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EXECUTIVE SUMMARY

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Statutory pensions in Finland – long-term projections 2013

This report presents the Finnish Centre for Pensions' long-term projections of the development of statutory pension expenditure and the average benefit level. The report also includes financing projections for earnings-related pensions. The main result from the financing projections is the development of contributions and assets under the Employees Pension Act (TyEL) from 2013 to 2080.

Projections follow Statistics Finland's population forecast from 2012. According to the forecast, the population growth in Finland will continue throughout the projection period. At the end of 2012, the population was 5.43 million and it is projected to grow to 6.5 million by 2080. The population growth is mainly due to the rise in the number of people aged 65 and above. The working-age population (15–64-year-olds) will decrease until the early 2030s, after which it will begin to increase again. In 2012 and 2050, the working-age population will be equally large, amounting to 3.52 million.

The old-age dependency ratio (the ratio of persons aged 65 and above to 15–64-year-olds) will continue to grow until 2080, the growth being at its fastest during the current decade. In 2012, the old-age dependency ratio was 29.0 per cent, and it is projected to rise to 53 per cent in 2080. 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 does imply that the old-age dependency ratio will continue to increase even after the impact of the baby-boom generations has faded. In 2012, life expectancy at birth was 80.5 years. It is projected to rise to approximately 90 years by 2080.

The employment rate was approximately 68 per cent during the period 2010−2012. According to the employment projection, it is expected to increase, settling at approximately 72 per cent from 2020 onwards. The growth in the employment rate follows from an increasing labour force participation rate and a decreasing unemployment rate. The employment rate of elderly workers will grow in part as a result of the expected decrease in the old-age retirement rate and the disability incidence rate. The expected effective retirement age depicts the level of retirement rates. In 2012, the expected effective retirement age was 60.9 years. It is projected to rise to 61.5 years in 2025 and 62.4 years in 2060.

Using the life expectancy coefficient, the amount of the old-age pension is adjusted to reflect changes in life expectancy at age 62. The value of the life expectancy coefficient is determined separately for each birth cohort. In 2012, the life expectancy coefficient was 0.987 for those turning 63 that year. It will be 0.89 and 0.76 in 2030 and 2080, respectively.

For the year 2012, the total statutory earnings-related pension expenditure was slightly over 13 per cent of GDP. At its highest, the ratio of pension expenditure to GDP is projected to increase to approximately 15 per cent in the 2030s. As of the early 2040s, it will stabilize at slightly less than 14 per cent.

In 2012, the earnings-related pension expenditure for the whole economy was 26.9 per cent relative to the sum of earned income. The expenditure ratio will continue to grow until the early 2030s, when it will be 33 per cent. From then on, it will decrease and be approximately 30 per cent as of the early 2040s. The increase in expenditure ratio is caused by the growth in old-age pension expenditure.

The average pension was nearly EUR 1,500 per month in 2012. The purchasing power of the average pension is projected to grow continuously, reaching EUR 3,400 in 2080 at 2012 prices. Relative to the average wage, the average pension will increase slightly over the next few years. Two main factors underlie this increase. 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, new pensions are based on a complete working life. The relative pension level will begin to decrease towards the end of the 2010s. The most important reason for this decline is the life expectancy coefficient, which adjusts the benefit level to correspond to changes in life expectancy. In addition, the employee's pension contribution and the changes made to the public sector pension benefits in the 1990s play a role in this development. The discretionary increases 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 assumption used in this projection, these increases will lag behind the earnings level.

The TyEL contribution rate will rise, from the current level of nearly 23 per cent to approximately 25 per cent during the on-going decade. This contribution rate will be sufficient until the later part of the 2050s, after which it will rise to 26 per cent by 2080. The rising

contribution rate follows from the increase in pension expenditure. During the next 20 years, the TyEL expenditure is projected to grow by approximately five percentage points relative to the wage sum. The contribution rate will increase by approximately 2.5 percentage points during the same period.

The constant TyEL contribution rate that would be sufficient to finance expenditures indefinitely is 25.6 per cent. In 2012, the TyEL contribution rate was 22.8 per cent. Similarly, a sufficient constant level for the contribution rate under the Local Government Pensions Act (KuEL) would be 26.6 per cent relative to the KuEL wage sum. In 2012, the KuEL contribution rate was 29.1 per cent. The contribution level sufficient to finance the total pension expenditure under all earnings-relates pension acts would be 28.1 per cent of the sum of all earned income for the whole economy. In 2012, the comparable figure was 27.6 per cent.

The sensitivity of the baseline projection to changes in the main assumptions is examined in the report.

Changes in mortality would mostly affect the benefit levels, as a consequence of the life expectancy coefficient. However, the life expectancy coefficient does not remove all the effects of the rising life expectancy on expenditure. First, it does not adjust the pension levels of those who have already retired. Furthermore, the life expectancy coefficient does not apply to pensions paid by Kela. It is also possible that the dampening effect of the life expectancy coefficient on the expenditure level will weaken if the value of the coefficient approaches its lower limit.

A *decrease in the retirement rate* that would cause the expected effective retirement age to rise to 62.4 years by 2025 would reduce the ratio of pension expenditure to GDP by 0.3 percentage points. The pension level would increase by approximately one percentage point relative to average earnings. The need to raise the TyEL contribution rate would be reduced by roughly one percentage point.

If the *old-age retirement rates and disability incidence rates* remained at the level observed in 2012, the pension expenditure relative to GDP would exceed the baseline projection by 0.2−0.5 percentage points after 2025. At the same time, the pension levels would remain lower than in the baseline projection. The TyEL contribution would need to be raised by nearly one percentage point above the baseline.

In the long term, 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 nearly three percentage points relative to average earnings. In the long term, the TyEL contribution rate would be approximately 0.7 percentage points below that of the baseline projection.

The *return on pension assets* mainly affects the contribution rate. Higher investment returns would initially increase the value of pension assets and later lead to a lower TyEL contribution rate. A one-percentage-point increase in investment returns would reduce the TyEL contribution rate by approximately one percentage point in 2025 and by three percentage points in 2080.

An *optimistic population and economic scenario* combines low mortality and retirement rates with high earnings growth and investment returns. In this scenario, the long-term pension expenditure will remain slightly more than half a percentage point below the baseline projection relative to GDP. Faster earnings growth and lower retirement rates lead to a lower relative level of expenditure, whereas lower mortality rates have the opposite effect. The TyEL contribution rate will be 2−3 percentage points below that of the baseline projection. Also higher investment returns lower the contribution rate. In the optimistic scenario, the average pension will be considerably higher than in the baseline projection. However, higher earnings growth and lower mortality rates imply that the level of pensions relative to average earnings will stay below that of the baseline projection.

A *pessimistic population and economic scenario* combines high mortality and retirement rates with low earnings growth and 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 TyEL contribution rate will be 3−4 percentage points higher than in the baseline projection. In the pessimistic scenario, the average pension will be considerably lower than in the baseline projection. However, the ratio of pensions relative to average earnings will be higher than in the baseline projection.

The publication is also available in Finnish:
Lakisääteiset eläkkeet – pitkän aikavälin laskelmat 2013.
Eläketurvakeskuksen raportteja 03/2014.

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