

Disability, Work and Cash Benefits

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Chapter 1 - Overview

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The papers in this volume are devoted to the analysis of disability, work, and cash benefits. The authors seek to understand the causes of work disability and the types of interventions that might enable individuals to remain at work, return to work, or enter the workforce for the first time, despite having chronic health conditions or impairments. There are several reasons for this interest, and these concerns form the backdrop for the studies included here.

First, all would agree that a life of productive employment, when it is practical, is far more desirable for individuals with disabilities and for their families and society at large than a life of relying on cash benefits as a substitute for wages. Moreover, even when persons with disabilities cannot be fully self-supporting, there may be major gains in family economic welfare and substantial contribution to aggregate productivity when impairments can be ameliorated or accommodated to permit some paid work.

Second, after a period of stability in the last half of the 1980s, the cost of Social Security disability benefits grew rapidly in the early 1990s, prompting concern about the long-term future of these programs. In 1994, Congress provided temporary additional funding for Social Security Disability Insurance (DI), but called for research to determine whether the recent growth in applications and allowances was a temporary phenomenon or a long-term trend, and, if the latter, what should be done about it.

Third, the main disability policy initiative in the 1980s focused on civil rights and culminated in the enactment of the Americans with Disabilities Act (ADA) of 1990. The Act rests on the belief that low employment rates among people with disabilities are due to prejudice and environmental barriers in public access and accommodation. Since passage of the law, however, employment rates have not significantly increased, leading to new questions about what is needed to improve employment outcomes.

Finally, the rates of Social Security benefit terminations due to medical recovery or return to work have always been modest, but have reached all-time lows. This has prompted calls for new approaches to link beneficiaries to the

services that will enable them to earn enough to leave the public assistance rolls completely.

These concerns form the backdrop for the discussion in this volume. The papers were presented at a conference on Disability, Work, and Cash Benefits held December 8-10, 1994 in Santa Monica, California. The conference was jointly sponsored by the private, nonprofit National Academy of Social Insurance and the National Institute for Disability and Rehabilitation Research of the U.S. Department of Education.

Who Are the Work Disabled?

A recurrent theme of all the papers is the vast diversity within the population of persons with disabilities. That diversity results not just from the range of physical or mental impairments but also from variations in age, education, prior work experience, and existing social supports, and in the possibilities for accommodation of differing impairments in distinct work environments. At one level, determining the population of persons with work disabilities seems relatively straightforward. The work disabled are those persons who have significant physical or mental impairments that prevent these individuals from earning enough to support themselves at a decent standard of living. At another level, however, determining who has disabilities is an enormously complicated question to which a large range of responses might be given.¹ We, therefore, devote some consideration to how those with work disabilities might be categorized.

If we were concerned with everyone who has some chronic health condition or impairment that might impose a limitation on their functioning, our research would involve perhaps one-half of the entire population of the United States, including the elderly and children. If we narrow our focus to those whose impairments or health conditions limit their major activity—such as work or housework for working-age adults, activities of daily living for the elderly, and playing or attending school for children—then about 36 million would be counted, based on estimates of the household population from the National Health Interview Survey (HIS), and of the institutionalized population (LaPlante 1991, 1992; National Academy of Social Insurance (NASI) 1994).

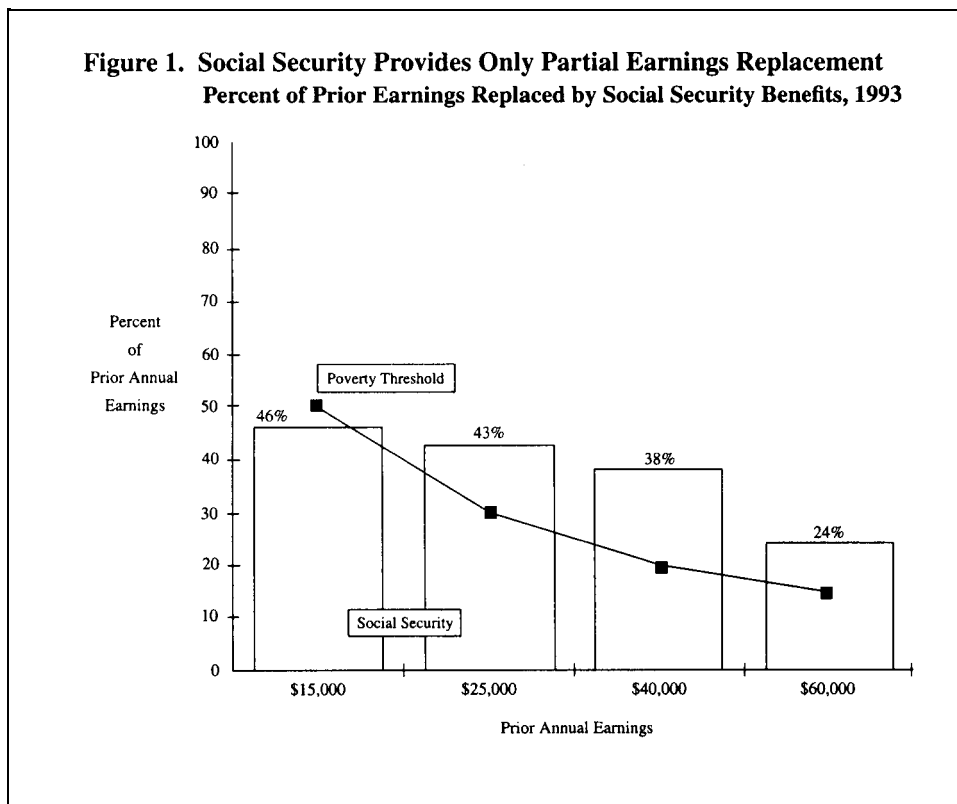
For this volume on work and disability, our interest centers on the working-age population. If we consider working-age people who have any of a broad range of functional limitations, or disabilities, that include but are not limited to work,² then nearly 30 million or almost one in five Americans aged 15-64 would

be counted, according to the 1991-1992 Survey of Income and Program Participation (SIPP). On the other hand, if we were concentrating only on those who have the most significant functional limitations—for example, persons who require assistance with one or more of the basic activities of daily living—we would be interested in about 1.5 million persons in the household population, or less than 1 percent of those aged 15-64; if we narrowed our focus to only those who use wheelchairs, then about 500,000 persons would be of interest (McNeil 1993).

There might be perfectly sound policy reasons to study either these very large or very small groups of "persons with disabilities." Our concern with work disability policies, however, is one that focuses on persons who have relatively severe impairments that put them at considerable risk of serious disadvantage in the labor market. These are people whose impairments pose a substantial threat to their economic well-being, but who nevertheless might work.

A relatively narrow subset of the work disabled consists of those who are receiving either DI or Supplemental Security Income (SSI) disability benefits. As of December 1993, this group comprised about 6.7 million working-age Americans. By statutory definition, the individuals in this group have an impairment that, when considered in light of their age, education, and work experience, makes them unable—for at least a year—to engage in substantial gainful employment (that is, with earnings of more than \$500 per month). Note that while this is a severely impaired population, the receipt of cash benefits does not necessarily imply that persons who receive DI or SSI assistance cannot work at all or that they will never again work at a level that might produce substantial income.

The cash benefit programs of interest, DI and SSI, provide modest substitutes for wages that, on their face, would seem to make work a preferred alternative. Social insurance payments from DI replace a disabled worker's prior earnings under a sliding scale, with lower replacement rates for higher earners. For average earners and above, the benefits replace far less than half of what the worker had earned while working. For low earners, whose replacement rates approach half the worker's prior earnings, the benefits nonetheless provide a level of living that is less than the poverty threshold for an individual (figure 1). Studies of replacement needs across the earnings range indicate that about 70-80 percent of prior earnings is required to yield a comparable level of living (Palmer 1994). The estimates take account of the difference in tax treatment of various sources of income and the absence of work-related expenses. These estimates are for reasonably healthy retirees and do not take account of the added cost associated with disability.



SSI provides means-tested benefits for disabled persons with little or no other income or financial assets. The full federal benefit, \$458 a month in 1995, amounts to 71 percent of the poverty threshold for an individual.³ For some, SSI supplements very low benefits from DI. Others who receive SSI do not qualify for DI because they lack the covered work experience needed before the onset of their disability. In brief, while these two programs provide a critical safety net of cash support for those who are unable to work, the modest level of benefits makes work a far preferable alternative for those who have the capacity to do so. Hence, several of the papers focus particularly on the work prospects for this population, or for some part of it (Monroe Berkowitz, Edward Berkowitz and David Dean, H. Allan Hunt et al., and Martynas A. Yčas).

We must remember, nevertheless, that there is great diversity even among the 3.8 million disabled-worker beneficiaries in the DI program, all of whom must have had significant work records before the onset of their disability. Some have life-threatening diseases such as cancer or AIDS. The majority are older

workers—just over half are over the age of 50—and they tend to have impairments or diseases that are associated with aging, such as cardiovascular or respiratory illnesses, complications of diabetes or arthritis, or other musculoskeletal impairments. Over the past two decades, however, there has been an increase in the number with mental illness as their primary diagnosis, from about 11-12 percent in the 1970s to about 25 percent today; these individuals tend to be workers in their thirties and forties (U.S. Department of Health and Human Services, Social Security Administration (SSA) 1994; NASI 1994).

Working-age adults who receive SSI benefits because of disability or blindness, who numbered 3.1 million at the end of 1993, are also a very diverse group. They include about 0.6 million whose SSI benefits supplement DI; the rest do not qualify for DI because their disabilities began before they had sufficient work records (NASI 1994). Many have disabilities that started in childhood or early adulthood. Just over a quarter have mental retardation as their primary diagnosis, and an additional quarter have other mental disorders as their primary diagnosis. The paper by Aaron Prero focuses on young adults with mental retardation who receive SSI and on their experience with transitional employment services to aid their entry into the workforce.

Other authors in this volume defined the group of interest as considerably broader than those in current DI or SSI payment status, by including those who self-report in household surveys that they have a physical, mental, or other health condition that limits the kind or amount of work they can do or that prevents them from working altogether. This increases the population of concern to something between 16 and 17 million persons, approximately 10-11 percent of the working-age population, according to the 1993 Current Population Survey and the 1991-1992 SIPP (U.S. Bureau of the Census 1993; McNeil 1993).

Those who report that they have work disabilities are of special concern because a number of these individuals are not receiving cash benefits yet are at a particular disadvantage in the labor market. Consequently, they are at a high risk of having inadequate incomes and of needing to rely on some form of cash support.

Persons who report themselves as having work disabilities are more than twice as likely as other workers to be unemployed, that is, without jobs but in the labor force actively seeking work. In March 1993, when the unemployment rate for workers without disabilities was 7.3 percent, it was 16.4 percent for those aged 16-64 with work disabilities. Viewed in another way, the unemployment figures show the particular challenges faced by job seekers with disabilities: for each one who was looking for work, there were ten other persons without disabilities also

seeking work. Further, the job seekers without disabilities were, on average, younger than the job seekers with disabilities (U.S. Bureau of the Census 1995).

Perhaps it should not be surprising that persons with work disabilities are far more likely than other workers to be out of the workforce altogether. That was the case in March 1993, when fully 66 percent of those with work disabilities were neither employed nor looking for work, compared to about 16 percent of other persons aged 25-64 (U.S. Bureau of the Census 1995). Similar disparities existed in past years, when the economy was stronger and overall unemployment was lower. For example, in 1988, 70 percent of persons with work disabilities and 17 percent of other persons aged 25-64 were out of the workforce (Bennefield and McNeill 1989).

Because employment is the primary means of support for most Americans, these differentials translate easily into much higher risks of poverty for persons with a work disability. Nearly 30 percent of people with a work disability had incomes below the poverty level in 1992, as compared with 10 percent of the working-age population without a disability (U.S. Bureau of the Census 1993).

Within the working-age population, both age and educational attainment are strong predictors of work disability (table 1). The risk of work disability rises sharply with age, with persons aged 55-64 being four times as likely to have a work disability (22 percent) as persons aged 16-24 (under 5 percent). The sharp increase in disability with age also indicates that the onset of work disability usually occurs during the work life—often relatively late in the work life—rather than before.

Table 1. Prevalence of Work Disability, by Age and Educational Attainment, March 1993

Age	Total	Educational attainment				
		0-8 years	1-3 years	4 years	1-3 years	4 years or more
Percentage reporting a work disability						
Total, aged						
16-64	9.5	27.3	13.3	10.0	7.3	4.1
16-24	4.5	9.8	5.9	5.2	2.4	1.0
25-34	6.6	18.4	12.8	7.2	5.6	2.0
35-44	8.6	23.0	17.3	9.2	8.3	3.5
45-54	12.1	31.0	22.6	12.0	10.6	5.1
55-64	21.7	41.9	31.7	18.1	17.4	11.1
Distribution of educational attainment of total population						
Aged 25-64	100	6	9	35	26	24

SOURCE: Unpublished tabulations from the Current Population Survey, March 1993, U.S. Bureau of the Census

The minority of working-age Americans over 25 years old who did not enter high school (6 percent) or did not complete it (9 percent) are at great risk of work disability, a risk that rises with age. On the other hand, the advantages of post-secondary education in averting or compensating for the disabling consequences of chronic health conditions are evident among workers in all age categories.

African-Americans and Hispanics also are more likely to have severe work disabilities than nonminorities. Some level of work disability was reported for 14 percent of African-Americans aged 16-64 and for about 9 percent of Hispanics and of whites. Severe work disabilities, which generally means the persons are prevented from working by their condition, were reported for 10 percent of African-Americans, 6 percent of Hispanics, and 5 percent of whites (U.S. Bureau of the Census 1993).

At the same time, according to the SIPP, a narrow majority (52 percent) of 21-64 year-olds with functional limitations were employed (McNeil 1993 p. 62).

Furthermore, some persons reporting quite substantial limitations had jobs. For example, 46 percent of persons with difficulty seeing normal newsprint even with corrective lenses were employed, as were 26 percent of those unable to see newsprint, 58 percent of those unable to hear a normal conversation even with a hearing aid, 31 percent of those with difficulty walking three city blocks, and 20 percent of those requiring personal assistance in keeping track of money and bills (McNeil 1993).

These data suggest that the population of persons with work disabilities is extraordinarily heterogeneous. Individuals' work limitations result from a wide variety of medical problems that have differential impacts on success in the labor market. People have varying levels of education and radically different levels of social supports to assist them in coping with their impairments. Equally important, the employment of persons with functional limitations shows that workplaces can accommodate and individuals can adapt to quite significant disabilities under some circumstances. The question is whether and how such adaptations and accommodations can be broadened.

Changes in the labor market will obviously affect this diverse population in different ways. The progressive shift from manual labor to service and "mind work" may reduce the barriers to successful employment for those with serious physical limitations but with high intelligence and educational levels. On the other hand, the same developments disadvantage those with lower educational attainment, limited cognitive ability, and mental disorders that make it difficult for them to work in customer- or team-oriented employment situations. Hence, an overall theme of the conference proceedings was that, given the heterogeneity of the population with work disabilities and the shifting nature of the job market, there was no magic policy "bullet" that would improve employment prospects for all persons with disabilities. Any single solution, however generally available, is likely in practice to be a partial solution with respect to a subset of the total population of concern.

The Plan of the Volume

The papers have been organized into three major groupings. The introductory section concerns work disability as a function of the economic and programmatic environment and considers the ways in which labor market changes, policy interventions, and individual choices shape the workforce participation of those with disabilities. The authors in the first section emphasize different aspects of this complex interaction, drawing on both national and cross-national experience.

The second section analyzes return-to-work policies provided by both the public and the private sectors for persons with disabilities. Although the workforce participation rate for all persons with any form of chronic health condition is quite high, it drops sharply for those with a work disability and much more sharply for those with severely disabling conditions. The emphasis in this section is on the latter two groups and on various strategies for preventing a severing of workplace ties or for promoting return to work after a period of disability.

Finally, the last two papers in the volume focus on particular needs of persons with disabilities that strongly affect their workforce participation. These needs include access to health care, to personal assistance, and to assistive technologies. The policy concerns in the last section shift from specific attempts at improving return-to-work outcomes to the broader social interventions that may be the necessary preconditions for the success of more targeted return-to-work efforts.

Work Disability and the Economic and Programmatic Environment

The volume leads off with a paper by Edward Yelin and Miriam Cisternas entitled "The Contemporary Labor Market and the Employment Prospects of Persons with Disabilities." The authors' interest is in the similarities and differences between the workforce experience of those with and without a disability, given these workers' other characteristics and changes in the labor market itself. As do all the authors, Yelin and Cisternas find that workers with disabilities are quite heterogeneous in terms of their age, gender, prior work history, education, and skill levels. Generally, these characteristics are predictors of labor force success, so they should be expected to have similar effects for those with disabilities. Indeed, that is the authors' finding. On the other hand, it is clear from the data that persons with disabilities are uniquely disadvantaged in labor market competition. With respect to either cyclical or structural changes in the economy, individuals with disabilities seem to be the leading edge out of the labor market, and they lag behind other workers in returning to work.

These results are particularly strong for certain workers, such as males over 50, but are less strong for other groups, such as young females entering the labor market. Disability thus seems to amplify negative effects for those who are already disadvantaged by changes in the contemporary labor market. Conversely, disability may have a lesser effect on those who have been entering the labor market in increasing numbers. Yelin and Cisternas caution that we currently have relatively poor models of how the labor market is shifting. Moreover, no one has yet analyzed data concerning persons with disabilities in relation to newer descriptions

of the characteristics of the labor force, such as the increasingly important distinction between "core" and "peripheral" workers.

In their paper, "Employment and Economic Well-Being Following the Onset of a Disability: The Role for Public Policy," Richard V. Burkhauser and Mary C. Daly take a different cut at understanding the workforce participation rates of persons with disabilities. Through careful manipulation of data from the Panel Study of Income Dynamics (PSID), they are able to trace the employment history of persons who have an onset of a work disability and to analyze the transition out of and back into work by these persons. The authors find that first, most persons who report the onset of work limitations are employed after that onset, with only the most severe conditions leading to an ultimate transition entirely out of the workforce. Second, the transition out of the workforce is relatively slow. Most persons who experience a disabling event still have significant attachment to the workforce during the first five years following that event.

Third, those who are never forced to sever their ties to the workforce completely have considerably better success in maintaining their position in it. There is substantial return to work by even those persons who spend a year out of the workforce, but never leaving seems to be strongly associated with longer-term retention. Burkhauser and Daly thus stress the importance of accommodation and early intervention in preventing long-term work disability. They urge a renewed emphasis on policy interventions that would reenforce both accommodation and the worker's desire to maintain attachment to a job.

In his paper, "Employment and Benefits for People with Diverse Disabilities," Walter Oi underlines both the diversity of persons with impairments and the poor labor force results of those with a work disability. He is particularly concerned with the policy environment within which such persons must determine whether to remain in the workforce or to move into a relatively permanent benefit status. Oi is critical of both the existing major cash benefit programs and of the ADA for their failure to focus explicitly on the diversity of the population that they serve.

In analyzing the work decisions individuals face from the perspective of economic theory, Oi observes that poor health tips the work-leisure trade-off on several dimensions. First, it makes work more difficult, thereby reducing the individual's preference for employment; it can lower the individual's wage rate, thereby decreasing the financial return from work; and finally, disability steals time by requiring more attention to "maintaining the human agent," leaving less time for

work, leisure, or both.

Attributes of the disabling condition also influence whether work is an economically rational outcome for the individual or for society at large, according to Oi. The severity of the impairment clearly is a factor. Other considerations are the age at onset, the anticipated duration of the condition, and its impact on life expectancy. Both age at onset and life expectancy influence the returns that can be anticipated from investment in human capital, such as training or preparation for a new career. Duration of an impairment is often difficult to predict but is critical to the worker's response to its onset. If the duration is believed, or hoped, to be only temporary, the rational investment might be in curing or in reversing the condition by having the individual remain away from work to rest and recuperate. On the other hand, persons who have conditions with early onset, which are expected to be permanent but not life-threatening, are the best candidates for investment in human capital, training, and return-to-work efforts. Oi observes that recipients of DI and SSI tend to be older and to have more serious, life-threatening conditions. They are not representative of the larger population reported in surveys to have a work disability, and they are not particularly good candidates for return-to-work efforts. He concludes that disability policy needs to draw proper distinctions in order to target the remedies offered by income support, training, wage subsidies, and accommodations to the particular subsets of the population for whom they are appropriate. To be treated fairly, people in different circumstances have to be treated differently.

In the last paper of this section, "European Experiences with Disability Policy," Leo J.M. Aarts and Philip R. de Jong provide a masterful and concise description of four different European systems. Because this chapter gives us both an historical account and a cross-sectional comparison, it is difficult to summarize in a few words. Four points appear to be particularly salient. First, our West European neighbors—the Netherlands, the United Kingdom, Germany, and Sweden—have experimented with a number of different approaches to disability policy. This is true both within individual systems and across the four systems studied. Second, the data suggest that all four of these systems have higher public expenditures for disability programs than does the United States, whether measured in terms of the prevalence of disability benefit receipt or the share of gross domestic product allocated to disability benefits, rehabilitation, and employment programs. Third, these higher disability benefit expenditures occur despite policies that emphasize rehabilitation, public-sector jobs, private employer quotas or subsidies, and partial pensions to encourage employment. Finally, in evaluating the consequences of disability income policy, incentives matter, not just those faced by workers with chronic health conditions, but those faced by

employers, by disability adjudicators, and by those offering services to workers with disabilities.

Return-to-Work Policy

In the first paper in this section, "Patterns of Return to Work in a Cohort of Disabled-Worker Beneficiaries," Martynas Yčas analyzes data from the New Beneficiary Survey and from subsequent samples sometimes characterized as the "New Beneficiary Data System." He cautions that his particular analysis is limited to persons who survived about a decade after entering the DI rolls. As such, it excludes about four in ten of the original group, because they had died. Relying on his own analysis and that of others, Yčas seeks to understand who among the survivors might have been prime candidates for return to work after they entered the disability benefit rolls.

Yčas' results are complex, nuanced, and tentative, but several findings stand out in fairly sharp relief and buttress Oi's conceptual approach. First, when the results are controlled for age, reported health status seems to be the primary determinant of labor market participation. Second, age is strongly predictive of the likely return to work or of the substantial labor force participation of beneficiaries. Workers over age 50 or 55 seem to be poor candidates for return-to-work intervention, while the (considerably smaller) group of comparatively young workers has much better prospects.

These findings are not terribly surprising, but they support certain policy conclusions. On one hand, these data suggest that current policy—making qualification for benefits somewhat easier for workers over age 50—is probably justified. Yčas suggests that the criteria should perhaps be relaxed somewhat further. These older workers are more like "retirees" than they are like younger disabled workers. By contrast, the failure to pursue the prospects for medical recovery or return to work with respect to younger beneficiaries may be overlooking a substantial pool of potential labor force returnees.

The paper by Hilary Williamson Hoynes and Robert Moffitt is entitled "The Effectiveness of Financial Work Incentives in Social Security Disability Insurance and Supplemental Security Income: Lessons from Other Transfer Programs." The lessons that Hoynes and Moffitt give us are highly cautionary. Work incentives designed to lower the marginal tax rate on earnings of existing beneficiaries have theoretically ambiguous net effects on program participation and on work effort. The empirical literature suggests that net increases in employment, if any, are quite small overall. The ambiguity results from the fact that lower marginal tax rates

increase the incentives for work effort by those already on the rolls but simultaneously may attract new entrants and forestall exit by those who could then earn more without losing their benefit status. Numerous studies in nondisability programs suggest that these offsetting effects make standard work incentive provisions relatively ineffective in either increasing employment or reducing program participation.

Hoynes and Moffitt are careful to point out that the population of persons with disabilities may be different from that in other cash support programs, and that the complex rules in the DI and SSI programs present somewhat different incentive structures from provisions found in Aid to Families with Dependent Children, the Food Stamp program, or a negative income tax. Nevertheless, the data concerning work incentives related to receipt of disability benefits also suggest modest responsiveness by disabled beneficiaries to changes in the economic incentives built into the programs. Given these sobering findings, Hoynes and Moffitt suggest that new policy instruments, such as the Earned Income Tax Credit, might have significantly greater effects in increasing work effort among all income transfer program beneficiaries, including those receiving disability benefits.

Edward Berkowitz and David Dean have a somewhat similar story to tell in their paper, "Lessons from the Vocational Rehabilitation Link for DI Beneficiaries." While virtually everyone agrees that rehabilitation and return to work are preferred to labor force nonparticipation and receipt of disability benefits, there is little evidence to suggest that rehabilitation policy has been or can be made effective for a large segment of the population with such significant work disabilities that they receive DI benefits.

Although there have been strong proponents of incorporating rehabilitation into the DI program dating back to the earliest proposals for public disability insurance, both politics and objective factors have prevented a fruitful marriage between DI and vocational rehabilitation (VR). As a matter of disability policy, Congress has stipulated that DI trust funds could be used to finance rehabilitation only for beneficiaries, not for applicants or denied applicants. Yet it is an article of faith in the rehabilitation community that early intervention holds the best prospects for promoting return to work. Further, the legislative rationale for spending DI trust funds for rehabilitation is to reduce trust fund expenditures. Hence, the cost of rehabilitation should not exceed the benefit savings that accrue when beneficiaries leave the rolls and return to work. Since 1981, DI has paid only retrospectively for VR successes among beneficiaries, and the number of successes has been small.

On the other hand, the problem is not just the micro-politics of program finance. On average, persons with significant work disabilities who receive DI benefits are not particularly good candidates for vocational rehabilitation services. Hence, it is not obvious that large numbers would be successfully returned to work by vocational rehabilitation activities, even if potential beneficiaries could be targeted before obtaining beneficiary status. Still, dramatic program shifts in the direction of the rehabilitation ideal might have substantial impacts, particularly with respect to younger workers.

The team of H. Allan Hunt, Rochelle V. Habeck, Patricia Owens, and David Vandergoot, has a much more encouraging story to tell in "Disability and Work: Lessons from the Private Sector." Through the review of case studies of private-sector interventions, these authors find that an aggressive approach to managing disability claims has significant payoffs in maintaining employees in their current jobs or in some job with their present employer. Firms use a multitude of strategies, but each successful strategy is characterized by (1) early intervention, (2) a commitment to the twin goals of illness and injury prevention and return to work, and (3) continuous attention to the medical, vocational rehabilitation, and accommodation needs of their disabled workers. As this study recognizes, private sector employers have major advantages in carrying out these aggressive return-to-work strategies in comparison to public programs like DI or SSI. Indeed, the authors note that these public programs provide places for firms to lay part of their potential long-term disability burdens in the cases where a return to work is not achieved.

Nevertheless, these authors are optimistic that public policy could be reshaped to provide incentives for return to work, early intervention, and strong case management. They are under no illusions that this could be accomplished without major changes in public policy, including, among other things, the elimination of waiting periods, the provision of partial disability payments, and enormous increases in services and supports to those at risk of long-term disability. These would be costly interventions, but, in these authors' views, would be appropriate public policy by comparison with the system that now sorts individuals into two lumpy baskets: the disabled who receive an entitlement to long-term benefits and the nondisabled who receive virtually nothing.

The uncertain returns to focused public interventions to promote work are underlined by Aaron Prero's paper, "Quantitative Outcomes of the Transitional Employment Training Demonstration: Summary of Net Impacts." Prero provides a retrospective analysis of a transitional employment training demonstration program for mentally retarded adults sponsored by the Social Security Administration

(SSA). The demonstration was conducted as a formal experiment with randomly assigned participants and control group members. At issue was the effect of placement in real jobs in the community, with training by job coaches, on the earnings and SSI outcomes of a cohort of SSI recipients, ranging from 18 to 40 years of age. The six-year experiment showed a small decline in receipt of SSI, but the dollar savings from that decline were much smaller than the costs of the training provided. There was a similar result for earnings. The author cautions that these negative findings should not be over-interpreted. When the benefits of training were measured only in terms of savings in SSI payments, they were less than the cost of the training. Nonetheless, the trainees' employment rate, earnings, and income did increase as a result of their participation, suggesting positive outcomes by measures other than SSI program savings. Moreover, the study cannot exclude the possibility that more precisely targeting services to groups where gains are likely to be large might produce better results in terms of program savings.

In "Policies for People with Disabilities in U.S. Employment and Training Programs," Burt Barnow looks at a broader range of initiatives to improve work outcomes for persons with disabilities. Included in his review are vocational rehabilitation funded through the Rehabilitation Services Administration; vocational education funded under the Perkins Act; the Job Training Partnership Act, Title II, training for economically disadvantaged adults and youth; labor exchange activities; the Targeted Jobs Tax Credit and testing programs run by the U.S. Employment Service; and the Special Minimum Wage Program for people with disabilities administered by the Employment Standards Administration. In general, Barnow finds very modest effects from any of these interventions.

It is not clear whether these results flow from the inherent difficulty of the task or from the structure of the programs. The employment service, for example, has a very low application rate by disabled individuals for its programs, but when disabled individuals do apply, they receive greater-than-average services and their placement rates are above the average for all applicants. On the other hand, programs like the Targeted Jobs Tax Credit seem to serve very few people with disabilities and almost certainly could be allowed to expire with no adverse effects. In general, Barnow finds that there is no overall strategy for assessing the employment and training needs of the population of persons with disabilities or for developing a comprehensive approach to serving that population. Little serious work has been done in evaluating the capacity of existing programs to help those with a disability. Barnow concludes, therefore, that there is currently no way of ascertaining whether sufficient resources are being devoted to improving the workforce participation rate of persons with work disabilities.

The section concludes with a paper by Monroe Berkowitz, "Improving the Return to Work of Social Security Disability Beneficiaries," which proposes an entirely new approach to involving the private sector in return-to-work efforts. Berkowitz suggests that the creative energies of the private sector be harnessed by providing substantial incentives to successful return-to-work activity. Providers who manage to return beneficiaries to work and to eliminate the need for further DI payments would receive a percentage of the long-term savings to the trust fund attributable to their efforts. A novel aspect of the Berkowitz proposal is the incentive to maintain prior beneficiaries in the workforce by making compensation payments to providers on an annual basis, conditional upon the recipient of services remaining off the DI program rolls. Given the high risks involved, it is uncertain how many providers could be attracted by this proposal or what percentage of the population could be served effectively. On the other hand, given the extremely low success rates of current return-to-work interventions and its provision for paying providers only after benefit savings accrue, the Berkowitz proposal has obvious attractions.

The Role of Health Care and In-Kind Benefits in Promoting Work

In "People with Disabilities: Access to Health Care and Related Benefits," the findings of Robert Friedland and Alison Evans suggest that our current arrangements are not "work friendly," but that they may be quite difficult to change. Persons with disabilities face substantial barriers to obtaining health care coverage in private markets. This situation makes these individuals difficult to hire and retain and increases their incentive to participate in public programs with relatively comprehensive attachments for health care coverage—Medicaid for SSI recipients and Medicare for DI beneficiaries after a 24-month waiting period. The recent failure of comprehensive health care reform is particularly salient from this perspective.

The authors discuss a wide range of piecemeal reforms to the regulation of health insurance practices and modifications of the current Medicaid and Medicare programs. However, these initiatives hold out modest prospects for assisting persons with disabilities to maintain needed coverage while returning to the workforce. Even if available, employment-based coverage frequently does not provide the range of services required by those with significant disabilities. Moreover, a number of the incremental reforms discussed might exacerbate work disincentives, perpetuate inequities across different groups, or accelerate the decline of the availability of private insurance for the nondisabled. Recent state initiatives seem designed more to spread a thin public health care dollar over a greater number of eligible people than to provide the chronic care or long-term

care coverage options that are often most needed by persons with disabilities. In short, if the goal is to uncouple health care provision from cash benefits entitlement, and thus to eliminate incentives to seek cash benefits in order to get needed health care, we seem to be making little progress.

Andrew Batavia attacks these work disincentives through a different route in "Health Care, Personal Assistance, and Assistive Technology: Are In-Kind Benefits Key to Independence for People with Disabilities?" Batavia postulates that the objective of disability policy is to permit independent living by persons with a disability. He recognizes, however, that this objective consists of two potentially conflicting subordinate goals: (1) assisting disabled individuals to live in their communities (the support goal), and (2) assisting disabled individuals to live self-sufficiently (the employment goal). In his view, the linking of in-kind benefits such as health care, personal assistance, and assistive technology to participation in cash benefit programs may promote the support goal but is likely to have the negative effects that Friedland and Evans postulate on the employment goal. Batavia's solution is to uncouple in-kind benefits from cash payments by providing benefits through cash equivalents, such as vouchers or refundable tax credits, not tied to eligibility for income support. The cash equivalents would be phased out incrementally as incomes rise. Hence, Batavia would provide benefits to people with disabilities regardless of their employment status. Assuming that administrative and fiscal difficulties could be surmounted, a major assumption, Batavia argues that such programs would give persons with disabilities greater control in achieving their twin goals of living in their communities while remaining self-supporting.

Policy Implications

We now return to the policy issues that are the backdrop for our discussion: the rising cost of cash benefit programs; the limited success to date of attempts to improve employment of persons with disabilities through legal remedies called for in the ADA; and the all-time low in the rate at which persons are leaving cash benefit rolls because of medical recovery or return to work.

Balancing Policy Goals: Income Support and Work

We started with the fundamental belief that productive employment, when it is feasible, is the optimal outcome for both individuals with disabilities and for society at large. At the same time, income support during periods of long-term work incapacity is an essential element of disability policy. Virtually all industrialized countries have some type of social insurance system for ensuring

income support to workers who have lost their earning capacity due to illness, injury, or chronic health conditions. Most also provide social assistance for those who do not achieve a basic minimum income from either work or social insurance benefits. Initiatives, therefore, must necessarily strive for a balance between policies that facilitate employment and those that ensure a fair and decent level of income support during periods of work incapacity. Further, that balance has to be found in an environment where new public spending for social welfare purposes is sharply constrained.

The paper by Aarts and de Jong offers a cross-national perspective for evaluating U.S. disability policy. Several observations emerge. First, if the success of disability policy is equated with low national spending on cash support for disabled workers (an equation that some would dispute), then the United States is highly successful when compared with its European neighbors. Among the five countries reviewed, federal spending for long-term disability benefits in 1991 was lowest in the United States, at 0.7 percent of gross domestic product (GDP). This compared with 1.9 percent in the United Kingdom, which has strict eligibility rules and relatively low benefits; 2 percent in Germany, which is notable for its emphasis on "rehabilitation before disability pensions"; 3.3 percent in Sweden, a mature welfare state that emphasizes both rehabilitation and publicly financed employment; and a whopping 4.6 percent in the Netherlands, which generally serves as a model of runaway disability costs not to be emulated elsewhere. When federal spending for vocational rehabilitation and employment programs for persons with disabilities is added to benefit spending, the United States remains the most frugal, with total disability spending of 0.75 percent of GDP compared to 2.22 percent in Germany, for example, where both rehabilitation and private sector employment are more strongly emphasized and subsidized.

The relatively low spending on long-term disability benefits in the United States is even more noteworthy because, as Aarts and de Jong point out, the United States does not have other policy instruments in place that reduce pressure on disability pensions. All of the other countries studied have systems that aid in preventing reliance on long-term disability benefits, such as universal short-term sickness benefits, which provide support while rehabilitation and return to work are tried; national health care coverage for all residents regardless of changes in their disability or employment status; and comprehensive programs to help pay for long-term supports such as personal assistance or assistive technology and devices. As Batavia and Friedland and Evans discuss, the lack of secure financing of health care and related long-term supports poses severe constraints on the employment choices people with disabilities face in the United States. To date, efforts to remedy this problem through comprehensive health care reform have not been

successful. Incremental reforms that target particular subgroups may have better prospects.

However, the fact that the United States spends less than other industrialized countries on disability remedies does not, in itself, suggest obvious reforms in a period of tight budget constraints. It also does not answer other important questions. What caused the rapid growth in Social Security disability benefit claims and allowances during the early 1990s? Is it a temporary phenomenon or a long-term trend? What can be done to improve the employment outlook for workers with disabilities? In particular, how might we improve the return-to-work prospects of those who receive benefits?

Cyclical Changes in the Economy

"The economy matters" is the clear message in the papers by Yelin and Cisternas, Oi, Burkhauser and Daly, and others. Cyclical changes—periods of economic expansion and recessions—alter the choices available to both employers and people with disabilities. When the economy is growing and firms are expanding, employers are in a much better position to accommodate workers with disabilities. Employers' assessment of what constitutes a reasonable accommodation may be more expansive when firms are competing for skilled workers and they have valued employees that they do not want to lose. On the other hand, when firms are laying off employees, opportunities decline for workers with disabilities along with the prospects for other workers, according to Yelin and Cisternas. They also find that people with disabilities—particularly older workers—are less likely to return to work when the economy improves.

For these kinds of reasons, cyclical changes in the economy affect the number of people claiming and receiving Social Security disability benefits. In fact, the recent, unexpected growth in DI claims and allowances coincided with an economic recession in 1990-1991. The number of people applying for and being allowed benefits reached an all-time high in 1992. Since then, the number of new entrants to the DI rolls has leveled off and declined. The number of people receiving benefits, however, continues to grow because more people are being added to the benefit rolls than are leaving. Policy approaches to address the low rate of terminations from the benefit rolls are discussed subsequently.

The condition of the economy also influences the effectiveness of the ADA because it alters the environment in which decisions about reasonable accommodation are made. Momentum for enacting the ADA built during a period of sustained economic growth during the 1980s. The actual implementation of the

ADA, however, fell on the heels of the recession of 1990-1991. Perhaps it should not be surprising that the beneficial effects of the ADA on employment of people with disabilities are being realized more slowly than had been hoped during its development and enactment.

Structural Changes in Employment and Wage Differentials

Structural changes in the economy over the past two decades have also differentially affected opportunities for workers with disabilities. Technological advancements and the decline in physically demanding jobs may bring better prospects for skilled workers with physical impairments. On the other hand, increased emphasis on intellect, advanced education, and flexibility may make cognitive limitations or mental illness greater impediments to work. In general, changes in the demand for workers with different aptitudes and education have brought about increased disparity in opportunities and earnings between highly educated and less-skilled workers (NASI 1994). This disparity is also likely to become evident within the highly diverse population of people with disabilities. In noting the great diversity within the disabled population, Oi's analysis suggests that the ADA remedies—banning discrimination, requiring reasonable accommodation, and breaking down architectural barriers—will be most effective for highly skilled workers who have faced these obstructions in the past. However, workers who face the double disadvantages of low skills and physical or mental impairments may need other remedies.

Burkhauser and Daly offer a solution for the problem faced by low-skilled workers with disabilities. They propose a wage subsidy built on the concept of the Earned Income Tax Credit, but one that is targeted at workers with disabilities. The subsidy is seen as a way to encourage entry into the workforce among young persons and to delay withdrawal from the workforce among older workers. For young workers with developmental disabilities, a wage subsidy encourages employment, even part-time or at low pay, that over the long run can improve human capital through on-the-job experience. Burkhauser and Daly also view the subsidy as a means of encouraging older workers with disabilities to remain at work even if their hours of employment or wage rates decline.

Hoynes and Moffitt's analysis lends support to the wage-subsidy proposal. Hoynes and Moffitt suggest that a wage subsidy—modeled after the EITC for workers with disabilities—might be more cost effective than adding new work incentives to the DI program. They note that expanding DI by offering a partial benefit offset to those who return to work is likely to increase program expenditures and to yield ambiguous results, at best, in terms of net increases in

labor supply.

Oi observes that, because disability steals time, part-time or flexible work schedules may be the kinds of accommodations some employees need. If such adjustments are accompanied by lower wages for workers in general, that result is likely to occur for workers with disabilities as well. A publicly financed wage subsidy, like that proposed by Burkhauser and Daly, is one way to alleviate these effects.

Oi also argues for a wholly different approach to cash support, which he offers as a substitute for DI. This alternative is based on the veterans' compensation concept of paying individuals based on their impairments, irrespective of the impairments' effects on earning capacity. While this approach was not specifically modeled by Hoynes and Moffitt, it appears to hold many of the same risks of increased program participation. The eligible population of benefit recipients would be significantly expanded even if eligibility were limited to persons with an impairment rating of 50 percent or more on the scale used for veterans' compensation. Paying benefits to a larger population of persons with disabilities, regardless of their ability to work, would significantly raise benefit costs unless current benefits were substantially reduced, and it would clearly result in more workers among the benefit recipients. As far as increasing the amount of labor supplied by the target population, Hoynes and Moffitt's analysis suggests that the outcomes, at best, would be ambiguous. Oi's proposal, however, for targeting return-to-work efforts on young persons with disabilities is consistent with that of Monroe Berkowitz, as discussed in the following section.

Rehabilitation and Return-to-Work Services

Prero's analysis raises important issues about the purpose and financing of rehabilitation services. One obvious goal is that of improving the quality of life and the community integration of persons who receive services. That, clearly, is among the objectives of the federal/state vocational rehabilitation program. The program is required by law to give first priority to persons with the most significant impediments to employment, and it is permitted to define rehabilitation success as placement in either competitive or sheltered employment or in unpaid homemaking activities.

As Prero notes, a different rationale has been used to justify the financing of rehabilitation services out of funds earmarked for cash benefit programs. In this case, the purpose is to reduce benefit expenditures. The measure of success is whether the client returns to work at a level of earnings that results in savings in

cash benefits exceeding the cost of rehabilitation provided. To this end, services would be appropriately targeted on those with the best prospects of leaving the benefit rolls because of those services. This is the rationale used by private insurers, according to Hunt et al.

Monroe Berkowitz proposes a radical new approach to linking DI beneficiaries with return-to-work services, based on this latter rationale. The plan offers consumers a choice in selecting their private or public provider of services; it enlists private sector providers in the task of returning DI beneficiaries to work; and it offers them incentives to produce that result by basing their payment, not on the cost of services they give, but on their success as measured by their clients' return to work and departure from the benefit rolls. Providers would be paid only after their success had been documented, and the amounts would be based on savings to the trust funds (from benefits not paid) as those savings accrue.

This reimbursement mechanism encourages service providers to select clients with the best long-term prospects for employment. It naturally targets those identified by Yčas and Oi as being good candidates for return-to-work efforts—the small, but growing, minority of DI beneficiaries who are relatively young and have stable impairments that are not life-threatening.

Because service providers are paid for their results, not for their inputs, they would have incentives to use whatever other resources they are able to locate. This strategy could include negotiating accommodations with an employer, or assisting clients in gaining access to the complex array of existing vocational education, training, and employment programs described by Barnow. Presumably, rehabilitation providers would build on the lessons learned from private sector employers and insurers about successful return-to-work methods, which are discussed by Hunt et al.

A question remains as to whether private sector rehabilitation providers would choose to participate in a system in which they would be expected to assume the financial risks and would be paid only after success had been demonstrated. Some payments to providers may be needed as their clients achieve milestones along the way toward fully withdrawing from the benefit rolls. In their paper, Edward Berkowitz and David Dean recount the sometimes fitful marriage between DI and publicly financed vocational rehabilitation services. However, a glimmer of good news exists in their findings about the cost-effectiveness of investing in rehabilitation services for beneficiaries. Between 1965 and 1980, the Social Security Act provided for allocating up to 1.5 percent of DI benefit expenditures for vocational rehabilitation services to return DI

beneficiaries to employment. There were few strings attached to the way in which public VR agencies expended the funds, and guidelines for their use were not strictly enforced. Audits by the General Accounting Office concluded that the monies were not well-managed, and the policy was abandoned in 1981. Nevertheless, even the most critical of the cost-benefit evaluations of that program, poorly managed as it may have been, found that it returned savings to the DI trust fund of about \$1.15 for each \$1.00 spent for rehabilitation services. Subsequent and more refined cost-benefit analyses found savings ranging from about \$1.40 to \$2.70 for each \$1.00 spent (McManus 1981). These studies suggest that there are savings to be gained by financing rehabilitation services from DI trust funds. With the proper mix of incentives and with accountability for service providers, some payment to providers for milestones their clients reach on the road to leaving the benefit rolls could be justified on cost-benefit grounds.

Administration and Disability Management

Aarts and de Jong emphasize that administrative accountability matters. They attribute part of the runaway cost of disability benefits in Holland to an administrative structure where adjudicators—disability boards made up of employer and labor representatives—are not accountable for the public costs of the decisions they make to allow benefits. In the United States, SSA, which administers the DI and SSI programs, is directly accountable.

There is, nevertheless, a parallel to this problem in American budget policy. Congressional policy makers work under a set of rules whereby disability cash benefits themselves are outside of a budgetary cap (as they are in other European countries studied), but the funds used to administer those benefits must compete with all other "discretionary" spending, which is sharply constrained. Still, private sector experience, recounted by Hunt et al., shows that sound disability management more than pays for itself. Some types of disability management initiatives available to private employers and insurers are not available to SSA without costly changes in policy; such initiatives include the elimination of the five-month waiting period for cash benefits or of first-day coverage under Medicare. However, other steps would be possible; these would include individualized attention in order to correctly decide who is eligible for benefits, who should be referred for rehabilitation, and who should be subject to periodic review of continuing eligibility, and in order to make accurate and fair decisions on the outcome of those reviews. The United States currently spends about 2.6 percent of DI outlays on administration, considerably less than the percentage for private insurers. Both the backlogs of pending applications and appeals and the shortfall in conducting the number of continuing disability reviews required by law

suggest that the United States is not investing enough in administration. SSA's actuaries estimate that investments in continuing disability reviews, even when only a small proportion result in benefit terminations, pay for themselves in benefit savings.

Conclusions

Some answers emerge to the questions raised earlier. What caused the recent rapid growth in disability benefit costs? Is it a temporary phenomenon or a long-term trend? What can be done to improve the employment opportunities of workers with disabilities? In particular, how might we improve the return-to-work prospects of those who receive benefits?

First, the economy matters. The economic recession of 1990-1991 contributed to the growth in claims and allowances. The number of new benefit awards reached an all-time high in 1992 and has since declined. As such, the surge in benefit awards appears to be a wave rather than a long-term trend.

The number of people receiving benefits, however, continues to grow because more people are entering the rolls than are leaving. There are four reasons people leave the rolls: they die; they reach age 65, when they are shifted to the retirement benefit rolls; they medically recover; or they return to work despite the continuation of their impairments. The last two reasons have always accounted for a small portion of benefit terminations, but they are now at a record low. Benefit termination rates because of retirement also are down. Part of the explanation is that more people are entering the rolls at younger ages, that is, under age 50. This is due, in part, to population changes (NASI 1994). The baby boom is now in the 35-to-50 age range. Just as these individuals swell the ranks of the labor force, they add to the ranks of the disability rolls when they become disabled. In addition, as more women are in the paid workforce, they qualify for social insurance benefits when they become disabled. Had they been housewives, as many of their mothers were, they would not have had disability income protection. To the extent that the low rate of terminations is due to the bulge of the baby boom cohort, it is a temporary phenomenon rather than a long-term trend. In the next decade, as the baby boom ages, we can expect more entrants to the disability rolls to be over 50 years old and therefore to have relatively shorter duration on these rolls.

The historically low rate of benefit terminations due to return to work or medical recovery may be more amenable to policy prescriptions. First, the innovative proposal for enlisting private sector providers in offering return-to-work services to DI beneficiaries could improve employment outcomes

for some subset of beneficiaries, particularly those who are relatively young and have stable, nonfatal impairments.

In addition, as discussed by several authors, a wage subsidy for disabled persons, patterned after the EITC, would improve returns to work for persons attempting to leave the benefit rolls. Perhaps more importantly, it could reduce entries onto the cash benefit rolls, first, by encouraging young workers to enter the labor force, and second, by encouraging older workers to delay their exit from the labor force even though their hours of work or wage rates decline because of the onset of a chronic health condition. The wage subsidy also could help increase the effectiveness of the ADA in promoting employment and accommodations for young or low-skilled workers with disabilities.

Finally, the rate of benefit terminations due to medical recovery is expected to be relatively low because of the nature of the strict test of long-term disability that is used. But SSA's own estimates indicate that this rate could be improved if more continuing reviews were conducted. Further, the effectiveness of both return to work and medical reviews could be enhanced by better disability management when claims are first allowed. Sorting new beneficiaries according to their prospects for either medical improvement or return to work and informing individuals of those expectations seem to be easily transferable lessons from private sector disability management. Allocating adequate resources to more fine-tuned management of initial disability awards and conducting ongoing disability reviews are expected to more than pay for themselves through benefit savings. To date, however, obstacles to allocating those resources through the federal budget process have proven insurmountable.

The volume's overarching theme is that the population of working-age persons with disabilities is extraordinarily diverse. Therefore, disability policy, broadly construed, has to match that diversity with a wide range of remedies appropriate for different subsets of the population. Those diverse remedies include the following: access to health care and related services, which is highly problematic for some persons with disabilities in the United States; civil rights protections and employer accommodations, as called for in the ADA; wage subsidies for low-income workers with disabilities; and access to appropriate rehabilitation, which may be financed from different sources, such as the federal/state VR program, employers, insurers, or public cash benefit programs, for different subsets of the population. More generalized education and employment policies also can be considered as part of disability policy. To the extent that such approaches enable Americans to gain and maintain the ability to compete in today's labor market, they aid in preventing even quite significant impairments from

resulting in work disability. Finally, cash support programs—social insurance and social assistance—remain critical elements of disability policy for those who experience periods of work incapacity.

NOTES

1. See particularly LaPlante (1992), and LaPlante, Miller, and Miller (1992).
2. The functional limitations are defined in the 1991-1992 Survey of Income and Program Participation to include the following: a work disability; a functional limitation in seeing, hearing, speaking, lifting, climbing stairs, or walking; a limitation in activities of daily living that include bathing, eating, toileting, getting around inside the home, getting in or out of bed or a chair; or instrumental activities of daily living that include going outside the home, keeping track of money and bills, preparing meals, doing light housework, or using the telephone; or a mental or emotional disability.
3. The poverty threshold for an individual under age 65 was \$7,357 in 1993, while federal SSI benefits were \$434 a month. Both are adjusted each year by changes in the Consumer Price Index.

References

- Bennefield, Robert L., and John M. McNeil. 1989. "Labor Force Status and Other Characteristics of Persons with a Work Disability: 1981 to 1988." U.S. Bureau of the Census, Current Population Reports Series, P-23, No. 160, July.
- LaPlante, Mitchell P. 1991. "The Demographics of Disability." In *The Americans with Disabilities Act: From Policy to Practice*, Jane West, ed. New York: Milbank Memorial Fund.
- _____. 1992. "How Many Americans Have a Disability?" *Disability Statistics Abstract*, No. 5. National Institute on Disability and Rehabilitation Research, U.S. Department of Education, December.
- LaPlante, Mitchell P., Shawn Miller, and Karen Miller. 1992. "People with Work Disability in the U.S.," *Disability Statistics Abstract*, No. 4. National Institute on Disability and Rehabilitation Research, U.S. Department of Education, May.
- McManus, Leo A. 1981. "Evaluation of Disability Insurance Savings Due to Beneficiary Rehabilitation," *Social Security Bulletin* (February): 19-26.
- McNeil, John M. 1993. "Americans with Disabilities: 1991-1992, Data from the Survey of Income and Program Participation." U.S. Bureau of the Census, Current Population Reports Series P70-33, December.
- National Academy of Social Insurance. 1994. *Preliminary Status Report of the Disability Policy Panel. Rethinking Disability Policy: The Role of Income, Health Care, Rehabilitation and Related Services in Fostering Independence*. Washington, DC: NASI.

- Palmer, Bruce A. 1994. "Retirement Income Replacement Ratios: An Update,"
Benefits Quarterly (Second Quarter): 59-75.
- _____. 1993. "Poverty in the United States: 1992." Current Population Reports
Series, P60-185, September.
- _____. 1995. Unpublished tabulations of the 1993 and 1994 Current Population
Surveys.
- U.S. Department of Health and Human Services. Social Security Administration.
1993a. Annual Statistical Supplement to the Social Security Bulletin.
- _____. 1993b. "Statistical Notes from the New Beneficiary Data System," Social
Security Bulletin (Fall): 88-94.
- _____. 1994. Annual Statistical Supplement to the Social Security Bulletin.