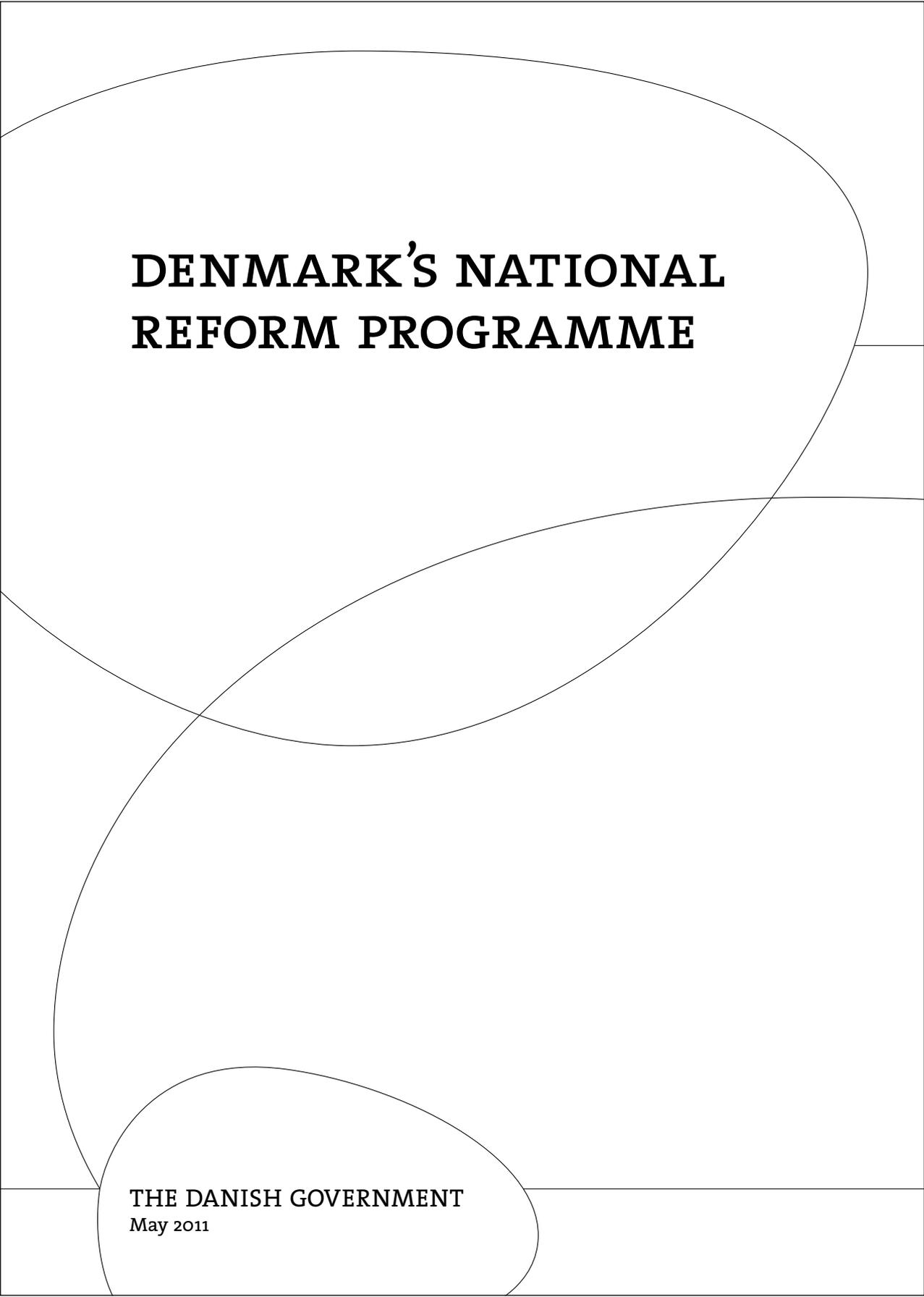


The cover features a large, dark blue, rounded shape at the top, resembling a stylized sun or a wave. Below this, the background is composed of several overlapping, rounded shapes in various shades of green, creating a layered, landscape-like effect. The text is centered within the blue shape and at the bottom left of the page.

# DENMARK'S NATIONAL REFORM PROGRAMME

THE DANISH GOVERNMENT  
May 2011





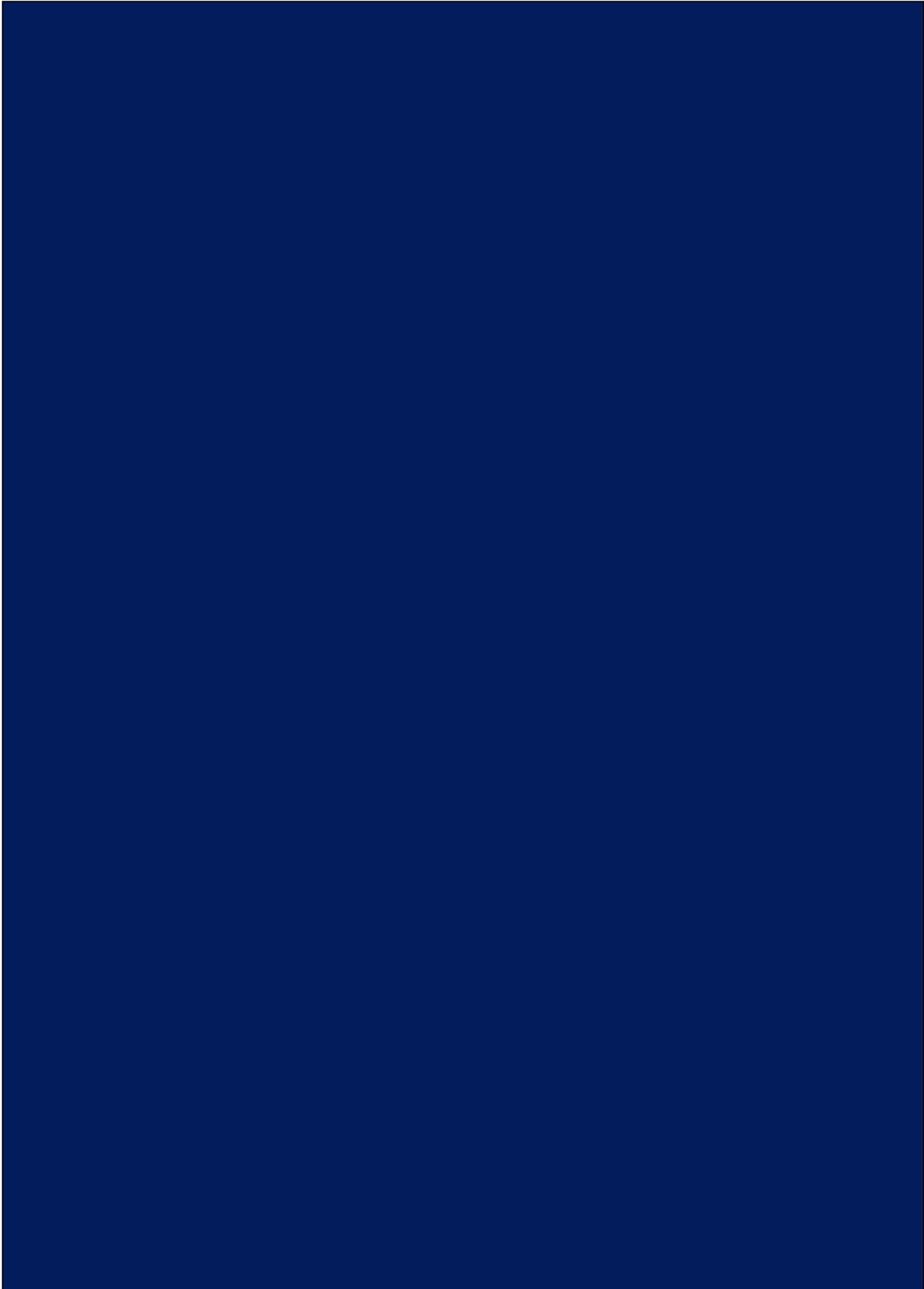
# **DENMARK'S NATIONAL REFORM PROGRAMME**

**THE DANISH GOVERNMENT**  
May 2011



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# Introduction

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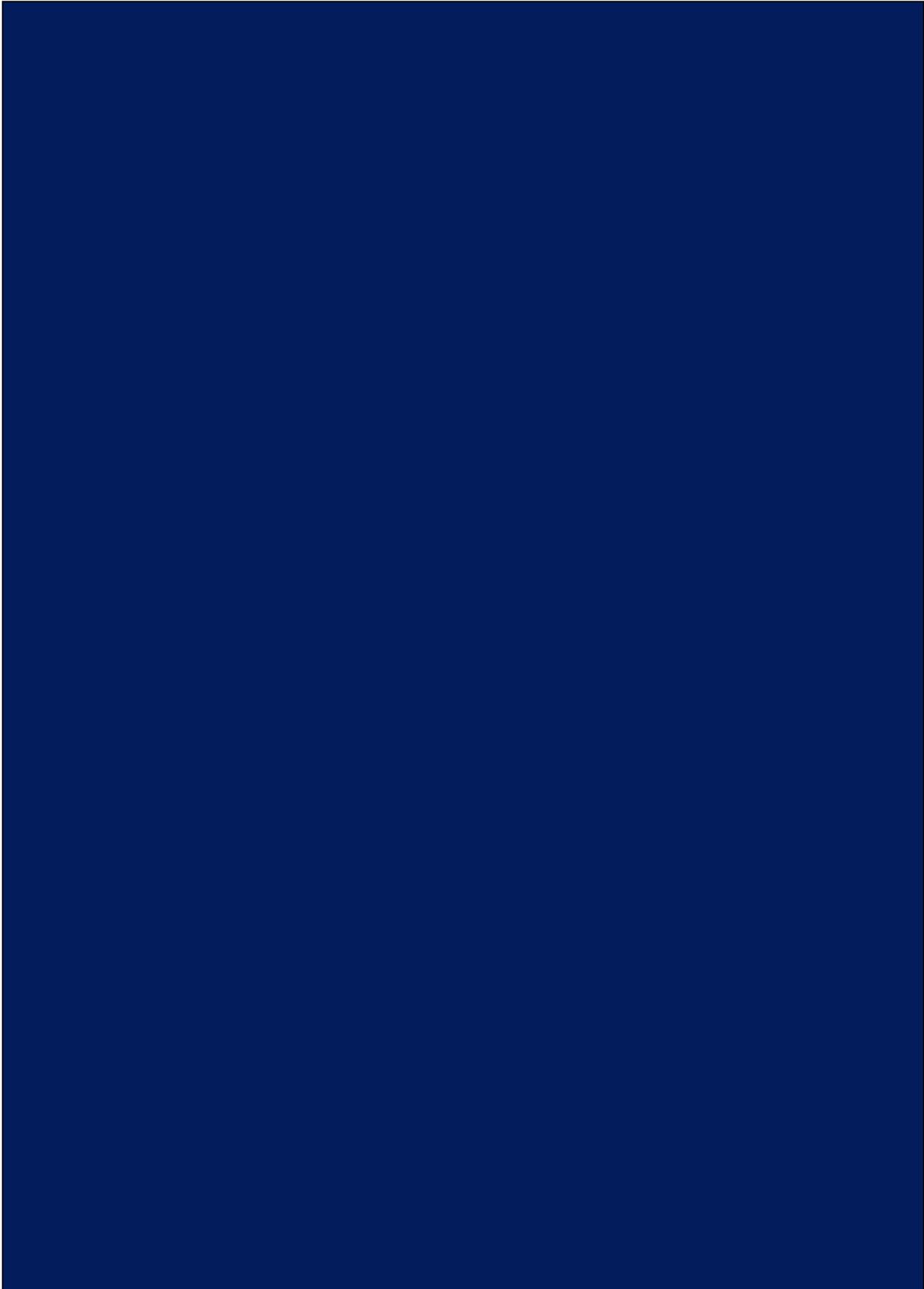
With the introduction of the European semester in 2011 EU member states have been asked to identify key structural reforms with significant macroeconomic effects to ensure sustainable and growth promoting policies and reforms which enable the consolidation of public finances and support a higher level of growth and employment. In the context of the new European semester the EU member states will have to submit a stability or convergence programme and a national reform programme. Denmark's National Reform Programme is hereby sent.

The Danish Government has committed itself to a number of ambitious goals: Denmark should be among the 10 richest countries in the world by 2020 measured in GDP pr. capita, have a total labor supply among the 10 best countries in the world, be among the most innovative countries in the world, ensure sustainable growth, and be among the three most energy efficient countries in the world. In addition, economic policies must be sustainable in long the long run.

The purpose of the national reform programme is to describe the measures Denmark has already taken and will take to fulfill the five headline targets of the Europe2020 strategy, together with the identification of structural bottlenecks in order to create new growth possibilities and improved competitiveness. The overall economic framework for the Danish economy is also presented in the programme, which is based on the new medium term strategy, the 2020 Plan, and is further elaborated in the convergence programme.

The structure of the national reform programme is based on the draft national reform programme, which was submitted in the end of 2010.

- Chapter 1 deals with the overall framework for the Danish economy based on the 2020 Plan.
- Chapter 2 focuses on the Danish national targets which will contribute to fulfilling the Europe2020 strategy and strategies for meeting the targets.
- Chapter 3 identifies the structural bottlenecks for growth in Denmark.
- Chapter 4 describes the inclusion of relevant ministries and non governmental organisations relevant for the Europe2020 strategy, including their involvement in the drawing up of the national reform programme.



# 1. The Economic Framework

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Danish economy has been progressing since the summer of 2009 following the sharp downturn in the wake of the financial crisis. Significant expansionary monetary and fiscal policy in 2009 and 2010 have been the major driving forces behind the economic growth and will continue to stimulate activity into 2011. Towards 2015 the recovery is expected to continue and gradually become more self-sustaining.

The key challenges ahead are to strengthen growth prospects and the public finances, both of which will be structurally weakened by demographic developments. The challenges are reinforced by the fact that public finances have weakened considerably in connection with the financial crisis and that growth opportunities through a number of years have been dampened by weak productivity gains. The Government's medium-term strategy for handling the challenges is specified in the 2020 Plan and described in Denmark's Convergence Programme 2011.

The key medium-term fiscal objective is to ensure structural balance on public finances in 2020, cf. Denmark's Convergence Program 2011. The recommendation by the EU Council of Ministers (ECOFIN) on improving the structural budget balance by 1.5 per cent of GDP over the period 2011-2013 is satisfied with the Fiscal Consolidation Agreement from May 2010

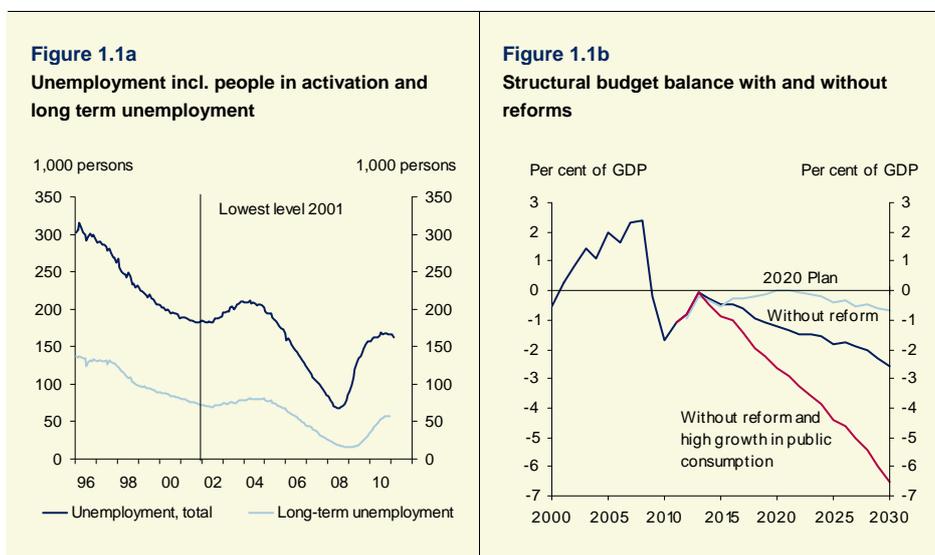
## 1.1 The economic outlook

The Danish economy was hit hard by the global downturn in the autumn of 2008, which came on top of an already ongoing slowdown in demand after a period with great pressure on capacity, weakening competitiveness and strong increases in housing prices.

Since summer 2009, however, the economy has moved forward again and over the past one and a half year, growth has been stronger than expected and unemployment has risen less than feared. The gross unemployment has stabilised during the last half year and is now lower than in 2001 when it reached the lowest level after the economic upturn in the late 1990s, cf. *figure 1.1a*. This is remarkable in light of the historically large setback in the Danish and international economy in 2008-09.

Towards 2015 a gradual recovery of economic activity is expected to continue so that unemployment could approach the estimated structural level. As the growth in demand becomes more self-sustaining it is natural to gradually phase out the large monetary and fiscal stimulus implemented during the crisis.

The recovery of activity assumes that confidence in fiscal policy and credibility of public finances in Denmark are maintained. The crisis has increased the fiscal policy challenges facing Denmark, and large government surpluses have been turned into a significant deficit, which is currently expected to be around DKK 70 billion (4 per cent of GDP) in 2011, partly because of discretionary fiscal loosening of more than 3 per cent of GDP, which is one of the largest in the EU. Therefore, Denmark is now in the EU procedure for excessive deficits and has received a recommendation to tighten fiscal policy toward 2013.



Note.: Figure 1.1b shows the development of the structural balance towards 2050: 1) without further reforms and high growth in public consumption (red), 2) without further reforms and low growth in public consumption (darkblue), 3) 2020 Plan with reform proposals (light blue)

Source: Own calculations.

In addition, the international economic climate has changed. The recovery in the western world is moderate, and many countries are facing fiscal challenges that can seem overwhelming. The financial markets have increased focus on the development of deficits and debt, and on how countries handle the task of ensuring sound public finances. The costs of irresponsible or untrustworthy economic policy in terms of for instance rising interest rates are significant.

Denmark is a small open economy that is very sensitive to interest rate changes and where the developments on the housing market have great significance both for overall demand and for financial stability. This increases the vulnerability to financial turmoil. Employment and growth is now more sensitive to changes especially in short-term interest rates than previ-

ously and the real economic consequences of pressure on the Danish krone, which implies higher interest rates, are therefore increased. The financial crisis has also demonstrated that economic stability is very dependent on international confidence in the financial sector in Denmark.

For Denmark, it is more important than ever to conduct a responsible and stability-oriented economic policy, which ensures credibility of the fixed exchange rate policy, and which can ensure that Danish government securities are still seen as a "safe haven" in times of financial turmoil. If confidence is not maintained it could endanger the moderate recovery that is underway and cause a major increase in interest payments on public debt, thereby reducing the scope for other purposes.

The fiscal consolidation agreement implies that consolidation of public finances will begin from 2011. The agreement, coupled with the planned fiscal policy in general, implies that up to 90 per cent of the fiscal expansion implemented in 2009 and 2010 is pulled back. The agreement implies, among other things, that public spending must remain stable until 2013 so that real public consumption is brought back onto the previously planned track. The agreement also contains some labour market reforms that can contribute to maintaining a low long-term unemployment rate and strengthen labour supply. Overall it is estimated that the agreement strengthens labour supply by about 10,000 persons in the longer term, equivalent to 0.3 per cent of the workforce.

However, when looking further into the future the challenges for public finances increase. In the coming decades Denmark is in a situation where the public economy will systematically come under increasing pressure. If no further reforms that strengthen the general government revenue base are implemented, and if real public consumption grows as in the past 30 years, the deficit could rise to above 2.5 per cent of GDP (DKK 48 billion) in 2020 and 6½ per cent of GDP (DKK 120 billion) towards 2030, *cf. figure 1.1b*. Such a scenario - in which expenditure policies are maintained - is not credible and will lead to pressure on the yield spread, which will further increase the debt. Even if the annual increase in government consumption is reduced by half compared to the past 30 years there will be a public deficit of around 1¼ per cent of GDP (DKK 23 billion) in 2020 and 2½ per cent of GDP (DKK 48 billion) in 2030.

The crisis has also clarified that Denmark is facing a challenge of low growth potential. Productivity growth has been low for a sustained period and while the employment has increased, the growth in prosperity has been less than in many comparable countries. Low productivity growth has also weakened public finances, because the growth in public spending has not slowed equivalently. In the coming years the demographic developments will reduce labour supply, while the population grows, mainly because the number of elderly people increases. This causes pressure on the public finances and dampens potential growth in the private sector, especially if growth in public consumption continues and thus reduces the recruitment base for the private sector.

The Danish economy is thus facing 3 fundamental challenges:

- Growth potential has to be strengthened. Without reforms which increase labour supply or a higher productivity growth the growth potential is very limited - around 1 per cent per year - and there is a risk that Denmark will be a low-growth economy. With great challenges for both the public finances and growth, it is the conditions for private enterprise growth that have to be improved. This requires reforms that can strengthen labour supply, productivity and competitiveness.
- Public finances need to be strengthened substantially in order to ensure that the public budget is balanced in the longer term. Without further reforms the room for growth in public consumption over the next decade will only be around zero if balance on public finances in 2020 (structurally) is to be ensured.
- It is a fundamental requirement that spending does not continue to increase more than what is planned and agreed. Stricter control mechanisms have been implemented, but it is assessed not to be sufficient. There is a need to introduce a new spending management system based on binding spending ceilings for the central government, municipalities and regions.

The government's strategy for handling the challenges is specified in the 2020 Plan. In the Plan, the centrepiece for fiscal policy is to ensure structural balance on public finances in 2020. Structural balance would strengthen the credibility of public finances and the fixed exchange rate policy and ensure fiscal room for manoeuvre in times with business cycle downturns.

By ensuring structural balance in 2020 through initiatives, which permanently strengthen public finances, the fiscal policy simultaneously satisfy the requirement (at least) of fiscal sustainability. Moreover, a structural balance will reduce the risk that Denmark again conflicts with the 3 per cent of GDP limit for public deficits in the EU Stability and Growth Pact.

In the 2020 Plan, the challenge for public finances is handled through the presented proposals for reforms, which increase private employment, and by better management and prioritisation of public expenditures. The reforms will therefore also strengthen the growth potential. The 2020 Plan is described in the Convergence Programme 2011.

During the spring the Government's reform package will be complemented by further proposals on how Danish companies can get the best conditions for creating new growth and jobs.

**Box 1.1****Key Targets in the 2020 Plan**

- Structural balance on public finances in 2020. Public debt accumulation is stopped.
- The target is reached by reforms that increase labour supply and by better management of public expenditures.
- From 2010 to 2020 private employment can increase by 125.000 persons (6.5 per cent).
- The growth potential increases to almost 2 per cent per year – compared to about 1 per cent without new initiatives.
- Primary public expenditures' share of (cyclically adjusted) GDP has to be less than 50 per cent in 2020. This includes aiming for public consumption to constitute less than 27 per cent of (cyclically adjusted) GDP in 2020.
- The reforms create room for growth in public consumption of about DKK 4 billion (0.8 per cent) per year from 2014 to 2020.
- New spending policy is introduced based on binding spending ceilings respectively for the central government, municipalities and regions. It is anchored in a specific law on spending ceilings.
- Continued tax freeze to 2020.

## 1.2 Macro economic imbalances

In its Annual Growth Survey the Commission has among other things focused on the necessity of correcting the macro economic imbalances with the aim of creating macro economic conditions conducive to growth. The Commission focuses on, that many Member States need to tackle their lack of competitiveness with greater urgency, Member States with large current account deficits should present concrete corrective measures and Member States with large current account surpluses should identify and tackle the sources of persistently weak domestic demand

In international comparisons, the assessment of economic structures in the Danish economy is generally favourable. Unemployment and long term unemployment are relatively low and employment quite high, *cf. OECD Economic Survey of Denmark 2009*. Denmark nevertheless faces important challenges in the coming years.

Danish competitiveness is under pressure as wage costs for a number of years have increased faster than abroad, which is a challenge because the productivity growth has not followed. The value a Danish worker produces in an hour (productivity) has not grown as fast as in other rich countries. Despite the weakened competitiveness Denmark still has a large surplus on the current account.

### Competitiveness

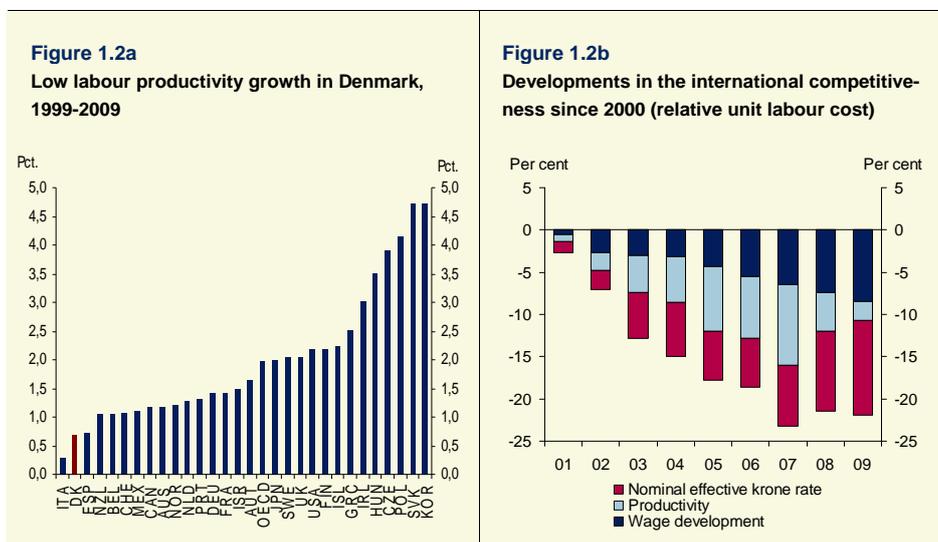
Between 1999 and 2009, Denmark recorded the second-lowest annual rate of productivity growth among the OECD countries, *cf. figure 1.2a*. In 2010 productivity increased significantly after large declines in previous years under the global economic and financial crisis. These fluctuations in recent years do not change the fact that since the mid-1990s there has been a trend decline in productivity growth in Denmark. The low productivity growth will be elaborated further in chapter 3.3.

Low productivity growth may contribute to macro economic imbalances when wage growth is decoupled from productivity growth, or if developments in public consumption fail to adjust to slower growth in the tax base. Households' and enterprises' expectations to future growth also influence private consumption and investments.

Overall Danish enterprises' international wage competitiveness has deteriorated since 2000 (a year when the euro and as a result the Danish krone were weak against the US dollar and a number of other currencies). Wage costs in Denmark have grown stronger than abroad in average terms during a number of years – in part a result of modest wage growth in especially Germany. In the Danish manufacturing industry wage costs are higher than in all other OECD countries except Norway.

This is a challenge, which is exacerbated by the fact that Danish productivity growth has been slower than abroad over a longer time scale. Although in recent years in connection with the international crisis seems to have been some catching up in relation to foreign countries, which have resulted in a slight improvement in wage competitiveness, *cf. Figure 1.2b*. Overall the development in wage competitiveness weakens opportunities for Danish export enterprises abroad and for Danish enterprises competing with foreign enterprises domestically. At the same time, it is likely that the international crisis implies an increased focus on price as a parameter for competition.

The Government can contribute to viable wage developments by a stability oriented economic policy and by securing good structures in the labour market. Wage setting in Denmark is agreed collectively between the parties on the labour market and at the company level between employees and management. In this way, wage setting reflects among others market terms and wage developments abroad.



Source: OECD and own calculations.

The Government's new 2020 Plan assumes that productivity growth in the private sector (nonagricultural industries) increases from 1 per cent the last 15-20 years to 1.5 per cent. This means that the underlying growth potential – i.e. disregarding business cycles – can be increased from almost 1 per cent. to almost 2 per cent yearly towards 2020.

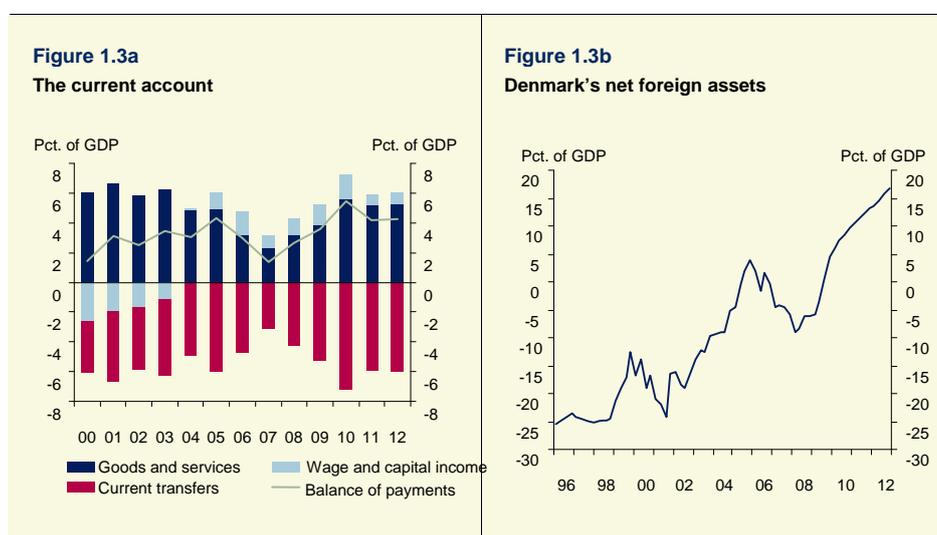
An increase in productivity growth of  $\frac{1}{2}$  percentage point presupposes a significant effort. Increased productivity is first and foremost a result of innovation, adaptability and investments taking place in the market-based private sector. But productivity growth in private businesses is supported by healthy and stable conditions for growth which among other things encourage businesses to use and develop their strengths, ensuring that resources – i.e. labour and investments – are utilised to create the most value. Concrete measures will among other things strengthen competition, ensure a continued well-educated and flexible labour force, good infrastructure and research, innovation and entrepreneurship.

A number of measures to strengthen the conditions for growth have already been launched. The impacts will gain an increased effect the coming years and will contribute to increases in productivity growth. Among other measures, massive investments in research, education, innovation and entrepreneurship have been undertaken. Business legislation has been modernised, administrative burdens and corporate tax have been reduced. Also a political agreement has been made on a competitiveness package to enhance competition and productivity in the private and public sector, and a new strategy for public-private partnership has also been launched. The venture market and finance of exports are strengthened with The Enterprise Package, and in 2011 the government made an agreement with the pension sector which will strengthen the market for risk capital with up to DKK 10 bn. The Spring Package 2.0 (tax reform) contributes both to an increase in labour supply and a strengthening of

productivity, especially as a consequence of a decrease in the marginal tax rate. These measures will have an increasing effect during the years to come<sup>1</sup>.

### The current account

Despite the deterioration of international competitiveness, large surpluses remain on the current account, *cf. figure 1.3a*. It is partly a result of improved terms of trade, which has more or less counterbalanced a considerable deterioration of net exports in quantities. At the same time, Denmark still has a substantial oil and gas production which improves the balance of payments by reducing net energy imports. These savings are nevertheless expected to weaken in the medium run. Additionally, the service balance has improved considerably for more than ten years as sea transport receipts have increased. Finally, the current account benefitted from a broad increase in capital income from abroad since the beginning of the millennium in part as a result of a substantial reduction of foreign debt, *cf. figure 1.3b*.



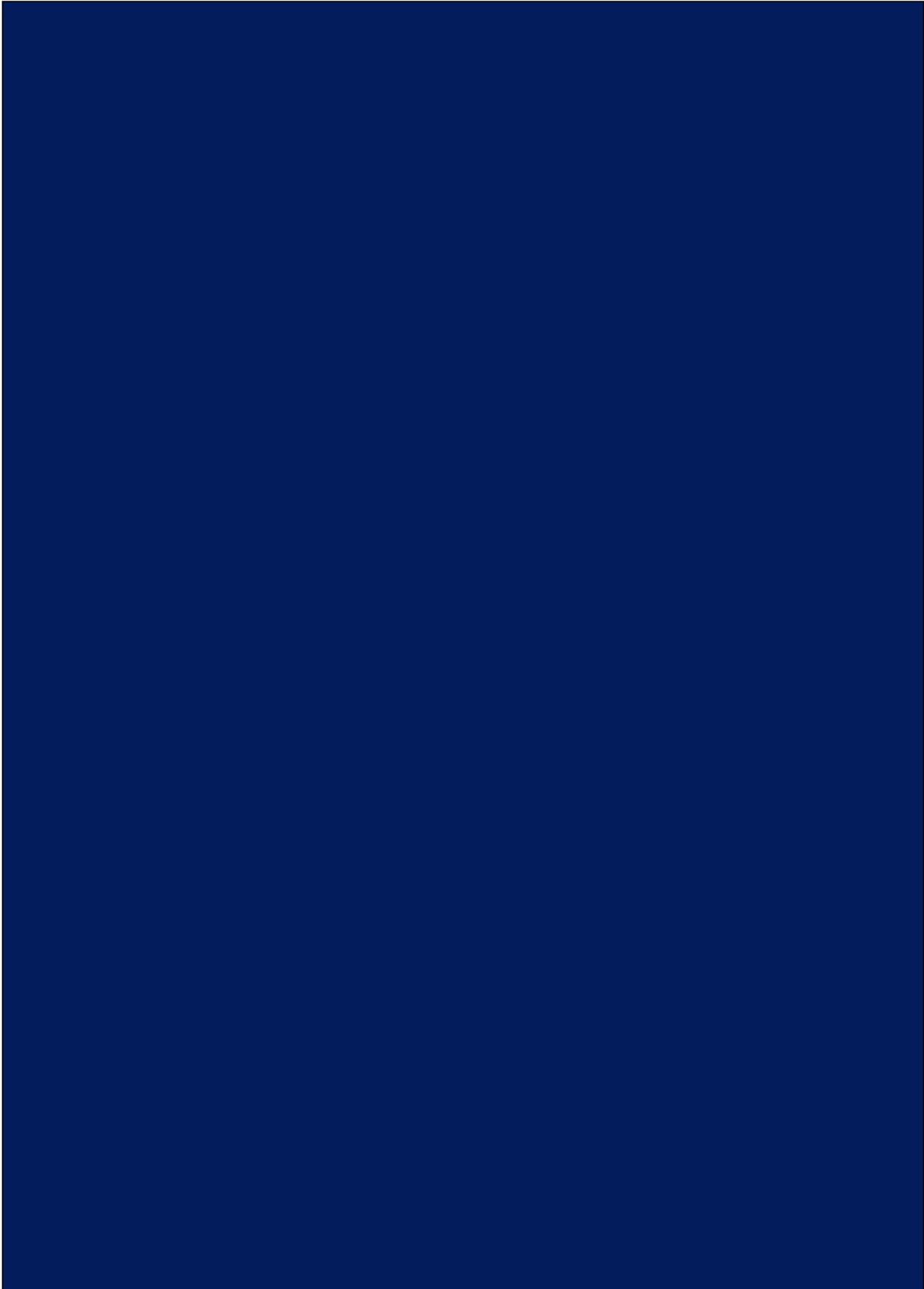
Source: Statistics Denmark and own calculations.

The present large current account surplus reflects very large private sector financial savings, much larger than the deficit in the public sector. The private savings surplus is in part the result of reforms that have strengthened saving incentives. Moreover, a continued expansion of labour market pensions in the past decade has helped increase private savings. It is expected to continue in the future as the Spring Package 2.0 from 2009 gradually reduces interest payment deductions over a number of years.

In the Annual Growth Survey the Commission has stated that countries among other things can eliminate the causes of low domestic demand by further liberalising of the service sector. The agreement on The Competition Package (2011), which is described in more details in chapter 3.4., contains a number of measures to create higher productivity and competition in the service sector, e.g. by liberalisations.

<sup>1</sup> For a detailed description of the different measures, see chapters 2 and 3





## 2. The National Targets in the Europe 2020 Strategy

In Denmark's draft National Reform Programme five preliminary national targets were set. These targets will contribute to the five EU headline targets in the Europe 2020 Strategy. Since the draft national reform programme was submitted the Danish government has presented the new medium term strategy, which implies an adjustment of the national target for employment, *cf. table 2.1.*

**Table 2.1**

**The national targets**

	<b>Targets in 2020</b>
The national target for employment	80 per cent structural employment rate.
The national target for R&D	3 pct. of GDP
The national target for climate/energy	<ul style="list-style-type: none"> <li>• Gradual reduction of emissions in non-ETS sectors in 2013-2020 of up to 20 per cent by 2020</li> <li>• Increase in the energy consumption stemming from renewable sources to 30 per cent by 2020 and use of renewable energy in the transport sector of 10 per cent by 2020.</li> <li>• Absolute reduction in gross energy consumption of 4 per cent by 2020 relative to 2006.</li> </ul>
The national target for education	Less than 10 per cent school drop out rates of the population aged 18-24 and at least 40 per cent of the population aged 30-34 having completed tertiary or equivalent education.
The national target for social inclusion	Reduce the number of people in households with low work intensity by 22,000 towards 2020.

In Denmark a number of measures have already been taken and more will follow in order to reach the national targets which will contribute to the five EU headline targets.

## 2.1 The national target for employment

A strengthening of the labour supply and employment is of vital importance for the welfare of the Danish society and the financing of the public sector. The Government has therefore set the target that by 2020 labour supply shall be among the 10 highest in the world. To achieve this target, additional reforms are required.

The national target is a structural employment rate of 80 per cent for the age group 20-64 year olds by 2020<sup>1</sup>.

### Strategies to reach the target

In order to increase labour supply and employment, a number of labour market reforms have been implemented over the last few years and several new initiatives are under implementation. Box 2.1 includes a number of the latest reforms and the Government's proposals for new reforms.

Meeting the national employment target for 2020 requires further reforms. These reforms are expected both to strengthen the incentive to work and a continued strengthening of measures targeting integration of vulnerable groups, including young people, elderly, ethnic minorities and disabled persons.

During the financial and economic crisis the Government has considered it to be crucial to ensure that as many people as possible keep their attachments to the labour market and maintain their qualifications, without, as a side effect, limiting the effective labour supply and increasing the level of structural unemployment. Targeted adjustments to the elements of the flexicurity model have contributed to this development – including by temporarily increasing flexibility in the short term working arrangements and increasing assistance to people under notice.

The development of the Danish employment rate over the last ten years is shown in table 2.1 below.

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<sup>1</sup> In the 2020 Plan the technical frequency of employment at 80.3 is calculated after the Commission's method.

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**Box 2.1****Initiatives to promote labour supply and employment**

- **A labour market reform, “More people into employment” (2002).** Individual contact sequences with conversations every 3 months, and CV talks after 4 weeks at the latest are introduced with the reform. A general strengthening of the financial incentives to bring more people into employment – both with regards to benefits/allowances and the tax system – are also elements of the strategy. E.g. reduction of benefits depending on the spouse’s income. With the regulation the level of social assistance is reduced after 6 months for married couples receiving adult rate of social assistance. In addition a general ceiling for the amount of social assistance has been introduced.
- **An agreement on integration, “A New Chance for Everyone” (2005).** Social assistance recipients with problems besides unemployment is covered by the repeated activation every 6 months. In order to increase local economic incentives to make an active effort, the state reimbursement of local living expenses is reorganized. It introduces an employment deduction for married couples where both are on social assistance. A spouse which has not had a job within the last two years with a total minimum of 300 hours of ordinary work loses its entitlement to social assistance.
- **Agreement on the Welfare Reform (2006).** The agreement introduces a mechanism to ensure that a higher life expectancy postpones the formal pension age. The Welfare Agreement also entails that the eligible age for the voluntary early retirement pay scheme is gradually increased from 60 to 62 years of age during the period 2019-2022. In addition, the agreement includes initiatives targeting the labour market, integration and education.
- **Agreement on a Job Scheme (2008).** The Job Scheme Agreement increases the labour supply in the short as well as in the long run. The scheme is composed of a number of various elements, among others the right to incapacity benefits in combination with work, improved opportunities for pensioners to work, tax deductions for 64 year olds in employment, harmonization and adjustment of regulations for supplementary unemployment benefits in order to increase the number of full-time jobs, improved efforts to recruit internationally, including changes in immigration laws with respect to attracting qualified labour, lowering the number of people on sick leave and more adult apprentices.
- **Agreement on absence due to sickness.** Based on an agreement between the social parties, a tripartite agreement on how to bring down absence due to sickness was signed. The agreement took effect in 2009, including 39 initiatives worth DKK 170 million. Key initiatives are early intervention in connection with illness, e.g. by way of talks/PES consultation no later than after four weeks of illness, focus on ill people being capable of at least some degree of activation during sickness absence, campaigns etc. The agreement is estimated to increase the labour supply with about 4,000 persons. “New ways to a better working environment” focuses on improving the working environment with a view how to increase the labour supply. The operations of the Prevention Fund will be extended as from 2011.
- **Tax Reform (2009) with lower marginal tax rates from 1st January 2010.** The reform implies among other things a reduction of the income tax by approx. DKK 29 billion. E.g. the upper marginal income tax rate will be lowered from 63.0 per cent to 56.1 per cent. This happens partly by reducing the ordinary income tax rate (the bottom income tax) by 1.5 percentage points and partly by removing the medium income tax bracket of 6 per cent. Furthermore, the threshold for paying the upper marginal tax will be increased. The reform means that some 350,000 tax payers will no longer be paying the upper marginal tax rate. It is estimated that the reforms will help increase the labour supply by approx. 19,000 full-time workers. As a result of the agreement to Rebalance the Danish Economy (2010), the original plan to increase the threshold for paying the upper marginal tax by 2011 has been postponed for 3 years.
- **The anti red-tape package and the Youth Packages I and II (2009).** With the package against bureaucracy a young unemployed person will receive the first offer of activation after three and not six months of unemployment. The youth packages contain a number of new initiatives designed to help young people into education and jobs. In the employment field, the packages contain initiatives offering young 18-19 years old on social benefits an immediate offer as soon as they enter the job centre, an extended mentor scheme, leisure time jobs to young persons, etc.
- **Action plan on long term unemployment (2010).** According to the plan approx. DKK 270 million will be spent on education and improvement of skills. Funds have been earmarked partly for a regional allocation for job specific requalification, partly for financing courses in reading, writing and arithmetic for unemployed people.

- **Fiscal Consolidation Agreement (2010), including an unemployment benefit reform.** The agreement contains a reform of the benefit scheme reducing the benefit period from 4 years within the last 6 years to 2 years within the last 3 years from 1st July 2010. The condition (employment) to qualify for unemployment benefit has been harmonized to 52 weeks of employment in all cases. The harmonization takes effect as of July 2012. The fiscal consolidation agreement contributes to an increase in the structural employment of approx. 10,000 persons.
- **An active labour market effort that works (2010).** The Government has concluded two political agreements aimed at strengthening municipalities' financial incentives to improve the efficiency of their employment policies with an increased focus on enterprises based on-the-job training. The agreements imply that the municipalities receive a higher state reimbursement rate (50 per cent) for expenses during periods in enterprise based activation and ordinary education, while a lower reimbursement rate (30 per cent) applies during periods in other guidance and qualification upgrading (for example courses and activation projects) as well as passive income support. At the same time, the state reimbursement rates will be harmonized and reduced across a range of benefits including unemployment benefits, social security, start assistance (for migrants), rehabilitation payment and unemployment / social assistance. A common ceiling is introduced in respect of per student-year operating expenses for educations taken up as part of the insured jobless persons' rights to six weeks of self chosen education.
- **Reform of the system of student grants and loans (SU)(2010) "SU, which creates growth and employment - better use of SU-measures".** With these changes of the SU-system, the Government will encourage young people to finish their education faster and give the students more flexibility and freedom to choose. Among other things, the Government will renew the system by restricting the education support in order for it to correspond with the official length of the study, and by introducing a bonus to students who start early and finish their study programmes fast. In addition to that, the proposal contains an increase of the so-called free amount (a fiscal term for the amount of money that a student can earn when receiving education support), loans on attractive terms of payment for study fees abroad and finally, a reduction in the quota of students, admitted via the quota 2 intake. With this proposal the supply of labour is estimated to be increased by around 4,000 persons and the public finances to be strengthened by approx. DKK 1 billion.
- **Proposal for a reform of the disability pension and flex-job schemes (2010).** The main elements are that young people under the age of 40 years shall not be eligible for disability pension. Instead, young persons, previously eligible for disability pension shall be offered coherent, supportive and patient support with a view to their further development. Flex-jobs are to be temporary and the scheme is to target persons with few resources. The present receivers of disability pension shall be offered better opportunities to find jobs. The aim is that more persons will have the chance to get and maintain ordinary employment, and that far less persons are awarded a disability pension or a flex-job. The Government is currently negotiating with the parties involved in the former political accord on this issue. No decisions have thus been made at this stage.
- **Proposal for a reform of the voluntary early retirement scheme (2011).** The Government wishes to advance part of the Welfare Reform (2006) with five years and gradually raise the early retirement age from 2014 and the public pension age from 2019. The Government proposes that the voluntary early retirement scheme is abolished totally for all people under 45 years old at the end of 2010. For the age group 45-56 years old and 57 years old and more the Government proposes transition arrangements. Introduction of a "senior early retirement pension" for persons who are less than five years from formal pensionable age. The proposal will give a significant lift in the labour supply and employment will increase by approx. 70,000 persons in 2020.

According to the Government's new 2020 Plan the reform of the system of student grants and loans and the reform of the disability pension and flex-job schemes will all together increase the employment with up to 10,000 persons before 2020. Together with the reform of the retirement age it is estimated that the employment level by realization of these reforms will increase approximately by 80,000 persons up to 2020. In the Governments's 2020 Plan there is also focus on recruiting and maintaining qualified labour from third countries which have given rise to a number of concrete measures directed at increasing labour supply in Denmark.

**Table 2.2**  
**Employment frequency for young people, elderly people and the total labour force. Distribution on gender in the period 1998-2009 (unadjusted for business cycle fluctuations). Percentage.**

Age/Gender	1998	2000	2002	2004	2006	2007	2008	2009
20-64								
All	76.9	78.0	77.7	77.6	79.4	79.2	79.9	77.8
15-64								
Men	80.2	80.8	80.0	79.7	81.2	81.0	81.9	78.3
Women	70.3	71.6	71.7	71.6	73.4	73.2	74.3	73.1
All	75.3	76.3	75.9	75.7	77.4	77.1	78.1	75.7
15-29								
Men	74.1	74.9	73.2	69.8	72.2	73.2	74.7	68.6
Women	68.8	67.8	66.0	65.8	68.2	68.9	70.9	68.5
55-64								
Men	58.5	64.1	64.5	67.3	67.1	64.9	64.3	64.1
Women	41.5	46.6	50.4	53.3	54.3	52.4	49.8	50.9
55-59								
Men	75.6	80.4	81.3	81.4	83.5	83.9	84.3	82.6
Women	59.6	64.6	69.7	72.4	75.0	74.9	74.5	74.4
60-64								
Men	39.7	42.8	43.9	49.3	49.5	45.7	44.6	45.8
Women	21.1	24.1	24.2	28.6	31.1	29.9	26.2	27.3

Note: The employment frequencies are based on EUROSTAT numbers, which is sample-based. The employment frequency in 2020 in the over all economic plan, which for the moment is basis for our work, and in the upcoming 2020 Plan is measured as the structural employment frequency and based on the principles behind the National account.

Source: EUROSTAT and own calculations

### The Annual Growth Survey

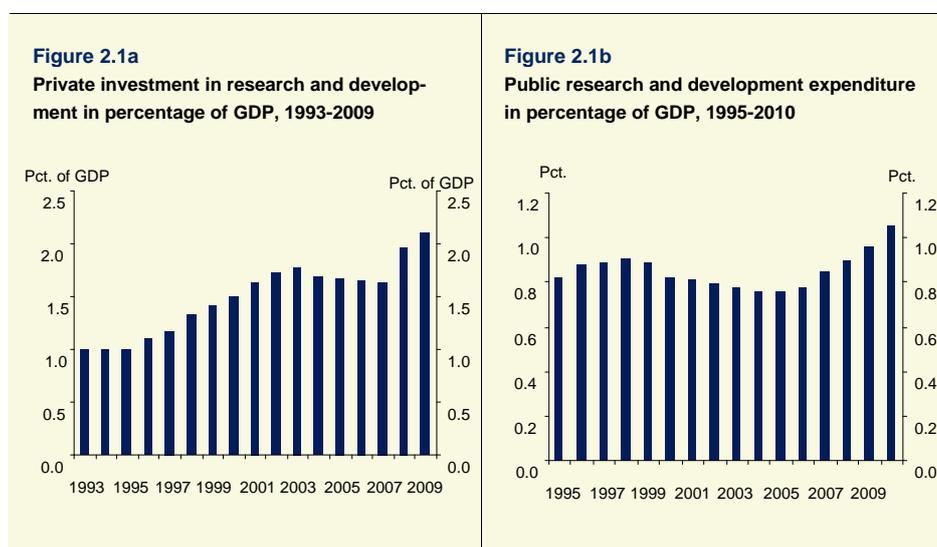
In the Annual Growth Survey the Commission focuses among other things on mobilization of the labour market and creation of jobs. The growth survey attaches importance to make work more attractive, to reform pensions systems, get the unemployed back to work and balance security and flexibility.

Denmark has implemented several labour market and employment reforms within the last ten years, *cf. box 2.1*. The elements of the Danish flexicurity model have continually been adjusted. The adjustments have resulted in high employment and low unemployment in an international comparison. The results imply that Denmark has contributed to the development of a strong mobilization of the labour market and creation of jobs.

## 2.2 The national target for research and development

The Danish Government has set a national target for investments in research and development of 3 per cent of GDP by 2020. Publicly funded research based on the Danish calculation method, which is the part of the overall target that can be directly controlled, is set to 1 per cent of GDP<sup>2</sup>.

The national target for research and development is composed of private and public research expenditure. Denmark's public research budget has been increasing since 2005. In 2010 the research budget accounts for 1.05 per cent of GDP, *cf. figure 2.1b*.



Source: Statistics Denmark.

Source: Statistics Denmark.

According to the most recent data from Statistics Denmark, in 2009 private research comprised 2.1 per cent of GDP, *see figure 2.1a and table 2.2*.

<sup>2</sup> The Commission uses national accounts figures to determine the level of research by the public and the private sector. For the private sector this is similar to the Danish method. However, with regard to the public sector Denmark manages its research expenditure ex-ante based on the annual appropriation bill. Due to the different methods, differences between the Commission's method and the Danish method could appear.

**Table 2.3**  
**Development in public and private research investment 2005-2010**

	2005	2006	2007	2008	2009
Public/budget figures	0.78	0.82	0.77	0.87	1.02
Private/accounts figures	1.68	1.66	1.63	1.96	2.1
<b>Total</b>	<b>2.46</b>	<b>2.48</b>	<b>2.4</b>	<b>2.83</b>	<b>3.12</b>

Source: Statistics Denmark.

### Strategies to reach the target

The Danish strategy to promote public and private research, development and innovation is focused on increasing the effectiveness of productivity in the field of research. Establishing synergy between the public research efforts and utilizing this within the business community is central. Denmark will therefore continue its work to:

- Ensure a better utilization of public research and development efforts and their results
- Establish better links between public research and development institutions and the business community
- Reduce the lead time from the development of new ideas to be translated into new products and processes
- Strengthen international cooperation, international knowledge transfer and participation in international research and innovation programmes
- Strengthen the use of output-related indicators for research, development and innovation.

To strengthen the competitiveness and innovativeness of the business community, there will be increased focus on quicker commercialisation of university research by:

- Increasing the output of research-based programmes at university level with stronger entrepreneurial and innovative competencies
- Strengthening knowledge transfer and knowledge dissemination from universities through increased contract research financed by businesses
- Promoting a more effective knowledge dissemination to small and medium sized enterprises

New, larger Government initiatives within the area of research and innovation are included in *Box 2.2*.

The Danish Government has set an objective within the field of innovation that Denmark will be among the countries with the most innovative businesses by 2020. A number of indicators, however, suggest that Danish businesses are less innovative than foreign competitors. The most recent study of the share of innovative companies shows that about 31 per cent of companies introduced innovative products or processes in the period 2007-2009 – placing Denmark mid-table in an international context.

Innovative efforts aimed at businesses must be viewed in connection with a number of other areas with influence on industrial innovative activity. For example, improved competition; improved efforts in the field of education, including higher education; improved access to venture capital; entrepreneurial efforts and public-private partnership amongst others.

### Box 2.2

#### New initiatives

##### Companies research, development and innovation

- Establishment of the Business Innovation Fund of DKK 760 million in the period 2010-2012 with the aim of supporting innovation and market maturity within the green and welfare areas to create growth, employment and export for Danish businesses.
- In August 2010, the Government presented "Styrket innovation I virksomheder" (Strengthened innovation in business) with an analysis of the Danish challenges in innovation and with 37 concrete initiatives, designed to improve the innovation in businesses
- Easy access to public innovation offers in the form of a user-friendly web portal for businesses. The Government will also establish a call centre under the auspices of the regional Business Link centres, to aid businesses in finding the offers that match their needs.
- The Government has established a program of national cluster and network organizations called Innovation Networks Denmark, and there has been established 19 national networks and 3 national partnerships.
- **Public research and universities**
- DKK 8 billion for research and innovation in the period 2010-2012 from the Globalisation Fund. Funds have been allocated for talent development programme for elite researchers, a thorough modernisation of university laboratories, an increase in the payment per student, a raise in base funding for universities, a match fund to encourage universities to attract external funds, increased focus on strategic research within fields where Denmark has an international position of strength, a green stimulus package and the improvement of a number of innovation and knowledge transfer initiatives among others.
- University cooperation with China through a Danish University Centre in Beijing. It is expected to accommodate 300 master's degree students, together with 75 PhD students and 100 researchers – with an approximate 50/50 mix from each country.
- European research facility – with Denmark and Sweden jointly hosting a European research facility, the European Spallation Source.
- **Entrepreneurs**
- Access to financing and globalisation via the Business Package for small and medium sized enterprises. Among the most important initiatives is a boost of Vækstfonden's loan guarantee scheme by DKK 1.5 billion. Furthermore, access to export financing has been improved and the venture capital market has been infused with DKK 500 million.
- The Government's agreement with the pension sector on venture capital means that the pension institutions will make a minimum of DKK 5 billion available to entrepreneurs and small and medium-sized enterprises as venture capital. In addition, the Government will implement new lending and guarantee schemes so the total effect on the supply of venture capital will be up to DKK 10 billion.
- Entrepreneurship education strategy, including the establishment of an Entrepreneurship Fund, which will create a comprehensive national effort across all levels of education.
- The Government has launched an action plan for female entrepreneurs.
- The Government, in association with the regional and municipal authorities has established Ethnic Promotion of Trade, to help entrepreneurs with an ethnic background to succeed.

Source: The Danish Competitiveness Report, 2010.

## 2.3 The national target for climate and energy

The national target for climate and energy encompasses:

- Gradual reduction of emissions in non-ETS sectors in 2013-2020 of up to 20 per cent by 2020 compared with the 2005 level.
- Increase in the share of final energy consumption stemming from renewable sources from 17 per cent in 2005 to 30 per cent by 2020.
- Use of renewable energy in the transport sector to be 1 per cent by 2020.
- Absolute reduction in gross energy consumption of 4 per cent by 2020 relative to 2006, corresponding to a decrease of 0.83 Mtoe.

Moreover, Denmark has a long-term target of fossil fuel independence by 2050. With the aim of achieving this target, in February 2011, the government presented its Energy Strategy 2050 - From Coal, Oil and Gas to Green Energy; for more information see below and *in chapter 3.6*.

Denmark is also focusing on more widespread resource efficiency measures through a number of adopted and financed action plans. The Government's waste management strategy 2009-2012 concentrates on reducing the loss of resources and sets specific targets for the depositing and recycling of waste. The Government's national Green Growth Plan, which includes water management plans and nature plans, aims at ensuring sustainable exploitation of vital resources such as water and land, for example, by setting specific targets for nitrogenous and phosphorus discharges to the environment and by establishing new nature areas.

Finally, a large number of separate measures help put focus on increasing resource efficiency. For example, this applies to the Technology List, which aims at providing an overview of available and verified environmental technologies in the agricultural area. It also applies to measures on implementing voluntary tools in retail trade and industry, including work with the ecolabels the Swan (Nordic) and the Flower (EU).

### *The climate*

As part of the EU Climate and Energy Package's targets for a reduction of 20 per cent in total greenhouse gas emissions below 1990 levels by 2020, Denmark has committed to reducing its non-ETS emissions by 20 per cent below 2005 levels.

Table 2.4 shows total non-ETS emissions in 2009 by sector. Greenhouse gas emissions in the non-ETS sectors are primarily CO<sub>2</sub> emissions, and these account for 65 per cent of total non-ETS emissions.

Commitments for the period 2013-2020 are annual. This means that from 2013, Denmark must annually meet a fixed reduction target, which will be tightened by a fixed rate from the level in 2013 until the final 2020 target. This makes for a reduction trajectory consisting of the annual sub targets. However, overshooting in one year can be carried over to the subsequent year.

**Table 2.4**  
Emissions in non-ETS sectors in 2009

	Mill. tonnes CO2 equivalents
Energy sector	0.1
Supply sector	2.1
Transport	13.4
Agriculture	11.8
Manufacture, including construction	2.6
Services	1.0
Households	3.2
Waste and wastewater	1.3
<b>Total</b>	<b>35.5</b>

Source: Danish Energy Agency.

### Energy

Under the EU Climate and Energy Package from 2008, Denmark has committed itself to increasing its share of gross final energy consumption stemming from renewable sources from 17 per cent in 2005 to 30 per cent by 2020. As part of the Climate and Energy Package, on an equal footing with other EU Member States, Denmark must meet the requirement for at least 10 per cent of energy consumption in the transport sector to come from renewable sources by 2020. How the target will be met is described in the National Action Plan for Renewable Energy in Denmark from June 2010.

In the energy agreement from 2008, the Government is committed to an absolute reduction in gross energy consumption of 4 per cent by 2020 relative to 2006, corresponding to a drop of 0.83 Mtoe. In 2006, energy consumption was 20.35 Mtoe and must therefore be reduced to 19.52 Mtoe by 2020. As Denmark's national agreement focuses on absolute energy consumption, it also has a positive effect for CO<sub>2</sub> emissions and security of supply.

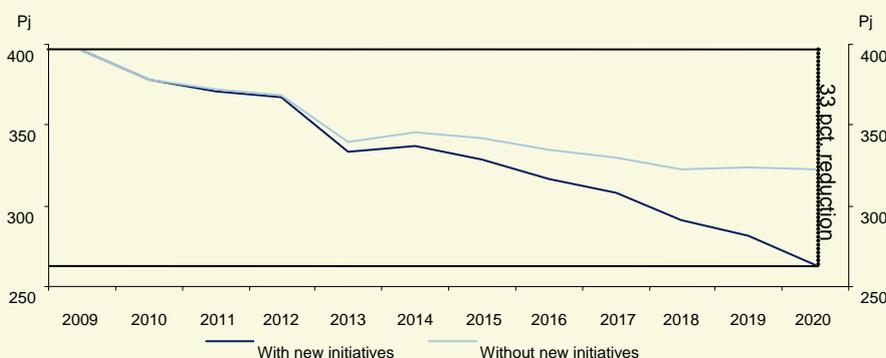
### Strategies for reaching the targets

The government has taken a series of initiatives to underpin and expand Denmark's position in the climate and energy area, see *Box 2.3*. A DKK 97 billion infrastructure fund has been set up, of which the majority will be used to improve the rail network, which is relatively less energy intensive than e.g. road transport. With the tax reform from 2009, tax on work has been lowered, while tax on energy has been raised. The Green Growth Agreement from 2009 has paved the way for continued improvement of nature and the aquatic environment in Denmark. Furthermore, a fund dedicated to green transition and commercial innovation has been established, which is to support e.g. the development of new climate-friendly solutions. The government will also regularly allocate funds within the globalisation framework through the Energy Technology Development and Demonstration Programme (EUDP) and Green Lab for innovation within the environment, nature and energy.

In addition to politically adopted measures, the initiatives in the Government's strategy for fossil fuel independence by 2050 may also contribute significantly to meeting the targets. The initiatives must be negotiated with the parties of the Danish Parliament (the Folketing) in connection with the expected energy agreement for 2012 and the years after. The main focus of the strategy is a reduction of the use of fossil fuels. If implemented as presented, it has been assessed that the strategy will help achieve a reduction in the use of fossil fuels in the energy sector of 33 per cent by 2020 relative to 2009, *see figure 2.2*.

**Figure 2.2**

**Use of fossil fuels in the energy sector 2009-2020 (excluding fuels for transport, extraction and refining), with/without implementing the initiatives in Energy Strategy 2050.**



Source: Energy Strategy 2050.

The Government has also initiated a number of initiatives in the environmental field which are currently being implemented and which will have a rub-off effect relative to the climate and energy targets, as well as the ambitions for increased resource efficiency, *see box 2.3*.

**Box 2.3****The first steps towards a green transition - adopted initiatives of greater significance**

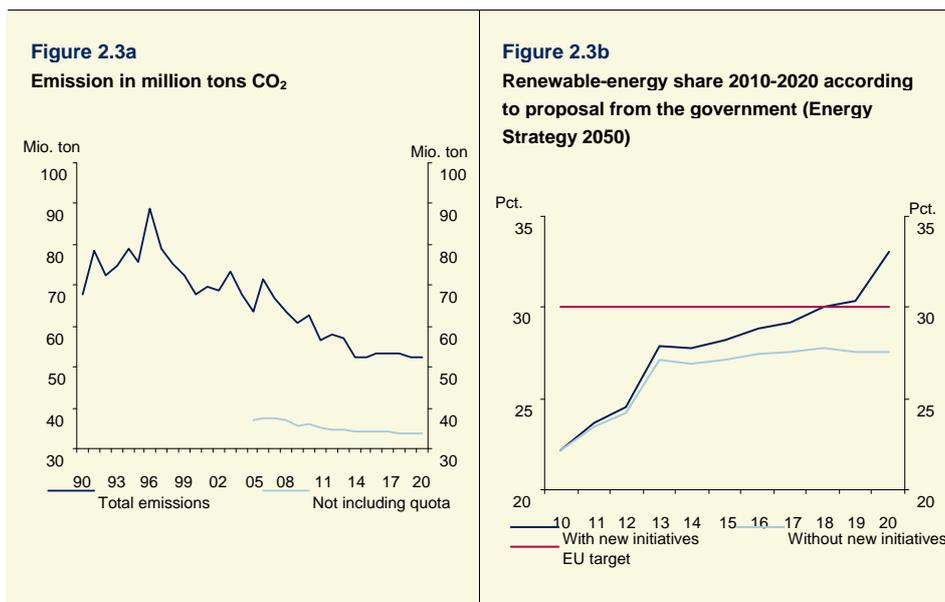
<b>Energy agreement (2008)</b>	More renewable energy, less energy consumption. The agreement has been implemented e.g. through inviting tenders for a new offshore wind farm on Anholt, and through a strategy for reducing the energy consumption of buildings.
<b>Agreement on a green transport policy (2009)</b>	Prioritisation of the rail system and other public transport instead of roads. Green road pricing.
<b>Spring package 2.0 (2009)</b>	Lower taxes on work, higher taxes on energy and other resources.
<b>Green Growth agreement (2009)</b>	Less nitrogen and phosphorus as well as fewer pesticides; agriculture to play a greater role as supplier of energy; better nature protection and more nature accessible to the public.
<b>Green Growth agreement 2.0 (2010)</b>	Addendum to the Green Growth agreement, further measures for organic crop farming and proposal for introducing free choice of fuel for small CHPs.
<b>Buildings strategy (2009)</b>	Contains 22 specific initiatives to reduce energy consumption of new and existing buildings.
<b>Business climate strategy (2009)</b>	Focuses on entrepreneurship, commercialisation, demonstration and public-private cooperation on green solutions.
<b>Vækst med Omtanke - the government's strategy for sustainable development (2009)</b>	Specific targets and initiatives relative to meeting the challenges for sustainable development, including focus on green innovation in production and consumption, as well as a long-term and durable economic policy.
<b>Environmental technological action plan 2010-2011 (2010)</b>	Focus on new environmental technological solutions that can relieve global environmental problems whilst also ensuring increased Danish exports and more Danish workplaces.
<b>Waste strategy 2010 (2010)</b>	Management of resource consumption is an integral part of Danish waste policy, as implemented in the Government's waste strategy 2009-2012 which aims at preventing waste generation and reducing the loss of resources.

*The climate*

Initiatives are already taken help to ensure that Denmark will be able to meet its Kyoto commitment for the period 2008-2012. A baseline projection from April 2011 shows that the Kyoto target is expected to be met with the instruments already decided.

Relative to the Danish CO<sub>2</sub> reduction target of 20 per cent by 2020 compared with 2005, in Energy Strategy 2050 from February 2011, the government suggested initiatives which will contribute to reducing emissions from non-ETS sectors by 4.5 mill. tonnes CO<sub>2</sub> for the period,

see figure 2.3a. With these suggested measures, Denmark will be on the road to meeting the reduction target in 2020, if the initiatives proposed are finally adopted. This enables flexible and dynamic establishment of further climate measures, also in sectors such as agriculture, waste and transport as well as purchases of international credits.



Source: Energy Strategy 2050.

### Energy

As regards the target for renewable energy, the baseline projection from April 2011 by the Danish Energy Agency shows that Denmark is expected to reach a 27.9 per cent renewable energy share by 2020 without launching any further initiatives; the required target, as mentioned above, is 30 per cent by 2020.

The National Action Plan for Renewable Energy in Denmark, which Denmark submitted to the European Commission in June 2010, illustrates how Denmark can close its renewable energy deficit. Part of the deficit can be closed by implementing measures that meet the renewable energy commitment in the transport sector, as well as the national target for a 4 per cent reduction in gross energy consumption by 2020, relative to 2006.

Figure 2.3b shows the expected growth in the renewable-energy share up to 2020, if the Governments' proposal from Energy Strategy 2050 is implemented, see chapter 3.6. The figure shows that the renewable energy share is expected to increase to 33 per cent by 2020 if all the proposed initiatives can be negotiated by a majority in the Danish Parliament (the Folketing) during the ongoing energy negotiations. This would then constitute a renewable energy head start relative to the binding target of 30 per cent.

Energy Strategy 2050 includes a proposal that the 10 per cent target for energy consumption in the transport sector (land transport) must be covered by renewable sources, for example ensured by an additional requirement of 10 per cent biofuels by 2020. The Government will also prolong the tax exemption for electric cars up to and including 2015, *cf. Denmark 2020*.

Energy Strategy 2050 also proposes new initiatives, which together with the current instruments are expected to reduce gross energy consumption by 6 per cent by 2020 relative to 2006. Like the renewable energy initiatives and a number of other initiatives, these must be negotiated in connection with a future new energy agreement.

## 2.4 The national target for education

The Government has signed up to the EU headline targets for education set out in the Europe 2020 Strategy to reduce the school dropout rate to 10 per cent for 18-24-year-olds as well as increase the percentage of 30-34-year-olds having completed a tertiary or equivalent education to at least 40 per cent, which will also represent the Danish reporting under the strategy. Denmark contributes to achieving these targets through its national targets, which are calculated according to different methods than the EU targets. The Danish national targets are that by 2015 at least 95 per cent of all young people must have completed an upper secondary education and at least 50 per cent must have completed a higher education.

In the economic projections that are the starting point for the Convergence Programme and the Government's work programme, Denmark 2020, it is assumed that the globalization targets will have been realised. A high general level of education increases employment and prosperity, partly by increasing the qualifications of the labour force and thereby productivity, i.e. the value created per working hour, and partly by increasing the population's participation in employment.

The realisation of the education targets is estimated in the long term and only very tentatively to yield a total increase in GDP of around  $\frac{3}{4}$ -1 $\frac{1}{4}$  per cent, of which  $\frac{1}{2}$ -1 percentage point stems from higher productivity and  $\frac{1}{4}$  from greater labour supply.

The increase in the future level of employment will occur in the long term when a sufficient number of generations have been through the education system and have entered the labour market. As the impact of higher employment is gradually felt, public finances will be strengthened. The long-term effect on employment is estimated to amount to almost 10,000 full-time persons<sup>3</sup>.

### Strategies to reach the target

In recent years, a number of initiatives have been launched in the field of education to ensure a Danish education system of world class quality.

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<sup>3</sup> A more detailed description of the calculations and underlying assumptions can be found in the work programme, Denmark 2020.

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With the Agreement on the implementation of the globalization fund, a total of approximately DKK 15 billion has been allocated to strengthen upper secondary education, higher education and adult and continuing education in the period 2007-2012, see *table 2.5*. More specifically, around DKK 8.8 billion has been allocated in the period 2007 to 2012 to strengthen upper secondary education, approximately DKK 4.3 billion has been allocated for initiatives in higher education and approximately DKK 2.2 billion has been allocated to strengthen adult and continuing education.

**Table 2.5**  
The overall implementation of the globalization fund

DKK Mio. (2007-prices)	2007	2008	2009	2010	2011	2012
All young people must complete an upper secondary education	308	781	1.220	1.702	2.232	2.620
More young people must complete a higher education	308	781	1.220	1.702	2.232	2.620
Strengthened adult and continuing education	200	285	537	650	1.147	1.461
<b>Total</b>	<b>141</b>	<b>534</b>	<b>540</b>	<b>547</b>	<b>217</b>	<b>217</b>
	<b>649</b>	<b>1.600</b>	<b>2.297</b>	<b>2.899</b>	<b>3.596</b>	<b>4.298</b>

Source: Agreement on the implementation of the globalization fund, 2006.

The purpose of the investments is to increase the proportion of a youth cohort with upper secondary education and/or higher education as well as to enhance the quality of education. *Box 2.4* shows selected examples of initiatives funded by the globalization fund.

Since 2006, there has been a focus on ensuring that more young people complete an upper secondary education as part of the Danish globalization strategy. In connection with the agreement aimed at helping more young people complete an education or become employed<sup>4</sup>, extensive changes have been implemented in upper secondary education during 2009/2010. In November 2010, a political agreement was additionally reached to increase the number of training places with an overall economic framework of DKK 2.4 billion, which for example will ensure 8,900 extra in-service training places in 2011 within the vocational education and training system.

<sup>4</sup> The agreement, *Aftale om flere unge i uddannelse og job*, was signed on 5th November 2009 between the Government, the Danish People's Party, the Danish Social Democrats and the Danish Social-Liberal Party.

**Box 2.4****Examples of initiatives funded by the *globalization fund***

<b>Upper secondary education</b>	<ul style="list-style-type: none"> <li>• Revamping elements of vocational education and training, such as increasing the number of in-service training places and a strengthened effort to ensure that the entire intake of trainees complete the education and training programme.</li> <li>• Increased efforts to ensure more in-service training places.</li> <li>• All 15-17-year-olds must be in education, in employment, etc., and municipalities are obligated to follow up on this requirement.</li> <li>• Guidance should be targeted at the transition from the primary and lower secondary level to the upper secondary level in order to keep pupils in the education system.</li> </ul>
<b>Higher education</b>	<ul style="list-style-type: none"> <li>• Establishment of an accreditation institution which ensures and documents the quality and relevance of higher education programmes.</li> <li>• New teaching methods, enhanced guidance and training of teachers.</li> <li>• Strengthened training for teachers and guidance counsellors at the professional bachelor education programmes.</li> <li>• A quality boost and a strengthening of the relationship between theory and practice in academic professions and professional bachelor education programmes.</li> <li>• Elite programmes at long-cycle higher education institutions.</li> </ul>
<b>Adult and continuing education</b>	<ul style="list-style-type: none"> <li>• Better guidance and advice for employers and employees.</li> <li>• Increased recognition of prior learning acquired through informal and non-formal education.</li> <li>• Better support offered to bilingual people.</li> <li>• More and better offers for adults at a higher education level.</li> </ul>

Source: Agreements on the implementation of the globalization fund, 2006-2010.

Furthermore, and as part of the Welfare agreement, a number of initiatives related to universities have been launched to ensure that more young people complete a higher education and to reduce the completion age, see *box 2.5*.

**Box 2.5****Some initiatives which support the goal of enabling more young people to receive a higher education**

- Since 2008, the specific requirements for admission (i.e. requirements for subjects and levels) to university undergraduate programmes have been streamlined and tightened. The aim is to ensure a uniform and higher academic starting point and thereby decreasing the drop out rate.
- In 2009, adjustments were made to the admission system to encourage students to pursue a higher education shortly after finishing their qualifying exam. Applicants with a qualifying exam within the last two years will have their grade point average multiplied by 1,08 which increases the likelihood of admission to education programmes with a qualifying quota.
- With effect from 1st September 2007, dissertation completion has been subjected to a time limit, thus a dissertation must be completed within the prescribed six months. Furthermore, initiatives aimed at speeding up the re-examinations process and automatic exam registration have been launched.
- As part of the strengthened efforts to provide guidance to students who are at risk of dropping out, students who are more than 12 months behind in their studies have the right to a personal interview.
- In 2009, the so-called N+1- system was introduced. The system includes a bonus for universities for every undergraduate who completes the education programme within the prescribed time plus one year.

Source: The Welfare Agreement, 2006.

In addition, two significant initiatives have been taken with a view to strengthening the education facilities at universities.

- A technological boost to university laboratories: With the Budget 2010, the Government has set aside DKK 6 billion for a technological boost to the universities' laboratories. The appropriation will be used as a grant for new buildings that replace outdated laboratory facilities and for the upgrading of existing laboratory facilities. The modernization is expected to stretch over the next 6-7 years.
- To ensure better study and research environments: The Campus Law which came into force on 1 July 2010 gives universities the opportunity to manage resources in order to build colleges, parks and to rent out facilities. The aim is to provide universities with tools to create even better study and research environments on campus.

Several initiatives have been launched to strengthen standards in primary and lower secondary schools, see box 2.6. The aim is for pupils in Danish primary and lower secondary schools to be in the top 5 internationally in reading, mathematics, science and English in 2020.

**Box 2.6****Government initiatives to strengthen standards in primary and lower secondary schools**

- Mandatory national tests (2010)
- More timetabled lessons in the subjects Danish, mathematics, physics/chemistry, English, history and sport (a gradual phasing-in during the academic years 2003/04-2009/10)
- Extension of compulsory education (2009) and pre-school class made compulsory
- Requirements to objectives and learning content descriptions drawn up by municipalities for school-based leisure time schemes (SFO) (2009)
- Mandatory final exams at the end of 9th grade as well as expansion of the list of examination subjects (2006)
- Improved physical environment in the *Folkeskole* through the Quality Assurance Fund, in which funds have been earmarked for, among other things, physical improvements of the *Folkeskole*
- Strengthened use of ICT in the *Folkeskole* through the programme "ICT in the *Folkeskole*", in which DKK 495 million was set aside in the period 2004-2007
- A further elaboration of the *Folkeskole*'s objects clause in which it is explicitly stated that a key task of the *Folkeskole* is to provide pupils with academic knowledge and skills that prepare them for further education (2006)
- Personal education plans (2006)
- Quality reports (2006)
- Binding national targets for teaching (2003)
- The Government has made an agreement with the Local Government Denmark to strengthen the inclusion in the *Folkeskole* in order to increase the number of students enrolled in the ordinary *Folkeskole* (2011)
- Strategy for training in entrepreneurship in order to strengthen the educational system's role in stimulating innovation and entrepreneurship (2009)
- Stronger focus on talent development (2010)

Source: "Faglighed og frihed – regeringens udspil til en bedre folkeskole" (2010).

*Initiatives in the coming years*

The Government work programme, Denmark 2020, from February 2010 puts focus on education.

In relation to the work programme, an independent so-called 360 degrees inspection of the Danish *Folkeskole* was carried out, which was designed to identify strengths and weaknesses of the public primary and lower secondary schools and to provide specific recommendations for improvement of the *Folkeskole*. The inspection was conducted by an independent expert team with knowledge on the education system. This team comprised both researchers and practitioners. At the opening of the Parliament in autumn 2010, the Government presented seven ambitious targets for the primary and lower secondary school system, and in December 2010 it presented its comprehensive primary and lower secondary school initiative<sup>5</sup>.

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<sup>5</sup> The targets are as follows: 1: All children must be able to read by the end of 2nd grade. 2: What 9th grade pupils can do today, they must be able to do in the 8th grade. 3: Fewer pupils in special needs education. 4: Recruitment of teachers among the best students. 5: Instruction based on scientific knowledge, not habit. 6: Pupils, parents and school boards must, to a larger extent, contribute to the *Folkeskole*'s development. 7: Clear objectives and transparency with regards to results to minimise the need for controlling in detail.

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Moreover, the Government is working on a reform of the governance of the publicly funded and independent education institutions<sup>6</sup>. The reform seeks to ensure more and better education for the money. For example, this can be done by collecting data which is located in education systems' IT systems regarding all relevant activities in the field of education in order to increase transparency both at a central and decentralised level regarding the use of resources and results in education institutions.

In November 2010, the Government presented its proposal for a reform of the public grants and loan system, *SU, der skaber vækst og beskæftigelse - bedre brug af SU-midlerne*, which focuses on promoting growth and employment through better use of grant and loan funds. The Government wishes to use the proposal to encourage young people to embark on an education programme at an earlier stage and to complete it faster. Likewise, a revised public grants and loan system aims to provide students with more freedom, more options and greater flexibility. It is proposed that the public grant and loan are limited to the prescribed time for completing an education, and that a bonus is awarded to students who start early and finish their studies quickly. The proposal also advocates frontloading the 1,08 rule, reducing the proportion of students admitted via quota 2, raising the earnings ceiling as well as the size of the study start loan and start grant so as to ease their financial burden at the start of their study programme, and providing loans on attractive terms for paying tuition fees abroad. The proposal is estimated to increase the supply of labour by approximately 4,000 full-time persons and strengthen, on a sustainable basis, public finances by approximately DKK 1 billion.

## 2.5 The national target for social inclusion

Prevention and the combating of poverty and social exclusion have been key priorities of the Danish Government for many years. Denmark is presently one of the European countries with the lowest income inequality and the lowest number of people at risk of poverty. Moreover, the Danish Government aims at maintaining Denmark's position among the countries in Europe with the lowest income inequality and which are best at creating equal opportunities for everyone in year 2020.

However, in Denmark, too, the financial crisis has increased pressure on individual households. A fall in employment may impede the present and future welfare of families and increase their risk of becoming victims of intergenerational transmission of poverty. Lack of employment also contributes to increase the structural challenges for the welfare state. A firm affiliation to the labour market is the best safeguard against poverty and social exclusion, both for the individual and for society as a whole.

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<sup>6</sup> Independent institutions are defined as institutions which are organized outside the ministerial hierarchy and the institution's board of directors is responsible for the institution's overall business and task performance.

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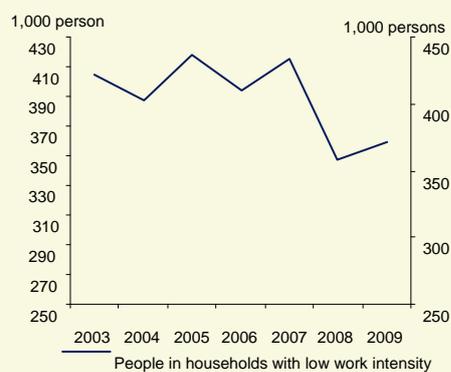
In its EU2020 strategy, the Danish government has thus set the target of reducing the number of people in households with low work intensity by 22,000 towards 2020. Efforts in relation to people in households with low work intensity are assessed, to a greater extent than is the case for the other indicators, to imply structural improvements in the economy. The target also represents a continuation of the Danish government's ambition of creating equal opportunities for all.

In 2008, approximately 347,000 Danes lived in households with low work intensity; *cf. table 2.6*. Some 60 per cent of these people are students, recipients of anticipatory pension or children.

**Table 2.6**  
People in households with low work intensity by benefit recipient groups, 2008

	Number	%
Anticipatory pension	84,000	24
Danish State Educational Grants and Loans	82,000	24
Social assistance, sickness benefits, unemployment benefits and unemployment allowance	62,400	18
Rehabilitation, flexi-job, sheltered employment and wage subsidies	15,500	4
Maternity benefits and other benefits	4,500	1
No benefits (self-supporting)	46,600	13
Children	51,300	15
<b>Total</b>	<b>347,100</b>	<b>100</b>

**Figure 2.4**  
Trend in the number of people in households with low work intensity, 2003-2009



Note: Weekly benefits translated into full-year persons.

Source: Ministry of Finance calculations based on EU-SILC 2008 and the National Labour Market Authority's DREAM database.

Source: Eurostat.

### Strategies to reach the target

In Denmark, the primary instrument to combat social exclusion is the tax-financed welfare system. Consequently, the Danish approach already includes a wide range of initiatives and schemes that are regularly adapted and adjusted to minimise the citizens' risk of social exclusion. For example, the Danish employment system contains a number of schemes, the purpose of which is to include as many as possible in the labour market. Unemployed people entitled to income-related benefits are offered guidance and qualification enhancement, on-

the-job training and employment with subsidised wages. Efforts are also targeted at creating more practical training places for young people, preventing long-term unemployment and reforming the anticipatory pension scheme, and initiatives are taken in relation to the socially inclusive labour market.

The Danish target is expected to be reached through structural measures within the education and employment areas, such as the agreement on more practical training places for young people and the proposal for a new anticipatory pension and flex-job reform, supplemented by initiatives in the social policy, health and integration areas, including the ghetto strategy and the national action plan for better prevention of long-term illness. Overall, these efforts will help improve social inclusion and reduce the number of people in households with low work intensity; *cf. box 2.7.*

### Box 2.7

#### Initiatives aimed at people in households with low work intensity

<b>Employment</b>	The Government has implemented a number of initiatives and labour market reforms to increase the labour supply and employment; <i>cf. chapter 2.1.</i>
<b>Education</b>	The Government has initiated a number of initiatives supporting the goal that 95 per cent of a youth year should complete a youth education; <i>cf. chapter 2.4.</i>
<b>Social policy</b>	In the social policy area, the Government's 2010 ghetto strategy is to ensure that a far greater number of residents in the socially disadvantaged housing areas find employment. Moreover, the Government has launched a number of employment initiatives in relation to young single mothers, disadvantaged children and young people as well as mentally ill and disabled people.
<b>Integration</b>	The Government works resolutely on young people with non-Danish backgrounds education in the form of several initiatives, including the campaign <i>A need for all young people</i> and the project <i>Retention-train</i> , aimed at getting more young people with non-Danish ethnic backgrounds to complete vocational training.
<b>Health</b>	The Government has among other launched an initiative targeted at chronically ill people, an enhanced treatment effort targeted at mentally ill people, and a national action plan for prevention, which can help increase employment.

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## 3. Identification of Bottlenecks

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After the economic crisis the central focus in the economic policy in the coming years is to ensure sound public finances and to strengthen the conditions for prosperity growth and high employment. Several reforms have been carried out the last couple of years to support higher growth including some elements from the crises management and the consolidation agreement.

Furthermore the Danish government has formed a Growth Forum which consists of leading CEOs, scientists and others with a key knowledge of what is important for Denmark's growth potential and competitiveness. In September 2010 The Growth Forum identified 10 key challenges for growth in Denmark, which in most cases correspond to the bottlenecks identified by the Commission.

<b>Identification of bottlenecks to growth</b>	
<b>Commission</b>	<b>Growth Forum</b>
Falling growth in productivity	Productivity growth is muted International competitiveness is under pressure Renewal and innovation are lagging Few new growth companies Requirements for increased efficiency in the public sector
Ensuring full utilisation of the economy's labour potential	Demographical head winds
Weak competition in parts of the economy	Too little competition
Insufficient cost effectiveness of education and the completion of these	Educational endowment is slowing compared to other countries
	Total labour supply is only average compared to the rest of the OECD
	A society independent of fossil fuels
Household indebtedness	

On the basis base of the structural challenges identified by the Commission and the Growth Forum the following bottlenecks will be discussed in further detail:

- Conclusions by The Growth Forum
- Demographical challenges
- Low productivity growth
- Competition
- Educational challenges
- A society independent of fossil fuels

The Commission has further identified the high level of household indebtedness as a problem. However, the households have a significant positive net wealth which is the reason why the high level of gross debt is not considered a problem by itself. The high level of household indebtedness is primarily due to the well functioning and flexible financial system, including the Danish mortgage system, which allows relatively young people to live in owner occupied housing.

### 3.1 Conclusions by The Growth Forum

The Government established the so called Growth Forum in September 2009 with the main purpose to contribute to analysis, find answers to the challenges of tomorrow and prepare the Danish economy for renewed growth.

The Growth Forum was composed by business leaders, scientists and others with broad experiences on issues important for growth potential and competitiveness in the Danish economy.

Meeting discussions have been based on discussion papers and analysis, presentations and recommendations from Danish and international experts, among these members of The Growth Forum.

The themes for the meetings have been one of the following: Green growth, Growth in an open economy, Knowledge and qualifications – from public school to university, New growth in Denmark – what is the diagnosis?, Growth through renewal, New growth in Denmark – what is the cure?

On this background The Growth Forum submitted in March 2011 ten main recommendations to the Government concerning future growth policy. With their recommendations The Growth Forum emphasised the need for reforms which increase labour supply, ensure sustainable public finances and improve the conditions for the business sector.

The ten main recommendations contain a number of concrete proposals for solutions. Box 3.1 below provides an overview of these recommendations in bullet points.

**Box 3.1**

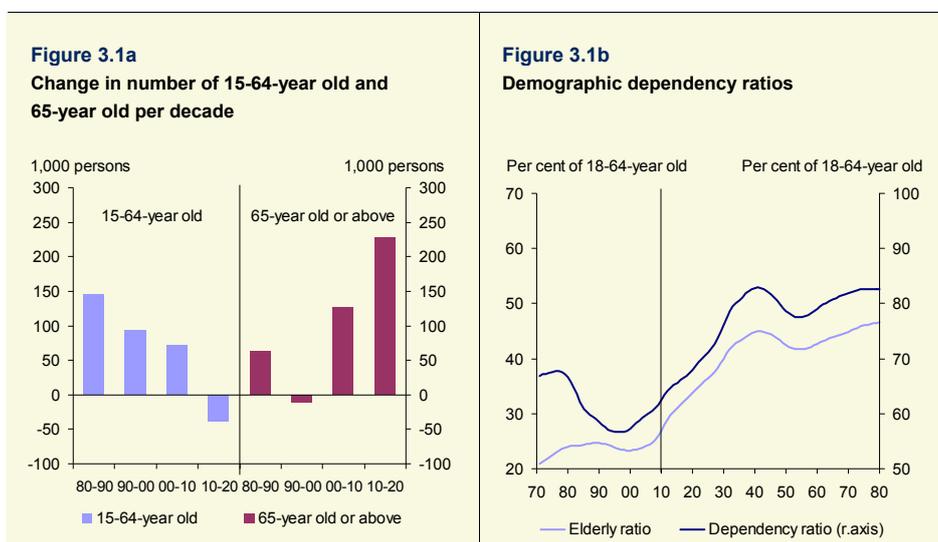
<b>Recommendation</b>	<b>Follow-up by the Government</b>
1. Loss of competitiveness must be regained	The Government contributes to viable wage developments by a stability oriented economic policy and by securing good structures in the labour market. <i>cf. chapter 2.1.</i>
2. More people must work more and longer	The Government has carried out a number of tax decreases and a reform concerning unemployment benefits in 2010 and has presented more proposals for reforms, which are also in the 2020 Plan: <ul style="list-style-type: none"> <li>• The retirement reform (2011)</li> <li>• Reform of the system of student grants and loans (2010)</li> <li>• Reform of the voluntary retirement and flex-jobs schemes (2010)</li> </ul>
3. Controlling the public finances	The Government has undertaken a number of measures to balance public finances, including: <ul style="list-style-type: none"> <li>• The fiscal consolidation agreement (2010)</li> <li>• The 2020 Plan, including a proposal on a new system of spending policy (2011)</li> </ul>
4. Significantly more competition in the private and public sectors	The Government has in 2011 agreed on a Competition Package with 40 measures to enhance competition and productivity.
5. Children and young people must be more clever	The Government has presented a draft proposal for the public school (2010), and has decided on a 360-degree review of the vocational educations.
6. More bright minds in businesses	The Government has not decided on following up on this recommendation.
7. The tax system must support the desire to work and invest	The Government has reduced personal and corporate tax rates, most recently with Spring Package 2.0.
8. More innovation in businesses and the public sector	The Government's forthcoming digitalization strategy.
9. Better terms for businesses in growth	The Government has concluded an agreement with the pension sector to collectively put out DKK 10 billion in risk capital (2011). A further follow-up can be made after the negotiations concerning the 2020 Plan.
10. Profitable green growth	The Government's Energy Strategy 2050 (2011)

During spring 2011 there will be a further follow-up on the recommendations on how Danish businesses are given the best possible conditions for creating new growth and jobs.

## 3.2 Demographical challenges

In the coming years, the generations that are retiring will be larger than those entering the labour market, *cf. Figure 3.1a*.

While the number of 18-64 year olds increased in every decade 1980-90, 1990-2000 and 2000-2010, the age groups with high labour market participation fall by approx. 40,000 persons by 2020, *cf. Figure 3.1a*. The Population forecast thus implies that the number of young and old will increase substantially compared to the age groups most active on the labour market and thus the "demographic dependency ratio" increases, *cf. Figure 3.1b*.



Note: The dependency ratio is measured as 0-17-year old and over 64-year old as a share of the 18-64-year old. The elderly ratio is measured as the population over 64 years as a share of the 18-64-year old.

Source: DREAM and own calculations.

The development reflects that the large post-war generations retire from the labour market. Moreover, the decline in birth rates from the 1950s to the 1980s contributes to the smaller population in the most active age groups in proportion to the number of elderly. Meanwhile, the proportion of immigrants and their descendants and their distribution by country of origin affects the development of the workforce, because the average participation rate for particularly immigrants from less developed countries is lower than for other population groups.

Hence demographic pressures on employment and public finances will be strengthened towards 2020.

In the absence of reforms labour supply is reduced by approx. 66,000 people (2¼ per cent.) towards 2020, cf. *Table 3.1*. For comparison, the overall population grows by about 150,000 people towards 2020 and from 2010 to 2020 there will be approx. 225,000 more on old age pension. The decline in the labour force will be greater if the historical trend of declining working hours continues in the future.

Taking into account the effect of altered composition of age and origin etc. on the work force and on working hours, the demographic decline in the labour supply correspond to over 65,000 (fulltime) persons from 2010 to 2020.

It is estimated with considerable uncertainty that already implemented reforms including tax- and labour market reforms increase the labour supply by about 45,000 persons from 2010 to 2020, cf. *Table 3.1*. The positive contribution from the reforms already implemented, are however insufficient to offset the negative contribution from demographic trends.

**Table 3.1**  
Change in labour supply 2010-2020 measured by structural employment

1,000 persons	Structural employment	Structural employment, incl. working hours
1. Demographics (age, gender og origin)	-42	-66
2. Tax and labour market reforms <sup>1)</sup>	23	43
3. Other <sup>2)</sup>	2	-6
<b>4. Overall 2020-projection (1+2+3)</b>	<b>-17</b>	<b>-28</b>
<b>5. Reform proposals</b>	<b>82</b>	<b>89</b>
- Reform of student grants	3	4
- Disability pension reform <sup>3)</sup>	7	5
- Retirement reform	70	79
<b>6. 2020-projection including reform proposals (4+5)</b>	<b>65</b>	<b>61</b>

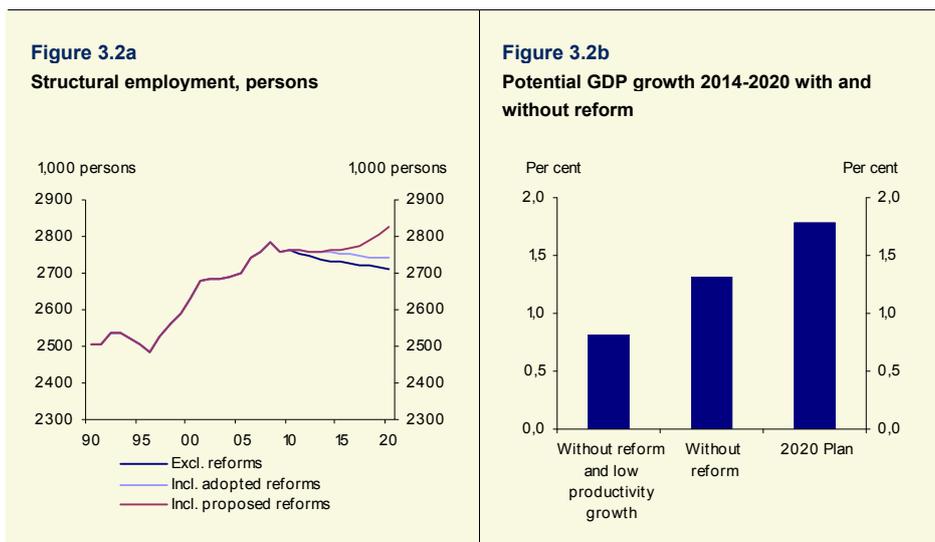
Note: Effects of working hours is calculated as full-time employed (i.e. number of persons with average annual working hours).

- 1) Incl. *Fiscal Consolidation Agreement* (2010), tax reforms since 2001, *Job Plan and sickness absenteeism plan* (2008), the increase in the eligibility age for voluntary early retirement in 2019 and 2020 in accordance with the *Welfare Agreement* (2006).
- 2) Incl. effects of increased residence time of immigrants, increasing level of education, educational targets of Welfare and Globalization Agreements (including drain on jobs from more enrolled students), cross border workers and projections of disability pension and voluntary early retirement according to the demographic projection.
- 3) The reform gradually phased in and therefore the effect is larger in the long run.

Source: Own calculations.

The Government has presented proposals for retirement reform and reforms of disability pension and student grants which strengthen employment towards 2020.

Together, these reforms are estimated to increase labour supply by approx. 90,000 persons by 2020. When the effect of the three reform proposals is included structural employment (including the effect on working hours) will increase equivalent to around 60,000 (fulltime) persons by 2020. In total an increase in structural employment (in persons) in the range of 65,000 persons is achieved from 2010 to 2020, cf. *Figure 3.2a and Table 3.1*. Without reforms structural employment is expected to decrease by approx. 17,000 people.



Note: Structural employment is measured in fulltime persons.

Source: Own calculations.

When the proposed reforms of retirement, disability pension and student grants etc. are implemented potential output is estimated to grow by approx. 1.3 per cent per year in 2010-2015 and by approx. 1.8 per cent annually in 2016-20 (measured by GDP), cf. *Table 3.2*. The reforms, especially the retirement reform, enhance growth potential together by approx. ½ per cent per year on average in 2016-2020.

For the period 2010-2020 as a whole potential growth is roughly in line with the period 1991-2007, where production potential is estimated to have grown by approx. 1.7 per cent per year. The financial crisis is estimated to have reduced production potential so that the average potential growth in the years 2008-2009 is approx. 0.

The 2020 projection assumes that the hourly productivity in non-agricultural industries increases by 1.5 per cent per year. This implies together with the assumptions for the other industries that hourly productivity for the economy overall increases by approx. 1.2 per cent per year<sup>1</sup>.

Without reforms - and without the assumed increase in productivity growth relative to trend since 1995 - then the potential GDP growth will be only just below 1 per cent per year during the period, *cf. Figure 3.2b*.

**Table 3.2**  
**Potential output growth, decomposition**

	1991-07	2008-09	2010-12	2013-15	2016-20
<b>Average annual growth, per cent</b>					
Production potential (GDP)	2.0	0.0	1.2	1.4	1.8
Contributions from:					
- Hourly productivity (structural)	1.3	0.3	1.3	1.1	1.2
- Structural unemployment	0.3	0.1	0.1	0.0	0.0
- Structural labour force	0.1	0.3 <sup>1</sup>	-0.1	0.0	0.4
- Reform effects	-	-	-	0.1	0.5
- Hours worked (structural)	0.1	-0.1	-0.1	0.0	0.1
- Indirect taxes (net)	0.1	-0.5	0.1	0.2	0.1
<b>Production potential (GDP) without reforms</b>					
	2.0	0.0	1.2	1.3	1.3

Note: There is uncertainty about estimated potential growth in sub-periods, including uncertainty about contributions from individual components.

- 1) Developments in the structural labour force include contributions from demographic changes (including net immigration) and changed number cross border workers, which are part of employment in the national accounts. In 2008-09 each of these two contributions account for around 0.2 percentage points.

Source: Statistics Denmark and own calculations.

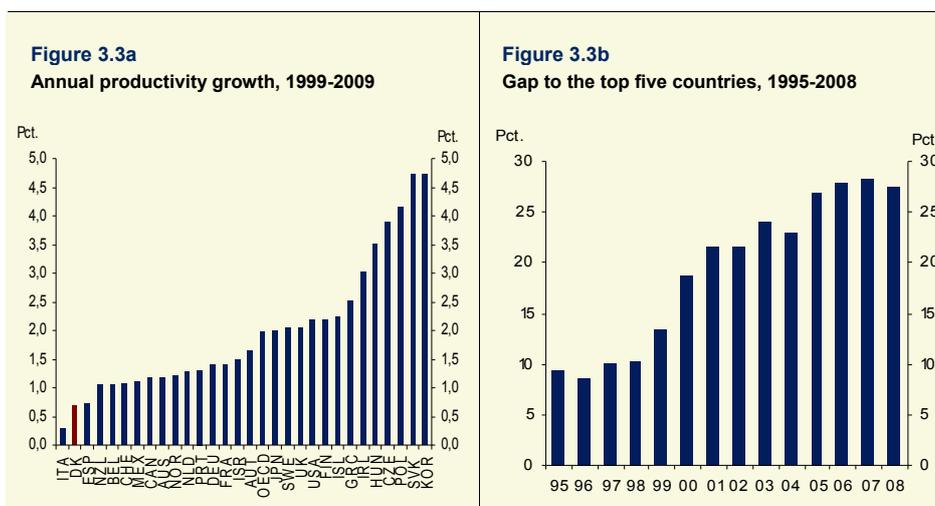
### 3.3 Low productivity growth

Between 1999 and 2009, Denmark recorded the second-lowest annual rate of productivity growth among the OECD countries, *cf. figure 3.3a*, widening the gap to the most productive

<sup>1</sup> The national accounts do not include productivity growth in the public sector, i.e. productivity growth is technically equivalent to approximately 0. See section Productivity in the public sector for a specification of the development in productivity in the public sector.

countries. The five best-performing countries currently create almost 30 per cent more value per working hour than Denmark. In 1995, the corresponding figure was approximately 10 per cent, *cf. figure 3.3b*.

The weak productivity performance is primarily structural, but productivity is also influenced by the business cycle. Denmark experienced a very sharp decline in productivity growth in 2008 and into 2009, while there in the past year has been an indication of a recovery in productivity growth.



Source: OECD Stat.

Employment in Denmark increased from 1993 to 2008, and Danes with weak labour market attachment for extended periods of time gained a foothold in the labour market. The improved employment rates had a positive impact on economic growth, but the influx of less skilled people may have dampened productivity growth as their productivity is lower than for average wage earners. For some years, an increasing number of people with previous weak labour market attachment have reduced Danish productivity growth by up to 0.2 percentage points per year. However, the immediate negative contribution to the development of productivity is replaced by a positive contribution in the longer term as wage earners with previous weak labour market attachment gain a better foothold in the labour market and thus become more productive. Over the period 2001-2007 as a whole, the influx of wage earners with previous weak labour market attachment is not assessed to be a significant structural explanation of the decline in productivity growth.

If labour and capital continuously migrate to sectors with higher-than-average productivity levels, this will, viewed in isolation, increase productivity in the economy as a whole. Historically, such shifts have occurred, primarily in the form of falling employment in agriculture, which has had a low level of productivity, and rising employment in urban industries where the level of productivity is higher. However, the general decrease in productivity growth can-

not be explained by shifts in industrial composition. Viewed in isolation, changes in industrial composition have contributed to higher productivity growth in the last 10-15 years. For the period 1995-2005 the contribution amounted to almost 0.1 percentage point per year.

The weak Danish productivity growth is probably attributable to several factors. One explanation could be weak innovation performance by Danish enterprises. More than 60 per cent of Danish enterprises indicate that they have not introduced new products and/or processes during the past three years.

Another factor could be weak competition. The relatively low Danish productivity growth is linked, in particular, to slow growth in the service industries overall and in construction. Manufacturing industry, on the other hand, has achieved productivity growth roughly in line with EU27. Large segments of the service industries target the Danish domestic market in which competition from foreign manufacturers is limited. This could help explain why Danish service enterprises have not engaged more intensively in efficiency measures and production innovation in recent years. Besides, a low level of competition weakens the incentives for innovation. The same applies to the construction sector.

A number of other areas also affect productivity, e.g. education, *cf. chapters 2.4 and 3.5* and research and development, *cf. chapter 2.2*.

Box 3.2 introduces a number of initiatives that have been launched or are in the pipeline and are designed e.g. to boost productivity growth.

**Box 3.2****Initiatives designed to boost productivity growth**

**Corporate tax and income tax.** The Danish government has continuously lowered the rates of both corporate tax and the tax on labour, most recently through the introduction of the Spring Package 2.0 (tax reform). As a result of the reductions in the income tax rate, the marginal tax rate has been lowered by 5-10 percentage points for virtually all groups of wage earners. The most recent reduction took effect on 1st January 2010.

**Innovation.** In August 2010, the Government presented the report "Strengthened innovation in business" ("Styrket innovation i virksomheder") with an analysis of the Danish challenges in innovation and with 37 concrete initiatives, designed to improve the innovation in businesses

**Capital.** Adequate capital is a prerequisite for turning new ideas into growth and jobs. The Government's Enterprise Package has improved lending opportunities for small and medium-sized enterprises and has strengthened the market for risk capital for the benefit of new enterprises. In September 2010 the Enterprise Package was extended into 2011. The Government's agreement with the pension sector on risk capital means that the pension institutions will make a minimum of DKK 5 billion available to entrepreneurs and small and medium-sized enterprises as risk capital. In addition, the Government will implement new lending and guarantee schemes so the total effect on the supply of risk capital will be up to DKK 10 billion.

**Competition.** During recent years, the Danish Government has removed a number of barriers to competition, and in 2011 it launched a strategy for public-private partnerships and entered into an agreement on a general Competition Package including 40 initiatives to promote competition and productivity. The Government will continue its efforts to strengthen competition and the competition culture in Denmark with particular focus on the service sector.

*Productivity in the public sector*

According to a new report from Statistics Denmark<sup>2</sup> measuring government output and productivity there are indications that government output has become more efficient since 2001. On average, productivity in the public sector has improved by approximately 1 per cent annually during the period 2001-2008. As regards services aimed at Danish citizens, the public health services in particular contributed to the positive productivity growth. Some productivity growth has also occurred in the area of education, while the area of social welfare contributed negatively to the development of productivity<sup>3</sup>.

<sup>2</sup> General Government Output and Productivity, Statistics Denmark, January 2011.

<sup>3</sup> The new report indicates the increase in labour productivity in the public sector measured as the average annual growth per working hour for the health, education, leisure and cultural sectors, respectively, in the period 2001-07 and for the area of social welfare in the period 2001-06. The individual services are calculated on the basis of a new output method which measures the amount of government output using indicators of the number of public services. The area of social welfare covers childcare, youth and adult centres and care centres for the elderly and accounts for 34 per cent of the individual service. Health accounts for 31 per cent, education for 29 per cent and leisure, culture, etc. for 6 per cent. The development of productivity across sectors is not directly comparable.

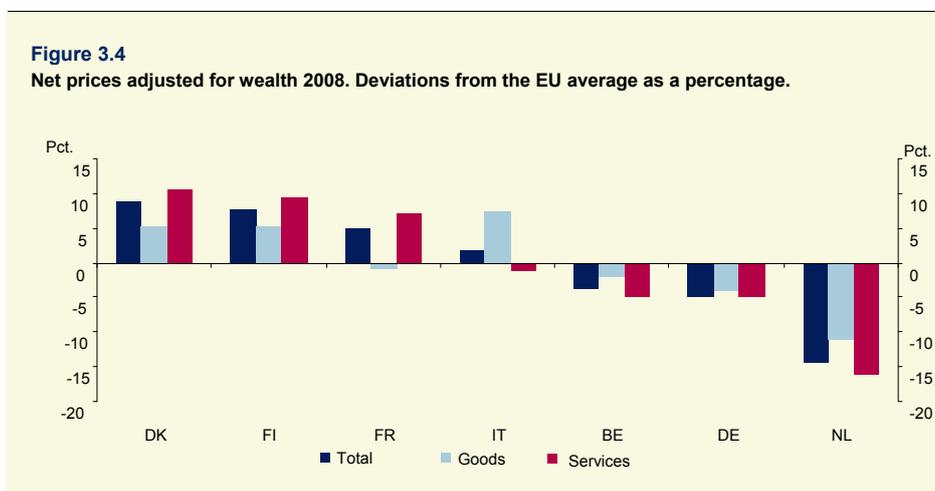
Increased use of information and communication technologies may have contributed positively to productivity. Denmark is among the front-runners when it comes to digitalization of public administration, providing greater flexibility for enterprises and citizens and saving public resources. This requires that everyone has access to fast and well functioning internet connections. Denmark is currently among the three OECD countries with the highest number of broadband subscribers relative to the number of inhabitants.

On the other hand, there is insufficient competition in some segments of the public sector to ensure focus on efficiency and innovation. This challenge is amplified by the relatively large size of the public sector in Denmark. In 2009, Danish government spending thus accounted for close to one-third of Denmark's total annual GDP, exceeding all other OECD countries.

### 3.4 Competition

Efficient competition is an engine for growth and prosperity. Free and efficient competition fosters innovation in the corporate sector and ensures the most efficient use of resources. Competition is also a precondition for low prices and a diversified range of goods and services. As suggested by a number of indicators, competition in Denmark is less intense in a number of sectors than in a number of other Western countries.

Firstly, Danish prices are high compared with all other OECD countries. A comparison with the prices of six selected comparable OECD countries shows that Denmark has the highest prices adjusted for VAT, taxes and level of prosperity, *cf. figure 3.4*.



Source: Eurostat, OECD and own calculations.

Danish prices of services, in particular, are above the OECD average, while the price gap to other OECD countries is smaller when it comes to goods. This may be a contributing factor to

the high price level. The service sector is less exposed to competition from foreign enterprises than the goods-producing sectors.

Secondly, weak Danish competition could be caused by a weaker competition culture in Denmark than in other countries. For instance, Danish enterprises, by their own admission, focus less on expansion, rivalry and earnings than their counterparts in Germany and United Kingdom.

Finally, a permanently higher profit margin in Danish enterprises than abroad could indicate a weak competition. In 2002-2007, Danish enterprises were in the middle ranks of the OECD countries in terms of average profit margin.

Various initiatives have been launched in Denmark to strengthen competition and the framework conditions for efficient competition were improved in the period 2009-2010.

In April 2010 the Danish Parliament adopted an amendment to the Danish Competition Act which improved the powers of the competition authorities to intervene against mergers. It is assessed that the new merger rules will generate an annual economic benefit to the Danish consumers of about DKK 400 million, while the expected additional expenses for the competition authorities and the enterprises are estimated at DKK 55 million.

The Enforcement Act of 2010 also enables the Complaints Board for Public Procurement to issue an enforcement notice to the effect that contracts entered into are to be terminated; moreover, financial sanctions may be imposed on orders in case of gross violation of the procurement rules.

Competition-restricting regulation was abolished in several other areas. The Danish Shop Closing Act was liberalised in 2010, and 2012 will see the abolition of the rules on shop opening hours except on public holidays and special red-letter days. Moreover, the book market will be fully liberalised in 2011.

In January 2011 the Danish Government launched a strategy for public-private cooperation including 21 specific initiatives to promote competition for public contracts, among other things. The public-private cooperation (PPC) strategy includes initiatives to adjust the legislative framework conditions and to provide directions and tools for public and private operators entering into the competition for public contracts. Parts of the PPC strategy are implemented as part of the Competition Package, *see below*.

In late 2009 a committee on competition legislation was commissioned to clarify the following issues:

- Whether strengthening of the general information and advisory efforts of the Danish Competition and Consumer Authority is required with a view to preventing competition law violations and ensuring compliance with the act
- Whether procedures for cases under Danish competition legislation could be organised more efficiently and with minimum burden to enterprises

- Whether introduction of possible imprisonment could contribute to improving the enforcement of competition legislation in cartel cases

The committee is to complete its work and report to the Minister for Economic and Business Affairs in 2011.

The lack of competition is one of the 10 challenges for growth identified by the Government's Growth Forum in 2010. Therefore, on 11th April 2011, the Government entered into an agreement on the Competition Package to bring Denmark's competitiveness on level with that of the best-performing countries. The objective is to promote competition and productivity in the private and public sectors. The Competition Package is aimed primarily at the construction and service sectors, including retailing, health services and service industries that are protected from the pressures of foreign competition. At the same time these sectors are characterised by particularly weak productivity growth. Finally, a large number of initiatives are to ensure increased competition for public contracts.

Overall, it is a comprehensive package of 40 initiatives that will strengthen competition across the board. During the current session of the Danish Parliament, seven bills will be tabled and a number of executive orders, etc. will be amended, particularly with relevance for the the construction sector.

### 3.5 Educational challenges

Denmark invests a higher percentage of GDP in education than most other OECD countries. The Danish public spending on education was 7.8 per cent of GDP in 2007, while the EU19 countries<sup>4</sup> on average spent 5.3 per cent of GDP, *see figure 3.5a*. Investments include a relatively beneficial student grants and loan system compared to other OECD countries. Denmark also uses relatively significant resources on adult and professional education compared to other OECD countries.

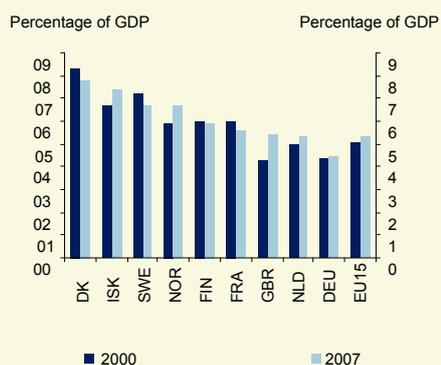
The high costs of education does not mean that Denmark scores correspondingly high in international comparisons of performance relative to other OECD countries. The PISA studies from the OECD show that the professional skills in reading, mathematics and science of the Danish 15-year-olds do not match the best OECD countries, *cf. figure 3.5b*.

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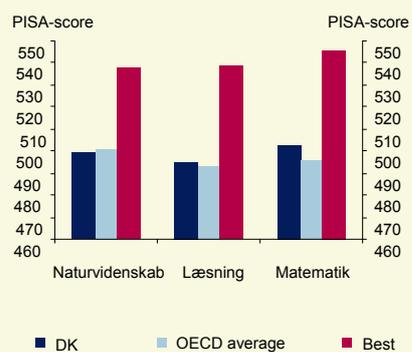
<sup>4</sup> EU-19 comprises all EU Member States prior to the accession of 10 new Member States on 1st May 2004 plus the four East European OECD Member States, namely the Czech Republic, Hungary, Poland and Slovakia.

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**Figure 3.5a**  
Public expenditure on education as a percentage of GDP in 2000 and 2007



**Figure 3.5b**  
PISA scores in reading, mathematics and science in 2009

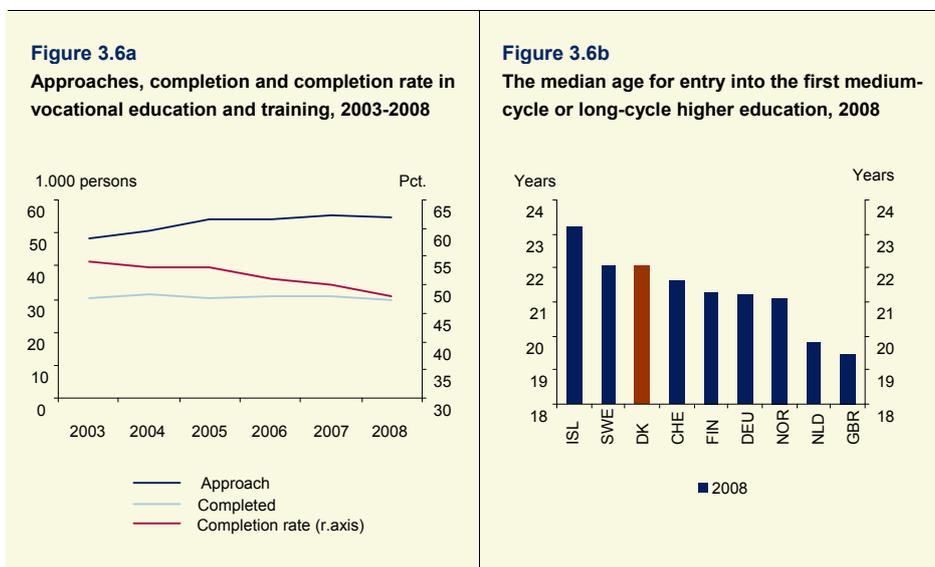


Note: Includes costs of education (grants and loan system).

Source: OECD, Education at a Glance, 2010.

Source: OECD, PISA 2009, Factbook.dk.

Another example is the high dropout rate in the Danish upper secondary education - particularly in vocational education and training, cf. figure 3.6a.



Note: “Completion rate” is the percentage of pupils who began a vocational education and training programme in a given year and are expected to complete. “Approaches” is the number of pupils who began a programme in a given year, while “Completion” relates to the number of pupils who completed a programme in a given year.

Source: The data bank of the Ministry of Education and finance legislation.

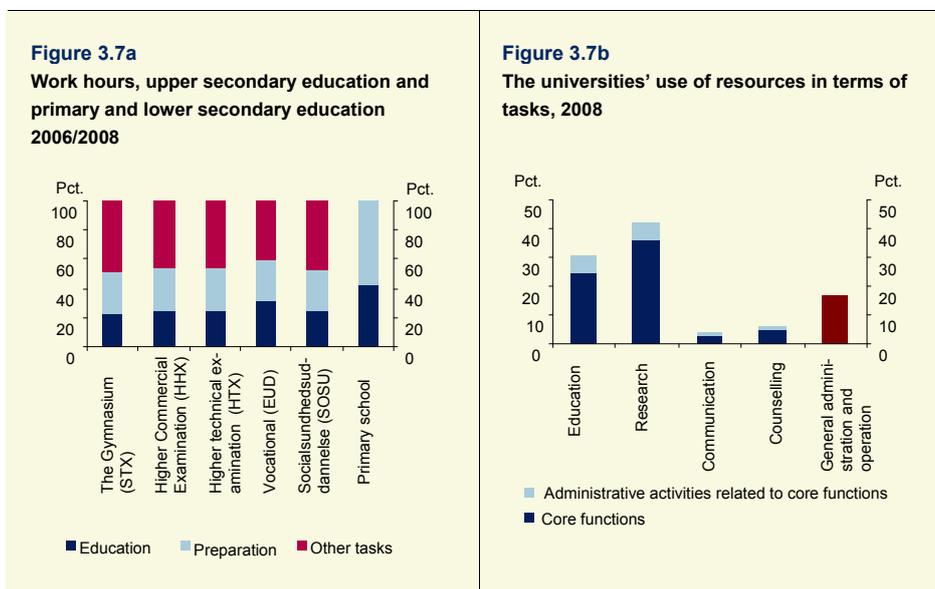
Source: OECD, *Education at a Glance*, 2010

It is also a challenge that young people enrol in their first higher education degree at a relatively high age in Denmark, *cf. figure 3.6b*. In 2008 the median age at the entry of the first higher education degree was 22.1 years on average in Denmark, while it was 21.1 years in Norway and 19.8 years in the Netherlands. As a consequence of starting education at a rather late age, young people also complete their degree at a relatively late age. This reduces the social return of investments in education, because the overall supply of a labour force with higher education in Denmark is reduced.

Finally, several studies identify that the Danish education institutions use relatively many resources on other tasks than the actual core task – which is ‘education’. Examples show that teachers employed in primary and lower secondary schools teach an average of 42 per cent of the total net working time<sup>5</sup>, *cf. figure 3.7a*. The teaching time in upper secondary education is even lower. A teacher in an upper secondary school for example teaches an average of 22 per cent of the total working time, *cf. figure 3.7a*<sup>6</sup>.

<sup>5</sup> Net work hours make up 1661.5 hours, which means that holidays, public holidays and half of the special holidays are not included in the teacher’s work hours.

<sup>6</sup> The average figure for upper secondary school teachers in OECD countries is 40 per cent teaching of the total working time, *cf. Education at a Glance*, 2010.



Note: "Other tasks" include a variety of administrative tasks, time allocated for meetings, time allocated for correcting papers, time allocated for exams and time allocated for breaks, etc. For primary and lower secondary education, "Other tasks" also includes time allocated for preparation. The calculations concerning primary and lower secondary education are based on an expanded teaching concept. The calculations for primary and lower secondary education are from 2008, while the remaining calculations are from 2006. HCEP = The Higher Commercial Examination Programme. HTEP = The Higher Technical Examination Programme. VET = Vocational Education and Training. PLSE = Primary and lower secondary education.

Source: Rambøll Management A/S, Ministry of Education calculations, UNI-C Statistik & Analyse and own calculations.

Source: McKinsey & Co., Analysis of the universities' and research institutions finance and organisation

Higher education institutions spend a fair amount of time on other tasks than the actual core tasks. An analysis of the universities' deployment of resources shows that universities use 69 per cent of their resources on core tasks such as research, education, communication and consultancy, *cf. figure 3.7b*. Administration connected to the core tasks (research administration, student administration etc.) makes up 14 per cent, while the remaining 17 per cent is used on administration of a more general nature (IT, HR, the Rectorate etc.).

The Government focuses on the efficiency of the administration of the public institutions, including universities. With The Fiscal Consolidation Agreement from May 2010, it is stated that the universities are to have more efficient administration and support functions.

To meet the identified educational challenges, the Government has launched several initiatives in the field of education in recent years. These initiatives are described in chapter 2.4.

### 3.6 A society independent of fossil fuels by 2050

In February 2011, the Government presented its strategy for making Denmark independent of fossil fuels by 2050. Energy Strategy 2050 - From Coal, Oil and Gas to Green Energy, includes a wide range of initiatives which will bring Denmark on track to an energy and transport system without fossil fuels by 2050. The strategy includes a number of specific initiatives which reduce dependence of fossil fuels up to 2020, as well as a planning and preparation track which is to create the framework for long-term efforts in addition to research, development and demonstration efforts. The fossil fuel independence target must be seen in light of two great challenges:

Firstly, Denmark must maintain a high security of supply and ensure a stable and affordable energy supply. Security of supply will be an important challenge in the future, when global demands for energy increase together with population growth and greater economic prosperity, and when the remaining oil and gas resources are concentrated in few and often politically unstable countries.

Secondly, Denmark must contribute to reducing global climate change, as agreed in Copenhagen 2009 and in Cancún 2010. Denmark must work to meet EU targets on reducing greenhouse gas emissions by 80-95 per cent by 2050 relative to 1990 levels.

The transition of the Danish economy towards a society independent of fossil fuels will not be free. The strategy is economically responsible and designed with full respect for existing economic policy frameworks. Financing has been organised to fully maintain the competitiveness and employment of Danish enterprises whilst also providing new and green growth opportunities.

The Energy Strategy 2050 follows four general principles:

- Choose solutions that provide the most value for the money.
- Maintain our competitiveness and employment.
- All new initiatives must be fully financed. Requirements for healthy public finances also apply to prioritisations in the energy area.  
Utilization of the existing international frameworks, the opportunities of a globalised world, and an ever closer EU cooperation.

It is important to finance the decrease in revenues caused by a fall in the consumption of fossil fuels which are highly taxed in Denmark. Therefore, the Government's strategy includes both a new security of supply tax on all fuels for heating, as well as an initiative to analyse the

overall subsidy and tax system in the energy area to support the target for fossil fuel independence, sound public finances and uncompromised competitiveness.

### **New green solutions for businesses**

An international transition towards a green economy will create possibilities to strengthen exports of green solutions benefiting both growth and employment. The global market for green solutions is certainly expected to grow considerably.

A number of Danish enterprises within renewable energy, improvements in energy efficiency, water, waste and air contamination, are well positioned to benefit from the new market opportunities. However, many countries are organising programmes to ensure that domestic businesses gain from green growth.

The Danish cleantech-companies must interact with the rest of the business community to make sure that correct measures are taken to exploit the new market possibilities. However the governments and the EU are able to contribute to the competitiveness of the companies by ensuring the right framework, research and development and public-private cooperation.

With The Energy Strategy 2050, the Government proposes a wide spectrum of initiatives which are to underpin Denmark's stronghold as a laboratory for research, development and demonstration within green technology, including energy technology. This applies to:

- The wind area, where the opportunities for development, testing and demonstration of wind turbines are strengthened for the benefit of enterprises in Denmark, and where such enterprises are well positioned for reaping the benefits of global expansion with wind power,
- the biomass and biofuels area, where an increased use of CHP production and transport will increase the opportunities for development and innovation for Danish enterprises,
- the biogas area, where improved framework conditions will support Danish actors and enhance the role of agriculture as a green energy supplier,
- development of smart grids, electricity transmission and integration of renewable energy in the electricity system, where enterprises in Denmark are already strong, and
- measures for energy savings which bring enterprises in Denmark to the cutting edge of developing energy-efficient solutions which will be in demand from other countries. In addition, this involves jobs created in the building and construction sectors.

These measures underpin the Government's ambition for Denmark to become an attractive place for development and testing of green technologies. Among other things this should happen through collaboration between public authorities, companies and knowledge institutions on testing and demonstrating the green solutions and to mature the market for new technologies, production methods and products. The efforts should ensure that Denmark can maintain and develop core competences and market shares in markets with growth.

The ambition for Denmark as a green technology laboratory can be supported in many ways. Denmark is often highlighted as a country with a healthy public-private cooperation, and one of the examples is the establishment of a center of wind turbine testing in Østerild in Thy. Furthermore, the Government is organizing a programme to support larger test and demonstra-

tion plants. The Government is also working to formulate new measures for environmental technology after 2011.

#### **The annual growth study**

In its annual growth study, the Commission has focused on providing cost-effective access to energy, including implementing a tighter national policy for energy efficiency. With the Government's Energy Strategy 2050 proposal, which is described above and in chapter 2.3, energy-efficiency improvements are strengthened. With the proposed initiatives, the strategy, if it is adopted by the Danish Parliament, will contribute significantly to reduce gross energy consumption by 2020 in addition to what is already expected. It has been assessed that gross energy consumption in 2020 will be reduced by 6 per cent relative to 2006. This means that the Danish ambition of a gross energy consumption in 2020 4 per cent smaller than in 2006 will be easily met. Denmark is then well on the way towards meeting the Government's target of becoming one of the world's three most energy-efficient countries by 2020.

Energy efficiency efforts will, for example, take place by strengthening and targeting the energy saving initiatives of energy companies. Such efforts include improvements in energy efficiency and shifting away from oil and natural gas. The initiatives must be negotiated with the parties of the Danish Parliament in connection with the forthcoming energy agreement.

Measures for energy savings will bring enterprises in Denmark to the cutting edge of developing energy-efficient solutions. In addition, this involves jobs created in the building and construction sectors.

### 3.7 Level of household debt in Denmark

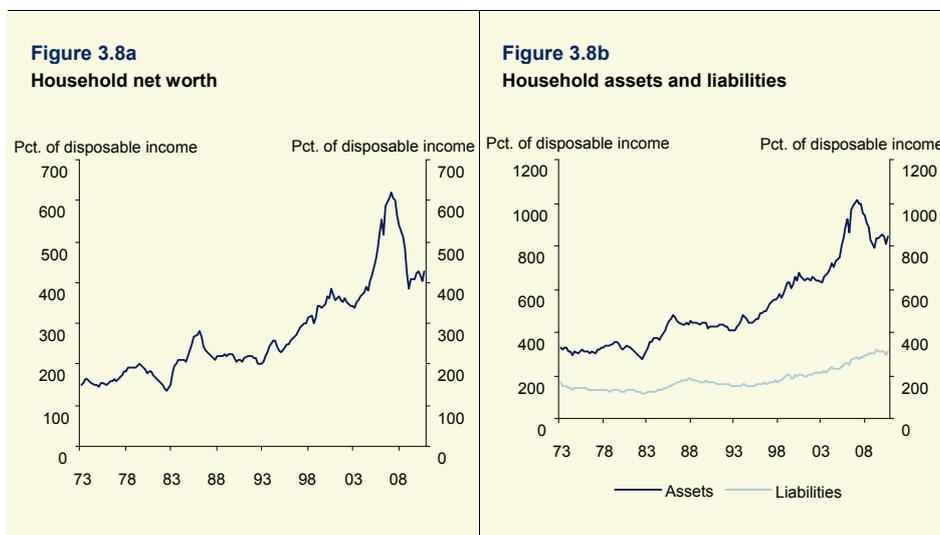
The Commission has pointed out that the high level of household gross debt in Denmark constitutes a challenge. However, the high level of gross debt should be seen in the context of the high wealth in net housing assets and, especially, private pension assets of Danish households' relative to other countries. At the end of 2009, the average net worth of Danish households was approximately DKK 800,000 excluding pension assets. If pension assets (after tax) are included, the figure is DKK 1.1 million.<sup>7</sup>

Although household net worth has plunged in value in the wake of the financial crisis, the Danish households collectively are well-consolidated, *cf. figures 3.8a. and 3.8b.*

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<sup>7</sup> *Economic Survey*, Danish Ministry of Finance, December 2010.

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Source: The Central bank of Denmark.

The high level of housing debt is attributable to different structures of ownership and housing finance in Denmark compared with a number of other countries. Danish first-time home buyers are generally relatively young, and Denmark is among the EU member states with the highest proportion of people under 30 living on their own. In 2008 46 per cent of all 18-34 year old persons in the EU lived with their parents, while this was the case for only approximately 14 per cent of the same age group in Denmark.<sup>8</sup> This is facilitated by the efficient and flexible Danish model of housing finance by way of mortgage loans, *cf. box 3.3*.

<sup>8</sup> Cf. Eurostat. / Marta Choroszewicz, Pascal Wolff: *Population and social conditions*, Statistics in Focus 50/2010, October 2010. In Sweden the proportion was approximately 18 per cent and in Finland it was approximately 20 per cent in 2008. In all other EU countries the proportion of 18-34 year olds living with one or more parents was 30 per cent or higher.

**Box 3.3****The Danish mortgage system**

Mortgage borrowing for ordinary owner occupied housing is possible up to a limit of 80 per cent of the property value. As a result, less savings are required than in a number of other countries where home buyers need to save e.g. with building societies for a long period of time to be able to buy a home.

The hallmark of the Danish mortgage system is a high degree of transparency, security and competition. The mortgage system has proved to be very resilient and stable – even in the face of the financial crisis of recent years. The experience gained in 2008 and 2009 was that Danish mortgage bonds remained fully liquid even in extreme market conditions.

This is due to the balance principle of mortgage lending, ensuring that mortgage banks may only to a limited extent be exposed to risk other than credit risk. In connection with SDOs (covered bonds), which currently account for most mortgages, credit risk is limited by the provision that a LTV (loan to value) limit of 80 per cent must be observed at all times.

It is also of importance that mortgages take precedence in the event of bankruptcy and subsequent foreclosure.

The net worth of Danish households is thus relatively high in a long-term historical perspective. Analyses at micro level also indicate that only a small proportion of Danish households have relatively high debt, rendering them very sensitive to changes in interest rates<sup>9</sup>.

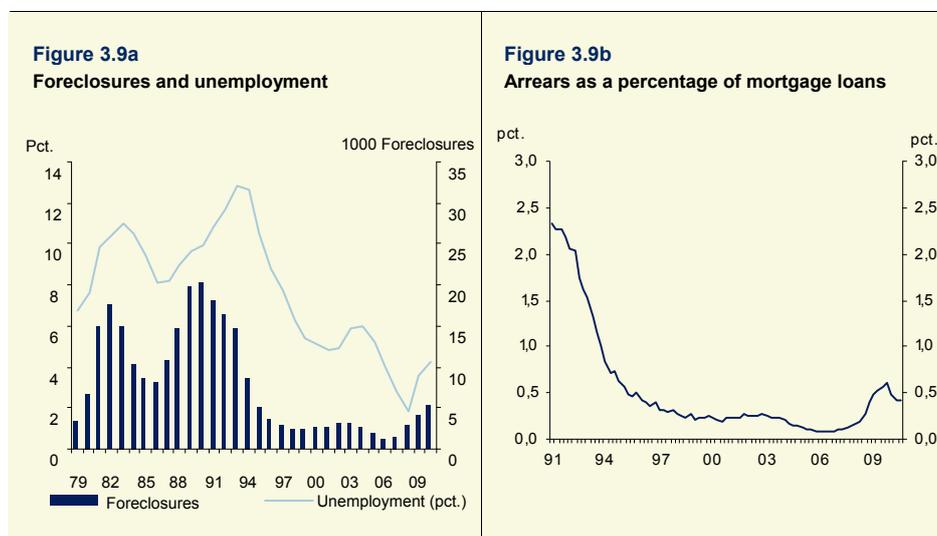
As mentioned, rather than being a result of the financial crisis, the high level of household gross debt in Denmark is due to institutional conditions in Denmark. In 2007 the OECD compared the levels of gross debt for 15 OECD countries, and in this analysis Danish households had the highest gross debt relative to their disposable income in 2005 and also in 1995.<sup>10</sup> The net worth of Danish households, which also includes value of real estate, was only slightly lower, relative to disposable income, than the average, as the net worth of a few countries was lower. The OECD analysis indicates that a high level of gross debt may increase the sensitivity to e.g. changes in interest rates.

The relatively high level of household gross debt is not seen to be a threat to financial stability in Denmark. The experience gained from the financial crisis of recent years is that corporate loans were the source of problems for the credit institutions which were particularly affected.

This is underpinned by the fact that the number of foreclosures remains very low relative to the early 1990s – although foreclosures have increased since 2006 in the wake of the financial crisis and sharp drops in housing prices. Foreclosures peaked in March 2010 and since then the number has fluctuated around a decreasing trend. This development should be seen in context of unemployment currently being much lower than it used to be. Arrears on mortgage loans also remain at a low level, cf. figure 3.9b.

<sup>9</sup> *Boligmarkedet og boligjernes økonomi, (The Danish Housing Market and Home Owner Finance – in Danish only)*, Danish Ministry of Economic and Business Affairs, April 2010. *Familiernes økonomi (Household Finances – in Danish only)*, Danish Ministry of Economic and Business Affairs, August 2010.

<sup>10</sup> *Has the rise in debt made households more vulnerable?*, Working paper no. 535, OECD, January 2007.



Source: Statistics Denmark and *Economic Survey*.

Source: For data prior to 1 January 2009 the source is the Association of Danish Mortgage Banks. For the subsequent period the source is the Association of Danish Mortgage Banks and the Danish Mortgage Banks' Federation.

Developments in the housing market and in household finances are followed closely. The Danish Centralbank analyses the loss ratios of banks and mortgage banks under various risk scenarios which also relate to household conditions.<sup>11</sup> Furthermore, the Ministry of Economic and Business Affairs published two in-depth analyses<sup>12</sup> on this topic in 2010.

It appears from the analysis of homeowner finance that the majority of homeowners had positive net worth in 2007, while just over 11 per cent had debt exceeding the value of their financial assets and housing put together. They thus had negative net worth, a condition which is often referred to as technical insolvency. By setting off the pension assets at an estimated value the proportion of homeowners with negative net worth can be conservatively estimated at around 4 per cent of all homeowners.

Negative net worth does not necessarily constitute a problem for the individual homeowner as long as the current payments related to the home can be made. Such payments are independent of financial circumstances, including the market value of the home. However, negative net worth may inflict losses on homeowners if they have to sell their homes, e.g. in case of changes in the household income.

<sup>11</sup> *Financial Stability 2010*, Danmarks Nationalbank, May 2010.

<sup>12</sup> *The Danish Housing Market and Home Owner Finance (in Danish only)*, Danish Ministry of Economic and Business Affairs, April 2010. *Household Finances (in Danish only)*, Danish Ministry of Economic and Business Affairs, August 2010.

Young homeowners, i.e. homeowners under the age of 45, are overrepresented in the group of homeowners with negative net worth. This reflects that young people are relatively new to the housing market. Consequently, most of them will only to a limited extent have repaid the housing debt normally associated with the first purchase of a new home. In time, the majority of homeowners will reduce their debt and in the long term they will find that their homes increase in value. Accordingly, persons over 45 years of age are underrepresented among homeowners with negative net worth. The pattern of younger people being overrepresented among homeowners with negative net worth and older people being underrepresented has changed very little over time. Since 1993, the 18-35 year olds have thus been overrepresented to more or less the same degree.

Another characteristic of homeowners with negative net worth is that the vast majority are active in the labour market. Some 85 per cent of homeowners with negative net worth have jobs, whereas the corresponding share for all homeowners is 68 per cent. On the other hand, old-age pensioners are strongly underrepresented in the group with negative net worth, reflecting, as mentioned above, that homeowners accumulate assets and reduce their debt with age.

Most homeowners only have negative net worth for relatively few years. Thus, if we consider all homeowners with negative net worth in 1993, only 53 per cent still had negative net worth five years later. Only 15 per cent of homeowners with negative net worth in 1993 still had negative net worth in 2007. This development reflects the fact that homeowners eventually repay their debt, and that house prices increased during that period.

Viewed in isolation, a high level of household gross debt entails that household finances are more sensitive to changes in interest rates as pension savings are less liquid. In addition, a large proportion of the mortgage loans are adjustable-rate loans, which increases the sensitivity to changes in interest rates. At the end of 2009, approximately 60 per cent of the mortgage loans were adjustable-rate loans and the rate has been increasing over time. Interest rate sensitivity calculations show that a 1 percentage point rise in interest rates will increase the median home owners' interest expenses by the equivalent of 1.4 percentage points of household income<sup>13</sup>, cf. table 3.3.<sup>14</sup> This should be viewed against the background of the expected increase in household disposable incomes during the period 2010-2012 of 5.8, 1.6 and 0.5 per cent, respectively<sup>15</sup>. Depending on the specific circumstances, the interest rate sensitivity could pose a problem to some households, but at the same time the interest rate

<sup>13</sup> *The Danish Housing Market and Home Owner Finance (in Danish only)*, Danish Ministry of Economic and Business Affairs, April 2010. The article states that gross terms of interest expenses and income are applied to ensure greater consistency over time and comparability with other analyses. It is assessed that in terms of the interest rate sensitivity calculation it is insignificant whether gross or net terms are applied.

<sup>14</sup> The analysis is carried out on a random sample of 3.3 per cent of the population in 2007. The size of the households' housing debt and total interest expenses is known, but data does not include information on loan types, remaining time to maturity and interest on individual household loans. As a consequence, the expected impact of interest-rate changes is modelled using Monte Carlo simulations. In 50 consecutive simulations 100,000 homeowners are randomly extracted and randomly assigned fixed-rate and adjustable-rate housing loans. The households' interest expenses are recalculated under various assumptions as to the size of the rise in interest rates. Interest rate sensitivity calculations have been made in terms of the number of simulations, the number of extracted homeowners and assumptions as to the breakdown of the outstanding debt into fixed-rate and adjustable-rate loans.

<sup>15</sup> *Economic Survey, December 2010*.

fluctuations are typically counter-cyclical and thus contribute to protecting disposable incomes during a recession. Besides, only 9 per cent of Danish households have high interest expenses, defined as a ratio of interest expenses to gross income in excess of 20 per cent.

**Table 3.3**  
Impact of interest rate increases on interest expenses as a ratio to income broken down by loan type

Composition of loan types (per cent)		Interest-rate change (percentage points)			
Adjustable-rate loans	Fixed-rate loans	Adjustable-rate loans	Fixed-rate loans	Adjustable-rate loans	Fixed-rate loans
20	80	20	80	20	80
40	60	40	60	40	60
50	50	50	50	50	50
60	40	60	40	60	40
80	20	80	20	80	20

Note: The table indicates the change in interest expenses as a ratio to income (percentage points) in the event of a rise in interest rates of ½, 1, 1½ and 2 percentage points, respectively, given various breakdowns of fixed-rate loans and adjustable-rate loans. The grey marking indicates the breakdown applied between fixed-rate loans and adjustable-rate loans corresponding to the Danish average. The calculations are based on Monte Carlo simulations.

Source: Own calculations using the Law Model.

The proportion of Danish households (i.e. both homeowners and tenants) with net debt was declining in the period from 1997 to 2008 – the latest year for which data are available<sup>16</sup>. The proportion with high net debt, i.e. more than DKK 200,000 per person, was largely unchanged during the period. At the same time, mobility from the group with relatively high net debt is high. Based on the group of households with relatively high net debt in 1997, only 38, 32, 29 and 23 per cent still had high debt after 3, 5, 8 and 11 years, respectively.

The Danish government is addressing a number of priority areas aiming to increase stability in the housing market. Accordingly, the Minister for Economic and Business Affairs has announced three initiatives designed to further strengthen the stabilising properties of housing finance.

Firstly, a task force on SDOs and supplementary collateral is to be set up. The objective is to examine the effects of the demand for continuous compliance with the loan-to-value limit of 80 per cent, including the link to loan limits on mortgage loan products.

Secondly, the sector is encouraged to intensify its efforts to spread the refinancing auctions of bonds to finance adjustable-rate loans which have traditionally been held annually in early December.

<sup>16</sup> *Household Finances (in Danish only)*, Danish Ministry of Economic and Business Affairs, August 2010.

Thirdly, a dialogue with the mortgage sector is to be initiated to ensure good customer advisory services. With respect to first-time buyers in particular, the basis for good advisory services is that the credit rating of customers must be based on a traditional, fixed-rate mortgage loan.

In this connection it should be noticed that the Danish Financial Supervisory Authority's survey of banking sector's advisory services indicates that all banks in the survey make it a condition that the customer can afford repaying a fixed-rate bond loan, no matter which kind of loan the customer wants to take out.

Part of the basis for a forward-looking assessment of the quality of the customer advisory services will be an analysis of the demographic and socio-economic distribution of the loan types granted. It is assessed that the risk associated with homeowners' gross debt may be unevenly distributed. There is a need for a more detailed analysis of this risk, and it is intended that such an analysis be conducted in the coming year.

**Box 3.4****The current situation in the Danish financial services sector**

It is the Government's assessment that the Danish credit institutions are well on their way to recovering from the financial crisis that hit banks across the world in 2008.

In its most recent stress test (November 2010) The Danish Centralbank states the following: "The Danish financial sector as a whole is assessed to have sufficient capital and liquidity to meet the expected economic scenario". On capitalisation it states: "Generally, the banks appear to be sufficiently well-capitalised to withstand the expected economic development. This reflects their focus in recent years on improving their capitalisation... the macroeconomic outlook has also improved." And on liquidity conditions: "Overall, the liquidity of the Danish banks has improved since the trough during the financial crisis ... The banks must therefore prepare to obtain financing without government guarantees, while retaining the current positive development trends in the form of more long-term issuances and a smaller share of financing from credit institutions."

Denmark was among the first EU countries to introduce a permanent winding-up solution for distressed banks replacing the temporary crisis scheme. The Danish winding-up solution is in line with the crisis management scheme being considered by the European Commission and the G-20 countries. The Commission emphasises that in future the banks' shareholders and creditors, including major depositors, must realise that they will be the ones to be affected if a bank fails. Taxpayers should not be in the front line to cover bank losses.

The model for management of distressed banks is based on the takeover of a bank by Finansiel Stabilitet A/S (the Financial Stability Company) as a last resort which will only be used if a private solution cannot be found. In that case winding-up under the auspices of the Financial Stability Company is a better alternative to compulsory liquidation as it ensures customers and creditors much speedier and more flexible proceedings. (The Financial Stability Company is a state-owned company for the management of distressed banks established as part of Bank Rescue Package I and continued under Bank Package III).

The winding-up solution for the management of ailing banks was used when the Financial Stability Company took over Amagerbanken as a private solution could not be found. The model turned out to be efficient.

In this connection the Governor of The Danish Centralbank stated that "The protracted vulnerable situation of Amagerbanken and its termination as an independent bank does not change Centralbank's general assessment of the strength of the financial system. The Danish financial sector as a whole is assessed to have sufficient capital and liquidity to meet the outlook for the Danish economy."

It has been pointed out that the collapse of Amagerbanken contributed to a downgrading of a number of Danish banks. In connection with this downgrading the Governor stated that "Moody's has downgraded a number of Danish banks. This is a logical consequence of Bank Package III, which has been in force since 1 October 2010... The overall impact of Bank Package III will contribute to creating a more robust and self-sustained financial system which takes fewer risks."

In that context it is noticed, that private solutions for distressed banks always will have first priority before turning to the use of Bank Package III. With the introduction of a compensation scheme Bank Package III is strengthened. The compensation scheme must thus foster the ability to conduct private solutions for the management of distressed banks before a possible application of Bank Package III. Under the proposed compensation scheme the Depositors' Guarantee Fund get the opportunity to supply funds or provide guarantees when activities of a bank in distress is being transferred to another bank.

**The Annual Growth Survey**

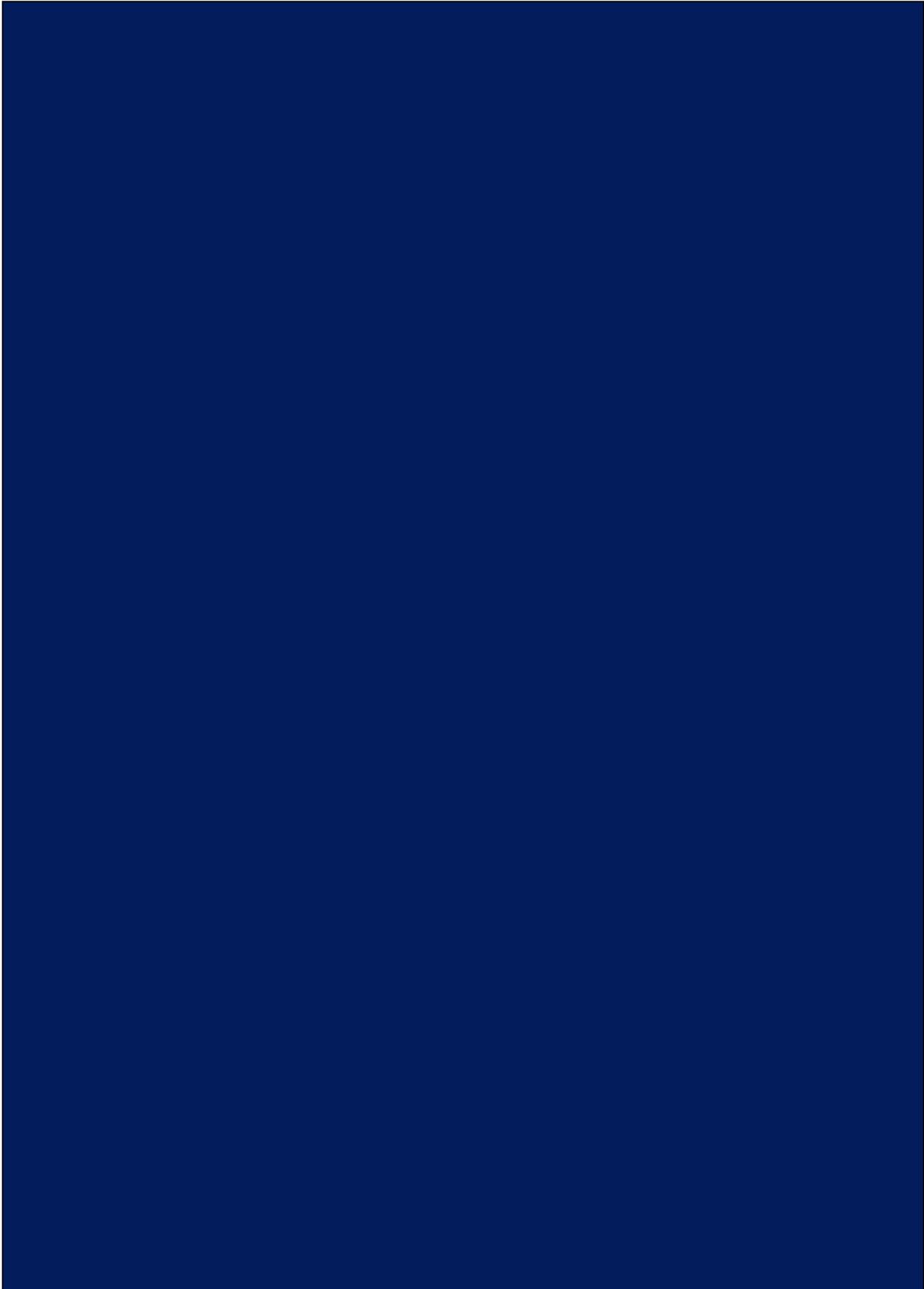
In its Annual Growth Survey the Commission encouraged a gradual withdrawal of subsidies to the financial services sector as a whole. Denmark generally supports this and acted in compliance with this request in connection with the expiry of the general government guarantee scheme (Bank Rescue Package I) 30th September 2010. In addition, Denmark has adopted and implemented a sector-financed winding-up solution for ailing banks (Bank Package III) under which banks are wound up at no cost to taxpayers. The solution was applied in connection with the Amagerbanken collapse.

In its Annual Growth Survey, the Commission emphasised that in future the European banking sector will be subject to stricter capital adequacy requirements as part of the implementation of Basel III in the EU. This is in line with the considerations of the Danish Centralbank as to the need for a continued strengthening of the capital base of Danish banks, and the Government supports the intentions of CRD IV.

Efforts to further streamline stress testing of the sector's resilience is important in this connection as well as in the work to implement the Directive concerning life assurance on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II).

The Government is also positive towards the efforts to create a common European framework for financial crisis management similar to the Danish model for the winding-up of ailing banks which has already been implemented, cf. *box 3.4*.





## 4. Participation, Communication and Identification of *Good Practice*

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A contact committee has been set up in Denmark with representatives of relevant ministries and professional organisations. The committee is regularly informed about European policy questions of relevance for Europe 2020 and is consulted when the National Reform Programmes are being formulated. The Folketing (Danish Parliament) is also regularly involved and informed about discussions concerning both Europe 2020 and the National Reform Programmes.

Following the adoption of the Lisbon Strategy, in 2001 the Government decided to establish a contact committee for the Strategy. It was the intention to create a platform for more systematic, coordinated exchange of information and views between relevant ministries, regional and local authorities and professional organisations concerning the overall Lisbon Process. Box 4.1 shows the composition of the Contact Committee.

**Box 4.1****Members of the contact committee**

3F	The Trade Union NNF
The Danish Confederation of Professional Associations, AC	Greenpeace
The Economic Council of the Labour Movement	HK
The National Council for Children*	The Danish Federation of Small and Medium-Sized Enterprises
The Confederation of Danish Employers (DA)	The Danish Society of Engineers, IDA
Danish Energy Association	The Danish IT Industry Association (ITB)
The Danish Chamber of Commerce	Local Government Denmark (LGDK)
Confederation of Danish Industry	Women's Council in Denmark*
The Danish Metalworkers' Union	Danish Agriculture & Food Council
The Danish Youth Council	The Danish Association of Managers and Executives
Disabled Peoples Organisations Denmark (DPOD)	The Danish Confederation of Trade Unions
Danish Regions	The Council for Socially Marginalized People*
The Ecological Council	The Danish Confederation of Employers' Associations in Agriculture (SALA)
EAPN.DK – European Anti Poverty Network*	World Wide Fund for Nature
Confederation of Professionals in Denmark	

Note.: \*= new members per February 2011.

The committee contains non-public organisations and further consists of a number of ministries and agencies as well as regional and local authorities, all of which have a connection to the Europe 2020 Strategy.

The transition to Europe 2020 has brought increased focus on the social dimension of the growth agenda. Consequently, the committee has been extended with a number of organisations, representing the social dimension *cf. Box 4.1*.

Through the years the committee has been involved in the implementation of the Lisbon Strategy. This involvement consists of the members being kept regularly informed about current topics in European policy of relevance for the Lisbon Strategy and Europe 2020, the members being involved in the design of the National Reform Programmes or with revisions of the Strategy as well as the members being involved with the annual discussion of the Strategy at the spring summit of the European Council, *cf. Box 4.2*.

**Boks 4.2****Meetings in the contact committee in the context of the Europe2020 Strategy**

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28 January 2010 (preparation of the Danish hearing statement)

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16 March 2010 (run-up to the spring summit)

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27 May 2010 (run-up to the European Council)

---

1 July 2010 (reporting from the European Council)

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3 September 2010 (preliminary National Reform Programme)

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11 October 2010 (meeting with the EU Commission concerning the preliminary National Reform Programme)

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22 February 2011 (preparation of the final National Reform Programme)

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15 April 2011 (general presentation of the final National Reform Programme)

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The committee has ensured national anchorage among the most important stakeholders and actors, including professional organisations as well as state, regional and local authorities and (this work has) improved the basis for the decision making. The parties have been involved at both formal and informal levels, creating an excellent opportunity for ongoing dialogue. At the same time the members of the committee have obtained a direct channel to the decision making process, which creates transparency, influence and overview.

From the beginning the committee has been involved in drawing up Denmark's preliminary National Reform Programme 2011, regarding both the preliminary and the final programme. This involvement will be maintained in the future when, apart from working with the reform programme, the committee will focus on the status for the implementation of the individual focus areas of the strategy. Thus, this functions as an overhead of the area-specific discussions that take place in the special EU committees and within the framework of the Danish EU decision making procedure.

In addition to the contact committee, the Folketing has also been involved on a regular basis and informed about discussions concerning both the Lisbon Strategy and Europe 2020. As part of the EU decision making process, the European Affairs Committee of the Folketing is always involved when Europe 2020 is on the agenda at the individual Council formations and in the European Council. In May 2010 the European Affairs Committee of the Folketing also convened a separate hearing on Europe 2020. The Folketing will continue to be informed on a regular basis in the future, including matters concerning the National Reform Programmes.

Finally, Denmark's National Reform Programme has been submitted to several parliamentary committees every year before being forwarded to the Commission.



**Denmark's National Reform Programme**

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Ministry of Finance

Christiansborg Slotsplads 1

DK-1218 Copenhagen K

Telephone +45 33 92 33 33

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