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Welfare State - The Scandinavian Model

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Abstract:

The Scandinavian countries have achieved both a high level of living standard (measured by e.g. average income) and an egalitarian outcome (measured by e.g. income inequality) despite a very large public sector and thus a large tax burden (about 50 % of GDP). The Scandinavian cluster thus poses a challenge to the standard view on the trade-off between efficiency and equity. How come that the Scandinavian countries have been able to achieve high equality without much sacrifice of efficiency in terms of income? This paper addresses this question with the outset in recent work stressing the insurance aspect of the welfare state. A broad interpretation of the Scandinavian welfare model in terms of social insurance or common pool aspects is given. The effects of social insurance are discussed and the potential incentive problems arising in a common pool arrangement are argued to be mitigated by a number of counteracting mechanisms. Issues in policy design and the political economy of the welfare state are also discussed.

JEL: H1, E62, F22, P1

Keywords: Risk-sharing, incentives, common-pool problems, political support

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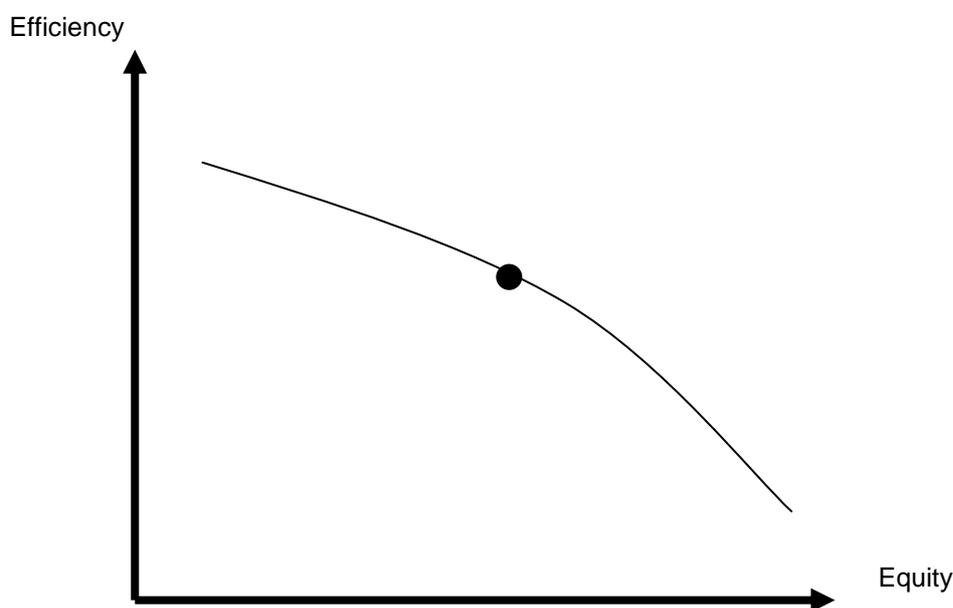
and Sara Heinämaa.

1. Introduction

The Nordic or Scandinavian countries are often highlighted as a particular cluster of countries, not only in the geographical sense, but also referring to the fact that they share a number of characteristics which differ from most other countries and which often have been at the centre stage in international comparisons and in policy discussions¹. In short, the main characteristics of these countries are that they are small and among the richest countries in the world, but also that the public sector is large and that the outcomes are more egalitarian distributed than in most other countries. These facts challenge conventional wisdom on how the public sector and egalitarian policies affect economic performance.

The standard approach to assess the role of the welfare state or the public sector is that it mainly derives from a political consideration. That is, ambitious political aims toward redistribution require high taxes and a generous social safety net, but this will affect incentives in general and the incentive to work in particular such that economic efficiency measured by employment or income is reduced. In short, there is a price to be paid or a trade-off where a quest for more equity implies a loss in efficiency². Figure 1 illustrates the standard view. Different outcomes characterized by different combinations of efficiency and equity are

Figure 1: Standard view: trade-off between efficiency and equity



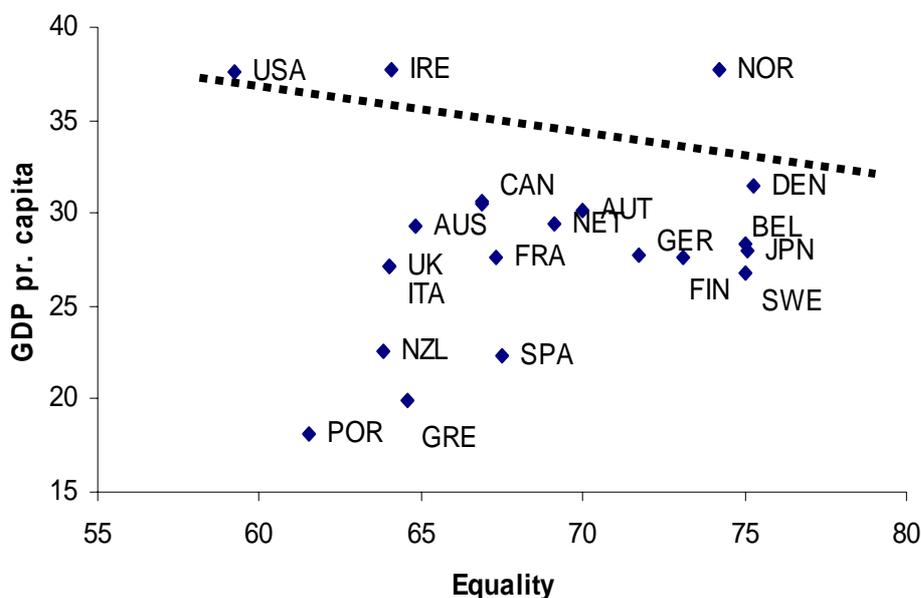
¹ Esping-Andersen (1990) made a seminal topology of welfare regimes defining a Scandinavian or universal welfare model. This paper is confined to discuss some main characteristics of the Scandinavian countries, but not to engage in a wider comparative analysis. Likewise some non-Scandinavian countries may share in full or partially many of the characteristics discussed.

² In the economics literature, the term efficiency is used to characterize whether economic decision making by private agents differ from those of a social planner; i.e. whether there is a difference between individual and collective rationality. The term should not, therefore, be mixed up with “hard work” or anything the like.

feasible depending on policy choices. If the concern for equity is small, there is little intervention in the market economy and efficiency is high, or vice versa if the concern for equity is high. Hence, political preferences determine where on this curve different countries are situated, but they cannot escape the trade-off or cost that more concern for equity implies lower efficiency.

This reasoning has the straightforward testable implication that the richest countries in the world should have higher inequality, and the more equal societies should have relatively lower incomes. The Scandinavian position is a puzzle in this context since it has been possible to achieve both a high level of living standard (measured by e.g. average income) and an egalitarian outcome (measured by e.g. income inequality) despite a very large public sector and thus a large tax burden (about 50 % of GDP). That the Scandinavian countries stand out in this respect is seen from the comparison in figure 2. It shows average income per capita in different countries as a measure of economic equality, and equity measured by how equal incomes are distributed. The figure indicates a best performance frontier in the efficiency-equity space, and comparing US to the Scandinavian cluster one finds that the former has a higher income level but a more unequal distribution³. One can say that the latter group of countries has traded-off some quality at the cost of a lower income level, but the figure does not seem to indicate a very steep trade-off.

Figure 2: Measures of efficiency and equity for OECD countries



Note: GDP in PPP adjusted \$, and equality measured by 100-Gini coefficient, both for 2006.
Source: UNDP, Human Development Index

³ Ireland and Norway are outliers in the figure. For Norway, GDP per capita is boosted by the petroleum sector accounting for about 1/4 of value added. In Ireland, a large share of income goes to foreigners, and the discrepancy between GDP and GNI per capita is about 15 % lower than GDP per capita. Accounting for these factors would move Norway and Ireland close to the line depicted in the figure.

The Scandinavian cluster thus poses a challenge to the standard view on the trade-off between efficiency and equity. How come that the Scandinavian countries have been able to achieve high equality without much sacrifice of efficiency in terms of income? This question is often phrased “how come that the Bumblebee can fly?” The following addresses this question with the outset in recent work stressing the insurance aspect of the welfare state. This essentially builds on two basic points. First, the premise that a market economy left to its own ensures efficiency does not hold, in particular private markets suffer from problems arising from incomplete information and uncertainty. Second, the welfare state is not only about redistribution in the passive sense, but also about providing risk sharing and ensuring that economic resources are put to their best use. As shall be discussed below, these two aspects may go a far step in explaining the position of the Scandinavian countries.

This paper is organized as follows: Section 2 gives a few stylized facts on the Scandinavian countries. A broad interpretation of the Scandinavian welfare model in terms of social insurance or common pool aspects are given in section 3 as a prelude to a discussion of the effects of social insurance (section 4). The potential incentive problems arising in a common pool arrangement are argued to be mitigated by a number of counteracting mechanisms (section 5). A few key aspects related to the political economy of the welfare state are given in section 6, and section 7 concludes.

2. Main characteristics of the Scandinavian Welfare Model

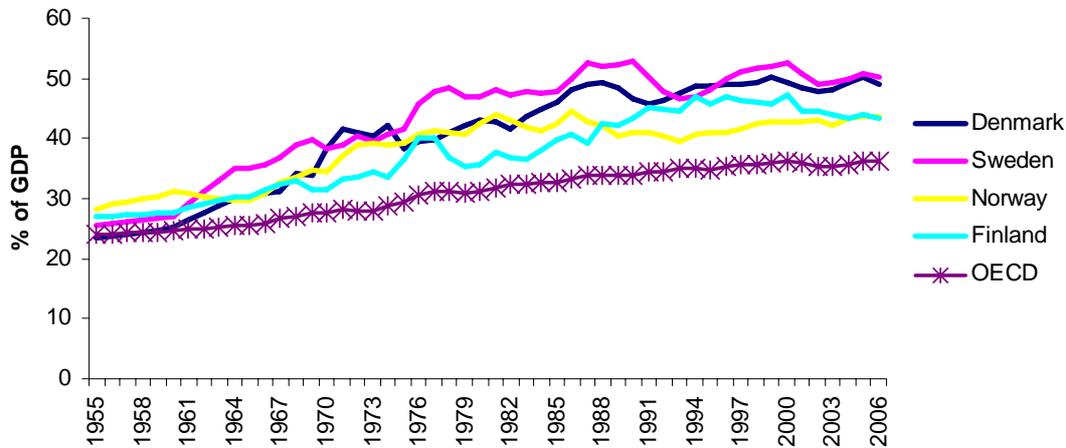
The fact about the Scandinavian countries that most often attracts attention is that a substantial amount of resources are allocated and distributed via the public sector, amounting to about 50 % of GDP, cf. figure 1⁴. The public sector was in particular expanded during the 1960s and 1970s, resulting in roughly a doubling of the relative size of the public sector.

Since the 1980s the relative size of the public sector has been constant at about 50 % of GDP. The developments in Denmark and Sweden have been rather similar, while the growth of the public sector came slightly later in Finland, and has converged to a slightly lower level in Finland and Norway⁵. Seen relative to both continental European countries and Anglo-Saxon countries, it is interesting to note that there were only small differences in the relative size of the public sector in the mid 1950s. Although there has been some growth in the relative size of the public sector in these countries, it is quite clear from the figure that it has been less strong than in the Scandinavian countries.

⁴ In international comparisons of the relative size of the public sector and the tax burden, an important problem is whether transfers are taxable income or not. If transfers are taxable, it follows that gross levels are higher than if they are paid in net-terms. Hence, countries with a gross system tend to have a higher measured tax burden, see e.g. Adema and Ladaique (2009)

⁵ The measure for Norway is downward biased due to the effect of the petro-sector on GDP, cf. above.

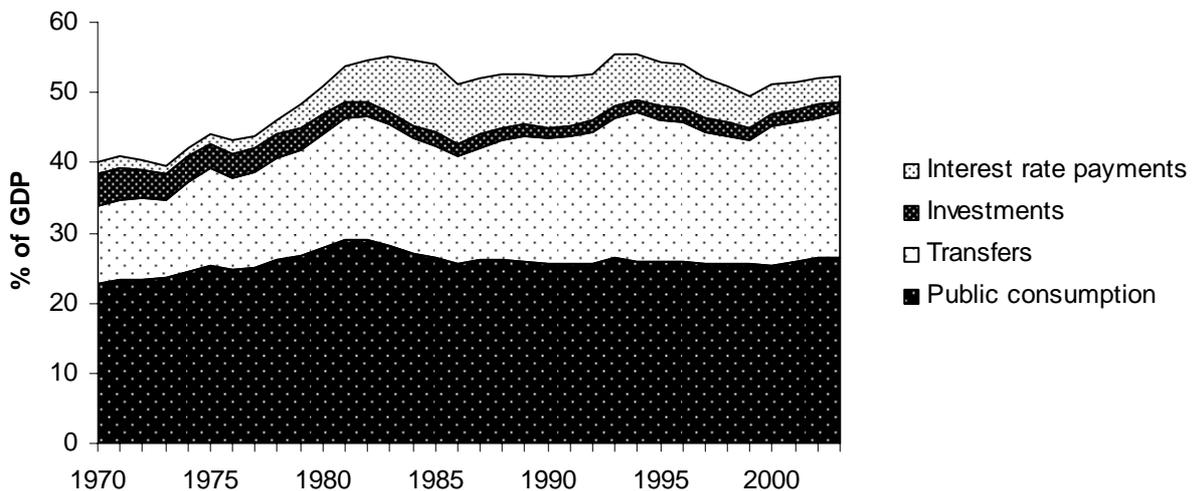
Figure 3: Relative size of the public sector – total tax revenue relative to GDP



Note: Total public revenue in percentage of GDP
Source: OECD

Considering specific activities of the public sector, a broad distinction can be made between provision of welfare services (education, day care, health, old age care etc.) and the social safety net. Figure 4 gives a decomposition along these lines for Denmark, also including public investments and interest rate payments. It is seen that the initial expansion of the public sector, also during the 1960s (not shown in the figure), is driven by public service provision, but

Figure 4: Composition of public expenditures, Denmark 1970-2006



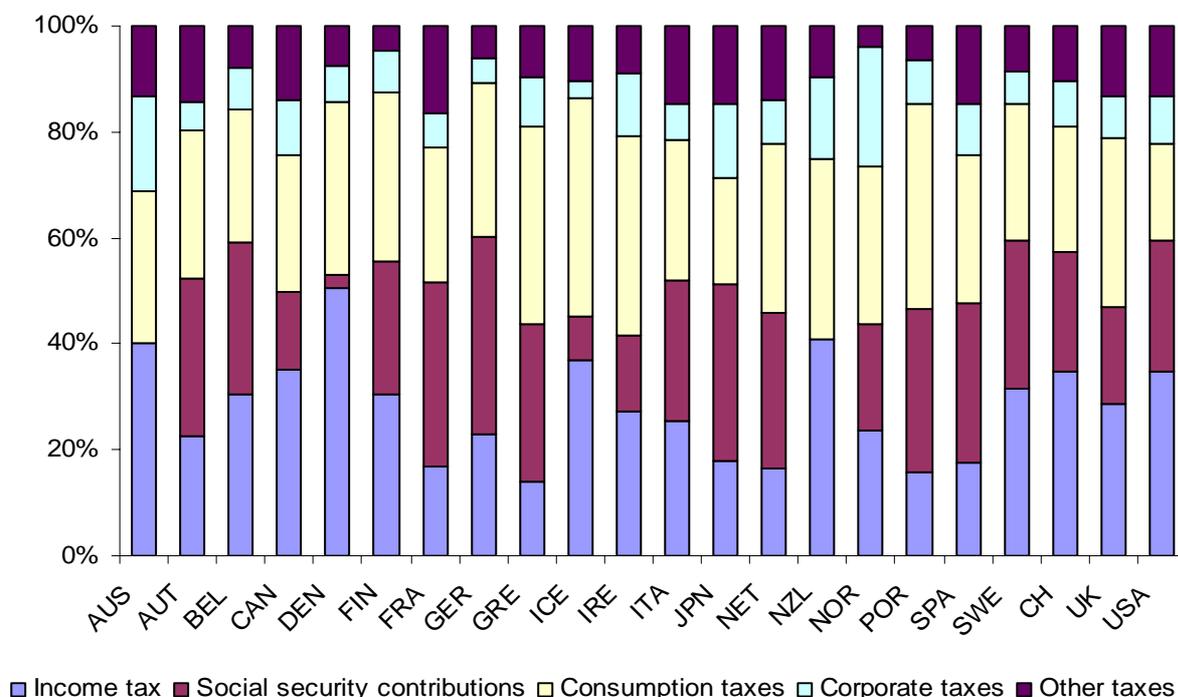
Source: Statistics Denmark (www.statistikbanken.dk).

this has remained at roughly 25 % of GDP the last 25 years. During the 1970s there is a strong increase in expenditures on income transfers which partly reflects the increasing unemployment during that period, but also that the social safety net was extended. The latter included both better coverage and eligibility for large groups (see Danish

Welfare Commission (2004)). Public investments constituted about 4 % of GDP in the 1960s, but in the last decades they have been rather constant at about 2 % of GDP. Finally, note that interest rate expenses increased during the 1970s and 1980s due to persistent budget deficits, but consolidation over the last decade has brought the debt level down, which in turn has contributed (alongside the general reduction in interest rates) to lower expenditures on debt servicing. These development trends are also found for the other Scandinavian countries.

Public expenditures are mainly tax financed, and therefore the tax burden is accordingly high in the Scandinavian countries. Two aspects are worth noting. The first is that there is substantial variation across countries with respect to how large a share of revenue different types of taxes contribute to total tax revenue, cf. figure 5. Note that this also applies among the Scandinavian countries where Denmark has much weight on direct taxation and little weight on social security contributions, and vice versa for Sweden.

Figure 5: Tax structure: selected countries, share of total tax revenue, 2002



Note: Relative share of various types of taxation of total public revenue.
Source: OECD, Factbook.

Second, it is important to note that the larger share of taxation (about 80 %) rests on direct or indirect taxation of income earned in the labour market or when it is spent. Hence, incomes generated in the labour market constitute the main revenue basis for the financing of the public sector.

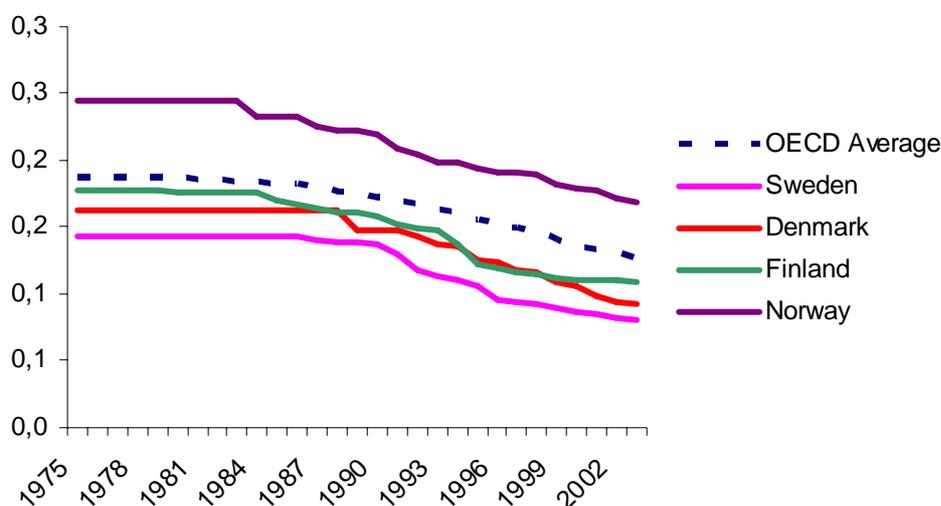
Politics against markets?

Labour markets in the Nordic countries have a tradition for being highly centralized. This is partly reflected in high unionization rates (although there has been a trend decline) and the organization of wage bargaining which have

involved a strong collective element (Boeri et al. (2001)). This may at first appear as a significant departure from market forces. While it does represent a concentration of market power which can affect both the level and structure of e.g. wages, it is also an arrangement which allows more coordinated initiatives to be taken. This is in particular important in small and open economies due to the need to maintain international competitiveness. There has been a tradition of close cooperation between unions, employers and governments, implying an environment characterized by cooperation more than competition.

Given the large public sector and the centralized labour markets, it is often claimed that Nordic countries are semi-socialist countries. Different meanings can be given to this term, but it is not a correct description of the private sector and therefore of what in economics jargon may be termed product markets. Fairly liberal policies have been pursued, and state intervention in the form of state-owned companies and the like has never played an important role. The Nordic countries are better described by a social-liberal model with extensive social objectives catered for through labour market institutions, the public sector and a liberal private sector. This point is underscored by figure 6 showing an index of product market regulation and intervention. It is seen that the Nordic countries – with the exception of Norway – have had less regulation than the OECD average; i.e. they have always been among the more liberal countries. However, the Nordic countries have followed the trend towards further deregulation as seen from figure 6⁶.

Figure 6: Index for product market regulation, Scandinavian countries and OECD average, 1975-2003



Source: OECD

As for other OECD countries, financial markets have been deregulated especially during the late 1970s and the 1980s. Most important has been the liberalization of financial markets and the room for manoeuvre of financial institutions. This includes more flexible terms for borrowing to private households and the removal of barriers for international capital movements, implying that there is effectively perfect capital mobility for the Scandinavian countries. That

⁶ The higher index for Norway is mostly driven by regulation of electricity, transport as well as post and telecommunication.

financial arrangements are of secondary importance for the welfare state can be seen from the fact that the Scandinavian countries feature quite different exchange rate arrangements: Denmark (exchange rate peg), Finland (EMU membership) Norway and Sweden (floating exchange rate with inflation targeting).

3. The common pool property

The main ingredients of the welfare state can thus be summarized as: i) welfare services like health care, old age care, education etc. provided to the population, ii) a social safety net providing income support in case of lack of self-support, and iii) tax financing depending mainly on income and consumption.

The Scandinavian welfare state rests on two core principles. (i) **Provision:** Provisions offered in relation to the standard range of welfare services, and the transfer level offered in the social safety net – are to fulfil the “reasonable” requirements of most people; that is, public solutions are not second rate or a last resort to which one turns if private solutions fail. (ii) **Financing and entitlements:** Entitlements whether for services or the social safety net are not contribution dependent⁷ but available to all (universal) in case of need. It is crucial that contributions paid by an individual in the form of various tax payments do not determine the entitlements. This is a key difference from a market based system where e.g. entitlement to insurance coverage is intimately tied to previous contributions. In short, the ambitions, and therefore the financing requirements of the welfare state, are high. Ensuring the financial viability is, of course, essential to maintain the properties of the welfare model.

While at the individual level there is no relation between entitlements and the contributions made in the form of various tax payments, there has to be such a relation at the aggregate level. The tax revenue raised has to be able to cover the expenses arising from the entitlements and use of welfare services and the social safety net. This is the financial constraint of the welfare state.

The provision and financing property of the welfare state implies that it rests on a common pool. By this is understood that tax payments contribute to a common pool of resources which finances the expenditures deriving from welfare services and the social safety net. The common pool property of the welfare state is obviously closely related to distributional aims of the welfare state; that is, certain needs should be met independently of ability to pay. Key questions related to the common pool property are what requirements it sets for economic policy and whether it has any implications beyond redistribution. The following lays out an essential implication of the common pool character of a welfare model relying on a large tax financed public sector, and the following sections discuss essential economic implications of it.

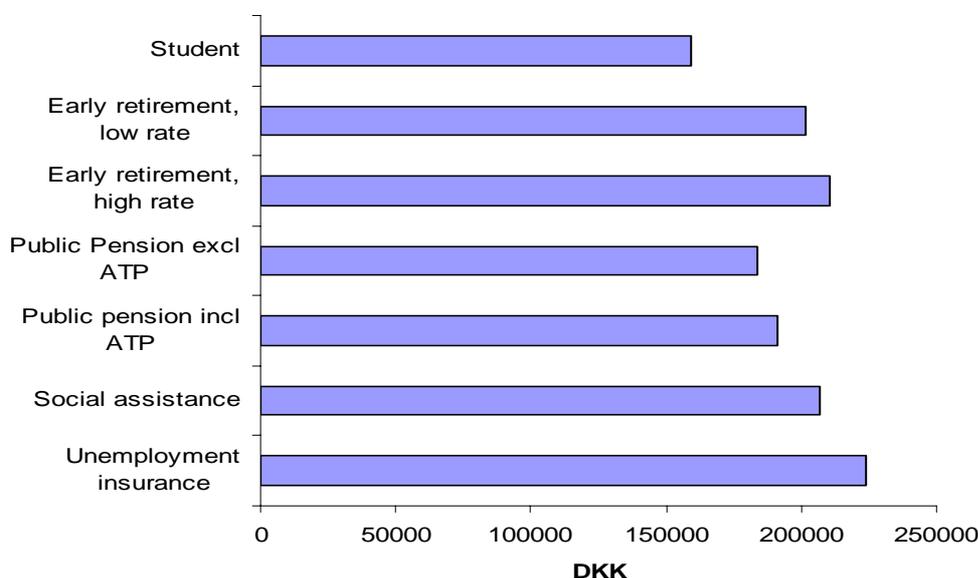
Employment focus

Pivotal for the financial viability of the welfare state is a high labour force participation and employment rate. In short the model is employment focussed. This is so for two reasons. First, when there are entitlements in the social safety

⁷ No rules without exception. Unemployment insurance and early retirement are examples of contribution based schemes, and thus membership based. However, both schemes are tax subsidized.

net to all without market income, and since this is mainly financed by taxes levied on labour income, it follows that the model is only financially viable if a sufficiently large fraction of the population is in private employment. If too many are out of employment, expenditures rise and revenues fall. To illustrate this, consider the sensitivity of the public budget to shifts between non-work and work which releases a double effect on the budget, namely reduced expenditures on transfers and increased tax revenue. Figure 7 shows for Denmark the immediate budget effect (one year) when a person shifts from receiving some benefits due to non-employment into employment in the private sector⁸. For an unemployed the amount is roughly 30.000 euro due to the double effect of the increased tax payment and the reduced benefit expenditures. An increase in private employment of 10.000 (0,6 %) will thus improve the budget by 2.25 billion DKK (300 million euro), corresponding to a budget improvement of about 0.15 percentage points of GDP.

Figure 7: First year budget effect of shifting from non-work to work, for various transfer types.



Source: Danish Welfare Commission (2006).

The second reason for the employment focus is that public service provision requires labour; that is, service provision is institutionalized and therefore market based in the sense that the most essential input has to be acquired in the labour market. The public sector in the Scandinavian countries is therefore a significant employer employing about 1/3 of all employed. In other countries this service production is to a larger extent taking place via the private market or within the family (civil society).

The Scandinavian welfare model therefore necessitates a high employment level both in the private and the public sector, and therefore for the economy as a whole. In relation to the labour market, the Scandinavian welfare model is therefore highly market based.

⁸ The orders of magnitude are the same for Sweden, see Swedish Economic Policy Council (2008).

Incentive issues

The common pool property raises a fundamental problem in relation to incentives. The building principle that entitlements and contributions (tax payments) are disassociated also implies that individual decision makers do not take into account that a change in behaviour may affect total tax revenue and therefore the resources available for the financing of the welfare state. This does not depend on whether the individual is a supporter of the welfare state, or whether he/she understands that taxes finance the welfare state. The reasoning is very basic and arises from the fact that one out of many is not perceiving that its behaviour can change the entirety. If the population size is N , then the individual only perceives to have an effect of $1/N$ on the aggregate, and clearly N does not have to be very large for $1/N$ to be practically zero. Specifically this means that the individual in its choice on e.g. labour supply only cares about the income after tax. The effect of the tax payment on total tax revenue and therefore the possibilities of the public sector is only $1/N$ and can therefore be disregarded. If all reason in this way, problems will arise because the tax revenue is obviously needed to finance the welfare state. In other words, a difference arises between the private and social return to work. The private return to work is the wage after taxes, while the social return also includes the tax payment. Therefore the social return is larger than the private return. This is the incentive effect of taxation underlying the standard view represented in figure 1. The incentive problems arising in a common pool arrangement are sometimes referred to as the "tragedy of the commons". However, the Scandinavian countries do not seem to suffer from the "tragedy of the commons", and the key question is why this is not the case.

4. Redistribution and risk sharing

Most discussions of the welfare state focus on redistribution. This follows directly from the standard logic on the trade-off between efficiency and equity (figure 1) and the fact that many welfare policies are indeed redistributive. This derives from society attending for the sick, those unable to work, those unable to find work etc., which is financed by those who are healthy, able to work and having a job. Despite the importance of this, it does not account for the Scandinavian paradox (figure 2). On further reflexion, it is important that redistribution and insurance cannot be separated. The redistribution interpretation refers to an ex-post situation; that is, when we know e.g. who is sick and who is healthy, we know who will receive from and who will contribute to the system. However, if there ex ante is some risk involved in determining the position one will have at a later point in time, it follows that the welfare scheme will perform an insurance function. A given individual does not know whether he/she will become ill, but he/she knows that if it happens, the public health care system will provide for him/her. Likewise, if the ability to work is lost, a social safety net will step in etc. Even tax payments include an insurance element since more taxes are paid if income turns out to be high, and less if it turns out to be low. Hence, seen from an ex-ante perspective, welfare arrangements provide insurance in relation to various possible social circumstances which may arise.

In recent years the literature on the economics of the welfare state has increasingly recognized that many welfare arrangements have an insurance element (see e.g. Andersen et.al. (2007), Barr (2001a,b), Sandmo (1991,1995), Sinn (1995,1996)). That is, the public provisions, whether they are income transfers or services, are contingent on various

circumstances which may arise in life, and therefore the schemes have an insurance element besides other possible effects. These effects have been recognized for a while as seen in the following quote defining the welfare state:⁹

A 'welfare state' is a state in which organized power is deliberately used (through politics and administration) in an effort to modify the play of market forces in at least three dimensions - first by guaranteeing individuals and families a minimum income irrespective of the market value of their property; second by narrowing the extent of insecurity by enabling individuals and families to meet certain 'social contingencies' (for example sickness, old age and unemployment) which lead otherwise to individual and family crises; and third by ensuring that all citizens without distinction of status and class are offered the best standards available in relation to a certain agreed range of social services (Briggs, 1961)

However, it is not until more recently that the insurance effect has been addressed more explicitly in relation to understanding not only how specific welfare arrangements work but also the difference between different welfare regimes or models. This insurance function may broadly be defined as social insurance¹⁰. In the following social insurance is used in a broad sense to capture the insurance effect arising from contingencies built into welfare arrangements¹¹. It should be noted that labour market institutions may also provide implicit insurance, and a complementarity between the insurance effects from the labour market institutions and welfare arrangements may therefore exist (see e.g. Agell (2002) and Barth and Moene (2009)).

Social insurance may have a direct welfare effect to the extent that individuals are risk averse, but it may also affect behaviour in a desirable way since risk sharing may make individuals more willing to undertake risky activities (the flexicurity argument). An important effect is that structural adjustments may proceed more smoothly and faster with positive effects on productivity and growth. These effects are a potential explanation of the Scandinavian Puzzle why a large public sector is not necessarily very costly in terms of efficiency. To see this, it is necessary to discuss why the market outcome does not necessarily ensure efficiency.

Private insurance

Capital and insurance markets offer possibilities for making contracts depending on time and states of nature. These markets allow agents to shift resources over time (borrow and save) and to diversify and spread risk. In practice it is often very difficult to separate the two (even a standard savings account includes some risk – e.g. what is the

⁹ Even though Briggs distinguishes between income maintenance and insecurity, it is the case that the social safety net also performs insurance functions besides its redistributive role.

¹⁰ Some authors like Atkinson (1991) and Feldstein (2005) make a distinction between social welfare and social insurance, where the former is taken to be means tested, while the latter is needs tested. This distinction is unclear both theoretically and empirically. Theoretically, means testing is obviously also involving contingencies, and welfare benefits also provide insurance against the risk of having a low income (wealth). Empirically, in many countries the basic social safety net - social assistance - is an integral part of a larger system of income transfers, implying that transition into other income transfer schemes often goes via social assistance.

¹¹ The broad definition is also applied by e.g. Pestieau (1994), Barr (2001a,b), Sandmo (1991, 1995) and Sinn (1996, 1995).

purchasing power of the money I will receive in say 5 years time?), and in the following private insurance will be used as a broad term to capture the scope to diversify and spread risk via financial and insurance markets.

Private markets may leave insufficient room for risk diversification due to transactions and information problems. In the economics literature, the problems are usually summarized under the heading of moral hazard and adverse selection problems. To explain these problems, note that any insurance contract implies a transfer of responsibility; i.e. the insured pays a premium, and the insurance company takes over the responsibility to cover part or the whole of a loss arising in a given situation. One fundamental problem is to clarify whether a loss has occurred and its consequences. If there are large transaction/information costs, this is not a trivial problem. A further problem is that a change in responsibility may affect incentives. A person with an insurance contract may be less inclined to try to avoid a loss (ex ante moral hazard) or to minimize the size of an eventual loss (ex post moral hazard). The insurance company realizes this, but with transaction/information costs it is not possible to monitor the insured and to prove eventual "misconduct". Hence, the insurance company will have to raise the premium or ask for some self-insurance (individuals are not compensated for the full loss). Another problem is that the insurance contract may only be attractive to individuals with a high probability of a loss. This is problematic because the basis of insurance is the possibility of spreading risk between those being exposed to a loss and those who are not. If only the former group applies for insurance, such risk diversification is not possible. For problems of moral hazard and adverse selection, private insurance markets can not offer an appropriate level of risk diversification and sharing. This applies in particular to shocks affecting many at the same time (like unemployment) since it is more difficult to diversify such shocks. Moreover, agents cannot enter private contracts until they reach a certain age, but at that time important uncertainties are always resolved, and they are therefore by definition non-insurable.

Social insurance

Social insurance is characterized by being mandatory. Entitlements are not determined by contributions, but the scheme is collectively financed. Mandatory refers to the fact that all individuals/families are covered by the system; i.e. social insurance is a citizen's right. Entitlements are not contingent on contributions, but may depend on various contingencies. Contributions in the form of tax payments are generally dependent on the ability to pay (income, consumption, wealth).

The fact that social insurance is mandatory implies that potential adverse selection problems are solved. Having the whole nation taking part in the risk sharing arrangement achieves ideal actuarial principles for risk diversification. The more participants there are in a risk sharing arrangement, the better the scope for risk diversification¹². Moreover, the public sector has an ability to diversify risk over time. To take an example, consider unemployment where the consequences can be spread over time by running public sector deficits in periods with high unemployment, and financing this by running surpluses in periods with low unemployment.

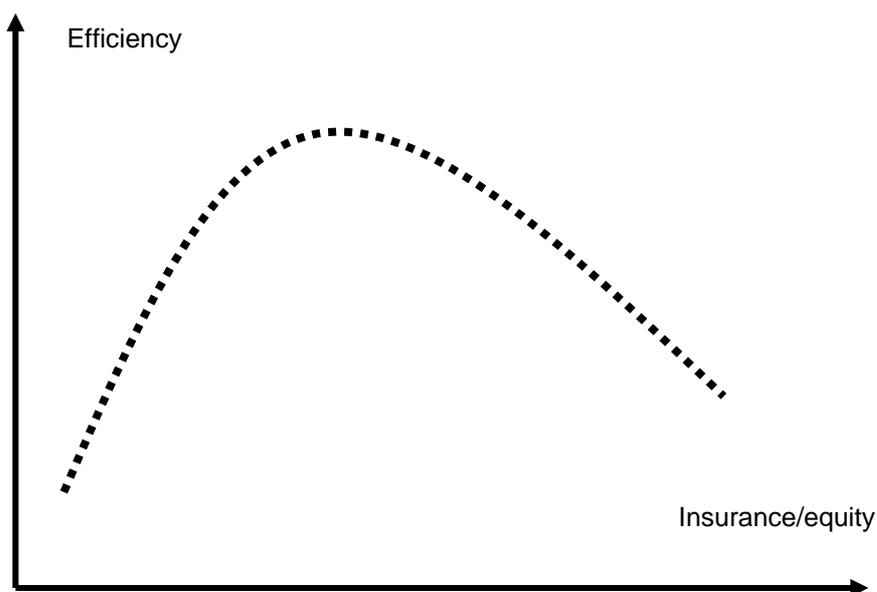
¹² This is known as the law of large numbers. The larger the number of participants N in a risk sharing arrangement, the better the scope for diversifying risk, Hence, an increase in N improves risk sharing, but worsens incentive problems, cf. above.

Thus, in some respects the welfare state can offer insurance which private markets cannot. Even in areas where this is not the case, it is still the case that some insurance is implied. However, the incentive problems (moral hazard) cannot be avoided for social insurance, as it cannot for private insurance

Incentives vs. insurance.

Return now to the issue of the incentive effects of the welfare state arising due to the common pool problem. Consider taxation as an example. As discussed above, taxation poses incentive problems by creating a wedge between the private and social return to various activities like work, saving, investing etc. However, taxation and the arrangements it finances provide insurance. The incentive problem is problematic since it may harm employment and production and thereby living standards (efficiency). The insurance effect arises via the effect on risk taking, which may be conducive for efficiency if private markets are incomplete.

Figure 8: Efficiency vs equity: incentive and insurance effects



The net effect of taxation on behaviour (efficiency) is thus in general ambiguous since it depends on the net balance between the incentive and the insurance effect. Taking into account the insurance effect, the relation between efficiency and insurance/equity may thus be like illustrated in figure 8. That is, up to some point the insurance effect dominates the incentive effect, implying that an expansion of welfare arrangements enhances both efficiency and equity. However, at some point a further expansion implies that the incentive effect comes to dominate the insurance effect, and therefore further improvements in equity are achieved at the cost of less efficiency. Note that more insurance ex ante means less inequality ex post.

The finding illustrated by figure 8 has several important implications. First, two countries may display the same level of efficiency measured by e.g. average income but different levels of equity. This may contribute to explain the findings

reported in figure 2 showing that the Scandinavian countries have achieved about the same level of average income, but with much less inequality than e.g. the US. Second, while it is theoretically possible that the relation between efficiency and equity may display some upward sloping part, more importantly insurance effects tend to counteract the standard incentive effects, which implies that the slope of the efficiency-equity locus may be rather small. Finally, if the relation has a positive sloped part as illustrated in figure 8, it is the case that a policy concerned about efficiency and equity will put the economy on the downward sloping part. The reasoning is simple since being on the upward sloping part means that both efficiency and equity can be improved, and to be in such a position would not be optimal. Note that this implies that even if the welfare state may enhance efficiency, it is still the case that a further expansion involves a trade-off between efficiency and equity.

Education

An important element of the welfare state which involves a strong capital market and insurance elements is education. Tax financed education implies that educational costs are not an impediment to education. In its absence education will presume either previous savings (typically by parents) or borrowing in capital markets. Both are associated with problems since not all parents will have the possibility to save enough for their children's education, and the private market will in general offer insufficient borrowing options for education. The latter arises from a classical moral hazard problem that the return to education depends on the effort of the individual. Hence, private financing of education may imply an inefficiency in the sense that the human capital potential of the population is not used appropriately. Since human capital is known to be an important driver of growth, it follows that insufficient education may show up in lower average income in society. Moreover, focus on education targeted to avoid un/low-skilled in the labour market may be a way to make it easier to achieve distributional aims; that is, decent wages and good employment prospects for all members of society.

Publicly financed education involves both a capital market and an insurance function. The capital market function arises because education is free, but individuals are assumed to use their human capital in the labour market, and hence they will effectively pay back in the form of higher tax payments. The insurance function arises because the "payment" depends on how successful the education has been in terms of employment and wage prospects. Clearly, publicly provided education also raises incentive problems. Do students study sufficiently hard to ensure success of their studies? Do their choice of education depend on the market needs (and hence the employment possibility = tax payment capacity)? Do they start education too late, or finish too slowly due to a wedge between the social and private returns to education?

While several aspects concerning education can be discussed, this also stresses the point that the effects of taxes on overall economic performance like average income or income growth cannot be seen independently of what the taxes are financing.

5. Incentives – counteracting effects

The incentive problems arising from the common pool property of welfare state arrangements may be counter-acted in various ways so as to make it possible to achieve equity at a low cost in terms of efficiency. In the following three main counteracting effects are discussed, namely, the employment conditionality of the social safety net, norms, and the role of centralized labour markets.

Employment conditionalities

To put the potential incentive problems arising from a generous social safety net in perspective, it is useful to contrast the presentation of the Scandinavian model in the economics and the political science literature. In the former the puzzle of how to combine a generous social safety net and a high level of taxation with a high employment level is at the centre. In parts of the economics literature, a generous social safety net is often portrayed as a "subsidy to leisure" or as "paying people for not working".

Many government spending programs implicitly provide a marginal subsidy to leisure, since they stipulate that benefits are conditional on not working, or that the benefit is reduced in response to any labour income. Relevant examples include some components of social security, unemployment insurance, traditional welfare programs and disability (Rogerson, 2007, p 73).

This line of reasoning identifies the composite tax rates (marginal effective tax rates) on labour market participation (i.e. the combined effect of taxes lowering the return to work, and the loss of transfers) as crucial for determining labour force participation, and by implication they are high in countries like the Scandinavian with a generous tax financed social safety net.

In the political science literature, the same issue appears but from a different angle since the focus is on the extent to which social policies lead to a decommodification of labour. By decommodification is understood that selling of labour¹³ is not a necessity to maintain a decent standard of living.

A minimal definition must entail that citizens can freely, and without potential loss of job, income, or general welfare, opt out of work when they themselves consider it necessary (Esping-Andersen, 1990, p 23).

Decommodification is seen as an integral part of the universal welfare model, stressing that entitlements are based on citizenship and needs rather than performance. Since the Scandinavian countries have welfare policies which come close to the universal model¹⁴, it is concluded that labour has become decommodified (see Esping-Andersen (1990)).

¹³ Also expressed as "the concept refers to the degree to which individuals, or families, can uphold a socially acceptable standard of living independently of market participation" Esping-Andersen (1990, p 37).

¹⁴ Various proposals on classification of welfare regimes or models have been made in the literature. Esping-Andersen (1990) made a seminal distinction between the liberal/residual, the continental/corporatist and the universal/social democratic/Scandinavian welfare model. This is used here since it is a convenient way by which to focus on the division of labour between the market, the civil society and the state. However, no country fits perfectly into these model categories, and countries with strong universal elements are also found outside Scandinavia, e.g. the Netherlands.

The decommodification interpretation goes hand in hand with the incentive view of the welfare state; that is, the economic incentives to supply labour are weakened by welfare arrangements.

On the one hand, the social safety net in Scandinavian countries may be described as universal in the sense that entitlements are available to all, but on the other hand it may also be characterized as conditional since there is a strong employment focus in the schemes. This is reflected in the summary table 1 giving some key properties of the social safety net in Denmark.

The employment conditionalities are stressing the employment focus of the welfare model. They mainly derive from the need to minimize incentive problems related to the common pool property of the welfare state, or to put it differently to ensure that a generous social safety net (insurance) is consistent with a high labour force participation rate. As already noted above, the work incentives may be muted by the fact that the net gain from moving from non-work to work is small when taking into account the lost transfer and the increased tax payments. This wedge on work incentive is in the literature termed the marginal effective tax rate on work (METR), and it is high for the Scandinavian countries¹⁵. This may lead to the conjecture that labour force participation and employment rates are correspondingly low in the Scandinavian countries. However, as seen from figure 9 giving a cross plot of the METR and labour force participation for EU14 countries, this is not the case. It is seen that the Scandinavian countries are outliers in the figure in the sense that a high labour force participation/employment rate has been maintained despite a high METR. The employment conditionalities or the active labour market policy are important in accounting for the fact that high labour force participation has been maintained despite small economic incentives to work.

By employment conditionalities in the social safety net is understood that transfers are conditional on not being able to find a job, but being willing to work; i.e. there is no free choice as to whether to work or to receive public transfers. The employment conditionalities address both moral hazard and adverse selection problems arising with the social safety net.

The moral hazard problem in relation to work may be summarised in reservation demands; that is, minimum requirements for a job to be acceptable. This may include the wage, the type of job, its geographical location etc. If transfers can be claimed unconditionally, the reservation demand may be high since the consequence of having to wait for the "right" job to come up is not large. However, the costs to society may be large if many react in this way. Incentives may be created by lowering benefit levels, but this will run counter to distributional objectives in the welfare state. There is an alternative route by which to strengthen incentives without reducing benefits. By attaching requirements like e.g. activation to claiming benefits, the reservation demands may be affected in a downward direction; that is, unemployed may reason that it is better to accept a less than ideal job than to be asked to participate in an activation programme.

¹⁵ Note that the high METR is precisely the reason why a shift from non-work to work has a large budget effect, cf. figure 7.

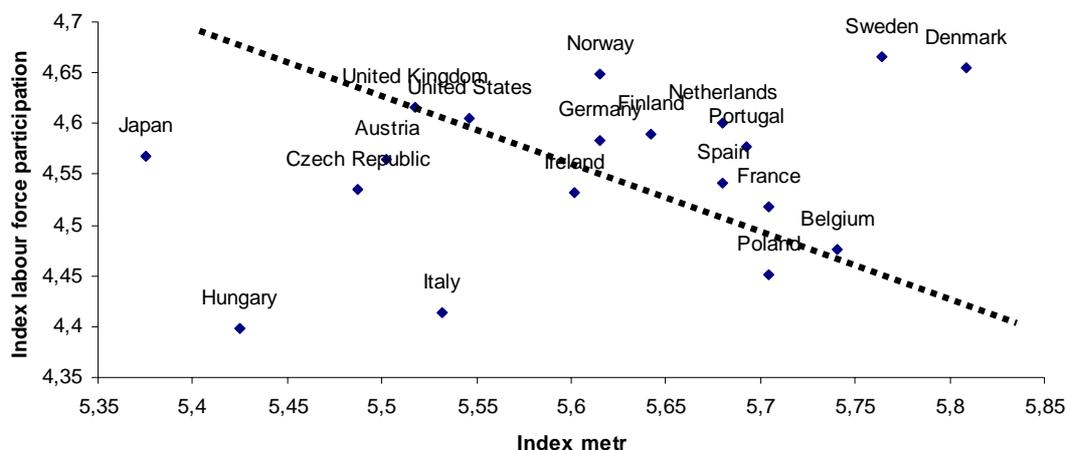
Table 1. Summary indicators of conditionalities in unemployment insurance, social assistance and early retirement - Denmark

	Eligibility	Conditions	Job search	Activation requirements ¹
Unemployment benefits	Voluntary, contribution based, tax subsidized	Membership: relevant education or employment in 12 months. Renewed benefit period: regular work in 6 out of the last 36 months. Duration: max 4 years	Mandatory registration in job centre (to be renewed weekly) CV on jobnet Individual job-plan/regular contact to job-centre Active job search (monitored and sanctioned)	Age below 30: after 6 months Age between 30 and 60: after 9 months Age above 60: after 6 months Repeated offers After 2 ½ years full time activation
Social Assistance	Universal, but depends on age, and means tested for married based on family income	Social event precluding self-support	For recipients of social assistance who are assessed to have lack of job as their main problem – the same requirements as for unemployment insured	Age between 25 and 30 and no education: education offers after 6 months (alternatively lower benefits) Age between 25 and 30: after 5 weeks an offer of duration 8 weeks, after 13 weeks an offer of duration 18 months Above 30: after 9 months
Early retirement	Voluntary but based on previous employment, contribution based, tax subsidized,	Age. 60-65.	None	None

Note: (1) the actual activity and duration vary across the different groups
Source: LBK nr 1074, 07/09/2007, Ministry of labour, Denmark

Likewise employment conditionalities can overcome adverse selection problems. The adverse selection problem occurs if a person is claiming benefits even though he/she does not want to work (but rather wants to pursue some interest of his/her own) or works in the black sector. The activation requirement will make it more difficult to claim benefits without being genuinely interested in work, and thereby the social safety net is better targeted to those it is intended for.

Figure 9: Labour force participation and marginal effective tax rate (metr)



Note: Data apply to 2004 and give the log value of the labour force participation rate and to the metr.
 Source: Andersen (2010)

In short the strong focus on active labour market policies in the Scandinavian countries can be seen as a response to the need to make incentives for work consistent with the common pool nature of the extended welfare state. Thereby a generous social safety net can be made consistent with a high employment rate. It should be noted that the active labour market policy also has the purpose of increasing the qualification and work capability of marginalized groups. This is to make high ambitions with respect to pay consistent with a high employment rate (working poor is not accepted).

Gender and social expenditures

The fact that key welfare tasks like child and old age care are imbedded in the welfare package has important gender implications since it shifts a traditional task out of the family sphere for which women have traditionally been mainly responsible. This goes in the direction of ensuring more equal opportunities for males and females to pursue a labour market career. It can also be interpreted in the sense that economies of scale in child and old age care are exploited, which makes it possible in net terms to expand labour supply, and therefore strengthen the financial basis of the welfare model. An additional aspect of child care is that it may play a role in a socialization process. The arrangements help account for the fact that female labour force participation rates in the Scandinavian countries are high in international comparisons.

More generally the Scandinavian welfare model may be characterized as less paternalistic or “male breadwinner centred” than models in other countries since entitlements to a large extent are disassociated from contribution. One example of this is in relation to old age care and public pensions, which tend to benefit females more than males since the longevity for females is significantly longer than for males (Danish Welfare Commission (2005)).

Norms

Incentive problems arising from a common pool need not arise if there are strong norms on the appropriate behaviour with respect to when and when not to use the common resources. It has been suggested that norms or ethics in the Scandinavian countries not to free ride on the common pool are particularly strong (see Cahuc and Algan (2008)), and therefore it is possible to maintain an extended tax financed welfare state. This begs the fundamental question why norms are different in the Scandinavian countries.

Lindbeck (1995) with various co-authors have argued that norms were particularly strong in the early years of the welfare state, perhaps because the founding generations had strong norms to be self-supporting and only resorted to the public sector in “special situations”. Later norms have been eroded due to high unemployment which made “living on transfer” more acceptable.

While norms are clearly of great importance, it is a fundamental question whether work norms can be maintained if they are not supported by economic incentives or other mechanisms. It is well-known from sociology that norms have to be supported by sanctions to be viable. Employment conditionalities and active labour market policies can be seen as sanctions to support the work norms of the welfare society, and therefore sociological and economic perspectives meet in stressing the importance of this policy element.

Others have referred to social capital as accounting for cross-country differences. The concept of social capital is somewhat imprecise and suffers from the problem that a high level of social capital is inferred from favourable performance, and therefore it is unclear what the predictive power is. One important point is, however, that just institutions – including the public sector – may be crucial for trust among citizens, not only in the individual system dimension, but also in interpersonal relationships, and this may in turn lower transaction costs and thereby contribute to a more efficient economy (see e.g. Rothstein (1998)).

Centralized labour markets

Scandinavian countries are characterised by centralized labour markets and a strong tradition for seeking cooperative solutions (tripartite settlements). This may be explained by the fact that the countries are both small and open, and therefore critically dependent on the ability to remain competitive to the outside world. Globalization is not a new phenomenon to the Scandinavian countries. One hypothesis is that the strong cooperative tradition has been necessitated by the smallness and openness of the countries (Katzenstein()); without it the countries would not have been able to meet international competition.

In relation to the common pool property of the welfare state, this is particularly important. The common pool problem arises because each single actor perceives that a change in behaviour to its own benefit will have no influence on the whole society. When all reason in this way, problems arise, cf. discussion above. However, centralized wage setters will realize that if they change wages or other work conditions, it will have an effect on the whole (or a significant

subpart) of the labour market and therefore also the public budget, which in turn will affect workers (see Summers et al. (1993)). Likewise union leaders will not formulate an agenda where they ask for tax increases to finance a more extended welfare state and at the same time ask for wage increases to compensate for the implied tax increases. In short, centralized wage setters take the effect of their actions on the public budget into account (the common pool problem is internalized). This may be one important contributory factor to explain why it has been possible historically to maintain a relatively high labour input despite high taxes. While individuals may perceive that the price of shorter working hours is small (the wage after tax), the centralized wage setters will realize that the cost to society is much larger since the lost tax revenue should also be taken into account. Hence, centralized determined working hours will take this into account and tend to be too long as seen from an individual perspective!

An important corollary of this is that the trend in recent years towards a more decentralized labour market may imply that one of the contributory factors to make the extended welfare state financially viable and consistent with a high employment focus is gradually being changed. If so, tax distortion may be more important, and issues of financing etc. arising from this become critical.

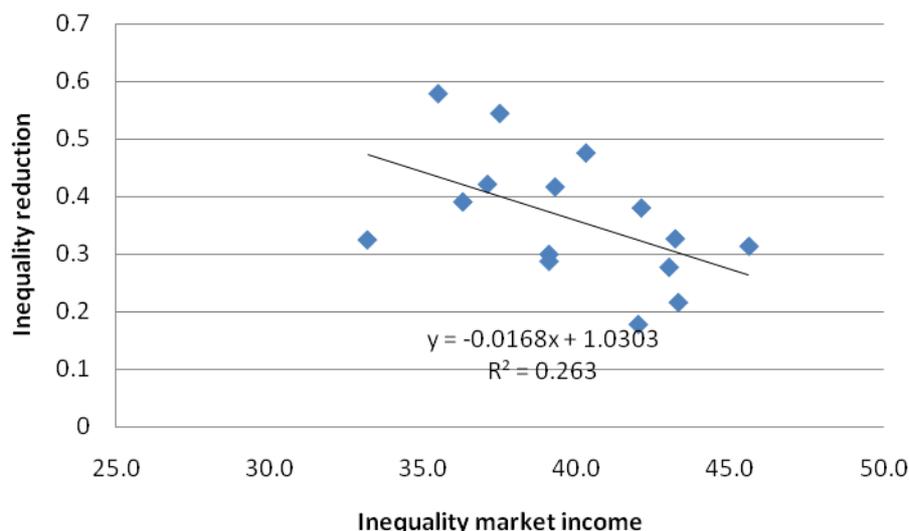
6. Political economy aspects

Do Scandinavian countries have a more extended welfare state because they are more altruistic? It is not quite clear that the answer to this question is affirmative¹⁶, and it is therefore important to understand why there has been, and still is, a strong support for the welfare state. To address this question, it may be useful to go to extremes and assume that voters are not altruistic but completely individualistic (egoistic); that is, voters are assumed to be concerned only about their own situation (utility). Can support for the welfare state still arise in this case? If the answer is positive, it gives a more robust explanation of the political support for the welfare state.

In a democracy one would expect that support for redistributive policies will be stronger the more unequal the distribution of income. The reasoning is simply that a majority will be net-gainers from an expansion of the welfare state. Support can therefore be found for a policy which redistributes from the “few” rich to the “many” poor. This seminal effect has a strong standing in the political economy of redistribution (see Meltzer and Richards (1981)). However, despite its basic logic the predictions are not supported by empirical evidence. A key implication of the model is that countries with more income inequality should have higher taxes (more redistribution) than countries with less income inequality. However, this is not the case, cf. figure 10. If anything, the empirical evidence seems to indicate that redistribution is lower in countries with large income inequalities (see also Moene and Wallerstein (2001a)). This leaves us with the so-called redistribution paradox. Why is there not more redistribution in economies with an unequal income distribution, and why is there so much redistribution in some countries with an equal income distribution?

¹⁶ One indication that this may be the case is the fact that the Scandinavian countries are in the top in international comparisons on foreign aid (as a share of GDP).

Figure 10: Inequality in market income and the extent of redistribution



Note: Inequality in market income is measured by the Gini-coefficient for market income, and inequality reduction measures the percentage reduction in the Gini coefficient between market and disposable income. Data for 15 OECD countries, 2000.

Source: Computations based on data from www.sourceoecd.org

The political science literature has advanced the so-called power resource theory for the political support for welfare state arrangements. According to this theory, the political compromise between the "poor" and the "middle-class" is important in shaping welfare policies since this is taken to ensure that there is redistribution towards the poor. This is sometimes phrased in the way that the welfare state redistributes from the "80 % richest to the 80 % poorest". This may seem a waste since the 60 % in the "middle" gain nothing, and therefore a more targeted scheme redistributing from the 20 % richest to the 20 % poorest may be more efficient. However, this may imply that there is no political support for redistribution as captured in the phrase "welfare for the poor, is poor welfare". However, if the middle-class supports redistribution without getting anything in return, this theory seems to rely on some kind of fiscal illusion; that is, voters mix up gross amounts with net amounts. It is not particularly convincing that persistent support for the welfare state can be sustained based on some form of illusion.

Both the redistribution paradox and the problem with the power resource theory can be reconciled when taking into account the insurance aspect of welfare state arrangements (see Moene and Wallerstein (2001a,b)). This development in the political economy of the welfare state mirrors the economic theories of the welfare state which also earlier mainly perceived the welfare state as a question of redistribution, while the role of risk and insurance has been stressed in more recent work, cf. discussion above. A key point of this more recent literature is that support depends not on whether one at a given point in time is a net-gainer or loser (ex post), but rather whether there is a likelihood that one at some point may benefit from the scheme (the insurance or ex ante argument). Following this line of reasoning, the support for the welfare state relies on whether most people perceive that they may at some point in time benefit from the welfare state arrangements. This brings us back to the common pool argument. If all agents ex

ante are reasonably identical (homogeneous) and therefore face similar possible life trajectories/risks, then it is more likely to gain support for an extended welfare state (see Alesina and Angeletos (2002)).

It is well established that welfare regimes are very persistent, and therefore the support for a given welfare arrangement is very strong. This poses the question why rather similar countries have chosen different welfare regimes, and why they have been persistent. This question is addressed in the literature on multiple political equilibria; that is, a literature where it is pointed out that rather similar (even ex ante identical) countries may end up with different welfare arrangements, and with no pressure for this to change. One particularly interesting example of this is Alesina and Angeletos (2005) focussing on the role of effort and risk in determining the position of individuals. People may consider differences in e.g. income due to effort as fair, while those arising due to risk are considered unfair. Hence, it may not be considered justifiable to redistribute in relation to the former, but it may be so for the latter. Interestingly there is a systematic difference between how the role of effort and risk is perceived to affect the income distribution in the US and Europe. In the US most think that differences in income are driven by choices and efforts, while the Europeans in general put more weight on the role of risk. In a cross-country perspective, there is a clear positive relation between the share of the population which attributes a large role to luck in determining income and the role of the public sector measured by social spending relative to GDP. Alesina and Angeletos (2005) show that the political equilibrium is either one where people attribute success mainly to effort, a “lean” welfare state is supported, and it is supported in equilibrium that effort is more important than risk for e.g. income, or it is one where risk is attributed a large role in determining the position of individuals, there is support for an “extended” welfare state, and it is supported in equilibrium that risk is more important than effort. A straightforward implication is that this helps account for the different policy choices of e.g. the US and the Scandinavian countries.

7. Conclusion

The Scandinavian countries are a puzzle from both an economic and a political perspective. Despite a large public sector and high tax burdens, it has been possible to maintain high employment and income levels. Also, despite a fairly egalitarian income distribution, the political support for the welfare state has remained strong. These puzzles may have a solution in interpreting the Scandinavian welfare states as broad ranging and implicit insurance arrangements; that is, the system provides insurance against various events which may happen through life. This has a direct welfare effect, but it may also enhance economic efficiency and at the same time strengthen the support for the system. This is so since all are “covered” by the insurance arrangement and may benefit from it at some point.

The common pool character of the welfare state is thus important for its benefits, but it is also an Achilles heel since it may leave important incentive problems (tragedy of the commons). Policy designs and institutions in Scandinavia reflect this, and employment conditionalities in the social safety net and centralized labour markets are among the key factors in mitigating incentive problems.

The smallness and homogeneity of the population in the Scandinavian countries are important contributory factors for the development of the welfare model. Policies have also worked to strengthen homogeneity via e.g. schooling and

education. In this sense the model has been self-supportive in strengthening its foundation. If the homogeneity property is crucial for the model, this raises the question whether migration is the most important threat to the Scandinavian welfare model. Migration may challenge the homogeneity property and thus the common pool property if the highly educated tend to emigrate, while a major of immigrants are low-skilled.

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