

## Chapter I: The International Background

Economic growth is expected to fall by  $\frac{1}{2}$  a percentage point in the OECD area to  $2\frac{1}{4}$  per cent this year. This slowdown is mainly due to gloomy economic prospects in Japan, a country severely hit both by the financial crisis in South East Asia and by its own recession triggered by fiscal contraction last spring. Growth in continental Europe is expected to pick up due to better prospects for Germany and France, while the United Kingdom faces an end to its economic upturn, with growth expected to fall sharply this year. The crisis in Asia has reduced global inflationary pressures by weakening demand, and inflation is expected to fall this year. The drop in inflation expectations has reduced the need for monetary tightening in Europe and the United States, and consequently the spread between long and short term interest rates has narrowed. The low interest rate level in Europe and the United States has more or less offset the negative impact of reduced foreign trade with Asian countries. As Asia recovers, a slight increase in growth in the OECD area is likely in 1999 and 2000, and inflation will increase modestly. In Europe growth is expected to remain largely unchanged in 1999 and 2000 at around  $2\frac{3}{4}$  per cent.

## Chapter II: The Domestic Economy

The last five years have been good for the Danish economy, and the economic upturn is expected to continue into the next millennium. The GDP growth rate is expected to be around 3 per cent in 1998 and 1999, declining to 2 per cent in 2000 (see table 1). Private consumption and private investments will be the main contributors to growth. Private consumption will increase by more than 3 per cent in both 1998 and 1999, fuelled by strong growth in disposable income and, mainly as a result of rising house prices, by a higher propensity to consume. Pri-

Table 1: Short-term prospects for the Danish economy

	1997	1997	Percentage change in volume terms			
	Current prices DKK bn. <sup>d</sup>	Per cent of GDP	1997	1998	1999	2000
Private consumption	568.5	50.7	4.1	3.2	3.2	2.5
Public consumption	286.8	25.6	2.9	1.7	1.2	0.0
Gross fixed capital formation, of which:	223.6	19.9	7.2	5.6	3.7	2.1
Residential investments	40.1	3.6	4.3	5.7	5.7	2.4
Fixed business investments	162.6	14.5	9.8	7.0	3.9	2.2
Public investments	19.6	1.8	-8.4	-7.5	-2.5	0.0
Stock building <sup>a</sup>	4.9	0.4	-0.2	-0.2	0.0	0.0
Total domestic demand	1083.7	96.7	4.2	3.2	2.8	1.8
Exports of goods and services	403.6	36.0	4.5	3.2	3.7	3.6
Imports of goods and services	366.4	32.7	7.0	3.8	3.7	3.2
GDP	1120.9	100.0	3.4	3.0	2.8	2.0
<b>Key indicators</b>						
Consumer prices, percentage change <sup>b</sup>			1.7	2.2	1.7	1.9
Unemployment, per cent <sup>c</sup>			7.7	6.6	6.0	5.8
Current account, DKK bn. <sup>d</sup>			7.3	-1.9	-3.3	-2.0
Current account, per cent of GDP			0.6	-0.2	-0.3	-0.2
General government financial balance, DKK bn. <sup>d</sup>			4.8	12.1	24.2	33.6
Gen. government financial balance, per cent of GDP			0.4	1.0	2.0	2.6
Hourly wage costs, percentage change			3.8	4.6	4.6	4.6
Terms of trade, percentage change			-2.3	-1.6	-0.3	0.0

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

b) Implicit private consumption deflator.

c) Percentage of total labour force.

d) The DKK/USD exchange rate is taken as 6.92 in the years 1998-2000.

Sources: Statistics Denmark, *National Accounts* and own estimates.

vate investments will remain high due to strong demand, low interest rates and a high utilisation rate. It is assumed that public consumption will grow considerably more slowly than in previous years, and net exports are not expected to contribute to growth. The economic slowdown in the year 2000 will be caused by a return to more normal growth rates in private consumption and investments.

The economic expansion will increase employment by around 80,000 persons during the forecast period. The labour force is expected to increase by around 25,000, and registered unemployment will thus drop to around 170,000 persons in the year 2000, corresponding to around 6 per cent of the labour force (national definition). This will be the lowest unemployment level since 1980.

The drop in unemployment will cause an increase in wage inflation, and labour costs are therefore expected to increase by 4½ per cent during each year of the forecast period. Price inflation is expected to remain modest, and thus real wages will increase substantially.

The increases in Danish labour costs are predicted to be around 1 percentage point higher than those abroad. In 1998 this will be almost offset by a depreciation of the Danish krone (due to the appreciation of the U.S. dollar and British pound), but in 1999 and 2000 Danish manufacturing industries will be less competitive. Thus, the growth rate in exports of manufactured goods will decline. Imports will also grow more slowly than last year, but the drop in export growth will be the dominating factor and may result in a current account deficit. Exports are expected to pick up in 1999 and 2000, and the current account will stabilize at a level around zero.

The continued upturn in the Danish economy will improve the general government financial balance. The surplus is expected to increase to around 2½ per cent of GDP in the year 2000, provided that public expenditures grow more slowly than in the last couple of years.

## Policy recommendations

Prospects for the Danish economy look bright, but there is a genuine risk that activity will increase too fast and lead to acceleration in wages and prices. It is expected that the high economic growth will increase wage inflation to more than 4½ per cent. This is approximately 1 percentage point higher than abroad, and this places Danish competitiveness under pressure. Moreover, the bottleneck situation in the labour market has worsened, and higher wage increases cannot be ruled out. At the end of 1997, the unemployment level was already very low in many occupations and regions. If the bottleneck problems result in major wage rate increases, the positive trend in the Danish economy could quickly be reversed. Another risk factor is house prices. In the forecast, the rate of house price increases is expected to slow. If this is not the case, it is possible that residential investments and private consumption will increase too strongly. The construction sector is particularly critical, because the unemployment rate already is very low in this sector.

To reduce the risk of overheating it is necessary to tighten economic policy significantly. This need is accentuated by the forthcoming discontinuation of various temporary measures that are currently dampening activity in 1998. The fiscal tightening should aim at improving the underlying structures in the economy, and should not just consist of traditional tax increases or welfare-reducing credit restrictions. There is no acute and immediate need to step on the brakes, but genuine tightening and reforms should take place no later than in connection with the Budget for 1999. The Budget proposal will be announced in August 1998. The announcement of reforms which will improve underlying structures could of itself reduce demand.

When the economic upturn began in 1993, current account surplus was more than 3 per cent of GDP. The surplus fell to less than 1 per cent in 1997, and in the forecast a small deficit is expected. The deterioration of the current account is one indication amongst others of the need to tighten economic policy. On the other hand, trying to achieve the government's goal of eliminating foreign debt by the year 2005 cannot be recommended. To meet this target, a current account surplus of nearly 4 per cent of GDP each year would be required. Surpluses of this magnitude could only be achieved by creating an economic downturn and accepting a significant increase in unemployment. This would benefit neither the present nor future generations.

The foreign debt objective originates from a commendable ambition not to place burdens on future generations. However, it is national wealth, not the foreign debt, that determines future consumption possibilities. The development in national wealth is determined by – private plus public – savings. The crucial question is thus whether the aggregate savings in Denmark are adequate. National savings (in per cent of GDP) have not declined during the economic upturn, but a larger proportion has been placed in domestic investments. This movement of savings has resulted in a deterioration of the current account level; consequently, the current account deterioration does not necessarily mean that increased burdens have been placed on future generations. If the saving rate had increased during the upturn, the future consumption possibilities would of course have been greater. It is a political matter to determine whether savings are currently at a level that is adequate to ensure a fair distribution of consumption possibilities between generations. Two factors suggest that a higher saving rate would be desirable. In the next couple of decades, the proportion of senior citizens in the population will increase, and this will weaken private and public savings. In addition, oil and gas resources, which are part of the national wealth, are currently being used at a high rate.

A general tightening of fiscal policy will strengthen national savings and reduce the risk of overheating. In 1997 there was a surplus on the public sector balance for the first time since 1989, and on the assumption that growth in public expenditures will slow down, the surplus will increase to more than 2½ per cent of GDP in the year 2000. A part of this improvement is permanent, since the structural unemployment rate has been reduced due to the labour market reforms. However, the greater part of the improvement in the general budget is a result of the economic upturn, and the surplus could quickly turn into a deficit when activity weakens again. A tightening of fiscal policy and new structural reforms will lead to a permanent improvement in public savings and thereby increase the room for fiscal manoeuvre in future downturns.

A strengthening of savings should also be a central goal of a future tax reform. The tax system affects the incentive to save by reducing the after-tax return. A cut in tax on capital income would reduce the incentive to incur debt and thereby strengthen private savings. In addition, public finances would be improved, since tax-deductible interest expenditures exceed taxable capital income. A cut in capital income taxation would thus increase national savings. A cut would furthermore increase house costs and thereby dampen house prices and reduce the risk of overheating. Thus, a cut in the tax on capital income would not only improve economic structures by increasing national saving, but would also reduce short term risks. An undesirable side effect of lower capital taxation would be a redistribution of wealth from younger to older generations. This redistribution could be avoided to a certain extent by using the increased tax revenue to cut taxation of labour incomes.

Because unemployment is unequally distributed, a reform of the tax system should also involve a cut in taxation for low wage-income earners. This would increase the income gap between being unemployed and having a low-wage job. This could dampen wage pressure, leading to an increase in aggregate employment. In *Danish Economy, Autumn 1997*, an earned income tax credit was suggested as such a reform measure. The proposed EITC could increase employment by as much as 25,000 persons, and thereby reduce unemployment by a little more than 10 per cent. Another way of increasing the difference

between income when unemployed and income for low wage-income earners would be to reduce the tax rate in the lowest income tax bracket and increase the ceiling of the middle income tax bracket. Such a reform would be less specifically directed at low wage-income earners, but it would strengthen savings by reducing capital income taxation. A choice made between these two tax reforms should thus reflect a weighting of the desire to increase savings and the desire to increase the income gain from taking a low-wage job.

A reduction of working hours is frequently suggested as a way of reducing unemployment, and for example in France it has been proposed to reduce the working week to 35 hours with this aim. In the Danish debate, working time cuts have come into renewed focus in connection with the wage negotiations this spring, where the demand for an extra week of paid holiday played a major role. This demand was primarily motivated by the desire to have more leisure time. However, a reduction in working time has to be paid for by lower economic welfare, and it is thus a fundamental welfare choice. In the short run, a working time reduction can increase the number of persons employed, especially if no wage compensation is given. The higher level of employment will, however, increase wage inflation and reduce Danish competitiveness. The positive employment effect will thereby tend to be offset, and in the long run the unemployment rate will be unaffected. Thus, a working time cut reduces aggregate income in the economy. The lower income also reduces the tax base, and with constant tax rates, the level of public service has to be reduced. Income transfers to the elderly and the unemployed also have to be reduced, unless the tax burden is increased. More leisure time will therefore reduce income for everybody but can – if the value of leisure time is sufficiently high – increase welfare for the employed.

## Chapter III: Is the Economy taking a New Path

The concept of “new economics” has emerged during the last few years. Advances in computer technology, increased globalization and other developments are supposed to have changed substantially the ways in which the economies of the industrialised countries function. In particular, “new economics” implies a future characterised by high and stable economic growth, low unemployment, and low and stable inflation. Based on empirical analyses, this chapter seeks to determine whether or not changes have indeed occurred in important economic relationships.

“New economics” originates in the United States, where GDP has been expanding for more than seven years, but it has also gained popularity in countries such as Denmark and the United Kingdom, where recent economic developments have been similarly positive. However, other countries in, for example, Central Europe have experienced relatively slow growth and rising unemployment during the 1990s. In addition to Denmark, the United States and the United Kingdom, the analyses therefore include Germany as a representative of countries which are in a different phase of the business cycle.

Seven important phenomena characterise all of the four countries at the end of the 20th century, though to varying degrees. First, the service sector now dominates these economies. Second, there have been rapid advances in computer and information technology. Third, globalization means that countries are becoming ever more integrated through trade and capital flows. Fourth, liberalised financial markets have created new financial instruments and improved risk control. Fifth, many goods markets have been liberalised, e.g. transport and telecommunications. Sixth, labour market policies are increasingly aimed at ensuring flexible job rotation and wage formation. Seventh, the achievement of low inflation and small budget deficits has received a higher priority in macro economic policy. Every one of these seven changes can potentially contribute to higher economic growth, lower inflation and unemployment, and reductions in the volatility of the business cycle. The aim of this chapter is to determine whether these potential effects have actually materialised.



Growth in the 1990s has been in line with the average growth rate for the post-war period in Denmark, West Germany, and the United States. The United Kingdom has in contrast experienced historically high growth rates, though this is more than anything a reflection of poor growth performance before the 1990s.

Even though growth in the 1990s has not been extraordinarily high in a historical perspective, tighter economic policies could have disguised the positive effects of “new economics”. The new phenomena of the 1990s could therefore emerge as being a series of relatively large supply-side shocks on the economies of these countries moderated by a series of negative demand shocks. But a structural VAR-analysis based on real growth and inflation – of the Blanchard and Quah type – reveals no such large supply-side shocks in the 1990s in the four countries.<sup>1</sup>

If international phenomena like globalization, the digital revolution, liberalisation of goods and capital markets etc. are important developments for the structure of economies in the 1990s, one would expect the economies to have become more open and thus more susceptible to external shocks. External shocks would to a greater extent be the same for all the economies. Accordingly, the level of correlation between shocks to the different economies should have increased. This has indeed been the case with respect to demand shocks for Denmark, the United Kingdom and the United States, but not for West Germany (see table 2). This increased correlation is probably predominantly caused by the parallel upturn in growth in the former three countries. West Germany, on the other hand, started the decade with a reunion boom, followed by a slump from which it is just recovering. The correlation between supply-side shocks – the main channel for the changes in the 1990s – remains the same when data for the last decade are added (see table 3).

1) Blanchard, O. J. and D. Quah (1989): The Dynamic Effects of Aggregate Demand and Supply Disturbances. *American Economic Review* 79, pp. 655-673.

*Table 2: Correlations between demand shocks excluding and including the 1990s*

	Denmark		West Germany		UK		USA	
	65-89	65-97	65-89	65-97	65-89	65-97	65-89	65-97
Denmark	1	1	0.49	0.45 <sup>a</sup>	0.06	0.21	0.21	0.33
West Germany			1	1	0.42	0.32 <sup>a</sup>	0.57	0.48 <sup>a</sup>
UK					1	1	0.28	0.41
USA							1	1

a) Only until 1994.

Sources: Statistics Denmark, ADAM's databank, OECD, *Main Economic Indicators*, and own calculations

*Table 3: Correlation between supply shocks excluding and including the 1990s*

	Denmark		West Germany		UK		USA	
	65-89	65-97	65-89	65-97	65-89	65-97	65-89	65-97
Denmark	1	1	0.69	0.66 <sup>a</sup>	0.29	0.29	0.50	0.49
West Germany			1	1	0.44	0.43 <sup>a</sup>	0.37	0.36 <sup>a</sup>
UK					1	1	0.50	0.49
USA							1	1

a) Only until 1994.

Sources: Statistics Denmark, ADAM's databank, OECD, *Main Economic Indicators*, and own calculations.

The contrast between the strong expectations of high growth due to the seven phenomena listed above on the one hand, and actual growth rates that are moderate on the other, seems paradoxical. However, there appear to be natural explanations for the lack in growth. On the basis of neoclassical growth accounting, it is estimated that computers are unlikely to have contributed more than ½ a percentage point to annual U.S. growth in recent years. This is primarily due to the fact that computers constitute a relatively small part of the total stock of productive equipment.

Globalization is another phenomena which is often expected to contribute substantially to economic growth and welfare. The existing evidence shows that global integration is beneficial for the countries involved, yet it is debatable whether the effects on annual growth in industrialised countries are actually very great. It is argued that the big gains from trade came in the 1950s and 1960s, when trade quotas and tariffs were reduced markedly, while the gains from more recent increases and changes in trade are more marginal. Similar arguments are presented for the other phenomena, which are also characterized by similar gradual growth.

One conclusion is therefore that the seven phenomena have contributed to economic growth in the four countries, but also that their effects have not been great enough to ensure historically high growth. Thus, the phenomena of the 1990s do not appear to be larger in relative terms than the phenomena that characterised earlier periods, e.g. the 1960s.

Inflation levels correlate closely for the four countries, and price increases have been low during the 1990s. Wage increases have been low as well, and it has been suggested that wage and price formation has changed fundamentally.

We have tested the wage formation by examining the wage equations included in a number of Danish macroeconomic models and one international model. We have analysed how good the wage equations are at forecasting the wage increases (see table 4). The conclusion is that there seems to be a structural break in the wage equation for the United States beginning in 1993. The other equations tend to forecast higher wage increases than were realised, but the differences between the expected and the actual changes are within the normal limits of statistical uncertainty. This indicates that the wage formation process has changed in the United States, while it seems to have remained stable in the other countries. Aggregate real wages in the United States have also been nearly constant since the 1970s, while they have increased in the other countries even when unemployment was high.

Table 4 Actual and estimated increases in hourly wages for private sector employees

	Denmark		Germany		UK <sup>a</sup>		USA	
	Estim.	Actual	Estim.	Actual	Estim.	Actual	Estim.	Actual
	----- Per cent -----							
1993	3.0	2.5	6.8	4.3	4.4	1.5	4.5	2.1
1994	3.4	3.1	5.7	3.9	4.8	3.5	3.9	1.2
1995	3.7	3.8	5.4	4.8	4.7	3.0	3.8	2.1
1996	4.7	4.1	3.2	2.7	6.2	3.2	3.6	2.7
Estimation period	1975:1-1990:4		1964:1-1992:2		1963:2-1992:2		1965:1-1992:2	

a) Increases in annual income for employees in private sector.

Note: The estimated wage increases have been calculated by dynamic simulation of the wage equations. The wage equation for Denmark is a former version of the wage equation of the macroeconomic model MONA of the Danish central bank. The wage equations used for the United States, the United Kingdom and Germany are nearly the same as those in Turner, D., P. Richardson and S. Rauffet (1996): *Modelling the Supply Side of the seven major OECD Economies, Working Paper No. 167*, OECD Economics Department, Paris.

Source: Information from Danmarks Nationalbank, information from OECD and own calculations.

Price formation might be affected by some of the major phenomena. Prices for computers and other IT products have fallen, international trade in goods has increased, and deregulation within, for example, the telecommunications sector has improved competition. Changes like these can reduce increases in consumer prices, but they are unlikely to have caused the large reductions in the level of inflation, since the effects of globalization, etc. affect prices gradually.

Inflation is also affected by changes in expected inflation. If a government announces a policy to reduce inflation, and the policy is considered credible by employers and workers, then it may be possible to reduce inflation without seriously harming growth. A number of countries have followed a strategy aimed at achieving lower inflation, which is one of the qualifications countries have to fulfil in order to enter the EMU. One of the instruments has been to increase the central banks' independence of the government.

One way of determining expected inflation is to look at the interest rate level of long term government bonds, which partly reflects expectations of future price increases. A test of this hypothesis shows that it is possible to forecast inflation in this way in a number of countries, including the United Kingdom and Denmark, but not in the United States.

Our conclusion is that there seems to have been a change in wage formation only in the United States, but the main reason for the low levels of wage and price increases in the 1990s in all countries has been a change in macroeconomic policy and price expectations.

“New economics” could also be expected to change the business cycle. This is not because shocks to the economy have changed – they have not, as stated above – but because of a more flexible reaction of prices and quantities to shocks. Increased competition in goods and labour markets could have brought this about. One would then expect to see the impact effects of shocks on prices and quantities increase, and the rate of adjustment decrease, following a shock in an impulse-response analysis. However, the temporary effect on GDP of a demand shock is an exception, since it would be expected to decrease. Adjustment after supply shocks has indeed become faster in the 1990s in the United Kingdom and the United States, but the speed of adjustment to demand shocks has not increased. Neither Denmark nor West Germany has experienced any general increase in the rate of adjustment to shocks. All in all, the business cycle does not change consistently in the expected direction when data for the 1990s are included in the analysis.

Our analyses have all in all shown that the economies of Denmark, the United States, the United Kingdom and Germany are working in almost the same way as they did in earlier decades. The optimistic view of the “new economics” does not appear to be warranted. Consequently, there are no reasons to believe that the constraints on economic policy have decreased, and balanced and effective structural, fiscal and monetary policies are still required.

## Chapter IV: The Danish Welfare State

It is sometimes claimed that the Danish welfare state is in crisis. The aim of this chapter is to discuss the problems of the Danish welfare state from an economic point of view. It is the intention in future reports of the Danish Economic Council to investigate in detail some of the questions raised.

Different welfare state models achieve the objectives of the welfare state in different ways. The Danish welfare state has a relatively equal distribution of income, and provides wide access to public services.

Public sector expenditures at factor costs as a proportion of GDP have been increasing in Denmark since 1948, resulting in a high tax burden. Income transfers in particular have increased markedly, due to a quadrupling in the number of benefit recipients below 67 years of age.

Expenditures on care of the elderly and child care have increased, and at the same time the female rate of participation in the labour market has increased. Health expenditures have been relatively constant in proportion to GDP. Expenditures on education have decreased in proportion to GDP, though it should be noted that the number of pupils in compulsory school has fallen substantially at the same time.

A central problem is the allocation of priorities to the various objectives of the welfare state. The priority problem emerges because the price paid by the recipient is different from the expense, and expenses are not taken into consideration by the recipient. Priorities have to be established both between different areas of the welfare state and within each area. For example, priorities have to be established between health care and other expenditures, and within the health sector between hip and heart surgery. These priority problems are reinforced by the existence of a large public sector and by emerging tasks for the welfare state to tackle.

The proportion of the population receiving retirement pensions will increase during the next 40 years. Demographic changes also mean that there will be more pupils in compulsory schools and fewer students in higher level schools and further education in a few years. Political decisions and new instruments in public sector management are needed because of these shifts in demand.

An important task for the welfare state is to ensure the health of the population. Life expectancy has increased less in Denmark than in other developed countries; yet health expenditures in Denmark are at the same level as in other industrialised countries. The ageing of the population and the availability of new treatments mean that the pressures on health services will continue. Priorities between different treatments will therefore have to be established. Furthermore, a study of prophylactic treatment is needed to see whether it is possible to relieve the pressure on expenditures on treating diseases.

The tax level in Denmark is among the highest in the world. The tax system is under pressure, owing to the fact that several tax sources have become more mobile because of increased internationalization. A closer look at the different sources of revenue is therefore needed.

Denmark gives greater weight to an equal distribution of incomes than to the insurance aspects of public services. Income transfers are partly a redistribution of income between different points in a person's lifetime. A comprehensive analysis is needed to see if it is possible to place more weight on individual savings and individual insurance against unforeseen events without changing the distribution of lifetime income.

A queueing system has been used to ration some public services, e.g. child care. It would be advisable to consider using the pricing mechanism more actively in distributing some public services, because it is not obvious that queueing for public service means a smaller loss of welfare than higher fees would.

A small proportion of the labour force in Denmark bears a large part of the burden of unemployment. It is important that unemployment is distributed more equally. The increasing burden of care for the elderly could be relieved if the proportion of employed persons in the population increased. But the burden would also be smaller if the elderly retired at a later age, or if working hours were increased. There is an important choice to be made between shorter working hours, lower retirement age and the possibility of financing and offering social services to the populace.

In the Scandinavian countries, the development of public services and the participation rate of women in the labour market have been relatively parallel. The participation rates for women in the United States and Scandinavia are at the same level, but in the United States there has not been a corresponding increase in the provision of public services. Household duties are taken care of through the market to a greater extent. An increase in public services is thus not necessary for women's participation in the labour market. However, public financing does redistribute income toward families with children and the elderly.

A thorough analysis of the management rules and institutions of the welfare state is needed because of the priority problems in the welfare state. Management rules depend on which problems the welfare state intends to solve. A study of the division of tasks between state and local authorities is needed, including the degree of decentralization of tasks.

In many areas the Danish welfare state has been a success. However, this does not mean that the present size and structure are optimal, or that the present objectives of efficiency and equality cannot be achieved at lower costs. Nor does it imply that the present structure is best suited to manage future economic and social challenges. But in future reforms the positive effects of the welfare state should be preserved.