

Unlike most public disability benefits, private program benefits are seldom automatically increased in later years by cost-of-living adjustments. Although specific increases to some pensions have been made in recent years, they have generally not been sufficient to counter the inflation-induced decline in real benefits. Recipients of both SSDI and a private disability program's benefits therefore receive automatic increments in only one part of their disability income; the SSDI benefit becomes a larger part of the disability payment than when initially awarded. Those who receive only pension benefits see their disability income erode even more quickly over time.

APPENDIX C. MODELS OF WORK BEHAVIOR AMONG DISABLED PERSONS

This appendix reviews two studies of work behavior among disabled persons. The first, conducted by the Social Security Administration, determines some demographic and economic factors influencing work behavior. The second, a working paper published by the National Bureau of Economic Research, estimates the effect of increasing SSDI benefit levels on SSDI beneficiary status among middle-aged men.

SSA Model

The SSA study found several factors to have an independent influence on work behavior among those who report being unable to work at all or work regularly.¹ The logit regression analyses of 1972 and 1974 survey data found that self-perceived severely disabled persons were more likely to work if they were male, had less severe health problems, had attained a higher level of education, were not receiving public income maintenance payments, or needed to help relatives financially.² The results imply that the financial demands on some disabled persons, or expectations of them, can induce even severely disabled persons to work. Also, those persons surveyed who had previously been employed for four or more years were more likely to be working than others. Having had lengthy attachment to the labor force or having been able to return to a familiar job also significantly affected positive work patterns.

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1. Evan S. Schechter, "Commitment to Work and the Self-Perception of Disability," Social Security Bulletin (June 1981), pp. 22-30.
 2. These results were obtained while holding constant the effects of other factors such as age, race, family size, marital status, and the change to increased work activity among spouses. Schechter notes that in order for the analysis to be "properly comprehensive," economic variables such as amount of family income, net worth, and earnings of a working spouse should be included in the model as predictor variables. Nonresponse rates of 20 to 40 percent, however, prevented the inclusion of such variables in the analysis.

The results do not show that mere receipt of public benefits is a serious work disincentive. Although the receipt of benefits from public programs in both 1972 and 1974 was significantly associated with not working in those years, receipt of benefits only in 1972 was not significantly associated with an increase in work effort in 1974, nor was receipt of benefits only in 1974 associated with not working in 1974. In addition, the ability to work at a familiar job, perhaps their previous occupation, could have prevented some severely disabled persons from receiving public income maintenance payments.

The SSA analysis reported above does not take into account, however, other important economic factors. These include, for example, the effect of disabled persons' predisability income and type of occupation, possible rehabilitation services available to the disabled respondents, and the effects of earnings limitations or work status requirements for benefit eligibility in some public programs. Men and women with similar previous incomes or occupations could have similar incentives to work. Also, those who have received retraining or education may be more likely to work at some jobs than those who have not been rehabilitated. Data limitations prevented testing these hypotheses, however.

A CBO analysis of the 1978 disability survey, that expected to make use of additional income data for recently disabled persons, was limited by the large degree of nonreporting of predisability earnings of working survey respondents. Consequently, some factors--such as age, sex, education, and length of predisability employment--that were found to be associated with increased work effort may actually have reflected differences in income levels or other factors that could not be measured. Nonetheless, it appears that the work behavior of disabled individuals continues to be influenced by some of the same factors as were found in the earlier studies.

NBER Model

The Leonard analysis attempts to show the work disincentive effects of SSDI program provisions.³ The author describes his

3. Jonathan S. Leonard, The Social Security Disability Program and Labor Force Participation, Working Paper no. 392, National Bureau of Economic Research, Inc. (August 1979).

results as showing that the liberalization of SSDI eligibility requirements and the increases in SSDI benefits relative to potential labor market earnings did in fact cause more men to drop out of the labor force between 1957 and 1975 and become SSDI beneficiaries. The results were based on a sample of men aged 45 to 54. The sample was drawn from the 1972 Social Security Disability survey that was augmented by beneficiary and earnings history data from administrative records.

Leonard estimated a cross-sectional logistic model and found the probability of being an SSDI beneficiary strongly responsive to expected benefits. A \$180 increase in annual benefits was found to cause a one-percentage-point increase in the proportion of SSDI beneficiaries in the population. In addition, the probability of SSDI beneficiary status was found to decrease sharply when past wages were at or above the ceiling on Social Security taxable earnings.

Next, Leonard applied the cross-section coefficients to changes in the variables over time, thereby explaining one-half of the increase in SSDI beneficiaries and about half the decline in labor force participation rates (LFPR) from 1957 to 1975. Macroeconomic factors such as the unemployment rate for all males were included in the time-series model.

While the study provides results consistent with earlier findings on the economic factors involved in work decisions, it does not consider or clarify other options available to middle-aged disabled workers.⁴ For example, the exclusion of spouses' or dependents' incomes in the model for the probability of beneficiary status precludes examining the importance of other family

4. In addition, see Robert H. Haveman and Barbara L. Wolfe, Have Disability Transfers Caused the Decline in Older Male Labor Force Participation? A Work-Status Rational Choice Model, Institute for Research on Poverty (University of Wisconsin-Madison, 1981). Haveman and Wolfe note that the disability indicators used in the Leonard study give no indication of the impairment or the degree of functional limitation, that the proxy for expected labor income is weak, and that other estimation problems exist in the analysis. They found the quantitative impact of expected disability income on LFPR to be statistically significant but smaller than Leonard's result.

income in decisions to remain in the labor force. Also, it is possible that the availability of additional benefits from other public programs could affect labor force dropout, but this was also not considered in the analysis.

APPENDIX D. SOURCES OF INCOME AND DISTRIBUTIONS OF
DISABLED BENEFICIARIES

The tables presented in this appendix provide additional information about the economic and demographic characteristics of disabled persons, particularly those receiving cash benefits. Tables D-1 through D-4 are based on the Social Security Administration's 1978 Disability Survey data. Table D-5 contains data derived from the 1977 Health Interview Survey, conducted annually by the National Center for Health Statistics.

TABLE D-1. PERCENTAGE DISTRIBUTION OF DISABLED AND NONDISABLED PERSONS AND DISTRIBUTION OF FAMILY INCOME BY INCOME SOURCE, 1977^a

Disability Category	Total	Percent in Public Income Maintenance Category ^b	
		Receiving (Share) ^c	Not Receiving (Share) ^c
All Disabled Persons ^d	100	100 (33) ^e	100 (0) ^e
Own earnings	54	41 (20)	70 (39)
Other family earnings	59	49 (37)	73 (53)
Asset income	41	35 (4)	49 (4)
Private income sources	24	25 (6)	23 (4)
Nondisabled Persons	100	100 (16) ^e	100 (0) ^e
Own earnings	80	77 (35)	81 (47)
Other family earnings	68	65 (42)	69 (48)
Asset income	49	43 (3)	51 (4)
Private income sources	21	22 (4)	20 (1)

SOURCE: Social Security Administration, Work Disability in the United States, A Chartbook (1980), and CBO calculations.

- a. Sources of income in 1977 were reported by respondents to the 1978 Disability Survey. The respondents represented 127.1 million noninstitutionalized Americans aged 18-64.
- b. Public Income Maintenance refers to all cash transfers from public sources received by the family during 1977 and includes disability and retirement benefits.

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TABLE D-1. (continued)

- c. Values in parentheses represent the share of total family income derived from a particular source.
- d. Disability is self-reported, and disabled persons were those reporting a limitation in the kind or amount of work (or housework) resulting from a chronic health condition or impairment lasting three or more months.
- e. Values in parentheses for all disabled or all nondisabled groups represent share of family income derived from public income maintenance.

TABLE D-2. REPORTED SOURCES OF DISABILITY INCOME RECEIVED BY FAMILIES OF DISABLED PERSONS^a

Disability Income Source	Receiving from Source		Average Monthly Benefit, 1977 (dollars)
	Number (millions)	Percent	
Any Source	5.67	100	301
Social Security	2.88	50.8	326
Supplemental Security Income	0.98	17.3	164
Veterans' Benefits ^b	1.33	23.5	214
Workers' Compensation ^c	0.35	6.3	313
Public Welfare/AFDC	0.26	4.6	148
Civil Service Disability	0.18	3.1	491
Other Disability ^d	0.19	3.4	320
Disability Pension ^e	0.98	17.4	26

SOURCE: Social Security Administration, special tabulations for the CBO.

- a. Reported receipt of disability income in 1977 is recorded in the table only when the benefits were received because of the respondent's own disability, except in the case of employer or union pensions described in e. below.
- b. Veterans' benefits include veterans' service-connected compensation and nonservice-connected pension payments, as well as education and training assistance payments.
- c. Federal and state workers' compensation payments are combined in the 1978 Disability Survey.

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TABLE D-2. (continued)

- d. Other disability benefit sources include railroad retirement, unemployment compensation, and any other benefit received because of the respondent's disability.

- e. Employer or union pensions received by families may be received for a disability other than the respondent's and may double the counts in d. above. Also, by eliminating certain outliers in the data, the average monthly benefit becomes \$278 for 673,000 pensioners.

TABLE D-3. PERCENTAGE DISTRIBUTION OF RECIPIENTS OF BENEFITS FROM MORE THAN ONE PROGRAM BY PROGRAM SOURCES^a

Program Source	Other Program Sources ^b				
	Social Security	SSI	Veterans' Programs	Workers' Compensation	Two or More
Social Security	70.0	8.7	14.5	1.6	2.2
SSI	25.6	66.1	--c	--c	3.9
Veterans' Programs	31.3	--c	59.3	--c	2.5
Workers' Compensation	12.6	--c	--c	77.4	--c

SOURCE: CBO tabulations from the 1978 Disability Survey data.

- a. Only public program benefits reported received in 1977 based on a respondent's own disability are included in this table; all respondents claimed to have had work-limiting disabilities prior to 1977.
- b. When the program source represented by the column is the same as the program source represented by the row, percentages are the proportion of recipients (of the row source) with only that program benefit source. Row percentages may not sum to 100 since some program sources are not listed.
- c. Numbers of recipients with combined benefits in this category are based on a sample of survey respondents too small for reliable estimates.

TABLE D-4. PERCENTAGE DISTRIBUTION OF REPLACEMENT RATES FOR SEVERELY DISABLED MALE BENEFICIARIES BY BENEFIT AND PREDISABILITY EARNINGS CATEGORIES^a

Category	Replacement Rates ^b			
	.01-.34	.35-.60	.61-1.0	Greater than 1.0
<u>Benefit Sources</u>				
Single program	41.6	46.2	7.4	4.8
More than one program	23.3	30.6	28.2	17.9
<u>Predisability Earnings^c</u>				
Less than \$6,191	d	44.6	18.6	36.8
\$6,191 to 12,382	25.6	53.3	14.8	6.1
More than \$12,382	58.5	30.6	11.0	d
<u>1977 Benefits</u>				
Less than \$2,400	89.6	10.4	d	d
\$2,400 to 4,200	43.6	44.1	12.3	d
More than \$4,200	18.8	48.5	19.8	12.8

SOURCE: CBO tabulations derived from the 1978 Disability Survey data.

- a. Severely disabled persons were identified in the survey as those who reported being unable to work or unable to work regularly because of a chronic health condition. Beneficiaries are recipients of public disability payments based on their own disabilities. Respondents summarized in this table were reported disabled between 1972 and 1976 and receiving benefits in 1977 and 1978.

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TABLE D-4. (continued)

- b. For respondents reporting earnings before disability as well as benefit amounts, the replacement rate is the ratio of family benefits received in 1977 to annual earnings, wage-indexed to 1977, before work-limiting disability.
- c. Predisability earnings were derived from survey responses of usual weekly earnings before work-limiting disability and then wage-indexed by average earnings to reflect 1977 wages. The poverty line for a nonfarm family of four persons in 1977 was \$6,191.
- d. For statistical significance, the proportion in this category has been combined with the adjacent category in the same row.

TABLE D-5. DISABILITY INCIDENCE RATES BY AGE FOR THE WORKING-AGE POPULATION in 1977^a

Age Distribution	Unable to Carry on Major Activity	Limited in Major Activity	Limited, but Not in Major Activity	Total Population
Number (thousands)				
Total (17-64)	3,711.4	8,862.3	4,413.4	129,977.6
17-24	173.6	745.3	813.0	31,340.4
25-34	335.7	1,335.5	911.7	32,171.8
35-44	493.5	1,440.5	735.6	23,107.9
45-54	914.1	2,239.6	996.2	23,191.2
55-64	1,794.5	3,101.4	956.9	20,166.3
Percent within Age Groups				
Total (17-64)	2.9	6.8	3.4	100.0
17-24	0.6	2.4	2.6	100.0
25-34	1.0	4.2	2.8	100.0
35-44	2.1	6.2	3.2	100.0
45-54	3.9	9.7	4.3	100.0
55-64	8.9	15.4	4.7	100.0

SOURCE: Unpublished data from the National Health Interview Survey, National Center for Health Statistics.

- a. Data are based on household interviews of the civilian, noninstitutionalized population.
- b. Disability categories are responses to survey questions and reflect self-perceived limitations in work (or housework) activities because of health conditions lasting three months or longer.

