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Individual Retirement Timing in Russia: Implications for Pension Age

This policy brief summarizes the findings in a paper where individual exit trajectories of Russians from the labor market to economic inactivity are examined using survival analysis methods based on the Russian Longitudinal Monitoring Survey for 1995-2015. Among other results, the analysis shows that the statutory retirement age has a significant impact on the time of exit from the labor market for both men and women, but the effect is very high for women. This is an interesting and unexpected result, given no penalty for working beyond the pension age of those already retired, the five-year difference in statutory retirement age between males and females, and the low pension age in Russia on an international scale. This questions the painlessness of rising the retirement age for women, should the decision finally be taken.



An ageing population, combined with a slowdown in economic growth, challenges the Russian public finances with an increased deficit of the Pension fund. In addition, the persistently negative natural population growth against the backdrop of ageing has predetermined a decline in the working-age population in the foreseeable future. Older cohorts are therefore becoming a potentially attractive source to increase the size of the labor force. All this has actualized the discussion about the need to increase the Russian retirement age (see, for instance, Maleva and Sinyavskaya, 2010). However, little is known about the labor market situation of older age groups and, in particular, about the process of their exit from the labor market

The Russian pension system, unlike the pension systems of many developed countries, hardly penalizes continuation of work after reaching retirement age and documenting a pension (working pensioners lose only pension indexation). The changes in pension law that have entered into effect since 2015 encourage continued work without recourse to retirement, but there have been few responses to the innovation so far. Coupled with the low pension replacement rate (i.e., the proportion of wages substituted by pension), this makes the process of leaving the labor market nontrivial, since a large number of people of retirement age remain on the labor market after reaching retirement age.

Denisova (2017) examines individual exit trajectories of Russians from the labor market to pension-age economic inactivity applying survival analysis to the Russian Longitudinal Monitoring Survey (RLMS-HSE). The major research questions are the following: What determines the length of stay of older age groups in the Russian labor market? What is the role of the statutory retirement age in this process?

Data and research methodology

The RLMS-HSE for the period of over 20 years, from 1995 to 2015, is the empirical basis of the research (<http://www.cpc.unc.edu/rlms>). I limit the sample to age 45-72 as there is practically no retirement by age before age 45, and 72 years is the upper boundary of the working age definition internationally accepted by statisticians. I exclude from the sample those who are on retirement and did not work or seek work for the entire period of observation, since their decision to end working activity remained outside the observation period.

An episode in the survival analysis of exit from the labor market into pension-age inactivity is an episode of working life. The analytical time in this case is the age of the respondent. The failure event (the moment of exit from the labor market to pension-age economic inactivity) is defined by the simultaneous fulfillment of three conditions: the respondent does not work, does not look for a job, and receives retirement pension. Only the final exits from the labor market into inactivity are considered, while temporary exits are disregarded.

I evaluate proportional hazard models, which suggest that exogenous economic factors shift the baseline hazard function (which reflects the average entire sample hazard rate at each age) proportionally. A semi-parametric Cox model specification with robust errors clustered at individual level is used.

The vector of explanatory characteristics includes education; marital status; experience in the labor market (work at an enterprise with a state share;



entrepreneurship versus work for wages); health characteristics (subjective and objective); settlement type; and attainment of statutory retirement age. In all cases, I control for the year of the survey.

Given the differences in the behavior of men and women in the labor market, the regression analysis is run separately for the subsamples of men and women. The statistical significance of the differences in returns to factors between men and women is tested based on the results of the full sample regression with interaction terms.

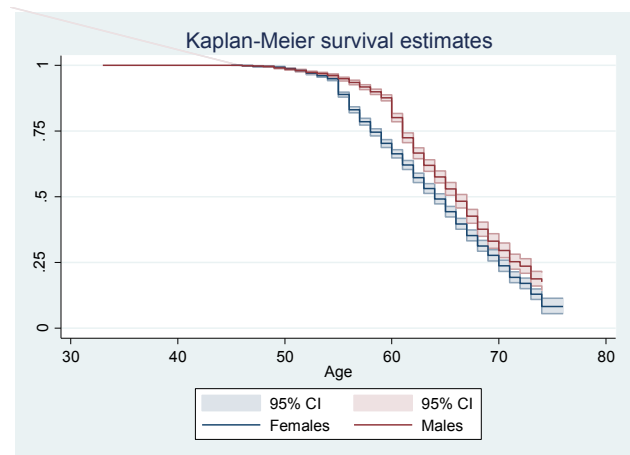
Averaged process of exit from the labor market

The averaged process of leaving the labor market pending on age is conveniently described through so-called Kaplan-Mayer's survival function (an estimate of the survival process). As seen from Figure 1, the process of exit prior to age 55 for women and 60 for men is very slow, while the rate of exit becomes almost permanent and slows down after 70 years. Men stay in the labor market longer: 25% of women leave the labor market at the age of 58 years, whereas for men this age is 60. The threshold of 75% of the sample that left the labor market is reached in the sample of women by the age of 70, and 71 for men.

Determinants of exit

The analysis of older cohorts' exit from the labor market via survival methods confirms important determinants of the process, previously identified in literature. The impacts of health and of financial incentives are in this group of results.

Figure 1. Survival functions, men and women



Source: Author's calculations based on RLMS-HSE 1995-2015 data

Health status is the key factor for men's exit into inactivity: the exit to inactivity is accelerated by 71 percentage points for males with bad health, whereas for women this factor is statistically irrelevant.

A higher per capita household income is correlated with later exit from the labor market. A higher income from the main place of employment has no statistically significant effect when we control for household income and is at an extended boundary (15%) of statistical significance if we do not. Both variables indirectly reflect the pension replacement rate, and I interpret the results as an indirect confirmation that workers at the top part of the income distribution, being inadequately insured by the pension system, remain on the labor market longer.

The identified peculiarities of the exit to pension-age inactivity of the Russian elderly are of major interest. Unlike many developed countries, only highly skilled persons remain in the labor market longer than others, while the behavior of middle-skilled groups, and skilled and unskilled workers does not statistically differ between them.

Employment at state-owned enterprises slows down women's exit to inactivity but is not



significant for men. Self-employment and entrepreneurship prolong the presence in the labor force, by 41 percentage points for women.

The regression analysis demonstrates that the statutory retirement age has a significant impact on the time of exit from the labor market for both men and women, and the effect is significantly higher for women: the hazard rate of inactivity rises by 63 percentage points when a woman reaches 55 years, and by 25% when a man reaches 60. For men, an effect comparable in size is the self-assessment of health as poor.

Discussion

The results, on the one hand, confirm those for developed countries: health status is the key factor for men's exit into inactivity, and financial motives have a significant impact. At the same time, the peculiarities of the Russian labor market are reflected in a differing labor market exit process of various professional groups, in the sense that self-employment and entrepreneurship and work at state enterprises postpone exit into inactivity. The high sensitivity of women to the statutory retirement age, which by 2.5 times exceeds the sensitivity of men, is one of the new

and unexpected results, taking into account that the statutory retirement age for women in Russia is very low by international standards. This questions the painlessness of rising the retirement age for women, should the decision finally be taken. Indeed, given the very low pension age for females, an (gradual) increase in the retirement age for women would seem not to raise strong objections. However, our result testifies that the normative border of the retirement age has a decisive influence on women's choice of time of exit from the labor market, even under control (as far as data permits) on differences in education, situation in the labor market and family circumstances. In this situation, the process of rising the retirement age, if such a decision is taken, can be rather painfully accepted by those who so strongly focus on its current meaning in their life plans.

References

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