

The Effect of Relabeling and Incentives on Retirement: Evidence from a Pension Reform

Jon Gruber (MIT and NBER), **Ohto Kanninen** (Labor Institute for Economic Research), **Satu Nivalainen** (Finnish Center for Pensions), **Terhi Ravaska** (Labor Institute for Economic Research), **Roope Uusitalo** (University of Jyväskylä and IZA)

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Summary

Developed countries around the world face enormous long run deficits with respect to their public pension systems. As a result, pension reform is a constant source of public policy debate. A common approach to addressing such fiscal deficits is to reform the underlying structure of pension plans, most commonly the retirement age.

Changes in retirement ages generally involve two separate elements: a change in the labeling of what is considered 'early' (ERA) or 'full' statutory retirement age (FRA), and a change in financing incentives. Usually, reforms affect both simultaneously. For example, when the U.S. raised its 'full' retirement age in 1983, starting after 2002, this amounted to a large benefits cut for those retiring at each age.

Yet these changes need not go hand in hand. In fact, if there are large behavioral responses to being labeled early or full retirement age, then it is possible that reforming those ages alone, without changing financial incentives, could have important impacts on retirement ages and so in fiscal balance.

Separating the financial incentives associated with such ages from their impacts on retirement norms is difficult, however. The ages that are used for retirement targets may be correlated with retirement for other reasons, such as tastes for retirement at certain (round) ages, or other government programs that kick in at those same ages (such as the U.S. Medicare program which starts at age 65). Past models have either assumed that the impact of these ages is independent of these other factors, or have relied on reforms which changes both the statutory ages and financial incentives. There is no empirical work to date that distinctly separates and quantifies financial incentives from the impact of the actual age

change.

A reform in Finland allows us to separate financial incentives and norms associated with retirement age. Before 2005, retirees in Finland faced an early retirement regime which ran from age 60 to age 65 in the earnings-related pension system, with full retirement at age 65. In 2005, the system was reformed so that a new 'flexible' retirement age was introduced at ages 63 to 68, which was treated as effectively lowering the full retirement age to 63. Yet while the reform also included changes in financial incentives, these changes were both modest and more continuous across cohorts than was this 'relabeling' - allowing us to separate the two.

Figure 1 illustrates this point. The figure is drawn for January 1, 2005, the date of the reform. The x-axis shows age as of that date, where the demarked ages represent the endpoint for that age. That is, the point labeled age 64 represents the last individuals who are age 64 as of January 1.

As shown by the two vertical dashed lines, ages 62 to 64 saw a large relabeling when the law took force. That is, before the law, in an observation window of twelve months, if they wanted to retire they were considered early retirees – whereas following the reform they are full retirees under the new flexible retirement regime. The solid line shows the change in pension wealth that resulted from this reform – e.g. the overnight percentage increase in pension wealth due to the reform for individuals retiring at each age. The dashed line shows the percentage change in marginal accrual rate (with associated error bands).

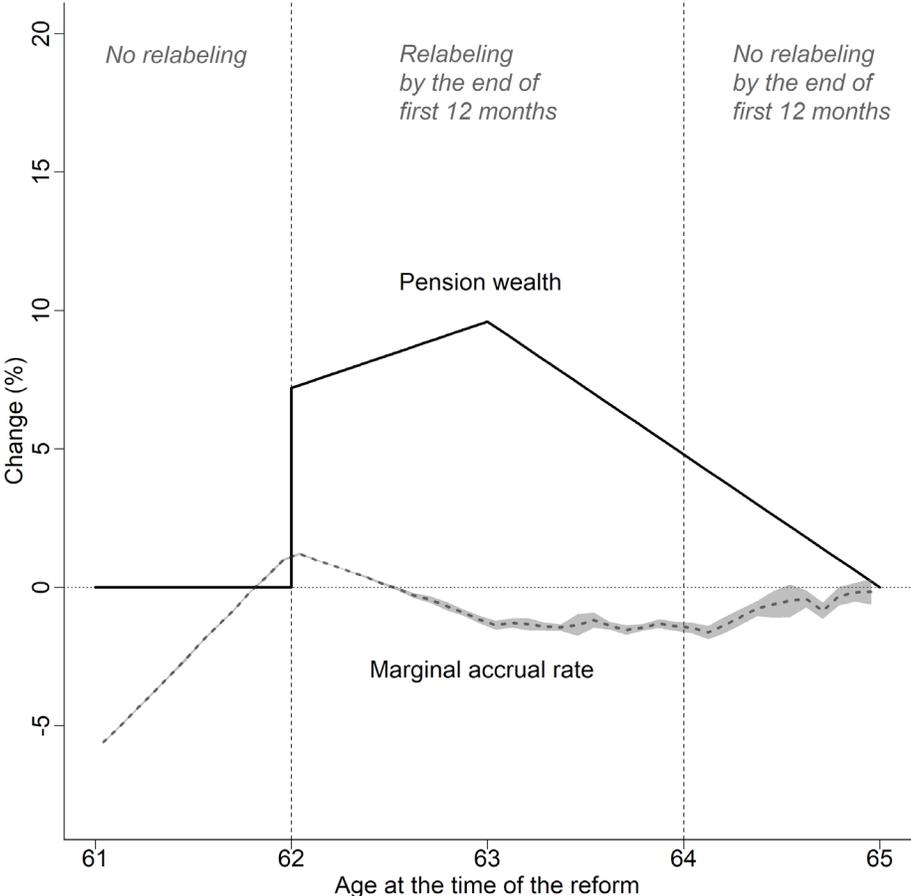
What is notable here is two things. First, on Jan 1, 2005 the changes in pension wealth and accrual rate due to the reform are relatively small – pension wealth rises by up to 10%, and accrual rates fall by only a small percentage amount. Second, while the changes in financial incentives are discontinuous for individuals around age 62, they are continuous for individuals around age 64. This allows us to separate the discontinuous impact of relabeling from the continuous changes in financial incentives.

Our results suggest that in fact this relabeling had an enormous effect. Figure 2 shows a rescaled version of the same type of graph as Figure 1. But this figure also includes the percentage change in retirement rates from 2005 relative to the pre-reform year of 2004. What we find is an enormous rise in retirement probabilities in the range that was suddenly eligible for flexible retirement, on the order of 40% or more. Not only does this huge impact seem inconsistent with the relatively modest change in financial incentives, but in addition to a decrease in retirement rates for those close to age 65, we see a huge discontinuity in impacts right around the end of the relabeling period. Taken together, this provides strong evidence that it is relabeling, and not financial incentives, driving most of the change in retirement behavior.

Regarding financial incentives, the reform allows us to separate the effect of a sudden jump in pension wealth on January 1, 2005, from the exogenous change in marginal accrual rates, also caused by the reform. Consequently, we can study the relative importance of all three effects. We show that the relabeling alone, holding incentives constant, had an impact on retirement roughly two times the effect the maximum wealth change of just under 10% had on retirement.

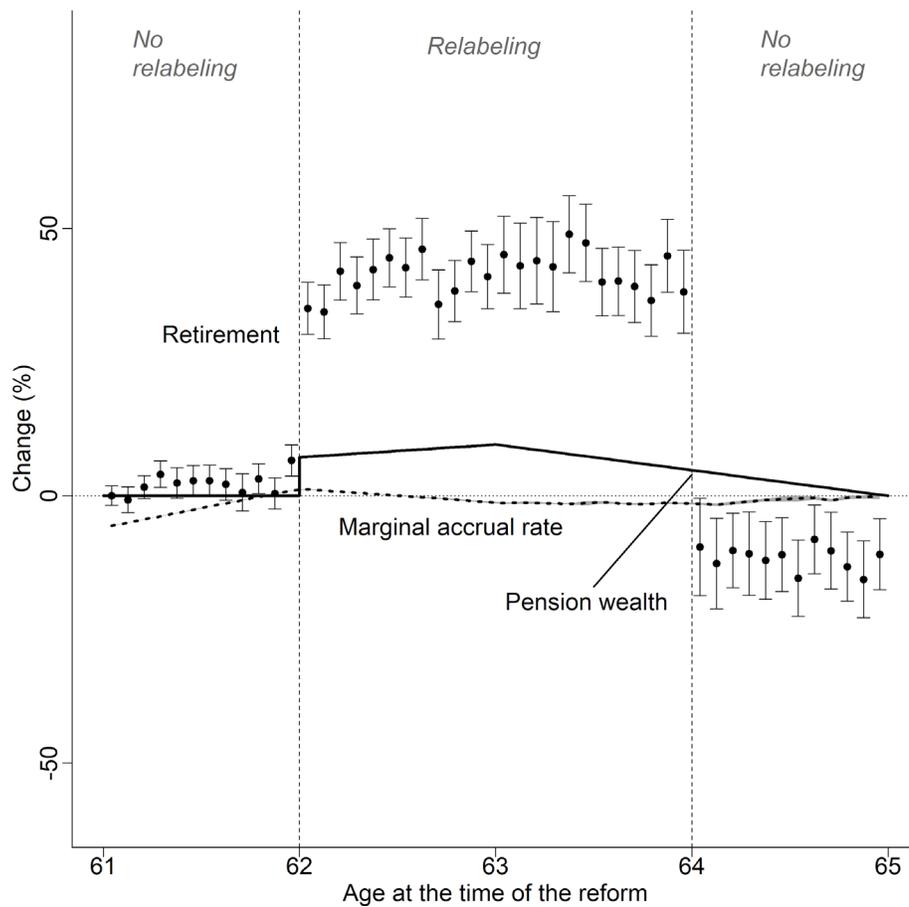
Exogenous changes on accrual rates had an even smaller marginal effect. We also study heterogeneity of the relabeling effect and whether retirement induced by relabeling affected the propensity to return to labor market after retirement.

Figure 1: The effect of the reform on pension incentives and labeling.



Notes. Pension wealth, if retired immediately, increased on January 1, 2005 due to the reform as a function of age. Marginal accrual rate as a proportion of accrued pension calculated for a 12-month period changed due to the reform as a function of age, earnings and accrued pension. The means are estimated for bimonthly birth bins. The 95% confidence intervals are shown in the shaded area. The sample is those with only earnings-related pensions. The cohorts represented in the x-axis are 1940–1943.

Figure 2: The effect of the reform on pension incentives and labeling, and change in retirement rates by monthly birth bins in 2005 vs 2004.



Notes. Pension wealth increased on January 1, 2005 due to the reform as a function of age. Marginal accrual rate as a proportion of accrued pension calculated for a 12-month period changed due to the reform as a function of age, earnings and accrued pension. The means are estimated for monthly age bins. The 95% confidence intervals are shown in the shaded area. Retirement is estimated as a t-test of the difference in 2005 and 2004 for monthly birth bins. The 95% confidence intervals are shown by the error bars. The sample is those with only earnings-related pension.