



STATISTICAL
REPORT

Expected effective retirement age in the Nordic countries

Finnish Centre for Pensions;
Statistical Report 2/2008

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Edita Prima Oy

Helsinki 2008

ISSN 1459-3823

ABSTRACT

In recent years one main objective of the changes carried out in the pension schemes has been to postpone effective retirement. This is measured through changes in the effective retirement age. At a Nordic cooperation forum (Nordiskt utvärderarmöte) a common indicator for the effective retirement age has been agreed on. The common Nordic indicator is called the expected effective retirement age, which is calculated in a corresponding way as life expectancy. It describes the average effective retirement age under the assumption that the retirement risk and mortality for each age group remain at the level of the year of observation. A main point is that the indicator is not affected by the age structure of the population.

In this report a joint Nordic formula is published for the first time as well as the results for the different Nordic countries calculated using this formula.

This kind of indicator has already previously been used nationally in Finland, Norway and Sweden. Even though the data of the national indicators and the Nordic indicator differ from each other, the differences in the results are small. Both indicators react to changes in the same way, which indicates that the Nordic indicator is useful and gives a correct picture of the development in each country.

This report presents the values of the expected effective retirement age in each country for 30-year-olds and for 50-year-olds calculated on the basis of commensurable data. There are differences between the Nordic countries. Iceland differs the most, and there the expected effective retirement age is clearly higher than elsewhere. The differences between the other Nordic countries are smaller, although the development trends have differed from each other up to the last few years.

The changes to the pension schemes of the different countries are reflected in the figures for the expected effective retirement age at different times and at different speed. However, one common denominator is that towards the end of the 1990s the expected effective retirement age was decreasing. In the 2000s, and especially in the last few years, the expected effective retirement age has increased, or at least the decrease has stopped, in all the Nordic countries.

The report also includes charts of the change in life expectancy in the Nordic countries. The time in retirement has been estimated with the help of the life expectancy and the expected effective retirement age. On the basis of this estimate, in the Nordic countries women spend approximately five years longer in retirement than men. The time in retirement for Icelandic men is the shortest of the Nordic countries (18 years) even though they live longer than other men. Correspondingly, Swedish women spend the longest time in retirement (26 years).

SAMMANFATTNING

Under de senaste åren har en viktig målsättning vid förändringar av pensionssystemen varit att försöka senarelägga den genomsnittliga pensioneringstidpunkten. Med pensioneringstidpunkt menas här den tidpunkt när en person blir ålderspensionär eller börjar uppbära sjukersättning (tidigare kallat förtidspension). Målsättningen kan följas upp med mätningar av hur den ”faktiska” pensionsåldern förändras. På ett nordiskt utvärderarmöte har enighet nåtts om en gemensam indikator för den faktiska pensionsåldern. Denna indikator kallas i Sverige medelpensioneringsålder. Den beräknas med en metod som påminner om beräkningen av förväntad livslängd. Det antas att pensioneringsrisker och dödlighet för varje ålder förblir på samma nivå som under observationsåret. Indikatorn påverkas inte av befolkningens åldersstruktur.

I denna rapport publiceras för första gången resultat för de olika nordiska länderna där denna gemensamma indikator tillämpats. Dessutom redovisas hur indikatorn beräknas.

Liknande indikatorer har även tidigare använts i Finland, Norge och Sverige. Även om de data och formler som tidigare har använts av de enskilda länderna skiljer sig något från den gemensamma nordiska indikatorn, är skillnaden i resultaten små. De nationella och den gemensamma indikatorn reagerar på samma sätt på förändringar vilket tyder på att den gemensamma indikatorn är användbar och ger en korrekt bild av utvecklingen i varje land.

Rapporten presenterar värden på medelpensioneringsålder i varje land på basis av jämförbara data för den som vid 30 respektive 50 år inte uppbar sjukersättning. Det finns skillnader mellan länderna. Island skiljer sig mest från de övriga. Medelpensioneringsåldern i Island är tydligt högre än i de övriga nordiska länderna. Skillnaderna mellan de övriga nordiska länderna är mindre även om trenderna har skilt sig åt fram till de senaste åren.

Förändringar i pensionssystemen i de olika länderna återspeglas i hur medelpensioneringsåldern förändras. En gemensam nämnare är dock att mot slutet av 1990-talet sjönk medelpensioneringsåldern. Hittills under 2000-talet, och i synnerhet de senaste åren, har medelpensioneringsåldern höjts eller åtminstone har den nedåtgående trenden brutits. Detta gäller i alla nordiska länder.

I rapporten finns också diagram över ändringar av förväntad livslängd i de Nordiska länderna. Det genomsnittliga antalet år som ”pensionär” har skattats med hjälp av förväntad livslängd och medelpensioneringsåldern. Resultatet av denna skattning är att i de nordiska länderna tillbringar kvinnor i genomsnitt ungefär fem år mer som pensionärer än vad män gör. Antalet år som pensionär är kortast för isländska män (18 år) trots att de lever längre än män i andra länder. Längsta tiden som pensionärer har svenska kvinnor (26 år).

ABSTRAKTI

Viime vuosina eläkejärjestelmiin tehtyjen muutosten keskeisenä tavoitteena on eläkkeelle siirtymisen myöhentäminen. Sitä mitataan eläkkeellesiirtymisiässä tapahtuvalla muutoksella. Pohjoismaisella yhteistyöfoorumilla (Nordiskt utvärderarmöte) on sovittu yhteisestä eläkkeellesiirtymisiän mittarista. Sitä nimitetään eläkkeellesiirtymisiän odotteeksi (Nordic method), joka lasketaan elinajan odotetta vastaavalla periaatteella. Se kuvaa keskimääräistä eläkkeellesiirtymisikää olettaen, että ikäluokittaiset eläkealkavuudet ja kuolevuudet säilyvät tarkasteluvuoden tasolla. Keskeistä on, että siihen ei vaikuta väestön ikärakenne.

Tässä raportissa julkaistaan ensimmäinen kerran yhteispohjoismainen kaava ja sen mukaisesti lasketut tulokset eri pohjoismaissa.

Jo aiemmin tällaista mittaria on käytetty kansallisesti Suomessa, Norjassa ja Ruotsissa. Vaikka kansallisten mittareiden ja yhteispohjoismaisen mittarin aineistot eroavatkin toisistaan, erot tuloksissa ovat pieniä. Molemmat mittarit reagoivat muutoksiin samalla tavalla, mikä osoittaa että yhteispohjoismainen mittari on käyttökelpoinen ja antaa oikean kuvan maakohtaisesta kehityksestä.

Tässä raportissa esitetään yhteismitallisella aineistolla lasketut maakohtaiset eläkkeellesiirtymisiän odotteen arvot 30- ja 50-vuotiaille. Pohjoismaiden välillä on eroja. Eniten poikkeaa Islanti, jossa eläkkeellesiirtymisikä on selvästi muita korkeampi. Muiden Pohjoismaiden väliset erot ovat vähäisempiä, joskin kehityssuunnat ovat poikenneet toisistaan viime vuosiin saakka.

Eri maiden eläkejärjestelmiin tehdyt muutokset heijastuvat odoteluvuissa eri aikoina ja erilaisella vauhdilla. Yhteistä on kuitenkin se, että 1990-luvun loppupuolella eläkkeellesiirtymisikä oli laskusuunnassa. 2000-luvulla ja erityisesti viime vuosina eläkkeellesiirtymisikä on ollut nousussa tai ainakin lasku on pysähtynyt kaikissa Pohjoismaissa.

Raportissa on esitetty kuvioita myös elinajan odotteen muutoksesta Pohjoismaissa. Eläkkeelläoloajasta on tehty arvioita elinajan odotteen ja eläkkeellesiirtymisiän odotteen avulla. Arvion perusteella naiset ovat viitisen vuotta miehiä pitempään eläkkeellä Pohjoismaissa. Islantilaisien miesten eläkkeelläoloaika on Pohjoismaiden lyhin (18 vuotta), vaikka he elävätkin muita miehiä pitempään. Vastaavasti ruotsalaiset naiset ovat pisimpään eläkkeellä (26 vuotta).

SAMMENDRAG

I de siste årene har en hovedmålsetting med endringer i pensjonsordningene vært å få folk til å stå lengre i arbeid. Dette kan måles som endring i den faktiske pensjoneringsalderen. I et nordisk samarbeidsforum (Nordisk utredermøte) er det blitt enighet om en felles indikator for den faktiske pensjoneringsalderen. Den felles nordiske indikatoren kalles Forventet faktisk pensjoneringsalder. Beregningsmåten tilsvarer beregning av forventet levealder. Den beskriver den gjennomsnittlige faktiske pensjoneringsalderen under den forutsetningen at pensjoneringsrisikoen og dødeligheten på hvert alderstrinn holder seg konstant, på nivået i observasjonsåret. Et viktig poeng er at indikatoren ikke påvirkes av befolkningens alderssammensetning.

I denne rapporten blir en felles nordisk formel publisert for første gang. Samtidig publiseres resultater for de nordiske landene basert på denne formelen.

Tilsvarende indikatorer er allerede i bruk i Finland, Norge og Sverige. Selv om datagrunnlaget for de nasjonale indikatorene og den nordiske indikatoren er forskjellige, er forskjellene i resultater små. De forskjellige indikatorene reagerer på endringer på den samme måten, noe som tyder på at den nordiske indikatoren er egnet og gir et riktig bilde av utviklingen i hvert land.

Denne rapporten presenterer Forventet faktisk pensjoneringsalder i hvert land for 30-åringer og 50-åringer på basis av sammenlignbare data. Det er forskjeller mellom de nordiske landene. Island avviker mest. Der er forventet pensjoneringsalder betydelig høyere enn ellers. Forskjellene mellom de andre nordiske landene er mindre, selv om utviklingen har vært forskjellig fram til de siste årene.

Endringer i pensjonsordningene i de forskjellige landene vises igjen i tallene for forventet pensjoneringsalder til forskjellige tider og med forskjellige utslag. Men et felles trekk er det at forventet pensjoneringsalder gikk nedover mot slutten av 1990-tallet. På 2000-tallet, spesielt i de siste årene, har forventet pensjoneringsalder økt, eller nedgangen har stanset, i alle de nordiske landene.

Rapporten inneholder også diagrammer som viser endringer i forventet levetid i de nordiske landene. Tid som pensjonist er estimert ved hjelp av forventet levetid og forventet pensjoneringsalder. Ut fra dette estimatet lever kvinner fem år lenger som pensjonister enn menn. Tid som pensjonist for islandske menn er den korteste i de nordiske landene (18 år) selv om de lever lengre enn andre menn. Tilsvarende er det svenske kvinner som tilbringer flest år som pensjonister (26 år).

ABSTRACT

I de senere år har et hovedmotiv bag ændringer i pensionssystemerne været at udsætte den effektive tilbagetrækning. Dette er målt gennem ændringer i den faktiske tilbagetrækningsalder. På et nordisk samarbejdsforum (Nordiskt utvärderarmöte) er der skabt enighed om en fælles indikator for den faktiske tilbagetrækningsalder. Den fælles indikator er benævnt den forventede faktiske tilbagetrækningsalder og beregnes på en måde, som er ganske lig den metode, der anvendes ved beregning af gennemsnitlige restlevetider. Den beskriver den faktiske tilbagetrækningsalder under antagelse af, at tilbagetrækningsrisikoen og dødeligheden for hver aldersgruppe forbliver på det niveau, den har i observationsåret. En central pointe er, at indikatoren ikke påvirkes af befolkningens aldersstruktur.

I denne rapport offentliggøres for første gang en fælles nordisk beregningsmodel sammen med resultater for de enkelte nordiske lande beregnet på grundlag af denne beregningsmodel.

Tilsvarende indikatorer har allerede tidligere været anvendt på nationale data i Finland, Norge og Sverige. Selvom data i de nationale indikatorer og den fælles nordiske indikator afviger fra hinanden, er de resultatmæssige forskelle små. Begge indikatorer reagerer på ændringer på samme måde, hvilket indikerer, at den fælles nordiske indikator er nyttig og giver et retvisende billede af udviklingen i de enkelte lande.

I denne rapport præsenteres den forventede faktiske tilbagetrækningsalder i hvert land for 30-årige og for 50-årige baseret på sammenhængende data.

Der er forskelle på tværs af de nordiske lande. Island skiller sig særligt ud og har en forventet faktisk tilbagetrækningsalder, som er klart højere end andre steder. Forskellene mellem de øvrige nordiske lande er mindre, på trods af at udviklingstendenserne frem til de seneste år har været forskellige.

Ændringerne i de nationale pensionssystemer slår igennem i den forventede faktiske tilbagetrækningsalder på forskellige tidspunkter og med forskellig hast. Imidlertid er et fællestræk, at den faktiske tilbagetrækningsalder faldt frem til slutningen af 1990'erne.

Omkring og efter år 2000, og især i de seneste år, er den faktiske tilbagetrækningsalder steget i alle de nordiske lande, eller den hidtidige faldende tendens er i det mindste bragt til ophør.

Rapporten indeholder også oversigter over udviklingen i den forventede restlevetid i de nordiske lande. Den tid, der tilbringes i tilbagetrækning er estimeret ved hjælp af den forventede restlevetid og den forventede faktiske tilbagetrækningsalder. Vurderingen peger på, at kvinder i de nordiske lande i gennemsnit tilbringer ca. fem år længere i tilbagetrækning end mænd. På trods af, at islandske mænd lever længere end mænd i de andre nordiske lande tilbringer de den korteste tid i tilbagetrækning (18 år). Tilsvarende tilbringer svenske kvinder længst tid i tilbagetrækning (26 år).

ABSTRACT

Á síðustu árum hafa flestar breytingar í eftirlaunakerfinu falið í sér frestun á raunverulegum eftirlaunaaldri. Þetta er mælt í gegn um breytingar á raunverulegum eftirlaunaaldri. Í norrænni samvinnu (Nordiskt utvardermöte) hefur orðið sameining um almennan mælikvarða fyrir raunverulegan eftirlaunaaldur. Þessi almenni norræni mælikvarði er kallaður væntanlegur eftirlaunaaldur, sem er reiknaður út á sama hátt og lífslíkur. Hann segir til um meðaltal raunverulegs eftirlaunaaldurs að því gefnu að áhættan af dauðsfalli og töku eftirlauna fyrir hvern aldursþóp sé sú sama og hún var á skoðunarárinu. Aðalmálið er að aldursmálmið er að aldursmálmið hafi ekki áhrif á mælikvarðann.

Í þessari skýrslu er sameiginleg norræn formúla kynnt í fyrsta skipti ásamt niðurstöðum fyrir Norðurlöndin sem reiknaðar eru samkvæmt þessari formúlu.

Mælikvarði eins og þessi hefur nú þegar verið notaður í Finnlandi, Noregi og Svíþjóð. Jafnvel þó að grunnur alþjóða mælikvarðans og norræna mælikvarðans sé ólíkur, er lítil munur á niðurstöðum. Báðir mælikvarðarnir bregðast við breytingum á sama hátt, sem bendir til að norræni mælikvarðinn sé nothæfur og gefi rétta mynd af þróuninni í hverju landi.

Þessi skýrsla sýnir gildi væntanlegs eftirlaunaaldurs í sérhverju landi fyrir 30 ára aldur og 50 ára aldur sem reiknaður er frá grunni samsvarandi gagna. Það er mismunur á milli Norðurlandanna. Mesti munurinn er á Íslandi, og er væntanlegur eftirlaunaaldur þar greinilega hærrí en annarsstaðar. Mismunurinn milli hinna Norðurlandanna er minni, þó að stefnan í þróuninni hafi verið ólík hvert öðru fram að allra síðustu árum.

Breytingar í eftirlaunakerfum hjá hinum mismunandi löndum endurspeglast í tölum yfir væntanlegann eftirlaunaaldur á mismunandi tímum og á mismunandi hraða. Samt sem áður er það almennt að við lok tíunda áratugarins hafði væntanlegur eftirlaunaaldur lækkað. Í byrjun þessarar aldar sérstaklega allra síðustu árin, hefur væntanlegur eftirlaunaaldur hækkað, eða alla vega hefur lækkunin stöðvast, hjá öllum Norðurlöndunum.

Skýrslan sýnir einnig líkan af breytingum á lífslíkum á Norðurlöndunum. Tími eftirlaunaaldurs hefur verið áætlaður með hjálp af væntanlegum lífslíkum og eftirlaunaaldri. Á grunni þessarar áætlunar, eru konur ca. fimm árum lengur á eftirlaunum en karlar á Norðurlöndunum. Eftirlaunaaldur hjá körlum á Íslandi er stystur af Norðurlöndunum (18 ár) jafnvel þó að þeir lifi lengur. Samsvarandi, eru sænskar konur lengst á eftirlaunum (26 ár).

INTRODUCTION

This report has been compiled in Nordic cooperation. The work has been directed by the working group Nordiskt Utvärderarmöte, with representatives of the central bodies responsible for or acting as coordinators of pension provision in Finland, Iceland, Norway and Sweden. In 2004 the working group established a working subgroup to survey the calculation principles for the Nordic indicator for the effective retirement age.

The report contains data on the development of the effective retirement age in the Nordic countries. A common indicator, the expected effective retirement age, is used in the survey. The indicator is calculated in the same way in all the countries. The data for the different countries has been obtained from the employment data of each country's statistics office and they include the statutory pensions for the persons resident in the country. The survey is done for the years 1996–2006.

The expected effective retirement age is calculated on the basis of the retirement risk. It meets the criteria for an indicator which describes the effective retirement age, since it reacts immediately and in the right direction to the retirement risk and is not dependent on the age structure of the population. The results in the report are comparable between the different countries and they are now published for the first time.

In Finland, Sweden and Norway a corresponding indicator is in use nationally. The expected effective retirement age presented in this report differs slightly from the national indicators, because the concepts and the background data differ. However, the results show a similar development. National reports on the expected effective retirement age have previously been published in Finland, Norway and Sweden.

The persons responsible for the contents of the report are in Sweden Hans Karlsson, in Norway Oddbjörn Haga, in Iceland Sigríður Lilly Baldursdóttir, in Denmark Ole Beier Sørensen and in Finland Jari Kannisto, who also chaired the working subgroup. Denmark and Iceland submitted the data, on the basis of which Mr Jari Kannisto did the calculations. The report was edited at the Finnish Centre for Pensions.

In addition to the persons responsible for the contents several persons have assisted in the preparation of the report. A sincere thank you goes especially to Mr Peter Biström and Mr Mika Vidlund from Finland, and likewise to Ms Christina Lindell as the initiator and provider of background support for the work. In addition also Ms Janina Gröndahl, Ms Maija Hiltunen and Ms Katariina Käkönen have contributed to the preparation of the report.

Helsinki, January 2008

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1 Description of the countries' pension systems

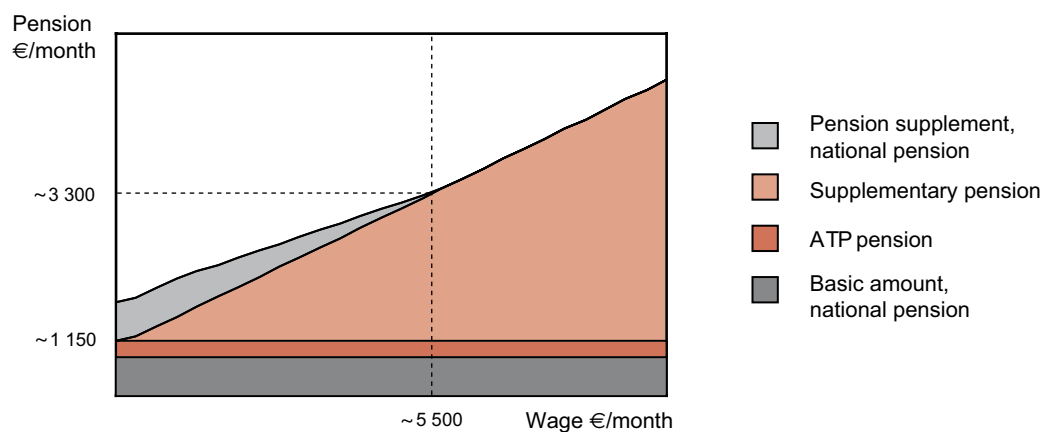
Nordic pension systems in general

In the Nordic countries both social security and pension provision are basically at a high level and extensive when compared internationally. They are fairly uniform, although there are also numerous differences. The following is a brief description of statutory pension provision in each Nordic country. The description strives to present the basic components of each country's pensions.

Denmark

In Denmark the residence-based national pension scheme is a central component of the total pension provision. The national pension scheme is supplemented by the employment-based pension scheme (ATP, Arbejdsmarkedets Tillægspension), which covers wage earners, and the mandatory special pension savings arrangement (SP, Særlige Pensionsopsparing), which is mandatory for everyone. Part-time pensions (delpension) may be paid on the basis of a separate act. In addition separate pensions are paid from the unemployment insurance scheme before the retirement age (efterløn). Occupational pension schemes agreed on in the labour market, which supplement statutory and mandatory pension provision, are common and their significance is increasing continuously. Over 80% of wage earners are covered by such occupational pension schemes.

Chart 1. Structure of the Danish pension system ¹⁾



1) In Denmark the ATP pension is in practice a flat-rate benefit and the supplementary pension may be determined in many different ways, often it is a defined contribution benefit. A pension supplement is not paid, if the single pension recipient's pension and asset incomes exceed approx. 3,300 euros/month. In the chart, the target level of the total pension has been set at 60% of the wage/salary. In that case a pension supplement is not paid when the wage/salary exceeds approx. 5,500 euros/month. The wage level does not in itself show the real situation and the target level may also vary.

Benefits paid from the national pension scheme are old-age pensions and disability pensions. Actual survivors' pensions are not paid, but if both spouses receive a benefit from the national pension scheme the sum of the pensions of both spouses are after the death of the spouse paid as a surviving spouse's pension for three months (etterlevelsespension).

The general retirement age in the national pension scheme was lowered to 65 years 1 July 2004. Before that the retirement age was 67 years. The change in retirement age concerned everybody born 1 July 1939 or later. Following the latest pension reform the retirement age will be raised to 67 years between 2024 and 2027 and it will be linked to life expectancy. The age limit for the early pension from unemployment insurance will be increased from 60 to 62 years in 2019–2022. The changes do not concern persons born before 1 January 1959.

The only benefits paid from the ATP scheme are old-age pensions and survivors' pensions. The pensions are not linked to the earnings; instead they are based on flat-rate contributions which are determined on the basis of the time in employment. In the ATP scheme the old-age retirement age is 67 years, but it is possible to take the pension early at the age of 65. The ATP pension provider also administrates the SP pension savings arrangement, for which the insured pay a contribution of 1 per cent on gross earnings and this sum is deposited into personal pension accounts. The pension savings are paid from the retirement age in the national pension scheme, i.e. from the age of 65, usually for a period of 10 years.

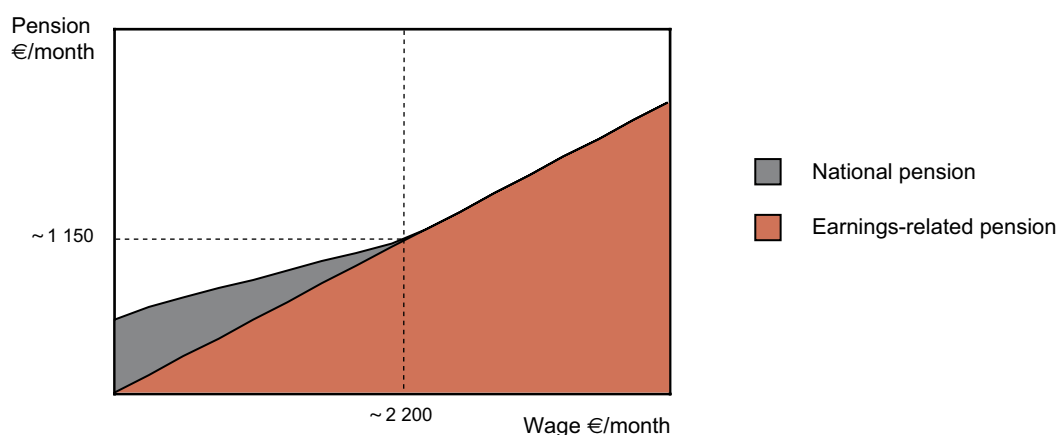
Early pensions from unemployment insurance and part-time pensions may be paid to persons aged 60-64. The significance of the part-time pension is small, and only persons who are not entitled to an early pension from unemployment insurance are entitled to this pension. The persons entitled to an early pension from unemployment insurance are persons who have been members of an unemployment fund for a long time. The possibility of early retirement via the unemployment insurance scheme has been a common exit pathway from the labour market and the criteria for this pension have been tightened in recent years.

The comparative data of the report include pensions from the national pension scheme and the ATP scheme as well as the early pension from unemployment insurance (etterløn).

Finland

Finnish pension provision consists mainly of the earnings-related pension, which is based on employment, and the residence-based national pension, which provides a minimum income. In Finland occupational pensions and pension provision based on personal pension insurance are not common compared to many other European countries. One important reason for this is that in the statutory earnings-related pension scheme there is no upper limit for the pension or for the pensionable earnings.

The national pension is reduced by the earnings-related pension, and it secures a minimum level of pension if the person receives no earnings-related pension or if the earnings-related pension is small.

Chart 2. *Structure of the Finnish pension system*

In the earnings-related pension scheme the retirement age is flexible between ages 63 and 68, the retirement age in the national pension scheme is 65 years. In both the earnings-related and the national pension scheme it is possible to take the old-age pension early at the age of 62. From both schemes it is also possible to receive disability and unemployment pensions. The schemes secure an income also in the case of the family breadwinner's death. In Finland the unemployment pension has been an important retirement pathway, and this pension may be awarded to unemployed persons who have reached the age of 60. At the beginning of the 2000s still every fourth retired person retired on an unemployment pension. In recent years the unemployment pension has become less important. In connection with the 2005 pension reform the unemployment pension was abolished and this type of pension will no longer be granted after the transition period (2011). Furthermore the pension acts make part-time work possible. The part-time pension may be awarded to persons aged 58–67.

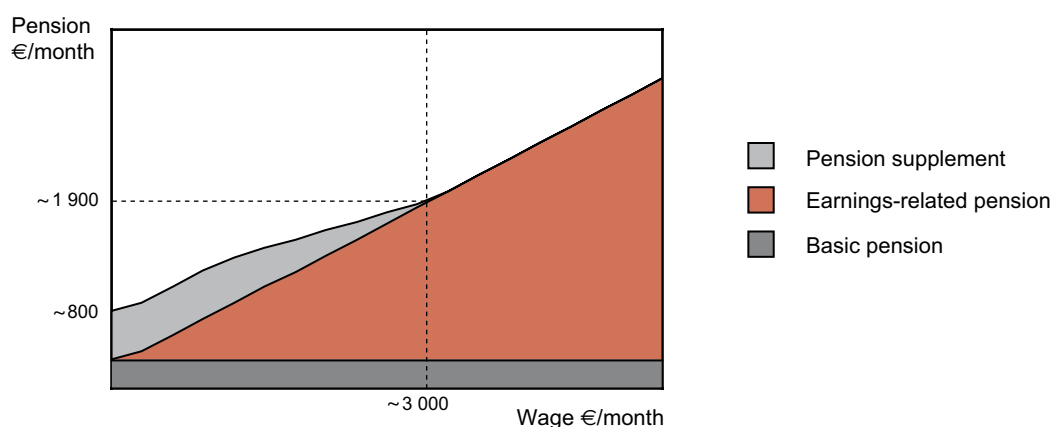
In the earnings-related pension scheme the largest reform since the introduction of the scheme took effect from the beginning of 2005. The main changes in this extensive reform were the change to taking into account the earnings for the whole work history in the pensionable wage, the introduction of the flexible retirement age, the increase in the age limits for the pre-retirement pensions, the abolishment of the unemployment pension and the individual early retirement pension as well as taking into account the increase in life expectancy in the pension amount through the life expectancy coefficient. The life expectancy coefficient will be applied for the first time in 2010.

As regards Finland the survey includes statutory pensions except the part-time pension. The part-time pension is not included, because it presupposes employment and in the employment statistics those who receive a part-time pension are categorised as employed.

Iceland

In Iceland pension provision consists of the residence-based national pension (basic pension and pension supplement) and the earnings-based mandatory supplementary pension (earnings-related pension). In addition to the mandatory supplementary pension schemes there have in Iceland been scarcely any separate voluntary supplementary pension schemes. Voluntary additional pension saving has increased only in recent years following changes in the taxation.

Chart 3. *Structure of the Icelandic pension system* ²⁾



Benefits paid from the schemes are old-age, disability and survivors' pensions. Earnings-related pension provision is arranged in administratively independent pension funds. The earnings-related pension benefits may vary between pension funds, as only the minimum level of pension provision has been determined by law.

The general retirement age in the national pension scheme is 67 years. It is not possible to take the pension early, with the exception of certain groups of persons (e.g. seamen). In the earnings-related pension scheme the retirement age may vary between pension funds between ages 65 and 70, but a retirement age of 67 years is common. The pension may also be taken early. The pension may be taken early or postponed by at the most five years. As a rule the pension may be taken early from the age of 65.

It can further be noted that in Iceland the grounds for payment of the pension supplement were changed 1 July 2007. After the change the amount of the pension supplement is 78,542 ISK/month (864 euros/month), whereas at the beginning of 2007 it was 44,838 ISK/month (493 euros/month). Nowadays the pension supplement is also paid for considerably higher incomes than before.

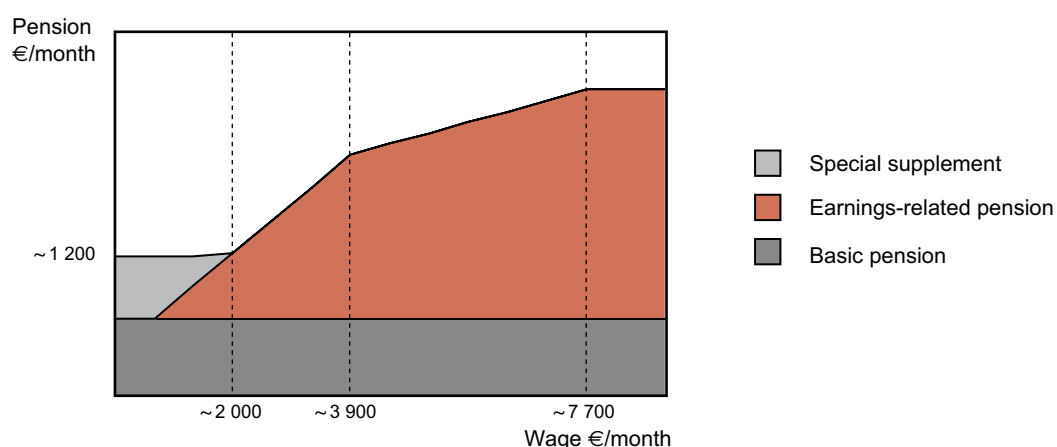
The figures in the report include pensions paid from the national pension scheme and from the mandatory supplementary pension scheme.

2) When calculating the supplementary pension the minimum level defined by law has been used (target level 56%). In reality the level may vary.

Norway

The benefits paid from the Norwegian statutory national insurance scheme are residence-based basic pensions and employment-based supplementary pensions (earnings-related pension). All residents are entitled to a basic pension. A special supplement, which is reduced by the earnings-related pension, may be paid to the basic pension. The statutory earnings-related pension scheme has a staggered earnings ceiling. The upper limit of the pensionable earnings is approximately 7,700 euros per month, and no pension accrues for the exceeding amount.

Chart 4. *Structure of the Norwegian pension system*



The pension benefits are old-age, disability and survivors' pensions. The general retirement age in the statutory pension scheme is 67 years. There are no early retirement arrangements in the statutory old-age pension system. However, the labour market organisations have agreed on a separate AFP early retirement scheme (avtalefestet pensjon), which allows for retirement at the age of 62. An estimated 60 per cent of the employees are covered by the AFP scheme. However, of those still employed at the age of 62, about 80 per cent are covered.

In addition to the national insurance scheme Norway has extensive supplementary pension schemes for different professions, industries and individual employers. The supplementary pension schemes were made mandatory in early 2006. This is part of a broader overall reform of the pension system, which has been in preparation since 2001. The pension reform will take effect in 2010, but full effect will only be reached after a transition period.

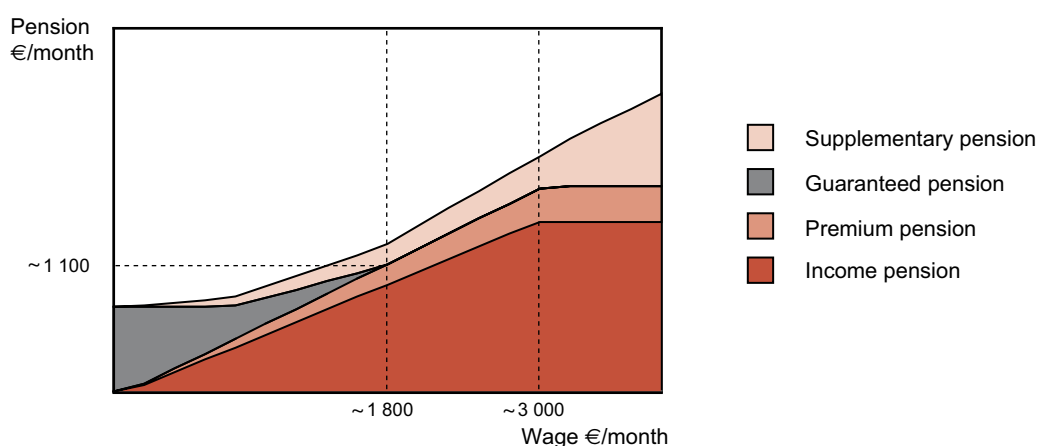
In today's statutory earnings-related system, a full pension accrues in 40 years and the benefit is determined on the basis of the average earnings for the best 20 years. After the pension reform the lifetime benefit will be determined on the basis of the earnings for the whole working career. The annual benefits will also be affected by a life expectancy coefficient, which will be introduced from 2010. The basic pension will also become a guaranteed pension along the model of Finland and Sweden. The general retirement age will not be changed from the current 67 years, but flexibility will be introduced, allowing retirement between the age of 62 and an upper limit which has not yet been decided. The AFP pension will be maintained alongside the new early pension, but may be reformed in order not to counteract the intentions of the pension reform.

The report includes old-age and disability pensions paid from the statutory national insurance scheme as well as the AFP early pension.

Sweden

The Swedish statutory old-age pension scheme, which was reformed in 1999, consists of the earnings-related pension and the guaranteed pension (garantipension), which secures a minimum cover. The earnings-related pension is based on defined contributions and it is divided into two components: the income pension (inkomstpension) and the premium pension (premiepension). Both pensions are determined on the basis of the insured person's accumulated amount of pension contributions for the whole working career. Contributions accumulate annually at the rate of 18.5 per cent of the pensionable earnings. The upper limit for the pensionable earnings (earnings ceiling) is approximately 3,000 euros per month.

Chart 5. Structure of the Swedish pension system ³⁾



The contributions of the income pension are not funded, but instead the pension is determined on the basis of the calculated contribution accumulation, whereas the contributions levied for the premium pension are funded and the pension is determined on the basis of the contributions and the yields on them. The insured may himself decide on the investment of the premium pension contributions. The share of the premium pension in the aforementioned old-age pension contribution is 2.5 percentage points. The earnings-related pension covers all employees and self-employed persons. The earnings-related pension will take effect gradually and the defined-benefit pension of the old pension scheme (ATP) is partially still in force during the transition period.

It is possible to retire on the earnings-related pension flexibly according to one's own choice from the age of 61. The pension may be taken as a full pension or a partial pension, which amounts to three-fourths, one-half or one-fourth of the full pension.

When the insured person retires the accumulated pension capital is converted to a pension by dividing it with an annuity divisor (delningstal), that reflects the age group's remaining life expectancy and includes an interest of 1.6 per cent, credited to pensions in advance. Increasing life expectancy increases the divisor and reduces the pension to be paid monthly. Due to the way the pension is determined the pension increases the more the insured postpones retirement.

3) The guaranteed pension in the chart is not paid when the wage/salary exceeds 1,800 euros/month, when the target level has been set at 60%. Since the Swedish pension scheme is a defined-contribution scheme, the wage level does not in itself show the real situation and the target level may also vary.

The guaranteed pension, like the former national basic pension, covers everyone who is resident in the country and the pension amount is linked to the number of years of residence. The earnings-related pension reduces the guaranteed pension so that when the earnings-related pension is high enough, no guaranteed pension is paid. The retirement age for the guaranteed pension is 65 years.

The sickness compensation (sjukersättning) and activity compensation (aktivitetsersättning), which are paid from health insurance, have since the beginning of 2003 replaced the former disability pension (förtidspension) payable from the pension scheme and the sickness benefit (sjukbidrag) payable as a fixed-term disability pension.

In addition to the statutory pensions Sweden has very extensive supplementary pension schemes based on labour market agreements for both public and private-sector employees. Membership in the schemes is mandatory for all employers and employees working in an industry covered by such an agreement. The supplementary pension schemes cover more than 90% of employees.

In addition to the statutory pensions the report includes benefits payable from health insurance which can be classified as disability pensions: sickness compensation (sjukersättning) and activity compensation (aktivitetsersättning).

2 Effective retirement age and expected effective retirement age

The traditional ways of measuring effective retirement age, arithmetic mean and median, are not well-suited to measuring changes over time. The average age of those who will retire in the next 10 years will increase in many countries, even though the retirement risk for each age group does not change at all. The reason for this is the age structure of the population. In the next few years the post-war baby-boomers will retire. In different countries the post-war baby-boomers usually constitute exceptionally large age groups compared to the age groups which are nowadays being born. There are differences between the countries mainly as regards the size of these age groups and over how short or long a time period they were born.

Certain basic requirements are set for the indicator for effective retirement age:

- The indicator reacts in a correct way to changes in retirement risk. It decreases when the retirement risk increases in some age group younger than the retirement age and increases when the retirement risk decreases.
- The indicator reacts only to changes in retirement risk. It must not be affected by demographic phenomena such as the age structure of the population.
- The indicator reacts immediately to changes in retirement risk.
- The statistical data needed for the calculation of the indicator is available.

The expected effective retirement age meets these four basic criteria quite well. A further criterion could be for instance international comparability, but obtaining comparable data may be problematic. However, this report shows that using this kind of indicator also in international comparisons is possible.

Finland, Norway and Sweden have nationally used indicators developed to measure effective retirement age, which react immediately and in the right direction to changes in retirement risk. The age structure of the population does not affect these indicators and the same name is used for them in different countries (expected effective retirement age). The indicators describe changes over time in effective retirement age.

Definition of the Nordic expected effective retirement age

The expected effective retirement age (expectancy) describes the average effective retirement age for insured persons of a specific age on the assumption that the age-specific retirement risk and mortality rate for each age group remain at the level of the year of observation.

In this report the expected effective retirement age is calculated primarily for 30-year-olds and 50-year-olds. The expectancy for 30-year-olds is used as a general indicator and it describes the retirement of the whole population. Since the pension systems of different countries clearly differ from each other, there is reason to calculate the effective retirement age for 30-year-olds, as they have mostly already achieved a stable status in the labour market and will also then retire from the labour market. However, only a small proportion of those who retire are aged under 50. For them the illnesses and handicaps are often such that staying on in the labour market is no longer possible. One reason for calculating the expectancy for 50-year-olds is actually that the inclination to retire among persons who have reached the age of 50 can be affected also by pension policy.

The expected effective retirement age is calculated by first calculating the insured persons' mortality rate and retirement risk for each age group during the year of observation. Using these proportions it is possible to calculate how many of a group of insured of a certain size and of a certain age (for instance 100,000 30-year-olds) would retire within one year. The number of insured which remains at a one year higher age is obtained by subtracting from the original number those who have retired and the number of deceased calculated from the mortality rates. Continuing in this way age by age until the retirement age for an old-age pension (or some other agreed age), the calculated numbers of those retiring are obtained for each age group. The average age calculated from these assumed retirements is the expected effective retirement age.

The data used is the employment statistics of each country's statistics office. The data is uniform, since the Nordic statistics offices have in cooperation defined the concepts used. The data is based on the data at the point of cross-section for the population then resident in the country. The statistics describe the distribution of the population at the end of the statistical year between different statuses (e.g. numbers of retired persons and number of economically active persons). In chapter 2 the descriptions of the pension systems of the different countries also state which pensions or benefits are considered as pensions. Since the statistics describes

the situation at time of the cross section, the numbers of persons who have retired have to be estimated through the population changes and the changes in number of pension recipients for two consecutive years for each cohort.

Since the statistics produced by the statistics offices of the different countries are produced at different dates, the data for this publication is available considerably later than the national data of the different countries. This indicator does also not replace the national indicators for the effective retirement age, but instead supplements them by providing an international dimension.

Mode of calculating the Nordic expected effective retirement age

Noted:

x = year of observation,

z_j^x = persons resident in the country at the end of year x , whose age at the end of year x is j ,

p_j^x = retired persons at the end of year x , whose age at the end of the year is j ,

v_j^x = non-retired persons at the end of year x , whose age at the end of year x is j ,

$*e_j^x$ = persons who have retired during year x (obtained as the difference between stocks of pensions), whose age at the end of the year is j ,

y_j^x = mortality (risk of death) year x for persons whose age at the end of the year is j ,

f_j = mortality factor in age group $j = \begin{cases} 9, & \text{if } j < 50, \\ 3, & \text{if } 50 \leq j < 60, \\ 1, & \text{if } j \geq 60. \end{cases}$

Mortality for the whole population and for those who are retired differs. This high mortality for those who are retired is taken into account through the mortality factor f_j . The factor reduces the error made when calculating the number of persons who have retired. The number of persons who have retired is calculated using the numbers of persons who were retired at the end of two consecutive years for each cohort.

In which case:

$$*e_j^x := p_j^x - p_{j-1}^{x-1} \cdot (1 - f_j \cdot y_j^x) .$$

In this case the retirement risk i.e. retirement risk year x at age j is:

$$e_j^x := {}^*e_j^x / v_{j-1}^{x-1}$$

and the probability of retirement at age j is derived from the formula

$$A_j^x := e_j^x \prod_{k=30}^{j-1} (1 - e_k^x - y_k^x) .$$

The expected effective retirement age for 30-year-olds is the age average of figures A_j^x :

$$E_{30}^x := \left(\sum_{j=30}^{70} j A_j^x \right) / \sum_{j=30}^{70} A_j^x .$$

At the Nordic level the development of the expectancy for 30-year-olds and for 50-year-olds is monitored. The retirement probability used for 70-year-olds is 1.

In Finland, Denmark, Iceland, Norway and Sweden the retirement ages differ from each other. Therefore the termination age agreed on for this model is 70 years. The choice of termination age has hardly any effect in countries where the retirement age is lower, because in those countries in practice everybody is retired starting from the retirement age.

3 Expected effective retirement age in the Nordic countries

Comparison of the development in different countries is made more difficult by the differences in the pension schemes: the pension schemes have been reformed at different times and these changes show in the effective retirement age in different years. As a general observation it can be said that the objective of the Nordic pension reforms is to postpone retirement, and on the basis of the last few years this is also what seems to happen.

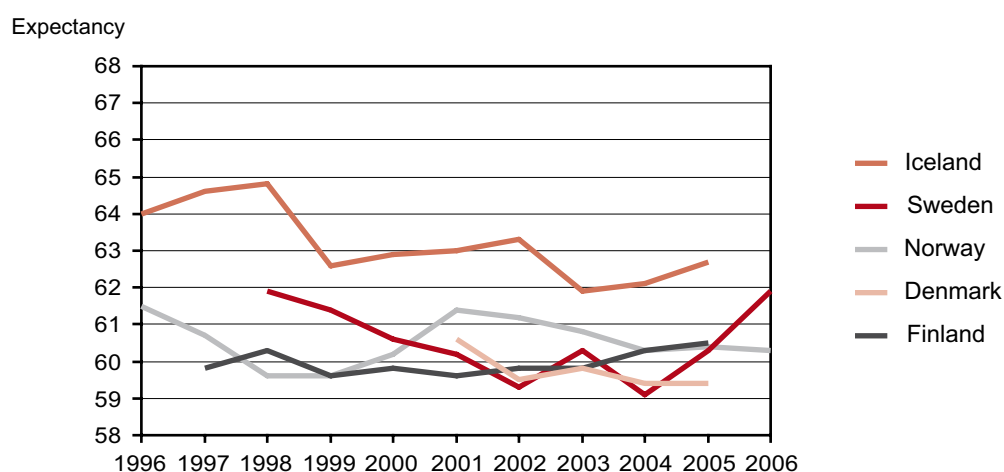
Even though this analysis uses different data and the method is also slightly different from that of the national calculations, the results are very similar. The levels differ somewhat from the countries' national figures (there also the groups of persons observed differ). It can thus be stated that the development described in this publication corresponds quite well to the situation in the different countries and in this way provides further information for international comparisons.

Expected effective retirement age for 30-year-olds

There are differences in effective retirement age between the Nordic countries. In Iceland people retire clearly later than in the other Nordic countries. In 2005 the expected effective retirement age for 30-year-olds in Iceland was 62.7 years. In the other Nordic countries it varied between 59.4 and 60.5 years.

The development in effective retirement age has also differed in the different countries. In Finland the effective retirement age stayed at the same level for the first few years of the 2000s. At the same time a slight trend-like decrease in effective retirement age could be observed in the other Nordic countries, which stopped in about 2005. At that time it seems the effective retirement age took a turn upwards. In Norway the effective retirement age has decreased almost to the level at the end of the 1990s even though it had risen in between. In Sweden the expectancy has started to increase after several years of decrease. In 2006 it was at the same level as at the end of the 1990s. In Denmark the effective retirement age has decreased slightly in the 2000s, although in 2004 and 2005 the situation levelled out.

Chart 6. *Expected effective retirement age for 30-year-olds in the Nordic countries in 1996–2006*

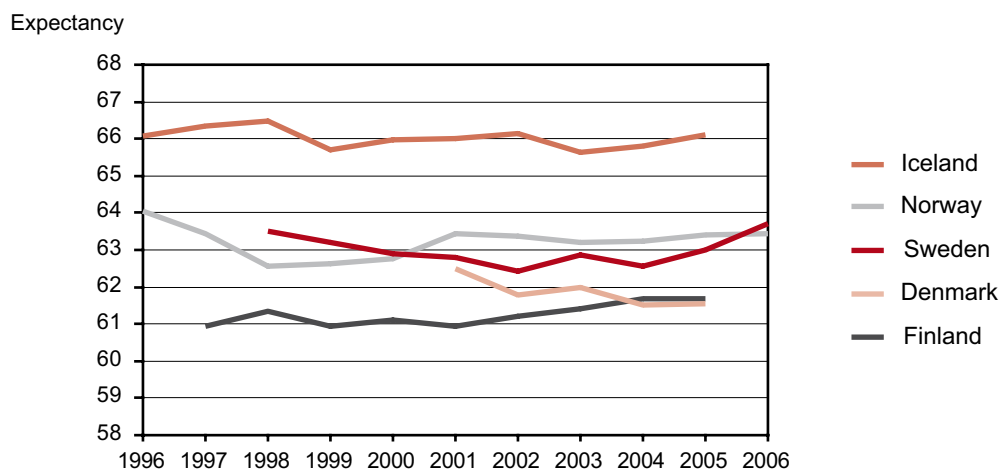


Expected effective retirement age for 50-year-olds

As for the effective retirement age for 30-year-olds there are also differences between the Nordic countries in the effective retirement age for 50-year-olds (see chart 7). The differences are even larger as regards the expectancy calculated for 50-year-olds. Of the Nordic countries the expected effective retirement age for 50-year-olds is also clearly the highest in Iceland. In 2005 it was 66.1 years. The reason for this higher level by about three years is probably the higher retirement age in Iceland (70 years) and especially men's late retirement. In Denmark the expected effective retirement age for 50-year-olds was the lowest (61.6 years), in Finland slightly higher, and in Norway and Sweden approximately 63 years.

Over the time period observed the changes in effective retirement age for 50-year-olds are pretty small. In Iceland and Norway it has in recent years stayed at the same level. On the other hand, in Finland and Sweden the expectancy for 50-year-olds is on the increase and in Denmark decreasing. In Finland the rise started at the beginning of the 2000s. In Sweden the expectancy started increasing clearly after 2004.

Chart 7. *Expected effective retirement age for 50-year-olds in the Nordic countries in 1996–2006*



Differences in effective retirement age for men and for women

In the Nordic countries the effective retirement age for women is lower than for men. The exception is Finland, where the expected effective retirement age for 30-year-old women is approximately six months higher than for men. In Finland the difference between men and women is also the smallest. In Iceland the difference is the largest: there the effective retirement age for women is about three years lower than for men. In Denmark the difference is less than a year, in Norway it has varied around 18 months. In Sweden the difference has been in the region of a couple of years, although in 2006 it was only a year.

The difference between men and women is smaller in the effective retirement age for 50-year-olds than for 30-year-olds. In Finland the expectancy for 50-year-olds is the same for men and women. In Iceland the difference is in the region of 18 months. In Denmark and Norway the difference is slightly less than a year and in Sweden still somewhat smaller, i.e. about six months.

The difference in effective retirement age between men and women has remained more or less the same over the period of observation. In all countries the changes are small. The largest change probably occurred in Norway in 2003 and 2004. There the difference has increased to a couple of years at the same time as the effective retirement age has decreased. There is a decrease for both men and women, but for women the decrease has been slightly larger. A change in the opposite direction has happened in Sweden: at the same time as the effective retirement age has increased in recent years the increase has been larger for women than for men.

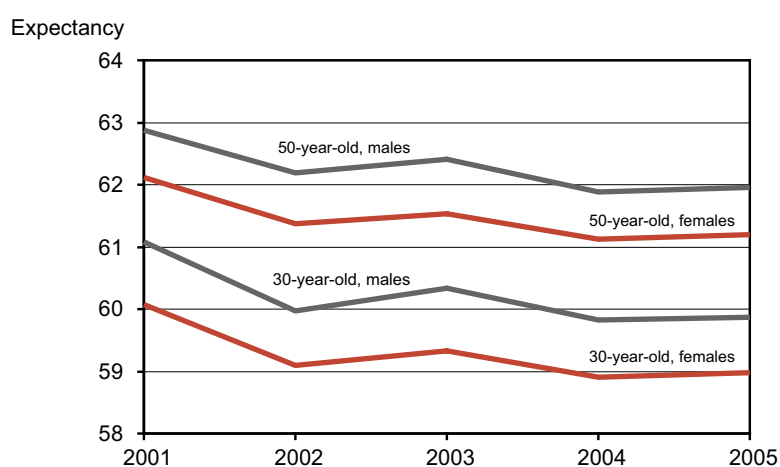
Further information in chart appendix 2.

Development of effective retirement age by country

Denmark

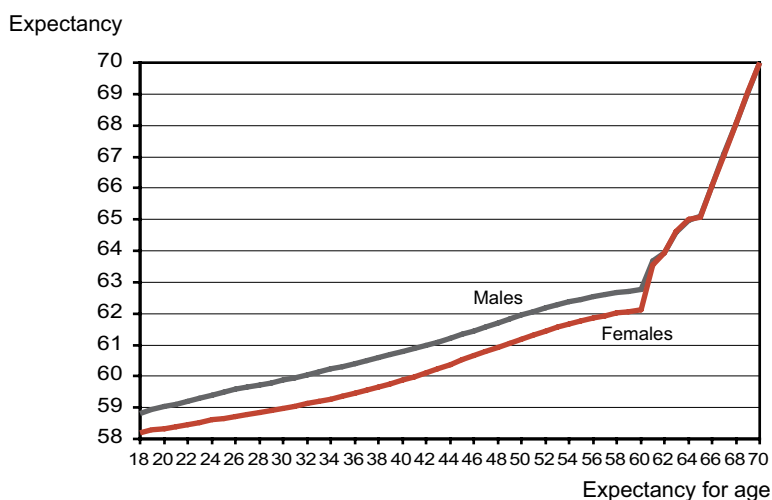
As regards Denmark the data includes data for 2001–2005. During this period changes in age limits have been made in the Danish pension scheme, and they have some effect on the effective retirement age (further information in the description of the Danish pension system). In recent years the effective retirement age in Denmark has varied slightly without a clear direction, maybe a slight decreasing trend occurred at the beginning of the 2000s, but the situation seems to have levelled out in 2005 (see charts 6-8).

Chart 8. *Expected effective retirement age for 30-year-olds and 50-year-olds in Denmark by gender in 2001–2005*



In Denmark the difference between men and women has in recent years stayed at the same level (for women slightly less than one year lower). The difference is of the same magnitude in both the expectancy for 30-year-olds and for 50-year-olds. Chart 9 shows that in Denmark the effective retirement age for women is lower than for men up to the age of 61. For persons older than this there are no differences.

Chart 9. *Expected effective retirement age in Denmark by gender and by age in 2005*

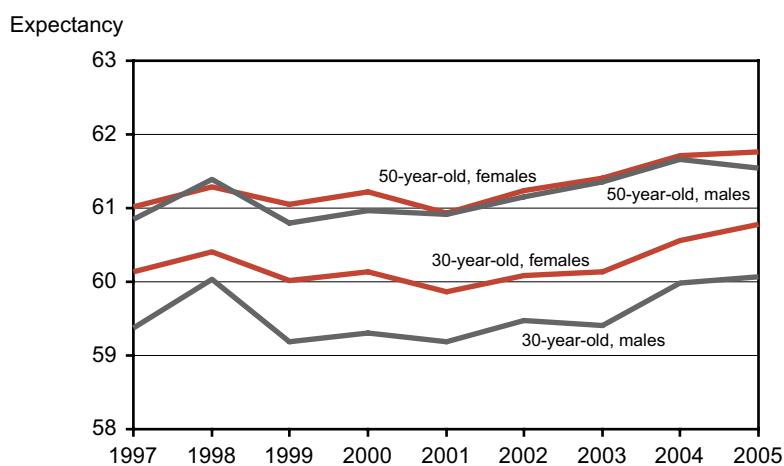


Finland

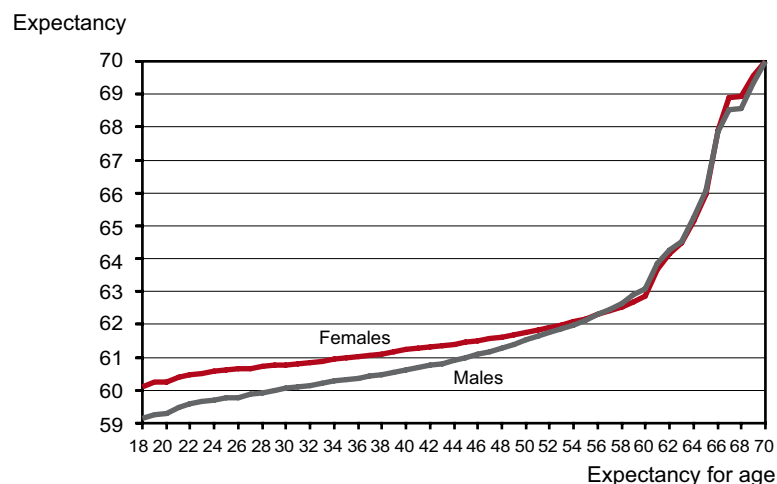
In Finland there were no large changes in effective retirement age towards the end of the 1990s. There has been little variation in the expectancy for 30-year-olds, and the expectancy is slightly less than 60 years. On the other hand, in the 2000s a slight increasing trend can be observed, and this trend can also be expected to continue. This is promoted by the favourable economic situation and the 2005 pension reform, although the effects of the reform do not yet show in the effective retirement age in the period observed.

On the basis of the national figures it is already apparent that the effective retirement age was still increasing in 2006. This trend concerns both the expectancy for 30-year-olds and for 50-year-olds, where the increase has in the last few years been even clearer.

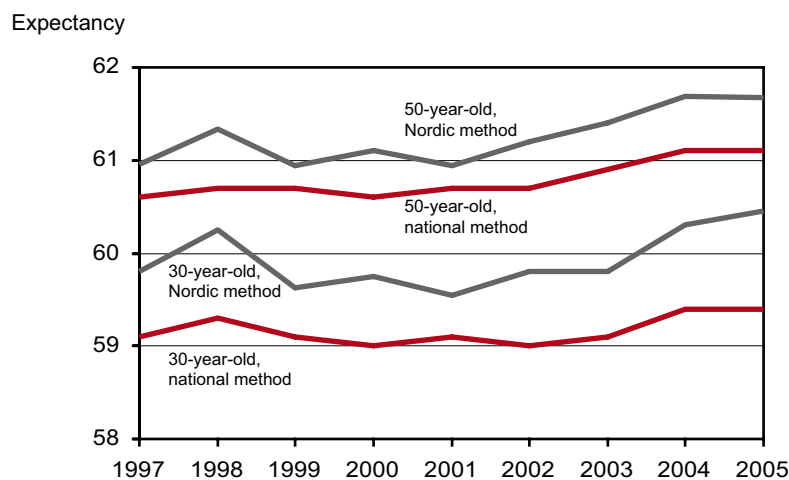
Chart 10. *Expected effective retirement age for 30-year-olds and 50-year-olds in Finland by gender in 1997–2005*



Finland differs from the other Nordic countries as regards the differences between men and women. In Finland the difference in effective retirement age between men and women is the smallest of the Nordic countries. A special feature specifically for Finland is the higher effective retirement age for women than for men when calculated for 30-year-olds. The effective retirement age for Finnish men is higher than for women when calculated for persons who are 56 years or older (chart 11). Before 2005 the values of the expectancy for men and for women were the same in the age category of 50-year-olds. The reasons for this are men's higher risk of incapacity for work, on one hand, and women's lower retirement ages, on the other hand. Especially the public sector, which employs a large share of women, has applied lower retirement ages.

Chart 11. *Expected effective retirement age in Finland by gender and by age in 2005*

In Finland a national expected effective retirement age has also been calculated. The national expectancy figures are slightly lower than the values of the Nordic indicator. So the difference is in the opposite direction to Sweden and Norway. The reason for this is that in Finland the national indicator and the Nordic indicator are calculated on the basis of different populations. The national expectancy figures are calculated only on the basis of the persons who have retired on an earnings-related pension, which thus does not include those who have retired on a pension which offers only a basic income, i.e. who start receiving only a national pension. Those who have started receiving only a national pension are on average younger than those who have retired on an earnings-related pension, so it might be assumed that increasing the population by those who receive only a national pension would reduce the effective retirement age. This does not happen, however, because the expectancy figures are primarily calculated for 30-year-olds and older. A significant proportion of the youngest persons who have retired start receiving only a national pension and are thus not included in the expectancy calculation. Thus the group of persons who have started receiving only a national pension, which is included in the Nordic calculation, mainly centers on older age groups and thus means that the Nordic indicators are higher than the national indicators.

Chart 12. *Expected effective retirement age by the Nordic method and the Finnish method in 1997–2005*

Iceland

Iceland differs clearly from the other Nordic countries as regards the effective retirement age. However, in the analysis it should be kept in mind that the effective retirement age as an indicator is pretty sensitive to changes. Since the Icelandic population is small, random variations may affect the results more than for countries with larger populations. The results indicate, however, that the expected effective retirement age describes the situation reliably also for Iceland.

In Iceland the effective retirement age is exceptionally high, the expectancy for 30-year-olds was 62.7 years in 2005 (see chart 6). The difference between men and women in the expected effective retirement age for 30-year-olds is also large, in the region of three years. The difference has even increased slightly in the 2000s at the same time as the effective retirement age has decreased from the level at the end of the 1990s. In the expectancy for 50-year-olds the difference between men and women is a couple of years.

Chart 13. *Expected effective retirement age for 30-year-olds and 50-year-olds in Iceland by gender in 1996–2005*

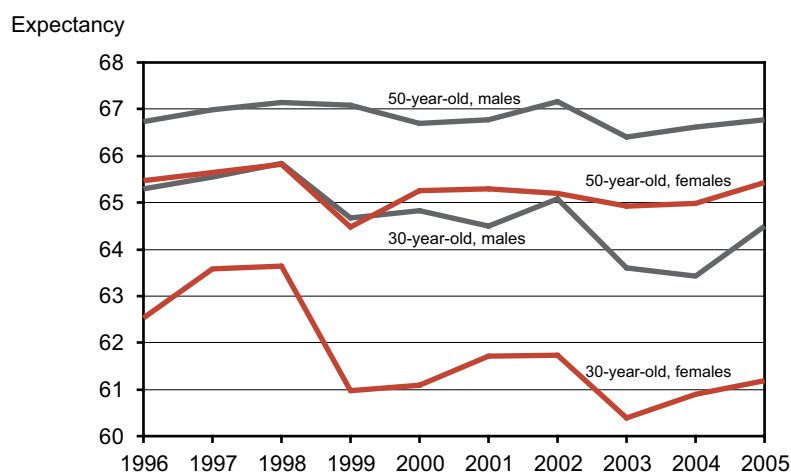
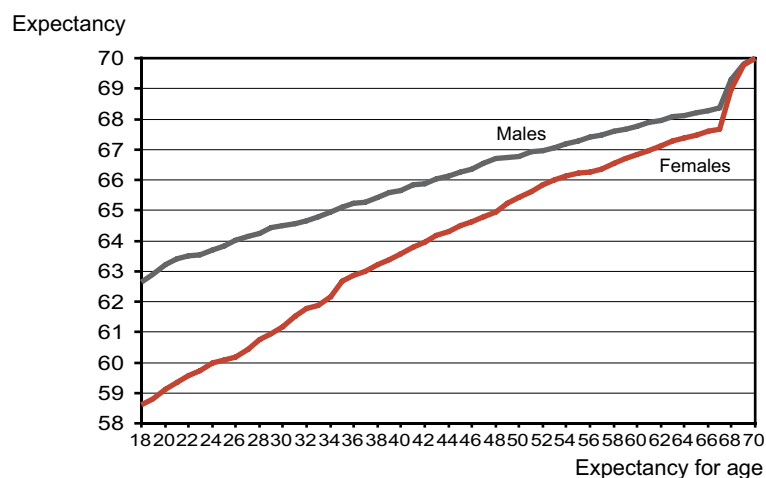


Chart 14 shows the effective retirement age in Iceland by age. The difference between men and women increases when moving towards older age groups. Still, also in the oldest age groups the effective retirement age is higher for men than for women.

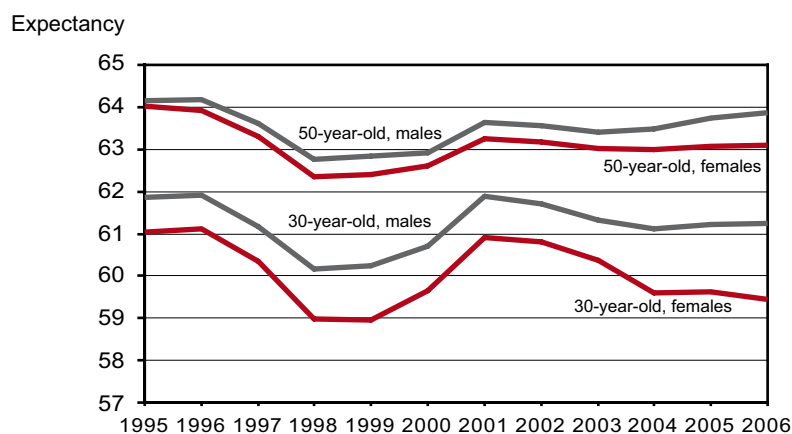
Chart 14. *Expected effective retirement age in Iceland by gender and by age in 2005*



Norway

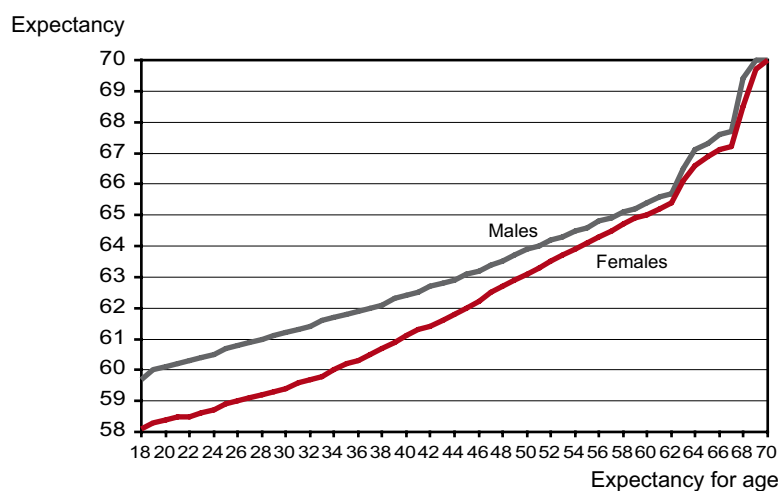
In Norway the effective retirement age has shown great variation over the last ten years. In recent years the expected effective retirement age for 30-year-olds has shown a decreasing trend. The effective retirement age for 50-year-olds has been more level with no large changes in the 2000s.

Chart 15. *Expected effective retirement age for 30-year-olds and 50-year-olds in Norway by gender in 1995–2006*



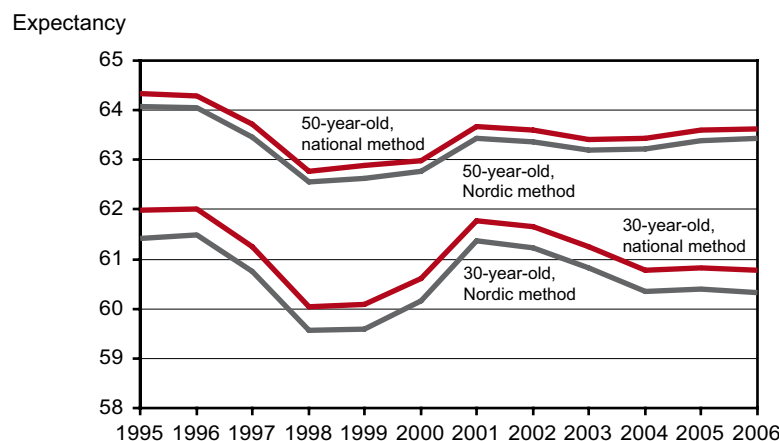
The effective retirement age for Norwegian men is higher than for women in all age groups. The difference is the largest in the youngest age groups (more than 18 months) and the smallest in the oldest age groups (less than six months). Chart 16 also shows that there are two clear points of change in the effective retirement age: at the age of 62 and at the age of 67. The reasons for this are the age limits in the pension scheme. On one hand, the early old-age pension in the AFP scheme can be taken at the age of 62, and on the other hand, the general retirement age in Norway is 67 years.

Chart 16. *Expected effective retirement age in Norway by gender and by age in 2006*



As in Finland, the expected effective retirement age has in Norway also been calculated on the basis of the national method. Over the observation period it has also reacted in the same way as the expectancy calculated on the basis of the Nordic method. This indicates that the indicators are comparable. The main difference is that the effective retirement ages calculated on the basis of the national method are slightly higher. In Finland the difference is in the opposite direction.

Chart 17. *Expected effective retirement age by the Nordic method and the Norwegian method in 1995–2006*



The drop in expected effective retirement age from 1996 to 1998 has two causes: The retirement age in the AFP scheme was lowered from 64 to 62 years, and at the same time there was a substantial increase in the number of new disability pensioners.

In 1991 the conditions for receiving disability pension were tightened. The result was a significant decrease in the number of new recipients, and consequently an increase in the expected effective retirement age of about 2.5 years from 1990 to 1993 (for 30-year-olds). After a few years the conditions were relaxed, and this accounts, at least partially, for the increase in 1998-99.

In 2000 the conditions for combining work and pension from the AFP scheme were made less favourable. This, together with a levelling off of the number of new disability pensioners, led to the rise in effective retirement age in 2001.

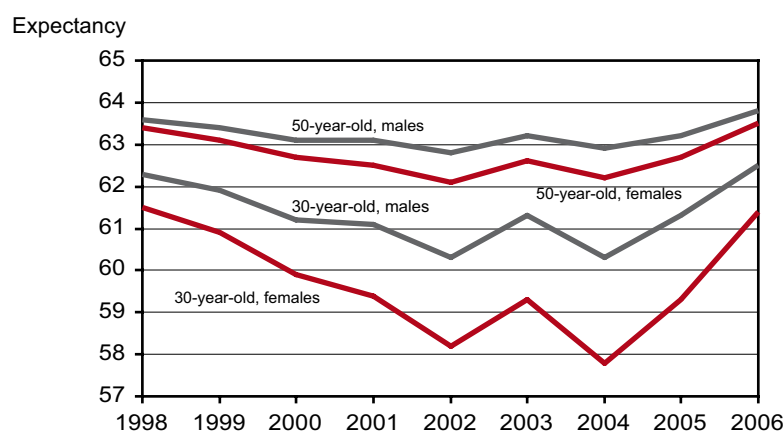
An increase in the number of new disabled below the age of 45 accounts for the decline in the effective retirement age for 30-year-olds from 2001. The probability of retiring on disability pension has declined for persons above 50 in recent years.

Sweden

In Sweden the effective retirement age has decreased from 1998 to 2002. The difference between men and women has increased, and the effective retirement age for women has decreased more than that for men. This has occurred in the expectancy for both 30-year-olds and 50-year-olds. In 2004 a more permanent turn seems to have occurred and the effective retirement age started to increase. There was an increase for both men and women. At the same time the difference between the genders has narrowed slightly.

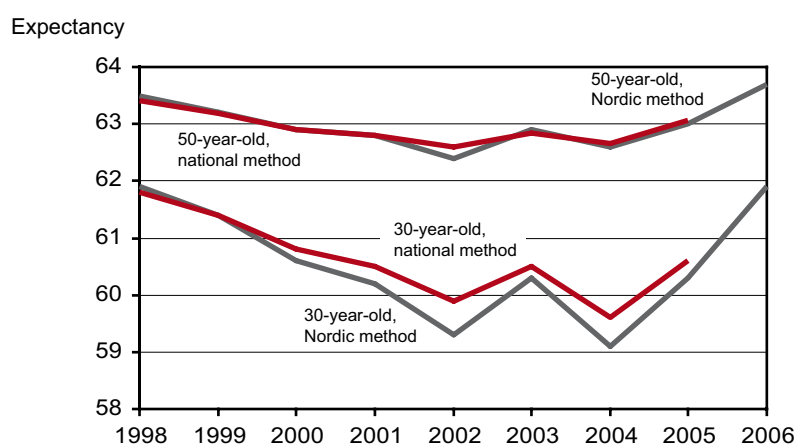
The main reason for the decrease between 1998 and 2002 is that the number of new disability pensions increased during this period. The temporary increase in 2003 is due to administrative reasons. The increase after 2004 was mainly caused by a decrease in the number of new disability pensions (now called sickness compensation).

Chart 18. *Expected effective retirement age for 30-year-olds and 50-year-olds in Sweden by gender in 1998–2006*



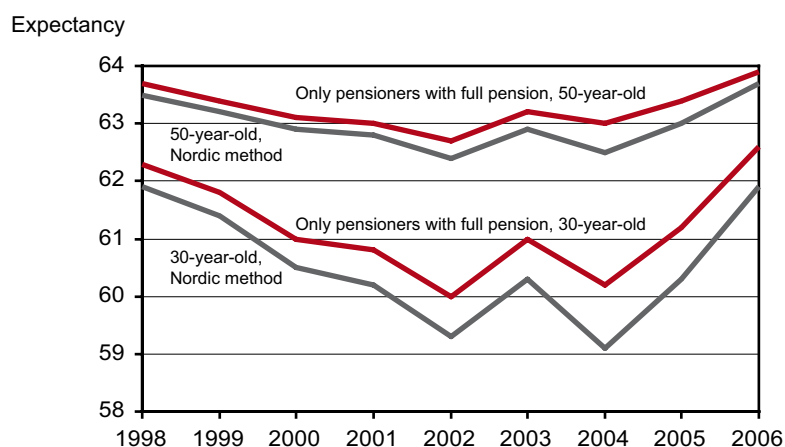
In Sweden the development of the former national expected effective retirement age has been very similar to that of the expected effective retirement age calculated according to the Nordic method (chart 19). The effective retirement age for 30-year-olds calculated according to the former national method is in Sweden slightly higher than when calculated according to the Nordic method. The expectancy for 50-year-olds is at the same level in both methods.

Chart 19. *Expected effective retirement age by the Nordic method and the former Swedish method in 1998–2006*



The persons who have retired also include recipients of different partial pensions, if the partial pension provides the main part of the pension recipient's income. Their amount is not high and their significance is mainly restricted to the level of the effective retirement age and not that much to the changes in effective retirement age (chart 20).

Chart 20. *Effect of partial pensions on the expected effective retirement age in Sweden in 1998–2006*



4 Life expectancy and time in retirement in the Nordic countries

We already stated above that the expected effective retirement age varies in the Nordic countries. Since there are also differences in life expectancy, it is interesting to survey how long people in the different Nordic countries spend in retirement.

Life expectancy at birth

In 1996–2005 life expectancy has increased in all the Nordic countries. In the Nordic countries life expectancy at birth for boys has increased on average by 2.5 years. For girls the corresponding increase is slightly less than two years.

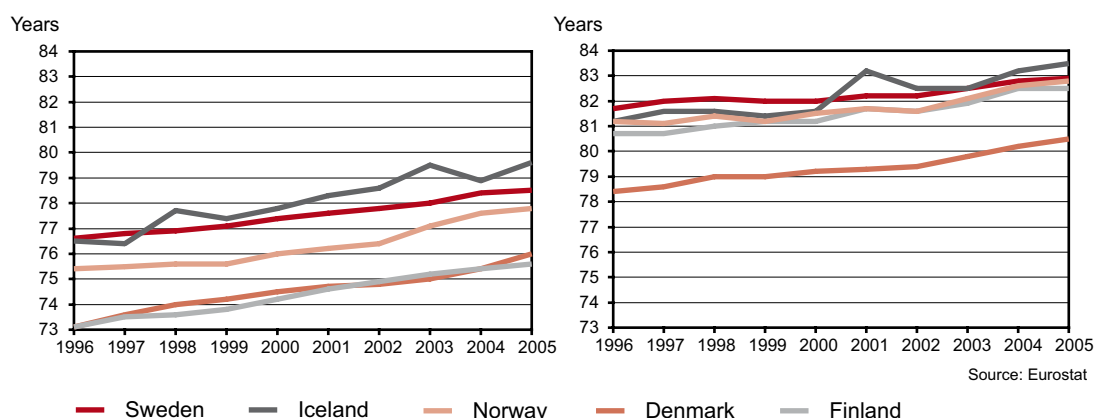
The change has been the smallest in Sweden and the largest in Iceland. In Denmark the increase has been the second-largest. In Finland and Norway the increase has been of the same magnitude, 2.5 years for men and over 1.5 years for women. In Sweden the initial level of life expectancy has been the highest for both men and women, which partly explains the smaller change. In Iceland life expectancy has increased over a ten-year period to become the highest of the Nordic countries for both men and women.

In 2005 life expectancy at birth for boys in the Nordic countries was on average 77.5 years. In Finland and in Denmark life expectancy was lower than this and in Finland it was the lowest of the Nordic countries (75.6 years). For girls life expectancy at birth was five years higher than for boys. In 2005 it was in the Nordic countries on average 82.4 years. In Denmark life expectancy for girls was a couple of years lower than in the other Nordic countries.

Chart 21. Life expectancy at birth in the Nordic countries in 1996–2005

a) Males

b) Females



Remaining life expectancy at age 60

Since the expected effective retirement age for 30-year-olds is approximately 60 years, the remaining life expectancy at age 60 is also surveyed separately. This gives an idea of how long people on average spend in retirement in the different Nordic countries.

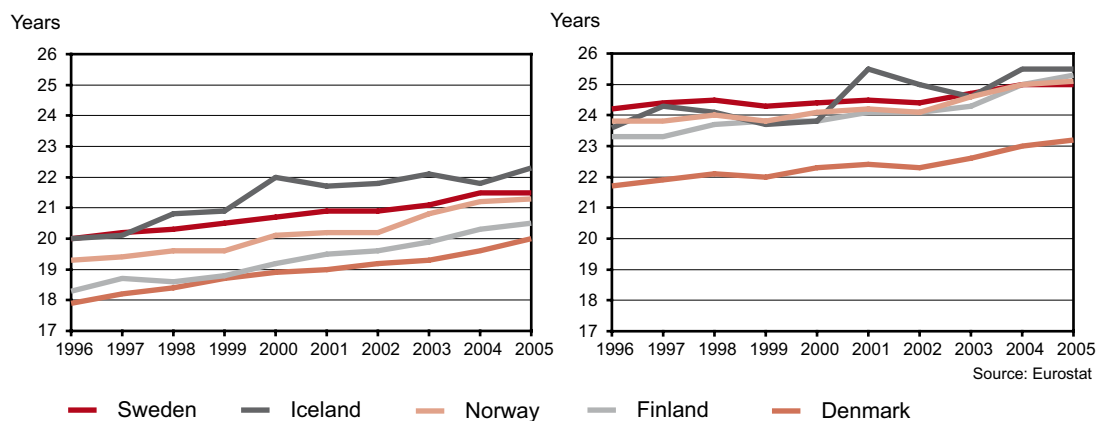
Life expectancy at age 60 has also increased in all the Nordic countries. In 2005 average life expectancy at age 60 for men in the Nordic countries was over 21 years. This figure has increased by two years over a ten-year period. Correspondingly life expectancy at age 60 for women was almost 25 years, which means an increase of 1.5 years over the observation period.

Also in the remaining life expectancy at age 60 there are differences between the Nordic countries. The countries follow almost the same order as for life expectancy at birth. In Denmark life expectancy is the lowest and in Iceland the highest. As regards women the Nordic countries are at the same level, except Denmark. There life expectancy at age 60 for women is a couple of years lower than for others. For men the differences are more pronounced. In Iceland the remaining life expectancy at age 60 for men is over 22 years, in Sweden 21.5 years, in Norway a good 21 years, in Finland 20.5 years and in Denmark 20 years.

Chart 22. Life expectancy at age 60 in the Nordic countries in 1996–2005

a) Males

b) Females



Time in retirement

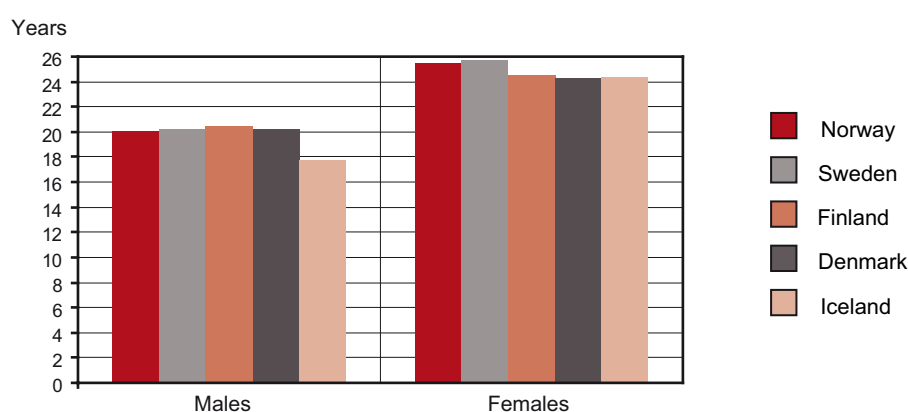
Since life expectancies and retirement ages differ between the Nordic countries, it is also quite natural to compare for how long pensions are paid out in different countries. An approximate indication of the length of the time in retirement is obtained by subtracting from the age of 60 years the expected effective retirement age for 30-year-olds and then adding the life expectancy at age 60. This is an approximate calculation and it does in fact not predict the future, as the current 30-year-olds will be 60-year-olds in 30 years. At that time their life expectancy will probably differ from that of today's 60-year-olds. Despite this the calculation gives a certain indication of the length of time in retirement in view of today's indicators.

The European Commission has also used a corresponding way of calculating the time in retirement (Economic Papers number 236, 2005: The economic impact of ageing populations in the EU25 Member States). The calculations are based on the figures of the labour force study and the results differ from those presented here. According to the Commission, the time in retirement is shorter than the time in retirement presented here.

According to the calculation used in this report, there are differences between the Nordic countries as regards time in retirement. Iceland has the highest longevity of the Nordic countries, but people retire so much later than elsewhere that the time in retirement is shorter than in the other Nordic countries. Especially the time in retirement for Icelandic men (18 years) is shorter than the time in retirement for other men. The difference is about 2.5 years. The time in retirement for men is the longest in Finland (20.4 years), but it is also clearly shorter than for women in the Nordic countries. Swedish, Norwegian and Danish men can expect to spend approximately 20 years in retirement.

The time in retirement for Norwegian and Swedish women is about 25.5 years. In Finland women's time in retirement is one year shorter. In Denmark and in Iceland women spend slightly over 24 years in retirement when calculating time in retirement in this way.

Chart 23. *Calculated length of the time in retirement in the Nordic countries in 2005*



5 Summary

It can be stated that the indicator describing the effective retirement age in the report works quite well. It gives the same picture of the development in each country as the corresponding national indicators used in Finland, Sweden and Norway, but produces a result which is more comparable between the different Nordic countries. As to their level the national indicators differ slightly from the Nordic indicator. In Finland the national expectancy figures are lower than those of the Nordic indicator. On the other hand, in Sweden and Norway they are higher. Thus the Nordic indicator is better suited for comparisons between different countries and does not replace the national indicators.

There are some differences in effective retirement age between the Nordic countries. In Iceland the effective retirement age is exceptionally high compared to the other countries. In addition the difference in effective retirement age between men and women is clearly larger than in the other Nordic countries.

Finland differs from the other countries in two respects. Only in Finland is the effective retirement age for women higher than for men as regards the expectancy for 30-year-olds. The difference between men and women is also smaller in Finland than in the other Nordic countries. In addition the changes in effective retirement age have in Finland been smaller than in the other Nordic countries.

In Sweden the effective retirement age has started increasing clearly in recent years. At the same time the difference between men and women seems to narrow. In Norway the effective retirement age has varied more than in the other Nordic countries. In the 2000s the expectancy has been on the decrease. The decrease seems to have stopped around 2005. In Denmark the effective retirement age has decreased slightly in the 2000s. This trend seems already to have stopped, however.

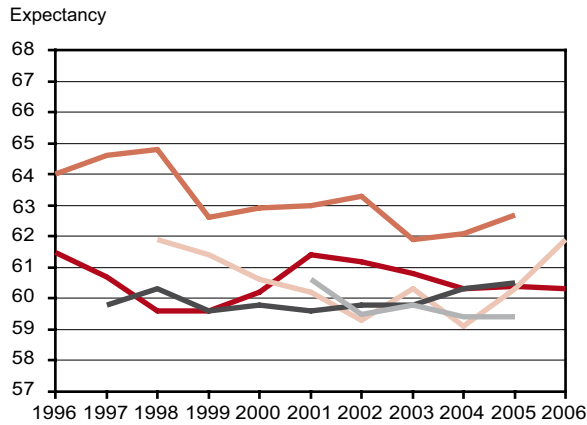
A joint Nordic phenomenon seems to be the development in recent years. The effective retirement age has started to increase in the last few years, or at least the decreasing trend no longer continues. This has surely been affected by the favourable economic development in recent years and the changes to the pension legislation which have been carried out in the Nordic countries.

In all the Nordic countries life expectancy has increased clearly between 1996 and 2005. Increase has occurred in both life expectancy at birth and remaining life expectancy at age 60. Life expectancy is the highest in Iceland and the lowest in Denmark. In Iceland especially men retire so much later than others that their time in retirement is 2.5 years shorter than for others. The differences between the other Nordic countries are small. The differences between the different countries are for women a couple of years, i.e. smaller than for men, although their time in retirement is approximately five years longer than for men. Norwegian and Swedish women have the longest time in retirement, and Icelandic and Danish women have the shortest time in retirement.

Chart appendix 1. Expected effective retirement age in the Nordic countries in 1996–2006

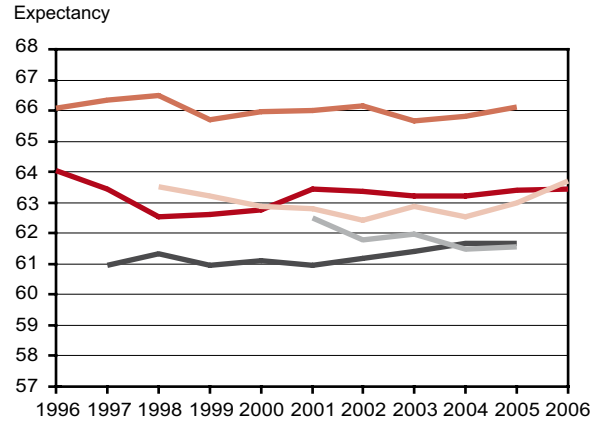
Expectancy for 30-year-olds

a) Both genders

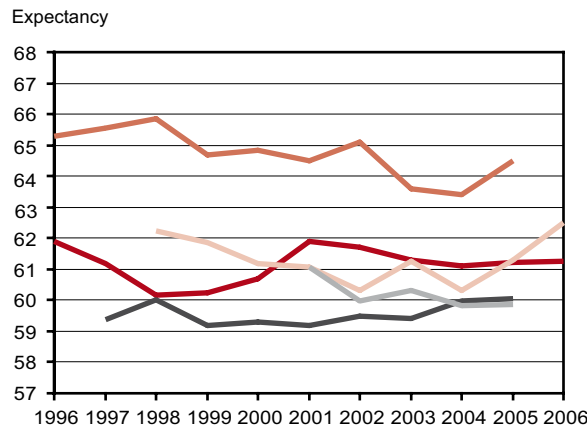


Expectancy for 50-year-olds

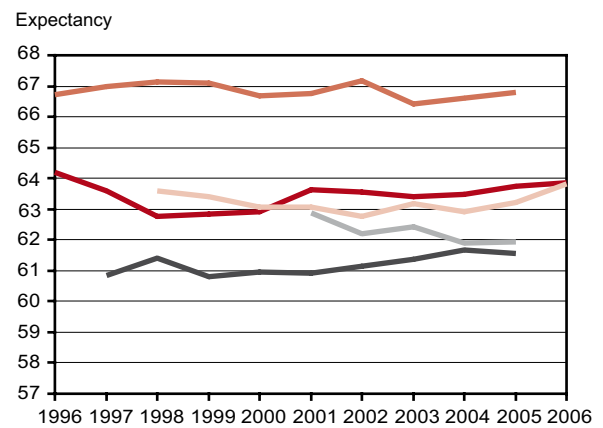
a) Both genders



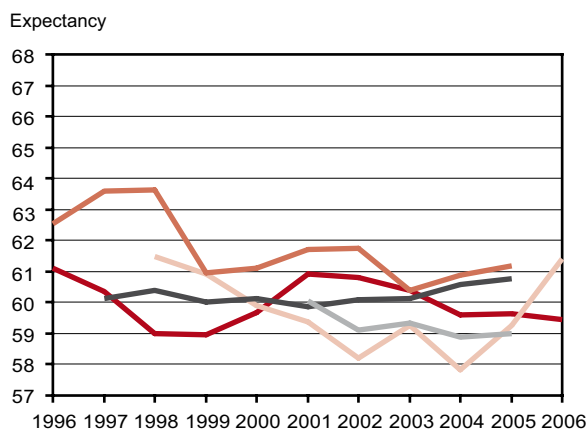
b) Males



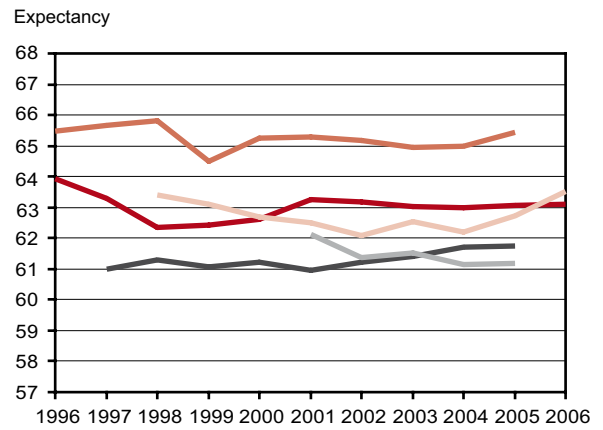
b) Males



c) Females



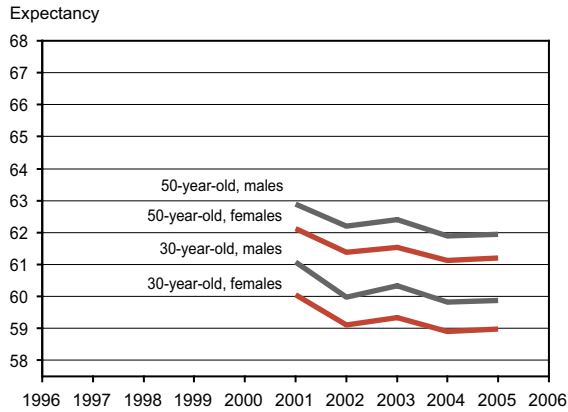
c) Females



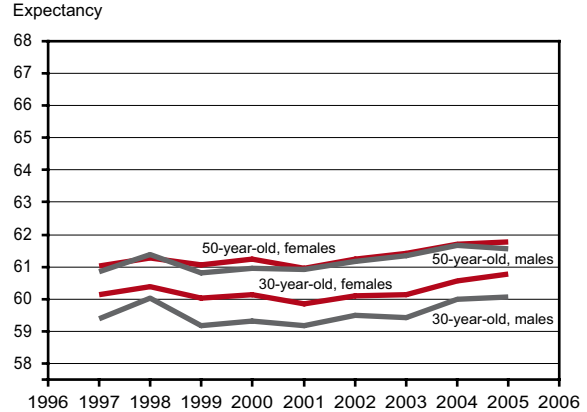
— Iceland — Sweden — Norway — Denmark — Finland

Chart appendix 2. Expected effective retirement age in the Nordic countries by gender in 1996–2006

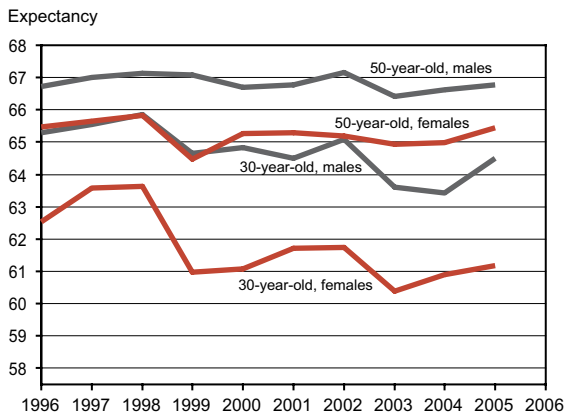
Denmark



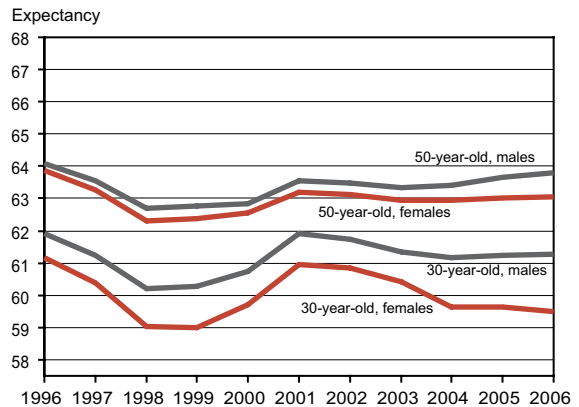
Finland



Iceland



Norway



Sweden

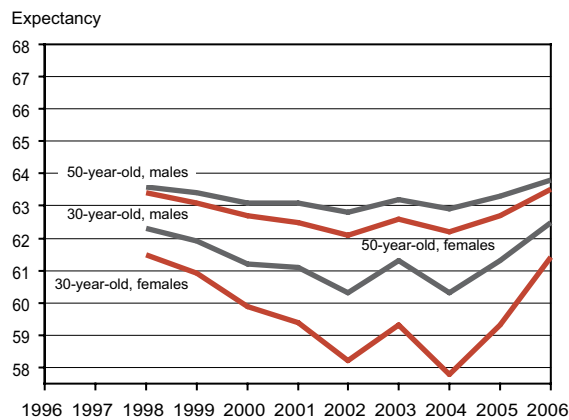
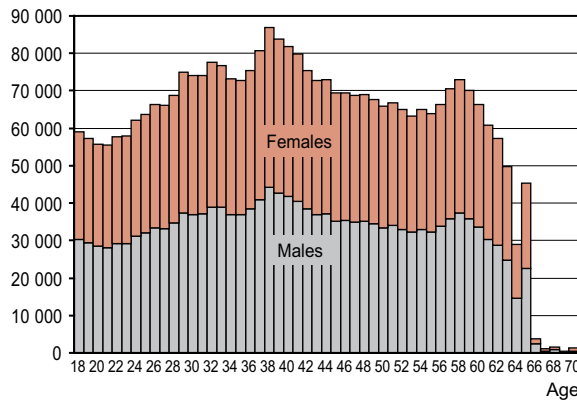
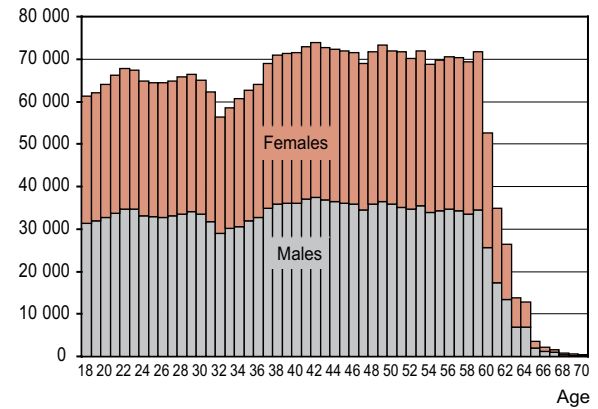


Chart appendix 3. Non-retired population in the Nordic countries by age and by gender in 2005

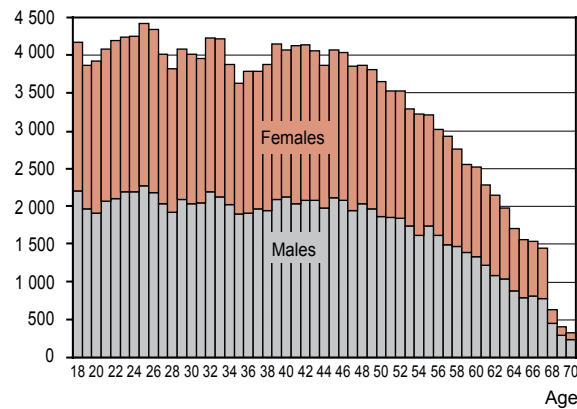
Denmark



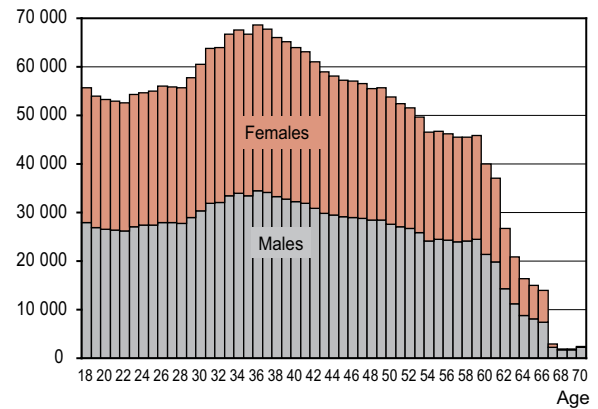
Finland



Iceland



Norway



Sweden

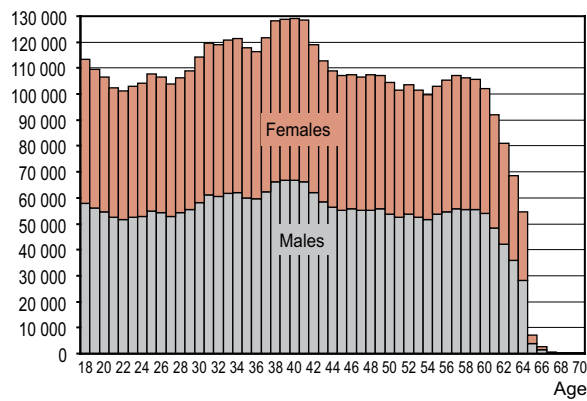


Table appendix 1 *Expected effective retirement age for 30-year-olds*

	Denmark	Finland	Iceland	Norway	Sweden
Both genders					
1995	..	..	..	61.4	..
1996	..	..	64.0	61.5	..
1997	..	59.8	64.6	60.7	..
1998	..	60.3	64.8	59.6	61.9
1999	..	59.6	62.6	59.6	61.4
2000	..	59.8	62.9	60.2	60.5
2001	60.6	59.6	63.0	61.4	60.2
2002	59.5	59.8	63.3	61.2	59.3
2003	59.8	59.8	61.9	60.8	60.3
2004	59.4	60.3	62.1	60.3	59.1
2005	59.4	60.5	62.7	60.4	60.3
2006	..	..	..	60.3	61.9
Males					
1995	..	..	..	61.9	..
1996	..	..	65.3	61.9	..
1997	..	59.4	65.5	61.2	..
1998	..	60.0	65.8	60.2	62.2
1999	..	59.2	64.7	60.2	61.9
2000	..	59.3	64.8	60.7	61.2
2001	61.1	59.2	64.5	61.9	61.1
2002	60.0	59.5	65.1	61.7	60.3
2003	60.3	59.4	63.6	61.3	61.3
2004	59.8	60.0	63.4	61.1	60.3
2005	59.9	60.1	64.5	61.2	61.3
2006	..	..	..	61.2	62.5
Females					
1995	..	..	..	61.0	..
1996	..	..	62.5	61.1	..
1997	..	60.1	63.6	60.3	..
1998	..	60.4	63.6	59.0	61.5
1999	..	60.0	61.0	58.9	60.9
2000	..	60.1	61.1	59.7	59.9
2001	60.1	59.9	61.7	60.9	59.4
2002	59.1	60.1	61.7	60.8	58.2
2003	59.3	60.1	60.4	60.4	59.2
2004	58.9	60.6	60.9	59.6	57.8
2005	59.0	60.8	61.2	59.6	59.3
2006	..	..	..	59.4	61.4

Table appendix 2 *Expected effective retirement age for 50-year-olds*

	Denmark	Finland	Iceland	Norway	Sweden
Both genders					
1995	..	..	..	64.1	..
1996	..	..	66.1	64.0	..
1997	..	61.0	66.3	63.5	..
1998	..	61.3	66.5	62.5	63.5
1999	..	60.9	65.7	62.6	63.2
2000	..	61.1	66.0	62.8	62.9
2001	62.5	60.9	66.0	63.4	62.8
2002	61.8	61.2	66.1	63.4	62.4
2003	62.0	61.4	65.6	63.2	62.9
2004	61.5	61.7	65.8	63.2	62.5
2005	61.6	61.7	66.1	63.4	63.0
2006	..	..	..	63.4	63.7
Males					
1995	..	..	..	64.1	..
1996	..	..	66.7	64.2	..
1997	..	60.9	67.0	63.6	..
1998	..	61.4	67.1	62.7	63.6
1999	..	60.8	67.1	62.8	63.4
2000	..	61.0	66.7	62.9	63.1
2001	62.9	60.9	66.8	63.6	63.1
2002	62.2	61.2	67.2	63.6	62.8
2003	62.4	61.4	66.4	63.4	63.2
2004	61.9	61.7	66.6	63.5	62.9
2005	62.0	61.6	66.8	63.7	63.2
2006	..	..	..	63.9	63.8
Females					
1995	..	..	..	64.0	..
1996	..	..	65.5	63.9	..
1997	..	61.0	65.6	63.3	..
1998	..	61.3	65.8	62.4	63.4
1999	..	61.1	64.5	62.4	63.1
2000	..	61.2	65.3	62.6	62.7
2001	62.1	60.9	65.3	63.2	62.5
2002	61.4	61.2	65.2	63.2	62.1
2003	61.5	61.4	64.9	63.0	62.5
2004	61.1	61.7	65.0	63.0	62.2
2005	61.2	61.8	65.4	63.1	62.7
2006	..	..	..	63.1	63.5

Table appendix 3 *Life expectancy in the Nordic countries, years*

	Denmark	Finland	Iceland	Norway	Sweden
Life expectancy at birth, males					
1996	73.1	73.1	76.5	75.4	76.6
1997	73.6	73.5	76.4	75.5	76.8
1998	74.0	73.6	77.7	75.6	76.9
1999	74.2	73.8	77.4	75.6	77.1
2000	74.5	74.2	77.8	76.0	77.4
2001	74.7	74.6	78.3	76.2	77.6
2002	74.8	74.9	78.6	76.4	77.8
2003	75.0	75.2	79.5	77.1	78.0
2004	75.4	75.4	78.9	77.6	78.4
2005	76.0	75.6	79.6	77.8	78.5
Life expectancy at birth, females					
1996	78.4	80.7	81.2	81.2	81.7
1997	78.6	80.7	81.6	81.1	82.0
1998	79.0	81.0	81.6	81.4	82.1
1999	79.0	81.2	81.4	81.2	82.0
2000	79.2	81.2	81.6	81.5	82.0
2001	79.3	81.7	83.2	81.7	82.2
2002	79.4	81.6	82.5	81.6	82.2
2003	79.8	81.9	82.5	82.1	82.5
2004	80.2	82.5	83.2	82.6	82.8
2005	80.5	82.5	83.5	82.8	82.9
Life expectancy at age 60, males					
1996	17.9	18.3	20.0	19.3	20.0
1997	18.2	18.7	20.1	19.4	20.2
1998	18.4	18.6	20.8	19.6	20.3
1999	18.7	18.8	20.9	19.6	20.5
2000	18.9	19.2	22.0	20.1	20.7
2001	19.0	19.5	21.7	20.2	20.9
2002	19.2	19.6	21.8	20.2	20.9
2003	19.3	19.9	22.1	20.8	21.1
2004	19.6	20.3	21.8	21.2	21.5
2005	20.0	20.5	22.3	21.3	21.5
Life expectancy at age 60, females					
1996	21.7	23.3	23.6	23.8	24.2
1997	21.9	23.3	24.3	23.8	24.4
1998	22.1	23.7	24.1	24.0	24.5
1999	22.0	23.8	23.7	23.8	24.3
2000	22.3	23.8	23.8	24.1	24.4
2001	22.4	24.1	25.5	24.2	24.5
2002	22.3	24.1	25.0	24.1	24.4
2003	22.6	24.3	24.6	24.6	24.7
2004	23.0	25.0	25.5	25.0	25.0
2005	23.2	25.3	25.5	25.1	25.0

Source: Eurostat



STATISTICAL
REPORT

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