THE IMPACT OF UNEMPLOYMENT INSURANCE EXTENSIONS ON DISABILITY INSURANCE APPLICATION AND ALLOWANCE RATES

BY MATTHEW S. RUTLEDGE

The Great Recession of 2007-2009, like the previous four recessions, induced the federal government to increase the duration of unemployment insurance (UI) benefits nationwide. Meanwhile, Social Security Disability Insurance (SSDI) applications have skyrocketed from already record-high levels. Policymakers are rightly concerned that both programs provide disincentives to job seekers. The economics literature has found that the job-finding rate increases substantially in the last weeks of UI eligibility (Meyer 1990), indicating that search effort over the jobless spell is an important factor. Also, disability applications increase with the unemployment rate (Autor and Duggan 2006), which contradicts disability insurance's mission to help the long-term disabled and terminally ill.

The extension of UI benefits, however, can ameliorate concerns about disability insurance being used as supplemental unemployment insurance. Potential disability applicants may delay applications until they exhaust their extended UI benefits. In the meantime, costs are transferred from the SSDI Trust Fund, scheduled to be exhausted in 2018 (Social Security Trustees Report 2011), to general revenue, which is more fungible. In addition, some delayed applicants might find jobs, reducing the long-term costs of the disability programs.

This paper, the first to focus on the effect of UI extensions on disability applications, investigates the conditions under which the availability of unemployment insurance, in general, and extended UI benefits, in particular, delay disability applications and changes the composition of the pool of remaining applicants. It uses the variation in the total UI duration provided by extensions to estimate whether UI eligibility, extension, and exhaustion affect individual workers' hazard to SSDI application, using the Survey of Income and Program Participation (SIPP) Gold Standard File, which links job loss data from a household survey to disability application and earnings information from the Social Security Administration's (SSA) administrative records. The effect of a new UI extension on the proportion of a state's workers who apply to the SSDI program and the (lagged) success rate for these applications provide corroborating evidence on the incentive to apply for disability and the composition of applicants.

Data and Methodology

The SIPP Gold Standard File links monthly employment and demographic information from the SIPP household survey, conducted by the U.S. Census Bureau, to administrative data on disability activity and earnings from the SSA and the Internal Revenue Service. The sample for the individual-level regressions includes approximately 29,000 workers ages 25 to 64 who lose a job during their time in the SIPP panel between 1990 and 2006.

Information on each state's unemployment insurance parameters comes from the Comparison of State Unemployment Insurance Laws, a U.S. Department of Labor annual report. The report includes information on automatic triggers for the Extended Benefits program, which increases UI durations when the state unemployment rate exceeds a proscribed level, as well as federal emergency UI extensions that supplement state-specific normal durations with federally funded extended benefits nationwide.

The regression analysis estimates a multinomial logit model to account for the competing hazards of SSDI application and re-employment. The independent variables include a set of mutually exclusive indicators for whether the jobless individual is eligible for UI, is receiving extended UI benefits, or has reached the end of non-extended or extended UI benefits in the current month. Other controls include the announcement of a new UI extension, the state unemployment rate, personal characteristics, and month-since-separation fixed effects to account for duration dependence.

An alternative model, which splits the SSDI application decision into the submission of ultimately successful and unsuccessful applications, tests the hypothesis that healthier potential applicants are more responsive to incentives created by UI eligibility. A state-level regression of SSDI application and allowance rates — the latter lagged to account for an application's average four-month processing time, provides additional evidence on whether UI extensions affect SSDI application behavior.

Finally, the results of the multinomial logit estimation for successful and unsuccessful SSDI application and re-employment are used to simulate the effect of 13- and 26-week extensions on the costs of the UI and SSDI (including Medicare) programs. The simulation calculates each individual's expected cost to the system in a given month — the probability of that individual receiving benefits multiplied by his or her benefit level — and then sums across months, up to his or her Full Retirement Age.

Results

A plot of the survivor functions and tabulations of the month of application relative to the month of UI exhaustion, separately by whether benefits are extended or not, indicate that jobless individuals are most likely to apply for SSDI in the month that their UI benefits are scheduled to expire, especially if those benefits have been extended since they lost their job. A large proportion of those who lose their job apply for disability benefits in the first few months of the jobless spell; most eventual applicants whose UI benefits are never extended apply in these early months, and the blip up at the month of UI exhaustion is smaller than for those who have longer-than-normal UI durations.

The multinomial logit model results confirm both hypotheses, that someone is more likely to apply for disability benefits in the month of UI exhaustion relative to other months and that UI extensions push out the application date further. During months that an individual with work limitations remains eligible for UI only because of an extension, the probability of applying to disability programs decreases by 57 percent. Among work-limited individuals whose benefits have been extended, applications are 144 percent more likely in the month of UI exhaustion than in the months after UI exhaustion.

Though some of the estimates are not statistically significant, the competing hazards model that allows for separate effects of UI eligibility on the probability of submitting a successful or a denied application provides evidence that healthier applicants are more likely to delay application until UI is exhausted. The

announcement of a new UI extension is associated with a decrease in denied applications and a significant increase in successful applications. In addition, lacking health insurance makes one significantly more likely to submit an ultimately denied SSDI application and significantly less likely to apply successfully. In addition, the state-level regression finds that the allowance rate significantly increases in the first few months after a UI extension.

The simulation finds that, contrary to the prediction that delayed application reduces the burden on the SSDI system, SSDI costs do not decrease following a UI extension. Extending benefits by 13 weeks increases costs to the UI system by 19.5 percent and to the SSDI system (including Medicare, for which SSDI beneficiaries are eligible after 24 months) by 3.4 percent. Compared to the no-extension scenario, a 13- or 26-week extension leaves the predicted probability of starting a new job or applying to SSDI relatively unchanged. Instead, the predicted probability of any given application being approved increases when benefits have been extended.

Conclusions

These results indicate that jobless individuals are significantly less likely to apply for disability benefits during the months their UI benefits are extended, and significantly more likely to apply to SSDI the month that the UI extension ends. State-level analysis suggests that relatively healthier applicants are most likely to delay application during the first months of a UI extension, thereby increasing the allowance rate observed after the applications wind their way through the determination process.

Despite this evidence, the cost simulation does not find a reduction in SSDI costs from hypothetical 13- or 26-week UI extensions. The study suggests several reasons why the probability of a successful application could increase around UI extensions, thereby increasing expected costs: the extension signals poor labor-market prospects, the screening process is potentially more permissive when suitable jobs are less likely to be available, or applicants' poor ex-ante judgment about their allowance probability leads to noisy estimates.

This study's findings are consistent with others (e.g., Lindner 2011) that conclude that disability insurance is being used, at least in part, as supplemental unemployment insurance. But these results also suggest an upside to this relationship between disability and unemployment: UI extensions effectively transfer recipients from the disability programs, for which the Social Security Trust Fund is rapidly approaching exhaustion, to the unemployment insurance program, funded by taxes on former employers and more-fungible general revenue. In addition, the incentive to seek employment is stronger with UI than with SSDI or Supplemental Security Income (SSI). Given these efficiency gains, the societal benefits of UI extensions may be understated in the current debates.

CENTER FOR RETIREMENT RESEARCH AT BOSTON COLLEGE