

## Replacement rates in the new Swedish pension system – a Danish perspective

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*The authors comment on the article in NFT 2/2006 on replacement rates in the Swedish pension system. The authors are not surprised by the financing problems arising in Sweden, and they claim that the organization of the Swedish pension system as a tax financed pay-as-you-go system makes it vulnerable to budgetary considerations, even though the system is a notional defined contribution scheme.*

*In Denmark the responsibility for topping up social pensions lies with the private sector. This gives rise to different risk sharing features than in Sweden.*



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The editor has asked us to provide a comment on the article "Replacement rates in the new Swedish pension system" by KG Scherman in NFT 2/2006<sup>1</sup>. We are certainly inclined to meet the demand of the editor. However, we must stress that we are not experts in the Swedish pension reform. Moreover, any pension system and its division of responsibility between the tax payers, the government, private individuals saving for the future and the social partners is the result of a political process, and, not least, of considerations on income distribution. We have no intention – directly or indirectly – to become part of a Swedish political debate and our comments below must be seen in this perspective.

However, we have experience with the establishment of the Danish pension system which gives rise to some qualitative comments on the Swedish system.

### **The Swedish challenge**

It is clear from KG Scherman's article that the Swedish pension system faces some important challenges. Like in many other countries, life expectancy is increasing and this puts strain on the pension system – either replace-

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ment rates will be significantly lower than projected, or people must spend more years on the labour market, as clearly analyzed in the article.

For an outsider, the financing or replacement rate issues facing the Swedish pension system are not that surprising. The reform, decided upon in 1994 and phased in over a number of years, basically replaced one publicly (taxpayer) financed pay-as-you-go (PAYG) pension system with another publicly financed PAYG pension system. One of the important changes was that pension rights would no longer be calculated on the basis of the 15 years with the highest wages (out of 30 years) but would rather be based on contributions and with the establishment of a balancing mechanism to secure future pension rights.

As KG Scherman states in his article, the political expectation was that the reform would not in itself necessitate a reduction in the future pension level compared to the former system. However, it seems that concern about the ability to service the former ATP pension system with taxpayers money was a clear rationale behind the reform. In other words, there was a need to cut the costs to taxpayers of the former pension system. All else equal, this would imply that acquired pension rights under the new system had to be lower than under the old system. The problems now documented by KG Scherman must be seen against this background.

Hence, it is no big surprise that the replacement rates and relative pension levels do not reach the target levels which were formulated in 1994. It seems to us that the statement in the bill introducing the system in 1994 – “there are no reasons why the pension levels in general should need to be reduced” (Scherman in NFT 2/2006, page 101) is more based on wishful thinking than economic analysis.

As mentioned, the public Swedish pension system is a tax financed PAYG system, except for the funded Premium Pension, which

plays a minor role in the overall picture. The ability of the Swedish pension system to honour the expectations of the future pensioner's therefore rests only to a marginal extent on the stipulated contribution rate in the Premium Pension (which is to be held constant), and primarily on the development in the Swedish tax base over time, life expectancy and the average time spent on the labor market.

According to KG Scherman, the reformed Swedish system was “completely rearranged” compared to conventional PAYG schemes because it is a notional defined contribution (NDC scheme). It is to be financially balanced over time through the buffer mechanism. However, in our view, even an NDC scheme can not be viewed in isolation from the general public budget.

If the general budget is under strain with (structural) deficits increasing, there will be a tendency to look to areas outside the official budget for financing. In respect to the NDC scheme this would probably imply a pressure for lower benefits without lowering contributions, hence alleviating the general budgetary problems. .

In Denmark, there have been examples of financing certain public expenditures by way of an “earmarked” tax where the tax rate was to be lowered in case of expenditures being lower than projected. Politically, however, the “surplus” tax proceeds found other expenditures to meet and rates were not lowered. In our view, this political problem could be a challenge facing the Swedish NDC scheme together with the longevity issue as described by KG Scherman.

### **The Danish pension system**

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KG Scherman does not comment in detail upon the role played by private (pillar II and III) pension schemes in Sweden. It is our impression, however, that they play a less significant role in Sweden than in Denmark.

The Danish pension system relies to a lesser extent than in Sweden on tax financing and more on funded savings. Like in many other OECD countries, the Danish pension system has a multi-pillar structure.

Pillar I consists of the social pensions, which are unfunded and financed from general tax revenues (i.e. a PAYG system). At the core of the public pillar, and of the whole system, the social pension scheme pays benefits to people over 65. It consists of two parts: a flat universal pension that is subject to a residency test and proportionality rule as well as an employment earnings test and a supplement that is paid to qualifying people subject to an income test.

The public pillar also has a smaller component that is fully funded, is financed from employee and employer contributions (or the tax payers for unemployed workers and those on parental leave etc.), and operates as a defined contribution plan. This is known as ATP (Labor Market Supplementary Pension). Despite being fully funded and based on individual accounts, ATP is classified as a first pillar scheme because it was established by law and entails social security features.

The second pillar comprises occupational pension plans that are quasi-mandatory and nearly universal. Most have been established by collective agreements between employer organizations and labor unions. They are managed by life insurance companies and multi-employer pension funds as well as – on a small scale – company pension funds and banks. The vast majority of these operate as defined contribution plans.

The third pillar comprises voluntary personal pension plans. These are created by life insurance and pension companies as well as banking institutions. The latter are not permitted to offer annuity products.

In general – but subject to certain regulations – premiums paid to pension savings are income tax deductible while benefits are sub-

ject to income taxation. Yields on the assets invested are taxed at a flat rate of 15 per cent. This system provides some tax incentive to save for retirement, yet does not leave a door wide open for tax evasion.

Coverage of the three pillars is very high. It is universal or nearly universal in the public pillar components, almost 80 percent of wage earners under occupational schemes (outside the mandated supplementary schemes), and 40 percent of wage earners in the third pillar. Overall, more than 90 percent of wage earners participate in at least one occupational pension scheme or individual scheme.

Another characteristic of the Danish pension system is the extensive use of guaranteed minimum benefits in the second and third pillars. Plans operated by insurance companies and multi-employer pension funds both offer guaranteed minimum investment returns (in the sense that future benefits are guaranteed), while banks do not have permission to offer guaranteed minimum investment returns.

The use of guaranteed benefits in occupational pension plans has been promoted by the active involvement of labor unions in collective bargaining and a strong emphasis on risk sharing arrangements that aim to protect retiring workers from large fluctuations in investment returns. In recent years, demand for more individualized products, with no or a low guarantee attached to the benefits, has been increasing fast. Hence, unit link products and specialized products tailored to the life cycle of the pension savers, are being developed and brought to the market with great success, in both pillar II and pillar III schemes.

Contributions to occupational pension plans increased steadily over the past ten years or so. Their annual growth rate was remarkably stable, ranging between 10 and 12 percent in nominal terms while during the same period (1995-2004) inflation averaged 2 percent per year.

The increase in contributed amounts are partly due to expanding coverage and partly to a gradually rising contribution rate. While contribution rates vary among different schemes, the upward trend in contribution rates is illustrated by the following figure, which represents the evolution of the average contribution rate for schemes covered by the labor market agreement between the Danish Confederation of Trade Unions (LO) and the Danish Employers' Confederation (DA). The contribution rate has crept upwards from 1 percent in 1993 to over 10 percent in 2006 (Figure 1).

### Replacement ratios

Projections of current and future replacement ratios are based on assumptions about future performance and bonus payments and take into account all types of pension benefits and allow for tax payments. A report from the Ministry of Economic and Business Affairs<sup>2</sup> provides some details of current and expected replacement ratios.

The average replacement ratio is expected to increase in the future irrespective of education (and income). For persons with a shorter education, the replacement ratio will increase from 80 per cent in 2000, reaching almost 100 per cent in 2045 (figure 2). For highly educated persons it is foreseen to reach a little less than 90 per cent in 2045. The reason for the shift in replacement ratios is the widening coverage of occupational pensions, which will affect in particular the lower income groups. For all groups, private pensions will play a more important role in the future, but the social pension will still represent the major source of income for pensioners with a modest income even in 2045.

### Risk sharing in the Danish pension system

The Danish pension system faces to some extent the problems which the Swedish system is exposed to. The social, tax financed pensions are set to increase significantly over

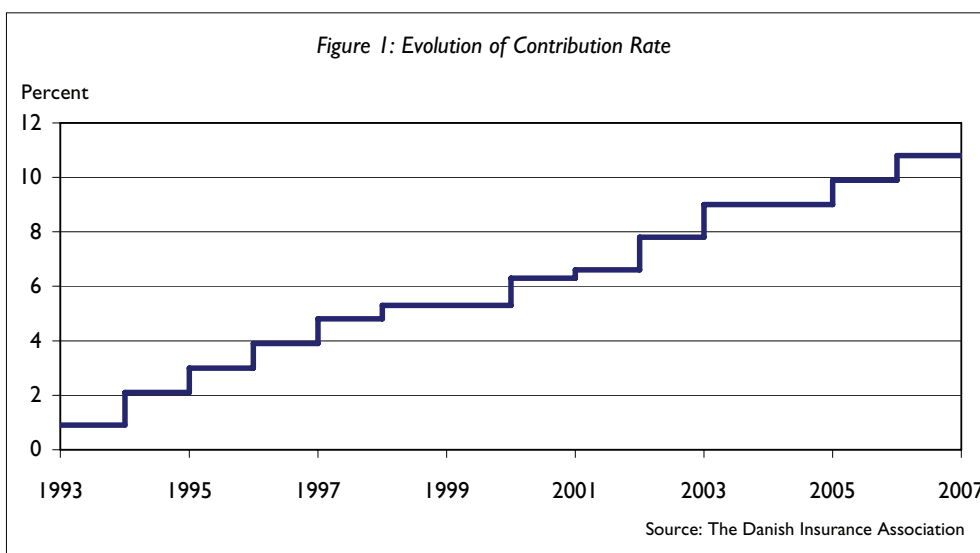
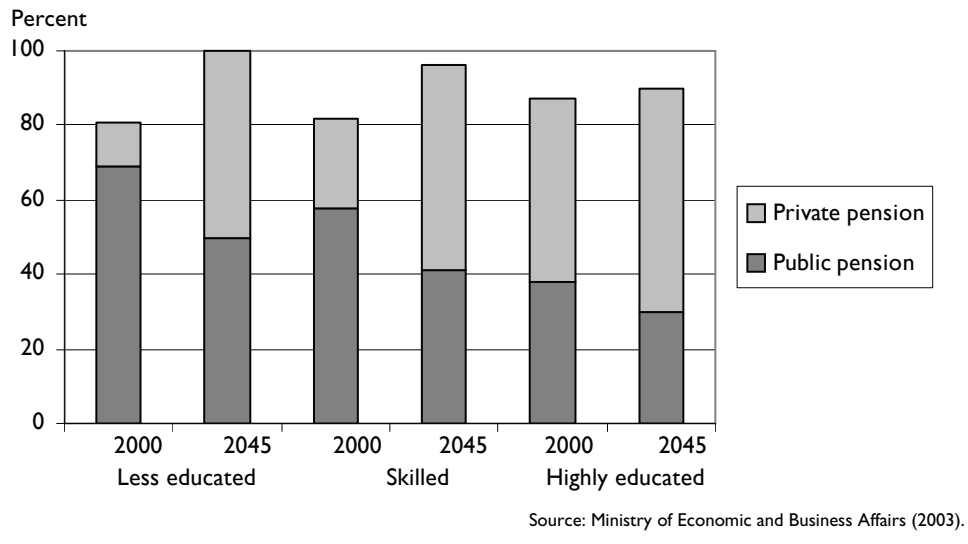


Figure 2: Average expected replacement ratios for different groups of education in 2000 and 2045



the decades to come because of demographic changes. Fewer people will be active on the labor market, while the number of retirees will increase – and the retirees will live longer, adding to the public financing pressure.

However, in the Swedish case this will to a very large extent be a political problem. Hard political decisions will have to be made on how to pay the bill – more reliance on tax payers money may be inevitable, or future pensioners expectations will not be fulfilled.

In the Danish case, a public financing dilemma also arises in the context of the social pensions. However, when it comes to the funded schemes of pillars II and III, the problem lies not in the first place with politicians. It lies with the pension savers and shareholders of the pension institutions. Annuity insurance is quite widespread, and where guarantees of future benefits have been provided as part of annuity insurance, these guarantees must be met – in the end by shareholders of the pension companies paying the bill. For lump sum benefits (benefits are paid out at one time

as a lump sum) and phased withdrawals (benefits are paid out over a specified period) the pensioner bears the risk of increased longevity.

In pillar II and III schemes the market risk (financial risk) is split between pension savers and the shareholders – in the sense that they share losses or yields that are considered inadequate. However, in relation to products based on guaranteed benefits the shareholders solely bear the risk that the long term yield can be lower than the guarantees, while for unit link products the market risk is (primarily) borne by the pension saver.

Basically, then, the Danish system has broader risk sharing features than the Swedish one. In particular, the risk that political promises to both tax payers and pensioners can not be kept is probably somewhat lower in the Danish than in the Swedish system. Of course there are political risks to the Danish pillar II and III schemes, however, of a different nature than in the Swedish system. We shall not elaborate in detail on this.

### **Tax wedges**

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The Danish pillar II and III schemes are defined contribution plans. Since they do not rely on tax financing, there is no problem of introducing tax wedges – which would reduce economic efficiency – associated with the financing of these two pillars.

The need to avoid tax induced efficiency problems may be one reason why the Swedish system has been reformed into one based on a NDC scheme. If the system is credible and pension savers believe that their future pension income reflect their tax contributions and some “interests earned”, this system may succeed in reducing efficiency problems usually associated with tax financing. However, if it is not credible – which KG Scherman leads one to presume – this system may distort economic decisionmaking because of distortions introduced by the tax financing.

### **Conclusion**

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The Danish and the Swedish pension systems are quite different. In both pension systems the public pension system plays a key role, aiming at avoiding poverty in old age. However, it seems to us that the further role of not only avoiding poverty, but also securing decent incomes upon retirement, is to a greater extent a public task in Sweden than in Denmark. The reliance on tax payer financing is greater in Sweden, hence calling upon politicians to make difficult choices when the system comes under strain as documented by KG Scherman.

The Danish pension system as a whole must meet some of the same objectives as the Swedish system. But the task of providing adequate incomes for pensioners and for bearing the associated risk lies more with the future pensioners and shareholders of pension institutions than in Sweden.

In any way, if the problems highlighted by KG Scherman are real, serious and difficult political choices must be made. And politicians are not keen to make those choices. In Denmark, a reform of the public early retirement system has just been passed in parliament alongside with an increase of the retirement age, which is set to increase in line with longevity.

Such changes are warranted and needed. But in order to gain political support, they are introduced with a long time horizon – the increase in the retirement age will only have effect starting in 2024 and all changes will only affect people under 48 years at the end of 2006.

Hopefully Swedish politicians are better at making tough decisions and introducing real welfare reforms than the Danish ones!

### **Notes**

<sup>1</sup> This article is one in a series about the Swedish pension reform. Earlier articles published in the NFT are written by Hagberg and Wohlner (4/2002), Könberg (1/2004), Casey (2/2004), Barr (3/2004), Lezner and Tipperman (4/2004), McGillivray (3/2005), Scherman (2/2006), Settergren (3/2006) and Andresen (4/2006).

These articles can all be found at [www.sff.a.se/?avd=forlag&sida=pension.lasso](http://www.sff.a.se/?avd=forlag&sida=pension.lasso)

<sup>2</sup> “Increased freedom of choice in the pension saving”, May 2003.