

How Do Pension Wealth Shocks Affect Working and Claiming?

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Between 1960 and 2010, the average life expectancy at age 65 in the United States increased by 4.5 years for men and 4.2 years for women. Over the same period, the average effective retirement age has declined by approximately three years. These forces have substantial fiscal ramifications for Social Security. The United States and other countries are reforming public pension programs by raising retirement ages and cutting benefits. There is little evidence on which of these two measures is more effective in delaying the labor force exit of older workers. It is possible that the statutory Full Retirement Age (FRA) acts as a social norm or as implicit advice from the government about when to claim benefits, such that raising the FRA could have an even larger effect on retirement decisions than financial incentives (e.g., by cutting retirement benefits).

This project aims to separately identify the impact of the FRA versus financial incentives on labor supply and pension claiming in Switzerland. Studying the Swiss setting is interesting. First, similar to the United States, there is no mandatory retirement in Switzerland, even though firing restrictions become less important after individuals pass the FRA. Also, there is no earnings test in Switzerland: individuals can both draw retirement benefits and continue working. Second, the effect of social norms might be especially relevant in the Swiss pension system where the FRA is the default claiming age; individuals claim automatically at the FRA, unless they announce their plan to the Social Security Administration before reaching the FRA. But FRAs as defaults could also have costs, if they induce individuals to make decisions that are not in their best personal interest. Third, we exploit exogenous variation in financial incentives and the FRA generated by a major pension reform that was implemented in two conceptually distinct steps. The first step increased the FRA for women from 62 to 63, followed by a further increase to 64, while offering early claiming at an actuarially attractive rate. The second step reverted to offering early claiming at an actuarially fair rate, notably without changing the FRA, and reinstated actuarial fairness. With this menu of implementation steps, we discuss how raising the FRA or raising the cost of claiming early affects labor supply and pension claiming.

In the empirical analysis, we estimate both a regression discontinuity design and a structural life-cycle model. The regression discontinuity design relies on the fact that the different reform steps were implemented by birth date. For example, the FRA was increased for women born in 1939 while the FRA remained at 62 for their counterparts born in 1938. We estimate the causal effects of increasing the FRA by comparing women who are born after

December 31, 1938 (treatment group) with those who are born on or before December 31, 1938 (control group). Similar discontinuities in birth date can be exploited to examine the second increase in the FRA for women from 63 to 64 and the increase in the penalty for early claiming. We estimate the causal effect of increasing the FRA in the following regression discontinuity model:

$$y_i = \alpha + \beta * D_i + \gamma_0(1 - D_i)f(Z_i - c) + \gamma_1f(Z_i - c) + X_i'\delta + \varepsilon_i$$

where i denotes the individual; D_i is a dummy that is equal to 1 if a woman is born after December 31, 1938 and 0 otherwise; Z_i denotes a woman's birth date; c is the cutoff date for the FRA increase (January 1, 1939); and f is a function of the difference between a woman's birth date and January 1, 1939. The coefficient of interest is β , which measures the impact of the increase in the FRA on the outcome variable y_i .

In a second step, we develop an estimable dynamic structural life-cycle model of retirement, pension claiming, and consumption decisions. In each period, a worker must decide whether to retire, whether to claim a pension, and how much to consume. A period in the model corresponds to an individual's age. At the start of a period, an individual knows the health status, old-age pension, wage, and value of assets. If the woman decides to continue working, she receives a wage, experiences disutility of work, and takes into account the value of retirement decisions at future ages. Our purpose is to find what kind of model (i.e., what structural parameters) can rationalize the causal estimates themselves. Motivated by the tendency of individuals to claim at the default claiming age, the FRA, despite financial incentives to do otherwise, we assume that there are two subpopulations. The first is attentive individuals who are fully rational and optimally claim based on their preferences and the constraints they face. The second population is comprised of inattentive individuals who claim at the default claiming age, regardless of the financial incentives they face. The observed claiming behavior allows us to separately identify the fraction of attentive and inattentive individuals. For example, since inattentive individuals only claim at the FRA, all individuals who claim before or after the FRA must automatically be attentive individuals.

Our empirical analysis yields the following insights. First, raising the FRA strongly affects women's labor supply. A one-year increase in the FRA increases the claiming age of

retirement benefits by about eight months and delays labor market exit by five to six months. Most of the adjustment in labor supply takes place in the year that women reach the pre-reform FRA (age 62 for the first and age 63 for the second FRA increase). Labor force participation also increases in the year before the pre-reform FRA and in the year of the new FRA, suggesting that labor market exit does not adapt immediately. Reinstating actuarial fairness does not affect labor supply exit but delays pension claiming by about four months. Second, the large response to the FRA increases and the modest response of reinstating actuarial fairness suggest that many individuals are inattentive vis-a-vis their pension claiming decision and simply follow the default option. Third, we find evidence that some women respond to the FRA increase by seeking benefits from other social insurance programs, in particular the unemployment and disability insurance programs, but the amount of benefit substitution is relatively modest.

In conclusion, our work suggests that increasing the FRA is an effective policy, delaying both labor market exit and the claiming of retirement benefits. For each year of increasing the FRA, the exit and claiming ages increase by around 0.5 years. On the other hand, pure financial incentives have only a modest impact on pension claiming and labor supply. The reason for these divergent responses can be attributed to the fact that, in the Swiss setting, the FRA is the default claiming age. Unlike in Switzerland, U.S. retirees need to make an active decision to start claiming Social Security benefits. However, Behaghel and Blau (2012) show that many individuals in the United States also perceive the FRA as a social norm or as implicit advice from the government. Our findings will have implications for the U.S. context, if only in identifying an upper bound of the effect of the FRA.

References

Behaghel, Eric and David Blau. 2012. "Framing Social Security Reform: Behavioral Responses to Changes in the Full Retirement Age." *American Economic Journal: Applied Economics* 4(4): 41-67.