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.
Summary
Main findings

Denmark scores highly on many dimensions of well-being. Nevertheless, weak productivity growth over the past two decades has contributed to a widening of the income gap vis-à-vis leading OECD economies. Renewing with stronger productivity growth over the longer run is an overarching challenge for Denmark and calls for keeping up structural reform efforts.

Rebalancing the economy

The economy is set to recover gradually as world trade regains momentum and confidence improves. However, household debt is high and there remain fragilities in the financial sector, which entail risks for private consumption and public finance. The financial sector is large, with seven systemically important financial institutions, and the share of deferred-amortisation mortgage loans has become too high for comfort. On the fiscal side, the framework has been strengthened in recent years, public finances are in a relatively good shape and automatic stabilisers are large, which helps buffer adverse shocks. Past and recent structural reforms will help to raise labour market participation and to better control public expenditure. However, the tax burden on upper labour incomes remains elevated and is likely detrimental to economic growth.

Fostering competition and innovation

Weak competition in some sectors and shortcomings in the innovation policy framework hold back productivity growth, notwithstanding high R&D spending, and can hinder participation in global value chains, which is one channel to achieve productivity gains. Regulatory hurdles impede competition in the services sector. Ownership, zoning and size regulations, as well as national standards that differ from international ones restrict entry in several sectors. With public spending in relation to GDP among the highest in the OECD, intensifying competition in the public sector can also raise productivity. In addition, there is room to enhance the efficiency of innovation policies. In particular, it is important to make sure that some schemes provide efficient support to young and dynamic innovative firms.

Making the most of skills

With free and broad access to education, a long tradition of active labour market policies, and a well-developed adult learning system, skills are relatively good, although some groups lack basic skills. Ongoing reforms of compulsory education and of the vocational education and training system will raise the skills of youth and improve transitions to the labour market. While the flexibility of the Danish labour market helps achieve an efficient allocation of skills within the economy, the share of high-skilled workers in the private sector is relatively low, which can partly be explained by weak incentives to undertake tertiary education and to choose demanding jobs. Employment rates are high, but people who are outside the labour market face low financial incentives to take a job. The recent reform of the flexjob and disability programmes should help to better activate skills if adequately implemented.
Key recommendations

Rebalancing the economy

- Create a new supervisory tool for mortgage banks, similar to the framework for banks, which includes thresholds on the share of deferred-amortisation loans and refinancing needs.
- Make sure that all banks, especially the largest ones, maintain a prudent leverage ratio, as a backstop to risk-weighted capital ratios.
- In case of a weaker or postponed recovery, the automatic stabilisers should be allowed to work. In the event of a faster recovery than the euro area one and a renewal of capital inflows, the fiscal stance should be tightened more than projected.
- Further lower marginal taxes on higher incomes. Raise taxes on property once the recovery of the housing market is well under way. Improve the structure of environmental taxes to raise their efficiency.

Fostering competition and innovation

- Assess the impact of the regulations of professions and remove those that hamper competition and are not fully justified by other objectives. Harmonise national standards that hinder foreign firm entry with international ones. Relax ownership regulations and zoning and size regulations for stores.
- Simplify the legislation on public procurement and increase the use of e-procurement to lower transaction costs and make the process more uniform.
- To support young and dynamic firms, further extend carry-over provisions and cash refunds in R&D tax credit programmes or increase direct support.

Making the most of skills

- When implementing the reform of vocational education and training (VET), make sure that VET becomes more attractive to students and more selective without increasing school failures among those who cannot enter VET. Develop VET programmes that offer pathways to tertiary education.
- Raise the performance of the adult learning system by continuing efforts to give educational institutions greater incentives to recognise prior learning and by increasing the quality control of courses.
- Improve the efficiency of ALMPs, including by ensuring that municipalities face the right financial incentives to help the unemployed find a job.
- When implementing the reform of flexjob and disability programmes, make sure that the special disability scheme for older workers does not become a new pathway to early retirement. Move to regular entitlement assessment of disability pensions and limit the granting of permanent pensions for those above 40.
Assessment and recommendations

On many counts, Denmark scores well in international comparisons. It is repeatedly ranked as the happiest nation in the world according to the Gallup World Poll (Helliwell et al., 2013) and enjoys a high level of well-being along many dimensions (Figure 1). Labour market outcomes are better than average, and are accompanied by an outstanding work-life balance, low inequality and a good level of education and skills. Environmental quality is high, as are civic engagement and trust in institutions (OECD, 2013a). Public finances are also in relatively good shape, with a small debt-to-GDP ratio and budget deficit despite the shocks endured in recent years. Inflation has been low and stable. These outcomes are the result of sound policies and institutions.

Figure 1. Denmark compares favourably on many well-being dimensions

Economic growth in recent years has nevertheless been anaemic. In the wake of the global economic crisis and of the burst of the housing market bubble, the Danish economy has grown hardly at all since 2010 (Figure 2, Panel A) although weakness has been concentrated in a small number of sectors including the financial one. Over a longer period, the country has lost ground in terms of GDP per capita compared to leading OECD economies, mainly due to lacklustre productivity gains (Figure 2, Panel B). The housing bubble contributed to the slowdown in productivity by causing a misallocation of resources and the accompanying surge in household debt resulted in financial sector fragility. Reinvigorating productivity growth and enhancing financial stability remain two key challenges for Denmark. Against this backdrop, continued reform efforts are called for to improve growth prospects, to ensure that public finances and the welfare system remain sustainable, and to maintain enviable well-being outcomes.

1. Each well-being dimension is measured by one to three indicators from the OECD Better Life Indicator set. Normalized indicators are averaged with equal weights. Indicators are normalized to range between 1 (best) and 0 according to the following formula: (indicator value – minimum value)/(maximum value – minimum value).

After a sharp fall in 2009, GDP was still 5% below its pre-crisis peak by mid-2013. Growth has been held back by very weak domestic demand, against the backdrop of the large housing sector adjustment, persistent uncertainties and – until recently – low consumer confidence (Figure 3). Export performance has also been poor, owing in part to weak growth in Denmark’s export markets. Deteriorating wage competitiveness in the past decade has also contributed to some extent to export market losses (Productivity Commission, 2013a). Successive governments have taken measures to boost domestic demand, including most recently the 2013 Growth Plan. These initiatives have improved the situation of households and firms and should help the economy to continue to recover gradually as world trade gathers momentum (Table 1).
Table 1. Macroeconomic indicators and projections  
Annual percentage change unless specified otherwise, volumes at 2010 prices

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<tr>
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<tbody>
<tr>
<td>GDP</td>
<td>1760.1</td>
<td>1.1</td>
<td>-0.4</td>
<td>0.3</td>
<td>1.6</td>
<td>1.9</td>
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<tr>
<td>Private consumption</td>
<td>855.4</td>
<td>-0.7</td>
<td>-0.1</td>
<td>0.2</td>
<td>1.4</td>
<td>1.9</td>
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<td>Government consumption</td>
<td>509.6</td>
<td>-1.4</td>
<td>0.4</td>
<td>0.5</td>
<td>0.6</td>
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<tr>
<td>Gross fixed capital formation</td>
<td>297.8</td>
<td>3.3</td>
<td>0.8</td>
<td>-0.9</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Of which: Housing</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Government</td>
<td>67.2</td>
<td>17.8</td>
<td>-8.0</td>
<td>-2.8</td>
<td>2.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Business</td>
<td>193.0</td>
<td>-1.9</td>
<td>2.6</td>
<td>1.8</td>
<td>4.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Final domestic demand</td>
<td>1662.8</td>
<td>-0.2</td>
<td>0.2</td>
<td>0.0</td>
<td>1.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Stockbuilding(^1)</td>
<td></td>
<td>0.4</td>
<td>-0.3</td>
<td>0.2</td>
<td>-0.3</td>
<td>0.0</td>
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<tr>
<td>Total domestic demand</td>
<td>1662.4</td>
<td>0.2</td>
<td>-0.1</td>
<td>0.6</td>
<td>1.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>887.8</td>
<td>7.0</td>
<td>0.4</td>
<td>0.8</td>
<td>3.2</td>
<td>4.3</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>790.2</td>
<td>5.9</td>
<td>0.9</td>
<td>1.4</td>
<td>3.2</td>
<td>4.5</td>
</tr>
<tr>
<td>Net exports(^1)</td>
<td></td>
<td>0.9</td>
<td>-0.2</td>
<td>-0.3</td>
<td>0.2</td>
<td>0.1</td>
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Other indicators (growth rates, unless specified):  

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>Potential GDP(^2)</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
<td>0.9</td>
<td>1.0</td>
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</tr>
<tr>
<td>Output gap(^2)</td>
<td>-2.4</td>
<td>-3.3</td>
<td>-3.8</td>
<td>-3.1</td>
<td>-2.2</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>-0.1</td>
<td>-0.5</td>
<td>0.1</td>
<td>0.3</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate(^3)</td>
<td>7.6</td>
<td>7.5</td>
<td>7.0</td>
<td>6.7</td>
<td>6.5</td>
<td></td>
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<tr>
<td>GDP deflator</td>
<td>0.7</td>
<td>2.3</td>
<td>1.6</td>
<td>1.1</td>
<td>1.5</td>
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<tr>
<td>Consumer price index</td>
<td>2.8</td>
<td>2.4</td>
<td>0.7</td>
<td>1.2</td>
<td>1.6</td>
<td></td>
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<tr>
<td>Core consumer price index (excluding food and energy)</td>
<td>1.8</td>
<td>1.8</td>
<td>1.2</td>
<td>1.4</td>
<td>1.5</td>
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<tr>
<td>Household saving ratio, gross(^4)</td>
<td>7.7</td>
<td>6.6</td>
<td>6.5</td>
<td>6.1</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Current account balance(^5)</td>
<td>5.6</td>
<td>5.9</td>
<td>6.1</td>
<td>6.1</td>
<td>6.0</td>
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<tr>
<td>General government financial balance(^5)</td>
<td>-2.0</td>
<td>-3.9</td>
<td>-1.5</td>
<td>-1.5</td>
<td>-1.9</td>
<td></td>
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<tr>
<td>General government underlying balance(^5)</td>
<td>-0.2</td>
<td>-0.4</td>
<td>-0.1</td>
<td>-0.3</td>
<td>-0.3</td>
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<tr>
<td>General government underlying primary balance(^5)</td>
<td>0.4</td>
<td>0.1</td>
<td>0.4</td>
<td>0.2</td>
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<tr>
<td>General government gross debt(^5) (Maastricht)</td>
<td>46.4</td>
<td>45.4</td>
<td>44.8</td>
<td>46.0</td>
<td>47.5</td>
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<tr>
<td>General government net debt(^6)</td>
<td>3.1</td>
<td>7.3</td>
<td>8.6</td>
<td>9.9</td>
<td>11.4</td>
<td></td>
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<tr>
<td>Three-month money market rate, average</td>
<td>1.4</td>
<td>0.6</td>
<td>0.2</td>
<td>0.1</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Ten-year government bond yield, average</td>
<td>2.7</td>
<td>1.4</td>
<td>1.8</td>
<td>2.3</td>
<td>2.8</td>
<td></td>
</tr>
</tbody>
</table>

1. Contributions to changes in real GDP.
2. As a percentage of potential GDP.
3. In per cent of the labour force.
4. As a percentage of household disposable income.
5. As a percentage of GDP.
6. Adjusted for the cycle and for one-offs.

Source: OECD Economic Outlook 94 Database.
Labour market conditions deteriorated in the wake of the global economic and financial crisis, but are expected to improve gradually as demand picks up. Employment has remained flat in the private sector over the past two years and has fallen in the public sector, leading to a fall in total employment (Figure 4). The labour force has fallen mainly because more youth continued education rather than trying to join the labour market. The share of long-term unemployment has increased but remains below the OECD average. The gradual shortening of the effective maximum unemployment insurance period from four to two years between 2013 and 2017 is raising incentives to take a job. Other structural reforms, discussed below, should raise labour market participation and employment in the longer term though in the near term they may limit the drop in unemployment somewhat.

There are signs that wage competitiveness is beginning to improve, reflecting a slight pick-up in productivity growth and some wage moderation (Figure 5). Export performance has also stabilised. All this should help Denmark benefit from the projected recovery in world trade. However, the terms of trade have stopped rising, suggesting that non-price competitiveness may be stagnating. With stronger external demand and high corporate savings, business fixed investment is projected to begin to expand after two years of decline.
Figure 4. The labour market has deteriorated

Index 2000 = 100

A. Total employment

Source: OECD, Analytical Database and OECD, ELS Database.

Figure 5. Price competitiveness has recovered somewhat

Annual, base 2000 = 100

Source: OECD, Analytical Database.
Monetary policy rates have been historically low for a long time, which has provided stimulus to the weak economy. Inflation has also been very low. Policy interest rates are mainly determined by the decisions of the European Central Bank (ECB) since the Danish krone is pegged to the euro, but lately they have diverged somewhat. Between late 2011 and mid-2012, demand for the Danish krone surged, as it was seen as a safe haven, and the 10-year government bond yield fell below the German one. The central bank (DNB) purchased large volumes of foreign exchange and cut its policy rates more than the ECB did (Figure 6). Indeed, one of its main policy rates, the rate on certificates of deposit (CDs) against which counterparties can deposit liquidity, was cut to -0.2% in July 2012. Pressure on the krone has since weakened a bit, and the central bank raised the CD rate to -0.1%. As the prolonged period of low interest rates has worsened their profitability, banks have raised fees. It is important to continue to monitor the impact of low interest rates on bank profitability and households. In addition, the monetary authorities should be prepared for a potential reversal in capital flows, possibly on a larger scale than the one that occurred in early 2013 and which pushed the Danish 10-year government bond yield back up above the German one.

**Figure 6. Monetary policy has been very accommodative**

![Lending rate vs. Certificate of deposit rate](Source: Danish National Bank.)

Compared to most other OECD countries, the public debt and deficit are low, and fiscal sustainability is not in doubt (Figure 7 and Annex A1). In addition, the government has financial asset reserves of 11% of GDP at the DNB. In the context of the European Union Excessive Deficit Procedure launched in 2010, the government programmed an improvement of its underlying balance over 2010-13 of 1.5% of GDP. Consolidation was achieved mainly through a fall in public employment and lower public wage growth, but also through increased taxes. Following the reform of the early retirement system in 2012, the government had to reimburse some contributions to households, which provided some stimulus and led to a temporary widening of the headline deficit (Table 1). In 2013-14, changes in pension fund taxation should contribute to fiscal consolidation. There are large uncertainties surrounding the effects of these changes on near-term public finance indicators but recent data suggest that they can be larger than projected in the November 2013 OECD Economic Outlook, which would lead to smaller budget deficits in 2013-14 and a larger one in 2015 (Ministry for Economic Affairs and the Interior, 2013; Ministry of Finance, 2013).

For 2014, the fiscal stance is broadly neutral. The government’s 2013 Growth Plan includes reforms to raise productivity growth and labour supply in the medium term. The large size of automatic stabilisers, including the fact that both unemployment benefits and active labour market expenditure increase automatically when the unemployment rate rises (ILO, 2009), would help in facing a weaker or postponed recovery.
Risks to the Danish outlook are both external and domestic. On the upside, if euro area concerns recede further or Danish wage competitiveness improves more than projected, the country would benefit from stronger foreign demand. However, if the krone continues to be seen as a safe haven and Denmark recovers faster than the euro area, fiscal policy will have to be tightened more than projected, since monetary policy will continue to defend the fixed exchange rate. On the downside, renewed euro area tensions or more generally a slowdown in growth in Denmark’s export markets worldwide, would weigh on exports and dampen firm and household confidence.

Another potential risk to the outlook is gross household debt, which soared during the house price boom (Figure 8) and has not come down since. Household assets are also high, but a major portion there of notably pension rights, is illiquid, while household debt largely consists of mortgage loans. A rising number of households are due to reimburse the principal of deferred amortisation loans introduced 10 years ago, which could lead some of them to hold back consumption. Stress tests suggest that most of these households could cope with adverse shocks in the form of higher interest rates or unemployment although some of them would face financial difficulties (Ministry of Business and Growth, 2013a; DNB, 2013; Andersen et al., 2012).
Enhancing financial stability

In the face of the global financial crisis and the bursting of the housing market bubble, the authorities responded with six bank packages from October 2008 to October 2013, involving capital injections, liquidity support and government guarantees. Other measures taken to improve financial stability included the introduction of a special resolution regime and of a credit register to which all banks must report information on their major customers, the reform of the deposit insurance scheme, and the strengthening of regulation and supervision in line with evolving reform at the global and EU levels (see the section on financial stability in the 2012 OECD Economic Survey). Even so, some vulnerabilities remain in the financial system, and will have to be addressed, as recommended in a recent report of the Committee on the Danish Financial Crisis (Ministry of Business and Growth, 2013b).

The size and structure of Denmark’s banking system, with both seven systemically important financial institutions (SIFIs) and a large number of small banks, create some challenges. The total assets of the Danish banking system are close to four times GDP (Figure 9) and the three largest banks make up 78% of total bank assets. Despite much stricter bail-in requirements than in other countries, the implicit guarantees on bank debt can reduce the funding costs for banks and might result in large contingent liabilities for the government (Schich and Lindh, 2012; IMF, 2013a). The Danish banking system is intimately interconnected with the other Nordic countries, underlining the importance of continued close coordination of Nordic bank policies, especially with respect to resolution procedures and burden sharing (IMF, 2013b). Denmark’s mortgage credit institutions, some of which are classified as SIFIs, do not take deposits and cannot access money markets. They only grant mortgage loans, which are funded through the issuance of covered bonds.
Progress has been achieved with respect to bank capital and liquidity, but bank profitability and asset quality are lower than in the other Nordic countries (IMF, 2013a), reflecting the bursting of the housing bubble, lower lending volumes and higher funding costs. In response to the relatively high share of non-performing loans (Figure 10), the FSA increased the requirements to provision for distressed property loans in April 2012. However, non-performing loans are mainly concentrated in agricultural and small business loans rather than loans to households and in small banks. The number of small and medium-sized banks has decreased due to failures, mergers and takeovers, from 137 in January 2007 to 78 in mid-2013, but some of them remain vulnerable.

The core Tier 1 capital ratio of Danish banks is 16.7%, well above that of their international peers, but some smaller banks still face capital adequacy challenges. Furthermore, the strength of bank capital could be overstated given capital quality and low weights on risky assets compared to other countries (Xiao, 2013). Relying solely on capital ratios, which weight assets by risk, can be misleading (Blundell-

1. Financial and non-financial assets of banks and other deposit takers (units engaging in financial intermediation as a principal activity).
2. Average of quarterly data available.
3. Includes both domestic and international banks.

Source: IMF, Financial Soundness Indicators.

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and a leverage ratio, which does not weight assets, is a desirable backstop to the risk-weighted capital ratios. At the start of 2013, the aggregate leverage ratio for the Danish banking sector stood at 5.6%, which is around the median of OECD countries and well above the Basel III ratio of 3%. However, the aggregate 5.6% ratio may mask lower ratios in specific banks. In October 2013, an agreement was reached to set up an expert committee to analyse the appropriateness of a leverage ratio above 3%, which is possible as a Pillar II measure under Basel III. Financial supervisors should ensure that each bank is sound and regularly publish both risk-weighted capital and leverage ratios in their financial stability reports.

Mortgage credit institutions in particular continue to rely on wholesale funding, which should be monitored closely. Since the beginning of the crisis, funding gaps have been reduced and loan-to-deposit ratios have improved, thanks to actions taken by banks and to the liquidity provided by the DNB. Liquidity ratios are monitored closely by the Financial Supervisory Authority (FSA) using the "Supervisory Diamond", a new tool that came into effect in 2013, which compares banks' performance against a number of benchmarks in terms of large exposures, lending growth, a funding ratio, concentration on commercial property and liquidity ratios. Smaller banks should continue to prepare for the EU liquidity regulations which will come into effect in 2015.

Changes over the past decade have created vulnerabilities in the Danish mortgage market. Although mortgage debt in Denmark is primarily concentrated among higher-income households, the share of deferred-amortisation loans increased from 19% of total private mortgage debt in 2004 to 56% in 2012. The government has improved the framework conditions to address the risks from deferred-amortisation loans, as recommended in the section on financial stability in the 2012 OECD Economic Survey. In May 2013, new rules came into effect restricting mortgages with variable rates or deferred-amortisation to people who can afford an equivalent mortgage with a fixed-rate, amortised loan. In July 2013, a risk-labelling scheme for housing mortgages was introduced so that borrowers have all the information on the risks associated with different types of loans.

Figure 11. Deferred-amortisation loans add to financial sector vulnerability

The number of households required to repay capital begins to rise in 2014 (Figure 11). Existing legislation offers three options to households with a deferred amortisation loan entering its amortisation period, and with a loan-to-value (LTV) ratio of over 80%: i) converting to a 30-year loan with amortisation; ii) raising a new deferred-amortisation mortgage loan up to the 80% LTV and supplement it with a bank loan with amortisation; or iii) taking a new deferred-amortisation loan offered by the bank if they face particular financial constraints and provided that the bank provisions for the potential losses. In most cases, the first option should be encouraged so as to lower the share of deferred-amortisation loans.

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Mortgage credit institutions face risks arising from deferred-amortisation loans in their portfolios and their financing model which uses shorter maturity funding for their loans. The share of bonds maturing in less than one year, used to finance 30-year mortgages, rose from 19% in 2008 to 37% in 2012. To address these risks, one major mortgage credit institution has introduced lower LTVs for variable-rate and deferred-amortisation loans and more generally fees have been raised for this type of loans. Since 2008, when all their refinancing was concentrated in December, some of the mortgage banks have spread their refinancing over the year, though much of it is still concentrated in December, and have tended to issue longer maturity bonds. In November 2013, the government proposed the introduction of a forced extension under certain circumstances of the term for mortgage bonds, shifting the risk of a term extension to investors. In addition, a broader approach to address the remaining risks associated with mortgage lending should be put in place. For example, a new Supervisory Diamond, which would include the share of deferred-amortisation loans in total loans and the share of mortgages with frequent refinancing as facets, could be created for mortgage banks, as recommended by the Committee on the Danish Financial Crisis (Ministry of Business and Growth, 2013b).

An interagency committee on SIFIs presented its report in March 2013. For crisis prevention, the committee recommended stricter capital and liquidity requirements, and improvements in corporate governance. For crisis management and resolution, it proposed a crisis management authority, a stability fund financed by SIFIs, the drawing up of crisis management plans by SIFIs, and the development of recovery and resolution plans. It also proposed a bail-in framework for the SIFIs to reduce potential liabilities for the government and encourage capital markets to monitor risks taken by banks. In October 2013, an agreement was reached to classify seven banks as SIFIs and implement the main recommendations of the committee starting in January 2015, which is welcome.

In February 2013, a Systemic Risk Council was set up composed of independent experts and representatives from various ministries, the FSA and the DNB. It is responsible for the identification of systemic risks in the financial system and the issuance of recommendations to the FSA and the government on macroprudential policies. The Council has an advisory role only. In October 2013, a draft law was introduced empowering the Minister of Business and Growth to implement macroprudential tools. This allocation of responsibilities could lead to a conflict of interest if macroprudential policies lead to a tightening of credit to firms. Furthermore, a dominant role of the ministry can compromise the independence of participating agencies (IMF, 2013c). The “comply or explain” rules should help address this risk, but if they fail to ensure the transparency and accountability of macroprudential policies, allocating the power to implement macroprudential tools to the FSA or the Systemic Risk Council should be considered.

### Box 1. Recommendations on financial stability

**Key recommendations**

- Create a new supervisory tool for mortgage banks, similar to the framework for banks, which includes thresholds on the share of deferred-amortisation loans and refinancing needs.

- Make sure that all banks, especially the largest ones, maintain a prudent leverage ratio, as a backstop to risk-weighted capital ratios.

**Further recommendations**

- Encourage households with loan-to-value ratios above 80% and facing the beginning of amortisation payments for loans granted 10 years ago to start now to amortise their loans.

- Monitor the effectiveness of allocating the power to implement macroprudential policies to the government and if this set-up turns out to be ineffective, consider allocating it to the Financial Supervisory Authority or the Systemic Risk Council.
The fiscal framework has been strengthened but the structure of taxation can be improved

The Danish welfare system acts as a buffer in times of crisis but may have costs. Even when the effect of the tax system (such as taxes on social benefits or tax breaks for social purposes) on social expenditures is accounted for, the so-called net social expenditures appear to be higher than the OECD average (Adema and Ladaïque, 2009). In part, this reflects strong redistribution, which has helped keep inequality relatively low. The relationship between government size and productivity growth is ambiguous. It depends on the relative importance of positive effects such as those associated with infrastructure spending and the correction of market failures, and negative effects, including the burden of taxation and the distortions stemming from market intervention (Adalet McGowan and Jamet, 2012). In any event, efficient public expenditure and a sound tax structure will foster economy-wide productivity.

Governments long failed to keep public expenditure in check, especially public consumption at municipal level (see the chapter on consolidating public finances in the 2012 OECD Economic Survey). In 2010, the previous government introduced a sanction mechanism to cut the main grant to municipalities if expenditure exceeds the agreed level, or if tax revenues do. In 2012, the new government introduced an obligation for Parliament to adopt expenditure ceilings for each level of government consistent with the overall medium-term fiscal objective, which it did for the first time in June 2013. These ceilings cover most spending, but exclude public investment and unemployment outlays. They are set for four years and will start in 2014. In parallel, the government has implemented the Fiscal Compact into Danish law. It is committed to keeping the underlying budget deficit below ½ per cent of GDP in the absence of exceptional circumstances and aims for budget balance or a surplus towards 2020.

The strengthening of the fiscal framework has delivered results. Public consumption remained below target in 2011 and 2012, which is attributed by stakeholders to the introduction of the sanctions for municipal overspending. For 2014, as part of the Growth Plan, municipalities have agreed with the government to continue to contain their consumption expenditures, but to increase investment. The government should fully implement the new fiscal framework and monitor the impact of the reforms on municipal outlays.

Better control of public expenditure allows to relax the tax pressure, in particular on labour. The high tax pressure on higher incomes coupled with a very narrow wage distribution give little incentives to take a more demanding job, which may have contributed to weak productivity growth. Despite the

**Figure 12. Marginal taxes on higher incomes are elevated**

Marginal tax wedge on labour income for a single person with no children, 2012¹

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![Graph showing marginal taxes on higher incomes](image)

1. Part of a marginal increase in total labour costs that is paid in income taxes plus employee and employer social contributions, for a single person with no children, for persons with income at 50-250% of average full-time earnings.

Source: OECD, Taxing Wages Database.
increase in the threshold of the higher personal income tax rate as part of the 2012 tax reform, the highest marginal tax rate will continue to apply at low levels of income although only 12% of taxpayers have income above this level (Figure 12). Besides, as part of the Growth Plan, the corporate tax rate will be gradually lowered from 25% to 22% between 2014 and 2016.

There is still room to improve the structure of taxes by further lowering taxes on income and raising property taxes. The property value tax has been frozen in nominal terms since 2002 except for properties with a current value below the 2002 one. The deductibility of mortgage interest has been limited and taxes on land have been raised. Once the housing market has stabilised, raising taxation on property further by restoring the tax base would limit the risk of future housing booms. This should be based on an improved valuation of property and land. The government has established a committee to that effect.

**Figure 13. Revenues from environmental taxes are high**

Per cent of GDP, 2011

1. The solid line shows the arithmetic average. The weighted average was 1.6%.
2. In Mexico, consumer prices on motor vehicle fuels are held more or less constant, in spite of large variations in world market prices. In years when world market prices are high, the excise tax on fuels turns into a subsidy – equalling 1% of GDP in 2011.

Source: OECD/EEA Database on Instruments used for Environmental Policy.

Environmental taxes are high in Denmark in relation to GDP and the country has adopted ambitious energy and climate targets (Figure 13). However, the efficiency of these taxes could be increased. Denmark differs from other countries because of its large taxes on transport, but this is mainly due to an extremely high tax on motor vehicle registration, which does not directly tax externalities from the use of cars, such as greenhouse gas (GHG) emissions. Recurrent taxes would do so, but they are lower, especially those on diesel (see the chapter on green growth in the 2012 OECD Economic Survey) and the room to increase them may be limited due to border trade. A plan to introduce a congestion tax in Copenhagen has been abandoned. The efficiency of environmental taxes can be further increased by taxing traffic and the use of roads more and car purchases less. This could also reduce air pollution in large cities, which is still an important issue (European Environmental Agency, 2010). The country could also push at the EU level for the adoption of policies that tax GHG emissions from agriculture.
Looking further ahead, the Danish Economic Council deems public finances to be sustainable thanks to recent pension system reforms (Danish Economic Council, 2013). In 2011, the government reformed the early retirement scheme and brought forward the increase in the statutory retirement rate from 65 to 67, which will now be implemented over 2019-22. In addition, from 2025, the retirement age will be indexed to life expectancy. However, public health and long-term care spending which is already among the highest in the OECD, is projected to reach very high levels in the future, with considerable uncertainty on the size of the increase, which will create new challenges for public finances in the future (Figure 14).

**Figure 14. Public health and long-term care expenditures are on course to rise sharply¹**

1. The figure shows the evolution of public spending on health care and long-term care in two scenarios, the "cost pressure scenario" and the "cost-containment scenario". Both scenarios include the effects of demographic and income changes but they differ in terms of the evolution of other factors such as relative prices, technological progress and the features of health institutions and policies. In the "cost pressure scenario", no policy action is undertaken to curb pressures on expenditure whereas the "cost-containment scenario" assumes some policy action to rein in these pressures.


In addition, the government’s fiscal sustainability estimates assume that labour market participation will improve. Reforms carried out in recent years to raise labour market participation will help. The shortening of the maximum unemployment insurance period will raise potential employment. The reform of the disability pension scheme and of the special employment programme for persons with disabilities (Flexjob) has the potential to lower the number of persons trapped into these schemes. The 2013 reforms of social assistance, compulsory education, and vocational education and training should help the labour market integration of youth. However, structural reforms will have to be pushed through, especially in the areas of competition, taxes and higher education to boost productivity (see below).
Box 2. Recommendations on fiscal policy

Key recommendations
- In case of a weaker or postponed recovery, the automatic stabilisers should be allowed to work. In the event of a faster recovery than the euro area one and a renewal of capital inflows, the fiscal stance should be tightened more than projected.

- Further lower marginal taxes on higher incomes. Raise taxes on property once the recovery of the housing market is well under way. Improve the structure of environmental taxes to raise their efficiency.

Further recommendation
- Closely implement the new fiscal framework and monitor its impact on municipalities’ outlays.

Boosting productivity growth is an overarching challenge

While labour productivity is still high compared with many countries, it has increased less since the mid-1990s than in the leading OECD economies and than in Denmark’s geographic neighbours (Figure 15). Productivity growth improved somewhat in 2009-10, but this reflected large job losses in the wake of the global economic and financial crisis and proved only temporary. Durably achieving stronger productivity growth remains a key challenge to maintain Denmark’s comparatively high living standards (Adalet McGowan and Jamet, 2012). In 2012, the government appointed a temporary Productivity Commission to help address the issue. This is welcome, but independent work on policies to enhance productivity should continue, either by setting up a permanent Productivity Commission or by giving this mandate to another independent institution.

Figure 15. Trend growth in real GDP per hour worked has been weak

Source: OECD, Productivity Database, December 2013.
Productivity growth is increasingly driven by investment in knowledge-based capital (KBC). In Denmark, investment in KBC is relatively high in relation to GDP (Figure 16), but its contribution to growth is lower than in some countries (Finland, Sweden and the United Kingdom) with similar KBC investment (Corrado et al., 2012). Developing the right skills and making a good use of them is also crucial for productivity growth. The new OECD Survey of Adult Skills (PIAAC) shows that adult skills are below the OECD average on the literacy scale and above it on the numeracy and problem solving in technology-rich environment scales (Figure 17). Also, Denmark ranks close to or below other Nordic countries on all scales.

**Figure 16. Investment in knowledge-based capital is relatively high**

Selected OECD countries in per cent of value added of the business sector, 2010 or latest data available.

*Source: OECD (2013), Science, Technology and Industry Scoreboard.*
Denmark’s participation in global value chains (GVCs) is closely associated with productivity growth. On the one hand, it reflects the ability to specialise and be competitive for highly demanded products. On the other hand, participation in GVCs in itself can generate productivity gains by boosting competition and the diffusion of knowledge. Denmark’s participation in GVCs is close to the median among OECD countries, but less than other small open economies (Figure 18; OECD, 2013b). It is mainly driven by the use of foreign intermediates in Danish exports (backward participation) rather than Danish production of inputs used in other countries’ exports (forward participation). Analysis of trade in value-added terms also shows the large role of trade in services for Denmark.

1. Levels 2 and 3 are the highest proficiency levels. France, Italy and Spain did not field the problem solving in technology-rich environments assessment.

The country should continue with structural reforms in various areas so as to benefit more from R&D investment, skills and trade, and to enhance productivity growth. Efforts to further strengthen education and labour market institutions should continue. Reforms should also spur competition and improve framework conditions for innovation and entrepreneurship. Stronger competition in private services would raise productivity growth in these sectors, boost participation in GVCs, and improve the competitiveness of manufacturing firms, which use services as inputs.

**Promoting competition**

There is evidence of weak competition in parts of the economy. For instance, prices corrected for taxes and levels of prosperity are 7% higher for goods and 14% higher for services compared to an average of OECD countries (Ministry of Business and Growth, 2013c). Weak competition is also reflected in the large number of low-productivity firms in many sectors (Productivity Commission, 2013b; Danish Economic Council, 2010).

In October 2012, the government presented a policy package that involved: i) strengthening the competition law; ii) conducting an analysis of competition in different sectors, especially non-tradable services; and iii) improving the effectiveness of public procurement. Over the past decade, competition problems in several sectors have already been analysed extensively, leading to the identification of the main issues and recommendations to address them, including in the chapter on competition in the 2005 OECD Economic Survey. However, not much progress has been made in policy implementation. Competition legislation was stiffened in December 2012, with higher fines and the possibility of imprisonment for cartel behaviour, and Denmark ranks well according to a set of new OECD indicators of competition law and policy (Alemani et al., 2013).

Many professions are highly regulated, notably retail trade, pharmacies, taxis and professional services (lawyers, dentists, general practitioners, real estate agents). An inter-ministerial taskforce has been appointed to examine the highly regulated professions and determine how to improve the regulations that govern them. In retail trade, legal shop opening hours were extended in 2012, with the possibility to open on Sundays. However, the sector remains subject to many restrictions (Figure 19), including the obligation to have permits to engage in commercial activity, specific regulations for large outlets, and protections for existing firms. Zoning regulations that limit the location of stores and strict regulations on their size, prevent entry and exit of firms and restrict competition and economies of scale. Environmental regulations, which are extensive in Denmark, can also create barriers to new firm entry and technology lock-in that would prevent the adoption of better solutions. The impact of these regulations should be assessed and the government should look at ways to increase the flexibility for the size and location of stores and to relax permit obligations, while taking into account objectives such as the quality of the environment. Some network sectors, such as railways, have some scope for further
opening competition (Productivity Commission, 2013b). Regulations that hamper competition and are not well justified by other objectives ought to be reconsidered.

Figure 19. The retail sector is highly regulated
OECD Product Market Regulation indicator in the retail sector

Note: The index scale is 0 to 6, from least to most restrictive. The reference year is 2008 for all countries. The PMR indicator for Denmark for 2013 is preliminary, and for purposes of comparability is calculated on the basis of the 2008 methodology. For more details, see Source.


Government procurement as a share of public expenditures in Denmark is low. Public authorities find procurement rules difficult to apply, especially since complaints can impose large costs on the public servants concerned. The Danish Competition and Consumer Authority has provided municipalities with guidance notes covering interpretation of legislation, how to apply legislation in practice as well as exchange of best practices as well as guidance on public-private partnerships, whose use has increased in recent years. A working group on public procurement was set up in June 2013 to produce clearer, simpler and more flexible draft legislation on public procurement and to reduce transaction costs faced by the participating parties in public procurement. Legislation on public procurement should be simplified as soon as possible, in line with the recommendations of the working group. In late 2013, the appeals procedure was made more efficient by increasing fees and shortening deadlines on when complaints are allowed to be filed.

The participation of small and medium-sized enterprises (SMEs) in public procurement is higher than that in the European Union at large. However, it is still limited by exacting documentation requirements and tight deadlines that make the bidding process costly, and by their lack of knowledge of procurement rules (Danish Competition and Consumer Authority, 2013). Greater use of e-procurement to decrease transaction costs and make the process more uniform could improve SME participation in public procurement.

Fostering innovation and entrepreneurship

Access to private funding, especially for SMEs, has deteriorated during the crisis and is now more difficult than in other Nordic countries. This underlines the importance of other sources of finance for SMEs, including venture capital and angel investors (OECD, 2011). Venture capital for new growing firms is available in Denmark, though less so than in some other Nordic countries and it declined by 60% between 2007 and 2012 due to the crisis. Since 2009, the government has tried to improve SME financing and export opportunities by strengthening loan guarantees, start-up loans and export guarantees, as well as easing access to risk capital for new businesses.

The amount of government-guaranteed loans increased more than seven fold between 2007 and 2012, and has been scaled back only to a limited extent. An analysis of credit guarantee schemes across OECD countries suggests that although they have increased credit availability, they also expose the guarantors to risk and there is scant evidence that they boost SME sales, employment or innovation.
(OECD, 2013c). As the economy recovers and access to funding improves, the government should gradually withdraw some of these schemes and ensure that all public intervention schemes are mainly privately co-funded. Evaluation of government support to SMEs is common in Denmark, but there should be a more unified and transparent approach to the monitoring and evaluation of these schemes.

Denmark has a balanced mix of R&D tax incentives for firms and direct government support to business R&D, which is welcome as each has strengths and weaknesses (Figure 20). Although R&D tax credits mitigate the “picking winners” problem associated with direct grants, they may protect incumbents at the expense of new firms, and slow down the reallocation process, if they are not designed well (Bravo-Biosca et al., 2013). This is because firms typically lose money in the early stages of an R&D project. Introducing carry-over provisions and cash refunds in the design of R&D tax incentives would help address this problem. In 2012, a new scheme was introduced allowing firms that spend on R&D and face after-tax income losses to benefit from a tax refund of 25% of these losses. This is a step in the right direction but the refunds remain quite limited compared to other countries. Furthermore, young firms may not fully benefit from this type of scheme if upfront they lack the means to start an innovative project (Busom et al., 2012). The government should continue to improve the access of young financially-constrained firms to funding, possibly by extending the tax refund scheme or increasing direct support.

Figure 20. Public support to business R&D is provided through both tax incentives and direct funding

As a percentage of GDP; 2011 or latest year available

The links between business, especially SMEs, and research in higher education institutions are not very strong. Total private R&D outlays, at 2.1% of GDP in 2011, are high in Denmark. However, the share of private financing of Danish university research remains low, despite some recent improvements. The concentration of higher education institution research in areas where business interest is low has been highlighted as one potential reason for this (Ministry of Science, Innovation and Higher Education, 2009). The funding system of universities’ research activities was reformed in 2007 and 2010 to raise quality by developing competition between institutions to obtain funding. However, public funding of universities in Denmark is mostly targeted on institutions and less on projects (Steen, 2012). A move towards a more balanced mix of project and institutional based funding could help nurture tighter links between industry and academia. The Danish Innovation Strategy that was launched by the government in December 2012 includes various initiatives to encourage cooperation between business and education institutions, for instance through public-private partnerships.

Even when innovation gets close to the market, the commercialisation of public research results does not seem to be that successful (ERAC, 2012). The GTS (Godkendt Teknologisk Service) institutes, which are in charge of transferring applied research to industry, and universities have a key role to play in this regard. The increased involvement of GTS staff in universities and placement of PhD students...
Barriers to entrepreneurship are low in Denmark, leading to high start-up rates. New firms add dynamism to the Danish economy as they contribute heavily to job creation and destruction. However, the prevalence of high-growth enterprises, which is another important sign of entrepreneurial dynamism, is not very widespread (OECD, 2012b; Nordic Innovation Centre, 2012). Market competition, innovation policies and access to funding are important to foster such dynamism, as are specific policies towards high-growth SMEs (OECD, 2010). In Denmark, these policies are run by Business Development Centres and include the provision of a variety of services, such as advice and bringing together collaborating partners. They seem to perform well in the short term, but their longer-term effect should be monitored more closely. Furthermore SME policies could be better coordinated with innovation and entrepreneurship policies to boost the impact of KBC investment on productivity growth.

Box 3. Recommendations to foster competition, innovation and entrepreneurship

Key recommendations

- Assess the impact of the regulations of professions and remove those that hamper competition and are not fully justified by other objectives. Harmonise national standards that hinder foreign firm entry with international ones. Relax ownership regulations and zoning and size regulations for stores.

- Simplify the legislation on public procurement and increase the use of e-procurement to lower transaction costs and make the process more uniform.

- To support young and dynamic firms, further extend carry-over provisions and cash refunds in R&D tax credit programmes or increase direct support.

Further recommendations

- Evaluate the effectiveness of the government loan guarantee schemes for SMEs in a unified and transparent manner and gradually withdraw those that are not economically efficient.

- Move towards a more balanced mix of project and institutional based research funding with the objective to increase the links between universities and industry.

Education and adult learning policies to develop the right skills

The share of 30-34 year olds who have completed at least secondary education is at the OECD average, but much below that in Finland and in other countries with large and effective vocational education systems such as Austria, Germany, and Switzerland (Figure 21). In 2012, average PISA results measuring the competencies of 15-year-old students were close to or above the OECD average depending on the competency, but the share of high PISA performers was low. Moreover, while the share of students with weak proficiency was relatively low, students with an immigrant background did not score well. As Denmark is one of the OECD countries spending the most on education, these results point to scope to raise the efficiency of the system.

The government has launched a comprehensive reform of compulsory education that: i) introduces a longer and more varied school day with an increase in the number of lessons and in the quality of teaching in mathematics and Danish, and with both extra activities and special targeted help for students; ii) increases the required education level of teachers, strengthens further the training of both teachers and school leaders, and gives more responsibilities to the latter as regards the organisation of school days; and iii) defines clear objectives for public schools and reflects them in performance
indicators to improve the assessment framework. In addition, a group of consultants will advise municipalities and schools on the implementation of the reform with the aim to enhance quality. The reform is welcome. It should be implemented with close monitoring of its effects. To enhance the attractiveness of initial teacher-training programmes and improve further career paths for teachers, the government could consider developing university-based initial teacher-training as a pilot programme. The new evaluation framework should more explicitly include teachers' and school principals' appraisals by municipalities.

The vocational education and training system (VET), in which about 20% students enrol, suffers from high drop-out rates, especially among students with an immigrant background, leaving some with poor skills. Some drop out because of a lack of basic skills when they enter the programme. Another reason is the inability to find a workplace (which is required in programmes), especially in times of economic distress. It is crucial to lower drop-out rates while improving the quality and attractiveness of VET.

The government increased funding of VET, including on training places as part of the 2013 Budget, and proposed a reform of VET in October 2013 that includes: i) the introduction of selection criteria to enter VET; ii) measures to increase its attractiveness, including by limiting early specialisation, increasing the number of high-level courses to ease transitions to standard upper secondary education and targeting youth; and iii) measures to raise the quality of VET such as an increase in the number of hours of courses and higher requirements for teachers. The reform also proposes various options for students who do not fulfil the selection criteria, either to prepare them for VET or to help them acquire specific skills. This reform is welcome. It will be important to closely monitor its impact to make sure that VET becomes more attractive to students without increasing school failures among those who are not selected. In addition, some VET programmes targeting high-performing students should offer pathways to tertiary education.

The share of 30-34 year olds with tertiary education has increased in recent years and is close to the OECD average (Figure 21), but below that in other Nordic countries. Estimates of the private return to tertiary education in Denmark vary but are generally relatively low despite free access, due to high marginal taxes and relatively low wage premiums. This may discourage some youth from undertaking tertiary education. In addition, generous grants and low private returns of education may lead students, when they choose their field of education, to put more weight on criteria such as their own short-term interest and the popularity of the field, rather than their abilities and the potential economic benefits.

Figure 21. A relatively large share of young adults have a low level of education
Decomposition of the 30-34 year olds by highest level of education attained, 2011


To strengthen incentives to undertake tertiary education and encourage students to acquire the right skills, the government should continue efforts to cut marginal taxes on higher incomes in order to increase the return to higher education. The 2013 reform of the grant system limits the duration of the grant beyond the normal length of programmes for students entering a higher education programme more than two years after having been accepted. This should encourage students to choose the right programme in terms of their abilities and labour market needs. However, as underlined in the chapter
on education in the 2009 OECD Economic Survey, introducing tuition fees would give even greater incentives to students to choose those programmes that will deliver high returns to them and to the society. The introduction of tuition fees should be gradual and in parallel with reductions in marginal income tax rates to preserve incentives to undertake tertiary education. In addition, income-contingent loans and grant programmes should ensure that students from poor families continue to have access to tertiary education.

Reforms to raise the quality of tertiary education should also continue. The National Audit Office has recently questioned the quality of programmes in humanities and social sciences, concluding that the number of teaching hours per student was extremely low in these fields. The government has decided to increase funding for humanities and social sciences. There should be close monitoring of the quality of these programmes and financial sanctions for universities with low quality programmes. Efforts to develop easily accessible indicators on the main features of programmes, including the number of teaching hours, are welcome and should continue by also including information on the labour market situation of alumni. More generally, reforms should improve the quality of the evaluation and control framework while preserving universities’ academic autonomy.

The share of workers participating in formal and non-formal education and the number of hours per participant are relatively high. However, the impact of the Danish adult learning system on employment and careers seems to be mixed (Kristensen and Skipper, 2009). Since 2010, the government has been reforming the adult education system by making it more targeted on the most vulnerable groups and increasing the role of vocational and higher education programmes. In addition, the funding system should encourage educational institutions to recognise prior learning so as to make for a better use of resources. Finally, teachers in vocational education should be given stronger incentives to update their skills, as planned in the context of the VET reform.

**Labour market and social policies to make the most of skills**

The low share of high-skilled workers in private service sectors has been identified as one reason for low productivity growth in Denmark (Productivity Commission, 2013a). The country has a slightly higher share of skilled workers overall than the EU average but lower shares in some private service sectors and higher shares in public administration (Figure 22). Other Nordic countries also have a large share of high-skilled workers in the public sector but the large overall number of skilled workers in the economy allows them to also have larger shares in private services.

The wage setting system and better work conditions in the public sector, combined with high marginal income tax rates, create some inefficiency in the allocation of skills in the economy. Wage growth in the public sector is indexed on that in the private sector with a delay, and is only weakly linked to individual performance (Productivity Commission, 2013c). While the scheme prevents wages in the public sector from exceeding those in the private sector on average over the long term, wages in the public sector can temporarily grow more than in the private sector, as has recently been the case as a result of the crisis. Since wages are not closely linked to individual performance in the public sector, there could be stronger incentives for highly productive workers to go to the private sector, although these are blunted by a compressed wage structure and high marginal income tax rates. Wages should be more closely linked to individual performance in the public sector to encourage productivity gains and to align financial incentives to work in the public and private sectors.

Non-compete clauses in employment contracts aim at protecting firm-specific knowledge but can hinder the transmission of knowledge within the economy and reduce labour mobility if they are used excessively. These clauses seem to be very frequent in Denmark (Productivity Commission, 2013b). The government should assess the use and impact of these clauses.
While a good allocation of skills within the economy will help to achieve better growth outcomes, it is also important to activate skills more broadly. Several reforms have been passed in recent years to raise labour market participation and employment. They include reforms of the early retirement programme, disability schemes, social assistance and a shortening of the maximum unemployment insurance period. Efforts should concentrate on:

- Carefully implementing the reform of flexjob and disability benefits and monitoring its impact. For those above 40 years old, disability benefits are still granted on a permanent basis. In addition, as part of the reform of early retirement programmes, older workers can more readily access disability benefits. It is important to make sure that new pathways to disability pensions for older workers are not created and to move to regular entitlement assessment of disability pensions. Permanent disability pensions should be granted only under special circumstances.

- Closely monitoring the implementation of the shortening of the unemployment insurance period. While it was appropriate to introduce a temporary scheme to avoid a sharp fall in income of the unemployed whose rights to unemployment insurance ran out, the phasing-in of the reform is now very gradual, stretching out to 2017. If the labour market recovers more swiftly than foreseen, an accelerated phasing-in would be warranted.

- Limiting inactivity traps. Recipients of social assistance face limited financial incentives to take up a job because most of the gains would be offset by the loss of social assistance (which is generous in Denmark), the loss of housing benefits and higher taxes. The 2013 reform of social assistance strengthens the obligation and financial incentives to undertake education for youths who need it, offers more job search help for those who are closer to the labour market, and increases control of job search for adults with ability to work. Its impact on education and labour market participation needs to be monitored.

Source: Eurostat.
• Raising the efficiency of ALMPs. The decentralisation of ALMPs to municipalities in 2007 has created new challenges but little is known about its impact. The government has appointed a committee to look at these issues, and more generally at the efficiency of ALMPs. There is a need to find a funding system that gives municipalities the right incentives to help the unemployed find a job and a framework that ensures equal and efficient treatment among the unemployed across municipalities without increasing the administrative burden.

Despite some improvement over the past decade, immigrants are not well integrated in the education system or in the labour market. The gap in PISA results between Danish-born children of immigrants and children of natives is high. Since the crisis, the foreign-born have seen their unemployment rate reach 14.7% in 2012 against 6.8% for the natives. Efforts to improve the integration of immigrants need to continue. The quality of Danish courses for immigrants should be raised. The Green Card programme, which allows skilled workers to enter and look for a job, has encountered limited success. While labour market weakness has played a role, the government should assess this programme and other relevant programmes to see how they may need to evolve.

Box 4. Recommendations to make the most of skills

Key recommendations

• When implementing the reform of vocational education and training (VET), make sure that VET becomes more attractive to students and more selective without increasing school failures among those who cannot enter VET. Develop VET programmes that offer pathways to tertiary education.

• Raise the performance of the adult learning system by continuing efforts to give educational institutions greater incentives to recognise prior learning and by increasing the quality control of courses.

• Improve the efficiency of ALMPs, including by ensuring that municipalities face the right financial incentives to help the unemployed find a job.

• When implementing the reform of flexjob and disability programmes, make sure that the special disability scheme for older workers does not become a new pathway to early retirement. Move to regular entitlement assessment of disability pensions and limit the granting of permanent pensions for those above 40.

Further recommendations

• Closely monitor the implementation and impact of the reform of compulsory education. Consider the introduction of university-based initial teacher-training programmes to enhance their attractiveness and improve career paths for teachers.

• Raise the incentives to choose the right tertiary education programme by gradually introducing tuition fees while continuing efforts to lower marginal income taxes.

• More closely link wages to individual performance in the public sector.

• Closely monitor the implementation of the shortening of the unemployment insurance period and implement a quicker phasing-in if the labour market recovers rapidly.

• Maintain the spending on efficient programmes for the integration of immigrants. Continue efforts to raise the quality of Danish courses for immigrants.
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Denmark does not appear to face fiscal sustainability challenges in the medium term. Gross public debt as a share of GDP is well below 60% and the government projects that the debt ratio will remain below 40% by 2030 as part of the 2013 Convergence Programme (Figure A1.1, “Baseline” scenario). Past structural reforms mentioned in the main text (including reforms of the pension system, fiscal framework, unemployment insurance and tax system) will strengthen public finances. The Baseline scenario of the Convergence Programme assumes an improvement by 1.6 percentage points in the primary balance to GDP ratio over 2014-30. With a moderate fiscal slippage, the debt ratio would remain well below 60% by 2030 (scenario “Fiscal slippage”). Because of the relatively small size of the debt, the mechanical impact of lower GDP growth (with an unchanged primary balance) on debt dynamics would also be limited until 2030 (scenario “Lower GDP growth”).

Pressures on public finances will increase in the longer term due to demographic change and declining North Sea oil production. The primary balance is projected to turn negative and the primary deficit to widen over 2030-40. Nonetheless, Danish public finances are deemed to be sustainable over the long term by several institutions (Danish Government, 2013; Danish Economic Council, 2010; European Commission, 2012). The pension reform that links the statutory retirement age to life expectancy has made fiscal sustainability more robust to longevity changes. In addition, analyses by the government and the Danish Economic Council show that since public wages, social transfers, and taxes are de facto indexed on wages in the private sector, and thereby on productivity, the primary balance and the sustainability of public finances would not be affected much by lower productivity growth.
Figure A1.1. Public debt ratio under alternative scenarios

Note: The Baseline scenario is the one presented in the Convergence Programme for Denmark 2013. The two other scenarios relax one of the assumptions of the Baseline scenario. In the "Lower GDP growth" scenario? GDP growth is lowered by 0.5 percentage point per year. In the "Fiscal slippage" scenario, the primary balance is lowered by 0.5 percentage point per year. Government assets are assumed to be unchanged in the alternative scenarios.

Source: OECD calculations and Danish Government, Convergence Programme Denmark 2013.
ANNEX A2. PROGRESS IN STRUCTURAL REFORMS

This annex summarises recommendations made in previous Surveys and actions taken since the OECD Economic Survey on Denmark published in January 2012.

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Action taken since January 2012</th>
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<tbody>
<tr>
<td>Fiscal framework and taxation</td>
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<tr>
<td><strong>Fiscal framework</strong></td>
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<tr>
<td>Introduce expenditure ceilings at general government level covering most public spending (not only public consumption, though perhaps excluding investment and cyclically-sensitive spending such as unemployment benefits) at a medium-term horizon.</td>
<td>In 2012, the government introduced a budget law to better control public spending. It implies that the Parliament has to determine binding multi-annual expenditure ceilings for each level of government consistent with the overall medium-term fiscal objective. The first ceilings, announced in June 2013, are set for four years and start in 2014. In addition, the Fiscal Compact has been implemented into Danish law to achieve budget balance or surplus towards 2020.</td>
</tr>
<tr>
<td>Give the Economic Council more of a fiscal council role and to this end grant it access to the necessary information, including the detailed government accounts.</td>
<td>The 2012 budget law gave the Economic Council the role of monitoring the new expenditure ceilings and fiscal policy.</td>
</tr>
<tr>
<td>Continue with the use of sanctions to contain local public expenditures and consider raising them further if slippages reappear.</td>
<td>Sanctions have been successful so far in containing local public spending.</td>
</tr>
<tr>
<td>If the new sanctions and envisaged spending ceilings fail to contain local public spending, consider limiting the use of grants to sub-national governments to specific purposes and reducing the sharing of responsibilities between levels of government.</td>
<td>The new fiscal framework has been successful so far in containing local public spending.</td>
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<tr>
<td><strong>Taxation</strong></td>
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<tr>
<td>Reduce marginal taxes on higher incomes, by raising the tax threshold or cutting the marginal tax rate, once fiscal consolidation has been achieved and public spending is better controlled. Increase property taxes by restoring the tax base once the housing market has recovered.</td>
<td>In 2012, as part of a tax reform, marginal taxes on higher incomes were lowered (through an increase in the top income tax threshold) and the earned-income tax credit was increased.</td>
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<tr>
<td><strong>Financial system</strong></td>
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<tr>
<td>Deposit insurance premia should be contingent on an institution’s riskiness. Consider imposing capital requirements dependent on size for systemically-important financial institutions.</td>
<td>In October 2013, an agreement was reached to implement the main recommendations of the Committee on Systemically Important Financial Institutions (SIFIs), including stricter capital requirements for SIFIs.</td>
</tr>
<tr>
<td>Continue to improve collaboration between the Danish National Bank and the Financial Supervisory Authority with a view to ensure consistency between the DNB macroprudential supervision mandate and the FSA microprudential mandate focusing on individual banks.</td>
<td>In February 2013, a Systemic Risk Council was set up, including representatives from various ministries, the Financial Supervisory Authority and the Danish National Bank. The Council is responsible for the identification of systemic risks in the financial system. In October 2013, a draft law put the Ministry of Business and Growth in charge of implementing macroprudential tools.</td>
</tr>
<tr>
<td>Closely supervise new deferred-amortisation mortgage loans, possibly by introducing more stringent caps on loan-to-value or loan-to-income ratios for such loans, once the housing market recovers. Continue the ongoing efforts to improve data collection to get a better understanding of the characteristics of the users of these types of loans.</td>
<td>In May 2013, new rules restricting mortgages with variable rates or deferred-amortisation to people who can afford an equivalent mortgage with a fixed-rate or amortised loan came into effect. In July 2013, a risk labelling scheme for housing mortgages was introduced. In 2013, several reports were published by the Ministry of Business and Growth analysing the characteristics of households with deferred-amortisation loans.</td>
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<tr>
<td>Labour market</td>
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<tr>
<td><strong>Labour market</strong></td>
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<tr>
<td>Implement the 2011 Agreement on early retirement while making sure that the provision concerning the “new” senior disability scheme does not lead to an unwarranted increase in the number of recipients of these benefits.</td>
<td>The Agreement on early retirement is being implemented, with the first increase in the early retirement age taking effect in 2014. No action on the new senior disability scheme, which will come into effect in 2014.</td>
</tr>
<tr>
<td>Improve work incentives and targeting of support for the sick and disabled with ability to work, while tightening eligibility conditions, and reassess entitlements regularly. In particular, the special disabled employment programme (flexjob) should be reconsidered. It should be better targeted, work ability should be regularly reassessed, and the wage subsidy should be lowered.</td>
<td>Since June 2012, the disability benefit for people under age 40 has been replaced by a new rehabilitation scheme with only a very limited number of people in this age group continuing to be entitled to a permanent disability benefit. The flexjob scheme has been reformed to limit its excessive use, including by making it less generous and temporary.</td>
</tr>
<tr>
<td>To move the unemployed into employment faster, the unemployment benefit entitlement period should be cut from four to two years.</td>
<td>From the beginning of 2013, the maximum unemployment benefit entitlement period has been cut from four to two years (as part of the 2010 Fiscal Consolidation Agreement). A temporary scheme has been introduced for the unemployed having exhausted their rights but who did not find a job, which will be gradually phased out until 2017.</td>
</tr>
<tr>
<td>Consider gradually reducing the unemployment benefit replacement rate over the benefit entitlement period.</td>
<td>Under the temporary scheme, the maximum benefit is 60% of the maximum unemployment benefit, which implies a reduction in the replacement rate after two years of unemployment.</td>
</tr>
<tr>
<td>To better align funding with municipalities’ responsibilities for labour market programmes, municipalities should receive proportionally less reimbursement for the costs of public benefits the longer a person is receiving benefits.</td>
<td>A working group of independent experts has been commissioned to examine ways to improve the performance of active labour programmes.</td>
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<tr>
<th>Integration</th>
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<tbody>
<tr>
<td>Further efforts are needed to streamline immigration processing to ensure that high-skilled workers can quickly and easily migrate to Denmark.</td>
<td>No action taken.</td>
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<th>Education</th>
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<tr>
<td>Compulsory education</td>
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<tr>
<td>Since pre-school class has been made compulsory, further strengthening its educational content should be undertaken to make it effectively the first year of primary education.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>The voluntary 10th year could be scaled back and targeted at those students most in need of further development.</td>
<td>As part of the October 2013 VET reform, the 10th year will be used to prepare students for VET and make them ready to meet the new eligibility requirements.</td>
</tr>
<tr>
<td>Develop school management and incentives to get more value for the comparatively ample resources that are available for compulsory education in Denmark. Develop outcome measures and hold managers accountable.</td>
<td>As part of the June 2013 compulsory education reform, the assessment and evaluation framework will be improved. Teachers and school leaders will be encouraged to use national tests.</td>
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<tr>
<td>Introduce accreditation of teachers and give more weight to teachers’ specific competencies when allocating tasks among staff. Introduce more wage flexibility.</td>
<td>No action taken concerning the accreditation system. The 2013 reform sets a target that, by 2020, all students in public schools should be taught by teachers who have obtained main subject qualifications.</td>
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<tr>
<th>Vocational education</th>
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<tr>
<td>Review the structure of apprenticeships and programmes to make sure that they are well anchored into a generic competence structure. Consider whether practical elements can be introduced earlier in vocational education programmes.</td>
<td>The VET reform includes a streamlining of VET education programmes and measures to increase pathways towards general upper secondary education.</td>
</tr>
</tbody>
</table>
**Tertiary education**

Consider gradually replacing some of today’s student grants with loans, particularly if studies are prolonged. 

The grant system has been reformed in 2013 to limit the possibility to receive grants to the normal duration of programmes for students entering a higher education programme more than two years after having been accepted and thereby to speed up completion.

Move gradually towards a system where not only non-EU students, but also Danish and EU students are charged for tuition, while extending income-contingent loans to finance tuition costs.

No action taken.

**Integration of immigrants**

A broad strategy is needed to better integrate immigrants and the second generation in the education system, starting at compulsory level.

The compulsory education reform aims at better integrating students with an immigrant background into the education system and at raising their educational outcomes.

Encourage private institutions to establish more international schools to cater for children of foreign workers living temporarily in Denmark.

No action taken.

**Competition**

Increase competition for pharmacies, taxis, and public transportation.

With the Competition Package of October 2012, a number of working parties and commissions have been appointed to examine competition in the pharmacy sector and for taxis.

Improve competition in the public sector via greater tendering.

The Council for Public-Private Cooperation was established in April 2013 to support competition for public sector contracts. A working group on public procurement was set up in June 2013 to produce simpler and clearer legislation for public procurement.

Ease regulations under the Planning Act surrounding the size and placement of new shops.

No action taken.

Streamline the institutional set-up of the authorities in charge of competition and increase the fines for violations of competition policy.

In December 2012, competition law was strengthened with higher fines and the possibility of imprisonment for cartel behaviour.

**Entrepreneurship and innovation**

Entrepreneurship education programmes need to be designed in a way that incorporates practical work experience as an employee in order to improve students’ understanding of running a business.

No action taken.

Consideration needs to be given to whether tax incentives could be used as well as, or instead of, direct expenditure as a tool to promote investment in R&D.

In 2012, a new tax incentive scheme was introduced, allowing firms that spend on R&D and face after-tax income losses to benefit from a tax refund of 25% of these losses. The scheme is capped at DKK 5 million, but the cap will be increased to DKK 25 million by 2015.

**Climate change**

Regularly reassess national targets in the light of international and technology developments. Adjust accordingly the share of GHG emission cuts to be achieved domestically by financing GHG emission cuts outside Denmark.

No action taken.

Push for more binding caps in future EU negotiations.

As part of the 2012 Energy Agreement, the government has announced that it will continue to push for ambitious climate and energy policies at the EU level. In June 2013, the Danish government called for the adoption of a binding target at the EU level to reduce GHG emissions by 40% in 2030 compared with 1990 levels.

Ensure that policies towards renewable energy support least-cost abatement options and avoid supporting one

The 2012 Energy Agreement supports the development of various types of technologies but includes specific...
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<th>Action</th>
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<tbody>
<tr>
<td>Work at the EU level towards the introduction of a common strategy to help meet EU renewable targets at least cost.</td>
<td>targets for wind energy (by 2020, 50% of electricity should come from wind energy).</td>
</tr>
<tr>
<td>Rationalise the Danish energy tax system to harmonise the implicit carbon price. In particular, raise tax rates on coal and diesel to reduce the gap with the implicit carbon price on petrol.</td>
<td>No action taken.</td>
</tr>
<tr>
<td>At the EU level, push for the adoption of a common policy to limit non-CO₂ emissions from agriculture.</td>
<td>No action taken.</td>
</tr>
</tbody>
</table>
Chapter summaries

Chapter 1. Trade specialisation and policies to foster competition and innovation

Danish productivity has grown only weakly over the past two decades, both historically and in relation to other countries, despite sound policies and institutions. At the same time, the country has lost export market shares. Denmark needs to continue its efforts to reap the benefits of globalisation, which would contribute to invigorating productivity growth. Fostering competition by removing regulatory barriers and improving public procurement would help. In addition, innovation policy needs to become more efficient and more in line with the growing importance of the service sector and knowledge-based capital. Small and medium-sized enterprises could be better integrated into global markets by improving their access to finance and developing the entrepreneurship culture.

Chapter 2. Making the most of skills

Surveys suggest that Denmark ranks close to or slightly above the OECD average in terms of student and adult skills, even though Denmark spends more than many OECD countries on education, labour market policies and adult learning. Sluggish productivity growth over the past two decades raises the question of how to develop better skills and use them more efficiently to achieve stronger and more inclusive growth. Improving the performance of compulsory and tertiary education would help all students acquire the right skills. Ensuring adults upgrade their skills is another key challenge, which involves strengthening the adult learning system. Reforms of taxation and of the wage setting system in the public sector would promote a better allocation of skills economy-wide. Finally, to activate skills more broadly, reforms to raise labour market participation should continue and the efficiency of active labour market policies will have to be increased further.
This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Denmark were reviewed by the Committee on 27 November 2013. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 19 December 2013.

The Secretariat’s draft report was prepared for the Committee by Stéphanie Jamet and Muge Adalet McGowan under the supervision of Vincent Koen. Research and editorial assistance was provided by Lutécia Daniel.

The previous Survey of Denmark was issued in January 2012.

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See also http://www.oecd.org/eco/surveys/Denmark.

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