How Extended Unemployment Benefits for Older Workers Affect Labor Market Exit, Disability Enrollment, and Social Security Claims

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Motivation

Extending the potential duration of unemployment insurance (UI) benefits is one of the most important policy instruments to ease economic hardships of job losers. However, such measures can be very costly if unemployed workers use the extended UI benefits in combination with other public transfers, in particular benefits from disability insurance (DI) or social security, to permanently withdraw from the labor force (program complementarity). On the other hand, extending UI benefits may also prevent unemployed workers from entering the DI program or social security, ultimately reducing expenditures in these programs (program substitution).

In this project, we estimate the magnitude of these two effects in the context of Austria. Studying the Austrian case has several advantages. First, the Austrian labor market and institutional features of the Austrian social protection systems are broadly similar to the United States. Second, we can use the Austrian Social Security Administration database (ASSD) which contains complete labor market and earnings histories of all private-sector workers in Austria. The availability of detailed information on labor market histories allows for the examination how extended UI benefits affect enrollment into other social insurance programs. Third, we can exploit exogenous variation in the duration of UI benefits that is generated by a policy reform. The combination of detailed matched employer-employee data and quasi-experiment policy variation presents us with an opportunity to study the impact of extended UI benefits on DI and social security claims that yields important insights to guide policy in the U.S.

While a robust literature examines the work disincentive effects of the SSDI program in the U.S., these studies have almost entirely ignored interaction effects with the unemployment insurance program (see, e.g., Bound 1989, Parsons 1991, Chen and Van der Klaauw 2008, Von Wachter et al. 2011, French and Song 2013, and Maestas et al., 2013). Yet, such interaction effects are potentially important for policy design. Autor and Duggan (2003) provide evidence that such program interaction effects exist in the United States. They show that more workers exit the labor force and seek DI benefits when they are laid off after a local labor market shock. Consequently, unemployment rates increase less due to the expansion in DI claims. Evidence for program interactions outside the United States is provided by Borghans et al. (2014) and Staubli (2011). Using
data from the Netherlands, Borghans et al. (2014) show that reducing the generosity of DI benefits increases reliance on other government insurance programs. Staubli (2011) studies a policy change that tightened DI eligibility criteria in Austria and finds that a significant fraction of workers responded to the change by seeking UI benefits instead. All these studies examine how changes in DI program parameters affect UI claims. How changes in UI program parameters, such as an extension in UI benefits, affect DI enrollment and labor market exit is not well understood.

**Policy variation and empirical methodology**

We exploit variation in the potential unemployment duration that is generated by a large policy change. More specifically, as a response to a crisis in the steel sector the Austrian government implemented the regional extended benefit program (REBP) in 1988. The REBP extended regular UI benefits for a subset of job losers from one year up to four years in regions with a strong steel sector. To become eligible for the extension an unemployed worker had to satisfy each of the following criteria at the beginning of the unemployment spell: (i) age 50 or older, (ii) location of residence in one of the eligible regions for at least 6 months prior to unemployment entry, and (iii) start of a new unemployment spell after June 1988 or spell in progress in June 1988. The program was in effect until August 1993 when it was abolished.

The REBP provides us with a unique opportunity to explore the impact of extended UI benefits on DI enrollment and social security claims in a clean way. Our empirical approach compares eligible job losers in REBP regions (treatment regions, TRs) to similar job losers in non-REBP regions (control regions, CRs) over time. This comparison can be implemented by estimating the following difference-in-differences regression:

\[
y_{it} = \alpha + \beta TR_{it} + \gamma D_t + \delta A_t + \pi (D_t \times TR_{it}) + \mu (A_t \times TR_{it}) + \epsilon_{it},
\]

where \( i \) denotes individual and \( t \) is the start date of the unemployment spell. The variables \( TR_{it} \) is a dummy variable that indicates whether or not an individual lives in a REBP-region to control for region-specific differences; \( D_t \) is an indicator taking the value 1 if
the unemployment spell started after the REBP was in effect (June 1988); and \( A_t \) is an indicator taking the value 1 if the unemployment spell started after the REBP was abolished (August 1993). The coefficients of interest are \( \pi \) and \( \mu \) which measure the effect of the REBP on job losers in REBP regions relative to non-REBP regions in the years when the program was in effect (\( \pi \)) and in the years after which the program was abolished (\( \mu \)).

We are interested to examine the impact of extended UI benefits on individuals’ exit states after unemployment. We distinguish between three different types of exits: (1) permanent labor market exit, (2) claiming of DI benefits, and (3) claiming of social security. In case (1) the outcome variable \( y_{it} \) is a dummy, which is equal to 1 if an individual permanently leaves the labor force. In cases (2) and (3) the outcome variable is a dummy, which is equal to 1 if an individual exits unemployment by claiming DI benefits or social security, respectively. In our empirical analysis, we focus on men because, as explained in detail in the paper, our empirical design is useful to understand program complementarity and substitution for males but it is less relevant in the case of females.

**Results and Discussion**

Figure 1 plots the fraction of transitions from unemployment into early retirement (Panel A), disability pensions (Panel B), and old-age pensions (Panel C) by age at UI entry and region of residence during the REBP. Early retirement comprises exits to disability and old-age pensions as well as job losers who stay unemployed until the end of 2006. In the paper, we show that transition rates into early retirement, disability pensions, and old-age pensions are very similar in TRs and CRs before and after the REBP, suggesting that any differences in transition rates during the REBP are driven by the UI benefit extension. Panel A shows that during the REBP is in effect, the transition rate into early retirement between ages 50-57 is significantly higher in TRs, indicating that a large portion of unemployed men uses the extended UI benefits to permanently exit the labor force. Panel B shows that during the REBP period, there is a striking increase in transitions into disability pensions between ages 50-54 in TRs, suggesting that some unemployed men use the extended UI benefits as a bridge to claim a disability pension at
age 55; at this age eligibility criteria for disability benefits are substantially relaxed (program complementarity).

Figure 1: Transitions into early retirement (Panel A), disability pensions (Panel B), and old-age pensions (Panel C) by age in TRs and CRs during the REBP

For the age group 55-57, there is a sizable decline in transitions into disability pensions in TRs relative to CRs (program substitution). Hence, the REBP induces some unemployed men who in the absence of extended UI benefits would have claimed a disability pension to stay unemployed until they become eligible for an old-age pension.
This substitution away from disability pensions is also reflected in Panel C, which shows that the transition rate into old-age pensions is significantly higher between ages 55-57 in TRs during the REBP is in effect (program complementarity).

The descriptive evidence shown in Figure 1 is also confirmed by our difference-in-differences analysis. More specifically, we find that the probability of entering early retirement among 50-54 year old unemployed men increased by 16.2 percentage points, or 61% of the baseline transition rate into early retirement before the REBP. This increase is mostly driven by an increase in transitions into disability pensions of 12.2 percentage points and – to a lesser extent – by an increase in transitions into old-age pensions of 3.4 percentage points. The effects are completely reversed after the program is abolished. For the age group 55-57 we estimate that the introduction of the REBP led to an increase in transitions from unemployment into early retirement of 14.8 percentage points. There is also clear evidence for program substitution and complementarity effects: in the years the program was in effect there is a 9.7 percentage point decline in the probability to claim a disability pension (program substitution) and a 24 percentage point increase in the probability to claim an old-age pension (program complementarity). As for job losers in the age group 50-54, the effects are completely reversed after the abolishment of the program.

In conclusions, our work suggests that extending unemployment benefits for older workers has a large impact on disability enrollment and social security claims. From a policy perspective, our findings imply that policy reforms aiming at increasing the effective retirement age should take particular care to carefully consider the entire set of welfare programs that impact the (early) retirement decision. A policy mix that allows for simultaneous and coordinated reforms in UI and DI programs to tackle the unemployment-disability margin, together with complementary measures that induce firms to hire and retain older workers are the most promising route for policy reforms.
References


