The Health and Earnings of Rejected Disability Insurance Applicants: Comment

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The Health and Earnings of Rejected Disability Insurance Applicants: Comment

By Donald O. Parsons*

The interaction of social insurance programs and the labor market has been an enduring concern to government policymakers and to social scientists. Understanding the effect of the social-security disability program on the labor-force participation of prime-age males is especially important, because the relatively small probability of a large earnings loss makes disability insurance highly valuable and because the aggregate costs of any work disincentives are potentially quite large for this important segment of the labor force. In a recent contribution to this Review, John Bound (1989) reports new estimates of the effect of the disability insurance program on male labor-market activity. Bound’s principal conclusion is that: “...DI accounts for substantially less than half of the postwar decline in the participation rates of older men.” (p. 484). Bound contrasts this finding with my own study (Parsons, 1980), in which I report estimates and simulations indicating that the establishment of the social-security disability program and the growth in general welfare “explained” virtually all the postwar decline in prime-age male labor-force participation. Even ignoring the inclusion of general welfare effects in my study, differences in work-disincentive estimates of this magnitude are well within the range of uncertainty that pervades such measurement. Unfortunately, Bound’s research design is seriously flawed, and his estimates are not a useful addition to the accumulating evidence on the work-disincentive effects of the disability program. Nonetheless, the wealth of data Bound presents, when appropriately supplemented, does provide new insights into the long-run effects of the disability insurance system on denied applicants.

Bound eschews standard econometric analyses and derives his conclusion from what he describes as a natural experiment, the labor-market behavior of disability applicants whose claims have been (initially) denied. Bound employs two types of data sets, the 1972 and 1978 Surveys of the Disabled and an internal Social Security Administration analysis (Ralph Treitel, 1976, 1419). Bound’s rejection of the standard econometric approach is supported by an odd set of logit analyses of the probability of “nonemployment” (his table 5). The logit analyses have as dependent variables a dichotomous variable equal to 1 if the respondent is unemployed or out of the labor force, 0 otherwise, with one analysis based on the full sample and another on a sample in which (self-reported) disability applicants are excluded. He finds similar replacement-rate effects on nonemployment in the two samples, even though, in his words, “there can be no possible causal connection between high benefit levels and labor force withdrawal” (p. 495) in the sample that contains no disability applicants. This statement places great confidence in the self-reporting of disability application among denied applicants. The analysis also fails to make the important distinction between nonparticipation and unemployment common to earlier studies. Although the peculiarities of the sample used by Bound make any such computation risky, a back-of-the envelope calculation suggests that approximately half of a randomly selected sample of not-employed nonapplicant males in this age-group would be unemployed workers. These individuals, although not directly affected by the disability program, face a similar progressive replacement-rate structure in the unemployment insurance system (and appear to have similar behavioral responses; see Finis Welch [1977] and Robert Topel and Welch [1980]).

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1As Bound (1989 p. 496) concludes, “To summarize, no one has disputed the claim that there are disincentives and social costs associated with DI. The questions are about magnitudes.” For an early statement of the social-security-disability disincentive hypothesis, see Parsons (1980a; b). Jonathan Leonard (1986) provides an excellent review of the empirical literature on the topic.
1979), and finds that approximately 50 percent of a sample of rejected disability applicants return to work following rejection of their applications. As Bound recognizes, the data from the Surveys of the Disabled are suspect, because the surveys rely on self-reporting to identify denied applicants. Respondents who are currently working may be particularly reluctant to report that they recently claimed to be incapable of working. Fortunately, the Treitel data are drawn from administrative records, so that it is not vulnerable to the same criticism, and it appears to provide similar estimates.

Bound's argument is that denied applicants form a "natural 'control' group" (p. 482) on work attachment in the absence of disability insurance. Presumably, the 50 percent of the denied applicants who did not return to work would not be working even in the absence of the social-security disability system—after all their applications for disability benefits had already been denied. The denied applicants are therefore either back at work or incapable of working, so that they could not be contributing to a higher aggregate nonparticipation rate. The eligibility-determination period is characterized by Bound as a brief period, "a few months" (p. 492), and can be ignored as a contributor to nonparticipation. The only remaining source of a disability effect on work attachment is among able workers accepted into the program. Assuming that the social-security disability screen is not perverse, so that the accepted are at least as healthy as the denied applicants, an "upper bound" (p. 484) on the magnitude of the program's work disincentives can be calculated as the product of the number of accepted applicants (or allowances) and the fraction of denied applicants who returned to work. The result is Bound's estimate of the work-disincentive effect of the disability program.

Unfortunately, a crucial element of Bound's design, the claim that work activity following rejection of an application is independent of the social-security disability system, is simply untrue. The independence of work activity following rejection and the social-security disability program requires that all of the following conditions hold:

1) denied applicants are not out of work while awaiting appeal;
2) they are not strengthening their cases for future reapplication by establishing a period of nonwork;
3) they are not having difficulty reentering the labor force after a substantial nonworking period.

As it happens, none of these conditions is met.

To understand the nature of the strong continuing role of the disability insurance program in the economic lives of denied applicants, some background information on the program is useful. The social-security disability system is a "total" disability system. Eligibility for social-security disability benefits involves a number of conditions, including easily verifiable requirements on the number of quarters of prior participation in the system. Much more elusive is the disability criterion.3 The official disability standard has changed only modestly over time; in 1984 the medical requirement is the presence of a disability, defined as:

the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last, for a continuous period of not less than 12 months.

(Social Security Administration, 1984). An elaborate administrative structure exists to make the disability-eligibility decision. The applicant must first obtain from a private physician his medical records, which he then submits with his application to a state agency. The "initial determination" is made by the state agency's examiner in consultation with a physician and perhaps a voca-

tional expert. As it happens, fewer than half of the applicants who claim to be disabled are certified as eligible for benefits at this stage.

Unlike the typical workers-compensation claimant, disability claimants are likely to have chronic age-dependent debilities, not traumas, and the precise point at which a claimant becomes incapable of engaging "in any substantial gainful activity" is poorly defined. The classification problem is consistently revealed in evaluation studies of the disability system. In one such study, Richard Smith and Abraham Lilienfeld (1971) sent back for review by the Social Security Administration's own Bureau of Disability Insurance (BDI) a sample of 250 cases initially allowed the preceding year and a like number of denials (248). The distribution of initial determinations and review determinations are reported in Table 1A. The redeterminations indicated a symmetric classification error of about 20 percent: 21.2 percent of the BDI allowances were initial denials and 22.5 percent of the BDI denials were initial allowances.

An evaluation study by Saad Nagi (1969) reveals similar classification difficulties. Nagi directed a study in which a sample of 2,454 disability applicants was drawn from three geographic areas (Louisiana, Minnesota, and Ohio), following the initial Social Security Administration determination of eligibility. The applicants were intensively examined by a clinical team that included a physician, a social worker, a psychologist, an occupational therapist, and a vocational counselor. Following the study, the cases were sent back for redetermination, when possible to the same examiner who conducted the original evaluation, with the additional information accumulated by the clinical team included in the file. The differences in the initial determination and the redetermination are reported in Table 1B. Review of the files with the additional information provided by the study team led to 8.2 percent of the initial allowances being changed to denials and 20.8 percent of the denials being changed to allowances.

An elaborate appeal system has been set up to adjudicate disputes that arise over eligibility determination. The denied applicant may first petition for a reconsideration by the state agency. If his application is again denied, he has the right to appeal to an administrative law judge, independent of the Social Security Administration. If that fails, he has the right to appeal to the Appeals Council. Finally if all internal appeals fail, the denied applicant can proceed to the U.S. court system (at the district court level). The ambiguities in the disability criterion make the appeal mechanism a common path among "initially" denied applicants. Of those who were initially denied in 1978, 41.7 percent appealed the decision (Table 2). Of appellants denied eligibility at the "reconsideration" stage, almost half (48.0 percent) appealed to the administrative-law-judge level.

This complex adjudication mechanism consumes a great deal of time. On average, an individual who pursued all internal appeal mechanisms faced an internal processing delay of approximately 10.4 months in 1982 (Table 3). It is important to point out that this lag does not include the applicant's own response lags at the various stages. In
TABLE 2—THE SOCIAL-SECURITY DISABILITY-DETERMINATION PROCESS IN 1978

<table>
<thead>
<tr>
<th>Stage</th>
<th>Accept</th>
<th>Deny</th>
<th>Appealed</th>
<th>Not appealed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial determination</td>
<td>357,000</td>
<td>548,000</td>
<td>228,600</td>
<td>319,400</td>
</tr>
<tr>
<td>Reconsideration</td>
<td>45,600</td>
<td>183,000</td>
<td>21,600</td>
<td>21,400</td>
</tr>
<tr>
<td>Administrative law judge</td>
<td>44,800</td>
<td>43,000</td>
<td>20,700</td>
<td>15,800</td>
</tr>
<tr>
<td>Appeals Council</td>
<td>900</td>
<td>20,700</td>
<td>4,900</td>
<td>15,800</td>
</tr>
<tr>
<td>District court</td>
<td>1,600^a</td>
<td>3,300</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>


^Includes 340 court allowances and 1,260 remands.

TABLE 3—AVERAGE PROCESSING TIME FOR DISABILITY INSURANCE CLAIMS IN 1982

<table>
<thead>
<tr>
<th>Level</th>
<th>Calendar days</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>This stage</td>
<td>Cumulative</td>
<td></td>
</tr>
<tr>
<td>Decision on initial claim</td>
<td>46</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Decision on reconsideration</td>
<td>39</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Decision at administrative-law-judge hearing</td>
<td>165</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Appeals Council decision</td>
<td>66</td>
<td>316</td>
<td></td>
</tr>
<tr>
<td>Overall processing time</td>
<td>316</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


general, the denied applicant has up to 60 days to appeal at each step. Delays between labor-force withdrawal and the initial application are also common. Bound cites a study by Robert Leihy (1979) that reports an average delay in the initial filing of a claim following disability onset of 7.7 months in the 1968–1978 period. Assuming that the turnaround time between denial and appeal is one month at each stage, the average time between disability onset and a final negative determination exceeds 10.6 months. Even ignoring the possibility of reapplication, the application process itself has a nonnegligible impact on work attachment.

The continuing involvement of the social-security disability system in the lives of denied applicants is clearly illustrated in one of the studies cited by Bound, a follow-up study of denied applicants conducted by the Social Security System (Treitel, 1976). For that study Treitel secured the administrative records of a large sample of individuals initially denied disability benefits in 1967. Summary statistics from Treitel (1976) are reported in Table 4. Almost half (48.6 percent) of denied applicants received some form of social-security payments within five years of the initial denial. Almost 60 percent of these (28.9 percent of the total sample of initial denials) received social-security disability benefits within five years of application denial! Many of these were individuals who appealed the initial negative decision. Reapplication was also an important phenomenon. Of denied claimants who did not appeal the initial negative decision, 15.6 percent received disability benefits within five years. Given that more than half of all applications are denied, the reapplication rate among those who did not appeal the initial decision is likely to have been double that percentage.

It is possible to construct a revised estimate of the work attachment of denied applicants in the manner of Bound, correcting for the disability-receipt effect. Treitel reports on the work attachment of his sample of initial denials five years later, with work attachment measured by the reporting of positive earnings in social-security-covered employment in 1972 (column 1 in Table 5). As Treitel and Bound both note, a large
Table 4—Subsequent Benefit Status in 1973 of Claimants Initially Denied in 1967

<table>
<thead>
<tr>
<th>Benefit status in 1973</th>
<th>All denials</th>
<th>Reconsideration hearing</th>
<th>No reconsideration hearing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>Allowance</td>
</tr>
<tr>
<td>Ever received disability benefits</td>
<td>28.9</td>
<td>100.0</td>
<td>36.7</td>
</tr>
<tr>
<td>Never received disability benefits</td>
<td>71.1</td>
<td>-</td>
<td>63.3</td>
</tr>
<tr>
<td>Retirement beneficiary</td>
<td>19.7</td>
<td>-</td>
<td>13.9</td>
</tr>
<tr>
<td>Receive no social-security benefits</td>
<td>44.0</td>
<td>-</td>
<td>44.5</td>
</tr>
<tr>
<td>Dead</td>
<td>7.0</td>
<td>-</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Sample size: 27,128 3,009 5,035 19,084

Source: Treitel (1976 table 7).

Table 5—The Percentage of Males Initially Denied in 1967 Who Worked Some Time in 1972, by Age

<table>
<thead>
<tr>
<th>Sample</th>
<th>(1) Adjusted for death and retirement beneficiaries</th>
<th>(2) Adjusted for disability beneficiaries</th>
<th>(3) Adjusted for employment underreporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total male sample of initial denials</td>
<td>36.2</td>
<td>51.6</td>
<td>66.7</td>
</tr>
<tr>
<td>Males under 50 years of age</td>
<td>51.7</td>
<td>56.2</td>
<td>69.2</td>
</tr>
</tbody>
</table>

a The share of initial determination records in 1967 that reported positive social-security payroll earnings in 1972. Source: Treitel (1976 table 10).
b The share in column 1, with the number of nonearners and the number in the total sample adjusted by deleting those who are dead and those who are receiving social-security retirement benefits.
c The share in column 2, with the number of nonearners and the number in the total population adjusted by deleting from the sample those who are receiving social-security disability payments in 1973.
d The share in column 3, adjusted for the undercounting of employment in social-security records. Column 3 is divided by 0.883, the fraction of social-security-covered civilian employment in total civilian employment.
	number of “nonworkers” (those with no reported earnings in 1972) were either dead or retired on social-security benefits at that time. Treitel reports on the benefit status in 1973 of these nonearners, so that adjustment of the work data for dead and retired individuals is possible. These adjusted work estimates are reported in column 2 of Table 5. The estimate of work activity of those who are living and not retired on social security in 1972 is 51.6 percent for all denials and 56.2 percent for Treitel's sample. What Bound failed to note is that a large remaining portion of the 1967 denial sample who are assigned zero earnings in 1972 were receiving social-security disability benefits at that time! Almost one quarter (24.9 percent) of initial denials with zero reported earnings in 1972 were receiving disability benefits (Treitel, 1976 table 10). Bound claims to find little evidence of the subsequent involvement of the disability system in the work behavior of the sample of denied applicants, even though these data are in the same table he uses and cites approvingly at several points. I correct for this oversight in column 3 of Table 5. Apparently, two-thirds of the living preretirement individuals who are not currently receiving disability benefits reported earnings covered by social security in 1972.

As Treitel is careful to point out, this estimate of two-thirds is an underestimate of those who actually worked (even if
one ignores activities in the underground economy), most prominently because the estimate is based solely on social-security earnings records. In December 1973, for example, only 88.3 percent of civilian employed were covered by the social-security payroll tax. The majority of the remainder were employed in the railways and in federal, state, and local governments. Such persons would appear as "not working" in these data on earnings in social-security-covered employment. A disabled worker who returns to work in a state or local government job that is not integrated into the social-security system would appear to have zero earnings. Assuming that government employers were as likely to hire older, disabled workers as were employers in the private sector, the work-attachment data can be adjusted to offset this incomplete coverage (column 4 in Table 5). The Treitel data indicate then that at least three-quarters (75.5 percent) of denied disability claimants who were alive and not on social-security programs five years later were working. If government agencies disproportionately hired the handicapped, the estimate would be higher. For males in the sample who are under 50 years of age, the estimate of the share working is four out of five (78.4 percent; see column 4 of Table 5).

Bound's third claim, that rejected claimants (who are older and not in good health) face no special problems in returning to the work force after an extended absence, is also seriously at variance with what is known about the rehabilitation process. Attempts to reintegrate disability beneficiaries into the labor force have not been successful; annual terminations by reason of recovery averaged about 2 percent of the recipient pool over most of the 1970's (Social Security Bulletin Annual Statistical Supplement, various issues). This failure may in part be due to the work disincentives provided in the system, but it surely also reflects the difficulty that long-term nonparticipants of this type have in returning to the labor force. As the Federal Disability Advisory Council recently reported, "Extensive oral and written testimony submitted to the Council demonstrates that the earlier a person receives [vocational rehabilitation] services, the more likely the services are to be effective" (Disability Advisory Council, 1988 p. 53). The council also notes the rehabilitation paradox designed into the present system: the most promising period for rehabilitation is precisely the period during which the individual must prove that he or she is (or will be) incapable of substantial gainful employment for a "continuous period of one year." The rehabilitation paradox does not end with the initial denial of eligibility. A large-scale GAO survey of vocational rehabilitation (VR) experts notes that, "Some VR officials believe that claimants who are initially denied benefits are poor candidates for rehabilitation because they do not want to compromise their prospects for appeal by working or training for work. Many such claimants continue to press their cases on appeal" (U.S. General Accounting Office, 1987 p. 45.)

The magnitude of the bias in Bound's estimate of the work-disincentive effect of the social-security disability system is difficult to compute precisely. Focusing only on the revised estimates of work activity of denied applicants in column 4 of Table 5 (excluding from the computation those who had succeeded in attaining disability benefit status), the Bound methodology would suggest that perhaps 80 percent of the recent decline in male labor-force participation can be attributed to the disability program. It is important to note that this is not an upper-bound estimate, since other factors neglected by Bound (including continuing attempts to secure disability eligibility and the

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6 Other problems include potential underreporting of deaths. Among nonrecipients, deaths would be reported only if a relative filed for the death benefits of $250.

7 This percentage is computed from the estimated number of civilians employed in social-security-covered jobs in December 1973 (Social Security Bulletin Annual Statistical Supplement (1980 table 4) and the estimate of the total civilian labor force in December 1973 (Employment and Earnings, 1974 table a-1).

8 More precisely, Bound remarks, "It seems doubtful that by delaying their search for work by a few months, applicants significantly reduce their employment prospects" (p. 492).
increased difficulty of finding a job following a prolonged absence from the work force during the application period) offset in part or whole Bound's conservative assumption that the accepted applicants are as likely to work as denied applicants. The potential error in this estimate is unknown, but it is clearly quite high. The important point is not that the revised estimate of 80 percent is a good one, but that the methodology Bound employs should be given little currency.

What does emerge from this analysis is evidence of the strong, continuing involvement of the social-security disability insurance program in the economic lives of denied applicants. Data provided by Bound (1989 table 4) on the income sources of denied applicants who do not return to work indicate that other components of the social-security system are also major sources of income for this group. In 1977, of all income reported by nonworking applicants who were denied disability benefits, 34.0 percent came from some social-security program, a magnitude equal to the combined income of wives (23.6 percent) and other family members (10.8 percent), and three times greater than the income from all other public income-maintenance programs (11.8 percent). The precise source of these social-security payments is not obvious. The sample includes individuals who are 62–64 years of age (and therefore eligible for retirement benefits), but the median age of the denied sample (55.6 years) would suggest that retirement benefits to the respondent cannot be the complete explanation. Social-security retirement payments to parents living in the respondent's household represent an alternative explanation, raising the possibility of significant transfers from aged parents to their middle-aged offspring. The income data clearly reveal that nonworking denied applicants are not privately financed retirees. Traditional private retirement-income sources (asset income and pension income) comprise only 11.8 percent of the aggregate income of nonworking denied applicants, less than one-quarter of the income derived from public sources, which is 52.2 percent of the total.

REFERENCES


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