

ENGLISH SUMMARY

Chapter I: The Danish Economy

The Danish economy is expected to move into a period of somewhat lower growth rates than was experienced in the period 1994-2000. GDP growth is thus projected to drop to around 1¼ per cent in 2001 and to remain at 1¾ per cent in 2002 and 2003. The main reason for the relatively sharp decrease from 2000 to 2001 is that domestic demand growth will slow down considerably. Exports will also grow at a weaker pace after almost unprecedentedly high growth in 1999 and 2000. The slow growth of private consumption is expected to continue in 2001, while a return to growth rates above 2 per cent is projected for the following two years. Private sector employment, which increased rapidly in the latter part of the 1990s, is expected to remain almost constant in the forecast period. The forecasted moderate increase in total employment is thus exclusively due to an expansion in the number of jobs in the public sector. This slow growth in employment, in combination with a small increase in the size of the available labour force, will result in a small increase in the rate of unemployment from 5.3 per cent in 2001 to 5.5 per cent in 2003.

Domestic demand grew almost 3 per cent in 2000, driven to a large extent by a substantial increase in investment, particularly residential investment and business fixed investment. In 2001 capital formation will no longer contribute to growth, and with private consumption still subdued, total domestic demand is expected to grow only around ½ per cent, primarily due to public consumption. As private consumption is expected to regain momentum in 2002 and 2003, domestic demand will also exhibit higher growth rates.

In the spring of 2001 the global economy, led by the United States, has experienced a period of high uncertainty and a slowdown in economic growth. The trade-weighted average growth for Denmark's trading partners is expected to fall from 3½ per cent in 2000 to 2.7 per cent in 2001, and will then

stabilise at around 2½ per cent p.a. This development is due to a relatively sharp drop in growth rates in the USA and Japan; most European countries are expected to show only moderate decreases in growth, due to strong domestic demand and relatively few capacity problems.

In Denmark, both exports and imports grew at rates of around 10 per cent in 2000, fuelled by large increases in the trade in industrial goods and in services. Lower growth rates for exports and imports are expected in 2001-03. Exports will be affected by slower market growth abroad and an expected strengthening of the effective exchange rate. Imports, on the other hand, will be determined in 2001 primarily by the low growth rates in private consumption and business fixed investments. In 2002 and 2003, the main reasons for lower import growth are expected to be weaker exports and a decline in business investments; both these have a large import content. The current account surplus is expected to increase to over 3 per cent of GDP in 2003 due to falling investment as a share of GDP.

The inflation rate measured by the increase in the deflator for private consumption was 3.1 per cent in 2000, which was the highest since 1989. However, there are three reasons why this should not give rise to too much concern. First, wage increases have been moderate and are expected to continue to be so despite the low unemployment rate. Second, the high inflation rate was primarily a result of the rise in fuel prices through 1999 and 2000. Third, the domestic slowdown will ensure that the demand-driven price increases will become smaller. Consequently, it is expected that consumer price inflation will drop to 2¼ per cent in 2001 and 1¾ per cent in 2002 and 2003. The hourly wage is expected to increase between 3½ and 4 per cent p.a. during the forecast period. This is somewhat less than historical evidence would suggest for the current unemployment rate, and this development should at least partly be ascribed to the structural reforms implemented during the 1990s.

The Danish labour force declined in size during the 1990s, even though demographic changes would have meant an

increase of around 150,000 persons if labour market participation rates had remained the same. Instead, participation declined steadily until 1998. In 1999 and 2000 the effects of the reforms implemented in the early retirement system became visible, and the labour force increased marginally.

The government surplus measured as a share of GDP is expected to remain roughly constant during the projection period. In general, expenditures are expected to grow only moderately, since income transfers will remain low due to the low rate of unemployment, and interest payments will decrease as the government debt falls. In 2001 the revenue from corporate taxes is expected to be unusually great, because of the large profits earned in the offshore industry in 2000; however, this increase in revenue will be partly offset by a budgeted increase in public consumption.

Table 1 Short-term prospects for the Danish economy

	Current prices	Per cent	Percentage change, volume			
	DKK bn. ^d	of GDP	2000	2001	2002	2003
	2000	2000	2000	2001	2002	2003
Private consumption	627.4	47.8	-0.2	0.6	2.4	2.2
Public consumption	324.3	24.7	0.6	2.2	1.2	1.2
Gross fixed capital formation	287.5	21.9	11.2	-1.5	-0.8	-0.6
consisting of:						
Residential investments	60	4.6	10.6	-16.3	-2.4	-2.3
Business fixed investments	204.9	15.6	11.9	1.8	-0.8	-0.4
Public investments	22.6	1.7	6.4	6.0	2	2
Stock-building ^a	2.2	0.2	0.3	0.0	0.1	0.1
Total domestic demand	1,241.3	94.6	2.8	0.5	1.5	1.4
Exports of goods and services	556.9	42.4	9.8	5.5	3.7	3.8
Imports of goods and services	486	37	10.2	4.1	3.4	3.2
GDP	1,312.2	100	2.9	1.3	1.7	1.8
Key indicators						
Consumer prices, percentage change ^b			3.1	2.2	1.7	1.7
Unemployment, per cent ^c			5.3	5.3	5.5	5.5
Current account, DKK bn.			25.1	30.7	40.5	52.3
Current account, per cent of GDP			1.9	2.3	2.9	3.6
General government financial balance, DKK bn.			32.1	33.6	31.6	36
General government financial balance, per cent of GDP			2.4	2.5	2.2	2.5
Hourly wage costs, percentage change			3.5	3.9	3.6	3.5
Terms of trade, percentage change			0.4	-0.3	0.4	0.5

- a) The percentage change is calculated as the real changes in stock-building relative to real GDP in the previous year.
- b) Implicit private consumption deflator.
- c) Percentage of the total labour force. National definition.
- d) The DKK/USD exchange rate is taken as 8.09 in 2000, 8.05 in 2001, 7.68 in 2002 and 7.46 in 2003.

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

Policy Recommendations

The outlook for Danish economy in 2001 is bleaker than in earlier projections. In the light of this development the current fiscal stance seems appropriate. GDP growth in 2001 and 2002 will be influenced positively by expansionary fiscal policy. Our estimates are that fiscal policy will cause GDP growth to increase by 0.4 per cent in 2001 and 0.2 per cent in 2002 in comparison with a neutral stance. Although growth rates are expected to be moderate in the years to come there will still be a tight labour market. Any further relaxation of fiscal policy in this situation could threaten the expected well-balanced slowdown.

The prediction of higher growth rates in GDP in 2002-03 is based on two main assumptions. Firstly, the international slowdown is assumed to be only temporary in nature, and secondly, it is expected that growth in private consumption will regain momentum. However, if these assumptions prove incorrect, or if other factors should cause a recession, there could be a need for an expansionary fiscal policy to stimulate activity.

The level of unemployment is expected to rise slightly in the coming years. This new development will increase the demands placed on labour market policy, as slower growth in economic activity will make finding jobs more difficult for the unemployed who have poor qualifications and who are in the highest unemployment risk categories. The Minister of Labour has initiated a revision of the scheme for the obligatory placement of unemployed persons in subsidised jobs. The stage is being set both for increased effort to place the unemployed in subsidised jobs that result in permanent jobs after the period of subsidy ends and for increased flexibility in creating subsidised jobs and training programmes that accord with the wishes of the unemployed persons in question. These initiatives could be reasonable, but several possible pitfalls exist that should be properly addressed in order to avoid a relaxation of the labour market policy. Increased flexibility could easily lead to a weakening of the current requirements concerning the availability for work criteria for the unemployed, for example. Such

a relaxation of the labour market policy would reduce the incentives for the unemployed to seek work and could make it difficult to maintain a low unemployment level. One way to counteract such adverse effects of relaxing labour market policy would be to make unemployment benefits more individual. This could mean, for example, that unemployment benefits were made dependent on the duration of the unemployment period, instead of the current system where unemployment benefits are the same throughout the whole period. Such an initiative would lead to an increased incentive for the unemployed to seek work.

In the last four decades, economic growth has been supported by a continuous increase in the size of the labour force, primarily as a result of changing demographic factors and the increased participation of women in the labour force. In the years to come the labour force is expected to increase only modestly in size, as neither demographic factors nor the increasing participation of women will continue to contribute positively to the labour force. In order to ensure that labour force factors will continue to make a positive contribution to economic growth it is therefore important that there are new initiatives. One area where improvements should be possible is in the better integration of refugees and immigrants into the labour market. This is an area that so far seems to have had only limited success. Special attention should also be given to poor working environments and stressful work routines which result in persons engaged in active employment retiring from the labour market too early. These people could probably remain in the labour market if the labour market parties made a more active effort to improve the working environment. Furthermore, structural improvements to the tax system could also contribute to an increased supply of working hours.

Chapter II: Challenges Facing the Tax System

In the coming years, it can be expected that there will be increased pressure on the financing of the welfare state. One important reason for this is demographic change, which in the absence of reforms will lead to a heavier tax burden. Another

challenge is growing internationalisation, which may threaten some of the existing tax bases. However, the adjustment to pressures from abroad is not a new issue. For example, there have been a number of adjustments during the last 15 years to excise taxes on various goods which are sensitive to border trade and to company taxation precisely in response to such pressures. However, future developments may make further changes necessary.

In considering how to create the most suitable tax system, the most important overall problem can be formulated as follows. Taxation is necessary in order to finance the public expenses that society decides upon. Taxes are also an important instrument for redistributing consumption possibilities among members of the population, to the extent that there is a political desire for this. But at the same time most taxes have costs in the form of various distortions, because they influence the behaviour of companies and individuals. Consequently, the tax system should be organised so that it minimises the welfare loss from such distortions, subject to the goals of collecting sufficient revenue and maintaining the desired distributional profile through taxation. These objectives will typically be internally conflicting to some extent, and in practice the tax system of a country normally will have to be a compromise between various considerations.

This report does not try to estimate the optimal size of the public sector, and consequently the optimal overall size of the tax burden is not assessed either. The focus is on the examination of various problems relating to each of the most important individual elements in the tax system. Taxes are identified which seem to be particularly distortive today, or which can be expected to come under strong pressure in the future, and conversely other taxes are identified which should play a relatively stronger role in the tax system than they do today. The recommendations of the analyses are expected to be relevant for the Danish economy for a period of around the next ten years.

Taxation of labour income reduces earners' after-tax income and consequently the labour supply. The Danish income tax is

characterised by high tax rates on wage income, with marginal tax rates of 44 per cent on low income, 50 per cent on medium income and 63 per cent on high income. The latest empirical study based on Danish data has found that raising disposable income by ten per cent would increase labour supply by one per cent, on average. However, this figure is higher for people with low disposable incomes and decreases for higher incomes, primarily reflecting the fact that men adjust their labour supply less than women do. Various reforms which reduce the tax burden on wage income have been analysed on the basis of this empirical study, which includes information on overtime pay and second job wage rates.

A tax reform which increased the threshold level for the upper tax bracket would be the most effective with respect to increasing labour supply and minimising loss of tax revenue. An increase in the medium tax bracket threshold would also have fairly positive effects on labour supply. A tax reform which increased the starting point for the upper tax bracket from DKK 277,000 to 350,000 would lead to increased labour supply and thence to increased income from taxation, covering 60 per cent of the initial loss of tax revenue. The higher disposable income would increase consumption and thus the revenue from VAT and excise taxes, bringing the overall level of self-financing to around 90 per cent. An increase in the starting threshold for the medium tax bracket from DKK 178,000 to 240,000 would have an overall level of self-financing of around 70 per cent. It should be noted, however, that these analyses cover only people in the labour force, so that the degrees of self-financing are overestimated when the tax cuts include everyone.

A complete removal of the upper tax bracket, however, is not an effective way of reducing distortions in the labour supply, as people with very high income would be given a large tax-reduction which would not be offset by a corresponding increase in the labour supply. Reducing the tax rate in the lower tax-bracket is not effective in increasing the labour supply either, as this at the same time brings large tax-reductions to people with relatively high income who will increase their labour supply only slightly. Both these tax reforms would

have a level of self-financing of only 40 per cent.

Raising the starting point of the medium and upper tax brackets would give a more uneven distribution of income. Choosing the most appropriate design of wage taxation is thus a trade-off between efficiency and distributional considerations. If it is desirable to reduce the tax burden for people with low incomes, this should be done in a way that makes working more rewarding for these people, as at present they have only weak incentives to work at all because of high benefit rates. This could be done by means of, for example, an earned income tax credit.

Apart from reducing the labour supply among people living in Denmark, taxation of labour income could potentially also lead to an out-flow of people from the country. In the 1990's there was a relatively constant yearly emigration of Danes of around 14,000 people, which was equivalent to 0.45 per cent of the population of Danes aged between 17 and 62 years. The pattern of emigration did not change much in the same period either. People with high levels of education or high incomes have the highest propensity to emigrate. However, only around 30 per cent of these people did not return to Denmark within six years of emigration. In addition, the people returning to Denmark earn a higher income after their return than they would have done if they had stayed in Denmark in the first place, probably due to the acquisition of relevant qualifications abroad. In the same period there was a slight increase in the number of people coming to Denmark from other OECD countries, reaching 9,000 people in the late 1990's. Due to return migration, however, the relevant net outflow from Denmark is well below the difference in the figures for emigration and OECD immigration of 5,000 people. After six years the net loss due to migration is less than 500 people per year, due to the high return rates among Danes in particular. Immigrants from OECD countries typically have a smaller income in Denmark than the Danes who emigrated had, but the differences in income are not huge. All in all, the analysis shows that the net outflow from Denmark is very moderate, and does not seem to be any threat to tax revenues.

Since the 1st January 1993, cross-border shopping in the EU has no longer been restricted through importation allowances. Denmark therefore reduced the excise taxes on a number of goods before 1993 in order to avoid an unacceptable level of cross-border shopping, particularly at the German border. In 2000 there was a moderate net deficit in the amount of cross-border shopping of DKK one billion, equivalent to less than 0.2 per cent of private consumption. By the end of 2003 at the latest, Denmark should have reduced its duties on spirits and cigarettes, as the Danish exemption from removing the quantity restrictions on the importation of these goods will expire then. However, this adjustment could be made earlier.

E-commerce transactions made by Danish consumers at foreign businesses will in some cases lead to a loss of VAT revenue for the government. The e-commerce carried out by private consumers in the OECD countries seems to be very limited. In Denmark this trade probably amounts to a fraction of a percentage point of the total retail trade, and Danish VAT is paid on the majority of these transactions. E-commerce in digital products will probably increase in the future, but it is difficult to imagine that the magnitude will increase to a level that could threaten VAT revenues.

The treatment of capital income in the present tax system is problematic in several ways. Different kinds of capital income are taxed in very different ways, which in itself leads to distortions. At the same time there are several arguments for organising the income tax system so that labour income is taxed progressively while capital income of various kinds is taxed at a fixed single rate, which should be low compared to the top-bracket tax rate for labour income (a so-called dual income tax).

The Danish tax system already has several elements of such a dual tax system. Negative capital income for individuals is taxed at a proportional rate, which at around 33 per cent is close to the company tax rate of 30 per cent. However, other kinds of capital income are taxed at either lower or higher rates. Positive individual capital income is taxed at rates which may be almost 60 per cent. Conversely, the returns to pensions

savings are taxed far more leniently at 15 per cent, and the present tax on a typical owner-occupied dwelling of 1 per cent of its value corresponds to a capital income tax of around 16 per cent. Similar differences apply for the effective real tax rates. Such differences of taxation distort the composition of savings.

There are no good economic arguments for giving pensions savings a specially favourable tax treatment compared to all other kinds of savings. If a stimulation of total national savings is desired, a single low tax rate for all kinds of savings is a better way to achieve this goal than subsidising one particular type of saving. It is uncertain whether the present low tax on pensions savings influences total national savings positively or negatively. Part of the pensions savings probably replaces other kinds of savings which would otherwise have taken place. In addition, the subsidisation creates a loss of public revenue, which could have been used either for public savings or to lower other distortive taxes. Also, the tax exemption for income when money is paid into a pensions scheme and the corresponding taxation when it is cashed results in unsystematic taxation which could be avoided if deductions for pensions payments were removed.

The taxation of owner-occupied dwellings is also sub-optimally low compared to the taxation of other kinds of capital. This discriminates against people who prefer to invest in assets other than owner-occupied dwellings, and creates a distortion of savings incentives towards house building at the cost of other kinds of investment which could give a higher return. The capital invested in other kinds of dwellings (co-operatives and social housing) should also be taxed in line with other investments.

In order to ameliorate the present distortions affecting savings and investment decisions, it is recommended that the principle of dual income taxes should be carried through more consistently. This means that the taxation of all kinds of capital income (positive as well as negative) should be harmonised at the same level. This level should preferably be lower than the present rate of 33 per cent for negative capital income. An

appropriate tax rate for all kinds of capital income could be in the order of e.g. 20-25 per cent. This corresponds to a tax on the value of owner-occupied dwellings in the order of 1.2 to 1.5 per cent.

A general lowering of capital income taxes would lead to a number of efficiency gains in the tax system, but might also result in a more unequal income distribution. An instrument to counter this would be a higher tax on inheritances above a certain limit. Over time, this would lead to a lesser degree of concentration of wealth. Another point to bear in mind is that inheritance taxes are probably less distortive than other kinds of capital taxes because some legacies are left unintentionally. Taxation of such unintentional inheritances will not distort savings decisions.

Company taxation is a complicated area where several special considerations are necessary. Traditional company taxes tax ordinary returns on invested capital as well as various kinds of extra-normal profits which may be due to monopolies, exploitation of scarce natural resources, etc. Unlike taxes on ordinary returns, taxes on extra-ordinary profits will not in general be distortive. To the extent that these profits are due to specific conditions in Denmark, their taxation will also be robust with respect to pressures from internationalisation, even in a situation where capital movements across borders are widespread.

Because of this, in principle taxation of ordinary and of extraordinary company income should be treated differently, and there exist various methods of distinguishing the two components in the earnings of the companies. Whereas ordinary returns, like other kinds of capital income, should be taxed at a lower rate than today, the extraordinary returns should be taxed at a considerably higher level. However, there are various practical problems in introducing a company tax which distinguishes between the two kinds of returns. Multinational companies in particular can often avoid high statutory company taxes. One way of doing this is to use transfer pricing rules which place the profits in subsidiaries in countries with low rates of company tax. To diminish such problems there is

a need for a better control of the transfer prices and internal debt arrangements of companies. More extensive international co-operation would be desirable in this area.

An estimate of the amount of income which avoids taxation in Denmark by means of income shifting to other countries suggests that this could be between DKK 20 and 40 billion annually. One of the possible explanations for this amount of international income shifting is transactions inside major companies who wish to avoid taxation in Denmark. It is necessary to investigate the mechanisms behind this traffic in more detail. At the same time, unregistered financial placements abroad should be examined more closely.

An expedient method of diminishing the distortions in the present tax system would be to put greater emphasis on the taxation of land and other immobile tax objects. Because the supply of land is not affected by tax changes, a tax on land would not be distortive, provided that the price of land can be separated with sufficient accuracy from the total price of land and property, which is determined in the market.

Like land, the Danish underground natural resources are an immobile tax source, and a correctly instituted tax of the gains from the exploitation of these resources would in principle have no distortive effects. The only tax source of any significance in this respect is the oil and gas in the North Sea. The present tax treatment of the oil and gas production is inefficient in several ways. In particular, the 250 per cent investment credit of the hydrocarbon tax is highly problematic. A change in the taxation towards an ordinary company tax supplemented by a superstructure in the form of a capital income tax which only taxes the extraordinary resource rent will result in a more efficient tax structure and probably more revenue than the present system.

Another reason for distortions in North Sea production besides tax considerations is the time-limited concession to the Danish Underground Consortium, which creates uncertainty about the situation after 2012. An early agreement on the conditions for a concession after this year as well as an early change to the

rules of taxation would be advantageous and could be coordinated through negotiations between the government and the Danish Underground Consortium.

Apart from the major problems mentioned above, there exist at present well over 100 separate arrangements in the tax system which favour certain sectors and groups of individuals. These arrangements cause a loss of revenue in the order of DKK 35 billion a year. In some cases there may be good reasons for special arrangements in order to promote certain goals. However, such arrangements should be constantly and critically re-evaluated to determine whether the original reasons for the arrangements are still valid. These arrangements have not been examined in detail in the present report, but probably some of them could be phased out. In many cases where it is considered desirable to maintain favourable treatment, it may be advantageous to convert the tax advantage into a direct, and thus visible, subsidy.

Overall, there are several areas where changes to the present tax system would be desirable. Certain clear principles for sound taxation are not currently being followed. Among the most important priorities for tax reforms in the coming years should be a reform of the tax on capital income, so that ordinary returns to capital should be taxed at a single low rate regardless of the source. Another general principle for future tax reforms should be a re-orientation of taxation from mobile towards immobile sources. While the taxation of goods and services and of labour income does not lead to very large overall distortions, there will be considerable efficiency gains in lowering the taxes in particularly exposed points within these two areas.

Chapter III: The Danish Housing Market – Distorted and Inefficient

This summary begins with a description of the Danish housing market and of the type and extent of governmental intervention. Next, there is a report on the distributional and efficiency

effects of rent control and subsidies to owner-occupied housing, and finally there is a recommendation for a substantial liberalisation of the housing market.

The housing standard in Denmark is high. This is the result of both high economic welfare levels and massive government subsidy of housing consumption. The housing market is a central part of the welfare state, but the arguments for general subsidies to housing consumption are dubious.

The Danish housing market encompasses four different sectors, each characterised by a different set of legal regulations and economic instruments. The four sectors are owner-occupied dwellings, private rented housing, social housing (rented housing provided by housing associations), and co-operative housing (where the occupants own a part of the co-operative and have the right to use a specific apartment).

Owner-occupied housing amounts to about 55 per cent of the housing stock. Housing investments receive an implicit subsidy through the tax system, because imputed rents from equity invested in the house are taxed at lower effective rates than the rates at which private market rents are taxed. Specifically, interest payments are deducted from capital income to arrive at taxable income to which a tax rate of about 33 per cent is applied, but the property tax on a typical owner-occupied house is only about 16 per cent.

Private rented housing amounts to about 20 per cent of the housing stock. Rent control has been a permanent feature of the Danish housing market for more than 60 years. The rents in most private rented dwellings are regulated cost-based rents. Landlords are allowed to pass on all costs, property taxes included, actually incurred in the day-to-day operation of the property, and a prescribed charge to cover maintenance costs. The cost-based rent also allows for a capital charge, which can vary between 7 and 14 per cent depending on the age of the property. However, the capital charge is calculated on the basis of the value of the house in 1973 – and no allowance for inflation on this part of the rent is permitted. Rents on dwellings constructed after 1991 are exempted from rent control.

Social housing accounts for almost 20 per cent of the housing stock and is basically a post-war undertaking. The housing associations are run as non-profit societies with rents basically being determined from their costs, of which interest payments and amortisation of the initial capital outlay are the major components. The housing associations are directly supported by the government through reduced expenditure related to interest payments and amortisation of the loans. The social housing investments receive an implicit subsidy through the tax system, because they do not pay property tax on equity.

The fourth type of dwelling is co-operative housing, which amounts to 6 per cent of the number of dwellings. Co-operative housing was institutionalised in the 1970s in order to allow tenants in private rented housing to buy their property. Whenever a privately-owned rented property is for sale, current residents must be offered the opportunity to buy the property and form a co-operative. The price of the property will typically be low, because of rent control, which means that a landlord's income from letting the property will be low. Housing costs for residents in co-operative housing thus typically reflect the controlled rents of private rented housing. Co-operative dwellings receive an implicit subsidy through the tax system, because they do not pay property tax on equity. A certain number of recently established co-operatives also get direct government support, which lowers expenditure related to interest payments and amortisation of loans.

The various direct and indirect subsidies to the different housing sectors result in a spread in user costs for the four types of housing. Co-operatives with no debts have the lowest user costs, and new privately-rented dwellings have the highest user costs. Privately-rented dwellings are the only type of housing which are not subsidised. The indirect subsidies to social housing rise as time goes by, because the tenant's payment of capital costs are only increased by three-quarters of the inflation rate.

The benefits accruing from rent control to the occupants of private rented housing, social housing and co-operative housing are calculated in the report, and the socio-economic

groups which receive the largest benefits are identified. Further, the effects of rent control on housing consumption and residential mobility are quantified.

Generally it is found that the rent control benefit is very poorly targeted among tenants in private rented housing. The average rent control benefit is DKK 10,200 per tenant per year (more than 9 per cent of the average income). Rent control benefit is related to income, so that low income groups receive more than the average, but the highest benefits go to high income groups, while the lowest benefits accrue to middle income groups. A regression of the rent control benefit on several socio-economic characteristics of the occupants reveals that a high level of education is particularly strongly associated with higher benefits. Thus, rent control is not targeted towards those that would be the natural recipients – that is, the low income groups.

Surprisingly, the rent control benefit in social housing is even worse targeted than in private rented housing. The average rent control benefit per person is somewhat lower, but the amount of benefit is clearly shown to rise with income. In addition, tenants from non-OECD countries, unskilled persons, persons on early retirement and the long-term unemployed receive relatively low benefits. The social housing sector of the housing market is supposed to take care of the worst off persons in society, but there seems to be a sorting mechanism inside the sector which prevents the allocation of attractive apartments with high rent control benefits to the worst off.

The residents in older co-operative housing are also in receipt of rent control benefits in the sense that these dwellings have been converted from rent-controlled private rented dwellings. Again the rent control benefit seems to be very poorly targeted, as the benefit is highest for the richest occupants, and persons with a high level of education get relatively high benefits. In total, the rent control benefits to residents in private rented housing, social housing and co-operative housing amount to DKK 15.5 billion.

Rent control also affects housing market efficiency, as housing consumption and residential mobility are distorted. Low rents due to rent controls lead to shortages of apartments because demand exceeds supply, and because the allocation of rent-controlled apartments across consumers is not efficient. That is to say, when demand is rationed, it is not necessarily those consumers who are willing to pay the market rent who are actually allocated an apartment. Evidence of such misallocation costs are found in private rented housing and co-operative housing, where residents in the most controlled units (i.e. units where the rent control benefit amounts to more than 30 per cent of the market rent) occupy more square metres per person.

The incentive to leave an apartment with high rent control benefit is clearly less, and as a consequence mobility on the Danish housing market is adversely affected by rent control. Tenancy duration for a typical household in the private rented sector is found to be more than six years longer if the apartment belongs to the 10 per cent most regulated units than if it belongs to the 10 per cent least regulated units.

The implicit subsidy to owner-occupied housing through the tax system is calculated in the report, and the income groups of the owners who received the largest subsidies are identified. There is a natural positive relationship between a household's income and its housing consumption, and as the imputed rent subsidy is perfectly correlated with the value of the house, the subsidy can be expected to rise with income. This is confirmed by the analysis, which reveals that high income groups among owners receive markedly higher subsidies than low income groups.

The implicit subsidy to owner-occupied housing has amounted to around DKK 15 billion since the most recent tax reform (Pinsepakken), which reduced the subsidy by around DKK six billion. Public finances are also affected by individual (income-dependent) housing support, urban renewal projects and direct support to social housing and new co-operative housing. Total support to the housing market exceeded DKK 30 billion in 1999.

The overall picture is of a highly regulated and subsidised housing market without any of the desired distributional effects being clearly evident. Instead, there are serious adverse effects in the form of distorted consumption and reduced mobility. Consequently, a dismantling of the regulation of the housing market is recommended. This would mean a neutral tax treatment of investment in owner-occupied housing and financial investments, a complete dismantling of rent controls, abolition of direct support to social housing and new co-operative housing, and taxation of the return on equity in the social housing and co-operative housing stock.