

# The Danish Pension System

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## Content

How the Danish multipillar system came into being .....	2
State pensions: More targeted .....	3
Defined contribution labour market pensions .....	4
Macroeconomic impact .....	4
Tax Subsidies .....	5
Retirement reforms, funded pensions and sustainability .....	5
Equality and poverty protection .....	6
Some problems .....	6

The Danish pension system is composed of three pillars: (1) a state pension (with several minor schemes), (2) semi-mandatory occupational pensions, referred to as labour market pensions, and (3) personal pension savings.

The state schemes provide an unusually high minimum and solid protection against poverty. As labour market pensions mature, they will challenge the people's pension as the backbone. The fully funded pensions provide the state with large income tax revenues from future pension payments which will also relieve the state quite a bit from future increases in pension expenditures. Alongside positive demographic prospects this makes the Danish system economically sustainable. It was deemed the best pension system 2012-16 by the Melbourne Mercer Global Pension Index (Melbourne Mercer, 2016). Still, some social and political challenges remain.

### **How the Danish multipillar system came into being**

Denmark was the second country to introduce old age support in 1891 after Germany, but took a different course with tax financed support for all citizens. Support was means-tested, but the People's Pension Reform of 1956 extended entitlements to all citizens. In 1964 this was changed to a fully flat-rate system (although with a tiny means-tested supplement).

The 1964 reform was the last comprehensive Danish pension reform, and the system developed without any master plan. Unlike Sweden and Norway, Denmark did not add an earnings-related tier, but chose to improve flat-rate pensions. Occupational pensions were introduced via the collective agreement system, not by legislation.

The first significant growth in collective schemes took place among professionals in the public sector, spreading down the hierarchical lines in the 1960s and 1970s. Crowding in of private supplements – individual or collective – is a logical implication of flat-rate pensions, since they provide insufficient income replacement for the middle classes. However, a main driver was the state's interest in higher savings: Consumption was chronically too high, and from 1960 to 1990, Denmark suffered from permanent current account deficits and increasing foreign debt.

Initially, savings was also the government motive for announcing in 1984 that it would welcome an extension of occupational pensions to the entire labour market. This was well received by the trade unions, and after tripartite consultations, labour market pensions were included in nearly all collective agreements from 1991/1993. Initially, contributions were low, but the social partners set a target of 9 per cent, later 12 per cent, which was reached by 2009. For the "old" schemes, contributions are typically 15-18 per cent.

Even though coverage of collective agreements is below 100 per cent, it became the norm for nearly the entire labour market that a labour contract includes a pension scheme. Usually, the employer contributes two-thirds and the employee one third. Even though labour market pensions are in practice semi-mandatory, it is formally a private system. Pensions are fully funded, and savings are secured in pensions funds. Only a few company-based schemes have survived, and most civil servants' schemes are (being) terminated.

## State pensions: More targeted

As occupational pensions were phased in, the state pension system became more targeted, partly because of new, means-tested schemes, partly because of targeting of the people's pension. In particular, the 1994 tax reform changed the balance between the universal basic amount and the means-tested supplement. For a single pensioner, the supplement is larger (78.612 DKK in 2017 – or 10.550 €) than the basic amount (73.920 DKK – 9.925 €). As labour market pensions mature, many will lose much or all of their pension supplement.

Next, a number of means-tested improvements have been added (see figure 1):

- A very generous housing benefit scheme for pensioners, often paying one-half of the rent (introduced by 1978). Maximum support is 45.480 DKK (2016 - 6.100 €). This scheme is essential for protecting pensioners against poverty. It is means-tested, but the slope is not very steep: By 2016, only fortunes above 808.800 DKK (108.500 €) are counted in (10 per cent of the exceeding amount is added to the income, 20 per cent of fortunes exceeding the double of that amount). The benefit is calculated according to a complex formula that allows many middle class pensioners to receive a modest amount.
- Support for heating (introduced by 1981), technically as an “individual supplement” where the slope for means-testing is very steep, i.e. only pensioners with very low incomes are entitled.
- Supplementary pension benefits (introduced by 2003), increased to a maximum of 16.900 DKK (2017 – 2.270 €). Again, the slope is steep; one quarter are entitled, and much fewer receive the maximum.

**Figure 1. Components of the Danish Pension System.**

	<b>First Pillar</b>		<b>Second Pillar</b>	<b>Third Pillar</b>
	State pensions and special arrangements for pensioners		Occupational pensions	Personal pensions
<b>Third tier</b> (topping up)				Rent pension (lifetime) Age pension (at once) Rate pension (10 years)
<b>Second tier</b> (income maintenance)			Labour market pensions (Civil servants' pensions ) (Company pensions)	
<b>First tier</b> (basic security)	ATP: State LM Pension (funded)			
	People's pension	Basic Amount		
		Pension supplement*		
	Supplementary pensions benefits*			
	Preferential housing benefits*			
Individual supplements (heating, health, personal)*				

Source: Adapted from Goul Andersen (2011).

Grey: Universal flat-rate benefit (tested against labour income, but only above a high level).

Light grey: Means-tested benefits (\*).

The remaining pensions are financed by contributions and fully funded.

- Further, pensioners may obtain means-tested individual supplements for extraordinary (in particular health-related) expenses

- Finally, the state system includes a small, fully funded scheme: ATP. Contributions are decided in collective negotiations, and some unions have preferred a lower contribution rate. Otherwise contributions and payments are uniform, depending only on full-time employment (28 hours or more), and contribution time.

Altogether, the state pension system becomes ever more targeted as labour market pensions mature. It should be added that pensions (unlike housing benefits or individual supplements) are subject to ordinary income tax (c. 37 per cent, 52 per cent for very high incomes, with a tax free minimum of 45.000 DKK – 6.050 €, 2017).

### Defined contribution labour market pensions

A dominant trend in current pension reforms worldwide is a change from defined benefit towards defined contribution. This is also the case in Denmark. Labour market pension is a pure case of defined contribution: Pensions depend on contributions, returns on invested capital, and age of retirement. Retirement age becomes a free choice – for those who have a choice: People can choose between an early retirement with low annual pension, or a late retirement with high annual pension. People are entitled to take out private pensions five years before the formal retirement age, but they have an economic incentive to continue working, sometimes beyond the formal pension age, in order to obtain an appropriate pension income.

Finally, fully funded pensions imply automatic adjustment to changes in longevity: If pension fund members live longer, annual pensions are automatically reduced, and people must work longer to obtain the same pension as earlier generations.

All these characteristics also apply to personal private pensions. There are three main types:

- rent pensions which provide a life-long pension
- rate pensions that are paid over an agreed-upon period of minimum 10 years
- age pensions that can be paid out at any time from five years before retirement age

Contributions to rent pensions and rate pensions are tax deductible, and pension payments are taxed. To limit tax arbitrage where people deduct contributions with a higher percentage than their tax rate as pensioners, there is a ceiling to annual contributions to rate pensions. A ceiling also applies to age pensions. Here, savings are not deductible, and withdrawals are not taxed. The incentive is that annual returns on the capital are only taxed by 15.3 per cent.

### Macroeconomic impact

As mentioned, the initial motive for the government to encourage labour market pensions was reducing the current account deficit. In this respect, labour market pensions – alongside other initiatives – has been a success. Since 1990, there has been a permanent surplus, and a large foreign debt has turned into a positive net international investment position (NIIP) of 45-50 per cent of GDP by 2016. Accordingly, net revenues from investments abroad ensure a much higher growth in Gross National *Income* than in the Gross National *Product*.

It is also worth noting that the capital accumulated is huge. Adding together pensions in private insurance companies, banks, and labour market pension funds (some of which are organized as private pension insurance companies), the total amount by the end of 2015 was 4.083 bill.DKK, that is, 201 per cent of GDP.<sup>1</sup>

## Tax Subsidies and deferred taxes

As over-consumption ceased to be a problem, previously huge tax subsidies for pension savings were nearly abandoned. Except for age pensions, contributions are tax deductible, but in return, pension payments are subject to ordinary income taxation. Besides, returns on investments are taxed by 15.3 per cent. This still involves a small subsidy, but in addition, people typically lose means-tested benefits when their pension income increase.

Due to the tax system, the pension fortune contain a very substantial amount of deferred taxes which should in principle be counted as an asset of the state.<sup>2</sup> At any rate, future tax revenues from pensions help finance higher old age expenditures.

## Retirement reforms, funded pensions and sustainability

Alongside the changes above, the state has also sought to reduce costs of ageing by raising the pension age. In the 2006 “Welfare Reform”, it was decided to index retirement age with life expectancy at 60 in 1995, fixing the average life time after pension age at 14½ years. In the 2011 “Retirement Reform” it was decided to start implementing the reform 5 years earlier. Moreover, the voluntary early retirement scheme was reduced from 5 to 3 years and made so economically unattractive that it is de facto phased out. Pension age is gradually raised from 65 to 67 years in 2019-22, to 68 years in 2030, to 69 in 2035 and to 70 in 2040, provided that life expectancy improves by five years. However, from 1995-2014, life expectancy at 60 had already increased by 3.9 years (Eurostat life expectancy tables).

These reforms are extremely radical: The earliest possible time of retirement increases from 60 years for those born in 1953 to 70 years for those born in 1970. But the challenge of ageing is basically solved:

- By higher pension age. The old age dependency ratio (65 years+/15-64 years old) was 28.5 in 2015. By 2050 it is estimated to be 39.4 (EU average is 49.4). However, if we take account of higher pension age in 2050 and calculate old age dependency as (70 years+/15-69 years old), the ratio in 2050 is 31.2, i.e. close to 2015 ([www.statistikbanken.dk](http://www.statistikbanken.dk), FRDK116, 20. Dec. 2016)
- By 15.3 per cent taxation of current revenues to all pension savings
- By income taxes on pension payments
- By lower means-tested pension from the state

<sup>1</sup>[http://www.forsikringogpension.dk/presse/Statistik\\_og\\_Analyse/statistik/pension/formuer/Sider/Pensionsformue\\_investor.aspx#](http://www.forsikringogpension.dk/presse/Statistik_og_Analyse/statistik/pension/formuer/Sider/Pensionsformue_investor.aspx#) and [www.statistikbanken.dk](http://www.statistikbanken.dk) table NAN1 (20. Dec. 2016).

<sup>2</sup> Implicitly, the state “owns” nearly 40 per cent of the pension assets; however, some 125 bill. DKK was paid in taxes when the government in 2013-15 enabled people to switch former (taxable) capital pensions to age pensions. Still, this leaves state assets of 70-75 per cent of GDP to co-finance future old age expenditures).

According to calculations on mainstream economic models, this is roughly sufficient to finance increasing age-related expenditures for pensions, health care, and elder care, based on the current service level. The sustainability problem is largely solved.

## Equality and poverty protection

From a social perspective, the Danish system is very satisfying. The minimum is unusually high – for a single pensioner equivalent to a person receiving maximum unemployment benefits (Goul Andersen & Hatland, 2014). Provided that people rent their apartment, poverty according to the 50 or 60 per cent criterion is not possible. Moreover, inequality among pensioners is *not* expected to increase.

However, one exception remains: Pensioners who have been living in Denmark for less than 40 years only receive a proportion of the people's pension. Still, they enjoy universal access to the other schemes and may be compensated a little via individual supplements.

## Some problems

In its unique combination of state and occupational pensions, the Danish pension system is excellent in providing adequate and sustainable pensions. The system is robust in relation to ageing. Cutbacks or higher taxes are unnecessary. Pension are adequate for most citizens, and minimum protection is unusually high.

Yet, some problems remain. First, there is *gender discrimination*, especially for middle class women (low-income women benefit from high minima). Unless agreed upon in collective negotiations, women do not earn pension points during maternity leave. Moreover, in a gender-divided labour market, pension funds are also gender-divided. In pension funds where a large majority are women, average life expectancy is higher, and annual pensions correspondingly lower. Gender wage gaps are not only carried on into pensions; the gap is aggravated. To complete the picture, employment-related pensions are *not* divided between spouses in case of divorce, unless explicitly agreed upon.

Second, there is a *tax trap*. As pension income is subject to income taxation, and as the state pension system (pensions and other benefits) is means tested, composite marginal tax rates inevitably become high. As a rough estimate, composite marginal tax on pension savings is typically around 55 per cent. For those with incomes exceeding the limit for means-tested entitlements, the figure is lower. For low wage groups who are entitled to several means-tested benefits as pensioners, composite marginal tax rates are higher – occasionally *much* higher.

Third, there is a *complexity trap*. The system is so complicated that few people understand it. This might be considered a blessing – the system works well, but legitimacy presumes that people misjudge their incentives. However, even politicians rarely understand the system – and some of the problems here are side effects of decisions where decision makers did not really know what they were doing.

Fourth, there is a *health trap* for the lower classes. Higher pension age is an obvious solution when life expectancy increases and health tends to improve even more. The problem is that there is high and increasing social inequality in health and life expectancy. Previously, early retirement schemes ensured a tolerable number of years of retirement even for the lower classes. The one size fits all-approach adopted since 2011 means that the lower classes often envisage a short retirement – and before that, problems of maintaining employment (or access to benefits) when their health deteriorate.

Finally, there is a *poverty trap*. Par excellence, pensioners used to fulfil all criteria of “deservingness” – need, identity, reciprocity and responsibility (van Oorschot, 2000). However, the visibility of pensioners with huge pension savings could erode deservingness perceptions as regards the *need* dimension. Indeed, economic experts have for a decade recommended to abolish special programmes such as pensioner’s housing benefit scheme, arguing that pensioners are no longer “weak”. This would, however, increase poverty, since there is no conceivable way to compensate the lower half of the pensioners for this – and if there were, it would aggravate the tax trap even further.

In short, economic challenges are largely solved, but some social problems are aggravated. And economic threats are replaced by political threats.

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