

ENGLISH SUMMARY

This report from the chairmen of the Danish Economic Councils contains five chapters. Chapter I presents the outlook for the Danish economy. Chapter II deals with the public sector finances. Chapter III examines Danish fiscal sustainability. Chapter IV discusses whether there is an investment crisis in Denmark. Chapter V analyses the distribution of income and wealth in Denmark.

Chapter I: Economic Outlook

The Danish economy continues to improve and is expected to grow by around 0.5 per cent in each quarter of 2016. In 2017, the quarterly growth is expected to be of a similar magnitude, which implies annual growth in the vicinity of 2 per cent. GDP is projected to increase by $2\frac{1}{4}$ per cent in 2018 and reduce the output gap from its current level of -1.8 per cent to -0.5 per cent, cf. Table A.

Private consumption has contributed positively to growth in recent years and is also expected to do so in the coming years, which is due to the fact that the current consumption share of disposable income is at a historically low level. Furthermore, consumption is supported by rising house prices. In the coming years, investments are also expected to contribute positively to GDP as increases in production and employment will call for a larger capital stock.

The international economic outlook has deteriorated slightly since the spring of 2016, and the moderate growth is projected to continue in the coming years. The downward adjustment of international growth is partly due to the uncertainty that has followed in the wake of the so-called “Brexit”, which is expected to restrain consumption and investment by households and companies – especially in the United Kingdom.

Despite weak economic growth in Denmark in recent years, employment has increased significantly and is expected to continue to do so in the future. Further employment growth is supported by a significant increase in the structural labour

force caused by reforms adopted during the past decade, in particular reforms that affect the retirement system.

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

	Current		Percentage change, volume				2025 ^{a)}
	prices	DKK bn.	2015	2016	2017	2018	
	2015	2015	2016	2017	2018	2018	
Private consumption	953.5		2.3	2.0	2.3	2.4	2.5
Public sector consumption	518.8		-0.7	1.2	0.5	1.0	1.0
Gross fixed capital formation consisting of:	377.9		1.0	1.2	3.1	3.9	3.1
Residential investment	73.4		-1.6	4.3	4.3	3.7	3.0
Business fixed investment	224.6		2.8	2.1	3.8	4.6	3.4
Public sector investment	73.6		-1.1	-3.6	-0.1	1.8	1.9
Stockbuilding ^{b)}	10.8		-0.3	-0.5	0.2	0.3	0.0
Total domestic demand	1,861.0		0.9	1.2	2.2	2.6	2.2
Exports of goods and services	1,060.5		0.3	0.4	2.5	3.2	4.8
Imports of goods and services	936.2		0.0	0.6	2.8	4.0	5.7
GDP	1,985.3		1.0	1.0	2.0	2.2	1.9
Key indicators							
Consumer prices, percentage change ^{c)}		0.6	0.4	1.5	2.0	2.1	
Unemployment, per cent ^{d)}		3.6	3.2	3.1	3.0	2.7	
Current account, DKK bn.		139	120	117	99	107	
Current account, per cent of GDP		7.0	6.0	5.7	4.6	3.8	
General gov. budget balance, DKK bn.		-34	-12	-34	-24	19	
General gov. budget balance, per cent of GDP		-1.7	-0.6	-1.6	-1.1	0.7	
Hourly wage costs, percentage change		1.8	2.3	2.4	2.4	3.1	
Terms of trade, percentage change		0.1	-1.3	-0.4	-0.8	0.2	

a) The column shows projected average annual growth from 2018 to 2025 for all variables except for unemployment, the current account, and the general government balance. For these variables the column shows the projected values 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.

Increasing employment has helped reduce the excess capacity in the labour market. The so-called employment gap, which denotes the difference between the actual employment level and the estimated structural employment level, has narrowed in recent years, while an increasing number of firms report labour shortages. Together with decreasing unemployment, this is expected to lead to larger wage increases. So far wage increases have been moderate, but compared to the productivity growth in recent years they are relatively high.

The expectation of relatively high growth rates in GDP and employment are based on a number of assumptions that are inherently uncertain. Due to these uncertainties the actual economic development can turn out to be different than expected.

One of the key uncertainties is the exact effect of the adopted labour market reforms. The reforms are expected to increase overall employment by more than 200,000 persons by 2025, compared to 2016. If the reform effects turn out to be smaller than anticipated, future growth rates will be lower than predicted and public finances will be weaker than projected.

Policy

The planned fiscal policy involves a moderate tightening in the coming years, and in light of the expected growth in the Danish economy, this seems appropriate. Without the fiscal consolidation, there would be a higher risk of overheating in the labour market. Also, with the planned fiscal policy, the structural balance is assessed to be close to the Budget Law's deficit limit of $\frac{1}{2}$ per cent of structural GDP. In the absence of a tightening of fiscal policy, the deficit limit for the structural balance could be exceeded.

In late August, the Danish government published its medium-term plan for public sector finances, the so-called "2025-plan". Overall, the plan is primarily focussed on boosting employment and productivity in Danish companies through changes in capital and business taxation, lower

income taxes and a reform of student grants. This focus is relevant, given the sluggish growth in productivity in recent years.

Chapter II: Public Finances

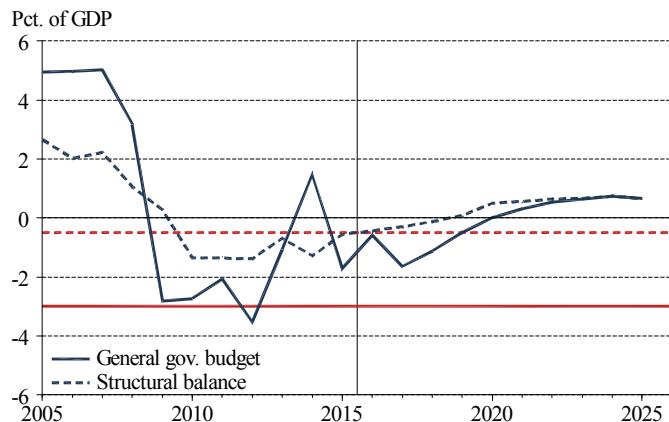
Danish fiscal policy is subject to the Budget Law, which has been in effect since 1 January 2014. The Budget Law imposes expenditure ceilings on the state, municipalities and regions, and sets a structural deficit limit of $\frac{1}{2}$ per cent of GDP. Fiscal policy is also subject to the constraints 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, cf. Table B.

Based on the current outlook for the Danish economy, the budget deficit is expected to be 0.6 per cent of GDP in 2016 and 1.6 per cent of GDP in 2017, cf. figure A. The budget balance is subject to significant uncertainty, and can be affected by changes in assumptions. Volatile tax revenue or expenditure could still lead to a breach of the EU deficit limit of 3 per cent of GDP.

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 $\frac{1}{2}$ per cent of GDP for the structural balance.

Source: Statistics Denmark and own calculations.

The structural balance shows a deficit of 0.3 per cent of GDP in 2017, which is close to the $\frac{1}{2}$ per cent deficit limit. Assessment of the structural budget is highly uncertain and slight adjustments in e.g. the output gap might result in the structural deficit exceeding the limit. A gradual improvement of the structural balance is expected from 2018 and onwards.

Expenditure ceilings for 2020 have been proposed by the government. However, it has been declared that revised ceilings for the period 2017-20 will be proposed reflecting a political agreement on a medium-term plan for public sector finances, the so-called “2025-plan”. The assessment of expenditure ceilings by the chairmanship will take place following the proposal of the revised expenditure ceilings.

Table B Assessment of fiscal policy rules

Objective	Assessment
Fiscal sustainability	<ul style="list-style-type: none"> ● The overall assessment is that Danish fiscal policy is sustainable, cf. <i>Danish Economy, autumn 2016</i>
Medium-term developments of the budget balance	<ul style="list-style-type: none"> ● <i>Structural balance</i> Yellow: Structural deficit close to deficit limit in 2017 ● Structural deficit within the ½ per cent deficit in the period 2018-25 ● Structural surplus in the period 2019-2025
	<ul style="list-style-type: none"> ● <i>Budget balance</i> Deficit below 3 per cent of GDP in the period 2016-25
Expenditure ceilings in accordance with fiscal objectives	Assessment will take place when revised expenditure ceilings for 2020 are proposed
Compliance with expenditure ceilings in fiscal planning	Assessment will take place when revised expenditure ceilings for the period 2017-19 are proposed
Compliance with expenditure ceilings in accounts	Assessment will take place when accounts are available

Note: The assessment of compliance with fiscal objectives is based on the planned policy:

Red: It is assessed that a limit or an objective will not be met.

Yellow: It is assessed that a limit or an objective is close to not being met, and there is a risk of non-compliance.

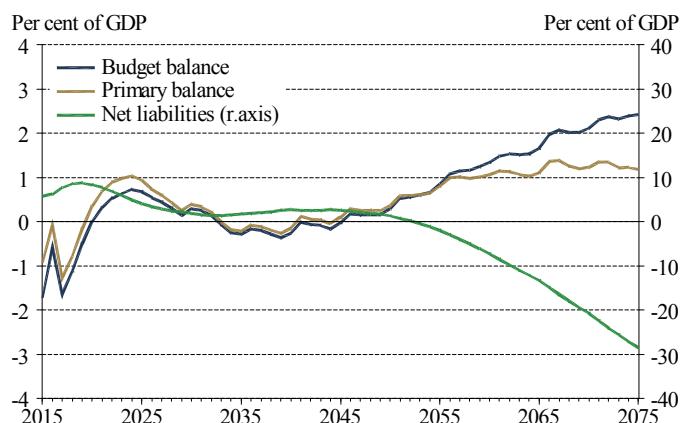
Green: It is assessed that a limit or an objective will be met.

Chapter III: Fiscal Sustainability

Chapter III presents a long-term projection for the Danish economy which builds upon the medium-term projection to 2025 presented in Chapters I and II. 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 during 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 close to $\frac{1}{2}$ per cent of GDP around 2040. Subsequently, the budget improves again and becomes permanently positive around 2045. 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 smaller than in the 2015 projection of the Danish Economic Council, however. Net government liabilities never exceed 10 per cent of GDP, and will turn negative around 2050, according to the present projection.

Figure B Budget balance and net liabilities



Source: Statistics Denmark, ADAM, DREAM and own calculations.

According to the projection, Danish fiscal policy is overly sustainable, the sustainability (S2) indicator being 0.5 per cent of GDP (i.e. the primary budget can deteriorate permanently by 0.5 per cent of GDP without causing debt to explode in the long run). The S2 indicator has improved steadily for several years in the long-term projections of the Danish Economic Council as well as those of the Danish government. There are many particular reasons for the changes in the indicator at each specific update. However, a systematic improvement during the latest years is caused by the fact that future government consumption expenditures that have been voted for by the Danish parliament are consistently lower than those projected by earlier projections.

An overly sustainable fiscal policy implies that the government permanently and systematically raises more money in taxes from its citizens than they get back in the form of government services and income transfers. This is not in itself a desirable political goal; in the long run, fiscal policy should be exactly sustainable, neither more nor less.

The temporary, though lengthy, deterioration in the structural budget balance from around 2025 to 2040 should not be considered a genuine economic problem, though it brings the budget close to the deficit limit of $\frac{1}{2}$ per cent of GDP according to the Danish Budget law. 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, the government is advised to work for more flexible budget rules.

Chapter IV: Investment crisis in Denmark?

In recent years a debate regarding investment activity has emerged in Denmark and elsewhere in Europe. The debate concerns the long-run trends as well as the slump in the aftermath of the financial crisis.

Danish investments decreased markedly in the years following the financial crisis. This is to be expected given the severe setback and similar economic deterioration that took place in other countries such as Germany, the United Kingdom and the USA. However in the period since 2009, Danish net investment as a share of GDP appears particularly weak.

Nevertheless, it cannot be concluded that Denmark has experienced an “investment crisis”. Rather, it seems that Danish firms have had good reasons to be reluctant on keeping up their investment ratio. This assessment is based on the fact that a pronounced decrease in Danish employment increased the capital-labour ratio substantially. The resulting excess capital capacity in the Danish economy subdued the need to undertake investments in order to increase the capital stock. The decline in Danish employment was mainly a result of flexible hiring and firing rules in the Danish labour market, but demographic developments reinforced the weak development, cf. *Danish Economy, spring 2016*.

Concerning the long-run trends in investment activity, the Danish experience is in alignment with developments in other comparable countries. It is a general phenomenon that gross investment has declined as a share of nominal GDP but remained steady or even increased when measured as a share of real GDP. This discrepancy reflects a longstanding decline in the relative price of investment in terms of output. Since investment goods are mainly produced by the manufacturing sector, this development may be caused by a slower pace of productivity growth in the service sector than in the manufacturing sector.

In Denmark, as well as in many other countries, net investment has trended downwards as a share of real GDP since

the 1980s. This has reduced the growth rate of the capital-labour ratio, but the capital-output ratio has remained steady or even increased. In this manner, the apparent weakness in net investment has not lead to any capital shortages. The observed developments are consistent with a slowdown in structural productivity growth – as has probably happened in Denmark and other comparable countries – for reasons other than a capital shortage. On the other hand, an investment crisis caused by other factors, e.g. a credit crunch, would most likely have led to a parallel development in the capital-labour ratio and capital-output ratio.

In Denmark the weaknesses in aggregate investments and productivity are, to a large extent, caused by developments in the service sector. This is consistent with the decrease in the growth rate of the capital-labour ratio being more pronounced in the service sector than in the aggregate economy. This is in accordance with the fact that the growth in total factor productivity, which measures technical progress in a broad sense, has decreased more in the service sector than in the manufacturing sector.

Therefore, the key problem seems to be that Danish productivity growth has decreased for several years due to a slowdown in TFP growth, particularly in the service sector. This emphasizes the need to increase the understanding of why technical progress has slowed down and whether something can be done to reverse this tendency. If the speed of technical progress increases, investment will most likely increase accordingly. Important issues to consider in relation to the slowdown of technical progress include education, globalization, adoption of new technologies from abroad and the degree of competition.

Chapter V: The distribution of income and wealth

During the last 25 years income inequality has increased in most OECD countries. In the US this development has mainly been caused by increases in incomes at the very top of the income distribution, and today, top incomes make up a markedly larger share of total income. In other OECD countries the rise in income inequality has been less pronounced and to a lesser extent caused by increases in incomes at the very top.

As in most countries income inequality has been increasing over the past 25 years in Denmark. The Gini coefficient of disposable income has risen from 0.20 in 1990 to 0.27 in 2014. The rise in inequality has affected both the bottom and the top part of the income distribution. The ratio of the top 10 per cent to the median and the ratio of the median to the bottom 10 per cent have both increased over the last quarter of a century. Furthermore, the number of people living in poverty and the share of total income earned by high-income earners have both grown.

The rise in income inequality is a consequence of political decisions as well as a result of changes in the labour and financial markets.

A decomposition of the changes in the Gini coefficient by income components, as suggested by Hoffman (2013), shows that labour income, capital income and public income transfers have all contributed to the growth in inequality, while the Danish system of progressive income taxes has dampened the rising inequality.¹

Capital income has contributed to the rise in inequality of disposable incomes because the ratio of total capital income to total disposable income has grown and the fact that primarily high-income earners have capital incomes. Growth

1) Hoffmann, R. (2013): How to Measure the Progressivity of an Income Component. *Applied Economic Letters*, 20 (4), s. 328-331.

in capital income has been mainly due to larger equity incomes and lower interest rates, which have lowered the interest payments and hence increased the net capital income.

Higher labour income inequality rather than changes in the ratio of total labour income to total disposable income is the driving force behind the labour income contribution to the rise in overall inequality. The inequality in labour income has been growing since the turn of the century, but the growth has accelerated since the beginning of the current economic downturn in 2008. A higher number of students (with part time jobs) is part of the reason why labour income inequality has risen, however at least part of the increase in labour income inequality is simply due to higher wage dispersion.

Compared to other countries, public income transfers are substantial in Denmark, and income transfers have an important equalizing effect on incomes. However, over the past 20 years the equalizing effect of income transfers has diminished. A considerable decrease in the number of recipients of unemployment benefits during the late 1990s has reduced the importance of unemployment benefits as an income-equalizing instrument. Furthermore, due to private and labour market pensions, pensioners are generally better off today. Therefore, public pensions given to all pensioners have a less equalizing effect on the distribution of disposable income today than before.

The tax system has dampened the rise in income inequality because of the progressive tax rates of the Danish tax system where high-income earners face a higher tax rate than low-income earners. However, during the past 20 years a number of tax reforms have been passed which, for a given distribution of pre-tax incomes, have reduced the equalizing effect of taxes on disposable income.

The Theil index, like the Gini coefficient, is a measure of inequality, and, like the Gini coefficient, the Theil index has shown an increase in income inequality during the past 25 years. Unlike the Gini coefficient, the Theil index is de-

composable and total inequality can be measured as the weighted average of inequality within subgroups plus inequality between those subgroups. By using the decomposability of the Theil index, analysis shows that a quarter of the rise in the inequality of disposable incomes can be attributed to demographic changes with regard to age, ethnic background and educational level. During the past 20 years the demographics in Denmark have changed, and today the share of persons over 50 years of age, the share of immigrants and the share of persons with an education beyond the compulsory level are higher than 20 years ago. All of these demographic changes have contributed to the rise in inequality of disposable income.

Wealth is still unequally distributed

Wealth inequality is larger than income inequality. Part of the inequality in wealth can be explained by natural variations in wealth over the life cycle. Individuals generally accumulate wealth until retirement and decumulate wealth thereafter.

Typically, individuals below the age of 25 have net wealth close to 0 DKK, whereas the median net wealth of 65-year olds is about 1.6 million DKK, including pension wealth. This reflects that some young individuals incur debts while studying, but normally individuals save up money after entering the labour market. Apart from savings, the development in net wealth is influenced by the returns to wealth and by inheritance and gifts.

In 2014, average net wealth (including pension wealth) amounted to about 1.1 million DKK per person above 17 years of age. The average values of assets and liabilities were 1.7 million DKK and 0.6 million DKK, respectively. The most important assets are real estate property (0.8 million DKK) and pension savings (0.5 million DKK).

During the last 25 years, a majority of employees have become covered by mandatory occupational pension schemes. This development has increased savings for most individuals who are attached to the labour market. The pension sav-

ings contribute to a more equal wealth distribution. Hence, net wealth including pension wealth is more equally distributed than net wealth excluding pension wealth.

Information on pension wealth is not available before 2014. However, when looking at the development in the distribution of net wealth excluding pension wealth during the last 25 years, there is no clear upward or downward trend in wealth inequality. For example, the richest 1 per cent of the population owned approximately the same share of total net wealth excluding pension wealth in 2014 as in 1990, that is, about 30 per cent of total net wealth. Likewise, the most indebted 10 per cent of the population had a net debt corresponding to approximately 20 per cent of total net wealth in both 1990 and 2014.