# Alternatives for Welfare Policy

Coping with internationalisation and demographic change

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## Torben M. Andersen and Per Molander

## 1.1 The public sector and the welfare state

The growth in the relative size of the public sector is one of the most important facts of economic development during the second half of the twentieth century. Growing public sectors not only reflect a substantial improvement in material wellbeing, but are also in their own right considered to be a core element in the development of so-called welfare societies, purposely designed to affect the allocation and distribution of resources.

The growth of the public sector has always been controversial, since it raises fundamental questions concerning the balance between the private and the public spheres. The welfare states that have developed reflect political compromises between markets and public intervention, and the route taken differs between countries, depending on power balance, institutional heritage and other factors. At present these issues are increasing in importance. The welfare state faces a number of challenges, which lead many to question whether it can be maintained in its present form.

Traditionally, the main reason given for state intervention has been redistribution, and the choices made have been interpreted as reflecting a particular trade-off between equity and efficiency (Okun 1975). Even in the absence of market failures, an outcome may be considered unacceptable on political or ethical grounds. In such cases, public intervention can be justified, but it comes at a cost. In this perspective, the size of the welfare state is basically a political question. Cross-country comparisons of socio-economic performance would indicate the price of equalisation, as a basis for identifying the trade-off.

There are numerous studies correlating growth rates and the size of the public sector, as measured by expenditure-to-GDP ration or tax ratios. The results are mixed. Some studies have found a negative growth impact from a large public sector (e.g. Barro 1991; Engen and Skinner 1992; Hansson and Henrekson 1994; Grier 1997), whereas others have failed to find such connections (e.g. Easterly and Rebelo 1993; Mendoza, Milesi-Ferreti and Asea 1997). There are several reasons for this apparent inconsistency. First, if there is a negative impact, we should expect to find it most pronounced in developed countries with large public sectors, so the country sample is important for the possibility of establishing stable relationships. Second, the size of the public sector is a crude measure, which includes very diverse activities – consumption, transfers, interest on public debt, etc. – some of which are detrimental to growth whereas others are conducive to growth. Third, variations in the administrative handling of transfers and taxes create artificial differences. Some countries tend to tax household transfers, whereas others do not, and others still subsidise certain households via tax expenditures (see section 1.3 below). Also tax ratio comparisons are marred by statistical problems (Volkerink and de Haan 2001). Fourth, there may be substantial socio-economic effects associated with a large public sector without this necessarily affecting the growth rate or other macroeconomic key variables.

Quite apart from these technical reasons for the difficulty of finding stable relationships, there are fundamental economic reasons why no simple conclusions can be drawn. Public intervention may be justified by the presence of market failures, the aim being to make the economy work more efficiently. Such failures can take many forms, including imperfect competition, incomplete information, incomplete market structures and various forms of transactions costs. Market failures in the provision of insurance are particularly important in a discussion of the welfare state, since many public sector activities can be interpreted as social insurance. The public sector offers services and transfers if various contingencies are realised through life, and part of this insurance is offered for circumstances which cannot be handled by private insurance markets. Modern economic theory has shown that this applies not only to public services, transfers and taxation (Varian 1980; Barr 1992; Sinn 1995) but also more generally to various institutional arrangements, e.g. in the labour market (Agell 2000). The implications of the public sector are both microeconomic, in terms of coping with individual risks, and macroeconomic, by affecting exposure to aggregate risks (Andersen 2002).

The social insurance implications make it difficult to separate redistributive from efficiency-related arguments for public-sector activities. The existence of social insurance schemes may enhance efficiency. On the other hand, to the extent that insurance schemes are not fully actuarial, that is, premia do not fully reflect differences in risk, there is systematic redistribution within the insurance system. Indeed, as shown by Pestieau (chapter 10), there are efficiency arguments for such arrangements. This shows that the traditional distinction between public sector activities aiming at correcting market failures and those aiming at redistributive objectives is problematic.

Another aim of public intervention is to secure the supply of certain *basic services* irrespective of household income. A reasonable supply of such services may require resources beyond the means of many households, in which case we are back to the redistributive argument. In some cases, those affected may not be fully autonomous decision-makers; this goes for children, and parents cannot always be perfect representatives of their children. As an example, it is generally recognised that a binding, collective decision about basic education is necessary to guarantee a minimal level common to all citizens. In the case of pensions, there is a moral hazard or myopia argument for mandatory schemes; some individuals may abstain from saving in the conviction that they will be taken care of for altruistic reasons. In the area of cultural policy, paternalistic arguments are often advanced; this seems more difficult to defend on a general welfare-theoretical basis.

Whatever arguments of efficiency and/or equality can be presented for public intervention, there are several reasons for concern. First, it does not follow that any form of public intervention is justified; to the risk of market failure corresponds a risk of political failure. The proper intervention in the market mechanism often puts unrealistically high demands on the informational base of the decision-makers. Second, the need and scope for public intervention depends on the way in which the economy functions. Given that society is always changing, policies that were well justified in the past may have become obsolete. Third, although market failures may justify public intervention, a number of political questions remain concerning the scope, character and level of ambition of this intervention. Indeed, if the debate about the public sector has been intensified in recent years, it is because there is a widespread feeling that costs of current policies are not fully outweighed by the benefits. A number of challenges, new and old, now have to be faced by the decision-makers in the public sphere.

## 1.2 Challenges for the welfare state

Among the reasons for a renewed interest in the organisation of the welfare state, we highlight five. Two of them – the general trade-off between *costs and benefits* and the so-called *Baumol's disease* – are classical. What justifies another look at these two aspects of public-sector design is simply the fact that they are underlying tendencies, the effects of which accumulate and therefore become more pronounced over time. The next two – *internationalisation* and *demographic change* – can be considered external to the public sector (at least to the first approximation). The final

#### 4 Alternatives for welfare policy

Australia	2.4
Canada	4.1
France	4.9
Germany	2.8
Netherlands	3.2
Norway	1.9
Sweden	2.5
Switzerland	7.0
UK	4.7
USA	4.1

Table 1.1 Administrative cost in social securitysystems in per cent of the amounts transferred fora number of OECD countries

Source: Mitchell et al. (1994), based on ILO material.

factor to be taken into consideration is the way public-sector arrangements affect *value formation*.

## Costs and benefits of the welfare state

The benefits from the welfare state are multifarious – basic services in education and care, income security, and a basic safety net strong enough to guarantee a reasonable level of social cohesion. These benefits do not come for free, however, but have to be traded against other goods and services that have to be sacrificed. The costs of the welfare state can be sorted roughly into three different categories: administrative costs, leakage and incentive-related costs. *Administrative* costs are the easiest to measure. As shown in table 1.1, they normally account for a few per cent of the amounts transferred in social security systems, in some countries more.

Notice that costs are in per cent of amounts transferred, so in absolute terms, countries with large flows such as the Scandinavian ones fare worse in the comparison. Even in relative terms, there is no clear correlation between social insurance system design and costs. Australia, Germany and Sweden represent very different traditions but have nonetheless similar relative costs of administration.

*Leakage* problems (dead-weight losses) arise from the difficulty of targeting subsidies or transfers with full accuracy. Subsidies to goods or services, for instance in the health care sector, will affect price formation in that sector; as a consequence, some of subsidy will accrue to the producers. Likewise, transfers will sometimes end up among non-intended

recipients. These costs are more difficult to estimate than administrative costs, but conservative estimates indicate that they are one order of magnitude larger than the latter.

*Incentive-related* costs are the most important, and at the same time the most difficult to estimate. Basically, they arise because subsidies, transfers and taxes affect the behaviour of citizens. A *service* that is supplied at a fraction of its cost of production or for free will exhibit excess demand – by how much will depend on the service in question, and is in practice very difficult to estimate.

*Social security* affects the choice between working and not working over all time horizons – day-to-day, month to year, and life cycle time spans. This is the classical moral hazard problem encountered in any insurance sector. Estimates of these effects vary. Atkinson and Mogensen (1993) report relatively limited effects. By contrast, a number of micro studies have identified significant effects. The organisation of sickness insurance, for instance, will affect everyday choices, depending on remuneration levels, number of waiting days, requirements on medical examination, etc. Johansson and Palme (1998) report a significant effect on absenteeism from rule changes, when heterogeneity of the workforce is taken into account.

At the intermediate level, unemployment insurance can be expected to affect the willingness to change employment and to commute, the intensity in job search, etc. Holmlund, in a survey of the literature on labour-market insurance (Holmlund 1998), summarises the state-ofthe-art by saying that there are significant effects on the incentive to work but no consensus as to the size of these effects. More recently, a specific study of a temporary rule change in labour-market insurance (Carling et al. 1999) showed a fairly strong influence of the benefit level on the intensity of search for a new job among unemployed.

In the lifecycle perspective finally, pension benefits have been shown to affect the decision to retire. Actual retirement age has been decreasing steadily in the OECD countries, and there is a strong connection between this parameter and the incentive to continue working (Gruber and Wise 1999).

Taxes affect economic incentives directly – by reducing the interest in activities or goods that are taxed. In some cases, such as alcohol or environmental damage, this is a desired effect. More often, taxes have a purely fiscal motive – to finance public expenditure – and a large effort has gone into estimating the socio-economic cost of taxes, as well as designing tax systems that attempt to minimise these costs. Estimates of the cost associated with tax extraction – *the excess burden of taxation* – vary a lot, and depend both on the tax base, the tax level and the purpose for which the taxes levied are used. Estimates for the mid-1990s from Sweden made for the Committee on Tax Reform Evaluation (Agell et al. 1998; Aronsson and Palme 1998) indicate an excess burden of 20 to 30 per cent for the general income tax for mid-range assumptions on the labour supply elasticity (0.11). Uncertainties are large, however; an elasticity of 0.25 trebles the excess burden. Further, the non-linear character of the excess burden makes the cost rise faster than proportionally to tax rates and incomes; calculations on the basis of average incomes will therefore underestimate the true cost.

An important reason why trade-offs between costs and benefits are particularly cumbersome in the public sector is the way in which decisions are made. Households and private companies meet hard budget constraints, whereas public decisions are often marred by a certain asymmetry; benefits are visible and accrue to certain stakeholder groups, whereas costs are diffuse. The problem is that the individual decision-maker does not fully take into account the effect that her own decisions have on the common budget. This so-called *common-pool problem* calls for countermeasures in the area of institutions. A well-designed budget process can compensate for the asymmetry and induce the decision-makers in the direction of meeting a more reasonably balanced trade-off.

## Baumol's disease

Baumol's disease – a steady increase in the relative prices of certain services – stems from the fact that certain activities are more difficult to rationalise than others. It is an empirical fact that a number of activities of this kind appear in the public sector. If wages followed productivity this would not be a problem, but this does not seem to be the case in the public sector. Productivity development, as far as it can be traced (Murray 1993), is sluggish and to a considerable extent determined by exogenous factors such as budget restrictions and demography. The traditional presumption of zero public-sector productivity increase seems to be not too far off the mark, but development has been uneven across sub-sectors.

Wage formation in the public sector, on the other hand, largely follows that of the private sector (Holmlund and Ohlsson 1992; Jacobson and Ohlsson 1994). If productivity in the public sector is roughly constant while wages increase, the relative prices of the service produced will also increase. If the service level is kept constant, there will be an upward pressure on the public expenditure level. When public services are financed by proportional income taxes (as is the case, for example, for local taxes in Sweden), automatic revenue increases will match this upward pressure,

and a constant tax ratio will be sufficient to compensate for the Baumol effect. If, by contrast, there is a preference for maintaining a fixed relation between private and public consumption, there will be a persistent upward trend in the tax ratio.

#### Internationalisation

While a process of international integration is an integral part of postwar economic development, there is no doubt that the process has been intensified in recent years due to both political decisions and technological change. Political decisions have been taken to reduce various forms of barriers to trade and to promote economic integration. Trade links are developing at a more rapid pace, and information flows globally at the speed of light at very low costs. As a result the economic sphere is expanding beyond the sphere of any national state (see further chapter 2).

The international integration process affects the public sector through many channels. The most obvious effect is that tax revenues in high-tax countries are negatively affected by increased mobility of important tax bases and that the distortions from some forms of taxation increase. But the need and scope for various welfare activities may also be affected, given that increased economic integration changes both economic structures and the character and frequency of shocks to which the national economy is subject. The expenditure side may also be affected to the extent that differences between national social security systems affect migration patterns (social shopping). In short, international integration implies that welfare policies in different countries become more interdependent.

## Demographic change

Health care, care for the elderly and pensions are important building blocks in the welfare state that account for a large proportion of total expenditure. These services are heavily age-dependent, and demographic change now poses challenges in most developed industrial nations (World Bank 1994; OECD 1999). In 1960 average male longevity in the OECD area was 67 years, 46 of which were spent on work. Today, average longevity has increased to 74, average time in education has increased, and the working period has shrunk to 37 years (OECD 1999). These changes have had dramatic consequences for family life and social relations, and also for public finances. Demographic projections for the twenty-first century show beyond doubt that the combined effects of varying cohort sizes, increasing educational periods, early retirement and

continued increased longevity will lead to severe strain on public finances over the whole OECD area.

Old-age pensions in the agrarian society were naturally of a pay-as-yougo form within the family or local community. Given structural changes in society in the form of industrialisation and urbanisation as well as increased longevity, this model was no longer feasible, and a need for social insurance developed. An attractive solution was to introduce a collective pay-as-you-go system, since it takes time to build up a funded system. Such a system is very vulnerable to decreases in population growth, however, as the return is basically equal to population growth, and this may fall short of the desired path for pensions.

The effects of demographic changes go beyond the direct effects on public expenditures. Aggregate labour productivity, saving, and other important macro-variables are affected by variations in cohort size (see chapter 3). Consequently, the demographic impact on the way in which economies function is multi-dimensional.

## Dynamics of the welfare state

Social behaviour even in the economic arena is not determined by economic incentives alone. Norms play a significant role. In many cases, norms can be considered as given, and their effect is imbedded in the behaviour observed. In a longer time perspective, it is not always possible to defend such a simplification.

A crucial factor is that norm-dependent choices are typically contingent on other people's behaviour. A common rule is to choose a particular alternative provided that sufficiently many others do likewise. Such choice rules, when universally applied, often yield multiple social equilibria (Schelling 1975).

In the area of welfare policy, important examples of norm-dependent behaviour are work supply, consumption and saving (Lindbeck 1997; Lindbeck, Nyberg and Weibull 1999). Norms against cheating are another case in point. The contingent character of the choices involved can lead to rapid deterioration of performance, such as discontinuities and hysteresis in expenditure levels and tax revenues. In order to retreat from an unsustainable combination of transfer levels and tax revenues, it may in such cases be necessary to reduce benefits and taxes simultaneously.

This sort of model is inherently difficult to test empirically, in particular when long-term value change is in focus. There is nonetheless some evidence that work norms in the younger generation can be affected by growing up with parents who are strongly dependent on transfers. A Danish study (Christoffersen 1996) reports that the probability of being unemployed as grown-up is significantly higher if one or both parents have been subject to durable unemployment while the persons in focus are in their teens, controlling for other background variables.

Given these threats and challenges to the welfare state, there are good reasons to consider reform possibilities. To this end it is necessary to start by identifying the basic problems which the welfare state faces, and from there proceed to consider possible reform avenues that can be pursued. A commonly heard proposal is to 'roll back the welfare state' – Tanzi and Schuknecht (2000) present this view – but defensive economic arguments for the welfare state have also been put forward (Atkinson 1999).

One of the basic premises of the present study is that there are strong reasons why the welfare state has been developed, and why the public sector has been growing. Much of this development is clearly based on genuine demand, and there is no need to invoke public-choice type explanations for the expansion of the state. To the extent that lobbying efforts among interest groups, bureaucratic expansion and similar factors have had an impact, this merely adds to a development that would have occurred anyway. Nonetheless, the size of the problems and the strength of the forces of change that we now see are sufficient justification to reconsider seriously policy choices made in the past. Hence, the present analysis asks the more difficult but also policy-relevant question of whether there are ways to reform the welfare state that do not jeopardise its basic objectives.

## 1.3 Welfare states in international comparison

Discussing the problems and challenges faced by the welfare state does not make sense unless we make precise what is understood by a welfare state. By *welfare state* is commonly understood in broad terms the institutions, norms and rules in society aiming at correcting the outcome of an unregulated market economy and in particular aiming at a more egalitarian outcome. Although parts of the public sector are an essential and large element of the welfare state, it is misleading to equalise the two, given that the objectives of the welfare state go beyond the activities of the public sector in a narrow sense. There are of course also public sector activities that have very little to do with welfare policy as we normally understand it. Therefore the term *welfare society* may be more appropriate than the welfare state.

## Welfare-political strategies

Moreover, the above definition is not precise since there are different ways of organising a welfare state. Esping-Andersen (1990) made an often-used distinction between three different types of welfare states or models, namely, the liberal, the corporatist and the universal model. The different models are distinguished by the weight given to the market, the civil society (family, church, friends, private organisations, etc.) and the state in providing social services.

Some countries, mainly Anglo-Saxon, have opted for a relatively small public sector, leaving plenty of room for traditional solutions and markets. Other countries, particularly in Central Europe, have given an important role to employers, thus stressing the link between work and welfare. In Scandinavia, by contrast, the state has developed encompassing collective welfare systems, still mainly based on work-life participation, but with limited room for private alternatives or supplements.

In the liberal welfare model the state plays a limited and well-defined role in the sense of providing the ultimate floor in cases where the market and civil society do not suffice. State-provided benefits are often targeted, and concern about work incentives plays a dominant role. The corporatist or continental European model relies on the family and employers as the backbones of society and therefore also as providers of social services. In its modern form, private insurance schemes play a crucial role, and they are mostly tied to labour-market participation. The activities of the state tend to be directed towards families rather than individuals. Finally, the universal or Scandinavian model has the state in a crucial role as supplier of social services. Benefits tend to be defined at the individual level, but with differences depending on the individual's labour market history. The main financial sources are taxes and fees.

Obviously no country can be classified unambiguously as belonging to one of these prototypes of welfare models, and the relative importance of the three pillars has changed over time. Nonetheless, it is clear that this classification captures important differences between, say, the welfare model in the US, the UK, Germany and Sweden.

## Comparing welfare states

Historically, the major burden of welfare state arrangements has rested on the civil society. Societal changes such as industrialisation and urbanisation have weakened many traditional networks. Further, the ability of the household to meet expectations has been further impaired by the shrinking average size of the household. In the year 2000, the share of single-person households in Sweden was 54 per cent, corresponding to 28 per cent of the population (Statistics Sweden 2002: 65).

This development also implies that many activities cannot ideally be left to the civil society. *Insurance* problems are more effectively dealt with

Country	1966	1976	1986	1996
Denmark	33.1	46.1	50.8	52.2
Germany <sup>1</sup>	33.2	40.9	37.7	38.1
France	35.7	42.7	44.0	45.7
Italy	28.8	35.3	36.1	43.2
Sweden	36.9	54.1	53.0	52.0
UK	31.5	41.0	37.6	36.0
US	25.3	33.6	28.9	28.5
Japan	18.4	23.6	28.4	28.4

Table 1.2 Public-sector size relative to GDP

<sup>1</sup> For 1966–86 only West Germany.

Note: Measure by total taxes relative to GDP.

Source: Statistics Denmark.

in a large collective group over which to pool risks rather than within, for example, a household. Both the market and the state can therefore offer superior solutions, the choice between the two being a matter for further deliberation. *Redistribution* will not be carried out to an extent corresponding to the public support for such activities in the absence of a state, the main reason being the collective nature of redistribution. Formally, the income distribution is a collective good (Thurow 1971). A different way of phrasing the interdependent nature of redistribution is that the support for redistributional activities is conditional on other people's support; in the absence of coordination, redistribution will therefore be under-supplied (Friedman 1962).

By consequence, the market and the state have taken over a number of tasks previously associated with the civil society. While countries differ in the roles they have assigned to the market and the public sector, it is a common phenomenon that the public sector has grown. Table 1.2 shows the development of the size of the public sector relative to GDP for selected OECD countries from 1966 to 1996. All countries have experienced substantial growth in their public sector. The EU average was 42.4 per cent in 1996, whereas it was 37.7 per cent for all OECD countries.

The increase reflects an increase in both public consumption and in transfers, although the latter have increased more in recent decades. For most countries one finds that the growth of public consumption relative to GDP levels off in the mid-1970s, whereas the growth of transfer payments drives the subsequent growth of the public sector. During the 1990s, many countries have emphasised the need to consolidate public finances, and growth has levelled off.

Country	Gross public social expenditure	Net publicly mandated social expenditure	Net total social expenditure
Australia	18.7	18.8	21.9
Austria	28.5	23.9	24.6
Belgium	30.4	27.5	28.5
Canada	20.7	18.7	21.8
Denmark	35.9	26.9	27.5
Finland	33.3	24.8	25.6
Germany	29.2	27.9	28.8
Ireland	19.6	17.1	18.4
Italy	29.4	25.2	25.3
Japan	15.1	15.3	15.7
Netherlands	27.1	20.8	24.0
New Zealand	20.7	17.0	17.5
Norway	30.2	25.1	25.1
Sweden	35.7	28.7	30.6
UK	23.8	21.9	24.6
US	15.8	16.8	23.4

Table 1.3 Social expenditure indicators, 1997 (per cent of GDPfactor cost)

Source: Adema (2001).

In interpreting these figures two important caveats should be stressed. First, considering the gross expenditures of the public sector in a crosscountry comparison may be misleading, as institutional arrangements may differ significantly. This measure depends critically on whether, for example, transfers are paid in net terms or in gross terms as taxable income. Some countries use subsidies in the form of tax deductions, which further distorts the comparison. Howard (1997) estimates that welfarerelated tax deductions in the US amounted to 346 billion dollars, close to one-half of visible welfare-related expenditures over the public budget.

Correcting for these implies that the differences are much smaller than the gross figures reported in table 1.2 indicate. To see this, consider social expenditures in table 1.3. When adjustments have been made for differences in bookkeeping practices and administrative routines, not only are differences between nations substantially reduced but the ranking with respect to public-sector size is also altered. The first row gives the *gross* expenditures in the public sector to social purposes (consumption and transfers). The next row gives the *net* public mandated social expenditures, which are derived by correcting for taxes (direct and indirect) and social contributions, and by adding mandatory private social payments.

The final row adds voluntary private expenditures to arrive at the net total social expenditures. The table shows that the differences in net publicly mandated social expenditures between most European countries level out. This suggests that the public sector problems discussed in this book are, or soon will be, on the policy agenda in many countries.

Secondly, despite the growth of the public sector it would be misleading to conclude that the role of the civil society has become trivial. Notwithstanding the changes reported above, the family remains dominant if judged on the basis of working hours. In 1993, Swedish households spent 7 billion hours on household work and 5.9 billion hours on salaried work in the private and public sectors (SOU 1997: 17). The household is also an important unit for redistribution. The Gini coefficient of disposable income drops substantially in the transition from individuals to household consumption units, which testifies to the important role played by the family in redistributing material resources.

The remarks made above on the effects of welfare state activities on the economy and on the data immediately suggest that one should not expect to find significant effects on economic growth rates and other important macroeconomic variables from the choice of welfare-political regime. This suggests that it is not very interesting to address the challenges faced by the welfare state by posing the question of whether the public sector is too large. It is necessary to consider in more detail the precise structure and the mechanisms through which the welfare state works. This can only be done at the microlevel. It is the positive and negative incentives facing single households, companies and other agents that determine the dynamics of the welfare systems and ultimately of the economic system at large.

When evaluating the achievements of different welfare policies, a number of indicators are relevant. This could for instance be in terms of inequality – a central issue in the welfare state. Table 1.4 gives some standard measures of inequality for selected industrial countries. While these data might suggest that countries having strong universal elements in their welfare policies may be more successful in reducing inequality, it is obvious that unambiguous conclusions cannot be drawn. The outcome is in part determined by the inequality measure chosen. Moreover, in order to evaluate the effects of given welfare regimes, one has to control for various background variables. At the aggregate level this is a very difficult, if not impossible task.

While suggestive, the aggregate data considered in this section reveal that no simple conclusions can be drawn by simple comparisons across countries. A more disaggregated approach has to be followed to identify possible reform areas.

Country	Ratio of high to low incomes	Gini coefficient	Poverty gap
Australia (1999)	4.26	0.31	1.3
Belgium (1992)	2.76	0.23	n.a.
Canada (1991)	3.86	0.30	1.4
Denmark (1992)	2.84	0.24	n.a.
Finland (1991)	2.71	0.22	n.a.
France (1994)	3.51	0.29	1.3
Germany (1984)	2.98	0.26	0.7
Norway (1991)	2.79	0.23	0.5
Netherlands (1991)	2.94	0.25	0.8
Spain (1990)	4.04	0.31	n.a.
Sweden (1992)	2.77	0.23	0.9
Switzerland (1982)	3.43	0.31	1.0
UK (1986)	3.80	0.30	1.2
USA (1991)	5.67	0.34	2.5

Table 1.4 Indicators of inequality – selected countries

*Note*: The first column shows the ratio between the 9th decile and the 1st decile. *Sources*: Smeeding (1996) (columns 1 and 2); Mitchell et al. (1994) (column 3; based on LIS statistics).

## 1.4 Four fundamental questions

The present study aims at analysing the role of the public sector as a crucial element of welfare societies, and at identifying possible reforms to address the challenges outlined in section 1.2. The time perspective that we have in mind is about three decades, although this varies depending on the issues analysed. In the context of demographic change, the horizon is naturally half a century or longer.

## The roles of state and market

The most fundamental question to ask, before embarking upon discussions about efficiency, excess burdens etc., is of course what social activities the state should be involved in at all. The classical categories mentioned above – insurance, redistribution and basic social services – give some indications, though this is but a first step towards decisions about the scope for public action in given areas. Are problems of adverse selection large enough to justify state financing and management of social insurance? What is the justification for state subsidies in the area of cultural policy?

To complicate matters further, it is in many cases very difficult to disentangle the market from the state. If the rules under which a market

operates are laid down by the state, the size of the public sector may be minuscule, although public intervention is not.

Second, the distinction between markets and public sectors is often taken to suggest a distinction between an individualised and a collective system. But market activities may also have a collective element. Most obviously this is the case for all insurance activities that rely on risk sharing among a larger group. More generally, the market is not necessarily atomised and collectively bargained arrangements may play a crucial role also with respect to provision of social services. Collectively bargained insurance and pension schemes are an important example.

Third – as noted above – it is often impossible to make a sharp distinction between insurance and redistribution. Many arrangements including taxation (Varian 1980) and labour market institutions (Agell 2000), which usually are considered redistributive, also have the role of providing implicit insurance. Conversely, insurance systems that do not adequately account for systematic differences in risk profiles between various individuals – whether for lack of information or as a deliberate choice – will contain an element of redistributive than another simply because insurance arrangements are organised by the state. To the extent that, for example, taxation also provides social insurance, conventional measures of the distortionary effects of taxation may be misleading. Equally important, it is not possible to evaluate the efficiency properties without explicitly considering the roles of social insurance.

When considering reforms of the welfare state, it is thus essential to make a distinction between the following three roles: namely, that of organising, financing and providing particular services or activities. In some cases the state has all three roles, while in other cases it might only have the organising role, for example, by making certain types of insurance mandatory. In the latter case the state relies on the market for financing and provision, but still the market is not left on its own. In some cases the state may use only the financing instrument to achieve its goals, for example, by providing subsidies for certain activities or by levying special taxes on specific services or commodities. Thus the extent of public involvement cannot be judged simply from considering the relative size of the public sector. To this end it is essential to consider the organising role of the state which can be in the form of either public provision or mandatory provision via the market. Financing can have a universal element via general taxation or social security contributions, or be related to use through user payments of various forms. In the provision of services the public sector may rely on its own production or use private suppliers. The multiplicity of combinations along these three dimensions shows that the welfare state cannot be measured by the relative size of the public sector as measured in national accounts. This also points to a variety of reform possibilities, and in particular to that of reforming the public sector without necessarily jeopardising the overall objectives of the welfare state.

## Organisation: centralised versus decentralised models

What are the pros and cons of a universal or centralised model relative to a model which is more decentralised (across groups or sectors), as is often the case for the corporatist welfare model, and definitely for the liberal model? Comparing a universal system to a decentralised system basically involves two fundamental issues: namely, the properties of the two systems with respect to risk diversification, and the distortions arising from the mode of financing social security broadly interpreted.

Consider, first, risk diversification. If various groups are affected differently by shocks, there is clearly a gain in terms of better risk diversification by organising social insurance at a centralised rather than at a decentralised level. This follows from basic principles of risk pooling. At what level economies of scale are exhausted depends on the risk under discussion. Health care insurance according to the Health Maintenance Organisation model requires about half a million individuals to be efficient. Unemployment, by contrast, is often driven by aggregate shocks, which implies that there is a case for pooling at the national level.

On the other hand, financing of social insurance involves – as does the financing of any insurance scheme – a 'common pool' problem or a tax externality. This is because all contribute to the system, but the link between contributions and benefits is not apparent to the single decision-maker. This creates a distortion – the single individual does not in her decision-making take fully into account the effects that contributions made in terms of, for example, tax or social security payments have for the common resources of the system. For private insurance this is known as the moral hazard problem. This distortion is clearly stronger in larger systems, given that the relation between contributions and benefits perceived by the single decision-maker is reduced, the larger the number of participants in the risk sharing arrangement. It follows that the distortions arising in a centralised system are potentially larger than those arising in a decentralised system.

Evaluating the pros and cons of the universal model relative to a more decentralised model from an efficiency point of view therefore becomes a question of weighting the relation between risk diversification achieved via the social insurance provided and the distortions arising from the financing of these activities. The universal model has the attraction that

it achieves the most in terms of risk diversification – all are part of the risk sharing arrangement. On the other hand the distortions are larger under this system as the link between payments and benefits is weaker. Evaluating the universal model relative to a decentralised model thus involves a trade-off between risk sharing and tax distortions.

Related to this issue is the degree of centralisation within the public sector – the fiscal federalism design problem. The relation between the different layers in the public sector – municipalities, counties and state – reflects many concerns. Decentralisation allows municipalities to tailor their activities to the preferences of their constituency, whereas centralised solutions tend to be standardised and less flexible. A decentralised system allows less risk diversification and more heterogeneity among otherwise similar groups in society, something running counter to basic objectives in the welfare state. Further, a centralised system may be more cost effective to the extent that there are substantial fixed costs or economies of scale involved in public sector activities. A decentralised system may give rise to inefficiencies to the extent that there are substantial externalities involved among municipalities. Finally, the decentralised solution may allow for more institutional competition, which can be important for flexibility and adaptation in the public sector.

The process of international integration has raised a new question in this debate, to wit, that the expansion of the economic sphere may imply that the existing structure is too decentralised, that is, the relative size between the political and economic sphere is being affected. If so, it may be necessary to centralise fiscal policy, and perhaps even move some competence to a supra-national level. The latter applies in particular to issues in relation to taxation where increased mobility of certain tax bases increases the externalities between tax jurisdictions. Obviously, such changes raise deep questions of authority beside the economic ones.

Another argument suggests that, at least for certain tasks, it might be possible to allow for more decentralised or flexible solutions. Advances in information and communication technologies change some of the constraints that have supported more standardised solution which have tended to characterise centralised solutions in the past. Hence, more flexible and individualised systems are becoming possible.

## Financing

The standard mode of financing public sector activities is by general taxation. Taxation affects economic incentives, which distorts decision-making, and the distortions tend to increase more than linearly in the tax

rate (see above). Financial reforms are consequently an integral part of any consideration of possible avenues for welfare state reforms.

For public provision of services there are two main alternatives for financing. One is user payments in various forms, which on top of the revenue effect have the advantage that it strengthens the relationship between benefits and costs and thereby improves the allocation of economic resources. The disadvantage is that the distributional objectives pursued via general taxation are less easy to fulfil.

Another possibility is to extend the use of means testing to target public activities more directly to those who need them the most. Most welfare states transfer large gross amounts between individuals relative to the net amounts redistributed, implying that the distortions necessary in order to reach the distributional objectives might be excessive. On the other hand, means-tested benefits may raise administrative issues as well as the problem that composite marginal tax rates can be rather high. It has also been suggested that more targeting has political implications – to the effect that it would be more difficult to maintain such a system compared to a system with larger gross redistribution (see e.g. Korpi and Palme 1998). Both theoretical and empirical arguments can be advanced against this hypothesis, however; we will return to the choice of welfare-political strategy in the concluding chapter.

For public transfers one possibility is to make more use of explicit insurance and funding, that is, to decentralise the financing of (social) insurance. This does not mean that one necessarily has to privatise transfers. Welfare objectives can justify that such arrangements be made mandatory, and that they are associated with redistribution and risk sharing arrangements that will not necessarily arise in an unregulated market. Moreover, such systems can be market based or publicly administered. On top of reducing tax distortions this step may have the advantage of increasing visibility, that is, it is clearer to individuals how costs and benefits are related.

A more radical proposal is the introduction of so-called welfare accounts. The basic idea here is that many welfare arrangements perform a capital market function in the sense that the amounts transferred at a given point during a lifetime are unnecessarily large relative to the transfer over the life cycle needed to achieve a certain redistributional objective. By defining an account for each single individual it would be possible to 'internalise' these payments, and thereby reduce tax rates and the excess burden of the present system at the same time as the individual incentives are created to economise on transfers. An open question is whether one in such a system can attain the same risk diversification as in the current

systems. Proposals have been made to introduce welfare accounts for specific areas or more generally for most of the activities currently financed via general taxation in the universal welfare model. Chapter 11 looks into the pros and cons of welfare accounts in more detail.

#### Provision

Even with public organisation and financing there is *a priori* no reason why the provision should also be public. Public organisations tend to be run on non-market principles, and while there are reasons for this in a few exceptional cases, there is no pertinent conflict between private provision and the objectives of the welfare state. Private provision implies that the advantages of the market mechanism can be exploited. On the other hand, contracting of any kind leads to principal/agent problems that have to be analysed in concrete terms in any given situation. There are consequently reasons to discuss the pros and cons of contracting out, in order to establish limits without ideologically predetermined positions.

## 1.5 Plan of the book

This book starts out by discussing some of the main challenges faced by the welfare state – internationalisation and demographic change. Chapter 2 examines the current process of internationalisation, with special reference to the problem of risk management. In the following chapter, Thomas Lindh examines the implications of demographic change for public finances. The main message is that aging has both a direct effect but also indirect effects on macroeconomic performance, due to shifts in the relative sizes of various age groups. Chapter 4, by Peder Pedersen, Marianne Røed and Lena Schröder, is devoted to a problem in the intersection of the preceding two – migration. Facing the argument that increased mobility also of human capital calls for substantial changes in fiscal policy, it seems necessary to establish the facts about current migration patterns, in particular with reference to highly educated groups.

The following two chapters are devoted to public service production. In chapter 5, Jørn Rattsø surveys the literature on efficiency of public service production and poses the question whether it can be improved by institutional reform, such as strengthening the budget process or switching to other tax bases for the financing of public services. Chapter 6, by Carl Emmerson and Howard Reed, analyses the consequences of increasing user fees in the financing of public services, that is, publicly produced private services that form the bulk of public consumption. Given the importance of social insurance in public budgets, it should come as no surprise that no less than five chapters are devoted to this complex. Chapter 7, by Lars Söderström and Klas Rikner, tries to determine the scope for privatisation of social insurance, whereas Ann-Charlotte Ståhlberg in chapter 8 asks similar questions for collectively negotiated but privately produced social insurance. In chapter 9, Mårten Palme and Ingemar Svensson analyse the incentive problems of pension systems, with particular reference to the recent Swedish pension reform. The following chapter, written by Pierre Pestieau, asks what are the arguments for redistribution within a social insurance system. Textbooks normally declare that insurance systems should be actuarial and that redistribution is a matter for the tax-cum-transfer systems, but in a second-best world, things may turn out differently. The social insurance block is concluded by a chapter on welfare accounts by Stefan Fölster, Robert Gidehag, Mike Orszag and Dennis Snower.

Increased mobility of tax bases is perceived as one of the main threats to high-tax welfare states. This is the problem addressed by Bernd Huber and Erik Norrman in chapter 12. Mobility is not the only problem, however, and the authors discuss a range of problems in their contribution. Chapter 13 discusses a particular aspect of taxation, namely taxation of human capital. Fredrik Andersson and Kai Konrad focus on the problems of education investment from the perspective of human capital being the main source of finance for the public sector in developed countries, and also address issues related to the international mobility of labour.

Public debt policy has been a contentious issue against the background of soaring debts during the 1970s and 1980s. Fiscal discipline has improved during the last decade, in particular among the countries involved in the Maastricht process, but fairly little has been written on the choice of policy parameters. Should high taxes be used to reduce the public debt, or should tax rates be reduced in order to foster economic growth, assuming there is a positive connection? This is the problem analysed in chapter 14 by Martin Flodén, against the background of demographic changes envisaged.

The concluding chapter draws together the contributions from the various chapters in order to form a consistent set of alternatives for welfare policy discussion. We offer an indication of the effects on the public budget of the main factors of change, and provide building blocks for reform packages to meet these strains. As stated earlier, our time horizon is about three decades. Given that time-lags can be substantial for certain types of policy change – pensions system reform is a case in point – a thorough policy discussion is urgent.