

SPOUSAL LABOR SUPPLY RESPONSES TO GOVERNMENT PROGRAMS: EVIDENCE FROM THE DISABILITY INSURANCE PROGRAM

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Women now play an increased role in insuring their households against financial risk due to shocks from spousal disability and unemployment. There have, however, been very few studies that have examined how women adjust their labor supply to their husband's disability and disability insurance receipt. This study documents the temporal pattern of labor force participation and earnings of the wives of disability applicants and provides estimates for the effects of husband's disability insurance receipt on his wife's labor supply. The wives of DI applicants are an interesting group to study because these women have husbands who have self-identified as having a disability so severe that they cannot work and are seeking disability insurance. If their husband's claim to having a permanent work preventing disability is valid, albeit a point that is resoundingly argued in the literature on the work disincentive effects of the DI program, then the wives are similar in all respects except one group has husbands that receive DI and the other does not.

To estimate the crowd-out effect of DI on wife's labor supply and to understand the temporal pattern of labor supply for these women, a unique longitudinal data set that matches Social Security Administrative earnings records, disability award records, and beneficiary records with information on married couples from the Survey of Income and Program Participation (SIPP) was assembled. In addition to the demographic variables such as age, race and education, the resulting dataset provides a rich source of information on the wife's earnings history, her husband's health status at the time of the disability award, and the result of his application to the DI program. The administrative earnings records extend the reach of the SIPP by covering substantial periods of time both before and after the application to the DI program. This database is then well suited to studying the impact of participation in the DI program on wives' subsequent labor supply.

In estimating the crowd-out effect, there are several issues that I consider in the specification of the longitudinal regression models. First, it may take time for wives to readjust their labor supply after the DI award decision is made. Allowing for this kind of flexibility in estimating treatment effect turns out to be important, and our estimates show that the crowd-out effects on wives' labor supply span multiple years with significant effects showing up as long as 5 years after the DI decision. Second, since studies have shown that there may be substantial differences in the residual work capacity of workers who are rejected from the DI program, in further analysis it is important to estimate models that allow for unobserved heterogeneity that may be correlated with program receipt. Since we have longitudinal data, we can account for person specific fixed effects and find that DI receipt crowds out wives' labor force participation by between 6 to 8 percent

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and earnings by \$1,200 in the year following the DI decision. The results also show that the crowd-out effects persist and are still significant up to 5 years after the DI award determination.

Finally, even among people with the same health condition, there may be substantial heterogeneity in the severity of their illness and disability. The assembled database includes a useful measure of health condition severity—the stage at which the applicant was determined to be disabled (or not), in particular, those who were assessed at Stage 5. About 40 percent of applicants to DI reach this final stage. This group is interesting because these are the marginal or most difficult to assess of all applicants to the DI program. To reach this stage, it means that the health condition was not severe enough to have been awarded benefits in Stage 2 or healthy enough to have been rejected in Stage 3 or 4. At stage 5 these applicants are now being assessed based on their age, education and other vocational factors to see if they can carry out any kind of work in the economy. Arguably, because they have gone through the DI screening process and have gotten to this stage, all the men in this sample have illnesses of equal severity. By studying this relatively homogeneous (in terms of health status) sample, the crowd-out effects can then be purged of concerns about heterogeneity in husband's health status. For this marginal group of applicants, the estimated crowd-out effects of DI receipt are between 8 to 11 percent for labor force participation and approximately \$2,400 for earnings. In both cases, the labor supply effects persisted up to 5 years after the DI award decision.

Taken together, the estimates suggest that DI receipt can spillover and crowd out wives' labor supply for up to five years after the DI decision date. The effects are small compared to other programs such as Unemployment Insurance. Even for the wives with "healthier" husbands, the greatest crowd-out effect is estimated to be 11 percent for labor force participation and \$2,500 for earnings. Future studies on the effect of disability and disability insurance on wives' labor supply should explore other methods of understanding how substitutable a wife's time is between market work and time spent producing her husband's health. This will lead to a better understanding for policymakers of how families insure themselves against health and income shocks and in particular the effect of a husband's early retirement due to disability on the future retirement patterns and experiences of their wives.

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