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Ageing and Globalisation in the Scandinavian Welfare Model

Torben M. Andersen, University of Aarhus, Denmark

Abstract

The Scandinavian welfare model implies an extended social contract across generations. Therefore it is sensitive to increases in the dependency ratio. Current welfare arrangements are not fiscally sustainable, that is, net-expenditures to maintain current welfare arrangements will slowly but steadily increase alongside the increase in the dependency ratio. While the demographic shifts are not worse than in many countries, the consequences and possible remedies must be seen in perspective of the welfare regime adopted. This paper discusses these problems and the possibilities of finding solutions against a process of globalisation affecting migration patterns and taxation.

Introduction

The Scandinavian countries share a welfare model in which the public sector plays a dominant role. There is an individual entitlement to income support and welfare services, and these activities are collectively financed via taxes. This is known as the Scandinavian or universalistic welfare model. It has several important hallmarks including a relatively large public sector and thus a high tax burden (more than 50% of GDP). Moreover, labour force participation rates are high (close to 80%) for people in normal working ages. This model has to be very "employment oriented". Most people are entitled to some form of income support if out of work, and the major revenue source is direct or indirect taxation of income generated in the labour market. Hence, unless a high fraction of the population is in employment it is not possible to ensure financial viability of extended welfare arrangements provided via the public sector based on universalistic principles[1].

Despite the similarity in welfare regimes across the Scandinavian countries it is worth pointing out that a more careful scrutiny of various welfare arrangements (organization, eligibility etc.) as well as the taxation system reveals substantial differences. The frame or underlying principle is fairly similar, but the ingredients are in many cases different.

The Scandinavian model has often been praised. During the 1960s and 1970s much international attention was devoted to Sweden as the model country showing how to square growth and high employment with the development of an egalitarian welfare model characterized by a high level of provision. The attraction of the Swedish model weakened during the 1980s and 1990s, and Denmark has more recently taken centre-stage. Focus has been on the ability to combine a flexible labour market with social security (the flexicurity model) as well as a relatively low unemployment rate and sound public finances. Norway has in recent decades been considered as a "special case" due to the importance of oil resources.

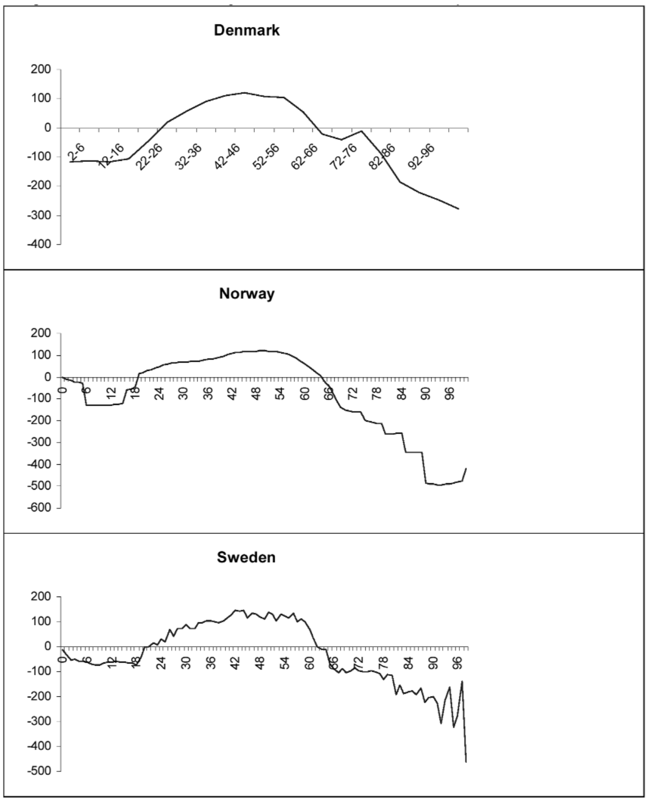
The Scandinavian countries share with most western countries an ageing population that increases the dependency ratio significantly. This is driven by the large post-WWII cohorts and increasing longevity. At the same time globalisation induces structural changes which may affect both the need and scope for welfare arrangements. In particular the migration pressure and the scope for taxation may change.

The core problem is that current welfare arrangements are not fiscally sustainable, that is, net-expenditures to maintain current welfare arrangements will slowly but steadily increase alongside the increase in the dependency ratio. While the demographic shifts are not worse than in many other countries, the consequences and possible remedies must be seen in perspective of the welfare regime adopted. Moreover, a solution must be sought against the background of a process of globalisation affecting migration patterns and taxation.

This paper outlines in section 2 the main characteristics of the social contract embedded in the Scandinavian welfare model and the problem of financial viability arising from increasing dependency ratios. Section 3 clarifies in what way the welfare model is affected by "ageing", while specific issues of migration and taxation are addressed in sections 4 and 5, respectively. Section 6 offers a few concluding remarks.

The social contract

Extended welfare arrangements of a universal nature cause a strong life-cycle dependency in the average person's position as either a net-contributor or net-beneficiary from welfare arrangements. This a straightforward implication of the "cradle-to-grave" character of the welfare model. The average person would be a net-beneficiary when young and old, and a net-contributor during his/her working ages. The relation has an inverted U-form, and since welfare arrange-



Note: There can be some difference across countries in respect to which expenditures it is possible to attach to specific age groups.

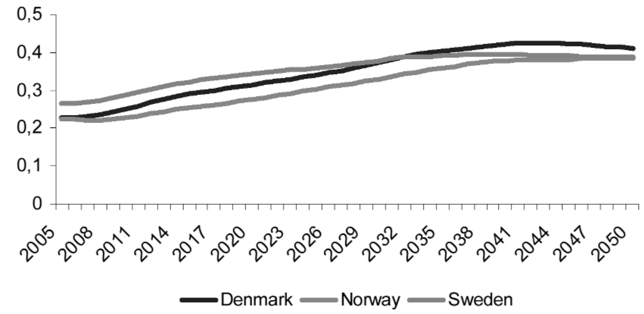
Source: Denmark: Velfærdskommissionen (2004); Norway: Finansdepartementet; Sweden: Finansdepartementet.

Figure 1. The social contract in the Scandinavian countries: Average net-contributions to the public sector as a function of age – 1000 kroner in national currency.

ments are extended and taxes high there is much variation over the life time, cf. Figure 1.

Although the welfare model is not a strict pay-as-you-go model[2] it has the property that the revenues generated by the current working population provide the financial basis for the welfare arrangements from which young and old people (and those without any market income) benefit. There is thus a social contract which implies redistribution and risk sharing between generations. At a given point in time there is of course also redistribution and risk sharing within cohorts.

A major challenge is the fact that ageing causes a significant change in the balance of the social contract. The drop in fertility rates causes a problem due to the large post WWII generations approaching retirement. On top of this, longevity is increasing, implying that the period over which the average person benefits from the social contract is prolonged. This is in itself a welfare improvement, but it raises some questions. The demographic shifts in all Scandinavian countries are of the same order of magnitude. The demographic old age dependency ratio will thus increase from about 0.25 to 0.4 within the next 3–4 decades, cf. Figure 2. The increase is permanent due to the expected increase in longevity.



Note: Defined as the age group 65+ relative to the age group 15–64.

Source: Demograaphic projections: Denmark, Statistics Denmark, 2005–2050; Norway, Statistics Norway, 2005–2060 (base case); Sweden, Statistics Sweden, 2004–2050.

Figure 2. Demographic old age dependency ratios 2005–2050.

Combining these demographic shifts with the properties of the social contract immediately reveals that a financial problem will arise. Current welfare arrangements are not financially sustainable in the wake of the increase in the dependency ratio. The order of magnitude of the financial problems is substantial, and deteriorating public finances will lead to systematic deficits. A recent assessment for Denmark by Velfærdskommissionen (2004,5b) projected deterioration of public finances (primary balance) of about 4 percentage points of GDP between now and 2040. For Norway the demographic consequences for public finances are among the most dramatic for OECD countries. According to estimates the deterioration in public finance in 2040 will be above 6 percentage points of GDP (Pensjonskommisjonen, 2004; Frederiksen *et al.*, 2004). The sustainable use of petroleum wealth can finance about _ of the expenditure rise due to ageing. For Sweden estimates by the OECD (2005) show that the increasing dependency ratio will continuously deteriorate public finances amounting to 4 _ percentage points of GDP between now and 2050. On top of this, there will be additional effects of increasing demands on public services and leisure, which will put further strain on public finances.

The three countries also face a declining trend in employment ratios. In Denmark an early retirement scheme has been very popular. In Norway early retirement as well as increasing sickness and disability pensions are causing a downward trend. A similar trend is observed in Sweden due to an increase in the number of people claiming sickness benefits and disability pensioners. In all three countries immigration from low income countries raises problems in relation to labour force participation and employment, cf below.

The implications of ageing are reflected in recent policy initiatives and ongoing reform proposals including pension systems, retirement and, more generally, ways to increase labour supply and employment.

A pivotal element in the Danish debate has been the early retirement scheme. It subsidizes early retirement and is very popular, and therefore it has proven difficult to change. There has been a substantial build-up of mandatory labour market pensions during the 1990s. Recently a commission has proposed a number of measures to increase labour force participation and employment, including a phasing out of the early retirement scheme and tying the entitlement age for public pension to longevity (Velfærdskommissionen, 2005b). In Norway a commission evaluating the pension scheme has made a number of proposals for reforms of the pension scheme in order to ensure more pension savings as well as later retirement. One element is to make the annual public pension benefit depend on longevity, and at the same time allowing for more flexibility in retirement. The implication is that pension benefits can be maintained by postponing retirement with increasing longevity. It is currently uncertain which reforms will be undertaken. In Sweden there was a major pension reform in the 1990s leading to substantial changes in the pension system and introducing some mechanisms by which to handle the ageing problem. The basic mechanism is that pension benefits will in future be linked to longevity (see e.g. Börsch-Supan, 2005). In combination with flexible retirement possibilities this creates incentives for later retirement alongside an increase in longevity. This reform is not sufficient to avoid a pressure on public finances, cf. above, and the need for reforms is currently debated, in particular the issue of how to increase labour supply.

The ageing problem

The ageing problem is a relative problem in the sense that the number of old people is increasing relative to the working age population, cf. figure 2. It is therefore intuitive to perceive migration as the solution. By allowing for migration to increase the working age population, the "demographic" balance can be regained, i.e. the increase in the dependency ratio can be prevented. It is often suggested that migration is the most obvious solution of the ageing problem, see e.g. IMF (2004).

There are two important reasons why it is important to distinguish between demographics and the financial problem of the welfare state. It is much easier to correct the former than the latter. The demographic changes have both a temporary and a permanent component. The temporary component is driven by the large cohort born after WWII and the subsequent drop in fertility rates. In the process where large cohorts retire and small cohorts enter the labour market the dependency ratio increases, and in a welfare state with an extended social contract this obviously has important consequences. However, other things being equal the dependency ratio will fall again. Still the problem is not trivial since demographic transitions run over decades.

However, there is a permanent change in the dependency ratio driven by increased longevity[3]. For given eligibility ages this implies that the balance in the social contract is changed since the number of years as net-beneficiary increases relative to the number of years as net-contributor, cf Figure 1. Increased longevity is considered by most a welfare improvement, but the social contract would have to be revised to adapt to the change. The permanent component cannot be solved by immigration since immigrants also must be expected to live longer. Hence, permanent changes in welfare arrangements are needed. Basically three options are available – increase taxes, lower benefits (or services) or delay retirement. The social contract needs to be adjusted to take account of increasing longevity.

How to square the collective solution with increasing migration flows?

Increased labour mobility is in particular a potentially important problem for the universal or Scandinavian model. The reason lies in the fact that the welfare model is comparable to an encompassing implicit (social) insurance contract, and like any insurance market it becomes problematic if adverse or self selection implies that the "good" risks leave and the 'bad" risks enter. The key determinant here is the labour market position of the potential emigrants and immigrants since this determines whether the person in financial terms is a net contributor or a net beneficiary to the welfare state. A problem arises if immigrants tend to have a below average attachment to the labour market since they would then be net beneficiaries of the welfare system. A parallel problem arises if there is among emigrants an overrepresentation of highly educated individuals since these tend to be higher net contributors to public finances. There is a basic reason why such an asymmetry in migration patterns must be expected. The combination of high taxes and a compressed wage structure means that the highly educated have the most to gain by emigrating, and the foreign highly educated correspondingly fewer incentives to immigrate. This can affect public finances significantly in the sense that expenditures will grow and tax revenue will shrink.

This creates some crucial dilemmas in economic policy. Consider first education and emigration. The public sector offers free education to provide equal opportunities and to reduce the risk in educational decisions. Expenditures to education are financed via general taxation with some progressive elements implying that those turning out to have the highest incomes after education will also pay the most. This scheme creates equal opportunities and provides both a capital market function (no credit constraint in relation to educational investment) and some risk sharing (diversification of the risk associated with wage and employment prospects). However, this model is vulnerable to mobility since the migration decision can be taken after benefiting from publicly financed education and the veil of ignorance in relation to labour market prospects has been lifted. Moreover, by moving to countries relying more on private financing of education and therefore having lower taxes and more wage dispersion, the individual gains from mobility can be high.

The potential importance of increased emigration of the highly educated for public finances is very large. However, for the time being one can not argue that this is a major problem, see e.g. Pedersen *et al*. (2003). Although there is some emigration of the highly educated, return migration is also high. However, future migration flows for the highly educated can be expected to move in only one direction. Various barriers to mobility like language, culture and travelling time are reduced, and competition between countries to attract highly educated labour has intensified.[4]

Immigration is a very topical issue. The immigration pressure from low income countries is large. Over the last decades, all Nordic countries have experienced increased immigration from low income countries and they face similar challenges[5]. The primary challenge is integration of immigrants into the labour market. Thus, from the structure of welfare arrangements it follows that the universal principle in combination with extended welfare arrangements require that a large share of the population in the working age group is in employment. If not, immigration will not reduce but strengthen the financial pressure on the welfare state[6].

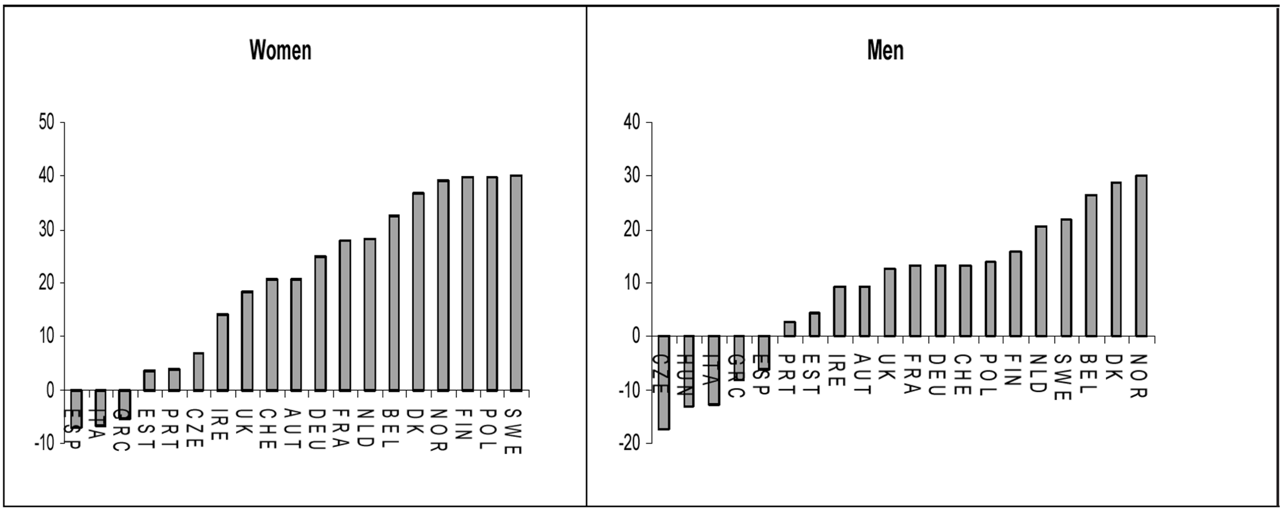
All Nordic countries face problems of ensuring that the employment ratio of immigrants reaches the same level as the rest of the population. Some of these problems are related to the structure of welfare arrangements. Figure 3 shows for a number of countries the difference between the employment frequency of the population and that of immigrants from lower income countries. Scandinavian countries stand out with a large discrepancy between resident and migrant labour force participation, in particular for women.

A number of factors can explain the difference. The gender gap reflects that female labour force participation has become the norm in the Scandinavian countries. It is an integral part of the welfare model, and various arrangements like day care facilities etc. support labour force participation of women. This reflects a different position of women in society compared to many low income countries, and there exist thus large differences in culture and norms between Scandinavian people and most immigrants from low income countries. In addition, most immigrants from low income countries have low qualifications, and this poses a particular problem in the Scandinavian countries since a compressed wage structure with high minimum wages implies that it is difficult for the low skilled to find work. [7]

For Denmark assessments have been made of the implications of immigration from low income countries for the social contract, presuming that the current low labour force participation rate is maintained. Unsurprisingly it is found that this form of immigration worsens the fiscal sustainability problem. In a counterfactual path with no further immigration from low income countries it is shown that the problem of fiscal sustainability due to ageing is reduced by about 3/4.

This has raised a delicate political problem in relation to immigration policy, namely, whether it is the immigration rules or the principles of the welfare state that should give in. Both have happened in Denmark. Immigration laws have been tightened, and the universal principle has been modified. To qualify for eligibility in the social safety net there is now an entry condition since one must have been a resident in Denmark for 7 of the past 8 years. If this condition is not met one is only entitled to a social benefit (starthjælp/introduktionsydelse) at roughly half the level in the ordinary social system (kontanthjælp). Both of these measures are controversial and have been much debated.

In all the Scandinavian countries there is an ongoing debate on how to strengthen the labour market integration of immigrants as well as how to reconcile basic principles of the welfare model with "open borders". In a similar vein



Source: Velfærdskommissionen (2005b).

Figure 3. The gap in employment ratio between immigrants from low income countries and domestic population.

there is much discussion about the risk of "brain drain" by emigration of the highly educated as well as the scope for attracting highly educated emigrants. This is often used as an argument in debates on the taxation system and the latter for integration rules depending on qualifications and the possibilities of providing tax rebates to emigrants.

Taxation

The Scandinavian model is tax financed, and it is well known that the tax-burden in particular on labour income is high. A key question is thus concerned with the extent to which globalisation strains this way of financing welfare arrangements (see Andersen, 2004).

Much attention has been devoted to increasing tax base mobility. The basic mechanism is that the more mobile a given tax base, the more difficult it is to tax at a rate (significantly) above that of your close trading partners. To avoid loss of tax revenue due to further integration the response has to be lower tax rates which in turn will erode tax revenue. A more aggressive response would be to undercut the tax rates of trading partners (i.e. tax competition leading to a race-to-the-bottom mechanism) in the hope of attracting more economic activity. Another response would be to change the tax structure lowering taxes on mobile tax bases and increasing them on less mobile tax bases.

The Scandinavian countries have gradually adapted their tax structure to cope with some of these changes, in particular via the so-called dual income taxation system allowing a proportional taxation of capital income to be combined with progressive taxation of other forms of income. Therefore it has been possible to adjust taxation of capital income and corporations to lower levels to match rates observed in competing countries while maintaining relative high rates (and progressive elements) of taxation of labour income. This follows the trend of lowering corporate tax rates with some broadening of the tax base. Tax adjustments have also been made in specific areas like excise taxes on e.g. alcohol to cope with problems from increased cross-border trade.

However, the key question is whether the ability to tax labour is affected. If this is not affected the above-mentioned changes are important from a tax policy perspective, but of second order of importance for the overall structure and size of the public sector and thus the welfare state. The reason is that the taxes most directly affected by mobility like corporate taxation and capital taxation matter relatively little for the overall financing of the welfare states in the Scandinavian countries.

One aspect of this is labour migration, but another and possibly more important mechanism is the indirect effects of taxation of labour. The indirect effect arises via the implications that labour income taxation has for labour markets, i.e. wage formation, job creation etc. This is important since the demand side of the labour market is being affected by globalisation. This can best be summarized in the form of increased job mobility across countries and thus labour markets. Increased integration of financial and in particular product markets in combination with technological changes implies that it is becoming easier to relocate production and thus employment across different geographic areas. This may work through mechanisms affecting market shares of domestic and foreign producers and relocation of firms via foreign direct investments, outsourcing etc. It is beyond the scope of the present paper to discuss this in detail, but the main point is that the distortionary effects of labour income taxation may increase. That is, the costs in terms of lost jobs of raising revenue via direct or indirect taxation of labour increase. Hence, the financial basis for the welfare state does not directly erode, but the costs of using tax-financing increase.

In all Scandinavian countries there is an ongoing debate on the possibilities of reducing the tax burden on labour. Alternative sources of revenue like taxation of immobile tax bases (houses and natural resources) as well as user payments etc. are discussed. However, although some reforms have been undertaken and others are suggested, they are all marginal in the sense that they do not fundamentally change the principles of taxation and financing of the welfare state. The lesson is thus that globalisation does not make it impossible to maintain the Scandinavian welfare state, but some adjustments are needed.

Conclusion

The Scandinavian countries have historically been well integrated internationally and are routinely classified as "small and open economies". Their welfare models have been developed and extended against this background. Hence, the historical evidence does not point to an obvious conflict between the chosen welfare regime and international integration. This is not to deny the implications of further international integration for the design of welfare policies.

The present challenge is how to adapt the welfare regime to the challenges raised by ageing and globalisation. The former does not require a qualitative change in the welfare regime. For example, an increase in the retirement age motivated by increased longevity does not require a change in principles but an adjustment to new fundamentals. Globalisation induces some structural changes which it is necessary to take account of, but there is no evidence that this necessitates a change of the core principles of the welfare state.

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Correspondence:
Professor Torben M. Andersen
Department of Economics, University of Aarhus, Building 1326,
DK-8000 Aarhus C, Denmark
Email: tandersen@econ.au.dk

Notes

[1] Female labour supply is very important in this respect. The high participation rate of females is both necessary to ensure the needed labour supply for public sector activities and to broaden the financial basis for the welfare state. At the same time, welfare arrangements like childcare make it easier for females to be active on the labour market.

[2] Periods with growing debt levels have been experienced by all the Scandinavian countries.

[3] Velfærdskommissionen (2004,2005a) documents that the permanent component in the demographic shift accounts for the major part of the fiscal sustainability problem for current welfare arrangements.

[4] It is often argued that high marginal tax rates on labour income are a particular problem in relation to migration for the highly educated. However, a migration decision is not a marginal decision, and is therefore affected by the whole welfare package i.e. tax payments but also the various entitlements.

[5] Immigration rules for refugees follows UN conventions. Denmark has stricter rules for family unification since 2002. Immigration for economic reasons is only allowed if there are special labour market needs, except for European citizens where the rules are in accordance with the EU/EØS agreement on labour mobility.

[6] Note that this argument also holds even if immigration as such is not driven by the generosity of welfare arrangements (welfare magnets). Recent empirical work did not find evidence of selection effects driven by welfare arrangements, but this can be due to restrictive immigration rules, cf. Pedersen *et al*. (2004).

[7] In addition, the economic gains from being active in the labour market can for some groups be small or absent and finally there are incidences of discrimination. Comparing integration of immigrants in Denmark and Germany Tranæs and Zimmermann (2004) found that both countries had difficulties, but the relative better performance of Germany can be attributed to i) better qualifications among immigrants, ii) lower minimum wages and iii) a large economic incentive to be in employment.