



AALBORG UNIVERSITY
DENMARK

Aalborg Universitet

The Danish Welfare Commission

main assumptions and overall proposals

Gjerding, Allan Næs

Published in:
Ikke angivet

Publication date:
2006

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Gjerding, A. N. (2006). The Danish Welfare Commission: main assumptions and overall proposals. In *Ikke angivet* Det samfundsvidenskabelige Fakultet, Aalborg Universitet.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

Take down policy

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

The Danish Welfare Commission

Main assumptions and overall proposals

By

Allan N. Gjerding

Dean, Associate Professor in Business Administration, Ph.D.

Faculty of Social Science, Aalborg University
Frederik Bajers Vej 7 F, DK-9220 Aalborg Øst

Tel.: +45 9635 9605 Mobile: +45 2341 6427
ang@adm.aau.dk

Paper prepared for the international conference on “Welfare State Change. Conceptualisation, Measurement and Interpretation”, organised by the Centre for Comparative Welfare Studies (CCWS), Aalborg University, at Store Restrup Herregård, Denmark, January 13-15, 2006.

Abstract

The paper deals with the main report of the Danish Welfare Commission and the one-hundred-and-nine proposals on the structure of the future Danish welfare state that the commission has put forward. Following upon a brief review of the discussion on the work of the Danish Welfare Commission, the paper focuses on the Danish Rational Economic Agents Model (DREAM) that have informed the commission’s analyses and proposals and concludes that inspired by the general equilibrium DREAM model the Welfare Commission is mainly interested in how to increase the supply of labour, restrain the demand on public services, and install economic incentives for the behaviour of private households. The paper then digs into the proposals of the commission that are broadly grouped into five policy target areas concerning (1) the ageing of the population, (2) the incentives for labour market participation, (3) competitiveness in the global economy, (4) behavioural regulation of the use of public benefits and services, and (5) management within tight budgets of an increasing demand on health and care. Finally, the concluding section sums up the discussion and elaborates on the debate on the Welfare Commission’s work in terms of the use of long term prognoses and the use of the DREAM model.

Background

The Danish Welfare Commission was initiated by the Danish government in autumn 2003 with the purpose of analysing the future challenges of the Danish welfare system and, through reports, preparing the grounds for a thorough public debate. The Commission comprises nine independent resource people from universities, organisations and private firms supported by a secretariat and (independently) corresponding with the Danish government. The Commission released its main report on December 7, 2005 (Velfærdskommissionen, 2005d), following upon a series of analyses (Velfærdskommissionen, 2004, 2005a, 2005b, 2005c). According to the Danish Welfare Commission (notably Velfærdskommissionen, 2005d), the Danish economy is facing three main challenges. First, an increasing ageing of the population combined with a decreasing workforce. Second, an increasing level of wealth that induces the households to choose leisure instead of work and that creates an excessive demand for public service. Third, a process of globalisation that necessitates investments in human resources, education, knowledge, industrial development and infrastructure. While the observation on the challenge posed by globalisation is in accordance with what is generally discussed in the Danish public debate and has been widely accepted, the challenges posed by the ageing of the population and the choice of households vis-à-vis increasing wealth have been heavily disputed. Furthermore, while the Welfare Commission argues that the analyses prepared by the Commission may well underestimate the challenges, the critics of the Commission argue that the challenges are by far exaggerated.

The debate on the Welfare Commission has become intense during the last couple of months as the date for the main report came closer. One line of criticism argues that the Welfare Commission is targeting a major change of the Danish welfare state that is not necessary, essentially political in nature and could be met by egalitarian political schemes (Greve, 2005; Helbak, 2005; Kolstrup, 2005; Puggaard & Abrahamson, 2005). Another line of criticism challenges the Welfare Commission's argument that the average number of working hours is decreasing and will continue to do so, partly because of early retirement. Instead it has been argued that middle aged Danish men enjoy more working hours than their counterparts in Europe in general (Andersen, 2005b) and that even though a political scheme for postponing retirement may increase the supply of labour it will not increase the amount of employment due to a negative relationship between age and employability (Lund, 2005a). Furthermore, even the perception of a decreasing number of working hours has been challenged with the argument that it is, primarily, caused by an increasing rate of female participation (Andersen & Borchorst, 2005; Borchorst, 2005). A third line of criticism reflects on the current state of the Danish economy, arguing that the economic conditions are more healthy than perceived by the Welfare Commission (Andersen, 2005a) and thus disagreeing with the commission's urge to part with the current emphasis of government policy on consolidating the public finances in order to equalise long term inter-generational benefits of public spending by ways

of accumulating public savings (Andersen, 2005c; Vastrup, 2005). Finally, a fourth line of criticism aims at the macroeconomic theoretical reasoning, criticising the specific assumptions, the perception of fiscal sustainability, and the specific modelling employed by the commission (Andersen, 2005d ; Jespersen, 2005a, 2005b, 2005c, 2005d; Sørensen, 2005a, 2005b, 2005c).

The formation of the Welfare Commission gave rise to the formation of an Alternative Welfare Commission formed by the Danish social policy association (Socialpolitisk Forening) as a protest against the Danish government and as part of a movement on “Mobilising in favour of a Denmark to be proud of” (“Mobilisering for et Danmark vi kan være bekendt”). The Alternative Welfare Commission comprises 25 resource people well-known as researchers and participants in the public debate who aim to produce two reports, of which the first (Jensen et al., 2005) dealing with how to finance the Danish welfare state has been issued while the second is still to come. The lines of criticism described above also penetrate the first report of the Alternative Welfare Commission, although the Alternative Welfare Commission from a social policy perspective point of view adds a number of critical points regarding participation at the Danish labour market, educational issues, integration of immigrants, and various social issues.

The present paper devotes its attention to how the Danish Welfare Commission analyses the challenges of the ageing of the population and the dilemmas of welfare, especially as described by Velfærdskommissionen (2005d) and Andersen & Pedersen (2005a, 2005b). It focuses on the main assumptions employed by the Welfare Commission in order to analyse the ageing of the population and the dilemmas of welfare by means of the general equilibrium model DREAM and how these assumptions have been challenged by researchers disagreeing with the basic modelling assumptions. Furthermore, the paper describes the array of welfare reforms suggested by the Welfare Commission – actually, the array which is in accordance with the DREAM model assumptions is so wide that it has surprised the public and the government. Finally, the paper summarises the discussions.

The main assumptions of the Welfare Commission

Traditionally, economic policy in Denmark has been informed by economic analysis based on econometric models, e.g. the SMEC model employed by the politically independent Economic Council (Det Økonomiske Råd) and the ADAM model employed by the Ministry of Finance. These models deal mainly with the short and medium term based on statistical estimation of basic economic relationships within an open Keynesian economy. Contrarily, the Welfare Commission has made use of a general equilibrium model, the so called DREAM model that has been developed since 1997 at Danish Statistics. The DREAM model – Danish Rational Economic Agents Model – focuses on how economic changes and policy affects the

incentives of economic agents, and assumes that the agents act according to rational expectations, i.e. as if they, on average, behave economically rational. While the traditional Danish econometric models are based on a relatively narrow set of data, the DREAM model is based on a comprehensive set of data covering demographic prognoses, the huge amount of Danish register based labour market statistics, a specific model dealing with the effects of legislative changes, the Danish national account, and extensive data on income, pensions, and capital, all available at Danish Statistics. Based on these data, the DREAM model specifically deals with long term prognoses of the Danish economy, economic effects of demographic changes, and sustainability and efficiency of fiscal policy and how changes in fiscal policy affects income and welfare distribution across generations, cf. Knudsen et al. (1998), Pedersen & Trier (2000) and Jensen, Nødgaard & Pedersen (2004) on which the following description is based.

The DREAM model comprises three main sectors, i.e. the households, the firms, and the public sector.

The household sector consists of representative families with children where the children are distributed across families according to the age of the mother in the family, based on a demographic prognosis of age-dependent fertility. The size of the representative family changes during time according to probabilities of child birth and death, and according to patterns for children growing up and moving out. Thus, overlapping generations exist within the household sector. At any time during their life span, the families choose a bundle of goods composed by housing, non-investment goods produced domestically or abroad, and public services. The budget of the family depends on its association with the labour market where eight categories are applied, i.e. part of the work force, studying, temporarily outside the work force, at leave, and four different groups of retirement arrangements. Being part of the work force means getting wages or unemployment benefits where the risk of being unemployed is determined endogenously. Retirement benefits as part of insurance schemes are fully financed by pension funds, and private endowments are treated according to the existing tax rules. Private possessions of bonds and shares, transfers from abroad, and inheritance left by parent households enters the income as well. Finally, the model includes a lump-sum transfer in order to make the budget balance at the end of each period.

The firms are firms with limited liability, profit-maximising in order to maximise the value of shares. Furthermore, as pension funds are treated as marginal investors it is assumed that the value of share is mostly influenced by the level of profits demanded by pension funds investors. In consequence, taxation rules at the pension fund market influences the cost structure of firms (while taxation of private capital income does not). Investments are financed by loan and retained earnings while re-investments are financed by retained earnings only. The cost of installation of new capital and deployment of existing capital is convex, thus leading to the occurrence of pure profits. The convex cost curve implies that capital is adjusted only gradually. Demand for labour and materials depend on current prices as there is no time-lag in the

adjustment of labour and materials. As competition is imperfect, the firms face a downward sloping demand curve and choose production factor combinations and set output prices accordingly.

The public sector produces non-market goods and services that are, primarily, distributed across the household sector according to age and gender, while other types of public activities such as military spending, policing etcetera are determined as a fixed proportion of gross national income. In general, the activities of the public sector are modelled according to existing rules, with only some minor exceptions for calibrating purposes.

International relations appear as perfect international capital transfers, a fixed currency, and high elasticities of foreign trade. The combination of perfect international capital transfers and a fixed currency implies that the domestic interest rate is determined by the foreign interest rate, thus being determined exogenously. Domestic goods are treated as imperfect substitutes for foreign goods, implying that the trade balance depends on the level of domestic economic activity.

The factors most influential in determining total demand are employment and income, including accumulated savings during the lifespan of households. The model assumes rational expectations in a setting where the rent of household savings is larger than the rate of time preference of household consumption. Consequently, savings are accumulated due to a long term plan of increasing consumption per individual as time goes by, i.e. the level of consumption is positively correlated with age.

The labour market is a competitive arena where a homogenous work force supplies labour and voluntarily chooses to be underemployed if the equilibrium of the model implies a level of unemployment. The voluntary choice of underemployment applies only to those who are part of the work force. The wages are determined at the demand side by the firms alongside their determination of the composition of labour, capital and materials in production. In the short and medium term, a higher supply of labour results in lower wages, more people being employed, but also a higher rate of unemployment as capital is adjusted only gradually. In the long term, capital will be fully adjusted and thus the increased supply of labour will lead to increased wages and lower the rate of unemployment until the wages meet the initial level. In consequence, because the model settles down at a stationary state the level of production depends on the level of labour supply. Similarly, the public income derived by taxation depends in the long run on labour supply.

Summing up, and considering the type of proposals put forward by the Welfare Commission which are described in the next section, three important aspects of the DREAM model seem to have been especially important to how the commission understands the Danish economy. First, the supply of labour is crucial to the long term development of income, savings and taxation. Consequently, it has been important for the Welfare Commission to focus on how the future level of labour supply can be increased. Second, consumption is positively cor-

related with age and thus the commission has found it necessary to focus on how the consumption of public goods can be restrained and become more effective as the population grows older. Third, as the Welfare Commission shares the idea that agents are economically rational it has focused on economic incentives for behavioural regulation.

The essential Welfare Commission proposals

Five areas where political action is necessary are identified by the Welfare Commission that subsequently presents one-hundred-and-nine specific proposals in the main report (Velfærds-kommissionen, 2005d), cf. figure 1. The five areas are

- (1) the ageing of the population,
- (2) incentives for labour market participation,
- (3) targeting competitiveness in the global economy,
- (4) behavioural regulation of the use of public benefits and services, and
- (5) management within tight budgets of an increasing demand on health and care.

The ageing of the population

The Welfare Commission estimates that the work force will decrease from approximately 2.8 million at present to some 2.45 million in 2045, i.e. an absolute decrease of some 350,000 during the next forty years. This will happen during a period of time where the demand on human resources will increase, partly because globalisation makes it more important to compete on knowledge, and partly because the demand on public services will increase as a result of increasing wealth. In order to meet these different requirements the Welfare Commission focuses on incentives for entry and exit at the labour market.

Regarding *entry* at the labour market, the Welfare Commission notices that within tertiary education Danish graduates are, on average, five years older than they would have been if they had started secondary education right after the 9th grade of primary school and kept studying until tertiary graduation. Actually, primary school in Denmark comprises 10 grades, but the 10th grade is not mandatory and the 9th grade gives access to further education. However, about half of the Danish pupils complete the 10th grade. In order to speed up the time spend at education, the Welfare Commission suggests that the 10th grade is devoted only to pupils with learning difficulties (and hoping to decrease the number of Danish pupils that never get an education above primary school, which is approximately 20 % of a year). This suggestion which has been widely disputed in the Danish public debate is one out of ten proposals on primary schooling, the other proposals aiming at improving teaching, specialising the education of teachers, and enforcing different types of national tests. Considering further education, the Welfare Commission focuses primarily on educations leading to bachelor and

Figure 1. Number of Welfare Commission proposals within the targeted areas (109 in total)

Target area proposals	No.
<i>(1) Ageing of the population</i>	
- entry: Getting faster to the labour market	
• Primary school	10
• Secondary vocational education	1
• Tertiary education	5
- exit: Leaving the labour market at a later point of life	
• Postponing retirement	5
<i>(2) Incentives for labour market participation</i>	
Assisting young people out of work and education (>30 years old)	4
Changes in the rules for unemployment benefits	7
Increased demand on labour market availability for unemployed	6
Increased effort for upgrading the skills of unemployment	6
Increased effort for upgrading the skills of immigrants	7
Economic benefits for getting a job rather than staying on social benefits	3
Economic benefits of employers for employing immigrants (integration)	2
Responsibility of employers for financing lay-offs	3
Increased opportunities for using flexible jobs for people with low employability	6
<i>(3) Targeting competitiveness in the global economy</i>	
Increased financing of long-term education and R&D	5
Decreased taxation of income and capital	4
<i>(4) Behavioural regulation of the use of public benefits and services</i>	
Creating a real estate market with less public subsidies	12
Focusing social benefits for housing and children for the lowest incomes	2
Mandatory private saving for pensions and removal of various retirement benefits	4
<i>(5) Management within tight budgets of an increasing demand on health and care</i>	
Health taxes are determined by the regions instead of the state	1
Increased individual private payment for public health and care services than today	2
Increased individual responsibility for insurance against lost employability	3
Increased efficiency, quality and productivity in public services	11

Source: Derived from Velfærdskommissionen (2005d)

master degrees. The only proposal on vocational training is about how to secure on-the-job training for pupils that become skilled workers, a problem that has been widely discussed in Denmark during the last couple of decades. In terms of educations leading to bachelor and master degrees, the Welfare Commission focuses primarily on economic incentives for students to begin studying at an earlier age and to complete their studies at a faster rate. Today, Danish students get a monthly allowance while studying which is fixed at the number of years for normal completion of the education in question including an extra year, and with an option for getting low-rent state loans while studying. In general, the Welfare Commission suggests

that fast completion of studies leads to economic bonuses in terms of a decor on repayment of state loans, money, or tax deduction for a period of time after study has been completed.

Regarding labour market *exit*, the Welfare Commission focuses on retirement. Today, old age pension takes effect at the age of 65, and furthermore Danes are allowed to retire at any time at the age of 60-65 provided they have been member of a state approved unemployment insurance arrangement for at least twenty-five years within their last thirty years at the labour market, i.e. the so-called post-wage retirement (“*efterlønsordning*”) where the benefit equals the unemployment benefit, however at a decreasing annual rate during the period of age 60-65. Today, four out of ten Danes aged 60-64 uses the benefits of post-wage retirement. In general, the Welfare Commission proposes to postpone old age retirement and to remove the post-wage retirement at a successive rate. Due to the prospect of enjoying a longer time span in Denmark, the main proposal put forward is to increase the requirement of old age retirement with one month per year beginning in 2013, the main argument being that while there are 4 people at the labour market per Dane aged 65+ today, the number will only be 2.5 in 2040 according to Welfare Commission prognoses. Similarly, it is suggested to increase the requirement for post-wage retirement with four months per year beginning in 2009 leading to a complete removal of the arrangement in 2028. Finally, other types of retirement are supposed to be removed according to similar arrangements. The effects of the proposals on old age retirement and post-wage retirement are summarised in figure 2.

Figure 2. *The effects on old-age retirement and post-wage retirement, examples*

People born.....	can use post-wage retirement at the age of	months of post-wage retirement	old age retirement at the age of
Before 01.09.48	60	60	65
01.07.50-31.05.51	61	51	65 and 3 months
01.04.53-28.02.54	62	42	65 and 6 months
01.01.56-30.11.56	63 and 4 months	30	65 and 9 months
01.10.58-31.08.59	64	24	66
01.06.62-30.04.63	65 and 4 months	12	66 and 4 months
After 30.04.63	The post-wage retirement no longer an option		+1 month per year
01.10.69-31.08.70			67
01.10.80-31.08.81			68

Source: *Velfærdskommissionen (2005d)*

Incentives for labour market participation

Since the prime concern of the Welfare Commission is the future size of the workforce, the commission devotes its main attention to incentives for labour market participation. Actually, the target area for incentives for labour market participation is the target area most heavily analysed in Velfærdskommissionen (2005d), and consequently no less than forty-four out of the commission's one-hundred-and-nine proposals regards the target area in question. The reason is quite simple, according to the logic of the Welfare Commission. Today, some 0.9 million adult Danes are on social benefits, of which 0.2 million are engaged in education and 0.2 million enjoy early retirement for physical and psychological reasons. This leaves half a million adult Danes that enjoy different types of social benefits, primarily benefits for unemployment, social welfare (for those who are not participating in unemployment insurance systems) and sick leave. Ideally, these types of benefits are applied to situations where absence from the labour market is temporary; however four out of ten have had little or no connection to the labour market during the recent three years. In most cases, these four out of ten are low-skilled, mostly with primary school as the main educational background. Especially among immigrants, the problem is severe, as the rate of labour market participation is about only 50 % as compared to 77 % of non-immigrants. The low rate of labour market participation among immigrants has actually been declining during the last twenty years, from some 70 % to the current 50 % (Velfærdskommissionen, 2005a). In essence, by creating schemes for incentives for labour market participation, including labour market policies for integration of immigrants, it may be possible to counter-act a substantial part of the decrease of the future work force, according to the Welfare Commission.

The proposals put forward by the Welfare Commission may be categorised into three groups: Schemes targeted at young adults, i.e. in the age group of 18-30; schemes targeted at providing economic incentives for an increased labour supply; and schemes targeted for increasing employability in general.

Regarding schemes targeted at the age group of 18-30, the Welfare Commission points to the need for shortening the period which young adults can spend before they are included in public arrangements for job training and education combined with a decrease in social benefits in order to induce young unemployed to engage in job seeking and education.

Concerning economic incentives for increasing the labour supply, the Welfare Commission primarily suggests a shortening of the period in which unemployment benefits can be obtained from the present 4 years to 2.5 years combined with higher requirements for entering unemployment insurance arrangements. Today, in order to enter an unemployment insurance arrangement you need to work only fifty-two weeks full time within a period of three years, and if you are about to exceed your four year period of unemployment benefit you need only to have worked 26 weeks full time within the last three years in order to enter a new four year period. Consequently, the Welfare Commission suggests that the fifty-two weeks requirement

complies all over. In order to make this new system work, the Welfare Commission stresses the importance of increasing the efficiency of the current public system for finding job and education opportunities for the unemployed combined with economic sanctions if the unemployed fails to cooperate with the public authorities on the matter. Furthermore, the commission suggests that the difference between unemployment benefits and low-paid jobs is increased, primarily by tax arrangements including a bonus for getting a job if you have been long term unemployed or is an immigrant.

Finally, regarding improved employability, the Welfare Commission presents a wide array of proposals, aiming at schemes for upgrading of skills, more flexible arrangements for people that for social or physical reasons need part time or less demanding jobs, a stronger emphasis on securing that immigrants are employable before granting them a Danish permit for employment combined with consultancy of immigrant entrepreneurs and host arrangements for immigrants, and special job arrangements with public subsidies where immigrants and non-immigrants can enter on-the-job training before getting an ordinary job. In addition, it is suggested that employers contribute more to unemployment insurance arrangements. The reason is that hiring-and-firing policies are easy to embark on today because most of the unemployment benefits are taken care of by public and semi-public financial schemes. Although these arrangements have contributed to high flexibility at the Danish labour market, the commission is concerned with the fact that about half a million employed receives unemployment benefits for shorter or longer periods of time at an annual basis.

Targeting competitiveness in the global economy

The point of departure for the Welfare Commission regarding how to improve the Danish competitiveness in the global economy is that a small high income welfare economy needs to compete on knowledge intensive products and services, and to counter-act the processes by which labour and capital flow to economic areas for reasons of taxation. Even though the effects of globalisation has been extensively analysed by the commission (Velfærdskommissionen, 2005a), the number of proposals is relatively small and focused on R&D and taxation issues, the exception being a proposal that universities should be economically rewarded if they are able to educate bachelors and masters with low unemployment risks.

Regarding R&D, the Welfare Commission focuses on the Barcelona declaration by which the EU countries have stated that public and private spending on R&D must constitute a share of 3 % of GDP by 2010 (public spending 1 % and private spending 2 %). The background of the Barcelona declaration is the concern of the EU countries that the European community will not be able to keep up with the spending on R&D in the most important competitor countries like USA, Japan and China. In an international context, Denmark lacked behind the OECD average on R&D spending as share of GDP during the 1970-1980ies, but has caught up during the last ten years with annual average growth rates at almost 7 % (1991-2001) as

compared to average annual growth rates at about 2.5 % in EU15 and 3 % in OECD (according to the OECD MSTI database employed in Velfærdskommissionen, 2005d). However, even though the total share of public and private spending on R&D in GDP has grown to 2.6 %, Denmark is still lacking considerably behind the Barcelona target of 3 % and even more so compared to the Nordic EU countries Finland (3.5 %) and Sweden (4.2 %). An important reason, the Welfare Commission argues, is that the Danish economy is dominated by small and medium sized firms that for reasons of their size have less opportunity to invest in R&D. Thus, public spending on R&D must compensate for the lack of private spending. However, the share of Danish public spending on R&D has been declining for almost a decade from 0.83 % of GDP in 1998 to 0.72 % of GDP in 2005 and is supposed to increase to only 0.73 % in 2006 (according to the law on the fiscal year of 2006 passed in the parliament this fall). Consequently, in order to meet the Barcelona target in 2010, the public spending on R&D must grow at a rate of 12 % annually in 2007 and onwards just to reach the 1 % of GDP target for public spending, and grow even faster if public spending is to compensate for lack of private spending.

This would imply a strategy of rapid growth against which the commission is rather sceptical, for two reasons. First, in order to meet the Barcelona target it is necessary to increase recruitment and training of researchers. According to the Danish Research Council (Danmarks Forskningsråd, 2003), about 2,700 new PhD students must be recruited in 2010 as compared to the about 1,500 that are by now expected in 2010 based on public expenditure planning that is fixed at the 2006 level. Thus, the Barcelona declaration implies that the number of PhD students increases by 80 % during 2007-2009. However, as it has proven difficult to recruit PhD students in Denmark during the last five years even at the current number, the commission finds it difficult to increase recruitment rapidly without decreasing the quality of researchers. Second, the Welfare Commission warns against a general increase of public spending for fear that new investments may be allocated to research groups that do not enjoy a critical mass necessary for achieving internationally comparable performance. Consequently, the commission proposes a careful strategy (implying that the Barcelona target will not be met in 2010) combined with targeting internationally promising research groups and increased financing of non-university research and knowledge institutions.

Regarding taxation, the Welfare Commission proposes a reform of the current state tax system comprising a so-called bottom tax (“bundskaat”) at 5.5 % of private income, a middle tax (“mellemskaat”) at 6 % of all private income above DKR 254,000 and a top tax (“topskaat”) at 15 % of all income above DKR 311,500 (2005 figures). Due to increasing wealth, 40 % of all full time employed tax payers pay maximum tax (20 % of all tax payers) as compared to 10 % in the beginning of the 1980ies (7 % of all tax payers). In order to decrease taxation of labour, the commission proposes that the middle tax is removed and that the rate of top tax is increased to 17 % of all private income above DKR 370,000. In effect, the marginal taxation of wage will decrease from 63 % to 59 % (and average taxation will fall below the current 40

%). In addition, the Welfare Commission proposes that the tax bonus for being employed is increased from 2.5 % of private income (however a maximum of DKR 7,200) to 11 % of private income (however a maximum of DKR 15,000). Furthermore, it is suggested that taxation on savings is reduced (however no specific proposals are put forward). Finally, the commission proposes that company taxation is reduced from 28 % to 25 %. The combined tax reform is supposed to take effect successively during 2010-2015.

Behavioural regulation of the use of public benefits and services

The main point of departure of the Welfare Commission regarding behavioural regulation of the use of public benefits and services is that due to increasing wealth less people will be in need of the public welfare system. Thus, the commission makes its course for dismissing a number of welfare benefits, e.g. old age discounts on public transportation and real estate taxes irrespective of the size of private fortune. Especially, the Welfare Commission focuses on social benefits for housing and children, savings for pensions and retirement benefits, and subsidies for real estate. In terms of social benefits for housing and children, the Welfare Commission proposes, in general, that the benefits are reduced. Concerning savings for pensions and retirement benefits, it is suggested that private savings for pensions become mandatory and that various discounts for old age pensioners are dismissed. Regarding public subsidies for real estate, a wide array of tax arrangements means that all sorts of real estate get tax reductions or public subsidies irrespective of increases in real estate values. For private real estate, the commission proposes various schemes for increasing taxation in order to keep up with the increase of real estate values. For private real estate used for rental business, the dismissal of various tax arrangements is suggested in order to let taxation reflect the real capital income on rental business. For real estate with shared ownership (“andelsboliger”, a common phenomenon in Denmark) where real estate value taxes are not in existence today, a real estate value tax like the one for private real estate is suggested. Finally, it is proposed that various subsidies and tax freedom for social housing are dismissed, and that the ensuing revenue is used for schemes targeting problems of social needs and ghettoisation within the social housing sector.

Management within tight budgets of an increasing demand on health and care

The Welfare Commission anticipates an increasing demand on health and care, for several reasons. *Ceteris paribus*, the ageing of the population increases the demand on health and care services as older people demand more services than young people. Additionally, a rapid rate of innovation within the health sector leads to more advanced opportunities for treatment which, besides leading to an increasing demand, also implies higher levels of expenditure. The Welfare Commission expects that these inducements to demand will become stronger as

wealth increases due to the empirical phenomenon that demand tends to grow faster than real income (Wagner's Law), and that an ensuing financial pressure will occur due to the tendency of productivity in services to grow slower than in the economy as a whole (Baumol's Law), cf. Andersen & Pedersen (2005a, p.201). All of this implies that the historical tendency of health and care expenditures to grow at a faster rate than GDP will persist, or even become stronger, in the future. Thus, managing within tight budgets will become even more important in the future.

In 2007, when the new Danish structural reform takes effect and the regional level will deal mainly with the health sector (Gjerding, 2005), the current regional tax is dismissed and a new health tax put in its place. As for now, the health tax will be claimed by the state that subsequently will transfer allowances to the new regions, partly as general allowances, partly as discrete allowances targeting specific areas and fields of activity. However, as management within tight budgets becomes even more important in the future – assuming that the health tax will not increase – the Welfare Commission suggests that the claim of the health tax is transferred to the regional level in order to make sure that responsibility for expenditures and how to finance the expenditures are placed at the same level of government. Furthermore, the commission suggests private individual payment for a number of health and care services in order to finance about 10 % of the growth in expenditures within the sector and install behavioural regulations for downsizing the growth of future demand. Today, private individual financing of the sector is 18 % of total financing, mainly in terms of payment for visiting doctors and dentists, buying hearing aids and glasses, and so on (Indenrigs- og Sundhedsministeriet, 2005, as employed in Velfærdskommissionen, 2005d). Increasing financing by private individual payment will mainly contribute to public budgets since private hospitals and clinics cover only 1.5 % of total health capacity in Denmark. Figure 3 compares the current Danish system with those of the other Nordic countries, as far as the health sector is concerned.

Figure 3. *Extent of private individual payment in the health sector*

	Consulting the family doctor	Consulting specialised doctors and temporary treatment at hospitals	Being admitted to hospitals	Medicine
Denmark	Free in most cases		Free	Some private individual payment
Sweden	Some private individual payment (SPIP)		SPIP	
Norway			Free	
Finland			SPIP	

Source: Velfærdskommissionen (2005d)

However, although private individual payment will contribute to financing health and care, the main contribution to managing within tight budgets must come from focusing on productivity and quality of services, the Welfare Commission argues. Consequently, the commission puts forward an array of proposals to that effect mainly based on three types of instruments: Benchmarking and performance contracts between authorities and hospitals, and between hospitals and hospital management; combining general budgeting with an increased discrete budgeting in order to target specific fields of activity and gradually decrease some budgeting in order to force especially local authorities in the field of care to become more effective; and public tender aiming at decreasing the cost of producing public services while maintaining or perhaps increasing the level of quality.

Conclusion

Inspired by the DREAM model, the Welfare Commission has focused on the long term in analysing the future challenges to the Danish welfare system and stressed the importance of increasing the supply of labour, decrease the demand on public services and improve the financial base of the welfare state, primarily by economic incentives. Their proposals imply the removal of a number of existing social benefits, based on the argument that due to increasing wealth fewer becomes dependent on social benefits and thus the remaining social benefits can be targeted as those who really need it – an argument that as a response to criticism regarding decreasing solidarity in the Danish welfare state has been rephrased as “true” solidarity (Velfærdskommissionen, 2005d) and that targeted welfare does not necessarily lead to less welfare (Kleven, Kreiner & Lassen, 2005).

The Danish government has adopted a cautious approach to the proposals of the Welfare Commission which have induced political commentators to frantic speculation. The speculations have mainly followed two paths: On the one hand, the commission has been accused of adhering to a hidden governmental agenda on how to transform the current welfare state into a more liberal and laissez-faire society, so it may be wise for the government not to embrace the proposals of the commission right away. On the other hand, an important part of the political strategy of the government is to change the welfare state only gradually in order to make sure that its political base does not fail, primarily taking into consideration that the main supporter of the government, the right-winged Dansk Folkeparti, has adopted the classic social democratic concern for social benefits for pensions, health and care. Consequently, the wide array of proposals put forward by the Welfare Commission is slightly embarrassing because it involves moving too fast. A third line of speculation might be that the Welfare Commission has criticised the Danish tax stop (Velfærdskommissionen, 2005d, ch.11), i.e. the fact that Danish taxes have been fixed during the present government, an initiative that carries extremely high political priority. On the one hand, the commission argues in favour of the tax stop, stating that it can be interpreted as a kind of budget rule by which the public sector is supposed to be-

come increasingly effective as the real value of public expenditure is decreasing on an annual basis. On the other hand, the commission finds that the tax stop is perverting the tax structure. For instance; the tax on real estate has been fixed at the 2001 level with the effect that the strong increase in Danish real estate values since 2001 has been tax free which might the commission interprets as a state subsidy to private real estates. At any rate, the real estate tax share of public revenue will fall from the current 0.7 % of GDP to 0.4 % of GDP in 2040, according to the Welfare Commission's prognosis. A similar reasoning goes for value added taxes where the current share of 4.5 % of GDP is expected to fall to 2.8 % in 2040. While this is exactly the kind of development desired by the current liberal government, the Welfare Commission argues that the tax stop contributes to make the financial pressure on the public finances even more severe than anticipated by the commission.

As mentioned initially, several lines of attack against the Welfare Commission has been launched. Among economists, especially the use of the DREAM model has been controversial. Actually, Jespersen (2005c, p.245) has argued that the Welfare Commission interprets the results of the DREAM model incorrectly since within a general equilibrium model the public sector does not experience financial constraints. If the economy is closed, a public deficit is balanced by a private sector surplus. If the economy is open, as in the DREAM model, a public deficit is divided between the private sector and foreign markets. Thus, depending on the level of private saving, a public deficit is translated into a balance-of-payment problem and not necessarily into a fiscal problem. However, this line of argument is mainly for polemic reasons. In general, two broad arguments have been put forward.

First, it has been argued that long term prognoses are extremely uncertain and that the ensuing results must be interpreted with the outmost care. It is almost impossible to predict what will happen in society, for instance if one takes into account the considerable structural changes of modern life during the last thirty years. Furthermore, the results depend heavily on the initial parameters, and it is generally argued that the Welfare Commission is too pessimistic and subsequently employs wrong parameters (e.g. Andersen, 2005d; Lund, 2005b). For instance, Lund (2005b) argues that the commission underestimates the increase in the level of skills of the work force and the increase in the level of labour market participation among immigrants, and that the commission makes the error of equating longer life span with an increase in the demand for health services. Thus the commission underestimates the future labour supply and overestimates the demand on health services. In addition, Lund (2005c) points to the uncertainties of demographic prognoses and goes through a number of prognoses prepared by Danish Statistics, the Economic Council, the Danish government, and the Welfare Commission that show a considerable range both regarding the estimates of population and the estimates of expected life span. These points of view have also been advocated by Andersen (2005d) and Sørensen (2005c) in a debate where they are refuted by the Welfare Commission (Andersen & Pedersen, 2005b).

Second, the DREAM model itself has been attacked. The main criticism is that the neo-classical foundations of the model do not reflect the intricacies of the current Danish welfare state. Basically, since agents behave rationally and the future can be predicted and thus taken into account in private economic behaviour, a public sector is not really needed, according to Jespersen (2005d) who furthermore argues that the DREAM model analyses the public sector as a private sector, however primarily financed by taxes, with no effect on total production and employment even in cases of increased public activities, apart from consuming almost fixed parts of GDP (Jespersen, 2005c). However, the interpretation of the passive role of the public sector has been refuted by the Welfare Commission by reference to an indirect effect, stating that the public sector affects total production and employment by the effect of public spending on the composition of total spending (Andersen & Pedersen, 2005b). Concerning the equilibrating mechanisms of the model, disagreements have been on how to model intergenerational income distribution, and whether the DREAM model assumes too fast adjustments to equilibrium (Vastrup, 2005; Andersen & Pedersen, 2005b). Regarding unemployment, DREAM fixes the basic rate of unemployment at 5 % and rates of unemployment above this level occur as voluntary unemployment based on a rational choice between labour and leisure. In the long run, the model settles down at a stationary state where the distribution between labour and leisure is determined by the initial wage formation at the level of 5 % unemployment. Thus, the size of labour supply becomes essential to fiscal sustainability of the welfare state. Finally, as argued by Jespersen (2005d), due to Pareto optimality the model functions without a measure of distribution and welfare, i.e. the utility value of marginal income is assumed to be same for rich and for poor, and the same in all kind of uses. Redistribution will diminish total welfare, and welfare is not increased if money are spend on education rather than charter holidays (*ibid.*, p.72).

Abstracting from the economic-theoretical discussions on the work of the Welfare Commission and the DREAM model, one major observation comes to mind. The extensive use of the DREAM model by the Welfare Commission is outstanding in the sense that for the last four decades economic policy in Denmark has mainly been informed by Keynesian reasoning. The exclusiveness by which the DREAM model has informed the theoretical and practical decisions of the Welfare Commission is in conflict with a long-standing policy tradition. Invoking neoclassical reasoning on general equilibrium as part of a major political agenda is bound to cause resistance within the Danish economic community and among those who oppose the right-wing liberal agenda of the present government. Thus, the debate will probably become even more intense during the coming months as the government starts initiating proposals inspired by the Welfare Commission.

References

- Andersen, J.G. (2005a), "Velfærdsdebat er overhalet af virkeligheden", *Politiken*, 7. december. ["Welfare debate overtaken by reality", December 7].
- Andersen, J.G. (2005b), "Efterløn + golf minder om myten om børn + storke", *Politiken*, 8. december. ["Post-wage + golf resembles the myth of children and the stork"].
- Andersen, J.G. (2005c), "Økonomisk ansvarlige forslag? Nej, snarere tværtimod", *Politiken*, 9. december. [Economically responsible suggestions? On the contrary", December 9].
- Andersen, J.G. (2005d), "Splinten og bjælken", *Nationaløkonomisk Tidsskrift*, 143: 258-264. ["The mote and the beam" (author's note: New testament, Matthew, VII:3)].
- Andersen, J.G. & Borchorst, A. (2005), "Tynges Danmark af en kvindebyrde?", *Politiken*, 6. december. ["Is Denmark weighed down by a female burden?"].
- Andersen, T.M. & L.H. Pedersen (2005a), "Demografi, velstandsudvikling og makroøkonomiske strategier", *Nationaløkonomisk Tidsskrift*, 143: 189-229. ["Demography, growth of wealth and macroeconomic strategies"].
- Andersen, T.M. & L.H. Pedersen (2005b), "Debat om fremtidens velfærd – opsamling og replik", *Nationaløkonomisk Tidsskrift*, 143: 275-298. ["Debate on the future wealth – recapitulation and an answer"].
- Danmarks Forskningsråd (2003), *Danmarks Forskningsråd årsrapport 2002. Vejen til Barcelona. Fremtidig velfærd forudsætter en styrket forskningsindsats*, København: Ministeriet for Videnskab, Udvikling og Teknologi. [The Danish Research Council, *Annual report 2002. The road to Barcelona. Future welfare depends on an increased research effort*, Copenhagen: The Ministry of Science, Technology and Innovation].
- Gjerding, A.N. (2005), *The Danish administrative structural reform of government*, mimeo, Aalborg: Department of Business Studies, Aalborg University.
- Greve, B. (2005), "Er velfærdsstaten i krise?", *Kritisk Debat*, december. ["Is the welfare state in a state of crisis?", December].
- Helbak, J. (2005), "Velfærdsstatens ulidelige tyngde", *Kritisk Debat*, december. ["The intolerable weight of the welfare state", December].
- Indenrigs- og Sundhedsministeriet (2005), *Sundhedssektoren i tal*, København: Indenrigs- og Sundhedsministeriet. [The Ministry of the Interior and Health, *Health sector statistics*, Copenhagen: The Ministry of the Interior and Health].
- Jensen, P.H., H.H. Lund, P. Schultz-Jørgensen & B. Schwartz, eds. (2005), *Velfærdssamfundets fremtid. En kritik og perspektivering af Regeringens Velfærdskommission – og nogle alternativer*, Rapport nr.1, Den Alternative Velfærdskommission, København: Socialpolitisk Forlag. [The future of the welfare society. A critique of and further perspectives on the government welfare commission – and some alternatives, Report no.1, The Alternative Welfare Commission, Copenhagen].
- Jensen, S.E.H., U. Nødgaard & L.H. Pedersen (2004), "Fiscal Sustainability and Generational Burden Sharing in Denmark", Copenhagen: Danish Statistics (www.dream.dk). Originally paper prepared for the workshop "Generational Accounting in the Nordic Countries", Reykjavik, February 24, 2001).
- Jespersen, J. (2005a), "Spåkoner har mange navne: Økonomer er ét", *Politiken*, 8. september. ["Fortune tellers have many names. Economist is one"].

Jespersen, J. (2005b), "Velfærdskommissionen kryber udenom", *Politiken*, 29.oktober. [The Welfare Commission is avoiding the issue, October 29].

Jespersen, J. (2005c), "Makroøkonomisk analyse, finanspolitisk holdbarhed og DREAM-modellen: en umage cocktail", *Nationaløkonomisk Tidsskrift*, 143: 243-249. ["Macroeconomic analysis, fiscal sustainability and the DREAM model: an unhealthy cocktail"].

Jespersen, J. (2005d), "Regeringens velfærdskommissions brug af økonomisk teori og beregningsmodel", in Jensen et al. (2005). ["The use of economic theory and calculation model by the government's welfare commission].

Kleven, H.J., C.T. Kreiner & D.D. Lassen (2005), "Velfærd på amerikansk?", *Weekendavisen*, 18.februar. ["Welfare the American way?"].

Knudsen, M.B., L.H. Pedersen, T.W. Petersen, P. Stephensen & P. Trier (1998), *Danish Rational Economic Agents Model – DREAM, Version 1.2*, Copenhagen: Danish Statistics (www.dream.dk).

Kolstrup, S. (2005), "Historiske modstykker til Velfærdskommissionens mørkemænd", *Kritisk Debat*, december. [Historical counterparts of the pessimists of the Welfare Commission"].

Lund, H.H. (2005a), "Det forkerte problem og de forkerte løsninger", *Kritisk Debat*, december. ["The wrong problem and the wrong solutions", December].

Lund, H.H. (2005b), "Samfundsøkonomien kan bære velfærd", in Jensen et al. (2005). ["The economy can sustain the welfare"].

Lund, H.H. (2005c), "Usikkerheder i forbindelse med Velfærdskommissionens befolkningsprognoser", in Jensen et al. (2005). ["Uncertainties regarding the demographic prognoses of the Welfare Commission"].

Pedersen, L.H. & P. Trier (2000), *Har vi råd til velfærdsstaten*, Copenhagen: Danish Statistics (www.dream.dk). ["Can we afford the welfare state?"].

Puggaard, R. & P. Abrahamson (2005), "Opbakning til velfærd", *Politiken*, 18.april. [Supporting welfare"].

Sørensen, C. (2005a), "Velfærdskommissionens anden rumrejse", *Politiken*, 4.december. ["The second space Odysseé of the Welfare Commission"].

Sørensen, C. (2005b), "Velfærdskommissionen har fortabt sig i 1000-årige tidståger", *Politiken*, 6.december. ["The Welfare Commission is lost in the mist of a thousand year range"].

Sørensen, C. (2005c), "Velfærdskommissionens analyse af finanspolitisk holdbarhed – før og nu", *Nationaløkonomisk Tidsskrift*, 143: 230-242. ["The Welfare Commission's analysis of fiscal sustainability, before and now"].

Vastrup, C. (2005), "Velfærdskommissionens makroøkonomiske analyser og anbefalinger", *Nationaløkonomisk Tidsskrift*, 143: 250-257. ["The Welfare Commission's macroeconomic analyses and proposals"].

Velfærdskommissionen (2004), *Fremtidens velfærd kommer ikke af sig selv*, analysereport, København: Velfærdskommissionen. [The Welfare Commission (2004), *Future welfare does not happen by chance*, analysis report, Copenhagen: The Welfare Commission].

Velfærdskommissionen (2005a), *Fremtidens velfærd og globaliseringen*, analysereport, København: Velfærdskommissionen. [The Welfare Commission (2005a), *Future wealth and globalisation*, analysis report, Copenhagen: The Welfare Commission].

Velfærdskommissionen (2005b), *Fremtidens velfærd – sådan gør andre lande*, analysereport, København: Velfærdskommissionen. [The Welfare Commission (2005b), *Future welfare – this is what other countries do*, analysis report, Copenhagen: The Welfare Commission].

Velfærdskommissionen (2005c), *Demografi, velstandsdilemma og makroøkonomiske strategier*, teknisk analysereport, København: Velfærdskommissionen. [The Welfare Commission (2005c), *Demography, dilemmas of wealth and macroeconomic strategies*, technical analysis report, Copenhagen: The Welfare Commission].

Velfærdskommissionen (2005d), *Fremtidens velfærd – vores valg*, København: Velfærdskommissionen. [The Welfare Commission (2005d), *Future welfare – our choice*, Copenhagen: The Welfare Commission].