Do the Nordic Welfare Systems Encourage 60-74-Year-Olds

to Work?

# Do the Nordic Systems Encourage 60-74-Year-Olds to Work?

'Do the Nordic Systems Encourage 60-74-Year-Olds to Work?' may be ordered from:

**Schultz Information** Herstedvang 12 DK-2620 Albertslund Phone: +45 70 26 26 36 Fax: +45 43 63 62 45

E-mail: schultz@schultz.dk

Or ordered or downloaded at www.nom-nos.dk

## Working group for

## Do the Nordic Systems Encourage 60-74-Year-Olds to Work?

#### Denmark

Arne Madsen Ministry of Social Affairs Socialøkonomi Holmens Kanal 22 DK-1060 København K Phone +45 33 92 47 10 E-mail: arm@ism.dk

#### Denmark

Hanne Rasmussen The Danish Pensions Agency Landemærket 11 DK-1119 København K Tlf. +45 33 95 16 19 E-mail: har@penst.dk

#### Faroe Islands

Michael H. Feldballe Hansen Almannamálaráðið (Ministry of Social Affairs) Eiragarður 2 FO-100 Tórshavn Phone +298 30 40 00 Fax +298 35 40 46

E-mail: michael.feldballe@amr.fo

#### Iceland

Kristinn Karlsson Hagstofa Íslands (Statistics Iceland) Borgartíni 21 A

Borgartúni 21A IS-150 Reykjavík Phone +354 5 28 10 60 Fax +354 5 28 11 99

E-mail: kristinn.karlsson@hagstofa.is

#### Norway

Ole Christian Lien The Norwegian Labour and Welfare Administration P.O. Box 5 St. Olavs Plass N-0130 Oslo

Phone +47 21 07 02 03 Fax +47 21 07 00 06 E-mail: ole.christian.lien@nav.no

#### Denmark

Lis Witsø-Lund Ministry of Employment Ved Stranden 8 DK-1060 København K Phone +45 72 20 51 92

E-mail: lwl@bm.dk

## Finland

Teemu Hänninen Actuarial and Statistics Department P.O. Box 450 00101 Helsinki Phone +358 20 63 41360 E-mail: teemu.hanninen@kela.fi

#### Finland

Eero Siljander
Ministry of Social Affairs and Health
P.B. Box 33
00023 Statsrådet
FI-00171 Helsinki
Phone +358 9 160 738 41
Fax +358 9 160 738 24
E-mail: eero.siljander@stm.fi

## Iceland

Stefán Ólafsson Háskóli Íslands (University of Iceland) School of Social Sciences Sudurgata IS-101 Reykjavík

Sudurgata IS-101 Reykjavik Phone +354 525 4520 Fax +354 553 6806 E-mail: olafsson@hi.is

#### Norway

Øystein Haram Ministry of Labour P.O. Box 8019 – Dep. N-0030 Oslo

Phone +47 22 24 47 12 Fax +47 22 24 27 68 E-mail: oh@aid.dep.no

## Norway

Arne Magnus Christensen Ministry of Labour P.O. Box 8019 - Dep. N-0030 Oslo Phone +47 22 24 86 10

Phone +47 22 24 86 10 Fax +47 22 24 95 38 E-mail: amc@aid.dep.no

### Sweden

Leif Johansson Statistics Sweden P.O. Box 24 300 S-104 51 Stockholm Phone +46 8 786 90 00 Fax +46 8 411 27 80 E-mail: leif.johansson@scb.se Project Management

Torben Heien Nielsen SFI – National Research Centre for Welfare Herluf Trolles gade 11 DK- 1052 København K Phone +45 33 48 09 51

Phone +45 33 48 09 51 E-mail: thn@sfi.dk

## Project Management

E-mail: cni@sfi.dk

Connie Nielsen SFI – National Research Centre for Welfare Herluf Trolles gade 11 DK- 1052 København K Phone +45 33 48 09 27

© Nordic Social-statistical Committee Copenhagen 2009

Cover by: Sisterbrandt designstue

Layout and graphics: Gry Metz Meillier

### Sweden

Annica Wallerå Statistics Sweden P.O. Box 24 300 S-104 51 Stockholm Phone 019 17 62 38

E-mail: annica.wallera@scb.se

#### Sweden

Bengt Eklind Ministry of Health and Social Affairs S-103 33 Stockholm Phone +46 8 405 17 04 Fax +46 8 411 90 98 E-mail: bengt.eklind@social.ministry.se

L man. bengt.ekmid@social.mmstry.se

#### NOSOSCO

Johannes Nielsen NOSOSCO secretariat Islands Brygge 67 DK-2300 København S Phone +45 72 22 76 25 Fax +45 32 95 54 70 E-mail: mail@nom-nos.dk

Print: AN:Sats

ISBN 978-87-90248-42-0

## **Preface**

The Nordic Socio-Statistical Committee (NOSOSKO) is a permanent committee under the Nordic Council of Ministers and the Nordic Socio-Political Committee whose aim is partly to coordinate statistics in the social field in the Nordic countries, partly to undertake comparative studies and descriptions of the content and scope of social security measures.

The committee consists of three representatives and a number of substitutes from each country. The presidency of the Committee alternates between the countries. The presidency period runs for three years. Sweden has the presidency for the period 2008-2010.

NOSOSKO publishes its results concerning the current development of social trends in the report *Social Security in the Nordic Countries*.

The report *Do the Nordic Welfare Systems Encourage the 60-74-Year-Olds to Work?* is a thematic report for 2009 published by NOSOSKO. At its annual plenary session in August 2008 NOSOSKO decided that the theme of 2009 was to be a follow-up to the theme of 2008 on the pensions systems of the Nordic countries. It is a fact that the population over 65 years and above will grow considerably in all the Nordic countries with subsequent growing expenditure on income transfers and social services in respect of the oldest part of the population. In all the Nordic countries endeavours are being made to stimulate the old part of the population to remain longer on the labour market, but we do not know whether these initiatives are uniform for which reason it was decided that the 2009 theme was to look at this issue in greater detail.

NOSOSKO set up a reference group in connection with the drafting of this present thematic report. The reference group has discussed the detailed content of the report at various meetings and has been responsible for the delivery of data in the shape of texts, figures and results.

Torben Heien Nielsen and Connie Nielsen from the Danish National Centre for Social Research, SFI, have, in their capacity of consultants, undertaken the project lead as regards the thematic report and have thus collected contributions from the individual countries and compiled the report on the basis of the data delivered. The reference group has had the opportunity to correct and modify the content of the report during and after the compilation process.

## Contents

Chapter 1. Introduction	9
Chapter 2. Delimitation	17
Chapter 3. Retirement schemes i the Nordic Countries	18
Pensions schemes	19
Retirement pathways in the individual countries	24
Other schemes that may influence decision on retirement	
Compulsory retirement and right to work	41
Tax incentives	42
Property and owner-occupied housing	43
Advantages for owner-occupiers that receive a pension	43
Housing benefits	44
Transport and consumer allowance and other advantagesv	45
Extra holidays	45
Schemes on the demand side	45
Summary	46
Chapter 4. Application of the Nordic Retirement Schemes	48
Old Age Pension	50
Early Retirement	55
Summary	65
Chapter 5. Income Coverage in the event of retirement and work	67
Introduction	67
Characteristics of the categories of persons	68
Disposable income as a pensioner	72
Pensioners' replacement rates	75
Summary	90
Chapter 6. Synopsis	93
Annex 1: The application of retirement schemes irrespective of full of	r
partial retirement	95
Annex 2: Calculation basis for Chapter 5	99
Annex 3: Replacement rate in case of full or partial retirement	105
Publications issued by NOSOSCO since 1995	108

## Chapter 1

## Introduction

The demographic development in the Nordic countries is a challenge to public budgeting authorities as funds must be available to finance the growing number of pensioners, who live much longer. A comparative analysis made by Nososko in 2008 dealt with the theme "Alderspensionssystem i Norden" (Old Age Pension Systems in the Nordic countries) and compared future public expenditure hereon. Calculations on mean life expectancy show that old citizens in the Nordic countries will live longer. This contributes to the fact that pension budgets in the Nordic countries have been put under a stronger pressure and that pension reforms will be needed.

Mean life expectancy indicates how long time a person at a given age class on average may be expected to live. The mean life expectancy trends of recent years in the Nordic countries appears from table 1.1.

Table 1.1. Mean life expectancy 1996-2007

	ı .			
	Men		Wome	n
Age	65	80	65	80
Denmark				
1996-2000	14.8	6.6	18.0	8.4
2004/05	16.0	7.0	19.0	8.8
2006/07	16.2	7.1	19.1	8.8
Finland				
1996-2000	15.0	6.6	19.1	8.1
2005	16.7	7.4	20.7	9.1
2007	16.9	7.5	21.0	9.3
Faroe Islands				
1996-2000	15.3	6.9	19.5	8.8
2005	16.9	7.7	19.4	8.7
2007	16.8	7.4	19.7	9.1
Iceland				
1996-2000	16.7	7.3	19.6	8.6
2004/05	18.0	7.7	20.7	9.4
2006/07	18.3	7.8	20.6	9.6
Norway				
1996-2000	15.7	6.7	19.5	8.5
2005	17.1	7.3	20.6	9.3
2007	17.4	7.4	20.6	9.2
Sweden				
1996-2000	16.4	7.0	19.9	8.8
2005	17.4	7.4	20.6	9.3
2008	17.9	7.7	20.8	9.3
Source:	Statistical Central Offices			

Table 1.1. shows the expected remaining life expectancy in respect of different age classes at different times. Generally the table shows that mean life expectancy in respect of the 65-and 80-year-olds will increase in the course of time in all countries. Increased mean life expectancy will intensify the pressure on public budgets.

But at the same time an increasing mean life expectancy is an indication that the health situation has improved in the Nordic countries. More years in good health may give the old person a possibility and a desire to work longer when they reach pensionable age, or old persons may wish to work again after having become pensioners.

This report asks the question: "Do the Nordic systems encourage the 60-to 74-year-olds to work? For this age group the alternative to work is retirement from the labour market – fully or partly. Therefore the focus in this report is on the possibilities for retirement. We shall respond to the question by looking at typical retirement routes, their application, at how different persons are compensated in case of full or partial retirement. The latter is a decisive element in order to understand the incentives that exist for retirement – and consequently to answer the main question of this report.

The aim of this report is to describe implemented initiatives that may influence the labour supply among old persons and the consequences they have and will get in respect of different types of persons in the individual Nordic countries.

In this connection the kind of incentive the old citizens in the Nordic countries may have to want to work, must be analysed. To give an empiric first hand impression of withdrawal patterns figures 1.1.a and 1.1.b. show how big a share of the population aged 60-74 that receive some kind of pension benefit – be it man or woman.

<sup>1</sup> The share in Iceland is some times over 100 per cent. This is due to the fact that in the calculations relating to Iceland it has not been possible to leave out the Icelanders living abroad who are in receipt of pensions.

Figure 1.1.a Number of men receiving a type of pension in 2008

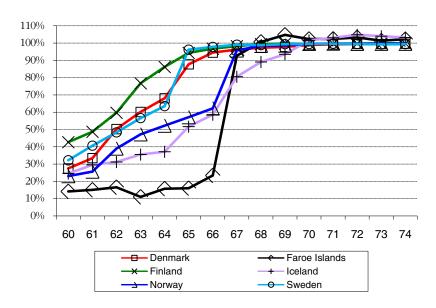
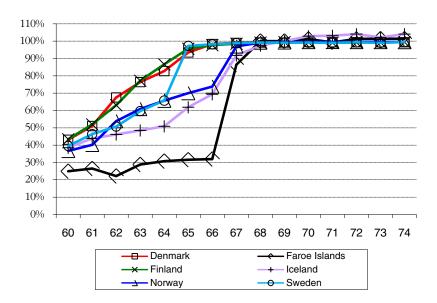


Figure 1.1.b Number of women receiving a type of pension in 2008



The figures show that the official pensionable ages for the guaranteed pension schemes (old age/guaranteed pension) today is 65 in Denmark, Finland and Sweden and 67 on the Faroe Islands, in Iceland and Norway. Special arrangements in some countries' old age pension schemes and retirement schemes facilitate early retirement.

In Denmark the voluntary early retirement pay scheme may apply from age 60 or a person may draw his labour market pension from age 60. In Finland under the labour market pension scheme it is possible to receive partial pension from age 58. Old age pension (both labour market pension and old age pension) may be paid from the age of 62. In Iceland a supplementary pension under the old age pension scheme may be payable as from age 65-67, and labour market pensions from age 62. A large number of employed persons in Norway may retire and receive pension as from age 62 under the agreed pensions scheme. As from 2011 it will be possible to receive pension from the age of 62 under the social pensions scheme (folketrygden - the Norwegian national social insurance scheme). And in Sweden an income and premium pension is payable from age 61.

A common feature of the early retirement schemes is, however, that the longer you wait before retiring with a pension, the higher is the compensation. The design of the retirement possibilities contributes to the explanation of figures 1.1.a and 1.1.b.

Chapter 3 describes in more detail the retirement possibilities for the citizens in the individual countries. Chapter 4 deals with the extent of the application of the schemes. The group of older persons availing themselves of a retirement scheme would normally be described as a group that is not available for work. The remaining would be described as being available either as wage earners, self-employed or unemployed. However, this is a truth with modifications because the individual retirement schemes contain possibilities and incentives to work at the same time. Therefore in chapter 4 the report looks at the share of the populations that receives retirement benefits and work and the same time.

Generally there is a difference as to whether the schemes of the individual countries are defined benefits or defined contributions. Defined benefits means that the individual citizen will get a defined benefit calculated on the basis of income through life. Under defined contributions schemes the contributions to savings schemes are decisive for the amount paid out eventually. Throughout working life a person earns rights to defined benefits or make compulsory savings. The timing as to when or how a person retires depends on the compensation a person is entitled to at different ages. Chapter 5 describes the incentive to work among older persons by comparing compensation ratios in the Nordic countries in the event of full or partial pension.

Pension reforms in the Nordic Countries - under continuous development

The demographic development has been a conducive factor to the way the pensions schemes are organised to day (for more details see NOSOSKO TEMA 2008), and to the fact that the schemes are continuously in the process of changing. A contributory factor is that the individual countries are endeavouring to stimulate the older generation to remain longer on the labour market. This has brought about pensions adjustments and pensions reforms in all Nordic Countries.

The recent reforms of the *Danish* pensions schemes have taken place since 1987 based on the mutual declaration between the social partners and the government, who decided to extend the compulsory collective pensions savings schemes to cover both the private and public labour market. This scheme is based on defined contribution as the point of departure. Thus future Danish pension incomes depend to a large extent on compulsory pensions savings. With the new calculation rules for benefits the reform of the voluntary early retirement pay scheme from 1999 (in operation as from 2004) stimulates the 60-65-year-olds to remain longer on the labour market. As part of the reform of the early retirement pay scheme, pensionable age was reduced from 67 to 65. The old age pension, the universal, guaranteed Danish pension scheme, is payable to everybody at a fixed amount, however, subject to a means test. With the introduction of deferred pension in 2004 it was possible to defer payment of old age pension for op to 10 years. By denouncing receipt of the pension for a certain period of time and work in stead the person under the deferred pension regime will receive a higher amount of pension the day he/she retires. By making pension benefits depend positively on work after the age of 65, the scheme removes barriers to continue work. Under the Welfare Agreement of 2006 it was decided to gradually increase the age for entitlement to voluntary early retirement pay as from 2019 and pensionable age from 2024. The early retirement pay reform, the deferred pension scheme and the Welfare Agreement all intended to urge older citizens to continue to work. Finally the anticipatory pension scheme in Denmark was reformed in 2003.

In 2005 a reform of *Finland's* defined benefit scheme was carried through. As part of the reform the benefits are calculated on the basis of life long income in stead of the income received throughout the last 10 years before pensionable age. The reform also introduced a flexibility as regards the time of retirement between age 63 and age 68. Finally the calculation of pensions was adjusted for the development in mean life expectancy. Besides the Finnish government and the social partners have agreed to that the employment carriers of the Finns are to be extended in the period 2010-2025. This will happen through an increase in the average pensionable age

by op to 3 years to reach 62.4 from the present 59.4 years. Measures to reach this goal will be dealt with in a working group where all social partners are represented. The working group is to come up with proposals by the end of 2009.

Pensions issues are also dealt with in the so-called SATA-committee, which plans reforms under the guidance and direction of the Ministry of Social Affairs and Health and is to make proposals on a revision of the present social benefit schemes in Finland at the end of 2009 (or the beginning of 2010 at the latest).

On the *Faroe Islands* a group of civil servants under the Ministry of Finance in June 2009 produced a report containing proposals for a reform of the old age pension scheme. The general goal of the report is to propose measures to reduce future costs on old age pension as a consequence of the expected increase of the number of older people. The proposals include rules on compulsory pensions savings, greater set-offs in old age pension benefits and projection of pensionable age. It has been proposed that pensionable age is increased by 6 months every 5 years from the present 67 up to and inclusive of 71. The subsequent political hearing of the proposal aims at a broad agreement which might have the consequence that some of the proposals are either postponed or carried through in another shape.

In *Norway* a reform of the "folketrygd" – the national social insurance scheme is implemented as from 2011. Instead of calculating the pension on the basis of the best 20 income years it will in the future be calculated on the basis of the total lifetime income. The new rules on earnings will be gradually phased in. Persons born in 1953 or before shall be subject to the earnings rules of today. Persons born between 1954 and 1962 or later shall have their pension calculated as an average between the earnings rules of today and the new ones to give the new rules increased importance. Persons born in 1963 or later shall be fully comprised by the new earnings rules. Furthermore it will be possible to take receipt of the pension from age 62 as from 2011 although the compensation rate increases with time. The flexible pension will apply both to current earnings rules and new earnings rules. A life expectancy adjustment of pensions in respect of new old age pensioner as from 2011 – both for those included in current earnings rules and those included in new earnings rules, will be introduced. Today old age pension is adjusted annually concurrently with wage increases whereas as from 2011 it will be adjusted concurrently with wage increases after which 0.75 per cent will be deducted.

In *Sweden* the public pensions system has been reformed and entered into force in all areas in 2003. The most important change was to let payments depend on contributions to the scheme instead of a percentage of

the wages/salary. For many years the relative minimum pension guarantee has been relatively high in *Iceland*. As at 1 January 2009 this guarantee was increased by almost 20 per cent. This has happened without precedents and aims at protecting low income old age pensioners against the heavy recession that Iceland faces right now.

With a pension calculation which to days is depending on life earnings in Finland, Norway and Sweden, the systems have moved towards a higher degree of a defined contribution system rather than a defined benefits scheme. Moreover calculations of pensions take average life trends into consideration, which makes the systems robust viz-a-viz demographic trends. In Denmark the development of labour market pensions has entailed that future pension incomes to a higher degree depend on contributions made throughout the pay/wage settlement period, and thus like Finland, Norway and Sweden, Denmark has moved towards a defined contribution scheme.

Within the framework of the new pension reforms which have been implemented and will be implemented, persons in the Nordic countries will have to decide how they wish to plan their life when they retire from the labour market. During the last 2 decades it has become generally accepted that it is not sufficient to live on the universal old age pension available in all the Nordic countries. In order to highlight the issue each individual citizen may estimate how the contribution ratio of the total pension income will relate to the earned income, the person has had during his/her life time. If health permits and there is a will, it is possible to work at the same time as receiving a pension. This thematic report compares the Nordic retirement schemes and looks at how the contribution ratio of the year in which the person will retire, is influenced by the schemes in case of full or partial retirement at different age levels.

## The structure of the report

The structure of the report is as follows: Chapter 2 deals with the delimitation of the report. Chapter 3 describes retirement pathways in the Nordic countries in respect of person between 60 and 74 years. Chapter 4 describes the share of different age cohorts receiving pension under different schemes. It also shows the number of person working at the same time and thus counts as partially retired. Chapter 5 compares the replacement rates that different persons in the Nordic countries may expect if retiring as 63-, 65- or 67-year-olds. Furthermore the chapter illustrates the gains relative to the replacement rate that different person get by working while receiving a pension.

## Chapter 2

## Delimitation

## General delimitation

At the meeting of the working group on 30 October 2008 it was agreed that the report was to focus on the age interval 60-74 years. This age interval was selected because most still have "normal" attachment to the labour market up to the age of 60 whereas almost all have retired at the age of 75. The report thus considers the conditions for retirement of a person born in 1980. This, however, does not apply to Denmark and the Faroe Islands, in case of which retirement conditions for a person retiring from the labour market in 2008 are considered (See annex 1 for the conditions for calculations of the respective countries). Chapter 5 contains calculations of typical cases for persons at different retirement dates.

Figures for charts in Chapter 4 are computed in the beginning of 2008 for Sweden, Denmark and the Faroe Islands and in the end of 2008 for Norway, Iceland and Finland. It is thus figures that apply to the present pension schemes that the computations account for.

The report contains 3 annexes: One illustrating chapter 4. Another which illustrates the detailed calculation assumptions of each individual country, which does not appear from the text of Chapter 5, and one which lists the replacement rate in the event of full or partial retirement in respect of a number of typical persons. The last two annexes belong to Chapter 5.

As the point of departure the report deals with systems available in the individual countries at the time of compiling the report, and as far as Norway is concerned, it relates to the reform which enters into force in 2011.

As regards foreign currency translations the following exchange rates are applied: For Denmark and the Faroe Islands 1 Euro = 7.45 DKK, for Iceland 1 Euro 127.46 ISK, Norway 1 Euro 8.01 NOK and Sweden 1 Euro 9.25 SEK. Translation of the currencies of the individual countries into Euro has been made on the basis of annual average exchange rates from the Danmarks Statistik, Statistikbanken for SEK, NOK and DKK in 2008. Translation of ISK to EURO has been made on the basis of information on the home page of the Iceland National Bank (Sedlabanki Islands).

## Chapter 3

# Retirement schemes in the Nordic Countries

The 2008 NOSOSKO theme Ålderspensionssystem i Norden (Old age pensions schemes in the Nordic Countries) dealt with the general similarities and discrepancies in the Nordic Countries within old age pension schemes and how the demographic development would be expected to influence public budgets in the future. This theme focuses on the individual citizen's incentive to retire from the labour market. It is obvious that the citizen's decision to retire depends on the schemes available to the individual citizen. This chapter will therefore provide an overview of the most important possible retirement pathways for the 60-74-year-olds in the Nordic Countries.

It may be a case of both voluntary and involuntary retirement when a person leaves the labour market. Voluntary retirement indicates that the person made an active choice himself to retire, given the norms, preferences for free time and leisure and the financial compensation available. Involuntary retirement means that a person retires because of bad health or disability. Unemployment is in most cases involuntary and may lead to retirement.

The chapter has the following structure: First the general structures of the pensions schemes are described, then retirement pathways of the individual schemes are described in detail. Other schemes, which may influence attitudes to retirement in the Nordic Countries will be looked at. And finally the Chapter will be summarised.

## Pensions schemes

The pensions schemes of the individual countries contain different retirement routes from the labour market. Below there is a general outline of the pensions schemes.

As the structure of the pensions schemes in each country is decisive for the understanding of the measures introduced in the individual countries, an outline of the institutional preconditions influencing the decision on retirement will be given. First old age pension will be described, including relevant benefits inherent in deferring retirement, secondly anticipatory pensions, labour market pensions and individual pensions.

## Old age pension

An old age pension exists in all Nordic countries entitling persons to payment of a pension once they have reached the age of 65, if they live in Denmark, Finland or Sweden, whereas the pensionable age is 67 in the Faroe Islands, Iceland or Norway. Norway will, however, as at 2011 introduce a flexible old age pension making it possible to retire fully or partly as from age 62. In Finland pensionable age is flexible from 63 to 68 in accordance with the Reform of 2005. In Denmark a welfare agreement was adopted, increasing pensionable age gradually to 67 as from 2024 to 2027 and thereafter in pace with the increase in life expectancy. If in Sweden the guaranteed pension is left out, lifetime-related income or premium pension may be payable fully or partly as from age 61.

The Finnish labour market pension, the Norwegian social pension (under the national social insurance scheme) and the Swedish income related pension are based on pensionable income throughout working life. Pensionable income may in all countries comprise income from work and benefits such as unemployment benefit, sickness benefit and rehabilitation benefit, etc. If the person continues to work fully or partly, the person will continue to acquire entitlement to pension. In Sweden pension may be payable as from age 61 whereas in Finland or Norway pensionable age is 62.

## Benefit gained in deferring old age pension

The individual Nordic countries have introduced schemes direct aiming at keeping older person on the labour market by way of flexible retirement schemes.

The timing of retirement is important to the amount of pensions in Sweden, Norway and partly in Denmark. Generally the principle is that the longer a person is prepared to defer retirement, the higher the expected payment. In Norway and Sweden total old age pension is calculated on the basis of rights acquired throughout working life. Thus the aggregate right to pension will increase along with increased work. In Sweden and Norway<sup>2</sup> the annual pension commitment is computed by dividing total pension rights by a devisor. The devisor is smaller the longer a person remains on the labour market. This leaves a further incentive to defer retirement. Old age pension in Finland is in principle also calculated on the basis of lifetime income. From age 18-53 a right to 1.5 per cent of pension carrying wages/salaries is acquired each year. This percentage increases by 1.9 per cent up to age 63. At age 63 – 68 it is possible to receive old age pension, but the accumulation rate increases to 4.5 per cent per year, which again creates an incentive to remain on the labour for a longer period. If old age pension is further deferred after age 68 the pension amount is increased by 0.4 per cent per month (4.8 per cent per year).

The consequences of the pensions reform in Norway as from 2011 will be the flexible pension payable under the social security insurance scheme (folketrygden) in respect of the age group 62 – 75. The scheme will take a neutral shape so that the annual payment of pension is increased the longer the payment is deferred. The pensions will be adjusted for life expectancy as from 2011 so that the annual pension payable to new pensioners will be somewhat reduced in respect of a specific pensionable age on the condition that life expectancy continues to increase. Pension commitments in respect of a person from the 1949 cohort, who defers his retirement until 65 years of age will be 15 per cent higher than that of a Norwegian, who retires at the age of 62. If the Norwegian defers his retirement until the age of 67, he will be entitled to 28 per cent more and as much as 53 per cent more if he postpones retirement until the age of 70.

In Denmark entitlement to old age pension does not depend on lifetime income. However, the payment of old age pension is means tested as regards income received on top of the pension. The principle is that if you have a high income e.g. from work or pension savings, old age pension will be reduced. On the other hand old age pensions commitment is depending on the amount of work in a positive way after the age of 65. Pension is payable as from age 65, but if payment is deferred and work continued, the amount of old age pension is increased by a factor, the so-called deferral percentage. It is calculated on the basis of the number of months a pension

20

<sup>&</sup>lt;sup>2</sup> According to regulations after the 2011-reform in Norway.

has been deferred and is divided by the mean life expectancy factor at the time of retirement. Based on 2008-figures a waiting percentage has the effect that a Dane postponing retirement until the age of 67 may expect a pension payment which is 12 per cent higher than if the person retired at the age of 65. If the Dane postpones retirement until age 70, he may expect an old age pension payment of up 36 per cent higher than if he retired at the age of 65. In Denmark it is a condition to defer a pension that the person concerned has an income from personal work for at least 1,000 working hours each calendar year. In Denmark also the ATP pension, labour market pensions and individual pensions may be deferred.

In the Faroe Islands pensionable age within the public sector may be deferred from age 67 to age 70, but that does not allow for deferral of pensions. If pension is not paid between age 67 and age 70 the person qualifies for an annual tax reduction. Entitlement to this reduction is maintained even if the person is in receipt of a special solidarity labour market retirement pay.

After having attained the age of 67 in Iceland and until the age of 72, pension commitments are increased by 0.5 per cent in respect of each month a pension is deferred. The increase in pension commitments due to deferral may thus increase to a maximum of 30 per cent. The possibility to defer payment does not only influence old age pension. Commitments for labour market pensions are also increased.

The financial compensation gained by retiring at different ages is a very important incentive in all the Nordic countries. In Denmark the number of years on the labour market (the labour market "history") influences old age pension only at 65-years of age. In Iceland and the Faroe Islands at age 67.

## Anticipatory pensions

All the Nordic countries have an anticipatory pensions scheme<sup>3</sup> payable to persons who become sick before pensionable age. It is a common feature in all countries that persons may qualify for anticipatory pension on account of reduced working capacity. In Denmark a person who has a minor degree of reduction of working capacity and who cannot obtain or maintain attachment to the labour market on normal conditions, may be employed in a flexijob. If, however, the working capacity is permanently reduced to a degree that leaves the person in a condition of not being able to maintain himself, anticipatory pension may be applied for.

\_

<sup>&</sup>lt;sup>3</sup> Anticipatory pensions are described in the NOSOSKO Report (30:2007, Chapter 6)

In Norway a person qualifies for a disability pension and in Finland for an invalidity pension if the person for medical reasons cannot work until pensionable age.

In Sweden the concept of anticipatory pension does not apply any more. Instead a person who is at least 30 years of age may qualify for sick benefit. The reason for this modification is that a person should rather be considered sick than on pension as this may leave the hope that they may be rehabilitated and return to work again.

In Iceland and the Faroe Islands there is no early retirement schemes besides disability and anticipatory pension schemes. However, entitlement is depending on a medical test just like in all the other countries, a test that may act as a barrier to early retirement.

## Work related pensions

Work related pensions are compulsory pension schemes linked to employment. The function of work related pensions is to ensure further income coverage in the event of retirement that old age pensions cannot ensure.

All employed persons in Norway has a labour market pension scheme, referred to as a service pension earned through the business enterprise where they worked. This pension scheme is financed through contributions from the individual employed person and the employer. This scheme has applied to public servants for a long time, whereas it was made compulsory for the private sector as from 2006. The labour market pension schemes in Norway has a statutory lower age limit of 67 years for payments. This may, however, be changed in connection with the qualifying age for national social insurance pension being reduced to 62 as from 2011. It should be noted, however, that no bill to further this proposal has been submitted.

In Denmark persons employed in employment covered by collective agreements pay contributions to a collective pensions savings fund. The contributions are administered by the employer. In enterprises that are not covered by collective agreements, most often similar schemes exist. Usually the employer pays 2/3 of the contributions whereas the employed person pays 1/3 himself. On an average an industrial worker pays approx. 12 per cent of his pay and a public servant pays 17 per cent. In Denmark the schemes administered by the employers and the individual schemes may be

\_

<sup>&</sup>lt;sup>4</sup> In Denmark a declining number of persons are employed as civil servants in the public sector. Civil servants qualify for the special, defined benefit civil servabnt's pension.

defrayed from age 60. In comparison with other Nordic countries labour market related pension schemes only exist to a relatively modest extent in Finland and the Faroe Islands.

The agreement based pension in Sweden complement old age pensions, but the agreement has been entered into by the two sides of industry. The scheme varies according to the different collective agreement areas. In respect of persons employed in the private sector the employer will as from 2012 pay 4.5 per cent of total wages to a pension scheme in respect of the first 7.5 income basis amounts which in 2008 is equal SEK 360,000 (Euro 38,919) In respect of the income over and beyond that amount 30 per cent is paid

In Iceland defined contribution based labour market pensions have existed since the 1970s where a person as part of his employment contract pays 4 per cent of his wages to a pension fund, whereas the employer pays 6 per cent.

# Individual pensions as a result of favourable taxation regulations

It is possible in all Nordic countries for citizens to initiate pensions savings schemes at their own initiative, where favourable taxation regulations exist. There are, however, relatively few individual pension schemes in Finland, which was also the case in Iceland until the taxation regulations were changed in 1997 when new labour market agreements were introduced that facilitated voluntary tax deductible pension schemes. In Sweden and Norway tax deductible pension insurances may be taken out.

In Denmark contributions to private pensions savings schemes (indowment pensions and pension annuities as well as insurance based life insurance schemes) are allowable against income tax. Indowment policy payments are, however, only deductible by up to DKK 46,000 (EURO 6,174) and are not allowable against the calculation of top rate tax. Payments from endowment pensions schemes are subject to 40 per cent tax at the time of payment. In Sweden private pension insurance schemes may be taken out where the premium paid of up to SEK 12,000/per year (EURO 1,297) are allowable against the calculation of the taxable income.

# Retirement pathways in the individual countries

In the individual countries there is a complex set of retirement possibilities in respect of the 60-74-year-olds, which are decisive to the number of years the citizens remain on the labour market.

The following paragraph deals with the possible retirement pathways which influence the choice of voluntary or involuntary pension before old age pensionable age on the one hand and factors that might create incentives to remain on the labour market beyond ordinary pensionable age on the other. This is done separately for each individual country based on a diagram of retirement possibilities.

## Denmark

There are several retirement possibilities in respect of the 60-74-year-olds in Denmark. The different schemes are illustrated in Figure 3.1.

Figure 3.1 Diagram of retirement pathways in Denmark Early retirement pay (Member of fund) Working as Employed or self-Employed Person Age: 60 - 64 year Retirement? Unemployment Benefit, cash assistance, sickness Benefit, unemploy-ment benefit (flexijob) Flex benefit Partial pension Public servants scheme Age = 65 years Retirement? Labourmarket pension ATP Individual Individual pension pension Anticipatory pension Retirement Old age pension (+Deferral percentage) Labour market pension Public servants ATP Individual pension

25

The figure shows retirement possibilities in respect of a person who, before attaining the age of 60, is employed or self-employed, or in receipt of unemployment benefits, cash assistance, sickness benefits or redundancy pay. The voluntary early retirement pay scheme is a voluntary scheme (provided the person is a member of an unemployment insurance fund) as is flexijob benefits (early retirement pay in respect of a person working in a flexijob), partial pension (if the person was born before 1 January 1959 and does not qualify for early retirement pay) or public servants' pensions (special pensions scheme for persons employed in the public sector). Besides a person may start receiving pensions from the labour market pensions schemes and pensions taken out individually, if any, as from age 60. Anticipatory pensions schemes exist for persons without working capacity.

At the age of 65 a person qualifies for old age pension and the labour market anticipatory pension scheme (the ATP). But pensionable age may be postponed through a deferred pension scheme. With the exception of public servants pensions and individual pensions, other retirement possibilities lapse.

The tax financed old age pension consists of a basic amount, a pension allowance and a supplementary pensions allowance. Old age pension is not depending on previous labour market participation. The annual basic amount of approx. DKK 63,000 (Euro 8,456) is gradually phased down by 30 per cent in the case of income from work over DKK 267,800 (Euro 35,946). The pension allowance is approx. DKK 63,500 (Euro 8,523) per year in respect of single pensioners and approx. DKK 30,000 (Euro 4,027) in respect of persons living as a couple. The pension allowance is gradually phased down by 30 per cent in case of income from other pension schemes, income from interest and work over DKK 60,000 (Euro 8,054) per year in respect of single pensioners and DKK 120,000 (Euro 16,107) in respect of pensioners living in a couple (where the income of both persons is taken into account, but where the phasing down is of 15 per cent) Old age pensioners with an especially low income also qualify for an annual special supplementary allowance of approx. DKK 10,000 (Euro 1,342).

Employed or self-employed persons, who meet the requirement for a special attachment to the labour market (the labour requirement) qualify for sickness benefits in the event of incapacity for work due to sickness. The legislation on sickness benefits does not contain any rules on deductions against social pension (old age pension).

Where the person wishes to work beyond the age of 65 the person may opt for the deferred pension arrangement. If the person works a minimum of 1,000 hours a year (equal to 19 hours a week) he may denounce old age

pension and take receipt of it later on, subject to a higher rate for the rest of his life.

The ATP is a statutory pensions savings scheme. All employed persons from the age of 16 to pensionable age contributes a fixed amount (public servants DKK 90 (Euro 12), DKK 180 (Euro 24) or DKK 270 (Euro 36) a month) depending on the number of working hours. Persons receiving partial pension, flex allowance and voluntary early retirement pay and anticipatory pensioners were granted anticipatory pension in accordance with the rules applicable before 1 January 2003 may continue to pay voluntary contributions to the ATP scheme.

The labour market pensions schemes are savings pensions schemes whose contribution percentage has been fixed by the two sides of industry and administered by collective pensions funds. An artisan or an industrial worker pays approx. 12 per cent of his pay to the labour market pensions scheme. A public servant pays approx. 17 per cent. Typically the employer pays 2/3 of the contributions whereas the worker pays 1/3. The labour market pensions are payable in connection with retirement as from age 60.

Individual pensions schemes may also be taken out in which case the contributions are allowable against income tax, but where payments are subject to taxation (with the exception of lump sum endowment policies, which are taxable by 40 per cent at the time of payment).

Below the voluntary early retirement pay, flex allowance and deferred pension are described.

Voluntary early retirement pay is a retirement pay scheme which is only payable to members of an unemployment insurance fund provided they have been members of the fund for a number of years and provided they have paid voluntary early retirement pay contribution. The early retirement pay scheme makes it possible to retire gradually from the labour market before pensionable age because it is allowed to work an unlimited number of hours as receiver of early retirement pay, which however, will result in deduction in the amount of early retirement pay. If a person is selfemployed at the same time as receiving early retirement pay, permission is to be obtained from the unemployment insurance fund. Voluntary early retirement pay is payable from age 60, once the person concerned has received his early retirement pay certificate, but there are several financial benefits involved in remaining on the labour market. By postponing transition to early retirement pay for 2 years after the date of the certificate, and if, during that period, the person has worked for at least 3,120 hours, the higher the rate of early retirement pay will be and a pension deduction on more favourable terms will be obtained. Furthermore a tax free premium is allowed if the 2-year-rule is complied with and if early retirement pay is

postponed or not taken. The tax-free premium is a maximum of DKK 135,720 (Euro 18,217) in 2009. As from 2019 and until 2022 the qualifying age for early retirement pay will increase to 62 years.

Flex allowance is a retirement benefit payable if a person has been approved for a flexijob and registered with the flex allowance scheme and wishes to retire from the labour market before pensionable age. The scheme is administered by the local authorities. Flexi allowance is equal to early retirement pay in respect of a person having a flexijob, and any periods in respect of which voluntary early retirement contribution to the unemployment insurance fund has been paid, is included as seniority in the flex allowance scheme. At present flex allowance is payable as from age 60 at the earliest. From 2019 until 2022 the flex allowance age will gradually be increased to 62 years.

Partial pension presents another early retirement facility from the labour market in respect of the 60-64-year-olds. In order to be included in the scheme persons must have been born before 1 January 1959 and have no possibility to qualify for voluntary early retirement pay. The scheme applies to employed as well as self-employed persons who have been attached to the Danish labour market currently and for a substantial period of time.

In case of transition to the partial pension scheme the number of working hours must be reduced so that the annual number of working hours is equal to an average working time of a minimum of 12 and a maximum of 30 hours a week. Only very few person avail themselves of the scheme.

Deferred old age pension and the ATP. When a persons attains the age of 65 the persons qualifies for old age pension and the ATP unless the person in question wishes to postpone payment of the pensions. Old age pension and the ATP may be deferred for up to 10 years.

In connection with the job plan adopted in the spring 2008 greater financial incentives to postpone retirement from the labour market and for old age pensioners to continue working, have been introduced. In respect of old age pensioners the incentive is e.g. a lower employment requirement in the event of deferred payment and special deductions for earned income relative to the calculation of the income adjustment of the amount of old age pension.

## The Faroe Islands

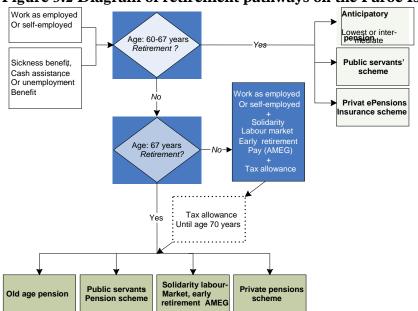


Figure 3.2 Diagram of retirement pathways on the Faroe Islands

On the Faroe Islands persons may as the point of departure remain active on the labour market as employed or self-employed persons. Persons who are not on the labour market may receive transfer payment. This may be sickness benefit, unemployment benefit or another kind of assistance. If the person is between 60 and 66 years of age it is possible to receive anticipatory pension for health reasons in case the person is incapable of work (intermediate amount of anticipatory pension), or on social grounds (lowest amount of anticipatory pension). Public servants also qualify for public servants pension as at age 60. Persons having a pensions savings scheme may take receipt of pensions under that scheme as a lump sum, under an instalments policy or lifelong pension from age 60.

The ordinary pensionable age on the Faroe Islands is 67. At that time old age pension may be applied for and payment from the personal pensions

savings scheme may start. When having attained the age of 67, persons qualify for solidarity labour market retirement pay.

Person living outside the Faroe Islands may apply for the retirement pay if they have been resident and registered in the Faroe Islands national register for a minimum of three years between age 25 and 67. Persons in receipt of old age pension may continue to work against setting off in taxable income where this taxable income attains a certain annually fixed level.

It is possible to postpone receipt of old age pension after age 67. Pensionable age in public service is up to 70 years. This results in entitlement to an additional personal deduction depending on marital status. However, the majority of persons entitled to old age pension chooses to take receipt of old age pension.

Entitlement to sickness benefit in connection with attachment to the labour market lapses at the age of 70. This implies that told age pensioners and other persons over 67 continues to be entitled to sickness benefit as long as they are attached to the labour market. This entitlement is maintained in the event of a minimum of 20 hours of paid work in a period of 5 weeks.

## **Finland**

Figure 3.3 illustrates retirement pathways in Finland. The pensions system consists of statutory earnings-related pensions scheme (employment pensions scheme, AP), old age pensions scheme (FPA) and special statutory pensions related to special risks (SOLITA), i.e. the legislation on traffic insurance, accident insurance, injuries incurred during military service and on injuries in connection with military service Persons are entitled to each of the 3 elements, see below. As far as voluntary retirement schemes are concerned a person entitled to a labour market pension may retire partially from age 58 – 67, and at age 62 a person may retire subject to anticipatory pension. From age 63-68 a person may retire on his own initiative without reducing the pension amount. Entitlement to old age pension (FPA) does not give entitlement to partial pension, but early retirement may take place from age 62-64 via anticipatory old age pension schemes.

There are other retirement schemes such as private pension insurance schemes and finally persons employed in agriculture have special schemes. As involuntary schemes may be mentioned invalidity pension or unemployment pension until age 63, provided the person concerned qualifies for employment pension (AP) and until age 65 if the person qualifies for old age pension (FPA).

All income form work between age 18 and age 68 gives entitlement to employment pension. The amount of employment pension depends on the annual amounts of income and the income percentage depending on age. The main rule is that the pension is accumulated as 1.5 per cent of the annual income. The income percentage increases with the age of the employed or the self-employed person. After having attained the age of 53 entitlement to pension is equal to 1.9 per cent of the annual income and after age 63 to 4.5 per cent annually. Where a person in receipt of pension, who has not attained the age of 68, is still on the labour market, that person qualifies for an additional pension to the tune of 1.5 per cent of the income from work.

In accordance with the legislation on old age pensions, a person resident in Finland, is entitled to old age pension if after the age of 16 he has been resident a minimum of 3 years in Finland. Invalidity pension is payable to a person who looses his working capacity before the age of 21 and is resident in Finland, also where that person has been resident in Finland for a short period of time. The pensioner's own labour market pensions influence the amount of pension and with comparable previous compensations.

Towards the end of 2008 93 per cent of all pensioners received employment pension and 50 per cent of all pensioners received pension through the old age pension scheme. 43 per cent received a pension from both the old age pensions scheme and employment pensions scheme simultaneously.

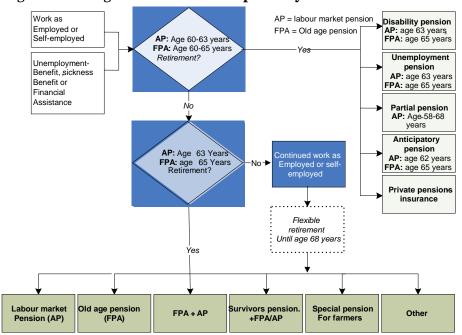


Figure 3.3 Diagram of retirement pathways in Finland

Retirement schemes within old age pensions schemes

Invalidity pension is payable under the employment pension scheme to the 18-62-year-olds and under the old age pensions scheme to the 16-64year-olds if they suffer from a disease that reduces their working capacity. When assessing entitlement to pension in respect of a person who has attained the age of 60 and who has carried out employment for a long period of time, the nature of the employment is important, and invalidity pension may either be granted on a permanent basis or by way of rehabilitation benefit for a fixed period of time. The rehabilitation benefit is granted if it may be assumed that the working capacity may be partly regained through treatment or rehabilitation measures. The amount defrayed by way of invalidity pension may amount to a full pension or a partial pension. Full invalidity pension may be granted where the working capacity is deemed reduced by a minimum of 3/5, partial invalidity pension where the working capacity is deemed reduced by 2/5-3/5. Partial pension equals half of full invalidity pension. Invalidity pension in the shape of old age pension is not granted as partial pension.

A person in receipt of full invalidity pension is entitled to a maximum of 40 per cent, and a person in receipt of partial invalidity pension may receive a maximum of 60 per cent of the previous stable income.

A special retirement benefit (farm closure allowance) is payable to farmers, who permanently surrenders commercial agriculture or forestry, or reindeer-breeders who permanently surrender their reindeer-breeding. The age at which the person concerned may take receipt of retirement benefit depends on the way of retiring and the year of retirement. The younger spouse may qualify for a so-called dormant pension right-

Partial pension is only payable under the labour market pension scheme. Partial pension is payable to employed persons who have attained the age of 58, and who do not qualify for any other personal pension, and who is transferred from full time to part time work. The income amounts to 35-70 per cent of the previous stable income. Persons born in 1947 or later may qualify for partial pension until age 68, and persons born before 1947 may qualify for partial pension up to age 65.

In the beginning of 2011 the lower qualifying age for partial pension will be reduced to 60, and pensions increment on the basis of lack of income in the event of partial pension will be abolished. The changes in the partial pensions scheme shall apply in respect of those who were born in 1963 or later

Unemployment pension is no longer payable to persons born in 1950 or later. Unemployment pension is payable to persons who were born before 1950, who has attained the age of 60 and who are long term unemployed. Besides it is a condition that the person has received unemployment benefit for the maximum period of time, has worked for at least 5 years within the last 15 years, and cannot be referred to employment which he/she cannot carry out without losing entitlement to unemployment benefit.

## *Iceland*

The Icelandic pensions scheme consists of three pillars that all influence the retirement pattern.

The first pillar consists of a defined benefits tax financed pay-as-you-go and a universal old age pensions scheme. The scheme dates back to 1946. A significant application of income adjustment has been incorporated. Old age pension apply universally, but the amounts paid in the first decades of the scheme were very low. This resulted in a demand for "additional pension schemes", which gradually resulted in the second pillar of the Icelandic pensions scheme.

The second pillar is a defined contribution and savings based labour market pensions scheme (pensions fund) dating back to 1969. In the beginning the employed person contributed 4 per cent of his wages/salary and the employer 8 per cent. Today total contribution is 12 per cent (4 per cent from the employed person and 8 per cent from the employer. The labour market pensions scheme became compulsory for all employed persons in 1974, and in 1980 all self-employed were also covered. Even though the scheme is contribution based, it guarantees 56 per cent of an average carrier income as a minimum. Contributions are tax deductible, but liable to full taxation when paid. The labour market pensions funds are administered by the two sides of industry, i.e. unions and employers organisations.

The third pillar consists of individual pensions savings schemes. The legislation dates back to 1997. These are voluntary contribution based pensions accounts. Employed pension savers may pay 4 per cent of their wages/salary subject to a tax deduction (of the payment) and are furthermore entitled to 2 per cent additionally from the employer. This results in a total tax deduction of 6 per cent. Payments are taxed. The individual pensions schemes are either administered by the labour market pensions funds, banks or investment funds and are, like the labour market pensions funds subject to public supervision by the Financial Supervisory Authority.

For many years Iceland has had a high real retirement age. This is mainly due to good job facilities, a positive attitude to work and incentives in the pensions schemes to later retirement since those who retire at a later time in life, increase their pension commitment considerably.

After having attained the age of 67 and until the age of 72, old age pension commitments increase by 0.5 per cent for each month, payments are deferred. The increase in pensions commitments due to deferred payment may thus rise to a maximum of 30 per cent. It is a general rule as far as labour market pensions are concerned that deferred payments may take effect from age 67 - 70, and in which case pensioners would neither loose nor gain. The gain involved in deferred payment thus corresponds to lost expenses. Earlier payment is possible from age 62 and is subject to the same conditions as deferring payments. Conditions may, however, vary form pensions fund to pensions fund.

Another important fact is that the number of invalidity pensioners from 16-67-years of age is rather low in Iceland. This is connected with a relatively low unemployment rate and a low rate of invalidity pensioners, which, however, has increased drastically since the early 1990's. There is no special pensions programme in the event of early retirement. Therefore the

only way out of the labour market is anticipatory pension and unemployment benefits.

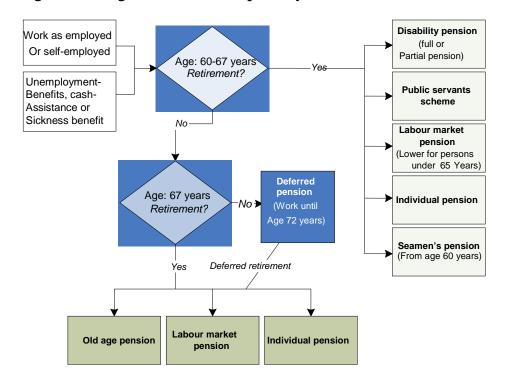


Figure 3.4 Diagram of retirement pathways in Iceland

Figure 3.4 illustrates retirement pathways in Iceland. Primary retirement pathways in respect of persons under 67 years of age are the following: invalidity pension, senior public servants pensions schemes (a retirement possibility for special groups working in the public sector, especially public servants), labour market pension schemes (from age 65, but subject to reduced commitments from age 62) and finally fishermen who have a special right to retire as from age 60 (only 3 per cent of the labour force belongs to this group of employed persons). Those who have accumulated savings by way of an individual pensions savings scheme, may release annual amounts from age 60-67. But as the scheme was only initiated in

1997, very few persons may acquire substantial funds from such schemes to day.

As there is no formal early retirement scheme in Iceland invalidity pension is clearly the primary retirement possibility in respect of persons, who retire before age 67. This, however, depends on whether the benefit may be granted on the basis of a test to prove reduced capacity, which thus is a barrier to the granting of the pension. The granting is based on a medical test (latest version is from the 1990s and is based on the British personal capacity test). Despite the fact that the number of persons in receipt of invalidity pension has increased from the beginning of the 1990s, the application rate is still relatively low. Invalidity pension is, however, clearly the most important way to full retirement in respect of persons of 65-67 years of age.

Another retirement route shown in the diagram refers to public servants. They have two limited possibilities for early retirement. First the public labour market pension is payable from age 62 as part of a flexible retirement facility including partial pension and partial work. The pension amount thus depends on an accumulated pensions right up to the time of retiring. The other retirement facility is the so-called 95-year-rule. This refers to the possibility to retire on the basis of the age of the individual person plus the number of years the person has contributed to a public pensions fund (the number of years of full time employment in the public sector), equal to 95 years. Thus a person may retire fully as from the time, he reaches the 95-year-limit. This retirement route is more effective, the higher the age is attained after 60. Most users are 65 or older.

#### Norway

Figure 3.5 shows the possible retirement pathways in Norway as from age 62 based on the legislation from 2011.

Old age pension National social Working as Employed or Insurance scheme Self-employed Age: 62-67 years (full or partial) Retirement? Recipient of Pension fixed by Maintenance benefits Collective agree-E,g, daily cash ment (public or Benefits or assess-Private sector) ment of working Civil servants' No Ability benefit Pension scheme (Special max/min Maintained by age) Private funds or live On savings Disability pension Age: 67-70 years (Full or partial) Retirement? Individual pension Saving scheme Yes Pension fixed by Age < 70 years Retirement? ollective agreemen private sector Yes Old age pension Civil servants' Individual pension Supplementary (full or partial) Saving scheme allowance Pension scheme

Figure 3.5 Diagram of retirement pathways in Norway (regulation applying as from 2011)

As a point of departure a person may either be in employment, live on private means or receive a sort of public maintenance benefit as e.g. daily cash benefits (unemployment benefit), sickness benefit or assessment of working ability benefit (corresponds to the Swedish sickness and activation benefit). These schemes are not considered retirement possibilities as they are meant to be temporary.

Daily cash benefits are paid to unemployed persons for up to two years, but persons over 64 may receive this benefit continuously until age 67. Daily cash benefit may thus in practice be a way to retire for this age group. Sickness benefit may be granted for up to one year in the event of temporary loss of working capacity due to sickness or injury. Assessment of working ability benefit is a temporary benefit granted to persons who for a relatively long period of time have lost their working capacity due to health problems, but who have a real possibility to get back to work.<sup>5</sup>

As from 2011 a person at the age of 62 may withdraw his/her pension fully or partly from the national social insurance scheme, possibly combined with continued work But to withdraw old age pension before age 67, pension rights of a certain degree must have been accumulated. The old age pension accumulated must be sufficient to equal a minimum of the guaranteed lowest amount of pension, once the person concerned attains the age of 67. In Norway there are agreed pension schemes that cover the age group 62-66 and which includes about 70-80 per cent of the population. This agreed pensions scheme will as from 2011 be transformed into a supplement to the social security scheme of the private sector and will be paid as a lifelong benefit.

In the public sector the contract pension will continue to be a time limited benefit, which may be withdrawn between age 62 and age 67. Those who withdraw the contract pension in the public sector may only withdraw old age pension under the social security scheme from age 67.

Persons who have a fully or partly reduced working capacity owing to sickness or injury, may be entitled to full or partial invalidity pension. Subsequently old age pension is payable from age 67. Invalidity pension may be payable from age 18.

Public servants' pension (labour market pension) is a labour market benefit that may be withdrawn together with the old age pension. Public servants' pension is part of the total pay and working condition of the individual business enterprise and there is thus a great variation in the

\_

<sup>&</sup>lt;sup>5</sup> Assessment of working ability benefit was introduced in March 2010 by merging three previous kinds of benefits: rehabilitation benefit, assessment of working ability benefit (previously attföringspenger), temporary disability allowance.

conditions of the public servants' pensions. But there are certain statutory minimum requirements as regards the public servants' pension. In accordance with the regulations applicable to day a public servants' pension may only be withdrawn as from age 67, but it is being considered to change the qualifying age to 62 as part of a pensions reform. Persons who work in some sectors exposed to special health risks (e.g. the police and the defence services) may take their public servants' pension at a specific age. This may be as early as at 57 years of age. In a number of cases there is, in such sectors, a duty to retire at a specific age.

#### Sweden

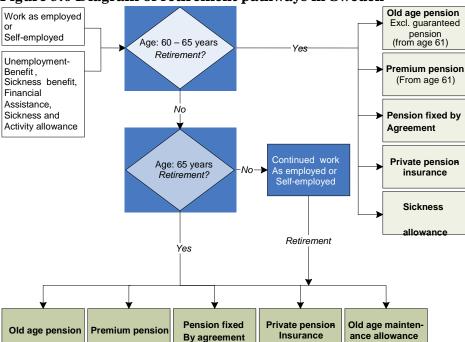


Figure 3.6 Diagram of retirement pathways in Sweden

As a point of departure a person may work either as employed or selfemployed person. If the person does not work, it is possible to receive compensation as e.g. unemployment benefit, sickness benefit, sickness and activation compensation and other kind of financial assistance. Pension may be payable as from age 61. Within specific areas agreements apply to the effect that partial pension may be payable as from age 61. In public service a partial pension may be payable to the tune of 50 per cent on the decision of the employer, subject to 60 per cent of the pension carrying salary In case of a 40 per cent partial pension the result is that income amounts to 84 per cent (0.6 + 0.6\*0.4) of the salary on the basis of which the income was calculated. In practice there is, however, some degree of variation. In Sweden pension is payable without reducing the number of working hours so that a person continues to accumulate entitlement to pension.

If a person retires before age 65 he receives income/supplementary pension, but not the pension fixed by collective agreement The latter is only payable as from age 65. Besides a premium pension, a pension fixed by agreement and private pension savings exist. "The pension fixed by agreement takes different forms depending on the agreement area concerned, but it may be payable as from age 55. If a person has a private pensions savings scheme, a pension hereunder is payable from age 55. Where a working capacity is permanently reduced for health reasons, sickness compensation may be payable. As from 2009 an income of up to SEK 42,800 (Euro 4,627) may be accumulated without reducing the amount of sickness compensation. This is a way to encourage to work at the same time of receiving sickness compensation.

Ordinary pensionable age is 65, but everyone has a right to continue working till the age of 67. After 67 a person may continue to work if a person so wishes, and if the employer and the employed person agree.

Within public pensions schemes entitlement to pension increases in respect of all paid employment. Generally pension from work is calculated as the amount of pension rights divided by the expected remaining life expectancy. In case of low incomes public employment pension is complemented by a pension fixed by agreement and housing benefit and special housing benefit. The latter is of great importance to the total income from pension.

Most persons (approx. 90) have joined an employment related agreed pension scheme. This pension varies from one agreement area to the next, but the similarities are important. Typically pensions rights related to work do not increase after 65 years of age

There is no upper limit as regards a person's working life. If a person is 65 years of age and does not have the basic maintenance needs fulfilled, public assistance is possible through the old age maintenance assistance scheme. This provides a possibility for a person who has not acquired the right to sufficient pension to provide for maintenance.

# Other schemes that may influence decision on retirement

There are other schemes that influence the supply and demand for manpower among older persons. Below a number of measures are described, which may play an important role as to the individual's deliberations regarding retiring from the labour market.

#### Compulsory retirement and right to work

An essential reason for retiring may be compulsory retirement. With the exception of a few collective and individual agreements on compulsory retirement at the age of 70 there are in Denmark no general rules regulating the compulsory retirement age (with pension) of the individual person. In connection with the implementation of the EU Directive on equal treatment on the labour market, which includes a ban on discrimination on grounds of age, Denmark introduced two special rules on maximum age in individual and collective agreements respectively. The Act on anti-discrimination lays down that the ban on discrimination due to age should not prevent maximum age limits in collective agreements entered into before the Act came into operation on the condition that the maximum ages are objectively reasoned by a legitimate purpose within the framework of Danish law. It also follows from the Act on anti-discrimination that the ban on discrimination due to age should not constitute an obstacle to collective or individual agreements on compulsory retirement, on grounds of age, at the age of 70. The possibility exists that the employer and the employed person, as part of their employment contract, agree that employment ceases because of age, however not before the age of 70. Thus the employment relationship shall normally not cease at the age of 70.

In Norway age is considered a substantive reason for dismissal as from age 70 in pursuance of the Working Environment Act. This does not make it compulsory for the person who is to retire to withdraw his/her pension, but it will normally be the consequence. In connection with the Norwegian pensions reform where the upper limit for withdrawing a pension is increased to 75, a modification of the act is being considered.

In Sweden ordinary pensionable age is 65, but everyone has a right to continue working until the age of 67. Thereafter the person may continue to work provided the employer and the employed person agree. Finland has

similar rules as the Swedish ones, however, subject to the fact that the right to continue work applies until age 68.

On the Faroe Islands pensionable age is 67. In public service the maximum retirement age is 70, but this age limit only applies to public servants.

#### Tax incentives

In Sweden persons receiving wages or income from employment may qualify for a special tax reduction, which is normally not applicable to persons solely receiving transfer payments. The rules are especially favourable to persons over 65 years of age.

On the Faroe Islands pensionable age at 67 gives the right to a special personal tax deduction of DKK 16,200 (Euro 2,174) in respect of single persons and DKK 10,200 (Euro 1,369) in respect of married persons respectively. This tax deduction is obtainable only if the person concerned does not receive old age pension. Very few people qualify for this deduction, as the tax free amount of old age pension is three times higher than the deduction, for which reason it is most favourable for most people to take receipt of old age pension.

Employed persons on the Faroe Islands pay a fixed percentage (1.75 per cent as at 2008) of their wages/salaries to a solidarity labour market early retirement pay fund. The contributions cease, however, at age 67. The latter rule is not depending on the person remaining on the labour market. Similarly a person is not liable to pay contribution to the maternity or unemployment benefits fund as from age 67.

Norway has especially favourable taxation rules for old age pensioners, who have attained the age of 67 and persons who receive the pension fixed through agreement and who have attained the age of 64. These tax rules do not apply to persons who continue to work as full time employed. Thus pensioners in Norway pay lower taxes than persons who are still active on the labour market. The reason is that the minimum pension is not liable to taxation and pensioners with higher income have a lower taxation rate than persons in active employment as a consequence of the "social security contribution" and a special deduction amount in respect of age.

#### Property and owner-occupied housing

Substantial personal assets may give the individual person additional economic possibilities to retire prematurely from the labour market. Homeowner's equity and equity in housing societies play an important role as the sale of a dwelling or the taking up of a loan by way of mortgage equity withdrawal (MEW) may release assets which may contribute to the financing of the life as a pensioner. In Denmark profits from house owner's sale of their owner-occupied house or society house is tax free. Interest on MEW may be deducted from the income in the calculation of bottom bracket tax and local authority tax.

### Advantages for owner-occupiers that receive a pension

In the Nordic countries there are different schemes that favour pensioners who own their dwelling.

In Denmark owner-occupiers (inclusive of summer houses) who have attained the age of 65 or who receive anticipatory pension, voluntary early retirement pay or partial pension may qualify for loans granted by the local authorities towards the payment of taxes on property and expenses on connection to collective plants in cases where there is a duty to connect. A person who owns two or more properties, may only qualify for loans in respect of one of the properties<sup>6</sup>. Besides, persons who have attained the age of 65 may get a reduction of the calculated property value tax of 4 per mille of the property value fixed in respect of the property in question. The reduction which is depending on the income has, however, been limited to a maximum of DKK 6,000 (Euro 805) in respect of houses for all-year habitation and DKK 2,000 (euro 268) for summerhouses. In Sweden low incomes are taken into consideration when property valuation increases, in respect of persons of 66 or more and of persons receiving sickness and

<sup>&</sup>lt;sup>6</sup> The amount of the loan plus added interest is due for payment when the property changes owner. The loan is subject to annual interest equal to half of the minimum lending rate of the Danish Central Bank (Nationalbanken) as at 1 october of the previous year (2 % in 2008). However, the interest is not tax deductible. In 2007 the total amount due to the municipalities altogether was approx. DKK 4.8 bill. (0.64 Euro). The number of persons who have obtained a loan towards the freezing of property taxes are not estimated on a national scale

activation benefit. This influences the calculation of property value tax in Sweden.

In Denmark summerhouses shall not be used for overnight purposes in the period 1 October until 31 March apart from short holidays, etc. Pensioners, on the contrary, are entitled to use the summerhouse for all-year habitation if they have owned the property for 8 years. The term pensioner covers all 65+, 60+ if they qualify for a pension, voluntary early retirement pay or flexi allowance fit and anticipatory pensioners. The possibility to have full-year habitation in a summerhouse is very popular among many summerhouse owners approaching pensionable age. In 2006 approx. 7,600 pensioners and person in receipt of voluntary early retirement pay took advantage of the rule and stayed all year round in their summerhouses.

#### Housing benefits

In some Nordic countries there exist special benefits to cover expenses on housing. In Denmark old age and anticipatory pensioners may receive housing benefit payable to both tenants, housing society members and owners. Tenants receive housing benefit as a supplementary benefit which is not liable to repayment. Owners and housing society members receive housing benefit fully or partly as a loan which is subject to repayment when the person moves. Housing benefit is calculated on the basis of the household income, the amount of rent and the size of the dwelling.

In Sweden pensioners may qualify for a housing benefit (BTP). In order to increase the incentive to work, only 50 per cent of income from work and 80 per cent of the amount of agreed pensions is included in the calculation of the qualifying income. Housing allowances are also payable in Norway. This does not only depend on income and assets, but also on the municipality where the person concerned lives, the size of the flat, type of dwelling and the rent. In Finland there are also housing allowances. The FPA assures a minimum benefit for pensioners who do not have a reasonable pension from work or employment.

Housing allowance for pensioners, care assistance for pensioners, child supplement and front veterans allowance also belong to the FPA pensions schemes. However, these benefits may also be payable to pensioners who do not qualify for pensions under the FPA schemes.

## Transport and consumer allowance and other advantages

In Denmark and Sweden regional transport companies offer season tickets to pensioners and persons receiving early retirement at very reduced prices. Similar schemes exist in Finland and Norway in respect of old age and invalidity pensioners. On the Faroe Island the transport companies apply special prices in respect of pensioners. Old age pensioners receive a document from the Faroe Islands' social services authority which gives access to these discount schemes. In Denmark pensioners having funds of less than DKK 59,900 (as at 1 January 2008) may also qualify for health allowance towards medicine, dentures, glasses and physiotherapy, etc.

Pensioners in Denmark are also offered flu vaccinations free of charge.

#### Extra holidays

In Norway employed persons who have attained the age of 60, qualify for an extra week of holiday.

#### Schemes on the demand side

There are schemes that commit business enterprises to set up special conditions in respect of older employed persons, which will contribute to keeping them longer on the labour market. This may be effected on the business enterprise's own initiative or through public incentive schemes.

In Denmark 1/3 of all business enterprises operate a senior's policy established on the initiative of the enterprises themselves. Senior policy schemes are especially common in public services since 58 per cent of public enterprises have such a scheme.

In Sweden labour market contributions are considerably lower in respect of persons of at least 65 years of age. In 2007 the special wage tax (labour market contribution) was reduced in respect of pensioners and was finally stopped in 2008, which makes it less expensive to employ old workers.

Previously Norway had a reduced labour market contribution in respect of persons over 62, but this scheme was discontinued in 2007.

#### Summary

Chapter 3 described retirement pathways in the Nordic countries and demonstrated that all countries have old age pensions schemes, however, with different retirement ages. As a point of departure the retirement age is 65 in Denmark and Sweden. In Norway, the Faroe Islands and Iceland pensionable age begins at 67. In Finland people may retire and receive an employment pension between the age of 63 and 68, and old age pension at 65. In several countries the pensions schemes are undergoing changes for which reason retirement ages will change with time. In Denmark, Norway, Sweden and Finland there is special focus on the adjustment of the pensionable age depending on average life.

Several countries have flexible retirement schemes in respect of public pensions. Thus retirement subject to public old age pensions schemes may take place from age 62 in Norway and Finland and in Sweden from age 61. But as commitment computations in these countries depend positively on of the period of attachment to the labour market (labour market history) – life income - Norwegians, Finns and Swedes have an incentive to remain on the labour market for a longer period of time to have an increase in the pension commitment. In Denmark, Iceland and the Faroe Islands public pensions do not depend directly on the income. Public pension commitments are income adjusted (decreased) in the year they are paid out for which reason compulsory or voluntary pensions schemes to which contributions have been paid during the labour market carrier, influence the amount of public pensions. The possibility of deferred pension in Denmark moves the Danish pensions schemes closer to those we see in Norway, Finland and Sweden since pension payments depend on the labour market history as from the time the person attains the age of 65 and onwards. If pension is deferred in Denmark in order for the person to continue to work, the person benefits from a higher rate of pension. In Iceland the old age pension commitments are increased by ½ per cent for each month payments are deferred. Besides the different, concrete computation formulas, as regards pension commitments, that vary from country to country, Denmark and Iceland differ from Finland, Sweden and Norway in the sense that the computation of public pensions only depend on labour market attachment from age 63, 65 and 67 whereas computation depend on the whole carrier in the other

Where a person wishes to retire before attaining pensionable age, the Dane may retire and receive voluntary early retirement pay from age 60. On the Faroe Islands and in Iceland it is not possible to retire on a publicly

subsidised pensions scheme until the person has attained the age of 67. The latter two countries do, however, have anticipatory and disability pensions schemes based on medical grounds, like the other Nordic countries.

In Sweden a person looses his right to work at 67-years of age. In Finland persons may continue to work, subject to agreement with the employer, after the age of 68, but they do not acquire entitlement to further pension. In Norway – under the working environment act – an employed person may be given notice at the age of 70. In Denmark one third of the business enterprises have a senior policy contributing to keeping the older person on the labour market.

A majority of Nordic citizens are covered by work related pensions schemes influencing incentives to retire at different periods of time. Furthermore there are redistributive subsidies in the transfer and taxation schemes, which benefit special groups in society. There are thus in most Nordic countries supplementary schemes payable to pensioners who live in tenants flats, there are special allowances against taxes on housing for those who own their dwelling, there is support towards transport costs in some countries, and in many countries there are incentives towards pensions savings payments through taxation. Finally Sweden, Norway and Finland have special tax rules applying to the older part of the population.

#### Chapter 4

# Application of the Nordic Retirement Schemes

Chapter 4 gives an overview of the number of persons in the age group 60 – 74 in the Nordic countries who have retired fully or partly in 2008<sup>7</sup>. The purpose of this chapter is to give a comprehensive view of when men and women typically retire and of the number of persons that work at the same time as receiving a pension. In other words this chapter provides statistics showing which of the retirement pathways described in chapter 3 are the typical ones in the respective countries.

In chapter 1 figures 1.1.a and b showed the share of men and women who receive some kind of pension at age 60 - 74. The figures showed that the share of the populations who benefit from some kind of retirement scheme, increases while approaching ordinary retirement age in each country. The number of women depending on a pensions scheme is higher than that of men in all the Nordic countries. There was a minor discrepancy on the Faroe Islands where an especially small share of the population receives old age pension till age 67. The primary reason is that anticipatory pension is the only possibility of early retirement before pensionable age on the Faroe Islands, for which reason a relatively small share of the population has retired fully or partly as 60 - 66 years of age.

Where a comparison is made only between Denmark, Sweden and Norway, figure 1.1.a furthermore shows that the share of Swedish and Danish men benefiting from some kind of pension scheme is generally higher than that of Norwegian men. It should in this connection be noted that the figure does not include persons benefiting from schemes outside the pensions schemes, i.e. persons that may benefit from other social security schemes, which the figure does not take into consideration as e.g. unemployment benefit.

48

<sup>&</sup>lt;sup>7</sup> It should be noted that the figures are computed as at the beginning of 2008 in respect of Denmark, Sweden and the Faroe Islands and at the end of 2009 as regards Iceland, Norway and Finland. Consequently there is one year's discrepancy as regards the computation of the figures between some of the countries. But it is not expected that there are great changes in the course of one year.

In respect of women in Denmark, Sweden and Norway the retirement schemes applicable to age 60 to 74 are applied to a much higher extent in Denmark than in the other countries. At age 65 the share of Swedish women enjoying some kind of retirement scheme reaches the level of Danish women.

In this chapter we shall look in greater detail at the specific schemes that the old persons in the Nordic countries benefit from and examine the share of different age groups who have retired fully or partly.

First the chapter deals with retirement on old age pension schemes in respect of the 60–74-year-olds. Thereafter with the application of early retirement schemes in respect of the 60–64-year olds. These may be expected to have greater importance in Denmark and Norway than in the other countries. The reason is that old age pension here is not payable until the person has attained the age of 65 whereas the payment of old age pension is more flexible in Finland and Sweden. Flexible payment of old age pension in Norway will, however, be possible after the reform in 2011.

Annex 1 contains figures showing the percentage of persons in each specific age group receiving specific benefits whether they have retired fully or partly.

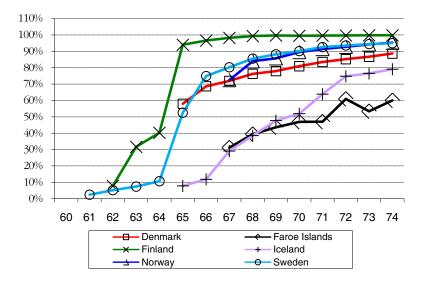
#### **Old Age Pension**

In this section we shall look at the application of old age pensions in the Nordic countries. First of all we consider the share of persons aged 60-74 receiving "full time" old age pension and thus receives, old age pension without working at the same time. Subsequently we shall look at the share of persons at different age groups receiving old age pension and working at the same time.

#### "Full Time" Old Age Pension

The most advantageous time of receiving old age pension varies from country to country. Retirement ages for old age pension is described in figures 4.1.a and b. showing respectively the share of men and women in age cohort 60 to 74 in 2008 who have retired fully and who do not work.

Figure 4.1.a The percentage of men receiving "full time" old age pension in 2008



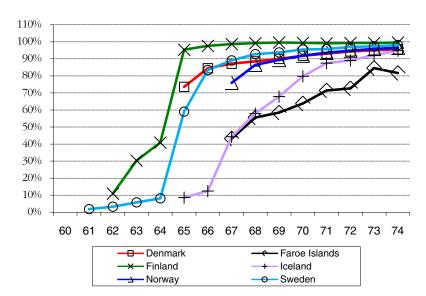


Figure 4.1.b The percentage of women receiving "full time" old age pension 2008

It should be noted that it is difficult to compare the figures in respect of Finland and the Faroe Islands with those of the other countries.

As regards Finland this is due to the fact that it is not possible to separate persons who work at the same time as receiving a pension, from persons who have retired completely. Persons working at the same time as receiving a pension in Finland is included in figures 4.1.a.and b in respect of Finland. The figures show that almost 8 % of Finnish men and 11 % of Finnish women receive old age pension at the age of 62. Subsequently the percentage increases by up to 31% and 40 % in respect of 63 and 64-year-olds – both men and women. At age 65 almost all Finns receive old age pension.

The Faroe Islands differs in the sense that a small part of both men and women receive full old age pension without working at the same time. This is due to the fact that it is not possible to separate income from work from income from pensions in the computation of taxable income in respect of old age pensioners. To compensate, the lowest income limit is applied in respect of income over and above old age pension of up to DKK 25,000 (Euro 3,356) annually. Old age pensioners with an annual income under the

said amount are registered as pensioners receiving a full old age pension in figures 4.1.a and b. Therefore the graphs are at a low level.

The graphs for Sweden, Norway and Denmark are more easily comparable.

In Sweden old age pension is payable as from age 61, but the number of persons receiving full old age pension shows a sharp increase at age 65. The share of men and women receiving full old age pension increases from a few percent in respect of the 61-year-olds to approx. 10 % in respect of the 64-year-old men and women. As from age 65 the increment of Swedes receiving "full time" old age pension accelerates. Approx. half of Swedish men receive full old age pension as 65-year-olds and 59 % of the women. Two important reasons for the increment being highest at age 65 is, first that the guaranteed minimum pension is payable as from age 65 and, second that entitlement to the employment related pension is acquired until age 65. From age 67 the increment takes place at a slower rate.

58 % of Danish men receive full old age pension at the age of 65 which is the lowest age for receiving old age pension in Denmark<sup>8</sup>. Before age 65 many have availed themselves of the possibility of retiring with voluntary early retirement pay. At the age of 65 75 % of Danish women have retired completely. Consequently the share of Danish men receiving old age pension is approx 9 percentage points lower than that of Swedish men.

In Norway 72 % of the men have retired completely with old age pension at age 67. This corresponds to the Danish figures. At the next age group the Norwegian percentage is equal to the Swedish one and goes alongside with the Swedish one as regards the remaining age groups.

In Norway, Sweden, Denmark and on the Faroe Islands the share of women receiving full old age pension is generally higher than that of men. An explanation might be the marriage patterns. Where women typically are married to men who are a few years older, and the couple wishes to retire at the same time, this will have the effect that the number of women receiving a pension at a given age is higher than the number of men.

In Iceland it is not possible to receive old age pension (under the national social security scheme) until age 67, unless the person is covered under the labour marked pension scheme facilitating retirement at 65 (however, subject to a lower rate of pension). Consequently the application of old age pension at age 67 increases sharply at age 67. Subsequently, compared with

\_

It should be noted that old age pension is only payable as at the first day of the month following person's attaining the age of 65. As the figures in respect of Denmark are computed on the basis of data as at 31 December of a year, the person born in December is not included until they attain the age of 66. Consequently the real share of persons retiring with old age pension at the age of 65 is underestimated

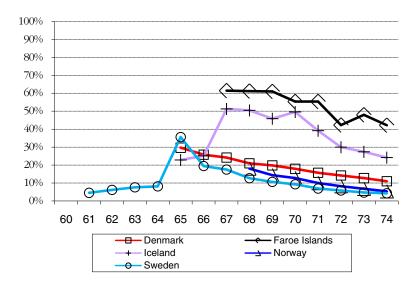
the other countries, there is a moderate increase in the number of persons who retire when reaching the subsequent age groups.

#### Old age pension and work at the same time

This section looks at the share of age group 60 - 74 receiving old age pension but working at the same time. We will not quantify the number of hours of work a pensioner carries out, but only demonstrate if the person works at the same time of receiving a pension or not.

Figures 4.2.a and b show the percentage of men and women receiving a pension and working at the same time.

Figure 4.2.a The percentage of men receiving partial pension 2008



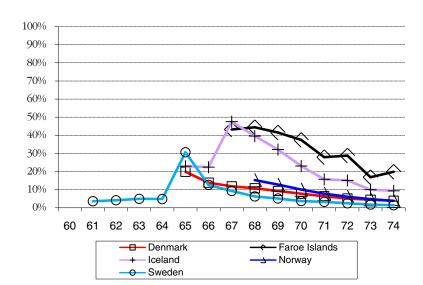


Figure 4.2.b The percentage of women receiving partial pension 2008

It should be noted that there are no graphs in respect of Finland. The reason is as mentioned previously that in Finland it is not possible on the basis of the given data to make distinctions between persons receiving full pension and partial pension. Persons working at the same time as receiving a pension are included in figures 4.1.a and b.

It is also difficult to make meaningful comparisons between the Faroe Islands and the other countries. This is due to the fact that it is not possible to separate income from work and income from pensions in connection with the computation of taxable income in respect of old age pensioners. To compensate, a lower income limit in respect of income over and above old age pension has been applied of up to DKK 25,000 (Euro 3,356). Old age pensioners having an annual income under this amount are registered as pensioners receiving a full old age pension in figures 4.1.a and b for which reason the graphs for the Faroe Islands are at a relatively high level in figures 4.2.a and b.

A little over 35 % of the Swedish<sup>9</sup> and approx 30 % of the Danish men work at the same time of receiving old age pension. This percentage

<sup>&</sup>lt;sup>9</sup> The Swedish figures, however, are computed at an annual basis. Therefore a number of persons will be able to retire in the month the person concerned attains the age of 65, but

decreases to 20 % in respect of the 66-year-olds in Sweden. Subsequently the percentage decreases by about two percentage points for each age group in Sweden. In Denmark the decrease is not as striking at age 65-66 as in Sweden. But in return the share of men who work at the same time of receiving old age pension drops by approx. 2 % in respect of each age group until age 74. As from age 68 the Norwegian level is between the Danish and the Swedish.

About 30 % of the Swedish and 20 % of the Danish women work and receive old age pension at the age of 65. As regards women in both countries the percentage drops to approx. 15 % in respect of the 66-year-olds and decreases gradually by one or two percentage points a year. However, the decrease is more substantial in Sweden than in Denmark. Approx. 15 % of Norwegian women work and receive old age pension at age 67 which thus indicates a somewhat higher level than both Denmark and Sweden. As regards the next age group the share decreases gradually to the effect that Norwegian women working at the same time as receiving a pension, is at the same level as Denmark, i.e. about 4 %.

In Iceland the share of persons receiving old age pension and working at the same time, is relatively high. Contrarily we saw that the share that had retired was relatively low. The latter situation might be attributable to the fact that deferred pensions payments had resulted in higher pension commitments.

But as may be seen 40 % of the 68-year-olds Icelanders have retired completely and 50 % have retired and continued work at the same time which means that the fact that the low percentage of persons who have retired completely is not due to the gain obtained in postponing pensions payments, but rather a preference for work and the desire to have a higher income.

#### Early retirement

This section looks at early retirement in connection with other schemes than old age pensions in respect of the 60-64-year-olds. In chapter 3 we distinguished between involuntary and voluntary retirement schemes. In the first part of this section we shall be looking at the application of involuntary

nevertheless be registered as a person who works at the same time of receiving a pension as he has had an income from work in the year during which he retired, prior to retirement proper. The figure in respect of persons working and receiving a pension is consequently overestimated as regards the 65-year-olds.

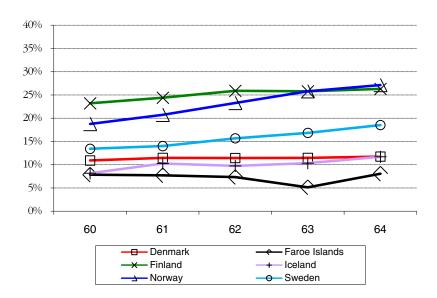
schemes. In Norway and Finland these are disability pension schemes and in Denmark, Finland and the Faroe Islands anticipatory pension schemes, whereas it is sickness allowance in Sweden. These schemes are characterized by the fact that persons qualify for the payments if their functional capacity has been reduced to an extent which makes the affiliation to work difficult. These schemes are referred to as anticipatory pensions schemes in this chapter.

Of considerable voluntary early retirement schemes we have the voluntary early retirement pay scheme in Denmark, in Finland the special pensions scheme for farmers and partial pension which may be payable as from age 58. In Norway these are early voluntary retirement schemes as e.g. the pensions fixed by collective agreement and survivor's pension. In Sweden old age pension may be payable as from age 61. Besides the collectively fixed pensions or a private pensions insurance scheme exist as early retirement schemes. As it is most unusual that persons take receipt of one of the latter pensions without receiving old age pension at the same time, graphs in respect of Sweden are not incorporated. On the Faroe Islands and in Iceland there are no early retirement schemes in respect of persons under 67 years of age neither fulltime nor part time.

#### Full anticipatory pensions

In this section we look at the share of age group 60 - 64 in receipt of anticipatory pension and without working at the same time.

Figure 4.3.a The percentage of men receiving full anticipatory pension 2008



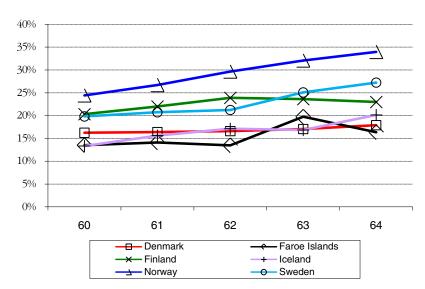


Figure 4.3.b The percentage of women receiving full anticipatory pension 2008

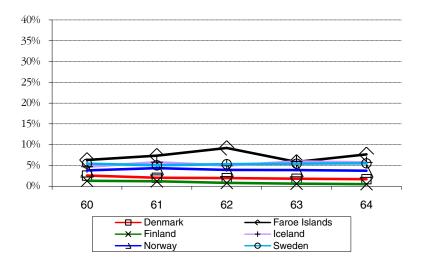
Figures 4.3.a and b show the percentage of the 60-64-year-olds receiving anticipatory pension and not working at the same time. As regards men this rate is highest in Finland in respect of the 60-62-year-olds where 23 % of the 60-year-old men receive anticipatory pension without working at the same time. As regards the 63-64-year-olds the rate is 26 %. Norway follows next with approx. 19 % of the 60-year-old Norwegian men receiving anticipatory pension and 27 % of the 64-year-olds. In Sweden only 13 % of the 60-year-olds receive anticipatory pension increasing to 19 % in respect of the 64-year-olds. Approx. 10 % of the Icelandic and a little more than 10 % of the Danish men of 60 – 64 receive anticipatory pension. The Faroe Islands have the lowest share of men receiving full anticipatory pension.

With the exception of Finland the share of women receiving anticipatory pension or disability pension is generally 5 - 8 % higher than that of men.

## Anticipatory pension and work at the same time

Figures 4.4.a and b show the share of men and women in 2008 of the 60-64 cohorts receiving anticipatory pension at the same time as they work. The share is generally lower than the figures in respect of the anticipatory pensioners who do not work at the same time.

Figure 4.4.a The percentage of men receiving partial anticipatory pension 2008



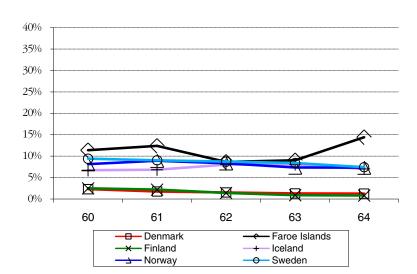


Figure 4.4.b The percentage of women receiving partial pension 2008

Where the Faroe Islands were at the bottom level as regards the number of persons receiving anticipatory pension without working at the same time, the Faroe Islands is at the top when it comes to persons working at the same time as receiving anticipatory pension. Even if a person qualifies for anticipatory pension for health reasons, a reason for placing the Faroe Islands at the top in figure 4.4.a and b may be that there are no alternative retirement schemes for persons aged 60 - 64. The Faroe Islands has the highest rate as regards both men and women. The percentage varies a lot, however, from cohort to cohort, which is probably due to the fact that numerically the population in the Faroe Islands is much smaller than in the other Nordic countries. Thus the fluctuations are probably not due to institutional differences within the age group 60 - 64 years.

Iceland, which has no early retirement schemes besides anticipatory pension, is not placed at a higher level than Sweden as regards the number of anticipatory pensioners. On the basis of these figures it is thus difficult to conclude that just because a country does not have any other early retirement schemes, the possibility of applying anticipatory pension is more often used.

Sweden and Norway have top placement as regards persons in receipt of anticipatory pension and working at the same time. Finland and Denmark have the bottom position. Denmark is placed rather low as efforts are made

in Denmark to try to find a flexi-job for the person concerned, and only if he/she is not able to take a flexi-job, anticipatory pension is granted.

#### Other early full retirement schemes

This section looks at the application of other early retirement schemes in the Nordic countries. An important early retirement scheme in Denmark is the voluntary early retirement pay scheme, in Finland there is the special pensions scheme for farmers. In Norway pensions fixed by collective agreement and "survivors' pensions". In Sweden old age pension is payable as from age 61. Besides, of other retirement schemes there are the pension fixed by collective agreement or a private pensions insurance scheme. As it is most unusual that persons take receipt of the latter without receiving old age pension at the same time, there are no graphs for Sweden. On the Faroe Islands and in Iceland there are no early retirement schemes in respect of persons under 67 years of age neither full time nor part time. For this reason there are no graphs for the Faroe Islands nor Iceland in this section.

Figure 4.5.a The percentage of men on a full time early retirement scheme 2008

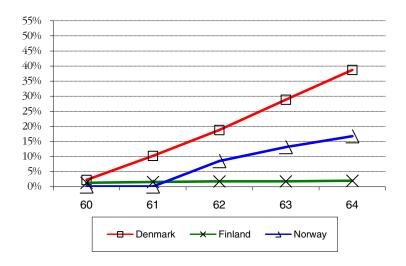
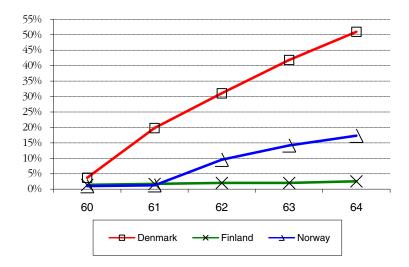


Figure 4.5.b The percentage of women on a full time retirement scheme 2008



Figures 4.5a and b show the percentage of the age group 60 – 64 in 2008 who has retired completely from the labour market against receiving a voluntary pension. The number is quite low in respect of Finland which is due to the fact that in Finland it is possible to take receipt of old age pension as from age 62 (furthermore the possibility of farmers to receive farm closure allowance It is in Norway and especially Denmark that the early alternative retirement schemes are most frequently used. This is seen by the fact that approx. 10 % of all Danish men and just below 20 % of the women have retired completely subject to voluntary early retirement pay at the age of 61. At age 62 19 % of the men and 31 % of the women receive voluntary early retirement pay full time. Correspondingly 9 % of the men and 10 % of the women in Norway receive the pension fixed by collective agreement or a survivors' pension at the age of 62. At age 64 50 % of the Danish women receive voluntary early retirement pay without working at the same time whereas 1/3 of the men do. In Norway approx. 17 % of both men and women receive the pension fixed by collective agreement or survivors' pension at age 64.

#### Other part time early retirement schemes

In Denmark persons receiving voluntary early retirement pay may work for a few hours a week and up to a certain income limit without reducing the amount of voluntary early retirement pay. Income over and above the fixed amount is set off against the early retirement pay hour by hour 10.

In Finland it is possible to receive partial pension. In Norway a partial pension fixed by collective agreement or survivors' pension are payable if desired, at the same time as retaining work.

The hour by hour set-off in the voluntary early retirement pay influences the incentive to work at the same time as receiving the early retirement pay in different ways for different

income groups is analysed in Chapter 5.

Figure 4.6.a The percentage of men on early partial pensions scheme 2008

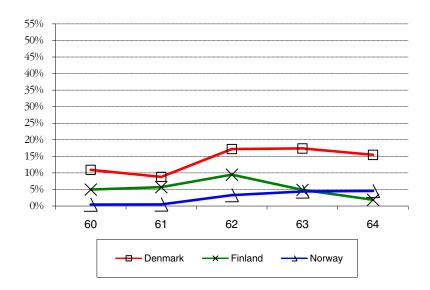
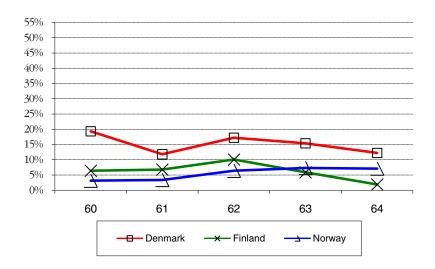


Figure 4.6.b The percentage of women on early partial pensions scheme 2008



Figures 4.6.a and b show the share of the 60 – 64-year-olds in 2008 on early retirement scheme and retaining work at the same time. The figures show that the share is biggest in Denmark. 11 % of all Danish men at age 60 work at the same time as receiving the voluntary early retirement pay. The corresponding figure for women is 20 %. In Norway the percentages are 6 and 3 respectively for women and 5 and 0.5 for men.

The percentage is 9 for Danish men aged 61. But as regards the 62-64-year-olds the percentages are 12-17 % in respect of Danish men. That the graphs are highest in respect of the 60- 62-year-olds in Denmark may be due to the fact that application of the voluntary early retirement scheme is biggest for these age groups. In Finland the share of men and women receiving another early retirement scheme subject to work at the same time in respect of the 62-year-olds is the highest. Here the percentage is 10 %. Similarly the percentage is approx. 2 in respect of the 64-years of age.

#### Summary

Chapter 4 gave descriptive statistics on the application of different retirement schemes in the Nordic countries.

The general picture is that women retire earlier than men in the individual countries. Not surprisingly an increase in total application of possible pensions schemes is seen the closer the person is to pensionable age (old age pension i.e. 65 and 67 years of age).

The application of old age pensions schemes is concentrated around 63 and 64 years of age in Finland and 65 in Sweden, even if retirement, subject to old age pension, is possible to some extent from 58 and 61 respectively in the year under review (2008). In the other countries public old age pensions schemes are applied to a high degree as from the age when pensions are payable.

As regards the age prior to the citizens attaining the right to old age pensions schemes, especially the voluntary early retirement pay scheme is applied in Denmark. The majority of the persons who chose the voluntary early retirement pay scheme, does not work at the same time. In Norway the application of the pension fixed by collective agreement increases from age 62-64, both as regards persons who have retired completely or who work at the same time. The number of persons applying this retirement possibility is, however, much lower than the number of Danes receiving voluntary early retirement pay.

On the Faroe Islands, in Finland and Norway and to some extent in Sweden a great share of the 60 – 64-year-olds receive anticipatory pensions for health reasons, disability pensions or sickness allowance. The extended application of anticipatory pensions and work at the same time on the Faroe Islands, is probably attributable to the fact that there are no alternative early retirement schemes there. This, however, also applies to Iceland where the application pattern, however, is not different from the other Nordic countries. Therefore it may not be concluded that if there are no early retirement schemes, anticipatory pensions schemes are more frequently applied. On the contrary the differences between the countries are rather due to different qualifying criteria within the schemes.

Besides, in the Nordic countries we find that an important share of different age cohorts work at the same time as they receive a pension. The number of persons doing so decreases, not surprisingly, with age. The possibility is most frequently used in connection with old age pension in Iceland.

#### Chapter 5

# Income Coverage in the Event of Retirement and Work

#### Introduction

There may be several reasons for the 60 – 74-year-olds retiring from the labour market. Besides the fact that special age groups as e.g. that of old age pensionable age, may be a motivating norm for retirement, preference for leisure time, changed health situation and problems involved in finding a suitable job and of course financial advantages achieved under different pensions schemes, influence the decision on retirement. Some older people chose not to work because the financial gains from work are too insignificant. However, as demonstrated in Chapter 4 quite a number of older persons work at the same time as receiving a pension. Taking simulated replacement rates in respect of a number of categories of persons as the point of departure, this chapter will first look at the financial incentive to retire at 63, 65 and 67 years of age respectively and secondly changes in the replacement rates in respect of work together with receipt of pension at different ages.

We will look at the incentive to retirement and work based on the replacement rate.

The replacement rate measures the simulated income at the time of retirement in relation to income before pensionable age. We look at net coverage margins, i.e. coverage margins in respect of disposable income after tax, pensions and supplements. A specification of the pensions, retirement schemes and supplements that are included in the analysis will appear from the next section. We look at how much the replacement rate changes if a person chooses to work 1 or 3 days a week besides receiving a pension. This expresses the gains in disposable income which a person will

get from working for a few days a week, once he/she has decided to take receipt of a pension. When differentiating the number of weekdays the categories of persons work after retirement, we will show how the replacement rate changes with increased work.

We shall only look at the replacement rate at the time of retirement, but not at the consequences increased work has on total income from pension for the remaining life time after the time of retirement. Each person who chooses to work an additional year may expect to acquire the right to a higher total amount of pension depending on the nature of the pension scheme. Such deliberation may be of significance in e.g. Norway and Sweden. Even if a person acquires "full coverage" in the event of retirement at the present point of time, a person taking early receipt of his pension in these countries, will see in a decrease in the replacement rate in the long term. For instance if a person works and receives a pension from the age of 65 to 67 and acquires total coverage of 100 %, the pension will, from age 67, be payable at a permanent lower rate than if the person had postponed pension until age 67. Furthermore one year of full or partial deferred pension will have the result that less savings are needed in order to achieve a desired income when retiring.

# Characteristics of the categories of persons

In order to illustrate how the pension scheme and taxation influence different categories of persons we have chosen to take concrete categories of persons as the point of departure as described in this section. We take single persons without children, who may retire at the ages of 63, 65 or 67 respectively, as the point of departure.

As pension commitments within certain pension schemes depend on the amount of income a person had while being on the labour market, we will define four different income levels in relation to the target of an average worker (AW)<sup>11</sup>, who has had full time employment and an average pay throughout his career. The four levels are the following:

I. 67 % AW II. 100 % AW

<sup>&</sup>lt;sup>11</sup> "AW" is the British abbreviation for average worker (AW). The percentage has been given on the basis of OECD's definitions.

III. 150 % AW IV. 200 % AW

In the calculations we assume that the person has been employed since age 25 in order to secure that the category is entitled to the most common pensions. A typical life time income will have the result that the 150 % AW or 200 % AW very rarely had high wages throughout the life cycle. On the contrary these persons will typically have had increasing income throughout life

Therefore the following standardised wage profiles in respect of the life cycle of the four income groups are assumed:

#### 67% AW profile:

67 % AW from the age of 25 until retirement

#### 100 % AW profile

100 % AW from the age of 25 until retirement

#### 150 % AW profile:

100 % AW from the age of 25 up to and inclusive of age 47

150 % AW from age 48 up to and inclusive of pensionable age, which may be 63, 65 or 67 years.

#### 200 % AW profile:

100 % AW from age 25 up to and inclusive of 39 years

150 % AW from age 40 up to and inclusive of 54 years

200 % AW from age 55 up to and inclusive of pensionable age, which may be 63, 65 or 67 years,

In respect of the categories of persons of 67 % and 100 % income of the AW it is assumed that they had this income level throughout life.

The incomes which the categories of persons may receive outside the labour market after pensionable age, as e.g. old age pensions, labour market related or individual pensions will, however, depend on the possibilities given in the individual Nordic country. This also applies to different types of transfer payments as e.g. housing benefits.

The table below shows the schemes included in respect of each country in the calculation of income from pensions and retirement in the event of retirement at age 63, 65 or 67 respectively.

Table 5.1 Schemes included in the calculations in each of the respective countries

	Denmark	Faroe Islands	Finland	Iceland	Norway	Sweden
63 years	Voluntary early retirement pay  Housing benefit	-		-		Income related pension  Contractual pension  Housing benefit
65 years	Old age pension  Labour market pension  ATP  Housing benefit	-	Labour market pension Old age pension	Labour market pension	National social security  Contractual pension  Occupational pension	Income related pension  Contractual pension
67 years	Old age pension  Labour market pension 2 years' deferred pension  ATP  Housing benefit	Old age pension Solidarity labour market pension (AMEG)	Housing benefit	Basic pension Labour market pension	Housing benefit	Guaranteed pension  Supplementary pension  Housing benefit

To make the calculations comparable and to take account of newly implemented reforms, which have the result that the level of pensions and

the replacement rates in Norway, Sweden and Finland depend on new calculation methods, the calculations are made in respect of a person born in 1980. In Denmark the calculations are made in respect of a person retiring in 2008. The calculations for Norway are based on the system introduced as from 2011.

All cases have been calculated on the assumption of constant prices and wages so that there is no inflation or increases in real wages.

Further country specific assumptions on which the calculations are based, will appear from annex 2.

#### Disposable income as a pensioner

By comparing disposable incomes in respect of the individual categories of persons in the Nordic countries we shall illustrate the income level in respect of persons retiring at different ages taking the retirement schemes as appear from table 5.1 into account. Disposable income is defined as gross income with deduction of taxation.

Table 5.2 is a survey of disposable incomes depending on the person being a 67, 100, 150 or 200 % AW and on the age at which the person retires (63, 65 or 67 years of age).

In respect of Norway, Sweden, Iceland and Finland the calculations have been made for persons born in 1980. For Denmark and the Faroe Islands calculations have been made in respect of a person retiring in 2008. Amounts in EURO 2008.

Table 5.2 Disposable income per month in respect of a worker who has had full time employment depending on the income profile during working life and time of pension - total cessation of work.

	Denmark (1 €= 7.45 DKK)	Faroe Islands (1 €= 7.45 DKK)	Finland	Iceland (1 €= 127.46 ISK)	Norway (1 €= 8.01 NOK)	Sweden (1 €= 9.25 SEK)			
63 years	1 483	0	1 066	0	1 688	1 090			
65 years	1 598	0	1 092	1 000	1 664	1 121			
67 years	1 725	1 206	1 133	1 508	1 714	1 147			
			AW	100 %					
63 years	1 483	0	1 198	0	1 774	1 165			
65 years	1 797	0	1 348	1 405	1 927	1 312			
67 years	1 938	1 206	1 494	1 722	2 096	1 527			
			AW	150 %					
63 years	1 483	0	1 418	0	1 922	1 664			
65 years	1 974	0	1 624	1 762	2 053	1 927			
67 years	2 126	1 206	1 790	2 121	2 353	2 246			
		AW 200 %							
63 years	1 426	0	1 626	0	1 936	2 191			
65 years	2 356	0	1 847	1 941	2 069	2 434			
67 years	2 512	1 206	2 095	2 327	2 449	2 847			

Obs. Calculation from the currencies of the individual counties into EURO has been made on the basis of an annual average of currencies based on Danmarks Statistik, Statistikbanken in respect of SEK, NOK and DKK in 2008. Calculation of ISK into EURO has been made on the basis of the Iceland Central Bank's (Sedlabanki Islands) home page.

In respect of Norway, Sweden and Finland pensions payments increase the longer pension payment are postponed because pension rights may be acquired for a greater number of years. This phenomenon urges people to remain on the labour market for a longer period of time. In Norway and Sweden it has an additional effect on the pension payments that the devisor applied to calculate the annual pension decreases with postponement of retirement. This again will make pensions commitments increase further. It should be noted, however, that income decreases in Norway in case of category AW 67 % if a person postpones retirement from 63 to 65. This happens even if gross pensions are lower at age 63 than 65 and 67. Part of

the explanation is that taxation is low when pensionable age is 63 and at the same time the person will still receive housing benefit (bostøtte) which lapses completely if retirement age is 65 or 67.

In Denmark income increases after retirement at age 63 - 65 because a person is transferred from the right to receive voluntary early retirement pay to old age pension. If a person does not take up voluntary early retirement pay a premium not liable to tax, is paid at age 65, which creates a further incentive to remain on the labour market for a longer period of time. As this premium is a one-off payment, the non-taxable premium is not included in the above calculations. Furthermore benefits increase from age 65 - 67 based on the assumption that the person has had his pension deferred and will thus qualify for a higher old age pension commitment. Furthermore retirement income increases with age group 63 - 67 because the categories have had several years of contribution to the labour market pensions schemes and the ATP.

In Iceland retirement income increases from age 65 - 67 because a person contributed more to the labour market pension schemes and is entitled to higher payments from those schemes and because persons are entitled to basic pension from age 67.

The Faroe Islands have a flat pension rate in respect of all income groups from 67 years of age.

With the exception of 200 % AW in Sweden, Norway has generally the highest income from pensions in respect of persons who wish to retire at 63 years of age. The relatively high amounts of disposable income with retirement at 63 is due to new rules applying to pensions fixed by collective agreement since the pension includes a supplement which is limited in time and which is only payable from age 62 to 66. As we are looking at the income from pension at the time of retirement and not at a discounted value of future expected income from pension, the table does not show a lifelong effect of deferred retirement. Lifelong effect on the pension of deferred retirement to age 67 may in respect of Norway be bigger than what the table might immediately show.

In respect of the Dane who retires at 63 or 65, the calculation of old age pension and voluntary early retirement pay is independent of earlier income from work. On the other hand the Dane will have more years of contributions to the labour markets pensions schemes and may thus increase income at retirement.

Income from pension in respect of a 63-year-old under table 5.1. is therefore solely based on maximum benefits under the voluntary early retirement pay scheme. This explains the important improvement of the disposable income if a person postpones retirement until age 65.

In Finland especially the effect of pension commitments reflecting the increasing pensions savings in the event of later retirement, is seen. This is true for everybody, but most evident for groups with a high income because of the somewhat higher percentage of the wages/salaries, on the basis of which right to the pension is acquired after age 63.

Even if Sweden has the lowest disposable income during retirement in respect of the workers who have AW 67 % or AW 100%, disposable income is rather good for workers of AW 150 % and AW 200 % in which cases Sweden takes the pride in the Nordic countries.

#### Pensioners' replacement rates

The comparison of disposable income as described in the previous section have weaknesses stemming from the fact that we have a nominal target. The target does not take the income level into consideration in the individual countries. Therefore it is difficult to say if it is advantageous to go on working instead of retiring – based on nominal disposable income. The nominal target makes it difficult to make comparisons across countries as countries with a lower price level would need lower pension levels. By comparing disposable retirement income with a suitable alternative income – the disposable income which the person would have gained had he/she worked full time instead of retiring in the respective country – we will get a relative target, which first of all may give an assumption of how big the relative compensation is, which the pension will render compared to work,, and secondly we may compare more truly across countries. The suitable target is the replacement rate.

The replacement rate measures the margin between the income received as a pensioner and income from work at the time of retiring. In this thematic report the replacement rate is calculated on the basis of the disposable income to demonstrate that not only the pensions scheme, but also the taxation scheme influence compensation at the time of retiring. The calculations will thus demonstrate than progressive taxation schemes tax person with a high income more that persons receiving a low income.

The replacement rate at the time of retirement thus gives a picture of how the income of categories of persons will change relatively when a person retires and changes the income source from income from work to income from pension, which is illustrated in table 5.1.

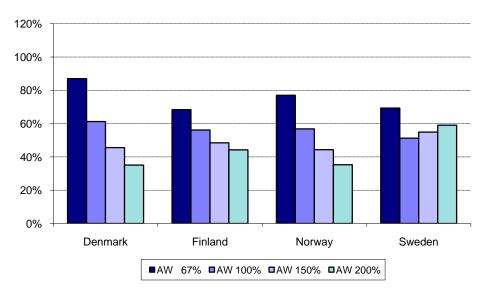
The rest of this chapter looks at the replacement rate when retiring at different ages on the basis of the schemes included in table 5.1, and illustrates how the replacement rate is influenced by extra work at the same time as receiving a pension. In real terms many savers have individual

pensions schemes, which are not included in the analyses. Furthermore Chapter 3 demonstrated that there are several schemes that influence attitude to retirement. Such schemes are disregarded in the section below.

## Replacement rates in the event of full retirement

As the point of departure we will show how big the replacement rate is in respect of a person who retires at 63. For each country the replacement rates are shown in figure 5.1.a depending on the category of persons we are looking at. For Denmark and the Faroe Islands the calculations have been made on the basis of a person retiring in 2008. For Norway, Sweden, Finland and Iceland calculations have been made in respect of a person born in 1980.

Figure 5.1.a Replacement rate in the event of full retirement at the age of 63



The figure is to be interpreted as follows: If the replacement rate, i.e. the column, reaches 100 % there is full coverage and the income from pension

corresponds to the income from work a person would have qualified for, had he/she remained on the labour market full time. If the replacement rate is under 100 % there would be a need for supplementary income from personal savings or work at the same time as receiving the pension in order to achieve full time income form work. The further away from 100 % the more the need and incentive is to get supplementary income e.g. from work. If the replacement rate is higher than 100 % the person in question will have an income level at the time of pension which is higher than the one he would have obtained had he remained on the labour market. In such a case there is no financial gain involved in remaining on the labour market, and the system will not encourage the person to remain on the labour market. In the typical cases described below there are examples of the contribution ratio exceeding 100 %. The appurtenant columns are hatched.

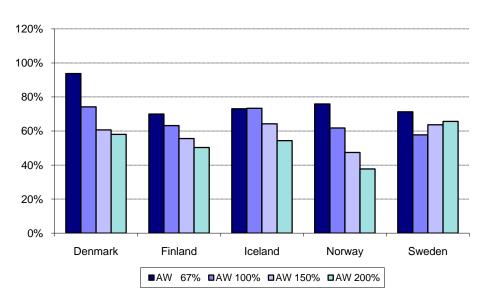
Figure 5.1.a does not include calculations for the Faroe Islands and Iceland as it is not possible to receive a pension at age 63 in those countries.

In Denmark, Finland and Norway the replacement rate declines when the income level increases so that it becomes more difficult to have full income replacement as a pensioner the higher the alternative income was. A person with a high income is thus to a much higher extent depending on personal savings than a person with low income if the person wishes to retire fully and wishes a high financial coverage. This gives persons with a high income incentive to work. The same thing is not the case in Sweden where the replacement rate is still highest in respect of AW 67 %, but lowest for AW 100 % subject to increases for AW 150 % and again for AW 200 %. This is due to the fact that calculations in Sweden take into account how the Swedish occupational pensions will develop in respect of persons employed in the private sector as from 2012. From 2012 employers are to pay 4.5 % of the wages/salaries up to a 2008-level of SEK 360,000 (EURO 38,919) (7.5 basis amount) and 30 % of all income over and above. As regards the first two categories 67 % AW and 100 % AW the result is that they will only have saved 4.5 % of their income by way of occupational pension, whereas the next two categories 150 % AW and 200 % AW will save 30 % of the income which is beyond the basic amount of 7.5) 12 The pension coverage deriving from the 30 % in respect of higher incomes means more than the loss in pension coverage arising from the fact that the statutory pension is solely based on income up to the basic amount of 7.5.

 $^{12}$  In respect of income under the basic amount of 7.5 a total of 23 % must be paid as statutory pension and occupational pension.

Figure 5.2.a and figure 5.3.a illustrate corresponding replacement rates in respect of categories of persons who either postpone retirement until age 65 or 67.

Figure 5.2.a Replacement rate in the event of full retirement at the age of 65



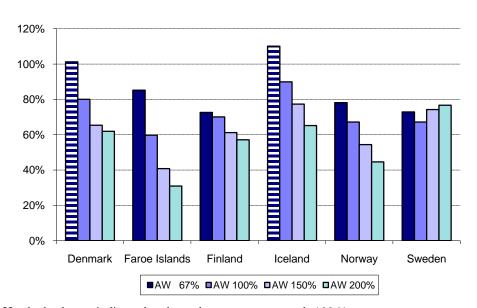


Figure 5..3.a Replacement rate in the event of full retirement at the age of 67

Hatched columns indicate that the replacement rate exceeds 100 %

It appears from figure 5.2.a and figure 5.3.a that in most cases it pays to postpone the time of retirement. A Dane with an AW of 67 % who postpones retirement from 63 to 65 years will move from 87 % coverage to 98 % coverage of his disposable income which again increases to more than 100 % if the person postpones the time of retirement to 67 years of age. It should be noted that the columns have been hatched if the replacement rate exceeds 100 %. Under the assumption that a person does not wish a higher income after retirement than before, it may in such cases be more favourable to retire than to work full time. Therefore it is probably not worth while for a person on a low income to postpone retirement in Denmark till after 65. In Denmark the replacement rate is not quite as high for the category of persons who ended their job career by earning at least as much as the average worker. At the other extreme is AW 200 % where the replacement rate increases to almost the double (just under 60 %) if the person chooses to remain on the labour market until age 65 in stead of retirement at age 63. At 67 years of age the replacement rate in respect of such a person is a little over 60 %. The replacement rate does not rise as sharply in respect of the person having a high income by postponing

pension from 65 to 67. In return the compensation level is so low that is takes a supplementary income to achieve full coverage. This might be achieved through individual savings or through deferral of the pension or through work.

In Norway it does not immediately look as if it pays to postpone retirement if the person does not have substantial income (67 % AW). If the income is at least as much as that of an average worker the replacement rate may increase by up to 5 percentage points (100 % AW). Both in Finland and Sweden the replacement rates increase evenly from retiring at 63 to retiring at 65 and 67.

With the exception of the 200 % AW in Sweden the replacement rate in Iceland is under all circumstances higher than in the other countries. The minimum guaranteed pension in Iceland has been relatively high for many years, and an increase of almost 20 % (without precedents) introduced on 1 January 2009, to protect low income pensioners during the present deep recession in Iceland results in rather high replacement rates in Iceland. This scheme thus protects against dramatic loses in savings based schemes which has not been set off by the calculations of replacement rates. With this in mind the replacement rate in respect of a 65-year-old 67 % and 100 % AW in Iceland is around 75 %. The replacement rate decreases in respect of AW's with higher income. When retiring at age 67 in Iceland there is an unambiguous fall in the replacement rate with increasing income level. Actually the contribution ratio of 100 % over full coverage in respect of the 67 % AW, in respect of whom it does not pay to remain on the labour market once that person attains the age of 67.

In respect of the 200 % AW Sweden has the highest replacement rates in the Nordic countries irrespective of the age of retirement.

## Gains in relation to the replacement rates in respect of work besides receiving a pension

In this section we shall look at the gains in relation to the replacement rate that a category of persons achieves by working either 1 or 3 days besides receiving a pension. We shall look at the gains from working 1 or 3 days by looking at the increase in percentage points in respect of the replacement rates introduced in figures 5.1.a, 5.2.a and 5.3.a, Where total replacement rates exceed 100 %,the column is hatched. The income is thus higher than the one a person had before retiring from the labour market. Hatching thus indicates that the total disposable income in respect of retirement and work

simultaneously, exceeds the disposable income the person had immediately before retiring from full time work without a pension.

In annex 3 tables showing total replacement rates in the event of full or partial retirement (i.e. with 1 or 3 days' work plus retirement schemes) are included.

### Gains in relation to replacement rates in respect of work plus pension in respect of the 63-year-olds

Figure 5.1.b shows the gains in relation to the replacement rate which the persons would get from working 1 additional day per week. The figure has been computed by adding income from work of 20 % to the gross income of the category of person corresponding to 1/5 of a working week.

Whether the system encourages to work depends on several factors. First, if total replacement rate is under 100 % there is a need for further income (under the assumption that the person wishes to maintain his working life income) which encourages to work (in cases where the total replacement rate exceeds 100 % the columns are hatched). Secondly, where profits from simultaneous work is high, full coverage may easily be achieved. This factor encourages to keep on working. On the other hand full coverage is quickly achieved if profits are too high, which has a negative effect on the incentive to work. If on the other hand gains from additional work are too low, the incentive to work decreases, on the one hand because gains in respect of extra work are too insignificant, and on the other incentive to work increases because more hours have to be added to end up with the same income.

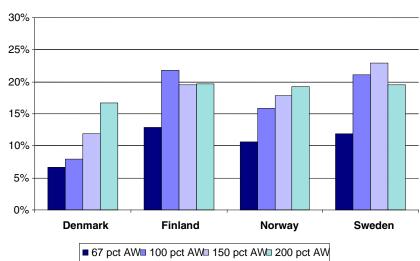


Figure 5.1.b Gains in relation to replacement rate for 1 day's work after retirement, 63 years of age

Figure 5.1.b shows that the gains in relation to the replacement rate for 1 day's work besides retirement schemes generally are lowest in Denmark. This is due to the set-offs to voluntary early retirement pay received together with work. As set-offs are based on an hour-by-hour set-off, the set-off is relatively higher in respect of the groups having a low income for which reason the gains in relation to the replacement rate increases with income.

Gains from extra work at age 63 in all countries are lowest for those of the low-income groups. But it should be noted that it is these groups that have the highest replacement rate as far as level is concerned (see figure 5.1.a). In Denmark and Norway gains rise with the income if a person works 1 additional day a week In Norway profits are close to 19 percentage points in respect of a 200 % AW, in Denmark compensation is 17 percentage points as regards gains in relation to the replacement rate.

In Finland and Sweden the gains in relation to the replacement rate is at 13 and 12 percentage points respectively in respect of 67 % AW. For other income AW's gains are close to 20 percentage points in both countries. Compensation is, however, highest for 100 % AW's in Finland and 150 % AW's in Sweden.

Figure 5.1.c shows gains from 3 days' work after retirement at the age of 63. The figure is calculated by adding income from work of 60 % to the

gross income of the person category, corresponding to 3/5 of a working week.

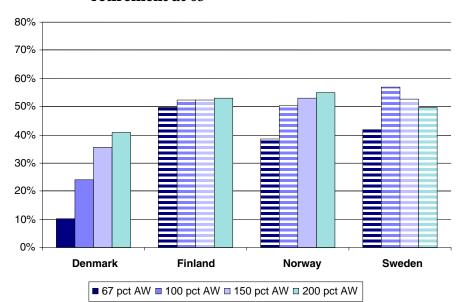


Figure 5.1.c Profits by compensation ratio with 3 days' work after retirement at 63

Hatched columns indicate that the total replacement rate in the event of retirement and work exceeds  $100\,\%$ . Therefore the hatched columns indicate that total disposable income in the event of retirement and work at the same time exceeds the disposable income the person in question had immediately after retiring fully without a pension.

In the figure all columns are hatched in respect of Sweden. This means that it applies to all categories of persons that their total replacement rate exceeds  $100\,\%$  if they work 3 days a week besides receiving a pension at age 63. The same thing applies to  $67-150\,\%$  AW's in Finland and  $67\,\%$  and  $100\,\%$  AW's in Norway. This means that it pays for the 63-year-olds Swedes, Finns and Norwegians to retire partially having less than 3 days of work. The figure, however, only analyses factors around the time of retiring, but does not illustrate that the persons would have acquired more substantial rights in respect of the remaining part of their time as a pensioner by deferring retirement.

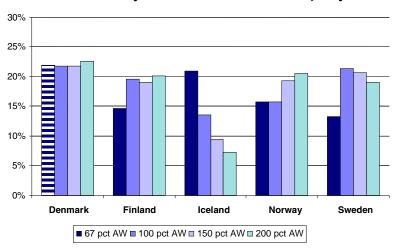
Figure 5.1.c furthermore shows that compensation by way of replacement rate gains is lowest in respect of the categories of persons having low income in all the Nordic countries. Furthermore the figure shows that the 63-year-old who has retired in Denmark, may not expect the same compensation for 3 days of work as a corresponding person in the other Nordic countries. In Denmark profits for 67 % AW is at 10 percentage point and will increase to 41 percentage points in respect of the 200 % AW. To compare, profits are at 50 – 53 percentage points in respect of all categories of persons in Finland. In Norway the 67 % AW has a replacement rate of 39 percentage points. This increases to 55 percentage points in respect of 200 %. In Sweden the 67 % AW has a replacement rate of 42 percentage points, the 100 % AW gains 57 percentage points and profits fall to under 50 percentage points in respect of the 200 % AW.

Altogether figure 5.1.c shows that the greatest incentive to work 3 days besides having a retirement scheme applies to the 200 % AW in Finland and the 150 % and 200 % AW in Norway. For these categories of persons total compensation is still under 100 %, given the schemes included in the calculations whereas the gains in relation to the replacement rate are over 50 percentage points (i.e. close to 60 percentage points) based on work for 3 days a week.

#### Gains in relation to the replacement rate in the event of work besides receiving a pension for the 65-year olds.

Profits from one and three days of work besides receiving a pension in respect of the 65-year-olds appears from figures 5.2.b and c.

Figure 5.2.b Gains in relation to the replacement rate in the event of 1 day's work after retirement, 65 years of age



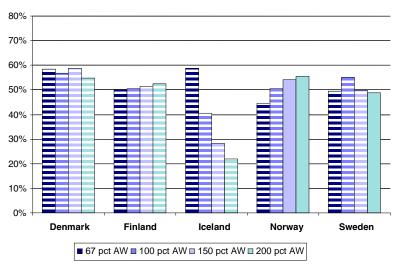


Figure 5.2.c Contribution ratio profit by 3 days' work after retirement, 65 years of age

Hatched columns indicate that the total replacement rate in the event of retirement and work at the same time exceeds  $100\,\%$ . Therefore the hatched columns indicates that total disposable income in the event of retirement and work at the same time exceeds the disposable income the person had immediately after retiring from full time work without receiving a pension.

Figure 5.2.b shows that the total replacement rate from 1 day's work besides receiving a pension only exceeds 100 % in respect of the 67 % AW in Denmark. When looking at 3 days' work and receipt of pension it is only in respect of the 150 % AW's and 200 % AW's in Iceland and the 200 % AW's in Norway that the replacement rate does not exceed 100 %.

When looking at the replacement rate profit from work besides receiving a pension as regards the 65-year-olds, the picture changes in relation to what we found for the 63-year-olds.

In Denmark a person obtains gains of 22-23 percentage points by working 1 day and 55-59 percentage points by working 3 days and receiving a pension at the same time. In Denmark the explanation of the difference between the 63-year-old retired and the 65-year-old is that the 63-year-old is subject to the regulations on voluntary early retirement pay whereas the 65-year-old may receive old age pension. In Finland gains are 15 percentage points for 1 day's work in respect of the 67 % AW whereas the other AW's gain approx. 20 percentage points by working 1 day. By

working 3 days all Finnish person categories gain 50 – 53 percentage points. The Norwegian 67 % and 100 % AW's gain 16 percentage points by working 1 day. The 150 % and 200 % AW gain approx. 20 percentage points. In Norway gains from working 3 days besides receiving a pension are 44 percentage points for the 67 % AW. Gains in respect of the 200 & AW increase up to 55 percentage points.

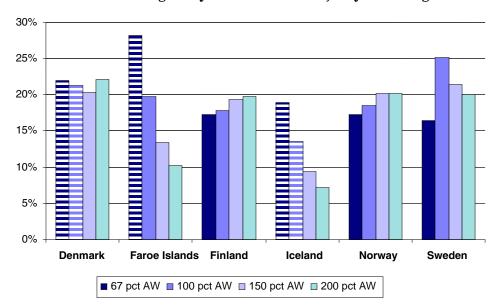
Those who retire at 65 in Iceland and work at the same time improve their living standard, but not any more than the categories of persons in the other countries. Actually persons with a high income do not gain a lot from working 1 or 3 days after having retired compared to corresponding groups in the other countries. This is probably due to the fact that old age pension in Iceland is subject to a considerable income adjustment.

Altogether figures 5.2.b and c show that if a person wishes to complement his income from pensions with an income from work in order to have full income replacement as a pensioner, this may be achieved by working between 1 and 3 days in respect of most of the categories of persons. There is an important difference, however, in the way the different income groups are compensated by working additionally in the individual countries. The most obvious difference is between Iceland and Norway. The gains in relation to the replacement rate are lowest for the income groups having a high income in Iceland whereas gains are highest for the high income groups in Norway. For the high income groups this means on the one hand that Norwegians have a relatively high incentive to work at the same time of receiving a pension because gains are high, and on the other hand that Norwegians achieve full coverage faster in relation to the working life income, which reduced the incentive to work.

#### Gains in relation to the replacement rate in the event of work besides receiving a pension in respect of the 67-year-olds

When looking at the replacement rate gains in the event of working 1 or 3 days respectively besides receiving a pension, we may, as seen from figures 5.3.b and c, also include the Faroe Islands in the analysis as old age pension there is payable from age 67.

Figure 5.3.b Gains in relation to the replacement rate in the event of working 1 day after retirement, 67 years of age



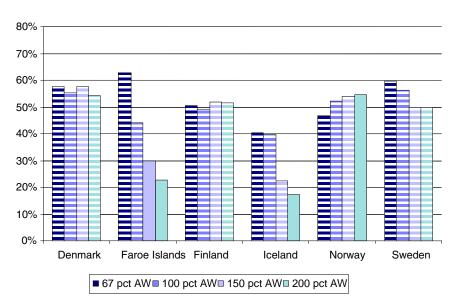


Figure 5.3.c Gains in relation to the replacement rate by 3 days' work after retirement, 67 years of age

Hatched columns indicate that total contribution ratio at retirement and work exceeds  $100\ \%$ 

From figure 5.3.b is appears that the columns for 67 % and 100 % AW's in Iceland and Denmark and the 67 % AW on the Faroe Islands are hatched. This indicates that the replacement rate gains exceed 100 % in respect of these categories of persons and that it does not pay to work besides retirement (on the assumption that there is no desire to have higher income than before full or partial retirement). Figure 5.3.c shows that the only category of person that does not achieve a replacement rate of 100 % with 3 days-work is the 200 % AW in Iceland, on the Faroe Islands and in Norway. But the profit achieved from adding 3 days of work only exceeds 50 percentage points in Norway.

Besides, the figures show that the replacement rate gains are at around 20 - 22 percentage points in respect of all AW's from working 1 day a week besides receiving an old age pension. The gains are between 54 and 58 % for 3 days' work. On the Faroe Islands gains decline for 1 day's work from 28 percentage points in respect of the 67 % AW to 10 percentage points in respect of the 200 % AW. We see a similar decline for the categories of persons by income in respect of 3 days' work and receipt of pension at the

same time on the Faroe Islands. 1 day's work and receipt of a pension gives replacement rate gains of 63 percentage points in respect of the 67 % AW and 23 % for the 200 % AW. In Finland and Norway gains increase by working 1 day subject to the income of the category of persons in question. The 67 % AW gains 17 percentage points whereas the 200 % AW achieves a profit of 20 percentage points. In the event of 3 days' work the 67-year-old Finns gain between 50 and 52 percentage points whereas the 67 % AW in Norway gains 47 percentage points, and the 200 % AW gains 55 percentage points by working 3 days.

In Sweden the gains are 16 percentage points by working 1 day and receiving a pension in respect of the 67-year-olds. The 100 % AW achieves the highest gains of 25 percentage points. Gains decrease to 20 percentage points in respect of the 200 % AW. For 3 days' work besides receiving a pension profits are highest for the 67 % AW to the tune of 60 percentage points. Profit declines to 50 percentage points for the 200 % AW.

As was the case of the 65-year-olds tables 5.2.b. and c show that in respect of the 67-year-old persons analysed it most often does not pay to work more than a maximum of a few days a week besides receiving a pension as the total replacement rate will exceed 100 %. Gains from additional work correspond to the work carried out by all categories of persons working 1 day (replacement rate gains of close to 20 %) in Denmark, Finland, Norway and Sweden. On the Faroe Islands and in Iceland gains from work fall with the income.

#### Summary

Chapter 5 looked at the net replacement rate for different categories of persons when retiring at the age of 63, 65 and 67 defined on the basis of the income level. Furthermore the chapter looked at gains in relation the replacement rate at the time of retirement subject to work at the same time.

The general picture is that the replacement rate is higher for persons who have had a relatively low income on the labour market than for persons who have had a relatively high income. This reflects the progression of the taxation system and redistribution elements of the pensions scheme in the Nordic countries. This picture, however, does not cover all the Nordic countries as, in Sweden, the lowest income brackets probably account for the highest replacement rate (persons with a 67 % AW income), but that the compensation ratio is increasing in respect of the 100 % AW above persons with higher incomes. This is due to the threshold value of the Swedish pension fixed by collective agreement, where the employer of employed

persons on the private labour market with an annual income of under SEK 300,000 (Euro 38,919) pays 4.5 % of their income to a pensions scheme whereas income beyond generates a payment percentage of 30. Consequently employers of employed persons with a high income on the private labour market, pay a relatively higher share of their income towards a pensions scheme. This is reflected in the replacement rates in Sweden.

In respect of the 63-year-olds, the replacement rate is highest for low income categories in Denmark in relation to Sweden, Norway and Finland. On the one hand this calls for relatively earlier retirement in Denmark than in the other Nordic countries as a higher replacement rate is obtained in Denmark. On the other hand the profit involved in postponing retirement until age 65 is higher in Denmark than in the other countries, which gives a relatively greater motive to postpone retirement.

The advantage involved in postponing retirement until 67 years of age is important in all the countries. On the Faroe Islands and in Iceland we see that the difference in the replacement rate that the compulsory and public pensions schemes yield to different income groups, are much higher than in the other Nordic countries. Low income groups may expect far higher compensation than the high income groups.

In Denmark the rise in the replacement rate from 63 to 65 years of age reflects the transition from voluntary early retirement pay to old age pension. Furthermore a tax-free premium is achieved if the person does not avail himself of the voluntary early retirement pay scheme. From age 65 – 67 the replacement rate increases because deferred pension is a possibility. In Norway, Sweden and Finland the replacement rate increases from 63 via 65 to 67 because right to a higher pension rate is obtained.

Around the time of retirement gains from work besides receiving a pension are highest in respect of the 63-year-olds high income groups in Finland and Sweden. In those two countries old age pension is payable at age 63. In Norway and especially Denmark gains from working a little besides receiving a pension is somewhat lower than in Sweden and Finland, especially in respect of the low income groups. As far as Norway is concerned this is due to special tax regulations applying to pensioners, which give a high marginal taxation rate for the low income groups. At this age persons are entitled to voluntary early retirement pay in Denmark, a scheme that has special set-off rules in relation to income from work<sup>13</sup>.

-

<sup>&</sup>lt;sup>13</sup> In accordance with the present rules in Norway there are specials set-off rules applying to the "contractual" pension, but they will disappear in the private sector after the implementation of the pensions reform in 2011.

The general impression of the difference between the countries is not significant if we look at the gains from working 3 days besides receiving a pension as the age of 63.

When we look at the 65- and 67-year-olds the differences between the countries are not significant when it comes to working besides receiving a pension. Iceland and the Faroe Islands, however, differ through the fact that gains from work are much higher in respect of low income categories than high income categories. On the Faroe Islands this is caused by the tax-free basic amount payable to old age pensioners and the special supplementary allowance or deduction in respect of low income categories, and set-offs in taxable income in respect of high income categories – both for high and low income brackets.

#### Chapter 6

## Synopsis

The reforms of recent years and the anticipated adjustments of the pensions schemes in the Nordic countries may be expected to postpone retirement in respect of the older citizens. With calculations of pensions in Finland, Norway and Sweden which today are based on the life time income, the schemes have moved towards a higher degree of contribution based scheme rather than a defined benefit scheme. Furthermore the calculations of pensions take the mean life expectancy trends into consideration, which make the schemes robust as regards the demographic development. In Denmark the development of the labour market pensions schemes has had the result that future income from pensions to a much higher degree depend on contributions made through the collective agreements and has like in Finland, Norway and Sweden, moved towards a defined contribution scheme.

In all the Nordic countries endeavours are made to encourage the older part of the population to remain on the labour market for a longer period of time. This present thematic report has looked at initiatives intended to encourage the 60-74-year-olds to remain on the labour market.

The report asks the question: Do the Nordic welfare schemes encourage the 60-74-year-olds to continue work? We answer the question by analysing the possibilities for retirement existing in the individual countries by looking at the extent of the application of such schemes and finally by examining the replacement rate in the event of retirement and work at the same time with in respect of the 63-, the 65- and 67-year olds.

Altogether we find that the Nordic countries encourage the 60-74-year-olds to work in different ways. The initiatives to encourage the individual person to work differ and depend on the basic set up of the pensions schemes. In Norway, Sweden and Finland the old age pensions schemes depend on the labour market affiliation of the individual person. The schemes are arranged in such a way that the pensions commitments depend on the lifetime income (in respect of Norway after the 2011 reform). By postponing retirement more substantial pensions rights may be accumulated through work. In Sweden and Norway (after the pensions reform in 2011)

the devisor applied to calculate the annual pensions commitment decreases along with postponing retirement. This further encourages to late retirement. In Finland the rate of pensions savings increases between ages 63 and 68 which results in further incentive to work.

In Denmark, Iceland and on the Faroe Islands the pensions commitments are not directly depending on labour market affiliation of the person concerned. Schemes exist in those countries that encourage people to go on working when they have attained ordinary pensionable age. In Iceland pensions commitments are increased by ½ % for each month the pension is deferred. In Denmark pension may be deferred and thus results in a higher pension commitment. On the Faroe Islands there are special tax privileges that encourage older people to work. These schemes remove barriers in respect of persons who wish to work beyond ordinary pensionable age.

Most Nordic countries have compulsory pensions schemes linked to employment. These contribute to higher income coverage throughout pensionable age. This fact may potentially lead to a rather low incentive to work in respect of the 60-74-year olds as they have already secured a higher rate of pension coverage. However, the analyses in chapter 5 show that that even if these compulsory schemes are included in the calculations of the replacement rate, the analysed categories of persons only rarely acquire full compensation coverage. Especially, in order for the high income groups to acquire full income coverage when retiring, they have to make voluntary pensions savings or work at the same time of retirement.

In Norway, Sweden, Denmark and Finland there are public retirement schemes for persons in their early 60s. A common feature is, however, that the longer they postpone retirement the higher a replacement rate is to be expected. With the exception of Sweden, compensation ratios are essentially lower for the high income groups in the Nordic counties. Consequently the Nordic high income groups generally have greater incentive to work than the low income groups.

In Iceland and on the Faroe Islands there are only a few public retirement schemes in respect of persons under 67 apart from anticipatory pensions. Those that exist are targeting industrial groups such as fishermen and special employment categories in the public sector. The few retirement possibilities for persons in their early 60s have the result that people in Iceland and on the Faroe Islands typically postpone their retirement for quite some time. On the Faroe Islands and in Iceland there are furthermore relatively high replacement rates as far as the high income groups are concerned, which on the face of it encourages the high income group to work more than the low income groups. However, gains from work besides a pension is relatively low in respect of the high income groups.

#### Annex 1:

# The application of retirement schemes irrespective of full or partial retirement.

Annex 1 relates to Chapter 4 and shows the application of old age pension, anticipatory pension and early retirement schemes respectively, where there is no distinction between persons having retired fully or partially.

Figure AP1.1.a Ratio of men receiving old age pension 2008

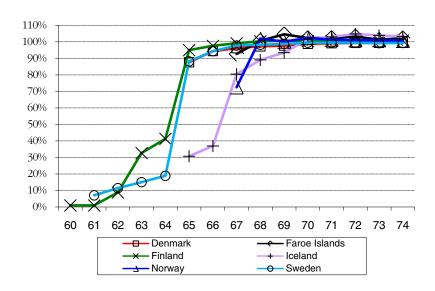


Figure AP1.1.b Ratio of women receiving old age pension 2008

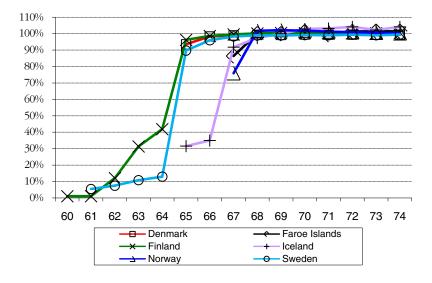


Figure AP2.1.a Ratio of men receiving anticipatory pension 2008

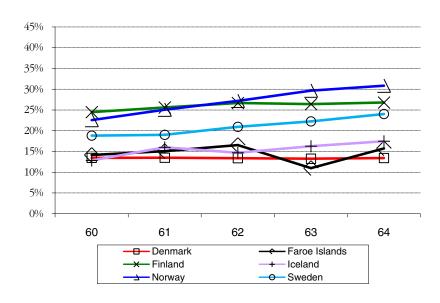


Figure AP2.1.b Ratio of women receiving anticipatory pension 2008

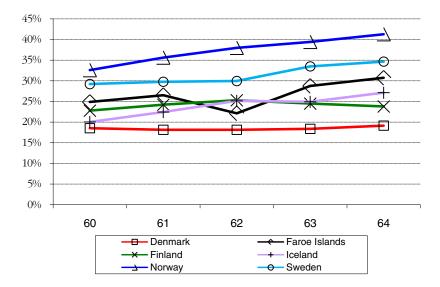


Figure AP3.1.a Ratio of men on early retirement schemes 2008

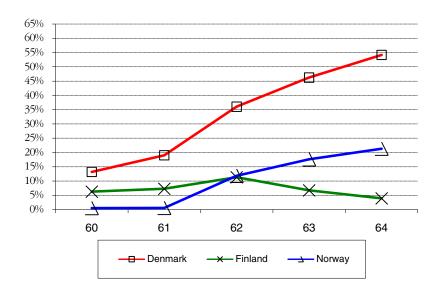
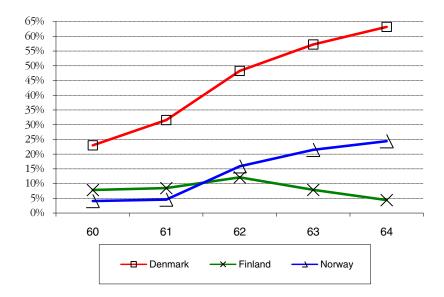


Figure AP3.1.b Ratio of women on early retirement schemes 2008



#### Annex 2:

#### Calculation basis for chapter 5

#### Denmark

The calculations for type cases were based on the following assumptions. The year in which pensions is payable is 2008 and all amounts are 2008 prices. Wage index of 1.0375 has been applied to carry forward 2007 wages to 2008 level.

A working life without interruptions of 38 years, 40 years and 42 years respectively are assumed.

	Calculated AW	Average pensions commitment		Income during pension	
		40 years 42 years		1/5 AW	3/5 AW
AW 67	240 800	45 000	47 000	48 160	144 480
AW 100	359 390	96 000	101 000	71 878	215 634
AW 150	449 245	156 000	164 000	107 820	323 460
AW 200	533 706	242 000	254 000	143 760	431 280

The AW wages in respect of AW 67 and AW 100 are constant throughout the whole working life.

An AW 150 is assumed to have AW 100 during the first half of his working life and AW 150 throughout the last half of the working life. An AW 200 is assumed to have AW 100 in the first third of the working life, then AW 150 in the next third and AW 200 during the last third of the working life. The table above shows the calculated AW as a consequence of the above assumptions.

The average pension commitment is calculated as a percentage of the calculated AW carried forward over the years of working life. Total pension commitment is subsequently distributed on 15 years. The percentages have been chosen to be 7 % for AW 67, 10 % for AW 100, 13 % for AW 150 and 17 % for AW 200 respectively. It should be noted that the calculated average

pension commitments are very sensitive to the choice of percentage and the number of years on which the pension is distributed.

When retiring at the age of 63 after 38 years on the labour market it is assumed that the person retires with voluntary early retirement pay, as old age pension at age 63 is not payable in Denmark. It is assumed that any labour market pension (paid by the employer) is not paid during the period of payment of early retirement pay, and it is assumed that everyone at transition to voluntary early retirement pay at age 63 has complied with the 2-year-rule so that the rate of early retirement pay is not influenced.

When retiring at age 67 after 42 years on the labour market it is assumed that AW 67, AW 100, AW 150 and AW 200 receive a supplement of 12 % on top of the old age pension as a consequence of 24 months' deferred old age pension.

When retiring at age 63 it is assumed that everyone receives DKK 0 per year from the ATP scheme as payment of ATP follows the qualifying age for old age pension, which in 2008 was 65 in Denmark.

When retiring at age 65 it is assumed that everyone receives DKK 20,000 per year from the ATP scheme.

When retiring at age 67 it is assumed that everyone receives DKK 23,600 per year from the ATP scheme as the amount of ATP is increased if payment is deferred.

It is assumed that contribution to the ATP scheme is not continued. Housing costs are assumed to be DKK 34,124 annually.

#### The Faroe Islands

When calculating typical cases on the Faroe Islands, 2008 is applied as the year of payment of pension, which is reflected in the benefits applied.

A projection of AW 2007 has been applied by way of a wage index of 1.0206 whereby AW 2008 has become DKK 293 550.

Calculations are only made with respect to the pensionable age of 67 as it is not possible to receive old age pension earlier, cf Faroe Islands legislation.

Pension commitment linked to occupational pension schemes are not applied on the Faroe Islands. Besides old age pension, everyone over 67 qualifies for a solidarity labour market retirement pay, but this is not dependent on labour market participation.

Under Faroe Islands legislation part of the old age pension is set off against concurrent income. The effect of the set off due to earned income as a pensioner for 1 day respectively 3 days a week, has been included in the gross benefit.

In the event of deferral of the old age pension an additional tax deduction is achieved. The effect of the deduction, seen in the light of the tax free share of old age pension, however, results in payment of DKK 33,828 more per year as old age pensioner rather than if the person chooses not to become a pensioner. As the deduction is not a progressive one, the amount is not modified irrespective of income groups corresponding to AW 67, AW 100, AW 150 and AW 200.

#### Finland

All typical cases are calculated on the basis of a person born in 1980.

The Finnish scheme applied has a "life time multiplyer" which takes the average life time into consideration and adjusts pensions in this connection. The multiplyer is unique in respect of each birth cohort and is calculated at the time when the cohort attains the age of 62. The first multiplyer will be established in 2010 and applied to the 1948-cohort.

The year of payment of pension is 2042 in respect of the 63-year-olds, 2044 in respect of the 65-year-olds and 2046 in respect of the 67-year-olds. All amounts are 2008 prices. A wage index of 1.0518 has been applied to carry forward 2007-wages to 2008 level.

The life time multiplyer applied is 0.83508.

Housing allowance is calculated on the basis of the average benefit towards the end of 2008. It is calculated in respect of a person living outside the Greater Helsinki area, but not in the countryside. Housing costs are assumed to be EURO 4 588.72 annually.

	Calculated	Average p	pensions	Income during		
	AW	commi	tment	pension		
		40 years	42 years	1/5 AW	3/5 AW	
AW 67	24.429 €	13.800 €	15.300 €	4.886 €	14.657 €	
AW						
100	36.643 €	20.400 €	23.000 €	7.329 €	21.986 €	
AW						
150	54.965 €	25.600 €	29.500 €	10.993 €	32.979 €	
AW						
200	73.286 €	30.800 €	36.000 €	14.657 €	43.972 €	

#### **Iceland**

The following assumptions have been applied in the calculations of the typical cases. All cases are calculated on the basis of a person born in 1980. All amounts are in 2008 prices.

The statutory supplementary pension was introduced in 1974 and harmonised through the legislative amendment in 1997. This means that pensioners today have different rights based both on supplementary pensions funds and their age. The calculations apply to a person born in 1980 and who retires subject to a supplementary pension calculated on the basis of minimum rights under the legislation from 1997.

As regards the calculation of the supplementary pension the prerequisite is that:

- 1. AW 67 keeps the wages of an AW 67 throughout the whole income period.
- 2. AW 100 keeps the wages of an AW 100 throughout the whole income period.
- 3. AW 150 starts as 25-year-old receiving the wages of an AW 100 and ends with AW 150 wages at the time of retirement. It is between age 25 and age 39 (15 years) with wages of an AW 100 and AW 150 during the last part of the working life or from 40 to 65/67 years of age (25/27 years).
- 4. AW 200 receives wages as AW 100 at age 25, 150 AW at age 40 and AW 200 at the time of retirement. It is from age 25 to age 39 with wages of AW 100 (for 15 years) and AW 150 during half of the years from age 40 to pensionable age (for 12.5/13.5 years), but AW 200 during the second half or from age 40 to 65/67 (for 12.5/13.5 years).

The calculations applied to the typical cases where a pensioner works 1 day a week (1/5 AW) are based on an income from work which corresponds to 20 % of the average pay (100 % AW) and in respect of a person before retirement, who works 3 days a week (3/5 AW), calculations are based on an income form work which is 60 % of the average wages (100 % AW).

Basic pension is normally paid as from age 67, but seamen may retire at age 60 if they have been at sea for at least 25 years (in 2008 there were only 44 persons younger than 67 years of age, who received the basic pension). In the typical cases the basic pensions are only included before age 67.

The pensions fund (the occupational pensions) are – under specific provisions in Islandic regulations - to start payment of old age pensions once a member attains the age of 65- 67 years. The pensions fund may also provide the opportunity for the member to accelerate or defer payment of the pension for 5 years. The lowest level of the pensions funds before payment and supplementary pension defined under the legislation on taxes and charges etc, is 56 % of the monthly pay in respect of a person who has paid contributions for 40 years. It is calculated on the basis of entitlement to 1.4 points in respect of each year (40 years\* 1.4 points = 56 %). Generally the amount of payment of the funds is higher in respect of the 67-year-olds who retire. This means that right to 1.5 point is acquired in respect of each year which results in a pension of 63 % of the wages if the pensioner started working as 25-year-old. The minimum rule applies to those who start receiving a pension at age 65 and which results in a pension of 56 % of the wages.

Housing costs or housing allowance are not included. Between 70 and 80 % of the pensioners in Iceland live in their own house (with very different cost levels) and receive no housing allowance.

#### Norway

Norway has based all calculations on a set of regulations on old age pensions, which is expected to come into force in connection with the pensions reform in 2011. All typical cases are calculated on the basis of a person who was born in 1980.

In respect of the years 2008 and earlier Norway has made the average wages in real terms the basis of the calculations. After 2008 a  $0\,\%$  inflation and a  $0\,\%$  growth rate of wages is assumed so that all results are 2008 price level-

Norway has included old age pension payable under the national social insurance scheme ("folketrygden"), compulsory occupational pension and the pension fixed by collective agreement (AFP) in the private sector in the calculations. Approx. 80 % of all persons working at age 62 are comprised by the AFP.

All employed persons in Norway have supplementary pensions schemes through the enterprise where they work, and financed through contributions made by individual, employed persons and the employers (referred to as occupational pension in Norway). There is a big variation between the occupational pensions schemes in Norway as they are operated by individual enterprises. But there are certain minimum requirements as

regards the occupational pension (the so-called compulsory occupational pension) and the calculations of the cases are based on the minimum requirements for the occupational pensions under the defined contribution scheme.

The calculations include housing allowance. The rules applying to the housing benefits in Norway are quite complicated, and the housing benefit does not only depend on the income and capital of the household, but also of the municipality where the person lives, the size and type of dwelling, and the rental costs. The typical cases are based on a person living alone in the municipality of Oslo with no capital and having rental costs of NOK 4,575 per month. These rental costs correspond to the average housing expenditure (rent and/or interest and instalments) in Norway for one-person-households in 2008 as per the Statistical Central Office (Statistisk Sentralbyrå).

#### Sweden

Sweden has made the calculations on the assumption of a  $0\,\%$  inflation and  $0\,\%$  development in wages.

Pensioners with a low income are entitled to housing benefit (BTP) but have to apply to receive it. In the calculations it is assumed that the case persons have applied for this benefit. As regards the category 67 % of AW (with the exception of persons having retired at age 67 and who have continued work) the BTP is included in the income.

#### Annex 3:

# Replacement rate in case of full or partial retirement

Replacement rates in case of full or partial retirement at age 63

Teplacement rai		Faroe						
	Denmark	Islands	Finland	Iceland	Norway	Sweden		
	AW 67 %							
Full retirement	87 %		68 %	0 %	77 %	69 %		
Retirement + 1 days' work	94 %	•	81 %	0 %	88 %	81 %		
Retirement + 3 days' work	97 %	•	118 %	0 %	116 %	111 %		
	AW 100 %							
Full retirement	61 %		56 %	0 %	57 %	51 %		
Retirement + 1 days' work	69 %		78 %	0 %	73 %	72 %		
Retirement + 3 days' work	85 %		109 %	0 %	107 %	108 %		
			AW	150 %				
Full retirement	46 %		48 %	0 %	44 %	55 %		
Retirement + 1 days' work	57 %	٠	68 %	0 %	62 %	78 %		
Retirement + 3 days' work	81 %		101 %	0 %	97 %	108 %		
			AW	200 %				
Full retirement	35 %		44 %	0 %	35 %	59 %		
Retirement + 1 days' work	52 %		64 %	0 %	55 %	79 %		
Retirement + 3 days' work	76 %	-	97 %	0 %	90 %	109 %		

Replacement rates in case of full or partial retirement at age 65

Replacement ra	tes in cas	e of full	or partia	<u>l retiren</u>	nent at ag	ge 65				
		Faroe								
	Denmark	Islands	Finland	Iceland	Norway	Sweden				
		AW 67 %								
Full retirement	94 %		70 %	73 %	76 %	71 %				
Retirement + 1 days'										
work	116 %	•	85 %	94 %	92 %	85 %				
Retirement + 3 days'										
work	152 %	•	120 %	132 %	120 %	121 %				
	AW 100 %									
Full retirement	74 %		63 %	73 %	62 %	58 %				
Retirement + 1 days'										
work	96 %	•	83 %	87 %	77 %	79 %				
Retirement + 3 days'										
work	131 %	•	114 %	114 %	112 %	113 %				
	AW 150 %									
Full retirement	61 %		56 %	64 %	47 %	64 %				
Retirement + 1 days'										
work	83 %	•	75 %	74 %	67 %	84 %				
Retirement + 3 days'										
work	120 %	•	107 %	93 %	101 %	114 %				
	AW 200 %									
Full retirement	58 %		50 %	54 %	38 %	66 %				
Retirement + 1 days'			•							
work	81 %		70 %	62 %	58 %	85 %				
Retirement + 3 days'										
work	113 %		103 %	76 %	93 %	115 %				

Replacement rates in case of full or partial retirement at age 67.

Replacement ra	tes in cas	1	or parua	reuren	ieni ai ag	e o/.			
		Faroe							
	Denmark	Islands	Finland	Iceland	Norway	Sweden			
			AW	67 %					
Full retirement	101 %	85 %	73 %	110 %	78 %	73 %			
Retirement + 1 days'									
work	123 %	113 %	90 %	129 %	95 %	89 %			
Retirement + 3 days'									
work	159 %	148 %	123 %	150 %	125 %	132 %			
	AW 100 %								
Full retirement	80 %	60 %	70 %	90 %	67 %	67 %			
Retirement + 1 days'									
work	101 %	80 %	88 %	103 %	86 %	92 %			
Retirement + 3 days'									
work	135 %	104 %	119 %	130 %	119 %	124 %			
	AW 150 %								
Full retirement	65 %	41 %	61 %	77 %	54 %	74 %			
Retirement + 1 days'									
work	86 %	54 %	81 %	87 %	75 %	96 %			
Retirement + 3 days'									
work	123 %	71 %	113 %	100 %	108 %	124 %			
	AW 200 %								
Full retirement	62 %	31 %	57 %	65 %	45 %	77 %			
Retirement + 1 days'	_				_				
work	84 %	41 %	77 %	72 %	65 %	97 %			
Retirement + 3 days'	_				_				
work	116 %	54 %	108 %	83 %	99 %	127 %			

# Publications Issued by NOSOSCO since 1995

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 1994. Nordisk Socialstatistisk Komité nr. 3:96. København 1996.

*Nordisk socialstatistik 1946-1996.* Nordisk Socialstatistisk Komité nr. 4:96. København 1996.

Social Security in the Nordic Countries. Scope, expenditure and financing 1994. Nordic Social-Statistical Committee no. 5:96. Copenhagen 1996.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 1995. Nordisk Socialstatistisk Komité nr. 6:97. København 1997.

Social Protection in the Nordic Countries 1995. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 7:97. Copenhagen 1997.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 1996. Nordisk Socialstatistisk Komité nr. 8:98. København 1998.

Social Protection in the Nordic Countries 1996. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 9:98. Copenhagen 1998.

Förtida utträde från arbetslivet 1987-1996. En jämförelse mellan de nordiska länderna. Nordisk Socialstatistisk Komité nr. 10:99. København 1999.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 1997. Nordisk Socialstatistisk Komité nr. 11:99. København 1999.

Social Protection in the Nordic Countries 1997. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 12:99. Copenhagen 1999.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 1998. Nordisk Socialstatistisk Komité nr. 13:00. København 2000. Social Protection in the Nordic Countries 1998. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 14:00. Copenhagen 2000.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 1999. Nordisk Socialstatistisk Komité nr. 15:01. København 2001.

Social Protection in the Nordic Countries 1999. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 16:01. Copenhagen 2001.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2000. Nordisk Socialstatistisk Komité nr. 17:02. København 2002.

Social Protection in the Nordic Countries 2000. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 18:02. Copenhagen 2002.

Nordic/Baltic Social Protection Statistics 2000. Nordisk Socialstatistisk Komité nr. 19:03. København 2003.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2001. Nordisk Socialstatistisk Komité nr. 20:03. København 2003.

Social Protection in the Nordic Countries 2001. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 21:03. Copenhagen 2003.

Sustainable Social and Health Development in the Nordic Countries. Seminar 27th May 2003, Stockholm. Nordic Social-Statistical Committee no. 22:03. Copenhagen 2003.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2002. Nordisk Socialstatistisk Komité nr. 23:04. København 2004.

Social Protection in the Nordic Countries 2002. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 24:04. Copenhagen 2004.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2003. Nordisk Socialstatistisk Komité nr. 25:05. København 2005.

Social Protection in the Nordic Countries 2003. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 26:05. Copenhagen 2005.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2004. Nordisk Socialstatistisk Komité nr. 27:06. København 2006.

Social Protection in the Nordic Countries 2004. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 28:06. Copenhagen 2006.

Sustainable Social and Health Development in the Nordic Countries. Seminar 6th April 2006, Oslo. Nordic Social-Statistical Committee no. 29:06. Copenhagen 2006.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2005. Nordisk Socialstatistisk Komité nr. 30:07. København 2007.

Social Protection in the Nordic Countries 2005. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 31:07. Copenhagen 2007.

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2006/07. Nordisk Socialstatistisk Komité nr. 32:08. København 2008.

Social Protection in the Nordic Countries 2006/07. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 33:07. Copenhagen 2008

*Ålderspensionssystem i Norden*. Nordisk Socialstatistisk Komité nr. 34:08. København 2008.

Old-age Pension Systems in the Nordic Countries. Nordic Social- Statistical Committee no. 35:09. Copenhagen 2009

Social tryghed i de nordiske lande. Omfang, udgifter og finansiering 2007/08. Nordisk Socialstatistisk Komité nr. 36:09. København 2009

Social Protection in the Nordic Countries 2007/08. Scope, expenditure and financing. Nordic Social-Statistical Committee no. 37:09. Copenhagen 2009

Opmuntrer de nordiske systemer 60-74-årige til at arbejde? Nordisk Socialstatistisk Komité nr. 38:09. København 2009

Do the Nordic Welfare Systems Encourage the 60-74-Year-Olds to Work? Nordic Social-Statistical Committee no. 39:10. Copenhagen 2010

Social Protection in the Nordic Countries 2007/08. Scope, expenditure and financing (booklet). Nordic Social-Statistical Committee no. 40:09. Copenhagen 2009

*Utfordringer for den nordiske velferdsstaten. Sammenlignbare indikatorer* Nordisk Socialstatistisk Komité nr. 41:10. Copenhagen 2009

Challenges to the Nordic Welfare State. Comparable Indicators. Nordic Social-Statistical Committee no. 42:10. Copenhagen 2010