Incentivizing the Disabled: Optimal Employment and Social Insurance Policies*

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In 2013, the labor force participation rate of the disabled was 20.3%, while 68.9% of those without disabilities participated in the labor market. Moreover, the unemployment rate of people with disabilities was 13.2%, about twice that of those without disabilities (7.1%).[1] In order to improve the labor market performance and welfare of workers with disabilities, the United States government implements a wide array of policies. Among them, the Americans with Disability Act (ADA) and Social Security Disability Insurance (DI) are the most influential labor market and social insurance programs for the disabled.

The Americans with Disability Act is a legislation passed in 1990 and amended in 2008 (ADA Amendment Act of 2008, ADAAA). The goal of the legislation is to provide employment protection of the disabled workers. The Title I of the ADA states that an employer should not discriminate against the workers with disabilities in job application procedures, hiring and firing, and workers' compensation, among others. Moreover, employers are required to make reasonable accommodations to physical and mental limitations of disabled employees. The amendments in 2008 strengthened the ADA by broadening the definition of disability. Despite its aim, however, most research on the ADA find negative employment effect of the disabled workers, as large as 8%.[2] Social Security Disability Insurance is a federal program that provides income security to the disabled workers. While the program insures workers with disabilities, it creates disincentives to work. A recent paper by Maestas et al. (2013) finds that the employment of the disabled would have been 28 percentage points higher without disability insurance. The effect varies widely across severity of disabilities.

This paper studies the effects of the ADA and DI on labor market performance and welfare of the workers with disabilities. We build a general equilibrium model with labor search to theoretically and quantitatively analyze the effects of these policies. Further, we use the model to design optimal labor market and social insurance policies for the disabled workers. These two policies interact with each other, and to the extent that people have different severity in disability, they differentially affect the extensive and intensive search decision of workers and welfare.

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[2] De Leire (2000) finds that the ADA caused a 8 percentage point decrease in the employment rate of men with disabilities, and Acemoglu and Angrist (2001) find a 5 percentage point decrease in the employment rate of disabled men.

In our model, workers are heterogeneous with respect to health status, which lies on a continuous domain. The unhealthy workers suffer greater disutility from working, which could be mediated by accommodations provided by the firms. The unemployed workers in the economy search for jobs. Firms in the model offer wage and accommodation contracts to attract workers. We model the ADA as restricting the wage and accommodation contracts firms can offer in the market. Moreover, disability insurance is modeled as providing a constant stream of consumption to workers who qualify.

With the enactment of the ADA, the government forces the firms to provide accommodations for the disabled workers, while paying them the same wage. From the workers' point of view, the ADA increases the unhealthy's incentive to work by increasing the value of employment. However, the firms now face higher cost of employing a disabled worker. Thus, in the general equilibrium, the model can generate negative employment effects, consistent with the empirical findings. We use the policy discontinuities and reforms to quantify the policy effects. Further, using the parameters, we aim to study the optimal policies for the economy.