

Thesis Abstract

“Essays on Disability and the Labour Market”

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Education Choices of Individuals with Early-Onset Disabilities in the Presence of Social Insurance Programs (*Job Market Paper*)

Individuals with an early-onset (before age 18) disability attain substantially less education than their non-disabled counterparts. In Canada, this equates to an eighteen percentage point gap in post-secondary attainment between these populations. This gap is likely related to how an early-onset disability affects the cost and return to investing in education and the availability of additional income through social insurance policies. In this paper, I build and estimate a structural life-cycle model of education investment and labour market choices to analyze the effect of social insurance policies on education investments for early-onset individuals. I focus on two social insurance policies in Canada: provincial social assistance (SA) and federal disability insurance (DI). Using linked Canadian survey and administrative tax data, I estimate the model and reproduce the education gap, life-cycle employment rates, and attachment to SA and DI. I find that heterogeneity in ability and the earnings return to post-secondary play important roles in driving the education differential between the early-onset and their non-disabled counterparts. I also find that approximately 30% of the gap in education attainment is due to the additional resources available via SA for individuals with a disability. DI is more relevant for older ages and has trace effects on education. Through counterfactual experiments, I find that reducing the generosity of SA available for those with a disability induces early-onset individuals to seek more education to self-insure themselves. It also increases their employment rates, however, this comes at a substantial welfare cost and a decline in consumption. Instead, post-secondary grants for early-onset individuals increases their educational attainment, employment, and is welfare improving.

The Longitudinal Effects of Disability Types on Incomes and Employment

A work-limiting disability can have important impacts on personal income in the years around its onset. Using linked Canadian survey and administrative tax data, I estimate the effect of different disability types in the ten years after onset on the level and composition of the main components of personal income. I distinguish disability types based on reported limitations to daily activities, and group them into physical, cognitive, or concurrent (both). My empirical results show substantial heterogeneity in the effect on personal income by disability type. In the years following onset, people with cognitive disabilities experience larger and more permanent declines in employment and total market income than those with physical disabilities. However, those with only cognitive disabilities receive similar increases in total government transfers, but less transfers from programs most relevant to disability. Instead, this group offsets some of the decline in market income via other transfers, such as programs that target families. Finally, the estimated effect of concurrent disabilities on market income and government transfers appears to be additive as it equals the sum of the effects of physical and cognitive disabilities.

The Labour Market Consequences of Disability: Types, Severity, Persistence, and Onset

This paper analyzes the heterogeneous effect of a work-limiting disability on labour market outcomes. Rich with information on the traits of a disability, I use the Participation and Activity Limitation Survey to compare the relative importance of each trait and their interactions. The set of disability traits includes the type of activity limitation (physical or cognitive), timing of onset, severity, and chronicity. I find substantial cross-sectional variation in labour supply and earnings across the activity limitations. My results show the timing of onset has large significant impacts on the labour market outcomes of individuals with disabilities. Further, the effects of disabilities that onset before age eighteen appear to inflict additional wage penalties through reduced skill accumulation.