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FINNISH CENTRE FOR PENSIONS, REPORTS

# EXECUTIVE SUMMARY

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## Statutory pensions in Finland— long-term projections 2011

This report presents the long-term projections of the Finnish Centre for Pensions for 2011 regarding the development of statutory pension expenditure and the average benefit level. Regarding the earnings-related pensions acts of the private sector, the report also contains financing projections in which the main results are the development of the TyEL contribution and assets.

The demographic development follows Statistics Finland's 2009 population projection, taking into account the demographic development realized by the end of 2010. The annual changes in mortality, birth rate and migration levels are equal to those in the 2009 projection published by Statistics Finland.

According to the projection, the population growth in Finland is set to continue. By the end of 2010, the population numbered 5.38 million and is projected to grow to 6.4 million by 2080. The population growth is mainly due to the rise in the number of persons aged 65 and above. The working-age population will decrease until the 2030s, after which it will begin to increase again. In 2010 and 2080, the working-age population (15–64-year-olds) will be equally large, amounting to 3.55 million.

The old-age dependency ratio (the ratio of 65-year-olds to 15–64-year-olds) will continue to grow until 2080. The change will be most rapid between 2010 and 2030. In 2010, the old-age dependency ratio was 26.5 per cent. It is projected to rise to 54 per cent in 2080. The constant weakening of the old-age dependency ratio is a consequence of the constantly extending life

expectancy. According to the projection, the life expectancy of the newly born will rise from 80 years observed in 2010 to nearly 91 years in 2080.

In 2010, the employment rate was just short of 68 per cent. By 2020, it is expected to increase slightly, settling at approximately 71 per cent from 2020 onwards. The growth in employment is due to an increase in the labour force participation rate, a decrease in unemployment and a rise in the effective retirement age. The expected effective retirement age is projected to rise from the current level of 60.4 years to 61.2 years in 2025 and 62.1 years in 2080. In the baseline projection, the annual growth rate of the earnings level is 1.6 per cent, while the average annual real return on pension assets is 3.5 per cent.

Using the life expectancy coefficient, the amount of the old-age pension is adjusted to the change in life expectancy for those over 62 years. In 2025, the life expectancy coefficient is 0.91, and in 2080 it is 0.75.

In 2010, the earnings-related pension expenditure for the whole economy was 25.6 per cent in relation to the wage sum. The growth in pension expenditure ratio will continue until 2030, when the earnings-related pension expenditure will account for 34 per cent of the wage sum. After that, the pension expenditure ratio will decrease and account for approximately 31 per cent of the wage sum as of the year 2050. The increase in pension expenditure is a consequence of the growth in old-age pension expenditure. Total statutory pension expenditure corresponded to 12.5 per cent of GDP in 2010. At its highest, the share is projected to increase to approximately 15 per cent in the 2030s. Towards the end of the 2040s, the share will stabilize at slightly less than 14 per cent.

Over the projection period, the purchasing power of the average pension will increase from EUR 1,370 to EUR 3,300. Relative to the average wage, the average pension will increase slightly in the next few years due to the maturing of the earnings-related pension scheme. However, the relative pension level will begin to decrease towards the end of the 2010s. The most important reason for this decline is an extended life expectancy and the life expectancy coefficient, which adjusts the benefit level to correspond to changes in life expectancy.

The TyEL contribution will rise from the current level of 21 per cent to approximately 25 per cent during the ongoing decade. Following this, the pension contribution rate will have to be increased to 26–27 per cent as of the 2030s. The rising contribution rate is a result of the increase in pension expenditure. During the next 20 years, the TyEL expenditure is projected to grow by 8 percentage points in relation to the wage sum, while the contribution rate will increase by approximately 5 percentage points.

A sufficient constant level for the TyEL contribution from the beginning of 2012 would be 25.9 per cent. This contribution rate would be sufficient to ensure a stable financing of the foreseeable pension expenditure.

The sensitivity of the baseline projection in relation to essential assumptions is examined in this report.

An increase of the effective retirement age to 62.4 years by 2025 would reduce the pension expenditure ratio of GDP by approximately half a percentage point. Simultaneously, the pension level in relation to the average earnings of the economy would increase by nearly one percentage point. 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 2010, it would mean that the pension expenditure in relation to GDP would exceed the baseline projection by 0.4 percentage points in 2025. At the same time, the pension level would remain lower than in the baseline projection. The TyEL contribution should be raised by approximately 0.6 percentage points above the baseline.

In the long term, an increase in the *earnings level growth* by half a percentage point would decrease the pension expenditure in relation to GDP by 0.7 percentage points. The purchasing power of pensions would grow significantly, but in the long term, the ratio of pensions to average earnings would decrease by roughly 2.5 percentage points. The TyEL contribution would increase in the long term by approximately 0.8 percentage points.

According to the principles of the defined benefit scheme, the *return on pension assets* mainly affects the contribution rate. A one-percentage-point increase in investment returns would reduce the TyEL contribution rate by approximately two percentage points, since the amount of pension funds is roughly double in relation to the wage sum during the projection period.

By combining the optimistic and pessimistic projections of the sensitivity analyses described above, an *optimistic and a pessimistic scenario* is drawn up. In the optimistic scenario, long-term statutory pension expenditure will stabilise at 13 per cent of GDP, while the equivalent figure in the pessimistic scenario is approximately 15.5 per cent. Respectively, the long-term range of the TyEL contribution would be 23–30 per cent of the wage sum.

*The near-future economic development* will determine how rapidly the pension expenditure in relation to the wage sum will grow and how quickly the TyEL contribution must be increased. However, conventional economic fluctuations have no impact on long-term development tendencies. In the alternative projection, which describes a weaker near-future economic development than that presented in the baseline projection, the wage sum and GDP would shrink from the 2011 level by approximately 2.5 per cent by 2013. The production level of 2011 would be achieved again in 2015. The return on investments in 2011 and 2012 would fall by three percentage points compared to the baseline projection. The pension expenditure in relation to GDP would grow at most by approximately one percentage point more than in the baseline projection. The TyEL contribution would react to the recession with a delay since the contribution level is fixed until the year 2014. On average, during 2016–2030, the TyEL contribution would exceed the baseline projection level by approximately one percentage point.

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