

Edited by Hannu Uusitalo

# Pensions and pensioners' disposable income

Trends in 1990-2005

Finnish Centre for Pensions, Reports 2006:3

REPORTS

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Trends in 1990–2005

Finnish Centre for Pensions, Reports 2006:2

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#### **ABSTRACT**

Adequate pensions and the economic sustainability of pension provision are among the central objectives of pension policy. This book provides material for assessing the adequacy of pensions. It reviews how pensions and pensioners' income have developed during the past 10–15 years both in real terms and in relation to changes in the earnings level.

The book consists of six articles. The first article provides a backdrop by investigating economic and social security trends, especially the pension policy pursued. It also summarises the main findings of the study. The second article focuses on changes that have taken place in retirement and in the employment of older people. The third article deals with pension trends. The fourth article widens the perspective from pensions to pensioners' taxable income. The fifth article widens the perspective further to the disposable income of pensioners' households by taking into account all sources of income available to the members of the household. The sixth article compares the disposable income of Finnish pensioners against that of pensioners in the 15 old Member States of the European Union.

The number and structure of pensioners have changed dramatically since 1990. The number of pensioners has increased at the same time as their mean age has risen. The trends identified in retirement and in continued working since the latter half of the 1990s have been in line with the goals set for pension and employment policies. During the 1990s, the expected retirement age of a 25-year-old person rose by 18 months. During this decade, the expected retirement age of a 50-year-old person has risen by about six months. People on early retirement account for a smaller percentage of the total population than before, and the employment rate of older people has risen.

The average total pension of people on old-age and unemployment pension increased by about 20 per cent in real terms between 1992 and 2005. This trend is largely explained by changes in the pensioners' group: new, starting pensions are higher than the average level, while old, ceased pensions were lower than the average level. In real terms, the total pension income of people on disability pension remained unchanged during the period under review.

When compared against the income level of economically active people, the total pension level of people on old-age and unemployment pension has remained

fairly steady, at around 50 per cent. The total pension level of people on disability pension, in relation to the general earnings level, has clearly fallen.

For examining the distribution of total pensions, pensioners were divided into ten deciles according to the size of their pension. It was thereafter calculated how much of the total amount of pensions falls into each decile. The share of the 10 per cent of pensioners who receive the highest pensions has diminished slightly, while the share of the remaining 90 per cent has increased correspondingly. This means that the distribution of total pensions became slightly more even during 1990–2005.

Analysis of taxable gross and net income among pensioners and among other population groups in 1990–2004 shows that pensioners' relative status improved during the recession years but has declined ever since. If we examine the whole period between 1990 and 2004, pensioners have maintained their income level with respect to wage-earners, when measured by their gross income. However, when taxation is taken into account and the focal point is net income, pensioners' income level has declined in comparison to wage-earners. This is because more tax reliefs have been introduced in wage-earners' taxation than in pensioners' taxation.

Between the years 1987 and 2004, the disposable income of pensioners' households increased by 50 per cent in real terms. The disposable income of pensioners' households in relation to that of wage-earners' households has varied depending on macroeconomic cycles. In 2004, the average income level of pensioners' households was 70 per cent of the level in wage-earners' households. Distribution of disposable income among pensioners' households is more even than among the rest of the population. Pensioners also run a much smaller risk of poverty than they did in the early 1990s; however, in recent years the trend has been the opposite. A sign of successful pension policy is that the risk of poverty among pensioners is not greater than the risk among the total population.

Comparison of pensioners' disposable income in Finland and in the 15 old EU Member States reveals Finland's interesting profile. The purchase power of Finns at pensionable age is among the lowest in the countries compared; the purchase power is also modest when compared to that of people at working age. Distribution of disposable income among Finnish pensioners is more even than average, and the risk of poverty is among the smallest. An exception is the group of women past 75 years of age; their risk of poverty is above the average in the EU Member States.

#### **ABSTRAKTI**

Eläkkeiden riittävyys ja eläketurvan taloudellinen kestävyys ovat eläkepolitiikan keskeisiä tavoitteita. Tämä kirja antaa aineksia riittävyyden arviointiin. Siinä selvitetään, miten eläkkeet, eläkeläisten tulot ja toimeentuloa ovat viimeisen 10–15 vuoden aikana kehittyneet reaalisesti ja suhteessa ansiotason muutokseen.

Kirja koostuu kuudesta artikkelista. Ensimmäinen artikkeli luo taustaa tarkastelemalla taloudellista ja sosiaaliturvan kehitystä, erityisesti harjoitettua eläkepolitiikkaa. Se sisältää myös yhteenvedon kirjan keskeisistä tuloksista. Toisessa artikkelissa huomion kohteena on eläkkeelle siirtymisessä ja ikääntyneiden työllisyydessä tapahtuneet muutokset. Kolmas artikkeli kohdistuu eläkkeiden kehitykseen. Neljännessä artikkelissa näkökulma laajenee eläkkeistä eläkeläisten veronalaisiin tuloihin. Viidennessä artikkelissa näkökulma laajenee edelleen eläkeläisten toimeentuloon, jolloin otetaan huomioon myös kotitalouden muiden jäsenten tulot kaikki käytettävissä olevat tulot. Kuudes artikkeli tarkastelee suomalaisten eläkeikäisten toimeentuloa verrattuna vanhoihin Euroopan unionin jäsenmaihin.

Eläkeläisten määrä ja rakenne ovat vuodesta 1990 voimakkaasti muuttuneet. Heidän lukumääränsä on kasvanut samalla kun eläkeläisten keski-ikä on noussut. Eläkkeelle siirtymisessä ja työssä jatkamisessa havaittu kehitys on 1990-luvun jälkipuolelta lähtien ollut eläke- ja työllisyyspoliittisten tavoitteiden suuntaista. 1990-luvulla 25-vuotiaan eläkkeellesiirtymisiän odote nousi puolellatoista vuodella. Tällä vuosikymmenellä 50-vuotiaan eläkkeellesiirtymisiän odote on noussut noin puolella vuodella. Varhaiseläkkeillä olevien väestöosuus on pienentynyt ja ikääntyneiden työllisyysaste on noussut.

Vanhuus- ja työttömyyseläkkeensaajien keskimääräinen kokonaiseläke nousi vuosina 1992–2005 reaalisesti noin 20 prosentilla. Tämä muutos selittyy pitkälti sillä, että eläkkeensaajien ryhmä on muuttunut: uudet eläkkeet ovat olleet keskimääräistä korkeampia kuin taas päättyneiden eläkkeiden taso on ollut keskimääräistä matalampi. Työkyvyttömyyseläkkeensaajien kokonaiseläketulo on pysynyt tarkastelujaksolla reaalisesti entisellään.

Vanhuus- ja työttömyyseläkkeensaajien kokonaiseläkkeen taso verrattuna ammatissa toimivien ansiotasoon on pysynyt melko vakaana eli noin 50 prosentin seutuvilla. Työkyvyttömyyseläkkeensaajien kokonaiseläkkeen taso suhteessa yleiseen ansiotasoon on selvästi alentunut.

Kokonaiseläkkeiden jakauman tarkastelussa eläkkeensaajat on jaettu tulojen suuruuden mukaan kymmeneen yhtä suureen osaan eli desiiliin. Sen jälkeen on laskettu, millaisen osuuden eläkkeistä eri desiilit saavat. Korkeinta eläkettä saavan 10 prosentin osuus on hieman supistunut, lopun 90 prosentin saama osuus on vastaavasti noussut. Tämä merkitsee sitä, että kokonaiseläkkeiden jakauma on vuosina 1990–2005 tullut hieman tasaisemmaksi.

Eläkeläisten ja muiden väestöryhmien veronalaisten brutto- ja nettotulojen tarkastelu vuosina 1990–2004 osoittaa, että lamavuosina eläkeläisten suhteellinen asema parani, mutta on sen jälkeen huonontunut. Jos katsotaan koko periodia 1990–2004, niin palkansaajiin nähden eläkeläiset ovat säilyttäneet asemansa bruttotuloilla mitaten. Kun vähennetään verot eli tarkastellaan nettotuloja, niin eläkeläisten asema on heikentynyt suhteessa palkansaajiin. Tämä johtuu siitä, että eläkeläisten verotus on keventynyt vähemmän kuin palkansaajien verotus.

Vuosina 1987–2004 eläkeläiskotitalouksien toimeentulon taso on noussut reaalisesti 50 prosentilla. Eläkeläiskotitalouksien toimeentulo suhteessa ammatissa toimivien kotitalouksien toimeentuloon on vaihdellut talouden suhdannetilanteen mukaan. Vuonna 2004 eläkeläiskotitalouksien toimeentulon taso oli 70 prosenttia ammatissa toimivien kotitalouksien tasosta. Eläketulojen jakautuminen on muuttunut tasaisemmaksi, kun eläkkeensaajien suurituloisimman kymmenesosan saama osuus eläketulosta on pienentynyt. Toimeentulo jakautuu eläkeläiskotitalouksien kesken tasaisemmin kuin koko väestössä. Eläkeläisten köyhyysriski on 1990-luvun alusta voimakkaasti pienentynyt, mutta viime vuosien kehitys on kulkenut päinvastaiseen suuntaan. Eläkepolitiikan onnistumista kuvastaa se, että tämä riski ei ole sen suurempi kuin se on koko väestön keskuudessa.

Eläkeläisten toimeentulon vertailussa viiteentoista (vanhaan) EU-maahan tulee esiin Suomen mielenkiintoinen profiili. Eläkeikäisten ostovoima on vertailumaiden pienimpiä ja myös suhteessa työikäiseen väestöön se on vaatimattomasta päästä. Eläkeikäisten toimeentulon jakautuminen on Suomessa keskimääräistä tasaisempi, ja köyhyysriski pienimpien joukossa. Poikkeuksena on 75 vuotta täyttäneiden naisten ryhmä, jonka köyhyysriski on EU-maiden keskitasoa korkeampi.

#### TO THE READER

Adequate pensions and the economic sustainability of pension provision are among the central objectives of pension policy. The Finnish Centre for Pensions monitors and assesses the attainment of these objectives, both in the light of past developments and in terms of future outlooks. The purpose of this book is to review how pensions and pensioners' disposable income have developed during the past 10–15 years.

In 2003, the Finnish Centre for Pensions and the Social Insurance Institution published an extensive study entitled Eläkeläisten toimeentulo 1990-luvulla [Pensioners' disposable income in the 1990s]. The time series used in the study ended with the year 2001. In the current report, the central time series extends until 2004 or 2005. The aim of this report is to update the principal data of the previous study.

The report begins with Hannu Uusitalo's article on pension policy trends, providing background information and including a brief summary of the findings. In the second article, Eila Tuominen, Jari Kannisto and Heidi Nyman analyse changes in the number of pensioners as well as trends in retirement and in the working of older people. In the third article, the same authors use pension statistics to describe developments in the real value of pensions and the level of pensions in relation to trends in earnings. This article presents the first calculations on how the distribution of pension income has changed in recent years. In the fourth article, Arto Laesvuori compares developments in the taxable income of pensioners and other population groups, as well as the importance of taxation. In the fifth article, Juha Rantala analyses how the disposable income of people in pensioners' households has developed and what changes can be observed in pensioners' income distribution and poverty. In the last article, Kati Ahonen compares the disposable income and poverty of pensioners in 15 Member States of the European Union and reviews how Finns fare in this comparison.

Although the authors have discussed the articles together, they are responsible for their own articles. The layout and figures were done by Heidi Nyman.

Helsinki, 13 November 2006

Hannu Uusitalo

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Hannu Uusitalo

### 1 Introduction and summary

#### 1.1 Economic trends and the long shadow of the recession

This book describes changes in the status and disposable income of pensioners from the early 1990s to 2005. Besides pension schemes, many other factors affect pensioners' income; the most important of these are developments in the economy and employment. These factors also have links with, and impacts on, the social, pension and tax policies pursued in the country.

Economic developments within the past 15 years can be divided into three phases. After vigorous growth in the late 1980s, Finland was hit by a deep recession. The gross domestic product declined for three years in a row, in total by about ten per cent. The employment rate plummeted and the financial base of the public economy tottered. The declining employment figures affected, above all, the income of people at working age, but the effects were also felt among pensioners. The recession was followed by seven fat years and a couple of years with slower growth rates; in recent years growth has again picked up.

The shadow of the recession was seen on the labour market and in social security much longer. During, and even after, the recession years, the pressures to reduce workforce often led to early retirement by way of the 'unemployment path'. After the peak in 1994, unemployment has diminished fairly slowly. Improved employment has also reduced the risk of unemployment among the older workforce. The employment figures of older workers began to rise rapidly after 1997.

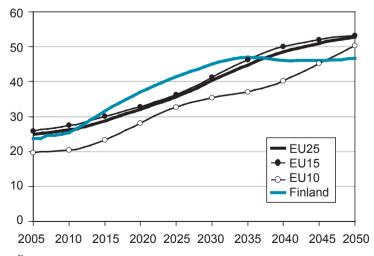
The public economy suffered during the recession years. Tax revenues declined even though tax rates and social security contributions were raised. At the same time public expenditure – especially unemployment costs, support to banks and government debt servicing costs – increased. After the economic upturn, the public sector's situation has become more balanced even though tax rates have been lowered. Cuts in social expenditure were one factor that helped stabilise the public sector.

The ratio of social expenditure to the GDP rose steeply during the recession. However, by the end of the 1990s, the revived growth of the national product had brought this ratio back to the level that had prevailed in 1990. Within the past few years, the ratio of social expenditure to the GDP has risen to about 27 per cent. In the main, the rise in social expenditure stems from costs associated with old age, sickness and health. In real terms, pension expenditure has grown on average 2.6 per cent annually during the past 15 years. The relation between pension expenditure and the GDP rose to as high as 14 per cent during the recession, but thereafter the percentage has again fallen to less than 12 per cent.

### 1.2 Changes in the population age structure and the new direction in pension policy

Since the beginning of the 1990s, the number of pensioners has increased by about one per cent annually. Their share of the population has risen to one out of four. This increase has still been moderate when compared to what lies ahead. Figure 1.1 shows Eurostat's projection of how the old-age dependency ratio (ratio of people aged 65 and older to the number of people from 15 to 64 years of age) will develop in Finland and elsewhere in the EU.

**Figure 1.1.** Old-age dependency ratio (65 years and older/15–64 years) in Finland and elsewhere in the EU in 2005–2050



Source: Eurostat

The figure shows that the age structure will change in Finland more quickly than elsewhere in the EU during the next few decades. According to population projections, the ratio of people who are 65 years or older to people at working age (15–64 years) will rise to over 45 per cent during the next 30 years. After 2035, the Finnish ratio will again return to below the EU average.

A new kind of situation is emerging on the labour market. Year after year, up to the present day, the number of people entering the labour market has exceeded the number of people exiting it. Figure 1.2 shows that, as of now, the age classes exiting the labour market will constantly be larger than the young age classes entering the labour market.

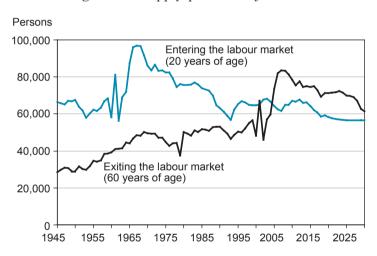


Figure 1.2. Change in the supply potential of labour 1945–2030

Source: Statistics Finland, Population statistics, population projection

Uncontrolled, this trend would lead to rapid growth of pension expenditure and pension contributions, and would place the burden of the altered age structure on the shoulders of younger age classes in working life. From the European perspective, Finns were quick to realise the needs caused by the change in age structure; this realisation came at the start of the 1990s. Since then, and all the way up to the major pension reform of 2005, amendments have been made to adapt the pension system to the ageing population structure. The reform of investment activities is still under way.

Back in the 1980s, all pension policy reforms still aimed at improved pension provision. The flexibility of retirement was increased by introducing new pension forms: individual early retirement pension; early old-age pension; and part-time pension. Other changes were also made in the pension system, and as late as 1990 the scope of the survivors' pension scheme was expanded to encompass widowers at the same time as the surviving spouse's pension was cut. The first sign of a new direction was given by the Pension Committee of 1987, which proposed that it would be worth studying whether a 'modified index' should be adopted during the 1990s and whether a person's statutory earnings-related pension should reduce the basic amount of the national pension<sup>2</sup>. The Pension Committee of 1990 incorporated these ideas into its proposals and also planned other reforms that would make it less attractive to seek retirement.

The recession of the 1990s, the aggravation of financing problems, the ageing of the population, and concern about the sustainability of pension schemes all contributed to the change of direction in pension policy. The increasing popularity of pre-retirement pensions was seen as problematic. The associated accrual of pension during the projected pensionable service<sup>3</sup> was cut. As of the beginning of 1994, the minimum age for the individual early retirement pension was raised gradually from 55 years to 58 years; on the other hand, the minimum age for part-time pension was lowered to 58 years. In 1996, other pension income began to reduce the basic amount of the national pension. The method of calculating the wages that form the basis of statutory earnings-related pensions was amended

<sup>&</sup>lt;sup>1</sup> A modified index refers to the practice where the index link is modified for reasons such as the person's phase in life, type of pension, or age. For instance, the index system adopted at the beginning of 2005 is a modified index system, where the index applied depends on the current phase in life (the index applied during working years is the wage coefficient and the index applied during retirement years is the earnings-related pension index).

<sup>&</sup>lt;sup>2</sup> When the earnings-related pension rises, the national pension decreases, and after the earnings-related pension has reached a certain level, the national pension ceases altogether.

<sup>&</sup>lt;sup>3</sup> Projected pensionable service refers to the period between the beginning of the year when the person is entitled to a pension and the person's 63rd birthday. The projected pensionable service increases the pension sum because the pension is calculated as if the person had continued working until the age of 63. However, the pension accrues according to a lower accrual rate. Usually a component for projected pensionable service is added to a disability pension.

so that wages earned during the last ten years of employment in each employment relationship are taken into account in the calculation; according to the old method, the period was four years. In addition, the index-linking of pensions was reduced, and pension benefits in the public sector were diminished so that they correspond to pension benefits in the private sector.

Amendments of the system have continued in the 2000s. The most important reform during the history of the statutory earnings-related pension system came into effect in 2005. The goal of the reform is to postpone the retirement age by two to three years in the long term, to adapt the pension system to the anticipated increase in lifetime, and to curb the rise in contributions caused by changes in the population age structure. Old-age pension can be started flexibly between the ages of 63 and 67 years. If working is continued after the age of 63 years, the earnings-related pension accrues according to the rate of 4.5 per cent. The minimum age for early old-age pension was raised to 62 years, the terms of parttime pension were amended, and the individual early retirement pension and the unemployment pension will gradually be abolished. The pension sum is determined on the basis of earnings during the entire career. The earnings are revalued to the level of the year of retirement by using a wage coefficient that follows trends in the earnings level better than the previously used index. A new feature was adopted in the reform: the life expectancy coefficient, which will be used to adjust starting old-age pensions to the ageing population's longer lifetime as from the year 2010.

The above could be summarised as follows. The new direction of the Finnish pension policy is a compromise, where the changes caused by the ageing of the population are not placed on one set of shoulders; instead, they are dealt with by using three or four mechanisms. Firstly, the pension system has been amended so that retirement is postponed. This will help control the inevitable increase in the number of pensioners and the equally inevitable reduction in the number of people in working life. Secondly, the terms of pension provision have been amended. For this reason, the mean pension in relation to wages will fall somewhat in the long term, and expenses do not rise as much as they would rise without these amendments. Thirdly, it has been accepted that ageing of the population will lead to higher pension expenditure. However, the rise in pension contributions will be lower than the rise in expenditure because, in the private sector's earning-related pension scheme, some of the contributions have been funded from the

outset of the scheme. The yield from the funds is used to cover expenses. The most recent amendment, now under preparation, aims to increase the percentage of investments in stock made by earnings-related pension funds. It is believed that this amendment will enable higher returns and will help defuse some of the pressure to raise contributions.

The impacts of the change of direction in pension policy will be seen gradually during the coming decades. It has been estimated that, following the changes made in the 1990s, pension expenditure in relation to the GDP will be about four percentage points lower in 2030 than it would have been if the Acts in force in 1990 had remained unchanged until 2030 (see Vanne 2003). It can be estimated that the reforms made in the 2000s will reduce the ratio of pensions to the GDP by just under one percentage point by the year 2030 (see Working Group Report 2002). However, the change in the population's age structure is so great that the ratio of pensions to the GDP will climb from the present level of a good 11 per cent to about 15 per cent in 2030. This is slightly more than the pension expenditure during the recession at its deepest (Biström et al. 2005). The relative level of statutory earnings-related pensions (the relation between the average earnings-related pension and the average level of earnings during the same year) is estimated to rise for some years after 2005 until the slight downturn envisaged for the latter half of the 2010s (Hietaniemi et al. 2006).

## 1.3 Themes: development of the real value of pensions and pensioners' disposable income, and development in relation to other population groups

The objective of the Finnish earnings-related pension scheme is to ensure reasonable maintenance of a person's former income level in the event of old age, unemployment, disability or the breadwinner's death.<sup>4</sup> The objective of the national pension system is to ensure the minimum level of income for all residents of Finland

The European Union also sets goals for pension policy and for its reforms. The Union has no jurisdiction in pension policy affairs but it has been initiating

<sup>&</sup>lt;sup>4</sup> In the pension reform of 2005, income during unemployment is still included in the earnings-related pension scheme for the duration of the transitional period until 2011. Thereafter it will be entirely within the scope of unemployment benefits.

pension policy cooperation between Member States through the open method of coordination. Accordingly, the Union and Member States set pension policy guidelines and timetables for reaching objectives, and apply these in their national policies. The purpose is to develop quantitative and qualitative indicators for comparing good practices and to learn from the experiences of other countries. In December 2001, the Laeken European Council endorsed the three broad long-term objectives agreed earlier and set 11 subordinate objectives (see Laitinen-Kuikka 2001, 263–285). One of the broad objectives concerned measures to ensure the adequacy of pensions. It incorporates three subordinate objectives.

- (1) It must be ensured that older people are not placed at risk of poverty and can enjoy a decent standard of living. It must be ensured that older people share in the economic well-being of their country and can accordingly participate actively in public, social and cultural life.
- (2) All individuals must be provided access to appropriate public or private pension arrangements, which allow them to earn pension entitlements enabling them to maintain, to a reasonable degree, their living standard after retirement.
- (3) Solidarity must be promoted within and between generations.

This report pertains, in particular, to the assessment of the adequacy of pensions in Finland and within the EU. We present up-to-date information on trends in pensions and in pensioners' income, both in real terms and in relation to developments in earnings. We also investigate how the risk of poverty has developed among pensioners. Besides assessing trends over time, we make comparisons with the situation in the European Union's old Member States.

Are Finnish pensions adequate or not? The question cannot be answered by using the surveys in this report because, in the end, determining the acceptable level of income and poverty is more an issue of social policy than a question of information<sup>5</sup>. However, this report provides a wide range of data that can be used to support discussion about adequacy or its shortcomings.

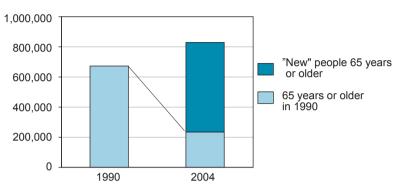
<sup>&</sup>lt;sup>5</sup> Finland's view on the status and development needs of the European Union's pension policy objectives can be found, for instance, in "Finland's National Pension Strategy Report 2005", drawn up by a broad-based working group for the EU.

The adequacy of pensions can be assessed by using different criteria. Adequacy is relative and requires a point of comparison. In this book, the adequacy of pensions is examined from two perspectives. On the one hand, we focus on the development of the real value of pensions by eliminating the effect of inflation. This reveals how much commodities and services the pension buys. On the other hand, we examine the development of pensions in relation to trends in earnings among the entire population or in a more restricted population group, such as those who are economically active. This review shows how pensions and pensioners' income have kept up with general trends.

In addition to this introduction, the book has five independent articles that illustrate pensioners' economic situation from various angles. The articles have different time spans: the starting point is the late 1980s or the early 1990s and the end year is the latest year on which data are available. Another important viewpoint is comparison with other countries; this is done by utilising the latest international statistical data available.

This report makes use of different materials. The materials have different concepts and definitions, which makes it more difficult to compare the results with each other. This causes extra inconvenience for the reader, over and above the attentiveness that is otherwise required by the material. There are no conflicts or inexplicable differences between the findings yielded by the various materials. Use of different materials is also a strength because together they give a more convincing, and a more varied, picture than can be obtained from a single source of material.

It is important to note that the report concentrates on how pensions and income in the pensioners' group have developed from the early 1990s to the middle of the current decade. The issue is not how the pensions and income of people who have been on pension, or who have retired, during a certain year have developed in the course of their retirement. The difference between these questions is illustrated by Figure 1.3.

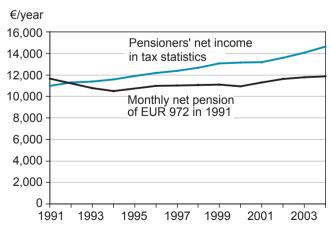


**Figure 1.3.** Number and structure of people who were 65 years or older in 1990 and 2004.

Source: Statistics Finland, Population statistics

The number of people who are 65 years or older rose dramatically from 1990 to 2004. The rise is caused by "new" people who have reached 65 years after 1990; they accounted for the bulk of those who were 65 years or older in 2004. When the report describes trends in pensions and in pensioners' income, the comparison includes all people on pension (i.e. the entire columns in Figure 1.3) and not just people who were on pension in a particular reference year, for example in 1990.

**Figure 1.4.** The net pension of a person who retired on old-age pension in 1991 (example calculation) and the net income of the group "pensioners" in tax statistics. Trends between 1991 and 2004, adjusted for prices in 2004.



Source: Oksanen 2004, Arto Laesvuori's calculations (see the fourth article in this report)

Figure 1.4 illustrates the importance of this distinction. It shows how the net pension of a retired person who received more or less an average pension in 1991 has developed according to an example calculation done by the Taxpayers' Association of Finland. The calculation takes into account index adjustments and taxation changes that have affected pensions. The same figure also shows the trend in the net income (not only net pensions) of the group "pensioners" (not only old-age pensioners), derived from tax statistics. The figure reveals that an indicator taking into account the number and structure of pensioners gives a different picture of the development of pensions than an indicator that follows the pensions of a number of persons who were on pension in a particular year. Changes that have taken place in the structure of the group of pensioners have clearly increased pension sums, income and disposable income within the group.

#### 1.4 Trends in retirement and in employment of older people

The above structural change is described in the article "Retirement and the employment of older people" by Eila Tuominen, Jari Kannisto and Heidi Nyman. The article provides a background for an analysis of pensioners' disposable income by studying how the number and structure of pensioners have changed during the years 1990–2005. It also describes changes that have taken place in the employment and labour market status of people who are 55–64 years old. The article is mainly based on statistics compiled by the Finnish Centre for Pensions and on labour force studies conducted by Statistics Finland.

Marked changes have taken place in the number and structure of pensioners since 1990. There are clearly many more pensioners now than there were at the beginning of the 1990s. Their number has increased by an average of one per cent annually. At the same time, the mean age of pensioners has risen as the number of people on old-age pension has increased and the number of people on early retirement has declined. The most marked increase is seen in the group of pensioners who are 75 years or older. The reasons underlying the increase in the number of pensioners are changes in the population's age structure and the fact that people live longer.

The findings show that the trends identified in retirement and in continued working since the latter half of the 1990s have been in line with the goals set in pension and employment policies. During the 1990s, the expected retirement age

of a 25-year-old person rose by a couple of years. During this decade, the expected retirement age of a 50-year-old person has risen by about six months. People on early retirement account for a considerably smaller percentage of the total population than before, and the employment rate of older people has risen.

The positive trend in the employment of older people stems from robust economic growth. Use of various early retirement arrangements has diminished, partly because of pension policy measures that have made it less attractive to stop working. The minimum ages applied to the unemployment path to retirement and to individual early retirement have been raised. Other important factors include the rise in people's education level and better health among older people, especially a reduction in the number of cardiovascular diseases.

The employment rate of older people has approached that in other Nordic countries, but it is still lower than in Finland's neighbouring countries. The percentage of people between 55 and 59 years of age and on early retirement has already approached the average Nordic level, but there are more unemployed people in this age group in Finland than in the other Nordic countries. The risk of unemployment diminished when the minimum age applied to the unemployment path to retirement was raised from 55 to 57 years. This is expected to reduce unemployment in these age brackets.

Even more could be done to improve the employment of people over 60 years of age. Although their employment rate has risen rapidly during the last few years, it is still low when compared to younger age brackets and to the other Nordic countries. People over 60 are the primary target group of the pension reform measures that aim at extending people's working careers. The rise of two years in the minimum age of early old-age pensions makes it harder for people to retire at 60–61 years of age; better incentives have been introduced to encourage people to continue working until the age of 68 years; and people can themselves decide when to retire between the ages of 62 and 68 years.

In the end, increases in employment rates depend on the demand for labour. In the light of the change in the supply of labour shown in Figure 1.2, it may very well be that the positive trend of the last few years will continue. The changes introduced in pension policy have created prerequisites for this trend.

### 1.5 Developments in pension income and in the distribution of pension income

In the third article "Trends in the real value of pensions and their level in relation to earnings", Eila Tuominen, Jari Kannisto and Heidi Nyman describe the development of pension income in 1992–2005, both in real terms and in relation to the general earnings level, and analyse the changes that have taken place in the distribution of total pensions. The article is mainly based on statistics compiled by the Finnish Centre for Pensions.

The statutory pension scheme consists of earnings-related pensions and the national pension, of which the latter complements the former. Earnings-related pensions have become an increasingly important component of pensioners' income. The importance of the national pension changed radically in 1996, when the national pension was made fully dependent on statutory earnings-related pensions. In 1992 earnings-related pensions accounted for 70 per cent of pensions earned by pensioners in their own right; in 2005 this share had risen to 80 per cent.

The real value of total pensions, consisting of statutory earnings-related and national pensions and possibly of a survivors' pension, has risen since the early 1990s. The average total pension of people on old-age and unemployment pension rose by about 20 per cent in real terms from 1992 to 2005. The reasons behind the changes are the gradual maturation of the earnings-related pension system and the rise in the earnings level. The old-age pensions of recently retired persons are higher than those of people who have been retired for a longer time, and ceased pensions are smaller than continuing pensions on average. The total pension income of people on disability pension remained unchanged in real terms during the period under review. This is partly because there was a marked fall in the number of individual early retirement pensions after their minimum age was raised in 1994 and 2000. Secondly, the terms of the projected pensionable service and its accrual rate were tightened for people over 50 years of age.

The level of the total pension of people on old-age and unemployment pension, in relation to the earnings level of economically active people, remained fairly steady throughout the period under review, or at about 50 per cent. A slight fall has been detected during the last few years, especially among people on unemployment pension. The level of the total pension of people on disability pension, in relation to the general earnings level, has declined markedly.

In this article, the method applied to conventional income distribution review is used for the first time to show how the distribution of total pensions has changed among pensioners. Accordingly, pensioners resident in Finland were first divided into ten deciles according to their pension income. It was then calculated how much of the total amount of pensions falls into each decile. The results show that pensions in all deciles have risen in real terms since the early 1990s. The higher the decile, the more the rise has been in monetary terms. Especially among the highest 10 and 20 per cent of pensioners, the rise in pensions in monetary terms has been considerable.

Thus, when measured in euros, differences between total pensions have increased. On the other hand, when expressed in per cent, the growth in pension income has been the smallest in the two highest deciles. In particular, the highest decile's share has diminished, while the share of the rest of the deciles has risen slightly. This means that the distribution of total pensions became a little more even during 1990–2005.

## 1.6 Trends in pensioners' gross and net income when compared to other income recipients

In Arto Laesvuori's article "Pensioners' gross and net income", the perspective is broadened to pensioners' taxable income. The focus is on how pensioners' income developed in 1990–2004 in relation to other income recipients and what factors explain the growth. The material is obtained from the tax administration's statistics that encompass all taxable income. This means that, for instance, child allowances, daily allowances, housing allowances, tax-exempt supplements to national pensions, and grants and scholarships are excluded.

The findings show that pensioners have maintained their relative status in income distribution, although economic fluctuations have occasionally changed the situation. The relative position of pensioners in relation to other income recipients improved during the recession, but started to decline after the recession. When compared against the years before the recession, pensioners had a better position than other income recipients during the last year of this review, 2004. Even when compared against wage-earners, pensioners have retained their position in terms of their gross income. However, when measured by net income,

the status of pensioners has declined in relation to wage-earners because more tax reliefs have been introduced in wage-earners' taxation than in pensioners' taxation

### 1.7 Trends in the disposable income of pensioners' households

Juha Rantala's article "Disposable income of pensioners' households" widens the perspective further. Besides the income of individual persons, the article takes into account the income of other persons included in the same household. People living in the same household more or less share their income. To determine a person's economic status, it is therefore important to take into account the income of the other members of the household. The article describes how the disposable income of people living in pensioners' households has developed in real terms and in relation to the disposable income of people living in other households, how the disposable income is distributed among pensioners' households, and how pensioners' poverty has changed. The article is based on longitudinal data in the income distribution statistics of Statistics Finland. The review covers the years 1987–2004.

The article utilises methods that have become established in income distribution studies. Disposable income and differences in disposable income between various population groups are studied by means of the household's disposable income. Firstly, disposable income includes income from production factors, i.e. wages and salaries, income from self-employment and property income. To this are added the income transfers received by the household, irrespective of whether these income transfers are subject to tax or not. This gives the household's gross income. The sum that is left once direct taxes and tax-like payments have been deducted from the household's gross income is the disposable income. The income figures of households of different sizes are made comparable by calculating the household's income per consumption unit, using the new consumption unit scale of the OECD. The concept thus obtained is called equivalent income. A household's equivalent income is the same for each member of the household.

Between the years 1987 and 2004, the equivalent disposable income of pensioners' households increased by 50 per cent in real terms. The development has not been steady. From 1987 to the recession, the equivalent income of

pensioners' households increased clearly. During the recession years 1991–1994, the growth came almost to a complete halt, but the rising trend has continued again since 1995.

There are differences in the income trends of pensioners' households, depending on the persons' ages. In pensioners' household where the reference person is under 55 years of age, the disposable income has risen considerably more slowly than in older pensioners' households. This finding is in agreement with the observation made in the third article concerning the slow development of income among people on disability pension.

The disposable income of pensioners' households in relation to that of wage-earners' households has varied depending on macroeconomic cycles. During the upswing in the 1980s, the level of disposable income in pensioners' households lagged behind the level in economically active households. The difference narrowed at the outset of the recession, and the ratio between the disposable income of pensioners' households and economically active households was at its highest around 80 per cent. After the mid-1990s, the relative position of pensioners has weakened; in 2004, the ratio was 70 per cent of the equivalent disposable income of economically active households. In relation to the disposable income of the entire population, the disposable income of people in pensioners' households was over 80 per cent in 2004.

In the income distribution encompassing the whole of society, pensioners' households are ranked among the low-income group, but they can also be found among the higher income levels. The overrepresentation of pensioners' households in the decile with the lowest income has diminished markedly during the last twenty years or so, although this overrepresentation has again risen since 2002.

Differences in the disposable income among people in pensioners' households were greater than those among people in wage-earners' households during the period between 1987 and the recession years. A change has occurred since then. As of the late 1990s, the distribution of disposable income among people in pensioners' households has been more even than among people in the labour force. This notwithstanding, differences in the disposable income of pensioners' households were somewhat greater in 2004 than in 1987.

According to the practice applied in the European Union, the risk of poverty is determined by comparing the equivalent income of a household to the corresponding median income of the entire population. If the household's income

is under 60 per cent of the median income, the members of the household fall below the poverty risk line. The poverty risk line is relative. If the population's median income rises or falls, the poverty risk line also changes correspondingly.

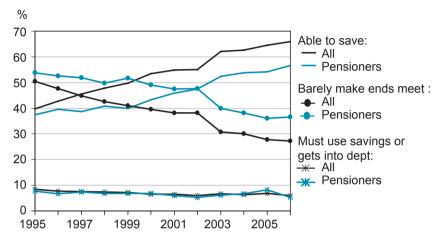
At the beginning of the 1990s, roughly one in five pensioners' households fell below the poverty line. During the recession years, the poverty risk of pensioners' households decreased clearly because the median income of the entire population declined, but no corresponding change occurred in pensioners' income. The poverty risk of pensioners' households doubled between the years 1993 and 2004. At the same time, the difference between the poverty risk of pensioners' households and that of people in the labour force has widened, although when compared to all households, the poverty risk has remained almost unchanged. On the other hand, people over 65 years of age receive living allowance considerably less often than the population on average; this indicates that pension provision has been able to prevent serious income problems.

### 1.8 Development of the financial situation in pensioners' households and in other households

Juha Rantala's article is based on data collected from registers and interviews concerning the income of households and its distribution. It is interesting to compare these data, which are independent of people's own notions, with the assessments that households have made of their own economic situation. In its annual Consumer Survey, Statistics Finland has inquired about people's own views. Some of these results have been compiled into Figure 1.5.

The figure shows that the economic situation of all households and pensioners' households has improved during the last ten years. The share of households that are able to save has increased, while the share of households that can barely make ends meet has diminished. However, among pensioners there are more of those who can barely make ends meet and correspondingly fewer of those who are able to save. It can also be noted that the gap between pensioners and all households has widened since 1995. In addition, the figure shows that the share of those who use their savings or get into debt has remained more or less steady among both pensioners and the whole population. Pensioners are not overrepresented in this group of households in economic difficulties; their share in the group represents their share among the population on the whole. Thus, the

assessments that people give of their own disposable income are in fairly good agreement with the picture obtained from statistics.



**Figure 1.5.** Financial situation of all households and pensioners' households 1995–2006

Source: Statistics Finland, Consumer Surveys from 1995-2006.

## 1.9 Finnish pensioners' disposable income in international comparison

In the last article "Pensioners' disposable income in international comparison", Kati Ahonen uses data from the early 2000s to analyse the disposable income among Finns at pensionable age (65 years or older) in comparison to the situation in other old EU Member States (EU15). The sources used are follow-up reports compiled within the EU, Eurostat's statistics, and recent studies. The concepts and definitions are largely the same as in the previous article. One difference is that the review focuses on disposable equivalent monetary income. Another significant difference is that in this article, pensioners' households are defined by the age of the household's reference person: a household where the reference person, i.e. the person with the highest income, is 65 years or older is defined as a pensioner's household. The data are from the early 2000s.

According to the findings, the disposable equivalent monetary income of people at pensionable age is lower in Finland than the average for the old EU Member

States. The relative level of pensioners' income also falls below the average: in Finland, the equivalent income of people at pensionable age is about 75 per cent of the income of people at working age, whereas the average figure in the old EU Member States is 81 per cent.

On the other hand, in Finland the distribution of income is among the most even and the poverty risk among the lowest in the EU15 group. Differences in disposable income among people at pensionable age are among the smallest observed in the old EU Member States. Similarly, the poverty risk of Finns at pensionable age is below the average in the EU15 group (17% in Finland; on average 20% in EU15). Almost without exception, the poverty risk of women who are 65 years or older is greater than that of men in the old EU Member States. This difference is the greatest in Finland and Sweden: women's poverty risk is about double the risk of men. The situation is the worst among women who are 75 years or older and live alone. Women's poverty risk is closer to that of men in countries where older people live in large households. In Finland and Sweden, it is common that old people live alone, and since women generally live longer than men, many older people living alone are women. This explains, at least partly, why women have a higher poverty risk than men in the oldest age bracket.

The high poverty risk of the oldest women is also seen in people's own assessments of their economic situation. In 2003, STAKES studied Finns' well-being and, among other things, the prevalence of economic difficulties in various population groups. According to the results, living "from hand to mouth" is the most common among people under 25 years of age and, in particular, among people who are 75 years or older (Appended Figure 1.1).

#### 1.10 How successful has pension policy been

In the redirection of pension policy that began in the 1990s, most attention has been focused on how to manage the rise in the number and relative share of people at pensionable age that has already started and will accelerate during the next decade. Pension policy has been adjusted to support continued working. The results presented in this book show that the changes that have taken place in the employment and retirement of older people have been in line with this objective. The level of pensioners' disposable income has risen during the past 15 years.

Pensions buy considerably more commodities and services than before. The purchase power of pensions has improved, and in this respect pension provision has developed favourably.

However, the picture changes when we look at the relation of pensions to the general earnings level. During the recession years, the relative status of pensioners improved while the income of other population groups declined, for instance, owing to unemployment. After the recession, the situation has become more or less what it used to be, as both earnings from work and property income have risen rapidly. On the basis of a calculation concerning long-term trends in average pensions, it would seem that old-age pensions (statutory earnings-related pensions) in relation to mean wages will continue to rise for some time, but this depends on factors such as the rise in the level of earnings (Risku 2005, 20–42). The total pension sum (statutory earnings-related pension and national pension together) will rise less.

Pensioners are not a homogeneous group. One new observation made in this report, or at least one that has not been much noted before, is the modest development of disability pensions in real terms and the weakening of the relative economic status of people on disability pension. The cuts made in disability pensions in the 1990s are an element in this trend. Another group worth noting consists of women who are 75 years or older; their risk of poverty is very high when compared to other population groups. On the other hand, pensions paid to people over 75 years of age have risen fairly rapidly since the 1990s. The problems that both "young" and the oldest pensioners have in terms of adequate income should in fact be analysed more thoroughly than has been possible in this general description of trends.

The distribution of pension income has become more even especially because the ten per cent of pensioners who have the highest income now receive a smaller share of the total amount of pension income than before. The distribution of disposable equivalent income among pensioners' households is more even than the distribution among the whole population. Pensioners' risk of poverty has diminished substantially since the early 1990s, but the trend observed in the last few years has been the opposite. A sign of successful pension policy is that this risk is not greater than it is among the total population.

Comparison among 15 EU Member States reveals Finland's interesting profile. The purchase power of Finns at pensionable age is among the lowest in the

countries compared; the purchase power is also modest when compared to that of people at working age. Distribution of disposable income among Finnish pensioners is more even than average, and the risk of poverty is among the smallest, with the exception of the group of women who are 75 years or older, as was mentioned above.

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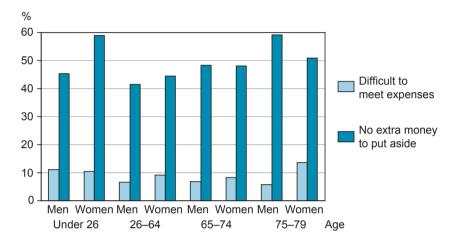
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#### **APPENDICES**

**Appended Figure 1.1.** The percentage of respondents who feel that it is difficult to meet expenses / who have no extra money to put aside, by age and gender in 2003.



Source: STAKES, Questionnaire on Finns' well-being and services in 2003. See Kautto et al. 2006.

Eila Tuominen, Jari Kannisto and Heidi Nyman<sup>1</sup>

## 2 Retirement and employment among older people

#### 2.1 Introduction

Owing to the change in age structure, the share of pensioners among the population is rising rapidly. People aged 65 years or older now account for 16 per cent of the population. During the next 30 years, their share will rise to 27 per cent, and will stay at this level for a long time. For each 100 people at working age there are now 24 persons who have reached the age entitling them to an oldage pension; in 30 years' time this figure will be 47 (Population projection 2004–2050 by Eurostat). The unfavourable trend in the population's age structure cannot be turned quickly by affecting the birth rate or immigration. However, the growth of the pensioner population can be controlled through various policy measures, for instance, by raising the minimum ages for retirement and by increasing incentives for continued working. This has been the aim of many of the pension legislation amendments made in the 1990s and 2000s; several of them were already included in the proposals made by the Pension Committee of 1990.

This article describes changes in retirement and developments in the employment of older people from the early 1990s to 2005<sup>2</sup>. Firstly, the article studies trends in the number and age structure of pensioners. In particular, attention is paid to changes in the share of people on early retirement. Secondly, trends in the average retirement age are studied by means of the expected effective retirement age and conventional indicators. Changes that have taken place in

<sup>&</sup>lt;sup>1</sup> Eila Tuominen has been responsible for planning the contents and for the writing of the article, with the exception of the section "*The retirement age rises slowly*"; its analyses were done and the texts were written by Jari Kannisto. Heidi Nyman produced the statistical material for the article.

<sup>&</sup>lt;sup>2</sup> It should be noted that it is still too early to assess the effects that the pension reform of 2005 has had on later retirement and continued working among older people. However, the amendments made earlier to the early retirement legislation, such as higher age limits and tighter rules for calculating pensions, are reflected in retirement practices and continued work.

retirement are reviewed in more detail by considering the proportion of new retirees in the insured population (incidence of pensions). Attention is paid to different pension types and to the reasons underlying retirement on a disability pension. Finally, it is analysed how changes observed in retirement are reflected in older people's participation in work and in their role in the labour market.

#### 2.2 More old-age pensioners among retirees

In 2005, a total of 1,297,000 people received a pension in their own right<sup>3</sup>, which is about 170,000 people more than at the beginning of the 1990s. The growth in the number of pensioners is explained solely by the increase in the number of people who have reached the age entitling them to an old-age pension. The biggest increase has occurred in the group of the oldest pensioners, those who are 75 years or older, whose number has risen by about 116,000 people. The number of pensioners between 65 and 74 years of age has increased by about 76,000 people (Figure 2.1). There are now fewer pensioners in the younger age brackets than there were at the start of the period under review. The number of pensioners aged 55–64 years has fallen by about 15,000 even though the total number of people in this age bracket has risen markedly during the period under review. Similarly, the number of pensioners under 55 years of age has fallen, by about 9,000 people, since the beginning of the 1990s.

The increase in the number of people whose age entitles them to an old-age pension is explained by bigger cohorts and increasing life expectancy. This trend will continue and the pensioner population will age rapidly. The number of pensioners who are 75 years or older will double during the next thirty years. Old-age pensioners will account for an increasing share of all retired persons.

<sup>&</sup>lt;sup>3</sup> The number includes part-time pensioners, who totalled about 32,500.

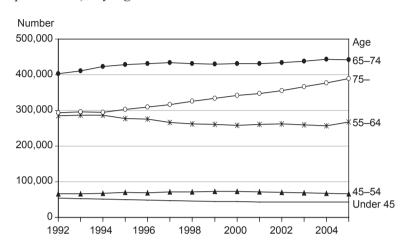


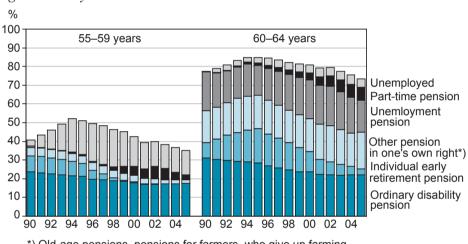
Figure 2.1. People receiving a pension in their own right (excluding parttime pensioners), by age in 1990–2005.

#### 2.3 A marked fall in the relative share of early retirees

A considerably smaller proportion of people are now on early retirement than in the early 1990s. Including part-time pensioners, the share of people between 55 and 64 years of age who were on retirement fell from 58 per cent in the early 1990s to 42 per cent in 2005. In addition to ordinary disability pensions and individual early retirement pensions, people who have not yet reached the statutory age for old-age pension can receive unemployment pensions and part-time pensions. Early old-age pensions also start before the age of 65 years. As of the beginning of 2005, it has been possible to retire on old-age pension at the age of 63 years in the private sector. In the public sector, this option has been available longer, sometimes even for people under 63 years of age. Farmers' special pensions also enable retirement before the age of 65 years.

Figure 2.2 shows that the share of retired people fell steeply in the age bracket of 55–59 years. In the early 1990s, 38 per cent of the age bracket had retired; in 2005, this share had fallen to 22 per cent. The share of pensioners kept diminishing throughout the 1990s, but in the 2000s there has not been much change any longer. Only the share of part-time pensioners has diminished since 2002. In 2003, the minimum age for part-time pensions was raised from 56 years to 58 years.

The terms applied to early retirement were tightened on several occasions after the recession of the early 1990s. The most important single factor contributing to the falling share is the reduction in individual early retirement pensions. The age limit of eligibility for the pension was raised in 1994 and 2000, and in the pension reform of 2005 this type of pension was abolished altogether. Persons born in 1944 and thereafter are not entitled to individual early retirement pensions<sup>4</sup>.



**Figure 2.2.** The population share of pensioners and unemployed people aged 55–64 years in 1990–2005.

\*) Old-age pensions, pensions for farmers, who give up farming, front veterans' pensions (1990–1998)

Source: Joint statistics of the Finnish Centre for Pensions and the Social Insurance Institution, Työpoliittinen aikakauskirja

Another factor contributing to the falling share of people on early retirement was the smaller share of people on ordinary disability pensions. The frequent use of the unemployment path to retirement reduced the need to retire on a disability pension. In Figure 2.2, this is seen as rapid growth in the group of unemployed people between 55 and 59 years of age. Spurred by vigorous growth of the economy, people stay at work longer, and the risks of unemployment and retirement on a disability pension have fallen (Rantala and Romppanen 2004). Figure 2.2 shows a clear downturn in the number of unemployed people in the late 1990s

<sup>&</sup>lt;sup>4</sup>People employed in the public sector and born before 1948 are an exception: they are entitled to individual early retirement pensions.

and early 2000s. However, it has not become more common to retire on a disability pension. Older people's better state of health is another factor underlying the fall in the relative share of early retirement.

To some extent, increased use of part-time pensions may have compensated for retirement on a disability pension. The share of part-time pensioners started to rise steeply in the mid-1990s. When the minimum age of part-time pensions was raised and the terms applied to pension calculation were tightened in 2003, the share of part-time pensioners between 55 and 59 years of age began to fall. However, the figure shows that in the age group of 60 to 64 years, the share of people on part-time pensions continued to rise throughout the period under review.

In the age bracket of 60–64 years, being retired became more common in the early 1990s but a downturn occurred in the middle of the decade. At its highest level, over 80 per cent of the age group was retired. Even though the falling trend has continued in the 2000s, pensioners still account for 69 per cent of the age group. When working part-time pensioners are excluded from the figure, the share is 62 per cent. In the same way as in the age bracket of 55–59 years, the marked decrease in individual early retirement pensions was the most effective factor lowering the pensioners' share of the age group of 60–64 years. The proportion of ordinary disability pensioners also fell during the 1990s but has not much changed in the 2000s.

A part of the early retirement arrangements is the unemployment path to retirement. By means of the unemployment pension, it is possible to secure the income of a person who has long been unemployed. Under certain conditions, an unemployed person can retire on an unemployment pension at the age of 60 years. Most unemployed people over 55 years of age are on the unemployment path to retirement. It is rare for unemployed people in this age group to find a job. A feature worth noting in Figure 2.2 is that, including the unemployed, the share of people encompassed by various early retirement arrangements has decreased significantly in both age brackets.

The pension reform of 2005 discontinued the unemployment pension scheme for people born in 1950 and thereafter. No unemployment pensions will be paid any more after the year 2011. The law was amended so that people aged 60–61 years cannot receive a pension after a period of unemployment; instead a long-term unemployed person can under certain conditions retire on a full old-age pension at the age of 62 years. Even though abolishment of the unemployment

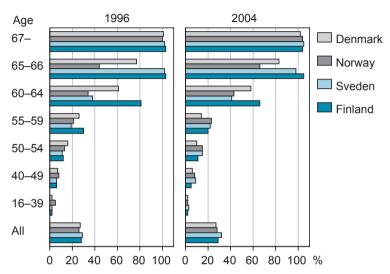
pension scheme is believed to bring a slight reduction in the share of people on early retirement, it will not solve the persistent unemployment problem. Figure 2 shows that the share of unemployed people has not decreased in either age bracket during the 2000s. In this respect, older people are not an exceptional group, since unemployment has remained more or less at the same level in younger age groups as well (Työvoimatilasto 2005).

#### 2.4 Differences with the other Nordic countries levelled off

The reduction in the share of people on early retirement has narrowed the difference between Finland and the other Nordic countries. The biggest fall has taken place in the share of early retirees in the age group of 60–64 years old and on early retirement. In the mid-1990s, 81 per cent of all Finns aged 60–64 years received some pension; in 2004 this percentage had fallen to 66. The proportion is still the highest in the Nordic countries (Figure 2.3). In Denmark, pensioners account for nearly as high a percentage of this age bracket as in Finland, whereas the percentages are much smaller in Norway and Sweden. In both of these countries, pensioners account for less than half of the age bracket, even though the share of 60-64-year-old pensioners has increased slightly in Norway and Sweden during the period under study. Besides various early retirement arrangements, the lower retirement ages applied by the public sector increase the share of pensioners in this age group in Finland. When making comparisons, the high share of retired Finns between 60 and 64 years of age on unemployment pension should also be noted (see Figure 2.2). When people receiving unemployment pensions are excluded from the review, the share of Finns on early retirement is roughly the same as that in Norway and Sweden.

In the mid-1990s, the share of pensioners in the age group of 55–59 years was the highest in Finland among the Nordic countries; now this share is even a little lower than in Sweden and Norway. One in five Finns between 55 and 59 years is retired. Besides in Finland, this share has decreased rapidly in Denmark. In Denmark, only 14 per cent of people in this age bracket are retired, whereas in the mid-1990s one in four was a pensioner. In contrast, the proportion of pensioners has increased slightly in Sweden and in Norway.

Among people under 55 years of age, the proportions of pensioners have remained almost unchanged. Among the Nordic countries, Finland and Denmark have the lowest percentages of younger people on a disability pension.



**Figure 2.3.** Pensioners' share of the age group<sup>1)</sup> in the Nordic countries in 1996 and 2004.

The figures do not include recipients of part-time pensions and survivors' pensions

Source: NOSOSCO 9:1998, 28:2006

The comparison among the Nordic countries could be summarised by concluding that in Finland, with the exception of Finns aged 60–66 years, the proportions of pensioners are "at the Nordic level". In the long term, the pension reform of 2005 is expected to postpone retirement and to increase working among older people. The effects should be seen especially among the group of people between 60 and 67 years of age, where the shares of Finnish pensioners are higher than those in the other Nordic countries. Abolishment of the unemployment pension scheme will presumably lower the proportion of pensioners. However, attainment of lower unemployment rates will in the end depend on improved employment and demand for labour.

### 2.5 The retirement age rises slowly

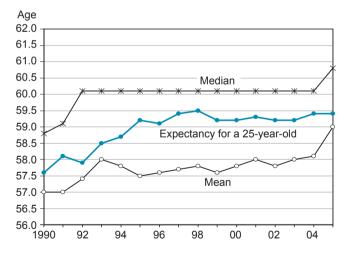
The expected effective retirement age (i.e. expectancy) is used to monitor changes in the average retirement age (Kannisto et al. 2003). The expectancy is an

<sup>&</sup>lt;sup>1)</sup> The pensioners' share may exceed 100%, because the population base consists of residents in the country, but pensioners include all pensioners irrespective of the place of residence.

indicator that is independent of changes in the population's age structure. It reacts to changes in the effective retirement age correctly and in the right direction, unlike the conventional age indicators, i.e. the median and the mean. For this reason it is used as the basic indicator of the average retirement age, even though the traditional average figures are still in use as well. Calculation of the expectancy is based on the numbers of earnings-related pensions starting in each one-year age class (both in the private and public sector). The calculation formula is analogous with the calculation of the population's average life expectancy (Kannisto 2006).

It is considered that a person has retired when the person's pension based on his or her own working career (other than part-time pension) has started during the year under review. It is additionally required that the person has not received any pension based on his or her working career (excluding part-time pensions) for at least two years. Thus, by definition, people retired on a part-time pension are not considered retired persons.

**Figure 2.4.** Expectancy, mean and median of the effective retirement age in 1990–2005, people retired from the private sector.



Examination of the trend in the private sector in 1990–2005 provides a good picture of the effective retirement age. This period includes many legislative amendments. In addition, other factors have affected the retirement patterns, most notably the recession in the early 1990s. Figure 2.4 shows the expectancy,

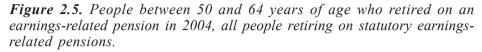
mean and median of the effective retirement age in the private sector. The traditional indicators supplement the various aspects associated with the retirement age.

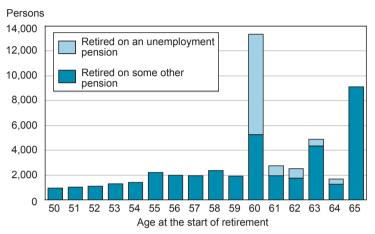
Figure 2.4 reveals that the average (mean) retirement age during the period under review has generally varied between 57.5 and 58.0 years. Only the first and last years of the period are exceptional. The low mean age in the early 1990s was the result of the new types of early retirement that came into effect as of the beginning of 1986. The new schemes that were introduced in the private sector at that time were the individual early retirement pension (minimum age 55 years) and the early old-age pension (minimum age 60 years). This increased retirement after the age of 55 in the private sector. Conversely, the rise in the mean age during the last few years is the result of changes in age structure and the pension reform of 2005.

The median, or the age below and above which 50 per cent of Finns retire, has remained the same for almost the entire period under review. This is the result of unemployment pensions. During the recession, unemployment increased steeply and unemployment pensions became a commonly used road to retirement. Because at that time the minimum age applied to unemployment pensions was already 60 years, nearly all people who were on the unemployment path were granted a pension as soon as they turned 60. The same practice has been followed since 1992, which has meant that the median age of retirement became stabilised at 60.1 years.

Figure 2.5 shows the numbers of people between 50 and 64 years of age who retired in 2004, because that particular year represents the age distribution in previous years as well. The figure illustrates well the importance of unemployment pensions in the group of 60-year-olds, even though the number of people retiring on an unemployment pension was already smaller than in previous years. Since the number of people retiring on an unemployment pension has been falling in recent years, the importance of unemployment pensions as a road to retirement is decreasing. Factors contributing to this trend include the raising of the minimum age of the unemployment path to retirement, as well as changes in the overall employment situation<sup>5</sup>. Up to 1996 the minimum age was 53 years. In 1997 the minimum age rose to 55 years, and as of the beginning of 2005 it has been 57 years. It can thus be assumed that the current trend will continue in future.

<sup>&</sup>lt;sup>5</sup>Rantala Juha (2002).



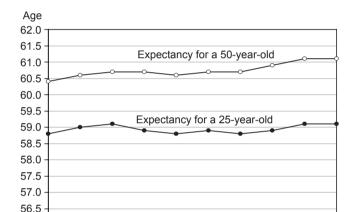


In 1986 the minimum age for the unemployment pension began to rise so that the first new age class was able to retire on an unemployment pension in 1992. This is seen as a dent in the expectancy during that year (Figure 2.4). Thereafter, the minimum age applied to individual early retirement pensions was raised in 1994 and 2000. No other changes affecting the minimum ages of retirement were introduced in the private sector until the pension reform of 2005. By definition, people on part-time pension are not considered retired and are not included in this review.

During the pension reform, it was decided to abolish the unemployment pension. However, unemployment pensions can still be granted during the transitional period (until 2011) for people born before 1950. People born later can retire on a full old-age pension at the age of 62 years, after a period of unemployment and under certain conditions. The removal of the unemployment pension from the selection of pensions will also affect the number and age of people who are about to retire, and thereby also the effective retirement age.

In the private sector, the expected effective retirement age rose by 18 months in the early 1990s. Thereafter, the level has become stabilised at a little over 59 years (Figure 2.4). For the entire earnings-related pension scheme, the expected effective retirement age has been calculated since 1996 (Figure 2.6). The expectancy is calculated separately for people who are 25 years of age and for

people who are 50 years of age. The expectancy for a 25-year-old person describes the effective retirement age of the whole population, while the expectancy for a 50-year-old person describes the retirement of those who are beyond 50 years of age. The expectancy for a 25-year-old person is always lower than that for a 50-year-old person, because it includes people retired at the age of 25–49 years, who are not included in the expectancy calculated for those aged 50 years.



56.0

**Figure 2.6.** Expectancy of the effective retirement age 1996–2005, all people retiring on statutory earnings-related pensions.

The expectancy for a 50-year-old person is calculated separately because, in practice, pension policy measures can only affect the retirement of those past 50 years. People who retire younger receive a disability pension. Their retirement is caused by a disease that prevents them from working or makes working considerably more difficult. It is much harder to have an impact on this group by means of pension policy measures.

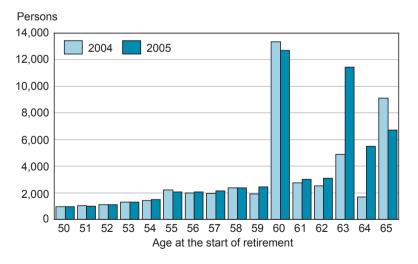
1996 1997 1998 1999 2000 2001 2002 2003 2004 2005

During the past ten years, the expectancy of all people retiring on earnings-related pensions has fluctuated yearly without a clear direction (Figure 2.6). By contrast, the expectancy of a 50-year-old person has risen by about six months in the 2000s. In 2005, the expectancy calculated for a 25-year-old person was also the highest during the period under review (59.1 years). The expectancy of a 50-year-old was 61.1 years (Statistical Reports of the Finnish Centre for Pensions 6/2006).

In 2004 and 2005, the expectancies calculated for both 25 and 50-year-old persons remained unchanged. The levelling out of the rise in expectancy stems from the "extra" cases of retirement resulting from the introduction of the flexible retirement age for old-age pension. At the same time, three age classes were granted the opportunity to lower their retirement age from the previously applied 65 years. For this reason, the number of people entitled to old-age pension was exceptionally large. In 2005, there were particularly many 63 and 64-year-old people among those who retired in that year (Figure 2.7). Without these 11,000 people who started their old-age pension, the expectancy figure would have risen by about 0.2 year (Kannisto 2006).

From now on, the minimum age for the old-age pension is reached by one new age class each year. Accordingly, it can be estimated that within the next few years the number of people retiring on an old-age pension will fall from the level in 2005. If other factors keep developing as before, it can be assumed that the rise in the expected effective retirement age that had started earlier this decade will continue.

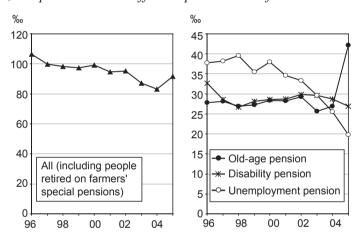
**Figure 2.7.** People aged 50–65 years who retired on an earnings-related pension in 2004 and 2005, all people retired on statutory earnings-related pensions.



### 2.6 A falling trend in the incidence of pensions

The incidence of pensions is analysed in the age groups of 55–64-years, i.e. in the age groups where retirement is common. The incidence describes the ratio of new retirees to the non-retired population of the same age. In this kind of analysis of incidences, the effect of changes in age structure on the incidence of pensions is eliminated by reviewing changes in the standard population<sup>6</sup>. With the exception of part-time pensions, the review encompasses pension benefits.

Figure 2.8. Age standardised incidence of statutory earnings-related pensions (excl. part-time pensions) among people aged 55–64 years in 1996–2005, all pensions and different pension benefits.



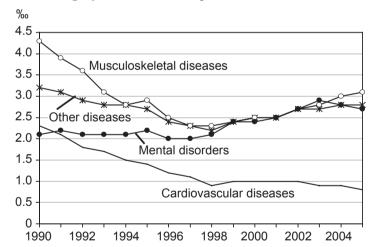
On the basis of Figure 2.8, it can first be concluded that the incidence of pensions has fallen when all retired people are included in the analysis. A clear decreasing trend can be observed in the proportion of new retirees up to the year 2005. The rise in the incidence in 2005 is explained by the flexible retirement age for oldage pensions introduced in the pension reform. When the reform came into effect,

<sup>&</sup>lt;sup>6</sup> The standard population used here is the non-retired population that is insured for statutory earnings-related pension benefits in 2005. The incidence of pensions would rise if no age standardisation were made, for instance, due to the fact that an increasingly large proportion of the population belongs to age groups where early retirement is common. The ageing of the population raises the proportion of new retirees in the insured population. The age standardisation helps reveal the change in the incidence that is independent of the change in age structure.

three new age classes were offered the opportunity to retire on an old-age pension during the same year.

The second conclusion that can be drawn from Figure 2.8 is that the change in the incidence of pensions has been different for different pension types. The incidence of unemployment pensions has fallen quickly after the turn of the decade. A slight declining trend can also be observed in the incidence of old-age pensions over the long term, with the exception of the year 2005 when the pension reform came into effect.

The incidence of disability pensions (individual early retirement pensions and ordinary disability pensions) has remained more or less steady during the last few years. A slight increase was observed in the incidence around the turn of the millennium, but this has levelled off lately.



**Figure 2.9.** Age standardised<sup>1)</sup> incidence of ordinary disability pensions, by disease category in 1990–2005, private sector.

<sup>1)</sup>Standard population = The non-retired population insured for statutory earnings-related pension benefits in the private sector in 2005.

The incidence of ordinary disability pensions by disease category describes the role of various disease categories in retirement on a disability pension and the changes detected over time (Figure 2.9). The incidence by disease category is based on data from the private sector, taking into account all age classes. Data

from the private sector are well suited to describe trends in the whole earnings-related pension scheme<sup>7</sup>.

There has been a systematic falling trend in cardiovascular diseases as reasons for disability pensions. The role of musculoskeletal diseases has also diminished, although a slight increase has been detected within the last few years. In contrast, pensions based on mental health disorders have increased markedly. Their share in new disability pensions has clearly risen since the late 1990s, but in recent years the rising trend has levelled off. The role of other diseases has fluctuated; however, in the long term the trend has been declining slightly.

#### 2.7 People continue at work longer than before

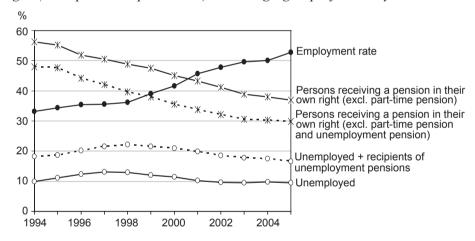
The diminishing share of people on early retirement is reflected as a corresponding rise in the share of employed people aged 55-64 years (Figure 2.10). The employment rate of older people has risen by about 20 percentage points since the mid-1990s, i.e. as much as the share of people on early retirement has fallen. Altogether 53 per cent of the age bracket is now employed; however, this is less than in the other Nordic countries (Employment in Europe 2005, OECD Employment Outlook 2006). A positive feature is that, during the period under review, the employment rate of older people increased more rapidly in Finland than in any other EU country. It is also worth noting that only in the age groups of 55–59 years and 60–64 years, employment rates have clearly exceeded the level that prevailed during the economic boom preceding the recession of the 1990s. In younger age groups, the employment rate has improved more moderately (Haataja 2006, 25). The employment rate among older people has continued to rise in the 2000s despite the economic downturn at the start of the decade. In the 2000s, the employment rate of 60–64-year-olds has risen by 11 percentage points and that of 55–59-year-olds by 6 percentage points.

The positive trend in the employment of older people stems from the fact that people stay longer at work. The risks of unemployment and retirement on a disability pension are now smaller than before (Rantala and Romppanen 2004). Use of dismissals and various early retirement arrangements has become less common, thanks to the rapid growth of the economy. Pension policy measures

<sup>&</sup>lt;sup>7</sup> The data from the private sector also include vested pensions in the private sector. In other words, persons whose principal pension comes from the public sector are also included.

that curb early exit from the labour market have also had an effect here. The minimum ages applied to the unemployment path to retirement and to individual early retirement have been raised, and the age classes encompassed by these changes have continued working longer than people born before them. The changes made in age limits have affected the large post-war age groups, and in consequence they stay longer at work. Another important factor is the improved state of health among older people, especially the reduction of cardiovascular diseases (see Figure 2.9). This is seen as a fall in the share of people who have retired on health grounds (see Figure 2.2).

**Figure 2.10.** Share of employed people, share of unemployed job-seekers (excl. those laid off), and share of people receiving a pension in their own right (excl. part-time pensioners) in the age group of 55–64 years.



The employment rate of older people has improved at a rapid pace, but unemployment has not eased off. Although the unemployment rates of ageing people have clearly diminished from the peak during the recession years, they are still far from the situation in 1989. The sluggish reduction of the unemployment rate is explained by the accumulation and prolongation of unemployment. Jobseekers who are over 54 years of age have the hardest time. Some of them already lost their jobs during the recession, and unemployment itself has become a hindrance preventing them from finding a permanent job. The ageing constitute the only group among the unemployed where the share of long-term unemployment has remained very high after the recession (Työvoima 2025, 61). The rapid

increase in the employment rate and the simultaneous high unemployment among ageing people indicate that the labour market of ageing people is polarised. Those who become unemployed cannot easily find work, while those who have a job stay at work longer than before.

Discontinuation of the unemployment pension scheme will eventually be seen as a fall in the share of people on early retirement. The dotted line in Figure 10 shows the share of retired people aged 55–64 years when both people on an unemployment pension and those on a part-time pension have been excluded from the group of people on early retirement. Calculated in this way, people on early retirement accounted for 30 per cent of all people aged 55–64 years in 2005. Similarly, the share of the unemployed rises from 10 to 17 per cent of the age group. Discontinuation of the unemployment pension reduces the share of people on early retirement, but for the alleviation of the unemployment problem it is crucial that the employment of older people develops positively and that their risk of unemployment is reduced. During the next couple of decades, the number of people at working age will fall and an increasingly large share of them will be over 55 years; this will have an effect on continued working and employment among older people. It can already be seen that employers who need more personnel are interested in hiring older workers (Tuominen and Takala 2006).

# 2.8 The labour market situation of older people has become stronger

Alongside the increase in employment, the labour market situation of older people has changed. Wage-earners account for an increasingly large share of employed people. The change has been particularly noticeable in the group of people aged 60–64 years. In 1996, 57 per cent of employed people in the age group of 60–64 years were wage-earners and nearly half were self-employed or their family members. In 2005, wage-earners accounted for 74 per cent, and only one in four was self-employed. In the group of 55–59-year-olds, the share of wage-earners rose from 78 per cent to 83 per cent during the same period (Labour Force Surveys 1996 and 2005).

Employment among older people has increased rapidly, and the increase has taken place entirely in permanent employment relationships. Figure 2.11 shows that the share of fixed-term jobs has not increased in either age group between

2000 and 2005. Instead, permanent full-time jobs have increased somewhat in both age groups. In the age group of 60–64 years, the biggest increase has occurred in permanent part-time jobs; this is explained by the fact that more people than before are on a part-time pension. In contrast, the rise in the minimum age for part-time pensions and the tightening of the terms for these pensions in 2003 have reduced the share of permanent part-time jobs among people aged 55–59 years.

55-59 years 60-64 years 100 self-employed or a family member 80 wage-earner, fixed-term part-time job wage-earner, permanent 60 part-time job wage-earner, fixed-term 40 full-time job wage-earner, permanent 20 full-time job 2000 2005 2000 2005

Figure 2.11. Labour market situation of employed persons among older people in 2000 and 2005.

Source: Labour Force Surveys 2000 and 2005, Statistics Finland

The increase in the employment of older people and their improved position in the labour market is partly explained by the fact that the level of education has risen. The share of people who have only basic education fell from 60 per cent to 40 per cent in the age bracket of 55–64 years between 1996 and 2005. During the same period, the share of people at the tertiary level of education rose from 17 per cent to 27 per cent (Työvoimatutkimukset vuosilta 1996 ja 2005).

The observation that employment rates have risen at all levels of education is a positive change in terms of employment targets. Figure 12 reveals that during the last ten years the employment rate among 55–59-year-olds who had completed basic and secondary education rose even more than the employment rate among people at the tertiary level of education. The employment rate of people aged 60–64 years has risen equally much at all levels of education.

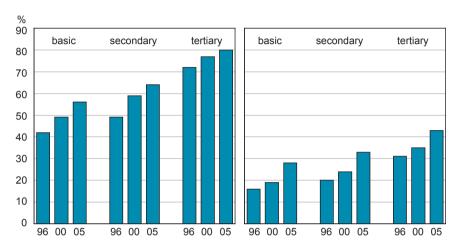


Figure 2.12. The employment rate of older people, by education, in 1996, 2000 and 2005.

Source: Labour Force Surveys 1996, 2000 and 2005, Statistics Finland

#### 2.9 Conclusions

The trends detected in retirement and in continued working have been in line with the objectives set in employment and pension policies. Measured with the expected effective retirement age of a 50-year-old person, the retirement age has risen by about six months. The share of early retirees among people aged 55–64 years has considerably decreased, and the employment rate of older people has risen.

Altogether 37 per cent of people aged 55–64 years is now on some type of pension; in the mid-1990s, this share was 56 per cent (excl. part-time pensions). Being employed has increased at a corresponding pace. The employment rate will exceed the target of 50 per cent set by the EU for the employment of older people for the year 2010. In Finland, this level was exceeded in 2003, and the current employment rate is 53 per cent. The employment rate of older people has risen by 20 percentage points during the last ten years.

In the age group of 55–59-year-olds, the employment rate has risen considerably more rapidly than the overall employment rate during the past ten years. Even though the employment rate (66%) is still about 10 percentage points lower than in the other Nordic countries, there is no longer the same capacity for

growth as before. The share of people aged 55–59 years who are on early retirement is already at the Nordic level, and the changes associated with the pension reform will no longer bring any significant reductions to the early retirement of this age group. The difference in the employment rate between Finland and the other Nordic countries is partly explained by high unemployment. The unemployment rate is falling slowly. In 2005, about 13 per cent of the age group was unemployed in Finland (Ministry of Labour statistics on job-seekers); the bulk of them will transfer to the old-age pension by way of an unemployment pension. Unemployment may very well drop in the long term provided that the risk of losing one's job can be lowered. This trend is supported by raising of the minimum age for the unemployment path to retirement from 55 years to 57 years, as agreed in the pension reform. In the end, increases in employment rates depend on the demand for labour.

The most room for employment growth is among people who are 60 years or older. Only 29 per cent of people aged 60–64 years are employed in the labour market. Despite the rapid increase in the employment rate during the last few years, it is still markedly low when compared both against younger age classes and against the other Nordic countries. Moreover, the changes introduced in the pension reform to improve employment mostly focus on people who are 60 years or older. At the same time as the two-year rise in the minimum age for the early old-age pension reduces the retirement options of people aged 60–61 years, there are good incentives for continuing at work until the age of 68 years. Although now only a small proportion of people continue working after the age of 65 years, more people may well decide to stay in working life even at a later age. The part-time pension supports part-time working. Nowadays pension can also be accrued from work done during old-age retirement. In the short term, the growth in the employment of people beyond 60 years is limited by the high share of people who are unemployed or on early retirement.

As concerns health and working capacity, ageing people have better opportunities than before to continue in working life. The maintenance and improvement of working capacity are promoted, for instance, through vocational rehabilitation within the earnings-related pension scheme. The purpose of the rehabilitation is to help an individual to continue in working life despite a medical problem. The legislation governing rehabilitation within the earnings-related pension scheme was amended in 2004 in ways that emphasise the importance of

rehabilitation. Although the number of people participating in vocational rehabilitation is fairly small (about 6,000 rehabilitees per year), the number of rehabilitees is increasing constantly, and the importance of rehabilitation as a factor maintaining and improving employment is being reinforced.

Economic growth and focusing of the demand for labour also on ageing people are crucial factors in view of the employment trend of ageing people. Generally speaking, the decrease in the supply of labour and economic incentives for continued working support a positive employment trend among older people. There will be fewer opportunities, and fewer reasons, to go on early retirement pension or to start on the unemployment path to retirement. On the other hand, everyone has the opportunity to retire on old-age pension at the age of 63 years, and as the level of pensions and the wealth of the population continue to increase, working at a later age to ensure a better pension may not prove to be a sufficient incentive. It is important that ageing workers find their work rewarding and workplaces provide active support to ageing workers continuing in their work.

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# 3 Trends of pensions in real terms and in relation to general earnings level

#### 3.1 Introduction

Pensioners' living is largely based on pensions paid by the statutory pension schemes in Finland. According to an international comparison, other pension income and other income sources play a minor role in Finnish pensioners' disposable income (Mäkinen 2002). The article analyses trends in the real value of statutory pensions from 1992 to 2005 and compares them with trends in the earnings of people in gainful employment. Pension income is examined as gross income, which has been raised to the level of 2005 by means of the cost-of-living index. Net income and the effects of taxation amendments on pensioners' disposable income are described in Article 4.

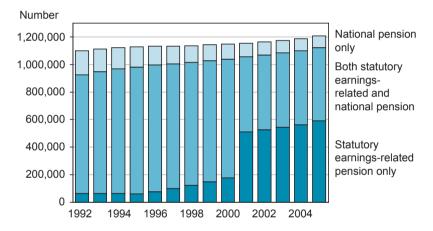
The analysis of pensions is limited to persons who receive a statutory earnings-related pension or a national pension in their own right<sup>2</sup>. Persons who receive no other pension besides a survivors' pension, or persons who are only entitled to a pension based on military injury, motor liability insurance or workers' compensation insurance (so-called SOLITA pensions), are not considered pensioners as defined in this survey. Part-time pensions are also pensions that pensioners earn in their own right, but part-time pensioners are examined separately in this article. In other words, part-time pensions are not included in the analysis of total pensions.

<sup>&</sup>lt;sup>1</sup> Eila Tuominen was responsible for planning the contents and for the writing of the article, with the exception of the section "Differences between pension income"; its analyses were done and the texts were written by Jari Kannisto. Heidi Nyman produced the statistical material.

<sup>&</sup>lt;sup>2</sup> A pension in one's own right refers to an earnings-related pension or to a national pension, but does not include survivors' pensions. The pension in one's own right may also include a SOLITA pension that is not paid as a survivors' pension. The national pension in one's own right includes any supplements that may be paid by KELA, but no general survivors' pension. In addition to pensions in one's own right, the article explores total pensions, which - besides the above elements - may include a survivors' pension.

Figure 3.1 shows the number of people who were paid a pension in their own right, and the changes that occurred in the structure of pensions, in 1992–2005. The number of pensioners rose from about 1.1 million to over 1.2 million. In 2005, about half of pensioners received only an earnings-related pension, while nearly half received both an earnings-related pension and a national pension. Only a small percentage received nothing but the national pension; their number was halved during the period under survey. The maturation of the earnings-related pension scheme is the main reason why the number of people dependent on the national pension alone has fallen so much.

Figure 3.1. Recipients of pensions in their own right (excl. part-time pensions) resident in Finland, by pension structure, in 1992–2005.



A major change took place in the structure of pensions when statutory earnings-related pensions began to reduce the basic amount of the national pension in 1996. Before that, everyone was paid at least the basic amount of the national pension, regardless of what their earnings-related pension was. The change was implemented so that people retired in 1996 or thereafter were not paid any national pension if their earnings-related pension exceeded a certain limit. Similarly, the basic amount of the national pension of people who had already retired was cut in stages within a period of five years, if justified by the size of their earnings-related pension. The final part of the basic amount was removed in 2001; this is seen as a change in the structure of pensions. The number of people who were paid both a statutory earnings-related pension and a national pension was reduced

radically, whereas the number of people who only received a statutory earnings-related pension tripled. Thereafter, too, the number of pensioners who only receive an earnings-related pension has increased, owing to a rise in the level of earnings-related pensions.

This article progresses as follows: The first section focuses on the development of the level of different types of statutory earnings-related pensions. Trends are described both for all pensions in payment and for newly started pensions. The next section discusses the national pension's role in the pension scheme, the number of pensioners entitled to the full national pension, and trends in the pension's real value. The third section deals with developments in the level of total pensions. The analysis of total pensions is restricted to all pensions in payment because there are no statistical data available on the total pensions of newly retired people. The fourth section discusses the distribution of pension income and any changes that can be observed in this distribution during the period under study. The conclusions summarise the findings made on the development of the real and relative values of pensions and the distribution of pension income.

### 3.2 Statutory earnings-related pensions

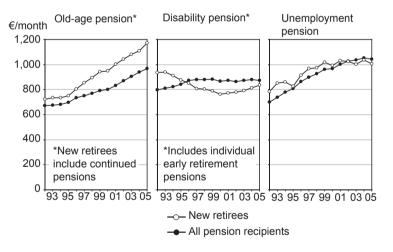
### Rapid rise in the real value of old-age pensions

The real value of old-age pensions paid under the statutory earnings-related pension scheme has increased markedly since the early 1990s. Figure 3.2 shows that the same trend applies both to people who have already been on old-age pension (all pensions in payment) and to people who have newly retired on old-age pension. The newly started pensions include 'continued pensions', i.e. people who have received some other type of pension, such as a disability pension or an unemployment pension, before the old-age pension. The real value of pensions paid to old-age pensioners rose by 44 per cent during the period under review. This does not describe the rise in the pension level of an individual pensioner, but shows the trend in the level of pensions paid to all old-age pensioners in each particular year. One third of all pensioners in 2005 had already been on old-age pension in 1992. Thus, the majority had retired on old-age pension during the period under review (see Figure 1.3 in Article 1). Turnover in pensions in payment has a major effect on the rise in the real value of pensions.

It can be seen in Figure 3.2 that the level of newly started pensions is better than the level of all pensions in payment, and that the difference has grown during the period under review. The mean value of newly started old-age pensions rose more rapidly than the mean value of all old-age pensions in payment. In real terms, the mean value of newly started old-age pensions rose by 62 per cent.

There are various reasons behind the rising level of newly started old-age pensions during the period under review: the gradual maturation of the pension scheme; the rise in the general earnings level; and the growth in the employment, and thereby longer careers, of women. An important factor that has contributed to the rising level of all pensions in payment is the low level of ceased pensions in comparison to all pensions in payment<sup>3</sup>. Ceased old-age pensions still include pensions in which the earnings-related component has been accrued only for a short time while the scheme has been in force since 1962.

**Figure 3.2.** The average pension in the statutory earnings-related pension scheme in 1992–2005 by pension benefit, euros/month, adjusted for the level in 2005.



Calculated for all old-age pensions in payment, the average monthly pension rose by about 300 euros in real terms (Figure 3.2). The bulk of this rise is explained by turnover in the pensions in payment. Index adjustments of pensions also play a

<sup>&</sup>lt;sup>3</sup> About 35,000 old-age pensions cease annually. In pensions ceased in recent years, the average pension sum has been about 700 euros a month.

role in the rising real value of pensions. Because the TEL index, linked with changes in prices and wages,<sup>4</sup> raises earnings-related pensions more than the cost of living has risen, index adjustments bring a slight increase to the real value of pensions. However, the importance of index adjustments in the real growth of pensions is relatively minor, even though their importance in securing the buying power of pensions is crucial.

## Real value of disability pensions remained steady, the value of unemployment pensions rose clearly

Figure 3.2 shows that the level of disability pensions rose only slightly in 1992–2005, and the rise took place during the early 1990s. By contrast, there was a marked downturn in the real value of newly started disability pensions, and in the mid-1990s the average pension fell below the level of all disability pensions in payment. However, the fall levelled off at the turn of the decade and was replaced by a gently rising curve. Despite the slight rise, the average value of newly started disability pensions was still a little lower than the average for all disability pensions in payment in 2005.

The legislative amendments concerning early retirement pensions had a significant effect on developments in disability pensions. The level of newly started disability pensions fell because changes were made in the earnings-related pension scheme: stricter rules were adopted for calculating projected pensionable service, and the accrual rate for projected pensionable service was lowered among people over 50 years of age. The cuts in projected pensionable service came into effect in 1996. Another major factor lowering the level was the radical drop in retirement on individual early retirement pensions (see Article 2, Figure 2.2). The age limit was raised in 1994 and 2000, and after the pension reform of 2005, people born in 1944 or later were no longer entitled to individual early retirement pensions. No new age classes have entered the system since 2003.

<sup>&</sup>lt;sup>4</sup> In the current earnings-related pension index, the weighting of the change in wages is 20 per cent and that of the change in prices 80 per cent. The index was adopted in 1996. As of that year, the earnings-related pensions of people aged 65 years or older have been adjusted using the index for people of retirement age, instead of the halfway index (50%/50%). The halfway index was used for adjusting the pensions of people under 65 years of age until 2004. In 2005, the scope of application of the index for people of retirement age was expanded to encompass all pensions in payment.

The appreciable fall in individual early retirement pensions lowered the level of disability pensions, because an average individual early retirement pension is nearly twice as high as an ordinary disability pension<sup>5</sup>. The level of disability pensions also fell because the number of fully effective pensions<sup>6</sup> decreased after the mid-1990s. This decrease was caused not only by the fall in the number of individual early retirement pensions, but also by the fact that fully effective pensions accounted for a somewhat smaller share of ordinary disability pensions in the late 1990s. However, in recent years, the share of fully effective pensions among all newly started disability pensions has again started to rise; this partly explains why the level of pensions has risen during the 2000s (Figure 3.2).

Figure 3.2 also reveals that the average pension of people on unemployment pension rose considerably during the period under study. The real value of unemployment pensions increased by 50 per cent from the level at the start of the 1990s. The rise in the level of unemployment pensions was accelerated by the legislative amendment passed in 1994, which required that a component for projected pensionable service be added to the unemployment pension. The amendment meant that starting unemployment pensions were fully effective pensions. However, the rise in unemployment pensions slowed down in the 2000s because a new amendment repealing the requirement for projected pensionable service was no longer added to the unemployment pension. However, for pensioners who were entitled to projected pensionable service, a component for projected

<sup>&</sup>lt;sup>5</sup> In recent years, a new ordinary disability pension has been on average about 800 euros a month, while a new individual early retirement pension has been about 1,400 euros a month. The difference is roughly the same for all pensions in payment. On average, persons who have retired on individual early retirement pensions have had longer careers than persons who have retired on ordinary disability pensions. In addition, the individual early retirement pension is a fully effective pension, i.e. it includes a component for projected pensionable service (see the next footnote). Some ordinary disability pensions are vested pensions, which do not include a component for projected pensionable service. Some of the difference derives from the fact that ordinary disability pensions include part-time disability pensions. Their share of all disability pensions increased slightly during the period under review.

<sup>&</sup>lt;sup>6</sup> In a fully effective pension, the projected pensionable service, i.e. the time between the contingency and the general retirement age, is taken into account when calculating the pension. A vested pension does not include a component for projected pensionable service.

pensionable service was added to the old-age pension that followed their unemployment pension.

The impact of legislative amendments is seen quickly in unemployment pensions in payment, because turnover in this group is rapid. The period for receiving an unemployment pension is short. The minimum age for receiving the pension is 60 years, and the pension ends at the latest with the start of the old-age pension at the age of 65. The rapid turnover also means that there are no great differences in the pension level between people who have already been on an unemployment pension and those who have newly retired on this pension.

#### The average part-time pension has decreased

The average part-time pension displayed a clearly falling trend until the turn of the decade. This is also true for newly started pensions, since there is no major difference in the average pension level between newly started pensions and all pensions in payment (Figure 3.3). This is explained by rapid turnover among part-time pensioners, owing to the short pension period. The fact that part-time pensions have become more popular has also increased turnover. Many new part-time pensioners have emerged both before and after the turn of the millennium, and rapid changes have taken place in pensions in payment.

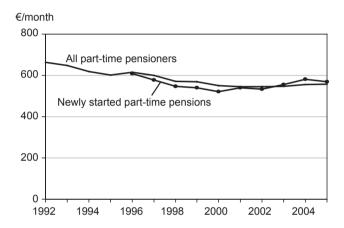
Other factors, too, affect the level of part-time pensions; for instance, how a person's full-time work is changed to part-time work and retirement<sup>7</sup>. A part-time pension may fall because the employee spends less time in retirement and correspondingly more time at work. According to a questionnaire survey conducted in 2001, part-time work accounted on average for 54 per cent of the previous full-time work. There was fairly little variation in this proportion between sectors and occupations (Takala 2004). No follow-up data are available on changes that might have occurred in this proportion.

Changes in the structure of part-time pensioners also affect the level of the average part-time pension. One clear structural change has been noted: As part-time pensions have become more common, an increasing number of pensioners

<sup>&</sup>lt;sup>7</sup> A person seeking part-time retirement agrees with the employer on changes in working hours. The average weekly working time must be between 16 and 28 hours. The person's earnings are reduced so that they are 35–70 per cent of the previous earnings level. The part-time pension is 50% of the difference between the earnings in full-time work and the earnings in part-time work.

work in shop-floor occupations. In the early 1990s, office workers and people in managerial positions accounted for a larger share than at present (Takala 2001). In consequence, the average earnings that form the basis of part-time pensions were higher than they are now.

**Figure 3.3.** The average part-time pension in 1992–2005, euros/month, adjusted for the level in 2005.

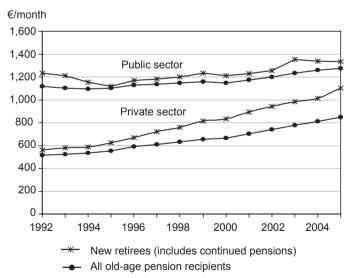


### Differences in pensions in the private and public sectors are much smaller than before

Figure 3.4 shows that the average old-age pension is considerably higher in the public sector than in the private sector. This is true both for people who have already been on a pension and for people who are newly retired. The figure also shows that in both sectors, the level of pensions among newly retired old-age pensioners is higher than the level among old-age pensioners who have retired earlier. The third observation that can be made is the indisputable narrowing of pension differences between the two sectors. The level of old-age pensions has risen more quickly in the private sector than in the public sector, and particularly speedily among newly retired people. The average pension of people who retired on an old-age pension from the private sector doubled in 1992–2005, while in the public sector the rise was about 10 per cent. The maturation of the earnings-related pension scheme explains this marked rise of the pension level in the private sector when compared against the public sector.

When analysing the trends, it is good to note that today more than half of pensioners who receive pensions from the public sector also receive pensions from the private sector. These people now account for a considerably larger share than in the early 1990s (see Hagfors et al. 2003, 80). A little less than one third of pensioners in the private sector also receive pensions from the public sector. As pure civil servant's careers have become less common, pension differences between the sectors have evened out. The reason underlying the difference between the sectors is the accelerated pension accrual in the public sector (66% pension in 30 years vs. 60% pension in 40 years in the private sector), which used to produce a better pension level in a shorter time. However, this difference is about to disappear because the accrual rules governing the public sector were amended to be in line with the accrual rules of the private sector in the mid-1990s. The gradual adoption of the amendment will not be seen as any greater fall in the public sector's pension level until later in the future.

**Figure 3.4.** The average old-age pension in the statutory earnings-related pension scheme, by the sector<sup>1)</sup> in 1992–2005, euros/month, adjusted for the level in 2005.

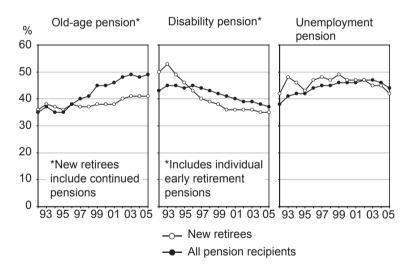


<sup>&</sup>lt;sup>1)</sup> People who received pensions from both private and public sector are included in the figures of both sectors.

# The rise in statutory earnings-related pensions exceeds that in general earnings – only disability pensions lag behind

The ratio of pensions to the general earnings level shows how the level of earnings-related pensions relates to the income level of people in gainful employment. Moreover, the ratio of newly started earnings-related pensions to the general earnings level shows the current level of recently retired persons' pensions in the earnings-related pension scheme. The ratio of the average pension to the average income received by wage-earners and self-employed persons is calculated from the gross income so that the pension income and earnings are adjusted for the value of money in the reference year. The average earnings during the period under review are based on data on the income of wage-earners and self-employed persons, as presented in income distribution statistics. The average earnings refer to the average income of wage-earners and self-employed persons who have worked for at least six months during the year under survey.

**Figure 3.5.** The average pension in the statutory earnings-related pension scheme in 1992–2005, as a percentage of the average earnings in the same year,<sup>8</sup> by pension benefit.



<sup>&</sup>lt;sup>8</sup> The average earnings are based on data on the average income of wage-earners and self-employed persons, as presented in income distribution statistics. The statistics include data on people who have worked for at least six months during the year.

Figure 3.5 indicates that the level of old-age pensions in the earnings-related pension scheme in relation to the general earnings level rose during the period under survey. The rise was particularly rapid among people who had newly retired on old-age pension. At the beginning of the period, the average pension of newly retired persons was a little over one-third of the average earnings of people in gainful employment; at the end of the period, the ratio was about 50 per cent. The average pension of all old-age pensioners in relation to the average earnings rose considerably more moderately. However, in the longer term, the rise in the relative level of old-age pensions has been more appreciable (Uusitalo 2005). The average old-age pension in the earnings-related pension scheme is now slightly over 40 per cent of the average earnings.

When assessing trends in the relative level of pensions, it is also good to note that most of the rise in the real value of pensions is explained by turnover in all old-age pensions in payment, which then also explains the rise in the ratio of pensions to earnings.

There was a clear downturn in the level of disability pensions in relation to average earnings in the late 1990s. The average pension of all people on a disability pension was a little over 40 per cent of the average earnings in 1992 and clearly under 40 per cent in 2005. The fall in the ratio stems from the fact that the real level of disability pensions rose only a little, and this rise took place in the early years of the period under review (see Figure 3.2). By contrast, the earnings level of people in gainful employment rose throughout the period. The only exception is the year 1993, when the average earnings declined slightly. This is seen as a rise in the relative level of all types of pensions, particularly in newly started pensions.

The sharpest decline during the period under study was observed in the level of newly started disability pensions in relation to average earnings. The average pension of people who retired on a disability pension in the early 1990s was half of the average earnings of people in gainful employment, whereas in 2005 this ratio had fallen to one third. The level fell quickly in the early 1990s but more moderately towards the end of the decade and in the 2000s. The main reasons for the falling trend are the factors mentioned above: cuts made in the projected pensionable service applied to disability pensions; raising of the minimum age for individual early retirement pensions; and abolishment of this pension type in the pension reform of 2005. The reduction in the number of people retired on an

individual early retirement pension also meant a major reduction in the number and relative share of fully effective pensions. In ordinary disability pensions, too, the share of fully effective pensions declined somewhat in the late 1990s, but no longer in the 2000s. These changes are seen more directly in the pension level of newly retired pensioners, and after a time-lag and less sharply in all pensions in payment.

In relation to the average earnings, the average unemployment pension kept rising until the end of the decade, but a downturn occurred in the early 2000s. The real value of unemployment pensions has hardly risen in recent years (see Figure 3.2), which explains the fall in the relative level. Despite the falling trend, the level of unemployment pensions in relation to the earnings level is now slightly higher than at the start of the period under study. Unlike at the start of the period, the average unemployment pension now clearly exceeds the level of 40 per cent. The trend in the relative level of newly started unemployment pensions has been similar to the trend in the level of all unemployment pensions in payment, with the exception of the early 1990s. People who retired on an unemployment pension at that time had lost their jobs during the economic boom of the 1980s, and there may be structural differences between people who have retired on unemployment pensions at different times.

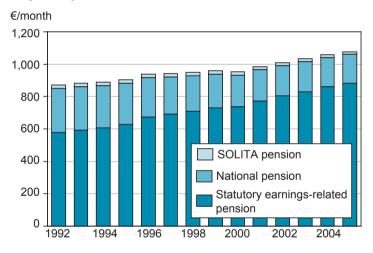
# Statutory earnings-related pensions play a bigger role in the average pension

Figure 3.6 illustrates the average pension income, including the national pension. Pensioners for whom the national pension is the only pension are also included. The importance of the national pension changed radically in 1996, when the national pension was made fully dependent on statutory earnings-related pensions. Figure 3.1 showed that when the legislative amendment became fully effective in 2001, the number of people receiving a national pension dropped from nearly one million to 640,000.

From Figure 3.6 it is seen that the national pension's share of the average pension earned in one's own right fell from about one-third to less than one-fifth during the period under review. Two factors contributed to this falling share: elimination of the basic amount of the national pension and the rising level of earnings-related pensions. The gradual maturation of the statutory earnings-related pension scheme, the rising earnings level, and longer careers owing to women's

increased participation in the labour market all raised the level of earnings-related pensions rapidly. Due to the slow maturation of the earnings-related pension scheme, the national pension has played an important role as an income element supplementing the earnings-related pension. However, this role has been shrinking quickly. The national pension has more clearly become the basic pension for people who have been outside the labour market or who have been in gainful employment only for a short time.

Figure 3.6. The average pension in one's own right, broken down between earnings-related, national and SOLITA pensions in 1992–2005, euros/month, adjusted for the level in 2005.



### 3.3 The full national pension

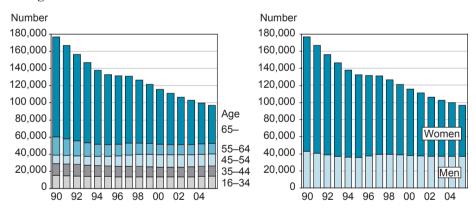
Another indication of the rising pension levels is that the number of people receiving the full national pension declined sharply during the period under study: from nearly 180,000 to less than 100,000 (Figure 3.7). People receiving the full national pension accounted for 8 per cent of all people receiving a pension in their own right in 2005; in 1992 this share had been 14 per cent.

Figure 3.7 also shows that the biggest group depending on the full national pension consists of people over 65 years of age. However, their number has fallen rapidly. At the start of the period under study, people who were 65 years or older accounted for two-thirds of all recipients of the full national pension; at the end they accounted for roughly half. In younger age groups, the number of people

receiving the full national pension changed little during the period under study. The number of people under 65 years of age who receive the full national pension is stabilised at a little over 50,000.

It should also be noticed in Figure 3.7 that the number of women living on the full national pension has decreased markedly. In 2005, women receiving the full national pension numbered 74,000 less than at the start of the period under study. Their number fell almost at the same pace as the number of people receiving the full national pension among pensioners who were 65 or older. The figure illustrates the rise that has taken place in the level of pensions among women over 65 years of age. The primary reason underlying the change is the increasing labour force participation of women. The number of men receiving the full national pension is much smaller than the number of women. Their number also fell during the period under review, but only by about 6,000 persons.

Figure 3.7. Recipients of the full national pension in 1990–2005, by age and gender.



## The real values of the full national pension and statutory earnings-related pensions developed along similar lines

Figure 3.8 shows that the pensions of people entitled to the full national pension rose more slowly than earnings-related pensions. However, the full national pension rose nearly as much as the TEL index of people at pensionable age, which rose by about 4 per cent after the current type of TEL index came into effect, i.e. in the years 1996–2005. During this period, the full national pension rose nearly as

<sup>&</sup>lt;sup>9</sup> See footnote 4 above.

much. The adjustments made to the national pension in 2001 and 2005 increased its real value

The level of the full national pension has fallen behind the trend in the general earnings level. At the start of the period under review, the full national pension was 26 per cent of the average wages; at the end of the period, 20 per cent. People entitled to the full national pension have not been able to enjoy the same increase in well-being as other groups. It might be argued whether it is correct to compare the trend in the full national pension to the trend in wage-earners' average earnings. The aim of the index adjustments of the national pension is to offset the effects of the rising price level. However, when earnings-related pensions are adjusted, the change in earnings is given a weight of 20 per cent.

140 Wage and salary index 130 120 TEL index, working age 110 TEL index, pensionable age Full national pension 100 90 1992 1994 1996 1998 2000 2002 2004

**Figure 3.8.** The change in the real value of certain indices and the full national pension in 1990–2005, 1990=100

### 3.4 Total pension

#### A rise of one-fifth in the total pension

The review of total pensions encompasses all people receiving a pension in their own right. This also includes people who only receive a national pension. Figure 3.9 illustrates trends in the total pension. In addition to statutory earnings-related pensions and the national pension, the total pension includes any survivors' pensions that may be paid. The average total pension rose from 960 euros to 1,160 euros per month, or in real terms by one-fifth, between 1992 and 2005. However, the

real growth rates of pension types vary, despite the fact that in 1992 the levels of all pension types – with the exception of part-time pensions – were roughly the same, or slightly under 1,000 euros per month.

During the period under review, the average total pension of old-age pensioners rose in real terms by a good 200 euros per month, or about by one fifth. Here, too, it should be noted that the rise in the level of total pensions largely stems from turnover in pensions in payment, or the higher level of newly started oldage pensions and the lower level of ceased pensions when seen against the level of all pensions in payment.

The average total pension of all old-age pensioners has risen clearly less than the old-age pension paid to recipients of statutory earnings-related pensions (see Figure 3.2). The reasons behind this difference are the inclusion of people receiving only a national pension within the scope of review, and differences stemming from the index adjustments of earnings-related pensions and the national pension. Despite these differences, the average total pension in 2005 (about 1,200 euros/month) was about one fifth higher than the average old-age pension of people receiving earnings-related pensions (about 1,000 euros/month).

**Figure 3.9.** The average total pensions of people receiving pensions in their own right, by pension benefit (excl. special pensions for farmers) in 1992–2005, euros/month, adjusted for the level in 2005.

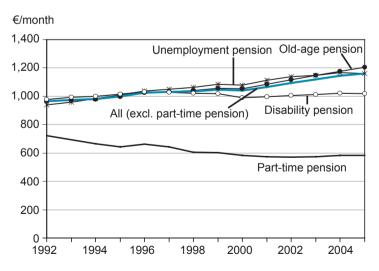


Figure 3.9 shows that the average total pension of people on a disability pension rose very little during the period under study: from slightly under 1,000 euros to slightly over 1,000 euros per month. The modest growth rate is explained by the fact that disability pensions paid as earnings-related pensions rose very little in 1992–2005. The considerable fall in newly started disability pensions curbed the rise in the level of all disability pensions in payment (see Figure 3.2). The reasons for the falling level of new disability pensions were discussed above in connection with the review on earnings-related pensions.

It can also be seen from Figure 3.9 that the average total pension of people on an unemployment pension has been almost the same as the old-age pension throughout the period under review. Thus the total pension has risen by the same sum in real terms, or by a little over 200 euros per month. The average total pension of people receiving old-age pensions and unemployment pensions in 2005 was about 1,200 euros per month.

The average total pension of people on part-time pensions fell from about 700 euros to a little less than 600 euros per month during the period under study. There are several reasons for the fall in pensions, and they were discussed in more detail in connection with the review on earnings-related pensions. The total pension of part-time pensioners is only a little higher than the average part-time pension paid as an earnings-related pension (see Figure 3.3). This is because a part-time pensioner is not paid any other pension in his or her own right in addition to the part-time pension. A surviving spouse's pension is the only other pension that can raise the level. The national pension is not granted as a part-time pension.

### Pension differences between the genders narrowed

There are significant differences in the level and structure of total pensions between the genders. Figure 3.10 reveals that women's total pension is about 300 euros smaller than men's total pension; expressed in euros, this difference has remained the same throughout the period under review. However, in relative terms the difference has narrowed, since women's pension level has risen more rapidly than that of men. The difference between the total pensions was reduced by four percentage points. In 2005, women's pensions were 78 per cent of men's pensions.

Figure 3.10 also shows differences in the structure of pensions. Among women, earnings-related pensions account for a considerably smaller share of the total

pension than among men. However, this share has risen more rapidly among women than among men. Increased working outside the home and longer careers have boosted the level of earnings-related pensions among women. For this reason, the national pension's share of the total pension has diminished more sharply among women than among men. The appreciable reduction in the number of people entitled to the full national pension during the period under study was largely attributable to women over 65 years of age (Figure 3.7); this is reflected as a declining share of the national pension among women. However, the national pension is still a clearly more important source of pension income among women than among men.

Figure 3.10. The average total pension (recipients of pensions in their own right) by pension structure and gender in 1992–2005, euros/month, adjusted for the level in 2005.

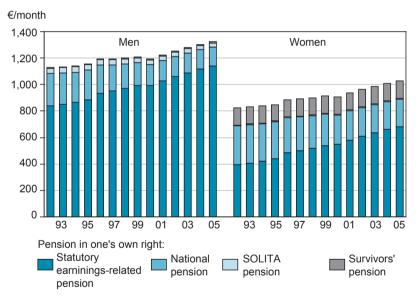


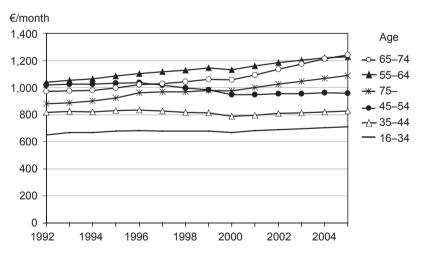
Figure 3.10 also illustrates the differences that exist between the genders in survivors' pensions and in SOLITA (military injury, motor liability insurance and workers' compensation insurance) pensions. SOLITA pensions only have a role to play in men's total pensions. They account for a very small share of women's average total pension. The situation is reversed in survivors' pensions. Survivors' pensions account for 13 per cent of women's total pensions and for less than one

per cent of men's total pensions. Some of this difference stems from the integration of the surviving spouse's pension, which reduces survivors' pensions more among widowers than among widows. In the integration, the surviving spouse's own earnings-related pension is taken into account when calculating the surviving spouse's pension. Owing to the integration, men are left without any surviving spouse's pension more frequently than women.

### The total pension has risen the most among the oldest age groups

Figure 3.11 illustrates the change in the average level of total pensions among pensioners of different ages. The pension level improved the most in the oldest age groups. The average total pension of people aged 75 years or older rose by 24 per cent during the period under study, while the pension of people aged 65–74 years rose by 28 per cent. In younger age groups, the total pension rose clearly more slowly. An exception is the age group of 45–54 years, in which the total pension in real terms fell during the period under study.

Figure 3.11. The average total pension (recipients of pensions in their own right, excl. part-time pensions), by age in 1992–2005, euros/month, adjusted for the level in 2005.



Many factors have affected the rapid increase in the total pension level among old-age pensioners: maturation of the earnings-related pension scheme; general

improvement of earnings; and growth in women's employment. Turnover in oldage pensions in payment also explains some of the increase in the pension level. During the period under review, the pension level of newly started old-age pensions was better than the level of all old-age pensions, and significantly better than the average level of old-age pensions that had ceased. It should also be noted that the majority of old-age pensioners are women (60% in 2005). The number of women at pensionable age who were entitled to the full national pension fell radically during the period under review (see Figure 3.7), while the share of women receiving earnings-related pensions increased correspondingly. Thus the number and share of old-age pensions linked with the TEL index rose considerably. This also sped up the rise of the pension level in the oldest age groups.

Among the various age groups, the average total pension was the highest in the group of 55–64 years. However, towards the end of the period, the total pension of people between 65 and 74 years reached the same level, slightly over 1,200 euros per month. The lowest total pensions can be found among young people on disability pensions. The average pension of people under 45 years of age is 700–800 euros per month, and the level of the total pension has not risen much in these age groups. The national pension accounts for a significant share of the total pension in the young age groups, because among young pensioners there are many who receive nothing but a national pension. This is reflected in the low level of the total pension and in the slow improvement of the level

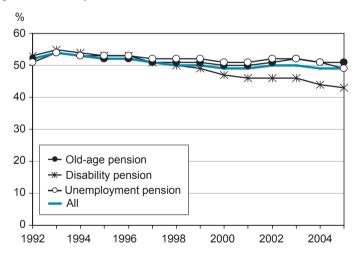
### The ratio of total pensions to the earnings level remained unchanged – except in disability pensions

From Figure 3.12 it can be seen that pensioners' average total pension in relation to average earnings remained at about 50 per cent during the period under study. The slight decrease in the relative level of total pensions was caused by disability pensions. Their level in relation to the average earnings has fallen, but the relative level of the total pensions received by people entitled to old-age and unemployment pensions remained at 50 per cent all through the period. In other words, the level of these pensions has risen more or less in step with the general earnings level. When assessing how well the relative level of pensions has been retained, it should be noted that the main factor affecting the level is the turnover in pensions paid: the higher level of newly started pensions and the lower level of ceased pensions, as compared against the average level of all pensions in payment.

Thus, the figure does not show how the pension level of people retired at a certain point of time has developed in relation to the trend in earnings.

When the national pension and the survivors' pension are taken into account in the total pension, the average pension income of people entitled to old-age and unemployment pensions rises to 50 per cent of the average earnings. From Figure 5 it could be seen that the average old-age and unemployment pensions of people in the earnings-related pension scheme was slightly over the 40 per cent level. From Figure 3.12 it can additionally be noted that, in relation to the average earnings, the average total pension of people on disability pension fell clearly during the period under study. However, the fall in the relative level of the total pension is less sharp than the fall in the pension level of people on an earnings-related pension (see Figure 3.5). In 2005, the average total pension was over 40 per cent of the average earnings, whereas the average disability pension of people in the earnings-related pension scheme was clearly under 40 per cent.

Figure 3.12. The average total pension (recipients of pensions in their own right) in 1992–2005, as a percentage of the average earnings in the same year, by pension benefit.



The reasons behind the fall in the pension level of people on disability pension were discussed in more detail above. The many changes introduced to early retirement pensions, the decline in individual early retirement pensions, and the marked reduction in the share of fully effective pensions lowered the real value

of newly started pensions to a considerable extent. These changes are reflected slowly in the level of all pensions in payment. In contrast, they are seen quickly in the fall of the relative level because the real value of disability pensions in payment remained fairly steady during the period under review, with the exception of the slight rise during the first years. Thus, the level of disability pensions fell behind the trend in the earnings level of people in gainful employment.

### Even shift in the total pension income from lower to higher income brackets

Figure 3.13 illustrates the distribution of the total income among ten income brackets in 1992 and 2005. The increase in the real value of total pensions is visible as a marked decrease in the share that the lowest income brackets have of pension income. The relative shares of pensioners whose pension is under 800 euros a month have become considerably smaller. Whereas at the start of the period under study, about half of pensioners belonged to the three lowest income brackets, at the end of the period their share had fallen to about one in four. Small pensions are particularly common among women who are over 65 years of age, and among young people on disability pension. A major positive development was that the number of women at pensionable age who were entitled to the full national pension fell substantially during the period under study (see Figure 3.7). Shifts in the lowest brackets of income distribution apply to women more often than men. One reason is that the rising number of women in gainful employment has increased women's earnings-related pensions, as well as the total pension, more rapidly than those of men (see Figure 3.10).

Figure 3.13 also shows that the shift to higher income brackets has been fairly even. The shares of pensioners in the four middle-income brackets, whose pensions are 800–1,599 euros a month, increased steadily. There has also been clear growth in the shares of pensioners in the three highest income brackets. Distribution of pension income is discussed in more detail in the next section.

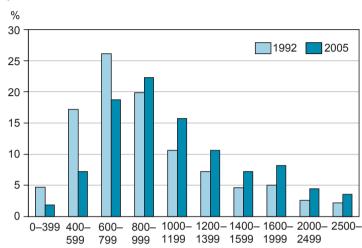


Figure 3.13. Distribution of the total pension (recipients of pensions in their own right, excl. part-time pensions) in 1992 and 2005, euros/month, adjusted for the level in 2005.

#### 3.5 Differences in pension income

This section deals with the distribution of statutory pension income in groups formed on the basis of total pensions. The analysis does not include pensioners who do not live in Finland or who receive a part-time pension. Another criterion is that the total pension must equal at least the minimum sum of the full national pension (427.73 euros/month in 2005)<sup>10</sup>. During the period under review, the number of people in the final material rose from 1,050,000 pensioners to 1,180,000 pensioners. The increase is thus over 10 per cent.

<sup>&</sup>lt;sup>10</sup> This minimum sum is the most important factor limiting the material. Owing to this limit, some 30,000–50,000 pensioners are excluded from the material annually. The limit is justified by the fact that normally a pensioner is paid a pension that equals at least this minimum sum, although some exceptions still exist. In these cases some other benefit may be paid. At least three basic types can be identified among the persons excluded: the institutionalised population; immigrants; and missing register data. The institutionalised population refers to pensioners who are in long-term institutional care (hospitals, old people's homes etc.). Immigrants are people who do not receive the full national pension because they have not lived in Finland long enough. For instance, immigrants from Ingria are in this group. Missing register data refers to persons whose pension data are not in some of the registers used. One reason for this is that data are entered into various registers at slightly different times.

On the basis of their pension income, pensioners were first divided into ten deciles<sup>11</sup>. Then the total pensions in each decile were compared against each other. If the income distribution is perfectly even, each decile receives one-tenth of the pensions paid. The greater the share that the higher deciles have of all pensions paid, and the smaller the share that the lower deciles have, the more uneven the distribution of pension income is. The review concerns the total pensions that were paid at the end of the years 1992–2005. For comparing the income levels in the deciles, the pensions paid in the various years were converted to the 2005 level by means of the cost-of-living index.

Table 3.1 shows the limits and the average total pensions of the various deciles in 2005. A pensioner whose pension income was under 641 euros per month was placed in the lowest decile. The average total pension of these pensioners with the lowest pensions was 559 euros. At the same time, the full national pension was between 427.73 and 505.24 euros, depending on the pensioner's marital status and municipality of residence. Thus, pensioners who only received a national pension and pensioners who received a very small statutory earnings-related pension were placed in this lowest pension income decile. Pensioners in the second decile received an earnings-related pension, as well as a national pension.

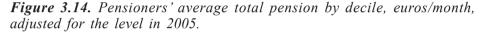
**Table 3.1.** The limits and average total pensions of each pension income decile, euros/month in 2005.

Decile	Decile limits, euros/month	Average pension, euros/month
ļ	- 641	550
'	* * * *	559
II	641 – 746	697
III	746 – 834	790
IV	834 – 917	876
V	917 – 1,011	963
VI	1,011 – 1,129	1,067
VII	1,129 – 1,283	1,202
VIII	1,283 – 1,501	1,384
IX	1,501 – 1,888	1,671
X	1,888 –	2,581
All		1,179

<sup>&</sup>lt;sup>11</sup> In 2005, there were 1.2 million pensioners who received a pension in their own right; thus, each decile had 120,000 pensioners.

In 2005, the median pension, or the 50-per cent income limit, was 1,011 euros per month. In other words, half of all pensioners received a pension that was under this sum. All through the period under review, the mean of all pensions has been fairly close to the average pension of the seventh decile (Figure 3.14).

In 2005, the average pension of the highest decile, or the one-tenth of pensioners with the highest pensions, was 2,600 euros per month. In this group, the average pension was 900 euros higher than in the second highest decile.



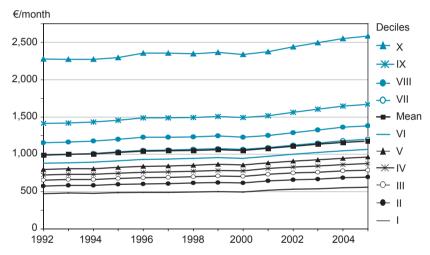


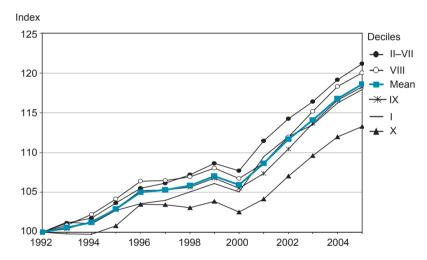
Figure 3.14 shows that the average pensions of all pension income deciles have risen in real terms since the early 1990s. The higher the decile, the more the rise has been in monetary terms. Thus, when measured in euros, differences between total pensions have increased. Although the rise in the pension sums received by pensioners in the two highest deciles has been considerable, the pensions of the lowest deciles have also risen.

The trend in pensions is illustrated more graphically in Figure 3.15, which shows in per cent how the average total pensions have risen in real terms in each decile. Calculated in per cent, the biggest change has occurred in deciles II–VII, where the increase has been around 21 per cent. The differences between these deciles are small; therefore the figure only shows the annual average of this

group. The mean pension rose by under 19 per cent between 1992 and 2005. At the same time, the average pension of the lowest pension income decile rose by 18 per cent, while the rise in the highest decile was around 13 per cent.

Thus, the relative change in the average pension was the smallest in the highest decile, and the second smallest in the lowest decile. Next come deciles IX and VIII, in this order. The rest of the deciles have developed fairly uniformly.

Figure 3.15. Change in pensioners' average total pension, in per cent, in each decile, adjusted for the level in 2005 (1992=100).



Income distribution usually refers to relative income differences. Accordingly, the distribution of pension income is analysed by calculating the shares that the various deciles have of all pensions (Figure 3.16). This shows how pension income is distributed between the various deciles.

Figure 3.16 shows the shares that each decile has of all pension income. When pensioners are divided into two equally large groups on the basis of their income, the half with the lower income gets one-third of all pensions paid, <sup>12</sup> while the half with the higher income gets two-thirds. The ten per cent of pensioners with the biggest pensions receive more than one-fifth of the total pension income. Correspondingly, the fifth of pensioners with the smallest pensions receive one-tenth of the total pension income.

<sup>&</sup>lt;sup>12</sup> The five lowest deciles contain half of all pensioners. Their share can be calculated by adding up the pension income shares of these deciles.

The distribution of pension income became slightly more even in 1992–2005. The shares that other deciles have of the total pension income have remained fairly steady, but the share of the highest decile has come down by one percentage point. The distribution of pension income is clearly more even than the distribution of income from production factors among people in gainful employment (see Tulonjakotilasto 2004, Table 21 b).

% total pension income 25 Deciles <u></u> ★ X 20 <del>\*</del> IX VIII O- VII 15 VI 10 <del>\*</del> \/ <u></u> ш 5 - 11 1992 1994 1996 1998 2000 2002 2004

**Figure 3.16.** The shares that pensioners in the various deciles received of the total pension income in 1992–2005.

#### 3.6 Conclusions

Pensioners' total pension rose on average by one-fifth in real terms in 1992–2005, but trends in the real values of pensions varied depending on the type of pension. The average total pension among old-age pensioners rose from about 1,000 euros to 1,200 euros per month during the period under study. The level of old-age pensions rose almost at the same pace as the income level of the population in gainful employment. The average old-age pension was roughly half of the average earnings throughout the period under study. The average total pensions of people on unemployment pension and on old-age pension were at the same level. Thus, unemployment pensions also followed the trend in the general earnings level.

The rise in the real value of pensions is mostly explained by turnover in pensions in payment; index adjustments play a smaller role. Two-thirds of all old-age pensioners in 2005 had retired on old-age pension during the period under review; one in three had already been retired in 1992. The average level of newly started old-age pensions was clearly higher than the level of all pensions in payment. The factors underlying this trend were the gradual maturation of the earnings-related pension scheme, the rise in the general earnings level, and the increasing labour force participation of women. For the same reasons, the average level of old-age pensions ceased was lower than the level of all pensions in payment.

The total pensions of disability pensioners rose very little in real terms. The average total pension remained at about 1,000 euros per month during the period under review. For this reason, disability pensions lagged behind the trend in the general earnings level, especially after the distinct upturn in the earnings level of people in gainful employment in the mid-1990s. A clear falling trend in the level of newly started disability pensions kept the level of all disability pensions in payment from rising. There were various reasons behind this decline: changes made in early retirement pensions; cuts in projected pensionable service; and raising of the minimum age for individual early retirement pensions, and subsequent abolishment of these pensions in the pension reform of 2005. Other factors contributing to the falling trend were the fact that the number of fully effective pensions, and their share of newly started disability pensions, decreased while the share of vested pensions increased substantially during the period under review.

The most noteworthy change concerning national pensions during this period took place when the national pension was made fully dependent on statutory earnings-related pensions. The number of people receiving a national pension fell from nearly one million to 640,000. Elimination of the basic amount of the national pension, together with the rising level of statutory earnings-related pensions, reduced the national pension's share of the average pension. The national pension's share fell from about one-third to less than one-fifth.

The national pension's share decreased more among women than among men because the level of women's earnings-related pensions rose slightly more quickly than that of men. The clearest indication of the improvement that has taken place in women's statutory earnings-related pensions is that the number of women entitled to the full national pension decreased by about 74,000 while the

number of men decreased by 6,000 during the period under study. The decrease in the number of persons entitled to the full national pension occurred almost exclusively among people who were 65 or older. This is also the group in which the rise in the total pension was the fastest during the period under study.

The slightly faster growth in women's earnings-related pensions also meant that the difference in pensions between the genders narrowed by a couple of percentage points. Women's total pension is now on average 78 per cent of men's total pension. However, expressed in euros, the difference between the total pensions remained almost the same, at about 300 euros per month.

Differences between pension incomes narrowed a little between 1992 and 2005. In relative terms, pension income rose the most in deciles II–VII and the least in the highest decile. In all, pension income is distributed more evenly than income among economically active people.

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Arto Laesvuori

#### 4 Pensioners' gross and net income

The previous article explored the increase in the real value of pensions and the trends in their distribution. The focus was on gross pensions. This article expands the concept of income to encompass income other than pensions received by pensioners. The effect of taxation on disposable income is also taken into account. The income data refer to nominal values. The main emphasis is on trends in pensioners' gross and net income and on comparing these trends with the income trends of other population groups.

The analysis is based on data on the average income of various groups of income recipients, calculated from the statistics of the Tax Administration (Verotilastot vuosilta 1990–2004). The analysis starts with 1990, or the year before the recession, and ends with 2004, the year for which the latest tax data are available. The statistics cover all taxable income. For instance, the following income types are therefore excluded: child allowances, daily allowances, housing allowances, tax-exempt supplements to national pensions, and grants and scholarships.

The article starts with a review of the development of the nominal value of pensioners' average gross income, as well as the development of its components: pensions and other income. This is followed by comparisons, first between the gross and net income trends of pensioners and all other income recipients, and then between the gross and net income trends of pensioners and wage-earners.

#### **Definitions**

Pensioners refers to all people who were at least 65 years old during the tax year, as well as to any younger people who have received pension income if their pension income has accounted for at least 90 per cent of their gross income during the tax year. For instance in 2004, altogether 1.153 million people fulfilled these criteria. According to pension statistics, this encompasses about 90 per cent of people entitled to a pension in their own right (Statistics on pensioners in Finland in 2004). Those left outside the scope are recipients of pension income who are under 65 years old and whose pension has started during the year covered by the statistics or who for some other reason have received wages, business income or capital income in excess of 10 per cent of their total income.

Wage-earners include all income recipients whose wages and salaries account for over 90 per cent of their total income, or whose wages and salaries exceed a certain limit during the tax year (for instance 16,100 euros in 2004). The limit has been adjusted annually to correspond to changes in the index of wage and salary earnings.

Other than pensioners: The article compares pensioners' income trends with the income trends of all other private individuals who have received taxable income. The group 'Other than pensioners' is obtained when people classified as pensioners are removed from the material that encompasses all income recipients. Thus, the reference group is comprised of income recipients in 'the rest of society'. Besides wage-earners, the group includes farmers, business enterprise owners, self-employed persons, and other natural persons. The last mentioned group Other income recipients includes people who are entitled to unemployment benefits or other social security benefits, or who receive capital income.

Gross income encompasses all types of taxable income received by people

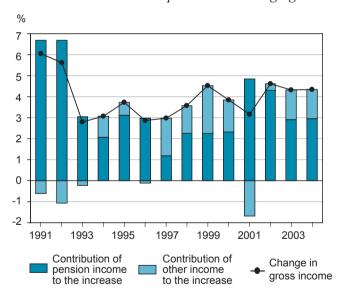
**Net income** is gross income minus the state taxes, health insurance contributions, national pension insurance contributions, municipal income taxes and church taxes that the person is liable to pay. The adjusted net income, calculated separately for this article, also takes into account the effects of the pension insurance and unemployment insurance contributions paid by employees on their income in hand.

**Pension income** includes all earnings-related pensions, taxable pensions paid by the Social Insurance Institution, pensions and annuities paid by virtue of accident insurance and motor liability insurance, and pensions based on voluntary insurance arrangements.

# 4.1 Index adjustments account for more than half of the increase in gross income

On average, over 90 per cent of pensioners' income consists of pensions. During the period under review, an average of eight per cent of pensioners' gross income was other than pension income. Despite the relatively modest share of other income sources, they have had an effect, even a considerable one, on the development of pensioners' gross income after the recession years (Figure 4.1). The amount of other income declined during the recession years 1991–1993 by a total of one quarter, but thereafter the relative growth rate of other income has been many times higher than that of pension income – with the exception of a couple of years. In fact, one quarter of the growth in pensioners' gross income between 1993 and 2004 can be attributed to the growth in other income.

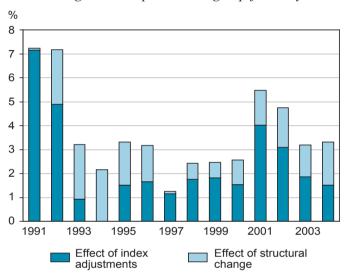
**Figure 4.1.** Contribution of the change in pension income and the change in other income to the nominal trend in pensioners' average gross income, %



In 2004, when the share of other income of pensioners' gross income had risen to over 11 per cent, altogether 75 per cent of the other income consisted of capital income, mainly dividends, income from rent and capital gains. In that year, over 500,000 pensioners received capital income, the average sum being

2,700 euros a year. Wages and salaries accounted for 1.5 per cent of pensioners' income in 2004; no essential changes occurred in this share during the study period.

**Figure 4.2.** The change in the average annual pension income, distributed between the share attributable to index adjustments and the share resulting from structural changes<sup>1</sup> in the pensioners' group for the years 1991–2004, %



Although the increase in other income sources raised pensioners' gross income substantially after 1993, the rise in pension income accounted for about 85 per cent of the increase in gross income during the entire review period of 1990–2004. Pensioners' average annual pension income rose by a total of 66 per cent during the period studied, i.e. by an average of 3.7 per cent a year. The index adjustments of pensions explain nearly 60 per cent of the increase in pension income<sup>2</sup>; the rest of the increase in the average pension income results from structural changes. The pensioners' group is not the same from one year to the next. New, starting pensions are generally higher than pensions that have ceased.

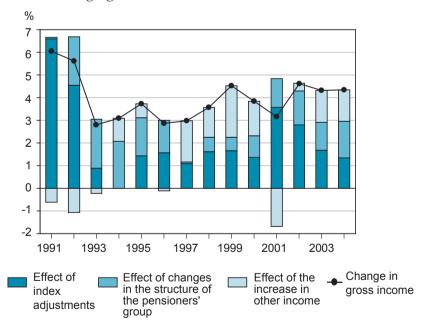
<sup>&</sup>lt;sup>1</sup> The effect of structural changes is obtained when the impact of index adjustments on the average pension income is deducted from the change observed in pension income.

<sup>&</sup>lt;sup>2</sup> The index adjustments of pensions explain about 30 per cent of the real increase in pension income.

One reason for this is that the number of people who receive a national pension – either as their only pension or together with other pensions – has decreased. Moreover, starting earnings-related pensions are usually higher than earnings-related pensions that have ceased. These factors raised the average pension above the level of index adjustments in all years reviewed (Figure 4.2), although in some years the structural change had only a slight effect.

In all, index adjustments made between 1990 and 2004 raised the average pension income by a good 38 per cent, or on average by about 2.3 per cent a year. This figure is just above the percentage by which wage increases agreed during collective bargaining have raised wage-earner's earnings. The index of negotiated wages,<sup>3</sup> which measures this percentage, rose by a little less than 37 per cent during the corresponding period, the main reason being that very slight increases, or none at all, were negotiated during the recession years.

**Figure 4.3**. Contribution of index adjustments, changes in the structure of the pensioners' group, and changes in other income to the nominal value of pensioners' average gross income, %



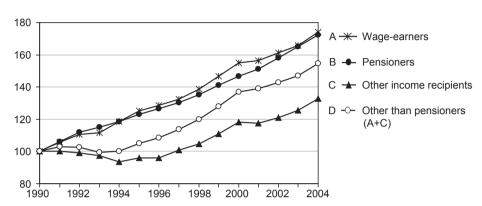
<sup>&</sup>lt;sup>3</sup> Source: Statistics Finland

The above inspection focused on two aspects: the effects of income other than pension income on the increase in gross income; and the impacts of index adjustments and changes in the structure of the pensioners' group on trends in the average pension income. Figure 4.3 combines the information and shows how much the above factors affected the development of pensioners' average gross income in the years under review.

The importance of various factors with regard to the increase in gross income has varied greatly from year to year, but only the change in other income has had a negative effect on the change in gross income in some years. For instance, in 2001 pensioners received about 20 per cent less capital income than in the previous year; this explains the negative effect of other income on growth. During the entire study period, index adjustments explained on average 55 per cent of the nominal increase in gross income, while structural changes in the pensioners' group accounted for 31 per cent and the increase in other income for 14 per cent

# 4.2 Equally rapid growth in the average gross income among pensioners and wage-earners

During the period under review, the average nominal gross income of pensioners rose by 72 per cent, or on average by four per cent a year. The average gross income of persons classified as wage-earners rose equally much (Figure 4.4). The figure also shows the trend in the gross income of all other income recipients except pensioners, as well as the trend in the subgroup of this category, "Other income recipients". This last group comprises all other income recipients, except pensioners and wage-earners. The income trend of this group is characterised by a marked fall in the income level during the recession years, and by the relatively slow recovery of the income trend after the recession in comparison to wage-earners and pensioners, whose average gross income continued to rise with hardly any break.



**Figure 4.4.** Nominal trend in the average annual gross income, by income recipient category, in 1990-2004, index 1990 = 100.

# 4.3 The recession brought a temporary increase in pensioners' relative income status

The fairly rapid increase in pensioners' average gross income during the first years of the recession, when compared against other groups of income recipients, boosted pensioners' relative income status. Before the recession, in 1990, pensioners' average gross income was 56 per cent of the gross income of all other income recipients. Only four years later, in 1994, when no index adjustments were made to pensions, the figure was 66 per cent (Figure 4.5.A). In fact, the Government proposal (HE 247/93) justified the freezing of index adjustments in 1994 by pointing out, among other things, that the working population's income development had ground to a halt and that unemployment had caused a widespread reduction of income.

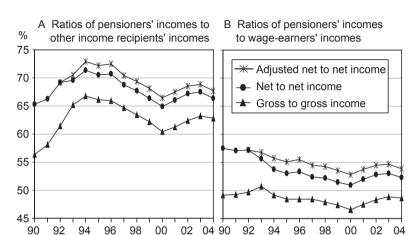


Figure 4.5. Ratios of pensioners' gross and net incomes to other income recipients' gross and net incomes, on average, in 1990–2004, %

After 1994, the economy began to recover from the recession. The number of people out of work decreased, and the number of people in the workforce rose even more rapidly than the number of unemployed job-seekers fell. The reference group's gross income increased clearly more rapidly than pensioners' income. In consequence, the ratio of pensioners' average gross income to the reference group's gross income fell to 60 per cent by the year 2000 (Figure 4.5.A). This was followed by a period of slower economic growth until 2003. During this period, no major changes took place in the number of the employed or the unemployed population. Owing to structural changes, the average earnings of wage-earners – who at the time accounted for about two-thirds of the reference group – increased clearly more slowly than the index of wage and salary earnings. Since pensioners' average pension income at the same time rose appreciably more than the index adjustments (Figure 4.2), and also more than wage-earners' average earnings, pensioners' income status began to rise again. However, this rise was replaced by a slightly falling trend during 2004. Nevertheless, the ratio of pensioners' average gross income to the average gross income of other income recipients in 2004 was 6.5 percentage points higher than before the recession in 1990.

Figure 4.5.A also shows the ratio of pensioners' average net income to the average net income of other income recipients. The calculation incorporates

state taxes, municipal income taxes and church taxes, as well as health insurance and national pension insurance contributions, but not the pension insurance and unemployment insurance contributions payable by employees since 1993. They reduce the disposable income of wage earners, but not at their full value since they are eligible for tax deduction. The "adjusted net to net income" curve shown in the figure includes the effect of these payments on the disposable income.

On average, pensioners pay less tax than other income recipients, because pensioners' average income is also lower than that of other income recipients. Calculated from net income, the ratio of pensioners' income to the income of other income recipients is about 6–7 percentage points higher than when calculated from gross income (Figure 4.5.A). After 1994, the curves for the gross and adjusted net values show the same trend. This indicates that the trend in the average tax rate, including employees' pension insurance and unemployment insurance contributions, has been almost identical for both pensioners and the reference group. By contrast, between 1990 and 1994, the curves approached each other in consequence of changes that increased pensioners' taxation: in 1992 pensioners began to pay national pension contributions, and as of 1993 they have been charged higher health insurance contributions than wage-earners. However, the ratio of pensioners' average net income to the net income of other income recipients was one percentage point higher in 2004 than before the recession in 1990.

# 4.4 Changes in taxation have weakened pensioners' position in relation to wage-earners

The picture of pensioners' relative income status changes essentially when the comparison is made only against wage-earners (Figure 4.5.B). With the exception of the first few years, the ratio of pensioners' income to the reference group's income falls by roughly 15 percentage points when compared to Figure 4.5.A.

Measured by gross income, pensioners' income status in relation to wage-earners improved very little during the recession years (Figure 4.5.B), when the trend is compared to the improvement in pensioners' income status in relation to all other income recipients (Figure 4.5.A). The main reason for this is that the wage-earners included in the statistics used for this article represent the wage-earner group having the strongest position in the labour market. This is a general

feature of all statistics. An unemployment benefit period of as little as one month may change a person's classification from "wage-earner" to "other income recipients". According to the statistics, during the recession between 1990 and 1994, the number of wage-earners fell by nearly 600,000. The number of other income recipients increased correspondingly. A problem inherent in this situation is that the average income of wage-earners who remained employed may rise even if their wages stayed unchanged, because dismissals and unemployment often affect people with lower wages first. This occurred in part also in 1991–1993, but owing to the time-lag in pension indices, the index adjustments exceeded the changes in wage-earners' gross income. In consequence, pensioners' income status in relation to 'pure' wage-earners improved to some extent.

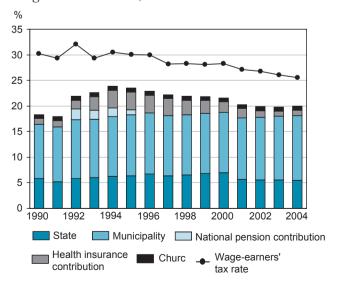
Measured by gross income, pensioners' position as a rule has weakened since 1993, with the exception of the period from 2000 to 2003. The special features relating to this period were explained in connection with Figure 4.5.A. However, it is worth noting that despite all legislative amendments made to index rules during the period under review and despite the modified index adopted at the beginning of 1996, the ratio of pensioners' average gross income to wage-earners' gross income was still at the same level in 2004 as it had been before the recession, or slightly under 50 per cent.

By contrast, when calculated from net income, pensioners' position in relation to wage-earners has declined steadily, albeit slowly. The above-mentioned years from 2000 to 2003 are again an exception. The following factors have affected the relative weakening of pensioners' position:

- The primary reason why the ratio of pensioners' net income to wage-earners' net income fell during the recession and immediately thereafter was the fact that pensioners were required to pay higher national pension and health insurance contributions than wage-earners. After the recession, this difference gradually evened out. The national pension insurance contribution was abolished altogether in 1996, but pensioners were still paying higher health insurance contributions than wage-earners in 2002 (Figure 4.6). Pensioners' tax rate rose by 5.5 percentage points between 1990 and 1994, whereas wage-earners' tax rate rose merely by 0.25 percentage points.

- -As the general level of pensions has risen, pensioners' taxation has increased because more and more pensioners come within the progressive state income tax system. In 1990, 38 per cent of pensioners paid state income tax; in 2004 this figure had risen to 53 per cent.
- Another factor affecting the declining trend of the "net to net income" curve in Figure 4.5.B is the fact that the tax reductions introduced since 1996, such as changes in the state income tax rates, have a more pronounced impact on wage-earners, because most wage-earners (78 per cent in 2004) are liable to pay state income tax. In addition, some reductions only apply to work-related earnings. For instance the amount of the earned income allowance in municipal taxation has been raised repeatedly and its scope has been expanded to include even higher annual income brackets. Moreover, tax reductions have no effect at all on small pensions because these are exempted from tax in any case. From 1995 to 2004, wage-earners' tax rate fell by 4.6 percentage points and pensioners' tax rate by 3.6 percentage points (Figure 4.6), although the gross incomes of wage-earners and pensioners increased equally much in relative terms during that period.

**Figure 4.6.** Pensioners' tax rate by type of tax, and wage-earners' total tax rate on average in 1990–2004, %



#### 4.5 Conclusions

This article examined pensioners as a group on the basis of average figures and in relation to other income recipient groups. Few conclusions can be drawn about individual pensioners' disposable income or relative status.

During 1990–2004, pensioners' average gross income rose nominally by 70 per cent. Wage-earners' gross income rose by equally much. Of the nominal increase in pensioners' gross income, 55 per cent stemmed from the index adjustments of pensions, 31 per cent from changes in the structure of the pensioners' group, and 14 per cent from the increase in income other than pension income.

On the basis of this review, pensioners as a group retained their status in income distribution during the period 1990–2004, although variations in economic trends have changed the situation from time to time. The relative position of pensioners in relation to other income recipients improved during the recession, but declined during the years of economic growth after the recession. However, when seen against the pre-recession year of 1990, the position of pensioners in the last year of this review, 2004, had improved when compared against a reference group comprising all other income recipients. When compared against wage-earners, too, pensioners have retained their status in terms of their gross income. By contrast, when measured by net income, pensioners' status has weakened in relation to wage-earners, because the tax reliefs that have been introduced in recent years have had a more pronounced effect on wage-earners than on pensioners.

#### **LITTERATURE**

HE 247/93. Hallituksen esitys Eduskunnalle laiksi työntekijäin eläkelain 9 §:n poikkeuksellisesta soveltamisesta vuonna 1994 sekä laiksi työntekijäin työeläkemaksun ja työttömyysvakuutusmaksun huomioon ottamisesta eräissä päivärahoissa (HE 247/93 vp.).

Statistical Yearbook of Pensioners in Finland 2004. Official Statistics of Finland. Helsinki 2005.

Verotilastot vuosilta 1990–2004. Tulojen ja varallisuuden perusteella maksuunpannut verot vuosilta 1990–1999, Verohallituksen julkaisut 568, 587, 626, 675, 714, 769, 819, 861, 897 ja 942. Verotilastot vuosilta 2000–2004, Verohallituksen julkaisut 978, 353.02, 353.03, 353.04 ja 353.05.

Juha Rantala

# 5 Disposable income of pensioners' households

The previous article explored trends in pensioners' income before and after taxation. In the present article, the perspective is expanded to pensioners' disposable income. When assessing disposable income, we must also consider other income sources besides taxable income and must take note of the fact that disposable income depends not only on the person's own income but also on the income of other people living in the same household. The article poses the following questions: Has the economic situation of pensioners' households improved or fallen behind the income trends for other population groups; have income differences between pensioners grown or narrowed; and how important are pensions as a source of income for pensioners? Questions like this are important for the social, economic and political sustainability of the pension system. After all, the objectives of pension insurance are to ensure that pensioners can reasonably maintain the income level to which they are accustomed, and to prevent poverty among pensioners.

The study focuses on the years 1987–2004. The period is interesting as concerns trends in disposable income and income differences. The 1990s were characterised by exceptionally great changes in employment, unemployment and retirement. The post-war baby boom generation has now reached the age for early retirement, the earnings-related pension scheme has attained full maturity, and various reforms have been made to adjust the direction of tax and pension policies.

Following presentation of the central concepts, the article describes trends in the number and structure of pensioners' households. Thereafter, it is assessed how pensioners' disposable income has changed in relation to other population groups and which income items make up pensioners' disposable income. The final section deals with income distribution between pensioners' households and other households. Particular attention is paid to low-income groups and poverty.

#### 5.1 Central concepts and the material used in the article

The concept generally used for assessing disposable income and income differences is the household's disposable income. Disposable income includes not only factor income, such as labour income and entrepreneurial income, and capital income obtained from property owned, but also the income transfers received and paid by households. The value of owner-occupied housing is also included in capital income (imputed rent). Households do not see this imputed rent as a concrete sum because it is a theoretically calculated concept. Another important 'income item' that is difficult to measure consists of free or subsidised social services, such as education and health care. However, public services are not included in disposable income.

The incomes of households of different sizes are not directly comparable. For instance, the disposable income of a single person is not the same as the disposable income of a single parent living with a child, even when the incomes earned by both households are equally high. To enable comparison of households of different sizes and structures, the household's income must be converted to member-specific equivalent income using the scale of consumption units. The focus is on a person but in terms of disposable income, attention is also paid to the household in which the person lives<sup>1</sup>. The consumption unit is calculated by means of the new consumption unit scale of the OECD. Among others, Atkinson (1997), Uusitalo (1988), Suoniemi (1998), and the Income Distribution Statistics of 2004 (2006) include more detailed accounts of the methods used in income distribution studies and of empirical findings.

Depending on the socioeconomic status of the household's reference person, households are grouped into three categories: those of economically active people; pensioners' households; and other (Socioeconomic classification of Statistics Finland). The group 'Other' includes, for instance, the unemployed, students and people doing housework. With some exceptions, the reference person is the household member who has the highest income. Pensioners, for example, can therefore sometimes be members of economically active households and other households, and vice versa. This is good to keep in mind, because pensioners'

<sup>&</sup>lt;sup>1</sup> In this article, the shorter expression "(pensioners') households" is often used to refer to the equivalent income of people living in (pensioners') households.

equivalent income is calculated only on the basis of pensioners living in pensioners' households.

The statistical material is based on material in the Income Distribution Statistics of Statistics Finland for the years 1987–2004 (see, e.g. Income Distribution Statistics 2004). The material in the Income Distribution Statistics is obtained from a sample study giving a detailed presentation of the distribution of households' annual incomes, as well as income differences between various population groups. In recent years, the annual sample size has varied between 9,000 and 12,000 households. The target population consists of private households. In other words, people living in institutions have been excluded from the survey. Their percentage is high especially among the oldest age groups. Income data for households are generally obtained from administrative annual registers, but some information is also ascertained through interviews. It should be noted that the group 'Other' consists of households with a wide range of income data. The results for this group also include more uncertainty, which is characteristic of sample studies. However, as concerns questions pertaining to disposable income, it is also good to consider the group 'Other'.

Because the Income Distribution Statistics consist of cross-sectional data, they describe the 'average' situation for one year at a time. However, the household's composition, socioeconomic status and income do not remain unchanged from year to year. For instance, new people retire every year, and their level of disposable income is on average higher than that of people who have been pensioners for some time, whereas people exiting from the pensioner population tend to have below average income levels. A cross-sectional survey does not reveal this dynamics. For instance, the research material in this article cannot be used to determine how an individual pensioner's disposable income has changed during the retirement years, although this question is a fairly important one in terms of disposable income.

#### Central concepts

**Household:** Persons who live and eat together or who otherwise use their income together. People in institutional care and in old people's homes are excluded.

**Pensioner's household:** Persons for whom the socioeconomic status of the household's reference person is 'pensioner'. As a rule, the reference person is the household member with the highest income. Thus, a pensioner's household may include members who are in working life but whose earnings are below the reference person's earnings. Another way is to focus only on people at pensionable age; in other words, a pensioner's household is a household in which the reference person (the person with the highest income) is at least 65 years old. This definition is often used in international comparisons.

#### Disposable income per year = A + B - C, where

A = Factor income: labour income + entrepreneurial income + capital income (incl. imputed income)

B = Income transfers received: general social security benefits (e.g. national pension) + social security benefits based on employment relationship (e.g. statutory earnings-related pension) + social assistance + other income transfers

C = Income transfers paid: direct taxes + social security contributions + employees' and self-employed persons' pension insurance contributions + other

**Equivalent income**: (the household's disposable income per consumption unit) = The disposable income of the household's members in total/consumption units. The equivalent income is calculated for an individual person, but as concerns disposable income, attention is also paid to the household in which the person lives.

Consumption unit: A means of considering each household member's weight in the household's consumption structure. In the new OECD consumption unit scale, the household's first adult is given the weight of 1, other adults are given the weight of 0.5 and children (0–13 years old) the weight of 0.3. The size of the consumption unit is the sum of the weights of its members. For instance, a household with two adults and two children under 14 years of age represents 2.1 consumption units (= 1.0+0.5+0.3+0.3). If the household's total income is 22,000 euros, the equivalent income calculated for the household's member is 10,476 euros (= 22,000/2.1)

The consumption unit scale affects the income level and the ranking of various population groups in income distribution statistics. For instance, in the old OECD scale, the household's first adult was given the weight of 1, other adults the weight of 0.7 and children (0–17 years old) the weight of 0.5. Because the old scale gave greater weights to family members, the income per consumption unit was somewhat smaller.

Household's total income: The household's disposable income + the value of social services.

Household's monetary income: The household's disposable income without theoretically calculated income items (e.g. the imputed rent).

**Median income:** The income falling in the middle when all incomes are arranged by size from the lowest to the highest.

**Poverty risk, poverty rate, low income:** Persons whose equivalent income is under a set (poverty) line are classified as people with low income (poor). The poverty risk is obtained by calculating the ratio of the poor to the corresponding population. The poverty line is a relative concept. The poverty line applied today by the European Union is 60 per cent of the equivalent median income of all households. Some years ago this line used to be 50 per cent. The lower the limit is set, the fewer people fall below the poverty line and the smaller the risk of poverty.

## 5.2 Ageing of the population is also seen in the age structure of households

In 2004, there were about 2.4 million households in Finland; altogether 5.2 million people lived in these households (Table 5.1 and Figures 5.1 and 5.2). Divided into the three socioeconomic categories, there were just under 1.5 million economically active households, 720,000 pensioners' households and 250,000 other households. Ageing of the population is also reflected in households; when compared against 1987, the number of economically active households has remained the same, but the number of pensioners' households has risen. The steepest rise is observed in pensioners' households where the reference person is at least 75 years of age. The recession of the early 1990s is also visible. During the recession years, the number of economically active households declined and the group 'Other' increased in number. The number of economically active households returned to the pre-recession level only during the current decade.

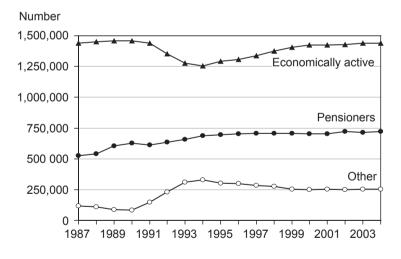
In 2004, the average household had 2.14 members. The biggest families were found among economically active households (especially self-employed people), where the numbers of both adults and children were higher than those in other types of households. The average size of pensioners' households was the smallest among the three categories, because pensioners' households had hardly any children. When compared against the situation in 1987, the average size of households has decreased. This trend has continued for a long time, the reason being that the numbers of both adults and children have decreased in households where people are working. By contrast, no major changes have occurred in the structure of pensioners' households.

Table 5.1. Structure of households in 1987 and 2004.

Household	Economically active		Pensioners' households		Other 1)		All households	
	1987	2004	1987	2004	1987	2004	1987	2004
Averige size	2.72	2.54	1.49	1.47	1.54	1.71	2.35	2.14
Adults, on average	1.95	1.85	1.45	1.45	1.30	1.34	1.78	1.68
Children, on average	0.78	0.69	0.03	0.02	0.24	0.38	0.56	0.46
Consumption units	1.74	1.67	1.24	1.23	1.23	1.29	1.58	1.50
Share of the population, % Share of	80	71	16	21	4	8	100	100
households, %	69	60	25	30	6	11	100	100
Households, 1,000 Persons, 1,000	1,441 3,925	1,441 3,665	524 778	720 1,061	118 181	254 435	2,082 4,884	2,415 5,161

<sup>1)</sup> The group 'Other' consists of very heterogeneous households.

Figure 5.1. Households in each socioeconomic category, 1987–2004



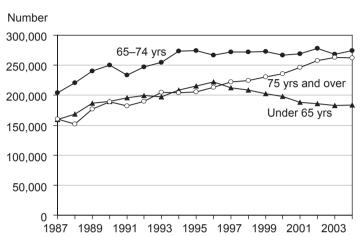


Figure 5.2. Pensioners' households broken down by the reference person's age, 1987–2004.

### 5.3 The real income of pensioners' household members has risen

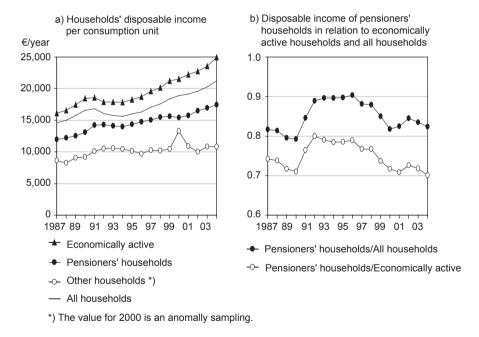
In 2004, the equivalent income of the population living in pensioners' households (disposable income per consumption unit) was 17,500 euros, or just under 1,500 euros per month (Figure 5.3a). Compared against 1987, the purchasing power had improved clearly, because the real income had increased by a total of 6,000 euros. Economically active households have the best economic status, while other households have the lowest status. Pensioners' households are between these two groups.

The position of pensioners' households in relation to economically active households has declined since the recession (Figure 5.3b). The intensity of the change depends on the reference year, because pensioners' relative status also follows the overall economic cycles. During the economic upswing of the late 1980s, the income of people in pensioners' households rose more slowly than the income of people in the labour force, and the income difference between these two groups widened. The income difference narrowed at the onset of the recession in the early 1990s, when there was even a slight drop in the real income of working people. During the recession years, the ratio of the disposable income of pensioners' households to that of people in the labour force reached a peak

value, or about 80 per cent. Pensioners' relative status has again weakened after the recession. This decline has also continued during the 2000s, which may indicate that there are other causes underlying the phenomenon than overall economic trends<sup>2</sup>.

As concerns the group 'Other', it is worth noting that there was virtually no rise in the real income of households in that group during the 1990s; in consequence, the income difference between this group and the other two categories has increased by far the most. However, it should be remembered that the group 'Other' is heterogeneous and fairly small. For instance, the peak in the year 2000 stems from an anomaly in sampling.

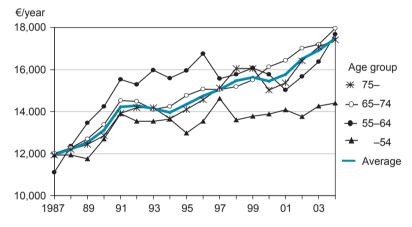
**Figure 5.3.** Households' disposable equivalent income in various socioeconomic categories. In real terms, adjusted for the level in 2004 (euros). The new OECD consumption unit scale.



<sup>&</sup>lt;sup>2</sup> There are several reasons why pensioners' position has weakened in relation to the working population. For instance, capital income accounts for a larger share of all income than before and tax progression has been eased (Riihelä, Sullström, Suoniemi and Tuomala (2001). Amendments made to taxation in the 1990s are discussed in more detail in Article 4.

Figure 5.4 shows the income trend of people living in pensioners' households, broken down by the age of the reference person. Pensioners of different ages are not a uniform group in terms of the level or trend of their disposable income. The group of 'under 55 years' has the weakest status. The income difference between this group and other pensioners has been growing steadily since the early 1990s<sup>3</sup>. The weak status of these 'young pensioners' is explained by the fact that their disposable income consists of a small earnings-related pension supplemented by a national pension (see Article 3).

**Figure 5.4.** The disposable equivalent income of pensioners' households, on average and broken down by the reference person's age. In real terms, adjusted for the level in 2004 (euros). The new OECD consumption unit scale.\*)



<sup>\*)</sup> The abrupt peaks and falls in the figure often stem from anomalies in sampling.

It is also worth noting the income trend of the group between 55 and 64 years of age. During this decade and at the outset of the period under review, the group's disposable income was close to the level of the average pensioner's household, but almost throughout the 1990s the level was clearly higher. There are several reasons underlying this irregular income trend. During the 1990s, some major changes occurred in the population shares of people on early retirement. Depending on the year, the income levels of people retiring on early retirement

<sup>&</sup>lt;sup>3</sup> In 2004, there were 113,000 pensioners who were under 55 years of age (some of them living in a pensioner's household). This is 9 per cent of all pensioners. The percentage fell slightly during the 1990s (See Article 2).

pension may have been very different. For instance, the decline in the late 1990s may have been the result of cuts made in the level of early retirement pensions during that decade. Owing to transitional periods, these changes did not have an immediate effect. It is also significant that the criteria of eligibility for early retirement (e.g. minimum ages) have been altered on several occasions in order to regulate the use of the 'early retirement path' (see Article 2).

**Table 5.2.** Placement of pensioners' households in the deciles describing the disposable income of the population at large in 1987–2004. The deciles were formed on the basis of the equivalent income, calculated according to the new OECD consumption unit scale.

	Decile	s									
	- 1	П	Ш	IV	V	VI	VII	VIII	IX	Χ	Total, %
1987	22.4	24.7	16.5	10.9	5.9	5.2	4.0	3.3	3.2	4.0	100
1988	26.2	24.1	14.8	9.1	6.5	4.5	3.9	3.1	3.5	4.3	100
1989	29.3	22.4	13.7	9.7	6.2	4.5	4.4	3.0	3.2	3.6	100
1990	31.0	20.9	13.3	8.5	5.9	6.1	3.7	3.6	3.4	3.7	100
1991	23.8	20.6	13.9	9.4	7.4	6.0	5.8	4.5	3.9	4.8	100
1992	20.1	18.1	15.2	9.7	7.4	7.0	6.4	4.9	5.4	5.8	100
1993	16.5	18.8	15.0	9.9	8.1	8.1	7.2	5.5	5.5	5.5	100
1994	16.3	18.2	15.1	10.5	9.4	7.5	6.9	6.1	4.8	5.3	100
1995	15.5	18.4	14.2	11.2	10.1	7.8	6.0	5.6	5.2	6.1	100
1996	12.7	19.8	13.5	12.3	10.8	8.4	6.4	5.7	4.6	5.9	100
1997	12.6	20.4	14.9	11.7	10.3	9.3	6.1	5.2	3.5	6.0	100
1998	13.5	20.1	16.3	10.7	10.1	7.8	6.2	5.2	5.0	5.2	100
1999	13.2	21.8	16.4	12.0	10.1	7.0	5.6	4.9	4.1	5.0	100
2000	13.1	21.7	17.7	11.9	9.2	7.7	6.1	4.6	3.9	4.2	100
2001	12.1	21.2	18.0	13.4	9.2	7.6	6.6	4.5	3.5	3.9	100
2002	10.9	21.0	16.9	13.4	10.1	8.3	5.8	4.9	4.5	4.2	100
2003	12.9	19.5	17.0	14.5	8.8	8.4	6.0	4.7	4.2	4.0	100
2004	13.9	20.7	17.3	13.0	9.6	7.4	5.3	4.6	4.2	4.1	100

Table 5.2 gives a more accurate picture of how well people in pensioners' households fare in the distribution of disposable income between all population groups. In the table, the disposable income of all households per consumption

unit (equivalent income) has been divided into ten equally large groups based on the amounts of income. The first decile comprises the ten per cent of households with the lowest income, the second decile the next ten per cent, etc. The highest decile comprises the ten per cent of households with the highest disposable income. Thereafter, it was calculated how pensioners' households related to these deciles. If the distribution of disposable income in pensioners' households is the same as that in the population at large, the share of pensioners' households in each decile is ten per cent. A higher (lower) percentage indicates that the number of pensioners' households in the decile in question is higher (lower) than the average.

This comparison reveals that people in pensioners' households have lower income than average. Almost without exception, the share of pensioners' households in the four lowest deciles exceeds ten per cent. In the other deciles, the share is usually under ten per cent. In relative terms, people in pensioners' households account for the highest percentage in the second lowest decile. In 2004, one in five pensioners' households were in this decile. On the other hand, pensioners exist in other income brackets, too. Over 8 per cent of people in pensioners' households fall into the two highest deciles.

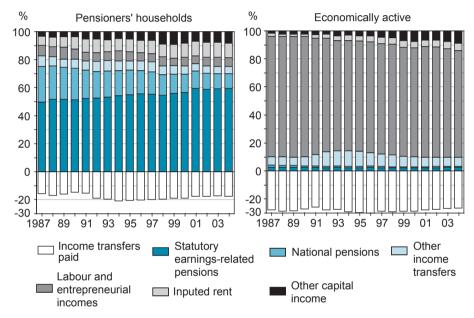
An important feature in view of pensioners' disposable income is that the percentage of pensioners' households in the lowest decile is smaller than it used to be. When the percentage peaked in 1990, over 30 per cent of pensioners' households were in the lowest decile, but nowadays the percentage is fairly close to the decile's share of the whole population, or ten per cent. Thus, within less than 20 years, the overrepresentation of pensioners' households in the lowest decile has decreased markedly. On the other hand, the share of the lowest decile has been rising since 2002; in this respect, the trend has not been entirely positive.

## 5.4 Statutory earnings-related pension is the most important source of income in pensioners' households

The above review focused on the disposable income of people living in pensioners' households, both in monetary terms and in relation to people in other households. Figure 5.5 shows the various elements that make up the disposable income in households. This may give some clues to the aspects that warrant special attention when exploring income differences. The positive axis shows the shares that

various income items have of the household's gross income<sup>4</sup>. The negative axis shows the income transfers paid, expressed in relation to the gross income; in other words, a kind of 'tax rate' for the household.

**Figure 5.5.** The structure of gross income and the income transfers paid by pensioners' households and economically active households in 1987–2004, share (%) of gross income.



By far the most important sources of income for pensioners' households are pensions (statutory earnings-related and national pensions). In 2004, pensions accounted for 70 per cent of households' gross income. In 1987, the corresponding share had been 75 per cent. Thus, on the whole, the importance of pensions as a source of income has diminished somewhat. At the same time, the 'structure' of pensions has changed: in less than twenty years, the share of earnings-related pensions has risen from 50 to 60 per cent, while the share of national pensions has fallen from 25 to 10 per cent. Maturation of the earnings-related pension scheme and a decrease in the importance of the national pension constitute an important explanation for the rise in the real incomes of pensioners' households.

<sup>&</sup>lt;sup>4</sup> The gross income consists of the household's disposable income plus the income transfers paid by the household.

In 1987, factor income accounted for 17 per cent of the gross income of pensioners' households; by 2004, this share had risen to 25 per cent. The rise is explained by the increase in capital income, i.e. the imputed rent and other capital income, as the shares of labour income and entrepreneurial income have remained virtually unchanged. Today, pensioners' households are wealthier than before; this is also reflected in the income structure. In particular, owning one's housing is important: despite the growth in other capital income, the imputed rent still accounts for over 40 per cent of the factor income of pensioners' households.

Figure 5.5 also shows the shares of the corresponding income items in economically active households. By far the biggest share comes from factor income – especially labour income – although their importance has diminished slightly following the growth in the share of other capital income. Pensions account for an insignificant share among income transfers. Even though an economically active household may also include persons who receive a pension, their total number is small, and for this reason pensions are of little importance for disposable income<sup>5</sup>. The figure also illustrates well how other income transfers (e.g. unemployment allowance, social assistance) played a clearly more important role in the disposable income of economically active households during the deepest recession years. This is connected to the decline in the real income of economically active households in the early 1990s; at the time it was not unusual for many working people to be unemployed for at least part of the year.

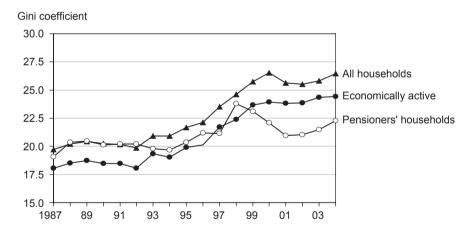
Income transfers, or taxes and contributions, paid by pensioners' households accounted for just under 18 per cent of their gross income in 2004. When compared to the late 1980s, the 'tax rate' has increased a little, but when seen against the recession years, it has decreased by about 3 percentage points. Owing to the higher income level and progressive taxation, taxes accounted for almost ten percentage points more in economically active households. Article 4 contains a more detailed analysis of the importance of taxation and contributions.

<sup>&</sup>lt;sup>5</sup> The situation may be different in households where the economically active reference person is between 55 and 64 years of age. The reference person's spouse may well be on early retirement or on a part-time pension.

# 5.5 Distribution of disposable income between pensioners' households is more even than that among the population at large

Have income differences among people in pensioners' households widened or narrowed? Has the trend been the same in other households? In the following, these questions are investigated by means of indicators describing the evenness of income distribution and inequality. Figure 5.6 shows Gini coefficients calculated separately for all households, for pensioners' households and for economically active households. The coefficient is given the value 0 if the equivalent income is equally high for all members of the group, and the value 1 if one person receives all of the group's income. The higher the value of the Gini coefficient, the wider the differences in disposable income, and vice versa.

Figure 5.6. Income distribution among people in pensioners' households, in economically active households and in all households in 1987–2004, measured using the Gini coefficient. The new OECD consumption unit scale.



Differences in the disposable income of all households have increased since the mid-1990s. However, in recent years the upward trend has levelled off, and income differences have slightly decreased. The Gini coefficient calculated for all households is higher than (in part as high as) the Gini coefficients calculated separately for economically active households or for pensioners' households. It seems that households within each socioeconomic category have a more

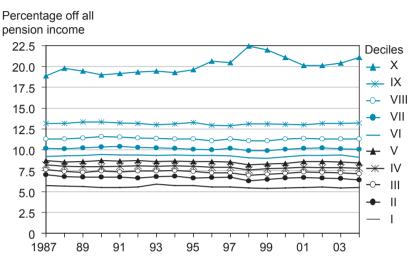
homogeneous income distribution than the population at large. Moreover, the category 'Other' raises the Gini coefficient calculated for all households because low income levels are particularly common in that category (see Figure 5.3a).

Up to the mid-1990s, few changes occurred in income distribution among people in pensioners' households. Thereafter – especially in 1998 – differences in disposable income increased markedly, although a falling trend followed in 1999–2001. When compared against the pre-recession period, income differences have widened, since differences in disposable income have again increased towards the end of the study period. When compared against economically active households, the increase in income differences in pensioners' households has still been moderate because differences in the disposable income of economically active households have increased continuously since 1992. Before that, differences in disposable income were even wider in pensioners' households than in economically active households.

The reason underlying the 'more moderate' income difference trend in pensioners' households than among the population at large may be that the share of people with the lowest income, i.e. people living on national pension alone, has been decreasing steadily. Another reason may be that pensions are linked to indices, which means that they have risen more or less in step with each other. In economically active households, corresponding index-linked income items have a lesser effect on disposable income. A particular reason reducing evenness in the distribution of disposable income is the steep rise in capital income and its accumulation mostly among high-income groups (Riihelä, Sullström, Tuomala, 2005).

Figure 5.7 gives a more detailed picture of the distribution of disposable income in pensioners' households. In the figure, people in pensioners' households have first been divided into ten equally large groups on the basis of their equivalent income. Thereafter, it has been calculated how much of the total disposable income in all pensioners' households falls into each of these deciles. The closer these shares are to 10 per cent, the more even the distribution of income among pensioners' households.

**Figure 5.7.** Distribution of disposable income among people living in pensioners' households in 1987–2004. The share of each decile (%) of the combined pension income in pensioners' households. The new OECD consumption unit scale.



The decile with the lowest income, and especially the decile with the highest income, stand out clearly. In 2004, the lowest decile accounted for just over 5 per cent, and the highest decile for about 20 per cent of income in pensioners' households. In other words, the income earned by the ten per cent with the highest earnings is four times the income earned by the ten per cent with the lowest earnings. The other deciles are located fairly close to each other. For instance, the third lowest decile accounts for over 7 per cent of the combined income while the third highest decile accounts for a little over 11 per cent.

During the period under review, differences in the disposable income of pensioners' households remained more or less unchanged. Even though the share of the highest decile has slightly risen, pensioners' prosperity has generally increased at a fairly uniform pace. An interesting detail is the rapid rise and fall in the highest decile's share in the late 1990s. The change is accompanied by a simultaneous increase in capital income, and this may also explain why the Gini coefficient of pensioners' households was exceptionally high in the late 1990s. In part, this may stem from an anomaly in sampling. However, the gently rising curve of the highest decile's share after 2002 is also likely to explain the rise in the Gini coefficient after 2002.

## 5.6 Different trends in the poverty risks of people in pensioners' households dependent on the poverty line

The real income of pensioners' households rose throughout the 1990s, although the relative status of pensioners' households in comparison to other households declined after the recession years. In the following, poverty among pensioners' households is assessed by means of the poverty risk. In the assessment, the income received by a pensioner's household (per consumption unit) is compared against the median income of the population at large. Persons whose income falls below the (poverty) line, determined by means of the median income, are classified as poor. The poverty risk is obtained by calculating the percentage of the poor in the relevant population group. In a similar way, poverty risks can be calculated for other household categories as well.

The poverty line is relative. If the population's median income rises, the poverty line also rises, and if the median income falls, the poverty line falls correspondingly. The current poverty risk line set by the European Union is 60 per cent of the median income; a few years ago the line was 50 per cent. The lower the line is set, the fewer people fall below the poverty line and the smaller the poverty risk is.

Figure 5.8 shows the poverty risks calculated separately for the whole population, for pensioners' households and for economically active households in 1987–2004, using three different poverty lines. According to the lowest line, or 40 per cent, just over 0.5 per cent of people living in pensioners' households, or about 6,500 persons, were poor in 2004. Their annual income per consumption unit was under 7,800 euros<sup>6</sup>. When compared against people in the labour force, the poverty risk of pensioners' households was slightly lower, and when compared against all households, it was clearly lower. Pensioners' households that fall below this lowest poverty line are likely to consist of people who have retired on a (disability) pension at a young age. According to Figure 5.4, their disposable income was clearly lower than that of other pensioners' households (see Figure 5.4 and Article 3).

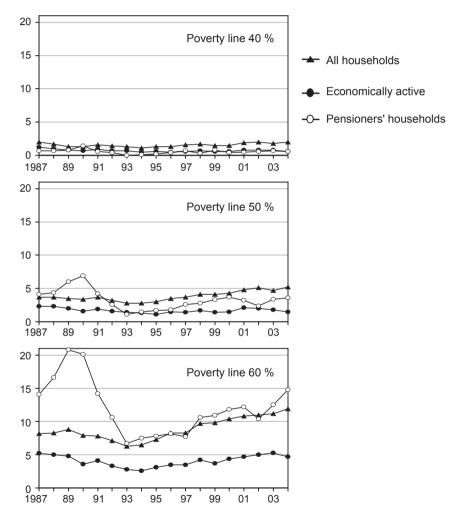
<sup>&</sup>lt;sup>6</sup> In 2004, the median income was 19,490 euros at the upper line (the new OECD consumption unit scale). The 40, 50 and 60 per cent poverty lines calculated from this are 7,796, 9,745 and 11,694 euros.

When the poverty line is set at 50 per cent of the median income, 3.5 per cent of pensioners' households fell below the poverty line in 2004. When the line is raised to 60 per cent, the share of the poor rose to 15 per cent. The fluctuation in the disposable income of pensioners' households according to economic cycles, as referred to above, is also visible in the poverty percentages (cf. Figure 5.3). In the early 1990s, roughly one in five pensioners' households was poor (60 per cent line), but during the recession years their poverty risk was reduced considerably. Since 1993, the poverty risk of pensioners' households has risen again. Determined with the highest line (60 per cent), the poverty risk had more than doubled by the year 2004<sup>7</sup>. At the same time, the gap between the poverty risks of pensioners' households and economically active households has grown, but the gap between the poverty risks of pensioners' households and all households has remained virtually unchanged.

There are several reasons why the poverty risk of people in pensioners' households has fluctuated. The falling risk at the beginning of the 1990s resulted from a lower poverty line because the real income of economically active households and the population's median income both fell. One reason for the rising poverty risk among all households and pensioners' households after the recession was the higher poverty line stemming from the favourable employment and wage trends of economically active people.

<sup>&</sup>lt;sup>7</sup> The poverty risk has also risen since 1993 when calculated according to the 40% and 50% lines. However, the scale used makes it difficult to see this from the figures.

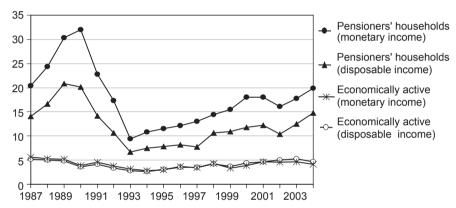
**Figure 5.8.** The poverty risks of people in pensioners' households, in economically active households and in all households in 1987–2004. The poverty line is 40, 50 and 60 per cent of the median disposable equivalent income calculated for the whole population. The new OECD consumption unit scale.



In addition to the poverty line selected, other factors affect the prevalence of poverty in pensioners' households. For instance, disposable income includes capital income, of which one important item is the imputed rent. When this and other imputed items are eliminated from the household's disposable income, the remaining sum is the disposable monetary income. Figure 5.9 reveals how the

poverty risk based on monetary income gives a darker picture of poverty among people in pensioners' households than the poverty risk calculated on the basis of the disposable income. No corresponding change is observed for economically active households. For them, labour income is by far a more important element in disposable income than the imputed rent. Nor is owner-occupied housing as common among economically active households as among pensioners' households.

**Figure 5.9.** Poverty risks based on disposable income and monetary income in pensioners' households and in economically active households. The poverty line is 60 per cent. The new OECD consumption unit scale.



Owner-occupied housing, small family size and a poverty risk based on disposable monetary income are important reasons why international comparisons show that poverty is fairly common among Finnish pensioners' households (see Article 6). However, it should be remembered that the imputed rent has a genuine effect on the economy of households. People living in their own (mortgage-free) home have more money for consumption than those whose monetary income is equally high but who have to pay a market rent for housing or mortgage payments for their own home.

Comparison against the poverty risk of the group 'Other' (including, among others, unemployed persons and students) supplements the picture of poverty among pensioners' households. According to the income distribution statistics, based on disposable income in 2004, the poverty risk in the group 'Other' was as high as 65 per cent, or over four times as high as the poverty risk of people living in pensioners' households (according to the 60 per cent line). The difference has

increased considerably since the early 1990s, because before the recession the poverty risk of the group 'Other' was about double that of pensioners' households. People with the lowest income, for whom social assistance, for instance, is an important source of disposable income are lagging the farthest behind the general income trend. According to the statistics on social assistance, the share of social assistance recipients is highest among young adults. The older the age group, the smaller the share of social assistance recipients. In consequence, it is less common for people over 65 years of age to resort to social assistance than it is for the age groups of 50–59 years and 60–64 years. In 2004, about 2 per cent of people aged 65 years or more received social assistance (Social Assistance 2004).

#### 5.7 Conclusions

The real disposable income of people in pensioners' households improved markedly between the years 1987 and 2004. Today's pensioners are wealthier than their predecessors because the importance of earnings-related pensions for disposable income has increased steadily as the earnings-related pension scheme has matured. However, the relative status of people living in pensioners' households has weakened since the mid-1990s in relation to economically active households. During the recession, pensioners' relative status improved while the status of people in the active age declined, but after the recession the disposable income of people in the labour force has risen more rapidly than that of pensioners.

Although pensioners of all income brackets are found in the income distribution among the whole population, they generally have a below average income. It is worth noting that the overrepresentation of pensioners' households in the lowest income decile decreased clearly during the 1990s. Distribution of disposable income among pensioners is also more even than among economically active households. Compared against the beginning of the 1990s, differences in disposable income have increased in both groups, but the increase has been markedly slower in pensioners' households. This is because the income trend for people in the highest decile has been better than average. This is also seen in the distribution of disposable income among pensioners' households, although not as sharply.

The extent of poverty is sensitive to the method by which it is measured. According to the 60 per cent poverty line used now by the EU, the poverty risk of people living in pensioners' households is as common as that for all households

on average, but more common than for economically active households. The distance to economically active people has increased since the first half of the 1990s.

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Kati Ahonen

## 6 International comparison of pensioners' disposable income

The previous articles discussed the composition of pensioners' disposable income at the national level. This article extends the perspective beyond Finland's borders, examining pensioners' disposable income in the old EU Member States and Finland's placement in this comparison.

In December 2001 the European Council of Laeken approved three main objectives for the European Union Member States' common pension policy: securing the adequacy of pensions; ensuring the economic sustainability of pension systems; and modernisation of pension systems to respond to the changes that have occurred in society. The objective pertaining to the adequacy of pension strives to ensure that the entire population has a minimum pension security that protects pensioners against poverty and that, to a reasonable extent, maintains the standard of living they have achieved during their lifetime. Pensioners' disposable income, the adequacy of pensions and the sustainability of pension systems are evaluated internationally in the EU and the OECD as well as in many comparative studies.

This article focuses on pensioners' disposable income and poverty in the old EU Member States through EU follow-up reports, Eurostat statistics and recent research data. The survey of disposable income centres on comparison of disposable equivalent monetary income.

#### 6.1 Materials used and definitions

Comparative research on the disposable income of the pensioner population has been made possible by the sound international study materials that have been built up in recent years. The materials on income distribution most commonly used in which Finland is also included are the Luxembourg Income Study (LIS) and the EU Survey on Income and Living Conditions (EU-SILC) coordinated by Eurostat, which was preceded by the European Community Household Panel (ECHP). The income data in the EU follow-up reports and Eurostat's statistics are based mainly on EU-SILC.

The materials are household-specific; i.e. the assessment of individuals' disposable income takes into account the income of all members of the household. The materials have been collected by means of interviews. In many countries the interview data have additionally been combined with register data. The practice, however, has not been uniform; this weakens the comparability of the data. For example, the EU-SILC income data for the Nordic countries are obtained mainly from registers while in other countries they are asked through interviews.

This article surveys pensioners' disposable income mostly on the basis of EU-SILC income data. Finland was included in the ECHP data collected in 1996. As a continuation, EU-SILC was launched in 2004 in Finland and twelve other EU countries. The first income data of the material pertain to the year 2003. In 2005 all 25 EU Member States as well as Norway and Iceland were included in EU-SILC.

This article in the main studies people at pensionable age, who are defined as being people who have reached at least 65 years of age. A pensioner's household is defined as a household whose reference person, i.e. the person with the highest income, has reached the age of 65. People in institutions and old people's homes are excluded from the analysis.

The income concept is the equivalent monetary income. Equivalent income is calculated by dividing the total of all household members' income by the number of consumption units, i.e. the equivalent, among household members. The income is thus calculated per person even though the total income is a sum of all household members' incomes. Equivalent income is the same for each member of the household. The income concept should be kept in mind when men's and women's incomes are examined separately in the article. If the household includes both a man and a woman, their equivalent income is the same regardless of their personal incomes.

Disposable monetary income consists of factor income, i.e. earnings (labour income and income from self-employment), property income and income transfers received (e.g. pensions) minus the income transfers paid (among others, direct taxes and social security contributions). Monetary income does not include calculated income items.

This article differs in its angle of inspection from the previous article in two ways. First the income concept, or disposable monetary income, does not include calculated income items, which were included in the concept of disposable income

used in the earlier article. The most important calculated income item is imputed rent linked with living in owner-occupied housing. A second difference in the angle of inspection is that it focuses mainly on the pensionable-aged population. The reference person thus may not necessarily be on pension and the reference person's spouse may be under 65 years of age. People on early retirement also remain outside the analysis. The concepts applied in this article have been defined in greater detail at the start of the previous article.

## 6.2 Disposable income level of the pensionable-aged population lower in Finland than the average for the old EU countries

In order to be able to compare income levels in different countries, one must take into account the difference in price level from one country to the next, i.e. one must calculate the purchasing power of income. The purchasing power of income is obtained by means of country-specific purchasing power parity. Purchasing power parities are exchange rates that are used to equalise currencies of different countries as to their purchasing power. Following correction for purchasing power, the same amount of money should buy the same amount of goods and services in different countries.

In the EU15 countries in the year 2001¹, the pensionable-aged population's equivalent monetary income in purchasing power standard (PPS) was on average² 12,200 euros per annum, that of the working-aged population being 14,600 euros, or somewhat more than 2,000 euros a year higher. In Finland, the purchasing power of pensioners' annual income was about 10,000 euros. The pensionable-aged population's annual purchasing power in Finland remains 2,000 euros below the average for the EU15 countries and is the fifth lowest among the EU15 countries. The purchasing power of working-aged Finns' annual income also fell short of the average for the EU15 countries. The purchasing power of the pensionable-aged population and the working-aged population is the highest in Central European countries (Figure 6.1).

<sup>&</sup>lt;sup>1</sup> The publishing of international statistics may lag several years behind national statistics. At present, e.g. Eurostat's income data are partly at the level of the year 2001 while at the national level, the statistics are for the year 2004.

<sup>&</sup>lt;sup>2</sup> This refers to Eurostat's estimate of the average weighted by population shares.

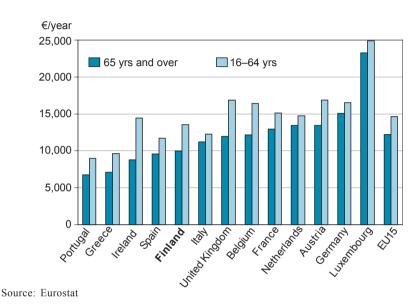


Figure 6.1. Equivalent monetary income of the pensionable-aged and working-aged populations in PPS in certain EU countries in the year 2001.

The purchasing power correction takes into account the effect of a country's price level on income but not, for instance, the effect of non-monetary benefits such as free health care and education. The type of housing also affects what sort of livelihood the disposable income provides. These factors are evaluated with regard to older people at the end of the article.

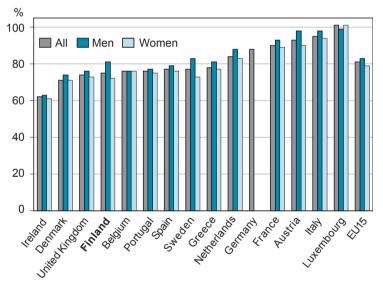
# 6.3 Disposable income of the pensionable-aged population in Finland lower in relation to the working-aged population than on average in the EU15 countries

The disposable income of the pensionable-aged population can also be evaluated in relation to the disposable income level of the working-aged population (those under 65 years of age). On average<sup>3</sup> in the EU15 countries, the pensionable-aged population's disposable equivalent monetary income is 81 per cent that of the working-aged population. In Finland, the pensionable-aged population's income

<sup>&</sup>lt;sup>3</sup> Country average for 14 EU countries, unweighted for the population shares.

remains at 75 per cent of the working-aged population's income. The pensionable-aged population's income falls the shortest of the working-aged population's income in Ireland; this reflects not only the low level of pensions in Ireland but also the raised pay level in recent years, brought about by rapid economic growth. In most EU15 countries, the income of the pensionable-aged population is 70–80 per cent that of the working-aged population. The income of the pensionable-aged population comes the closest to that of the working-aged population in countries where pensions are high; in Luxembourg, Italy, Austria and France. The lion's share of the pensionable-aged population's income is income from pensions, and so the pension level is strongly linked with the disposable income of the pensionable-aged population. (Figure 6.2 and Appended Table 6.1.)

**Figure 6.2.** The pensionable-aged population's equivalent monetary income in relation to that of the working-aged population by gender in the year 2003.



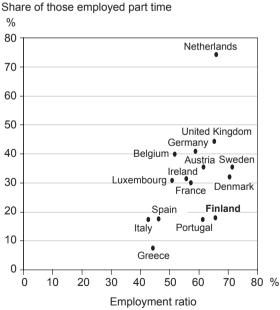
Source: COM(2006) 62 final.

On average in the EU15 countries, the income of pensionable-aged men is 83 per cent that of working-aged men; for women of pensionable age the corresponding proportion is 79 per cent. The pensionable-aged population's income in Finland is 81 per cent that of the working-aged population for men, and correspondingly 72 per cent for women. In Finland and Sweden, pensionable-

aged women's income falls short of working-aged women's income considerably more than is the case for men. Such a great difference is not observed in other countries (Figure 6.2).

With industrialisation and the creation of the public day-care system, women's full-time employment outside the home became widespread at a rapid pace in Finland and Sweden in the 1960s–1970s. The relatively poor position of pensionable-age women in Finland and Sweden is in part explained by the stable economic status of working-aged women. Working-aged women in Finland are well educated and the ratio of working women is high. They typically hold full-time jobs. The share of part-time employment is somewhat higher in Sweden, but women's employment ratio in Sweden is correspondingly higher than that in Finland (Figure 6.3). Women's high employment and the low share of part-time employment increase working-aged women's income; thus pensionable-aged women's income in relation to that of working-aged women remains smaller than in countries where women's full-time employment is not as common.

**Figure 6.3.** Employment ratio among women and share of women employed part-time in the EU15 countries in the year 2003.



Source: Eurostat.

Countries where employment among women is high are Finland, Sweden and Denmark – and also Portugal. In Central European countries, the share of part-time employment among women is considerable and employment among women is lower. In Southern European countries, women's employment ratio is low, but those who do work outside the home often hold full-time jobs.

## 6.4 Poverty risk among the pensionable-aged population in Finland lower than in the EU15 countries on average

Income poverty can be defined as absolute or relative. The absolute poor are people whose income falls below the minimum subsistence level; the relatively poor are people whose income falls below the general level of earnings. Use of an absolute poverty line requires information about the basic needs, consumption behaviour, price level, service level etc. of people living in different countries. Placement of these at the same level is difficult. Relative poverty is easier to measure. The relatively poor, however, are not necessarily absolutely poor, and vice-versa. For example, in a country with a very even income distribution, there are virtually no relatively poor people, although it is possible that nearly the entire population falls below the minimum subsistence level.

The official EU poverty risk is considered to be an income level that remains under 60 per cent of the median equivalent income for the whole population. In the EU15 countries on average<sup>4</sup> 20 per cent of the pensionable-aged population falls below the 60 per cent poverty risk line. The figure for the working-aged population is 15 per cent. The pensionable-aged population's poverty risk is thus greater than that of the working-aged population in nearly all countries except for The Netherlands, Luxembourg and Italy (Figure 6.4).

The pensionable-aged population's poverty risk in Finland is slightly less than the average for the old EU countries and it is the lowest for the working-aged population, along with Denmark. In Luxembourg and The Netherlands, the poverty risk among those at least 65 years of age is below 10 per cent. The poverty risk among the elderly is clearly the highest in Ireland, Spain, Portugal and Greece (Figure 6.4).

<sup>&</sup>lt;sup>4</sup> Country average for the EU15 countries without weighting for population shares.

Poverty risk, 65 yrs and over 45 Ireland 40 35 Spain 30 • Portugal Greece 25 United Kinadom • Belgium Aust<u>ria o</u> EU15 20 Finland Germány Denmark Italy 15 France Sweden 10 • Netherlands 5 Luxembourg 0 20 25 30 40 10 15 35 45 Poverty risk, 16-64 yrs

**Figure 6.4**. The pensionable-aged and the working-aged population's poverty risk in the EU15 countries around the year 2003.

Source: COM(2006) 62 final.

# 6.5 Poverty risk in EU countries greater among pensionable-aged women than among pensionable-aged men

The disposable income of pensionable-aged women is clearly less than that of men in several countries. Especially in Sweden, Finland, Germany, Ireland, Austria and the United Kingdom, women's poverty risk is considerably higher than that of men. In Finland and Sweden, the poverty risk among pensionable-aged women is about twice that among men (Figure 6.5).

**Figure 6.5**. Poverty risk among the pensionable-aged population by gender in the EU 15 countries around the year 2003.

Source: COM(2006) 62 final.

In many countries the poverty risk is the highest among the very oldest and particularly among the very oldest women. For instance in Finland, 30 per cent of women at least 75 years of age are at risk of poverty, in Ireland as many as over 60 per cent and in Portugal, Greece, Austria and the United Kingdom the corresponding risk exceeds 30 per cent (Table 6.1). The major importance of age among women is linked with remaining alone. A study by Smeeding and Sandström (2005), based on the LIS material, revealed that in all countries included in the comparison, women at least 65 years of age had a clearly greater risk of poverty if they lived alone. (See also Zaidi et al. 2006 for more about this topic). Being widowed weakened disposable income not only because of lowered income but also because the advantages of scale derived from living with another person disappeared.

<sup>&</sup>lt;sup>5</sup> Besides Finland and Sweden, other EU15 countries included in the study were the United Kingdom, Germany and Italy.

The oldest age group did not stand out as clearly among men and in Finland, the poverty risk among men at least 75 years of age is even smaller than that among men at least 65 years of age (Table 6.1). Compared against women, fewer older men live alone. In addition, mortality is typically higher among those with a weaker economic status. Thus the group of the oldest men is a selected group of pensioners who are better off. Owing to the small number of men over 75 years of age in the material, however, this finding should be viewed with caution.

**Table 6.1.** Poverty risk among older people by gender and age in the year 2000.

	Men, % 65–74 75+		Women 65–74	en, % 75+	
Austria	10	21	26	32	
Belgium	21	30	22	25	
Denmark	:	:	:	:	
Finland	11	5	23	30	
France	17	17	17	23	
Germany	7	5	12	13	
Greece	30	34	27	35	
Ireland	24	46	37	62	
Italy	12	9	14	15	
Luxembourg	6	9	6	15	
Netherlands	:	:	:	:	
Portugal	28	34	30	41	
Spain	18	19	19	19	
Sweden	:	:	:	:	
United Kingdom	15	23	19	36	

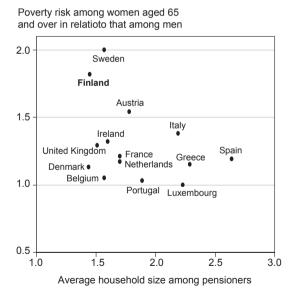
Source: Eurostat.

Women's poverty risk is closer to that of men in countries where older people live in large households. The average size of pensioners' households in Finland is among the smallest for the EU15 countries. Pensioners typically live in their own households and not, for instance, with their children, as is often the case in Southern European countries (SHARE, 2005). Since women on average live longer than men, a large share of pensioners living alone are women. This proportion in Finland is larger than on average in the EU15 countries, because the difference in life expectancy between men and women in Finland is among the greatest for

the EU15 countries. Besides women in Finland, women in Sweden also have a clearly higher poverty risk compared to men (Figure 6.5 and Appended Table 6.2).

In Belgium and Denmark the differences between genders are not as sharp as in Finland and Sweden despite the small household size in those two countries (Figure 6.6). This is probably a consequence of the high level of survivor's pension and pensioner's minimum security. The national pension is exceptionally good in Denmark, while in Belgium a divorced spouse's pension is paid also as survivor's pension, if the spouse's income was greater than the survivor's income during their marriage. A divorced spouse is entitled to survivor's pension also, for example, in the United Kingdom, France and Germany (Laitinen-Kuikka, Bach and Vidlund, 2002; for more about this topic see also Tuominen and Laitinen-Kuikka, 2006).

**Figure 6.6.** Average household size among pensioners (in the year 2000) and pensionable-aged women's poverty risk in relation to the poverty risk among men of the same age in the year 2003.



Source: Eurostat, own calculations.

Because the equivalent income is the same for all household members, the income of those living in households lacking a spouse is the determining factor in the difference in equivalent income between men and women (this is also the case

for the difference in poverty risk). The amount of difference in equivalent income is influenced by the country's relative number of households lacking a spouse and by the structure of these households. The fewer households lacking a spouse a country has, the closer men's and women's equivalent income is and thus the closer the poverty risks, too. In addition, the difference is influenced by the typical size of households lacking a spouse: for example, the equivalent income of a low-income survivor is higher if, rather than living alone, the survivor lives with the family of an employed child and isn't subsisting merely on personal income.

## 6.6 Distribution of disposable income among the pensionable-aged population in Finland one of the most even in the EU15 countries

The above analysis examined the disposable income of the pensionable-aged population on average. In addition, we should examine how disposable income is distributed among the pensionable-aged population. Figure 6.7 shows the 80/20 income ratio of the pensionable-aged population and the working-aged population. The figure indicates the ratio of the average incomes between a person in the highest income bracket, i.e. a person in the top income quintile, and a person in the lowest income bracket, i.e. a person in the bottom income quintile. For Figure 6.7, this income ratio has been calculated separately for the working-aged population and the pensionable-aged population. If the income distribution is the same in both groups, the observation points (countries) fall on the diagonal.

The countries with small income differences are located at the lower left of the Figure. Sweden, Denmark, Finland and Luxembourg are the countries where the income differences are the smallest in both groups. Austria is the only country where the income differences between the pensionable-aged population exceeds that among the working-aged population. In France, the income differences among the pensionable-aged population are close to those among the working-aged population.

In nearly all countries, income differences among the pensionable-aged population are smaller than those among the working-aged population. Among the pensionable-aged population, persons in the top income quintile on average earn about four times more than persons in the bottom income quintile; the corresponding proportion is just under three times more in Sweden, Denmark, Finland and Luxembourg.

income among the working-aged and pensionable-aged populations around the year 2003.

80/20 ratio for income, 65 yrs and older

8
7
Portugal

Figure 6.7. 80/20 ratio for the distribution of disposable equivalent monetary

Greece 5 Austria Spain Italy France 4 , United Kingdom Belgium ( Ireland 3 Netherlands iixembourg Sweden Finland 2 1 0 7 3 80/20 ratio for income, working aged

Source: COM(2006) 62 final.

### 6.7 Other factors influencing disposable income

Disposable income is also influenced by the consumption structure of the pensionable-aged population and by their other expenditure. On average, the pensionable-aged population's need for health care services is greater than that among the working-aged population. Property and financial assets also affect disposable income.

The most important shortcoming in evaluating disposable income by using monetary income is that the type of housing is not taken into account. The lower housing costs of living in owner-occupied housing as opposed to rental housing are called the imputed rent. There are considerable differences between the EU15 countries in the prevalence of owner-occupied housing: according to Eurostat statistics, owner-occupied housing among the pensionable-aged population ranges from some 40 per cent in Germany and The Netherlands to about 90 per cent in Greece and Spain. In Finland, 80 per cent of pensioner households live in owner-occupied housing and owner-occupied housing is the fifth most common

in the EU15 countries. Besides Finland, Greece and Spain, at least 80 per cent of older people in Ireland, Luxembourg and Italy live in owner-occupied housing. In Luxembourg, Finland, France and Greece, owner-occupied housing is clearly more common among pensioners than among the employed. The situation is the reverse in The Netherlands, Denmark, the United Kingdom, Austria and Germany (Figure 6.8).

Pensioners' househoulds Economically active

80

40

20

George Sain Back House Househoulds Agriculture Belling France Belling

Figure 6.8. Households living in owner-occupied housing in the EU15 countries in the year 2001.

Source: Eurostat.

The previous article revealed that inclusion of the calculated income, mainly imputed rent, in disposable income significantly reduces Finnish pensioners' poverty risk. For example in the year 2003, pensioners' poverty risk fell from 18 per cent to about 13 per cent with consideration of calculated income items (Article 5, Figure 5.9). A corresponding finding has already been obtained from EU-SILC for Denmark: the elderly population's poverty risk is cut in half if imputed rent is included in disposable income.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> The objective in EU-SILC is in future to calculate imputed rent as income. The data are already available for Denmark in the material for the year 2003.

Consideration of housing costs can thus significantly level out the differences between countries. Support for this is obtained from the study by Ritakallio (2003), which explored differences in poverty between Finland and Australia before and after housing costs. Measured by income only, the proportion of people falling under the threat of poverty was 10 percentage points greater in Australia than in Finland, but following consideration of housing costs, the difference shrank to two percentage points. The change can be explained by the lower cost of housing in Australia and by the fact that nearly 100 per cent of elderly people there live in owner-occupied housing.

Inclusion of imputed rent probably also levels out the differences in disposable income among pensionable-aged populations in different countries, since the purchasing power of the pensionable-aged population's income in countries where living in rental housing is common – The Netherlands, Germany and Austria – was among the highest of the EU15 countries. Correspondingly, purchasing power remained low in several countries where the proportion of owner-occupied housing is high; Greece, Ireland, Spain, Finland and Italy (Figure 6.1).

Living in owner-occupied housing in Finland is on average more common among the pensionable-aged population than among the working-aged population, and young people of working age live in rental housing quite often. Imputed rent thus probably decreases the difference in poverty risk between the pensionable-aged population and the working-aged population not only in Finland but also in France and Greece, and in Luxembourg it further strengthens the position of the pensionable-aged population in relation to the working-aged population. Housing debt also influences disposable income. People at pensionable age often live in debt-free owner-occupied housing, while the home of younger people is often encumbered with debt. A person living in debt-free owner-occupied housing is better off than a person with the same income who pays rent or makes mortgage payments.

Another important factor that often goes unnoticed in income comparisons is how social and welfare services are provided in the country. How the public sector participates in health care, and its contribution to health care, has an impact particularly on the disposable income of older people, because on average they have a greater need for health care services than the rest of the population.

In the EU15 countries, health care is provided by the public sector at least in part, and the own deductibles payable for its use are small. The countries differ,

however, with regard to the coverage, level and available of services. In many countries, employers arrange private health insurance for their staff or at least for those in management positions. Insurance taken out by private persons is probably also becoming more common. The share of private health care expenditure in the EU15 countries is at most about a quarter except for The Netherlands and Greece, where the share of private expenditure is clearly higher than for the other countries<sup>7</sup> (Appended Figure 6.1).

Health care expenditure in the EU15 countries is on average 8.5 per cent of GNP. In Finland, the share of the GNP spent for health care expenditure is among the smallest of the EU15 countries (Appended Figure 6.1). The OECD has evaluated Finland's health care as being of a good level and quite cost-effective compared against that in many other countries. Finland's low health care expenditure in international comparison stems largely from the low salary level and high productivity and not from the allocation of quantitatively fewer resources for health care than those allocated in other countries (Klavus and Linna 2006). By contrast, the OECD criticises Finland because of citizens' unequal access to care and states that in this regard, the working population is in a better position than those outside the labour force. (OECD, 2005 Reviews of Health Systems: Finland.)

The influence of public health care services on the relative position of Finland's pensionable-aged population is difficult to assess. Although the level of health service in Finland is good by international standards, pensioners are in a weaker position than the working-aged population as concerns access to services. This is probably the case in several other EU15 countries as well.

#### 6.8 Conclusions

People at pensionable age have a lower disposable equivalent monetary income in Finland than in the old EU countries on average. The purchasing power of the annual income earned by the Finnish pensionable-aged population is about 2000 euros below the average in the EU15 countries. Similarly, the relative level of

<sup>&</sup>lt;sup>7</sup> In The Netherlands, public health care does not cover those in high income brackets and private health insurance taken out by the employer is common. In Greece, too, employer-specific arrangements are common because the availability of public health care, and to some extent also the level of care, is modest (see, e.g. Kari and Markwort, 2005).

income falls below average: pensionable-aged Finns earned about 75 per cent of the income earned by working-aged Finns, while the average figure in the old EU countries is 81 per cent.

In Finland and Sweden, the difference between the disposable incomes of working-aged and pensionable-aged women is clearly higher than that between men. The income of Finnish women at pensionable age is 72 per cent of the income of working-aged women, whereas the corresponding ratio among men is 81 per cent. No equally sharp difference between the genders exists in other countries between older people and working-aged people. The reason for this is that Finnish and Swedish working-aged women have a relative high income, owing to their high level of education and full-time employment.

The income distribution in Finland is one of the most even among the EU15 countries, and the poverty risk is one of the lowest. Income differences between people at pensionable age, as well as between people at working age, are among the lowest in the old EU countries. Income differences between the pensionable-aged population are smaller than those among the working-aged population. The poverty risk of Finnish people at pensionable age is also below the average level in the EU15 countries (17% in Finland; on average 20% in the EU15 group). With the exception of Luxembourg, women's poverty risk is greater than that of men in the old EU countries, but in Finland and Sweden the difference is the widest: women's poverty risk is about double that of men. The worst situation is among women who are past 75 years of age and live alone.

Women's poverty risk is closer to men's poverty risk in countries where older people live in large households. In Finland and Sweden it is common for old people to live alone, and because women live longer than men, most old people living alone are women. This fact is in part behind the higher poverty risk of older women when compared against that of men. If, instead of living alone, a low-income widow lives with her employed child, which is common, for instance, in Southern European countries, her income as a member of the household will probably exceed the poverty risk line, even if her income were below this line when living alone.

Monetary income does not include calculated income items, such as imputed rent. Owning one's home is very common in Finland, in particular among the pensionable-aged population. When the imputed rent is included in disposable income, the poverty risk of Finnish people at pensionable age is likely to decrease.

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#### **APPENDICES**

Appended Table 6.1. Share of equivalent income made up by pensions among the population at least 65 years of age in the EU15 countries.

	Share of equivalent income made up by pensions, %
Austria	79
Belgium	84
Denmark	76
Finland	82
France	91
Germany	:
Greece	71
Netherlands	74
Italy	83
Ireland	70
Luxembourg	77
Portugal	72
Spain	78
Sweden	83
United Kingdom	69

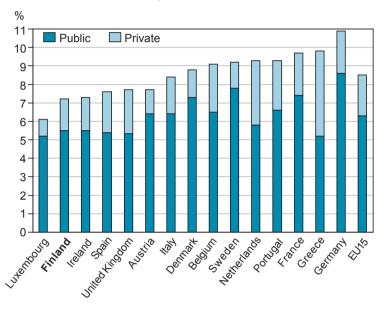
Source: COM(2006) 62 final.

Appended Table 6.2. Life expectancy in the EU15 countries of those born in the year 2004.

	Woman	Man
Spain	83.6	76.9
France	82.9	75.9
Italy	82.5	76.8
Sweden	82.5	77.9
Finland	81.8	75.1
Belgium	81.7	75.9
Austria	81.6	75.9
Germany	81.4	75.7
Greece	81.3	76.5
Luxembourg	81.0	75.0
Netherlands	80.9	76.2
Ireland	80.7	75.8
United Kingdom	80.7	76.2
Portugal	80.5	74.2
Denmark	79.9	75.1

Source: Eurostat

Appended Figure 6.1. Share of the gross national product spent for public and private health care in the year 2002.



Source: EPC and European Commission