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How Will Ageing Affect Finland?

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by
Pablo Antolin, Howard Oxley and Wim Suyker

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ABSTRACT/RÉSUMÉ

In Finland, as in most OECD countries, the ageing of the population is one of the major long-term policy challenges. This paper first explores the scale of the demographic changes in Finland, the relevant institutions and their effect on the decision to retire. In light of the increase in the number of elderly expected over the coming years, various issues concerning their economic position and health care are considered. The paper then considers the impact that demographic changes will have on public finances: the cost of the pension system will increase by a third; health care spending and the cost of care for the frail elderly are also likely to rise substantially. The paper ends by outlining the policy options to cope with ageing.

En Finlande, comme dans la plupart des pays de l'OCDE, le vieillissement démographique est l'un des principaux défis que devront relever les pouvoirs publics à long terme. La première section de ce document examine l'ampleur de l'évolution démographique, les institutions concernées et l'effet qu'elles exercent sur la décision de départ en retraite. Compte tenu de l'augmentation prévue du nombre des personnes âgées au cours de prochaines années, on passera en revue différents aspects de leur situation économique et des soins de santé qu'il faudra assurer. La section suivante traite de l'incidence que l'évolution démographique aura sur les finances publiques : le coût du système de pensions augmentera d'un tiers et il est probable que les dépenses de soins de santé et le coût de la prise en charge des personnes âgées dépendantes augmenteront aussi. La dernière section décrit les mesures qui pourraient être prises pour faire face au vieillissement de la population.

JEL codes: I1, I3, J1; J11, J14, J26.

Keywords: Finland, ageing, pension, health care, long-term projections.

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HOW WILL AGEING AFFECT FINLAND?¹

Pablo Antolin Howard Oxley and Wim Suyker

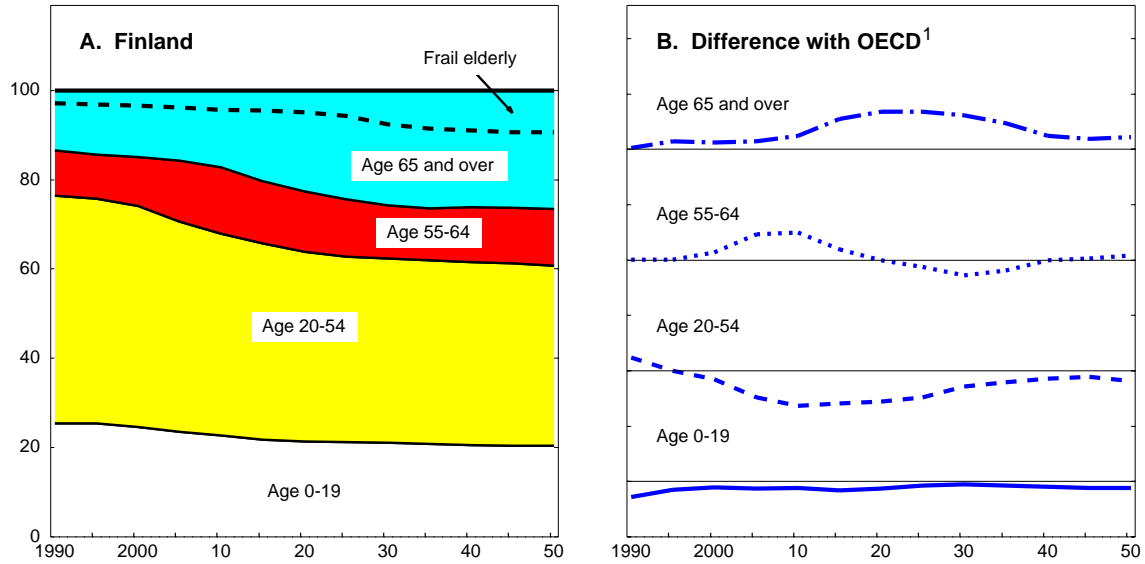
1. In Finland, as in most OECD countries, the ageing of the population is one of the major long-term policy challenges. In 2030, the share of the elderly in the population will be the second highest in the European Union. The more rapid ageing than in most other OECD countries makes tackling the problem more urgent than elsewhere while the low effective retirement age makes it a more daunting task. On the other hand, the pension system is partly funded, in contrast to many other OECD countries, and the pension reforms of the 1990s have reduced the fiscal implications of ageing to some extent. As stated in the OECD report on *Maintaining Prosperity in an Ageing Society* (OECD, 1998), a key response to the ageing challenge will be to ensure that resources are available to allow economic output to grow as quickly as possible. In this way, the young can enjoy a growing living standard while maintaining an adequate living standard for an increasing number of elderly people. In the case of Finland, bringing the effective retirement age closer to the official retirement age of 65 would greatly boost the funds available to the pension system in the future. To accomplish this, further reforms of the pension system and other social programmes are needed as — separately and in combination — they encourage withdrawal from the labour market before the official retirement age. This paper first explores the scale of the demographic change, the relevant institutions and their effect on the decision to retire. In light of the increase in the number of elderly expected over the coming years, various issues concerning their economic position and health care are considered. The paper then considers the impact the demographic changes will have on the economy: the cost of the pension system will increase by a third. Health care spending and the cost of care for the frail elderly are also likely to rise. It ends by outlining the policy options to cope with ageing.

The problems facing Finland

A major demographic challenge

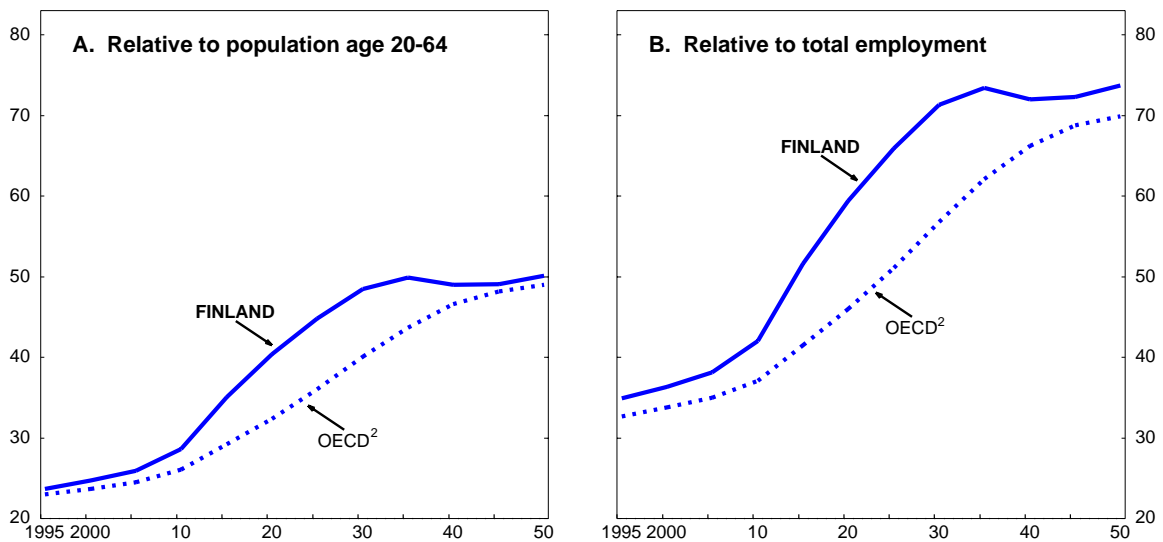
2. The Finnish population is ageing more rapidly than in any other OECD country.² Reflecting the low birth rate since the 1970s and the continuous increase in life expectancy, the share of the working-age population in the total population will begin to diminish in the next few years, falling from 61 to 53 per cent by 2050 (Figure 1). The number of pensioners is projected to surge soon since the baby boom generation — those born between 1945 and 1955 — will begin to retire. The share of the elderly in the population will increase sharply, from 15 per cent in 2000 to 27 per cent in 2050. The total population is projected to increase somewhat till 2020 but is expected to be 5 per cent smaller in 2050 than in 2000.³ Another measure of the pressures stemming from ageing is the sharp deterioration in the projected old-age dependency ratio — the ratio of those aged 65 and over to those of working age. Currently, there are more than four persons of working age for every person of pensionable age. By the year 2035, this is expected to fall to two to one, stabilising thereafter (Figure 2). By contrast, for the OECD as a whole, this ratio is not expected to fall to two to one until the year 2050.

Figure 1. Population trends
Per cent of total population



1. Excluding Mexico and Turkey.
Source: Statistics Finland, Eurostat, United Nations and OECD Secretariat.

Figure 2. Old-age¹ dependency ratios
Per cent



1. Persons aged 65 and above.
2. Average of the rates of individual countries (excluding Mexico and Turkey).
Source: Statistics Finland, Eurostat, United Nations and OECD Secretariat.

A low effective retirement age

3. This unfavourable demographic evolution is compounded by the long-term trend towards earlier retirement. Finland has a relatively high employment-population ratio for prime-age individuals, but the ratio for older workers — those aged 55 to 64 — is below the European Union (EU) average and is significantly below its Nordic neighbours (Figure 3). Employment ratios fall more quickly with age beyond 55 years than in other OECD countries. Around 30 per cent of those aged between 55 and 59 are pensioners, and about 80 per cent of people aged 60 to 64.⁴ While the retirement age already declined during the 1970s and the 1980s, the sharp worsening of the labour market situation in the early 1990s had a further negative effect on the employment rate and the timing of retirement (Figure 4). However, the situation has somewhat improved in the recent recovery. Although the official retirement age is 65 years, in practice, the effective average retirement age is somewhat below 60 years.⁵ It is even lower if it includes the unemployed aged 55 to 59 years covered by a benefit scheme called “pipeline towards an unemployment pension” (see Box 2 below) who are effectively retired. Thus, a more accurate measure of the scale of the long-term pressures on the funding of retirement and old-age related services is the ratio of those in employment to those aged 65 or more (Figure 2, Panel B).⁶ Based on current employment rates by age group, there would be only 1.4 employed persons per person aged 65 or more as early as 2030, while the equivalent ratio for the OECD average will reach 1.5 by 2050.

Support for the elderly and incentives for early retirement

The main features of the pension system

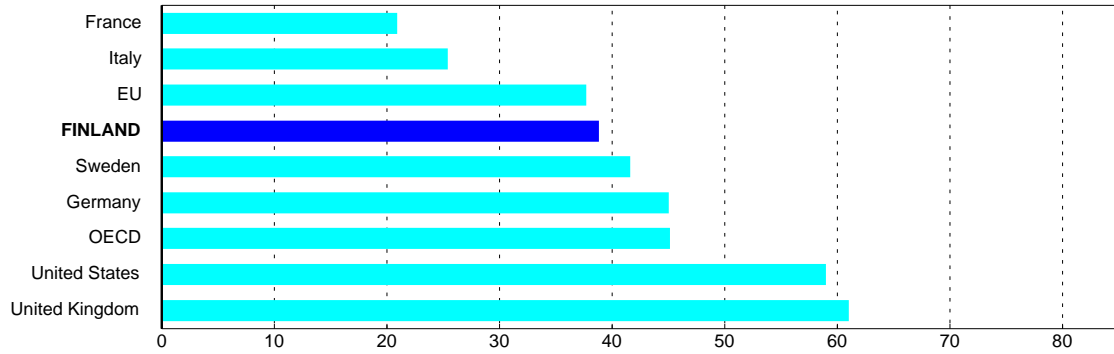
4. There are two main schemes in the Finnish pension system: the national pension scheme and the earnings-related pension scheme. The national pension was introduced in 1957 in its current form and the earnings-related pension scheme for private sector employees was introduced in 1962.⁷ The pension system was substantially reformed during the 1990s and the description in this paper covers rules in vigour at the beginning of the year 2000. In 1998, 77 per cent of pensioners received both pensions, and 10 and 13 per cent received only a national pension or earnings-related pension, respectively. The number of voluntary supplementary pensions is currently small, only around 7 per cent of the working-age population belong to a private supplementary pension scheme, but it is increasing rapidly.

The national pension scheme

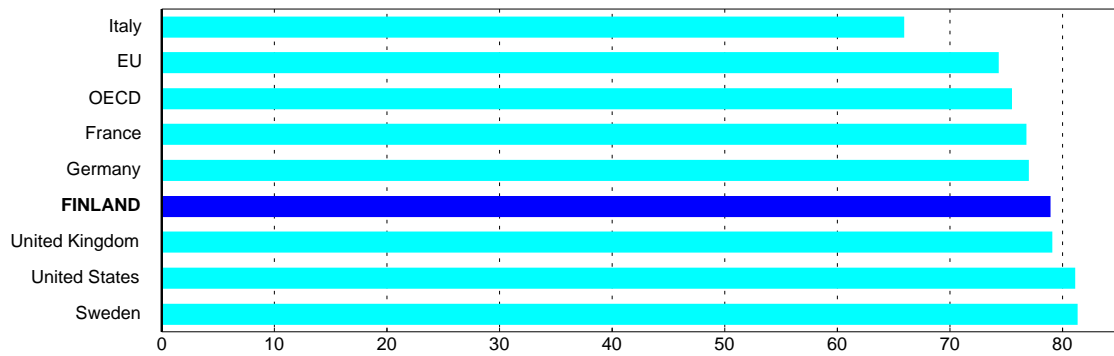
5. The national pension scheme guarantees a minimum income for resident persons who are not entitled to a statutory earnings-related pension or for those whose statutory earnings-related pension is small.⁸ The national pension scheme pays old-age, disability, unemployment and survivors pensions. It is financed by employers’ premiums and government transfers. In the private sector, the employers’ contribution rate is 2.0, 4.0 or 4.9 per cent of the payroll depending on the size of payroll and investments.⁹ In the public sector, the employers’ contribution rate is 3.95 per cent for the state and 3.15 per cent for local authorities. In 1999, the government transfer corresponded to around 50 per cent of the total national pension expenditure.

Figure 3. Employment rates in selected OECD countries
1998, per cent

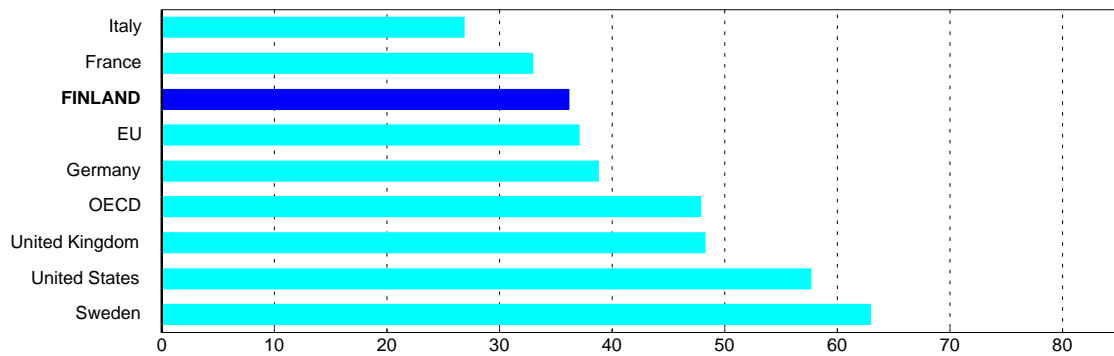
A. Age 15 to 24¹



B. Age 25 to 54

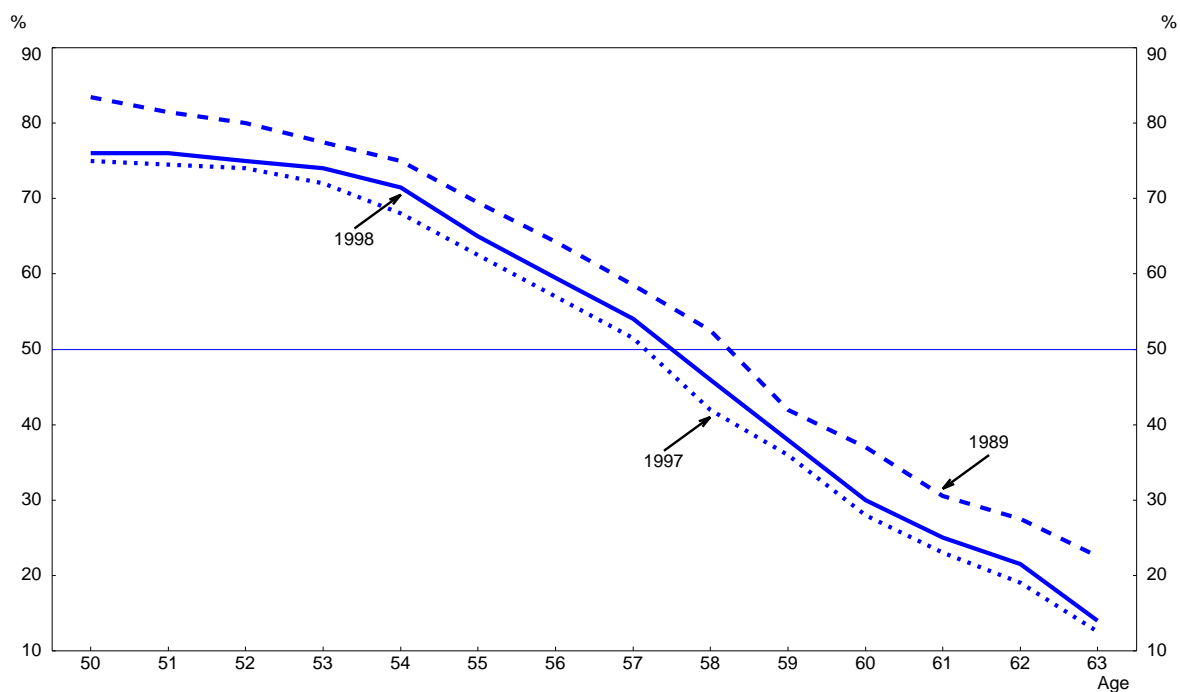


C. Age 55 to 64



1. Age group 16 to 24 for Sweden, the United Kingdom and the United States.
Source: OECD (1999), Employment Outlook.

Figure 4. Employment rates for older workers in Finland
Persons aged 50 and over

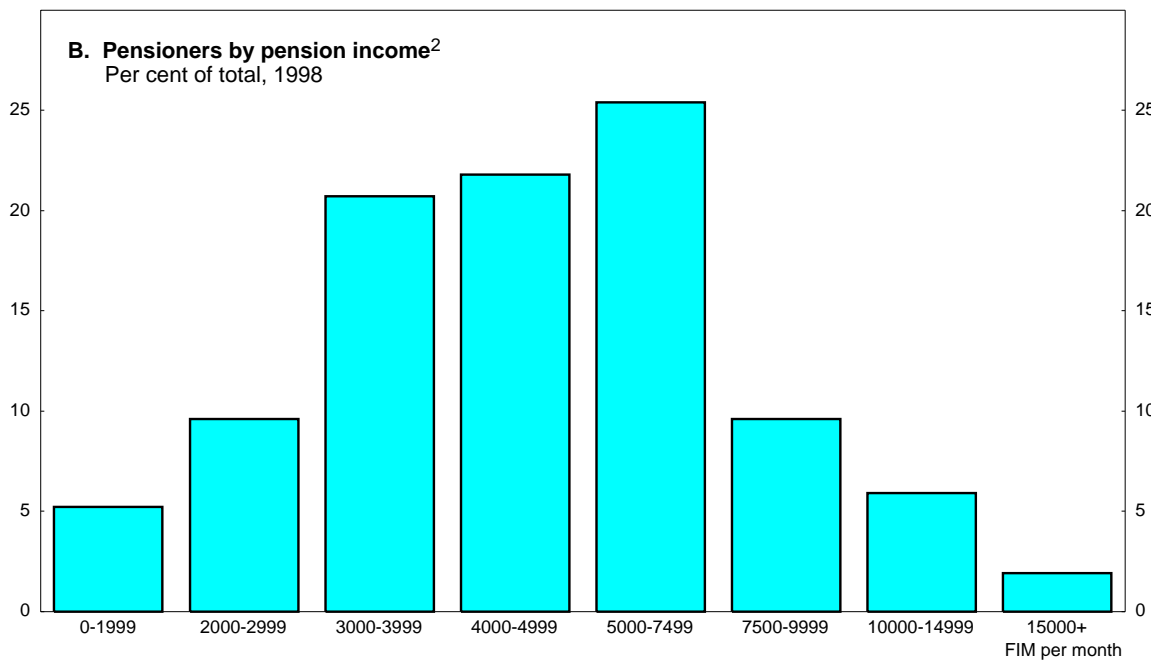
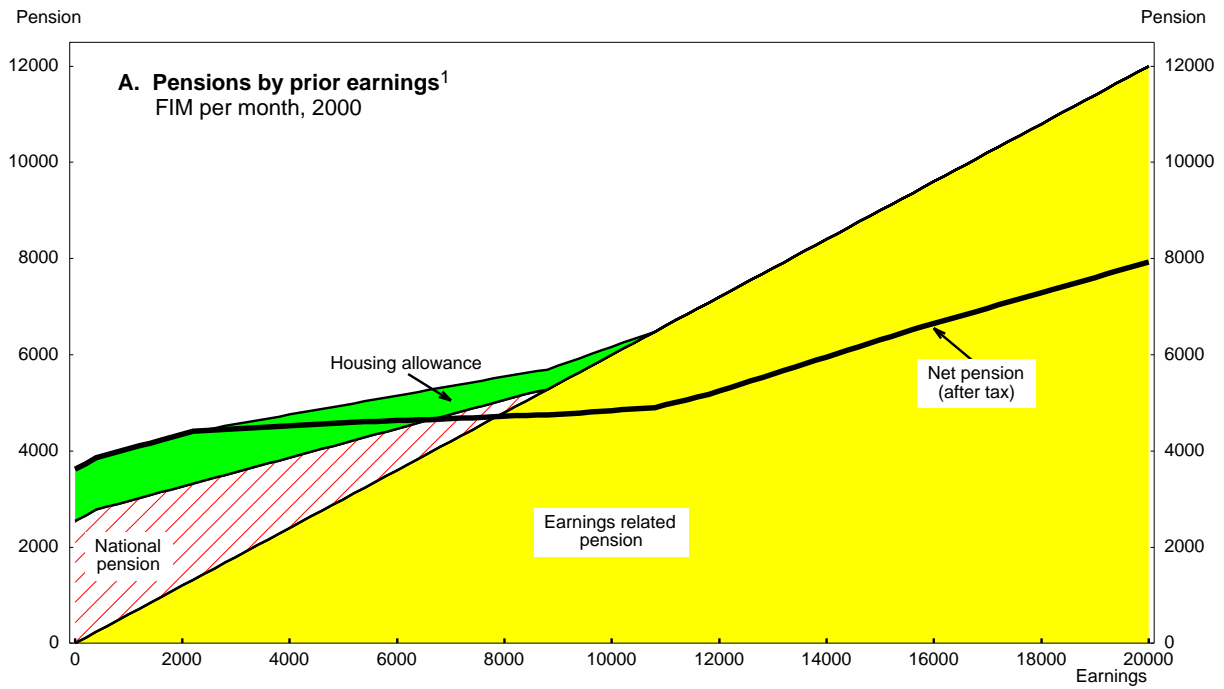


Source: Statistics Finland.

6. The full national pension is low: 20 to 24 per cent of the average wage on a gross basis, depending on marital status and municipality, and 30 to 32 per cent on an after-tax basis.¹⁰ It is means-tested with respect to the earnings-related pension, so that the earnings-related pension reduces the national pension and, above a certain level (41 to 46 per cent of the average wage), the national pension is not paid (Figure 5).¹¹ It is, however, not means-tested for other revenues and can be topped up by substantial allowances.¹² The national pension is an individual right, so that a married person with no earnings-related pension will get a full national pension even if the spouse is receiving an earnings-related pension or is still working. This and the separate tax treatment encourage employment by the second earner.

7. With the earnings-related pension scheme maturing, the proportion of retired persons receiving a national pension will fall. It has already fallen from 91 per cent in 1990 to 87 per cent in 1998. However, the national pension will continue to play a role when the earnings-related pension scheme matures in 2002. For instance, a person with average earnings and only 25 years of contributions will still qualify for a national pension.

Figure 5. Pension income



1. Single recipient, class 2 municipality, housing cost FIM 1 500 per month. Earnings related pension 60% of earnings.
 2. Overall pension in FIM per month. Includes recipients of old-age pension, early old-age pension, individual early retirement pension and unemployment pension.
 Source: Central Pension Security Institute and Social Insurance Institution (1999), Statistical Yearbook of Pensioners in Finland.

Earnings-related pension schemes

8. The earnings-related pension consists of all the pensions that have accrued from each employment contract and from self-employment. It is of a defined-benefit nature, based on tripartite agreements, managed by private pension institutions¹³ and governed by several pension acts.¹⁴ These schemes pay old-age, disability, unemployment and survivors pensions. The earnings-related pensions are financed by employers' and employees' contributions and are a mix of a pay-as-you-go system (PAYG) and a funded system.¹⁵ Benefits are based on the number of years of gainful employment, the age-specific accrual rate and the "pensionable wage" which is based on the gross wage net of employees' pension contributions (Box 1). There is a 60 per cent ceiling on the number of accrued pension "points" of pensionable wages. But, mainly due to the way pensionable wages are indexed, the maximum attainable replacement rate is in practice somewhat lower, around 56 per cent. With the system maturing, for a person starting work at 23, the 60 per cent ceiling discourages work after the age of 61, four years before the official retirement age, as those employed who reach the ceiling keep paying pension contributions without accruing rights. Another disadvantage of the current system is that it discourages job mobility (Box 1).

Table 1. Pension recipients by type of pension
Persons aged 55 and over by age group, 1998

| | Age 55-59 | Age 60-64 | Age 65+ | Total |
|-------------------------------|-------------------------------------|-----------|---------|-------|
| | Per cent of population ¹ | | | |
| Population | | | | |
| Employed | 50.8 | 19.4 | 2.0 | .. |
| Unemployed | 9.3 | 1.3 | 0.0 | .. |
| Receiving a pension | 24.1 | 78.3 | 98.0 | .. |
| Total | 84.2 | 99.0 | 100.0 | .. |
| | Per cent of pensioners | | | |
| Pensioners² | | | | |
| Old age | 6.8 | 16.3 | 91.8 | 63.6 |
| Early old age | 0.2 | 6.9 | 5.3 | 4.7 |
| Disability | 71.9 | 30.1 | 0.0 | 19.8 |
| Individual early retirement | 6.8 | 16.9 | 0.0 | 3.6 |
| Unemployment pension | 0.0 | 21.7 | 0.0 | 4.0 |
| Part-time pension | 6.7 | 2.5 | 0.0 | 0.9 |
| Special pension for farmers | 7.7 | 5.6 | 2.9 | 3.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

1. In same age group.

2. Excluding survivor pensions.

Source: Central Pension Security Institute and Social Insurance Institute (1999),
Statistical Yearbook of Pensioners in Finland, 1998.

Box 1. Pension benefits in the earnings-related scheme

Pension rights accrue at a rate of 1.5 percentage points a year of gainful employment from age 23 to 59 and at a rate of 2.5 percentage points annually from 60 to 64. When unemployed, pension rights accrue at 1.2 per cent per year. There is, however, a maximum level for accrued pension rights of 60 per cent. This means that those with an uninterrupted working life since age 23 in the same employment relationship hit the pension ceiling at the age of 61, four years before the official retirement age.¹

Apart from old-age and survivors pensions, earning-related schemes also pay pensions before the official age of retirement in the form of disability and unemployment pensions (Box 2). When calculating disability and unemployment pension benefits, pension rights are based on two components: rights earned before the event occurred and rights granted for the post-event years until the official age of retirement. The post-contingency period on disability pension accrues rights at the standard 1.5 per cent per year before age 50, but at 1.2 per cent per year from 50 to 59 and at 0.8 per cent per year from 60 to 64. The post-contingency period on unemployment pensions does not accrue unemployment pension rights as of January 2000. Periods of unemployment accrue pension rights at 1.2 per cent per year. When reaching 65 disability and unemployment pensions cease and an old-age pension is granted. However, pension rights for the old-age pension after having received an unemployment pension are calculated somewhat differently. During the years on unemployment pension, between 60 and 64 years of age, old-age pension rights accrue at a rate of 0.8 per cent.²

The pensionable wage is calculated as the average earnings over the last ten years. To calculate the pensionable wage, gross wages net of employees' pension contributions are revalued annually on the basis of the annual change in consumer prices (weight 50 per cent) and the wage index (weight 50 per cent). This partial indexing to wages and the netting of employees' contributions leads to a maximum attainable replacement rate of less than 60 per cent. The pensionable wage is calculated for each employment relationship. Thus, a person who has had two jobs will have a pensionable wage calculated for his/her first employment and another one for the second employment relationship. The combination of the calculation of average earnings per employment relationship and the partial indexing to wages means that persons with exactly the same wage profile during their career, but different labour mobility, will have different pensions.³ Persons who do not change employment will have a higher pension than those frequently moving to another employer.⁴ The current system therefore discourages labour mobility.

Once a person is granted a pension, benefits are indexed annually to wages (weight of 20 per cent) and to consumer price inflation (80 per cent), but only after 65.

Pension income is taxed as wage income above the basic deduction for pensions.

1. Public workers accrued rates are 2.2 per cent for each year of gainful employment until 1995 and 1.5 per cent afterwards. Working before age 23 does not accrue pension rights even though the worker has to pay contributions. This reduces incentives to work before 23.
2. For example, a person who began working at 23 and moves into unemployment or disability pensions at 58 will have 55 percentage points of pension rights accrued on unemployment pensions — $1.5 \times (58 - 23) + 1.2 \times (60 - 58) + 0 \times (65 - 60)$ — and 59 percentage points on disability pensions. The pension rights accrued for the old-age pension at 65 will be 59 percentage points in both cases.
3. Even with full indexation to wages, there would be differences from earnings increases due to promotion.
4. A simple two-period example may help to clarify this. Two workers, A and B, have a wage of 100 in the first period and 105 in the second period; the wage index increases 5 per cent in the second period while the consumer price index is constant. Worker A has the same job during the two periods while worker B shifts to another employer after the first period. As in the Finnish situation, the pensionable wage is based on the wage in the last year of the employment contract and the pensionable wage per contract is revalued on the basis of the wage index (with weight of 0.5) and the consumer price index (with weight of 0.5). Worker A's pensionable wage is 105 (wage in second period) while worker B's pensionable wage is 103.75 (the unweighted average of the revalued wage in the first period and the wage in the second period).

Voluntary supplementary pension schemes

9. There are two kinds of supplementary pension schemes: group schemes and individual schemes (Lindell, 1999; Lindqvist-Virtanen, 1999). Most group schemes were introduced by large companies in the early 1960s to raise the pension level for elderly employees to the maximum level of the statutory earnings-related pension and to facilitate early retirement. Premiums are almost completely paid by employers and pensions paid are relatively small (6 per cent of the total earnings-related pension). Around 15 per cent of the employees in the private sector are currently covered by a supplementary group scheme, with the share falling over time as many of these schemes are closed for new employees. The importance of individual pension schemes, however, has increased substantially in recent years. Currently around 7 per cent of the working-age population has signed up to a private pension scheme from a life insurance company, with the number of persons rising by around 20 per cent annually in recent years. In 1999, the government reduced the tax relief on premiums for voluntary retirement pensions as these schemes were used to retire early.¹⁶

The social security system allows several routes to early retirement

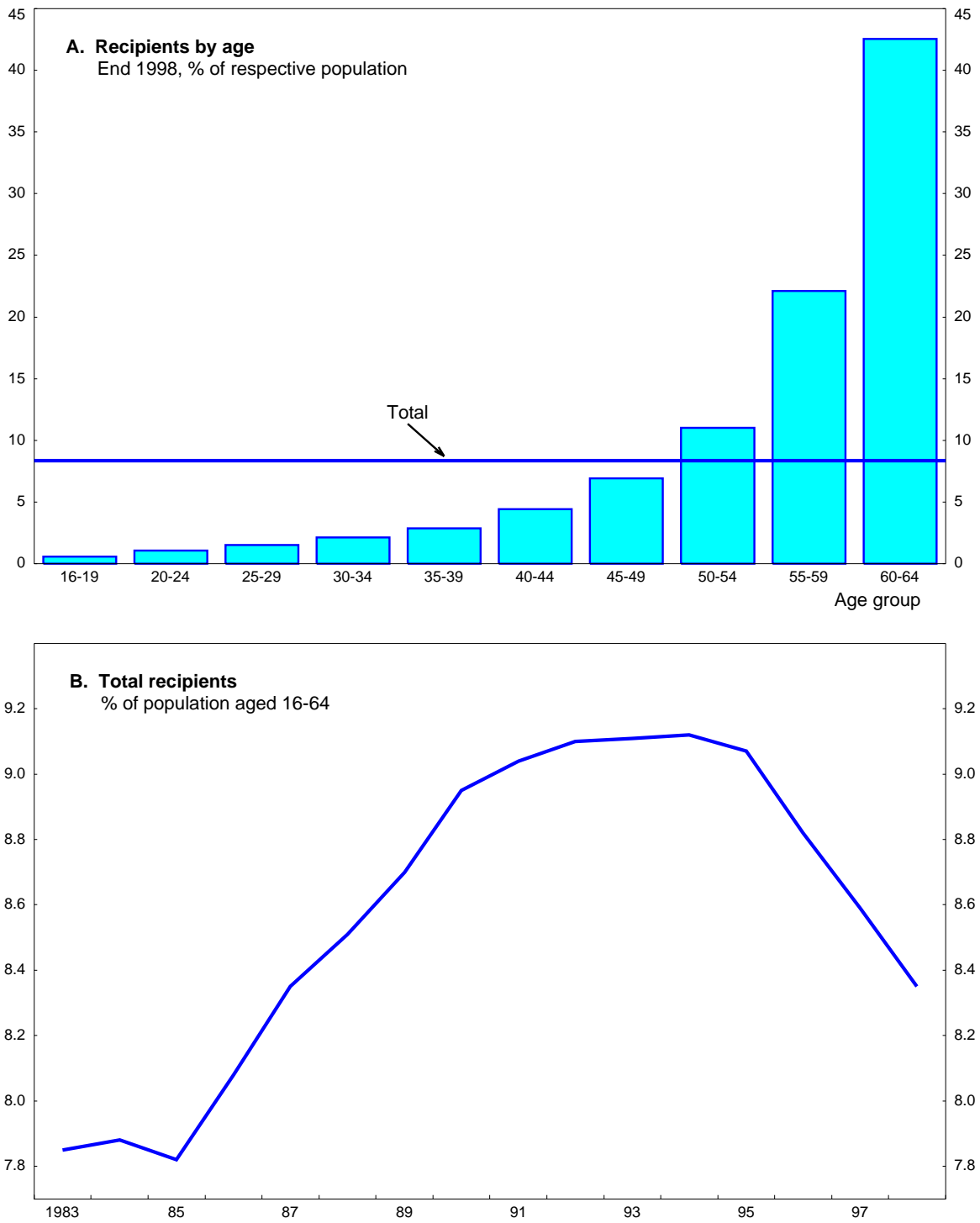
10. In principle, old-age pensions are awarded at 65, but there are several ways to stop working and collect a pension before 65 (Box 2). The financial consequences of this will increase substantially in the near future if people continue to retire early at present rates, as the number of early retirees will increase by half due to the bigger cohorts (the baby boom generation) reaching the age of 55 to 64 years. The majority of those exiting the labour market early do so on the disability pension scheme (Table 1). Entrance to the disability scheme is based on a relatively soft medical examination, especially for a specific type of disability pension, the so-called individual early retirement pension (Box 2). The share of people in their respective population groups receiving a disability pension increases sharply in the old-age groups (Figure 6, Panel A). For the age group 60 to 64, those receiving a disability pension were 43 per cent in 1998, up from 39 per cent in 1990. The number of people in the disability scheme has decreased recently in Finland (Figure 6, Panel B), nonetheless, it has relatively more people receiving a disability pension than its Nordic neighbours (Table 2).

Table 2. Disability pensioners in the Nordic countries
1997, per cent of respective age group

| | 50-59 | 60-64 | Total |
|---------|-------|-------|-------|
| Denmark | 8.4 | 13.6 | 4.3 |
| Finland | 16.8 | 43.9 | 8.8 |
| Iceland | 9.7 | 17.2 | 5.6 |
| Norway | 16.3 | 33.8 | 7.6 |
| Sweden | 14.2 | 33.5 | 7.7 |

Source: NOSOSCO (1999), *Social Protection in the Nordic Countries, 1997*.

Figure 6. Disability pensions



Source: Central Pension Security Institute and Social Insurance Institution (1999), Statistical Yearbook of Pensioners in Finland.

Box 2. Early retirement pension schemes

Both the earnings-related and the national pension schemes pay pension benefits before 65 under several programmes.

The *disability pension* is granted from 16 to 64 years in case of work incapacity. Benefit levels are based on accrued pension rights during gainful employment as for the old-age pension, but the years since disability occurs until 65 also accrue pension rights but at a different rate (Box 1).

The *individual early retirement pension* is a special type of disability pension paid to someone between 58 and 64 with a long working career whose work capacity has been significantly reduced. When assessing the work capacity, apart from the health status, factors associated with age which could affect work performance are also considered. The benefits are as for the standard disability pension scheme.

The *unemployment pension* is available for those aged 60 to 64, who received an unemployment benefit for the maximum period (500 working days, approximately two years), and have been employed for at least five of the last 15 years. The unemployment pension benefit is lower than the old-age pension benefits as no rights are granted after the age of 60 when calculating the unemployment pension benefit (Box 1). Unemployment pensioners are considered as having withdrawn from the labour force and are, therefore, not included in the unemployment numbers.

The *unemployment benefit paid to 55 to 59 year olds* can also be seen as a kind of early-retirement scheme. This is the so called “unemployment pipeline to retirement”. Those who become unemployed at the age of 55 or more receive an unemployment benefit for the maximum period of 500 working days. Moreover, they are entitled to an extension of a maximum of three years until the age of 60, when they will receive the unemployment pension. The benefit received is around 55 per cent of the previous wage. In practice, they do not have the obligation to look actively for work, although measures introduced at the beginning of 2000 may change this.

The *early old-age pension* can already be drawn by 60 year olds. The pension is reduced by 0.4 per cent per month of early withdrawal relative to the standard old-age pension at 65. Thus, five years of early retirement imply a pension that is permanently 24 per cent lower than the standard old-age pension. There is also the possibility to defer the old-age pension with the pension increased by 1 per cent for every month of postponement but with the ceiling remaining at 60 per cent of the pensionable wage.

Part-time pensions are available for those between 58 and 64 years who switch from full-time to part-time work. They represent around 9 per cent of all pensions for the age group 55 to 64. In the labour force statistics, these people are considered as employed. This scheme has been established recently and provides an alternative to other early retirement pensions. At the end of June 1999, 14 700 persons (1.2 per cent of all pensioners), twice as many as a year earlier, had retired on a part-time pension.

11. Another large portion of the early retirees is covered by the unemployment pension scheme. Those aged 60 to 64, who received an unemployment benefit for the maximum period of 500 working days and have been employed for at least five of the last 15 years, are entitled to receive an unemployment pension. At the end of 1998, around 22 per cent of pensioners aged 60 to 64 were receiving this pension (Table 1). In addition, those aged 55 or more can benefit from the “unemployment pipeline to retirement”: those who become unemployed in this age group and have received an unemployment benefit for the maximum period are entitled to a three year extension with, in practice, no obligation to look actively for work (Box 2). About 2 per cent of the labour force is currently covered by the “pipeline” scheme, roughly the same number of people that are receiving an unemployment pension. Therefore, around 21 per cent of the population aged 55 to 64 are either in the “pipeline” or receiving an unemployment pension.

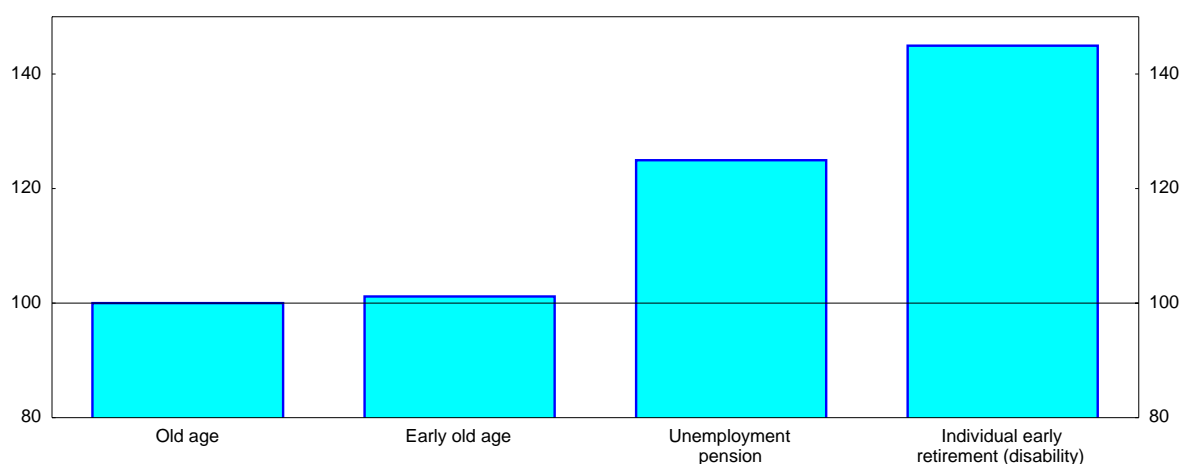
12. Finally, there is the possibility of an adjusted early old-age pension. However, given the size of the downward adjustment and the availability of other early retirement schemes, less than 5 per cent of retirees between 55 and 64 years have opted for an early old-age pension.

13. These schemes affect the retirement decision if they are not “actuarially neutral”. A pension scheme is “actuarially neutral” if the value of pension wealth of an individual (*i.e.* the discounted sum of pension benefits received during his or her retirement) remains unchanged, irrespective of the scheme and the age of retirement. Calculations of pension wealth show that the present discounted value of the stream of pension benefits of an individual who takes an early old-age pension are slightly higher than that of an individual who retires at 65 receiving an old-age pension.¹⁷ Relative to pension wealth at a “normal” retirement at 65, the stream of benefits associated with the unemployment pension is 25 per cent higher, while the individual early retirement pension is 45 per cent above (Figure 7).¹⁸ There are, thus, financial incentives for people to move into early retirement, especially for the individual early retirement (disability) and unemployment pension schemes.

The way pensions are financed penalises older workers

14. The national pension scheme is a PAYG system financed by employers’ and government contributions. The earnings-related pension schemes are a mix of PAYG and a funded system where a part of the annual employers’ and employees’ contributions is used directly to pay for current pensions and another part to fund future pension payments. Thus, the overall contribution rate is divided into several components. It includes a component used to cover the pay-as-you-go part of pension payments and components to pre-fund old-age, disability and unemployment pensions (Figure 8, Panel A). A part of contributions are used to fund a third of old-age pension rights accrued from age

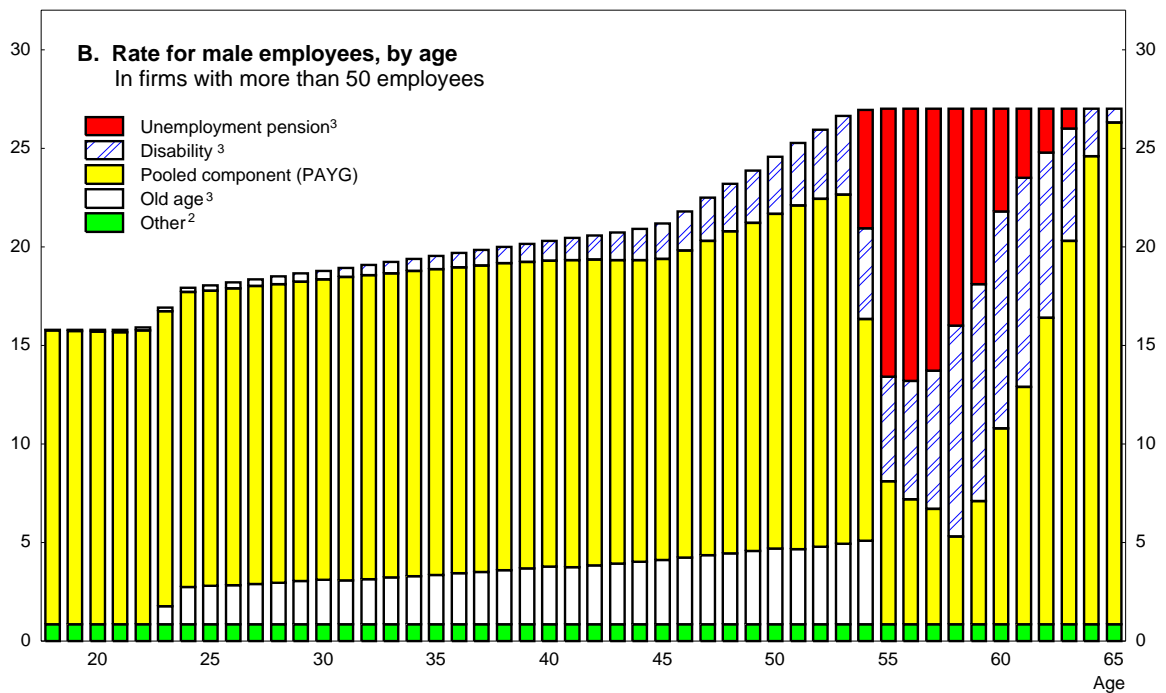
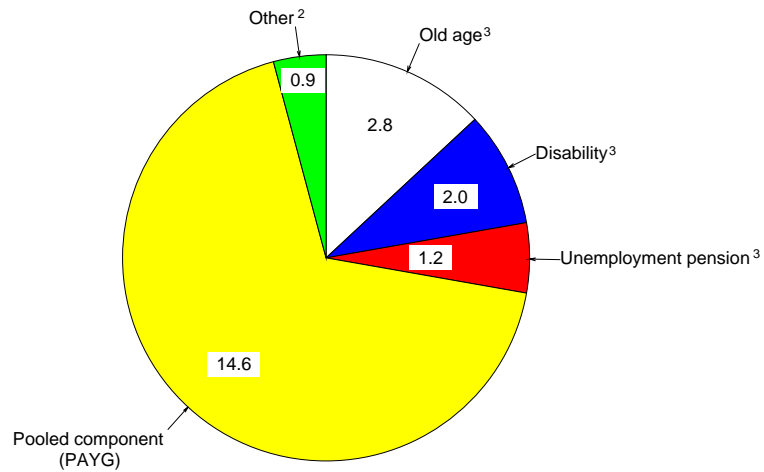
Figure 7. Pension wealth by route of retirement¹
Per cent of old-age pension wealth



1. Present value of the future stream of pension benefits given average life expectancy at age 60. For an individual who began working at age 23 and takes any of the retirement routes as soon as they are available (see Box 2).
Source: OECD Secretariat.

Figure 8. Contribution rates
 TEL tariff premiums in the private sector in 2000, per cent of wages

A. Average rate by components¹



1. The total TEL contribution rate is 21.5 per cent.
 2. Administration costs.
 3. Funded part.
 Source: Central Pension Security Institute.

23 to 54. The size of the other components depends on the total expenditure needed to fund new disability and unemployment pensions.¹⁹ Pre-funding is collective and, thus, has no effect on the size of the pension, but it affects the future path of contribution rates and could lead to refunds to employers in case of a high rate of return.

15. Currently, the average contribution rate in the private sector scheme for permanent employees is 21.5 per cent of gross wages. Unemployed and early-retired do not pay a pension premium although they accrue rights. Employees pay 4.7 per cent and employers, on average, 16.8 per cent.²⁰ However, the rate varies with firm size. Firms with 50 or fewer employees pay an overall rate

Box 3. Pre-funding pensions

A part of annual employers' and employees' contributions is used to pre-fund old-age, disability and unemployment pensions (Figure 8, Panel A).

Old-age pensions

A third of the 1.5 percentage points of pension rights accruing to an individual between 23 and 54 years is funded. All pension rights accruing after 54 are completely financed by the pay-as-you-go system. Consequently, around 15-20 per cent of old-age pension benefits are funded.

The pre-funded part of the old-age contribution is calculated taking into account life expectancy at 65, the current age of the individuals and a discount factor of 3 per cent in nominal terms.

Disability and unemployment pensions

Pre-funding of unemployment and disability pensions is 80 per cent of future benefits. The remaining 20 per cent are covered by the PAYG component of the contribution rate. The degree of pre-funding or financing depends on the size of the firm.

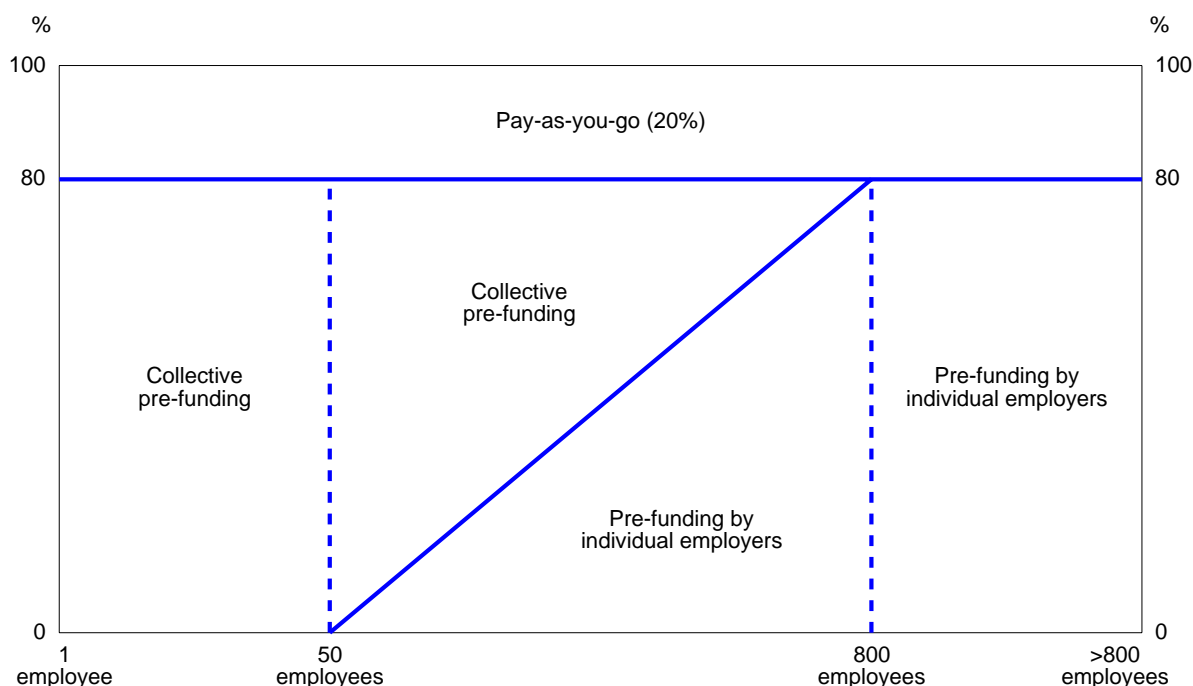
Pre-funding is done collectively for firms with 50 or less employees via the components for disability and unemployment pensions of the overall contribution rate (Figure 8, Panel A). However, employers with more than 50 employees are responsible for their disability and unemployment pension expenditures. Their responsibility increases linearly from 0 per cent at 50 employees to 80 per cent with 800 employees.* At the same time, their share of the disability and unemployment premium decreases from 100 to 20 per cent.

Therefore, for firms with 800 employees or more, the employer pays 80 per cent of the principal value of the employer's own new disability and unemployment pensions at the time the disability and unemployment contingency occurs. But they do not pay any premium at all.

The pre-funding components of the contribution rate are calculated assuming an actuarial rate of return, or discount rate, of 3 per cent in nominal terms — around 1 per cent in real terms in 2000. There is also a benchmark rate of return approved by the Ministry of Social Affairs and Health, currently 5.25 per cent in nominal terms. Returns on pension funds over and above 3 per cent but below the benchmark are used to increase funding, but returns to investments above the benchmark can be used by pension funds to compete to attract employers.

* Before 2000, the maximum was 50 per cent for unemployment pensions and 100 per cent for disability pensions. Employers had thus a much greater incentive to use the unemployment pension route. Actually, the number of people under unemployment pensions increased during the 1990s.

Figure 9. Financing of unemployment and disability pensions
Per cent of total by size of firm



Source: OECD Secretariat.

of 22 per cent. For firms with more than 50 employees the rate can vary from 14.5 per cent to 30.7 per cent depending on the age and gender of the insured employees (Figure 8, Panel B).²¹ The component covering disability and unemployment increases substantially for workers aged 55 and over because the risk increases. This contribution rate profile clearly discourages large firms from retaining older workers. On the other hand, firms with more than 50 employees have to fund the corresponding amount of pension payments for disability and unemployment pensions at the time the disability or unemployment occurs until the official age of retirement (Box 3). The amount of this pre-funding increases with firm size (Figure 9).

16. Firms with 50 or less workers are clearly indifferent between retaining older workers or letting them retire.²² Firms with more than 50 workers can save by dismissing older workers and, thus, avoid paying the higher unemployment and disability premium. However, they have to fund the corresponding amount of pension wealth until the official retirement age. Big firms have two ways to avoid this liability cost: they can transfer older workers to smaller firms (for instance subsidiaries) or can end the contractual relationship early enough.²³

17. In summary, there are several channels for early retirement. While pension reforms in the 1990s (see Box 4) and the reform in early 2000 (Box 5) have greatly improved the situation and have reduced the costs of the pension system, the way pension benefits are still calculated introduces incentives to retire early.²⁴ Moreover, the way of financing disability and unemployment pensions

Box 4. Pension reforms during the 1990s

The severe recession at the beginning of the 1990s and the looming demographic challenge led to several reforms of the pension system to improve its long-term sustainability. The reforms are estimated to have reduced expenditure in 2030 by around 8.5 per cent of the wage sum (Table 3).

In the face of the deteriorating financial situation of the pension system, the first reforms introduced employees' pension contributions in 1993, increased the official retirement age for public sector employees from 63 to 65 years, and reduced the annual accrual rights for civil servants from 2.2 to 1.5 per cent, to bring pension benefits more closely in line with those of private sector employees. The reforms in the public sector are being introduced very gradually, with the transition period ending in 2032. The reform originally only applied to new civil servants but since 1995 all those aged 55 or below were also included, speeding up the reform.

Several measures were taken in 1994:

- Pensions were not adjusted for inflation in 1994. This had a permanent, one-time effect on pension expenditures as this was not offset later.
- The lower age limit for individual early retirement pensions was raised from 55 to 58 years and was lowered for part-time pensions from 60 to 58 years.
- The accrual rate for those in gainful employment from 60 to 64 was raised from 1.5 to 2.5 per cent to increase incentives for longer labour market participation.

In 1996, future pension outlays were reduced by extending the period over which pensionable earnings are calculated from the last four years' earnings to the last ten years. This extension is being gradually implemented and will be fully effective in 2002. Pension expenditures were also cut by defining pensionable wages as net of employees' pension contributions and by reducing the weight of wage increases in the pension benefits indexing formula from 50 to 20 per cent and increasing the weight of the consumer price index to 80 per cent. Yet, the way pensionable wages are indexed to wages and prices (50-50) was maintained. Finally, the basic amount of the national pension paid to all was gradually reduced and will be eliminated in 2002, thus extending means-testing for eligibility to the national pension.

Furthermore, in 1996, one of the most important reforms of the 1990s in terms of savings (Table 3) was to reduce the accrual of pension rights during the years in early retirement till the official retirement age of 65. The annual accrual rate for retirement pensions for those in disability, individual early retirement and unemployment pensions was reduced from 1.5 to 1.2 percentage points for those aged 50 to 59 and from 1.5 to 0.8 percentage points for those aged 60 to 64. The changes were retroactive.

In 1997, the rules of pension funding were changed substantially making it possible for pension funds to invest in more risky assets such as shares. This has increased the rate of return on investments and led to some increased funding. The investment yield had already been improved in 1993 by the introduction of mandatory bank guarantees on re-lending of pension contributions to employers.

Also in 1997, the unemployment "pipeline" was shortened, with indirect favourable effects on the pension system. The number of years of extension of the standard unemployment benefit period for older workers was reduced from 5 to 3 years, shortening the "pipeline" eligibility by two years (from 53-59, to 55-59 year olds).

To increase old-age workers' incentives to remain at least partly in employment, the lower age limit for part-time pensions was lowered temporarily from 58 to 56 years in 1998.

Table 3. **Savings in 2030 due to changes in the pension schemes in the 1990s**

| Date | Changes | Billion FIM (in 1998 prices) | % of wage sum |
|--------------|--------------------------|---------------------------------|------------------|
| 1.1.1996 | Pensionable salary | -2 | -0.4 |
| | Post-contingency accrual | -7 | -1.5 |
| | Indexation | -7 | -1.5 |
| | National pension | -4 | -0.8 |
| 1.1.1994 | Retirement ages | -4 | -0.7 |
| | Other | 0 | -0.1 |
| 1.1.1993 | Public sector reforms | -12 | -2.7 |
| 1.7.1990 | Survivors pensions | -4 | -0.8 |
| Total | | -40 | -8.5 |

Source: Central Pension Security Institute.

introduces disincentives for employers to keep or hire older workers. Finally, and most importantly, the 60 per cent ceiling on accrued pension rights greatly reduces the incentive to work beyond 61 years.

More pensioners are close to the poverty line than the rest of the population

18. Poverty rates are below the average rate for the whole population for households headed by 64 to 74 year olds but slightly above the average for the group of 75 years and older (Table 4). More old-age households as compared to the rest of the population are, however, just above the poverty line of 50 per cent of the median income and increasing the poverty line to 60 per cent raises poverty levels among old-age households five-fold.²⁵ When considering the likelihood that an old-age individual, not a household, becomes poor, the picture changes. While Finland has the lowest overall poverty rate among several OECD countries, this is not the case for those 65 years or older. During the 1990s, the poverty rate of pensioners has fallen much more rapidly than for the population average, partly because the deep recession of the early 1990s had a smaller negative effect on pensions than on wages. Pensions are by far the most important source of income for the retired (Table 5), ranging from 89 per cent for the lowest quintile to 67 per cent for the highest quintile. For the lowest quintile, the national pension scheme makes up the largest share while for the other quintiles it is the earnings-related pension schemes. As noted, the importance of the national pension falls as other pension income increases.

Box 5. The 2000 pension reform

The following reforms came into force at the beginning of 2000 based on the agreement reached in July 1999 by the representatives of the social partners and the pension institutions:

- New pensioners will no longer accumulate pension rights for unemployment pensions from the time they receive an unemployment pension until the general retirement age of 65. This lowers the unemployment pension benefits by 7 per cent. However, at 65 the unemployment pension ceases and an old-age pension is granted, and the years of receiving an unemployment pension do accumulate pension rights at 0.8 percentage point (Box 1).
- The financial disincentive for large employers to use the unemployment pension scheme has been raised. Large employers have to pre-fund a larger part of the unemployment pension of an older employee who becomes unemployed (Boxes 2 and 3). Their own risk has been increased to 80 per cent from 50 per cent. At the same time, the financial disincentive for large employers to use the disability pension scheme was aligned with that of the unemployment pension scheme (it was decreased from 100 to 80 per cent) and has therefore become somewhat smaller. Moreover, employers' contributions per employee to unemployment pensions have increased, except for workers hired when aged 50 years or older.
- The age limit of the individual early retirement pension was increased from 58 to 60 years for those born after 1944. Thus, the measure will only start to bite in 2003.
- The temporary reduction of the age limit for part-time pensions from 58 to 56 years was extended to 2002.

The changes came into force at the beginning of 2000 for the private sector and will come into force later for the public sector. Together with these changes, the government introduced labour market measures for those aged 55 to 59 years. This age group will now be covered by the Public Employment Service (PES) the same way as younger unemployed, while before the PES treated them as effectively retired. When 55 to 59 year olds become unemployed, there will be an immediate interview by a PES officer, their ability to work will be examined and they may be offered a job-search training within three weeks. After an unemployment spell of three months, they can be offered vocational training or a training place in the private or public sector. After an unemployment spell of 11 months, they can be offered a subsidised job. The 2000 Budget includes FIM 70 million for subsidised jobs for the 55 to 59 year olds. The impact of these new measures remains to be seen and could be limited as, in line with past experience, they are unlikely to be fully enforced by the PES.

The government will assess in the coming years, together with the social partners, the impact of the new measures on the effective retirement age. It has announced additional measures, if this initiative is considered insufficient, to increase the effective retirement age by 2 to 3 years in the long run, the goal set in the 1999 government programme.*

* This goal is not new. Already the 1990 Pension Committee advised the taking of measures which would increase the effective retirement age by one year per decade until 2020.

Table 4. **Poverty rates by age group¹**

| | All households | -24 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75+ |
|-------------------------|----------------|------|-------|-------|-------|-------|-------|------|
| 1990 | 4.7 | 16.9 | 2.7 | 1.8 | 2.5 | 5.3 | 8.4 | 19.3 |
| 1991 | 4.3 | 22.8 | 3.5 | 2.0 | 2.3 | 4.0 | 4.0 | 11.7 |
| 1992 | 4.1 | 24.0 | 3.6 | 2.2 | 2.0 | 2.7 | 3.8 | 9.0 |
| 1993 | 3.4 | 22.8 | 3.6 | 2.2 | 2.1 | 1.4 | 1.2 | 3.5 |
| 1994 | 3.5 | 27.3 | 3.0 | 2.1 | 1.9 | 2.4 | 1.1 | 4.9 |
| 1995 | 3.5 | 25.0 | 3.0 | 2.1 | 2.0 | 2.5 | 1.5 | 4.7 |
| 1996 | 3.7 | 29.1 | 2.8 | 2.4 | 2.0 | 3.5 | 2.2 | 3.1 |
| 1997 | 4.1 | 33.9 | 4.1 | 2.0 | 2.2 | 2.6 | 1.4 | 4.7 |
| 1998 | 4.2 | 30.3 | 4.5 | 2.3 | 2.4 | 2.8 | 1.6 | 4.4 |
| <i>Memorandum item:</i> | | | | | | | | |
| 60% poverty line | | | | | | | | |
| 1998 | 9.6 | 47.7 | 10.8 | 5.0 | 5.2 | 7.2 | 9.9 | 17.6 |

1. Age group refers to the age of the head of the household. The poverty line is 50% of the median equivalent disposable income of all households. Household disposable income includes imputed rents of owner-occupied dwellings. Only non-institutionalised population.

Source: Ministry of Social Affairs and Health, calculations from the Income distribution survey micro data files.

Table 5. **Income structure of old-age¹ households by quintile**
1997, per cent of gross income

| | I | II | III | IV | V | All old age households |
|--|------|-------|-------|-------|-------|------------------------|
| Earnings | 2.1 | 1.7 | 2.5 | 3.2 | 11.1 | 5.9 |
| Capital income | 0.7 | 1.1 | 1.2 | 2.3 | 12.2 | 5.7 |
| Imputed rent of owner-occupied dwellings | 7.7 | 10.9 | 10.7 | 9.5 | 8.1 | 9.2 |
| Pensions based on private/individual insurance | 0.9 | 0.4 | 0.6 | 1.1 | 1.5 | 1.1 |
| Earnings related pensions | 36.4 | 48.1 | 56.6 | 62.8 | 56.8 | 55.1 |
| Social transfers (including national pensions) | 52.2 | 37.8 | 28.3 | 21.2 | 10.3 | 23.0 |
| Taxes and social security contributions | -7.3 | -10.0 | -14.2 | -18.5 | -27.4 | -19.2 |

1. Age 65 and over.

Source: Ministry of Social Affairs and Health, calculations from the Income distribution survey micro data files.

Care for the elderly

The institutional set-up

19. Care for the elderly is largely publicly financed and provided. The Finnish health care system, which was reviewed in detail in the 1998 OECD Economic Survey (OECD, 1998*b*), and other care services for the elderly are organised at the municipal level on the basis of general legislation set at the national level that provides the core principles of social welfare. The role of the central government is now limited to providing a general framework governing the scope and standards of care provided. The central government establishes broad guidelines and supplies information on financing, operating costs and investment policy, and monitors compliance. The 1998 OECD Economic Survey indicated that there is scope for further improvements to both the quality and cost-effectiveness of health care.

20. The health care and social welfare system provide high quality health care and a wide range of services — *e.g.* support services, home help, service housing, institutional care and support for informal care.²⁶ Spending on health care is close to the OECD average (8 per cent of GDP in 1999) following a very sharp fall in expenditure in real terms in the early 1990s, as highlighted in the 1998 OECD Economic Survey. This was largely achieved through improvements in productivity in the hospital sector. Outlays on care for the elderly represent around 1 per cent of GDP.²⁷ A large part of the financing is in the hands of the municipalities. This was reinforced in 1993 when the central government transferred responsibility for finance and planning to the local administrations. Financial support by the central government was changed from cost sharing — which encouraged the expansion of local government services — to a fungible block grant covering services provided by the municipalities.

21. While municipalities have a large degree of autonomy in deciding on how health care and other care for the elderly is provided, services for the elderly are primarily publicly produced. Ambulatory care is provided at municipal health centres with salaried doctors and staff, although there are private specialists, many of whom also work on a salary basis in hospitals. Municipal health centres also have some in-patient services and about half of these beds are used for long-term care for the elderly. Hospital care is organised at the level of 21 hospital districts (governed by the municipalities) which run one to three acute care hospitals and one to two psychiatric hospitals. Municipalities usually purchase health care from these local providers — on the basis of a range of pricing mechanisms — although they can also purchase from other suppliers.²⁸ Pharmaceutical drugs are sold in privately owned but highly regulated pharmacies.

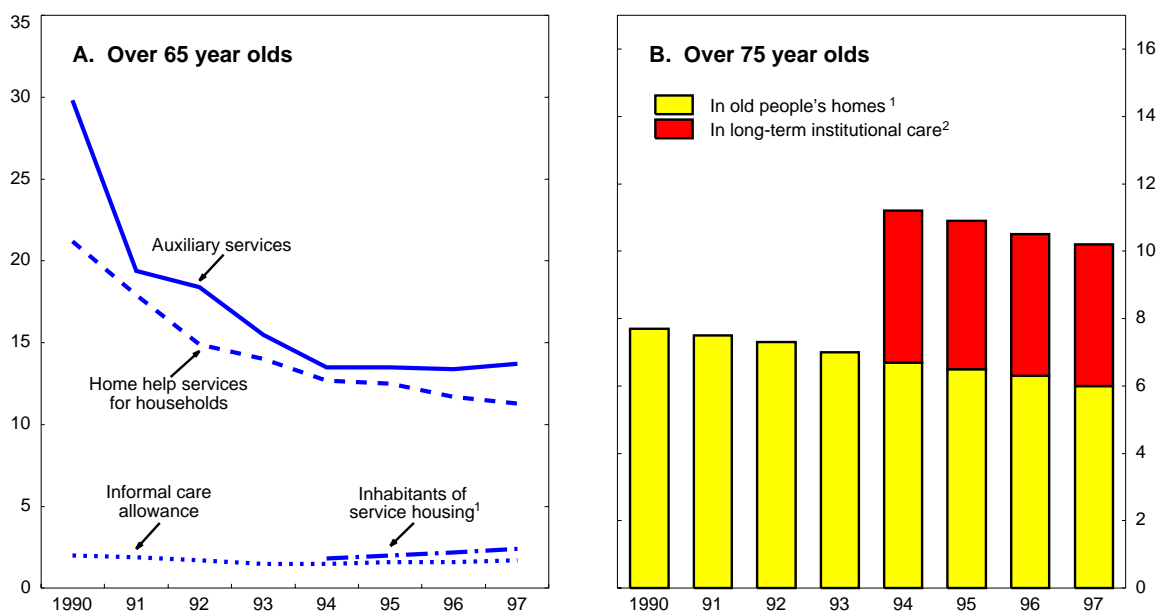
22. The supply of non-health care for the elderly is provided by the municipalities themselves (sometimes jointly or purchased from non-governmental organisations, an option that is on the rise). When an elderly person needs regular care, the quality and quantity of services is ensured through an individual service and care plan which is drawn up together with the older person and his or her immediate family and a working group, often made up of a general practitioner and social workers who can best assess the functional capacity of the older person. Since a key policy objective in this context is to allow individuals to remain independent as long as possible, there is increasing attention paid to using the existing health care and support services to rehabilitate the elderly rather than maintain them in an institutional environment. However, there is probably greater variation in both the type, quantity and quality of care in this area across municipalities than in health care, thus providing scope for improving the cost effectiveness of public policies in this area.

Sharp drop in health care costs and in institutional care

23. As highlighted in the 1998 OECD Economic Survey, health care spending was sharply reduced between 1991 and 1994. This was largely achieved through improved management and resource allocation²⁹ and a continuing shift from in-patient care towards ambulatory care and pharmaceuticals. Reductions in the scope and quality of care appear to have been limited, although the extent is difficult to judge.

24. In general, most people of retirement age are independent: 93 per cent of those above the age of 65 live in private accommodation and require little in the way of additional help. In 1996, 7.5 per cent of this group received regular home services. Five per cent of those over 65 and 10 per cent of those over 75 were in long-term care in homes for the elderly or in hospitals and 2.5 per cent of those over 65 were in service housing. The number of individuals in institutional care fell in the 1980s and this trend continued in the 1990s (Figure 10). This was accompanied by increased service housing, thus reducing the operating costs of the system, although those entering long-term care are now generally older and in poorer physical and mental condition than in the past. Finland compares favourably with the other Nordic countries: they have the lowest share of the elderly in institutional care or service housing (NOSOSCO, 1999).

Figure 10. Recipients of the main forms of care for the elderly
Per cent of people in same age group



1. At 31 December; no data available 1990-93.

2. In hospitals and health centres for care lasting over 30 days; no data available 1990-93.

Source: Ministry of Social Affairs and Health (1999), Trends in Social Protection in Finland 1998-1999.

25. Other services for the elderly appear to have declined in volume, possibly reflecting budget restrictions at the municipal level, but possibly also increased service charges. The more limited supply of services has meant that they have been concentrated on those most in need and the policies aimed at rehabilitation may have been neglected. There is some concern that a narrow focus on services may lead to an increased demand for institutional care and service flats as individuals perceive care as difficult to obtain outside institutions. Another concern is the wide variation in the supply and quality of services across municipalities.

Financing of the system: substantial and increasing user fees

26. A portion of health and social spending is paid in the form of a fungible block grant from the central government, which is calculated on the basis of population, demographic structure, the unemployment rate and classification of its financial capacity.³⁰ The remainder is financed by the municipalities and through user charges. In the event, about three-quarters of health care is financed by the public sector with the remainder in the form of out-of-pocket payments by patients.³¹ The share of the latter has increased by 4 to 5 percentage points during the 1990s. For social services — of which one quarter is provided in the form of care for the elderly — only one eighth is financed through out-of-pocket payments. If out-of-pocket payments by patients reach a yearly ceiling, there is no further cost for the individual for additional health services. For other care for the elderly, user charges are limited to the cost of the services and, while certain services are free of charge, the size and the way they are calculated varies across the country. Services are not asset tested.

27. The current pattern of user fees leads to two problems. *First*, the combination of income taxes, the income-tax deductible housing allowance and ceilings for client fees can lead to a “poverty trap” type development — *i.e.* incomes net of taxes and service charges can decline as gross income increases. In other words, individuals receiving care can be less well off on a net basis with a higher pension and for the same level of services provided (Ministry of Social Affairs and Health, 1999). A *second* problem arises because ceilings on user charges can mean that the user charges do not reflect the relative cost of the services, particularly for high-cost institutional care. For example, individuals living independently, but with a high need for care, may find it financially more attractive to enter institutional care: since food, lodging and medical care and medication are covered they may be better off even where the user cost is a maximum of 80 per cent of net income.

Recent policy changes concerning care for the elderly

28. With the variation of practices across municipalities a key area of concern, the authorities have established a “Social and Health Care Target and Action Programme”, in part to help bring greater consistency to policies in this area and to encourage the achievement of broader health care goals. A first four year programme covers the years 2000-03. This programme has been drawn up by relevant ministries, the Federation of Municipalities and various health-care organisations. While targets and instructions are not binding on the municipalities, policies will be followed and monitored by a set of committees. A major policy goal is to promote the independence of individuals as long as possible. In this context, prevention (*e.g.* voluntary preventive home visits to assess risks of home accidents for all individuals over 80, to assess the need for auxiliary help and repairs), ensuring adequate supply of qualified care personnel in a non-institutional environment and an emphasis on rehabilitation in health care are key areas of consideration. Furthermore, there is the need to introduce more uniform standards and practices in assessing needs and the appropriate quantity and intensity of services. Greater information on best practices may help municipalities improve the cost effectiveness

of their services. Finally, financing of services and policies regarding user charges will also need to be reconsidered so as to minimise the financial incentives to enter an institutional environment.³²

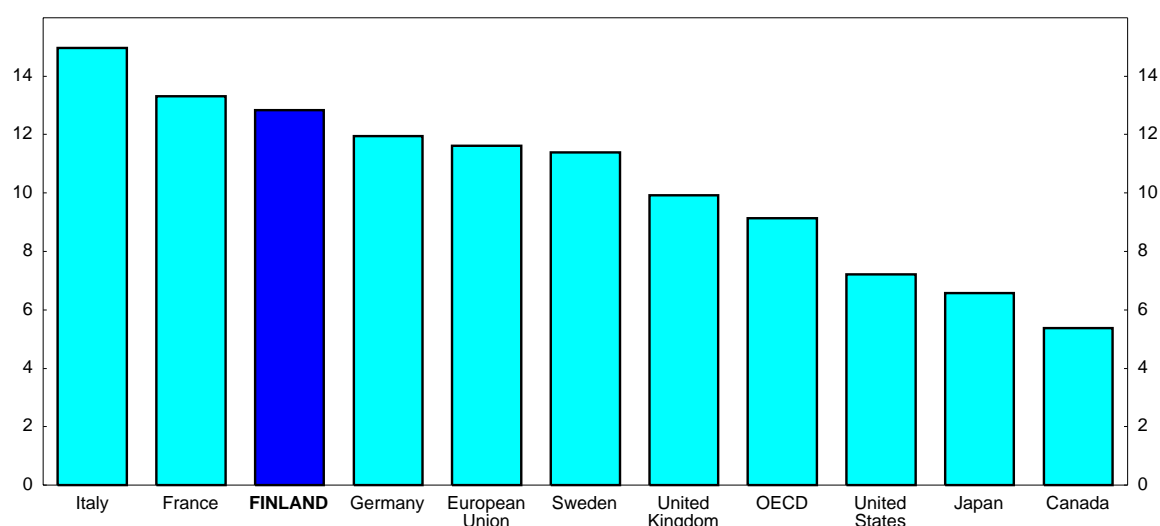
Ageing will substantially increase the fiscal burden

29. Pension expenditures in Finland — already high by international comparison (Figure 11) — are expected to increase from around 12 per cent of GDP in 2000 to just over 16 per cent between 2030 and 2050 (Figure 12).³³ The share of statutory earnings-related pensions will increase from 8.3 per cent of GDP in 1998 to an estimated 14.6 per cent by 2050, while the share of national pensions will fall from 2.5 to 1.1 per cent as the earning-related pension system matures.³⁴

30. The projected rise in spending will require, given current benefits and funding rules, an increase in the pension contribution rates of around 10 percentage points, from 21.5 to 32 per cent.^{35, 36} The current partial funding arrangements are thus insufficient to prevent a substantial increase in contribution rates. Fund assets would be depleted by 2030 if current contribution rates were kept constant. A rise in the contribution rate of 10 percentage points would clearly jeopardise the labour market performance and the competitive position of the Finnish business sector.

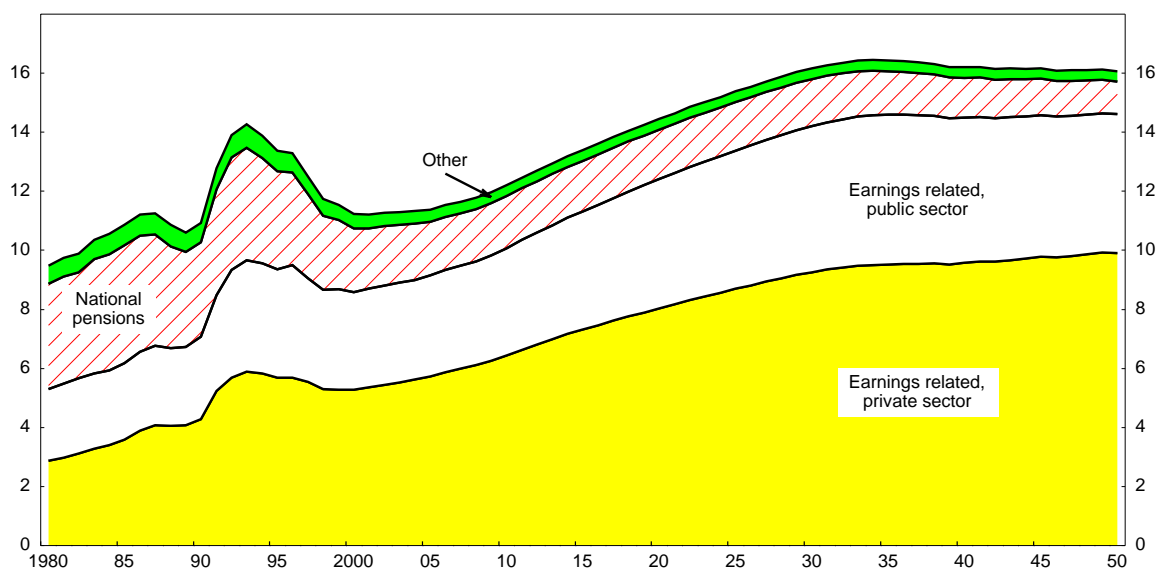
31. These long-term projections may be optimistic. They assume an increase in the employment rate from 65 to 72 per cent in 2015, which comes almost entirely from a decrease in the unemployment rate from 10 per cent in 2000 to 5 per cent by 2015.³⁷ Achieving this outcome almost certainly requires additional labour and product market reforms. If unemployment were to remain at 10 per cent, pension expenditure would be around 0.6 to 0.8 percentage point higher than projected (Klaavo *et al.*, 1999).

Figure 11. Pension expenditures in selected OECD countries¹
Per cent of GDP, 1995



1. Differences in the tax treatment of pensions across countries are not taken into account.
Source: OECD Social Expenditure database, 1999.

Figure 12. Projected pension expenditures
Per cent of GDP



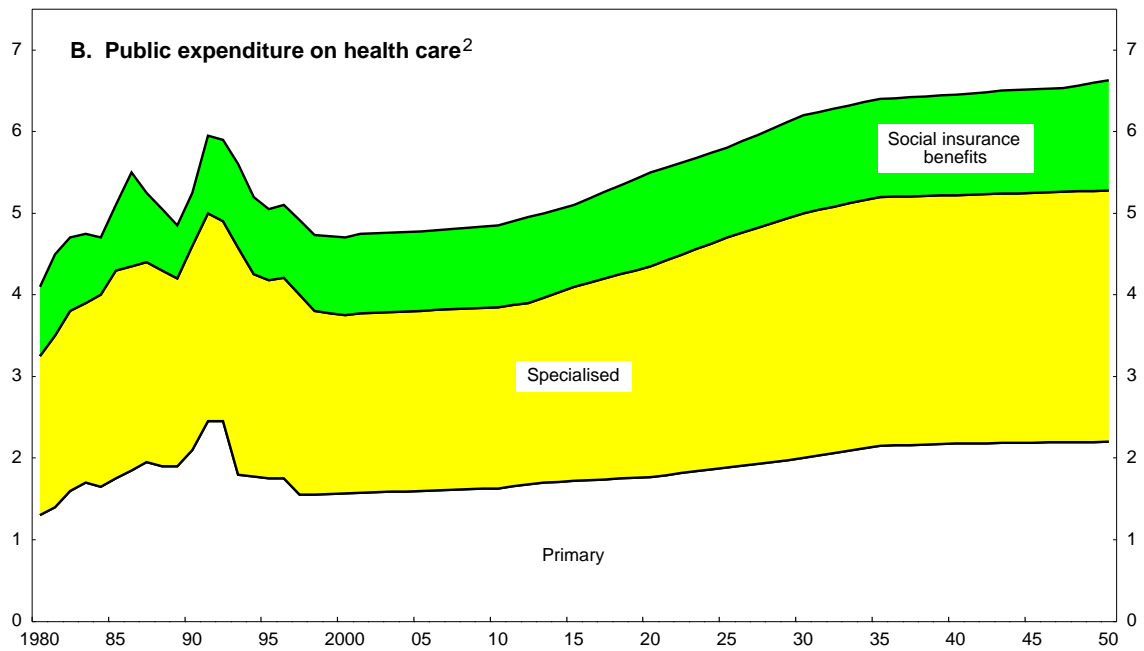
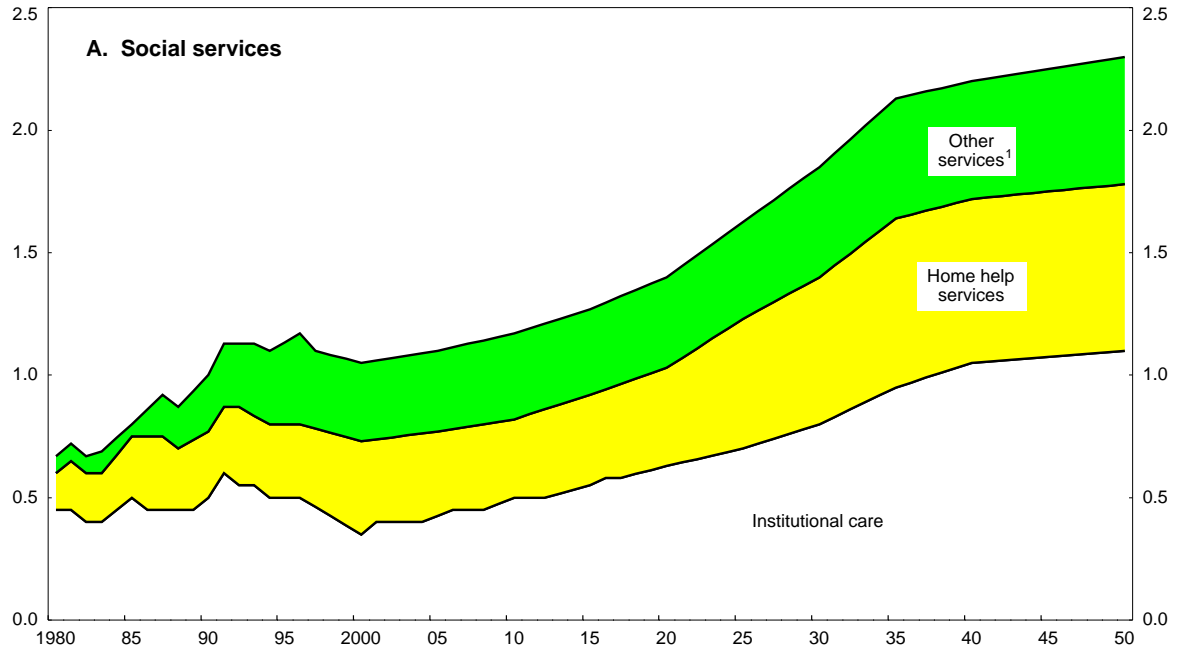
Source: Central Pension Security Institute.

32. Although, the risk of a more pessimistic demographic development than officially projected may be somewhat less in Finland than in other countries as official projections are rather cautious, uncertainty over future demographic developments is high.³⁸ A higher old-age ratio, for instance caused by a drop in fertility or longer life expectancy, could require a rise in the contribution rate to 50 per cent (Lassila and Valkonen, 1999). On the other hand, the projections assume productivity growth of only 1.5 per cent per year. An increase to 2 per cent would reduce expenditure over GDP by 1 percentage point (Klaavo *et al.*, 1999).

33. The main policy lever to tackle the ageing problem is to increase the effective retirement age. These projections are based on only a marginal increase in the effective retirement age. An increase of the effective retirement age by 2 to 3 years — the government target — would reduce pension outlays by 1.5 percentage points of GDP. Contribution rates would still rise by 6.5 percentage points though. Reaching the government target is, therefore, not enough to prevent a sizeable increase in the pension burden.

34. Outlays on care for the elderly will be affected by the sharp increase in the share of the population aged 65 and by the increase in the average age of the elderly. While the numbers of the elderly will rise from just under 15 per cent of the population in 2000 to around 25 per cent, the share of the very old (80+) could increase from around 3 per cent of the population to around 9 per cent over the same period. Thus, the average age of the elderly will rise, with the sharpest increases occurring between 2020 and 2035. On the basis of the current structure of costs by age, official estimates suggest increases of about 2 percentage points of GDP between now and 2050 for health care spending and an additional 1 to 1½ percentage points for non-health care for the frail elderly (Figure 13).³⁹ These estimates only take into account the changing population structure and do not allow for a possible lengthening of disability-free lives, or technical progress in the provision of health care (which would lower costs), or more capital intensive health care, or increases in relative wages of health care workers (which would increase it) (Jacobzone *et al.*, 2000).

Figure 13. Health care and other costs for the elderly
Per cent of GDP



1. For elderly and disabled.
2. Certain items only.
Source: Ministry of Social Affairs and Health.

Options for reform

35. In summary, ageing poses a serious challenge and it will occur earlier than in most OECD countries. The number of persons of working age per person of pensionable age will fall from four in 2000 to two in 2035, a level reached only in 2050 for the average of OECD countries. Even under “optimistic” assumptions of a considerable rise in the employment rate, the pension contribution rate is projected to increase from 21.5 per cent in 2000 to 32 per cent in 2050. In addition, the impact of ageing on health and non-health care costs for the elderly, estimated at 3½ per cent of GDP, will need to be financed.

36. To prevent a steep rise in the overall tax burden of the order estimated above, an increase in the effective age of retirement should be pursued as the main policy goal. The measures put in place in January 2000 acknowledge this and are a step in the right direction. They have made retirement through unemployment pensions less favourable and introduced labour market programmes to keep 55 to 59 year olds in work. The new measures are, however, unlikely to be sufficient to reach the government’s goal of an increase in the effective retirement age by 2 to 3 years in the long run. Moreover, reaching this goal will only mitigate but not prevent a steep rise in contribution rates.

37. Several policy options are available to tackle the impact of ageing (Box 6). Lifting the current ceiling to accrue pension rights beyond 60 per cent of the pensionable wage would help to reduce incentives to retire early. With the earnings-related pension system fully maturing in the coming years, this ceiling is becoming binding for a rising number of older workers. In this respect, the current system is inconsistent: while it provides incentives to stay employed at an older age because of the higher pension accrual rights beyond the age of 60, it also undermines this by putting a ceiling on the extent to which these rights can accrue in practice. In this light, the need to have higher pension accrual rates for people in gainful employment aged from 60 to 65 could be reconsidered. Lifting the 60 per cent ceiling will lead to higher pension payments by increasing replacement rates. One specific alternative would be to lift the ceiling in combination with full funding of the accruing rights after the age of 60 years.⁴⁰ A second alternative would be to lift the ceiling in combination with the introduction of personal pension accounts for older workers (Hautala and Tuukkanen, 1999 and 2000).

38. The personal account would be funded by the pension contributions and the yield on the contributions. The longer persons keep working the higher will be the account at the end of the working career and the higher will be the annuity paid on the basis of the account during retirement.⁴¹ This could create a strong financial incentive to remain longer in the labour force.⁴² In general, the introduction of personal accounts leads to the double burden of paying into a personal fund while simultaneously continuing to contribute to the pay-as-you-go scheme. In the case of the introduction at the end of the working career to top up already accrued pension rights, this double burden is, however, limited. This is because many older workers are usually already retired in Finland and, hence, do not make contributions to the system in any case.⁴³

39. As already recommended in previous OECD Economic Surveys, the disability and unemployment pension schemes should be made less attractive by eliminating the old-age pension rights granted during the period of early retirement. Also, the entry rules to the disability scheme should be reconsidered. Eligibility should be allowed for medical reasons alone. As noted, for bigger firms, the pension contribution rate for older workers is much higher than for younger ones reflecting the higher disability and unemployment risks. To raise the incentive for enterprises to keep older workers, these risks could be spread over the entire employed population, thus eliminating the current age-dependency of the pension contribution rate. Finally, the “pipeline to unemployment pension”

scheme should be phased out by shortening gradually the extension of the unemployment period for the 55 to 59 year olds (currently three years, after the standard maximum unemployment benefit period of 500 working days). The improving labour market situation would prevent tensions developing from such measures. In this respect, the labour market policy programmes for older workers introduced at the beginning of the year are welcome. However, to make such policies effective, it is necessary for the Public Employment Service to link unemployment benefits for older workers to the requirement not to refuse training or suitable jobs.

Box 6. Synopsis of options to reduce the economic impact of ageing

Remove incentives for early retirement

- Lift the pension ceiling of 60 per cent of the pensionable earnings in order to make work above the age of 60 attractive.
- Abolish old-age pension accrual during early retirement.
- For older workers, shorten the “unemployment” pipeline to early retirement by reducing the extension of unemployment benefits to the standard period.
- Put early retirement schemes on an actuarially sound footing.
- Removal of incentives to early retirement could be combined with using the whole working career earnings to calculate the pensionable wage. At the same time, this would remove the impediment to labour mobility caused by the calculation over the last ten years for each employment contract.
- Increase the statutory age of retirement.
- Decrease accrual rates during gainful employment, in particular from 60 onwards.

Introduce elements of defined contributions in the pension system

- Consider the introduction of personal pension accounts for older workers.

Smooth the future impact of ageing by increasing funding now

- Use higher returns on pension fund investments, as well as any additional contributions from economic windfalls to increase the funding of the earnings-related pension schemes.
- Introduce a properly funded pension scheme for central government employees.

Improve job opportunities for older workers

- Reduce the current age-dependency of the pension contribution rate to raise the incentive for enterprises to keep older workers.
- Step up active labour market measures for older workers.
- Apply sanctions in case older unemployed refuse training or a suitable job.

Prudent fiscal policy should be pursued

- Stick strictly to the goal of the Stability Programme of a sizeable surplus of the general government.
- Avoid an increase in the tax burden to finance higher health and non-health care costs for the elderly.

Enhance the efficiency of the health care and non-health care system for the elderly

- Provide more information on current practices to reduce the wide quality and cost variation between municipalities.
- Review the current system of user charges in order to avoid situations where ceilings lead to a shift to more costly facilities.
- Complement income-testing by asset-testing.

Pursue structural reforms of labour and product markets and the public sector that lift labour productivity

40. The funded part of the earnings-related pension schemes could be gradually increased to prevent a sharp rise in contribution rates as the baby boom generation enters retirement. At a minimum, contribution windfalls due to stronger employment and output growth or a higher than

expected rate of return on investments should be fully used to increase the degree of funding. As part of a comprehensive reform that will remove the 60 per cent ceiling, increase funding and introduce elements of defined contributions, pensionable wages could be calculated on lifetime earnings rather than the last ten years of earnings.

41. Currently all employees are covered by the earnings-related pension scheme. The introduction of a pension ceiling in combination with individual supplementary pension insurance schemes may be considered. On the other hand, lowering generosity in general is probably not an option as pensions are not high in comparison to average wages.

42. The distorting effect of the pension system on labour market decisions of employees is possibly smaller in Finland than in some other OECD countries with earnings-related pension schemes. For instance, the individual approach to pensions does not discourage employment by the second earner. However, labour mobility is discouraged by the calculation of pensionable wages and, thus, benefits per each employment contract. This distortion would disappear if pensions were based on the whole working career, as suggested above.

43. In the area of health care and care for the elderly, Finnish policies appear to have been rather successful to date. While cross-country data are sketchy in this area, they provide a full range of care at a cost which is close to the OECD average. At the same time, the trend towards institutionalising the elderly has been reversed. This may partly reflect the incentives inherent in the current approach to financing the system. By limiting the financial role of the central government to providing a fungible block grant, local authorities face greater pressure to control costs, to find the best balance of institutional and non-institutional care and to improve the linkages between health and social policy more generally. However, as reported in the 1998 OECD Economic Survey, there may be some problems associated with co-ordination between care providers, which leads to an overlap of health care services supplied by various health care institutions. There is also the need for greater specialisation within the hospital system to improve efficiency and the quality of care. Similarly, despite overall guidelines for policy set at the national level, there is still a wide range of practice in care from one municipality to another. There are no steering mechanisms available to help correct these problems and increase co-ordination between the various levels of care. The recent "Social and Health Care Target and Action Programme" put in place by the government is a first step in this direction and may serve a useful purpose by providing more information on current practices.

44. Within this context, the use of user charges may require review. While the local authorities need to balance trade-offs between access to services with that of limiting unnecessary demand through user charges, the current approach, which is partly income tested, may create incentives to enter institutional care. As the need for services — such as home help and auxiliary services — increases, their cost, at some point, will be more than the cost of living in a retirement or nursing home (once additional living expenses are taken into account). Given ceilings on user charges, the full cost of long-term care is not visible to the user. One response to this dilemma is to make long-term care subject to an asset as well as an income test, thus increasing user charges on the wealthy and reducing the net cost of these services to the taxpayer. As it stands, subsidies to long-term care of the elderly normally benefit those inheriting the estate, as the assets of the individual are, generally, left untouched in the last years of life if they are in institutional care. Such policies need not imply individuals being forced to sell off their assets: the cost of care could be accumulated and liquidated at the time of the estate. The revenue potential of such policies is difficult to judge. However, it is known that close to 90 per cent of the elderly are homeowners. In considering such policies, careful attention would need to be paid to the risk that assets are transferred to heirs while the person is alive to avoid paying these costs. In any case, such policies would have to be carefully designed if they are not to have adverse effects on household saving.

45. Finally, structural reforms of the labour and product markets and the public sector that would lift labour productivity growth would ease the future financial burden associated with ageing. They would increase resources available to society and would make it possible for the young to enjoy a growing living standard while maintaining an adequate income for the increasing number of retirees.

NOTES

1. This paper was originally produced for the OECD Economic Survey of Finland, which was published in July 2000 under the authority of the Economic and Development Review Committee. The authors, who are all members of the Economics Department, would like thank the Finnish authorities, especially Jorma Tuukkanen, for the information and assistance provided; and are indebted to Andrew Dean, Jorgen Elmeskov, Mike Feiner, Peter Hoeller, Val Koromzay and Nicholas Vanston for valuable comments and drafting suggestions; to Desney Erb for statistical assistance and Valerie Luccioni-Lassaut for secretarial skills.
2. In 2035, it will be the first country in the OECD to reach its projected maximum level of the ratio of old people over those of working age.
3. This is based on Statistics Finland projections (Statistics Finland, 1998). The projections present a more pessimistic development than Eurostat (Eurostat, 1999) which assumes a slightly higher fertility rate than Statistics Finland, leading to a somewhat higher working-age population in 2050. Statistics Finland also assumes slightly lower net immigration, also leading to a somewhat lower working-age population. Finally, the slightly higher longevity rates assumed by Statistics Finland increase the ageing challenge further.
4. Pennanen (2000) reveals a social tendency for people to take retirement in their late 50s.
5. There are no official data on the effective retirement age, although the government has set the target to raise it by 2 to 3 years in the long run. Indicators differ due to different approaches (cohort or cross-section), different averages (median or arithmetic) and the way very early withdrawal of the labour market (before the age of 50) is taken into account (see also Hytti, 1999). The Ministry of Social Affairs and Health estimates the effective retirement age in 1999 at 57 years on a cohort basis and at 58 years on a cross-section basis. The Central Pension Security Institute estimates that for the earnings-related pension scheme, the average age of retirement is 57 years and the median 60 years. The Social Insurance Institute suggests that it is 60 years and the OECD estimate is 59 years for 1995 (Blöndal and Scarpetta, 1998).
6. In the projection, it is assumed that the proportion of employment in the age groups 15-24, 24-54 and 55-64 remains constant at levels in 2000. This is probably pessimistic. Female participation rates have fallen in the 1990s, and could rise again if the current rate of growth continues.
7. The national pension scheme was set up in 1937 as a pure premium-based insurance scheme with personal saving accounts. Inflation during the war period destroyed the system and after the war it became gradually a pay-as-you-go system (Lindqvist-Virtanen, 1999).
8. For a full national pension, residence in Finland or another European Economic Area (EEA) country for at least 40 years after the age of 16 is required. A shorter period leads to a proportional cut.
9. The rate is 2 per cent in the case where the depreciation on investment is less than FIM 300 000 or less than 10 per cent of the payroll. It is 4 per cent if the depreciation is above FIM 300 000 and is between 10 and 30 per cent of the payroll. It is 4.9 per cent in the case where the depreciation exceeds FIM 300 000 and is more than 30 per cent of the payroll. The current system of investment-dependent rates reduces the tax burden for labour-intensive sectors.

10. To take into account cost of living differences, two categories of municipalities are distinguished. In 2000, full national pension for single individuals is FIM 2 655 and FIM 2 542 per month in Class I and Class II municipalities, respectively. The pensions for married recipients are FIM 2 328 and FIM 2 231 respectively. Pensions are tax-exempt up to around FIM 3 300 per month.
11. In 2000, the maximum earnings-related pension for full national pension eligibility is FIM 255 per month (2 per cent of the average wage). Above this amount, the national pension is reduced by half a markka for every additional markka of earnings-related pension. However, irrespective of the earnings-related pension, all pensioners receive the basic amount of FIM 92 per month since March 2000. This basic amount has been gradually reduced since 1996 and will be abolished in 2001.
12. In 2000, the maximum housing allowance for pensioners is FIM 2 719 per month and the maximum care allowance is FIM 1 415 per month. The care allowance is intended to make it possible for pensioners with an illness or a disability to keep living at home. In 1998, both the housing allowance and the care allowance were received by around 15 per cent of pensioners (Central Pension Security Institute and Social Insurance Institution, 1999). Somewhat more than 15 per cent received the war-veteran's supplement (in 2000, FIM 225 for the standard supplement and a maximum of FIM 547 for the additional supplement).
13. There are 61 pension institutions. The pension schemes for the permanent employees in the private sector are run by six insurance companies, 42 company pension funds and eight industry-wide pension funds, with respective market shares of 81, 15 and 4 per cent, in 1997.
14. Six pension acts cover the private sector: TEL, the employees' pension act (the number of insured at the end of 1998 was 1.1 million); LEL, the temporary employees' pension act (80 000); TaEL, the pension act for performing artists and certain other employee groups (40 000); MEL, the seamen's pension act (7 000); MYEL, the farmers' pension act (115 000); and YEL, the self-employed persons' pension act (155 000). Three acts exist for the public sector: VEL, state employees' pensions act (185 000); KVTEL, local government employees' pensions act (445 000); and KIEL, Evangelical-Lutheran church pensions act (15 000). The description in this paper of the earnings-related pension system is based on the TEL scheme as it is by far the biggest and because it is the benchmark for the other schemes. Due to switches during the working career, pensioners may be entitled to pensions from various funds. However, for the private sector (and in the future also for the government sector), the pensioner will receive the total amount from the institution where the person was last insured. The Central Pension Insurance Institute settles the net payments between the pension institutions.
15. The pension scheme for central government employees is completely unfunded. The central government provides transfers to some pension schemes to have contributions and pensions comparable with those of the scheme of permanent employees in the private sector. Transfers cover around three-quarters of the pension outlays for farmers and a third for seamen and constitute an implicit subsidy to these sectors.
16. Premiums are deductible up to 10 per cent of the salary (with a ceiling of FIM 50 000) if this pension is not paid out before the age of 60 and does not lift the total pension above the 60 per cent of pensionable wage.
17. The current adjustment for the early old-age pension is therefore actuarially not completely correct.
18. Pension wealth is calculated for an individual with an uninterrupted working career since age 23. The different schemes are taken at the earliest possible time. Life expectancy is set at age 80, the average life expectancy age in Finland. The stream of pension benefits is discounted at 3 per cent. At 65 all early retirement schemes cease and an old-age pension is granted. However, pension rights accrued differ according to the scheme used to retire in the first place (Box 1).
19. The overall contribution rate is set by negotiations for a specific period. Every year, the funded components are reassessed in the light of the need to fund new pensions, and the pay-as-you-go part is

- determined by actuarial calculations. In case overall contributions are higher than pension expenditures, the residual goes to a so-called “reserve fund”.
20. In case an adjustment of the contribution rate is needed, the two rates are changed by equal amounts.
 21. Due to small differences in age composition, the variation in average rates per firm is much smaller: between 18 and 22.5 per cent.
 22. Firms may have, in any case, an incentive to substitute older workers by younger ones because older workers have a much lower skill and educational level (Forss, 1999). Moreover, salaries of older workers tend to be higher.
 23. The period spent receiving unemployment pensions is considered as early retirement, but the preceding period of unemployment (up to five years) is not and the firm does not have to pay for it and during this period will not pay the higher premiums.
 24. Microeconomic analysis shows a significant, although relatively low impact of economic incentives on the retirement probability (Hakola, 1999).
 25. This is based on calculations of the Ministry of Social Affairs and Health.
 26. Service housing is accommodation provided for the elderly which is adapted to their needs and has certain services such as cleaning, presence of nurses and meals provided on site.
 27. This figure refers to services for the elderly (OECD Social Expenditure database).
 28. There is a strong incentive not to do so, however, as the municipality is obliged to cover the deficits of the health care providers. Another reason for purchasing from local providers is support to local employment, especially in regions with high unemployment.
 29. For example, between 1990 and 1995 the number of hospital bed-days per inhabitant fell by around 40 per cent and the average length of hospital stays fell from around 10.4 to 6.6, a fall of around 36 per cent (OECD, 1998*b*).
 30. The central government also finances capital spending on health care (between 25 and 50 per cent depending on the per capita income of the municipality) and it maintains some oversight, particularly for large projects. It also provides grants to university hospitals for teaching and research.
 31. User fees for both health care and care for the elderly can vary from one municipality to another with the maximum amounts set out in central government legislation. For ambulatory care the maximum is a flat fee of FIM 120 per year or FIM 60 per visit; for outpatient care (specialist care) at a hospital it amounts to FIM 120 per visit; for hospitals the maximum is a flat fee of FIM 150 as a basic charge and FIM 135 per day for hospital care. As regards drugs, individuals pay the first FIM 50, with a certain share of additional spending paid for by the insurance.
 32. The programme also aims at integrating the issue of ageing within broader policies concerning housing and other services (such as transport, education, culture and sports) aimed at ensuring the quality of life of the elderly. In this context, better co-ordination among the various municipal services (health, social services and housing) would appear essential.
 33. The Central Pension Security Institute published long-term projections on pension expenditures for the earnings-related pension schemes (Klaavo *et al.*, 1999). The Social Insurance Institute published projections for the national pension scheme and for the national health insurance scheme (Social Insurance Institute, 1999). Finally, the Economic Council published comprehensive economic scenarios up to 2050 (Economic Council, 1999). The first two projections are the primary source drawn upon in the report.

34. The drop is also partly caused by the abolishment in 2001 of the basic amount of the national pension. This basic amount has been gradually reduced since 1996.
35. Current rules for partial funding of the earnings-related pensions are taken into account. Assets are assumed to have a real rate of return of 3 per cent. An increase from 3 to 4 per cent would reduce the increase in contribution rates to 8 percentage points.
36. This increase will be offset to a limited extent by a drop in employers' contributions to the national pension scheme.
37. The participation rate is also assumed to increase from 73 to 76 per cent in 2015.
38. Alho (1998) calculated confidence intervals for the ratio of the population aged 60 and over to the population aged 20 to 59. The 80 per cent confidence interval for the ratio in 2030 is from 0.61 to 0.79 compared with a current ratio of 0.35.
39. The national health insurance already shows a deficit excluding government transfers. The government transfer is currently 9 per cent of the health outlays under this scheme, but would rise to 16 per cent in 2020 and 14 per cent in 2050, if premiums remain unchanged (Social Insurance Institute, 1999).
40. Full funding is needed to prevent the additional contributions in the short run — due to the delay in retirement — leading to an initial drop in the overall contribution rate, thus magnifying the rise in the contribution rate in the longer run.
41. Calculations by the Secretariat suggest that the replacement rate will increase by 9 percentage points in case of an introduction of personal accounts at the age of 60 and the person working till the official retirement age of 65.
42. Other advantages are the greater individual choice concerning the timing of retirement, the simplification of the early retirement schemes (five schemes are replaced by one scheme) and a more balanced investment yield risk distribution between the younger and older parts of the population. The main disadvantage is that the system may be too harsh for those having to stop working for medical reasons at the age of 55 or slightly above. As their pension would be based on the accrued rights before the age of 55 it would be only 48 per cent of the pensionable wage.
43. Hautala and Tuukkanen (2000) estimates that a temporary increase in the contribution rate of 1.5 percentage points is necessary to introduce the personal accounts in one go for workers beyond 54 years. The increase would be negligible in the case of introduction for workers of 60 years and older as practically none of them is currently employed and therefore do not pay pension contributions. As a consequence, there is in practice no double burden problem in this case.

GLOSSARY

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|------|---|
| EEA | European Economic Area |
| EU | European Union |
| GDP | Gross Domestic Product |
| PAYG | Pay-As-You-Go |
| PES | Public Employment Service |
| TEL | Pension scheme for private sector employees |

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