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The Effect of Delayed Retirement Credit on Social Security Claiming and Employment

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Introduction

The delayed retirement credit in Social Security provides workers with a financial incentive to claim OASDI benefits after their full retirement age. The magnitude of this incentive has increased substantially over time as a result of changes to the OASDI program. In this project, we investigate the effect of the substantial changes in the delayed retirement credit on the claiming decisions of retired workers. To the extent that changes in the delayed retirement credit influence the timing of claiming benefits, it might also influence workers employment decisions. We therefore investigate the effects of the policy changes on employment and earnings as well.

While much previous work has investigated the effect of the increase in the full retirement age (Mastrobuoni, 2009) and changes in the earnings test (Friedberg, 2000) on claiming de- cisions and employment outcomes, surprisingly little work has explored the effect of changes in the delayed retirement credit on behavior. This represents an important gap in the litera- ture especially since the responses may influence future Social Security expenditures. If, for example, those with the longest life expectancies respond to the policy change by delaying claiming, outlays by the Social Security program may be much larger as a result.

Motivation

Social Security provides monthly income to insured individuals and their families. For retired worker benefits, an insured individual can claim beginning at age 62. Claiming age directly affects monthly benefits, where earlier claiming before the full retirement age (FRA) induces an actuarial reduction in benefits. If an individual claims

after her FRA, she actually receives an upward adjustment in monthly benefits, due to the delayed retirement credit (DRC). Both adjustment rates and the FRA are determined by an individual's year of birth. Changes to the DRC have substantially increased the financial incentive to delay the date of claiming retired worker benefits. For example, an individual born between 1918 and 1924 would receive an additional 3 percent in benefits per year (beyond inflation-adjustment) or percent per month by delaying the claiming date beyond their full retirement age of 65. In contrast, an individual born in 1943 or later receives an additional 8 percent per year (beyond inflation- adjustment). Through the 1983 Social Security amendments, these changes were phased in gradually so that those born between 1925 and 1942 had an actuarial adjustment between 3.5 percent and 7.5 percent per year.

To the extent that workers consider the present value of their retired worker benefits when deciding when to claim benefits, one would expect some to respond to this change by claiming retired worker benefits later. The incentive to delay claiming in response to the policy changes described above would be strongest for those with the longest life expectancies, who would stand to gain relatively more from sacrificing current monthly benefits to receive higher monthly benefits in the future. This could have important implications for Social Security financing given that the present value of benefits paid may have increased substantially for those who delayed claiming as a result of the policy changes. Adding to this increased incentive to claim at later ages, mortality probabilities for elderly individuals have been falling steadily in recent decades. For example the probability of death for a 62-year old male in 1986 was 2.02% versus a 1.39% probability for his counterpart in 2005. The reduction in mortality probabilities at older ages are similarly striking. Thus, even absent any change in the actuarial

adjustment of benefits beyond the full retirement age, one might expect a steadily increasing share of individuals to claim later as the value of higher future benefits grows with life expectancy. Of course, other factors beyond just the present value will influence the timing of claiming decisions and it is important to account for these.

Understanding how individuals respond to program incentives is crucial for program and policy design. There are major concerns of the long-term solvency of OASDI. As of the end of 2018, the total cost of the program was $1.000 trillion, and the 2019 Trustees Report projected that program costs will exceed income beginning in 2020, with trust fund reserves depleting by 2034. Therefore, incentives to retire and claim later might be financially bene-ficial for the program, but not if, for example, those who have the longest life expectancies are the ones claiming later. The 1983 amendments not only affected the delayed retirement credit (DRC), but also steadily increased the full retirement age (FRA). Starting with those born in 1938, FRA increases from 65 and 2 months to 67 for those born in 1960 or after. These changes confound with DRC changes, with prior research showing that individuals are quite sensitive to the FRA (Behaghel and Blau, 2012). Therefore, we focus the study thus far on individuals born prior to 1938, for whom the FRA remained steady at age 60.

Data

The two primary data sources are the Social Security Annual Statistical Supplement, and the Census Population Survey (CPS) March Supplement. The Annual Statistical Supplement has been published annually by SSA since 1940 and provides aggregate data on each of the OASDI programs. Section 6 provides data on Benefits Awarded, or information on individuals who are added to Social Security benefit rolls. We take these as the new benefit claimants and focus on table 6A.4, which itself is

sourced from the Master Beneficiary Record. We aggregate data from the 1985-2017 supplements, allowing us to follow individuals starting with the 1923 birth cohort. For each claiming year, the compiled administrative data shows the number of new retired worker claims by age and sex of the claimant. However, we are unable to observe birth year of these individuals, which we must impute by subtracting age from claiming year. In addition, this table buckets age after 69, preventing us from imputing birth year for the 69+ claimants. Even with these limitations, this data set gives us the opportunity to observe general patterns in claiming behavior.

The March CPS contains micro-level data on (self-reported) Social Security receipt, as well as individual level information on demographics and labor force outcomes. We incorpo- rate the 1980- 2016 CPS, where year of birth is imputed in the same spirit as Mastrobuoni 2009 from age and survey year. The CPS nicely complements the aggregate administrative data, in that it allows us to capture individuals who might never claim Social Security or claim at a much later age and explore demographic heterogeneity among the recipients. Unfortunately, the CPS does not distinguish between retired workers versus disability insurance benefits until 2001, while the Annual Statistical Supplement does make this distinction.

Results and Discussion

Focusing on those born before 1938, we calculate, for a given birth cohort and sex, the share of individuals who claim at each age, out of all those who will claim between the ages of 62 through 69. For example, we know for the 1940 birth cohort, what fraction of all claims that occur between 62 and 69 happen at age 65. Recall that the Annual Statistical Supplement does not give detailed age breakdowns past the age of 69, so we are unable to impute year of birth. However, as shown from Table 6.B5 of the Annual Statistical Supplement, prior to the claiming year of 2012 (where the 1937 group would be 75), less than about 2% of all claims in any given year were from age 70+, so very few individuals decide to claim at age 70 or after. Not claiming after age 70 is also financially sound, since DRC remains constant after 70.

Focusing on the figure below, we find that for those born between 1924 and 1937, there is no overall noticeable shift for people to claim after their FRA. Generally, claiming at 62 is the most popular, at around 60%. Then, there is a sharp drop for ages 63 and 64, and another spike at 65, the FRA. However, for the overall population, claiming after 65 remains overall unpopular and small. For men, claiming patterns between 62-65 look overall quite steady, with no discernible changes. For women, there is a general slight trend of claiming at age 62 becoming less popular, while claiming at 64 or 65 becoming more popular. Again, claiming after 65 is small and largely remained unchanged for these groups.

While the CPS does not provide the age at claiming, we are able to observe the share of individuals who have Social Security, at each age and birth cohort. For these same birth cohorts, there is again not a clear pattern of individuals claiming more after the FRA, though for women, the overall share receiving Social Security out of the population has declined. If we split the population by educational attainment, we find that those with at least 4 years of college are less likely to claim before FRA compared with those with less than 4 years of college; around 20-25% have Social Security at age 62

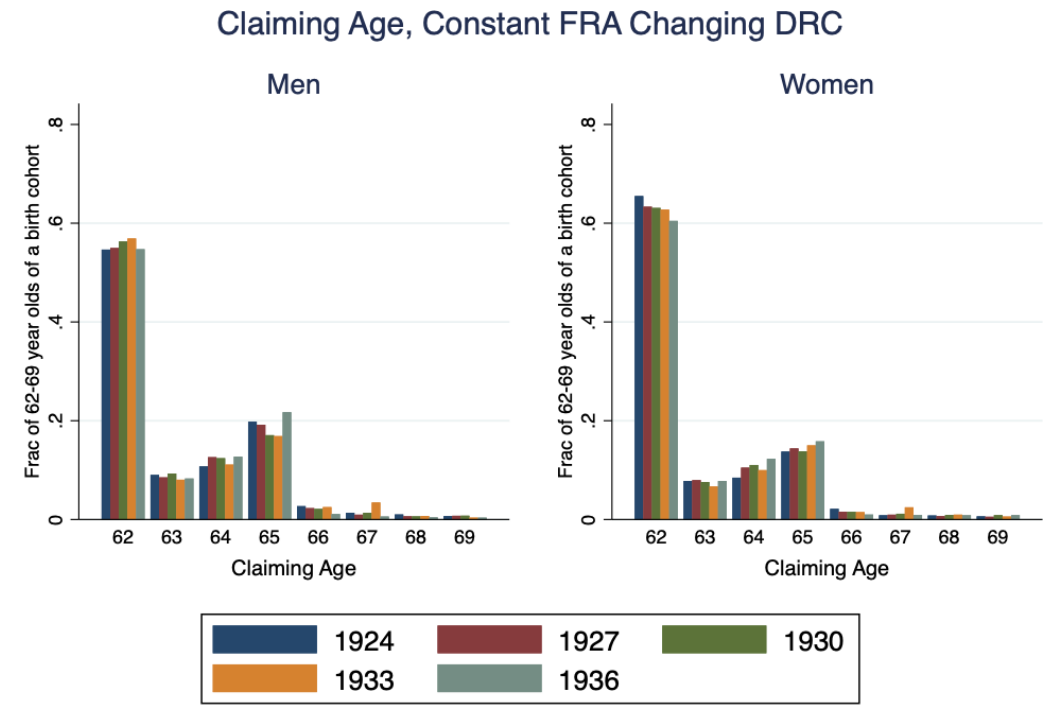
compared with 40% for those with less than 4 years of college. In addition, more claim after 65 for the more educated group. For the labor market, we also find evidence that the share of individuals who receive Social Security while also in the labor force have increased in our birth cohorts of interest for the post FRA ages, suggesting that individuals are more likely to be employed or working while taking benefits at older ages.

Conclusion and Future Work

The results thus far are striking. On the whole, individuals do not seem to be, in the aggre- gate, changing their claiming behavior and claiming later, despite the significant increase in benefits of claiming later. Yet, the results from the March CPS already begins to suggest that aggregate results might mask heterogeneity in the population. Certain subpopulations might be particularly sensitive to DRC and are currently not being captured by our aggre- gate SSA data. In addition, given the strong connection between claiming and working, we hope to further shed light on how DRC might affect working behavior, as our results already suggest the larger effect might not be on the claiming margin, but rather, on the labor force participation and working margins.

Therefore, the next steps in the project are to incorporate a much richer data set that al- lows us to begin addressing these questions. We are in the process of working with micro-level SSA data sets, which contains detailed information on individual claiming and work histo- ries. As we begin to incorporate this rich micro-data, we hope to expand our understanding of the factors that influence Social Security claiming, to better assess how individuals are responding to DRC incentives.

Figures



Source: Annual Statistical Supplement 1985-2017, Table 6A4
All birth cohorts had FRA of 65, and DRC increases from 3% to 6%.

Figure 1: Social Security Claiming by Age and Sex

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References

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