Edited by Suvi Ritola & Niko Väänänen

UNDERSTANDING FINNISH PENSIONS

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To the reader

Pension provision is an essential part of our welfare society, and pensions play a role in everyone's life. When young, we uphold the system by being active in working life, thereby contributing to the financing of pensions. In our old age, we have the right to retire with the pension we have earned, while the responsibility for financing the system has passed on to younger generations. To keep the system rolling, future generations have already been assigned their roles in the arrangement.

The population in Finland is ageing and pensions are the subject of increasing interest. Despite the importance of pensions in our society, they are not very well known. The Finnish system of pension provision is unique, with no fully comparable system found elsewhere. *Understanding Finnish Pensions* presents the Finnish pension schemes and describes the security they offer to people living in Finland, how they are financed and how they are positioned in international comparison. The book is intended to provide answers to frequently asked questions. Our hope is that after reading this book, you will understand Finnish pensions.

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Niko Väänänen and Suvi Ritola

Helsinki, Finland, 8 November 2023

1. What are the key principles of pensions in Finland?

Pensions play a key role in modern society. They secure an individual's livelihood when their working life comes to an end due to ageing or disability. In Finland, all permanent residents are entitled to receive a pension at a specific age. Universal pension provision covering the entire population is a relatively new phenomenon. In the Finnish language, the word *eläke* ('pension') first appeared in its current meaning in the 1840s. Before universal pensions, getting old often meant falling into poverty and a dependency on family members and the community. The first legislative act concerning a general old-age pension was passed in Finland in the late 1930s. Today, more than one fourth of the population in Finland are pension recipients, and retirement covers a considerable part of the human life cycle.

Pensions in Finland fall under two separate schemes, namely earnings-related pensions and national pensions. The earnings-related pension scheme covers the principal pensions, whereas pensions paid from the national pension scheme are in place to ensure minimum pensions and to guarantee a minimum income to all pensioners. The Finnish pension system is mainly based on statutory pensions (also referred to as public pensions) and, unlike in many other countries, occupational

and employer-specific supplementary pensions are uncommon. Also, the role of voluntary private pensions or individual retirement savings is minor.

Back in the 1960s, social partners were actively involved in the creation of the current earnings-related pension scheme, and they continue to contribute to the development of the system. Pension reforms are normally prepared through tripartite collaboration by the Government and the social partners. The Finnish pension system has undergone several reforms over time. The most recent reforms have aimed at adapting the system to the increasing life expectancy and changing population structure. New reforms are likely to be needed also in the future. Decreasing birth rates have resulted in smaller generations, which is a challenge in terms of financing the system. Significant size differences between overlapping generations will lead to a need to reassess pension provision in the future. Future pensions will also be affected by constant changes in working life and the labour market.

Pensions as part of social security

Every individual who permanently resides or works in Finland has the lawful right to social security that is intended to safeguard their livelihood and care in all life situations.[1] An essential part of the social security is statutory social insurance. Statutory social insurance refers to mandatory insurance for certain social risks, such as old age or illness. In addition to pension insurance, other forms of social insurance include sickness, unemployment and occupational accident insurances as well as group life insurance for employees.

Some of the social insurance benefits are based on paid employment, while others are based on residency in Finland. Paid employment entitles to benefits in relation to previously earned income. In Finland, these benefits include earnings-related pensions and daily allowances, such as sickness, parental and unemployment allowances. The provision of earnings-related benefits is in line with the principle of insurance: the paid benefits should be covered by social insurance contributions, and there is a correlation between the contribution level and risk.

In the absence of other income, every individual residing permanently in Finland is entitled to receive minimum-level social benefits. These benefits include, for example, national and guarantee pensions as well as non-earnings-related minimum social benefits. There is a minimum level set for earnings-related daily allowances as well; this minimum amount will be paid even if the person has no earned income.

The minimum benefits are usually income-tested, in other words, they are only paid if a sufficient livelihood is not provided by other income. Any other income will have an impact on the amount of the benefit paid. The minimum security is financed by means of tax revenues. Different forms of support and subsidies are paid to low-income groups. Basic social assistance is the last resort if other benefits and support are insufficient.

The Finnish pension system in a nutshell

The aim of earnings-related pensions is to ensure a reasonable income level in retirement in relation to the pre-retirement work income. Earnings-related pensions accrue based on the wages or salary paid

to an employee, or the insured income of a self-employed person. The national pension and guarantee pension, on the other hand, safeguard a minimum level of pension for those pension recipients whose earnings-related pension is small due to their short working career or low level of income, or who have not accrued any earnings-related pension at all. Pensioners with a low income are entitled to receive different additional benefits, such as the pensioner's housing benefit. Pension benefits are also paid from, for example, the statutory motor liability, the occupational accident or the military accident insurance schemes.

Old-age pension secures an individual's livelihood after their working life comes to an end and they reach their retirement age. In addition to old-age pension, other possible forms of pension benefits include disability pension payable in the case of declined work ability, and survivors' pension paid upon death of a spouse or family provider. Rehabilitation benefits are intended to prevent disability and restore an individual's work ability. Pension insurance institutions are responsible for the payment of pension benefits based on the earnings-related pension scheme, whereas those pension benefits that are included in the national pension scheme are paid by the Social Insurance Institution of Finland (Kela). It is possible to receive pension from either one or both schemes.

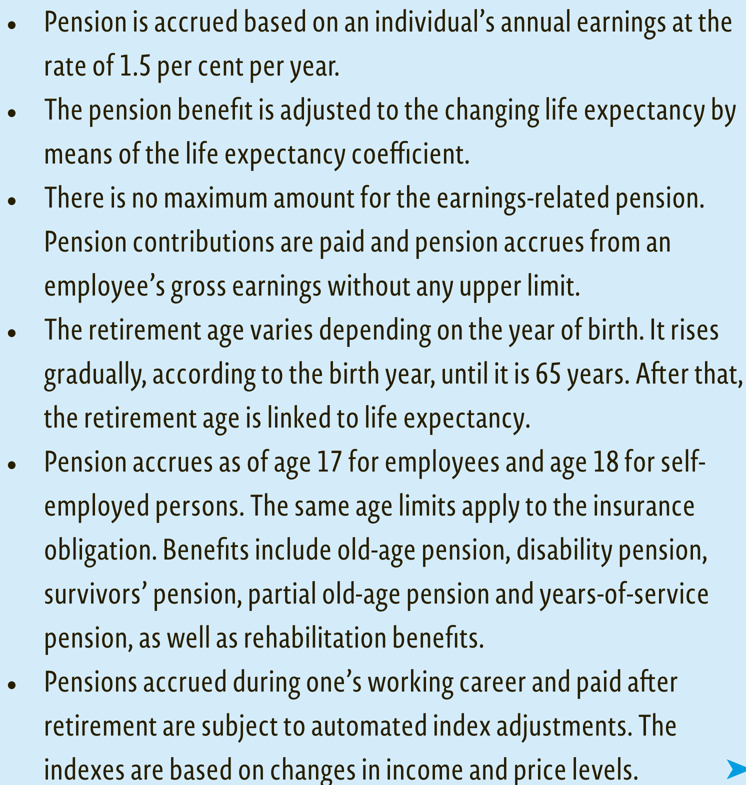
In Finland, nearly all paid work must be insured for pension. Earnings-related pensions accrue to all employees and self-employed persons whose work meet the minimum statutory requirements and whose pension contributions have been paid. Pension legislation includes separate acts for private-sector employees, self-employed persons, farmers, sailors and public-sector employees. Today, the determination of earnings-related pensions is largely harmonised in these acts.

The national pension scheme is governed by Kela, which also manages other forms of social security. The earnings-related pension scheme, on the other hand, is managed in a decentralised manner. In the private sector, earnings-related pensions are managed by various pension providers, including pension insurance companies, industry-wide pension funds and company pension funds, as well as specific pension providers for farmers and sailors. The public sector has a specific pension institution of its own. All these pension providers are responsible for granting and paying earnings-related pensions. They also offer guidance in pension matters for employees and self-employed persons who are insured by the pension institution in question.

Pension contributions are paid by employers and self-employed persons to the pension insurance institution of their choice. Despite the decentralised management of the pension scheme, the earnings-related pension accrued to an employee is granted in its entirety by the pension provider that served as the final insurer for the employee. This principle, together with the related system of division of costs between the actors involved in the earnings-related pension scheme, is internationally unique.

Since its initial stages in the 1960s, the earnings-related pension scheme for private-sector employees has been partially pre-funded. Today, approximately one fourth of pensions are paid out from the previously accumulated funds. The remaining three fourths are covered by the pension contributions collected from those currently working (the pay-as-you-go method or PAYG). For public-sector pensions, the pre-funding started later. When it comes to the pensions of self-employed persons and farmers, no pre-funding is in place. The national pension scheme is fully financed by the State.

In Finland, the number of pension recipients in 2022 totalled approximately 1.6 million, that is, around 29 per cent of the population. Roughly two thirds of them received earnings-related pension only. About one third received both national and earnings-related pension. Approximately 5 per cent of pension recipients in Finland were paid pensions solely from the national pension scheme.



Central aspects of the earnings-related pension scheme

- Pension is accrued based on an individual's annual earnings at the rate of 1.5 per cent per year.
- The pension benefit is adjusted to the changing life expectancy by means of the life expectancy coefficient.
- There is no maximum amount for the earnings-related pension. Pension contributions are paid and pension accrues from an employee's gross earnings without any upper limit.
- The retirement age varies depending on the year of birth. It rises gradually, according to the birth year, until it is 65 years. After that, the retirement age is linked to life expectancy.
- Pension accrues as of age 17 for employees and age 18 for self-employed persons. The same age limits apply to the insurance obligation. Benefits include old-age pension, disability pension, survivors' pension, partial old-age pension and years-of-service pension, as well as rehabilitation benefits.
- Pensions accrued during one's working career and paid after retirement are subject to automated index adjustments. The indexes are based on changes in income and price levels. ➤

- Accrued pension benefits remain intact when an individual stops working or the employer changes. Pensions are subject to the constitutional protection of property.
- Pensions in payment are primarily financed by means of pension contributions collected during the year in question (the pay-as-you-go method), but partly also by using the accumulated pension assets (the pre-funded system).

International classifications and the Finnish pension system

Pension systems in different countries are often categorised using the World Bank's five-pillar framework. The zero pillar refers to the means-tested minimum security for persons with low income. The first pillar refers to the basic pension arranged by the State and financed by means of tax revenues. The second pillar is the pension based on the collection of employer-specific or occupational pension contributions that are saved and invested in funds for pensions paid in the future. The third pillar is the voluntary individual pension based on personal savings.[2] The fourth pillar includes the services affecting the subsistence of an aged individual, both the formal (healthcare, supported housing) and informal (family) support services. The roles of these pillars vary from one country to another.[3]

Finnish pensions are poorly compatible with the World Bank's pillar classification. In Finland, both the earnings-related pension and national pension schemes belong to statutory pension security as intended by the first pillar. Internationally, it is common to complement statutory pensions with occupational and employer-specific pensions, which

constitute an essential part of an individual's overall pension. However, this is not the case in Finland where there is no ceiling set for the earnings-related pension: pension accrues from the employee's overall earnings, and contributions are paid for the earnings without any upper limit. The level of statutory pensions is sufficient, so there is apparently no need for supplementary pension plans.

There are two types of pension systems: those in which the pension benefits are determined in relation to the previous earnings from work (defined benefit systems) and those in which the benefits are based on the sum of contributions paid and their yield (defined contribution systems). In Finland, statutory earnings-related pensions are defined benefit pensions, which means that it is necessary to collect pension contributions to such an extent that all promised pension benefits

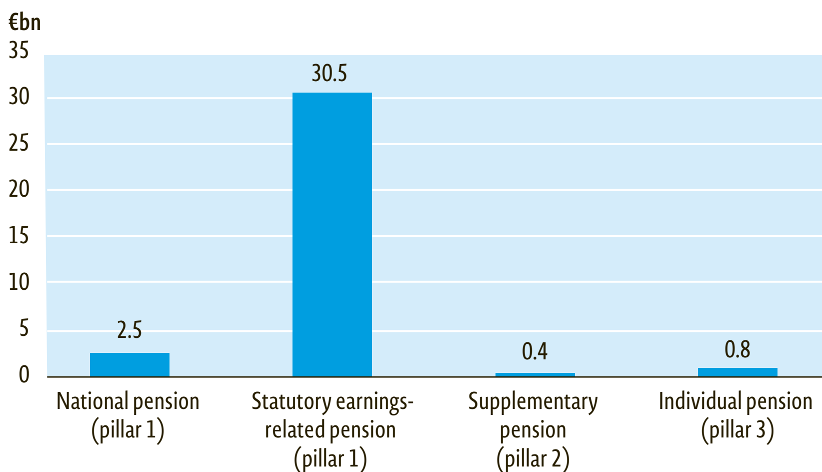


Figure 1. Pension expenditure in Finland by pillar in 2021

can be paid out. The pension benefits can only be revised through the amendment of legislation.

The pension system is an essential part of the welfare state. In social policy research, Finland is classified as a Nordic welfare state. In the Nordic welfare state model, the public sector provides universal services and other social security to which all individuals residing permanently in the country are entitled. In line with the Nordic model, everyone residing in Finland is covered by the national pension scheme and all wage-earners and self-employed persons by the earnings-related pension scheme. However, the Nordic countries differ significantly from each other in terms of the arrangement of overall pension provision.[4] For example, unlike in Finland, occupational supplementary pensions are more common in the other Nordic countries.

Target level of Finnish pensions

In general, the aims of pension policy are to provide all pensioners with a reasonable income in relation to their earlier level of earned income and to prevent poverty in old age.[5] The earnings-related pension is based on earned income during one's working life, whereas the national pension and guarantee pension safeguard a minimum income. In Finland, there are no specific criteria set out for the minimum income level but, according to the Constitution of Finland, everyone shall be guaranteed the right to basic subsistence. International human rights conventions also set limits for the level of minimum social security.[6]

In the early phase of the earnings-related pension scheme in the 1960s and 1970s, earnings-related pensions remained quite small due to the

short period of pension accrual for new pensioners. The first earnings-related pensions mostly complemented national pensions. In the private sector, the target level of earnings-related pensions for wage-earners was 40 per cent of the 'final pay' received during one's working career. Old-age pension was earned from employment relationships lasting a minimum of six months. The accrual of pension started at the age of 23 and old-age pension was paid out at the age of 65.

In the early decades of the earnings-related pension scheme, the level of benefits was low in international comparison, which generated pressure to improve and expand the benefits. This was affordable since the dependency ratio was low: the number of pension recipients was small in relation to the working population. A significant improvement in pensions was seen in 1975 when the target level of earnings-related pensions was raised from 40 per cent to 60 per cent of earnings.[7]

Through the first decades of the earnings-related pension scheme, the target level was defined in a clear-cut manner. In 1997, Professor Teivo Pentikäinen, known as the father of the earnings-related pension scheme, wrote: "After multiple trials and errors in Finland and elsewhere, the conclusion is that 60 per cent of the final pay is a suitable target for a pension." [8] This replacement rate was widely approved as the target level to be achieved after a 'full' working career of 40 years.[9]

The clear idea of a general target level for earnings-related pensions was finally blurred in the pension reform of 2005. This reform introduced a flexible retirement age and a life expectancy coefficient, which would affect the level of monthly pensions and be different for each birth-year cohort. Also, the pension was now calculated based on the earnings over the entire working life, in contrast to the earlier calculation method based on the final years of each employment relationship. Through

the reform in 2017, also the retirement age became dependent on the individual's birth year. Those born in different years can no longer reach the same level of pension with an equally long working life. The younger the generation, the more working years are required to achieve the same level of pension relative to their previous earnings, as the expected lifespan becomes longer.

Nevertheless, the basic aim of providing a reasonable pension that is in proportion to the earnings during one's working career has remained. One way of evaluating the sufficiency of the pension is to look at the replacement rate, that is, the ratio of the pension to the earlier pay level. Another method is to compare the income levels of pensioners and other population groups. In Finland, the average overall pension was approximately 1,800 euros per month in 2022. On average, old-age pension equals to approximately 50 per cent of the average earnings of those engaged in gainful employment. On an individual level, however, there is great variation in the pension levels and the subsistence of pensioners.

Pensions transform along with society

At the time the earnings-related pension scheme was established, Finland had a different population and industrial structure than it has today. In the early 1960s, the proportion of old-age population was approximately 12 per cent in relation to those in working life, whereas in the 2020s, this ratio is close to 40 per cent (Figure 2). In the 1960s, most of the population gained their livelihood from agriculture and forestry, whereas in the 2020s, most of the employed population work in the field

of services.[10] Over the decades, the earnings-related pension scheme has been reformed in response to the ageing population, the transformation of the labour market, changing family forms and economic crises.

The need to reform pension schemes arises when, for example, the development of the population structure or changes in working lives are seen to influence the development of the pension expenditure or benefit levels in the future. The future outlooks of the system are monitored by means of pension projections that facilitate the estimation of the future evolution of the pension expenditure and pension benefits. [11] In Finland, these calculations play an essential role in the design and development of pension schemes. International actors, such as the EU Commission

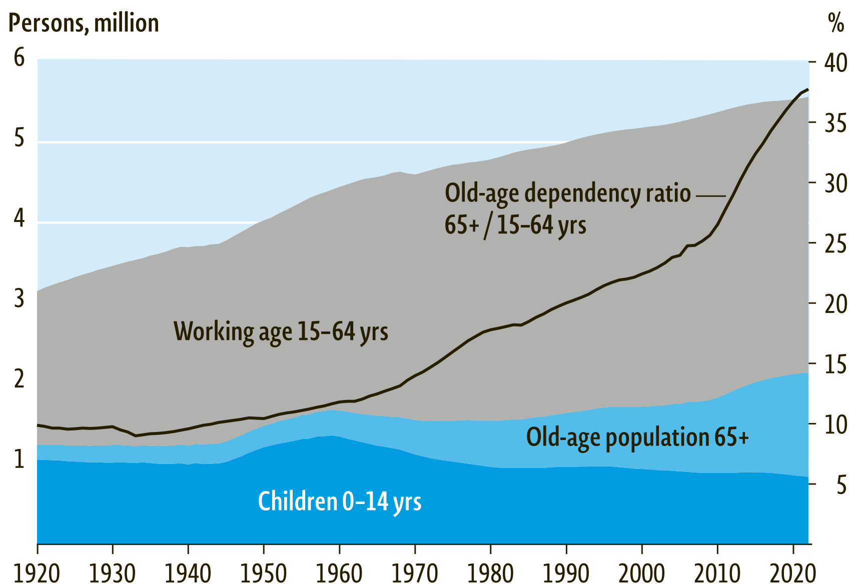


Figure 2. Population structure in Finland in 1920–2022
Source: Statistics Finland 2023a

and the OECD, also issue recommendations concerning the provision of pension security. [12] Along with changes taking place in society, needs for larger reforms or smaller revisions may become topical, for example, when raised by actors involved in the pension system or by politicians.

In Finland, the employer and employee organisations have been active in developing the earnings-related pension scheme. An agreement between social partners or a statement in the Government Programme, for example, can serve as the stimulus for initiating work towards a reform in response to the above-described needs. Amendments to pensions provided by Kela and financed by means of tax revenues, thus falling within the responsibility of the State, have usually followed in line with the reforms of the earnings-related pension scheme.

The need to reform the earnings-related pension scheme is often generated by social changes that have an impact on pension contributions or benefit levels. It is possible to respond to the growing pension expenditure by increasing the rates of pension contributions but there is a limit, because these rates affect the income available to the working-age population as well as the international competitiveness of businesses. Another way to influence the pension expenditure is to make modifications to the pension benefits. The effects of such changes usually take decades to be realised, because it is a more complicated matter to change the already earned pension rights through legislation. Rising expenditure is often a cause of concern for employers while the deterioration of benefits worries employees.

Finnish pension provision has been renewed through smaller and larger reforms over the years. However, the fundamental principles of the system have remained unchanged: the earnings-related pension is determined based on earned income and the national pension safeguards

minimum pension security. The main objective of the pension reforms carried out during the past decades has been to lengthen working lives by, for example, restricting the possibilities for early retirement and by raising the retirement ages. The most recent major pension reform became effective at the start of 2017.

As a result of the reforms, the impact of one's working life and income level on individual pensions has changed but, unlike certain other countries, Finland has not seen the development towards defined contribution system or individual accounts. Examples from other countries have raised discussions, also in Finland, about automatic mechanisms that would adjust pension benefits in response to population changes or the state of system financing. For example, the life expectancy coefficient was introduced in the 2005 reform, and the varying retirement age based on the expected lifespan of each birth cohort was taken into use in the 2017 reform.

For an individual person, any changes to the determination of earnings-related pension benefits are primarily applicable to the portion of pension that accrues after the entry into force of the reform. Usually, the changes do not concern the already accrued earnings-related pension. The reforms also often include transition periods aimed to protect the benefits of those who are close to retirement, because they would otherwise have only a minimal period to adjust to the changes. On the other hand, any changes to the level of the national pension and guarantee pension will have an immediate effect on the pensions being paid out.

2. How do pensions safeguard livelihood?

In Finland, various types of pension benefits are paid out for different reasons. Earnings-related pensions and national pensions safeguard one's livelihood as one ages or if work ability diminishes. Pensions can also be paid out to ensure a family's livelihood upon the death of a spouse or family provider. It is possible to receive a partial pension to enable an older person or one with a limited work ability to continue working part-time.

Pensioners with a low income are entitled to receive different additional benefits, such as a housing benefit for pension recipients, which can be a significant addition to their overall income. The taxation of pensions affects the amount of the net pension left in hand. It is possible to work during retirement and earn a salary or wages alongside one's pension. Any such income will also accrue additional pension.

Overall pension provision: earnings-related, national and guarantee pensions

Earnings-related pensions accrue from earned income and are intended to safeguard a reasonable income level in relation to pre-retirement employment or entrepreneurial income. The national pension supplements small earnings-related pensions, and the guarantee pension ultimately secures a minimum level of pension for all those residing permanently in Finland. The minimum pension (€922/month in 2023) equals approximately one fourth of the average salary in Finland.

National pensions are integrated with earnings-related pensions. This means that each euro of earnings-related pension reduces the amount of the national pension by 50 cents until no national pension is payable (in 2023, this occurs at an earnings-related pension level of €1,500/month). However, earnings-related pension will only begin to reduce the amount of national pension once earnings-related pension exceeds the set income limit (€61.95/month in 2023). Hence, permanent residents are entitled to national pension, but it will not be paid if a person's earnings-related pension is at a sufficiently high level. The amount of national pension is higher for those living alone than for those living with a spouse. Guarantee pension is paid if the combined earnings-related pension and national pension fall below the full amount of guarantee pension.

Figure 3 shows the amounts of national and guarantee pensions paid when the amount of earnings-related pension is 0–2,000 euros per month. Net pension refers to the amount of income in hand after taxation. A very low pension is not taxed at all, and the tax rate increases progressively along with an increase in the amount of pension.

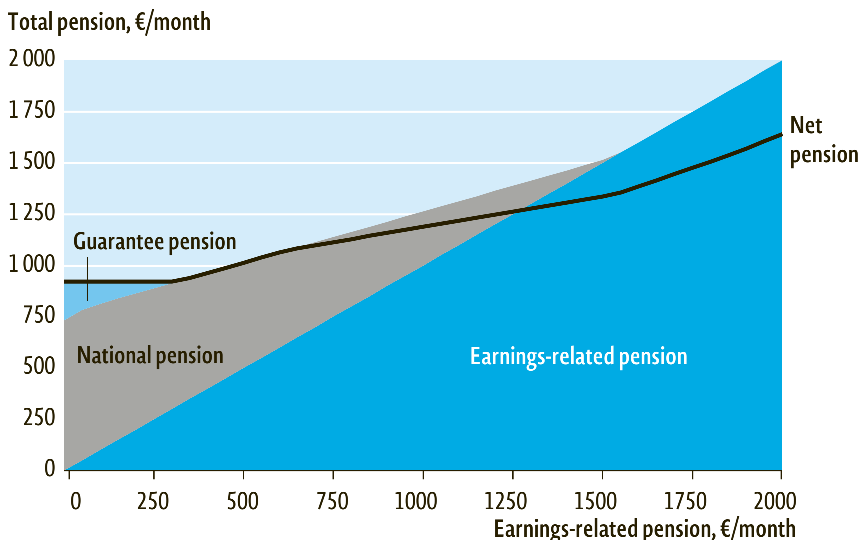


Figure 3. Earnings-related pension, national pension, guarantee pension and net pension
Source: Ritola & Tuominen 2023

Pension benefits can also be paid from statutory motor liability, occupational accident or military accident insurance schemes. The benefits paid out from these schemes will reduce the amount of national pension in the same way as earnings-related pension. National pensions are also reduced by employer-specific supplementary pensions and pensions paid from abroad. The amount of national pension is also proportioned to the duration of residency in Finland, so any time spent living abroad will reduce the national pension. Guarantee pension is reduced by all other pensions paid from Finland and foreign countries.

Pensions and continuing compensations paid in connection with statutory motor liability, occupational accident and military accident insurance schemes are primary in relation to earnings-related pensions.

This means that the amount of the primary benefit will be reduced from the earnings-related pension. Often, the level of primary benefits is higher, so there will be no earnings-related pension payable after the reduction.

Income in retirement can be improved by supplementary pensions. In Finland, these include group pension insurance arranged by the employer, individual pension insurance and long-term savings accounts. In Finland, the role of supplementary pensions has been minor in comparison to other countries, and the monetary significance is currently minimal.[13] The comprehensive security assured by Finland's statutory system means that there is less need for supplementary systems. The tax incentives, for example, for supplementary pension savings are also minimal.

Pension taxation

The final amount of pension left in hand depends on an individual's tax rate and social security contributions. Earnings-related pension, national pension and guarantee pension are all considered to be taxable income. On the other hand, small pensions are not taxed at all because of various deductions.

Generally, pensions are taxed in the same manner as wages and salaries, that is, as earned income. Understandably, no insurance contributions that are deducted from earnings, such as the earnings-related pension contributions or unemployment insurance contributions, are deducted from pensions. Pensioners are required to pay State income tax, municipal tax and public broadcasting tax as well as health care

contributions. Pensioners receiving larger pensions (more than 47,000 euros/year in 2023) are required to pay an additional tax on their pension income. Members of the Evangelical Lutheran Church and Orthodox Church also pay a church tax.

In taxation, earned income is subject to deductions that reduce the amount of taxable income and, ultimately, the amount of tax to be paid. Some of these deductions are carried out automatically. In State and municipal taxation, a specific pension income deduction is applied that reduces the amount of taxable pension income. Finally, the amount of taxable income is reduced by the basic deduction which is made after all other deductions and applies equally to salaries and pensions. Due to these deductions, no tax is paid until one receives a pension that is slightly higher than the amount of the guarantee pension.

Like statutory pensions, any supplementary pension arranged by an employer is taxed as earned income. On the other hand, voluntary private pension insurance policies and long-term savings accounts currently fall within the sphere of capital taxation. Contributions can be deducted from taxation if the supplementary pension scheme is such that the pension can only be withdrawn after the individual reaches the age when their insurance obligation ends, which, depending on the age group, falls between the ages of 68 and 70. As a result of the rise in the applicable age limit in 2013, the popularity of private pension savings decreased.

The higher the income level, the higher the tax percentage. As pensions are typically lower than earned income, taxes and other compulsory contributions payable by an individual tend to decrease upon retirement. However, when comparing pensions and salaries of equal size, the share of taxes and other contributions is lower for pension income than for

earned income, especially at lower income levels. At average or high-income levels, taxes and contributions paid from pensions are either similar or even slightly higher than those paid from earned income.

Pension calculation: accrual, life expectancy coefficient and indexes

The amount of earnings-related pension is based on a person's previous earned income. Earnings-related pension accrues at a rate of 1.5 per cent of all earned income per year from the age of 17 up until they reach the age at which their insurance obligation ends. A self-employed person's pension accrues based on their confirmed income, but only after the age of 18. As an example, one year of work with earnings of 36,000 euros will increase the monthly pension by 45 euros. At the point of retirement, the amount of pension accrued to date is adjusted using a life expectancy coefficient.

Earnings-related pension accrual with annual earnings of 36,000 euros:

€36,000 × 1.5% ÷ 12 months = €45/month

A person's final pension is comprised of all pension accrued throughout working life from income earned as an employee or a self-employed person and in accordance with the applicable acts on earnings-related pensions. The method of pension calculation has changed over the

years, and accordingly, an individual's pension accrual is affected by the calculation rules in effect during each period of work. This chapter will describe the pension calculation process in accordance with the pension reform that took place in 2017. To replace the earlier age-specific accrual rates, the reform introduced a single accrual rate across all age groups. During the transition period up until the end of 2025, pension accrues for those aged 53–62 at a higher rate of 1.7 per cent per year.

Earnings-related pensions can also accrue from certain periods of social benefits, also called unsalaried periods, such as during parental leave, sick leave or unemployment. However, pension accrues only during periods of earnings-related social benefits, so no pension is accrued during periods of, for example, the basic unemployment allowance or the labour market subsidy paid by Kela. In addition to other unsalaried periods, pension also accrues during periods of studies that lead to a qualification or degree and homecare of one's child(ren) under the age of three.

Pension that accrues during periods of social benefits is generally accrued based on the pre-benefit earnings used to calculate the benefit in question. The basis for pension accrual is 121 per cent of the pre-benefit earnings for parental allowances, 75 per cent for unemployment allowances, and 55-65 per cent for other benefits. The pension accrued during studies or care for one's child under three is calculated based on a fixed monetary amount, which is roughly one fifth of the average salary in Finland (€815 in 2023).

Working while receiving pension will accrue additional pension at a rate of 1.5 per cent of the annual earnings from work, if the person has not yet reached the upper age limit for pension accrual. No pension accrues from possible periods of social benefits that overlap with the

pension. For example, no pension accrues for periods of the parental allowance if they overlap with a period in which the individual is paid a disability pension.

Life expectancy coefficient

When the payment of earnings-related pension begins, a life expectancy coefficient is applied to the accrued pension. The coefficient will permanently affect the amount of the pension. The life expectancy coefficient was introduced in connection with the pension reform in 2005. The purpose of the coefficient is to curb the rising pension expenditure due to the extended life expectancy and to encourage people to extend their working lives beyond their retirement age. As life expectancy increases, the value of the life expectancy coefficient reduces the amount of the monthly payable pension. However, the total amount of the pension payable for the entire old-age pension period will not decrease if the pensioner lives to the age corresponding to the extended life expectancy.

The reference level for life expectancy is the level in 2009, when the life expectancy coefficient for those born in 1947 was assigned a value of one. From that year onward, the life expectancy coefficient has been determined at age 62 for each age group according to year of birth, and it will not change after the start of the pension. For example, the pension accrued for a person born in 1960 is multiplied by the life expectancy coefficient of 0.94659, which reduces the amount of monthly pension by 5.3 per cent. According to the projection in 2022, the life expectancy coefficient will reduce the monthly pension of persons born in 1970 by 7.3 per cent and that of those born in 1980 by 9.2 per cent.[14]

Life expectancy coefficient for earnings-related pension:

- Accrued pension of €2,000/month
- Birth year 1960, life expectancy coefficient 0.94659

Pension: €2,000/month × 0.94659 = €1,893/month

If a person wishes to retain the level of pension that they would have earned at their lowest retirement age without the impact of the life expectancy coefficient, they will need to defer their retirement until later. However, the life expectancy coefficient always cuts the monthly pension amount by the same percentage regardless of the age at which a person retires on old-age pension.

In addition to old-age pension, the life expectancy coefficient affects all other types of earnings-related pension: disability pension, partial old-age pension, years-of-service pension, rehabilitation allowance and survivors' pension. The life expectancy coefficient is not applied to national pensions. Since the life expectancy coefficient decreases the amount of earnings-related pension from what it would otherwise be, the person receives more national pension. Thus, for a person receiving national pension, the national pension compensates for about half of the impact of the life expectancy coefficient on earnings-related pension. For a person receiving the guarantee pension, the national pension and the guarantee pension compensate for the entire impact of the coefficient.

Pensions and accrued pension rights index-adjusted automatically each year

The aim of pension indexation is to maintain the value of the accrued pension and to ensure the purchasing power of pensions in payment. Pension indexes include the wage coefficient, the earnings-related pension index and the national pension index. The wage coefficient is used to adjust the earned income from previous work years to the level of the year in which the pension starts. Without this adjustment, the pension level would be very low, since the nominal value of earnings from previous decades does not reflect the purchasing value it would have today. In the determination of the wage coefficient, the realised change in the level of earnings has a weight of 80 per cent and the change in price level 20 per cent.

Earnings-related pensions in payment are adjusted at the beginning of each year by means of the earnings-related pension index. In this index, the realised change in the level of earnings has a weight of 20 per cent and the change in price level 80 per cent. The national pension index, used to adjust national and guarantee pensions, solely corresponds to changes in prices. Partially for this reason, national and guarantee pensions are periodically adjusted by separate decisions to prevent them from lagging behind the general earnings level. In some years, as an austerity measure, national pension index adjustments are not made at all or the index is lowered.[15]

The pension indexes are calculated in accordance with the index of wage and salary earnings and the consumer price index generated by Statistics Finland. The annual change in the indexes is calculated based on data from the third quarter (July, August, September) of the preceding calendar year. For example, in 2024, the pension indexes will be based on

changes in earnings and prices that take place from the third quarter of 2022 to the third quarter of 2023. Thus, changes in earnings and prices have a delayed impact on pensions.

	At retirement age	Weakening work ability	Death in the family
Earnings-related pension Based on earned income Payer: Earnings-related pension providers	Old-age pension Partial old-age pension	Disability and partial disability pension Rehabilitation benefits	Survivors' pension for spouse and children
	Years-of-service pension		
Kela pensions National and guarantee pension Minimum security if earnings-related pension is small Payer: Kela	Old-age pension	Disability pension Rehabilitation benefits	Survivors' pension for spouse and children

Figure 4. Pension benefits in different life situations

Pensions based on age: old-age pension and partial early old-age pension

Within the earnings-related pension scheme, a person can retire on an old-age pension once they reach their retirement age. However, simply reaching the retirement age is not grounds for terminating an employment contract. Employees have the right to continue working up until they reach the age at which their insurance obligation under the Employees Pensions Act ends. The retirement age is determined based

on one's birth year, and it rises at intervals of three months for each birth-year cohort. The retirement age is 64 years and six months for those born in 1960, 64 years and 9 months for those born in 1961 and 65 years for those born between 1962 and 1964. In the public sector, a transition period has been granted for certain retirement ages that differ from these. Only the statutory retirement age for soldiers will remain lower than those given above.

The old-age pension retirement age for those born in 1965 or later will be tied to the change in life expectancy. According to the projection in 2022, for example, the retirement age would be 65 years and 10 months for a person born in 1970, 66 years and 10 months for a person born in 1980 and 67 years and 9 months for a person born in 1990.

In terms of the national pension and the guarantee pension, the retirement age is 65 years up until it aligns with the retirement age of the earnings-related pension for those born in and after 1965. Persons born before 1962 may receive a national pension and a guarantee pension before reaching the age of 65. Early retirement reduces the pension by 0.4 per cent for each month that retirement is brought forward.

The old-age pension paid to an individual is the earnings-related pension accrued throughout their working life, multiplied by the life expectancy coefficient for the relevant year of birth. If the amount of earnings-related pension is small, a national pension or the guarantee pension may be paid to supplement it.

Employees are encouraged to retire later. If the payment of earnings-related pension is deferred beyond the retirement age, the pension will be increased by 0.4 per cent for each month of deferral. For example, a deferral of one year increases the entire amount of accrued pension

Year of birth	Lower age limit for old-age pension	Age limit for partial old-age pension	Upper age limit for obligation to insure/pension accrual
1954	63 yrs	61 (as of 2017)	68
1955	63 yrs 3 mos	61 (as of 2017)	68
1956	63 yrs 6 mos	61	68
1957	63 yrs 9 mos	61	68
1958	64 yrs	61	69
1959	64 yrs 3 mos	61	69
1960	64 yrs 6 mos	61	69
1961	64 yrs 9 mos	61	69
1962–1963	65 yrs	61	70
1964	65 yrs	62	
1965 or later	To be confirmed later	To be confirmed later	70

Table 1. Retirement age and upper age limit for earnings-related old-age pension according to year of birth

by 4.8 per cent. The increment for deferred retirement is not linked to working and has no upper age limit. In addition to the increment for deferred retirement, earnings-related pension accrues at a rate of 1.5 per cent after the lowest retirement age up until the person reaches the age limit at which the insurance obligation ends.

The national pension is increased for each month of deferral beyond the age of 65. The increment is 0.6 per cent per month if the person was born before 1962 and 0.4 per cent for those born in 1962 or later. There is no upper age limit for increments to national pensions. The increment for deferred retirement does not apply to the guarantee pension.

Increment for deferred retirement when pension is 2,000 euros/month and deferred for one year

Increment for deferred retirement: 0.4% × 12 months = 4.8%
Pension with deferral: €2,000 × 1.048 = €2,096 /month

For each birth-year cohort, the calculated target retirement age is the age at which the increment for deferred retirement offsets the reduction of the monthly pension due to the life expectancy coefficient. The idea behind this system is that, by delaying retirement, a person can increase their monthly pension to the same level as it would have been at their retirement age without the impact of the life expectancy coefficient.

Prior to the retirement age for old-age pension, a person can receive a partial earnings-related pension. The partial early old-age pension is an option at the age of 61 at the earliest. This age limit will increase to 62 for those born in 1964, and for those born in and after 1965, it will be linked to life expectancy in the same way as the retirement age for the old-age pension. This means that the age limit for the partial old-age pension will always be three years lower than the age limit for the old-age pension. Taking a partial old-age pension does not require the termination or reduction of work, and the applicant may continue to earn without any limits.

An individual can draw 25 or 50 per cent of their accrued old-age pension as a partial old-age pension. Drawing pension early reduces the amount taken early. The reduction amounts to 0.4 per cent for each

month that the retirement is brought forward. For example, a partial old-age pension taken three years before one's retirement age reduces the part taken out by 14.4 cent. The reduction of the part taken early is permanent and thus also reduces the total pension after the full old-age pension begins. The partial old-age pension can also be taken at or any time after the retirement age for old-age pension. If this pension is taken after the retirement age, an increment for deferred retirement is added to the pension.

When work ability is weakened: disability pension, rehabilitation benefits and years-of-service pension

During their lifetime, people may become ill or otherwise lose their work ability, thereby making it difficult or impossible to work. A disability pension can be granted to a person with an incapacity for work. Fixed-term benefits and partial benefits are the primary form of support for those with the potential to return to work. Fixed-term disability pension is referred to as a cash rehabilitation benefit. The assumption is that the person would be able to return to working life after the period of the fixed-term benefit. Partial benefits in this situation include partial disability pension and the partial cash rehabilitation benefit. These benefits are granted if the pension recipient is deemed to be capable of doing regular part-time work. The risk of disability can also be prevented through rehabilitation, during which the person will receive a rehabilitation allowance or partial rehabilitation allowance.

Disability pension

Disability pensions are provided by both Kela and pension insurance companies. The decision to grant a disability pension to a person working is made by the person's pension provider. If the person has not been working or has accrued a very small earnings-related pension, they are entitled to a disability pension provided by Kela. Depending on the amount of the earnings-related pension, the disability pension may be comprised of both earnings-related pension and pension from Kela. However, Kela grants no partial disability pensions. If a person's disability is the result of an occupational accident, occupational illness or traffic accident, the disability pension will be provided through the relevant occupational accident or motor liability insurance. This form of pension is primary and is reduced from the earnings-related or national pension.

The granting of disability pensions is always based on individual case assessment. The assessment includes a medical assessment as well as consideration of socio-economic factors, such as education, work history and age. Work ability is assessed based on whether the applicant is incapable to perform any work that they might reasonably be expected to perform. The disability assessment is slightly different in the public and private sector. In the public sector, the assessment is primarily based on the person's ability to cope in their current work. In the private sector, this type of occupational assessment is only carried out for employees aged 60 and older.

Disability pension can also be granted as an earnings-related pension if the work ability is weakened due to an illness or injury for a period of at least one year. The requirement for full disability pension is a reduction of 60 per cent in a person's work ability. A partial disability pension

requires a 40 per cent reduction in work ability. The cash rehabilitation benefit is a temporary disability pension that is intended for persons with an incapacity for work due to injury or illness if it is estimated that their work ability can be restored through rehabilitation. To receive the cash rehabilitation benefit, a treatment or rehabilitation plan must be drawn up for the person in question.

In most cases, the granting of a disability pension or a temporary disability benefit is preceded by long-term sick leave, during which the person has been paid a sickness allowance. The sickness allowance can be paid for a maximum of one year. The criteria for receiving the sickness allowance and disability pension are different, so the right to a disability pension does not automatically follow the end of the sickness allowance period. The decision on entitlement to a disability pension is made in co-operation with insurance physicians, lawyers and pension experts working for pension insurance companies. Sometimes this decision differs from the assessment of the attending physician.

The amount of the earnings-related disability pension consists of the pension accrued at the time of the incapacity for work and the projected pension component. It is a calculated component intended to compensate for the interruption of working life before the retirement age for old-age pension. The projected pension period is calculated based on the person's earlier earnings. The temporary disability benefit is calculated in the same way as a disability pension. The amount of the partial temporary disability benefit and the partial disability pension is half of the full disability pension.

The disability pension paid by Kela supplements an individual's income if the amount of earnings-related pension is small. Kela's disability pension is calculated in the same way as the old-age pension, which

means that each euro of earnings-related pension reduces the national pension by 50 cents. The guarantee pension is intended to safeguard a minimum pension level.

If a young person becomes incapable of working, the level of their disability pension may remain low over the course of time as they grow older. The disability pension is index-adjusted primarily based on price developments, whereby it falls behind wage developments. For this reason, the level of the earnings-related pension will be secured by means of a lump-sum increase, which is paid five years after the start of the disability pension. The full increase is 25 per cent and is paid at the maximum age of 31. For anyone older than 31, the increase is reduced by one per cent per year of age and is no longer granted if the disability pension starts in the year after the recipient has turned 50.

Rehabilitation benefits

Since the primary aim of rehabilitation is to ensure that people can remain in working life, pension insurance companies and Kela promote the ability to work through vocational rehabilitation. Forms of vocational rehabilitation may include, for example, a work trial, apprenticeship training or retraining. For those engaged in working life, rehabilitation is primarily organised by the applicant's pension provider. For others, especially young people, the primary rehabilitation provider is often Kela. A rehabilitation allowance or partial rehabilitation allowance is paid for the period of vocational rehabilitation.

When disability threatens, rehabilitation is always the first option before disability pension. The pension provider must assess the potential benefits of rehabilitation when a person is applying for disability pension.

Kela assesses the need for rehabilitation already when the person is receiving a sickness allowance. If the pension provider estimates that the applicant is likely to be at risk of becoming fully or partially disabled within five years, they will be granted the right to rehabilitation under the earnings-related pension scheme. Kela provides vocational rehabilitation if it estimates that the applicant's earnings possibilities or ability to work or study have decreased substantially.

Under the earnings-related pension scheme, a rehabilitation allowance is paid during vocational rehabilitation, the amount of which is equivalent to the disability pension increased by 33 per cent. If the rehabilitee is already receiving a disability pension or cash rehabilitation benefit, the 33 per cent increase will also be granted during the rehabilitation period. Pension providers may also pay discretionary rehabilitation assistance during the waiting and interim periods of vocational rehabilitation as well as while the rehabilitation plan is being drafted. The amount of rehabilitation assistance is equal to the disability pension. During vocational rehabilitation, Kela pays a rehabilitation allowance or partial rehabilitation allowance. The amount of the rehabilitation allowance is the same as the amount of the sickness allowance.

Years-of-service pension

Persons who have been engaged in work that requires great mental or physical effort may be eligible for a years-of-service pension. This form of pension is granted at age 63 at the earliest, and after at least 38 years of such work. Additionally, the person's work ability must be slightly weakened, but not to the extent required for disability pension. The pension provider utilizes registry data and reports submitted by

the applicant to determine whether they meet the condition for work requiring great effort.

The lower age limit for the years-of-service pension will be adjusted in accordance with the change in life expectancy for those born in and after 1965. After this, the age limit for the years-of-service pension will always be two years lower than the general retirement age of the age group in question. The amount of the years-of-service pension is the pension accrued up until the beginning of retirement without the projected pension component for disability pension.

Survivors' pension upon the death of a spouse or parent

The purpose of the survivors' pension is to safeguard the family's livelihood upon the death of a spouse or parent. The survivors' pension is paid in the form of surviving spouse's pension and orphan's pension to the spouse and children of the deceased individual. Under the earnings-related pension scheme, the surviving spouse's pension can be paid to the surviving spouse, depending on the birth cohort, for either the rest of their life or for a period of ten years. The purpose of the surviving spouse's pension provided under the national pension scheme is to safeguard at least a minimum livelihood until the spouse begins to receive their old-age pension. The children of a deceased person can be granted an orphan's pension.

The surviving spouse's pension can be paid to a married or common-law spouse, or a registered partner of the deceased individual. If the married couple has a child together, the surviving spouse's pension is paid if the spouses were married before the deceased spouse reached the age of 65. If they have no child together, the surviving spouse can get

survivors' pension if they are over 50 years old or unable to work and the marriage has lasted for at least five years. Since 2022, surviving common-law spouses are also entitled to the surviving spouse's pension if they have a child (who is under the age of 18) together with the deceased and have cohabited with the deceased spouse for at least five years.

The amount of the surviving spouse's pension paid as an earnings-related pension is based on the deceased spouse's earnings-related pension or on a calculated disability pension for those of working age. The surviving spouse's pension can be no more than half the earnings-related pension of the deceased spouse. The surviving spouse's share is determined by the number of beneficiaries (Table 2). Under the earnings-related pension scheme, the orphan's pension is paid until the age of 20. When one of the children reaches the upper age for the orphan's pension, the shares will be redistributed among the remaining beneficiaries. The total amount of pensions received by the surviving spouse and children cannot exceed the amount of the deceased person's pension. From the beginning of 2022, the surviving spouse's share of the survivors' pension can be paid to the children of the deceased if there is no surviving spouse entitled to this pension. In this case, the total amount of the survivors' pension will be distributed among the children.

Number of children	0	1	2	3	4–
Surviving spouce's pension	6/12	6/12	5/12	3/12	2/12
Orphan's pension	–	4/12	7/12	9/12	10/12
Total	6/12	10/12	12/12	12/12	12/12

Table 2. Distribution of survivors' pension under the earnings-related pension scheme

The earnings-related surviving spouse's pension is subject to a deduction based on the surviving spouse's own pension. This deduction is not made if the family has underage children. The higher the surviving spouse's own pension in relation to their spouse's pension, the lower the surviving spouse's pension. As a result of this deduction, the surviving spouse may not receive a surviving spouse's pension at all.

A surviving spouse who was married to the deceased person receives survivors' pension for the rest of their life if the surviving spouse was born before 1975 or if the spouse passed away before 1 January 2022. As a rule, surviving spouses born in or after 1975 receive survivors' pension for a period of ten years. However, the survivors' pension is always paid until the youngest child receiving the orphan's pension turns 18. A common-law surviving spouse is paid the surviving spouse's pension until the youngest child they had together with the deceased turns 18. If the surviving spouse remarries before reaching the age of 50, the surviving spouse's pension ends.

A former spouse of the deceased may also be entitled to an earnings-related surviving spouse's pension. This is quite rare, however, since it presupposes that the deceased spouse was obligated to pay alimony to their former spouse. The amount of the surviving spouse's pension for former spouses is also generally smaller, since it is calculated in a different way based on the amount of alimony.

The surviving spouse's pension provided by Kela is paid until the age of 65. Former spouses are not entitled to this form of pension. Kela initially pays the surviving spouse a starting pension (€362/month in 2023) for a period of six months regardless of their other income. The basic amount of the orphan's pension (€67/month) provided by Kela is paid regardless of other income. Kela's continuing pension for surviving

spouses and the additional amount of orphan's pension are reduced based on any earnings-related survivors' pension and other income the surviving spouse or children may have. Kela pays the orphan's pension until the age of 18 and the basic amount of the orphan's pension for students until the age of 21.

3. What is the history of pensions in Finland?

In Finland, systematic pensions covering the entire population were instituted rather late in comparison to other European countries. The first legislative act on national pensions came into force in 1939. In 1956, it was replaced by the new National Pensions Act that transformed the national pension from an individual account system to a flat-rate pension. The earnings-related pension scheme in its current form was created in the early 1960s, when the Employees' Pensions Act and the Temporary Employees' Pensions Act were enacted by Parliament. Pension coverage has been further enhanced through several reforms over the past decades.

Following the initial phases, matters related to the earnings-related and national pension schemes were advocated by several political actors with varying interests. After the major political decisions of the early years, the main structure of the system has remained unchanged. The role of the national pension changed in the 1990s because of the decision not to pay national pension to every citizen.

The overall pension system has undergone reforms from time to time. The reforms have been driven by changes in population structure and economic trends. Pension benefits have first been improved and then

again cut, the rules for pension determination have been revised and the conditions for pensions harmonised.

Pensions before the earnings-related scheme

Historically, before there was any social security system in place, the provision and care of older people and those in ill health was the duty of the family and the Church. In rural parishes in Finland, farms and estates grouped together to share the responsibility for providing for "the poor and infirm" living within the parish. This relief system continued until the late 1800s when the responsibility for the old and disadvantaged was assigned to the municipalities, that is, the newly established units of local government. In the 1800s, factory owners began to organise financial protection for their old and sick employees. On the one hand, this was attributable to the long tradition of trade or occupation-specific benefit funds and, on the other hand, it resulted from the legal obligation of masters and employers to provide for their employees. Also, new ideas were spreading from Europe concerning the characteristics of a 'good' employer.

Although several different proposals for arranging public pensions were presented in the 1800s and early 1900s, the circumstances did not favour the creation of any such system. Finland remained a predominantly agrarian country for a much longer time than, for example, Sweden.[16] In 1920, a total of 70 per cent of the population earned their livelihood from agriculture and only about 10 per cent from industry.[17] It was not a priority for policymakers to institute new forms of social security for a relatively small population of wage-earners in towns. Also, those engaged

in agriculture were already covered by certain arrangements against social risks. For centuries, the life annuity system had guaranteed retired farmers with lifelong housing and support provided by the successor to the farm.[18]

Another reason for Finland's late start in terms of pensions related to the political position of Finland as part of the Russian empire. During the period when national pension systems had already been established in other countries, such as Germany and Denmark, Finland was a grand duchy under Russian rule. The development of comprehensive social security would have required a sovereign parliamentary government.[19] Sweden was considerably ahead of Finland and implemented – as the first in the world – a pension system covering the entire population in 1913.[20]

Although the development of social security started relatively late in Finland, it was among the first nations to introduce the system of statutory occupational accident insurance in 1898, which initially covered workers engaged mainly in industrial occupations. Internationally, the construction of social security has typically started with accident insurance.

Sickness insurance was introduced much later, in 1964. Employee organisations had advocated the matter for years, but the Agrarian League found that the proposed sickness insurance system would not benefit the rural population. Employer organisations felt that sickness insurance would be too expensive, whereas the radical wing of the working population declared that minor improvements in social security would only delay the international revolution. Chancellor Otto von Bismarck, who ruled in Germany, saw social security as a means to keep

the people, especially the urban working population, content with the prevailing conditions and to prevent revolutionary activities. [21]

In the early 1900s, structural changes in the Finnish society, the civil war, the rising labour movement, various international examples and, finally, independence from Russian rule were among the causes that led to the establishment of committees that discussed the working population's social security and its development. However, the comprehensive national pension act was not passed until the late 1930s.[22]

Along with the increasing unemployment and subsistence issues that followed the depression in the 1930s, policymakers began considering improvements to the position of the working population as well as reforms of legislation related to the existing relief funds.[23] Sickness insurance was discussed as the primary target for development by a committee appointed by the Government. The committee was also tasked to present a plan for an old-age and unemployment insurance scheme. In 1935, a new social insurance committee was appointed by the Government to draw up a proposal for a pension insurance scheme that would cover the entire population. Following several years of committee work, the first act on national pensions finally entered into force in 1939.

Initially, the national pension scheme was a defined contribution system, in other words, every individual saved for their own old-age pension by paying a small contribution from their earnings; first, at the rate of 1 per cent and, since 1944, at 2 per cent of earnings. The future pension was determined based on the savings and their yield. A similar pension scheme based on contributions and their yield was already in use in Sweden.[24] The scheme also included a disability benefit as well as a minimum pension to be paid to those of limited means; both of these

benefits were financed from tax revenues.[25] Thus, the insurance principle was accepted as the basis for the act on national pensions, but with the exception of disability pensions to which the assistance principle was applied.

The first national pension scheme was not sustainable, as the real value of the pension savings crashed due to the post-war inflation. As prices kept rising, the pension paid out in cash was not worth much. It soon became evident that the national pension did not guarantee a high living standard in retirement.[26]

In Finland, there were ideological tensions between different social classes, as well as between the urban and rural population. In 1956, the political situation escalated into a general strike. In the challenging atmosphere, Parliament endeavoured to prepare a new act on national pensions that would be more sustainable. The Government proposed that national pensions be linked with individual earnings and financed by pre-funded contributions.[27] In 1956, Parliament finally decided to turn national pensions into flat-rate pensions that were financed with

Ideological principles of social security

Assistance principle	Insurance principle
• Financed with tax revenues • Redistributive • Typically, flat-rate and/or income-tested pensions • Beveridge model	• Financed with employee and employer contributions • Typically linked to earnings • Pre-funding of contributions possible • Bismarck model

tax revenues and pension contributions. The solution followed the example of other Nordic countries. The flat-rate pensions served the rural population better than the earnings-related scheme as wage-earners were in the minority. The ruling Agrarian League advocated the flat-rate system, and it was also favoured by the left-wing Finnish People's Democratic League. The Social Insurance Institution of Finland (Kela) started paying a basic pension with an income-tested additional benefit to all those eligible. The new flat-rate pensions were financed by using the existing pension funds. This process was called "the hijacking of national pensions" by Teivo Pentikäinen, who at that time served as Head of the Insurance Department at the Ministry of Social Affairs.[28]

Ideologically, the Agrarian League's motivations for the flat-rate pension scheme were based on the Beveridge model of health care and social security that originated in the United Kingdom after World War II. The model is named after Lord William Beveridge, a British economist and politician (see info box Ideological principles of social security). In time, the earnings-related pension scheme based on the Bismarck model and insurance principle has grown to play the key role in pensions in Finland. The national pension scheme providing flat-rate pensions financed with tax revenues, in accordance with the Beveridge model, has gradually become the basis of the minimum pension for those with a short working career or a low-income level.

First steps towards workers' pensions in Finland[29]

Already in the 1700s, when Finland was part of the Kingdom of Sweden, factory or farm owners were obliged to provide for their long-term workers when the workers were no longer capable of working.[30] This maintenance liability also served as the fundamental idea for assistance funds.

The tradition of occupational assistance funds, especially among craftsmen, dates to the 1600s.[31] Later on, factory owners established their own funds to provide for their employees. Membership in these factory-specific assistance funds was mandatory for workers. They paid fees to the fund, and the fund granted assistance in case of illness, disability, old-age infirmity, or death. The late 1800s was the golden era for different employee assistance funds. In addition to factory-specific funds, general workers' funds were established to provide wage-earners and their families with income security in case of illness or death. Industry-wide pension funds were also set up, especially among craftsmen.

The first act on pension and other assistance funds was enacted in 1897. In practice, these funds were run without any actuarial expertise or operational supervision. Unfortunately, the real value of the savings collapsed because of inflation caused by World War I, thereby making it difficult to pay sufficient pensions. Moreover, only a fraction of the working population was covered by these pension funds. The act on industry-wide pension funds was reformed in 1942, and the principle of fully funded liabilities became applicable.

Employers had several options available for arranging pensions for their employees. Employers could pay pensions directly from the company's cash reserves, from the assistance or pension fund, or through a group pension insurance policy from an insurance company. It was also possible for a company to establish a company pension fund; the relevant act for this was passed in 1955.

Civil servants were covered by a specific pension arrangement already in the early 1800s. In the 1920s, pensions for various employee groups in the service of the State were harmonised. Initially, the retirement age was 70 years. Later, it dropped to 65 and finally, in the 1860s, to 63, which remained as the retirement age for civil servants until the 1990s.

In the late 1800s, cities also began to arrange pensions for their officials. The city of Hämeenlinna was the first to draw up comprehensive pension bylaws for the city employees in 1908. As employers, the cities could decide on these bylaws independently, so the conditions varied between the cities.

Sailors had a pension scheme of their own already in the 1700s, but their rules were repealed in the 1930s. Pension provision for sailors was re-arranged by enacting a new Seafarers' Pensions Act, which entered into force in 1956.

Birth of the earnings-related pension scheme

Old-age security in Finland has developed step by step, and new institutionalised structures have been added upon the existing ones. The reform of national pensions in 1956 represents a different approach: the earlier institutionalised structure was set completely aside.[32] While the reform failed to link national pensions with earnings, those social partners that had supported improvements to wage-earners' pensions urged the Prime Minister to advance the development of earnings-related pensions. There was an obvious need for this since only every fifth private-sector employee was covered by employment pensions valid at the time.[33] In 1956, the Government appointed a new pensions committee, led by Teivo Pentikäinen, Department Head at the Ministry of Social Affairs and Health. The members of the pensions committee included representatives from the major labour market organisations, the Central Union of Agricultural Producers and Forest Owners and of the political parties (the Social Democratic Party, the People's Party of Finland and the Agrarian League). [34]

The 1950s was an era of great ideological competition. The situation was politically challenging, and the governments changed frequently. Political parties and interest organisations suffered from internal splintering. Questions about retirement age, minimum age for pension accrual, pension level targets or the coordination of the earnings-related and national pensions were among the debated topics.

However, most pension committee members supported the idea of earnings-related pensions being managed in a decentralised manner rather than solely by the Social Insurance Institution of Finland (Kela). [35] The employers wanted the system to be managed by private pension

companies. They also wanted employers to have the right to take a contribution loan, that is, to borrow back part of the paid contributions. The employees' main interest, on the other hand, was to have a system financed by employers that would safeguard the workers' income level in retirement. They also wanted that an individual's pension rights should remain intact regardless of workplace changes. [36] A specific institution, currently known as the Finnish Centre for Pensions, would be established for the coordination of the system and its operation.

In its report, the committee presented a plan for earnings-related pensions that was largely based on the principles of the Seafarers' Pensions Act from 1956 and the Act on Company Pension Funds from 1955. The proposed accrual rate for earnings-related pensions was 1 per cent during the initial period of 30 years, and the proposed accrual age was between 25 and 65 years. In terms of financing the pension scheme, the committee recommended a system based on full funding, meaning that all future pension rights would be pre-funded.

At the turn of the 1960s, there was strong opposition prevailing between the rural population and the labour movement. The Minister in charge of the matter represented the Agrarian League and was unwilling to give Parliament a proposal for earnings-related pensions based on the committee work. Several parliamentary motions for an earnings-related pension scheme were submitted. The first one, submitted by a Social Democrat Member of Parliament, Veikko Kokkola, finally served as the basis for legislation. It was largely in line with the proposals of the committee. The employees' pensions acts for the private sector were enacted by Parliament on 8 July 1961 and entered into force on 1 July 1962.

Central aspects of the Employees' Pensions Act of 1961:

- Earnings-related pension corresponds to a maximum of 40 per cent of the earnings of the final year of employment.
- Pension accrues at the rate of 1 per cent of the annual earnings per year.
- The retirement age is 65 years.
- Employees are insured from the age of 18 but the old-age pension starts to accrue from the age of 23.
- Employment relationships that last for at least six months fall within the scope of the Act.
- The benefits include old-age pension and disability pension.
- Index adjustment is based on wage development.
- Pension benefits remain intact.
- Pensions are financed by partial pre-funding.

Since its initial stages, the coverage of pension legislation has expanded, and pension schemes have been reformed through tripartite collaboration between the social partners and the State. Originally, only old-age and disability pensions were included in the acts on earnings-related pensions in 1962. Soon after, the lack of survivors' pensions to be paid upon the death of a spouse or family provider was raised as an issue. The debate was boosted by comparisons with other countries where survivors' pensions were paid to orphans and surviving spouses. Survivors' pensions were added to the earnings-related pension scheme in 1967 and to the national pension scheme in 1969.[37]

Teivo Pentikäinen
Source: ETK photo archive

Professor, Actuary Teivo Pentikäinen (1917–2006) played a key role in the development of the Finnish earnings-related pension scheme. He graduated with a M.Sc. degree in Mathematics from the University of Helsinki in 1944 and earned his Ph.D. in Applied Mathematics in 1947. During 1948–1961, Pentikäinen served as Head of the Insurance Department at the Ministry of Social Affairs. He was a central figure in the Pension Committee appointed to plan the new earnings-related pension scheme. Pentikäinen was the Managing Director of Ilmarinen Mutual Pension Insurance Company in 1962–1977.

Farmers and other self-employed persons were included within the sphere of statutory earnings-related pension insurance in 1970. One half of farmers' pensions would be financed by the State, as advocated by parties representing the rural population. This was the outcome of the tug-of-war between the earnings-related and national pension schemes throughout the 1960s.

In the mid-1970s, a significant improvement to earnings-related pensions was seen as the accrual rate increased retroactively from 1 per cent to 1.5 per cent and the target level of earnings-related pensions was raised from 40 to 60 per cent of the pre-retirement salary or wages. In 1977, pension indexation was impaired by changing over from the index based on wage developments to a combined index in which changes in earnings and prices carry equal weight.

The national pension scheme was radically reformed in the 1980s. The national pension became a non-means-tested minimum pension payable to every individual residing in Finland. It was comprised of a basic flat-rate component for all, and an additional component for those whose earnings-related pension remained minimal.

Changing roles of national and earnings-related pensions

Earnings-related pensions are aimed to ensure a reasonable income level in retirement in relation to the pre-retirement work income, whereas national pensions and guarantee pensions paid by Kela safeguard a minimum pension level for individuals whose earned income was low. Pensions paid by Kela and earnings-related pensions are provided from different schemes that vary in terms of their old-age retirement ages

and types of pension. The national pension scheme has followed the reforms of the earnings-related pension scheme and, as a result of the 2017 reform, the retirement ages will be unified in the future. In 2022, changes were made to survivors' pensions, which were largely identical in the earnings-related and national pension schemes.[38]

Earnings-related and national pensions are governed and regulated under separate schemes but with an intent to coordinate them with each other. Their roles have changed over time. Historically, the national pension scheme and earnings-related pension scheme have been rivals because they were driven by political actors with different interests. National pensions developed already at an early stage from defined contribution and earnings-based pensions to flat-rate pensions, thus paving the way for the current earnings-related pension schemes. Over time, the benefits of the earnings-related pension scheme have improved gradually, and the number of pensioners increased steadily over time and the system matured.[39]

National pensions saw improvements in the 1980s. The national pension was no longer an income-tested benefit, that is, the spouse's income and any other earnings apart from pensions did not affect the amount of national pension anymore. Like earnings-related pensions, national pensions became taxable income, which, in part, facilitated the integration of the schemes. As a result of various tax deductions, however, the pension remained non-taxable for those who only received national pensions, as is the case even today.[40]

During the depression in the early 1990s national pensions were adjusted so that they no longer were paid to all citizens but only to those who receive no or only a small earnings-related pension. The gradual abolition of the non-earnings-related, flat-rate basic amount of the

national pension in the late 1990s closed the discussion on the different roles of the pension schemes.[41] Previously, a certain amount of national pension was paid to all pensioners regardless of their earnings-related pension. As a result of the reform, the number of pensioners receiving a national pension gradually declined.[42] The abolition of the basic amount aimed at reducing pension expenditure during the depression in the 1990s. The purpose of national pensions is to safeguard a minimum pension provision, and it was found that this purpose did not require paying a flat-rate basic amount to all pensioners regardless of their other income.[43]

Guarantee pensions were introduced in 2011 to establish a new minimum pension level in Finland. The aim was to raise the income level of pensioners with the lowest income and to safeguard subsistence for those who are ill or disabled from childhood. Along with the guarantee pension, the amount of minimum pension was no longer dependent on the spouse's income: unlike the national pension, the level of the guarantee pension is the same for single persons and those living with a spouse.[44]

The guarantee pension has also facilitated a more accurate allocation of improvements to those with the lowest pension income. Whenever the benefit levels of national pensions are raised, the impacts extend to the higher income levels as well as to recipients of earnings-related pensions, thereby increasing the number of national pension recipients. Since the introduction of the guarantee pension, the raises to the lowest pensions have only affected guarantee pension, except for the year 2020 when benefit levels were raised both for national and guarantee pensions.[45]

The integration of national pensions and earnings-related pensions continues to be a problematic issue, especially in terms of the incentive to

work.[46] Any earnings-related pension will reduce the amount of national pension paid to an individual, while the guarantee pension is paid to everyone, even those without a work history. It follows that especially self-employed persons may be put off setting their income for their pension insurance at a proper level. Low-income persons may also find it unprofitable to work more since their national pension will be reduced if they accrue a higher earnings-related pension. In addition, pensioners' housing benefits and taxation also affect pension recipients' income level.

Routes to early retirement

The earnings-related pension scheme was expanded by adding benefits related to early retirement, namely the unemployment pension in 1971 and the early old-age pension, the individual early-retirement pension and the part-time pension in the late 1980s. To smooth out individual and occupational differences, it was deemed necessary to offer possibilities to retire before the general retirement age.[47] This resulted in a rather long period in Finland when people very often retired early, and only a small number of people continued working full-time up until the old-age retirement age.

Originally, discourse on various routes to early retirement and the retirement age in general was motivated by concerns about the livelihood of the older population. The underlying causes of subsistence difficulties included the older generation's wartime service on the front, physically heavy occupations and the structural shift from an agrarian Finland to an industrial or service society. In the private sector, the retirement age was set at 65 and, in comparison to the occupational retirement ages

applicable in the public sector, more flexibility was desired. International examples, such as the part-time pension and the flexible retirement age in Sweden, also put pressure on creating early-retirement routes.[48]

Persons who had been unemployed for a long period of time could retire on an unemployment pension at age 60 via the unemployment pathway to retirement. In practice, an ageing longer-term unemployed person continued receiving the unemployment allowance after the maximum 500 days until the start of the unemployment pension. The unemployment pension then continued until the general old-age retirement age.[49]

In the 1980s, unemployment pensions were used as a practical tool for employment and structural policies, and for businesses it offered an

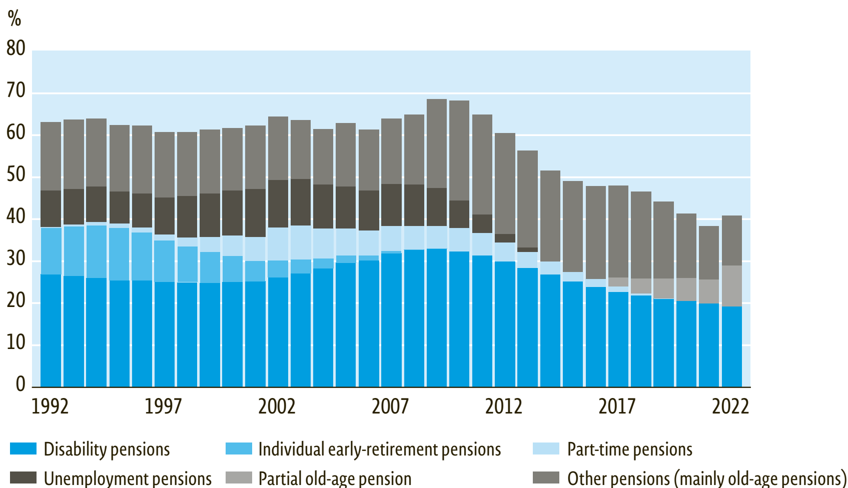


Figure 5. Share of pension recipients aged 55–64 years of the matching-age population in 1992–2022
Source: Finnish Centre for Pensions 2023b, Statistics Finland 2023a

attractive option for restructuring. At its lowest, the minimum age for the unemployment pension was 55, but one could get on the pathway to retirement already two years earlier, at the age of 53, voluntarily or involuntarily. The changes to age limits and the structural shift in industries contributed to the increase of unemployment pensions. The share of persons on unemployment pension among those aged 55–64 saw a nearly tenfold increase in the years 1979–1984. At the end of this period, a total of 9 per cent of them received an unemployment pension.[50]

Later, the criteria for receiving the unemployment pension were tightened, and as part of the pension reform in 2005, the option for unemployment pension was abolished for those born in or after 1950. The pathway to early retirement remained, however, as the unemployment pension was replaced by the right to an earnings-related unemployment allowance payable up until the retirement age. Entitlement to additional days of unemployment allowance provided an individual with the opportunity to retire on an old-age pension at the age of 62 without a reduction in the amount of pension. The age limit of additional days was raised gradually, until the right to continue on unemployment allowance up until retirement was abolished for those born in or after 1965. This decision aimed at improving the employment of the ageing population.[51]

The individual early-retirement pension was introduced in the private sector in 1986. It served as one type of disability pension, but the disability-related criteria were less strict than those for the actual disability pension. Initially, the lower age limit for the individual early-retirement pension was 55. Parliament approved this low age limit despite general expectations and criticism from the employer organisations.[52]

When the individual early-retirement pension entered into force, it was estimated that about 11,000 individuals in the private sector would

be receiving an individual early-retirement pension within five years. In fact, the number amounted to 35,700 at that time. Within ten years, a total of 52,000 persons were receiving an individual early pension.[53] These figures and the experts agreed: it was rather easy to get an individual early-retirement pension. By the year 2000, the lower age limit for the individual early-retirement pension was raised gradually to 60. As of 2003, the option for the individual early-retirement pension was included in the disability pension scheme, thus facilitating the granting of disability pension with less strict criteria at the age of 60.

The early old-age pension was launched to provide individual flexibility in terms of retirement. It was possible to retire on a reduced early old-age pension at the age of 60, whereas the general old-age retirement age was 65. Starting from 2005, the minimum age limits were 63 for the earnings-related and 65 for the national old-age pension, and the right to early old-age pension started at the age of 62. As of 2013, those born in or after 1951 were no longer entitled to an early old-age pension. However, within the national pension scheme, those aged 63–64 still had the right to the early old-age pension.

The part-time pension was introduced in the earnings-related pension scheme as one route to early retirement in the late 1980s. It facilitated gradual retirement after the age of 60 in the private sector or 58 in the public sector. The idea was to enable people to slow down toward the end of their working life by reducing work input and preparing themselves for retirement. The criteria for receiving the part-time pension were strict in terms of the individual's work history and reduced work input.

The popularity of the part-time pension remained low for a long time but grew in strength during the depression in the 1990s. As a rule, the decision-makers hoped that, in the short term, part-time pension could

alleviate the large-scale unemployment that prevailed at the time. To make the part-time pension more attractive, the age limits were lowered and the criteria were modified so that taking the pension would not reduce the amount of the future old-age pension.[54] The age limit for part-time pension was 56 at the lowest but, starting from 2003, the age limit was raised gradually. Finally, in the pension reform of 2017, the part-time pension was abolished for those born in or after 1956 and replaced by the partial old-age pension.

The part-time pension was subject to criticism. The system was considered expensive since people could accrue pension by reducing their amount of working. The system was difficult to implement in practice because of the strict conditions for granting the part-time pension. Employer organisations were dissatisfied with the part-time pension system, whereas the employee organisations defended it and stressed its positive effects.[55]

The expansion of pension benefits was followed by the need to harness expenses.[56] The trends of globalisation, ageing populations and weakening dependency ratios resulted in changed future scenarios. In the 1990s, Finland fell into a deep depression. In this environment, the curbing of the expenditure became an essential aspect of pension reforms. The goal was to extend working lives with the abolition of early-retirement benefits as the primary method.

The social partners have emphasised flexibility and the consideration of differing situations as important aspects of the earnings-related pension scheme, especially at times when the statutory retirement age is raised. The aim of the partial old-age pension, which replaced the part-time pension in 2017, was to offer more flexible opportunities for combining partial retirement and work.[57] The idea was to enable

individuals to lighten their workload and continue longer in working life.[58]

The partial old-age pension is designed to be neutral in terms of financing. In other words, the built-in reduction for early retirement is assumed to cover the cost of the pension paid prior to the old-age retirement age. The option of a partial old-age pension has proven to be rather popular, and it is often taken immediately after reaching the lower age limit of 61. Each year, one in ten of those reaching the lower age limit have taken out the partial old-age pension.[59] In 2022, the popularity peaked, as those who opted for the pension gained from the exceptional index development due to high inflation.[60]

Taking out the partial old-age pension appears to correlate with early retirement on an old-age pension. According to research, those who have taken the partial old-age pension also more often retire on the old-age pension as soon as they are eligible for it, as compared to those who do not opt for the partial old-age pension. Also, the partial old-age pension is more popular among those who expect themselves to live a shorter life. [61]

The 2017 pension reform also introduced the years-of-service pension as a means for more flexible retirement. As the retirement age increased, those employees and self-employed persons who had done strenuous and wearing work for a long time were given an opportunity to retire before their old-age retirement age.[62] The years-of-service pension has not attracted any large number of people. Initially, it was possible to advance retirement only by a few months when the age limit for the years-of-service pension was 63 years and the old-age retirement age started to rise from 63 years upward. Along with the gradually rising

old-age retirement age, the age limit for the years-of-service pension will be two years lower than the age limit for the old-age pension.[63]

From the very beginning, the pension benefits have included the disability pension, which will safeguard livelihood when an individual's ability to work is weakened for a long period of time. Following the depression in the 1990s, accrual rates were changed, which also impacted the level of disability pensions. The reform in 2005 introduced the life expectancy coefficient, and the applicable index was changed, which had a negative effect on the index adjustment of pensions in payment. A lump-sum increase paid after five years of pension payment as well as the improvements made in 2010 to the accrual rates of the disability pension will compensate for this development for younger disability pension recipients.

The changes made to the level of earnings-related pensions have decreased the disability pension levels from the 1990s onwards. As a counterbalance to these impairments, several factors, including Kela's benefit increases, the abolition of municipality-specific benefit levels and the introduction of the guarantee pension, as well as the lightening of taxation for pension recipients, have improved disability pensions since the 1990s.[64]

Increased investments in the maintenance and restoration of people's work ability have been a major development trend in terms of pension security. The role of rehabilitation has significantly grown since the rehabilitation reform in the 1990s. The option of combining the partial disability pension and part-time work has also become more prevalent than before. [65]

Similar rules for all: harmonisation of the schemes

Already in the 1960s, the pension system was criticised for being too complex. The overall system was governed by a number of acts on earnings-related pensions with differing rules for the private and public sector. Legislative consolidation was a topic of discussion for years, and finally, in 2007, the three private-sector acts on employees' pensions were united to form the current Employees Pensions Act.[66] In 2017, the acts on local government, State and Church pensions were united into the current Public Sector Pensions Act.[67]

Measures to harmonise the pensions under various acts have been taken over the decades. Today, earnings-related pensions are determined in a similar way both in the private and public sector. Before the 1990s, the harmonisation mostly meant improving private sector benefits to match public sector benefits. During the years of depression in the early 1990s, however, the level of public sector pensions was brought down to the level of private sector pensions.[68]

In the 1960s, under the Employees' Pensions act, pensions accrued at the rate of 1 per cent and the target level for pensions was 40 per cent of pre-retirement earnings. In contrast, those in State or local government service earned a pension that corresponded to 66 per cent of their earnings after 30 years of service. The annual accrual rate for basic and supplementary pensions was thus 2.2 per cent. In 1993, the accrual rate was reduced to 1.5 per cent, the target level of pensions to 60 per cent and the old-age retirement age to 65 years in line with private sector pension legislation.[69] Throughout the reforms, efforts have been made to retain the earned benefits of those who have uninterruptedly worked within the public sector. Up until the 2030s, there may still be individuals

with a long career in the public sector who have a higher pension accrual and an individual or occupational retirement age that deviates from the general retirement age.

Before 2005, there were varying rules for the determination of pensions within the private sector as well. For example, under the main pension act for employees, the pension was calculated based on the final ten years of each employment relationship, whereas for those with short-term work contracts and the self-employed, the pension was calculated based on the individual's earnings throughout their working life. Because of the so-called one-year rule in the main pension act for employees, any interruptions shorter than one year did not affect the individual's pension accrual, whereas those insured under the other pension acts did not earn any pension during, for example, a maternity leave.

Longer lifespans: aiming for later retirement

Since the turn of the millennium, pension reforms have aimed for longer working lives. Because life expectancy has increased, it is assumed that part of the longer lifespan must be used for working. In addition to cutting down the various early retirement options, an essential method for extending working lives is to raise the age limits for retirement. In addition to the retirement age, however, there are many other factors that influence retirement, including individuals' ability to work and maintain that ability, economic and employment trends in society, or quality issues in working life. Individual decisions are also affected by how much people value the leisure time facilitated by retirement.

The general old-age retirement age at 65 years was valid from the beginning of the earnings-related pension scheme until the year 2005. In the pension reform of 2005, the retirement age for the old-age pension was reduced to 63 years. The concept of a flexible retirement age was introduced to encourage people to work longer, and the accrual rate was raised to 4.5 per cent for those aged 63–67 years.[70] Later on, it has been estimated that the accelerated accrual rate did not particularly motivate people to continue working after reaching the retirement age.[71] Nevertheless, the pension reform in 2005 resulted in longer working lives because more people continued working until they reached the old-age retirement age. This development was mostly the result of the abolition of the early routes to retirement. At the same time, the number of new disability pensions among the ageing population declined as it was possible to retire on an old-age pension already at age 63.[72]

The pension reform of 2017 included a decision to raise the retirement age gradually for each birth-year cohort. Thus, the retirement age of 65 years will be resumed for those born in 1962–1964 and, for the following birth cohorts, the old-age retirement age will be linked with changes in life expectancy. The intention is to maintain the ratio between the periods of retirement and working at the same level as in 2025. The principle of a flexible retirement age, with a range of five years, remained in the reform of 2017. For both the obligation to insure and pension accrual, the upper age limit will also rise, but in full years of age. Accordingly, the duration of the flexibility period will vary depending on the year of birth. For the time being, the obligation to insure ends at 70 years at the latest, but in the future, it may increase along with the rise of the retirement age for the old-age pension.

The higher pension accrual rates were intended to attract people to postpone their retirement, thus representing the carrot approach. The stick, on the other hand, is the life expectancy coefficient, which was introduced in the 2005 pension reform; it will cut the amount of monthly pension as a result of the extended life expectancy. The pension may be small if a person decides to retire immediately when reaching the retirement age. However, the intended idea did not work in practice, and the cutting of pension levels did not lead to a sufficient extension of working lives. As a result, pensions were estimated to decrease too much in the future. Due to the 2017 pension reform, the impact of the life expectancy coefficient will be alleviated when the retirement age is linked with life expectancy as of 2027.

The reform in 2017 also introduced the concept of a target retirement age. The target retirement age refers to the age at which the calculated increment for deferred retirement after the earliest possible retirement age is equal to the decrease in pension due to the life expectancy coefficient. The idea is that by postponing retirement until the target retirement age, one could compensate for the cut of pension caused by the life expectancy coefficient. The role of the target retirement age is mostly psychological.

In the public sector, the retirement age rises primarily in the same way as in the private sector. The lower individual and occupational retirement ages in the public sector since the 1990s remain valid for a transition period after the 2005 reform, but with the 2017 reform, occupational retirement ages will rise.[73]

Unlike the retirement age of the earnings-related pension scheme, that of the national pension scheme is 65 years. Both schemes will have the same retirement age as of those born in 1965 and later.

From final salary pension to career average

Factors influencing the level of earnings-related pension include the determination of earnings that serve as the basis of the pension, the pension accrual rate, the life expectancy coefficient and the indexation rules. Also before the 2005 reform, the amount of pension was limited to a maximum of 60 per cent of the highest salary or wages paid to an individual during their working career.

The calculation rules have undergone several changes over the decades, usually in connection with a larger reform. From the viewpoint of the individual, the amount of the future pension is determined in accordance with the various rules valid throughout the course of one's working career, and the rules are not normally amended retroactively. Thus, the earnings-related pension is comprised of amounts that have accrued according to different rules at different times. For instance, before 2005, no pension was accrued from work carried out under the age of 23, but since 2005, pension has accrued as of age 18. The change in 2005 was not retroactive but only concerned younger generations.

The amount of earnings-related pension is based on an individual's earned income. Earlier, only the earnings of the final years of each employment relationship were taken into consideration in the calculation. Gradually, the basis for calculation changed from the final 2–4 years' earnings to the average earnings over a period of 10 years. Finally, the reform in 2005 introduced the current calculation method based on career average earnings. On the other hand, for the self-employed and some short-term employees, the pension calculation has always been based on career average earnings.[74]

When pension accrual became based on career average, the accrual also started from the age of 18 instead of the former 23 years. The age of 23 was viewed as unjust in, for example, blue-collar occupations where people started working at a young age. The age limits for the obligation to insure and for pension accrual were also controversial; employees had to be insured from the age of 14 onwards but they started accruing their old-age pension at age 23.[75] However, in case of disability, it was possible to qualify for a disability pension even before the age of 23.

A pension calculation method that considers an individual's entire working career was viewed as being a fairer solution while also offering a way to simplify the earnings-related pension system.[76] The old calculation method favoured long-term employment relationships in which the level of pay peaked during the final ten years. The method was unfavourable for those whose working career was comprised of shorter employment relationships or who had received their highest earnings at a younger age.[77] The method benefitted the highly educated, in particular.

Changes have also been made to the determination of the pay that serves as the basis for the calculation. For example, in the years 1996–2016, the calculation of pension was not based on full gross earnings but on the amount left after the deduction of the employee's pension contribution. Starting from 1993, a share of the earnings-related pension contribution was collected from the employees, which reduced their available income and, once they retired, they would experience a smaller decline in their net income. With the intention to maintain the same level of difference in net income at retirement as before the introduction of the employee contribution, the earnings serving as the basis for calculation were reduced by an amount corresponding to the employee's share of

the contribution.[78] In the pension reform of 2017, the earlier calculation method based on gross pay was resumed to support the goal of providing equal accrual of pension at different ages.

The accrual rate of earnings-related pension has played an essential role in the determination of its target level. Initially, as pension accrued at a rate of 1 per cent of the earnings, the pension accrued by an individual in 40 years equalled 40 per cent of the earnings. In 1975, the accrual rate was raised to 1.5 per cent, and the target level for earnings-related pension was increased to 60 per cent of the earnings. Unlike other pension reforms, this increase applied retroactively, in other words, pensions accrued earlier were increased correspondingly.

The general accrual rate has remained at 1.5 per cent but, at times, higher rates have applied to older private and public sector workers as well as to sailors. In 1994, the accrual rate was raised to 2.5 per cent for those aged 60–64 years. When the flexible retirement age was introduced in connection with the 2005 pension reform, higher accrual rates were set for older individuals to encourage them to continue working (1.9% for those aged 53–62 and 4.5% for those aged 63–67 years). At the same time, the rule of limiting the earnings-related pensions to 60 per cent of a person's highest earnings was abolished. This ensured that the higher accrual rates would not become ineffective but would instead encourage people to continue working.

In 2017, one of the aims of the pension reform was to equalise pension accrual at different ages. After a transition period, the age-linked accrual rates were abolished. Problems related to the use of varying accrual rates had been discussed already after the 2005 reform. In 2013, Professor Nicholas Barr stated in his expert report on the Finnish pension system that the higher accrual rates during the final years of one's working career

favour those with higher income and that it might be justified to increase the accrual rates applied at the earlier stages of the working life. This would take better into consideration blue-collar workers who often start their working life at a young age.[79]

In 2017, the higher accrual rates were replaced by the increment for deferred retirement. The increment (at 0.4% for each month that retirement is postponed) is calculated based on the already accrued pension as a whole, whereas the accrual based on the higher accrual rates were tied with the person's income level in older age. Thus, the increment for deferred retirement is more favourable for those whose pension is high in relation to their pay in the final years of their working life. The increment for deferred retirement was considered a more appropriate actuarial method for calculating an increase based on the postponed take-up of the pension benefit.

Accrual of earnings-related pension during unsalaried periods

Individual working careers may be interrupted for various reasons, such as unemployment or family leaves. Already in the late 1960s, the impact of periods of unemployment on an individual's pension was raised as a topical issue, especially in the fields where short-term employment relationships are typical. As a result, the social partners agreed on an unemployment supplement. According to the agreement, the members of an unemployment fund would accrue pension during the period of unemployment roughly at the same level as for their employment.[80]

Before the 2005 pension reform, the rules concerning pension accrual based on social benefits were incoherent. For example, during periods of

child-care, study or job alternation leaves, pension accrual depended on the earnings-related pension act under which the individual was insured. According to previous legislation, pension accrual was not interrupted for a person with an employment relationship if the unsalaried period lasted for a maximum of one year. During periods of unemployment, training or rehabilitation, the accrual of pension also continued in the form of an earnings-related pension supplement.

The significance of interruptions in one's working career was reduced by the fact that only part of the working years was included in the pension calculation since the years with the lowest income were omitted. Once the pension calculation method was changed to be based on the earnings throughout one's entire working career, any interruptions were reflected directly in the pension. Thus, the role of pension accrual during unemployment, child-care leaves or other interruptions in the working career became more significant in terms of pension accrual.

In 2005, the rules for pension accrual during unsalaried periods were harmonised. The same rules were now applicable to all recipients of social benefits. The reform was designed to advance equality among employees working in different sectors, harmonising and simplifying pension accrual particularly during family leaves. Moreover, pension started to accrue for studies leading to a degree and periods of the child home care allowance while caring for one's child under three at home.

Pension accrual during military service was also included in the discussions on pension accrual for unsalaried periods. The age limit for pension accrual was lowered from 23 to 18, which is under the typical military service age. Possible pension accrual during military service was investigated, as requested by Parliament, but it was not included in the reform. The decision was motivated by the view that earnings-related

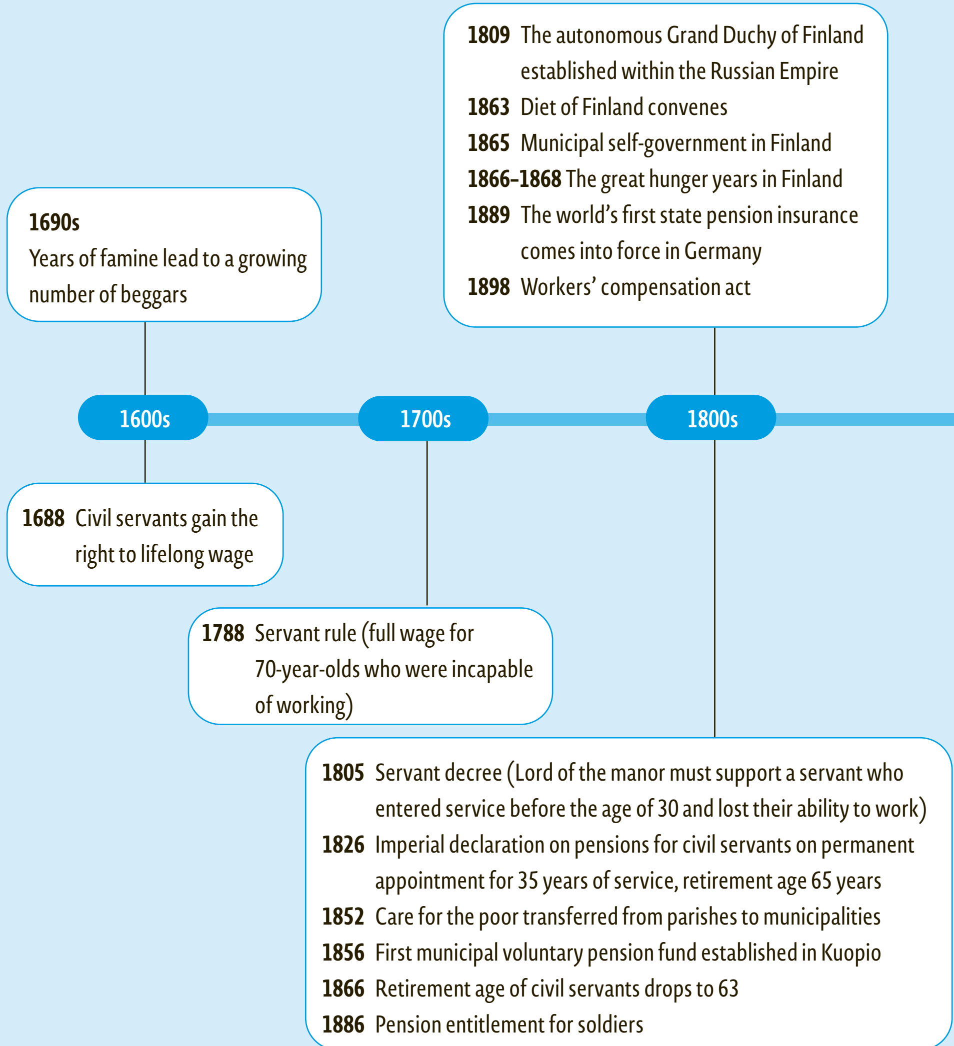
pension security should not be expanded to cover non-work related periods and that the pension accrual for a relatively short time would remain minimal.[81]

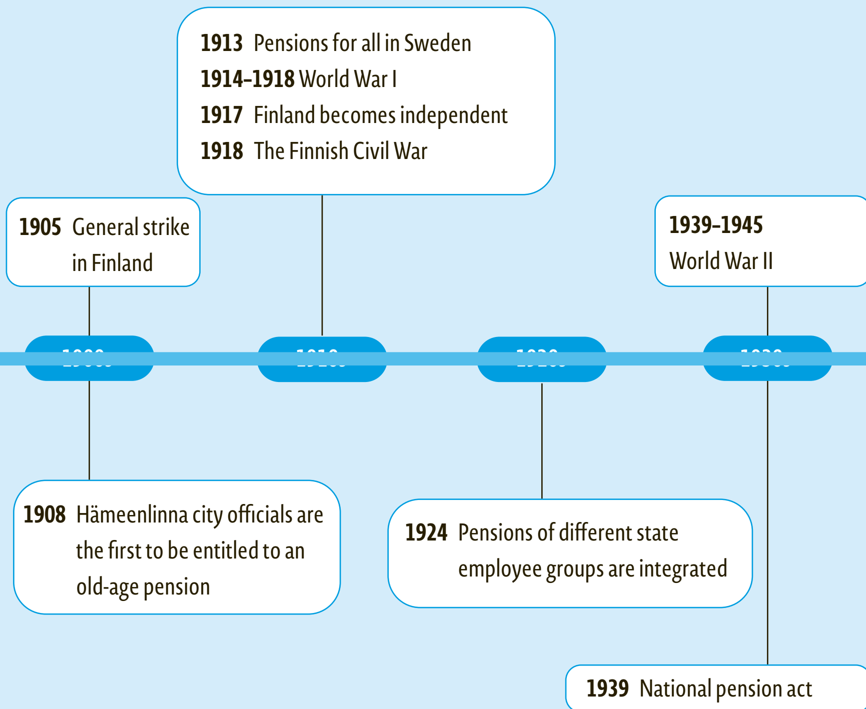
The justification of pension accrual during unsalaried periods has also been discussed.[82] Such pension accrual serves partly the same purpose as the minimum pension provided by Kela and deviates from the basic principle of earnings-related pensions. On the other hand, pensions accrued during unsalaried periods ensure that different situations during working life, including atypical work, is covered by the pension system. Pension accrual from other than earned income is motivated for the purposes of spreading the risk across the system and minimising the impact of interruptions in working careers on earnings-related pension. Also, there will be less demand for minimum pensions if the earnings-related pensions are larger due to comprehensive accrual. [83] Pension accrual during parental and child-care leaves can be motivated by the fact that raising the next generation is vital, even in terms of financing future pensions.[84]

Indexation as part of pension reforms

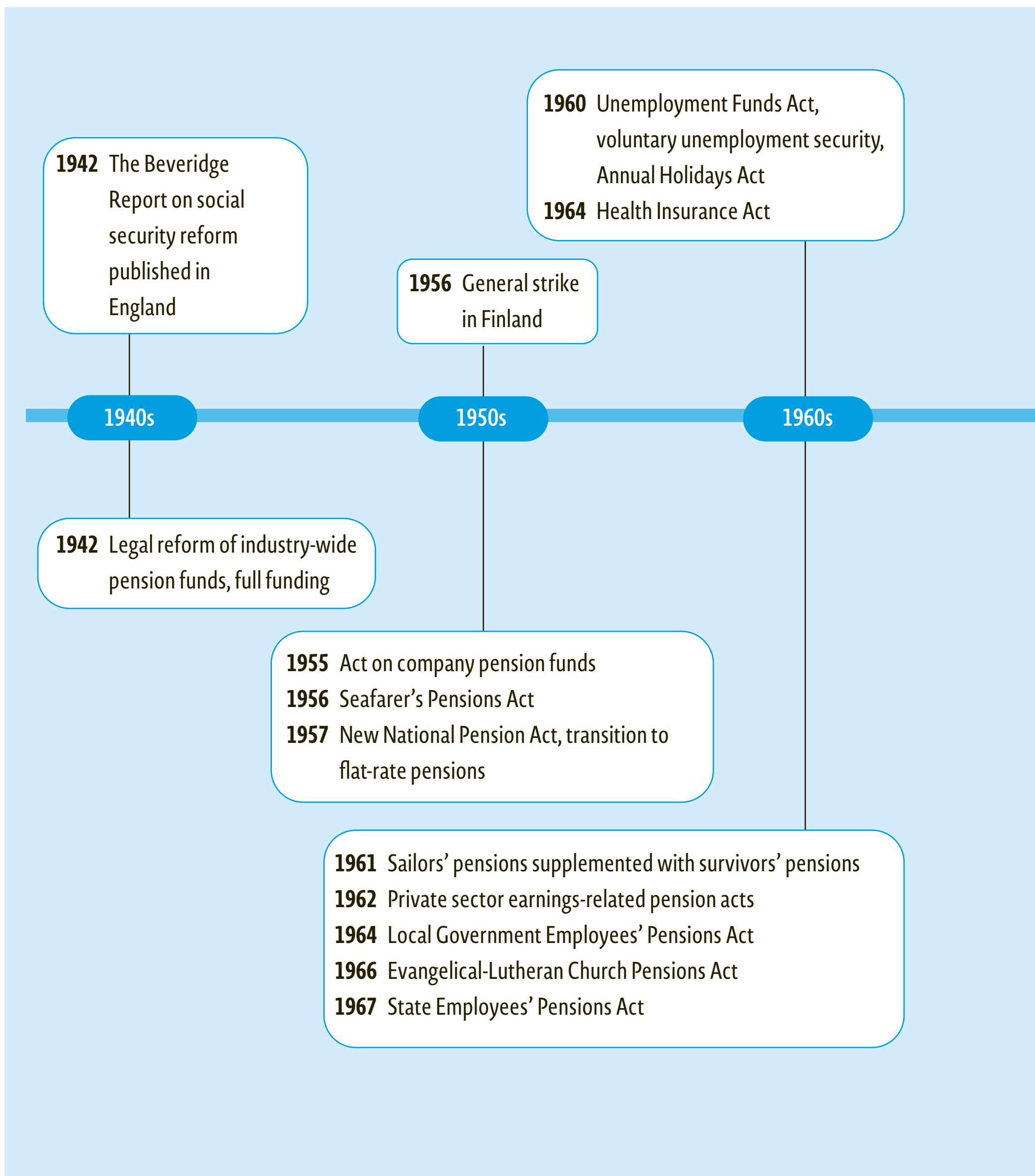
When the period of the working career that serves as the basis for pension calculation has been extended, modifications to the index adjustment of earnings have been deemed necessary. Pensions accrued in the early years of one's working career will keep their value better when the index used for adjusting earnings is primarily tied to the development of earnings.[85] In the private sector, both the earnings received while working and the pensions in payment were originally adjusted using an index, which

History of pension provision and changes in society
Source: Hannikainen & Vauhkonen 2012; Jaakkola et al. 1994





1913 Pensions for all in Sweden
1914–1918 World War I
1917 Finland becomes independent
1918 The Finnish Civil War
1905 General strike in Finland
1939–1945 World War II
1908 Hämeenlinna city officials are the first to be entitled to an old-age pension
1924 Pensions of different state employee groups are integrated
1939 National pension act


1942 The Beveridge Report on social security reform published in England
1956 General strike in Finland
1960 Unemployment Funds Act, voluntary unemployment security, Annual Holidays Act
1964 Health Insurance Act
1940s
1950s
1960s
1942 Legal reform of industry-wide pension funds, full funding
1955 Act on company pension funds
1956 Seafarer's Pensions Act
1957 New National Pension Act, transition to flat-rate pensions
1961 Sailors' pensions supplemented with survivors' pensions
1962 Private sector earnings-related pension acts
1964 Local Government Employees' Pensions Act
1966 Evangelical-Lutheran Church Pensions Act
1967 State Employees' Pensions Act

1970s

1970 Children in Finland are no longer legally obligated to take care of their elderly parents

1970 Self-employed persons and farmers are covered by earnings-related pension acts

1980s

1980–1985 Structural reform of the National Pensions Act

1986 Pensions Act for Performing Artists and Certain Groups of Employees

1990s

Early 1990s Recession

1995 Finland joins the European Union

1996 The pensionable wage is the average wage of the last 10 years, weakened index

1996 The national pension becomes fully deductible from the earnings-related pension

1996–2001 The basic component of the national pension is abolished

1998 All short and low-pay employments are covered by pension acts

2008 Financial crisis

2000s

2010s

2000 Act on Accident and Pension Provision for Athletes

2005 Pension reform after which pensions are solely based on earnings

2007 Private sector employees' pension acts are integrated into one act

2009 Researchers and artists working on a grant are covered by pension acts

2011 The guarantee pension act comes into force

2017 Pension reform in which the retirement age is linked to life expectancy; public sector pension acts are integrated into one act

was determined based on changes in the employees' earnings level. Thus, pensions and accrued pension rights followed the development of wages and salaries. Within the State and local government, where the pension level in relation to the pre-retirement salary was higher, the index adjustment of pensions in accordance with wage development could occasionally result in a situation where the pension exceeded the salary paid for the post in question.[86]

When the pension accrual rate was increased and, as a result, the pension starting level rose, the future development of the pension and its impact on pension expenditure had to be solved. In 1977, the index adjustment was revised by introducing a combined index (known as the '50-50 index') in which changes in prices and earnings carried an equal weight. During the years of high inflation, index adjustments were made twice a year. This practice continued into the mid-1980s.[87]

In 1996, a new praxis was introduced. The earnings of all were adjusted with the 50-50 index, but the pensions were adjusted with different indexes depending on the age of the pension recipient. The 50-50 index was used to adjust the pensions of people under the age of 65. The pensions of people who had turned 65 were adjusted with the pensioner's index. In the pensioner's index, the changes in price levels weighed 80 per cent and changes in earnings weighed 20 per cent.[88] In the Government's proposal, the pensioner's index was motivated by the different consumption level in retirement and the improved pension levels after the entry into force of the earnings-related pension scheme, but also by the desire to reduce pension expenditure. Unlike the changes in the determination of pensions in general, the changes to indexes facilitate rapid savings or improvements because the indexation has an immediate effect on the pensions in payment.[89]

The pensioner's index has been criticised by pension recipients and their interest organisations for being primarily tied to the price development, which makes the pension level fall behind the wage and salary development. In 2016, Parliament discussed a citizens' initiative for linking the index to the development of wages and salaries. The proposed index change was rejected by Parliament because it would have resulted in massive expenditure increases that would have to be paid by younger generations. In addition, the change would not improve the smallest national or guarantee pensions.[90] On the other hand, under the exceptional inflation prevailing in the 2020s, the earnings-related pension index has safeguarded increments to pensions that exceed those applicable to wages and salaries.

Regardless of the age of the pension recipient and the pension starting date, all pensions in payment are adjusted with the earnings-related pension index as of 2005. This index is defined in the same way as the pensioner's index described above. The pension calculation is based on the earnings throughout the entire working career, and the indexation for the active period was improved by introducing the wage coefficient. For the determination of the wage coefficient, the change in price levels weighs 20 per cent and the change in earnings levels weighs 80 per cent.[91]

The changes in index rules are reflected in an individual's pension: when the amount of a new pension is calculated, the indexation of previous earnings follows the rules valid at the time. For example, pensions earned before 2004 are adjusted with the 50-50 index to the level of 2004. After that, they are adjusted to the level of the year of retirement by using the wage coefficient.

In his assessment of the Finnish pension system, Professor Torben Andersen stated that the indexation of pensions in payment with

an index in which wage development has a higher weight might be motivated to prevent the pensioners' risk of poverty from growing during retirement. However, such a change would require a lower starting level of new pensions to be budget neutral.[92] Improvements to the indexation of pensions in payment would mean impairment in the indexation of earnings during the working career or other modifications to the pension calculations rules.

Pensions paid by Kela have always been index-adjusted solely based on price development. Because salaries and wages rise faster than prices in the long term, the price index will result in benefits falling behind the growth of earnings. This is why occasional level increments have been made to national and guarantee pensions in addition to price index adjustments. As a result of the different indexation applicable to national pensions and earnings-related pensions, the relevant benefits develop differently over time. Increases to Kela pensions based on separate decisions are more uncertain and unpredictable than the implementation of corresponding increments by using indexation rules. [93]

4. How are pensions financed?

A lot of money is needed to pay out pensions. On average, more than half a million euros are paid in old-age pension to an individual throughout their retirement. Given the average pension of 1,850 euros per month and the fact that pensioners account for more than one fourth of the population, this turns into a very large overall expenditure. In 2022, pensions in payment amounted to 35 billion euros.

In Finland, earnings-related pensions are primarily financed directly by the pension contributions collected from those still in working life, while approximately one third of the accrued pensions are paid from previously accumulated funds. In the private sector, only one fourth of the old-age pensions for employees are paid out from the accumulated funds and the rest of the expenditure is covered by pension contributions collected during the year in question from those still working. This financing method is called partial pre-funding. In spring 2023, the investment assets in pension funds totalled approximately 250 billion euros.[94]

The State also contributes to the financing of pensions. National pensions are fully financed by means of tax revenues; the amount of money used for these pensions is significantly smaller as compared to earnings-related pensions. In 2022, Kela paid out pensions to the amount of approximately 2.5 billion euros. The number of Kela pension recipients

and Kela's share of the total pension expenditure have declined over the past decades.

Different financing methods

The two main methods for financing pensions are the pay-as-you-go (PAYG) method and the pre-funded system. In the PAYG system, the pensions in payment are financed using the contributions collected from those still in working life or by the State by means of tax revenue. In the pre-funded system, the pension contributions of those active in working life are invested through the financial markets. Later on, the invested assets are sold to pay out pensions.

The main principle of the PAYG system is that those in working life share part of their earnings with pensioners and, in compensation, the next generation will share part of their pay with them. This system involves intergenerational income transfers, so the size differences between generations play a central role in the financing of the system. The number of workers must be sufficient in proportion to pensioners for the system to be able to pay adequate pensions with reasonable contributions.

In the pre-funded system, pension contributions collected throughout one's working career are allocated to different investments within the market. When the time comes to pay the pension, the investment assets accumulated from the pension contributions will be used to pay pension benefits. In principle, the pre-funded system is not as sensitive to intergenerational size differences as the PAYG system. Its challenges concern primarily the management of assets and their returns. Owing to financial market fluctuations, a large variation in the value of pension

assets is possible in the short term. Assets can be invested in global markets, in which case the risks are not geographically tied to a specific country. In Finland, this is particularly important since the Finnish economy is relatively sensitive to economic fluctuations.[95]

The PAYG system can only function if it is compulsory. Pre-funded pensions can also be voluntary. Often, the financing of pensions is a combination of these two methods. Financing can be seen as a continuum with a pure PAYG system at one end and a fully pre-funded system at the other. Internationally, public pensions are typically financed using a PAYG system. Sometimes it is possible to use partial pre-funding as well, as in Finland and Canada. The occupational supplementary pensions agreed on in collective agreements or provided by the employer are usually fully pre-funded. These types of pension schemes are used in, for example, the Netherlands, Sweden and Denmark.[96]

Pension schemes can be divided into defined contribution systems and defined benefit systems. In the defined contribution system, pensions are financed according to a specified contribution rate, which means that pension benefits will be decreased if there are not sufficient funds for their payment. In the defined benefit system, on the other hand, the payment of promised benefits is guaranteed. If the pension expenditure cannot be covered with the contribution rate, then the contribution rate will be increased. Today, in most cases, pre-funded pensions are based on a defined contribution system and PAYG pensions on a defined benefit system.[97] In the pre-funded systems, there has been a shift to defined contribution pensions because the pre-funding of defined benefit systems has often proven to be insufficient. Very large increases to contributions to finance the promised benefits would be too high a risk for the sponsor.

Pre-funding: buffer funds and individual-level funds

Buffer or reserve funds are used to back up the PAYG system by setting aside any portion of the contribution income that exceeds the pension expenditure or by collecting money from other sources. In time, by dissolving the buffer fund or by using its investment returns, it is possible to finance the growing pension expenditure without having to increase the pension contribution rate. With buffer funds, pension assets are collected at the system level into a common pool.

Buffer funds provide a method to prepare for future challenges, including intergenerational size differences, to safeguard a more stable development of pension contributions and to avoid excessive variation in the contribution level between generations. Buffer funds also diversify the financing base for pensions. Through buffer funds it is possible to seek a better profit on pension contributions from financial markets as compared to the PAYG system based on the payroll development.[98]

Individual-level pre-funding means that pensions are funded when pension rights are accrued. The assets in the fund will cover the pension rights earned by the insured person, in other words, the pension liabilities. This way it is possible to pay out the pensions as promised even if the employer or industry closes.[99] Sometimes an individual-level fund may concern only a part of the accrued pension rights, as is the case for the private sector earnings-related pensions in Finland.

As a rule, pension liabilities are directly equal to the amount of pension assets in defined contribution systems. The solvency of the insurer is always ensured even though the value of pension assets may fluctuate. This is because the pension level is not defined in advance,

only the contribution rate is. Defined contribution systems do not require solvency capital or risk buffers because the risks are managed by adjusting the benefits.

In defined benefit systems, the value of promised pensions (pension liabilities) is obtained by calculating the current value of pension benefits in payment and those accrued, assuming a specific interest rate. The duration of pension payment is estimated based on the life expectancy of the insured persons. As life expectancy increases, the value of pension liabilities increases because the estimated pension payment period is longer. Correspondingly, when life expectancy decreases, the value of pension liabilities is lowered.

The solvency of an insurer requires that, in addition to liabilities, they are prepared for risks by means of solvency capital. The better the insurer is prepared for risks, the better their solvency. There is a regulatory minimum level for the risk buffer that should be exceeded.[100] A frequently discussed topic is the size of pension funds, which usually refers to the market value of investments and assets.

In Finland, slightly less than 70 per cent of the earnings-related pension funds in the private sector represent earmarked individual-level funds, while the rest are buffer funds. In the public sector, all pension funds are buffer funds.

Earnings-related pensions in Finland

For decades, the Finnish earnings-related pension scheme has been based on one key principle, namely partial pre-funding. This means that earnings-related pensions are financed partly by means of pension

contributions collected during the year in question and partly by using previously accumulated funds. Part of the pension contributions are invested so that part of the pension liabilities are pre-funded. The method of partial pre-funding combines advantages from both the funded system and the PAYG system. By pre-funding it is possible to gain returns on pension contributions from international investment markets. The PAYG system facilitates the more secure financing of, for example, index adjustments to pensions that are tied with price and wage development because, when salaries rise, the pension contribution income also increases.[101] In terms of risks, the partial pre-funded system is also more diversified than any of the two methods alone.

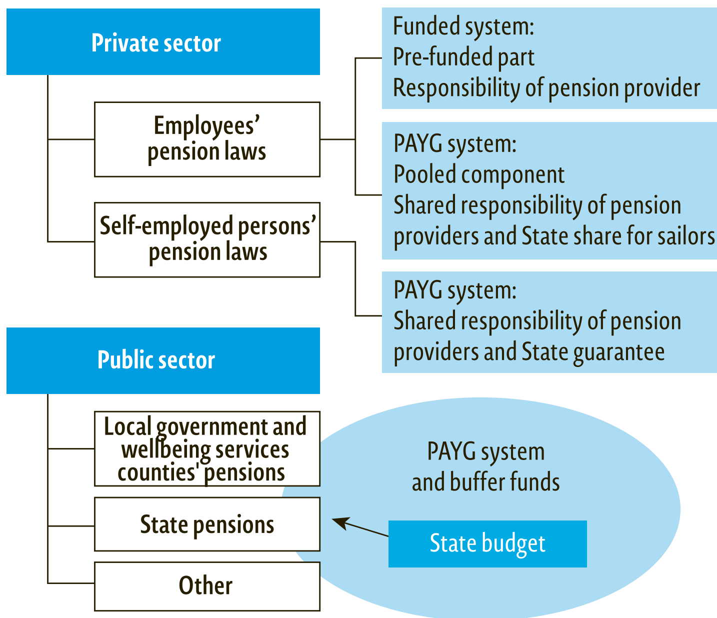


Figure 6. Sources of pension financing
Source: Mäkinen 2018

Financing is slightly more complicated in Finland as shown in Figure 6. The financing method for earnings-related pensions differs between employees and self-employed persons, as well as between the public and private sector. In the private sector, the wage-earners' pensions are paid out partly by using the PAYG method and partly from individual-level and buffer funds. The pensions of self-employed persons and farmers are financed using the PAYG method. The State pays any proportion of the self-employed person's pension that is not covered by the contributions. In the public sector, earnings-related pensions are financed by using the PAYG method and large buffer funds. Also, the State's share is high in the pensions of those employed by the State.

As shown by the money flows within the earnings-related pension scheme (Figure 7), earnings-related pensions are primarily financed

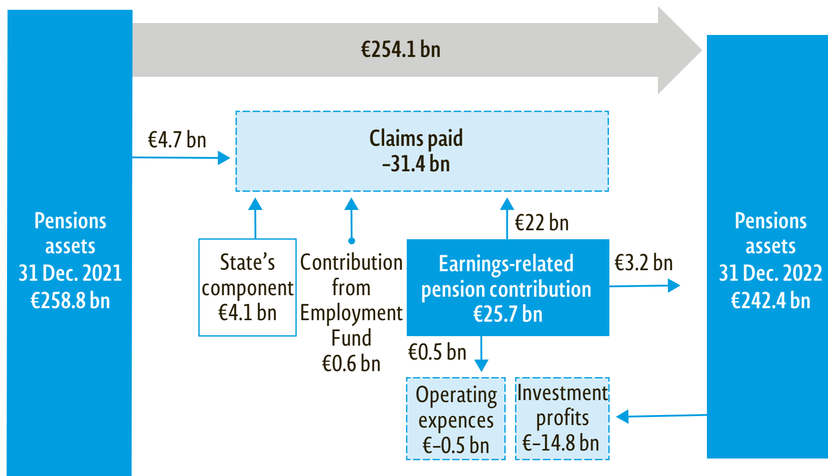


Figure 7. Money flows of earnings-related pensions in 2022
Source: Finnish Centre for Pensions, TELA

using the PAYG method. In other words, most of the pensions in payment are covered by the pension contributions of those active in working life. A significant proportion of the pension expenditure is also covered by pre-funded pension assets; in the private sector, the proportion is roughly one fourth. Other important sources of financing are the State and the Employment Fund.

Private sector employees' pensions

Earnings-related pensions are partially funded in the private sector under the Employees Pensions Act and the Seafarers' Pensions Act. Pension contributions are designed to cover the pension expenditure and administrative costs: the shared pension expenditure financed through the PAYG method, the future pensions that are pre-funded during the year in question, the administrative costs for managing the pension scheme and the losses caused by outstanding pension contributions. The level of the earnings-related pension contribution is negotiated by the social partners representing the payers of the scheme, (employers and employees) based on a proposal submitted by the pension providers. The annual level of the earnings-related pension contribution is agreed on for one or several years at a time.

The employer pays the earnings-related pension contributions to the pension provider, calculated as a set percentage of the insured earned monthly income of the employee. The employer's share of the contribution is about two thirds, and the employee's share is one third. In 2023, the employee's share was 7.15 per cent of the wage or salary.

Employees have been paying their share of the earnings-related pension contribution since 1993. Up until the end of 2025, the employee's share is higher for those aged 53–62 as they also accrue more pension. Correspondingly, the employer's share of the contribution is lower for this age group. The employer's share may also vary depending on the operational efficiency of the pension provider and the result of their investment activities, the size of the employer and the amount of granted disability pensions.

The State contributes to the financing of sailors' pensions by paying approximately one third of the total expenditure. The State subsidy reduces the employer's pension contribution, which makes it lower than otherwise in the private sector.

What is the private sector pension contribution used for?

The earnings-related pension contribution is divided into the PAYG component and the pre-funded component. The pre-funded component is the part of the pension contribution that is earmarked in the pension fund for the insured individual. In the private sector, the basic contribution paid for an employee consists of the following components:

The **pooled component** is used for paying the parts of the pension that are financed through the PAYG method as well as certain benefits in their entirety. Of the various contribution components, the pooled

component is clearly the largest: it pays for approximately three fourths of the earnings-related pensions in payment. The pooled component covers payments other than those that are pre-funded.

The **old-age pension component** is retained in the fund for future old-age pensions. The share that is pre-funded corresponds to an annual pension accrual of 0.4 per cent of earned income. This means that slightly over one fourth of each wage-earner's pension accrual of 1.5 per cent is set aside into the fund at the time of pension accrual. Based on realised investment returns, the old-age pension funds may be adjusted later. The old-age pension component is calculated individually for each employee and is affected by age and gender. For older women, the old-age pension component is the highest and, correspondingly, for young men, it is the lowest. The average lifespan of women is longer and, as the insured individual ages, the duration of the pre-funding period shortens.

The **disability pension component** is allocated to funded disability pensions. Unlike old-age pension, the disability pension is not funded until at the start of the pension. In the 2020s, approximately 60 per cent of the disability expenditure was funded. The rest of the expenditure was paid through the PAYG method.

Other contribution components include the administrative cost component, contribution loss component and the statutory charge component. They are used to cover the operating expenses of the pension providers, and various statutory charges. The contribution loss component covers losses caused by unpaid pension contributions.

Only the basic component of the earnings-related pension contribution is paid by occasional employers that have not entered into a policy agreement with a pension insurance company. Contract employers, on the other hand, may be entitled to discounts and bonuses in their contributions. The return on investments as well as the efficiency of insurance operations of the pension insurance company have an impact on the amount of the pension contribution. The returns and efficiency are competitive tools for insurance companies. In addition, for those large-scale employers whose payroll exceeds 2.2 million euros per year, the earnings-related pension contribution is also affected by the disability cases among their employees. If a company has more employees retiring on disability pension in comparison to other employers with similar aged personnel, the disability pension component payable by that company will be higher. The aim is to encourage employers to prevent cases of work disability. Large-scale employers may also receive a discount on the contribution based on the insurance company's operations.

In company and industry-wide pension funds, the earnings-related pension contribution is more like a support fee, which is collected only if it is necessary in terms of financing. The contribution is determined in accordance with the same principles as in pension insurance companies. The fee charged from employers is equal to the amount that is required, together with the investment income, to cover the fund's expenditure. The employee's share is the same as in pension insurance companies. The average earnings-related pension contribution is presented in Table 3. The contribution includes average client bonuses and discounts.

Old-age pension component	3.6%
Disability pension component	0.9%
Pooled component	20.57%
Other components	0.37%
Estimated bonuses and discounts	−0.6%
Average earnings-related pension contribution in total	24.84%

Table 3. Average earnings-related pension contribution in the private sector and its components in 2023
Source: Contribution levels (Etk.fi)

Self-employed persons' and farmers' pensions

The financing of pensions for self-employed persons and farmers is based on the PAYG system. The State pays a part of the pension expenditure for these groups. This is due to the decision to keep the earnings-related pension contribution rate for the self-employed the same as for employees, which is not sufficient to cover the pension expenditure. In 2022, the State's share of the pension expenditure was approximately 30 per cent for self-employed persons and more than 80 per cent for farmers.

Self-employed persons' pension contributions are based on their confirmed income. According to the law, the confirmed income should correspond to the value of the self-employed person's work input, that is, the amount an outsider would be paid in wages for doing the same work. Underinsuring refers to a situation where the confirmed income is lower than the actual value of the work input. This has been a common phenomenon and, therefore, an amendment was made to the law in 2023 to ensure a more adequate determination of the insured income.

Now, the pension insurance companies will determine the self-employed person's insured income based on several factors, including the median pay in the relevant industry, the volume and value of the self-employed person's work input, the extent of the entrepreneurial activities and the professional competence of the self-employed person.

The contribution rate for self-employed persons (24.1% in 2023) is based on the pension contribution rate for private sector employees. First-time entrepreneurs are granted a 22-per-cent discount for a period of four years. The contribution rate of those aged over 53 is higher similarly to the employee's share of the contribution in the private sector. The self-employed may temporarily either raise or reduce their confirmed income within certain limits depending on the company's financial situation.

For farmers, the pension contribution is based on the pension contribution rate for private sector employees but there is no possibility to flexibly change the confirmed income for the contribution as with other self-employed persons. However, the contribution rate for farmers varies depending on the amount of insured income. In 2023, the contribution rate was approximately 13 per cent for annual income of less than 30,000 euros and 24.1 per cent for income exceeding 47,000 euros. In 2023, the average pension contribution rate was around 14 per cent. The pension contribution rate is low because of the relatively low annual income of farmers. Most pensions paid to farmers are financed by the State because the number of pension recipients is double in comparison to those of working age and because the farmers' contribution income is very small.

Public sector pensions

Public sector earnings-related pensions are primarily financed on a PAYG basis, but buffer funds also play an essential role. For a long time, the pensions of those employed by municipalities or local governments were financed on a PAYG basis alone. Along with the legislative reform in 1988, Keva (the public-sector pension provider) started preparing for the future pension expenditure by means of pre-funding. Since then, a part of the annual pension insurance contributions paid for local government employees has been transferred to a fund. Keva's pension reserve fund is a buffer fund, in other words, its aim is to even out changes to the earnings-related pension contribution rate.

As of 2017, Keva's contribution income has been smaller than its expenditure. The deficit has been covered by the reserve fund, making it possible to keep the pension contribution at a lower level than required by the pension expenditure for local government. According to projections, the assets of the fund will be increasingly used for the payment of pensions in the 2030s, when more than one fourth of the pension expenditure will be financed by means of fund assets.[102]

Compared to the private sector, the municipal sector has a greater need for contribution income. Reasons for this include the higher life expectancy in the public sector because of a predominantly female workforce, a higher education level among local government employees, pensions accrued before 1995, which are higher than in the private sector, and the older age structure of employees.

The employee's share of the pension contribution is the same in both the private and public sector. In the public sector, employers pay a wage-based contribution that includes an employer-specific disability pension

contribution component. The employer's pension contribution is of the same size as the average contribution for private sector employees. In addition, as of 2023, the municipalities and wellbeing services counties pay a balancing payment, which is not tied to the payroll sum. The balancing payment is used to cover the portion of long-term pension expenditure that exceeds the collected pension contributions based on the payroll.[103]

State pensions are financed through the State budget and transfers from the State Pension Fund, not directly from pension contributions. The State employers and employees pay their pension contributions to the State Pension Fund, which will invest them. The contribution is set at the same level as the private sector earnings-related pension contribution. The employee's share of the contribution is the same as in the other sectors. The State Pension Fund is responsible for the funded assets and related investment activities. However, instead of directly paying out pensions, a sum corresponding to 45 per cent of the annual pension expenditure is transferred from the Fund to the State budget for pension payment. The remaining pension expenditure is paid by using other State income, such as tax revenue. Since 2013, the amount transferred from the State Pension Fund to the budget has exceeded the annual total of incoming pension contributions.

The pensions of the employees of the Evangelical-Lutheran Church are financed partly through the PAYG method and partly from a buffer fund. The Church Pension Fund is responsible for financing the pensions and investing pension assets. Kela has its own pension fund for the purpose of managing the pensions of its employees. The Bank of Finland has a fully funded pension scheme of its own. Keva pays out pensions to all public sector employees.

Those insured / pension act	Pension contribution in relation to earnings (%)	State's share / Tax-based financing in relation to earnings (%)*	Employment Fund's share in relation to earnings (%)	Total in relation to earnings (%)
Private sector employees / Employees Pensions' Act	24.8	–	0.8	25.6
Sailors / Seafarer's Pensions Act	19.0	27	0.8	46.8
Employees of Keva's member organisations / Public Sector Pensions Act	24.4	3	0.8	28.2
State employees / Public Sector Pensions Act	24.8	47	0.1	71.9
Ev.-Luth. Church employees / Public Sector Pensions Act	28.7	0,3	0.8	29.8
Self-employed persons / Self-employed Persons' Pensions Act	23.0	10	–	33.0
Farmers / Farmers' Pensions Act	14.0	69	–	83.0

*Municipalities and wellbeing services counties pay a balancing payment, and the Evangelical Lutheran Church pays a pension fund levy.

Table 4. Financing shares in relation to the insured earnings (payroll sum or confirmed income) under different pension acts in 2023

The sources for financing different pension schemes are described in Table 4. In addition to earnings-related pension contributions, the schemes may be financed by the State or the Employment Fund. The financing shares are presented in relation to the payroll sum or earned income in accordance with the relevant pension acts. As shown in Table 4, the share of State financing is particularly high in the pensions paid to farmers. Currently, the paid contributions are not at all sufficient to cover the pensions in payment. As the result of structural changes within agriculture, there are fewer farms and contribution payers to finance the pension scheme. In addition, the State has a key role in financing the pensions of State employees, sailors and self-employed persons.

Pensions accrued during unsalaried periods

Pensions may also accrue during certain unsalaried periods. In addition, pension accrues during periods of study that lead to a degree and while caring for one's child under the age of 3 at home. Because no earnings-related pension contribution is paid for these periods, the accrued pension right must be financed by other means. Any pension accrued based on income other than earnings from paid work is financed either jointly by means of earnings-related pension contributions, unemployment insurance contributions or tax revenues, depending on the type of benefit.

The expenditure for pension rights accrued during periods of sickness or rehabilitation allowances or parental allowances is shared between the pension providers in proportion to the payroll sums of the persons they insure. In 2022, a total of 266 million euros were paid in pensions accrued during unsalaried periods.[104]

Pensions accrued during a period of unemployment, the adult education subsidy or a job alternation leave are financed by the Employment Fund. Whenever such pension rights accrue, a sum that corresponds to the calculated pension contribution is transferred by the Employment Fund to the earnings-related pension scheme. The transfers from the Employment Fund thus reflect annual unemployment trends: when unemployment rates are high, pensions accrued for individual periods of unemployment are also higher. In 2022, the Employment Fund transferred approximately 630 million euros to the earnings-related pension scheme.

The State is committed to paying out the pension benefits that have accrued during a period of study leading to a degree or home care of one's child under the age of 3, but not until the pension falls due for payment. The expenditure for these pensions is very low for the time being as the relevant legislation entered into force in 2005. In 2022, the expenditure for benefits accrued for child home care and studies amounted to 15.5 million euros.

Investments of the private sector pension scheme

As pre-funding has been part of the private sector earnings-related pension scheme as of its early phases, investment activities have been carried out since 1962. Initially, investment activities were limited and mostly involved lending money to companies. Lending activities included contribution loans and investment loans. Contribution loans provided companies with an opportunity to borrow money from the funded pension contributions. At most, the amount of the loan equalled

the proportion of pension contributions that were not needed to cover the current pension expenditure. A collateral was required for the loan. Investment loans enabled pension funds to reinvest pension contributions in a member company of the fund.

The Finnish capital market was tightly regulated and domestic until the 1980s. As the restrictions concerning international capital markets were removed, floating interest rates were allowed in banking and financing.[105] These changes facilitated more versatile investment activities for earnings-related pension providers. Along with the concurrent decrease in the general interest rate level, contribution loans with higher interest rates no longer appeared as an attractive form of financing for companies. Thus, pension providers needed to find other potential investment targets. The role of real estates and equities, which had been rather minimal, gained more weight in the investment portfolios of the pension providers.[106]

Following the depression in the early 1990s and the rapid indebtedness of the State, new investments were increasingly allocated to Finnish government bonds, whose nominal interest rate peaked at over 13 per cent while inflation was close to 3 per cent.[107] The bonds were a competitive choice compared to other investments. At the same time, they followed the requirements regarding profitability and security, as set out for the investment activities of pension providers. The proportion of equity investments began to grow toward the end of the decade as the reform concerning investments within the earnings-related pension scheme entered into force in 1997. The aim of the reform was to allow for higher risk-taking to gain better return on investments, while at the same time, the idea was to alleviate the future pressure to raise the level of pension contributions in response to the challenge brought about by

an ageing population. On the other hand, risk diversification was sought by allocating assets to foreign investments.[108]

In the early 2000s, most pension providers' investments were in bonds, although the share of equity investments had grown to about 20 per cent of the portfolios. In the 2020s, the share of equities and corresponding investments has already exceeded 50 per cent, despite the burst of the IT bubble in the early 2000s and the short-term drops caused by the financial crisis of 2008. The development was also affected by the long-term and powerful declining trend in the interest rate level.[109]

Over time, investment activities have internationalised, and in 2022, the assets invested in Finland accounted for about one fourth of the portfolios. Investments have also been increasingly diversified to include

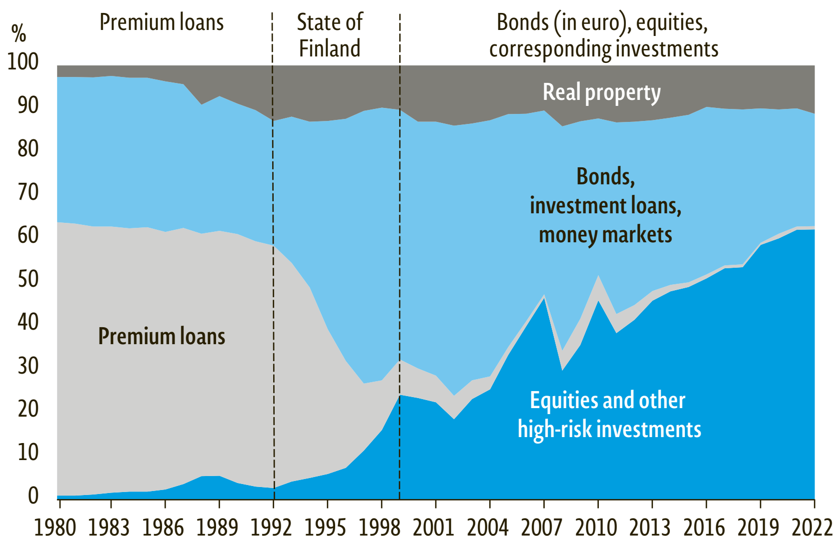


Figure 8. Distribution of pension providers' investments in 1980–2019
Source: TELA

non-listed investments and alternative asset categories. The most recent major investment reform in 2017 provided pension insurance companies with better opportunities to increase their equity-related risk.

Regulation of investment activities

The basic task of pension funds is to gain return on pension contributions at a specified risk level. In Finland, the investment risks of pension providers are restricted in legislation by the requirement to invest pension assets in a diversified, profitable and secure manner. Thus, it is not possible to only seek the lowest risk or the highest return for investments. Instead, there must be a balance between these goals. It is advisable to spread assets across various investments to meet the requirements of diversity and security. The requirement can also be interpreted to mean diversification across different countries and continents. On the other hand, the return should be favourable in relation to the desired risk level. The investment risk of a pension provider is steered by two factors: while the solvency regulations restrict risk-taking, the profitability requirement presumes it. In the public sector, investment activities are primarily steered by the policies set out by the Boards of the funds.

Solvency regulations have an impact on how much risk pension providers can take in their investment activities. The intention is to safeguard the payment of earnings-related pensions in all situations. The solvency of a pension insurance company is calculated by dividing the pension assets by the funded pension liabilities. The amount of liabilities, sometimes called technical provisions, is influenced by the yield on equities through the equity-linked component. This component

can either be positive or negative, depending on the average return on equity investments. The idea is to alleviate the weakening of solvency in a poor market situation and thereby minimise the need for forced sales of equities when the price is low.[110]

At all times, a pension provider must have adequate solvency capital to cover the risks related to its insurance and investment activities. The solvency limit refers to the minimum amount of capital that is needed to cover the liabilities even when the investment risks are realised. For investments carrying greater risks, the solvency limit is higher. Correspondingly, for a low-risk investment portfolio, the solvency limit is lower. The regulations concerning the solvency risk are the same for all competing pension providers, but the operating principles in terms of the solvency limit vary to some extent depending on the type of pension provider. Solvency has no impact on the payment of earnings-related

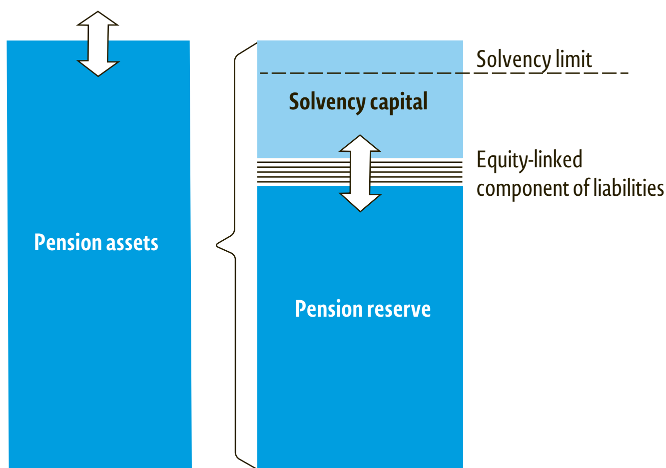


Figure 9. Elements of the solvency framework

pensions because, ultimately, all pension providers are jointly responsible for paying out the promised pensions.[111]

In the public sector, there are no defined liabilities that must be covered by funds. It follows that, in practice, the investment activities are based on the investment strategy drawn up by the pension provider's Board of Directors. In addition, investment activities are steered by the criteria set out in law and, for the State Pension Fund, also by the regulations of the Ministry of Finance.

The legislation concerning Keva and the State Pension Fund include practically no provisions regarding investment activities. However, according to law they both must ensure the security, profitability, liquidity and diversification of their pension investments. In addition to the general legal provisions, there are no other regulations regarding the content of the investment activities. This is a fundamental difference compared to what applies to private sector pension providers in Finland.[112]

Unlike Keva, the Ministry of Finance has the right to issue general regulations concerning the State Pension Fund's administration, financial management and asset investments. According to the Ministry's regulations, the share of equity investments by the State Pension Fund must not exceed 60 per cent and the share of fixed-income investments must not fall below 30 per cent. Other investments may account for a maximum of 15 per cent.[113]

5. How are pensions governed and who makes the decisions?

The foundation of the Finnish pension system is built on earnings-related pensions, which are based on work. Pension accrues for nearly all paid work. The pensions of private sector employees, self-employed persons, farmers, sailors and public sector employees are governed by separate pension acts. National pensions provide a minimum income in retirement. In international comparison, the administration of pensions in Finland is exceptional. Earnings-related pension is social security managed by private, competing pension providers. The public sector, sailors and farmers have their own pension providers. The national and guarantee pensions are managed by Kela. The operations of the pension system and related legislation fall within the responsibilities of the Ministry of Social Affairs and Health. The reliability and transparency of the administration of Finland's pension system has been assessed positively in international comparisons. In the Global Pension Index for 2023, Finland received the best ratings in this area for the tenth time running.[114]

The primary decision-makers and those in power of the earnings-related pension scheme are the social partners and the Finnish Parliament. Within Finland's statutory earnings-related pension scheme,

the position of the social partners is exceptionally strong. Representatives of the employees and employers play a central role in the preparation of pension reforms and serve as members in the administrative bodies of the pension insurance companies.

Decisions concerning the pension system are significant for individuals, the labour market and the entire national economy. Earnings-related pensions are a key component of the overall income of pensioners, the pension contribution is a considerable indirect labour cost and pension funds hold investment assets equal to approximately the annual GDP of Finland. Intergenerational impacts pose a challenge for decision-making regarding the pension system.[115]

Earnings-related pensions governed by different acts

In Finland, earnings-related pension accrues from nearly all paid work. Earnings-related pension benefits are regulated by several different pension acts that cover specific forms and sectors of work. Despite

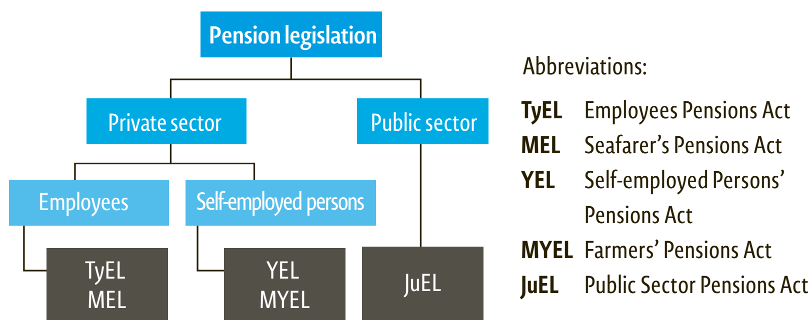


Figure 10. Earnings-related pensions are governed by multiple laws

multiple acts, the rules of pension provision are generally the same across all pension legislation nowadays.

Employees earn pension either under the Employees Pensions Act, the Seafarers' Pensions Act or the Public Sector Pensions Act. The latter regulates the pensions of employees working for the local government, wellbeing service counties, the State, the Evangelical Lutheran Church of Finland, Kela and the Bank of Finland. Farmers and recipients of scientific or artistic grants are insured under the Farmers' Pensions Act. The pension benefits accrued for periods of caring for one's child under the age of three at home or studying for a degree are regulated by their own separate act. Pension benefits provided by Kela are governed by the National Pensions Act and the Act on Guarantee Pensions.

In addition to these, specific groups have their own pension provisions on insurance, and the determination of benefits may deviate greatly from the acts listed above. Professional athletes are insured under their own act. Team athletes must be insured when a set earnings limit is exceeded, but insurance for individual athletes is voluntary. Members of Parliament are governed by the Members' of Parliament Pensions Act, and those who entered the service of the Provincial Government of Åland before 2008 are covered by their own pension act.

At the end of 2022, a total of 3.4 million persons were covered by earnings-related pension insurance, and nearly 2.5 million of those were working. A total of 1.9 million of the insured were working in the private sector, with nearly 90 per cent of them falling within the scope of employees' pension insurance. Those insured in the public sector totalled over 730,000 people, of which about 80 per cent worked for municipalities (currently: municipalities and wellbeing service counties) and around 20 per cent for the State. A total of 216,000 self-employed

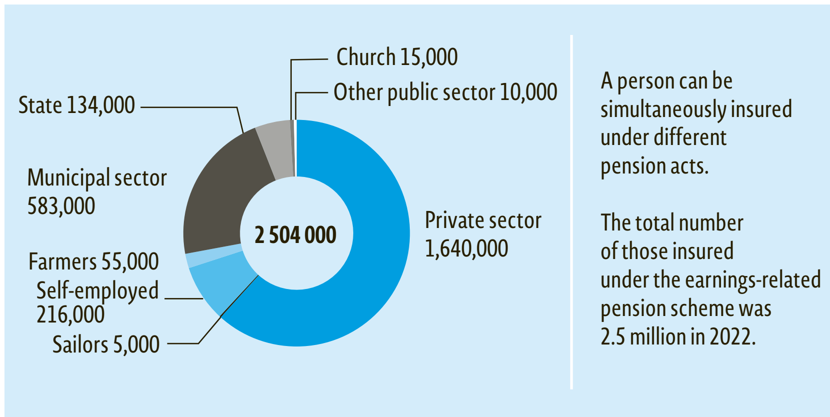


Figure 11. Employees and self-employed persons insured under different earnings-related pension acts on 31 December 2022

persons had pension insurance and 55,000 farmers and grant recipients were covered by their own pension insurance act.[116]

The number of employees insured has increased over the past ten years, but the development has been somewhat different depending on the pension act. The number of farmers has declined, while the number of self-employed in other fields has increased. The number of people working for the State has also gone down over recent decades. One underlying reason is the university reform in 2010, which transferred personnel from the public to the private sector.

The pension benefit rules have been harmonised between the different pension acts, but certain professional groups still have sector-specific rules, particularly in the public sector. The biggest differences concern the rules for military personnel working for the Finnish Defence Forces and the Border Guard. They have lower retirement ages and different pension calculation bases. Also, old occupational provisions may still be

valid for teachers and police officers. However, these do not apply to new employees which means that rules will be gradually harmonised across the board. The Seafarer's Pensions Act also contains special provisions that are currently applicable to older employees alone.

EU social security regulations and agreements between countries govern the coordination of pensions within Europe to prevent having to pay social security contributions to both countries, and to eliminate the restrictions to access social security. However, the social security level, contributions and benefits are always determined in accordance with the national legislation of each country.[117]

Pension providers and pension insurance

The implementation of earnings-related pensions has been decentralised to different pension providers. In the private sector, pension insurance is managed by private pension insurance companies, company pension funds and industry-wide pension funds. The pension benefits are the same regardless of which institution is providing the insurance. Sailors and farmers have their own pension providers, namely the Seafarers' Pension Fund and the Farmers' Social Insurance Institution of Finland, which both hold a monopoly position. Keva manages public sector pensions. In addition, the Provincial Government of Åland manages the pensions of those employed by the provincial government based on its own pension rules.

Pension insurance companies are tasked with managing statutory earnings-related pensions of employees and self-employed persons in the private sector. They are not permitted to practice any other type of

activities. Most (about 70%) of those covered by earnings-related pension acts are insured with a pension company. In 2023, there were four earnings-related pension insurance companies in Finland: Ilmarinen, Varma, Elo and Veritas. Their company forms differ. Veritas is a non-listed limited liability company owned primarily by Fenno-Swedish foundations and societies. The other pension providers are mutual pension insurance companies, jointly owned by the policyholders (= employers) and the insured (= employees).

A company pension fund is a fund established by one or more employers to ensure the pensions of their employees. In 2023, seven companies, including the Finnish Broadcasting Company, had their own company pension funds. Industry-wide pension funds manage the pensions of a particular employer, group or industry. In 2023, there were four industry-wide pension funds in Finland. One of them is Finland's oldest pension provider: the Pharmacy Pension Fund. The number of company pension funds and industry-wide pension funds is constantly decreasing, and their significance is minimal in the overall picture. Each of them insures less than 1 per cent of all persons insured for an earnings-relate pension. The pension insurance companies, company pension funds and industry-wide pension funds are governed by separate laws that regulate their activities. Each earnings-related pension provider, regardless of type, has its own Board of Directors and CEO. Certain qualifications are laid down by law for persons belonging to the administration of a pension provider. For example, at least one third of the Board members must have solid investment expertise. In addition, a Board member must have completed comprehensive induction training. The administration of pension insurance companies is also characterised by the representation of policyholders and insured persons. A special

feature of the Finnish earnings-related pension scheme is the close involvement of social partners in its administration.

The highest decision-making power in a pension insurance company is held by the Annual General Meeting, at which the shareholders of the company elect the supervisory board. In mutual pension insurance companies, the shareholders include the policyholders and the insured. At least one third of the members of both the supervisory board and the Board of Directors must be employee representatives and one sixth employer representatives.[118] One of the key tasks of the Board of Directors is to approve the investment plan that every pension provider must draft. In practice, this shows in the Board's guidelines on how to invest and the proportion to be allocated to domestic investments.[119]

The national pension scheme is administered by Kela, an independent social security institution under public law. Kela operates under the supervision of the Finnish Parliament. Kela ensures the provision of minimum pensions as well as many other forms of basic social security. Kela has approximately 200 offices throughout Finland that offer personal service and through which, for example, earnings-related pension applications can be submitted

Principle of the last provider

Although there are multiple pension providers, earnings-related pensions are claimed with a single form and is paid by the pension provider in which the person was last insured. Pension claimants do not need to know in which pension providers they have been insured

throughout their career. The pension claim can be submitted to any pension provider or to Kela. The same claim form can be used to apply for the national pension and the guarantee pension, as well.

The earnings-related pension scheme adheres to this principle of the last provider. The pension provider that served as the insurer for the last employment relationship calculates the total amount of pension accrued from different employment relationships and pays out the pension to the pension recipient. The pension provider paying the pension collects any components that other pension providers are liable for based on a division-of-costs specification made by the Finnish Centre for Pensions. Thus, the mechanisms of the earnings-related pension scheme ensure that all earnings-related pension providers concerned are accountable for their share of the payment of earnings-related pensions, even if the pension is paid out by only one institution.

One characteristic of the decentralised earnings-related pension scheme is that the pension providers are jointly and severally liable if any individual company goes bankrupt. This ensures that no individual pension recipient will lose their pension in the event of bankruptcy. Throughout Finland's history, pension providers have gone bankrupt, whereby joint and several liability was called into play. The most recent case was the bankruptcy of the pension fund Viabek in 2018. Eläke-Kansa went bankrupt in 1994, whereby its liabilities (promised earnings-related pensions) were divided among the five largest pension providers at that time. The expenditure was covered by an increase in the earnings-related pension contributions for four years at the turn of the millennium.[120]

The pension insurance process is governed by laws and decrees. The Ministry of Social Affairs and Health is responsible for preparing legislation on earnings-related pensions and annually confirms the calculation bases for earnings-related pension contributions in the private sector. The Finnish Centre for Pensions issues recommendations on the application of the laws governing earnings-related pension provision. The recommendations are prepared together with earnings-related pension providers. The Financial Supervisory Authority provides pension companies with more detailed regulations and instructions concerning, for example, accounting and financial statements, the calculation of liabilities and solvency requirements.

In principle, pension providers are subject to competition legislation because they compete for customers and engage in economic activities as intended by the provisions of competition legislation. Compliance

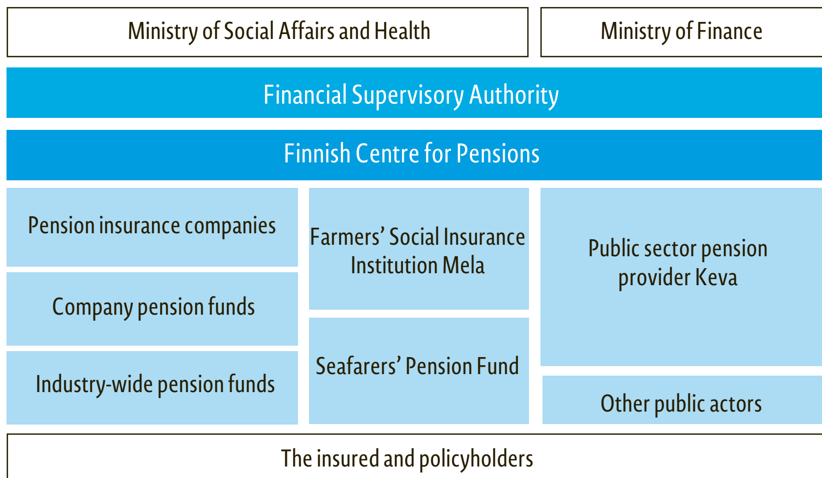


Figure 12. Parties to the earnings-related pension scheme

with the Competition Act is supervised by the Finnish Competition and Consumer Authority. The Financial Supervisory Authority oversees the competitive conditions for the pension providers and clarifies the competition restrictions.

The Financial Supervisory Authority supervises the solvency, financial status and operating practices of private-sector pension insurance companies as well as the pension providers for farmers and sailors. The Authority has the right to conduct inspections and participate in meetings with discretionary authority, but it does not participate in the actual decision-making process. The Financial Supervisory Authority supervises Keva, the public sector pension provider, in terms of its financial activity planning and asset investing. The Ministry of Finance is otherwise responsible for the general supervision of Keva and the National Audit Office of Finland for the supervision of State pensions.

In recent years, the Financial Supervisory Authority has intervened in the operations of pension insurance companies. For example, it found that assets intended for disability risk management had been used in the competition for customers. The Authority can appoint an authorised representative to oversee activities, as was done in the early 2020s when Elo Mutual Pension Insurance Company's solvency position dropped below the permitted limit. The Financial Supervisory Authority addressed the qualification requirements for the CEO of Veritas Pension Insurance Company and required the company to arrange a longer training and induction programme.[121]

Other actors within the earnings-related pension scheme

A system that is decentralised between several different pension providers calls for a joint body that coordinates operations, maintains registers and ensures consistent practices. This task has been assigned to the Finnish Centre for Pensions. Despite it being a private actor, the activities of the Finnish Centre for Pensions are regulated by law. The Board of the Finnish Centre for Pensions includes representatives of the social partners, pension providers and the State.

The key tasks of the Finnish Centre for Pensions include ensuring uniform practices and legal interpretation within the earnings-related pension industry by means of application guidelines and interpretations of the pension acts. The Finnish Centre for Pensions is also a research institute that conducts studies, compiles statistics and performs calculations to advance the development of earnings-related pensions. The Finnish Centre for Pensions is responsible for maintaining certain registers and forwarding Finnish residents' claims for pensions from abroad to foreign contact institutions. Additionally, the Finnish Centre for Pensions supervises the obligation to take out insurance and supports the related legislative work.

The Finnish pension providers are members of Finance Finland, which lobbies on behalf of the actors within the financial sector in Finland. Through Finance Finland, they endeavour to influence the relevant legislative framework within Finland and the EU. Another significant lobbyer overseeing interests in the field is The Finnish Pension Alliance TELA, which represents all insurers providing statutory earnings-related pensions in Finland. TELA's primary task is to influence current and future decision-makers to ensure their commitment to the

principles of the earnings-related pension scheme. The target groups include social partners, politicians and influencers within political youth organisations. In practice, TELA serves as a mouthpiece for the executors of the earnings-related pension scheme. The most important tasks of TELA are to influence the regulation and operating environment of investment activities and to safeguard investment assets from being used for purposes other than earnings-related pensions.

Competition and collaboration between pension providers

Pension insurance companies are private actors that compete for customers and fall primarily within the scope of competition legislation. The aim of the competition between the pension providers is to streamline the activities of the industry and to improve services and investment returns. However, the competition is limited since all pension providers offer the same insurance products for the same prices. The competition is also limited by the requirement for mutual co-operation as stipulated by pension legislation.[122] It is not possible to compete using the content of earnings-related pension benefits since the content is the same for all employees and self-employed persons, regardless of how their pension provision is arranged. In addition, competition is restricted by the fact that competition between actors must not jeopardise the basic function of the earnings-related pension scheme, which is to safeguard pensions.

Pension providers engage in competition through the quality of their customer service and various bonuses offered to customer companies and insured persons. To a limited extent, pension providers can also

compete through pension contribution levels. Although the average level of the pension contributions is agreed centrally, individual employers' contributions may vary depending on whether they have arranged pension insurance with a pension insurance company, a company pension fund or an industry-wide pension fund. In the case of pension insurance companies, the contribution is also affected by the administrative cost component specified for operating costs, as well as possible client bonuses. Client bonuses are a surplus that accrues from the pension provider's investment and insurance activities and is distributed among its customers. Pension contributions vary between customer companies due to the differences in client bonuses.

One justification for a decentralised system is also the competition in terms of investment activities and returns. A significant amount of investment assets has been accumulated in earnings-related pension funds. When there are multiple actors, pension funds are invested according to different views. At the same time, the investment risks are shared by several actors. In Finland, the actors within the pension system independently manage their own investment activities.[123]

The investment activities of earnings-related pension institutions have been criticised as being ineffective because of the decentralised system. The core of the criticism is that a larger amount of pension providers does not improve returns and, thus, the system is less efficient than it could be. The traditional counterargument is that, in a model based on multiple pension companies, the risks are more diversified. With more actors, pension assets are better protected against short-sighted political decisions and poor individual investment choices. In addition to these, decentralisation is also justified as it reduces the political risk, for example, that assets in the earnings-related pension funds would be

used to finance the state budget. This type of misuse is more difficult when multiple actors are involved.[124]

According to legislation, pension providers are permitted to co-operate to ensure that the pension system functions properly. In some cases, they are required by law to co-operate. Co-operation is required for the preparation of insurance terms and conditions and calculation bases, in the compilation of statistical data and in other matters related to the implementation and development of earnings-related pension legislation. Competition legislation prohibits actors in the same industry from disclosing information comparable to business secrets to competitors. Pension providers must take this into account when implementing such co-operation. The insurance companies are primarily competitors with one another, and competition can only be restricted to the extent required for the performance of common tasks.

Fewer pension providers

The number of actors within the earnings-related pension scheme has decreased significantly since the early days of the scheme. In the 2010s the centralisation accelerated. Elo Mutual Pension Insurance Company was established in 2014 because of the merger of the Fennia and Tapiola pension insurance companies. Etera merged with Ilmarinen in early 2018. This leaves only four large private sector pension insurance companies and one big public sector pension provider, Keva. Newcomers to the earnings-related pension scheme have been small industry-wide pension funds, while the big pension providers have merged to form even larger

pension providers. The number of company pension funds has also decreased over the past two decades from 37 to seven.

From time to time, discussions have reverted to the question of whether the idea of a decentralised system works, particularly when the number of actors becomes small. Timo Kietäväinen, former CEO of Keva, proposed that all pension providers merge into one, or at least that the possibility of doing so be explored[125] Competition between pension providers has been viewed artificial since pension benefits are laid down by law and the contribution rate is jointly decided. A single institution model has been seen by some as potentially more efficient and easier to supervise.[126]

In the early 2020s, the Ministry of Social Affairs and Health assigned a working group to investigate the possibility of merging the private sector and local government pension schemes. Such a merge would have been possible because the rules for earnings-related pensions in various sectors had been harmonised through pension reforms. In this sense, the division was no longer motivated. A major reason for this endeavour was that it would make it easier to transfer the labour force from one sector to the other. However, the tripartite working group assigned by the Ministry did not reach consensus on the implementation of the merger.[127]

Legal protection in pension matters

Accrued earnings-related pensions are interpreted as falling within the scope of property protection. Pensions that have already been granted can only be reduced through constitutional procedure, which requires Parliament's approval in two consecutive parliamentary terms. Accrued

pension rights are also protected by property protection, although not as strongly as pensions in payment. Entitlement to a national pension has not been considered as falling within the scope of property protection.[128]

In Finland, the accrued pension entitlement can be checked from the register maintained by the pension providers. The pension record shows how much earnings-related pension has accrued and from which employment relationships and periods of self-employment. On the basis of the pension record, individuals can check their information and report inaccurate or missing information.

Pension providers calculate the final pension amount and grant the pensions. Those who are dissatisfied with the pension provider's decision can appeal to the Pension Appeal Board. This is the first appeal instance in earnings-related pension matters. Four out of five appeals submitted to the Pension Appeal Board are about disability pensions. Approximately every tenth appeal concerns rehabilitation, and about one in 20 is about old-age pensions. Annually, the Pension Appeal Board issues about 5,000 decisions, of which around 10 per cent involve a change to the original decision of the pension provider and about 6 per cent involve returning the matter to the pension provider for further processing.

Appeals regarding pension decisions issued by Kela can be submitted to the Social Security Appeal Board. Annually, the Board issues approximately 2,000 decisions on rehabilitation and the rehabilitation allowances provided by Kela and several hundred decisions on the national and guarantee pensions.

Decision issued by the Pension Appeal Board or the Social Security Appeal Board can be appealed to the higher instance of legal protection: the Insurance Court. The Insurance Court is an independent and impartial special court dealing with income security matters. In 2022, the

Insurance Court resolved 3,690 appeals. Altogether 576 cases concerning earnings-related pensions were handled. Decisions that were subject to appeal were changed in 14 per cent of the cases. The average processing time for appeals is slightly over one year.

A decision of the Insurance Court can be appealed to the European Court of Human Rights, which ensures compliance with the European Convention on Human Rights in the Member States of the Council of Europe. In this case, the assumption is that an individual's right as guaranteed by the European Convention on Human Rights has been violated. The European Court of Human Rights is the last instance of appeal, so the matter must have been processed by both domestic court instances prior to submitting the appeal to this court.

Tripartite decision-making

In Finland, Parliament has legislative powers. Earnings-related pensions are governed by laws that are laid down in normal legislative procedure. Therefore, the legislative decision-making power concerning the pension schemes is in the hands of the Members of Parliament. However, before new laws or legislative amendments can be voted on by Parliament, they must be prepared.

The social partners representing employees and employers play a key role in the preparation of earnings-related pension laws. They have often jointly agreed on pension reforms and, later, these agreements have been approved and enacted by Parliament. The reason for the strong position of social partners has been that earnings-related pension is an essential part of employment terms and conditions. This position is

further strengthened by the fact that, since the 1960s, the establishment of a private-sector earnings-related pension scheme and subsequent pension reforms have been mutually agreed on by the social partners.[129] Earnings-related pensions, an important benefit for those in working life, are financed primarily by the employees and the employers. The State also participates in their financing by means of State tax revenue, the use of which is decided on by Parliament. The rules of the earnings-related pension scheme regulate the supply and cost of labour, which are important aspects for employers. The joint decision-making model of the social partners and the Government is called tripartism.

In Finnish pension negotiations, employees are represented by the Central Organisation of Finnish Trade Unions, the Finnish Confederation of Professionals and the Confederation of Unions for Professional and Managerial Staff in Finland. Employers are represented by the Confederation of Finnish Industries and Local Government and County Employers. Suomen Yrittäjät, which represents self-employed

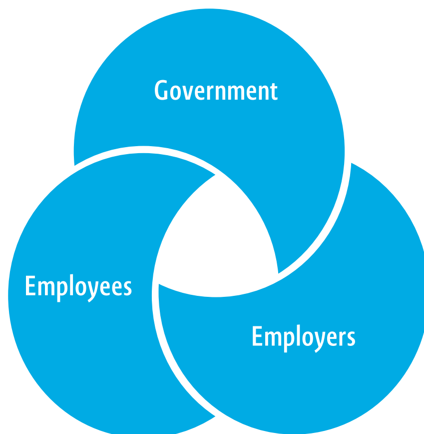


Figure 13. Tripartite decision-making

persons, is also involved in the negotiations, particularly when the matter relates to pensions of the self-employed.

The political decision-making process for the pension system is well illustrated by how the employee organizations reacted when Prime Minister in office, Matti Vanhanen, proposed raising the retirement age to 65 in the spring of 2009. Upon this announcement, the employee organisations immediately demanded that the Government withdraw its proposal. The Social Democratic Party, which was an opposition party at that time, filed an interpellation on the matter. Two weeks later, the Government withdrew its proposal. The social partners and Government resumed their tripartite work with a focus on finding ways to extend working lives.[130]

Pension reforms are thus preceded by a tripartite negotiation involving the social partners and the State. Once the negotiators have reached a mutual understanding, the reform proposals are submitted to Parliament and its Committees for processing. The Social Affairs and Health Committee has often demanded further justifications for reform proposals.[131]

While Parliament approves the final legislative amendments, its role in the preparation work is minimal in the end. In recent decades, the debate on pensions has been limited, even in the context of larger reforms. For example, when deciding on the 2005 pension reform, Members of Parliament did not seem to believe that they could significantly influence the agreement of the social partners and the Government proposal.[132] The Members of Parliament who made the decisions were also not very versed in the actual impacts or the agreed details of the pension reform. For example, some of the Members of Parliament had no understanding of the function of the life expectancy coefficient included in the reform.[133]

Parliamentary work does not introduce any significant alterations to pension reforms, which is understandable.[134] Reforms prepared by a majority government often come with only minor proposals for amendments, because the support of the majority of Parliament has already been ensured during the preparatory phase.[135] Proposals for changes to the pension reforms that are put forward by the opposition or individual parties have only received minimal support. For example, in connection with the 2017 pension reform the other parties did not support the proposal of the Swedish People's Party to modify the increases in the retirement age of those working in the Defence Forces and the proposal of Left Party representative Anna Kontula to reject the entire pension reform.[136]

Often, Government programmes have included entries stating that pension reforms will be prepared on a tripartite basis. Unlike other areas of social insurance, pension reform negotiations have generally progressed on their own track. For example, the Social Security Committee preparing the social security reform during 2020–2027 has excluded the old-age pension from the aspects of the reform.

The decision-making structure of the Finnish pension system has not been spared from criticism. A prominent Finnish economist, Sixten Korkman, has criticised the inefficiency of the decision-making process: "Decisions concerning the pension system can no longer be left only to the social partners. With that approach, the decisions risk being inadequate or not made at all because of disagreements. Experience has shown that Finland needs a more clear-cut and structured decision-making system for its pension policy."[137] Despite Korkman's concern, the system has indeed been reformed in a more sustainable economic direction over the last decade under the current decision-making structure.

The Pension Negotiation Group assesses the need for change

The key internal developer of the earnings-related pension scheme is the Pension Negotiation Group established by the social partners. This group, independent of the central government, makes proposals for the development of the earnings-related pension scheme. Earlier, the group was known as Puro's group, because it was led by Kari Puro, the CEO of the pension insurance company Ilmarinen, when it was set up in the early 1990s.[138]

If necessary, the working group may, for example, implement requests from ministries and set up sub-groups with external experts. The group consists of representatives of social partners and the chairs of the key institutions in the earnings-related pension scheme, such as the Ministry of Finance and the Ministry of Social Affairs and Health, the Finnish Centre for Pensions and the co-operative working groups in the earnings-related pension industry. In recent years, the group has been chaired by the Managing Director of the Finnish Centre for Pensions.[139]

The Pension Negotiation Group has occasionally been criticised as being undemocratic, since its activities are not public and it does not directly answer to any other body.[140] The group's former chair, Jukka Rantala, has spoken out in support of the group and its activities. In 2007, he made the following statement in the journal *Työeläke*:

> "Earnings-related pensions, if anything, is an area in which social partners have full say; after all, this is a benefit that is comparable to the terms and conditions of employment, and the organisations represent both the payers and the current and future beneficiaries. In a democratic State, it is natural for organisations to establish

different working groups for mutual co-operation, and the Pension Negotiation Group is just one example of these."[141]

The role of the Pension Negotiation Group has been central in terms of pension policy changes.[142] It has been involved in initiating the reforms of the pension system, particularly in terms of smaller reforms. According to Jukka Rantala, the Pension Negotiation Group has also worked on individual assignments. For example, before the 2005 pension reform, Paavo Lipponen's Government asked the social partners, on two occasions, to draft a proposal for a pension reform and defined the aims of the reform.[143]

The 2017 pension reform differed from earlier pension reforms in that it was negotiated among the social partners without clear representation from the earnings-related pension providers. The negotiations involved the Confederation of Finnish Industries, the Confederation of Unions for Professional and Managerial Staff in Finland, the Central Organisation of Finnish Trade Unions, and the Finnish Confederation of Professionals, as well as a new social partner, the Local Government Employers. An additional aspect of the negotiations was the presence of a representative of the Ministry of Finance and the requirement that the pension reform should reduce the sustainability gap, that is, the difference between the revenue and expenditure of the public economy, by one percentage point in the long term.[144]

How is the pension contribution rate determined?

In terms of earnings-related pensions, perhaps the most important figure, that is, the pension contribution rate and its division into employer and employee components, is negotiated annually by the social partners. For this purpose, the background work is carried out by the Finnish Pension Alliance TELA's Calculation Criteria Section to ensure that the contribution is accurate and in accordance with actuarial principles. On behalf of the earnings-related pension insurance companies, the Section prepares a joint application for the annual calculation criteria. At the same time, the basis for calculating liabilities is determined, which refers to the rate of interest calculated for pension funds, among other things. The interest rate defines the present value of the pre-funded pension. In short, the lower the interest rate, the higher the pension liabilities.

The Calculation Criteria Section consists of actuaries of the earnings-related pension insurance companies (Varma, Ilmarinen, Elo and Veritas). The unanimity of members is required for the application. In addition, the Section includes expert members from the Finnish Pension Alliance TELA, the Ministry of Social Affairs and Health and the Finnish Centre for Pensions. Private-sector social partners discuss the calculation of the contribution.

Earnings-related pension insurance companies submit the application to the Ministry of Social Affairs and Health, which can either reject or accept the prepared application. The Ministry can only accept a contribution rate that is considered legal. The contribution rate

must be sufficiently high so that the clearing reserve (a buffer fund) of private sector pensions does not fall below the minimum. The minimum amount ensures that pensions for the year in question can be paid.

The Financial Supervisory Authority monitors the operations of the Calculation Criteria Section but does not participate in its work. In his memoir, Lasse Laatunen, a long-standing pension negotiator of the Confederation of Finnish Industries, describes the practices of the Calculation Criteria Section as ingenious because the Section gives the social partners much power. With the application for the calculation criteria, the level of earnings-related pension contributions can be determined without a separate parliamentary decision.[145]

6. What is the current state and future of pensions in Finland?

Pensions are the subject of great interest, and people often have a certain view regarding the sustainability of the pension system, or the adequacy or equity of pensions. A regular assessment of the pension system is therefore justified. The purpose of pensions is to prevent poverty in old age and to maintain a reasonable income level in retirement in relation to work career earnings. Pension provision should be implemented in an efficient and economically sustainable way to ensure that the pension expenditure remains moderate.

The pension system is generally assessed in terms of the sufficient level of pensions, the coverage of the pension system and the sustainability of its financing (i.e., the balance between contributions and benefits), as well as through the administrative functioning and costs of the system. Analyses are constantly being carried out in Finland, and the Finnish pension system is also the subject of international assessments and comparisons.[146] The at-risk-of-poverty rate, the pension level and replacement rate, the length of working lives and employment rate are important indicators of social sustainability. The pension expenditure, the pension contribution rates and the development of assets are indicators of the financial situation.

To achieve the objectives, pension systems must continuously adapt to changes taking place in society. The changes in the population structure, economy, financial markets and working life also impact the pension systems. Many of the challenges are the same in different countries, and so the countries often turn to one another to find alternative ways to adapt their own models. Finland strives to form a view of the future by means of, for example, long-term pension projections, which contribute to steering the reforms of the system to a more significant extent than in many other European countries.[147]

Pension levels and pensioners' livelihood

Pensions are a vital source of income for the ageing population. The level of the average pension, the amount of pension relative to the previous salary (the replacement rate), and the at-risk-of-poverty rate of pensioners indicate the adequacy of pensions in relation to the previous income level and the rest of the population. The livelihood of pensioners has improved over the decades and is at a relatively good level in Finland. Although the income differences between various groups of pension recipients is lower than the EU average, pensioners are not a homogeneous group, and some are facing subsistence issues.[148] In particular, those who have lost their ability to work at a young age represent one group that is experiencing income difficulties.[149]

Average pensions have consistently risen in Finland because of pension legislation enforcement, positive wage development and, more recently, extended working lives. The initial phases of the earnings-related pension scheme were reflected in pension levels for decades,

because the time for pension accrual was shorter for older generations compared to more recently retired pensioners. The extension of pension coverage to self-employed persons and artists has improved average pensions. In 2022, the average old-age pension in Finland was higher than the EU average.[150]

The average total pension, which includes earnings-related pensions, pensions provided by Kela and possible pensions granted on the basis of motor liability and accident insurance, was approximately 1,800 euros per month in 2022. The level of old-age pensions is higher than that of disability pensions, and the average pension of women is about one fifth lower than the average of men. In proportion to the average earnings of those engaged in gainful employment, the average old-age pension has remained at around 50 per cent for the past two decades. On the other hand, the level of disability pensions has fallen to about one third of the average earnings of those working.[151]

On average, women's pensions in the EU are lower than men's pensions. The gap has narrowed but, on average, women's pensions were nearly one third lower in 2019. In Finland, the gap is over 20 per cent, which is lower than the EU average. The differences between countries are significant. In Estonia, for example, the gender gap in pensions is nearly non-existent since the country used to have a flat-rate pension. In Luxembourg, the average pension for women is only about half of the pension received by men.[152]

In Finland, as well as in other countries, the gender gap in pensions is usually the result of an earnings gap caused by, among other things, the lower pay and prevalence of part-time work in predominantly female industries. Furthermore, women's working lives are usually shorter and they have more career breaks than men. In some countries, women

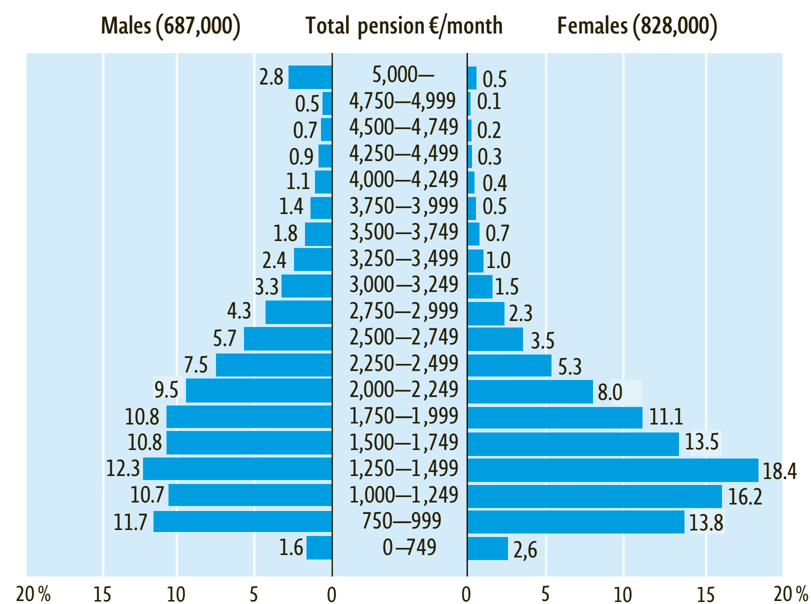


Figure 14. Distribution of total pension in Finland in 2022
Source: Finnish Centre for Pensions and Kela

also have a lower retirement age than men. Pension differences follow the gender pay gap after a delay of a few decades. In Finland, national pensions and taxation of pensions compensate for the difference in earnings during working life. In terms of the total sum of pensions paid throughout one's retirement, the situation evens out, since women live longer and will therefore receive pension for a longer period.

The pension replacement rate depicts the amount of pension in relation to the earnings received before retirement. In 2021, the replacement rate for those entering retirement in Finland was 57 per cent

on average. However, there is a great deal of variation between individual replacement rates. The earnings for the final working years can differ from the average earnings throughout one's career, which means that the replacement rate can become very high or low compared to the salary for the final years.[153] A theoretical replacement rate can also be calculated for those who are yet to retire. Both the EU and the OECD monitor the replacement rates in different countries. According to the current regulations in Finland, the pension replacement rate would be about 50 per cent for the age group that is just entering working life. The assumption for this calculation is a working career of at least forty years that lasts until the retirement age. This replacement rate would be the European average.[154]

Pensioners extensively use public social and health services - low-income pensioners more than high-income pensioners. Publicly offered or subsidised services, such as health care, rehabilitation and home care or institutional care have an impact on the livelihood of pensioners. However, the current comparisons between countries do not take such services into account. Comprehensive consideration of services as part of subsistence assessments, especially between different countries, would also be challenging.[155]

In Finland, the average monetary value of services used by pensioners in 2015 was 6,500 euros per pensioner, of which only 12.7 per cent were covered by paid customer fees. Publicly supported services are especially important for low-income pensioners. A total of 70 per cent of the costs are attributable to 10 per cent of pension recipients. The costs for this group are around 50,000 euros per year.[156]

Being at risk of poverty implies a low economic standard of living. There are many ways to define the rate of those who are at risk of poverty.

Finland has no official poverty risk line. The European Union defines somebody being at risk of poverty as someone whose household's disposable monetary income per unit of consumption (equivalised income) is less than 60 per cent of the median income of the population as a whole. In 2021, 15.8 per cent of all pensioners in Finland were at risk of poverty as defined in this way. The share of people at risk of poverty was 12.7 per cent of the total population. When the threshold of those at risk of poverty is set at 50 per cent of the median income of the population as a whole, the number of pensioners at risk of poverty will be significantly lower, below 5 per cent.[157]

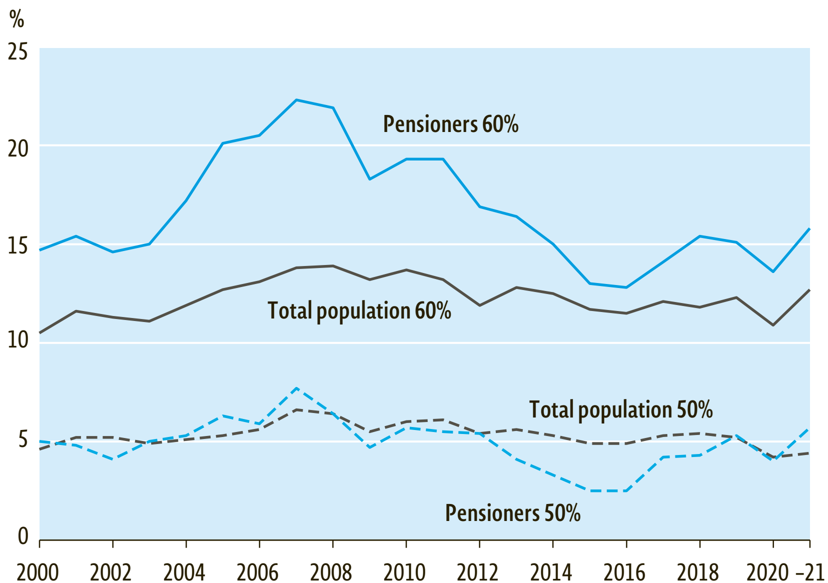


Figure 15. At-risk-of-poverty rate for pensioners and the total population, at treshholds of 50% and 60% of the median income of the population
Source: Statistics Finland, Income distribution statistics

In addition to income, severe material deprivation, for example, can be considered an indicator of actual living conditions. This indicator helps to clarify whether a household has financial difficulties or an involuntary deprivation of certain material goods or services. In 2019, slightly more than 1 per cent of pensioners in Finland experienced severe material deprivation, while the EU average was nearly 6 per cent.[158]

The income differences between pensioners in Finland are not particularly large. The share of low-income people aged 65 or over within the population of matching age is lower than the EU average. Also, poverty among pensioners receiving old-age pension is not differentiated in the EU comparison. Among pension recipients in Finland, young people (in practice, those on disability pension) and pensioners over 84 years of age have more often low incomes. Pensioners living alone are far more likely to be at risk of poverty than those living with their spouses.[159]

For self-employed persons, the level of statutory pensions is lower than average. This is due to underinsuring, which means that the self-employed have set their insured income at a level that is lower than the actual value of their work input.[160] Generally, in Europe, the insured income of self-employed persons is determined based on the actual income amount verified in taxation which, in turn, determines the level of pension contributions and social security.

Finland is one of the few European countries in which self-employed people have the possibility to contribute to the determination of the income level that serves as the basis for their earnings-related pension contributions. This has also drawn the attention of the OECD which, in its assessment of Finland, proposed that the income of self-employed persons should be tied to the actual income verified in taxation, as is the general approach for the rest of Europe.[161] A reform entered into force at

the start of 2023 with the aim of establishing a more accurate system for the determination of the self-employed income level.

Working lives and retirement

Since the depression in the 1990s, Finnish governments have strived to increase the effective retirement age, that is, the actual age when people leave the labour market, and the employment rate of older workers through pension policies. As a result of longer lifespans, time spent in retirement has extended, thereby increasing the pension expenditure. To maintain contributions and benefits at the current level, working lives need to be further extended. A higher employment rate affects the public economy positively since tax revenues are higher and the benefit expenditure lower. On the other hand, the longer people work, the more pension they accrue. This will improve the level of pensions and the livelihood of pensioners.

Presently, people retire in Finland clearly later than they did at the start of the millennium. Over the past two decades, employment rates have risen significantly, particularly among those aged 55–64. In Finland, the age when people stop working increased in the 2010s by 1.6 years to just under 64.[162]

Working lives are longer in Finland than the average in the EU but shorter than in other Nordic countries. In 2021, the average expected duration of a working life in Finland was about 39 years. This is nearly a year above the EU average, which was 38.2 years. In Sweden, the expectation was 42, in Norway 41 and in Denmark 40 years. In Iceland, the expected duration of a working life is the highest in Europe at up to

45 years.[163] Finland has caught up to the other Nordic countries in this respect, and the employment rate of older workers has clearly increased, even though it still lags behind that in the other Nordic countries. The Finnish work culture has been different compared to other Nordic countries, with more routes to early retirement, and these have also been used. In the Nordic countries, except for Finland and Denmark, it is usual to continue working after retirement, often part time. When the employment rate is converted to reflect full-time work, Finland does not differ much from the other Nordic countries. In other words, there are more employed people in other Nordic countries but, overall, the amount of working hours done is the same.

At the moment, it appears that changes to the retirement age have led to extended working lives and a higher effective retirement age. It remains to be seen how well people will be able to continue coping at

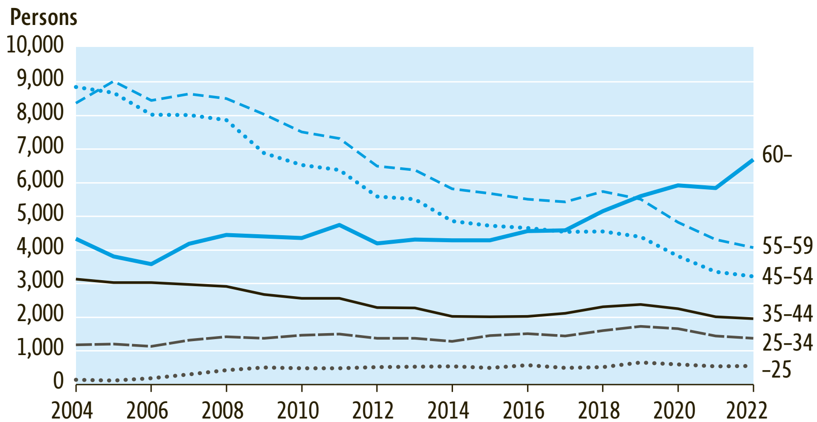


Figure 16. New retirees on an earnings-related disability pension in 2004–2022, by age group
Source: Finnish Centre for Pensions

work and how the number of disability pensions will develop. Figure 16 shows that since 2017, when the retirement age began to rise, the number of people over 60 who are retiring on disability pension has also increased.[164]

The Finnish Government and social partners have defined a target to increase the age at which people retire. The target has been an expected effective retirement age of at least 62.4 years by 2025. In 2021, this target was achieved, but in 2022, the expected effective retirement age decreased by 0.2 years. The dip can reasonably be assumed to be temporary, after which the expected effective retirement age is likely to rise again.[165]

Population ageing and declining birth rates

The biggest changes in the population structure over the past century relate to longer lifespans and declining birth rates. In Finland, the old-age dependency ratio, which depicts the ratio between the number of those over 65 to those aged 15–64, is high: the share of the population aged over 65 (22.9%) is the highest in Europe, after Italy (23.7%).[166]

Changes in the population structure significantly impact the financing of pensions and benefit expenditure. The development of life expectancy and the birth rate affect the number of pensioners relative to people of working age. The population structure is also affected by immigration. If immigrants of working age move to Finland from abroad, it will have a positive impact on the old-age dependency ratio and, through employment, on the financing of pensions. Work-based immigration increases the number of contributors to the system immediately but also the pension expenditure in the long run.

In Finland, life expectancy has risen significantly over the past decades. In 1990, it was 71 years for men and 79 years for women, whereas the corresponding figures in 2021 were 79 for men and almost 85 for women.[167] Life expectancy has a core impact on the financing of pensions. It tells how long pensions need to be paid. Currently, the old-age pension is being paid for an average of more than 20 years, whereas, in 1980, the average duration of old-age pensions that ended that year was only 8.6 years.[168] Over the past 30 years, the number of remaining years of life on an old-age pension has increased by nearly five years for men to 18.5 years and by about four years for women to almost 22 years. However, the positive trend was unexpectedly interrupted in 2021, since the COVID-19 pandemic caused the life expectancy of the older population to drop.

By international comparison, life expectancy in Finland has risen rapidly, and for those aged 65 in 2020, it was already above the EU average (19.3 years). In comparison to other Nordic countries, the life expectancy was in the middle range, although that of men in Finland was slightly lower compared to the other countries. For women, life expectancy for those aged 65 was the highest of all the Nordic countries.[169] This development is mainly the result of better health. Diseases and injuries are treated and prevented more efficiently. Overall health care has also become more effective.[170] However, health inequalities between income and education groups are large and persistent in Finland.[171] According to a study conducted in 2013, the expected duration of old-age retirement of men was four to five years higher for upper-level employees than for those with a lower employee status. The corresponding difference for women was three years.[172] It is worth noting that the expectation for healthy life years among Finnish women and men is average when reviewed on the EU level.[173]

Projections show that the average life expectancy will continue to rise in the future as well, but the rate of increase may slow down. By 2040, the life expectancy of those aged 65 in Finland is anticipated to increase by about three years more for men and 2.5 for women.[174] Increases in life expectancy are also reflected in the pensions of other countries. Within the EU, the retirement age of 65 years is currently common, and many countries have also made decisions about raising their retirement age. In certain countries, the retirement age is tied to the increase in life expectancy. In addition to Finland, such countries include Denmark and Italy.

The birth rate is also a significant factor in terms of population structure and, consequently, pensions. In about 20 years, the number of children being born will impact the number of people of working age and, therefore, the financing of pensions. In Finland, the birth rate during the 1990s and 2000s was relatively high compared to that of other wealthy countries. The total fertility rate was approximately 1.8 children per woman in Finland. Even though this figure is high in European comparison, it was clearly lower than 2.1, which is the fertility rate required to keep the population size stable.

Since the turn of the 2010s, the birth rate has fallen below the Nordic level and, since 2016, also below the EU average. In 2019, Finland's total fertility rate was the lowest in measuring history, at 1.35. The corresponding figure for the same year in the EU was 1.53. In its population projection, Statistics Finland assumes that the birth rate will not increase significantly, and that the fertility rate will be around 1.45 in the future.[175] The declining birth rate reduces the number of people who are working. Having fewer people working, without any major increase in productivity, would increase the contribution rate for earnings-related

pensions in the future, as younger age groups would always be smaller than older age groups.[176]

Immigration has an impact on population structure and can also improve the financing of pensions. If immigrants are primarily of working age and children, immigration will reduce the old-age dependency ratio. The birth rate among immigrants may also be higher than among natives on average, whereby immigration lowers the age structure. However, immigrants are not a homogenous group. They differ greatly in terms of employment and earnings. Many underlying factors are linked to employment, such as the reason for immigration, the educational level, gender, age and language skills of the immigrants, as well as the time spent in the country[177]

During the years 2010–2021, altogether 12,000–23,000 more people moved to Finland than moved away. The assumption of the population projection is that Finland's net migration would be 15,000 people per year. Over the past decade, net migration of Denmark and Norway, whose population size is similar to Finland's, has been an average of about 22,000 for Denmark and 30,000 for Norway. In the more populous country of Sweden, net migration has been 76,000 people.[178] The impacts of immigration on the financing of pensions depend on the number and employment rate of immigrants. If net migration grows permanently to 25,000 people per year, pension contributions could be reduced. The reduction would be about one percentage point in 2050 and about three percentage points at the end of this century.[179]

Financial sustainability

Financial sustainability means that the income and expenditure of the pension system are balanced and not too high in relation to the size of the national economy. In terms of financing pensions, the number of those working (pension payers) in relation to pensioners (benefit recipients) is key, since the working population is primarily financing the pensions in payment through their pension contributions. Already for decades, the financial sustainability of pension provision has been one of the standard topics of public debate. One reason for this is certainly that, within a defined benefit pension scheme, balance has been ensured by raising the earnings-related pension contributions. The current earnings-related pension contribution is nearly five times compared to what it was when the earnings-related pension scheme was initiated in 1962. Very few anticipated that the pension contribution would become so high.

Nowadays, the payment of earnings-related pensions is facilitated by the fact that part of the pension expenditure is covered by contributions that were pre-funded. The role of pre-funding has progressively grown along with the increase in the size of the funds. In Finland, statutory earnings-related pension assets are approximately equal to the annual GDP and large by international standards. In other countries, the pre-funding of statutory pensions is much less common. For example, in the EU countries with the largest economies, namely Germany, France, Italy and Spain, statutory pensions are not pre-funded. Similarly, pre-funded supplementary pension schemes (that is, occupational pension schemes set up by social partners) are not very common in these countries, which means that the ratio of pension assets to GDP remains at a relatively low level.

In Finland, the pension assets and their returns affect the level of the pension contribution but not the pension benefit. If investment returns are higher than expected for a longer period, the pension contribution can be lowered. If the investment income is lower, the pension contribution needs to be increased. In the private sector, the pension expenditure has been higher than the income from contributions since 2013. The difference is financed by the accumulated pension assets. According to the projections of the Finnish Centre for Pensions, pension assets will be used to cover part of the difference between the contribution income and the pension expenditure in the future as well.

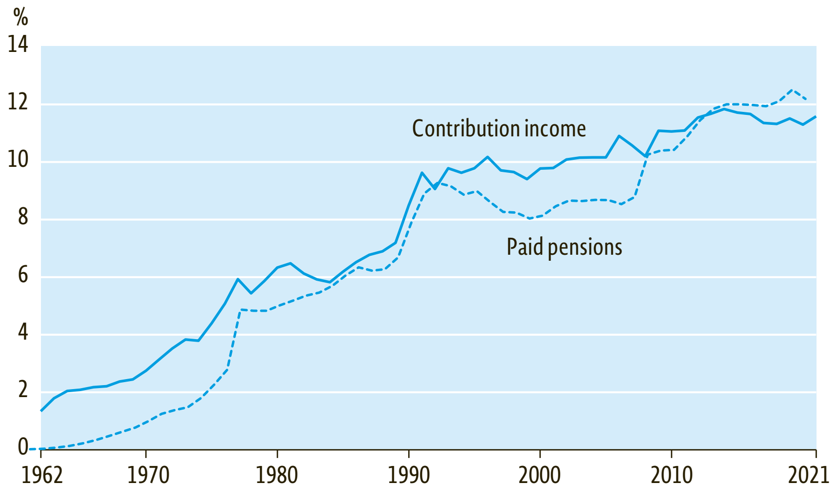


Figure 17. Paid pensions and contribution income in 1962–2021, % of GDP
Source: Time series from 1962 (Etk.fi)

The Finnish earnings-related pension scheme as part of the national economy

National accounts describe all economic activity in Finland. In the national accounts, social security is classified under the general government sector and the public sector. They also include Finnish earnings-related pensions although these are managed by private actors. Earnings-related pension providers are social security funds because they are mandatory, collective and controlled by public authority.[180]

The result of the classification into the general government sector and the public sector is that the surplus or deficit of earnings-related pension providers affects the general government figures, even though the funds cannot be used for any purpose other than pensions. According to EU economic governance rules, the public budget deficit must not exceed 3 per cent. The earnings-related pension scheme has improved the financial position of the general government because the earnings-related pension providers have been in surplus, thus reducing the total public budget deficit. In the 2010s, the earnings-related pension scheme had an average surplus of around 1.8 per cent.[181]

Statutory pension contributions are included in Finland's total tax rate which measures the amount of taxes and mandatory contributions payable relative to GDP. In Finland, the total tax rate is high because of, for example, comprehensive public welfare services and benefits. The earnings-related pension contribution also raises the total tax rate. This makes comparisons between countries more difficult since supplementary or occupational pensions that are common in

many countries are financed by private contributions. They are not considered in the total tax rate, although the contributions are often compulsory and, thus, would be somewhat comparable to statutory earnings-related pension contributions.[182]

The total contribution income collected for statutory pensions in Finland is high by European standards. This is due to the central role of statutory pensions. When taking into account all minimum, earnings-related and occupational pensions, Finland's total contribution income is slightly higher than in Sweden but lower than in Denmark. In Finland, nearly all contribution income collected is used towards statutory pensions, but in other countries, the share of supplementary and occupational pensions is greater. Figure 18 show an overview of the total contribution income, or the total sum of taxes and contributions collected for pensions, in certain European countries. In the Figure, the total contribution and tax income is proportioned to each country's GDP.[183]

However, the typical way to consider pensions relative to the national economy is to look at pension expenditure. As a result of the ageing of the population, pension expenditure has increased in Europe. In 2011, the total pension expenditure of countries in the eurozone was an average of 13.1 per cent in relation to their GDP, whereas in 2020, the expenditure had risen to 13.6 per cent. This same development also took place in Finland, where the total pension expenditure has risen from just under 12 per cent to just under 14 per cent in relation to GDP. Earlier projections anticipated even faster growth, but the implemented pension reforms have contributed to the deceleration of growth in the expenditure. However, it is estimated that the pension expenditure in

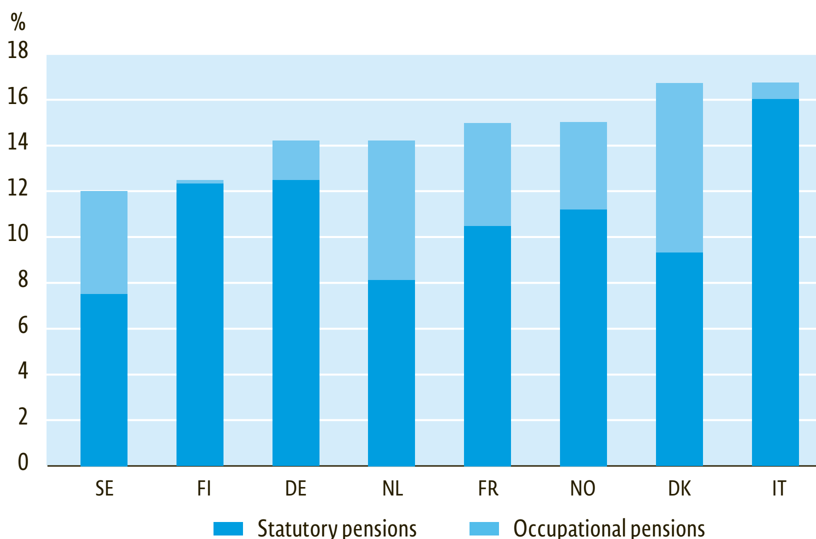


Figure 18. Contribution income for statutory and occupational pensions in relation to GDP in 2020
Source: Vidlund et al. 2022

relation to GDP will grow further and the statutory pension expenditure will continue to remain above the EU average.[184]

According to long-term projections calculated by the Finnish Centre for Pensions, the current earnings-related pension contribution rate is insufficient to pay the earnings-related pensions of the private sector in the future.[185] Based on the assumptions of the calculations, it follows that either benefits need to be reduced or contribution rates increased to balance pension financing. In the calculations, the increases in pension contribution rate are set to take place mid-century. It would be possible to increase the contribution rate already earlier, whereby the increases would be smaller and would be more evenly allocated to different age groups.

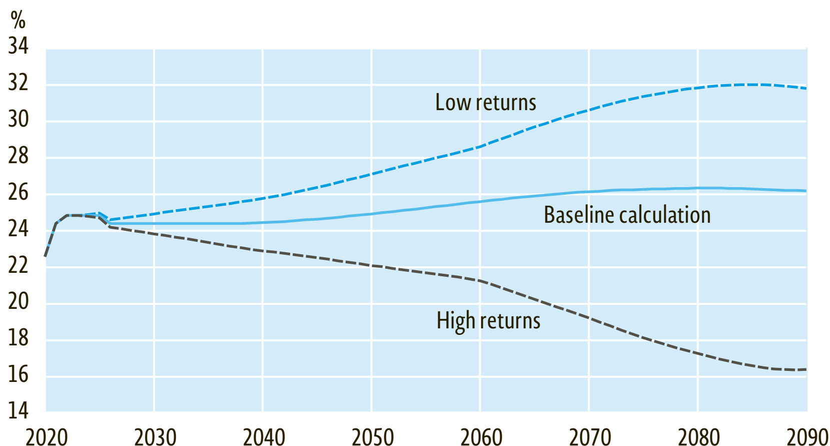


Figure 19. Private sector contribution in proportion to the wage sum at different investment returns
Source: Tikanmäki et al. 2022

Good investment returns reduce the required pension contribution rate. For example, an increase of one percentage point in the average investment returns would lower the pension contribution rate over the long term by about three percentage points. However, there is a great deal of uncertainty connected with investment returns. The returns can also be lower than expected, in which case the pension contribution rate will need to be raised.

In the long-term projections of the Finnish Centre for Pensions, the real rate of return on the pension assets of the pension insurance companies is assumed to be 2.5 per cent higher than inflation until 2031. Thereafter, the real rate of return is assumed to be 3.5 per cent per year. If the real return was 1.2 percentage points lower, this would mean a

more than 5 percentage point increase in the pension contribution rate by the end of the century. If, on the other hand, the real return was 1.2 percentage points higher, the pension contribution rate could be steadily reduced by nearly ten percentage points by the end of the century.[186]

Finnish pension insurance companies have not succeeded especially well in gaining good investment returns when compared to the pension funds of other countries.[187] One explanation could be that the risk-taking is regulated by law in Finland, and returns must be sought within the framework of this prudential regulation.[188] Therefore, the alleviation of regulation has been up for discussion as one way to improve the financing of the earnings-related pension scheme.[189]

In his assessment of the Finnish earnings-related pension scheme, Professor Torben Andersen also pointed out that the regulation of

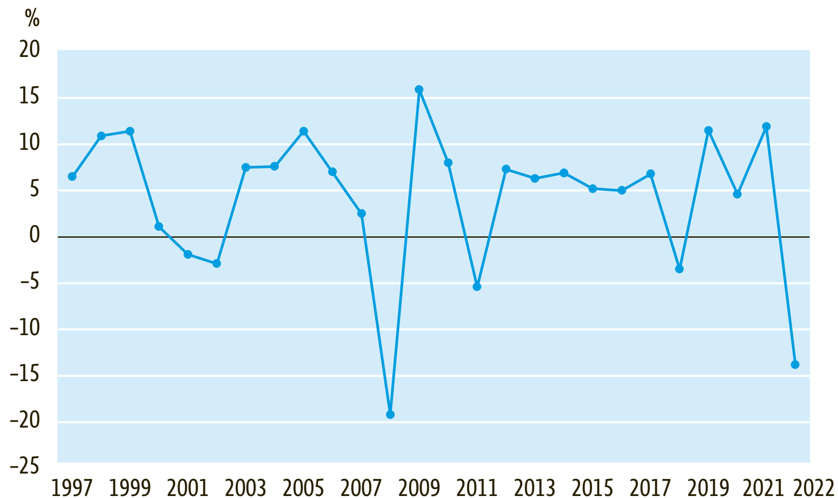


Figure 20. Investment returns of earnings-related pension assets in 1997–2022
Source: TELA

investment activities could be improved.[190] The pursuit of higher investment returns would also mean an increase in the investment risk involved. The acceptable level of risk is a political decision.

Employment affects pension contribution income and expenditure

The financial state of the Finnish earnings-related pension scheme is affected by wage sum development; in other words, how the total sum of the paid salaries and wages develops.[191] This is because pensions in payment are mainly financed on a PAYG basis. In other words, pension contributions levied on current earnings of employed persons are used to finance pensions currently in payment. Wage sum development is dependent on the labour market, that is, changes in the paid wages and the number of employed persons.

The employment rate indicates the proportion of employed persons aged 15 to 64 within the population of matching age. In Finland, following the financial crisis of 2008, the employment rate remained below 70 per cent up until the mid-2010s. Since then, employment has gradually risen, and by the end of 2021, it was already at more than 72 per cent. It is assumed that the employment rate will settle at slightly over 73 per cent from the 2030s onwards. The calculations also simulate situations in which employment would be a couple percentage points lower or higher than in the baseline assumption.[192]

Lower employment would result in an increase in the pension contribution rate of approximately half a percentage point at most during the 2030s–2040s. Correspondingly, in a higher employment scenario,

the pension contribution rate could temporarily be reduced by half a percentage point. In the long term, however, the contribution rate will even out to the same level for different employment rates, as changes in employment will eventually also be reflected in the earnings-related pension expenditure. During a period of low employment, for example, people accrue less earnings-related pension, thus reducing the earnings-related pension expenditure in the future.[193] From the perspective of the overall pension system, on the other hand, lower employment and smaller earnings-related pensions will mean a higher expenditure of national pensions. The working population bears the risk of fluctuations in earnings since income and expenditure are balanced by increasing or decreasing the pension contribution rate. In certain countries, efforts have been made to share the risk related to changes in the wage sum with benefit recipients as well.

Adjustment mechanisms to safeguard pension adequacy and sustainability

Pension reforms call for separate decisions and legislative amendments that can be slow to enact. In addition to legislative changes, pension schemes are equipped with internal mechanisms that enable them to adapt to changes in society.[194] Adjustment mechanisms can be automatic, whereby the parameters of the pension benefits are revised based on a rule when certain conditions are met. These types of adjustment mechanisms allow for risk sharing between the parties within the system, that is, those paying the pension contributions and those receiving pension benefits. At the same time, the risks are evened out across the different

life phases of an individual or between generations. Thus, adjustment mechanisms can also protect those generations that cannot influence decision-making.

In Finland, the defined-benefit system, in which pensions in payment cannot be reduced without separate amendments to legislation, is adjusted to the imbalance of income and expenditure primarily by changing the pension contribution rate. As the population ages, it is necessary to increase the pension contribution rate to cover the expanding pension expenditure. As lifespans also increase, the pension contribution rate would only have to be increased if the system is not otherwise adjusted. This is one reason why Finnish government decided to raise the retirement age and take the life expectancy coefficient into use. This way, the increasing life expectancy can be taken into consideration in the pension level and retirement age. In defined contribution systems, such as in Sweden and Norway, the lengthening of lifespans would automatically and gradually lead to a very low pension level if people chose not to extend their working lives or if the retirement age was not adjusted. In Sweden and Norway, the amount of accrued pension, or pension capital, is divided over the entire expected time spent in retirement. As life expectancy increases, the pension level decreases if the retirement age remains the same.[195]

In European pension systems, pension indexes adjust benefits annually. The countries have differing index rules but, typically, they take into consideration changes in prices, salaries or both that have taken place during the year. In some countries, the index takes other factors into account as well, particularly changes in the economy and population structure. In Germany, for example, changes in the level of the pension contribution rate and number of pensioners are also included in the

index. An increase in the pension contribution rate weakens the index increase. At the same time, the index increase is smaller if the number of pensioners in proportion to those in working life increases.[196] By increasing the pension contribution rate and weakening the indexation of benefits, the financial position of the employed and pensioners in relation to one another will be more stable. This also works vice versa when the economic development is positive.[197]

In Sweden, the approach of balancing the public pension scheme by adjusting the benefits has been taken quite far: the pension contribution rate cannot be increased. Pension cuts are possible. Pension indexation is carried out annually based on earnings development, but the index also takes the financial state of the scheme into account. The index is affected by the ratio of contribution income and pension assets in relation to pensions in payment and future pension benefits. The index will become weakened or drop into the negative if the scheme has a deficit. Similarly, the growth of the index will accelerate if the scheme has a surplus and pensions have been cut earlier. Pensions have actually been cut, but the cuts have been compensated for by a reduction in taxes.[198]

Changes in the birth rate affect different pension schemes in different ways. Within PAYG schemes, a low birth rate is eventually reflected in the pressure to either increase pension contribution rate, as in Finland, or to weaken benefits, as in Sweden. In pre-funded schemes, the effects of changes in the birth rate are not as evident, particularly if the pension assets are invested globally, whereby size differences between succeeding generations do not have the same type of impact on the financing of pensions.

Pre-funding of pension contributions is one way to prepare for the intergenerational size differences. It has also been suggested that pre-

funding could be linked to the birth rate.[199] A low birth rate initially reduces the required spending on children, since fewer children need less services. The unspent resources could be pre-funded to finance future pension expenditure when there will be less payers. However, the financing challenges posed by declining birth rates could also be addressed by supporting families with children instead of making structural changes to pension schemes.

Pensions in the future

Pension provision in Finland is primarily based on statutory earnings-related pensions. National pensions secure a minimum income level for all residents. These schemes have complemented each other for decades. In comparison to many other countries, the overall pension provision approach is simple, with practically no other occupational or individual supplementary pensions beyond the statutory ones.

The rules and benefits of the earnings-related pension scheme have come a long way since the 1960s. In its early days, the benefits were relatively modest, and the pension expenditure was very low. During the 1960–70s, pension levels improved, and new benefits were introduced. In the 1980s and 1990s, people were able to reduce working already before the official retirement age of 65 by taking early and part-time pensions. The long-term unemployed were able or forced to enter the unemployment pathway to retirement as early as at age 53.

The strong increase in life expectancy has surprised pension experts. Following the positive development, the key theme of pension reforms since the turn of the millennium has been to extend working lives with

incentives or compulsory rules. The retirement age increases gradually following the 2017 pension reform. On top of that, the monthly pension amount is proportioned to life expectancy using the life expectancy coefficient. The low birth rate has led to more attention being paid to the financial basis of pension provision. If the contribution income of the earnings-related pension scheme increases at a slower rate than the expenditure, the contribution rate will need to be raised in the future.

If the younger generations pay more for their pensions than previous generations, the question of intergenerational fairness arises; is the pension scheme treating different generations fairly and equally? Because people live longer, younger generations will have to work longer than the generations before them to achieve the same pension level. According to projections, the purchasing power of pensions will continuously grow as a result of the rise in average earnings, but relative to wages, pensions will decrease over the coming decades. The average pension was about 55 per cent of the average earnings in 2023. By 2050, the ratio is expected to drop to 49 per cent and by 2090 to 46 per cent. The life expectancy coefficient impacts pensions the most. However, if working lives are extended more than anticipated, the ratio between the average pension and average earnings will remain close to the current level.[200]

As shown in this book, Finnish pensions have evolved over time. Changes are inevitable in the future as well. Pension benefits are not likely to be cut or pension contribution rates raised in any dramatic way soon since our legislation already sets the limits for such measures. The aim of pension projections is to assess and review the pension system with a proactive approach over a period of decades. If the projections are correct and measures are taken in advance, the necessary changes will be smaller than those that might be required by a short-sighted assessment.

Pensions will continue to be paid if the economy functions and people continue working. Pension reforms will surely be implemented in the future, whenever developments in society so require.

Notes

1 Social security committee 2022; Kela 2023.
2 World Bank 1994.
3 Holzmann et al. 2008.
4 Andersen 2023.
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