

Kalle Elo, Tapio Klaavo, Ismo Risku and Hannu Sihvonon

## Statutory pensions

### Long-term projections 2009

This report presents the long-term projections of the Finnish Centre for Pensions in 2009 regarding the development of statutory pension expenditure and the average pension level. Concerning earnings-related pension acts in the private sector, the report also includes a financing projection in which the main results are the developments in contributions and assets under the Employees Pensions Act (TyEL).

The demographic development follows the projection released by Statistics Finland in autumn 2009. The Finnish Centre for Pensions extended this forecast beyond the year 2060. Under this forecast, the life expectancy of 63-year-olds will have increased by 3.1 years (from the current level of 20.9 years) by 2025, and by 8.6 years by 2075. The working age population will decrease until the beginning of the 2030s, after which it will begin increasing again. The working age population will be equally large in 2008 and 2075. The old-age dependency ratio will increase from 25 per cent in 2008 to 42 per cent by 2025 and 53 per cent by 2075.

In 2008, the employment rate was just short of 71 per cent. By 2010 it is expected to have fallen under 67 per cent as a result of the economic recession. Following this, employment will increase and from 2025 onwards, the employment rate is expected to be approximately 71 per cent. The growth in employment rate can be explained by a decrease in unemployment and increase in the effective retirement age. By 2025, the expected effective retirement age is expected to have risen by 1.6 years from the 2008 level, and by 2050 by 2.5 years. Due to the expected increase in life expectancy, the average time spent in retirement at the end of the

calculation period is estimated to be roughly 6 years longer than today. The annual growth rate of the earnings level in the baseline projection is approximately 1.75 per cent, and the average real rate of return on pension assets is just under 4.0 per cent per year.

The amount of the old-age pension is adjusted to the change in life expectancy for those over 62 years of age, using the life expectancy coefficient. In 2025, the life expectancy coefficient is expected to be 0.90 and in 2075, at the end of the projection period, the coefficient is expected to be 0.75.

The earnings-related pension expenditure for the whole economy was slightly over 22 per cent of the wage sum in 2008. In the years 2009–2010, the pension expenditure percentage will grow quickly due to the decrease in employment. The growth in expenditure percentage will continue until the beginning of the 2030s, when earnings-related pension expenditure will account for a third of the wage sum. From the end of the 2030s onwards, the pension expenditure percentage will decrease by a total of 3 percentage points by the end of the projection period. The increase in pension expenditure is a consequence of the growth in old-age pension expenditure. Total statutory pension expenditure currently corresponds to 11 per cent of GDP. At its highest, the share is projected to increase to an ample 15 per cent in the 2030s. From the end of the 2040s onwards, the share of pension expenditure in GDP will stabilize at 14 per cent.

Over the projection period, the purchasing power of the average pension will increase from EUR 1,260 to roughly EUR 3,200. Relative to the average wage, the average pension will increase even further until the end of the next decade. This is explained by the maturing of the earnings-related pension scheme. The relative pension level will, however, begin decreasing at the end of the 2010s. The most important reason for this decline is an extended life expectancy and the life expectancy coefficient, which adapts the benefit level to correspond to changes in life expectancy.

The TyEL contribution rate will rise from the current level of 21 per cent to approximately 27 per cent by 2025. Following this, the contribution level will decrease by two percentage points. The increase in the TyEL contribution rate is a result of the increase in the pension expenditure percentage. In 2008, the TyEL pension expenditure was 18.1 per cent of the wage sum, and by 2030 the expenditure percentage is expected to have increased by 11 percentage points. A sufficient constant level for the TyEL contribution from the beginning of 2010 would be 25.4 per cent. This contribution rate would be sufficient to ensure the long-range financial stability of the scheme.

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

The rise of the *employment rate* as permanently higher in the baseline projection would at first indicate that the expenditure and contribution percentages would be lower than in the baseline projection. In the long-term, a higher employment rate will, however, raise the pension level and the connection between employment and contribution level will disappear.

The decrease in *starting disability pensions* decreases pension expenditure and increases employment. Both factors decrease contribution and expenditure percentages. Additionally, the decrease in starting disability pensions will slightly raise the average benefit level. The impact of starting disability pensions on the expenditure and contribution level will not disappear even in the long-term.

Concerning *old-age pension*, the pension expenditure would at first decrease and the wage sum increase if all those who stayed in the labour market until the age of 63 continued to work until the age of 68. However, in the long-term the average benefit level would increase, implying that the pension expenditure relative to the wage sum would not change significantly.

The increase in the *earnings level growth rate* to become higher than the baseline means the relative pension level will be lower than the level of the baseline projection. This decreases the pension expenditure percentage. However, the growth rate of the earnings level only has a slight impact on the TyEL contribution level. The share of investment returns that exceeds the increase in the wage sum can be used to permanently fund pensions. If the growth in wage sums speeds up, an increasingly smaller share of the pension expenditure could be funded from investment returns.

The *return on pension assets* mainly affects the contribution level, in accordance with the principles of the defined benefit scheme. A percentage point in average investment returns has an effect of approximately two percentage points on the TyEL contribution, since the amount of pension funds is approximately double in relation to the wage sum during the projection period.

**The Publication is available only in Finnish:**

Lakisäätöiset eläkkeet. Pitkän aikavälin laskelmat 2009.

Eläketurvakeskuksen raportteja 2009:4.

**More information:**

Kalle Elo

E-mail: [kalle.elo@etk.fi](mailto:kalle.elo@etk.fi)

Telephone: +358 10 751 2502

Ismo Risku

E-mail: [ismo.risku@etk.fi](mailto:ismo.risku@etk.fi)

Puhelin: +358 10 751 2566

**Ordering of publications:**

[aineistotilaukset@etk.fi](mailto:aineistotilaukset@etk.fi)

ISSN 1236-5948

ISBN 978-951-691-116-1 (PDF)

ISBN 978-951-691-115-4 (printed book)