Chapter 1: The Danish Economy

Like the rest of the world, Denmark was in 2008 hit by the most severe economic downturn since the Second World War. The fall in Danish GDP was initiated in the beginning of 2008, and the downturn thereby started earlier in Denmark than in most other countries, see figure A. The decrease in GDP has also been greater in Denmark. Part of the explanation for the greater fall is that the capacity pressure was considerable in the Danish economy in 2007 and 2008, and therefore there were low Danish growth rates in prospect, even before the crisis.

Figure A  GDP in Denmark, USA and the Euro area

GDP fell sharply in the second half of 2008, and the fall continued with increased strength in the first half of 2009. The large decrease entails that GDP in the second quarter is 7 percent lower than one year ago. In spite of the large decreases in production, there are indicators implying that the bottom will soon be reached. The decrease in industrial production has ended, and the fall in private consumption has slowed. Also the business and consumer expectations of the future have moved upward, and the more optimistic
mood is reflected in the stock prices, which have increased by 50 percent since March. The signs of recovery are even more pronounced abroad, and some countries (including Germany) actually experienced positive growth rates in the second quarter of 2009.

Therefore, a recovery of the Danish economy is in prospect, but from a very low starting point. However, there are several reasons to expect a slow recovery, and that it will take years before the Danish production is at the same level as before the crisis.

An important reason to expect a relatively weak recovery in Denmark is that households have suffered considerable wealth losses, in particular due to lower house prices. The lower wealth and the prospect of increasing unemployment will tend to keep private consumption at a low level, in spite of increases in disposable income.

Another reason to expect a weak recovery is that public finances have deteriorated in both Denmark and abroad, which implies a need for fiscal consolidation. It is expected that public finances abroad will be tightened along with the improvement of the economies, and this will contribute to lower growth on the Danish export markets the following years.

A third reason for expecting a weak recovery is that even though the conditions in the financial sector have been partly normalised, there is still a considerable need for consolidation in response to the large losses the sector have suffered during the crisis. This will restrain the growth in lending and thereby the increase in economic activity. The dampening of the growth in lending will probably be complemented by tighter regulation of the financial sector, e.g. through more restrictive international capital requirements for banks. Finally it is expected that monetary policy will return to more normal conditions, as the state of economies improves. This will, within a few years, imply higher interest rates and more restrictive opportunities for banks to acquire liquid funds in the central banks.

GDP fell by 7 percent from second quarter 2008 to second quarter 2009 as earlier stated. Based on the expectation of a weak but positive growth rate in second half of 2009, GDP is expected to fall by around 4½ percent from 2008 to 2009,
see table 1. The downturn is reflected in all of the private demand components. Private consumption is expected to fall by 5 percent, exports by more (10 percent) and investments by even more (15 percent).

Private consumption falls in spite of a considerable increase in disposable income, among others due to tax cuts and the release of the Special Pension Savings, which is a compulsory pension payment that all employees paid in the period 1997 to 2004. Tax cuts will also increase disposable income in 2010, and thereby tend to stimulate private consumption. However it is expected that the ratio of private consumption to income will fall, because of higher unemployment and lower house prices. Based on this, private consumption is only expected to increase by around 1¾ percent in 2010.

The Danish housing market is characterised by falling prices, increasing selling periods and a markedly fall in construction activity. Housing prices were at an unsustainable high level under the preceding boom, and housing prices have already fallen by almost 20 percent, compared to the peak in 2007. With the increasing unemployment in mind it is expected that housing prices will fall by around 5 percent from 2009 to 2010. Starting from 2011 housing prices are expected to rise again.

Fixed business investments have already fallen markedly due to the lower demand, and they are expected also to fall in 2010. A large fall in inventories investment in the first half of 2009 contributes to a decrease in GDP by 1 percentage point, while investments in inventories is expected to contribute to an increase in GDP by ¾ percent in 2010.
### Table 1  **Short-term outlook for the Danish economy**

<table>
<thead>
<tr>
<th></th>
<th>Current prices DKK bn.</th>
<th>Per cent of GDP</th>
<th>Percentage change, volume of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>Private consumption</td>
<td>851,2</td>
<td>49,1</td>
<td>-0,2</td>
</tr>
<tr>
<td>Public consumption</td>
<td>463,0</td>
<td>26,7</td>
<td>1,5</td>
</tr>
<tr>
<td>Gross fixed capital formation</td>
<td>366,3</td>
<td>21,1</td>
<td>-5,0</td>
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<tr>
<td>Stockbuilding</td>
<td>13,1</td>
<td>0,8</td>
<td>-1,0</td>
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<tr>
<td>total domestic demand</td>
<td>1,693,6</td>
<td>97,7</td>
<td>-0,7</td>
</tr>
<tr>
<td>Exports of goods and services</td>
<td>950,9</td>
<td>54,9</td>
<td>2,2</td>
</tr>
<tr>
<td>Imports of goods and services</td>
<td>911,1</td>
<td>52,6</td>
<td>3,4</td>
</tr>
<tr>
<td>GDP</td>
<td>1,733,5</td>
<td>100,0</td>
<td>-1,2</td>
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</table>

#### Key indicators

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer prices, percentage change</td>
<td>3,1</td>
<td>1,5</td>
<td>2,0</td>
<td>2,0</td>
<td>1,9</td>
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<tr>
<td>Unemployment, per cent</td>
<td>1,8</td>
<td>3,4</td>
<td>5,4</td>
<td>5,9</td>
<td>5,4</td>
</tr>
<tr>
<td>Current account, DKK bn.</td>
<td>37,8</td>
<td>30,8</td>
<td>28,5</td>
<td>29,6</td>
<td>26,1</td>
</tr>
<tr>
<td>Current account, per cent of GDP</td>
<td>2,2</td>
<td>1,8</td>
<td>1,6</td>
<td>1,6</td>
<td>1,4</td>
</tr>
<tr>
<td>General government financial balance, DKK bn.</td>
<td>59,5</td>
<td>-39,6</td>
<td>-88,9</td>
<td>-70,4</td>
<td>-46,1</td>
</tr>
<tr>
<td>General government fin. balance, per cent of GDP</td>
<td>3,4</td>
<td>-2,4</td>
<td>-5,1</td>
<td>-3,9</td>
<td>-2,5</td>
</tr>
<tr>
<td>Hourly wage costs, percentage change</td>
<td>4,2</td>
<td>3,2</td>
<td>2,7</td>
<td>2,2</td>
<td>2,2</td>
</tr>
<tr>
<td>Terms of trade, percentage change</td>
<td>1,3</td>
<td>-1,4</td>
<td>1,5</td>
<td>0,4</td>
<td>0,3</td>
</tr>
</tbody>
</table>

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

b) Implicit private consumption deflator.
c) Percentage of the total labour force. National definition.

Note: The DKK/USD exchange rate is calculated assumed to be 5.41 in 2009 and 5.22 in 2010-12.

Source: Statistics Denmark, National Accounts and own estimates.
Both imports and exports have fallen heavily as a response to the economic crisis in Denmark and abroad. Imports are expected to fall by around 12 percent in 2009, and exports by around 10 percent. The following increase in net exports reduces the fall in GDP, stemming from the fall in domestic demand. One of the explanations for the large fall in imports is that the import quota had increased extraordinary during the preceding boom, due to the considerable capacity pressure. The decline in exports is expected to turn into an increase in the second half of 2009. Several international institutions have revised their estimates of the global economic growth upward, and it is assessed that the growth in the countries who buys Danish exports will turn from -4 percent in 2009 to around 1¼ percent in 2010, and increasing to around 3½ in 2012.

The noticeable fall in production has not yet been reflected in a corresponding decrease in employment, because the productivity has continued to fall. The hourly productivity in the private urban sector is estimated to have fallen by more than 5 percent since 2006, and the productivity level is assessed to be around 7½ percent below the trend level. The large productivity gap implies a potential for large increases in productivity in the following years. However, this also implies that the employments number is expected to fall toward 2011, in spite of the increase in production. The total fall in employment from 2008 to 2011 is estimated to be around 160,000 persons.

The fall in employment is not expected to be fully reflected in the number of registered unemployed, due to a cyclical fall in the total workforce. It is estimated that the number of unemployed will increase to around 170,000 persons in 2011, which is 125,000 higher than the historical low level in the summer of 2008.

The higher unemployment has also lowered the rate of wage increases, and it is expected that the percentage increase in wages will remain around 2½ the following years. This development implies a further deterioration of the Danish wage competitiveness, even though the domestic wage increases are at a historical low.
The state of the economy has contributed to a markedly deterioration of public finances. It is expected that a surplus of DKK 60 billion in 2008 will be turned into a deficit at around DKK 90 billion in 2010. This is primarily due to a cyclical fall in tax revenues and an increase in unemployment expenditures. This however, is supplemented by a discretionary fiscal easing, through tax cuts and increased expenditures, at around DKK 45 billion.

Policy recommendations

In 2009, the Government’s fiscal policy will stimulate economic growth and reduce unemployment. This is due to increased public consumption and investment and also tax cuts. The general government budget for next year is not yet final, but there has already been planned fiscal easings for about DKK 20 billion in 2010. The easing in 2010 is mainly due to the tax cuts as part of a tax reform, which is underfinanced in the short run, but estimated to have a neutral impact on the general government budget balance when it’s fully implemented. An extraordinary rise in public investments also contributes to the fiscal easing in 2010, and it is estimated that altogether the fiscal policy will stimulate GDP-growth by ½ percentage point next year.

The current economic downturn is expected to be deep and long lasting. Therefore the chairmanship recommends further fiscal easing next year than already planned for. It is recommended that fiscal policy stimulate GDP-growth by at least 1 percentage point in 2010, which implies that further fiscal easing should stimulate growth by at least ½ percentage points. A stimulation of ½ percentage point can be achieved with a further increase in public investments of about DKK 10 billion, but the recommended effect can also be achieved through other policy measures. Risk scenario calculations show that the recommended fiscal policy will not bring unemployment below its estimated natural rate, even if economic growth becomes somewhat stronger than forecasted. If growth on the other hand becomes somewhat weaker than forecasted, there is a risk that high unemploy-
ment will lead to hysteresis effects and an increase in the natural rate of unemployment.

It is important that expansive fiscal policy during downturns is countered by contractive fiscal policy during upturns, and it is therefore important that new expansive policies do not lead to a permanent increase in public spending. Starting an already planned investment project is by definition a temporary measure, as the fiscal tightening begins when the project is finished and spending stops. Thus public investment is a preferred measure in the current situation.

Fiscal policy is usually a trade off between short run growth stabilization and long run fiscal sustainability. A larger fiscal expansion increases public debt and increases the need for future fiscal tightening or growth enhancing economic reforms to secure the fiscal sustainability. The chairmanship recommends that traditional fiscal policy stimulus measures are implemented to achieve short run stabilization while economic reforms should be implemented to achieve long run fiscal sustainability. The long run sustainability challenge should thus not be prioritized in favour of the short run stabilization problem. It is possible to obtain both a short run fiscal expansion and long run fiscal sustainability through the right mix of policy measures.

The general government EMU debt is estimated to reach DKK 700 billion by the end of 2010. This is about DKK 200 billion more than estimated in the central government's latest Convergence Programme\(^1\) prepared in accordance with the rules in the EU’s Stability and Growth Pact.\(^2\) The increase in debt is primarily due to weak growth and a high degree of automatic fiscal stabilizers, which weakens the general government budget balance, but the Government's discretionary fiscal measures are also enhancing debt. An

1) The Convergence Programme is also an update of the central governments 2015-plan for fiscal sustainability.

2) These figures do not include the increase in government debt due to the state funded capital injections into banks and mortgage institutions.
attempt to reduce the debt to the level from the Conver-
gence Programme will result in an inexpedient contractive
tax policy in the years to follow. Before the emergence of
the financial crises there was a need for economic reforms
to ensure long run fiscal sustainability – the unexpected
debt increase considerably aggravate the need for economic
reforms.

The new outlook makes it clear that Denmark is in need of a
new plan to ensure long run fiscal sustainability. The sus-
tainability challenge needs to be recalculated with regard to
the latest information and the calculations should take the
increasing health expenses into account, cf. later in this
publication. A new sustainability plan should include con-
crete measures with regard to labour market reforms and
measures to postpone retirement age. A new plan should
also include an annulment of the tax freeze on property and
other nominal fixed non-inflation-adjusted taxes, which has
been in place since 2001. Such measures will improve fiscal
sustainability. Measures to fulfil the government’s objectives
regarding education and GHG emissions should also be
included in the new plan. The necessary economic reforms
should be carried through the parliament as soon as possible,
but the reforms can be implemented later and over
several years when economic growth has recovered.

A new plan for fiscal sustainability should also include a
public investment plan. Public investments are an important
part of both the short run stabilization policy and longer run
structural policy as e.g. investments in infrastructure can
close productivity. The central government already has
individual investment plans in a number of areas, but a
systematic prioritizing of public investments across sectors
is not conducted. A joint public investment plan for all
public investments would help in prioritizing between
different investments and it will also make it easier to
postpone or advance public investments when the business
cycle calls for it. A public investment plan will also help
when prioritizing between public consumption and different
public investment projects.
Both the rise and the fall in Danish housing prices have been larger than in a lot of other countries. The volatile housing prices have caused volatility in housing construction and private consumption. The tax freeze on property and other non-inflation-adjusted taxes has put an important automatic fiscal stabilizer out of function. The tax freeze has resulted in a continual reduction in the effective tax on owner occupied dwellings as house prices has risen. House prices are falling at the moment, and the tax freeze is thus resulting in a rise in the effective tax rate on owner occupied dwellings. Without the tax freeze, the effective tax rate would be falling at the moment and thus dampen the current fall in house prices.

The tax reform of 2009 did not incorporate an annulment of the tax freeze on property. The chairmanship recommends that this tax freeze is annulled in order to improve long run fiscal sustainability and to ensure a more stable business cycle development in the future. It is important that the annulment do not lead to an increase in the effective tax rate on houses as this can have a negative impact on private spending and growth. It should also be considered to introduce a capital gains tax on the sales value of owner occupied dwellings as suggested in *Danish Economy, Autumn 2008*. Such a capital gains tax can be designed to not hamper mobility on the housing market.

The Danish government has appointed a temporary Labour Market Commission with the assignment to propose employment initiatives that can improve the long run fiscal sustainability. The Commission published its proposals this summer and once again it has been shown that too early retirement in Denmark should be the main focus with regard to improve the fiscal sustainability\(^3\). The chairmanship supports the Labour Market Commissions wish to reform the early retirement scheme and the unemployment benefit system. The sooner reform bills are passed the better.

\(^3\) The retirement age in Denmark is considerably lower than retirement age in other Western European countries due to an early retirement pay scheme
The Labour Market Commission has suggested a reduction in the four year unemployment benefit period. This is in line with former proposals from the chairmanship. The Commission has suggested a two year unemployment period which can be extended by up to a year in periods with high unemployment. The extension of the unemployment benefit period will be given in to steps of half a year each. The first half year extensions is given when gross unemployment rises above 7 percent and the last half year extension is given when gross unemployment rises above 9 percent. The extension of the period is only intended for unemployed persons who are about to reach the two year limit. The suggested model leads to a significant reduction in the average unemployment benefit period and thus increases the incentives for unemployment benefit recipients to find a new job. If the suggestion is implemented the reduction in the unemployment benefit period will only be imposed on future and not current unemployed persons. Therefore the shortening of the unemployment benefit period will not affect the unemployed until 2012.

The high growth in economic activity and employment in recent years have lead to an increase in jobs for a lot of low-skilled workers with difficulties in getting a foothold on the labour market. It is important that these people do not loose their foothold on the labour market as employment falls. In a few years time, the Danish economy will once again be in lack of labour supply, and active labour market policy measures should therefore target this group.

In *Danish Economy, Spring 2007* it was concluded, that labour market policy measures in the form of educational programs in general do not get unemployed persons into employment. Recent research done by the Labour Market Commission confirms this result. The commission finds that only a few specific work-related courses – e.g. lorry driver’s license – improve the unemployed’s likelihood of getting a job. These results indicate that labour market policy meas-

4) Gross unemployment includes persons in labour market schemes as opposed to the more official registered unemployment that do not take these persons into account.
ures should be more work related and focus less on education.

A recently conducted labour market policy test (*Hurtigt i gang 2*) has shown that intensive contact in the form of weekly or fortnightly meetings with the unemployed is the most effective way to bring unemployed people out of public benefit programs. The central government subsidizes the municipalities’ use of labour market policy measures, but the subsidy for the weekly or fortnightly meetings is less than for other measures. This system should be changed so that the municipalities get stronger incentives to use the labour market policy measures which are most likely to bring unemployed persons out of public benefit programs.
Chapter two: Health expenditure and financing

Danish health care policies are based on the principle, that the health care sector should provide easy and equal access to health care services to all Danish citizens. This principle is generally accepted in Denmark as a central part of the Danish welfare state.

Danish health expenditure is equal to $\frac{1}{10}$ of total Danish GDP. The large majority of the expenditure is financed by taxes, while direct user fees only account for 15 percent of the total. Total health expenditure (private and public) has grown faster than GDP since 1970 in most OECD countries. The growth in Danish health expenditure has been more moderate, but from 2000 health expenditure has been increasing and health expenditure accounts for an increasing share of GDP.

This should not necessarily be seen as a problem. The increase may very well reflect citizens’ preferences for higher quality health care. However, as the main part of health expenditure is financed by taxes, further increases in public health expenditure can lead to a public deficit or require additional tax funding. This would increase the already high tax distortions in Denmark.

Both demographic and non-demographic factors are likely to lead to increasing health expenditure in the next decades. Two demographic factors are worth mentioning:

- Cohort effects: The large cohorts born after World War Two will require more health care as they get older.
- Reduced mortality: Increases in life expectancy will further increase the number of elderly, who requires health care.

Prior research suggests that improvements in life expectancy only have little impact on future health expenditure. A significant share of health services is provided to individuals in the end of their life (terminal costs). When life expec-
tancy increases, the terminal costs will also be postponed. This is referred to as “healthy ageing”.

An empirical analysis of the Danish population was carried out to estimate and separate out the individual effects of age and proximity to death (reflecting terminal costs). The analysis followed the approach described in e.g., Seshamani og Gray (2004), Zweifel et al. (2004) and Zweifel et al. (1999). The analysis is based on micro panel data from the period 2000 to 2007, covering a random sample of 10 percent of the Danish population. Health expenditure includes treatments in hospitals, subsidies to prescribed medication and health care provided by general practitioners and specialists. Results show that proximity to death has a significant impact on health costs of the individual. Therefore, increases in life expectancy will lead to healthy ageing.

Results also show that age influence health costs also after indicators of proximity to death are included in the empirical model. Thus, the analysis does not support the so-called red-herring hypothesis, that age has no effect of health expenditure, after the effect on individual health costs of proximity to death is accounted for.

The results were combined with a long term population forecast in order to predict the impact on public health expenditure of demographic change (cohort effects and the effect of improved life expectancy). Healthy aging reduced the impact of increased life expectancy on health expenditure by 50 percent compared to a situation without healthy ageing.

Generally, growth in health expenditure is higher than overall economic growth even after accounting for demographic factors. In Denmark, the average annual growth in public health expenditure has exceeded economic growth by about 0.3 percent during the last 15 years after controlling for the impact of demographic changes. If instead the past ten years are analysed, growth in public health expenditure has exceeded economic growth with more than one percent per year. This reflects a shift in health care policy from a
budget-and-supply restricted system to a more demand-oriented health policy, which gives a higher priority to reducing waiting time and demand for care.

Figure XX  Public health expenditure as percent of GDP

<table>
<thead>
<tr>
<th>Percent of GDP</th>
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<tbody>
<tr>
<td>12</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>6</td>
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<td>4</td>
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Note: The three scenarios reflect different levels of excess growth in public health expenditure relative to the overall economic growth rate (assumed to be 2 percent per year), as described in the text.

Source: Calculations based on the DREAM model

Three forecast scenarios of public health expenditure have been developed to reflect different expectations of growth rates in public health expenditure (see figure XX). In the forecast, demographic effects are calculated by taking into account the impact of healthy aging. The main scenario models annual growth in health expenditure, which exceeds the annual growth rate in GDP by 0.3 percent. This corresponds to the average growth in health expenditure during the last 15 years. In the forecast, public health expenditure increase from 6.8 percent of GDP in 2008 to 9.6 percent of GDP in 2050.

In the second scenario, growth in public health expenditure is the same as growth in GDP. Public health expenditure will increase from 6.8 percent of GDP to 8.5 percent, which is caused only by demographic factors. The further increase from 8.5 percent to 9.6 percent in the first scenario is the
effect of the 0.3 excess growth rate of public health expenditure. In the third scenario, the annual growth rate in the public health expenditure exceeds growth in GDP by 0.6 percent. In this case public health expenditure will increase to 10.8 percent by 2050.

The increase in health expenditure is likely to put pressure on public expenditure over the next decades. It is therefore worth considering alternatives to tax-based financing of health expenditure. One alternative is to shift from tax payments to compulsory social health insurance, which is currently used in countries like Germany, the Netherlands and France. However, it is not obvious that social health insurance will be cheaper than tax-funding. An insurance payment system must be developed in addition to the already existing tax collection system. Furthermore, it suffers from the same incentive problems as the tax system. For example patients’ demand for health care does not take into account the cost of treatment, and activity-paid health care providers have little incentive to limit treatments to patients.

Also, it seems that the social health insurance system is generally less redistributional than tax though this depends on the design of the insurance payments. If the insurance payment scheme has the same distributional effects as the tax financed system, then the distortionary labour market effects are also likely to be the similar.

The number of employer-paid supplementary health insurances in Denmark has increased rapidly in this decade and in 2008 one million citizens were covered. This increase is encouraged by a tax exemption to the employee, given that the employer offers the insurance to all employees. The tax exemption yields an indirect subsidy to the supplementary health insurances. The exemption is only given to persons in the labour market and may therefore not be consistent with the principle of easy and equal access to health care services. For these reasons, it is recommended that the tax exemption should be abolished.

Instead of increased funding, the increasing health expenditure could be limited by increasing the efficiency of the
health sector through competition of supply of health services. However, the overall assessment is that it will decrease expenditure to a small and limited extent, because only a small share of the health services can be supplied competitively.

The conditions for establishing a well functioning market with good competition are best for health services that are well defined, not specialized and that only require relatively inexpensive capital equipment. This applies to care and planned basic surgery. However, the Danish Competition Authority has assessed that planned surgery expenditure in total amounted to only 13 percent of the total hospital expenditure in 2003. Most health services require expensive emergency teams on standby, highly qualified personnel and/or extremely expensive equipment, which implicate economies of scale and are obstacles to competition. Health services that are characterized by economies of scale are assessed to be unsuitable for competition.

The principle of free choice of hospitals is central to Danish health policy. Once the required treatment has been established, the patient has a right to choose between public hospitals for that treatment. If the waiting time for the treatment exceeds one month, the patient has an additional right to choose among the private hospitals that offer the treatment. This is the principle of extended free choice of hospitals.

In 2003, 43,000 people made use of the extended free choice of hospitals. This is 13 percent of the patients, who qualified for the extended free choice of hospitals. The extended free choice was primarily used, when the patient needed treatment for bone, muscle, connective tissue and eye illnesses. Among the qualified, it was in particular young people, professionals and people with high income that used the extended free choice.
The principles of free choice and extended free choice of hospitals give the Danish Administrative Regions\(^1\) incentives to provide high quality health services and to fully utilise the existing capacity of its hospitals and maybe even to increase the capacity to be able to offer treatment within one month. This is due to the higher price the Regions are paying for treatments, if a patient chooses to be treated at a hospital outside the Region. However, the principles do not create direct economic incentives for the public and private hospitals to increase the cost efficiency and to minimize the prices for treatments, because prices are not determined by competition. Supply competition is only possible within the existing legislation, if the Regions decide to use competitive tendering \textit{before} the extended free choice of hospitals take effect for the patients.

Competitive tenders can be used to increase competitiveness and is recommended for the treatments that are suited for supply competition. However, this implies a tradeoff with respect to the patient’s free choice between hospitals, because the right to choose from a high number of hospitals weakens the price competition. To ensure good competition, it may be required to change the legislation such that the Regions are allowed to reduce the number of available hospitals under the extended free choice of hospitals.

One way to consider both patients’ free choice and supply competition is use tenders, where the suppliers bid for the obligation – but not the right - to provide a specific health service up to a given limit. This allows the Regions to select a range of the best and cheapest suppliers, because it has no obligation to purchase a fixed amount of health services. Thus, the region may offer a contract to a range of the best and cheapest suppliers, but inefficient suppliers are not offered a contract.

\(^1\) Denmark is divided into 5 Administrative Regions. They own and run the public hospitals and provide health services in the primary health sector. The regions are governed by regional politicians, who are elected for 4 years. The regions are not allowed to impose taxes and are funded by the state and local governments.
This means that suppliers carry the costs of the uncertainty surrounding the amount of health services to be provided. It implies higher expected prices compared to a tender with fixed, guarantied demand, which would be cheaper, but then the Regions carry the risk for fluctuations in demand.

This suggests that it is profitable to combine the tenders with guarantied demand (and lower expected prices) and the tenders with the variable demand (and higher expected prices). This combination of tenders enables the Regions to fulfil the guarantied demand while giving - to some extent - the patients a free choice and an extended free choice of hospitals. The public hospitals and other institutions should be included in the tender process as this will strengthen their incentives to increase efficiency.

The local governments finance part of the regions health expenses. This aims at giving the local governments incentives to take preventative measures. However, the existing rate scheme is not designed to actually increase these incentives as the basic contribution is a fixed rate per inhabitant. It gives no incentives to take preventative measures and it is therefore recommended to replace the shared financing with state financing, as the shared financing increase administrative costs. If the shared financing is maintained, it should be focussed on areas, where local governments can influence health expenditure. Even with a more suitable structure, the potential for cutting health expenditure is very limited.

Fifteen percent of total Danish health expenditure is financed by user charges. User charges are mainly applied on dental services, physiotherapy, and medication. There are no user charges, for instance, on visits to the casualty departments or hospital meals, which is the case in other Nordic countries. It is recommended to apply user charges on more health services to rectify this imbalance. This should be applied within the existing budget for user charges, so that the user charges are reduced on some health services and increased on others. By spreading the user charges on more health services, they may be used to regulate the demand for other services than dental services, physiotherapy, and medication.
The conclusion is, that increasing efficiency and applying alternative financing of health services as private insurances and user charges may only contribute to a very limited extent to the financing of the total health expenditure, if the existing objectives of easy and equal access to health services are to be kept.

Calculations show that the fiscal sustainability will worsen by 3 per cent of GDP with a reasonable forecast of public health expenditure. This means that the public budget has to be improved by 3 per cent every year to avoid a future tax increase. The public health expenditure per person is expected to exceed the economic growth by 0.3 percentage point. Healthy aging will lower expenditure growth per person for the elderly. The forecast also accounts for the increase in expenditure as the large cohort born after World War Two gets older.

Public health expenditure is the post on the public budget that can cause the biggest financial problems and therefore puts the fiscal sustainability under pressure.

At the moment, the increase in health expenditure, which is due to the big cohort born after World War Two, is not financed. A Danish welfare reform from 2006, which had the aim of deferring the withdrawal from the labour market, is implemented very slowly and will only finance a small part of the increase.

If a tax increase is needed, it is suggested to introduce an earmarked health care contribution tax, which is only increasing at the same rate as the expected increase in health expenditure. It should be increased at the same rate as public health expenditure increases. A continuous adjustment of the tax rate, in accordance with the development of health expenditure, will entail that improvements in health care are paid by the generations who enjoy the improvements.

A health care contribution tax can ensure that the expected increase in health expenditure will not undermine fiscal
sustainability. In this way, it is avoided that increases in health expenditure result in higher levels of public debt. A debt, future generations will have to pay.

An introduction of a health care contribution tax that finance the total increase in public health expenditure — whether it is caused by demographics or not — will solve the problem with fiscal sustainability. The suggested health care contribution tax will gradually increase to 2.75 percentage points in 2030. Thereafter the rate of increase will lower and the total necessary increase in 2050 is 4.5 percentage points compared to 2009 levels.

This major tax increase illustrates the political dilemma of financing the increase in future health expenditure. One (extreme) alternative to a health care contribution tax is a restrained development in health expenditure that ensures that health expenditure as a proportion to GDP is kept constant at the current level. Due to the pressure on health expenditure caused by aging, this implies a slower growth rate in health expenditure per person in a given age group than growth in GDP and is a way to secure fiscal sustainability.

A less radical possibility is to let the health expenditure increase in the same pace as average income and the development of demographic factors such as the size of cohorts and healthy aging. It is roughly the assumptions in Denmark’s Convergence programme 2008, which is the Government’s latest financial forecast. Such a development in health expenditure presumes a distinctive tightening of expenditure control and is hardly realistic in the light of the present focus on fast treatment of patients. Even if a tight control of health expenditure is possible, there is a need for a permanent increase in taxes or structural reforms to finance the increase in health expenditure as a proportion to GDP.

If the current line in health care policy is continued, health expenditure will increase at a faster pace than average income. To finance this, either other public expenditure has to decrease, taxes has to increase (i.e. by the proposed
health care contribution tax) or more extensive reforms with the aim to increase labour supply and by this way the income taxes has to be introduced.

Even though the gradually increase in a health care contribution tax in principle can solve the problem with fiscal sustainability, it does not mean that need for structural adjustment disappears. Structural reforms which gradually increase labour supply will reduce the need for a tax increase and thereby tax distortions from higher marginal taxes on labour caused by the health care contribution tax.

Litteratur

