many countries, and the German government is reducing the average duration further (BAMF, 2015). In late 2014, Germany lowered barriers to labour market entry for asylum seekers. The agency dealing with asylum applications and integration issues has been linked more closely to the federal job agency and both are increasing staff. The government has taken steps to take stock of immigrants’ skills, expand training opportunities and improve access to the education system.
Integration of immigrants in the labour market and in the education system has improved. The unemployment rate for immigrants has fallen markedly over the past 10 years (Figure 11). Nonetheless, scope to improve labour market integration remains. Unemployment gaps between natives and immigrants are close to the OECD average but still larger than in best-performing OECD countries. Gaps in PISA test scores between immigrant and native youth have also decreased substantially, but remain relatively large (Figure 12). Children raised in Germany but with immigrant parents are eligible to dual citizenship, easing their social integration. Measures have been taken to attract qualified immigrants, including through residence permits for highly-skilled workers and for workers with qualifications that are in short supply. Certification of foreign qualifications has also been improved.

To ensure bigger economic benefits from immigration, for example through higher productivity and better attachment to the labour market, and thereby lower long-term budgetary costs of benefit dependency, the refugees need to be integrated quickly. This

Figure 11. The unemployment rate has fallen, especially for immigrants
Percentage of labour force (15-64 years old)

Source: OECD (2015), Indicators of Immigrant Integration 2015: Settling In.
requires upfront spending, for which the government has appropriately budgeted substantial resources (see below). Experience across OECD countries suggests that the following policies are important to improve their labour market prospects (OECD, 2016):

- Germany has improved access of asylum seekers to the labour market. For example labour market testing has been abolished for some asylum seekers, integration and language courses have been opened to them and measures to assess qualifications and to improve skills have been introduced. However, most asylum-seekers can only be employed in the first 15 months after requesting asylum if no suitable EU national is available to take the post. This also applies to asylum-seekers with a high probability of staying in Germany durably. Moreover, a waiting period of 15 months applies for employment by a temporary work agency with exemptions only for high-skilled and shortage occupations. These barriers should be lowered.

- Notwithstanding recent efforts to make recognition of formal skills easier for immigrants, regulations for the recognition of formal skills differ by Land and the process remains costly for applicants. If immigrants are not granted recognition in the form of a degree or permission to perform the job they trained for, they should get access to training to gain the missing qualifications, ideally on the job (OECD, 2014e). Training measures are for example provided by the nationwide Network “Integration through Qualification (IQ)”. However, active labour market policies, upskilling opportunities and the provision of housing for vulnerable low income households should be stepped up.

Experience with past immigration waves (Jean et al., 2007) shows that immigration reinforces the need for policies which keep labour markets and product markets open to entry. Less restrictive entry regulation in some services, notably the crafts, would raise the economic benefits of immigration and steps to facilitate firm creation, for example by improving access of all self-employed to low-cost public health insurance, would also help (OECD/European Union, 2013; OECD, 2014a). The share of immigrants in public sector jobs is low. Public employment could be opened further to non-EU nationals.
Improvements in the education system help to integrate all children of families, including immigrant children (OECD, 2015g). Support for students with weak socio-economic background in education needs to be raised (OECD, 2014a). Refugee children and youth should be included quickly within the regular compulsory education system to avoid segregation and the standard curriculum should be supplemented with German language training. Families with weak socio-economic status and immigration background should be encouraged to make use of formal childcare and early childhood education for their young children, including with financial support (OECD, 2014e; OECD, 2015g).

**Fiscal policy must address several challenges**

Germany's budgets are governed by top-down and multi-year budgeting (OECD, 2014b). They are bound by a structural general government deficit limit of 0.5% agreed with the European Union. According to national constitutional rules, a structural deficit limit applies to the federal government and, from 2020 onwards, balanced budget rules will apply to Länder governments.

Strong budget balances in recent years, in part reflecting low interest rates on government debt, and the sale of financial assets acquired from banks during the global financial crisis have reduced government debt to 71% of GDP. However, without reforms to the pension system, public pension expenditure is projected to increase by at least 2½ per cent of GDP between 2013 and 2060 (Federal Ministry of Finance, 2016), which would weaken the sustainability of government finances. Indexing the pensionable age to life expectancy would improve the sustainability of government finances.

Spending to receive and integrate immigrants is expected to increase by ¼ per cent of GDP in each of 2016 and 2017. Spending for child benefits and child tax allowances and long-term care benefits rises (by 0.2% of GDP). Government investment spending for transport infrastructure, broadband networks, energy efficiency, urban renewal, childcare facilities, universities and other research institutions also increases (by 0.1% of GDP). The federal government has also made higher transfers to local governments for investment and plans to create a long-distance road infrastructure corporation, to which it has assigned the revenues of road use charges.

Under EU rules the fiscal room for the general government is projected to amount to about ½ per cent of GDP in 2016. If there is also room under the national rules this could be used to finance additional short-term spending needs. Chief among these is spending to receive and integrate immigrants. Further spending priorities include filling remaining gaps in the provision of early childhood education and care, full-day primary schooling and transport infrastructure.

**Reforming the tax system**

The labour tax wedge in Germany is higher than in many OECD economies (Figure 13). Public health and long-term care spending is mostly funded from social security contributions on wage income, and this spending will rise as the population ages and as a result of technological progress in health care. As argued in previous Economic Surveys (e.g. OECD, 2014a) the tax burden could be shifted towards real estate and consumption, for example by updating valuation of real estate and by eliminating exemptions and lower tax rates in the VAT system.
The tax system features disincentives for full-time employment of second earners in dual-earner couples. In Germany, in comparison to other OECD countries, the tax burden on household labour income rises strongly when a second person takes up employment (Figure 14). This reflects joint taxation of couples and free health insurance for married spouses as well as the progressive income tax schedule. To avoid the higher marginal tax, second earners (mostly women) have incentives to take up part-time employment in the

Figure 13. The labour tax wedge is high
Income tax plus employee and employer contributions less cash benefits, 2014

Figure 14. Difference in the average tax wedge between two- and one-earner families in 2014

Note: The bars show the difference between the tax wedge of a two- and a one-earner family. The main earner earns the average earnings and the secondary earner earns 67% of the average earnings of a full-time worker in a family of a married couple with two children. The tax wedge is the sum of personal income tax, employee plus employer social security contributions, minus benefits as a percentage of labour costs.

context of a minijob, which is almost fully exempt from tax for income up to EUR 450 per month. Indeed, 20% of women only work on a minijob and women account for over 60% of all minijobbers. Eliminating these disincentives would remove significant barriers to women participating more fully in the labour market and to pursuing their careers. Such steps would raise women’s hours worked substantially (Bach et al., 2011; Bonin et al., 2013; Böhmer et al., 2014).

Replacing the joint assessment of couples by separate assessment of each individual would eliminate the difference in the effective tax burden between the first and the second earner. However this reform is not compatible with the constitution. Incentives to supply labour for the second earner could be improved in other ways. For example, a separate tax-free allowance for second earners would reduce the tax wedge on the second earner, and is thus a second best alternative worth consideration. Health insurance contributions could be assessed on the basis of the number of adults who are insured. For example, in Switzerland, adults pay a lump sum fee for compulsory health insurance and low-income households receive a transfer from the government to cover for the full or for part of the fees, depending on income.

Recent evaluations show that the general child cash benefit (Kindergeld), which does not depend on household income, has a small effect in lowering income poverty of families, relative to its substantial budgetary cost (1.1% of GDP, Bonin et al., 2013). Families in which the parents’ income is high enough only to cover their own basic needs, but not those of their children, are eligible to a child benefit supplement (Kinderzuschlag). Its budgetary cost is small (less than 0.1% of GDP). It has proven effective in lowering poverty of families with children and has little impact on labour supply. The income tax allowances for families with children lower the tax burden, but widen the gap in the tax wedge between the first and the second earner, with little overall impact on labour supply or poverty reduction. Higher investment in childcare and early childhood education facilities as well as full-day schooling by contrast have proven the most efficient in reducing poverty. Moreover, such investment has a high return in terms of better education outcomes and reducing the disincentives women face when they consider supplying market labour.

**Raising investment and productivity**

The government and businesses have taken little advantage of low interest rates to boost investment, despite sound government finances and strong profitability. Non-residential investment spending as a share of GDP is modest (Figure 15). The growth of the capital stock has slowed and appears to be weaker than in most high income countries (OECD, 2015c, Chapter 1). Relative to value-added, over the past 20 years business services account for most of the decline in non-residential business investment. The subdued growth in investment can slow the replacement of old vintages of capital goods, which may constrain long-run competitiveness as new technologies are often embodied in new capital goods.

Weak non-residential investment does not appear to reflect a shift towards intangible forms of productive capital (“knowledge-based capital”, KBC). While business expenditure in R&D in Germany is high compared to other OECD countries, investment in KBC, which also includes spending on other intangible assets, such as other intellectual property, software and management skills, is lower than in leading high-income OECD economies (Figure 16) and has grown little over time.
Knowledge-based capital (KBC) is a key determinant of long-term productivity growth. It has been estimated to account for one-fifth to one-third of labour productivity growth in the market sector of the US and EU economies (Corrado et al., 2013). Investment in KBC can boost productivity especially strongly in countries close to the technology frontier such as Germany, which have higher capability to absorb and leverage advanced knowledge.

Business investment growth has been weaker in euro area countries, including in Germany, than in other high income countries, since 2011 (Figure 1, Panel D). Demand is a key determinant of business investment (OECD, 2015e), and weak demand conditions in geographically close export markets, notably in the euro area, are likely to be particularly

Figure 15. **Non-residential investment spending is low in international comparison**

- **A. Nominal residential investment**
- **B. Nominal non-residential investment**

Source: OECD (2015), OECD National Accounts Database.

Figure 16. **Business investment in physical and knowledge-based capital (KBC)**

Percentage of business sectors’ gross value added, 2013


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Business investment growth has been weaker in euro area countries, including in Germany, than in other high income countries, since 2011 (Figure 1, Panel D). Demand is a key determinant of business investment (OECD, 2015e), and weak demand conditions in geographically close export markets, notably in the euro area, are likely to be particularly
damaging to investment, as geographic proximity is a key determinant of trade flows (e.g. Boulhol and de Serres, 2008). Episodes of demand weakness, even if temporary, can have lasting effects on the capital stock if investment decisions are costly to reverse (Dixit, 1992). In addition, uncertainty rose in the euro area, including in Germany, with the eruption of the euro area crisis (Figure 17), and estimates suggest that higher uncertainty may have lowered investment in Germany (Federal Ministry for Economic Affairs and Energy, 2013; Deutsche Bundesbank, 2016a).

Figure 17. Uncertainty remains high in Germany and main European economies
News based policy uncertainty index\(^1\) normalised to a mean of 100 prior to 2011

Policies that strengthen stability and growth prospects in the euro area would raise the attractiveness of Germany as a location to invest. Germany should therefore continue to support efforts to improve growth prospects in the euro area, notably steps to strengthen the single market and cross-border infrastructure, and complete the banking union. These steps will strengthen long-term growth, reduce the risk of financial crises, and strengthen crisis management.

Weak demand growth cannot fully explain why investment spending is especially low in Germany. Recent empirical research suggests that cross-country differences in cyclical positions, as well as in structural features, including employment, demography and the sectoral structure, do not appear to explain why investment in Germany is relatively low (DIW, HRI, 2014). Moreover, in Germany firms retained large profit and equity buffers, which typically boost investment (e.g. Schiantarelli, 1996). These findings suggest that there is scope for improved structural policies to boost investment in Germany.

Opening up the services sector

Reducing regulatory barriers to competition or market entry stimulates business investment, including in KBC, and thereby improves productivity. The impacts on investment are especially large for regulation restricting entry (Alesina et al., 2005;
Nicoletti and Scarpetta, 2005; OECD, 2015d). While Germany has made much progress in reforming product market regulation in general over the past 15 years, regulation in some services, especially professional services, network industries and crafts, remains restrictive (see the OECD Economic Survey of Germany 2014, OECD, 2014a). In Germany investment in KBC is particularly low in the services, both compared to other high-income countries and compared to German manufacturing (Figure 18). The estimated contribution of investment in KBC to services productivity growth has been also lower than in other advanced EU economies (Corrado et al., 2014). Less stringent regulation increases the diffusion of knowledge, which contributes to productivity growth (OECD, 2015d).

Figure 18. **Investment in knowledge-based capital is low in the services**

Percentage of activity-specific value added, 2010

Regulation of professional services and network industries is particularly relevant because they play an important role as intermediate inputs. Close to 100% of the services produced by lawyers and notaries, building engineers and architects in Germany are intermediate. In telecommunications, this share is 50%. Empirical evidence suggests that steps to make regulation as competition-friendly in the professional services as in one of the best-performing OECD country in this regard, the United Kingdom, suggests that productivity throughout the German economy could rise by 2% (IWU, 2015). Deregulation of notary services has brought economic benefits for example in the Netherlands and the UK (OECD, 2014a).

Several professional services are subject to extensive exclusivity rules that reserve activities to particular professions. In some of these activities, other OECD countries have eased such rules with substantial reductions in costs (OECD, 2014a), for example for legal services needed to create a new business. Shareholder requirements in a wide range of professional services require that the certified professionals themselves must be majority owners in their businesses. There are binding price regulations for notaries, architects and building engineers. Advertising continues to be restricted in some professional services.
In the network industries, sectoral regulators lack powers to prevent vertically integrated incumbents from discriminating against market entrants. In telecommunications, a large potential lies in breaking up the exclusive right to issue SIM cards (OECD Economic Survey of Germany 2014, OECD, 2014a). Steps in this direction have been taken by the Netherlands and Belgium. In the railways the authorities are implementing an EU directive which will improve conditions for competitors to access the network. But the government should also strengthen the regulator’s powers by granting it more investigative competences, which will help ensure a level playing field between the incumbent and market entrants.

In 41 crafts professions, including in the construction industry (painters, plasters, bricklayers, scaffolders and installation of heating and cooling installations) self-employment is restricted to holders of tertiary level vocational degrees. Alternatively, workers in these professions can open a business with a minimum work experience of six years, four of them in a managing position, in addition to the vocational education degree at the upper secondary level required to exercise the profession. These requirements raise entry barriers for self-employment. Self-regulation by sector-specific business chambers, notably in the professional services and the crafts, also risks protecting incumbents.

**Fostering the reallocation of resources**

Owing to its intangible nature, the initial cost incurred in deploying KBC typically does not increase when it is combined with increasing amounts of other inputs (labour, capital) in the production of goods or services. Therefore taking advantage of KBC depends on the ability to reallocate labour and capital to their most productive use. With the rise of the importance of KBC, the ability to reallocate resources is becoming increasingly important for productivity growth (Andrews and Criscuolo, 2013).

Extensive government ownership in some business sectors risks hampering the reallocation of resources to more productive sectors or firms. Publicly owned commercial banks have a market share of more than 40% in Germany. As the 2014 Economic Survey pointed out, the regional Landesbanken, which are mostly owned by Länder governments, have had a poor track record in allocating credit, technical efficiency and vulnerability to solvency risk. Reflecting stricter risk management standards, governance has improved also in the Landesbanken, but specific governance problems for the Landesbanken resulting from regional government ownership are likely to remain (OECD Economic Survey of Germany 2014, OECD, 2014a). Länder governments are planning to privatise only one of 7 Landesbanken. Further privatisation would be welcome. Steps to further improve governance might be an alternative option. Since the outbreak of the global financial crisis, the federal government has also kept a minority share in one of the large private, commercial banks. A regional government also owns just above 20% of Volkswagen, one of the biggest car manufacturers. The federal government owns substantial shares in network industry incumbents, notably in telecommunications and postal services. Privatising these shares would help remove perceptions of conflicts of interest between the government’s role as owner of these businesses and its role as the regulator of the relevant markets, boosting market entry, competition and investment.

Policies to avoid that incumbents’ interests disproportionately affect the design of regulation can also improve reallocation, thereby raising innovation and productivity. Germany has made significant improvements to its regulatory policy system over the last years, introducing systematic ex post evaluation of regulations in 2013. Nonetheless, the capacity of the administration should focus more strongly on the analysis of the
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Germany could benefit from an independent standing capacity to regularly undertake comprehensive in-depth reviews of policy areas to inform large scale regulatory reforms (OECD, 2015o). In the Netherlands, for example, the Bureau for Economic Policy Analysis conducts analysis of economy-wide impacts of regulation for the government. In Australia, such analysis is conducted by the productivity commission. Germany can also do more to raise transparency of lobbyists’ involvement in public decision processes. For example, the German lobbying register does not provide information about the potential beneficiary or the government action targeted by lobbying (OECD, 2014c).

**Low government investment poses risks for long-term inclusive growth**

Net government investment has been low in the past 15 years and declined markedly at the level of the municipalities in the first half of the 2000s (Figure 19). While survey evidence suggests that the quality of German transport infrastructure continues to rank highly, there is some indication that maintenance standards have fallen (BMVI 2015). Moreover, there is scope to raise provision of social infrastructure which is key to raise long-term inclusive growth. For example, in 2014, only 33% of children under the age of 3 were enrolled in day care and only 53% of elementary schools offered full-day schooling, although supply has improved considerably over the past 10 years. The subnational government levels contribute to the funding of transport and key social infrastructure. Municipalities which invest less tend to be those with weak budgetary positions, are in relatively poor regions, and have relatively high spending on social cash transfers (which are often mandated at the federal level, but are the responsibility of municipalities) (Arnold et al., 2015). Fiscal federal transfers broadly equalise tax revenues per capita across the Länder but do not take into account differences in federally mandated social cash transfer spending. This reduces budgetary space for investment spending in municipalities where such transfer spending is high.

Figure 19. **Net government investment has fallen, especially by local governments**

Source: OECD (2015), OECD National Accounts Database.

http://dx.doi.org/10.1787/88893345492
The Länder are primarily responsible for providing local governments with adequate financial resources. Fiscal equalisation systems take needs-related socio-economic indicators in municipalities into account within each Land. In order to increase budgetary leeway for investment financial flexibility of Länder may be strengthened, by allowing them to levy a surcharge on the income tax.

The federal government has assumed an increasing share of spending which results from federally-mandated social transfer programmes. This has provided some budgetary relief for municipalities. It has also introduced a programme which allows municipalities with high debt to apply for federal co-funding of up to 90% for selected investment projects until 2018. However, by linking transfers to outstanding debt, this scheme risks harming incentives for sound budgetary policies. Municipal public investment could be strengthened in a financially sounder way. The federal government should provide more support for investment in municipalities where spending on cash transfers mandated in federal entitlement programmes is high. Alternatively federal government support for municipal investment could be based on income and demographic indicators, which are correlated with higher social spending needs, such as age composition or the share of the immigrant population.

The federal government currently contributes to the funding of physical infrastructure for childcare facilities. However, meeting gaps in the quality of childcare may also require more qualified personnel. The federal government makes no contribution to full-day compulsory schooling. The long-term benefits of investment in childcare and full-day schooling are likely to accrue nation-wide, generating positive economic externalities for other jurisdictions. Therefore there is a case for the federal government to play a strong role in funding such services. Constitutional barriers prevent federal co-funding for full-day primary education. In view of the large benefits of full-day primary schooling, there is a case for reviewing these constitutional barriers. There also is a case for disbursing federal subsidies for childcare in a way which takes into account parental preferences. A scheme of vouchers, linked to a nation-wide accreditation system, could ensure that supply adjusts better to parental demand.

Germany has so far made little use of public-private partnerships (PPPs) (Partnerschaften Deutschland, 2015). PPP arrangements can improve efficiency, but call for a sound analysis of their suitability to particular infrastructure projects, careful contract design and full transparency regarding current and future public costs and benefits, preferably in the context of the budget process. Municipalities often lack the competence to manage large investment projects, including PPPs. Germany’s federal structure generates considerable diversity in the procurement and the implementation of investment projects across municipalities. This yields valuable lessons about best practices, which are not exploited. Advisory units at the national or regional level to support municipalities in procuring and managing investment projects, including for PPPs, as already introduced in some Länder, would help (Academic Advisory Board of the Federal Ministry for Economic Affairs and Energy, 2015).

Germany takes relatively little advantage of e-governance and e-procurement practices which could make government services more efficient (OECD, 2015i; OECD, 2011). Stronger e-governance would also generate spillovers to the private sector, fostering investment in information and communication technology and knowledge-based capital. Parliament is
considering draft legislation to implement a comprehensive e-procurement system which is welcome. More efforts are needed to use procurement as a policy lever to promote such strategic objectives as promoting inclusive and green growth, SMEs and innovation.

Complex infrastructure projects often entail important benefits for society as a whole, but also come along with local costs, for instance pollution and noise. Moderating such conflicts effectively is key to efficient decision-making, but requires early involvement of the public in the planning and realisation of investment projects (Bertelsmann Stiftung, 2012). There is scope to involve the public more effectively in realising complex investment projects in Germany (OECD, 2014c). Steps to do so would also raise Germany's wellbeing score on civic engagement and governance (Figure 3 above). The recent advances in electronic media and communication technologies have substantially changed the way public administrations, citizens and civil society can interact. E-governance, if used as a two-way communication tool, can be particularly useful in raising citizen participation, but it is rarely used in Germany in this way (European Institute for Public Participation, 2009; OECD, 2014c).

**Strengthening green growth**

Germany has a strong record of investment in energy efficiency, supported by demanding building standards and extensive government financial support, for example, through subsidised loans. Germany invests close to 0.7% of GDP in energy efficiency (IEA, 2015). Investment on this order of magnitude is needed across OECD countries to limit the increase in global temperatures to 2°C, according to estimates by the International Energy Agency (IEA, 2015). Germany is committed to the climate change mitigation targets fixed in the COP21 climate conference. In residential housing, efficiency is estimated to have improved by 23% since 2002, although these gains were partly offset by the impact of higher income and changes in household structure on energy consumption (IEA, 2015). In industry and services, efficiency gains have been smaller and have been more than offset by growth in activity, while sectoral change has contributed little to efficiency gains. To meet its CO₂ emission targets and reduce CO₂ emissions by 40% below the 1990 level until 2020, the government has introduced a wide-ranging programme to further strengthen support for energy-saving investment.

While environmental regulation in Germany is demanding and energy taxation is among the highest in the EU, energy taxation is subject to exemptions which weaken incentives to reduce the environmental externalities of energy use. Tax exemptions and subsidies which are harmful to the environment have a budgetary cost of about 1½ per cent of GDP (Umweltbundesamt, 2014). Achieving environmental objectives in a way that is less costly to the government and taxing environmental externalities more consistently could thus create more fiscal space. Some energy-intensive manufacturing industries (such as chemicals, iron and steel) and agriculture are exempt from energy taxation. The gap between electricity prices paid by households and energy-intensive manufacturing firms is particularly large, as reported in the 2014, OECD Economic Survey of Germany (OECD, 2014a). Coal is virtually tax-free (OECD, 2012b). Tax breaks on business cars and commuting allowances encourage car use.

Energy tax exemptions, including for energy-intensive manufacturing which are motivated by competitiveness considerations, were already reduced in the course of the 2011-14 tax reform package (OECD 2012b; 2012c). The output and employment effects of the current exemptions are small overall, but can be considerable for individual
companies and sectors (Fraunhofer-ISI and Ecosys, 2015). Gradually removing the tax exemptions, taking into account EU rules and according to a predetermined time schedule would reduce uncertainty and strengthen incentives to invest in energy efficiency, while limiting the costs of transition to new technologies and products. This will become easier, if regulatory reforms foster innovation and structural change (see above and Chapter 1). The removal of these tax exemptions would also help to reduce the economy-wide cost for Germany to reach its CO₂ emission targets. In any case, the authorities should carefully monitor the real-economy effects to ensure that implemented policies are effective and least-cost for the economy as a whole.

Aligning taxation of energy more closely with environmental externalities and eliminating tax exemptions for environmentally harmful behaviour would also contribute to reducing local pollution which is harmful for human health. As in other OECD countries estimated mortality from outdoor air pollution is high (Figure 20). The cost of mortality induced by air pollution is estimated at 5% of GDP (OECD, 2014d). Diesel is taxed less than petrol, even though analysis suggests it should be taxed more because it is more polluting. Many cities in Germany have high levels of NO₂ emissions, in part because of diesel cars. The introduction of stricter pollution standards for cars has not lowered emissions (Löschel et al., 2014). Raising diesel taxes and taxing cars according to their NOₓ emissions could do better. Sweden also tackled NOₓ emissions by taxing large emitters.

Figure 20. **Deaths from ambient air pollution**

Per million inhabitants


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Well-being and demographic change

Projected population ageing implies a marked increase in the old-age dependency ratio by 2060 (Figure 21), earlier than in many other OECD countries. The OECD projects population to decline by 18% and employment, on current policies, by 23% by 2060, reducing GDP per capita by 6½% per cent, according to the OECD *Long-Term Database*. The recent inflow of refugees has raised immigration well above projected levels. Immigration can delay the impact of demographic ageing on labour supply.
Reducing barriers for women in the labour market

Steps to reduce barriers for women in the labour market, notably the reforms recommended above, could raise GDP per capita growth considerably, offsetting the impact of ageing on employment. Full convergence by women to men in terms of labour market participation and hours worked could result in a gain of GDP per capita of 20% when convergence is complete, boosting GDP per capita growth by 0.4% annually if convergence is achieved by 2060 (Table 2). This estimate includes the impact higher female employment and hours worked have on access to better-paid, more productive jobs, as well as the gains...
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in productivity that would result from more job experience. Most of these gains would reflect
women working longer hours. In a simulation exercise, Teignier and Cuberes (2014) have
estimated the potential impact of gender convergence on GDP per capita in Germany at 10%.
Their estimation does however not include the impact of higher female labour input on
investment which can be expected to raise the capital stock in the long-term. This effect
accounts for 7 percentage points of the estimated impact on GDP per capita in Table 2.

Improving the work-life balance of the elderly

The labour market and output effects of ageing are exacerbated by policies that
encourage individuals to withdraw from employment prematurely. These policies include
early retirement schemes and features of pensions systems that penalise working. The
labour market participation of individuals older than 65 years remains comparatively low
in Germany (Figure 22). Enabling individuals to adjust their working hours to their physical
and mental ability and their willingness to work is essential for work-life balance and
subjective well-being of the elderly (Reday-Mulvey, 2005; Barnay, 2014; Nikolova and
Graham, 2014). This includes options to combine an old-age pension with paid
employment. Steps to remove barriers to employment at higher age can also help to reduce
old-age poverty risks.

The German government made it easier to extend employment contracts beyond the
pensionable age for workers who start receiving their pension in 2014. However, pensioners
lose pension wealth if they postpone their decision to draw old-age pensions beyond the age
of 60 (OECD, 2015b). Current rules cut pension benefits by up to two thirds if pensioners on
early retirement enter a new employment relationship. Employers pay unemployment and
pension insurance contributions when they employ pensioners who have reached the
pensionable age or receive a full pension, although these workers do not accrue the
corresponding entitlements. The government is considering steps to correct this.

To remove disincentives for older workers to work, the pension premium for drawing
old-age pensions later in life should be raised and pension benefits should not be withdrawn
when pensioners work. This would also raise subjective wellbeing. The pension reform in
Norway in 2010-11 provides an example for a comprehensive flexible retirement scheme that
does not penalise continued work (OECD, 2013c; OECD, 2014m). In Norway, pension and work
income can be combined without any restrictions and employment income earned by
pensioners generates additional pension rights. Pension discounts for drawing a pension

Table 2. Impact of convergence of women’s to men’s employment outcomes on GDP per capita

<table>
<thead>
<tr>
<th>Per cent</th>
<th>Increase of average GDP per capita growth, 2015-60</th>
<th>Increase of GDP per capita when convergence is complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convergence of the participation rate¹</td>
<td>0.1</td>
<td>5</td>
</tr>
<tr>
<td>Convergence of participation rate, hours worked and earnings²</td>
<td>0.4</td>
<td>20</td>
</tr>
</tbody>
</table>

¹ The female labour market participation rate of women is assumed to converge to the male participation rate from 2015 to 2060.
² Productivity per worker is assumed to rise in line with the closure of the gender earnings gap to the extent it reflects differences in experience and hours worked.

before the pensionable age are large enough to fully compensate for the longer period of expected pension receipt and the shorter contribution record (so-called actuarial neutrality). Nearly 65% of workers aged 62-66 combine old age pensions with work.

Life-long learning is particularly important to support employability in the context of population ageing, as the renewal of skills through the entry of young people in the labour market diminishes and workers are considering working more at higher age. The participation rate of workers with upper-secondary vocational education degrees in life-long training has increased from 38% in 2010 to 47% in 2014. Nonetheless, vocational education graduates participate less in lifelong learning (including informal training) than university graduates (Behringer and Schönfeld, 2014). Employment rates of vocational education graduates decline relatively quickly with age in particularly in Germany (Hanushek et al., 2011) and earnings rise relatively little with experience (Chapter 2). These findings suggest that policies to encourage life-long learning for vocational graduates are particularly important to maintain high employment prospects for them at high age.
Indexing mandatory pension systems to life expectancy is important for ensuring the long-term affordability of public pensions for government finances as life expectancy increases (OECD, 2011c; OECD, 2014g; Johansson et al., 2013). The pensionable age is gradually rising from 65 to 67 years by 2029, but no further adjustment is foreseen. Without further increases in the pensionable age, increases in life expectancy after 2029 would raise the government deficit, increase the tax burden on labour and lower the level of pensions relative to average income (OECD, 2013d; OECD, 2015g). Some OECD countries, including Italy and Denmark, index the pensionable age to life expectancy (OECD, 2011b) to balance the ratio of retirement and working years and ensure the sustainability of old-age pension systems as life expectancy increases. In Denmark the resulting increases in pensionable age are subject to parliamentary approval every five years. Germany should also index the pensionable age to life expectancy.

Public pension entitlements relative to wages are lower than in many OECD countries and past pension reforms will reduce this ratio further. While old-age poverty is not a major concern in Germany today, poverty risks among the elderly are expected to increase (Geyer, 2014; Martens, 2014). The federal government is monitoring the situation carefully. Continuous employment records and avoiding barriers to employment are important to reduce poverty risk. Moreover, individuals systematically under-save when planning for retirement due to myopia (Holmes, 2011; Börsch-Supan, 2005).

Occupational pensions provide an opportunity to supplement public pensions from private sources at relatively low cost and are the most common form of private pensions in Germany. Workers have the legal right to join an occupational pension plan, but need to take an active decision to do so. Only half of workers are aware of this legal right (Lamla and Coppola, 2013). The government plans to promote occupational pensions through the legal extension of collective agreements among social partners. A number of countries have chosen a broader approach, by introducing automatic enrolment with an option to opt out. Insights from behavioural economics and evidence from Italy, New Zealand and the United Kingdom suggest that automatic enrolment improves coverage (OECD, 2014f). Such automatic enrolment could be complemented with the introduction of a fall-back pension fund, which offers a low-cost investment instrument to those firms and individuals who do not wish to make their own arrangements to save for complementary private pensions. Occupational pension plans may not reduce old-age poverty risks substantially for workers with long interruptions in their employment careers. As recommended in the 2014 Survey, a cost-effective way of limiting future old-age poverty risks with poor employment careers while preserving incentives to work would be to phase out means-tested subsistence benefits more slowly as pension entitlements rise. Moreover, compulsory pension coverage should be extended to the self-employed.

**Improving health outcomes in the light of population ageing**

Health outcomes are a strong determinant of well-being and of employment at older ages. Germany faces a range of ageing-related health challenges (OECD, 2014h; OECD, 2015j; OECD, 2015k; OECD, 2015l; OECD, 2015m). The number of expected healthy life years at 65 is lower than in other high-income countries (OECD, 2014h). The prevalence of unhealthy lifestyles is high in international comparison, despite improvements in recent years (OECD, 2014h). Stricter regulation of advertising alcohol and tobacco products, raising taxes and imposing explicit price thresholds below which alcoholic beverages cannot be
sold to consumers would yield high benefits in terms of higher disability adjusted life years and lower health costs. The government is already taking steps to improve health prevention, including through higher spending.

Employment is a major driver of material living standards and non-material well-being. However, it can also be an important source of stress and poor health, diminishing employability later in life, if job quality is low (OECD, 2010). Germany performs comparatively well in terms of earnings in international comparison, but falls below the OECD average in terms of quality of the working environment. For example, 19% of German workers report difficult and stressful working conditions, which is more than twice as high as for Denmark and the Netherlands. Low quality of the working environment and high stress contribute to poor self-reported health and to sickness absence and raise the risk of mental illness and associated early retirement (Argaw et al., 2013; Barnay, 2014; OECD, 2015k). The share of disability benefits recipients with mental ill-health increased substantially in recent years, especially among those aged 55 to 60.

Employers are well placed to reduce stress and thereby help employees stay healthy (OECD, 2014k). Many German businesses already make substantial efforts to support sick employees to return to work. Firms engaging in prevention can be awarded premia and certificates through the accident insurance scheme (IAG, 2010) and employers’ contributions to the accident insurance depend on the share of former employees on accident insurance benefits (experience rating), which helps provide incentives to employers to prevent health risks at the workplace. The public health insurance funds have been required to raise workplace health promotion spending. In addition, safety-at-work regulation has been strengthened. But there is scope for improvement:

- Collaboration between authorities, health insurance and employers in the prevention of work-place related health risks can become more effective (Ahlers, 2015; Kohte, 2015; OECD, 2015k), in particular to serve as a platform for exchange of information among the private sector, researchers, health insurance providers and the government. This would help to build up a common stock of knowledge by regional authorities to keep the quality of inspections high, support small firms, to ensure enforcement for workers in precarious employment and to monitor progress.

- Financial incentives for enterprises to engage in prevention could be raised. In accident insurance contributions, penalties for employers with a high incidence of work-related accidents are small overall (IAG, 2010). These penalties could be raised. Moreover firms’ disability insurance contributions are not adjusted according to the likelihood of disability (experience rating). Some countries, including Switzerland and the Netherlands, introduced experience rating in employer contributions to disability insurance, obliging employers with many former employees on disability benefits to pay higher contributions.

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ANNEX

Progress in structural reform

This annex summaries key recommendations made in previous Surveys and main actions taken since the OECD Economic Survey on Germany published in May 2014.
<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Improve Labour Market Performance</strong></td>
<td></td>
</tr>
<tr>
<td>Reduce the gap in employment protection between permanent and temporary workers by moving towards a unified job contract with the degree of protection rising with tenure. Ease employment protection legislation for regular job contracts by shortening the notification procedure, by reducing the notice period for workers with long tenure and, in case of dismissals for economic reasons, by giving employers the right to choose between paying a severance payment or paying a higher unfair dismissal compensation which would replace the court route. Limit the use of multiple successive fixed term contracts with the same employee.</td>
<td>The government is planning to limit the duration of employment on jobs filled by temporary work agency workers to 18 months. If these plans are implemented, these workers will also have to be paid like comparable regular workers after 9 months.</td>
</tr>
<tr>
<td>Target the preferential tax treatment of minijobs towards low-wage workers.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Introduce a general minimum wage at a sufficiently low level that will not lead to job losses, determined by an expert commission. Cautious use should be made of higher sectorial minimum wages set on the basis of collective agreements.</td>
<td>On 01 January 2015, Germany introduced a general minimum wage of EUR 8.50 per hour, or equals 51% of the median wage of a full time worker in Germany (fifth-highest in the EU). Adjustments of minimum wage level will be decided by the Minimum Wage Commission which comprises 6 members representing the social partners (members entitled to vote) and 2 labour market experts (non-voting members). According to the government’s assessment, so far the minimum wage has not resulted in significant employment loss.</td>
</tr>
<tr>
<td>Make active labour market policies more targeted by monitoring self-selection problems within target groups.</td>
<td>Programs were launched to reach long-term unemployed and low-skilled people to increase their participation in further education and training. Measures to promote basic skills, provide support for retraining and financial incentives for completion of interim and final exams are planned.</td>
</tr>
<tr>
<td>Reduce fiscal work disincentives for second earners by reforming joint income taxation of couples and by considering introducing contributions for public healthcare co-insurance of nonworking spouses.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Continue to expand early childcare provision, notably for full-day care, and further increase the availability of full-day schooling. Ensure equal access of the most vulnerable to affordable high-quality childcare. Consider introducing a voucher system for childcare. Lower regulations for the set-up of childcare facilities to encourage more private supply.</td>
<td>Enrolment in formal childcare continued to rise strongly. The government has committed EUR 1.1 billion additionally for expanding and improving the quality of childcare and early childhood education until 2018. A working group to develop quality targets and financing strategies has been established, involving representatives from all government levels as well as stakeholders such as trade unions and non-profit organisations providing early childhood education and care. An interim report will be presented by the end of 2016. Programmes supporting children’s language development and extended childcare hours for single parents and workers on unconventional time schedules have been launched.</td>
</tr>
<tr>
<td>Raise pension discounts for drawing a pension before the statutory pension age towards an actuarially neutral level.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Focus additional pension entitlements on reducing future old age poverty risks, for example, by phasing out subsistence benefit entitlements more slowly as pension entitlements rise. Fund such additional spending from general tax revenue instead of higher payroll taxes.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Extend compulsory pension insurance coverage to all self-employed.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Continue to review in-work benefits (long-term unemployment benefits which low-pay workers may be able to receive in employment) to ensure that the most vulnerable receive sufficient support while minimising disincentives to work. For instance, phase out more slowly means-tested subsistence benefits for particularly vulnerable individuals earning more than EUR 100. Phase out additional child benefits paid to parents receiving a housing allowance more slowly.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Expand support for German language training for immigrants.</td>
<td>Since October 2015 asylum seekers from countries with a recognition rate of more than 50% (at present Syria, Iraq, Iran and Eritrea) may attend an integration course consisting of a language course and an orientation course before the asylum procedure is completed. Budgetary resources for the integration courses were increased from EUR 269 million in 2015 (for about 190 000 new participants) to EUR 559 million in 2016 (for about 300 000 new participants). Follow-up German language courses adapted to individual professional needs will also be funded. A new programme “vocationally oriented German language courses” will be launched in mid-2016.</td>
</tr>
<tr>
<td>Improve the recognition of foreign qualifications.</td>
<td>Monitoring through common statistics across the Länder is planned. Since 2015, new projects to validate informal qualifications and provide information on follow-up training are introduced.</td>
</tr>
<tr>
<td>Consider engaging more actively in foreign recruitment policy.</td>
<td>A website for the recruitment of foreign highly-skilled labour (“Make it in Germany”) was expanded. The Federal Employment Agency has started providing support, including placement services, for foreign residents intending to work in Germany.</td>
</tr>
<tr>
<td>Consider establishing an institution tasked with designing, assessing and coordinating labour migration policy.</td>
<td>No action taken.</td>
</tr>
</tbody>
</table>
### B. Enhance competition in product markets

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberalise the issuance of SIM cards in mobile communication. Sell the remaining government shares of Deutsche Telekom.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Raise competition in the railway sector, for example by fully privatising the transport service subsidiaries while retaining state ownership of the tracks, and by eliminating exemptions from tendering of regional railway services. Facilitate access of market entrants to rolling stock. Strengthen the role of the regulator by improving its investigative and interventional competences. Move to full ex ante regulation of access conditions.</td>
<td>Draft legislation to implement the minimum requirements of an EU directive will, if implemented, strengthen the incumbent's incentives to reduce infrastructure costs and broaden the range of infrastructure on which the regulator can determine access conditions.</td>
</tr>
<tr>
<td>Provide equal treatment in value added taxation for all postal service providers. Sell the remaining government shares of Deutsche Post.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Scrutinise compulsory membership and chamber self-regulation in the professional and crafts chambers for entry barriers and lower entry requirements where possible. Examine if entry conditions to crafts could be further liberalised without jeopardizing the vocational education and training system.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Abandon price regulation in some professional services. Abolish the price regulation for architects and engineers and consider liberalising price regulation for notaries. Give lawyers more options to deviate from the principle of effort-based remuneration, e.g. allow all-inclusive fees for certain tasks and extend outcome-based payments.</td>
<td>In the context of the infringement proceedings launched by the European Commission, the government plans to abolish regulated prices (Steuerberatervergütungsverordnung) for tax consultants in out-of-court matters and for tax consultants based abroad.</td>
</tr>
<tr>
<td>Reduce exclusive rights in the professional services. For example, allow new companies to register in the commercial registry without notary services and open the provision of auxiliary services in property conveyancing to other professions. Reduce exclusive rights of lawyers in providing legal advice and representation in court.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Review restrictions on business conduct. Abolish all remaining restrictions on advertising for lawyers. Give consideration to abolishing restrictions on shareholders for limited liability companies of lawyers, tax consultants, architects and engineers.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Relax the requirement that pharmacies can only be owned by a pharmacist who has to work personally in one out of a maximum of four branches he/she is allowed to own.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Establish an advisory body tasked with identifying and reviewing regulatory hurdles to higher productivity.</td>
<td>No action taken.</td>
</tr>
</tbody>
</table>

### C. Improve educational outcomes

<table>
<thead>
<tr>
<th>Recommendations in previous Surveys</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve the quality of early childhood education and care, including by improving the staff-child ratio in accredited facilities; by better integrating education and care; and by ensuring early childhood professionals have better qualifications, more professional development opportunities and better working conditions.</td>
<td>New measures to improve early childhood education and childcare have been launched (see “Improving Labour Market Performance” above). An on-going program (Kindertagespflege) provides a competence-oriented qualification handbook to prepare childminders in pedagogy. It also supports municipalities that implement this qualification.</td>
</tr>
<tr>
<td>Continue to reduce the stratification in the school system, notably by delaying the tracking decision beyond age 10 and reducing the number of school tracks across all Länder. Reduce grade repetitions.</td>
<td>Some more Länder have started to combine different tracks in one school type.</td>
</tr>
<tr>
<td>Further reform the VET system by considering reducing the variety of VET qualifications and providing continuing education offers of general skills (mathematics, German, foreign languages, computer skills) according to labour market needs. Let vocational schools and chambers jointly prepare and carry out the final examination of dual VET programmes.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Provide more financial resources to schools with a comparatively high share of pupils with weak socio-economic background in particular at lower secondary level. Continue reducing the assignment of pupils to special needs schools (Sonderschulen) and make sure assignment to such schools does not reflect the socio-economic background of pupils.</td>
<td>Disadvantaged youth can receive assistance such as remedial teaching and auxiliary instruction. Social educational support is available.</td>
</tr>
</tbody>
</table>
### Recommendations in previous Surveys

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide more support for disadvantaged youth to complete formal upper secondary education programmes, in particular mainstream vocational education and training (VET).</td>
<td>The federal government and the Länder seek to further reduce the number of young people aged 20 to 29 who do not have an upper secondary VET degree and are not in education or training. The Alliance for Initial and Further Training (Allianz für Aus- und Weiterbildung), concluded between national and subnational governments and the social partners, aims to strengthen vocational education and render it more attractive to young people. Disadvantaged youth can receive assistance to acquire a degree at upper secondary level, especially in VET. This covers the transition from school to vocational training, for example support and guidance to find an appropriate occupation via the “Educational Chains Initiative”. In case of financial problems that endanger the completion of the training, a subsidy can be granted to defray training and living costs.</td>
</tr>
<tr>
<td>Make tertiary education more attractive and responsive to labour-market requirements by increasing universities’ input flexibility.</td>
<td>Public higher education institutions now generally have budgetary autonomy in the context of agreements with Länder governments specifying education targets. In order to improve conditions for study and the quality of teaching, the Federal Government and the Länder have started the Teaching Quality Pact.</td>
</tr>
<tr>
<td>Ensure sufficient and diverse financing of higher education and overcome the free-rider problem between Länder in the financing of university education.</td>
<td>The Higher Education Pact 2020 addresses the different starting positions and unequal burden sharing among the Länder.</td>
</tr>
<tr>
<td>Raise participation in lifelong learning. Improve transparency in the adult education market and facilitate access to guidance on adult training. Carefully monitor the outcome of financial support programmes for adult learning and education.</td>
<td>The Alliance for Initial and Further Training (2015-18) aims to strengthen continuous training.</td>
</tr>
</tbody>
</table>

### D. Strengthen financial service resilience

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce a leverage ratio requirement as a complement to capital ratios in line with international agreements. Give consideration to introducing a leverage ratio requirement for systemically important banks before 2018.</td>
<td>Germany complies with international agreements and the European Union regulation, in particular the European Union’s rules implementing Basel III. These include a leverage ratio requirement from 2018 onwards.</td>
</tr>
<tr>
<td>Accelerate loss recognition of impaired assets. Consider requiring valuing impaired loans in line with market prices of underlying collateral and to value bonds according to market values, including those not held in the trading book.</td>
<td>The European Union’s rules implementing Basel III apply.</td>
</tr>
<tr>
<td>Micro- and macroprudential regulation should address remaining risks emanating from the Landesbanken. Continue restructuring the Landesbanken, including through privatization, consolidation or focusing on core activities according to a viable business model.</td>
<td>Landesbanken have reduced their securities trading business and their foreign activities. This restructuring process is still ongoing. The government considers that further restructuring is key to ensuring the viability of business models.</td>
</tr>
<tr>
<td>Improve corporate governance in the Landesbanken and savings banks, for example, by requiring members of the board to be more independent from elected regional and local governments.</td>
<td>Governance rules for all banks were revised with the transposition of the Basel III directive in the EU’s Capital Requirements Directive IV, to strengthen risk management arrangements. Rules concerning independence of board members from regional and local governments were not changed.</td>
</tr>
<tr>
<td>When transposing the European Union’s Bank Recovery and Resolution Directive into German law, aim for enabling the authorities to include bank debt as comprehensively as possible in the future bail-in instrument. Clarify the priority for financial stability objectives over creditor rights when the legislation is applied.</td>
<td>The EU Banking Restructuring and Resolution Directive (BRRD) has been transposed in national law. The resulting Recovery and Resolution Act is in force since January 2015 and has been aligned to the European Single Resolution Mechanism (SRM/M). As a result the resolution authority has the power to bail in debt. The range of bank debt available for bail-in corresponds to the BRRD provisions. The capacity to absorb losses (through bank equity and bail-in debt) must be at least 8%. Interbank lending and covered bonds are generally excluded from bail-in.</td>
</tr>
<tr>
<td>Consider ways to improve the effectiveness of requirements to separate investment banking activities from retail banking. For example, give consideration to including securities held for market-making purposes in separation requirements and to focusing such requirements on derivatives exposures.</td>
<td>Separation requirements are being considered by the European Union.</td>
</tr>
</tbody>
</table>

### E. Increase the efficiency of public finance

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Action taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift taxation from mobile bases to immobile bases. Phase out reduced VAT tax rates. Reduce social security contributions, notably for low income workers.</td>
<td>Social security contributions rose by 0.1 percentage point in 2015. Personal income taxes were lowered somewhat in 2015 and 2016. Overall the tax wedge on labour income remains broadly unchanged.</td>
</tr>
<tr>
<td>Go further in cutting statutory corporate tax rates. Consider lowering or abolishing the local trade tax.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Broaden tax bases by updating real estate tax valuations while protecting low income households.</td>
<td>The Länder have agreed to a common model of taxing real estate.</td>
</tr>
<tr>
<td>Extend capital gains taxes on residential real estate except for owner-occupied housing.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>Raise the tax rates applying to household capital income towards marginal income tax rates applying to other household income.</td>
<td>Changes in taxing capital gains may be considered in the next election period.</td>
</tr>
</tbody>
</table>
### Recommendations in previous Surveys | Action taken
---|---
Equalise the inheritance tax burden for different forms of wealth. | Parliament is discussing inheritance tax reform.
Prioritise government spending on growth-enhancing items such as infrastructure and childcare. | The Federal Government has increased growth-enhancing public spending with focus on public infrastructure as well as education and research. This includes an additional EUR 3 billion for research and development 2014-17. Furthermore, the Länder and municipalities will be supported in financing child care, schools and universities with EUR 6 billion 2014-17. EUR 5 billion are made available for public infrastructure investment 2014-17 and EUR 8.1 additionally 2016-18. In the 2016 budget, federal government investment spending will rise by 5.4%, with investment being stepped up in education, research and infrastructure. Investment spending grew by 2.1% in 2015.
Federal Government spending on education and research increased by 10.3% in 2015 (target). An additional 5.8% is foreseen in 2016. EUR 21.1 billion will be spent on education and research in the 2016 federal budget.
No action taken.

### F. Green growth

Phase out tax expenditures for activities that damage the environment without harming international competitiveness, and better align environmental taxation with negative externalities. To this effect maintain high support for international solutions. | No action taken.
Eliminate exemptions and reduced energy tax rates, except if they are designed to avoid double taxation, notably in sectors covered by the EU ETS. | No action taken.
Consider creating an effective carbon tax in the sectors not covered by the EU ETS and ensure that other, non-carbon related, externalities are adequately priced. | No action taken.
Legislation in 2014 has reduced the cost of funding new installations, by concentrating subsidies on low-cost onshore wind and solar technologies. Most new installations receive a subsidy which responds to market developments, replacing the fixed feed-in tariff. Auctions have been carried out in 2015 to determine the level of subsidies for ground-mounted photovoltaic installations. The government is preparing legislation so that the support scheme for wind onshore, wind offshore and PV will generally be changed to competitive auctions by 2017. The legal basis for competitive auctions for biomass plants is planned to enter into force by mid-2016.

F. Green growth

Further improve the determination of risk-adjusted transfers within the health fund, by considering a larger number of diseases and by ensuring that transfers for higher age groups and diseases with high death tolls are high enough. | The accuracy of the risk-adjustment model has been improved.
Include private insurers in the financing system based on the central health fund. | No action taken.
Consider strengthening the tax autonomy of the Länder by allowing them to levy a surcharge to the income tax. | No action taken.
Re-design inter-governmental transfers so as to reduce the disincentive effects for states to develop their own tax base. | The Länder have submitted a proposal for reassessment of the financial equalization system which is being examined by the Federal Government.
Re-allocate administration of the collection of taxes which accrue to the federal government or are shared between the different layers of government from the Länder to the federal government. | No action taken.

A nationally coordinated system for transmission grid development was set up and the planning and authorisation procedures were shortened. At the same time, far-reaching possibilities for participation and consultation of the public were introduced.

Provide adequate incentives for the transmission systems operators to invest in the most efficient technologies while extending the grid. Further implement measures which aim at more transparency and public involvement in the decision process of grid extension.

OECD recommendations regarding the improvement of the efficiency of the public sector have been considered in the subsidy policy of the German government. According to the 25th Subsidy Report Subsidies (including tax) are budgeted to remain steady to 0.7% of until 2016 with a rise in priority investment spending, especially support for broadband rollout in rural regions where market-driven rollout is difficult, measures to improve energy efficiency of buildings and the National Climate Initiative.

No action taken.
Chapter summaries

Chapter 1. Boosting investment performance

Non-residential investment has fallen over the past 20 years as a share of GDP and is now lower than in several other high-income OECD countries. Business investment growth has been weak since the outbreak of the global financial and economic crisis. Government investment has been low, especially at municipal level. Investment in knowledge-based capital (KBC), which is closely related to long-term productivity performance, has been subdued. Weak growth prospects in the euro area have weighed on business investment and an increasing share of firms invests in distant, more dynamic markets. Policies that strengthen stability and growth prospects in the euro area would raise the attractiveness of Germany as a location to invest, notably steps to strengthen the single market and cross-border infrastructure, and complete the banking union. Steps to liberalise regulation of services, in particular knowledge-intensive professional services, would raise investment and productivity. Policies that encourage the reallocation of resources would also increase investment in KBC. Poor municipalities invest relatively little and there is scope to lower the cost of public investment projects. Better use of e-governance and more performance-oriented budgeting could improve the efficiency and effectiveness of public investment.

Chapter 2. Raising well-being in Germany's ageing society

Population ageing is setting in earlier in Germany than in most other OECD economies and will be marked. It could lead to a substantial decline in employment, weighing on GDP per capita, and will raise demand for health-related public services. Germany has already implemented far-reaching reforms to mitigate the implications of ageing for per capita income, well-being and the sustainability of public finances. Nonetheless, continued efforts are needed to help older workers to improve their work-life balance and adjust their working hours to their ability and desire to work. Moreover, stressful working conditions and unhealthy lifestyles contribute to poor self-reported health and reduce the ability and willingness to work at higher age. There is scope to promote life-long learning. As the generosity of the public pension system will diminish, the contribution of private pensions to ensure pension adequacy needs to be strengthened.
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The Secretariat’s draft report was prepared for the Committee by Andrés Fuentes Hutfilter, Andreas Kappeler, Naomitsu Yashiro and by Dorothee Schneider, who was seconded from the German Ministry of Economic Affairs and Energy, under the supervision of Andreas Wörgötter. Eun Jung Kim and Giovanni Maria Semeraro provided research assistance. Heloise Wickramanayake formatted and produced the layout. The previous Survey of Germany was issued in May 2014.

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