Summary

This is an English Summary of the report for the Danish Economic Council, *Dansk Økonomi, forår 2010* (spring 2010, in Danish only, henceforth referred to as The Report). The Report focuses on the fiscal challenges that the Danish economy faces in the short, medium and long run.

At the end of 2008 and during part of 2009 the global economy experienced one of the most severe recessions for many years. World trade fell 20 percent in the closing stages of 2008 and most countries experienced negative growth rates. Danish production fell almost 5 percent in 2009, and private employment has decreased by around 175,000 since the business cycle peaked.

In response to the crisis, Denmark, along with many other countries, reacted by expanding monetary as well as fiscal policy. These measures helped counteract the negative effects on the economy of the slow down. However, the fiscal expansion, in combination with the cyclically induced budget responses, has resulted in large public deficits. In Denmark a surplus of more than 5 percent of GDP during the upswing was transformed into a deficit of about the same size in 2010.

The expansive policies have led to large public deficits in many economies, not least in Europe where many countries have violated the Stability and Growth Pact, which states that public deficits must not exceed 3 percent of GDP. The size and acceleration of the deficits led to substantial turmoil in the financial markets. The turmoil hit the Greek economy particularly hard, but other countries with large public deficits have suffered as well. The large deficits raised fears that some of the hardest hit countries might not be able to meet their debt obligations. This fear resulted in a significant increase in interest rates on treasury bonds in Greece and other countries. The financial turmoil has since been dampened considerably following establishment of the EU Stabilisation Plan and by the agreements reached with the EU and the IMF, which makes substantial loans to countries in financial crisis, on condition that they imple-
ment wide ranging budgetary improvements. The turmoil served to show how important fiscal credibility is, and how fatal the consequences can be if fiscal policy is not perceived to be credible.

Even though the worst part of the crisis seems to have passed, many countries now face the immediate need to consolidate their public budgets. The necessary economic tightening will slow down the speed of the recovery and it is therefore expected that the normalization of the economic situation will take several years for most European countries, including Denmark. It is assessed that production and employment in Denmark will not return to their normal levels before 2015.

The analyses in The Report reveal that the Danish economy is facing large challenges. The trajectory of the public budget deficit to 2020 is projected to be worse than forecast in the Danish government’s convergence programme. The need to restrain public expenditure, in the absence of significant reforms or tax increases, is, therefore, more severe than anticipated in the convergence programme. This is partly due to the expectation that the return to normal economic conditions will be slow and, as shown in The Report, partly due to the fact that the underlying growth in productivity is likely to be lower than previously expected. A lower growth rate in productivity implies that real public consumption must increase at a correspondingly lower pace in order to maintain a given development in public consumption relative to the total economy.

The large deficits have increased long-term fiscal challenges. The long-term challenge is to ensure that future generations can maintain a welfare state of the same size relative to the total economy as that of the present generations. The demographic development implies that the generations that will be leaving the labour market in future decades will be larger than those entering it.

As part of the welfare reforms adopted by parliament in 2006, the retirement age in Denmark will be gradually raised and this will reduce some of the pressure on the
public finances. However, the part of the welfare reform that deals with the retirement age will not be implemented until 2019. Moreover, the analyses in The Report reveal that in order to secure the long-term sustainability of the public finances, further measures will be needed.

While a sustainable fiscal policy is necessary, it is not sufficient to secure an appropriate and credible development in public finances. A development which is, in a technical sense, sustainable does not necessarily ensure that annual public deficits will be reduced sufficiently. The projections in this report show that sustainable development could be consistent with a period of around 30 years of public deficits in excess of 3 percent of GDP. Not only would this violate the EU Stability and Growth Pact, but financial markets would be likely to perceive this as non-credible. Deficits of this size for so many years induce a risk of public debt being financed by higher interest rates. This would lead to larger deficits that may induce even higher interest rates on public debt, thereby creating a vicious spiral.

The demographic trend will tend to induce large public deficits for a long time to come. In order to ensure a credible budgetary trajectory, it is necessary to reduce the size of these deficits substantially. This will require significant restraint in public expenditure combined with comprehensive labour market reforms and changes in the retirement system. Without these measures, considerable tax increases cannot be avoided.
The rest of this summary is divided into the following subjects:

- The Danish Economy, cf. Chapter I in the Danish Report.
- Recommendations regarding economic policy in the short run.
- The medium- and long-run projections, cf. Chapters II and III.
- Policy recommendations for planning sustainable and credible fiscal policy in the medium and long run, including a brief presentation of some elements that could be a part of a future 2020 plan, cf. chapter IV.

Chapter I: The Danish economy

The forecast for the Danish economy presented in Chapter I of the Report is for growth slightly above the trend growth rate in 2010 and the years that follow. It is expected that growth will be around 1¾ percent in 2010, which is about ½ a percentage point higher than expected in Dansk Økonomi, efterår 2009 (autumn 2009).

The higher than expected growth rate is partly due to the expectation of higher than anticipated export growth, but is also due to the effects of the expansionary fiscal policy in 2010. The fiscal expansion consists mainly of increases in public investment and lower taxes coming into effect following the tax reform in 2009. The tax cuts increase disposable income thereby stimulating private consumption. Private consumption had already started to increase in late 2009, which is partly due to the release of the Special Pensions Savings. Furthermore, house prices ceased falling in the second half of 2009 and this contributed to higher private consumption as well. The stabilisation of house prices is the result of the very low short-term interest rates, including low interest rates on short-term adjustable-rate loans. It is also expected that low interest rates will continue to support house prices in 2011, but the combination of uncertainty regarding the future state of the economy and
the prospect of interest rate rises will tend to drag down house prices. Consequently, it is expected that house prices will remain almost unchanged over the coming years.

An expected tightening of the fiscal stance will drag down economic growth in 2011. In accordance with the convergence programme of the Danish government it is assumed that growth in real public consumption will be zero in the period 2011-13. What’s more, public investment will be reduced from the relatively high level seen in 2010. Finally, the phasing-in of the revenue elements of the tax reform will have a negative effect on economic growth. Overall, fiscal policy is forecast to drag down economic growth by 0.6 of a percentage point in 2011.

As a result of a tighter fiscal policy, economic growth is expected to fall to around 1 percent in 2011. An increasing consumption ratio, increasing investments and higher export growth will help counteract the effects of the tighter fiscal policy in 2011, but these factors will not be enough to completely neutralize the negative effects on the growth rate.

The improved state of the economy is expected to lead to the consumption ratio increasing further in 2012, while at the same time growth in investment and exports is expected to gain strength. Fiscal policy is also expected to be less counteractive in 2012, and economic growth is therefore expected to increase to around 1⅓ percent.

According to this forecast, growth in production in 2010 and 2011 will not be enough to ensure an increase in employment. On the contrary, employment is expected to fall, though by a moderate rate. This is partly due to the expectation of relatively high growth rates in productivity following a couple of years of very small productivity gains. As a consequence of the expectation of falling employment, unemployment is expected to increase further. However, as a result of better growth prospects and the surprisingly positive development in unemployment in the beginning of 2010, the increase in unemployment is now expected to be significantly lower than predicted in autumn 2009. It is now
expected that the number of unemployed will peak at around 150,000 in 2011.

The increase in unemployment has been moderate despite the fact that employment has decreased by about 175,000 people since the peak. The reason for this apparent paradox is that the labour force has turned out to be more sensitive to the business cycle fluctuations than expected. Part of the explanation for the reduced labour force is that a considerable amount of foreign labour has left Denmark. Another possible part of the explanation is that there has been significant increases in the number of unemployed who are not insured and therefore not entitled to receive economic assistance. These persons are not counted as a part of the official labour force.

The development in the labour market has led to a significant drop in wage increases. It is expected that annual wage increases will be around 2-2¼ percent in 2010-12, which is markedly lower than in recent years. However, wage increases abroad are forecast to be even lower and this will lead to a deterioration in Danish wage competitiveness, except in 2010 where a weakened currency is having a positive effect on competitiveness.

The normalisation of the economic situation combined with the fiscal tightening will reduce the public budget deficit markedly. This year the public deficit is expected to be around 5 percent of GDP, but in 2012, it is expected to be down to 2 ¾ percent, bringing Denmark into compliance with the EU Stability and Growth Pact. However, without any further measures there is no prospect of the public budget being balanced in the following years, cf. chapter II and III.

The central figures of the forecast can be seen from table 1.
### Table 1  Short-term outlook for the Danish economy

<table>
<thead>
<tr>
<th></th>
<th>Current prices DKK bn.</th>
<th>Percent of GDP</th>
<th>Percentage change, volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private consumption</td>
<td>817.4</td>
<td>49.3</td>
<td>-0.3</td>
</tr>
<tr>
<td>Public consumption</td>
<td>492.1</td>
<td>29.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>312.1</td>
<td>18.8</td>
<td>-4.5</td>
</tr>
<tr>
<td>consisting of:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential investments</td>
<td>84.9</td>
<td>5.1</td>
<td>-14.2</td>
</tr>
<tr>
<td>Business fixed investments</td>
<td>191.6</td>
<td>10.9</td>
<td>-0.2</td>
</tr>
<tr>
<td>Public investments</td>
<td>35.7</td>
<td>2.2</td>
<td>-2.9</td>
</tr>
<tr>
<td>Stockbuilding&lt;sup&gt;a)&lt;/sup&gt;</td>
<td>-19.1</td>
<td>-1.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Total domestic demand</td>
<td>1,602.6</td>
<td>96.6</td>
<td>-0.5</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>784.2</td>
<td>47.2</td>
<td>2.4</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>727.0</td>
<td>43.8</td>
<td>3.3</td>
</tr>
<tr>
<td>GDP</td>
<td>1,659.7</td>
<td>100.0</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

#### Key indicators

- **Consumer prices, percentage change<sup>b)</sup>**
  - 3.2 1.3 2.3 2.0 1.9
- **Unemployment, percent<sup>c)</sup>**
  - 1.8 3.4 4.3 5.2 5.0
- **Current account, DKK bn.**
  - 38.0 66.3 59.4 55.0 47.5
- **Current account, percent of GDP**
  - 2.2 4.0 3.4 3.1 2.6
- **General government financial balance, DKK bn.**
  - 59.8 -46.7 -88.3 -69.5 -51.4
- **General government fin. balance, per cent of GDP**
  - 3.4 -2.8 -5.1 -3.9 -2.8
- **Hourly wage costs, percentage change**
  - 4.2 2.9 2.3 2.0 2.3
- **Terms of trade, percentage change**
  - 1.2 -0.7 1.0 0.8 0.1

<sup>a)</sup> The percentage changes are calculated as real change in stock building relative to GDP in the previous year.

<sup>b)</sup> Implicit private consumption deflator.

<sup>c)</sup> Percentage of the total labour force. National definition.

Source: Statistics Denmark, National Accounts and own estimates.
Policy recommendations

The fiscal expansion has been considerable in Denmark, consisting primarily of increases in public consumption, bringing forward public investments, tax cuts that are underfinanced in the short run and the release of the Special Pension Savings. The contribution of the fiscal stimulus to growth was almost 1½ percentage points in 2009; this excludes the contribution from the release of the Special Pension Savings, which is estimated to be around ¼ of a percentage point. It is expected that fiscal policy will further stimulate the economy in 2010 by ¾ of a percentage point. Thus, since 2008 fiscal policy will have contributed a 2½ percent increase in GDP. The total expansion in 2010 is therefore in line with the recommendations put forward by the chairmanship in Dansk Økonomi, forår 2009 (spring 2009) and Dansk Økonomi, efterår 2009 (autumn 2009). However, in two central areas the chairmanship’s recommendations have not been followed; namely in the timing and composition of the fiscal expansion and by ignoring the recommended structural reforms.

Compared to the recommendations of the chairmanship, a large part of the fiscal expansion was carried out in 2009 when unemployment was still relatively low. Moreover, a large part of the expansion consisted of increases in public consumption, which in 2009 was around 28 percent of structural GDP. Consequently, public consumption exceeded the benchmark set out in the Danish government’s so-called 2015 Plan for the medium-term public finances (26½ percent of structural GDP). By 2009 public consumption was at a historically high level of 29 percent of actual GDP. The calculations presented in chapter II of The Report illustrate that, with realistic assumptions about, e.g., productivity growth, up to 10 years of zero growth in real public consumption may be needed in order to bring the public share down to the 2007 level (27 percent of structural GDP). Past experience with controlling public expenditure shows that it will be very hard to bring it down enough to meet the requirements.
The other area where the recommendations from the chairmanship have not been adopted is the question of structural reforms. In *Dansk Økonomi, førår 2009* (spring 2009) the chairmanship recommended a two-sided strategy where the short-run expansion was complemented by extensive structural reforms in order to secure sustainable development of the public finances. However, the Danish Government has not initiated such reforms.

The combination of the lack of reform and the fact that a large part of the expansion has been achieved through increases in public consumption has increased the fiscal challenges significantly. Even though the business cycle situation in itself calls for continued fiscal expansion in 2011, it is recommended that fiscal consolidation begins in 2011, and that the extent should be similar to the one in the Danish government’s convergence programme.

However, should the economic outlook for 2011 deteriorate relative to the one put out in this forecast, fiscal policy ought to be reconsidered when finally deciding upon next year’s economic framework. It is essential, though, that a less tight fiscal policy is complemented by the adoption of structural reforms that will improve the underlying structural balance, see the recommendations in chapter IV of the Report.

The extent and consequences of the financial crisis have led to international pressure to tighten the rules for banks. The Basel Committee, organised under the central banks’ bank, Bank for International Settlements, has prepared the existing Basel II rules and the latest response from the Basel Committee will probably also form the basis for the following changes of rules: capital requirements are expected to be tightened and new liquidity rules for banks are likely to be introduced. The financial crisis has shown that governments need to provide guarantees and capital when banks are in trouble. The chairmanship assesses that tighter rules are appropriate even though this tightening will lead to a more costly capital structure in the financial sector. The purpose of tighter rules is to reduce the risk of governments again having to supply funds for banks.
The implementation of tighter rules may affect the Danish mortgage sector through the effect on short-term adjustable rate loans. These loans, in their current structure, are not essential for the Danish housing-finance system. As short-term adjustable rate loans can contribute to macroeconomic instability, it would not necessarily be a disadvantage for the Danish economy if households were forced to replace a part of the adjustable rate loans with more stable loans (e.g. fixed-rate loans).

Chapters II and III: Medium and long run projections

In chapter II of The Report, a projection for the development of the Danish economy up to 2020 is presented, while chapter III presents an even longer-term projection. The focus of the projections is on the development in public finances.

The projections are based on the assumption that the normalisation of the business cycle that is expected to begin during 2010-12 (the forecasting period in chapter I) continues over the period towards 2020. However, the cyclical imbalance is so large that the business cycle situation is not expected to be fully normalised for several years, cf. figure A.
The projection to 2020 is based on the assumption that real public consumption is held constant in the period 2011-13. After which the growth in real public consumption is assumed to be the same as in the 2015 Plan. Due to a technical assumption, this also applies to the period 2015-20. This is similar to the assumption in the convergence programme on growth in real public consumption. The unspecified elements in the convergence programme consisting of public savings (including a lowering of transfers by DKK 11 billion) and structural reforms (which improve the budget balance by DKK 7 billion) are, however, not included in the present projection.¹

In this medium-term projection the forecast for the public budget deficit is considerably worse than in the government’s convergence programme. In 2020 the public budget balance is about 2 percent of GDP lower than in the convergence programme. In particular, there are three reasons why this projection contains a worse outlook for public balances.

¹ The Danish government put forward an initiative after the editorial deadline that specifies savings of DKK 11 billion. The initiative contains a nominal freeze of transfers and tax brackets in 2011 and 2012.
The first one is that this projection contains a slower than initially forecast normalisation of the business cycle situation. This leads to larger deficits towards 2020 and thus to larger debt and interest expenses. Second, the unspecified elements in the convergence programme (lower transfers and structural reforms) are not included. Finally, the underlying growth in GDP in this projection is about ½ a percentage point lower than assumed in the convergence programme. This implies that, for a given growth rate in public consumption, public consumption as a share of GDP will be higher. In this projection public consumption amounts to about 28½ percent of GDP in 2020 compared to the 27 percent level forecast in the convergence programme.

The importance of the two latter differences is illustrated by an alternative projection. In this alternative projection the unspecified elements (lower transfers and structural reforms) in the convergence programme are included while at the same time it is assumed that public consumption gradually adapts to the same percent level of GDP as in the convergence programme. This eliminates the most important effect of the different assumptions about the underlying productivity growth. The requirement that public consumption as a share of GDP equals the share in the convergence programme is assumed to be achieved by a longer period with very low growth rates in real public consumption. Hence, it is assumed that real public consumption only grows at 0.1 percent each year over the period 2014-20, compared with growth rates between ¾ and 1¼ percent in the basic projection (and in the convergence programme).

The developments in public budget balances according to the convergence programme, this medium-term projection and the alternative projection (with lower growth in public consumption) are shown in figure B.
The figure shows that public budget balances in this projection will be almost identical to that in the convergence programme if the unspecified elements are included, and it is assumed that public consumption amounts to 27 percent of GDP in 2020. However, the development towards 2020 is much worse in this projection even though all the requirements from the convergence programme are incorporated. This is partly due to the slower normalisation of the business cycle and partly due to the assumption that the increase in structural employment, which follows from the structural reforms, is only gradually translated into an increase in actual employment.

The calculations show that it might be very difficult to attain the government’s goal of a balanced budget in 2015. According to the calculations, this would require a faster normalisation of the business cycle than expected in this projection and the structural reforms should have their full impact in 2015. In addition, the calculations indicate that the requirement for the development in the share of public

Note: In the alternative projection it is assumed that the Convergence Programme’s unspecified cuts and reforms (that improve the budget by 18 billion DKK) are implemented, and that public consumption is reduced to the same level as in the Convergence Programme (that is 27 percent of GDP as opposed to the main scenario’s 28½ percent).

Source: Denmark’s Convergence Programme 2009 and own estimates.
consumption relative to total GDP is crucial. With the assumptions about underlying productivity growth in this projection, 9-10 years of zero growth in real public consumption are necessary, compared to a period of three years in the convergence programme. Given that there have only been five years with growth in real public consumption of less than a ¼ percent in the last 40 years, holding growth rates at zero for 9-10 years would seem to be a very difficult challenge.

Chapter III of The Report presents a long-term projection of the Danish economy, which builds upon the medium-term projection to 2020 presented in chapter II. The long-term projection period is the 21st century, although the period up to 2040 is particularly emphasized. The projection has been made using the so-called DREAM model, which is a computable general equilibrium model for the Danish economy.

An appropriate long-term economic policy should ensure fiscal sustainability. That is, it should ensure that current public services and other public expenditure can be maintained at an unchanged level into the future without increasing taxes, and without public debt exploding.

However, it is not sufficient to establish fiscal sustainability. The trajectory of the public budget also has to be credible. In principle, a sustainable fiscal policy may involve large levels of public debt for a very long period of time. This may not only be incompatible with the EU’s Stability and Growth Pact requirement that public deficits must not exceed 3 percent of GDP, but it is also very unlikely to be perceived as a credible trajectory by financial markets. Large deficits for very long periods involve a substantial risk that additional risk premiums will have to be paid, thereby increasing the cost of financing the public debt. This would imply even bigger losses that could raise interest rates on public debt even further and create a vicious spiral. Hence, a credible fiscal policy must also ensure that annual public deficits are moderate.

According to the long-term projection, the labour force will shrink by about 3 percent during the next decade. Thereaf-
ter, the labour force will grow gradually throughout the projection period. This is primarily attributable to the 2006 Welfare Agreement ("velfærdsaftalen") under which the retirement age from 2019 onwards will be indexed to the increasing life expectancy. Because of the expected continued growth in productivity, the living standards of the population are expected to grow considerably. GDP per capita is expected to have doubled by around 2050.

The projection also forecasts a worsening of the public budget that starts in 2015 and continues throughout the projection period, as shown in figure C. This is partly because of demographic trends over the coming decades, but is also a result of the low starting point of the Danish economy. The trajectory of the public budget deficit implies that Denmark would be in clear violation of the EU’s Stability and Growth Pact and would undoubtedly lead to such marked increases in the interest rate on Danish government bonds that this scenario rules itself out.

**Figure C  Public budget balances over the projection period**

![Graph showing public budget balances over the projection period.](image)

**Note:** The primary budget is equal to the actual budget minus net interest expenditure. When the actual budget deficit is larger than the primary budget deficit, net public debt and, consequently, interest expenditure are positive.

Source: DREAM calculations.
Moreover, the projection suggests that Danish fiscal policy is unsustainable by an amount of 1.4 percent of GDP, which corresponds to about DKK 25 billion in current prices and wage levels. This implies that the public budget must be permanently improved by 1.4 percent of GDP in order to ensure sustainability.

As the current fiscal policy is unsustainable according to the projections, the budget must be improved. To improve fiscal sustainability it will be necessary to introduce measures that increase revenue or decrease expenditure. Revenue-increasing measures could include tax reforms that result in a net surplus, or reforms that effectively increase the labour force, whereas expenditure can be lowered by reducing public consumption and/or public transfers. Chapter III of The Report illustrates a series of measures that individually or in combination could improve the public budget such that fiscal policy becomes sustainable. Table B provides an overview of the consequences of some of these measures. Obviously, there are many other ways to improve the public budget.
### Table B  Selected budget-improving actions

<table>
<thead>
<tr>
<th>Improvement of SI</th>
<th>Permanent annual improvement</th>
<th>Improvement of government budget in 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent of GDP</td>
<td>DKK billions</td>
</tr>
<tr>
<td>Reduction of government spending by 1.5 percent from 2021</td>
<td>1.4</td>
<td>25</td>
</tr>
<tr>
<td>Adjusting all transfers by the CPI for eight years from 2021</td>
<td>1.5</td>
<td>27</td>
</tr>
<tr>
<td>Abolition of the voluntary early retirement pension scheme from 2013</td>
<td>0.9</td>
<td>16</td>
</tr>
<tr>
<td>Abolition of voluntary early retirement pension scheme from 2019</td>
<td>0.8</td>
<td>14</td>
</tr>
<tr>
<td>Reduction of the voluntary early retirement pension scheme period to three years from 2013</td>
<td>0.5</td>
<td>9</td>
</tr>
<tr>
<td>Reduction of structural unemployment by 0.7 percentage points from 2021</td>
<td>0.3</td>
<td>6</td>
</tr>
<tr>
<td>Increase lower tax rate by 3½ percentage points from 2021</td>
<td>1.4</td>
<td>25</td>
</tr>
<tr>
<td>Abolition of the nominal tax freeze cap from 2021</td>
<td>0.9</td>
<td>16</td>
</tr>
<tr>
<td>Abolition of the nominal tax freeze cap from 2012</td>
<td>1.2</td>
<td>21</td>
</tr>
<tr>
<td>Base scenario</td>
<td>1.4</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Note:  SI = sustainability indicator. Billions are in 2010 prices.
Source: DREAM calculations.
The analyses reveal that a permanent reduction in public spending of 1.5 percent of GDP will improve sustainability by 1.4 percentage points, which exactly ensures sustainability. However, this improvement in sustainability is not sufficient to ensure that the public budget meets the requirements of the EU’s Stability and Growth Pact in the long term. The improvement of the public budget by 3 percent of GDP in 2040 is far from enough to fulfill the EU requirement of a deficit of no more than 0.5 a percent of GDP.

A broadly similar improvement in sustainability can be achieved by increasing the lower tax rate by 3½ percentage points, or by adjusting all transfers by the inflation rate rather than by the wage growth rate for eight years.

Moreover, full abolition of the Danish voluntary early retirement pension scheme can improve sustainability by about 0.9 of a percentage point, if the inflow to the scheme stops in 2013. This corresponds to a permanent improvement in the public budget of about DKK 16 billion. A reduction in the length of the voluntary early retirement pension scheme period from 5 to 3 years would improve sustainability by around 0.5 percent of GDP.

A reform of the unemployment benefit scheme that reduces structural unemployment by 0.7 percentage points, or about 20,000 persons, would improve fiscal sustainability by 0.3 percent. Such a reform could, for example, include a shortening of the period in which the unemployed are entitled to receive benefits.

Finally, table B shows that removing the nominal cap on the so-called Danish tax freeze from 2012 would improve sustainability by 1.2 percentage points, while removal from 2021 would improve sustainability by only 0.9 percentage points. By freezing some taxes and duties in DKK, including property taxes, inflation gradually erodes real revenue.

Increasing participation in higher education has also been proposed as a way to improve public finances. However, its effect on sustainability is associated with great uncertainty.
If the effect of education on labour market participation is limited, or if the marginal individuals who complete an education are more expensive to educate than those who already have an education, then sustainability can actually be worsened due to the additional effort.

A common feature of all the analyses outlined above is that they do not prevent significant public deficits in the medium run. Hence, the projections show that sustainability is not a sufficient condition to ensure a credible trajectory for the public budget. A necessary condition for a credible long-term economic policy is to improve the development of the public budget significantly.

**Chapter IV: A sustainable and credible fiscal policy**

This chapter of The Report contains a discussion of the principles and framework for the preparation of the fiscal policy in the short-, medium- and long-run term. The objective is to describe the fundamental principles for a future 2020 plan and to give an insight into some of the elements that are required to make fiscal policy both sustainable and credible.

The EU Stability and Growth Pact requires the budget deficit to be no higher than 3 percent of GDP and the public debt to be less than 60 percent. The credibility of economic policy is strengthened by the fact that the Pact holds deficits under a certain size and requires approximately balanced budgets in the long run. Large deficits which have developed within a short time period or which could be permanent could increase the interest rate on public debt. Even though the present turmoil hitting Greek bonds must not be overestimated, it does emphasize the importance of the credibility of a state’s ability and commitment to fulfilling its debt obligations. Mistrust in a country’s commitment to fulfilling its obligations, whether there is reason for this or not, may lead to a substantially higher interest rate and start vicious circles of larger deficits and even higher interest rates.
The Stability and Growth Pact requires the actual deficit to be less than 3 percent and the implication is that countries have to keep public finances in balance or in surplus. This is especially true for a country like Denmark with large automatic stabilizing budget reactions. Therefore, if the government wants to use fiscal policy to stabilize the economy, public finances must be healthy.

The projections forecast increasing pressure on the public finances until 2040 due to demographic factors. The estimates in chapter III show that it will be very difficult to prevent several decades with substantial deficits. Even technically sustainable projections exhibit deficits larger than 3 percent of GDP from 2030 to 2060. This is far from being in line with the requirement of balanced budgets. One of the causes of the predicted long term deficits is the demographic factors that imply that a larger than usual proportion of the population will retire from the labour market up to 2040. Chapter III illustrates that the accumulation of deficits builds up a large debt, and that interest payments increase public deficits. The situation with a larger labour force and fewer retirees that applied in previous decades was not utilized to accumulate public net wealth that could have financed the future retirement of the large generations, which means the economy faces the prospect of major deficits in the coming decades. Public expenditure has generally been too high compared to tax income and it still is.

The Growth and Stability Pact does not include incentives to establish and retain public surpluses in good times, no matter whether the cause of the good times is high growth or favourable demographic situations. It is a task, on the national level, to secure the necessary positive stance in good times.

Fiscal policy in Denmark is determined in two steps, where the first step is the agreement between the local and the central governments on the local governments’ expenditure. The second step is the budget. Even though the tax freeze may have contributed to a reduction in the growth of public spending, it is concluded that control of public expenditure
has been insufficient and it has been the norm to systematically exceed the planned and agreed budgets. There is a need for new instruments. It is recommended that the central Government introduces taxes and subsidies to regulate the local governments’ investments. When economic conditions deteriorate the local governments could receive a subsidy but when growth is high they would have to pay a tax. Further, it is recommended that the Government introduce tradable local government “expenditure rights” limiting the local governments’ expenditure to the number of “rights”.

The Swedish experience with such local government budget constraints over several years seems to be positive, and should be investigated as a possible inspiration for the introduction of similar instruments in Denmark. Nominal expenditure goals should replace the current system that targets real growth in public expenditure. Real growth is not an appropriate target, because there is considerable uncertainty about the price of public consumption. In the short run it is much more efficient to use the growth contribution from fiscal policy as an instrument in the fiscal policy.

Short-term fiscal policy must be conducted within the framework of long-term policy. Denmark has a good tradition of preparing medium-term plans. These plans ensure a longer-term focus for the public finances and have contributed to the fact that Denmark is, despite everything, in a better position than most other EU countries.
A future 2020 plan must develop the tradition further and introduce measurable milestones and targets:

- The plan must contain targets for the trajectory of the cyclically adjusted budget to 2020.
- The plan must ensure fiscal sustainability and specify how much of the adjustment should take place within the time frame of the plan, and how much should take place afterwards.
- The plan must set milestones to make certain that the long-run profile of the structural budget is credible and in accordance with the EU regulations. Fiscal sustainability is not sufficient.
- The existing milestones for the size of public consumption relative to GDP must be kept. The annual targets for the real growth of public consumption must be substituted by nominal targets which are adjusted to ensure that the proportion used for consumption is not exceeded.
- The plan must introduce ways of sanctioning those who exceed the targets to ensure they consequently meet their targets in future.
- The plan must contain a specified list of structural reforms and savings.
- The plan must take account of expensive goals and ways of financing these. This could be the goals for educational attainment or the emission of greenhouse gases.

The chairmanship assesses that it is necessary to implement a plan containing traditional cuts in public expenditure and/or higher taxes and at the same time introduce wide ranging reforms aimed at increasing the supply of labour. Without such fiscal tightening and the implementation of the reforms, many years of large public deficits must be expected, and the development of the budget is clearly neither sustainable nor credible.

To illustrate the elements necessary for a plan which is both sustainable and credible, an example showing the minimum required level of fiscal consolidation for the
2020 plan has been calculated. The elements of the plan are the following and they are illustrated in figure D.

- A reform of the early retirement system which reduces the maximum period to three years, to be phased in from 2012.
- A labour market reform reducing the length of unemployment benefit entitlements such that the structural level of unemployment is reduced by ½ a percentage point.
- Abolition of the nominal tax freeze from 2012.
- A tight fiscal policy with a milestone for public consumption to be reduced to a maximum of 27 percent of GDP by 2020.

**Figure D  Public budget balances**

Note: The blue curve is the basic projection in chapter III. The brown curve builds on top of the blue curve but also includes the effects of limiting public consumption expenditure to 27 percent of GDP by 2020. The green curve further includes a reduction in the early retirement scheme to a maximum of 3 years and the effect of labour market reforms that reduce the structural level of unemployment ½ a percentage point. The red curve finally also includes abolition of the nominal tax freeze. The red curve illustrates the consequences for the budget if the total minimum plan is introduced.

Source: Own calculations.
The calculations and the figure illustrate that there would be a considerable budget deficit for the next 40-50 years even if all four elements of the plan were introduced. In the short run the budget is expected to approach balance, but even when the deficit is at its lowest structural level, it is expected to be between 1 to 2 percent of GDP. This underlines the fact that there may be a need for further improvements in the budget within the next 5-10 years.

It also illustrates that a combination of a tight fiscal stance up to 2020 and reforms would only reduce the long term trajectory of the budget deficits to a little less than 3 percent. Abolition of the nominal tax freeze would reduce the deficit further to around 2 percent at the time that the demographic burden reaches its maximum.

The plan leads to a fiscal policy outcome which is “oversustainable” - with a surplus of 1.6 percent of GDP. The reason for the surplus is a substantial improvement in the structural budget in the very long run, and despite the eventual surplus, there is a budget deficit of 1 to 2 percent of GDP for a very long time.

Reforms must necessarily contain political priorities and there are various possibilities for adjusting the plan and still reaching the same fiscal consolidation. One example is to abolish the voluntary early retirement pension scheme fully and leave the labour market regulations unchanged or to choose an increase in taxation rather than limiting public consumption further. The essential thing is to introduce initiatives that improve the budget both in 2011 and in the long run. Furthermore, the plan must improve the structural deficit and partly prevent the systematic demographic development from deteriorating the budget before 2040.

It must be stressed that the plan is only a minimum of what must be introduced before 2020. It is not clear whether the plan is enough to ensure that fiscal policy would be credible after 2020. The suggested initiatives imply that the adjustments in fiscal policy that may be necessary after 2020 are limited to a manageable size.