

# FACTORS AFFECTING RETIREMENT DECISION IN ESTONIA

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## INTRODUCTION

One major problem of the developed countries is aging population – life expectancy and dependency ratio of older people to working population have both risen. Additionally, trend that people retire earlier has been deepening during the decades. Both aspects generate pressure to the social security systems and labour market; still generous benefits may have promoted early exit to the retirement. It is presumable that decision about retirement is thoroughly considered, as the retirement decision is made usually once and it is permanent. However, there are different patterns how people can diminish their working load and exit from the labour market, as retirement decision is influenced by many labour supply and as well as by labour demand factors and institutional factors. According to previous literature there are several supply side factors that affect retirement – for example income, health, family characteristics, but also different job characteristics and job satisfaction.

In Estonia the situation is similar and under the conditions of the aging population, labour scarcity due to the outflow of working-age population and therefore rising dependency ratio ensuring the subsistence level of older people will be complicated. Besides the foreign labour, older workers including those who are above the normal retirement age can be potential additional labour capacity. Consequently, employment of older people, their exit from the labour market and retirement are important issues of social and labour policy in Estonia. Moreover, in Estonia it is common that the exit from the labour market is sharp and diminishing ones working load is not a traditional behaviour. The key issue is to motivate older workers to stay in labour market at least to the official retirement age or even longer (depending on their working abilities). To implement appropriate measures there is need to analyse through which measures labour supply of older workers and retirement can be influenced.

## AIM OF THE RESEARCH

The aim of this research paper is to analyse aspects that influence the retirement decision of older people and especially the factors that affect people to retire as early as possible. Previous studies (e.g. Bloemen (2010); Euwals *et al.* (2006); Gustman, Steinmeier (2002); Börsch-Supan *et al.* (2008)) show that the main factor that influences decision whether to retire or not is income. When the person receives higher salary it is not likely that (s)he will decide to retire. On the other hand, if the individual has great amount of personal assets it is more likely that (s)he will retire. Several articles have concluded that health and pension benefits are the determinants most affecting retirement decisions of older people. Also, lower education and poor job satisfaction encourage worker to retire as soon as possible. From the institutional factors it is important to follow different criteria that individual has to fulfil in order to get pensions.

## DATA AND METHOD

Data for empirical analysis is from the 4<sup>th</sup> wave of SHARE in which Estonia participated first time. In total 6282 respondents were interviewed during this survey. Analysis is restricted to individuals who belong to the age group 50 – 74 years old and who have work-history. The final sample included 5193 participants. Weights were considered within the analyses. As a dependent variable the answers to the question “Thinking about your present job, would you like to retire as early as you can from this job?” is used. SHARE survey includes extensive information on personal characteristics, different health characteristics, family and job characteristics and institutional variables. Due to the poor quality of data (missing data) it was impossible to add income and/or wealth variables to control the material situation of individuals/families. The binary choice logit-model as a method is applied.

## FACTORS INFLUENCING THE RETIREMENT DECISION

Table 1. Factors affecting retirement decision

| Factors influencing retirement decision | Institutional factors   | Individual characteristics | Household factors   | Working conditions  |
|---|-------------------------|----------------------------|---|---|
| POSITIVELY                              | Generosity of benefits  | Increasing age             | Females - partner's individual characteristics (higher age, worse health)             | Low job satisfaction, physical strain and/or mental stress                |
|   | Increase of pension age | Females                    | Females - need to take care from family members (grandchildren, other family members) | Poor /unsatisfying working conditions                                     |
|   |                         | Health problems            | Higher level of income and assets   | Over-qualification, low occupational position                             |
| NEGATIVELY                              | Post-retirement schemes | Higher educational level   | Males - partner's individual characteristics (higher age, worse health)               | Good career and training opportunities and good relations with co-workers |
|   |                         | Early retirement age       | Males - need to take care from family members   | Self-employed persons   |
|   |                         | Higher income from working |   |   |

## LABOUR SUPPLY OF OLDER PEOPLE IN ESTONIA

Participation and employment rate of older people in Estonia is relatively high compared to the European Union average. The participation rate was 58.5 % (male) and 53.3% (female). Employment rate was 53.1% (male) and 49.8% (female). While analysing Estonian older people employment dynamics in 2002 – 2012 it occurred that until the years 2009 – 2010 the employment rate increased, then during the recession it slightly decreased. However, the number of pensioners as well as the number of early pensioners has risen during the previous years.

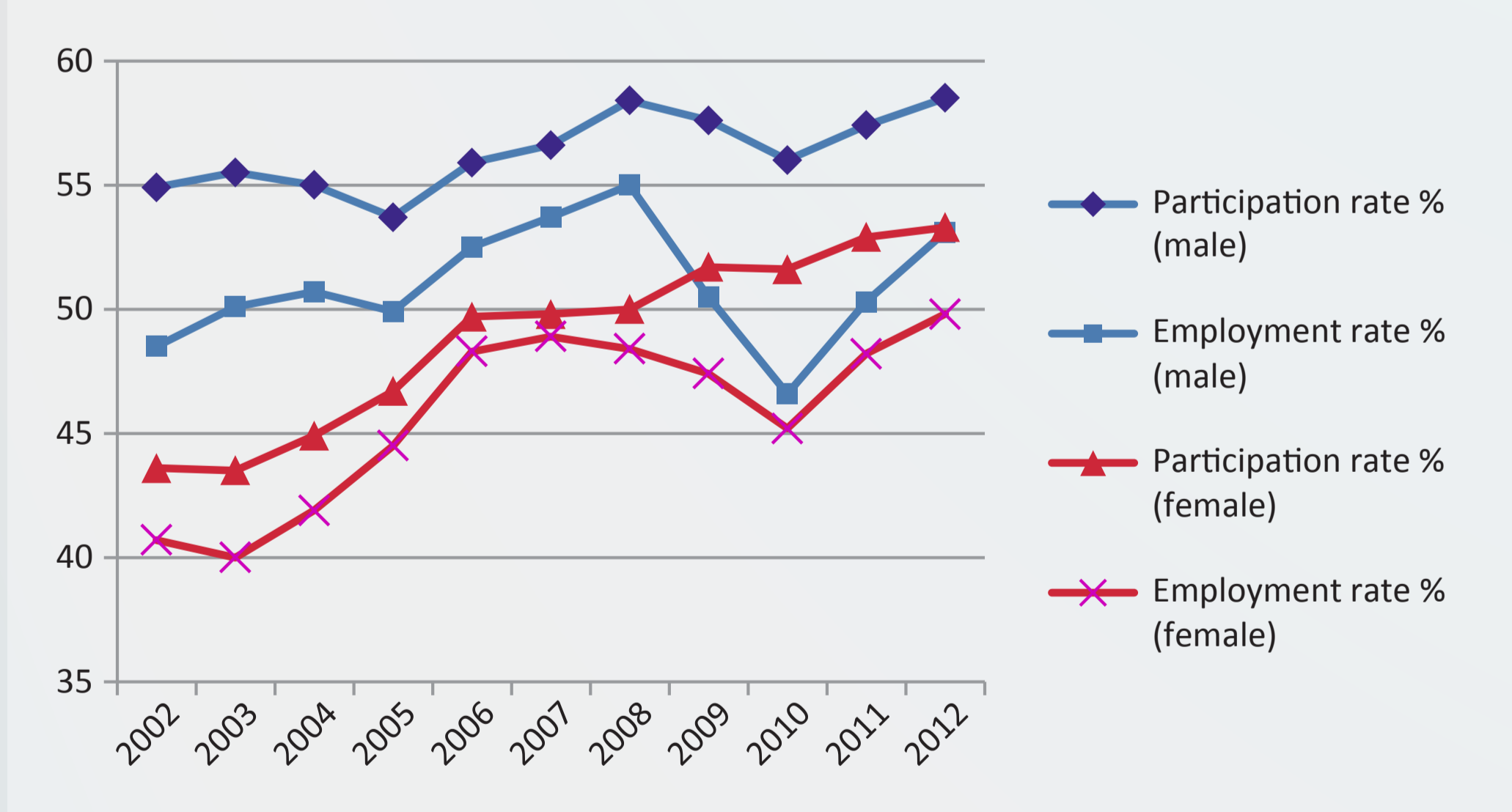


Figure 1. Older workers (50 – 74) participation and employment rates 2002 – 2012 (Statistics Estonia)

- Official retirement age has been increased over the last 15 years and it will be 63 in 2016 for both, men and women. In 2026 the official retirement age will be 65 years. Average labour market exit in 2009 in Estonia was 62.6 years and the EU average was 61.4.
- Pension benefits are linked with tenure requirement meaning that only individuals with tenure of at least 15 years are entitled to the pension benefits. Individuals with less tenure are entitled to basic pension which is very low. Motivation of the working is probably increased by the aspect that since 1995 full benefits are paid to individuals who choose to work after the retirement age. One can also retire three years before the official retirement age, but then received benefits are being reduced. One has contrarily right to the deferred retirement which case received benefits are increased. These measures should induce older workers to stay longer to the labour market.
- While analysing health situation, it occurred that most of Estonian older workers state that their health is fair. 20.1% of unemployed men and 14.2% of unemployed women said that their health is poor.
- Most of older workers (40.6% of men and 30.9% of women) say that their job is physically demanding and 18.3% of men and 17.9% of women say that they suffer from heavy workload.

## MAIN RESULTS

- According to SHARE data over 20% of workers in Estonia would like to retire as early as possible.
- While analysing wish of early retirement among Estonian older workers it occurred that the most important factors that affect possible retirement decision were health factors and factors that are related to the working conditions. Those respondents who stated that their health was bad in comparison with those who said their health was good, very good or excellent and men who suffered from depression were more likely to wish retire as early as possible.
- While analysing working conditions it occurred that those workers who are not satisfied with their work, who feel time pressure because of the heavy workload in their job, who have poor prospects for job advancement and who do not receive recognition for their work in their main job would like to retire earlier. These results refer that older workers also need inner motivation and knowledge that their work is important.
- This result is supported by the fact that these workers who are already in eligible age for pensions have lower possibility for

wishing to retire as early as possible. Also, workers who have physically demanding jobs are more likely to wish early retirement. This result is supported by the fact that skilled agriculture or fishery workers are more likely to wish early retirement.

- The biggest difference in comparison with earlier studies ((Kalwij, Vermeulen (2007); Radl (2012); Bloemen (2010); Pozzoli, Ranzani (2009)) is about education level. In Estonia, those workers who have higher education have lower possibility to retire early, which is contradictory to the previous findings. On the other hand this result might be logical in consideration with Estonian relatively low income and pension level which means that workers would like to continue working in order to maintain their living standards.

Table 2. Results of logit model. Dependant variable: wish for early retirement.

| Variable                                | General model    |                | Male             |                | Female           |                |
|---|------------------|----------------|------------------|----------------|------------------|----------------|
|   | Marginal effects | Standard error | Marginal effects | Standard error | Marginal effects | Standard error |
| Sex (male)                              | -0.050**         | 0.024          | -                | -              | -                | -              |
| Marital status (married)                | 0.019            | 0.024          | 0.049            | 0.042          | 0.002            | 0.030          |
| Estonian citizenship                    | 0.032            | 0.033          | 0.026            | 0.041          | 0.043            | 0.052          |
| Elementary education <sup>1</sup>       | -0.066           | 0.049          | 0.006            | 0.063          | -0.144*          | 0.076          |
| Secondary education                     | -0.086**         | 0.035          | -0.069           | 0.049          | -0.098**         | 0.049          |
| Vocational education                    | -0.033           | 0.028          | -0.017           | 0.043          | -0.037           | 0.037          |
| Fair health <sup>2</sup>                | 0.036            | 0.025          | 0.030            | 0.035          | 0.042            | 0.034          |
| Poor health                             | 0.162***         | 0.049          | 0.124*           | 0.073          | 0.178***         | 0.068          |
| Long-term illness                       | -0.003           | 0.024          | -0.020           | 0.035          | 0.009            | 0.034          |
| Service worker <sup>3</sup>             | 0.042            | 0.035          | 0.105*           | 0.055          | 0.020            | 0.045          |
| Skilled agricultural or fishery worker  | 0.108*           | 0.060          | 0.100            | 0.079          | 0.139            | 0.092          |
| Craft and related trades worker         | 0.025            | 0.036          | 0.050            | 0.046          | -0.006           | 0.056          |
| Plant and machine operator or assembler | -0.035           | 0.054          | 0.011            | 0.057          | -0.205           | 0.125          |
| Elementary occupation                   | -0.034           | 0.039          | -0.078           | 0.058          | -0.004           | 0.054          |
| Job satisfaction                        | -0.186***        | 0.034          | -0.166***        | 0.048          | -0.204***        | 0.047          |
| Physically demanding job                | 0.047*           | 0.026          | 0.020            | 0.037          | 0.064*           | 0.035          |
| Time pressure due to a heavy workload   | 0.046*           | 0.025          | 0.032            | 0.036          | 0.053            | 0.034          |
| Poor prospects for job advancement      | 0.048**          | 0.025          | 0.079**          | 0.037          | 0.027            | 0.033          |
| Deserved recognition for work           | -0.061***        | 0.023          | -0.057*          | 0.033          | -0.064**         | 0.031          |
| Suffering from depression               | 0.029            | 0.024          | 0.089**          | 0.040          | -0.008           | 0.031          |
| Fatigue                                 | 0.038**          | 0.022          | 0.037            | 0.033          | 0.039            | 0.030          |
| Eligible age for pension                | -0.188***        | 0.069          | -0.184           | 0.115          | -0.199**         | 0.086          |
| Early retirement age                    | 0.038            | 0.046          | 0.039            | 0.061          | 0.039            | 0.063          |
| Wald Chi-Square                         | 132.14; p=0.000  |                | 60.54; p=0.000   |                | 82.7; p=0.000    |                |
| Pseudo R <sup>2</sup>                   | 0.07             |                | 0.08             |                | 0.07             |                |
| Number of observations                  | 1979             |                | 848              |                | 1131             |                |

<sup>1</sup> Compared with higher education

<sup>2</sup> Compared with good, very good and excellent health

<sup>3</sup> Compared with higher positions

\*\*\*p<0.01; \*\*p<0.05; \*p<0.1

Table 3. Factors affecting retirement decision: main results in comparison with previous literature

| Factors            | Estonian results   |  | Previous literature   |  |
|--------------------|--|--|---|--|
|                    | Positive effect  | Negative effect  | Positive effect   | Negative effect  |
| Age                |  | For those who are in eligible age for pensions   | Wahrendorf <i>et al.</i> (2012), Kalwij, Vermeulen (2007)   | With early retirement decision - Fisher, Sousa-Poza (2006)   |
| Sex                | Women  |  | Women   |  |
| Education          |  | Secondary education (compared with higher education)   |   | Higher education (compared with lower education) – Engelhardt (2011)   |
| Health             | <ul style="list-style-type: none"> <li>Poor health</li> <li>Suffering from depression</li> </ul>               |  | <ul style="list-style-type: none"> <li>Poor health – Kalwij, Vermeulen (2007)</li> <li>Suffering from depression – Alavina, Burdorf (2008)</li> </ul>   |  |
| Working conditions | <ul style="list-style-type: none"> <li>Physically demanding job</li> <li>Suffering from work stress</li> </ul> | <ul style="list-style-type: none"> <li>Work satisfaction</li> <li>Higher position at work</li> </ul> | <ul style="list-style-type: none"> <li>Poor working conditions, physically demanding job – Siegrist <i>et al.</i> (2006)</li> <li>Suffering from work stress – Wahrendorf <i>et al.</i> (2012)</li> </ul> | <ul style="list-style-type: none"> <li>Work satisfaction – Schnalzenberger <i>et al.</i> (2008)</li> <li>Higher position at work – Pozzoli, Ranzani (2009); Radl (2012)</li> </ul> |

## DISCUSSION AND CONCLUSIONS

- Based on the results, there may be several channels to influence the labour market behaviour of the older workers.
- To increase employment of older people it is essential to pay attention to factors related to health and working conditions. Unfortunately it is very likely that older persons' health deteriorates but it should not mean that the worker should leave labour market.
- It would be good to encourage flexible working forms that let persons to continue in the labour market but at the same time they have more leisure time for their family and health. For this, attention must be turned to the specific segment in labour market and it must be analysed the need and opportunities to promote flexible working. It means that it is very important to improve factors that related to finding balance in working and leisure time and also job satisfaction. This means that it is also important to encourage bridge-jobs – workers should have an opportunity to find a job that satisfies them even in the older age.
- To support older workers with the lower level of education, more attention should be paid to the active measures of labour policy and develop the measures aimed directly to the older people which would take into the account the aspects characteristic to the older people such as deterioration of education, lower ability to adapt and learn, and on average more health problems.
- Additionally deferred retirement must be made more attractive and early retirement more non-attractive. As a more radical measure, remittance or reduction of the income tax to the older people can be considered if they work after the official retirement age.

In sum, the labour market behaviour of older people in Estonia is affected by several different factors which may have joint effect to retirement decisions. Therefore more sophisticated model is needed to analyse retirement behaviour which accounts for example formation of wages and pension benefits, changes in health and probabilities of hiring and firing.

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