English Summary

The report contains three chapters that concern the economic outlook and fiscal policy challenges faced by Europe and Denmark.

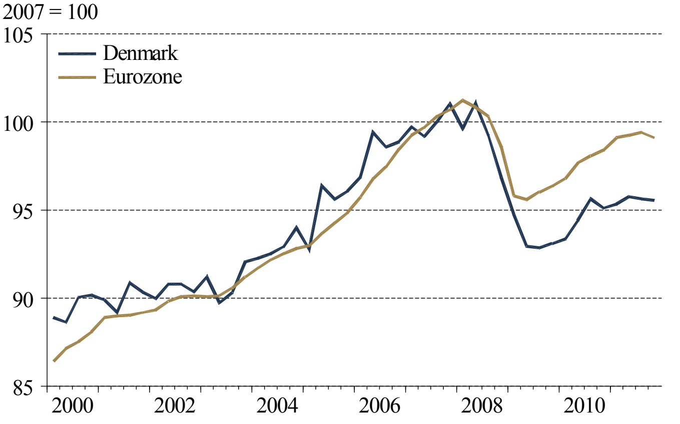
Chapter I contains a description of the outlook for the Danish economy up to 2020. In Denmark, as well as in many other countries, the lack of confidence in the public finances of a number of European countries is putting a on burden the economic outlook, and consequently a rather slow normalisation of the business cycle is expected. In Denmark fiscal policy measures already adopted along with the normalisation of the business cycle suggest that the public finances will gradually improve towards the year 2020 and approximately balance in the year 2020.

Chapter II deals with the background of the sovereign debt difficulties in a number of European countries. The chapter gives an account of the measures that have been implemented by the EU to mitigate the scope of the existing crises and prevent new crises. The measures include the establishment of the permanent rescue fund system, ESM, the Fiscal Compact and a number of other initiatives. Restoring confidence in the public finances is crucial to economic development in Europe in the coming years.

Chapter III contains a long term projection for the Danish economy focusing on the development of the public sector finances. The projection points out that substantial budget deficits must be expected in the years following 2020 due to the demographic evolution, which will result in an increased proportion of older people, and the exhaustion of resources in the North Sea. The fiscal policy is sustainable, given the assumptions in the projection, however, the future budget deficits are problematic and in conflict with the requirement that the structural deficit should not exceed ½ per cent of GDP.

Neither Denmark nor the eurozone countries have recovered from the financial crisis that hit the global economy in 2008. The level of production in Denmark is at approximately the same level as 18 months ago, and growth in the eurozone has been weak as well, cf. Figure A. Europe is suffering from an economic slowdown, large budget deficits, and the widespread sovereign debt crisis. Households and businesses hesitate to spend and invest. The low level of consumption and investment is, to some extent, a result of the completed fiscal tightening and the concerns about a further escalation of the sovereign debt crisis. Consequently, demand is low which impedes the growth that could otherwise mitigate the budget deficits in the exposed countries. The projection in chapter I presupposes that the sovereign debt crisis will gradually taper off, and that the economy slowly recovers. During this process it is likely, however, that temporary setbacks could occur.

Figure A GDP in Denmark and the eurozone



Note: Latest observation is 4th quarter 2011.

Source: Statistics Denmark and EcoWin.

The recovery is expected to be fragile, and an escalation of the sovereign debt crisis cannot be excluded, which could weaken the recovery further. The recent public resistance to fiscal tightening in, for example, Greece shows that it may be very difficult to accomplish the necessary fiscal consolidation in some of the exposed countries. Ultimately this might lead to sovereign defaults and thus a new economic recession.

This year growth in Denmark is expected to exceed growth in the eurozone, cf. Table A. This is partly due to a planned fiscal stimulus including growth in public consumption and investment and repayment of early retirement contributions. In addition, unlike a number of European countries, fiscal policy in Denmark is not subject to mistrust.

In Denmark one of the reasons for the large setback was the development in the housing market. Housing prices increased rapidly up to the start of the sudden decline in 2008. Spain and Ireland have had a similar experience, whereas house prices had a different, gradual development in Germany, cf. Figure B. Overheating of the housing market and other macroeconomic imbalances have proven to constitute a risk to public finances in some countries.

Most of the European countries have large budget deficits. The economic setback has caused a considerable deterioration in the public finances because tax revenues have decreased due to lower economic activity, and expenses to unemployment benefits have increased. Furthermore, discretionary measures have been undertaken to support economic activity, e.g. tax cuts, public sector investment, and capital injections to banks. Denmark and most other countries in the EU have received a recommendation from the EU commission to tighten fiscal policy and improve the budget stance. The fiscal consolidation is ongoing and expected to proceed in the years ahead. Consolidation is necessary to restore confidence in the public finances, but the fiscal tightening per se will hamper growth. However, if the necessary consolidation is not carried through, the risk of a collapse in confidence is increased. A collapse in confidence will have immeasurable economic consquences.

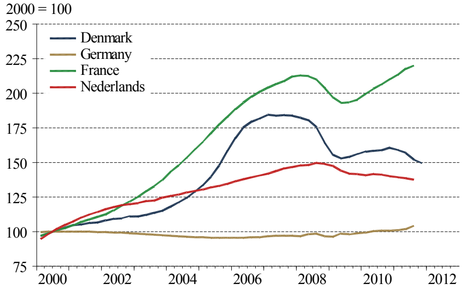
Table A — Key figures of the short-term outlook for the Danish economy

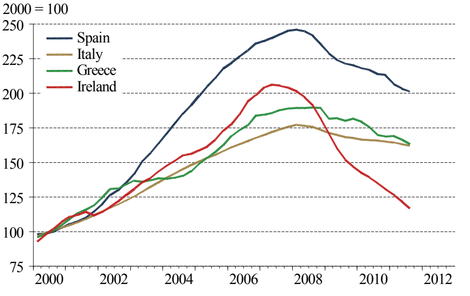
	Current prices DKK bn.	Per cent of GDP	Percentage change volume			
	2011	**2011**	**2011**	**2012**	**2013**	**2014**
Private consumption	868	48,6	-0,5	2,3	1,3	1,8
Public sector consumption	511	28,6	-1,0	1,3	0,1	0,9
Gross fixed capital formation	310	17,3	1,0	5,2	2,5	2,4
consisting of:						
Residential investment	83	4,7	8,8	0,3	0,2	2,4
Business fixed investment	187	9,9	-3,2	6,7	7,4	2,8
Public sector investment	40	2,2	3,8	8,5	-18,0	1,6
Stockbuilding[a)]	3	0,2	0,4	0,1	0,5	0,0
Total domestic demand	1.692	94,7	-0,1	2,6	1,7	1,6
Exports of goods and services	957	53,6	6,8	1,4	2,8	2,6
Imports of goods and services	863	48,3	5,2	4,0	3,9	2,9
GDP	1.786	100,0	1,0	1,3	1,2	1,5
Key indicators						
GDP in the eurozone, percentage change			1,7	-0,1	1,1	1,6
Consumer prices, percentage change[b)]			2,5	2,5	1,9	1,8
Unemployment, per cent[c)]			3,8	4,0	4,2	4,1
Current account, DKK bn.			115,8	79,6	62,0	57,1
Current account, per cent of GDP			6,5	4,3	3,3	2,9
General government budget balance, DKK bn.			-34,7	-72,0	-44,2	-37,5
General gov. budget balance, per cent of GDP			-1,9	-3,9	-2,3	-1,9
Hourly wage costs, percentage change			2,3	1,8	1,8	2,3
Terms of trade, percentage change			-2,1	-1,1	0,0	0,3

a) The percentage changes are calculated as real change in stock building relative to GDP in the previous year.
b) Implicit private consumption deflator.
c) Percentage of the total labour force. National definition.

Source: Statistics Denmark, National Accounts and own calculations.

Figure B   House prices in Denmark and selected euro countries





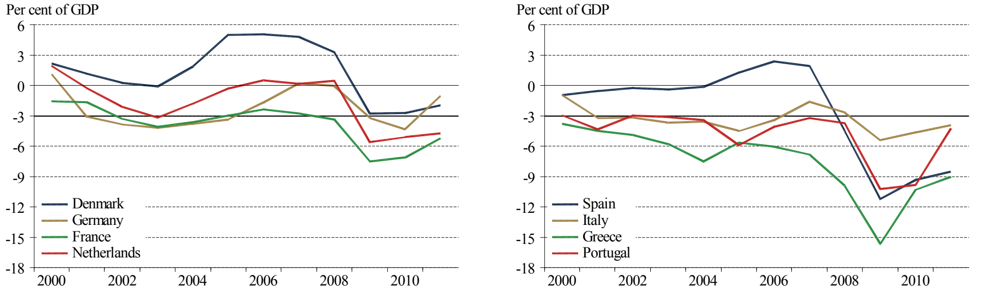
Note: Latest observation is 1st quarter 2012 for Denmark and 4th quarter 2011 for the other countries.

Source: Statistics Denmark and OECD.

The large budget deficits are not caused exclusively by the crisis. In many European countries, the public finances were not sufficiently consolidated in the years prior to the crisis in 2008, and many countries struggled, irrespectively of the cyclical upswing, to keep the budget deficit below 3 per cent of GDP. Greece and Portugal more or less systematically exceeded the deficit limit in the 2000s, and Italy, Germany, and France also violated the regulations. For the entire period, Denmark has complied with the requirements, cf. Figure C.

A few EU countries, including Italy and Greece, have not only struggled with the budget deficit limit, they also had public debts exceeding 60 per cent of GDP already in the year 2000. The development of the public finances in the 2000s meant that the debt of the eurozone countries increased from 70 per cent of GDP in 2000 to almost 90 per cent of GDP in 2011. Last year, public debt exceeded 60 per cent of GDP in many countries, including Germany and France. In Denmark, the public debt has been below 60 per cent during the entire period, cf. Figure D.

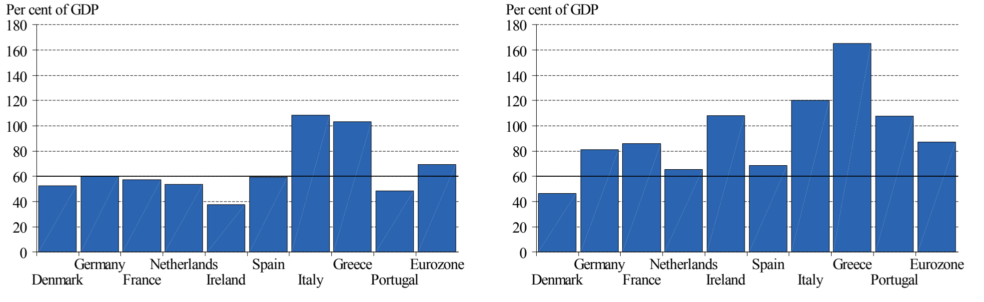
Figure C *Budget balance in Denmark and selected euro countries*



Note: The horizontal line illustrates the EU requirement that the budget deficit should not exceed 3 per cent of GDP.

Source: OECD, *Economic Outlook*, Statistics Denmark, and Eurostat.

Figure D *Gross debt in 2000* *Gross debt in 2011*



Note: The horizontal line illustrates the EU requirement that the public debt should not exceed 60 per cent of GDP. Eurostat note that the recent figures reported by Greece are subject to substantial uncertainty.

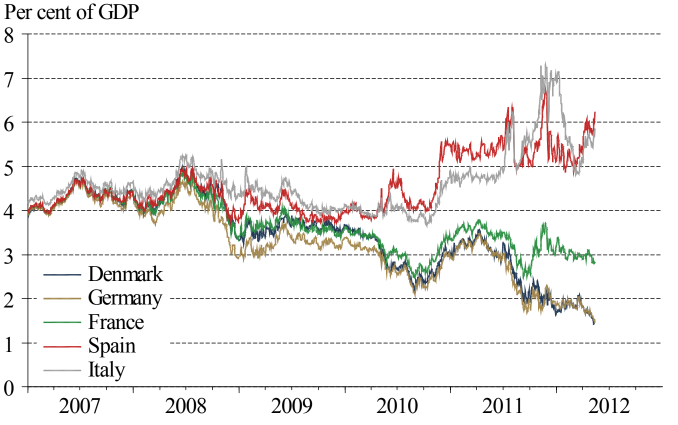
Source: Eurostat.

The systematic problems that countries have had complying with the requirements for budget deficits and public debt highlight the fact that the existing rules have been insufficient. Many countries have had budget deficits close to 3 per cent in times of normal or even favourable economic conditions. This is a clear indication of fiscal policy being too expansionary and shows that many countries have been off-track compared to the goal of balancing the structural budget. It is remarkable that no countries were fined for breaking the budget deficit limit.

The financial and economic crisis has led to a considerable deterioration in public finances that were already weak. Based on large and increasing public deficits, Greece requested loans from other EU countries and the IMF in May 2010, and shortly afterwards loans were also provided to Ireland and Portugal. Following a period with gradually increased confidence that the countries would be able to cope with the difficulties, mistrust returned during the summer of 2011. Interest rates on government bonds increased rapidly for the most exposed countries, and the unrest also hit Spain, Italy, and to some degree France. The adverse development was stopped by a number of measures taken by the affected countries themselves and measures and declarations by the EU in late 2011 and the beginning of 2012. For the exposed countries, the measures include fiscal tightening and implementation of reforms in accordance with the recommendations given by the EU. The measures undertaken by the EU include the advance of the permanent rescue funding programme, ESM, fiscal policy measures in terms of the Six Pack, the Fiscal Compact, and quantitative easings by the ECB. The Greek debt write-down in March 2012 was expected by financial observers and thus not per se an event that reduced business and consumer confidence in Europe.

Though the measures taken by the EU have helped to restore confidence in the European economy, the interest rate spreads to Germany are still large in a number of countries. This is the case for the most exposed countries like Greece and Portugal, but also Spain and Italy suffer from worrisomely large spreads, cf. Figure E. For these countries, the interest rate on 10-year bonds approaches 6 per cent, which is 4½ percentage points above that of Germany (and Denmark). The interest rate in France is also higher than in Germany.

Figure E Interest rate on 10-year bonds



Note: Latest observation is mid-May 2012.

Source: EcoWin.

The large spreads have directed attention to the potential role of the ECB. Some have argued that the ECB should play a more active role and systematically intervene in the government bond market by buying government bonds to keep the interest rates down. By intervening in the market the ECB could, in principle, lower the probability of a "debt spiral", where mistrust in the public finances increases the interest rates making it more difficult to service the debt. However, such bond purchases by the ECB lower the incentive to consolidate fiscal policy. The same problem applies to loans given by ESM, however, these loans may be made conditional on fiscal tightening and structural reforms in the exposed countries. Moreover, the ESM construction has the advantage that the costs and risks of aid to countries struggling with fiscal imbalances are fully transparent. The transparency and possibility of providing aid conditional on reforms imply that rescue funding programmes by ESM are preferable to systematic market intervention by the ECB.

In many countries the budget deficits are unsustainably large. In the most exposed countries, it is imperative to implement measures that improve the public finances and restore confidence. Due to irresponsible fiscal policy and lack of reforms in favourable years, the state of the public finances is very poor. In these countries, it is not possible to use standard fiscal stimulus – though the economy suffers from low demand, high unemployment, and in many countries, very high youth unemployment. In many countries, the fiscal policy difficulties are so severe that no alternative to reforms and a very tight fiscal policy is available.

The IMF has recommended that countries with healthy public finances and large private sector savings surpluses, including Germany and Denmark, should choose a less tight fiscal policy. A fiscal stimulus in these countries could increase growth in the eurozone, indirectly helping the most exposed countries by increasing export potential. A slower consolidation in the healthiest countries could be part of a strategy to lift Europe out of the crisis, however, the stimulus would primarily affect the countries that stimulate, and the effect on e.g. Greece, Italy, Spain, and Portugal would only be indirect and limited.

A more direct way to promote growth in the exposed European countries is to temporarily channel a larger part of the EU's structural funds to the most exposed countries or temporarily increase available funds. The EU funds could help to make socially beneficial investments possible in a situation where the state of public finances cannot ensure the usual funding. EU funds should be used on socially profitable investments only. Additional contributions from countries with a relatively favourable level of economic activity to troubled countries could ensure that the stimulus takes place where it is needed the most, i.e. in southern Europe. The state of the business cycle is certainly not the same in all eurozone countries, and with a single monetary policy there may be a need for different fiscal policies. A redistribution of funds based on a business cycle perspective has, however, a number of political and practical difficulties that the existing system may not be optimal to cope with.

One way to raise further funds to finance a coordinated fiscal stimulus in the EU could be to impose a financial transaction tax (FTT). The European Commission has presented a proposal for such a tax. However, it is the assessment that a FTT is inefficient in this respect. At first, the tax on financial transactions is paid by financial institutions, but the costs are, to a large extent, passed on to companies and consumers through higher financial costs that affect investment, saving, and thus GDP negatively. A FTT is adequate if unintended adverse side effects of financial transactions can be identified. In general, a high number of transactions and a large turnover is desirable as it increases liquidity and thereby efficiency in the markets. Nevertheless, some transactions may destabilize markets and form bubbles. From a theoretical point of view it is not obvious whether a FTT increases or decreases the stability of markets, and empirical evidence does not support the hypothesis that a high number of transactions tend to destabilize markets – rather the opposite.

If the intention is to increase tax revenue in the EU by increased taxation of the financial sector, this ought to correct the VAT exemption that applies to most financial services in the EU. To this end a payroll tax (and perhaps a tax on above normal profits) in the financial sector is suitable. Currently only a few European countries have levied a payroll tax on the financial sector, however Denmark has such a tax that may serve as an example. The need to reduce risk-taking behaviour in the financial sector is better achieved by imposing capital and liquidity requirements etc. than by imposing a FTT.

In the EU focus is on the necessity to establish credible public finances. Nevertheless, success has been limited. Credible public finances increase investor confidence that a country is able (and willing) to meet its financial obligations as they fall due. In the end what matters is that the fiscal policy is sustainable, i.e., the revenue matches the expenses such that the debt-income ratio is stable in the long run. Hereby the country should be able to pay back loans including interest and avoid a sovereign default. Thus, it is crucial that the fiscal policy of each country is sustainable – and at the moment this is far from being the case. The European Commission frequently calculates simple indicators of fiscal sustainability that show considerable difficulties with sustainability among countries in the EU. Recent calculations show that the budget balance in the eurozone must be improved by 6.4 per cent of GDP in order to obtain sustainability. One of the most troubled countries is Spain. In Spain, sustainability requires an improvement of the budget balance of 12.0 per cent of GDP. In Germany and France, the corresponding numbers are 5.0 and 5.5 per cent of GDP, respectively. In this context Denmark distinguishes itself positively.

The substantial difficulties with fiscal sustainability in the EU countries clarify that the short-term outlook is not the only problem. There is a great need to pay attention to the long term difficulties as well. Hence, it would be expedient if the EU countries were required to indicate how they would obtain fiscal sustainability in the yearly EU stability and convergence programmes. Ideally, the requirement for regular and well-documented sustainability estimates can increase fiscal discipline in the EU countries. In Denmark, there has long been a focus on such long-run issues which are dealt with in the medium and long term fiscal planning. This focus has most likely contributed to the passing of reforms necessary for fiscal sustainability in the Danish economy.

Fiscal sustainability is not necessarily sufficient to avoid mistrust in the public finances. Large budget deficits and increasing debt in the short term might raise doubts about a country's ability and willingness to service the debt – irrespective of the fact that large deficits are countered by surpluses later on. If investors start losing confidence in the public finances the interest rate increases, and the public finances consequently deteriorate further. Increasing interest rates may thereby lead to unsustainable fiscal policy. Loss of confidence may be self-reinforcing, and the country might enter a phase of runaway debt – even though fiscal policy was sustainable in the first place. Changing expectations are particularly troublesome for countries with large initial debt.

The Maastricht Treaty and the Stability and Growth Pact define the framework for the fiscal policy in the EU countries: The general government deficit should not exceed 3 per cent of GDP, and the gross public debt should not exceed 60 per cent of GDP. In principle, the fulfilment of the debt-GDP ratio limit implies a fiscal policy which is sustainable. However, by adding the budget deficit limit one achieves an earlier indication if the public finances are heading in the wrong direction. The budget and debt requirements are supplemented by country-specific medium term objectives for the structural budget balance which, in the case of Denmark, is a structural budget deficit of a maximum of ½ per cent of GDP.

During the autumn of 2011 and spring of 2012 the EU countries implemented a number of measures to enhance the credibility of fiscal policy in the EU countries. These initiatives include the Six Pack and the Fiscal Compact. The purpose of these measures is to improve the fulfilment of the public finance requirements.

The Fiscal Compact increases the focus on the structural stance of the public finances. As part of the Fiscal Compact, each country is obligated to ensure that the structural deficit requirement and a correction mechanism take effect in national legislation. This implies that if the structural deficit appears to deviate significantly from the requirement then the country has to put forward a programme of measures to improve the public finances. All EU countries, except the United Kingdom and the Czech Republic, have announced that they intend to join the Fiscal Compact.

The Fiscal Compact and other recent measures give a more prominent role to the structural stance of the public finances in terms of the estimated structural deficit. The structural budget balance is the budget balance adjusted for effects related to the business cycle and temporary circumstances. The development of the structural budget has a closer relationship to the long term development of the public finances and fiscal sustainability than the actual budget balance itself. The structural budget deficit should not exceed ½ per cent of GDP (for most countries) unless there are exceptional circumstances, e.g. a severe economic setback.

Abiding by the requirement that the structural deficit should not exceed ½ per cent of GDP implies that the budget balance itself will be in surplus during economic upswings. It also implies that the automatic stabilizers are allowed to work during a downturn. Hence, it would not normally be necessary to tighten fiscal policy during a downturn in order to avoid a violation of the 3 per cent deficit limit. The rules allow for deviations from the budget deficit and structural budget balance requirements under special circumstances such as a severe economic contraction. If the financial policy just fulfils the structural balance requirements, there is no room for discretionary fiscal stimulus during downturns that are not considered extraordinary. If a more expansionary fiscal stance is desired it presupposes that the fiscal policy aims at structural balance or a surplus. Whether it is necessary and desirable to plan fiscal policy to leave room for discretionary stimulus depends on a number of factors including the actual use of the concept "extraordinary circumstances".

The structural deficit is an estimate, not an actual balance. The estimate depends, among other things, on the perception of the business cycle and the way temporary circumstances are accounted for. Hence, there is significant practical and methodological uncertainty attached to the estimate of the structural deficit. In a projection, the estimate of the structural balance is closely related to the estimate of the future actual budget itself. Clearly, the latter is also subject to substantial uncertainty related to, e.g. the development of the business cycle and occurrence of temporary circumstances.

The uncertainty involved in estimating a structural budget balance calls for its cautious use. However, this is not an argument for avoiding using the concept in the planning of fiscal policy. It is imperative to address the structural position of the public finances. The disregarding of this issue is probably the reason why, in the years before the crisis, many countries continued running budget deficits close to (or above) 3 per cent of GDP. The structural budget balance should work as an important indicator for the development of the public finances, but it is not sufficient. It is also important to take the estimates of the actual budget balance in the medium and long term into consideration.

With the Six Pack the EU countries have increased the focus on macroeconomic imbalances. This is a favourable step. The development in recent years has shown that macroeconomic imbalances might affect the public finances negatively. The fact that the sovereign debt crisis was partly triggered by the private (financial) sector stresses the need to pay attention to imbalances in the various parts of the economy that may influence the public finances.

It may be necessary for the euro countries to make an effort to increase the credibility of their public finances. The former requirements were largely not respected, and sanctions were not introduced, even though this was possible. The Six Pack increases the possibilities to sanction countries that do not comply with the policy requirements, e.g. a penalty payment, and the Fiscal Compact involves requirements for national legislation that supports the framework for fiscal policy. The tightening measures increase the probability that the requirements will be respected. However, this remains to be proven.

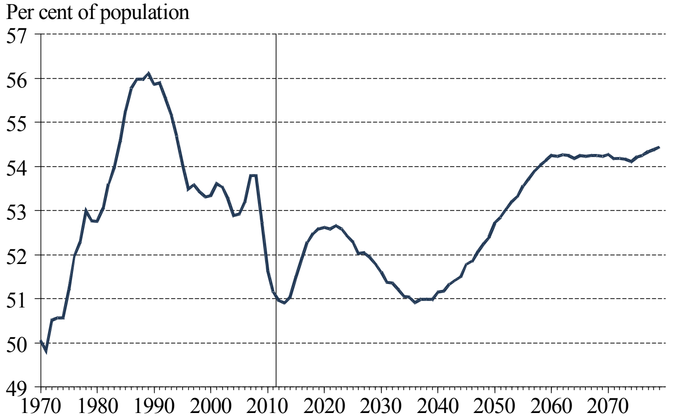
By increasing credibility, the new rules will contribute to settling the unrest in the markets for government bonds. The development since the approval of the measures shows that confidence is difficult to restore. Even if the attempt to restore confidence in the financial markets succeeds in the short-term, confidence may be lost in the future. An important test of the new fiscal framework would arise if France, Italy, or Germany experiences an economic boom in a few years. In this case, the structural deficit requirement implies that the actual public finances have to be in surplus.

Public finances in Denmark are healthy compared to most other European countries. In 2011 gross public debt amounted to 47 per cent of GDP in Denmark, while the corresponding number in the euro area was 80 per cent of

GDP. The public deficit is modest compared to other, especially southern, European countries. Also, according to the assessment of long run fiscal sustainability made by the EU-Commission, public finances are in a significantly better condition in Denmark than in most other countries.

Given recent measures, in particular the reform of the retirement system and assuming that the abolition of the nominal tax freeze on excises is permanent, fiscal policy is assessed to be sustainable in the long run, according to the calculations in chapter III. The sustainability indicator is 0.2 per cent of GDP. An important explanation of the development in public finances is the development of the labour force. As a consequence of the recent reforms to the Danish pension system, the labour force (as a share of the population) will gradually increase to a level that is higher than the current level, cf. Figure F.

Figure F Labour force as a share of the population

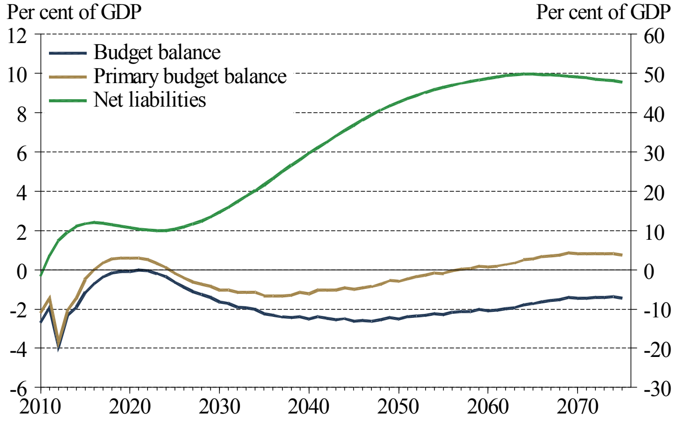


Source: Statistics Denmark, ADAM's databank, DREAM's population and labour force projections and own calculations.

The projection presupposes that the structural budget balances (after the consolidation following the European Commission's recommendation) from 2013 until the start of the 2020s. Hereafter, public finances are expected to deteriorate due to both demographics and reduced production of oil and gas in the North Sea, resulting in lower tax revenues. Fiscal sustainability notwithstanding, a period with structural deficits of approximately 2 per cent of GDP is expected, cf. Figure G. Thus, Danish fiscal policy will conflict with the Fiscal Compact.

A structural deficit of around 2-2½ per cent of GDP limits the availability of fiscal policies to actively intervene in the case of a recession. A recession can easily cause actual deficits that are in conflict with the deficit limit of 3 per cent of GDP even without active expansionary policy, as automatic stabilizers are fairly large in Denmark. Many years with deficits also imply a risk that financial markets will respond with higher interest rates on Danish government bonds.

Figure G Budget balance and net liabilities



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

The prospect of relatively large deficits for a number of years indicates that eventually reforms will be needed to improve public finances. However, under the current circumstances, the challenge is manageable. Over three years a structural improvement in public finances of around 1½ per cent of GDP is planned in the fiscal consolidation agreement. This shows that reforms are feasible, if they are considered necessary. Another example is the implementation of the recent reform of the Danish retirement system.

In this projection the deficit is forecast to be DKK 2 billion in 2020 and sustainability of the public finances is estimated to be a surplus of 0.2 per cent of GDP. The 2012 Convergence Program for Denmark estimates a deficit in 2020 of around ½ per cent of GDP (around DKK 7 billion in present value) and a modest sustainability problem of 0.1 per cent of GDP. The relatively negative forecast for the public balance in 2020 in the convergence program is partly due to a less positive estimation of the development of the labour force.[1] The differences in the expected developments in the labour force and balance reflect the fact that projections are based on assumptions that are uncertain and not necessarily identical, and therefore can be debated.

In early May 2012, the government presented a new 2020 plan, *Denmark at work - challenges for the Danish economy towards 2020*. The plan is based on maintaining the previous Liberal-Conservative government's goal of structural balance in 2020. The plan suggests implementation of reforms in several areas, including disability pensions, subsidised jobs, social assistance, taxes and tripartite negotiations, amounting to a requirement for an increase in the labour force of approximately 60,000 people. The resulting revenue would be primarily used to close the gap in the public finances in 2020, which the government estimates to be just under ½ per cent of GDP, cf. *the challenge scenario* in the convergence programme. The revenue is also to be spent on the new, more ambitious, educational goal that 60 per cent of a youth cohort completes a higher education. Finally, further revenue from the reforms is planned to be used for growth initiatives. The government thus plans a

1) In the 2020 projection presented in *Convergence Programme 2012* the labour force increases by about 50,000 persons less than in this projection. This difference is partly due to the use of different population projections. Part of the difference in the development of the labour force, however, is offset by an opposite difference in average working hours. The scenario that shows a deficit of just under ½ per cent of GDP is termed *the challenge scenario* in the convergence programme.

significant increase in the labour force by 2020, partly to ensure public balance in 2020, partly to increase expenditures above the path that ensures unchanged service standards.

The need for reforms to improve public finances depends on the estimation of the underlying trends and on political desires to increase expenditure or lower taxes. As mentioned, the government intends to achieve balance in 2020. This aim can be reasonable, partly because it is operational, e.g. compared to an aim of sustainable and credible public policy. Balance in 2020 is a stricter aim than Denmark's current medium-term aim that allows a deficit of ½ per cent of GDP. By aiming at budget balance, a small margin is achieved to insure against broken presumptions. If the presumptions are correct, achieving balance in 2020 allows for a small extra stabilization policy scope.

Given the aim of balance in 2020, the projection in chapter I implies that increased expenditures necessitate reforms or other measures that provide sufficient funds. The need for reforms depends on the initiatives that require increased expenditure (or lower taxes) and is thus a highly political issue. A precautionary principle and the requirement of a maximum structural deficit of ½ per cent of GDP imply that increased expenditure cannot occur until the effects of the implemented measures to finance them are fairly certain. In light of the uncertainty regarding the development towards 2020, it is appropriate to pursue such a precautionary strategy, even though the gap in this projection is expected to be lower (DKK 2 billion).

Increasing deficits are expected from 2020 onwards. Meeting the requirement of a structural deficit of a maximum ½ per cent of GDP will, therefore, sooner or later, require reforms or other measures that can improve public finances. However, there is no urgent need for reforms in the short run as public finances are expected to be in balance in 2020 without costly initiatives. However, in chapter III, a calculation shows that an improvement of the primary balance of 0.9 per cent of GDP, equivalent to DKK 18 billion could ensure that the structural deficit is a maximum ½ per cent of

GDP in the years to follow. Such a tightening of public finances tends to give a surplus and the fiscal policy would be over-sustainable. If the presumptions behind the calculations hold, this implies that the fiscal policy can be expanded in the (far) future to be beneficial to future generations.

Rather than tightening over the period until 2020, it is possible to postpone the necessary improvements in public finances until after 2020. If the implementation of the measures necessary to ensure that the structural balance under the given conditions never exhibits a deficit in excess of ½ per cent of GDP is postponed until after 2020, the required improvement of the primary balance is larger than if tightening is implemented before 2020. Calculations in chapter III show that the necessary improvement in the primary balance is around DKK 23 billion if the tightening is implemented over the period 2021-30. When and how tightening should be implemented depends on the political priorities, including the consideration of different generations. The later the improvement is implemented, the greater it must be. Conversely, there may be both economic and distributional considerations that imply that additional fiscal tightening in the short run is not realistic or appropriate. At the moment, a significant traditional fiscal tightening has been implemented with the fiscal consolidation agreement, and there have been reforms: one reduces the length of the unemployment benefit period by half and another postpones retirement. Further measures in the next few years will add to those already adopted and partially implemented. The expected slow normalization of the business cycle also pulls in the direction of postponing the implementation of necessary measures.

There is a substantial redistribution between generations through the public sector. Calculations presented in chapter III show that, on average, a newborn receives almost DKK 500,000 more from the government than he pays over the life cycle in the scenario with slightly over-sustainable fiscal policy. Similar calculations have sometimes been perceived to indicate that public finances are not sustainable. However, this is a misunderstanding. When the fiscal policy is sustainable, while all future generations are net beneficiaries of the public sector, it is due to the fact that the generations alive today for the rest of their life pay just as much as future generations receive. The amount of just below DKK 500,000 thus expresses that the most important generational redistribution in the Danish welfare state occurs from adults to children. Thus, in Denmark a large part of the transfer of resources from parents to children that have always existed takes place through the public sector.

The profile of the public balance in the coming decades is primarily the result of changes in the age structure of the population, but the specific profile is also a result of institutional factors. To the extent that it is possible to change the institutional setting so that the given public revenues and expenditures are transferred over time, it will, in principle, be possible to change the deficit profile, without affecting fiscal sustainability. With the expected profile of the deficit, it is tempting to look for opportunities to move forward revenues expected in the distant future to the early 2020s and through the 2030s - or, alternatively, to postpone to the future expenses that fall in these years. A pure advance of earnings (or delay of expenses) will improve the balance in the medium run and thereby contribute to a slower accumulation of debt in the longer run without compromising sustainability.

An option to defer public spending could be to consider a public-private partnership (PPP) on public investment, for example investment in infrastructure or other major construction projects, where a private company makes the investment and the government pays rent in the future, rather than the public sector makes the investment. There may be many arguments for and against increased use of PPP. Compared to the profile of the public finances, they have the specific effect that public expenditure decreases in the short term - against higher expenditure in the longer term. This will pull in the direction where the profile of the public balance is smoothed and, to a greater extent, will meet the deficit requirement.

Another possibility to influence the profile of the fiscal balance could be to tax contributions to pension schemes at the time of payment instead of at the time of repayment. Calculations in *Danish Economy, spring 2011* show that the public finances in that case are improved by just over 3 per cent of GDP for many years, and there will be a large public accumulation of wealth rather than debt. In principle, sustainability of public finances is unaffected, because it is merely an advance of revenue. However, a risk of advancing pension taxation is that the sizable wealth accumulation and the large annual surpluses could lead to pressure to loosen fiscal policy. The same argument applies against a significant increase in the use of PPP. In any event, there is no reason why Denmark should change the taxation of pensions, as described, before 2020.

The above examples illustrate that different institutional arrangements may influence how restrictive the requirement for a structural deficit of no more than ½ per cent of GDP will be. For example, historical differences between the institutional settings in two countries with the same fundamental fiscal sustainability problems could mean that fiscal policy must be organized differently, if the requirement for the structural balance is to be met. This element of randomness indicates that, in the longer run, refining the EU requirements for the structural balance may be needed in a way such that the country-specific requirements depend on the basic institutional settings and possibly on fiscal sustainability. In a Danish context, the sizeable tax revenues that are postponed, in combination with a fundamentally sustainable fiscal policy could justify that the requirement for the Danish structural balance should not be a deficit of up to ½ per cent of GDP, but rather e.g. 1 per cent. An adjustment of EU rules may be appropriate, but no changes should be made before Europe has come safely through the sovereign debt crisis.

Calculations of fiscal sustainability require a projection of developments in public finances far into the future, to which are obviously attached great uncertainty. The uncertainty is associated with both the general assumptions and assumptions about economic policy. One of several key assumptions behind the calculations is that government expenditure follows the evolution of population size and composition, corrected for the general income development. Historically, however, there has been a significantly higher growth in public consumption compared to the calculated growth corresponding to unchanged standards. Such a historical excess growth tendency is not included in the projection, but would then jeopardize sustainability. Thus, there is a need for tight control of public consumption etc. if the projection is to hold.

The government has proposed a Budget Law that includes the introduction of expenditure ceilings (effective from 2014). At the same time the possibility of sanctioning municipalities in the case of expenditure exceeding the agreed amounts is made permanent, and sanctions are introduced for the regions. Adoption of the Budget Law will also imply implementation of the Fiscal Compact in Danish legislation, including the requirement that the structural deficit in public finances must not exceed ½ per cent of GDP. The Budget Law is in line with previous recommendations from the chairmen of the Economic Council and helps to meet the medium-term objectives.

The municipal accounts for 2011 exhibited lower consumption expenditures than agreed and budgeted. This respect for agreements and budgets is in contrast to the typical picture of the past decade, which has been characterized by more or less systematic deviations. This suggests that the tougher sanctions for municipalities in 2011 have had an effect. It is therefore reasonable to make the possibility of sanctions permanent.

The expenditure ceilings are in effect for four consecutive years and cover most of the public expenditure that is not related to unemployment, interest payments or investments. Five different ceilings will be established for municipal operating expenditures, regional operating expenditures (the health area and the regional development area respectively), central government expenditures on transfers and operational expenditures, EU-contributions etc. The size of the expenditure ceilings will be determined on the basis of the target for the structural balance and a macroeconomic projection. This projection can only include revenue from reforms that have majority support in the Danish parliament.

There are various possibilities of adjusting the ceilings along the way. The Danish parliament can decide to establish new ceilings. Also, the Minister of Finance can redistribute the ceilings among central government, municipalities and regions with the approval of the Finance Committee. Finally, the Minister of Finance can, under some circumstances, increase or decrease the ceilings. On the one hand it is appropriate to allow a certain amount of flexibility within the system, e.g. when the underlying assumptions change. On the other hand adjustments may reduce credibility. Thus, it is important that changes in the ceilings are limited and that the changes are transparent, justified and in accordance with the fiscal targets.

Public finances deteriorated sharply during the economic crisis, and there is an urgent need for consolidation of public finances. A part of this consolidation takes place automatically as the economic situation improves, but there is a further need for withdrawing the crisis-related discretionary measures. A substantial part of this withdrawal occurred in 2011, mainly as a result of reductions in public consumption, which were larger than planned.

Fiscal policy is planned to be eased in 2012, such that fiscal policy is assessed to increase the growth rate of GDP by ½ percentage point compared to a situation with a neutral fiscal policy. Recently, a number of measures which strengthen public finances in the long run have been implemented. These measures give room for the planned fiscal stimulus in 2012, which will, however, not change the economic situation significantly.

The fiscal stimulus in 2012 consists of high growth in public consumption, a sharp increase in public investment and repayment of the contributions to the voluntary early retirement scheme. The increase in public consumption is a result of public consumption expenditure being

DKK 6 billion lower than planned in 2011. Another expansive element in the fiscal policy this year is a planned sharp increase in public investment. Expenditure on public investment will reach 2½ per cent of GDP, which is the highest level in forty years. However, experience has shown that it is difficult to control public investments in a precise manner. Thus it is likely that some of the public investments will be implemented in 2013. This will tend to limit the fiscal expansion in 2012, while the tightening in 2013 is reduced.

As mentioned earlier, Danish fiscal policy is restrained by the European Commission's recommendation that the structural balance should be improved by 1½ per cent of GDP from 2010 to 2013. According to calculations made by the Danish Ministry of Finance, this target will be met given the planned fiscal policy. The reason for the recommendation was that the public deficit was expected to exceed 3 per cent in 2010 and 2011. It turned out that the actual deficit in these two years did not exceed 3 per cent. This was not due to a more favourable economic situation and only to some extent due to policy measures. The primary reason for the improved budget balance was unexpected and extraordinarily revenues from taxation of pension yields, which yielded DKK 35 billion in both 2010 and 2011. In a normal year the taxation of pension yield is expected to yield DKK 20 billion.

Taking the fiscal expansion this year into account there is a need for a sharp fiscal tightening in 2013, assuming that the recommendation of the European Commission is to be met. It is assessed that the planned fiscal policy will reduce GDP growth by almost 1 percentage point in 2013, which is primarily due to a planned fall in public investments. To some extent this can be mitigated by the plan to bring forward renovation of social housing provided by housing associations and higher private investment as a consequence of the recent energy agreement. However, the scope and timing of these investments are highly uncertain.

The planned tightening of fiscal policy in 2013 is not appropriately timed considering the fragile economic situation. GDP is expected to grow at around 1¼ per cent in this year and the next. This is only slightly above the estimated growth rate of structural GDP. If this expectation proves correct then the output gap will only narrow slowly. The expectation of only weak growth in aggregate demand and output implies that employment will not begin to increase before 2013 or 2014. Employment is estimated to be substantially below its structural level even though unemployment is not very high. This calls for a less tight fiscal policy even though a part of the fall in employment can be explained by a reduction in the number of foreign cross-border workers and increased entry into education. In the absence of the recommendation of the European Commission a slower tightening of fiscal policy would have been beneficial. This could for instance be done by reaching the desired improvement of the structural balance in 2015 instead of 2013. It is still advised to follow the recommendation but a revised recommendation could be part of a fiscal expansion at the EU-level.