ENGLISH SUMMARY

This report contains two chapters: Chapter I presents an economic outlook for the Danish economy, and chapter II examines the Danish system of unemployment insurance.

Chapter I: Economic Outlook

The Danish economy has hardly grown over the past four years. Until recently, there were indications that the Danish economy was about to return to positive growth rates. However, growth was weak during the first half of 2014 in Denmark, as in the euro zone, and various business cycle indicators have recently deteriorated due to the geopolitical conflict in Ukraine. The projected growth rate for Danish GDP in 2014 is revised downwards from 1½ per cent forecast in the spring report to ½ per cent.

The cyclical position of the Danish economy has not deteriorated as much as the downward revision of GDP growth suggests. Developments in the urban area business sector have been more positive during the first half of 2014 and the projected growth rates for gross value added in this sector have hardly changed. As this sector accounts for the bulk of private employment, this may explain the fact that Danish employment is rising despite stagnant GDP.

The currently weak economic growth is presupposed to be a temporary phenomenon. Danish GDP is forecast to grow by close to 1½ per cent in 2015 and by about 2½ per cent in 2016. Business investment and private consumption, which have remained at low levels for several years, are expected to contribute significantly to the economic recovery. Growth rates are expected to exceed the rates of structural growth over the following years such that the output gap...
will be closed by 2020. The output gap is estimated to be about 4½ per cent of GDP in 2014. The main figures of the projection are presented in table A.

### Table A  Key figures of the short-term outlook for the Danish economy

<table>
<thead>
<tr>
<th></th>
<th>Current prices DKK bn.</th>
<th>Per cent of GDP</th>
<th>Percentage change, volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private consumption</td>
<td>906.1</td>
<td>48.8</td>
<td>-0.1</td>
</tr>
<tr>
<td>Public sector consumption</td>
<td>523.9</td>
<td>28.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>320.9</td>
<td>17.3</td>
<td>0.2</td>
</tr>
<tr>
<td>consisting of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential investment</td>
<td>73.8</td>
<td>4.0</td>
<td>-8.0</td>
</tr>
<tr>
<td>Business fixed investment</td>
<td>204.0</td>
<td>11.0</td>
<td>3.4</td>
</tr>
<tr>
<td>Public sector investment</td>
<td>43.1</td>
<td>2.3</td>
<td>7.7</td>
</tr>
<tr>
<td>Stockbuilding a)</td>
<td>0.9</td>
<td>0.0</td>
<td>-0.3</td>
</tr>
<tr>
<td>Total domestic demand</td>
<td>1,751.8</td>
<td>94.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>1,018.6</td>
<td>54.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>913.6</td>
<td>49.2</td>
<td>0.9</td>
</tr>
<tr>
<td>GDP</td>
<td>1,856.8</td>
<td>100.0</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

**Key indicators**

- Consumer prices, percentage change b) 2.8 1.0 0.7 1.3 1.7
- Unemployment, per cent c) 4.2 4.1 3.8 3.8 3.6
- Current account, DKK bn. 109.2 136.0 109.5 85.8 71.4
- Current account, per cent of GDP 6.0 7.3 5.8 4.5 3.6
- General gov. budget balance, DKK bn. -71.9 -15.8 -31.9 -69.8 -54.7
- General gov. budget balance, per cent of GDP -3.9 -0.9 -1.7 -3.6 -2.7
- Hourly wage costs, percentage change 1.9 1.7 1.5 1.9 2.7
- Terms of trade, percentage change 0.0 1.6 0.3 -0.7 -0.5

a) Contribution to GDP growth in percentage points.
b) Implicit private consumption deflator.
c) Percentage of total labour force. National definition.

Source: Statistics Denmark, National Accounts and own calculations.
Employment is projected to increase significantly along with rising GDP. The economic recovery is expected to increase employment by 85,000 persons from 2014 to 2020. A significant part of the projected rise in employment is due to a cyclically induced increase in the labour force rather than a reduction in unemployment. This rests on the assessment that the labour force is currently considerably below its structural level for cyclical reasons. This view is supported by analyses in the chapter suggesting, among other things, that part-time employment among students and border workers is abnormally low, and the number of unemployed people categorised as not job ready is abnormally high. Further, in spite of relatively low unemployment, there is no indication of bottlenecks in the labour market. Admittedly, it is very difficult to estimate structural levels, so the projected cyclically induced increase in the labour force is subject to substantial uncertainty. There is a risk that the estimated structural labour force is overestimated.

The public budget deficit is forecast to be just over 3½ per cent of GDP in 2015, but it is projected to improve gradually over the following years. The estimate for 2016 is 2¾ per cent of GDP, which is still close to the Stability and Growth Pact deficit limit of 3 per cent. These estimates incorporate planned fiscal policy including the 2015 proposed budget. The sizeable deficit in 2015 is largely caused by the cyclical weakness of the economy. The structural deficit, i.e. the budget deficit adjusted for cyclical and temporary impacts, is forecast to be slightly below ½ per cent of GDP in 2015. The actual and structural budget deficits are projected to improve substantially towards 2020.

**Fiscal Watchdog**

The chairmanship of the Danish Economic Councils has been assigned the role of “fiscal watchdog”. The chairmanship is to evaluate various fiscal policy objectives, in particular, whether fiscal policy complies with the Budget Law. This includes assessing the expenditure ceilings.
The main conclusion of the evaluation in this report is that the principal points of attention concern the developments in the actual budget balance in 2015 and – but to lesser extent – in 2016, as well as the structural deficit in 2014-16. In addition, it is assessed that it would be impossible to fully utilise the adopted expenditure ceilings for 2014-17 without exceeding the structural deficit limit stipulated in the Danish Budget Law of ½ per cent of GDP. The assessments are summarized in Table B.
### Table B Assessment of fiscal policy objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal sustainability</td>
<td>The overall assessment is that Danish fiscal policy is sustainable, cf. <em>Danish Economy, spring 2014</em></td>
</tr>
<tr>
<td>Medium-term developments in budget balance</td>
<td><strong>Structural balance</strong>&lt;br&gt;- Structural deficit of 0.4 per cent of GDP in 2014-15 and of 0.5 per cent of GDP in 2016&lt;br&gt;- Structural deficit less than 0.4 per cent of GDP in 2017-20</td>
</tr>
<tr>
<td></td>
<td><strong>Budget balance</strong>&lt;br&gt;- -3.6 per cent of GDP in 2015&lt;br&gt;- -2.7 per cent of GDP in 2016&lt;br&gt;- Gradual improvement from 2017 towards a surplus of 0.3 per cent of GDP in 2020</td>
</tr>
<tr>
<td>Expenditure ceilings in compliance with fiscal policy objectives</td>
<td>Not possible to utilise expenditure ceilings for 2015-17 fully within the constraints on the structural balance in the Budget Law</td>
</tr>
<tr>
<td></td>
<td>Expenditure ceilings for 2018 comply with fiscal policy objectives</td>
</tr>
<tr>
<td>Compliance with expenditure ceilings in fiscal planning</td>
<td>The agreements with municipalities and regions as well as the proposed budget for 2015 are within the confines of the proposed expenditure ceilings</td>
</tr>
<tr>
<td>Compliance with expenditure ceilings in accounts</td>
<td>No assessment, as accounts for 2014 are not yet available</td>
</tr>
</tbody>
</table>

**Note:** Compliance with fiscal objectives is assessed based on the following colour codes:<br>**Red:** It is assessed that a limit or an objective will not be met.<br>**Yellow:** It is assessed that a limit or an objective is close to not being met, and there is a risk of non-compliance.<br>**Green:** It is assessed that a limit or an objective will be met.

The Budget Law and the expenditure ceilings have effect from 2014. There is an ongoing disclosure of information regarding adjustments of expenditure ceilings and interpre-
tation of the Budget Law. The Ministry of Finance is responsible for providing the information needed. In certain areas the interpretation of the law could be clarified. This includes the provisions for conducting measures that impact the structural balance after the budget proposal has been presented. Furthermore, the handling of tax expenditures upon adjustments of the expenditure ceilings should be more transparent.

**Fiscal policy assessments and recommendations**

Based on the current outlook for the Danish economy a budget deficit of just over 3½ per cent of GDP is forecast for 2015. This considerably exceeds the Stability and Growth Pact deficit limit of 3 per cent. However, the excess is assessed to be temporary, as the estimated deficit in 2016 is below (but close to) the limit of 3 per cent. The medium-term outlook for the public finances supports the view that the excess is temporary.

It is assumed that the European Commission will share this view. Therefore, it is considered that Denmark will not be subject to the Excessive Deficit Procedure once again, and hence will avoid being issued a recommendation. If issued, a recommendation may include instructions for fiscal consolidation measures and a deadline for bringing the budget deficit permanently below 3 per cent. The possibility that Denmark will be issued a recommendation cannot be fully excluded. Should it happen, it is advisable to follow the recommendation.

Although it is considered most likely that Denmark will not be subject to the Excessive Deficit Procedure, the sizeable estimated actual budget deficit in 2015 and the expected structural deficits in 2014-16, which are close to the deficit limit of ½ per cent of GDP in the Budget Law, speak in favour of a fiscal tightening. The government’s budget proposal for 2015 implies a fiscal tightening of 0.3 per cent of GDP in comparison with a neutral fiscal policy. This tightening has been incorporated in the presented projection. The appropriate fiscal tightening balances the need for fiscal stimulus during a cyclical slowdown on the one hand and
the development in public finances on the other hand. It is assessed that the planned fiscal tightening of 0.3 per cent of GDP is acceptable, but it is at the lower limit for a defensible fiscal tightening in 2015.

Fiscal policy for 2016 is to be decided in 2015. Naturally, this decision should take into account the cyclical and fiscal developments up until then. Currently, a fiscal tightening of 0.1 per cent of GDP is planned for 2016. As of now it is worthwhile noting that a larger fiscal tightening than currently planned may be needed. Firstly, in the present projection the output gap will be reduced by more than 1 percentage point of GDP from 2015 to 2016. In itself this may justify a scaling down of fiscal stimulus. Secondly, a structural budget deficit of 0.5 per cent of GDP is expected for 2016. This is on the limit stipulated by the Budget Law.

**Supervisory diamond and LTV limits for mortgages**

In September the Danish Financial Supervisory Authority presented a proposal for a “supervisory diamond” for Danish mortgage banks akin to the existing supervisory diamond for banks. The proposed supervisory diamond includes a number of benchmarks for the lending portfolio and capitalisation. The proposed supervisory diamond is a reasoned proposal that promotes financial stability, as does the “refinancing law” that was adopted in the spring. The refinancing law implies that the maturity of short-term covered bonds is extended in the case of a failed auction or an interest rate hike. However, these measures do not change the fact that the majority of Danish households are sensitive to interest rate hikes due to the prevalence of short-term adjustable rate mortgages.

The Danish fixed exchange rate vis-à-vis the euro involves risk of a currency crisis with an ensuing interest rate hike. The associated increase in payments on adjustable rate mortgages may cause a significant drop in private consumption leading to a notable increase in unemployment. Hence, the risk associated with the prevalence of adjustable rate mortgages is not assumed solely by the household that
chooses to take advantage of the lower average interest rate on adjustable rate mortgages, but by society. This possibility of contagion justifies regulation of floating rate mortgages in general.

The supervisory diamond and refinancing law put restrictions on mortgage banks, but not on the individual homeowner. Currently, there is a loan-to-value (LTV) limit of 80 per cent on all types of mortgages from the specialized mortgage banks, but ordinary banks can provide mortgage loans on banking terms for the remaining 20 per cent of the property value. Hence, it is possible for the individual homeowner to exploit the LTV limit fully and mortgage the entire property value with floating rate mortgages by combining loans from banks and mortgage banks. As the supervisory diamond does not prevent homeowners from this exploit, homeowners with a desire for doing this pose the greatest risk for the macroeconomic development in the case of an interest rate hike.

This speaks in favour of underpinning the supervisory diamond’s benchmarks for mortgage banks with limitations on the possibilities for obtaining floating rate mortgages. One possibility is to impose an LTV limit on these mortgages. The limit should apply to the sum of all mortgages – not just to the loans from mortgage banks. This implies that an LTV of e.g. 80 per cent, coinciding with the current LTV on mortgages from mortgage banks, imposes a genuine limitation and eliminates the loans with the highest LTVs.

The benefits from imposing limitations on the possibilities for obtaining floating rate mortgages should be balanced with the associated costs. The benefit is a reduced risk of an economic setback in case of interest rate hikes. The costs are a weakening of the countercyclical part of ECB’s monetary policy and less scope for homeowners to take advantage of the lower average rates on adjustable rate mortgages by assuming the risk of an interest rate increase.

The size of the benefits and costs of imposing restrictions on adjustable rate mortgages depends on the starting point. It is currently possible to mortgage the entire property value
so that the LTV is 100 per cent. From this starting point it can be supposed that the benefits from a moderate decrease in the LTV limit are relatively large, whereas the costs are relatively small. Based on this reasoning, it is recommended that the LTV on adjustable rate mortgages be reduced to below 100 per cent.

Chapter II: Unemployment Insurance in Denmark

Unemployment insurance offers workers partial compensation for income loss in case of unemployment. This contributes to consumption smoothing. The insurance, however, also reduces incentives to search for and hold on to employment. The design of an unemployment insurance system therefore implies an underlying trade-off between insurance and incentives, and the focus of chapter II is to illustrate different changes to the Danish UI system.

In Denmark, unemployment insurance (UI) is a voluntary insurance scheme that requires membership of one of 26 different unemployment insurance funds, many of which are organised by trade unions. Unemployment benefits are not means-tested with respect to household income and wealth, in contrast to other transfers in the Danish welfare system. Approximately 60 per cent of the UI system is financed by membership fees, while the remaining part is paid for by the government.

It is important to distinguish between the UI system as an insurance device and as a redistributive tool. A change in the unemployment insurance system will both affect the insurance properties, described by the expected net benefits from insurance for different groups, as well as the income distribution.¹

¹) In the literature the net benefit from insurance is termed the degree of actuarial fairness.
Chapter II therefore looks at changes to the unemployment system to demonstrate the trade-offs between the insurance function of the unemployment insurance system, i.e. the degree of actuarial fairness of the insurance scheme, and the effects on structural unemployment and income distribution.

**An evaluation of the 2010-reform of the Danish unemployment insurance system**

In 2010 a reform of the UI system was adopted, reducing the maximum unemployment benefit period from four to two years, while the benefit re-entitlement condition was strengthened for unemployed individuals who have exhausted their unemployment benefits. The primary purpose was to reduce unemployment, increase employment and improve public finances permanently.

The chapter contains an analysis of the effect of the reform on the transition from unemployment to employment. The analysis indicates that the reform, when fully implemented, will reduce the structural rate of unemployment by around 0.5 percentage points. This corresponds to an increase in structural employment of around 15,000 persons. However, due to temporary measures the reform has not been fully implemented yet, and thus there is a substantial amount of uncertainty concerning the estimate. The analysis, however, indicates that unemployed people respond to changes in economic incentives.

**Changes in the Danish unemployment insurance system**

The reform of the unemployment insurance system in combination with a longstanding decline in the replacement ratio implies that the insurance function of the UI system has been weakened. While this may have contributed to a fall in structural unemployment, it may constitute a concern if this development also leads to a fall in membership in the voluntary unemployment insurance system, as this may negatively affect the attitude towards risk-taking as well as labour mobility.
Chapter II discusses the effects of a number of reforms to the unemployment insurance system, with the central aim of strengthening the insurance function of unemployment insurance:

- An increased UI allowance in the beginning of the unemployment benefit period
- An extension of the maximum unemployment benefit period to a third year with a lower unemployment allowance
- A relaxation of the benefit re-entitlement condition for unemployed persons who exhaust their maximum benefit duration
- Business-cycle dependent maximum benefit duration

The exact design of a reform of the UI system will depend on the particular objective that the decision maker wants to pursue. There will typically be a contradiction between reforms that increase the degree of actuarial fairness and changes that increase equality of income among the insured. The primary objective of UI, especially in a voluntary system as in Denmark, is insurance against income loss when unemployed, while objectives with regard to basic income support and income equality are handled by other transfers, such as social security (“kontanthjælp” in Denmark).

**Reforms with a focus on insurance and efficiency**

An increased UI allowance in the beginning of the benefit period can increase the compensation rate from UI for people who are only occasionally and temporarily unemployed. This can strengthen the insurance function of UI for the group of unemployed who contribute most to the UI system. At the same time the resulting decreasing UI allowance profile will retain incentives for the unemployed to seek employment and therefore reduce the potentially negative incentive effects of the higher UI allowance.

Calculations using a CGE-model show that an increase in the UI allowance in the beginning of the benefit period by 25 per cent during the first three months, financed by a 10
per cent reduction in UI allowance for subsequent months of unemployment, would decrease structural unemployment by 0.2 percentage points, corresponding to about 5,000 persons. This reform would make all insured unemployed individuals better off up to a limit of 10½ months of unemployment. If the improved insurance function in the beginning of the benefit period is financed alternatively by increased income tax, structural unemployment would see a slight increase.

The effect of a higher UI allowance in the beginning of the benefit period on the distribution of incomes among insured persons strongly depends on the way the reform is financed. While the higher allowance in the beginning in itself roughly benefits all income deciles, a reform that is financed by lower allowances for subsequent months of unemployment would disproportionately benefit high-income groups, as they have fewer long UI spells. If the reform instead is financed by higher income tax, the reform would conversely benefit low-income groups, as they pay less income tax in absolute terms.

A way to decrease the scope of the reform and still improve the insurance function for a core group in the labour market that contributes disproportionately more to the system, would be to condition the higher UI allowance in the beginning of the maximum benefit period on a strong employment history. Calculations using detailed registry data show that conditioning the increased allowance on at least two years and nine months of employment over the previous three years would reduce the net effects of the change on public spending after tax by 75 per cent.

**Reforms with a focus on maximum UI benefit exhaustion**

An extension of the UI benefit period to a third year with a lower UI allowance is considered to be a reform that would increase the insurance function from the UI system for the long-term unemployed. This would make permanent an existing, temporary scheme introduced in the wake of the 2010-reform.
Calculations using registry data show that approximately 70 per cent of the unemployed who exhaust their UI benefit period, would not be eligible for social security due to means-testing. An extended maximum benefit duration would, therefore, primarily benefit low-income groups and reduce the incentives for unemployed people to search for employment.

A different way to help unemployed people who exhaust their maximum benefit duration would be to relax the re-entitlement condition for UI, which currently requires employment corresponding to 52 weeks of full-time employment during a span of 3 years.

Calculations show that a 50 per cent reduction of the re-entitlement condition for all unemployed would increase the structural unemployment rate by 0.1 percentage points (corresponding to 2,700 persons). A corresponding relaxation, but only for unemployed persons who exhaust their maximum UI benefit duration, would increase the structural unemployment rate by 0.06 percentage points (corresponding to 1,700 persons). It is, however, argued that a relaxation of the re-entitlement condition only for the unemployed who have exhausted their maximum UI benefit duration may introduce incentives for the unemployed to exhaust their maximum benefit duration to qualify for the lower re-entitlement condition.

**Business-cycle dependent unemployment insurance**

Persons who lose their job during an economic downturn have a lower probability of returning to work than persons who lose their job during an upturn. The former, therefore, have a higher probability of exhausting the maximum UI benefit duration than the latter. Therefore, UI systems that are invariant to business-cycle variations in fact imply differential treatment of the unemployed. This can be criticized from an equity point of view.

The chairmanship has several times recommended that a rule-based business-cycle dependent unemployment insur-
inance system should be introduced. Recent economic research suggests that a business cycle dependent unemployment insurance system is welfare improving and that it increases structural employment.

During the economic downturn in recent years the phasing-in of the reform of the unemployment insurance system from 2010 has been delayed through temporary measures. If this conceals a political desire for changing the system when the economic situation calls for such a change, then these changes should be based on rules instead of discretionary measures. Rule-based changes will result in less uncertainty and more sound incentives compared to discretionary changes.

Back in 2009 a Labour Market Commission recommended a system in which the maximum unemployment benefit period is increased in times of high unemployment. The proposal of the commission implies that the benefit period will be increased whenever the gross unemployment rate exceeds a certain level. Also, the proposal implies that only the unemployed who are close to exhausting their benefits would be entitled to a longer benefit period.

The proposal is assessed to be a sound starting point. However, there are some elements of the proposal which should be taken into consideration:

First of all, including a supplementary indicator for the state of the economy should be considered. For instance, the number of vacancies is considered to contain important information regarding the likelihood of finding a job.

Also, the precise limits which trigger a longer benefit period should be reconsidered, based on the recent evolution of the unemployment rate and the assessed evolution of structural unemployment.

If the average maximum unemployment benefit period is to be two years, as it is today, then the lowest maximum benefit period is bound to be lower than two years. The lowest maximum benefit period is the one that operates when un-
employment is low and below the level which triggers the first extension.

Finally, it could be considered whether the unemployed who receive an extension of the maximal benefit period should obtain the same benefit level as they received in the first part of the unemployment spell. An alternative could be to make the benefit level for those who receive an extension equal to the general social assistance level, but without any means-testing. This would correspond to turning the temporary “labour market assistance program” into a permanent, but business-cycle dependent measure.