

Summary of the analysis

The State Pension Insurance Act and the Action Programme of the Government of the Republic for 2015–2019 put the Ministry of Social Affairs and the Ministry of Finance under an obligation to analyse the social and financial sustainability of the state old-age pension.

In addition to employees of the Ministry of Social Affairs and the Ministry of Finance, social insurance experts from universities have participated in the drafting of the analysis. Many interest groups, incl. social partners, have also been involved.

The state old-age pension comprises both the first and second pillar pension. In the chapters of this analysis regarding the objectives and baseline scenario, the first and second pillar are considered together, the options for solutions only include changes in the first pillar of old-age pension since there are parallel processes in progress with respect to the second pillar. Neither does the analysis directly address other pension reforms, such as reforms related to superannuated pensions and old-age pensions under favourable conditions, since these are covered in separate concept documents.

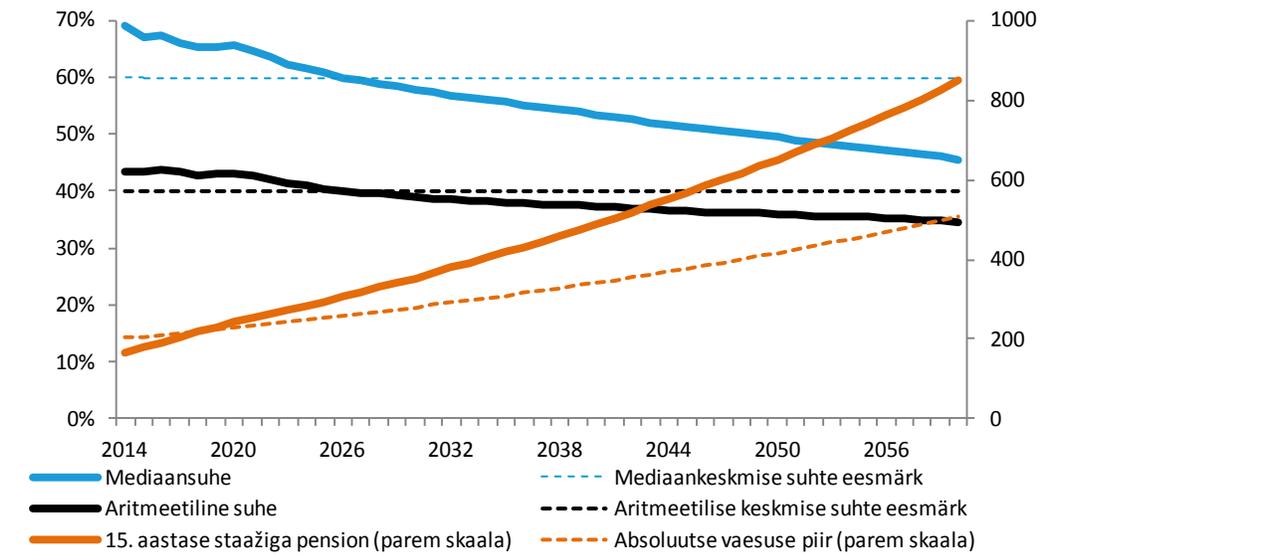
Objectives of the pension system and the baseline scenario

The **minimum level**, **distribution** and **average level** of pensions give the best overview of the pension system, and the analysis is also based on these indicators as the objectives. The fiscal sustainability of the system is also an objective.

According to the baseline scenario (the period of analysis extends to 2060), we will be able to guarantee a person whose length of employment is at least 15 years and who earned the minimum wage a pension that is greater than the estimated subsistence minimum.

However, the average old-age pension (both the median and arithmetical average) will drop below the set objectives as soon as in 10 years. In the long perspective, there is a considerable drop in the ratio of pension to wage. This drop results from the fact that the retirement period is increasingly longer and the pension index is growing slower than wages.

Figure 1. The arithmetical and median average net ratio of pension to wage and the minimum objective for pensions in 2014–2060 (the dotted lines indicate the objectives).



Median ratio

Arithmetical ratio

Pension of a person with 15 years of pensionable service (scale on the right)

Objective for the median average ratio

Objective for the arithmetical average ratio

Subsistence minimum level (scale on the right)

The distribution of pensions will become considerably more unequal compared to now since the difference between wages and the length of employment will carry over to pensions. The difference between the average pension of the wealthiest 20% and the poorest 20% of pensioners will rise from 1.6 to about 4. While the median average and arithmetical average old-age pension are currently equal (around 375 euros in 2015) and 2/3 of people receive a pension that is close to the average (between 325 and 425 euros), the median average pension will be about 25% lower than the arithmetical average in the future. At the prices and pension levels of 2015, this would mean that more than half of pensioners would receive a pension that is lower than 300 euros.

According to the baseline scenario, the expenditure and revenue of the pension insurance system will successfully be kept in balance because most pensions for incapacity for work will be removed from the expenditure side of the pension system in the next five years and the pension index will keep the growth pace of pensions close to the growth pace of the receipt of social tax. At the same time, it cannot be stated that the current situation is also sustainable in the long perspective since the

demographic situation also affects other areas (healthcare, long-term care) in addition to pensions, but tax proceeds will decrease in amount. Despite being balanced, the current state budget is relatively tight and the pressure for different expenses is big.

Options for solutions

The analysis addresses changes related to the pensionable age, pension formula, and pension index as well as options for flexible pensions. Raising the pensionable age improves the balance between employees and pensioners, which in turn makes it possible to increase the ratio of pensions to wages. Introducing a more flexible pension system would alleviate potential social issues that result from raising the pensionable age. By changing the pension formula we can first of all adjust the dispersion of pensions. The objective of the pension index is to increase pensions at the necessary pace and keep the budget in balance. Most of these factors can be tied to automatically adaptive mechanisms (AAMs).

Pensionable age

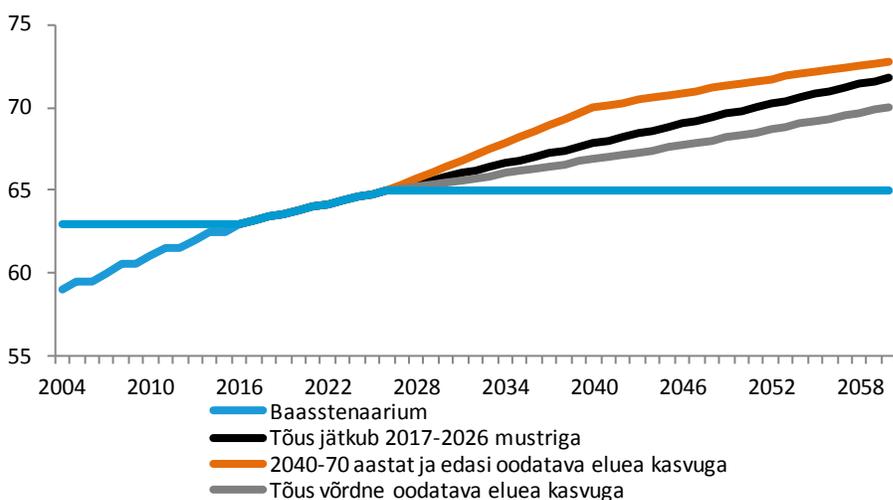
The old-age pension was originally created for extremely old people who were no longer able to work. However, since the 1970s, people in Western countries have been allowed to retire at an increasingly younger age, which is why the period of retirement has become longer. Although life expectancy has increased over the years, the effective age of exiting the labour market has been falling steadily. This has put a considerable financial burden on countries, which is why countries have actively started to raise the pensionable age in this millennium. The objective of raising the pensionable age is to improve the financial and social sustainability of pension systems by increasing the number of employees and decreasing pension expenses. Increasing the tax burden, raising a loan or paying smaller pensions are alternatives to raising the pensionable age. Almost half of the EU countries have tied the pensionable age or the size of the pension to changes in the country's life expectancy. This means that one must retire later to earn a pension that is comparable to the current pension.

The alternatives of raising the pensionable age that were analysed:

1. the pensionable age will keep increasing at the same pace as in 2017–2026 based on a political decision;
2. the pensionable age will increase to 70 by 2040 and thereafter at the same pace as the life expectancy (AAM);
3. the pensionable age will start to increase at the same pace as the life expectancy (AAM) from 2027 onwards;
4. the application of a coefficient reducing the pension as the life expectancy increases (AAM).

The pensionable age will increase at the fastest pace if alternative no. 2 is chosen. In this case, the pensionable age will be 72 in 2060. If we indexed the pensionable age only according to increases in the life expectancy, the pensionable age would rise to 70 by the same time (see Figure 2).

Figure 2. Increases in the pensionable age as per the alternatives of raising the pensionable age in 2004–2060



Baseline scenario

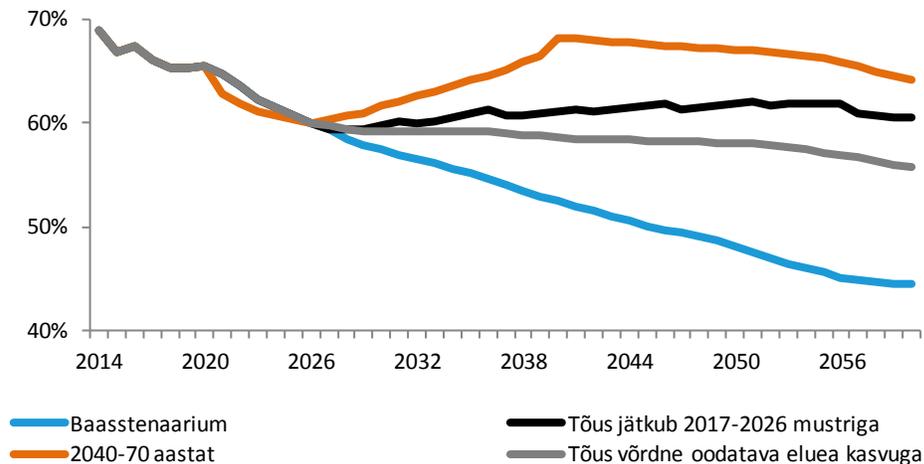
Increase is to continue according to the pattern of 2017–2026

2040: 70 years and from there as per increases in Estonia's life expectancy

Increase is equal to increases in Estonia's life expectancy

However, as the pensionable age increases according to the life expectancy, the net ratio of the median pension to the median wage will decrease to some extent, but the decrease is considerably smaller compared to the baseline scenario. The ratio of pensions to wages would remain at the current level in the long perspective if alternative no. 1 was opted for (see Figure 3).

Figure 3. The net ratio of the median pension to the median wage as per the alternatives of raising the pensionable age in 2014–2060, provided that the revenues and expenses of the first pillar are balanced from 2026 onwards.



Baseline scenario

2040: 70 years

Increase continues according to the pattern of 2017–2026

Increase is equal to increases in Estonia's life expectancy

Flexible pension

The pensionable age and the withdrawal of one's pension may be made more flexible to mitigate the effect of raising the standard pensionable age, at the same time ensuring actuarial neutrality, meaning that all pension assets received by a person are the same in amount irrespective of the time of retirement or the size of pension withdrawn at one time (which also means that the financial burden of the state does not increase). In the case of a flexible pensionable age, people can decide on their own when to retire. In order to prevent people from retiring at a time that is socially not optimal, the imposition of restrictions, such as a requirement for a minimal length of employment, pension size or retirement age, is worth considering. In order to better take account of the desired labour market behaviour and employment options of older people, the option of receiving a partial pension (e.g. 25–75% of the full pension) can be offered to increase flexibility. Another possibility is to give people the option to halt the payment of their pension and resume payments at a suitable time.

Alternative flexible pensionable age rules that were analysed:

- a minimum length of employment requirement of 30–40 years, which is henceforth tied to changes in the life expectancy (AAM);
- the minimum size of pension is the minimum pension \times 1.5–2.
- a minimum pensionable age which is tied to changes in the life expectancy (AAM).

Pension formula

If the current situation continues, the disparity in old-age pensions will increase 2.5 times if we look at the inter-quintile ratio, despite the fact that the proportion of the base amount of the first pillar in the average first and second pillar pension will remain at the level of today. Above all, the disparity results from a big difference between official employment incomes (incl. from the concealment of employment income) but also from part-time employment and having gaps in one's employment history. Differences between pensions are not bad per se, but if we consider the small size of the average Estonian pension, it means that the number of pensioners that will receive low pensions is going to be large. It is, however, evident from the objectives of the pension system and feedback from interest groups that the distribution of pensions should be more similar to the current one and pensions should not depend on the size of one's salary so much. The analysis proposes the following alternatives to guarantee low-income workers a sufficient pension in the future as well:

1. changing the coefficients of the indices of the base amount of pension and the value of a year of pensionable service from 1.1 to 1.3–1.5 and from 0.9 to 0.7–0.5;
2. replacing the insurance part with the pensionable service period component.

The coefficient of the first alternative should be around 1.5 and 0.5 to reach the same result of distribution with alternatives no. 1 and no. 2. Alternative no. 1 means that the first pillar will become completely flat and the dependence on work is abolished in the very long perspective. Alternative no. 2, on the other hand, means that the dependence of the first pillar pensions on salaries is lost but a link to working is maintained through one's length of employment. A connection to salaries is maintained in both cases owing to the second pillar. Alternative no. 1 also affects the current pensioners and the calculation of their labour input, whereas alternative no. 2 only concerns new pensioners.

Pension index

The objective of the pension index is to keep the growth of the revenues and expenses of the state pension insurance in balance. The growth of revenues is dependent on changes in the pension insurance part of the social tax and the number of employees that have joined the second pillar. The growth of expenses is dependent on the number of pensioners, the division of pensioners between different types of pension, changes in the pensioners' rights to pension, and increases in the pension index. Regarding the components and structure of the index, the extent of the automation of the process of balancing the revenues and expenses is important. The valid pension index includes one element of an automatically adaptive mechanism, namely the calculation of the

growth of the receipt of social tax (also takes account of changes in the consumer price index, which is an external factor), but does not take account of factors that influence the cost base.

In order to have the pension system react to changes in the pensionable age and pension formula, the index should minimally be fully dependent on the receipt of social tax and changes in the number of pensioners. Changes in the number of pensioners may be replaced with changes in the amount of insurance components and components calculated on the basis of years of pensionable service.