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## SUMMARY

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# Statutory pensions in Finland – long-term projections 2016

This report presents the Finnish Centre for Pensions' 2016 long-term projections of the development of statutory pension expenditure and the average benefit level. The report also includes financing projections for the earnings-related pension acts. The main result from the financing projections is the development of contributions and assets under the Employees Pensions Act for the years 2016–2085.

The projections follow Statistics Finland's population forecast from 2015, which we have extended to 2085. According to the forecast, the population will continue to grow throughout most of the projection period. At year-end 2015, the population in Finland amounted to 5.49 million. It is projected to grow to 6.1 million by the end of 2085. The population growth is mainly due to the rising number of people aged 65 and above. With the exception of the 2030s and the early 2040s, the working-age population will decrease throughout the projection period never to reach the starting level.

The old-age dependency ratio (the ratio of persons aged 65 and above to the 15–64-year-olds) will continue to grow until 2085, but at a slower pace after 2030.

In 2015, the old-age dependency ratio was 32.4 per cent. It is projected to rise to 56.4 per cent by 2085. The weakening of the old-age dependency ratio in the near future is a consequence of the current age structure in Finland. However, the steadily rising life expectancy causes the old-age dependency ratio to weaken throughout the projection period. In 2015, life expectancy at birth was 81.3 years. It is projected to rise to above 90 years by 2085.

The employment rate in 2013–2015 was approximately 68.3 per cent. According to the employment projection, it is expected to increase to 70 per cent in 2020 and reach 72 per cent by the end of the 2020s. After that, the employment rate will vary between 72 and 73 per cent, depending on the age-structure of the working-age population. The growth in the employment rate follows from an increasing labour force participation rate and a decreasing

unemployment rate. The employment rate of the elderly will rise partly as a result of the expected postponing of retirement due to, among other things, the 2017 pension reform. In 2015, the expected effective retirement age was 61.1 years. It is projected to rise to 62.7 years by 2025 and to stabilise at slightly below 65 years by the end of the projection period.

The old-age pension amount will be adjusted to changes in life expectancy with the life expectancy coefficient. The value of the life expectancy coefficient will be determined separately for each birth cohort. In 2015, the life expectancy coefficient for the 62-year-olds was 0.972. It will be 0.91 and 0.95 in 2030 and 2085, respectively. For those born in 1965 or later, the eligibility age for retirement will also be adjusted to changes in life expectancy. The earliest eligibility age for old-age pension will be 66 years and 7 months for those born in 1980 and it will increase to approximately 68 years for those born in 2000.

In 2015, the total statutory pension expenditure accounted for 13.6 per cent of GDP. It will be at its highest – slightly more than 14 per cent – in the 2020s. In the 2040s, the ratio of pension expenditure to GDP will decrease to just over 12 per cent, after which it will start to grow slowly again in 2050. At the end of the projection period, the pension expenditure will grow to nearly 14 per cent of GDP.

In 2015, the earnings-related pension expenditure for the whole economy was 30.4 per cent relative to the sum of earned income. The expenditure ratio will grow until 2020, at which time it will be slightly over 33 per cent. After 2025, the ratio will decrease, standing at approximately 29 per cent in 2050. From then on, it will grow again to slightly over 33 per cent by the end of the projection period. The increase in the expenditure ratio is caused by the growth in old-age pension and disability pension expenditure.

In 2015, the average monthly pension was EUR 1,613. The purchasing power of the average pension is projected to grow continuously, reaching EUR 3,700 in 2085 at 2015 prices. Relative to the average wage, the average pension will increase slightly over the next few years. This growth is due to two factors: first, the earnings growth is expected to be slow in the near future. Second, the gradually terminating pensions of the oldest pensioners are low since they started working before the pension acts came into force in the 1960s. In contrast, the new pensions are based on a full working life. The relative pension level will begin to decrease around the year 2020. The main reason for the decrease is the life expectancy coefficient, which adjusts the benefit level to correspond to changes in life expectancy. The employee's pension contribution and the adjustments made to the public sector pension benefits in the 1990s also play a role in this development. The discretionary changes made to pensions paid by the Social Insurance Institution of Finland (Kela) will have a pivotal impact on the level of these pensions. According to the assumptions of this projection, the increases to the pensions paid by Kela will exceed inflation but lag behind the earnings level.

During the projection period, there will be no significant changes to pension distributions inside gender groups. However, the differences in pension levels will decrease between genders. The pensions for people of different educational levels will develop more-or-less at the same rate. Men with a higher university degree and men and women with a basic-level

education form the exception. For both groups, pensions will develop at a below-average rate because of changes in the educational structure. In the future, those with a higher-level education will not form as selective a group as previously. Correspondingly, the group with a basic-level education will include relatively more people who are, on average, less well off. It will also include relatively more immigrants.

The contribution rate under the Employees Pensions Act will rise from 24 per cent in 2015 to 24.8 per cent at the end of the 2020s. After that, it will go down to 24.4 per cent for about one decade. The contribution rate will rise again in the 2050s to a little over 28 per cent by 2085, the end of the projection period. The increase in the contribution rate is a result of the increase in pension expenditure. By the end of the century, the assets under the Employees Pensions Act will also grow relative to the wage sum. In contrast, the amount of assets relative to the pension expenditure will remain constant.

The constant contribution rate under the Employees Pensions Act that would be sufficient to finance expenditures indefinitely is 25.7 per cent. In 2015, the contribution rate was 24.0 per cent of the wage sum. Similarly, a sufficient constant contribution rate for local government pensions would be 26.0 per cent relative to the local government wage sum. In 2015, that rate was 29.8 per cent. The contribution level sufficient to finance the total pension expenditure under all earnings-related pension acts would be 28.1 per cent. In 2015, the comparable figure was 28.5 per cent.

We have examined the sensitivity to changes in the main assumptions in our report.

*Changes in mortality* would affect the development of retirement ages and the benefit levels due to the life expectancy coefficient. However, these adaptation mechanisms would not remove all the effects of the rising life expectancy on expenditure. First of all, they do not adjust the pension levels of those who have already retired. Furthermore, the life expectancy coefficient does not apply to pensions paid by Kela. In addition, the rise in the retirement age does not affect, in full, the effective retirement age. This phenomenon will be highlighted if the retirement age rises quickly as a result of a rapid increase in life expectancy.

*Immigration* strengthens the financing of the earnings-related pension system. Most immigrants are young, working-age people or children. Immigration increases the number of working people and the wage sum, even when the employment rates of the immigrants are lower than those of the original population. In general, immigrants will not be paid pensions until much later. Although immigration will increase Kela's pension expenditure, it will also reduce the total pension expenditure relative to GDP.

In the long run, an increase in the *earnings growth* by half a percentage point would decrease the pension expenditure relative to GDP by approximately one percentage point. The purchasing power of pensions would grow significantly, even though the pension level would decrease by more than three percentage points relative to average earnings. In the long term, the contribution rate under the Employees Pensions Act would be approximately 0.7 percentage points below that of the baseline projection.

The *employment rate* affects the pension expenditure relative to the wage sum both in the short and the medium term. If the employment rate falls short of that in the baseline projection, the accrued earnings-related pension rights are lower than those in the baseline projection. In the latter part of this century, a constant deviation from the baseline projection will not show in the pension expenditure or the pension contribution rate.

The *return on pension assets* affects the contribution rate and the amount of pension assets. Higher investment returns would initially increase the value of pension assets and later lead to a lower contribution rate under the Employees Pensions Act. A one-percentage-point increase in investment returns would reduce the contribution rate slightly less than one percentage point in 2025 and by more than three percentage points towards the end of the century.

An *optimistic economic scenario* combines high employment rates with fast earnings growth and high investment returns. High employment rates and fast earnings growth reduce the pension expenditure relative to GDP. In the long run, this ratio will remain approximately one percentage point below the baseline projection. In addition, high investment returns will lower the contribution rate. The contribution rate under the Employees Pensions Act will be 2–4 percentage points below the baseline projection. In the optimistic scenario, the average pension will be considerably higher than in the baseline projection. However, the level of pensions relative to average earnings will stay below that of the baseline projection. This is due to the fast earnings growth.

The *pessimistic economic scenario* combines low employment rates with slow earnings growth and low investment returns. In the long term, the ratio of pension expenditure to GDP will be slightly more than one percentage point higher than in the baseline projection. The contribution rate under the Employees Pensions Act will be 2–4 percentage points higher than in the baseline projection as of the early 2020s. The average pension will be lower but the ratio of pensions relative to average earnings will be higher than in the baseline projection.

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