

THE EFFICIENCY OF GOVERNMENT DISABILITY PROGRAMS: AN INTERNATIONAL COMPARISON

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Extended Abstract

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Disability insurance programs play a crucial role in the safety net of most developed countries. There are large variations across countries in the percentage of GDP devoted to disability payments, ranging from 0.4 percent in Canada to 2.5 percent in Sweden. Most countries are critically concerned about rising rates of DI enrollment, and the resulting pressure on their public sector budgets (OECD, 2003, 2010).

In response, some governments have restricted eligibility and reduced payment rates, but these reforms in turn have caused concerns about restricted access to DI for people with very serious disabilities that prevent them from working. The U.S. disability insurance program is particularly notable for the very long waiting period and extensive appeals for people with what

appear to be serious disabilities. By contrast, the Swedish system allows for disability to be defined in percentage terms and provides smaller awards for those less disabled. Thus governments adopt very different approaches to navigating between Type I error (providing disability benefits to someone who is healthy enough to work) and Type II error (denying disability benefits to someone who is too unhealthy to work). In this view, the size and growth of DI programs should reflect where countries choose to draw the line in determining whether specific workers are sufficiently disabled to become eligible for DI.

Previous literature suggests strongly that health status and demographic factors are less important in explaining such differences in enrollment rates and budgetary costs. Instead, institutional factors surrounding the ease of being accepted for DI payments, and the generosity of benefits, have been shown to have a much stronger impact whether in cross-country comparisons (Börsch-Supan , 2007) or in country-specific studies that examine enrollment and policy changes over time (see Milligan and Wise, 2011). Measurements of the institution-level DI generosity across countries comes from pioneering work by the OECD (2003, 2010) that categorized such programs according to dimensions such as the severity of disability needed to qualify, the type of physician (if any) required to certify disability, the duration and size of the compensation, and types of vocational and employment support. The overall index of DI generosity was created by assigning numbers (from 0 to 5) to each dimension, and summing over all dimensions (OECD 2003, p. 188).

While a modified version of this index has been used to explain some of the cross-country variation in DI enrollment rates, it also has several limitations. First, DI agencies across countries may have different norms in determining (e.g.) what constitutes disability or how much to weight employment opportunities in application decisions not captured in regulations and stated guidelines. Second, the OECD index is a simple sum of many different dimensions, some of which are likely to be less important for the decision to apply or to be accepted, and it is not clear *a priori* how to weight such factors. Third, these compilations were created for a point in time, and do not necessarily reflect the *stock* of DI recipients, many of whom qualified under regulations in effect decades ago. And finally, the measures do not necessarily measure the extent of Type I and Type II error above; how well does the application process sort out those who are truly sick and unable to work, versus those who can potentially work.

This paper takes a first step towards addressing these issues by examining the micro-level characteristics of those enrolled in country-level DI programs -- relative to those not in the DI program -- to make inferences about the implicit decision rules followed by different countries. To do this, we first develop a simple model of DI application and enrollment that allows for systematic variation across countries in their objectives and apparent randomness of the application process. The first implication of the model is that, as above, countries setting stricter eligibility for health-related disability will experience both lower DI enrollment rates, and conditional on receiving DI, enrollees will also be substantially sicker than average (and much sicker than those not on DI). The second and less intuitive implication is that difference in how countries make tradeoffs between health and employment, and how well they are able to distinguish between sick and less sick applicants, will blur this association between generosity and relative health.

We use longitudinal data from the Survey of Health, Ageing, and Retirement in Europe and the Health and Retirement Study to infer these different characteristics of DI programs among people aged 50-64 across 10 countries in Europe and the U.S. We first demonstrate the weak correlation between the size of the DI program and the average or relative self-reported health or depression scores of those in the DI program. We then find that European countries appear to place a greater weight on the lack of market opportunities, as proxied by education, while in the US there appears to be no impact of market opportunities on DI enrollment once one controls for self-reported health. Finally, we find marked differences across countries in both the relative likelihood of getting DI insurance even while in good health (Type I error), and the share of those in fair/poor health receiving DI insurance (Type II error). For example, Denmark and Sweden experience the same high enrollment rate for DI insurance in their populations aged 50-64, yet the Danish system appears better at screening out people without debilitating illnesses by keeping them in the labor force. In general, Greece, Denmark, and Switzerland tend to look more efficient, while Spain, Italy, and Austria are nearer the bottom.

The policy implications of these results are both discouraging and encouraging. Discouraging because the association between DI enrollment and health status appears to do such a poor job of targeting people in the poorest health. More encouraging, however, is that countries do not appear to be facing the rigid tradeoffs whereby cost savings can only come at the expense of reducing benefits for needy workers. Instead, the wide variability across

countries suggests a much larger scope for improving the targeting of DI programs towards those with real disabilities, whether by focusing less on the role of insuring against labor market risks, or by intervening quickly and providing supportive employment to avoid the worst-case outcome of a permanent transition to long-term disability.

References

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