

Two Decades of Structural Reform in Denmark: A Review¹

1 Introduction

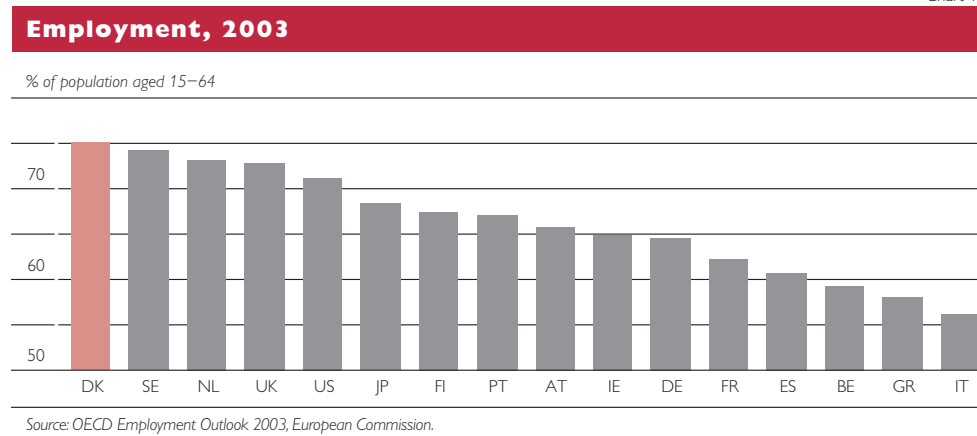
In an international perspective, Denmark (and Scandinavia's) economic performance is notable for combining a generous welfare state and high income equality with a fairly strong labour market performance and, more broadly, a well-functioning economy. At the same time, the total tax pressure is among the highest in the world, close to 50% of GDP, and the number of transfer recipients is high. In 2003, more than 20% of Danes of working age (defined as 15–64 years) received some sort of transfer income, a figure boosted by more people being in early retirement or on disability benefits than there are unemployed.

The employment rate is the highest among the EU-15, the U.S.A. and Japan (see chart 1a).

The unemployment rate stood at some 5½ percent in 2003, which was a good deal below that of most EU-15 countries and lower than the U.S. (see chart 1b). In purchasing power adjusted terms, GDP per capita is among the highest in the EU-15, (chart 1c).² Productivity growth per employee since 1995 exceeds the EU-15 average, but has fallen behind the strong performance of the U.S.A. and some of Denmark's Scandinavian neighbours, namely Sweden and Finland which both have a strong(er) presence in IT-sectors (chart 1d).

Meanwhile, income inequality is among the lowest in the OECD, and the public expenditure ratio among the highest. A strong focus is maintained on high public service standards and avoiding poverty.

Chart 1a



¹ This paper is in large part inspired by Callesen (1997). The views expressed are those of the authors alone and not necessarily those of the Danish Ministry of Finance.

² The gap with the U.S.A. largely reflects fewer annual hours worked per employee, and so does not imply a similar gap in welfare. Fewer hours worked may reflect different preferences over leisure versus consumption as well as weaker work incentives at the margin from high marginal taxes.

Chart 1b

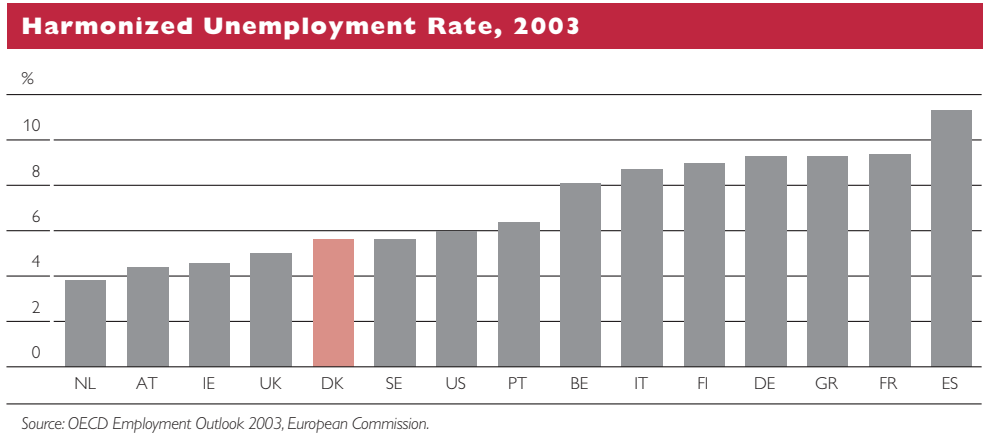


Chart 1c

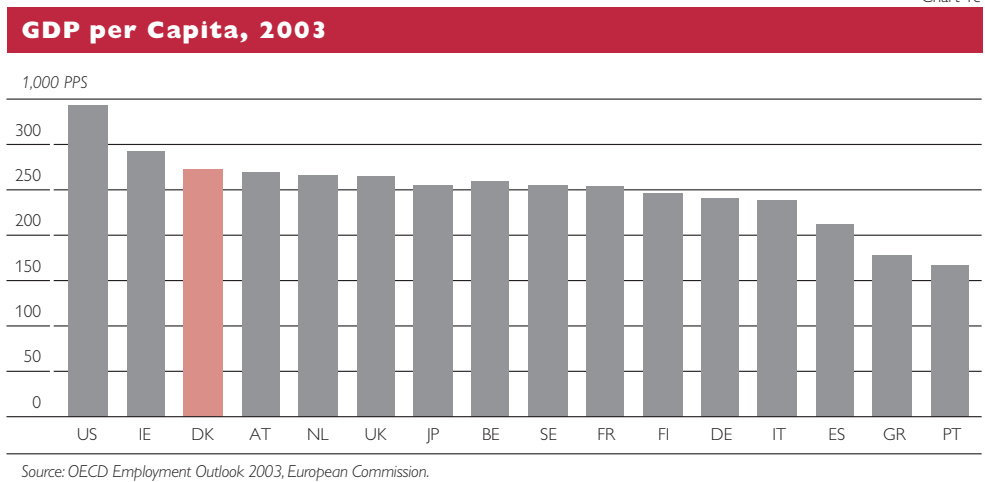
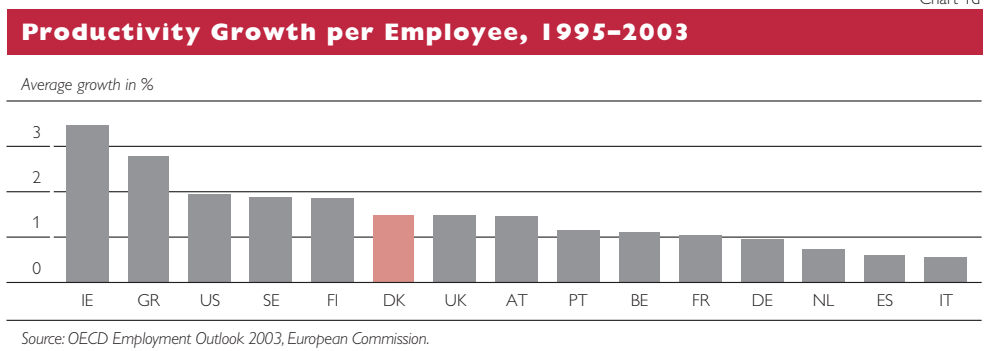


Chart 1d



Public and private savings are high in an international comparison, providing both for a high level of private gross fixed investment and a sizeable current account surplus (i.e. total financial savings), (see table 1).

The generally favourable employment and savings performance should be seen against the background of a long period of structural reforms that helped turn around the economy from a dismal position in the 1970s. The reforms have focused on

Table 1

Total, Real and Financial Savings , 2002

	DK	Euro area	US	SE	UK
	% of GDP				
Total savings	22.9	21.3	14.0	21.2	14.5
– of which private	19.6	21.0	14.0	17.2	14.6
– of which public	3.3	0.3	0.0	4.1	-0.1
Total investment	20.8	20.2	18.6	17.1	16.3
– of which private	19.1	17.6	15.2	14.1	14.9
– of which public	1.8	2.6	3.4	3.0	1.4
Total financial savings	2.1	1.1	-4.6	4.1	-1.8
– of which private	0.5	3.3	-1.2	3.1	-0.3
– of which public	1.6	-2.3	-3.4	1.1	-1.5

Source: OECD, *Economic Outlook 74 (2003)* and Statistics Denmark.

strengthening private and public savings and improving the functioning of labour and product markets.³ In this vein, the reforms have in some areas scaled back on easy access and rights to universal welfare services, while maintaining the basic functions of the welfare state in terms of alleviating exposure to economic risks, providing old-age security, alleviating poverty, and providing equal education opportunities.

In part, the key to Denmark's improved performance is that policy-makers managed to move beyond the traditional efficiency versus equity debate, with its strong ideological overtones, to find ways of combining efficiency and equity. In particular, generous welfare support systems are maintained for those that qualify, while alleviating disincentives e.g. by restricting access or testing availability for work. The tax system has been reformed to reduce marginal tax rates despite a continued (slight) increase in the total tax-to-GDP ratio since the mid-1980s – although marginal tax rates remain high.

A fairly wide political consensus has also formed behind the objective of running sustainable fiscal (and structural) policies in view of the future financial pressures related to the ageing of the population. The government's so called *2010-strategy* is focused on running public surpluses to reduce public debt, and increasing employment through structural measures, to ensure the sustainability of public finances. The adjustment burden still outstanding in terms of fiscal policy measures or structural reform in order to prevent public debt from rising beyond bounds is, on available estimates, moderate compared to most EU countries and the U.S.A., (see Frederiksen, 2003 and 2004 and Economic Policy Committee, 2003).

Significant policy challenges remain to prepare for ageing, however, in particular with respect to tight expenditure control, and continued structural reforms to raise sustainable employment. A Welfare Commission has been established to explore ways of reforming the Danish welfare model with a view, notably, to boost labour supply and employment.

³ In this paper, "structural reform" refers not only to measures that raise potential output and reduce rigidities, e.g. in labour markets, but also to changes in tax and pension systems that impact savings and investment incentives.

2 Historical Policy Challenges and the Timing of Major Policy Initiatives

Denmark entered the 1980s in an unfavourable macroeconomic position. As in the rest of the EU, unemployment and inflation had risen from very low levels in 1972 to double-digit ranges in 1982, with Denmark experiencing a slightly worse deterioration than the average. Long-term interest rates had soared to 20% under the impact of high foreign rates and a lack of credibility of the exchange rate parity within the ERM in the aftermath of repeated devaluations of the krone in 1979–82.

Unlike other EU countries Denmark had a seemingly chronic current account imbalance – with an uninterrupted 30-year run of deficits. The imbalance was rooted in disincentives to save in the private sector and, from the mid-1970s, mounting public deficits. Under the impact of rising unemployment and high interest rates, the government deficit reached 9% of GDP in 1982.

Against this unfavourable background, Denmark has had four major (stabilization) policy adjustments since the early 1980s, namely:

- The introduction of the fixed exchange rate policy in 1982 backed by strong fiscal tightening

Chart 2a

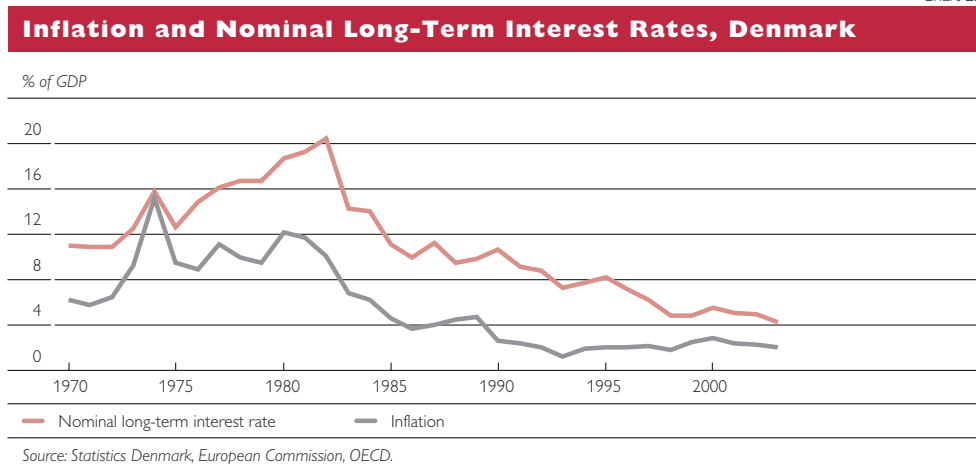


Chart 2b

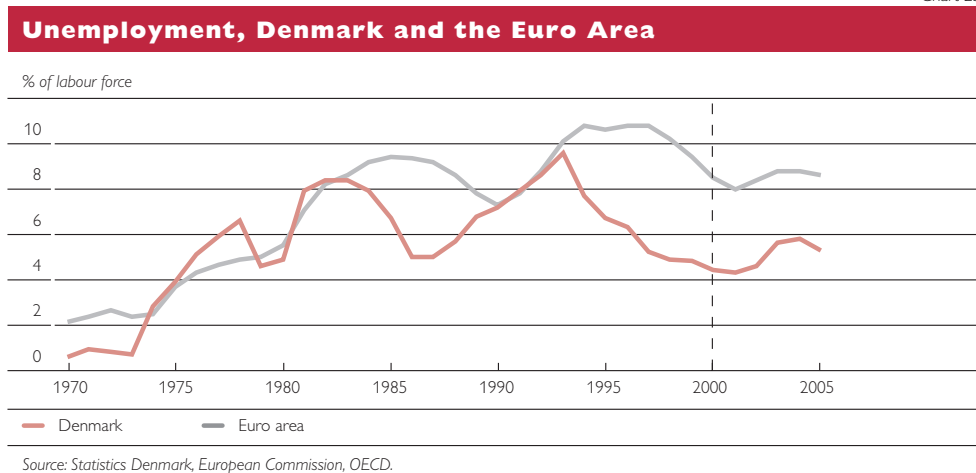


Chart 2c

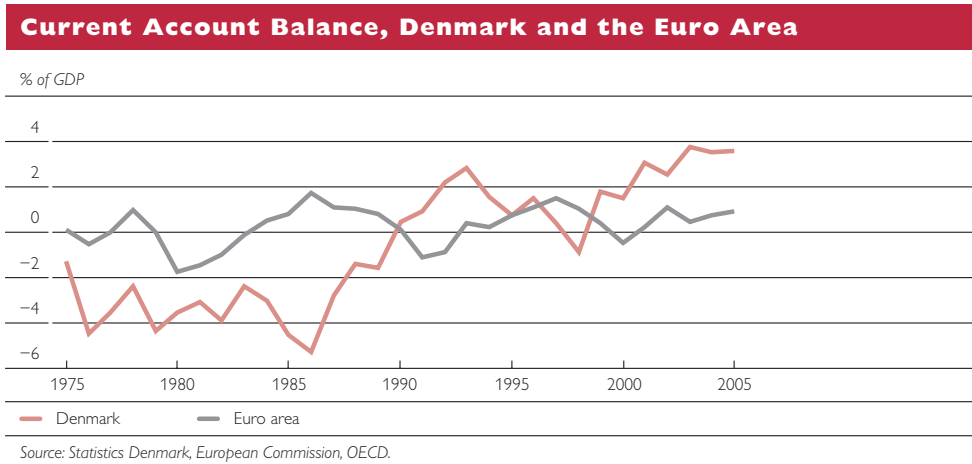
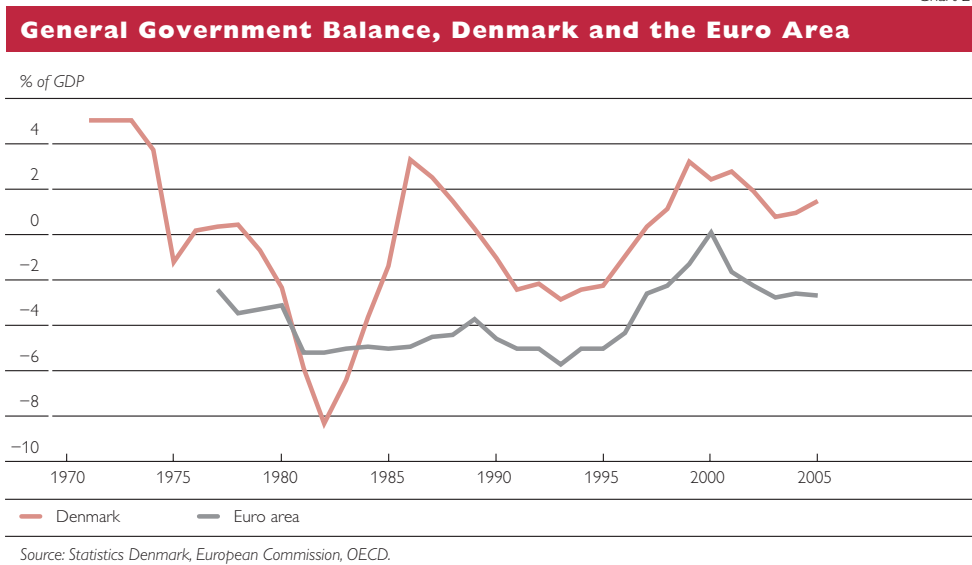


Chart 2d



and the abolition of wage indexation.

- The 1986 “potato diet” and 1987 tax reform to redress overheating pressures and external imbalances by strengthening private savings.
- The “kick start” of 1994 to promote recovery and reduce unemployment.
- The “Whitsun package” of 1998 to prevent overheating and strengthen savings.

The timing of these packages was related to major imbalances in the economy in the shape of significant

output gaps (chart 3a) and, on the first two occasions, substantial savings-investment imbalances (charts 2b and 2c).

The turnaround in macroeconomic performance was initiated with the introduction of the fixed exchange rate policy backed by strong fiscal tightening from late 1982 onwards. This episode has been labelled an example of “expansionary fiscal tightening” (see Alesina and Perotti, 1995, and others). The fiscal tightening was more than offset by an exceptional decline in long-term rates from 20% to 10%

Chart 3a

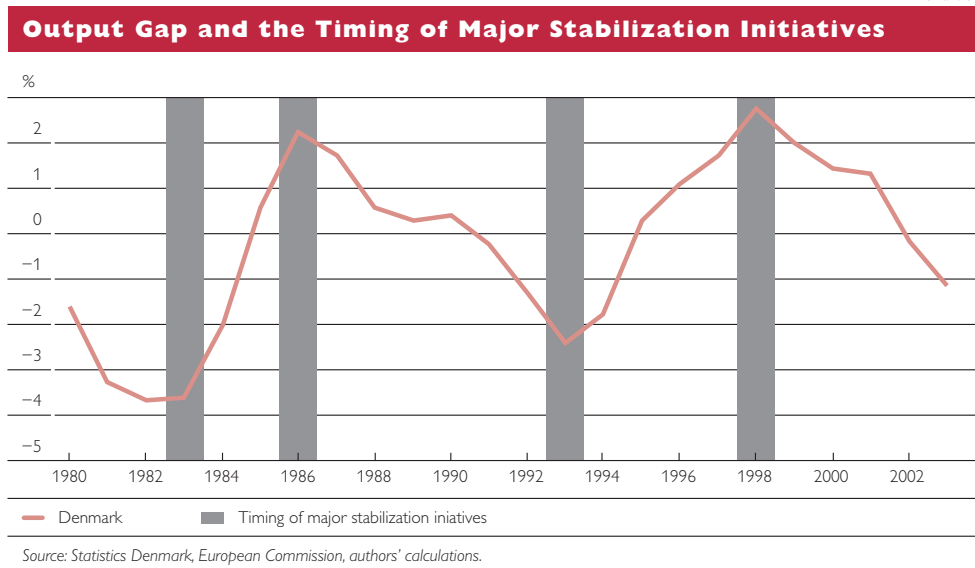
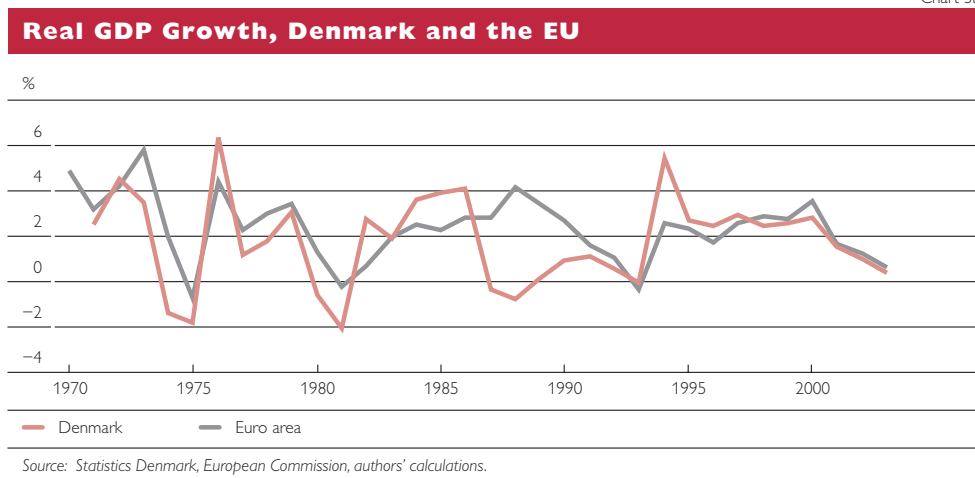


Chart 3b



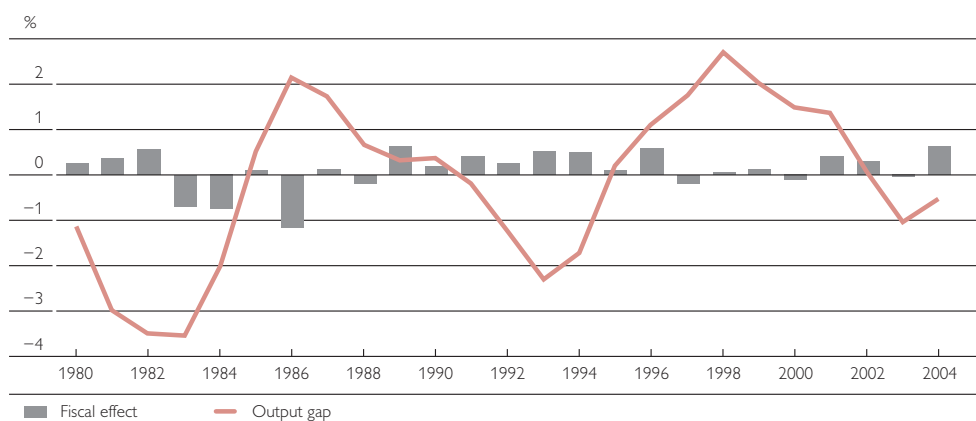
within three years and a rebound in confidence. Consequently, the Danish economy boomed in 1983–86 at a substantially faster pace than the rest of the EU, and the business cycle deviated significantly from the EU average in the mid- to late-1980s (see chart 3b).

As private consumption and investment soared, the current account deficit widened to a record 5% of GDP in 1986, and wage inflation accelerated. In response, the “potato diet” of 1986 consisted

largely of administrative credit market tightening, particularly in the mortgage credit market (affecting top-up loans, repayment profiles on new loans, etc.). The tax reform of 1987 lowered the tax value of interest deductions to strengthen savings incentives (see below). The measures had a strong contractionary effect on private consumption and the housing market. To help restore competitiveness, employers’ social security contributions were sharply reduced in 1988, fully financed by a

Chart 4a

Simulated First-Year Impact of Fiscal Policy and the Output Gap, Denmark



Source: Authors' calculations using the macroeconomic model ADAM.

Note: The fiscal effect is a model-dependent simulated impact of discretionary fiscal policy changes relative to a defined neutral path for fiscal variables.

2.5 percentage point increase in (effective) value-added tax (VAT) rates.

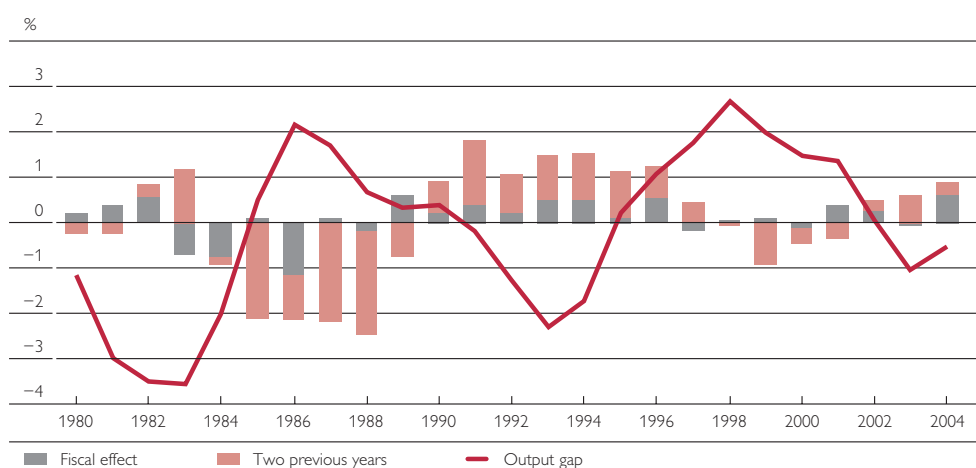
As the ensuing slump in domestic demand was prolonged by high interest rates during the German reunification boom, growth was meagre and unemployment climbed until 1993. The former credit measures were gradually lifted in 1993 and 1994. Alongside a wave of mortgage refinancing when interest rates fell,

this played an important role in “kick-starting” a strong recovery in 1994. Helped also by fiscal stimulus, growth reached 6% in 1994. The subsequent period of falling unemployment was also the most active in terms of labour market reforms (see below).

When policy tightening became necessary in 1998 to prevent overheating, the “Whitsun package”

Chart 4b

Three-Year Cumulated Fiscal Effect and the Output Gap, Denmark



Source: Authors' calculations using the macroeconomic model ADAM.

Note: The fiscal effect is a model-dependent simulated impact of discretionary fiscal policy changes relative to a defined neutral path for fiscal variables.

Table 2

	1980	1986	1993	1998	2002	2004
	%					
Maximum tax value of interest deductions	68.8	73.2	52.2	46.4	33.3	33.3
Tax on return of private pensions	0.0	44.1	50.1	35.8	15.0	15.0
Corporate tax rate	40.0	50.0	34.0	34.0	30.0	30.0

Source: Author's calculations.

mainly took the form of further reductions in the tax value of interest deductions and increased mandatory pension savings – rather than administrative credit market measures, which entail distortions.

Further credit market liberalization – with the introduction of variable rate mortgages during the late 1990s and mortgage loans free of repayment for up to 10 years (which may be rolled over) as of 2003 – are providing substantial support to house prices and private demand during the emerging upswing in 2004.

With changes to the tax value of interest rate deductions and credit market policies heavily influencing domestic demand, demand management has not been restricted to (traditional) fiscal policy, even though monetary policy is bound by the fixed exchange rate. Fiscal policy has, in contrast to many other EU countries, played a notable counter-cyclical role (see chart 4a and 4b).

3 Policies to Strengthen National Savings

Private savings incentives

The chronic savings deficits up to the mid-1980s appeared to be rooted in three structural factors: the tax

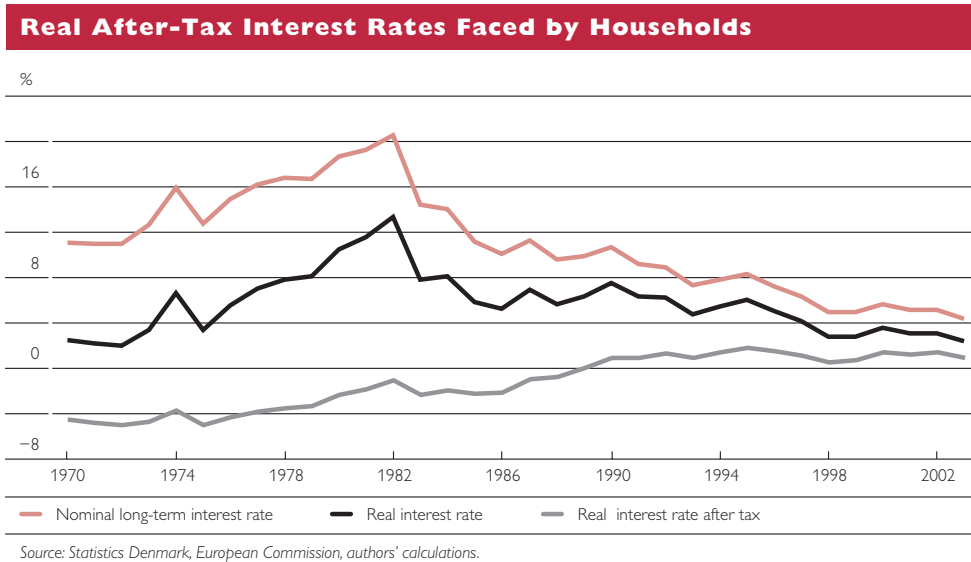
treatment of interest payments, the tax-financed pay-as-you-go pension system, and the tax treatment of investments. Policies to deal with these aspects were enacted from the mid-1980s.

Until 1987, the tax value of interest deductions depended on the marginal income tax rate, which at the time could be up to 73%.⁴ The tax value was subsequently reduced through a series of tax reforms agreed in 1987, 1994 and 1998. The tax reform of 1998 reduced the tax value of interest expenditures to its current level of 33%, phased in during 1999–2001. These changes have raised the real after-tax rate faced by households despite a concomitant decline in pre-tax real interest rates (see chart 5a).

Denmark has a tax-financed pay-as-you-go pension system with universal coverage. However, the pension support levels relative to average income are fairly modest in comparison with many EU-countries. The pay-as-you-go system is complemented by tax-favoured individual retirement savings accounts, collectively agreed labour market pensions, and mandatory (legislated) labour market pensions. These are based on actuarial principles with a

⁴ The very high income tax rates in Denmark should be seen in conjunction with the near-absence of payroll taxes (although part of the income tax since 1998 consists of an 8% so-called labour market contribution, it applies to both wages and other personal income and is collected with the normal income tax). The total tax wedge between wage costs to the employer and the net wage of employees is not correspondingly higher in Denmark (see section 7).

Chart 5a



clear link from individual contributions to future pension rights. The widely perceived need to top up moderate state pensions with personal pension savings underpins incentives to work and save.

In the late 1980s, private pension savings covered about one third of the labour force, mainly white-collar workers. Subsequently, a gradual build-up of supplementary pension schemes has taken place for almost the entire labour market. The decisions to build up labour market pensions were taken by the employer and labour organizations in the context of collective bargaining agreements. Individual retirement accounts are also widespread.

Notwithstanding the introduction of a tax on pension returns (see below), as well as altered rules for tax deductions of pension contributions and taxation of pension pay-outs, the tax treatment of pension savings remains preferential to other savings.

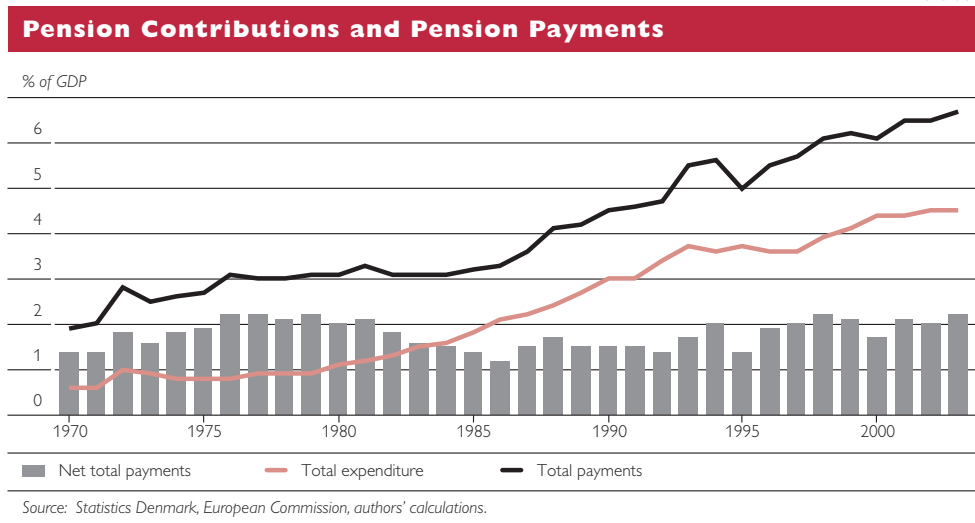
There are no signs that the reduced tax subsidy has restricted the build-up of private pensions savings (see chart 5b).

The build-up of collectively agreed and mandatory labour market pensions presumably contributes to higher total private savings, though they may partly substitute for other individual savings. Particularly households with short planning horizons and households at a point in their life-time income cycle, where they do not wish to save for pensions, may save more than they would otherwise have done.⁵ Without the build-up of new schemes, net pension payouts might have ensued by now, affected by the very high tax free investment yields up to the early 1980s for previous cohorts of pension savers.

Formerly very generous depreciation rules for investment expenditure reduced the efficiency of investment decisions, and distorted the

⁵ This applies to households that cannot easily offset mandatory pension savings by running down liquid asset holdings or take reasonably-priced loans, including many first-time house owners and many who live for rent. As liquidity constraints ease over time for such households, their savings may decline relative to a counterfactual with less mandatory saving. But new generations of constrained households may offset this decline.

Chart 5b



relative price between the production factors capital and labour. Depreciation rates have been reduced, and the tax base for company taxation broadened, which has allowed a reduction in company tax rates (see table 2).

Strengthening public savings

As the rise in unemployment due to adverse economic shocks during the 1970s and early 1980s interacted with still unreformed Danish institutions, the high unemployment rate increasingly turned out to be of a structural nature. High interest rates also made for a rapidly rising debt service burden, and fiscal policy had

to be tightened to halt the build-up of debt.

Much of the movement in the actual budget balance over the last two decades reflects changes in the (estimated) structural budget balance (see chart 6a). Discretionary fiscal tightening was the main reason for the sharp improvement in the structural balance in the mid-1980s. Especially since 1995, an estimated reduction in structural unemployment has provided a major contribution to the improvement in the structural budget balance (see chart 6b).

Tighter control of real public consumption growth was instituted from 1982 to 1992 (see chart 6c).

Chart 6a

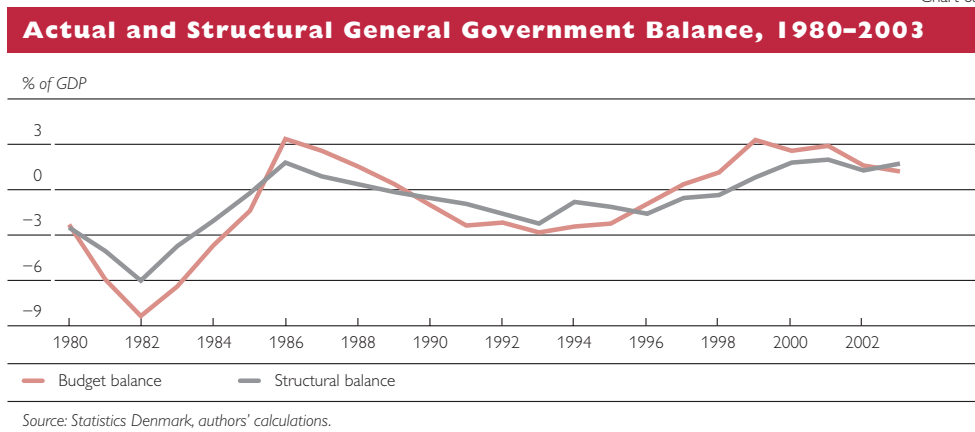


Chart 6b

Contribution of Lower Structural Unemployment to Improvement in the Structural Balance since 1995

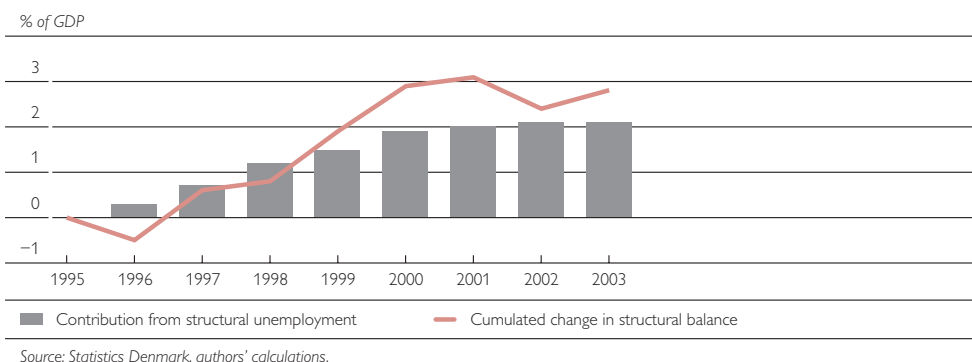


Chart 6c

Public Outlays and Receipts

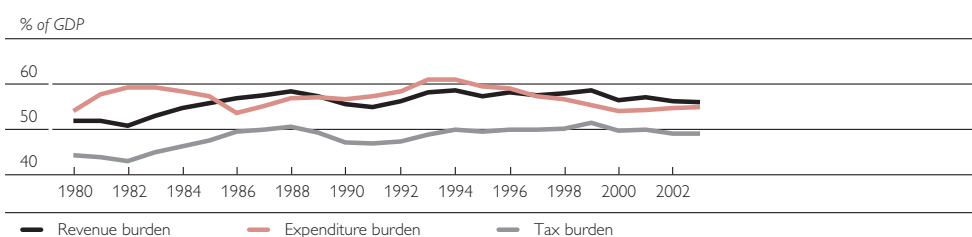
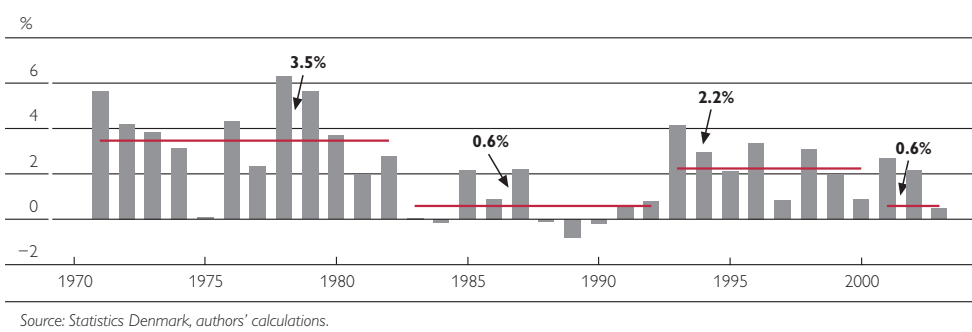


Chart 6d

Real Public Consumption Growth



Some relaxation was permitted in the 1993–2001 period, but spending restraint has been reinforced in 2002–04 with an average real consumption growth of less than 1% per year. Public transfers (and public sector wages) are largely indexed to private sector wages.

The total tax-to-GDP ratio increased significantly during the 1980s and, to a lesser extent, during

the 1990s. Still around 50%, the tax ratio has eased down in recent years, helped by the current government's institution of a tax freeze from 2001. The tax freeze fixes all tax rates whether set in percentage terms or in nominal amounts (e.g. excise duties). For local and regional governments, the tax freeze applies to the average tax rate across the nation, with flexibility allowed for tax

changes in individual municipalities or counties, as long as they are offset by opposite movements elsewhere.

An important contribution to fiscal consolidation was the introduction of a tax on investment income in the private (and semi-public) pension funds and life insurance companies as of 1983. Originally in the form of a real interest rate tax, the tax regime has gone through a series of changes and today consists of a 15% flat rate on all types of investment returns (see table 2).

4 Key Features of the Danish Labour Market

The Danish labour market is characterized by relatively generous unemployment benefits combined with

highly active labour market policies, relatively stringent availability-for-work requirements and liberal firing rules. These institutions, together with generally strong basic schooling and fairly high educational attainment levels, contribute to a highly adaptable labour force, with a job turnover among the highest in the world. Today, government involvement in wage setting is minimal, with no legislated minimum wage, and wage negotiations are predominantly decentralized.

Unemployment benefits

Unemployment benefits are generous for low-income individuals covering 90% of previous income – the highest rate in the OECD. Benefits are capped at a maximum, however,

Chart 7a

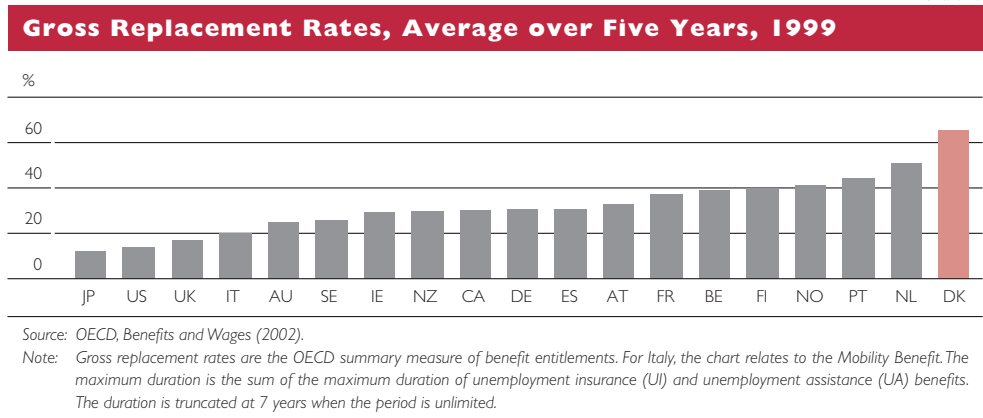


Chart 7b

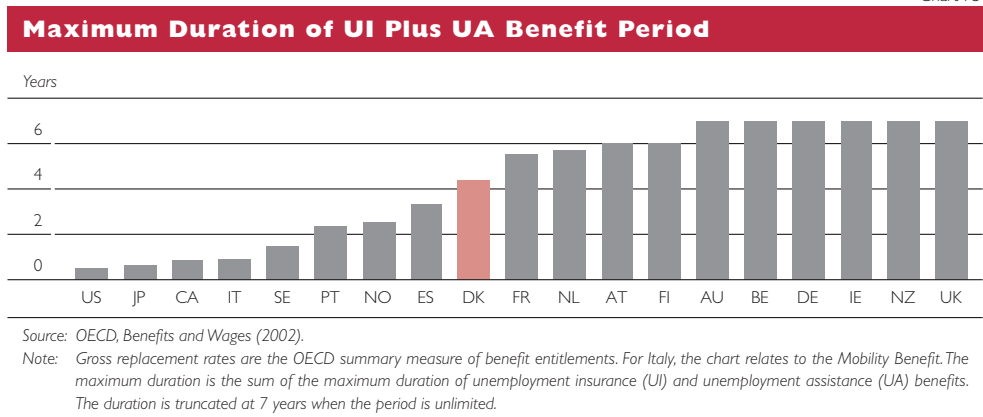


Chart 8a

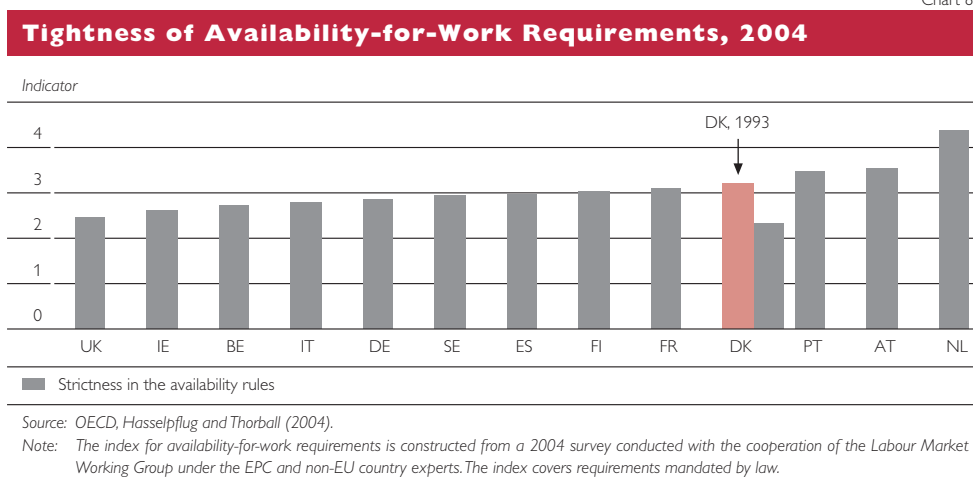
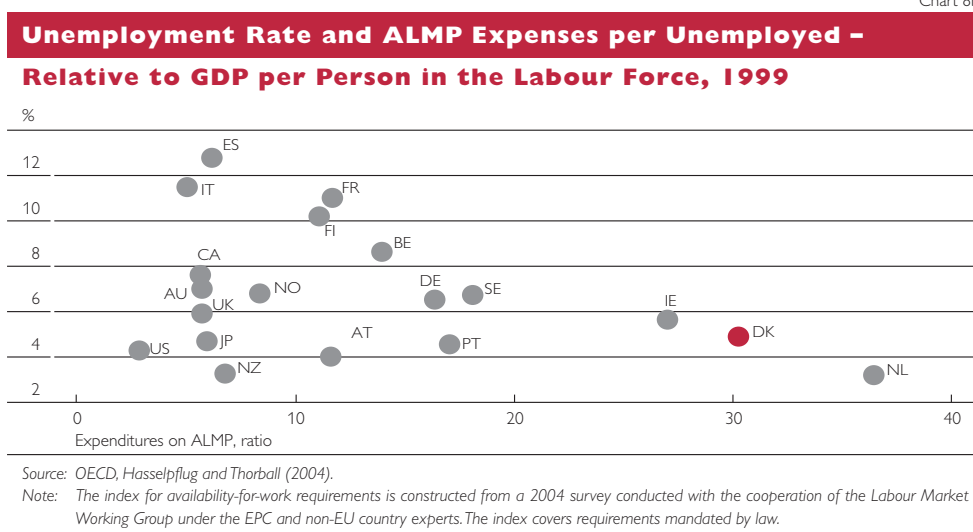


Chart 8b



which corresponds to roughly 60% of average wage income for the employed. Hence, only 10% to 15% of the unemployed receive benefits at the 90% compensation rate. Benefits are less generous for high-income individuals than in some EU-15 countries. Benefits are not reduced over the course of the unemploy-

ment spell and the maximum duration is relatively long. Total compensation is the highest in the OECD when measured over a five-year period (see chart 7a and 7b).⁶

The potential adverse incentive effects from generous benefits may, however, to some extent be counterbalanced by relatively tight “availabil-

⁶ The OECD summary measure of gross replacement rates over a five-year period does not take into account that in some countries the unemployed may be entitled to a new benefit period after participating in an ALMP program. Hence, the maximum period of obtainable benefits may be much longer than indicated by the OECD measure. Also, in Denmark, periods on activation benefits are counted in the duration of unemployment but may be considered a separate activity in other countries. This impedes international comparisons using the OECD summary measure or statutory maximum durations.

Chart 9a

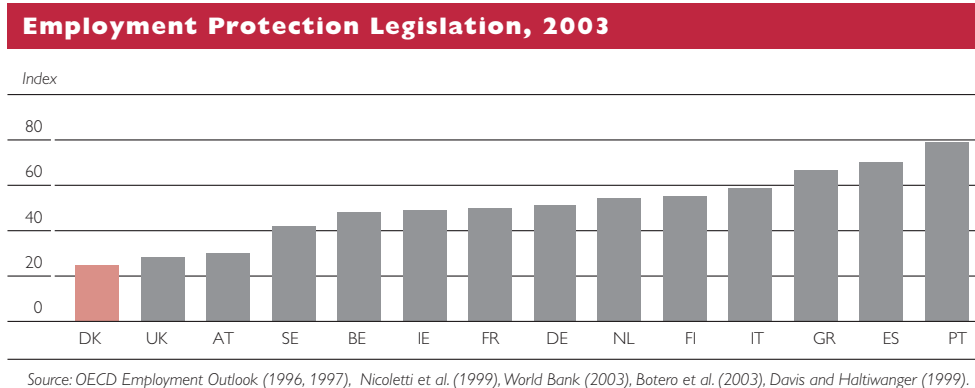
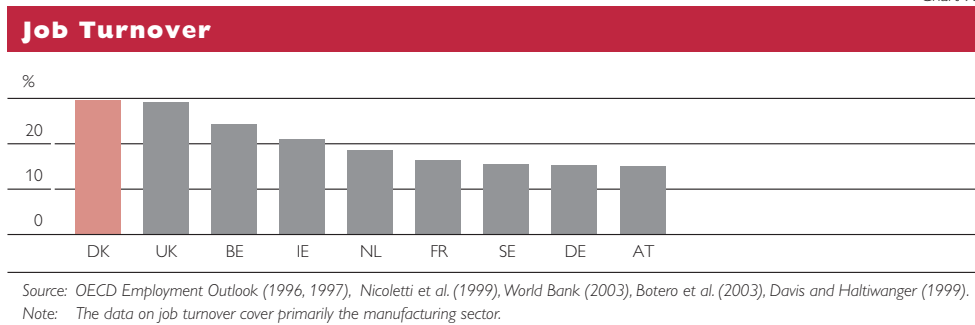


Chart 9b



ity-for-work” requirements for the unemployed (see chart 8a).

Active labour market policies (ALMP)

Denmark spends the second highest share of GDP in the EU on ALMP when measured relative to the level of unemployment (see chart 8b). The extensive focus on ALMP has several objectives. First, ALMP is – if suitably implemented – skill enhancing either through formal education or on-the-job training. Second, ALMP may alleviate bottlenecks in a tight labour market. Third, and potentially most important, ALMP may be an effective way of testing availability-for-work due to the requirement of participation in active measures already after six or twelve months of unemployment, depending on individual circumstances. ALMP is considered at least as

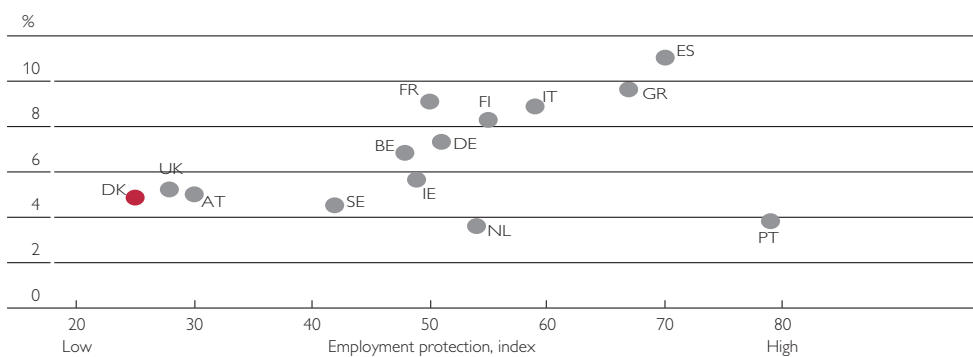
important in this respect as formal availability-for-work requirements.

Flexible institutions and an adaptable work force

The level of employment protection legislation (EPL) is low (see chart 9a). Turnover in the labour market is high, with Danish workers changing jobs more often than in other countries for which data are available (see chart 9b). Across countries, low EPL appears to be correlated with low structural unemployment (see chart 9c), Portugal being a much-noted exception. Product markets seem reasonably competitive (although considerable scope for improvement remains) and product market regulation is liberal compared to continental Europe (see chart 9d). Basically very few attempts are made at halting structural adjustment in the private sector

Chart 9c

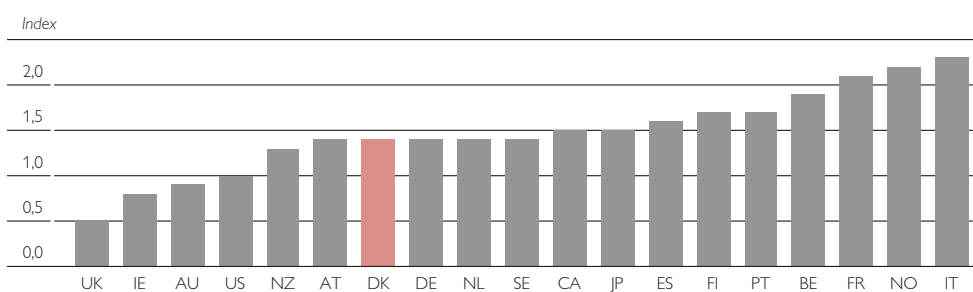
**Structural Unemployment and Employment
Protection Legislation in the EU-15, 2003**



Source: OECD Employment Outlook (1996, 1997), Nicoletti et al. (1999), World Bank (2003), Botero et al. (2003), Davis and Haltiwanger (1999).

Chart 9d

Product Market Regulation, 1998



Source: OECD Employment Outlook (1996, 1997), Nicoletti et al. (1999), World Bank (2003), Botero et al. (2003), and Davis and Haltiwanger (1999).

through government intervention or subsidies. State subsidies for private businesses are low and there is little or no direct state ownership of e.g. manufacturing entities or financial institutions.

At least in the Danish context, a strong social safety net and generous unemployment benefits may be a necessary prerequisite for maintaining broad political support for these flexible institutions.

Labour supply-enhancing welfare spending

Some welfare spending acts to raise labour supply, notably subsidized childcare and care for the elderly, i.e. functions that were formerly taken care of at home or in the fam-

ily. Most local governments guarantee availability of childcare for preschoolers, with parental co-payment limited to a maximum of 33% of costs. For older children, after-school care is widely available at subsidized rates, and elderly care is well developed, including care and assistance in elderly persons' own homes.

Supply and demand for labour across skill levels and wage-setting

The Danish education system appears to have met the trend-like increase in demand for skills, perhaps to a larger extent than in other countries. Hence, shifts in demand from low to high skilled labour owing to technological progress and re-

Chart 10a

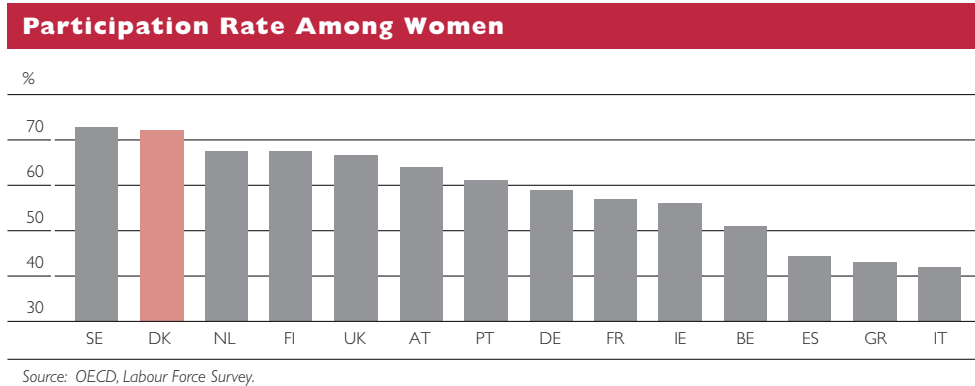
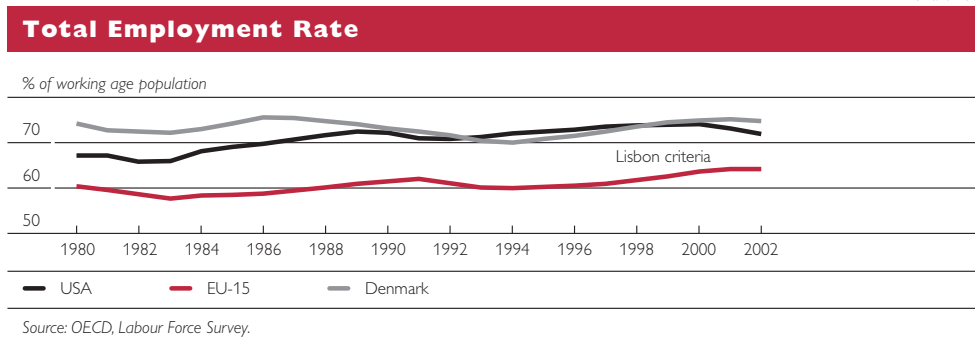


Chart 10b



inforced by globalization seem to have been met by similar shifts on the labour supply side (see Fosgerau et al., 2001). Relative unemployment and non-employment rates by skill have remained broadly constant, or even narrowed, and so have wage differentials across skill levels (see chart 11a and 11b).

Wage setting has become increasingly decentralized during the 1990s. Collective bargaining now mainly covers areas such as pensions, maternity leave etc. Among workers covered by collective bargaining, the share of workers for which wages are fixed in collective (sectoral) agreements has fallen from 34% in

1989 to 15% by 2000. The vast majority of wages are set at company and individual level.

6 Successes and Failures in the 1990s

The labour market policies of the 1990s comprised successes but also unsustainable elements, which have subsequently been curtailed. The key success was a marked reduction in structural unemployment during the 1990s (see chart 12a).⁷ However, labour force participation contracted in the first half of the decade and has only picked up slightly since then (see chart 12b).

⁷ The structural unemployment rate is estimated in an unobserved components model using the Kalman filter. Similar results are found by the OECD and the EU Commission, although the drop in both actual and structural unemployment is less pronounced when the EU/ILO harmonized measure of unemployment is used instead of the national measure shown in chart 12a.

Chart 11a

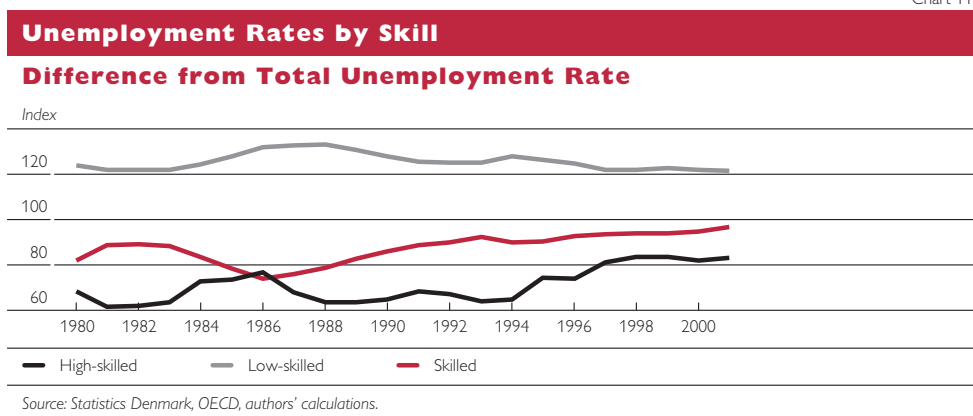
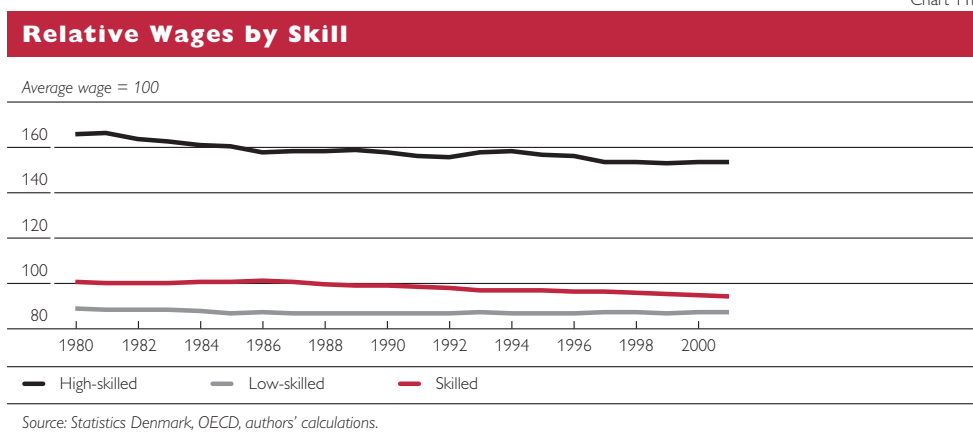


Chart 11b



6.1 Measures to Reduce Structural Unemployment

In the first half of the 1980s, policymakers were preoccupied with what seemed an excessively high average wage level in the economy, a diagnosis founded on the combination of persistent current account deficits and high unemployment. Repeated attempts at income policies, either through direct government involvement or pressure on the labour market parties to settle on “responsible” wage agreements, turned out less successful than hoped-for – although the abolition of price indexation of wages as of 1982 was an important and useful step, particularly in the context of disinflation.

The experience of accelerating wage inflation during the upswing in the mid-1980s – despite official government policies for continued moderate wage developments – shifted the focus of policymakers towards structural labour market policy. In line with the findings of the theoretical literature, the government’s ambition in the 1980s was to lower replacement rates in the unemployment benefit system and alter their structure, but it proved impossible to rally sufficiently broad political support behind such measures.

As of 1992–94, the agenda shifted to reforms of active labour market policies and other parameters in the unemployment insurance benefits (UIB) system than the general replacement rates.

Chart 12a

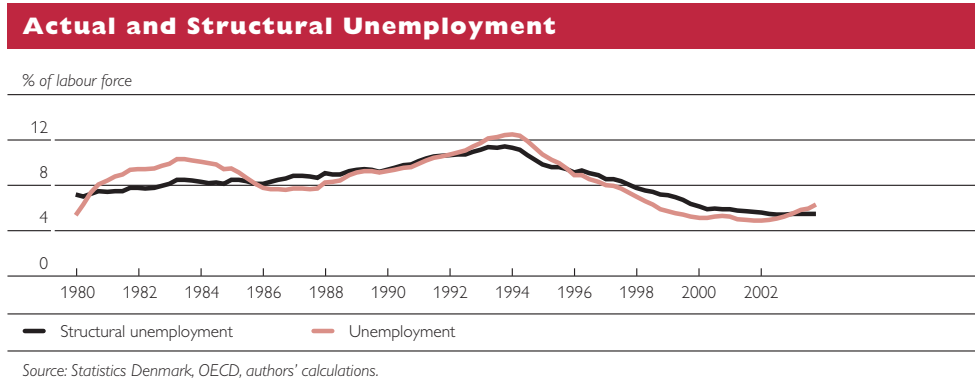
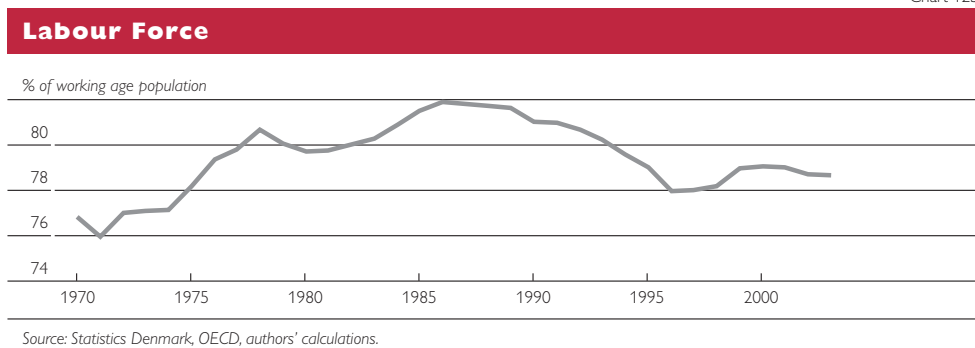


Chart 12b



Active labour market policies (ALMP)

Prior to 1994, the maximum benefit duration was 2½ years, but the unemployed could qualify for a new benefit period by participating in active labour market programs. Effectively, the maximum duration of benefits was approximately eight years. Availability-for-work requirements were relatively lax. By 1994, substantial reforms were initiated, and these were extended in the subsequent years.

Firstly, participation in active programs would no longer qualify the unemployed for a renewed benefit period. This was a crucial element in the reforms, shifting the focus of the ALMP system more firmly to getting people into work rather than keeping the unemployed in the benefit system. The formal maximum benefit period was set at seven years. Subsequently, the maximum period

was reduced to five years (in 1998) and currently to four years (since 2000).

Second, participation in active programs became obligatory in a policy known as “right-and-duty” of activation. Sanctions were put in place in case of refusal or for people that dropped out. Initially, the right-and-duty to participate became effective after three years of unemployment, but this was moved forward gradually and by the end of 2002 it was effective after one year of unemployment. The activation measures may be private or public job placement, education or retraining schemes, or other (quantitatively less important) activities. Over the period, various changes have been made to the exact content and scope of the active measures.

Third, among reform initiatives targeted at specific groups, unemployed aged 25 years or less without

a qualifying education are no longer allowed more than 26 weeks on passive benefits (since 1996). Thereafter, they must either work or enter education at a benefit level corresponding to roughly half of the UIB.

There was also an increased focus on alleviating bottlenecks on local labour markets, and a host of other changes of an administrative nature.

Tightened eligibility criteria and formal availability-for-work requirements

Work requirements for qualifying for UIB were extended from 26 weeks to 52 weeks of work in the preceding three years. When the benefit period was shortened in 1998, the work requirement was lowered to 26 weeks for people who exhaust their benefit entitlement due to concerns that an unacceptable number of unemployed would exhaust their entitlement. An attempt in 2002 to restore the work requirement at the previous level was unsuccessful.

Formal availability-for-work rules have been tightened in several steps and are, by now, relatively tight compared to most EU countries (see chart 8a above).

Evaluating the impact of reform

The sharp fall in actual unemployment from 1993 to 2002 without resurging inflation provides prima facie evidence that the structural unemployment rate has fallen since the early 1990s. This conclusion is confirmed by estimates of the structural unemployment rate in unobserved components models estimated by the Kalman filter employed by, e.g., the OECD, the EU, and the Ministry of Finance (see chart 12a).



To help quantify the contribution of individual policies to the reduction in structural unemployment, a panel-data analysis of 19 OECD countries is used, in a first step, to attribute variation in unemployment rates to observable differences in labour market institutions, product market regulation, taxation etc. (see box 1). Applying these coefficients to the change in Danish institutions suggests that the reduction in unemployment chiefly came from the

Chart 13a

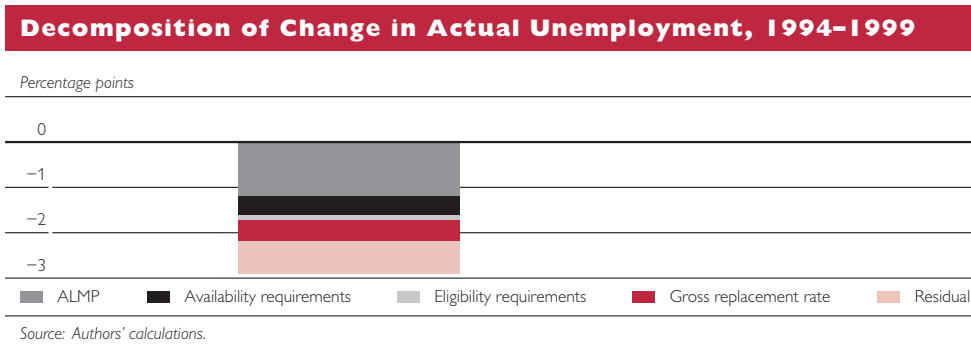
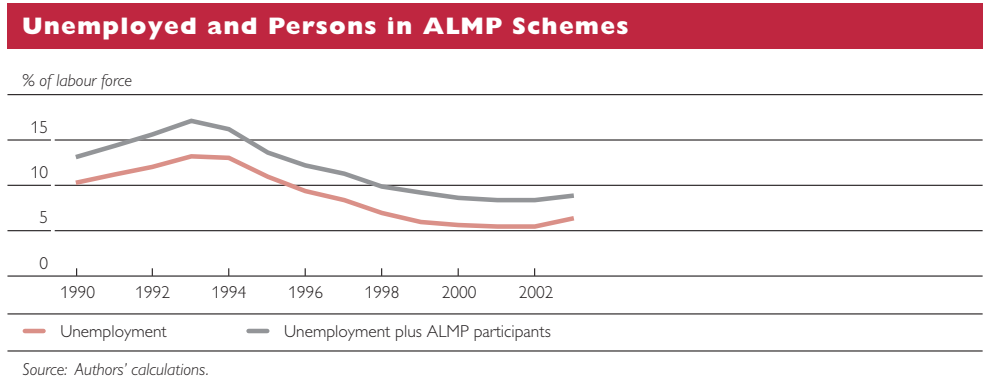


Chart 13b



increased focus on ALMP. Tighter eligibility and availability requirements as well as reductions in the five-year gross replacement rate through shortening of the benefit period also contributed substantially (see chart 13a).

Meanwhile, active labour market policies entail sizable (direct) budgetary costs amounting to roughly 1¼ percent of GDP, with lesser deviations from year to year. Moreover, the lowering of unemployment through ALMP schemes is by some considered to be partly “cosmetic”.

Despite the bringing forward of the point of activation, the total number of persons in active schemes has been relatively constant at around 2¾ percent of the labour force (see chart 13b) (although this implies an increase in numbers relative to the lower number of unemployed).

Private and public job training may also potentially “displace” regular workers, despite formal requirements that attempt to prevent displacement. The size of displacement is not well-known (though studies in Sweden indicate that it may be sig-

Box 1

Explaining Cross-Country Variation in Unemployment Rates

Panel data regressions for 19 OECD-countries are used to attribute variation in actual unemployment rates to differences in labour market institutions, product market regulation and taxation. The results show that high unemployment insurance benefits (UIB), long duration of UIB, passive labour market policies, and limited testing of availability-for-work are all factors which can raise structural unemployment (see table 3).

Table 3

Impact of institutions on unemployment, 1963/83–1999

	Coefficient	Standard deviation
Higher UIB compensation	0.054	(0.023)
Longer duration of UIB ¹	0.006	(0.005)
Tighter availability-for-work requirements	-0.020	(0.010)
Higher expenditure on ALMP ²	-0.001	(0.000)
Tighter eligibility (prior work) requirements	-0.037	(0.020)
Stronger job protection	0.004	(0.002)
More centralized wage bargaining	-0.013	(0.004)
Higher degree of unionization	0.189	(0.010)
Total labour taxes ¹	0.047	(0.015)

Source: Gaard (2004).

Note: The coefficients were obtained from several separate regressions. In addition to the listed variables, deviations from HP-trend of log real GDP, country dummies, and, in some specifications, time dummies enter the regressions.

¹ Not significant in the 1983–99 sample, presumably owing to difficulties in constructing the indicator.

The coefficient is based on a sample covering 1963–99.

² Measured in units of GDP per unemployed in relation to the labour force.

Chart 14a

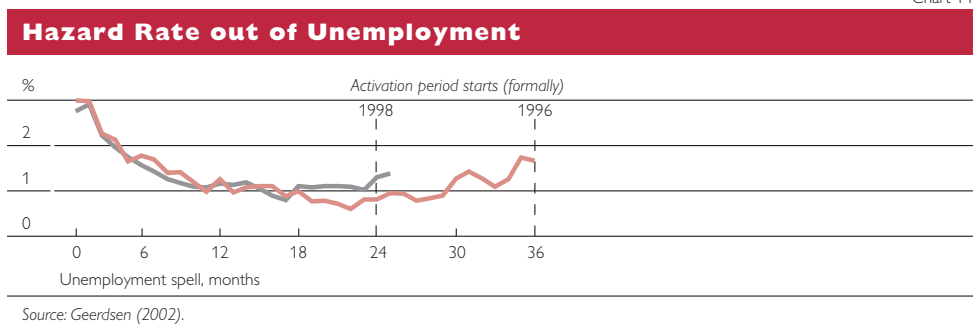
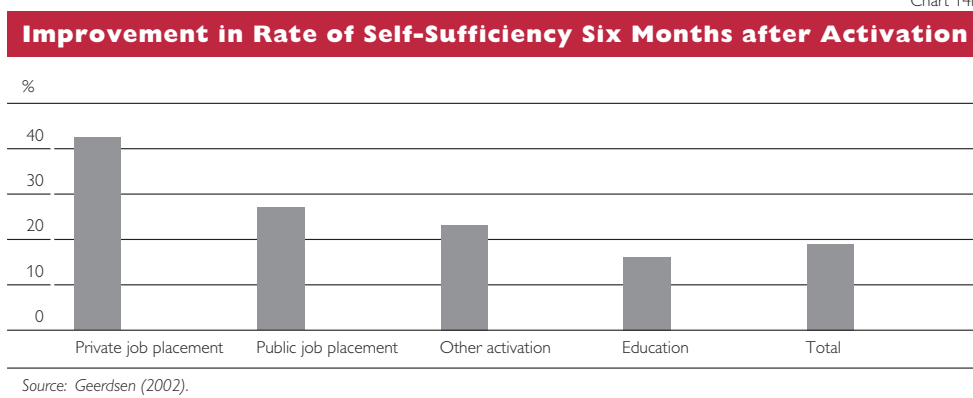


Chart 14b



nificant). Private job-training is less predominant in Denmark, however, than in countries where displacement effects have been more actively discussed, perhaps because wage subsidies are relatively moderate.

The positive impact of active labour market policies may in part be attributed to a motivational effect on job search among the unemployed. In this vein, a considerable body of evidence suggests that the “right-and-duty of activation” enhances job search activity in the run-up to the time when activation becomes mandatory (see chart 14a). The bringing forward of the point of activation from 36 to 24 months between 1996 and 1998 led to a significant increase in search at 24 months.

Experience shows that job placement in private firms has a higher success rate at getting the unemployed lastingly into employment

than training measures (see chart 14b); – although this may in part reflect a selection bias in that private job placement may be offered to those unemployed that are most job-ready.

6.2 Labour Supply Management and Mismanagement in the 1990s

Many European countries, including Denmark, have attempted to reduce high unemployment – even when mainly of a cyclical nature – by reducing labour supply, e.g. through early retirement schemes. Such measures are, however, short-sighted in that the labour resources are no longer available, once the cyclical upswing materializes and business starts demanding labour again. In this way, cyclical downturns in employment tend to become structural, with adverse medium-term consequences for public finances.

Chart 15a

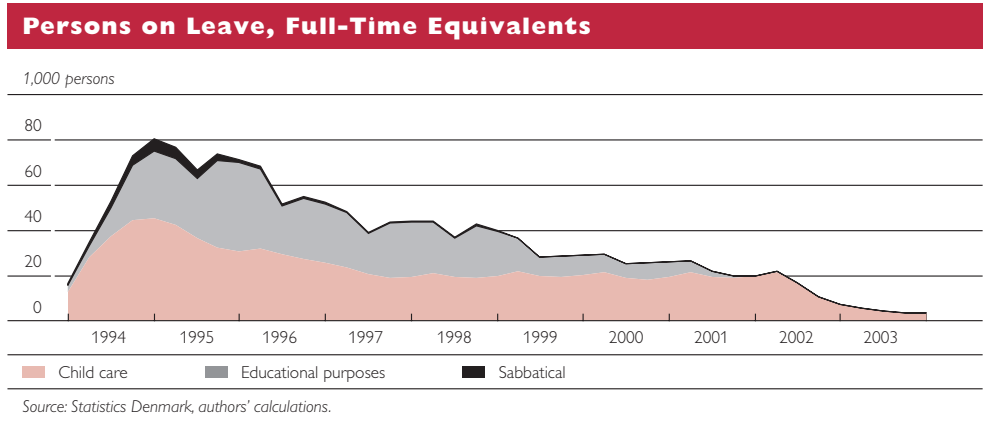
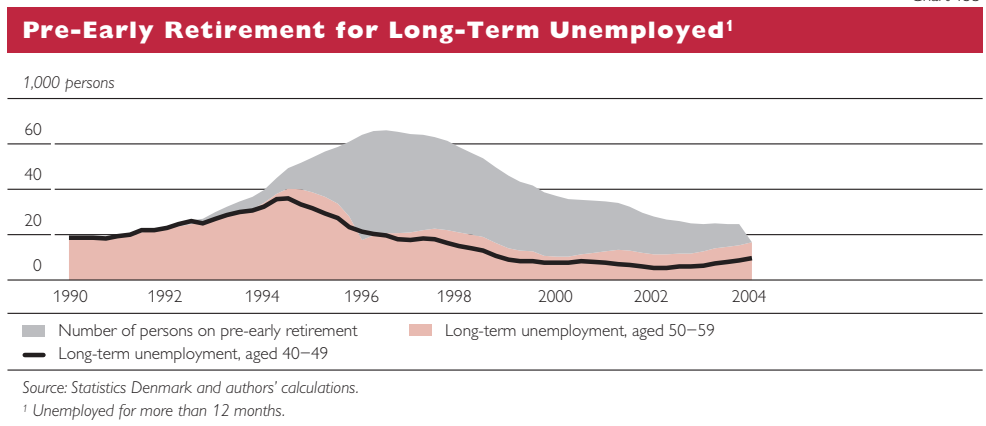


Chart 15b



Unemployment in Denmark rose sharply during the cyclical downturn from 1987 to 1993, and from 1992 to 1994 a pre-early retirement scheme was gradually introduced for long-term unemployed 50–59 year olds (this scheme was in addition to the already existing early retirement scheme for 60–66 year olds, instituted during the recession in 1979). In addition, leave schemes were introduced that gave workers the right to take leave of absence for educational purposes (at 100% of the UIB rate), childcare (at 80% of UIB), and sabbatical (80%). Particularly as of 1994, the uptake on these schemes reduced the labour force significantly (see chart 15a).

The schemes have subsequently been tightened and to a large extent

abolished. Hence, the permanent adverse effects on labour supply have been much smaller than if cuts in working hours or retirement ages had been introduced.

The pre-early retirement scheme provides an interesting and cautionary tale as it acted mainly as a substitute for employment, not for long-term unemployment, as intended. Despite the large uptake on the scheme from 1994 to 1996, long-term unemployment among the 50–59 year olds fell only briefly, and it subsequently developed largely in parallel with long-term unemployment among 40–49 year olds (see chart 15b). It appears that the natural flow into long-term unemployment (and out of long-term unemployment in the absence of the

Chart 16a

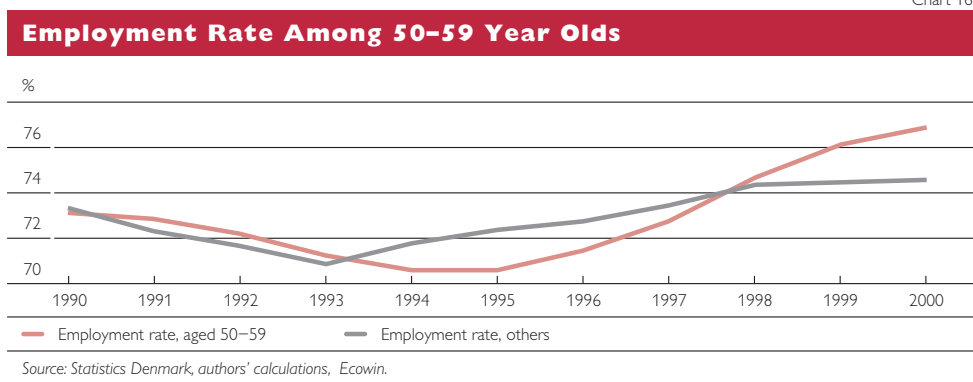
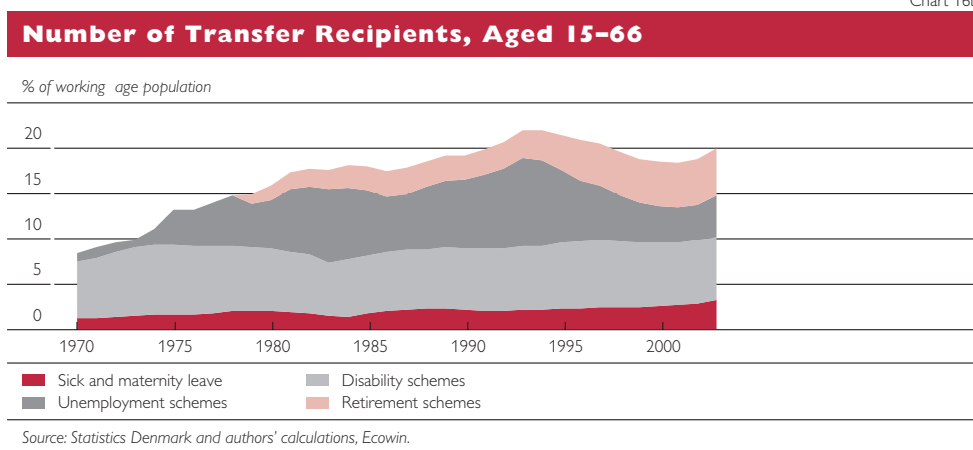


Chart 16b



scheme) had been underestimated. In the run-up to 1996, when access to the scheme was possible, employment among 50-59 year olds fell, while it rose for other age groups. After 1996, when access to the scheme was closed, employment among 50-59 year olds developed stronger than total employment (see chart 16a).

Participation in the temporary leave schemes has dwindled to almost nothing as compensation levels were reduced to first 70% and then 60% of UIB for childcare and sabbatical. Access to educational leave and sabbatical has been closed. Lately, the extension of maternity leave periods to one year has caused a sharp decline in the number of

persons taking leave for childcare purposes.

Other welfare schemes have also been reformed, but participation is still high. Reforms of the disability schemes have cut the annual inflow and reduced the total number of recipients to below 1995 levels (see table 4).

The early retirement scheme still remains in force. Despite a reform in 1998, which is estimated to reduce the number of recipients by 15,000 persons (almost 10%) over time, the total number of people in early retirement amounts to 6% of the labour force in 2003.

Labour supply has also been reduced through reductions in collectively agreed weekly working hours

Table 4

Labour Supply (Mis)Management				
	Introduced	Eligibility	Participation	Reform
Pre-early retirement	1992–94	Age 50–59 years, long-term unemployed UIB member	46,000 in 1996 11,500 in 2003	Access closed in 1996
Temporary leave	1992–94	Children and education	77,000 in 1995 5,000 in 2003	Gradually tightened 1995–2002
Disability	Before 1979	Disability or in need of permanent social support	270,000 in 1995 259,000 in 2003	1998 and 2000: Annual inflow reduced strongly
Official working hours	1987–90 2000–04	From 40 to 37 hours a week. From 5 to 6 weeks of annual vacation		
Early retirement	1979	Age 60–66 (from 2004 60–64) ¹ UIB member	115,000 in 1995 179,000 in 2003 (6% of total labour force)	1998 (Impact assessment 15,000)

Source: Author's calculations.

¹ The official retirement age was reduced from 67 to 65.

(from 40 to 37 hours, phased in during 1987–90) and an extension of annual leave from five to six weeks of vacation through 2000 to 2004 (see table 4).

Despite the cut back on leave schemes introduced in the mid-1990s, the total number of transfer recipients of working age is still high, at more than 20% in 2003 (see chart 16b).

7 Alleviating the Disincentive Effects of High Taxes

Total tax revenues are high, but the distortion compared to other countries is probably smaller than might appear at first look. First of all, the tax ratio is exaggerated by the fact that transfer incomes in Denmark (as well as some other countries, including Sweden) are taxed, while in most other countries they are paid “net-of-tax”. This feature alone boosts the measured tax ratio in

Denmark by 4% to 5% of GDP relative to most OECD countries.⁸ Secondly, exemptions and loopholes have been virtually eliminated from the tax system, and this has made possible a reduction in marginal tax rates. Third, means-testing of income transfers or public services to persons of working age is not very predominant in Denmark. In many other countries, means-testing e.g. for parental payments to child care implies that composite marginal rates can be higher than would appear from the tax system alone.

The marginal effective tax rate, including employers’ social contributions, is close to the average of EU countries for incomes at 100% of the average wage, but among the highest for incomes at 150% of the average wage (see chart 17a and 17b).

High taxes have not prevented high participation rates, in part because the negative substitution effect

⁸ Correction for other technical factors, especially the inclusion of indirect taxes in the GDP measure in the denominator, would pull in the opposite direction.

Chart 17a

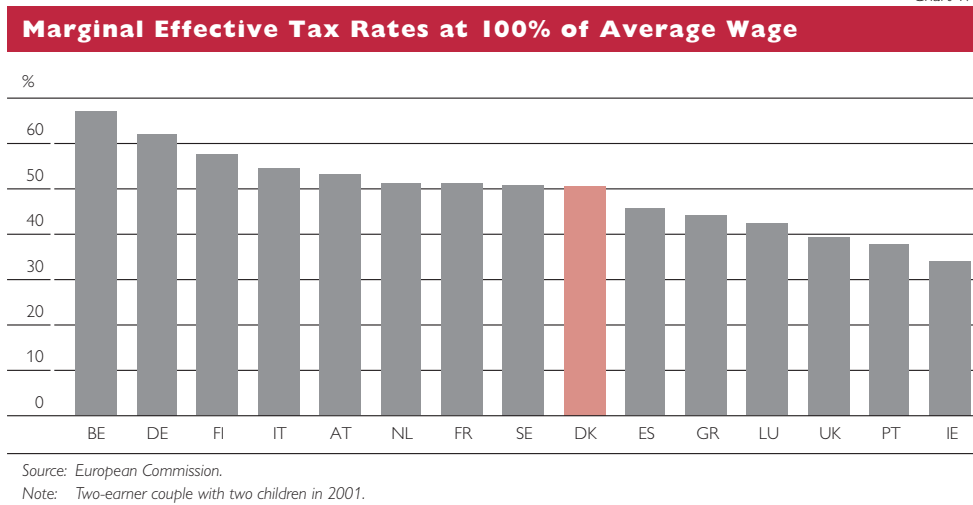
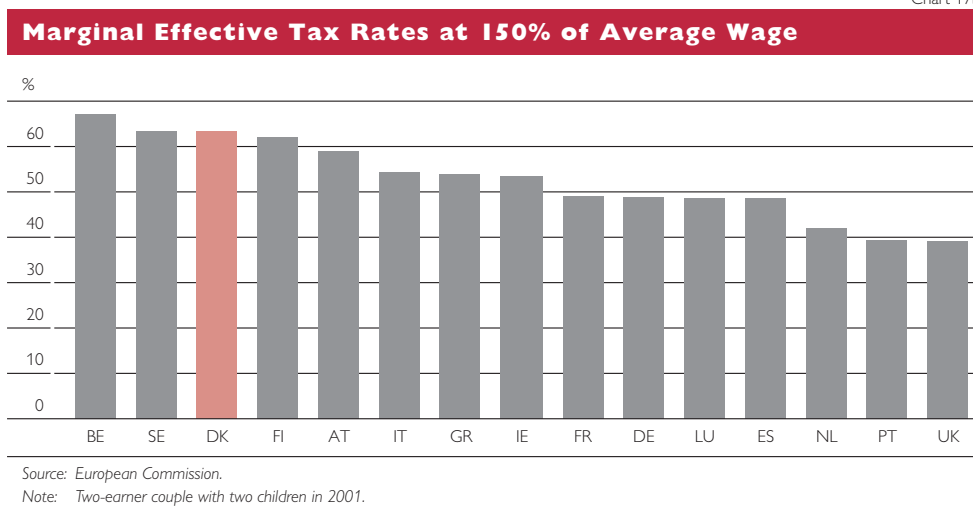


Chart 17b



on work effort from high marginal taxes is off-set by a positive income effect, requiring people to work more to attain a given level of income net of tax. Econometric evidence of labour supply elasticities is mixed and estimated elasticities are

subject to considerable margins of uncertainty. Tax progression may have contributed to lower average working hours, through more vacation days and fewer weekly hours, while contributing to the tendency for most families to rely on two incomes.

Table 5

Marginal Tax Rates, 1980–2004

	1980	1986	1993	1998	2003	2004
Marginal income tax, average employed	x	57.7	59.3	54.3	53.8	52.2
Marginal income tax, highest bracket	68.8	73.2	68.7	62.0	62.9	62.9
Marginal income tax, first bracket	43.6	48.0	50.6	45.2	43.7	42.9

Source: Ministry of Finance, Denmark.

Table 6

Indicators of Income Distribution		
	DK ¹	EU ²
Income quintile ratio (s80/s20)	3.2	4.4
Gini-coefficient	23	28
Share of persons living in low-income households	4	9

Source: Authors' calculations.

¹ National calculations based on incomes from 2002.

² Joint Inclusion Report, 2004. Based on incomes from 2000.

For the average employed person, the marginal tax rate has been reduced from close to 60% in 1993 to 52% in 2004 (see table 5). Lower marginal tax rates have been financed e.g. by lower mortgage interest deductions and higher indirect and green taxes.

The income distribution remains among the most even in the OECD, and (on standard measures) considerably more even than in the average of the EU (see table 6).

8 The Danish Experience

Structural reform is feasible without weakening the basic functions of the welfare state. Reforms of labour and product markets generally require a greater willingness to change and adapt. But flexible institutions do not necessarily imply high income inequality, at least not if skills are not too unevenly distributed and the education system meets the increased demand for skills. Welfare spending has been reformed without important adverse distributional consequences. Also, it has been possible to reduce distortions within the tax system, e.g. lowering marginal tax rates, without reducing the effective progression of the system or overall tax revenue. The tax wedge on labour remains high, though, and is above the EU average, at least for higher incomes.

Welfare expenditures may be a prerequisite for public support for flexible

institutions. Liberal firing rules, relatively light product market regulation and a hands-off approach to state subsidies or state involvement in market-based production might not have been politically feasible if not accompanied by a strong social safety net for those affected by structural change and unemployment. The emphasis is not on preventing job losses associated with structural change but on cushioning the income loss and providing opportunity as well as incentives for displaced workers to transition to new jobs.

Deep recessions feed bad policies – it is important not to do irreversible damage. During recessions, external competition and technological progress are often blamed for the economic woes. Pressure may arise for increased government intervention, subsidies, working hours reductions, early retirement schemes, and sometimes protectionist measures. Such measures can do medium-term damage to output and public finances, and are not easily reversible. Reduced labour supply should be avoided or, at the very least, restricted to measures of a temporary nature that can be undone when labour demand picks up.

For countries with a fixed exchange rate or participants in a monetary union, there may be some scope for demand management through administrative credit measures or borrowing in-

centives, particularly those that affect the housing market. Opportune timing of changes in credit market regulations and borrowing incentives – including mortgage interest deductibility – have had strong and generally stabilizing demand effects in Denmark. Hence, demand management is not restricted to (traditional) fiscal policy even though monetary policy is bound by the fixed exchange rate.

Significant policy challenges remain to prepare for the ageing of the population. The Danish government's 2010-strategy aims at ensuring the sustainability of current policies, i.e. ensuring that current rules governing social transfers (indexation, retirement age, early retirement etc.) and public service standards can be sustained without imposing a need for future generations to raise taxes to prevent an unsustainable debt path. The strategy entails running fiscal surpluses of 1½–2½ percent of GDP on average from now to 2010 and implies that the relatively large current generations of working age contribute to the financing of their future state pensions, elderly care etc. The strategy presupposes real public consumption growth of 0.5% per year from 2005 to 2010 and further structural reforms that can raise sustainable employment by roughly 2% by 2010 (see Ministry of Finance, 2003). Further reforms may be considered in the context of the Danish Welfare Commission's reform proposals due by 2005, e.g. with a view to make the welfare system more robust to possible changes in life expectancy (relative to the increase assumed in current baseline projections). Future generations may wish to make different priorities notably with respect to taxes, public

services, or working hours. With the 2010-plan already in place, there is reasonably ample time to discuss and consider possible reforms. ■

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