ENGLISH SUMMARY

This report from the chairmen of the Danish Economic Councils contains four chapters. Chapter I presents the outlook for the Danish economy and discusses the state of the public finances. Chapter II investigates fiscal sustainability. Chapter III discusses behavioural responses to public expenditure and the possibilities of incorporating them in official projections and impact assessments. The final chapter examines the impact of labour migration on the Danish economy.

Chapter I: Economic Outlook and Public Finances

The Danish economy is expected to grow by around 2 per cent this year and the growth rates are expected to be of similar magnitudes towards 2025. Overall, the cyclical stance of the economy is assessed to be broadly neutral with an output gap of \(-\frac{1}{2}\) per cent of GDP in 2017, cf. Table A. The expected annual growth in GDP for the coming years is higher than the average growth rate over the past 20 years. This is partly due to an expected increase in employment caused by reforms, in particular reforms that gradually increase the retirement age.

The excess capacity in the labour market diminishes as the economic situation normalizes. Wage inflation has increased slightly over the past couple of years and the recent collective agreement on wage formation in the private sector points to a somewhat larger increase in wages over the next three years. However, the risk that the labour shortage develops into overheating of the economy is limited by the prospect of a significant increase in the structural labour force in the coming years.
### Table A  Key figures of the short-term outlook for the Danish Economy

<table>
<thead>
<tr>
<th>DKK bn.</th>
<th>2016</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2025(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private consumption</td>
<td>979.0</td>
<td>1.9</td>
<td>2.2</td>
<td>2.4</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Public sector consumption</td>
<td>525.6</td>
<td>-0.1</td>
<td>0.8</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>412.5</td>
<td>5.6</td>
<td>4.1</td>
<td>3.0</td>
<td>4.4</td>
<td>3.8</td>
</tr>
<tr>
<td>consisting of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential investment</td>
<td>91.5</td>
<td>11.0</td>
<td>2.9</td>
<td>2.9</td>
<td>3.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Business fixed investment</td>
<td>247.1</td>
<td>4.1</td>
<td>5.9</td>
<td>5.2</td>
<td>5.5</td>
<td>4.6</td>
</tr>
<tr>
<td>Public sector investment</td>
<td>73.9</td>
<td>2.2</td>
<td>-0.4</td>
<td>-2.7</td>
<td>1.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Stockbuilding (^b)</td>
<td>2.1</td>
<td>-0.4</td>
<td>0.1</td>
<td>0.3</td>
<td>0.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Total domestic demand</td>
<td>1,919.2</td>
<td>1.6</td>
<td>2.3</td>
<td>2.5</td>
<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>1,094.3</td>
<td>1.7</td>
<td>4.4</td>
<td>3.0</td>
<td>4.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>952.6</td>
<td>2.4</td>
<td>5.1</td>
<td>4.0</td>
<td>5.0</td>
<td>5.4</td>
</tr>
<tr>
<td>GDP</td>
<td>2,060.9</td>
<td>1.3</td>
<td>2.1</td>
<td>2.1</td>
<td>2.2</td>
<td>2.1</td>
</tr>
</tbody>
</table>

#### Key indicators

- **Consumer prices, percentage change** \(^c\)  
  - 0.5 1.1 1.4 1.2 1.5
- **Unemployment, per cent** \(^d\)  
  - 3.2 3.1 3.0 3.0 2.8
- **Current account, DKK bn.**  
  - 167 160 148 139 127
- **Current account, per cent of GDP**  
  - 8.1 7.5 6.8 6.1 4.5
- **General gov. budget balance, DKK bn.**  
  - -19 -27 -3 -5 11
- **General gov. budget balance, per cent of GDP**  
  - -0.9 -1.3 -0.2 -0.2 0.4
- **Hourly wage costs, percentage change**  
  - 2.2 2.5 2.7 3.1 3.1
- **Terms of trade, change in percentage points**  
  - 0.1 0.0 -0.6 -0.7 -0.2
- **Output gap, per cent of GDP**  
  - -1.0 -0.5 -0.1 0.1 0.0  

\(^a\) The column shows projected average annual growth from 2019 to 2025 for all variables except for unemployment, the current account, the general government balance and the output gap. For these variables the column shows the projected value in 2025.

\(^b\) Contribution to GDP growth in percentage points.

\(^c\) Implicit private consumption deflator.

\(^d\) Percentage of total labour force. National definition.

Source: Statistics Denmark, National Accounts and own calculations.

Growth over the coming years is expected to be driven by rising domestic and foreign demand. Both the investment and consumption share of GDP are expected to increase from their current low levels with the resulting prospect of a
gradual reduction of the current account surplus from 8.1 per cent of GDP in 2017 to 4.5 per cent of GDP in 2025. Nonetheless, it is expected that there will be several consecutive years with continued large surpluses. Part of the surplus comes from significantly higher net interest payments from abroad. A contributing reason for this is that foreign assets provide a return that is greater than the interest rate on foreign debt.

The expected development in GDP towards 2025 depends on a number of assumptions that are inherently uncertain. This includes whether employment will rise with the increase in retirement ages and whether the average working time per employee increases as assumed. It is therefore important to focus on these uncertainties and be ready to make adjustments to the fiscal policy if the assumptions appear not to hold.

Public finances

Danish fiscal policy is subject to the Budget Law, which has been in effect since 1 January 2014. The Budget Law imposes expenditure ceilings on the state, municipalities and regions and sets a structural deficit limit of ½ per cent of GDP. Fiscal policy is also subject to the constraints of the EU Stability and Growth Pact, including the deficit limit of 3 per cent of GDP. In addition, Danish fiscal policy must be sustainable in the long run.

The Budget Law assigned the chairmanship of the Danish Economic Councils the role of “fiscal watchdog”. The chairmanship is to evaluate the fulfilment of various fiscal policy objectives, including long-term sustainability and whether fiscal policy complies with the Budget Law and other medium-term budgetary restrictions. This includes assessing the expenditure ceilings.

It is the opinion of the chairmanship that the planned fiscal policy is generally in compliance with the fiscal policy rules. The 2017 budgets of the municipalities and regions comply with the expenditure ceilings. The 2016 accounts
for the municipalities, regions and central government comply with the expenditure ceilings.

Based on the current outlook for the Danish economy, the budget deficit is expected to be 1.3 per cent of GDP in 2017 and 0.2 per cent of GDP in 2018, cf. Figure A.

The structural balance is expected to show a deficit of 0.2 per cent of GDP in 2018, which is in accordance with the \( \frac{1}{2} \) per cent deficit limit.

![Figure A Budget balance 2005-25](image)

**Note:** The red lines indicate the deficit limits of 3 per cent of GDP for the general government budget and \( \frac{1}{2} \) per cent of GDP for the structural balance.

**Source:** Statistics Denmark, ADAM’s databank and own calculations.

**Policy**

The planned fiscal policy involves a moderate tightening, which is expected to reduce growth in demand by \(-\frac{1}{4}\) per cent in 2017 and 2018. This seems appropriate in the current situation. Employment and unemployment are considered close to their structural levels and interest rates are at a low level seen in relation to the economic situation. The planned policy helps reduce economic activity, yet leaves room for continued growth in employment in accordance
with the expected expansion of the labour force. The fiscal tightening supports the structural balance, which is expected to be above the limit of $-\frac{1}{2}$ per cent of GDP in 2018.

Political agreements have been reached concerning taxation and valuation of real estate. It is positive that the agreements put an end to the nominal freeze on taxation of real estate values, which, since 2001, has reduced the effective taxation substantially. It is also positive that the agreements maintain the structure of real estate taxes where both land and real estate value is taxed. However, the effective taxation of real estate value will be 0.44 per cent, which implies a lower taxation of real estate than other assets. Thereby, the tax system remains too favourable to investments in real estate relative to investments in other assets.

**Chapter II: Fiscal sustainability and fiscal rules**

Chapter II presents a long-term projection for the Danish economy that builds upon the medium-term projection to 2025 presented in Chapter I. The long-term projection focuses on public finances and is used to evaluate whether Danish fiscal policy is sustainable under assumptions made about demographic trends, etc.

As seen in Figure B, the budget is projected to improve over the years up to 2025, partly because of business cycle improvements and partly because of various policy measures. After 2025, the budget deteriorates for about 15 years and reaches a maximal deficit of 0.2 per cent of GDP around 2035. Subsequently, the budget improves again and becomes permanently positive around 2040. This is the so-called Danish fiscal “hammock problem”, named after the shape of the budget curve. The main reason for both the deterioration and the later improvement is the succession of small and large generations in the labour market. The deterioration of the present projection is a bit smaller than in the Danish Economic Council’s 2016 projection. According to the present projection, net government liabilities never exceed 10 per cent of GDP and turn into a net wealth position shortly after 2040.
According to the projection, Danish fiscal policy is overly sustainable, the sustainability (S2) indicator being 1 per cent of GDP (i.e. the primary budget can deteriorate permanently by 1 per cent of GDP without causing debt to explode in the long run). This is an improvement of ½ percentage point of the S2 indicator compared to the Danish Economic Council’s autumn 2016 long-term projections. The main reason for the improvement is an increase in projected private savings, which increases future capital income tax revenues. The May 2017 agreement to reform taxation of owner-occupied dwellings also improves fiscal sustainability.

The chapter discusses pros and cons of various supplementary long-term fiscal policy rules. In many respects, the present fiscal framework in Denmark seems suitably directed towards ensuring a sensible fiscal development. It is reasonable to supplement the overall ambition of maintaining long-run fiscal sustainability with a government debt limit, and to have medium-term structural deficit limits to provide an anchor for budget planning. However, the constant structural deficit limit of ½ per cent in the Danish Budget law does not seem warranted. One reason for this is that the budget does not properly reflect the strength of Danish government finances, chiefly because of the large implicit government assets in the form of deferred taxes on
pension savings. Were the interest from these implicit assets to be added to the budget, it would show a solid surplus during the whole projection range. Rather than raising taxes or cutting expenditure in the future for the sole purpose of avoiding a formal conflict with the deficit limits, it seems advisable to work towards more flexible budget rules.

Chapter III: Behavioural responses to public expenditure

In government projections of the Danish economy and in impact assessments of policy proposals, there has been no tradition of including effects of changes in public consumption and public investment on labour supply and productivity. Therefore, past Danish forecasts have implicitly assumed that changes in public consumption and public investment do not have any effects on long-term prosperity. In contrast, effects of changes to tax and income transfer systems on labour supply are usually included in projections and impact assessments.

There are theoretical and empirical reasons to expect that public consumption and public investment give rise to behavioural responses by firms and households in terms of labour supply and productivity effects.

The assessment of changes in the tax and expenditure system becomes unbalanced when behavioural responses to changes in public consumption and public investment are not considered, while behavioural responses of changes in the tax and income transfer system are. This is likely to blur the assessment of the economic impact of changes on the revenue and expenditure side of the public sector, regardless of whether public expenditure promotes or impedes economic activity.

A better practice would be to consider the tax and expenditure side in an integrated context when analysing the impacts of changes. The overall effect of an increase on the public spending side depends on how it is financed, and the effect of a tax cut financed by lower public spending depends on how the expenditure cut is implemented.
There are a number of challenges when it comes to uncovering the behavioural effects of changes in public expenditure, and this probably explains the lack of general accounting principles.

One challenge is to define a ‘proper’ baseline projection for public consumption and public investment, both with respect to these two aggregates and the subdivision into the various types of expenditures. Eventually, the composition of public consumption and investment will reflect, among other things, decisions taken at the decentralized level by the Danish regions and municipalities. Thus, how to project the different types of expenditures is not obvious. Moreover, for several reasons, it is difficult to incorporate effects from the time paths of public consumption and public investments on the time path for productivity in the baseline projection. Projections typically only forecast the aggregate evolution of (total factor) productivity based on the historical evolution without making specific assumptions regarding what elements drive the evolution of productivity.

In addition, some types of public expenditure only have long-term behavioural responses. In that case, it is not relevant to consider the behavioural responses in medium-term projections of the Danish economy that usually only forecast the Danish economy about ten years ahead.

Building credible and operational accounting principles requires reliable estimates of the behavioural responses to public consumption and public investment. At the same time, the accounting principles should take into account the heterogeneous nature of types of public expenditures and assign them different behavioural responses.

In this report, the chairmanship of the Danish Economic Councils focuses on childcare - an area in which behavioural responses to public spending are to be expected. The chapter contains an analysis of the effects of public childcare subsidization and of the number of children per adult in daycare services on the employment of the parents after childbirth.
The analysis concludes that a lower number of children per adult in day care services increases the employment of parents after childbirth. On the other hand, there is no statistically significant effect of the cost of childcare on the employment of parents. Two probable explanations of this finding are that the public childcare subsidy, as well as the female labour force participation rate, are high in Denmark. Thus, marginal changes in the price of childcare would not be expected to have a large employment effect. However, it could be that a larger increase in the cost of childcare has a negative impact on the employment of parents.

Although the challenges of developing accounting principles for behavioural responses to public consumption and public investment are great, efforts should be made to improve the knowledge about behavioural responses in all areas where they can be expected to exist from a theoretical and empirical viewpoint. The aim should be to establish principles of how to take into account expected behavioural responses to public expenditure in order to ensure a more balanced assessment of changes in the tax and expenditure system. The alternative used today – to implicitly assume zero behavioural responses to public consumption and public investment – provides an unbalanced assessment of changes on the revenue and expenditure side of the public sector.

**Chapter IV: Migrant Labour in Denmark**

During the last decade Denmark has seen a large increase in immigration of citizens from other EU and EEA countries who can reside and work in Denmark under the EU regulation of free movement. Notably, there has been a large increase in the number of migrants from the new EU member states in Eastern Europe. There has been a smaller increase in the number of working migrants from non-European countries, who are permitted entry through a number of working visa programs.

The main working visa options for non-European citizens include the Pay Limit Scheme ("Beløbsordningen") for individuals with an annual gross salary package above a
threshold (currently DKK 408,800), the Positive List for professions currently experiencing a shortage in the Danish labour market and the points-based Greencard scheme (abolished in June 2016). In addition, there are a number of schemes governing special professions and skills such as researchers, entrepreneurs and establishment cards for foreign nationals with a Danish master’s or PhD degree.

Working migrants are predominantly males aged 25 to 44 years. Migrants who acquired working visas on the Pay Limit and Positive List schemes are typically employed in positions that require high skill levels. In contrast, working migrants from the new EU countries and Greencard visa holders are typically in unskilled or low-skilled occupations.

International studies indicate that migrating labour has a positive effect on the average income of the native population. Danish studies show that employed migrants contribute positively to government budgets.

Migrating labour may also have a stabilizing effect on the local labour market during an economic upturn. Indeed, having flexible access to foreign labour may counteract labour shortages and bottlenecks in the labour market, thus reducing wage pressures that may otherwise contribute to the onset of an economic downturn.

However, not all natives will necessarily benefit from migrating labour. The chapter presents new results on Danish data that indicate a (short-term) negative relationship between an observed increase in the influx of migrants to local labour markets and the employment among unskilled workers. Evidently, this result contradicts another recent study that finds a positive employment effect for the young and middle-aged unskilled natives of an increase in the share of employed refugees in local areas.¹

The chapter also investigates whether an increase in the number of migrant workers is likely to have an impact on the wages of natives. The results are ambiguous. Nevertheless, there are indications that while an increase in the share of migrant workers does not impact wages at the low end of the wage distribution of the natives, the middle and the top-end wages may increase slightly. Previous studies based on Danish data point in different directions.

During the past three decades, migration to Denmark has been dominated by low-income individuals. This development appears to have been amplified by the EU enlargement into Central and Eastern Europe in 2004 and 2007 and the subsequent access of nationals from these countries to the Danish labour market, cf. figur IV.16.

Middle and high-income immigrants have a positive net impact on government budgets and are likely to provide efficiency gains without having significant negative consequences for the income distribution of the local population. The introduction of skilled migration schemes in the 2000s has improved access for high-income individuals, but even so, relatively few high-skilled migrants find their way to Denmark. A reduction in the threshold for the ‘Pay Limit Scheme’, currently at DKK 408,800, would provide improved access for skilled migrants that have been documented to make positive contributions to the Danish economy.

The relatively high taxes imposed on high incomes are a likely impediment to attracting high-skilled individuals. An obvious way to remedy this situation would be to exempt foreigners from the top tax rate for an initial period of, say, five years after arrival.

Many foreign students leave Denmark after finishing their studies. A general restructure of tertiary education funding could motivate more foreign graduates to stay and work beyond graduation. Possible reform elements include increased user-funding for tertiary education combined with a loan scheme and a tax employment allowance for graduates. Self-funded students could be entitled to a graduate tax
allowance that effectively would repay the value of their tertiary study fees over a number of years as tax payers.

Empirical results presented in this chapter suggest that migration may impact negatively on the employment prospects of low-income Danes. Legislation regarding access to the Danish labour market and welfare payments is largely governed by the EU and changes have to be agreed with the other member states. Hence Denmark has limited leeway to make independent changes to legislative areas with potential consequences for migration outcomes.

The Danish labour market model is characterised by flexible hiring and firing rules combined with relatively generous unemployment benefits and an extensive system of active labour market policies. The three-pronged system helps alleviate any negative impacts on individuals caused by increased competition from immigrant workers. The generous welfare payments provide income support for those who may lose their jobs, and the active labour market programs may assist jobseekers by upgrading their qualifications and general job-readiness. At the same time, the flexible labour market tends to create more job-openings for the unemployed. Accordingly, the Danish labour market model improves the economic benefits of free movement of labour and globalisation, and helps individuals who are affected negatively.

The low-skilled are at a higher risk of being negatively impacted by globalisation. Although the Danish education system has been successful in increasing educational attainment for each new cohort, there are still too many adolescents who never obtain a post-school qualification. The Government has recently proposed a new Preparatory Education (“Forberedende Grunduddannelse”) that would aim to provide adolescents with basic professional, personal and social competencies to either complete secondary schooling or to obtain paid employment. The Chairmanship welcomes this initiative with the recommendation that the new education be properly evaluated as soon as practically possible to ensure that it works as intended.