

ENGLISH SUMMARY

This report from the chairmanship of the Danish Economic Councils contains three chapters. Chapter I presents the outlook for the Danish economy and discusses the state of the public finances. Chapter II examines the development in the working age population with a history of long-term public income support. Chapter III on industry reallocations and growth prospects investigates whether Denmark is influenced by Baumol's disease by analyzing the industrial structure of the Danish economy.

Chapter I: Economic Outlook and Public Finances

After several years with excess capacity, it now looks like the capacity limits of the Danish economy will be tested. The cyclical stance of the economy is assessed to be broadly neutral, and GDP is expected to grow by 2¼ per cent in 2017, cf. Table A. In the coming years demand is expected to increase production above its structural level, which will result in a positive output gap. The forecast is based on agreed policy changes and on the government's proposed budget for 2018, as set forth in August 2017.

The increase in demand is expected to come from exports, investment and private consumption in the coming years. The export growth is a result of positive global growth prospects, and growth in investment and private consumption is expected to be supported by continued low interest rates in the next few years. Growth is also expected to be supported by increasing employment and by the considerable wealth that companies and households have accumulated in recent years.

After almost 10 years with a negative output gap, the economy now has to adapt to a situation with fewer available resources. This naturally entails greater pressure on the labour market, as has also been seen in recent years, and which has become particularly evident in recent months. Wage growth, however, is still moderate, but wages usually

react with a delay to a tightening of the labour market. The pressure on the labour market is expected to be mitigated, to some extent, over the coming years by a growing labour force.

Table A Key figures of the outlook for the Danish Economy

	DKK bn.				
	2016	2017	2018	2019	2025a)
Private consumption	980.8	2.3	2.4	2.4	2.5
Public sector consumption	525.5	0.8	0.9	1.2	0.9
Gross fixed capital formation	414.1	2.4	4.6	4.7	4.0
consisting of:					
Residential investment	91.5	5.0	3.8	3.9	1.8
Business fixed investment	249.2	2.1	7.0	5.4	5.2
Public sector investment	73.4	0.7	-1.7	3.5	2.1
Stockbuilding ^{b)}	5.7	0.1	0.1	0.1	0.0
Total domestic demand	1,926.0	2.0	2.6	2.7	2.4
Exports of goods and services	1,101.7	4.3	3.5	3.4	4.6
Imports of goods and services	962.9	4.0	4.3	5.0	5.3
GDP	2,064.8	2.3	2.3	2.0	2.1
Key indicators					
Consumer prices, percentage change ^{c)}		1.0	2.0	1.6	1.7
Unemployment, per cent ^{d)}		3.1	2.9	2.8	2.9
Current account, DKK bn.		197	183	158	130
Current account, per cent of GDP		9.1	8.2	6.9	4.6
General gov. budget balance, DKK bn.		-18.6	-2.8	1.1	21.7
General gov. budget balance, per cent of GDP		-0.9	-0.1	0.0	0.8
Hourly wage costs, percentage change		2.1	2.9	3.2	3.4
Terms of trade, change in percentage points		1.6	-0.7	-0.8	-0.4
Output gap, per cent of GDP		0.0	0.6	0.6	0.0

a) The column shows projected average annual growth from 2020 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.

Production and employment are assessed to be close to their structural levels. However, this does not imply that stable growth rates along the trend can be expected for all sectors of the economy going towards 2025. Wages as a percentage of gross value added, private consumption as a percentage of disposable income and the ratio between capital and labour are currently at low levels compared to their structural levels. This implies that relatively large increases in real wages, private consumption and business investment are expected towards 2025.

Public finances

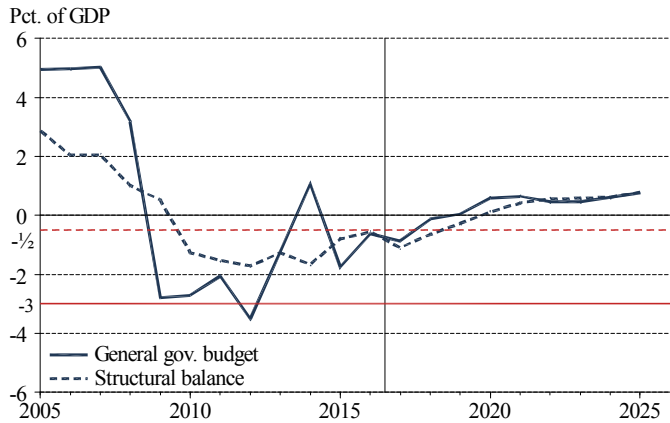
Danish fiscal policy has been subject to the Budget Law since 1 January 2014. The Budget Law imposes expenditure ceilings on the state, municipal and regional budgets, and sets a limit for the structural deficit at $\frac{1}{2}$ per cent of GDP. Fiscal policy is also subject to the constraints of the EU Stability and Growth Pact, including the budget deficit limit of 3 per cent of GDP.

The Budget Law assigned the role of “fiscal watchdog” to the Chairmanship of the Danish Economic Councils. The Chairmanship is to evaluate compliance with 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 complies with the fiscal policy rules except that the limit for the structural deficit will be breached in 2018. The structural deficit is expected to be 0.6 per cent of GDP for 2018. The deficit is expected to be temporary and the deterioration since the forecast in *Danish Economy, spring 2017* is not due to fiscal policy initiatives during the summer but rather to the changed economic outlook. The structural balance is expected to be positive from 2020, and the medium-term targets for the government’s structural balance are expected to be met. The proposed expenditure ceilings for 2021 are in compliance with the government’s medium-term targets.

Based on the current outlook for the Danish economy, the budget deficit is expected to be 0.9 per cent of GDP in 2017 and 0.1 per cent of GDP in 2018, cf. Figure A. From 2019 and until 2025 budget surpluses are expected.

Figure A Budget balance 2005-25



Note: The red lines indicate the deficit limits of 3 per cent of GDP for the general government budget and ½ per cent of GDP for the structural balance.

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

The breach of the Budget Law's structural deficit limit concerns only 2018. Indeed, it is expected that the structural balance will be significantly improved in the coming years with a structural surplus of 0.8 per cent of GDP projected for 2025. The projected improvement in the structural balance is partly due to the tight restrictions on the growth in public consumption set by the expenditure ceilings from 2018 till 2021. Furthermore, the expected increase in structural employment will also contribute to an improved structural balance over the coming years.

Policy

It is the Chairmanship's assessment that the planned fiscal policy for 2018 is appropriately aligned with the economic situation, as fiscal policy in the current economic situation should contribute to dampening growth. It is important for both the economic situation and compliance with the limits of the Budget Act, that no unfinanced fiscal measures result from future political negotiations. The Chairmanship thus advises against fiscal easing for both formal and real economic reasons.

In the 2018 draft budget, the government proposes that the current tax subsidy scheme for homebased services and energy renovations, which expires in 2017, be replaced by a new permanent scheme targeted at homebased services. Since it is now proposed that a scheme should be continued, it is positive that it is targeted at homebased services, as these are conceivably more closely linked to the household's labour supply decision than renovation services. However, the Chairmanship has not found sufficient evidence for recommending this type of subsidy scheme, either on the effects on labour supply or the reduction of undeclared work. Experience from Sweden indicates significant control problems. It is thus crucial that any Danish system be designed to minimise the risk of abuse.

In recent years mortgage institutions have raised their fees significantly. A report by The Competition Council in August 2017 points to limited competition in the Danish mortgage market, which may have allowed mortgage institutions to raise their fees. The Competition Council provides a number of recommendations that can intensify competition. The effectiveness of the proposed measures is difficult to assess, but it cannot be ruled out that further measures to strengthen competition, including more direct intervention in pricing, is warranted.

Chapter II: Long-term Recipients of Public Income Support

The chapter focuses on the development in the working-age population who are outside the labour market and who are long-term public income support recipients. This group calls for special attention because long-term public support is costly for the individual as well as for society.

In 2016, more than 395,000 people had received public income support for at least four out of the past five years (excludes Danish Student Grants). This corresponds to 13.4 per cent of the working age population. The proportion decreased by around one percentage point from 14.6 per cent in 2000 to 13.4 per cent in 2016.

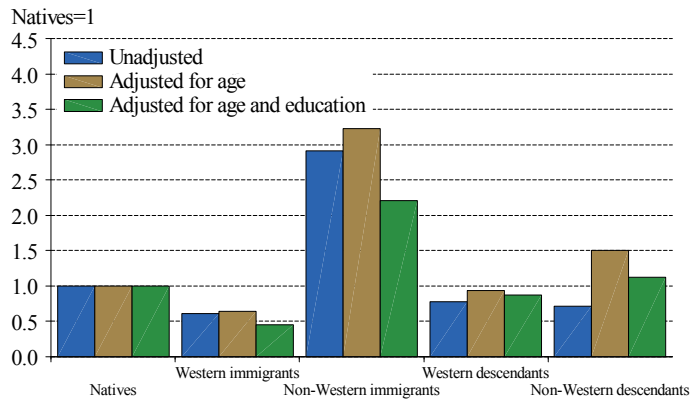
There are two main opposing trends that underlie this development; a significant decrease in the number of people on early retirement and unemployment benefits, and a significant increase in the number of people in subsidised employment, i.e., in the so-called flexjob program. Unlike others on public income support, people in flexjobs work part time. The development in the number of people in these three schemes must be seen in the light of the changes in the rules of the schemes. In 2010, for example, the maximum period for receiving unemployment benefits was reduced from 4 to 2 years, which means that hardly anyone receives long term income support in the form of unemployment benefits.

The incidence of long-term public benefit recipients varies considerably across population groups. Long-term income support recipients among the 60 to 64-year-olds in 2016 was more than six times larger than among the 22 to 25-year-olds. Almost 30 per cent of non-western immigrants were long-term income support recipients compared with 12.5 per cent of the natives, while the incidence was 32 per cent for the unskilled compared with only 2.2 per cent of those with a long tertiary education.

However, there are significant compositional effects behind these numbers. For example, there are more unskilled per-

sons among the older age groups and among non-western immigrants than among the younger age groups and among natives. But even when accounting for differences in age and education, a non-western immigrant is more than twice as likely to receive long-term income support, cf. figure A.

Figure A Relative probability of long-term public income support, 2016



Note: Relative probability is the so-called *odds ratio*. Only people aged between 22 and 64 years who have lived in Denmark for the last five years are included.

Source: Own calculations.

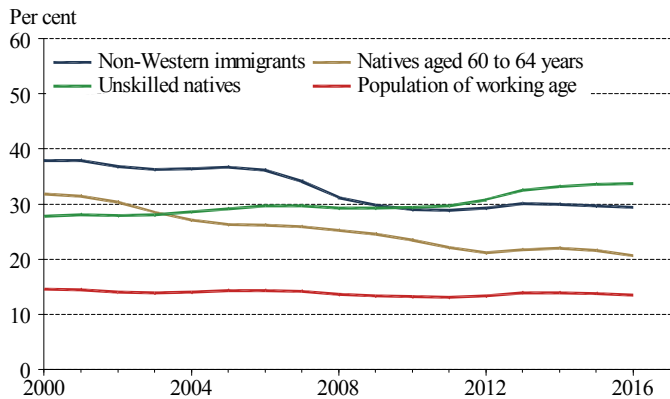
The development in the incidence of long-term income support reciprocity over time has been affected by a number of compositional changes in the population. On the one hand, an increasing education level is likely to have reduced the number of long-term recipients, while on the other hand, the age distribution of the population and an increasing number of non-western migrants would have contributed to the increase in the proportion of long-term recipients in the population as a whole.

The largest drop occurred among those aged 60 to 64 years and, more generally, among immigrants. Several reforms since the mid-1990s have targeted these groups. The social security reforms, including the introduction of an integra-

tion allowance have had a particular impact on non-western immigrants who often receive social security. Changes to the early retirement schemes have naturally affected the older age groups. Nevertheless, a large share of long-term public recipients is found among older age groups and among non-western immigrants compared to other groups.

In general, the incidence of long-term reciprocity has fallen mostly for groups with the highest incidence in 2000. However, the group of unskilled natives is an exception as this group had a relatively high proportion of long-term recipients and the proportion has risen since 2000, cf. figure B. The increase is probably partly a result of increasing education levels in the population that have lifted the most resourceful out of the unskilled group and left it with less skilled persons.

Figure B Incidence of long-term public income support



Note: Includes people aged 22 to 64 years who have lived in Denmark for the last five years. Long-term recipients of public income support are defined as persons who have received such benefits for at least four of the previous five years.

Source: Own calculations.

Since the turn of the millennium a number of reforms have targeted, among other things, reductions in the number of

people on public income support, and while the proportion on long-term income support has fallen for some groups, there have been only minor changes for most native groups. There could be several possible reasons for this. It could be due to a lack of focus on natives in the reforms that the reform elements have been ineffective or that long-term reciprocity at the outset represented those who were effectively unable to cope with a job. Likewise, it is conceivable, that the proportion of natives on long-term income support would have actually increased in the absence of the reforms, and that the reforms, therefore, have had a positive effect. Finally, it is possible that we have not yet seen the full effect of some of the past reforms that have been implemented.

The analysis raises a number of questions that warrant further investigation. First, why the proportion of unskilled natives on long-term income support has increased should be investigated, and related to this, the role education plays in the risk that individuals end up as long-term income support recipients should also be examined. Would education reduce the likelihood of becoming a long-term recipient of income support for an unskilled person, and if so, by how much? Finally, it is relevant to unravel the extent to which the number of long-term income support recipients corresponds to those who are actually unable to cope with a job. If that is the case, a reform policy aimed at restricting access to benefits will only cut income and consumption opportunities for this group without increasing their contribution to economic activity.

Chapter III: Industry Reallocations and Growth Prospects

The chapter on sector reallocations and growth prospects is a contribution to an ongoing debate on the growth prospects of advanced economies. In recent years optimistic views have emerged on the basis of the potential for technological progress in areas such as IT, artificial intelligence and biotechnology, cf. Brynjolfsson and McAfee (2014). Opposing these views, Gordon (2016) argues that it will be harder to make new inventions and sustain productivity growth in the

future. The analyses in the chapter contribute to this debate by emphasizing and analyzing the notion that the demand side is crucial for understanding the industrial composition of the economy, and hence, to understanding the extent to which technological progress in individual industries affects overall productivity growth.

Specifically, the chapter examines whether Denmark is influenced by *Baumol's disease* by analyzing the industrial structure of the Danish economy. Baumol's disease is present if differences in productivity growth between industries leads to displacement in industry composition towards industries with low productivity growth. Such a reallocation would dampen overall productivity growth. The effect is a result of increasing production costs in industries with low productivity growth, which prompts them to raise prices. Unless rising prices leads to an equivalent fall in demand, these industries will constitute a larger proportion of the economy. Although the condition is labelled "disease", it is not in itself a problem, as it simply reflects households' preferences for particular goods.

The analysis of the industrial structure is supplemented by an analysis of the composition of the consumption of households. This analysis examines the extent to which households maintain their demand for product groups despite relative price increases. If households largely sustain their demand, their demand for low productivity goods will tend to displace high productivity industries, i.e., Baumol's disease.

The results of the analyses indicate that household demand has pulled the economy towards Baumol's disease. On the other hand, there are no signs that the supply side of the Danish economy is affected by the disease. Therefore, the overall conclusion from the analyses is that there are no signs of Baumol's disease in the Danish economy. In this respect, Denmark seemingly differs from the United States and Europe as a whole as previous studies suggest that these economies are indeed affected by Baumol's disease, cf. Nordhaus (2008) and Hartwig (2011).

The apparent conflict between the results of the industry and the household consumption analyses is resolved by accounting for the influence of foreign trade, as it accounts for the difference between domestic production and consumption. Trade is expected to affect the economy's industrial composition because countries tend to specialize in their most internationally productive industries. If productivity growth in these industries is high, industrial composition will be pulled towards high-growth industries. At the same time, international trade allows these high-growth industries to grow because the export market absorbs the increasing output. Nevertheless, there is no reason to believe that trade affects households' demand for a particular consumption mix. Therefore, it is reasonable to assume that the absence of Baumol's disease on the production side is a result of the presence of net exports. This interpretation is consistent with the result that the analyses are more capable of rejecting the disease among industries with a high export propensity.

Denmark is likely to be affected by Baumol's disease sometime in the future. Demand from domestic households has pulled in this direction historically and will probably continue to do so in the future. Historically, the trend has been counteracted by foreign trade because it has led to specialization in industries with relatively high productivity growth. However, foreign trade could as well have led to a specialization in industries with relatively low productivity growth. It cannot be ruled out that foreign trade will continue to outweigh the pull towards Baumol's disease from household demand for some time, but it is unlikely that it will continue to do so indefinitely.

As to the debate on future growth prospects, the implications of the analyses are ambiguous because Denmark does not appear to be influenced by Baumol's disease. If Denmark catches "the disease", such developments will speak against the optimistic growth forecasts that emphasize the potential for progress in areas such as IT, artificial intelligence and biotechnology, as the positive effects of technological advances in some industries will be dampened by the negative effect of industry reallocations. The chapter also

contains a decomposition of productivity growth in the Danish economy. It shows that sectoral reallocation contributed positively to productivity growth in the Danish economy over the period 1966-2013. However, the contribution to productivity growth from industry reallocations has tended to decrease over time, and in recent years it has been slightly negative.

The overall conclusion is that Denmark has not been affected by Baumol's disease over the period 1966-2013, but that this may very well change in the future, as our main trading partners appear to be characterized by Baumol's disease. This is an indication that could imply that it will become increasingly difficult for Denmark to compensate for the pull towards Baumol's disease with international trade. However, the disease is a consequence of the fundamental economic condition that households demand goods and services produced by low-growth industries, even though their relative prices increase. This, of course, does not rule out that growth in some industries is low, precisely because of market failures or poor framework conditions. In economies with Baumol's disease, the problem is reinforced by low-growth industries gradually crowding out high-growth industries.