

# Displaced Concern: The Social Context of the Work-disability Problem

EDWARD YELIN

*University of California,  
San Francisco*

WORK DISABILITY, PREVIOUSLY AN ISSUE TOO arcane even for academics to spend their time on, emerged as an important policy issue as this decade began. Several trends account for the growing interest in the work disability problem, but none of the phenomena that fueled our concern with work disability is directly responsible for the increase in its prevalence. Thus, we still do not know why people stop working in the face of illness and we are still searching for the one social context which will allow us to explain this phenomenon. Because our attempts to tie the work disability problem to other phenomena have not been successful, one might say that the interest in work disability has been *misplaced*. Because our interest in work disability derives from its social context and not from an interest in the problem of work loss itself, I prefer to say that the attention now given to work disability is *displaced* from our concerns about these other phenomena, and that policy in this arena is unfocused, if not adrift. My goal is two-fold: to describe the social context which brought the work disability problem to prominence and to present some evidence that work disability is an issue worthy of more than this displaced concern.

In this article, I define work disability in terms of actual work status: individuals become disabled only when they stop working after onset of a chronic disease or impairment. This definition stands in

distinction to the common usage, in which work disability connotes capacity to work rather than actual work status. It neither implies that health precluded work nor that a medical condition was necessarily the primary cause of the withdrawal from work. Moreover, although individuals who were over the age of 65 could be considered "work disabled" if they wanted to work, I will follow the convention of enumerating only those within the normal ages of work, 18 to 64.

When the economy is faltering, almost any social program may be viewed as a threat to the fiscal health of the government. The scrutiny given to the work disability problem as the decade began was in this sense no different than that given any other item in the federal budget. Three worrisome trends, however, made policy makers pay special attention to this issue. First, rates of severe activity limitation among adults of all ages rose, suggesting either that health inhibited the work capacity of a greater proportion of the labor force or that a greater proportion felt this to be so (Colvez and Blanchet 1981; Rice and LaPlante 1988; Verbrugge 1984; Ycas 1987; Chirikos 1986; Baily 1987). Second, rates of male labor-force participation fell dramatically during the 1970s, particularly among men just under the normal age of retirement (Parnes 1981). And even as record numbers of women joined the work force, labor-force participation rates of women in the immediate preretirement years remained stagnant (U.S. Bureau of the Census 1987). Finally, since labor-force participation rates and health status decline with age, the aging of the population exposed a greater proportion of working-age adults to these phenomena (Rice and Feldman 1983; Chapman, LaPlante, and Wilensky 1986).

Whether as cause or effect of declining (or putatively declining) health, falling labor-force participation rates, and the aging of the population, the Social Security disability insurance (SSDI) program lies at the center of the debate about the work disability problem. No wonder. During the 1970s the number of disabled workers receiving SSDI benefits grew two-fold to 2.9 million, the number of total beneficiaries (disabled workers and their dependents) increased from 2.7 to 4.7 million, and the cost of the program quintupled, from 2.8 to 14.9 billion dollars a year (the cost of the SSDI program increased two and one-half times in real terms) (*Social Security Bulletin* 1986).

The debate about SSDI turns on the question of whether this growth was a health effect of declining work capacity and an aging popu-

lation, an economic effect of declining employment opportunities, or the principal cause of declining rates of labor-force participation. If the themes sound familiar, they should be: the debate about the work disability problem takes place in the context of a larger debate about the role of entitlement programs in the society as a whole. Do the entitlement programs "induce" individuals who could work to stop doing so, or do they merely compensate the chronically ill or those thrown out of work by declining employment opportunities, the proverbial circumstances beyond the individual's control?

Much effort has been expended in the last several years to test the notion that the value of income transfers relative to earned income net of taxes (the "replacement rate") affects the willingness of people to continue working (economists use the term "labor supply theory" to imply that workers control the decision to work, or to supply their labor). The alternative notion, that labor-force participation moves in tandem with the health of the overall economy and, hence, with the demand for labor, also has a long history, although it has not been tested with the same vigor in recent years, primarily because public policy has hued more to labor supply theory during the tenure of the Reagan administration (see endnote).

But as heated as the general debate about the role of entitlement programs in labor-force participation can be, the debate about the role of disability and disability compensation on the decision to work is even more highly charged. First, health status and capacity to work can not be ascertained objectively in the same way as age or even income. Judgment rather than ascertainment lies at the center of disability policy (Stone 1984). Second, because this is so individuals and the society as a whole can and do change their criteria for entitlement to disability compensation. Disability programs contract and expand with these changes, providing a measure of flexibility which, depending on one's point of view, individuals may use to gain entitlement when times get rough (or even when times are not so rough) and society may use to respond to general fiscal problems. The cost of almost all universal entitlement programs can be reduced by lowering compensation levels. Disability compensation, however, is the only universal program for which entitlement criteria are open to interpretation and for which, therefore, access can be severely restricted. Disability compensation provides one of the principal mechanisms through which society can regulate social spending. As a result,

disability policy held center stage in attempts to reduce government expenditures.

It was not always thus. First suggested, along with medical insurance and retirement income, in the Progressive Era and then again in the New Deal as one of the cornerstones of Social Security, disability policy languished until the initiation of the SSDI program in 1956 (Starr 1982; Stein 1980; Berkowitz 1987). Passed in the belief that decisions about disability compensation either are solely medical in nature or should be, sustained growth in the number of beneficiaries over the ensuing fifteen years in the absence of dramatic increases up to that point in the prevalence of chronic disease belied the medical model underlying the program. Thus, as this decade began the notion that overly generous compensation induces the chronically ill to leave work displaced the medical model of disability which held individuals harmless for their health and labor-force status. The reduction in the magnitude of SSDI benefits in the years to follow, however, provided only a temporary respite from the now two decades of growth in the number of the program's disabled worker beneficiaries. The resumption of the growth in the number of beneficiaries and the political cost of reducing SSDI entitlements (U.S. Congress. House Select Committee on Aging 1984; U.S. Congress. Senate Special Committee on Aging 1984) displaced the replacement rate as the culprit of choice in disability policy. Although several compete, no organized academic theory or political agenda with respect to the labor-force participation of the chronically ill has risen in its stead. One view is a reprise of the health model in which the concomitant aging of the population and rising prevalence of chronic disease results in higher rates of disability; in the other view, declining employment opportunities force persons with disabilities out of work in the same way that other people with labor market liabilities—racial minorities, women, older people in general—are prone to the last hired, first fired phenomenon.

Paradoxically, all the explanations of the work disability problem rely on the same set of data. This article, thus, begins by reviewing the trends in health status, labor-force participation, and the aging of the population which fuel the debate about SSDI. Although rising rates of activity limitation and an aging population are consistent with declining rates of labor-force participation, high rates of labor-force participation among severely disabled persons in the past suggest that objective conditions do not account for the rise in work disability

rates. Second, I describe the changes in the scope of the SSDI program over the last thirty years to show why concern with the program grew, the extent to which efforts to impede its growth have been successful, and to situate it in the economy as a whole. SSDI never consumed more than six-tenths of one percent of the gross national product. Therefore, analysts were more worried about trends in its growth and its effects on labor-force participation at the margin than its absolute size. The process by which individuals with illnesses become impaired, stop working, and then apply for SSDI benefits may take a decade or more. Since there are few longitudinal studies following individuals through this process, analysts rely on a series of cross-sections to describe the complex interaction among health status, the economy, and work. I begin by describing the principal prism through which cross-sectional associations among these variables have been filtered in the 1980s, as well as the principal alternative vision that is emerging.

## The Political Context of Work Disability

George Gilder (1981) states the argument that entitlements cause unemployment and the social ills associated with it. He writes:

The moral hazards of current programs are clear. Unemployment compensation promotes unemployment. Aid for Families with Dependent Children makes more families dependent and fatherless. Disability insurance in all its multiple forms encourages the promotion of small ills into temporary disabilities and partial disabilities into total and permanent ones . . . . Comprehensive Employment and Training Act subsidies for make-work may enhance a feeling of dependence on the state without giving the sometimes bracing experience of genuine work. All means-tested programs . . . promote the value of being "poor" and thus perpetuate poverty. To the degree that the moral hazards exceed the welfare effects, all these programs should be modified, usually by reducing the benefits.

A few years later, Charles Murray (1984) went so far as to argue that the society would be better off without entitlement programs. He writes:

I begin with the proposition that it is within our resources to do enormous good for some people quickly. We have available to us a program that would convert a large proportion of the younger generation of hardcore unemployed into steady workers and [would help them] make a living wage. The same program would drastically reduce births to single teenage girls. It would measurably increase the upward socioeconomic mobility of poor families. These improvements would affect some millions of persons . . . . The proposed program, our final and most ambitious thought experiment, consists of scrapping the entire federal welfare and income-support structure for working-age persons, including AFDC, Medicaid, Food Stamps, Unemployment Insurance, Worker's Compensation, subsidized housing, disability insurance, and the rest. It would leave the working-aged person with no recourse whatsoever except the job market, family members, friends, and public or private locally funded services. It is the Alexandrian solution: cut the knot, for there is no way to untie it.

If Gilder and Murray argue that entitlements cause poverty among individuals by sapping their initiative, conservative macroeconomists hold high levels of state expenditure responsible for the slow rate of growth in the economy as a whole. Social Security, SSDI included, plays a big part in this, since money allocated to Social Security is not available for private investment (Fieldstein 1974).

The two parts of the conservative attack on the welfare state—that it creates poverty among individuals and slows growth in the economy as a whole—have come, belatedly, under attack. The recurrent theme is that economic stagnation as represented by slow growth and the decline of manufacturing result in lower real wages among the employed population and declining opportunities to secure any employment among those who have trouble competing in a slack labor market, the underclass as well as those with physical disabilities. Frank Levy (1987) writes:

In the early postwar period real wages rose so fast that many of these people [blacks, the disabled, or poorly educated] were quickly absorbed. Incomes grew faster than dreams and a growing part of the population found middle-class life within reach. Rising incomes also helped fund a larger welfare state to assist people at the bottom of the distribution. In the 1973–1985 stagnation this all changed . . . inequality was made much larger by a bad economy.

Most analysts study the impacts of the business cycle and partic-

ularly the unemployment rate on the economic well-being of the population. Business cycles last about five years. The consequences of the secular changes in labor-force participation and real wages, however, trends which are now fifteen years old, are equally profound and they are only now being documented. Wilson (1987) demonstrates that the social pathology of the ghetto—female-headed families, high crime rates, drug addiction—is associated with declining employment opportunities among black men, a trend accentuated by the migration of jobs away from northern central cities to suburbs and other regions of the country (Kasarda 1985). Schorr and Schorr (1988) argue that declining government investment in children, itself a result of budget deficits connected to problems in the macroeconomy, is to blame for rising rates of poverty among the young. And Levy shows that there has been tremendous displacement from the high-wage manufacturing sector over the period of 1979 to 1984 (5 percent of the entire work force), with some workers taking service jobs at much lower wages and/or on a part-time or a temporary basis and 40 percent unable to secure any employment as of 1986. The decline in employment opportunities has hurt young workers first entering the labor market since a high percentage of new jobs pay low wages (Bluestone and Harrison 1986). And many analysts feel that older workers are being pushed out of the labor force to make way for lower-wage employees (Levy 1987). Moreover, economists often view the unemployment rate—the percentage of those claiming to be in the labor force who are looking for work—as an incomplete measure of the slack in the labor market. They generally use the labor-force participation rate—the proportion of a group of people who are either working or looking for work—to measure the status of the labor market. Even the labor-force participation rate, however, may understate employment problems if older workers leave the labor force because they can no longer compete and/or their pensions and Social Security allow them to do this, since such persons would no longer be searching for work.

The view that a stagnating economy and not entitlement programs is responsible for declining employment and attendant poverty is buttressed by recent research about the SSDI program. SSDI provides the best test of the thesis that entitlement affects work because, relative to other entitlement programs, SSDI pays the highest benefits. This research shows that when health effects are adequately taken into account, the ratio of expected SSDI benefits (or total transfer payments)

to actual earnings has no effect on work status (Yelin 1986), that only a small fraction of those people who might qualify for SSDI benefits receive them (Lando, Cutler, and Gamber 1982), and that individuals whose applications for SSDI benefits are denied are very unlikely to secure employment (Ellwood and Summers 1986). Thus, summarizing the evidence about the effect of entitlement programs versus the effect of a declining economy, Ellwood and Summers note:

Almost all of the variation in the poverty rate is tracked by movements in median family income. The poverty rate, and the poverty line as a fraction of total family income, move almost completely together. . . . Much of the blame [for the rise in the poverty rate] must be placed on the productivity slowdown.

Of course, the conservative and liberal positions might be joined if one could show that high rates of government expenditure simultaneously caused productivity growth to slow, the real wages of workers to stagnate, and poverty rates to rise. Cohen and Zysman (1987), Piore and Sabel (1984), and Levitan and Werneke (1984) argue otherwise, that slow growth in productivity in the United States is due much more to a failure to master the technologies of manufacture, especially in comparison with Japan and West Germany, than to the absolute level of government expenditure. More important, the tax cuts which were supposed to spur investment in manufacturing technologies did not do so, in the process hurting our prospects for future growth by causing huge deficits (Rothschild 1988).

Thus, there are two principal perspectives on the work disability problem, the one holding that entitlement programs, in particular, and government expenditure, in general, have sapped individual incentive, producing both economic stagnation and social pathology in their wake, the other that economic stagnation results in social problems like work disability.

## The Demographic Context of Work Disability

All of the phenomena that fuel the growth in work disability are age related. That is, health and function worsen, labor-force participation declines (even among the well), and application for benefits increase



with age. And as a greater number of individuals of working ages withdraw from the labor market, this reduces the number of workers supporting them—the young and the elderly—the so-called dependent population. Table 1 presents three 1982 Census Bureau projections of the population in the United States for the period of 1985 to 1990 (the actual United States population of 1985, 239.3 million, exceeded the medium estimate for that year).

Whatever the rate of overall population growth between 1985 and 2000, the proportion of the population of working ages (18 to 64) will grow by between 11 and 12 percent over the next decade or so. We know, too, that the ranks of people at highest risk for work disability (aged 45 to 64) will grow by more than one-third (and perhaps by as much as 40 percent), whatever the overall rate of population growth. Thus, even if the work disability rate at any one age remains constant (and there is good evidence, shown below, that this will not happen), the overall prevalence of work disability will rise very quickly in the years to come. This will occur while the overall work force grows much more slowly (the small post-baby-boom cohorts are now beginning to enter the labor force). A 12 percent larger work force may be paying for 34 percent more Social Security disability recipients, a prospect not lost on the trustees of the SSDI program.

Although we can predict with confidence the relative size of the populations of working-age adults and those at greatest risk for work disability, the magnitude of the growth in the dependent population—those aged less than 18 or over 65—depends on how fast the overall population grows. If the overall population grows slowly, the dependent population will increase by 3 percent between 1985 and 2000; if quickly, by 21 percent. In part because we blame those who leave work for doing so and in part because the criteria for entitlement to disability benefits are more flexible than for other entitlement programs, society's commitment to the disabled has wavered over the last two decades (Stone 1984; Berkowitz 1987). We are unlikely to support the disabled to the extent we have done so in the past if overall population growth causes the ranks of the young and old to expand: we hold the young and old harmless for their plight and we grant them entitlement simply by verifying their ages.

TABLE 1  
Estimates of the Growth of the Population between 1985 and 2000

	Nature of estimate	Year		Percentage of change, 1985 to 2000	
		1985	1990		2000
		millions (% of total population)			
Total U.S. population	Low	237.4 (100%)	245.5 (100%)	255.6 (100%)	8%
	Medium	238.7 (100)	249.7 (100)	268.0 (100)	12
	High	240.4 (100)	254.7 (100)	282.3 (100)	21
All persons aged 18 to 64	Low	146.6 (62)	152.2 (62)	162.3 (64)	11
	Medium	147.2 (62)	153.6 (62)	165.6 (62)	11
	High	148.0 (62)	155.7 (61)	170.6 (60)	12
All persons aged 45 to 64	Low	44.5 (19)	46.1 (19)	59.8 (23)	34
	Medium	44.7 (19)	46.5 (19)	60.9 (22)	36
	High	44.8 (19)	46.9 (19)	62.2 (22)	39
All persons aged <18 or >65	Low	90.8 (38)	93.3 (38)	93.4 (37)	3
	Medium	91.5 (38)	96.1 (39)	102.4 (38)	12
	High	92.3 (38)	99.0 (39)	111.7 (40)	21

Source: Author's analysis of data from U.S. Bureau of the Census 1983, 32.

## The Health Context of Work Disability

The medical model of work disability which underlies the Social Security disability insurance program holds that the onset of chronic disease may eventually lead to impairment and then to a withdrawal from the labor market. Almost no physical impairment, however, precludes all work (many quadriplegics work, after all) and relatively few jobs in the service economy require much in the way of physical exertion. Thus, there are no universally accepted measures of health with which to describe the dimensions of the population at risk for work disability. This allows a few analysts to claim that the health of people in the ages of highest risk for disability has been improving (Fries 1980, 1989), while most take the position that a greater proportion of people at these ages are limited in activities than in years gone by, reflecting poorer underlying health.

The increasing prevalence of activity limitation was first noticed almost a decade ago in a study analyzing the National Health Interview Survey from 1966 to 1976 (Colvez and Blanchet 1981), but the trend has continued in the interim (Verbrugge 1984, 1989; Manton 1984; Ycas 1987; Rice and LaPlante 1988). Although methodological changes in the Health Interview Survey and an increasing propensity to claim activity limitation may account for a part of the increase (Wilson and Drury 1984), there is now good evidence that at least a substantial part is not artifactual. The fastest growth in activity limitation among people of working ages has been occurring for the severest forms of disability for which reporting bias is less likely (compare figures 1 and 2 with 3 and 4). Studies using sources of data other than the National Health Interview Survey and different definitions of activity limitation corroborate the trends (Chirikos 1986). And studies of the prevalence of chronic disease—regardless of disability status—find substantial increases in the rates of many of the chronic conditions which are common causes of disability, suggesting that the rise in activity limitation is due to a rising prevalence of pathology (Verbrugge 1984; Newacheck, Budetti, and Halfon 1986; Rice and LaPlante 1988; Feldman 1983). Another reason that reporting bias and changes in survey methodology probably do not account for the rise in rates of activity limitation is that the prevalence of some of the chronic conditions which are common causes of activity

limitation has remained stagnant. One would expect all to rise if proclivity to report illness was to blame.

Figures 1 through 4 use the National Health Interview Survey (NHIS) to chart the trends in the prevalence rate of severe and all forms of activity limitation from 1970 through 1986 for people of the ages of highest risk of work disability (55 to 64) and for those a decade younger (45 to 54). Although the usual cautions should prevail in interpreting these data (the sample size is not large enough to provide accurate estimates for nonwhites in any one year, a 1982 change in the way the NHIS collects information about activity limitation may account for the surge in disability rates among women in that year and, perhaps, for some of the subsequent increases as well), the data are consistent with the studies showing rising rates of activity limitation. The percentage of those aged 55 to 64 reporting that they cannot perform their usual major activity (the definition of severe limitation) has risen substantially for men of all races, steadily for white women, and, perhaps, slightly for nonwhite women (figure 1). Even after slight declines in recent years, about 25 and 35 percent more white and nonwhite men aged 55 to 64, respectively, report severe activity limitation than in the early 1970s. All told, about one-quarter of nonwhite men of these ages claim severe limitation in activity. White women aged 55 to 64 report much lower rates of severe activity limitation than men, but they have sustained steady increases. Prior to the 1982 change in the NHIS, rates of severe activity limitation among white women aged 55 to 64 increased by 50 percent. If one were to project the 1970–1982 increases to 1986, white women of these ages would have experienced a 75 percent increase in severe activity limitation rates. Since 1982, their rates of severe activity limitation have increased by one-quarter. Even discounting some of this increase as an artifact of the way the NHIS began to collect data on activity limitation in 1982, one can safely argue that white women aged 55 to 64 have experienced dramatic growth in severe disability. Rates of severe activity limitation among nonwhite women aged 55 to 64 held steady prior to 1982 and seem to have risen on average in the interim. They continue to be substantially higher than the rates among white women.

Figure 2 charts the increase in the prevalence rate of total incapacity for major activities among those aged 45 to 54, a time in life when

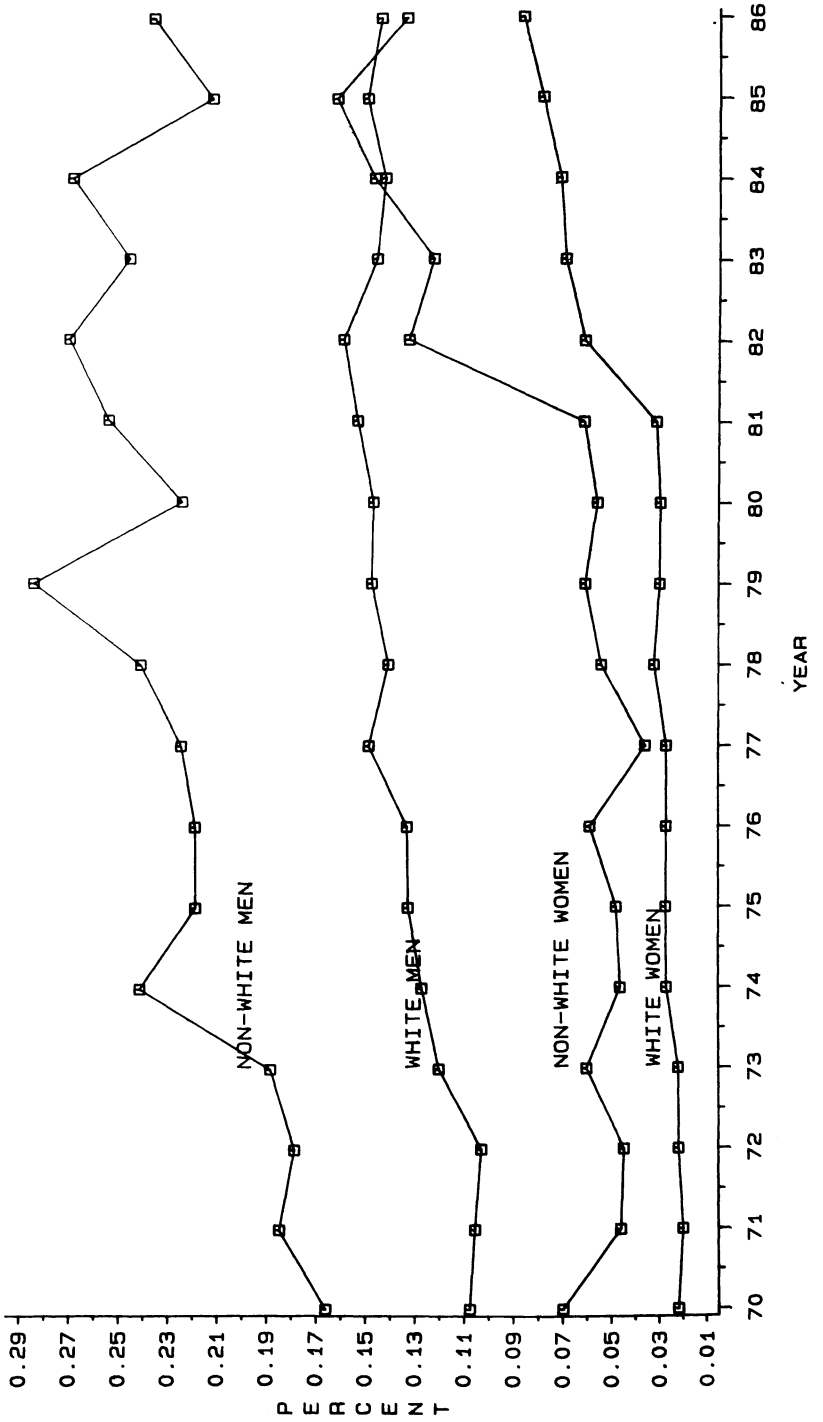


FIG. 1. Percentage of persons aged 55 to 64 with severe limitations, United States, 1970-1986, by race and sex.

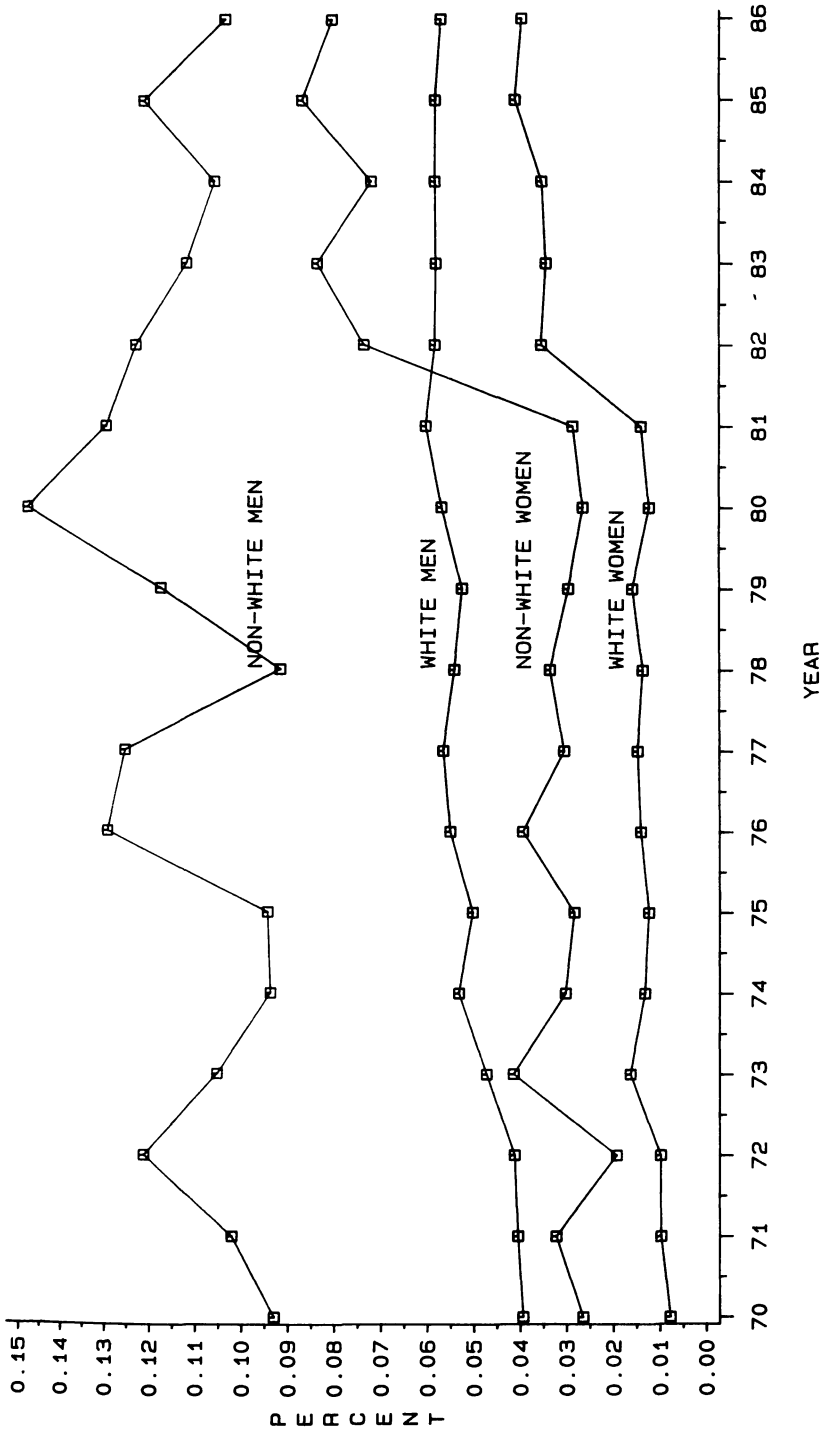


FIG. 2. Percentage of persons aged 45 to 54 with severe limitations, United States, 1970-1986, by race and sex.

labor-force participation peaks. Nonwhite men of these ages experience the highest rates of severe activity limitation (over 10 percent), but, on average, have sustained no major change in their rates of severe activity limitation since 1970. The average, however, masks tremendous volatility. Of interest, the prevalence of severe activity limitation among nonwhite men aged 45 to 54 decreased throughout much of the 1980s, which suggests that they are not reporting activity limitation to legitimate high unemployment rates during this time. The rate of severe activity limitation among nonwhite women aged 45 to 54 also did not change much between 1970 and 1982, but may have risen on average since. White men and white women of these ages, on the other hand, have both experienced steady increases in rates of severe activity limitation, perhaps 20 percent among white men, about 30 percent among white women prior to 1982, and, perhaps, another 15 percent in the subsequent four years. The increasing prevalence of severe activity limitation among white men and women aged 45 to 54 is troubling for several reasons. First, it suggests that the period of disability is lengthening, meaning both that fewer individuals will remain in the labor force and that those who leave it will seek disability benefits for much longer periods. Second, it suggests that the historical rise in work disability rates will not soon abate.

Figures 3 and 4 show the trends in rates of all forms of activity limitation for persons aged 55 to 64 and 45 to 54, respectively. Only white women sustained substantial increases in the rate of all forms of activity limitation between 1970 and 1986. This is consistent with the findings of other studies that white women are, in some sense, catching up with white men and minority women in their rates of disability (Verbrugge 1984; Myers and Manton 1984). It also suggests that the extent to which individuals report disability to legitimate a withdrawal from activities is limited because the milder forms of disability are likely to be the most contestable cases, but the rates of these milder cases have not risen so substantially.

Overall, the data presented here suggest that rates of severe activity limitation have increased for white women and white men aged 45 to 54 and 55 to 64 since 1970. For nonwhite men, rates of severe activity limitation rose among those aged 55 to 64 and held steady among those aged 45 to 54. Nonwhite women in both age groups certainly did not experience dramatic changes in severe activity limitation rates, but neither did they experience decreases (if one accepts

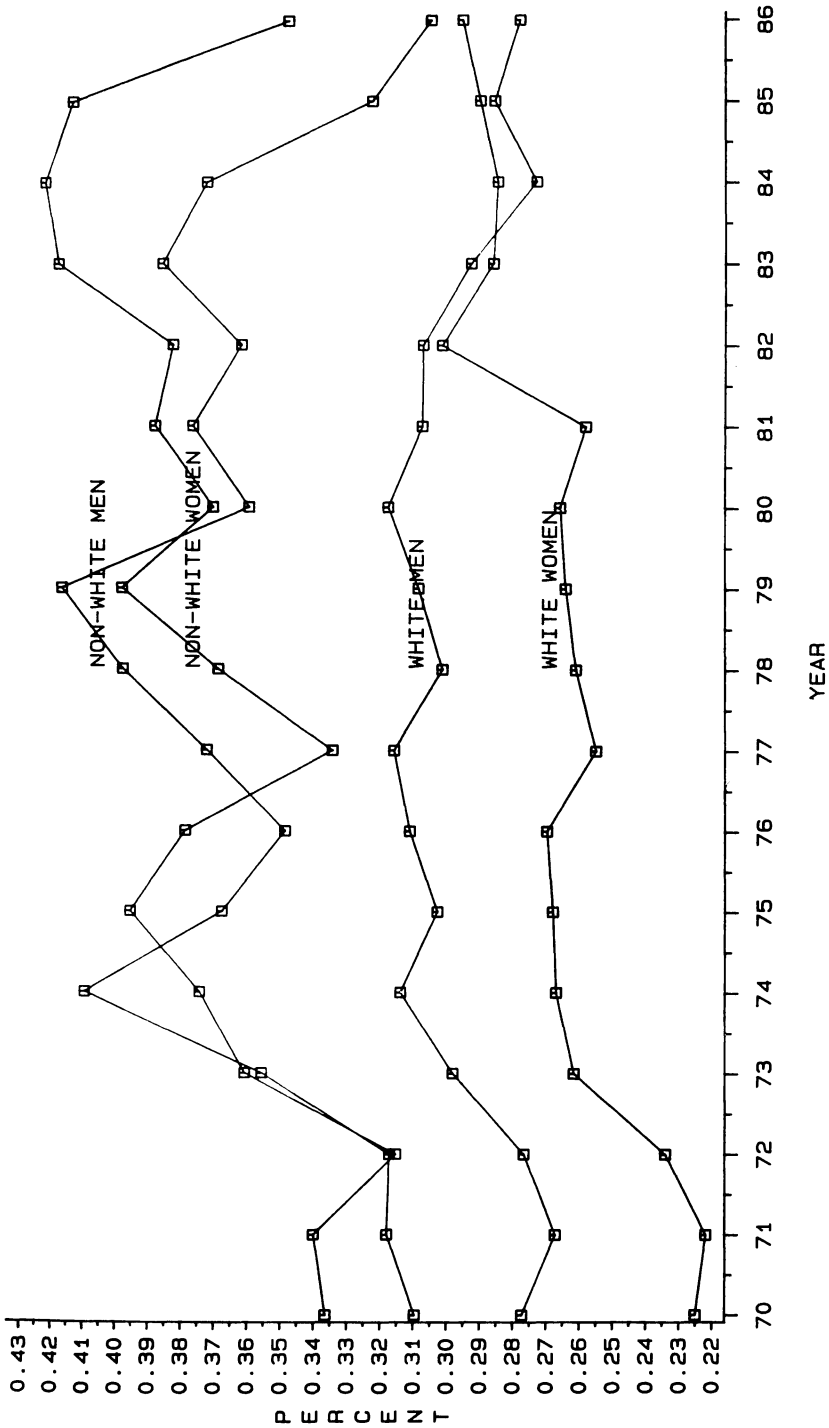


FIG. 3. Percentage of persons aged 55 to 64 with any form of limitation, United States, 1970-1986, by race and sex.



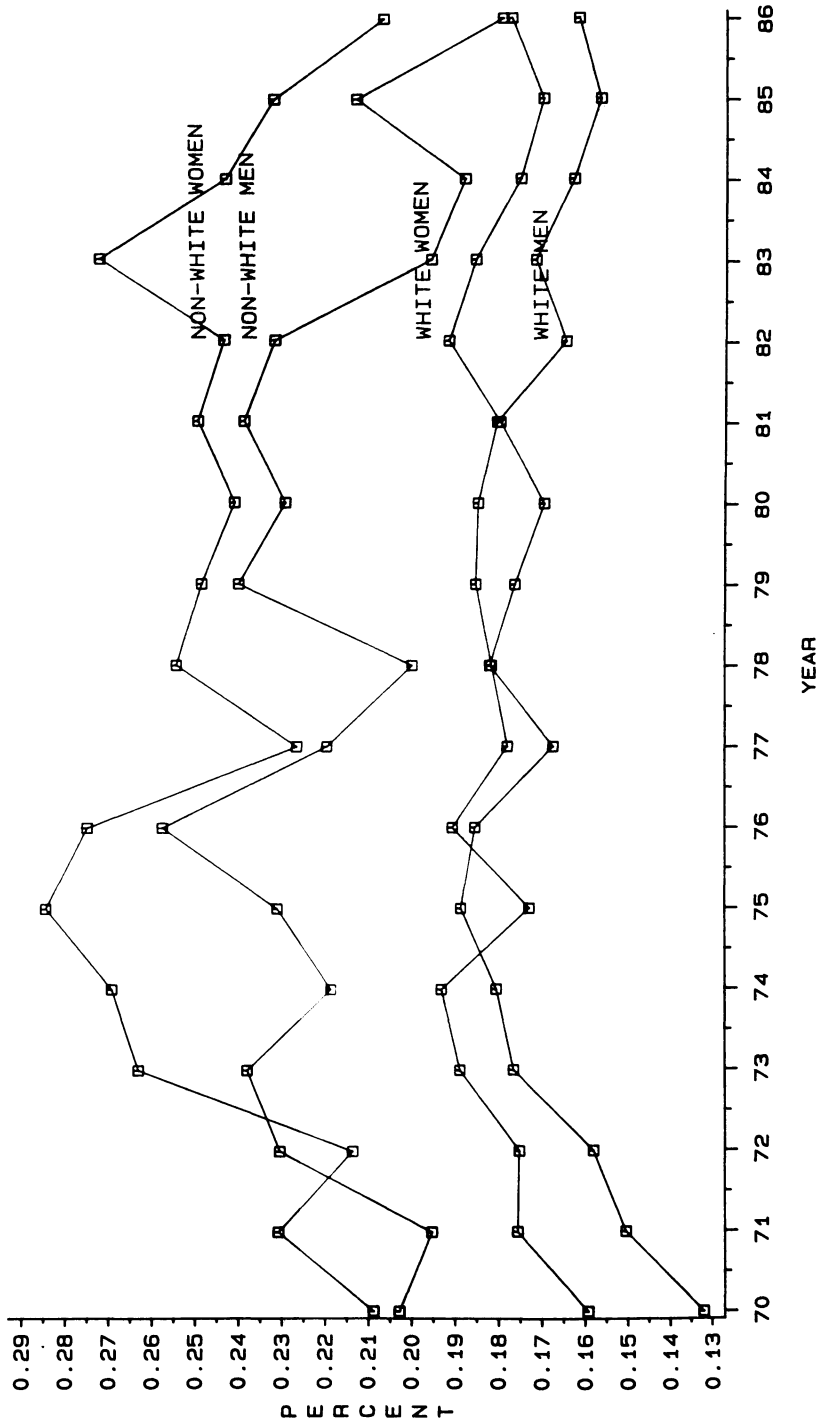


FIG. 4. Percentage of persons aged 45 to 54 with any form of limitation, United States, 1970–1986, by race and sex.

the post-1982 results at face value, then their rates are on the rise, too). Thus, if severe activity limitation puts one at heightened risk for work loss after onset of chronic disease, then a substantially higher proportion of the total population faces that risk than in the early 1970s.

## Labor-Force Participation

No trend in American society has been as well chronicled as the dramatic change in the labor-force participation rates of women since World War II. Most analysts, however, focus on the average labor-force participation rate among women of all working ages which obscures differences among age groups during this time.

A little over four decades ago, Rosie the riveter was sent home to take care of the children. Her husband's income allowed her to do so. In the 1950s, Frank Levy writes, median family income increased by over 40 percent and the average 30-year-old wage earner had to pay only 14 percent of his gross income for his mortgage (Levy 1987). These rising incomes led, in turn, to large families which, in reciprocal fashion, reinforced Rosie's decision to remain out of the labor force. The rapid increase in incomes continued almost without interruption during the 1960s (real incomes rose 3 percent a year during that decade). Nevertheless, some of the women who had raised children in the 1950s went back to work in the 1960s: labor-force participation rates among women aged 55 to 64 rose from 37 percent to 43 percent during this decade (table 2). It has not risen since. While labor-force participation among women in the immediate preretirement years has stagnated since 1970, rates among younger women have continued to climb, increasing by slightly less than one-fifth among those aged 45 to 54, by one-half among those younger than that (data not shown in table), and by one-quarter across all working age groups. The social phenomenon of increasing participation in the labor force is largely concentrated among younger women. Many of these young women who work no doubt do so because fifteen years of declining real wages preclude families from living on the wages of a single worker, because of the increasing cost of living (the average mortgage on the average house now consumes over 40 percent of the average man's earnings), and because many of them are raising children alone.

TABLE 2  
 Labor-force Participation Rates of Civilian Population Aged 18 to 64, by Sex, Age, and Year

Year	Both sexes, all ages	Males			Females		
		All ages	45-54	55-64	All ages	45-54	55-64
1960	67%	94%	96%	87%	44%	50%	37%
1965	67	92	96	85	45	51	41
1970	76	91	94	83	51	55	43
1975	71	88	92	76	54	55	41
1980	78	89	91	72	62	60	41
1982	75	88	91	70	63	62	42
1985	76	88	91	68	65	64	42

Source: Author's analysis of data from U.S. Department of Labor, Bureau of Labor Statistics 1961, 1971, 1981, 1986.

The decline in labor-force participation among men is concentrated among those in the immediate preretirement years, having fallen by almost 20 percentage points among those aged 55 to 64 since 1960 (table 2). This is not to deny the significance of the slight decline among men aged 45 to 54, nor the steady erosion of employment opportunities for nonwhite men of all ages (data for nonwhite men summarized in figure 6). But it does indicate that in the aggregate, the largest portion of the overall decline in men's labor-force participation occurred among those aged 55 to 64.

### Labor-force Participation and Race

The two most significant long-term secular trends in the labor market since 1970 are the rise in women's participation, concentrated among younger women as noted, and the decline in men's participation, dramatically in the case of those aged 55 to 64. These trends differ between the races (figures 5–8). Among men (figure 5), the decline in labor-force participation rates of those aged 55 to 64 has occurred faster among nonwhites than whites (declining 23 percent among the former, about 18 percent among the latter). Among men of all working ages, white men's participation rate fell by about 4 percent while that among nonwhites declined by 10 percent. Thus, nonwhite men accounted for a disproportionate share of the decline in overall male labor-force participation as well as that among men in the immediate preretirement period.

The increase in the labor-force participation of nonwhite women (figure 6) occurred across the age spectrum (about 15 percent among those aged 55 to 64; about 14 percent among those of all working ages). As previously noted, about the same percentage of white women aged 55 to 64 are in the labor force now as in 1970. Thus, the dramatic increase in the labor-force participation rate of younger women occurred disproportionately among white women, whose labor market profile is now very similar to that of nonwhite women: about 60 percent of the two groups are in the labor market.

### Activity Limitation and Labor-force Participation

Activity limitation, like race, accentuates overall labor market trends. Labor-force participation rates of men reporting activity limitation are

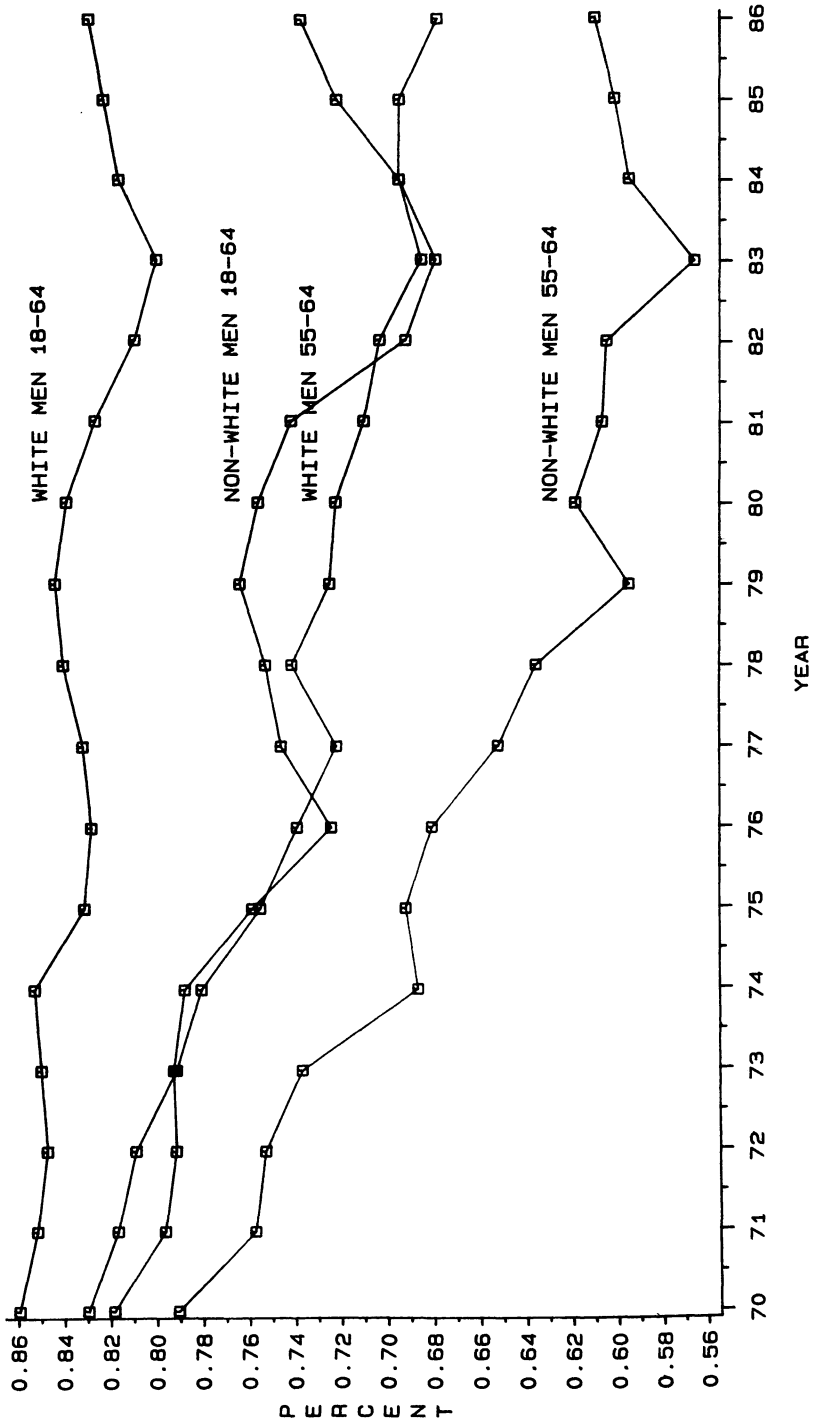


FIG. 5. Percentage of men in United States labor force, 1970-1986, by race and age.

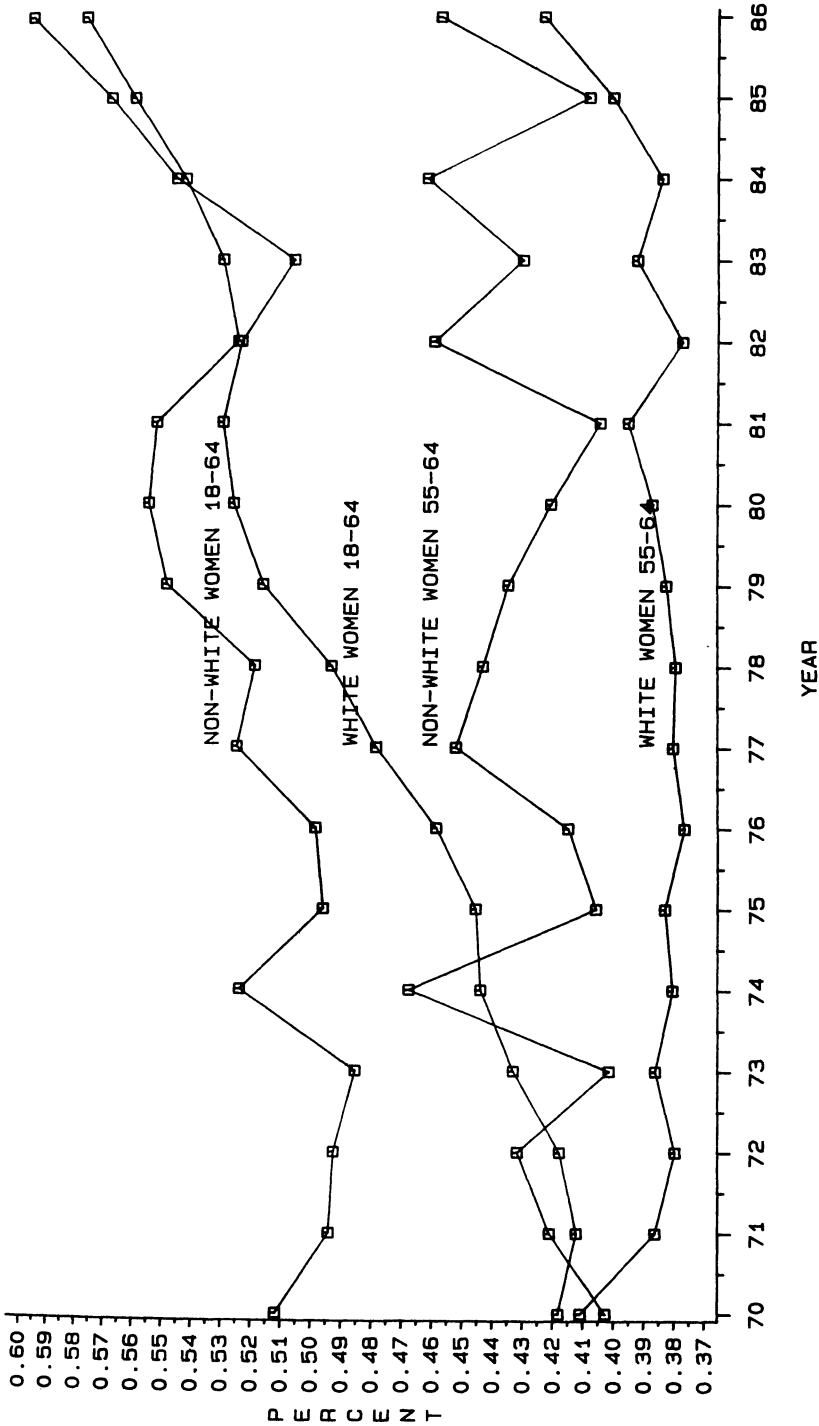


FIG. 6. Percentage of women in United States labor force, 1970-1986, by race and age.

dropping faster than those who do not, with this effect more pronounced among nonwhite men than among white men and most pronounced among nonwhite men of immediate preretirement ages (figures 7 and 8). Thus, labor-force participation rates among nonwhite men aged 55 to 64 reporting activity limitation fell by close to one-half between 1970 and 1986; among nonwhite men of all working ages with activity limitation, the decline was about 25 percent (figure 8). Nonwhite men aged 55 to 64 reporting no activity limitation sustained a 20 percent decrease in labor-force participation rates, while for those of all working ages the corresponding figure was 10 percent. By 1986 fewer than one-quarter of nonwhite men aged 55 to 64 with activity limitation were in the labor force.

The trends were similar for white men (figure 7), but the relative declines were less than for nonwhites, and the absolute levels of labor-force participation remain universally higher. Between 1970 and 1986, the labor-force participation rate among all working-age white men reporting no activity limitation declined, but by only 4 percent. In contrast, the drop in labor-force participation among all working-age white men reporting activity limitation was three times as swift. Still, almost 60 percent of working-age white men with activity limitation continue in the labor force, a rate almost twice as high as that among such nonwhites. Likewise, 40 percent of white men aged 55 to 64 reporting limitation are in the labor force, or almost twice the rate among nonwhites with the same characteristics. These differences in the labor-force participation of white and nonwhite men with activity limitation are much greater than between such men reporting no limitation (in 1986, 83 and 74 percent of white and nonwhite men free of limitation, respectively, were in the labor force). Thus, poor health worsens a situation already made difficult by race and the characteristics associated with it.

If the withdrawal of men from the labor force occurred more quickly among those reporting activity limitation, the entrance of women claiming limitation occurred more slowly than among those without limitation (figures 9 and 10). Among white women aged 55 to 64, rates of labor-force participation changed little between 1970 and 1986, regardless of limitation status (figure 9). Among white women of all working ages, labor-force participation rates increased by about one-third among those reporting activity limitation, but among such women free of limitation, the increase was almost 50

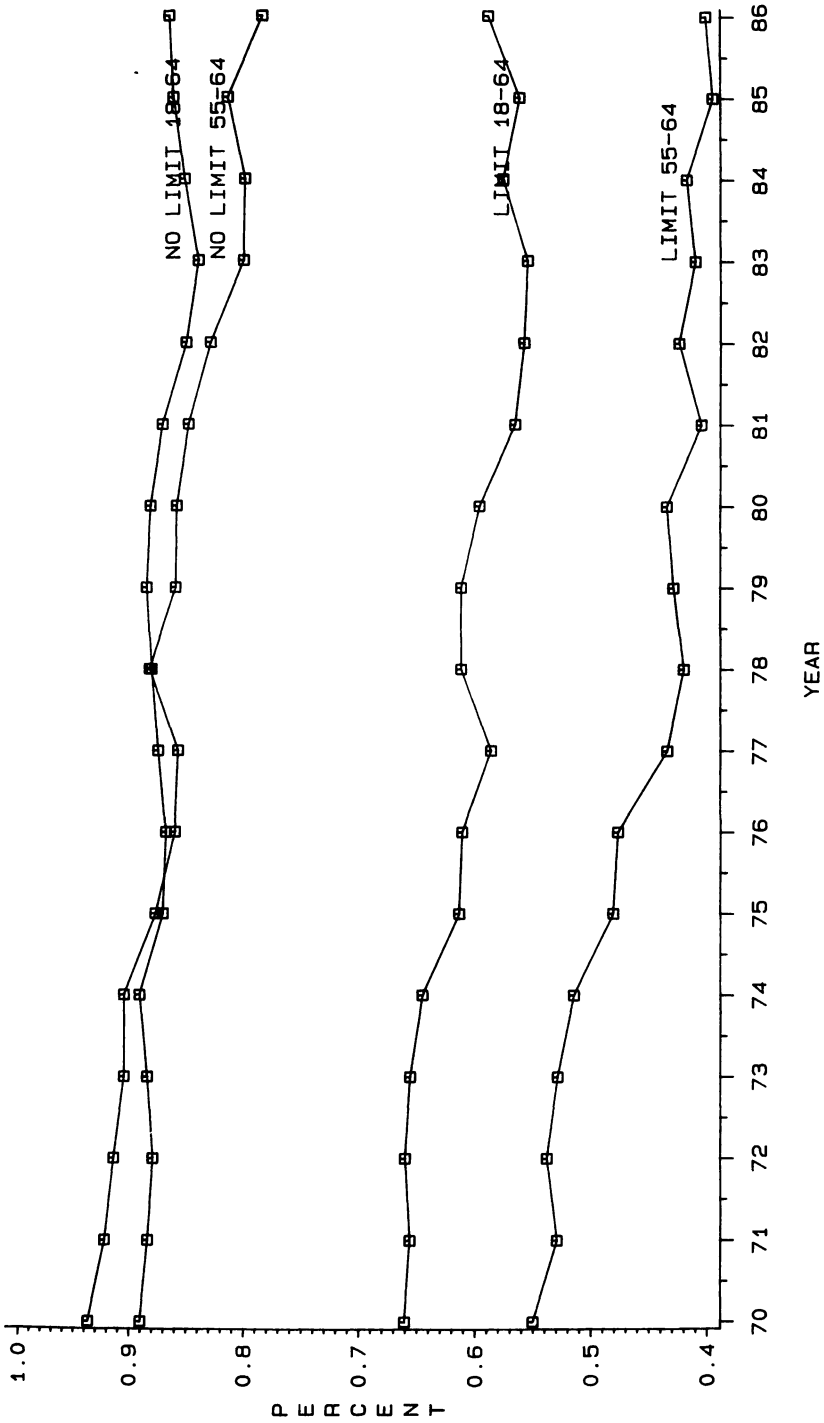


FIG. 7. Percentage of white men in United States labor force, 1970–1986, by limitation status and age.



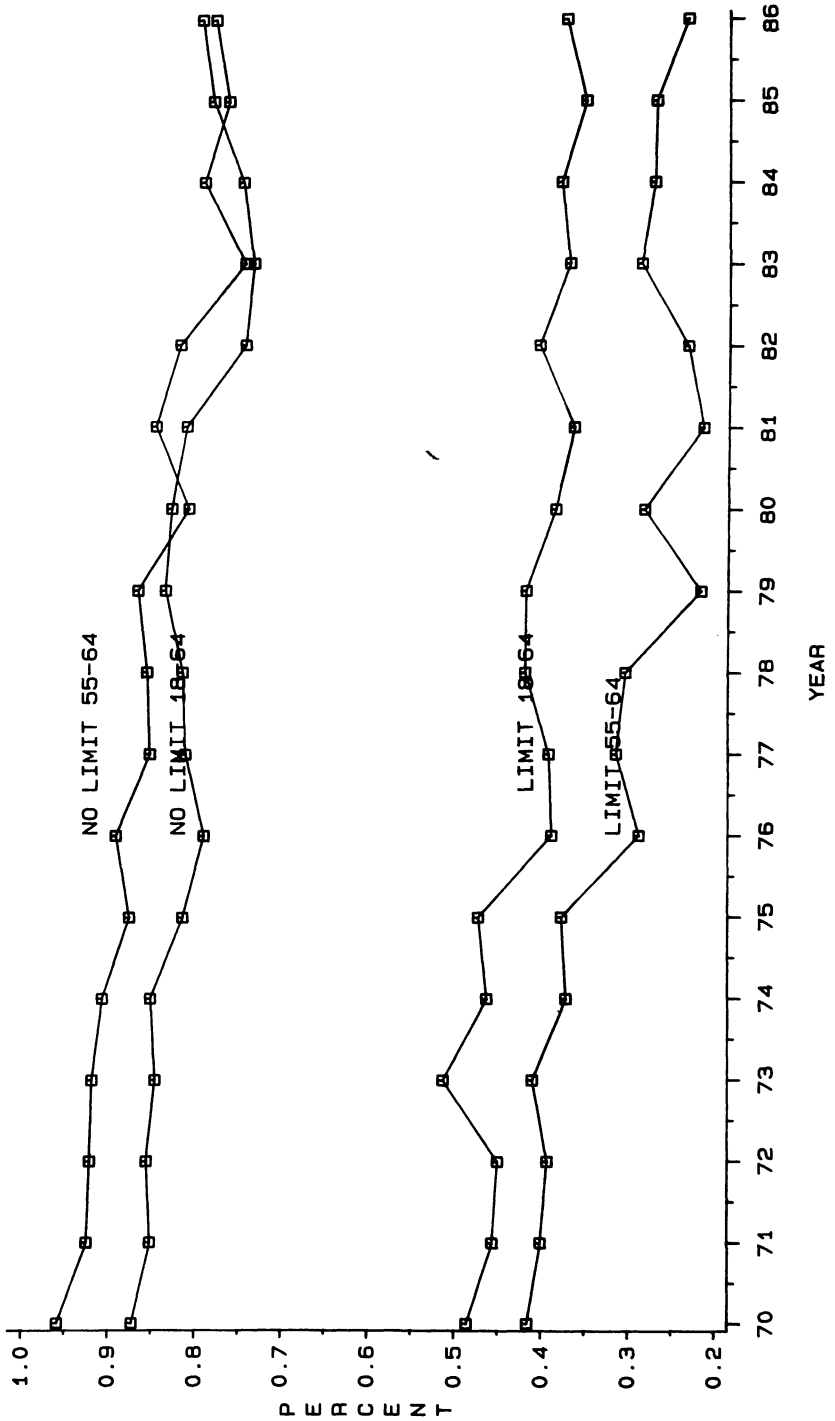


FIG. 8. Percentage of nonwhite men in United States labor force, 1970-1986, by limitation status and age.

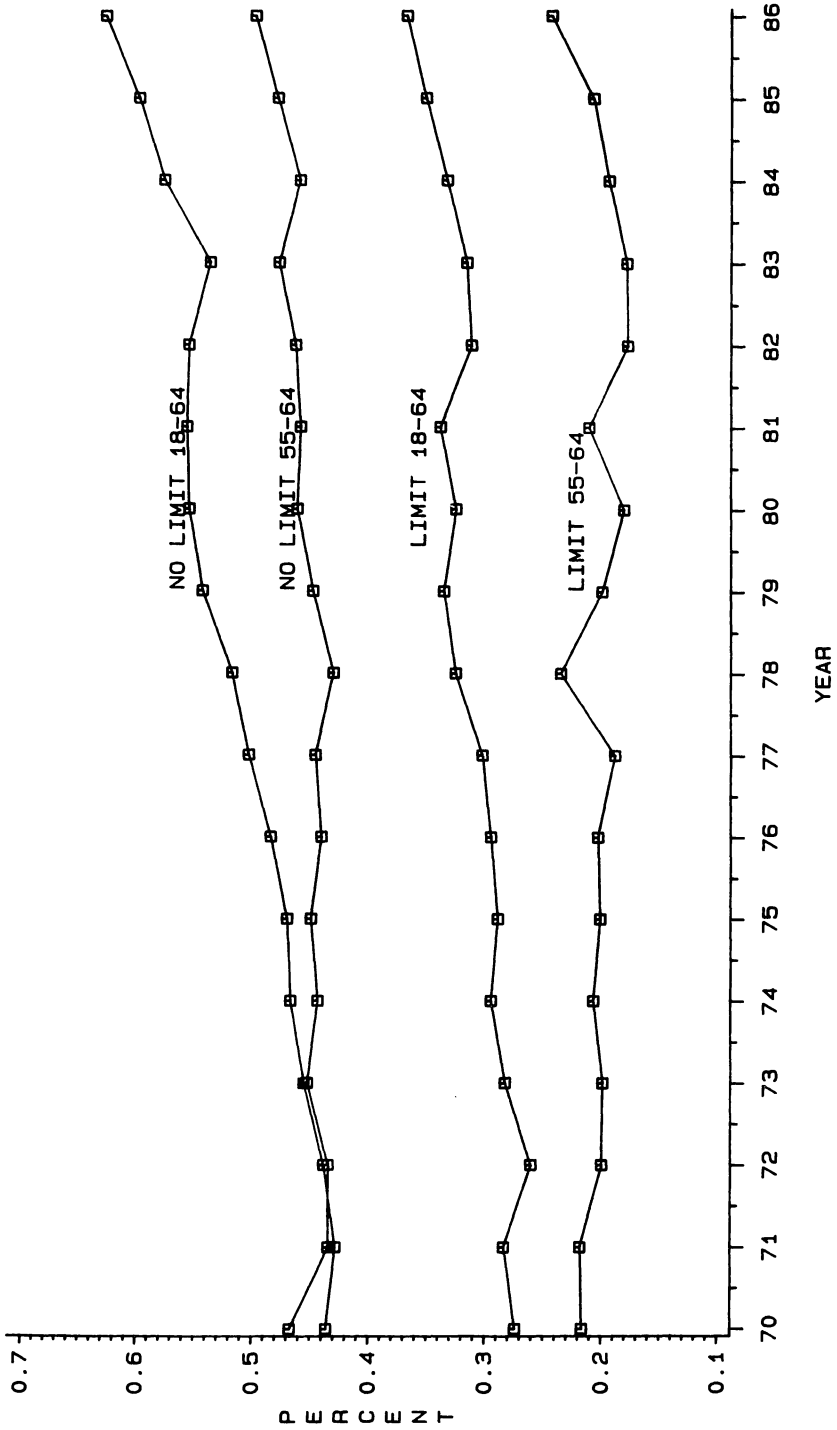


FIG. 9. Percentage of white women in United States labor force, 1970-1986, by limitation status and age.

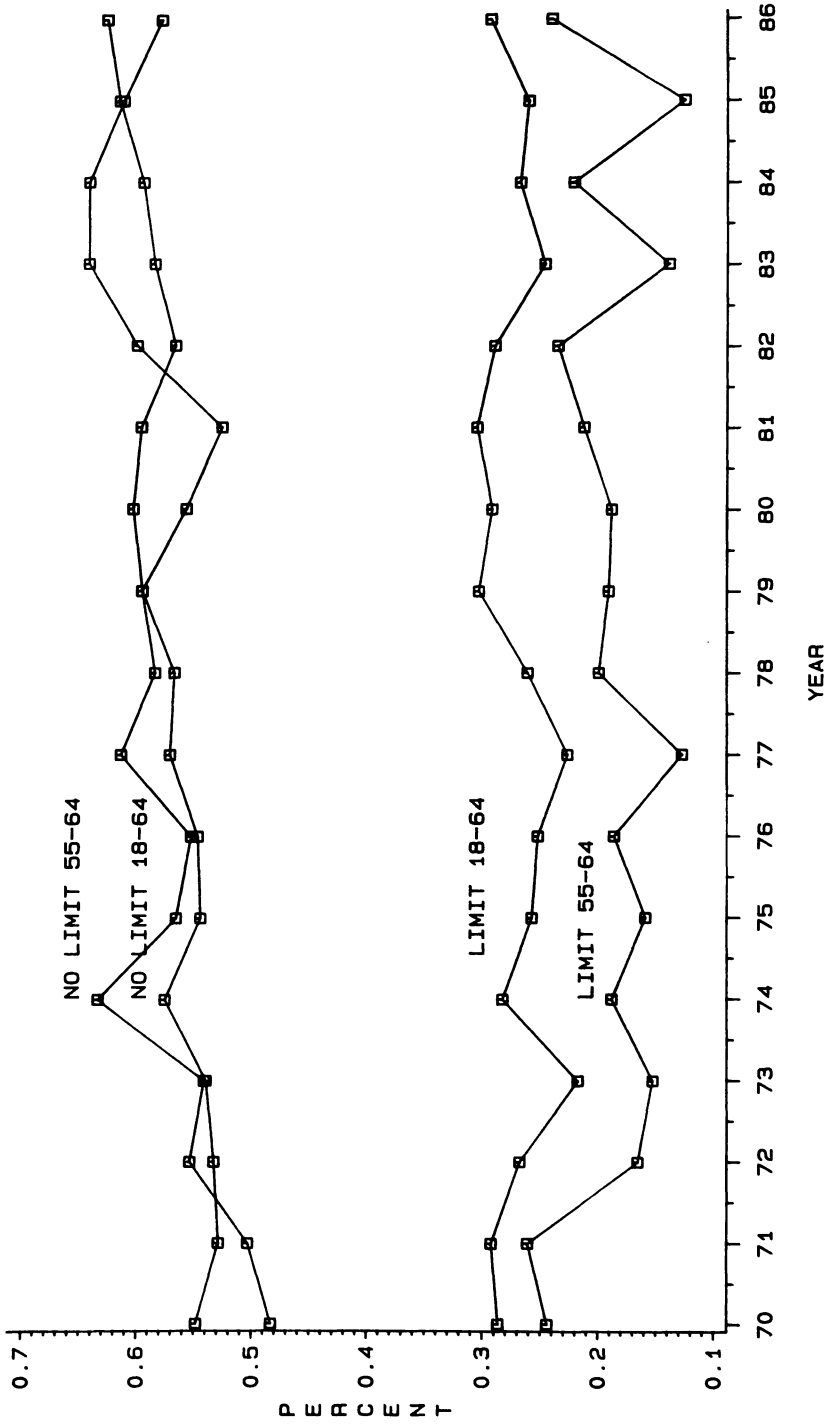


FIG. 10. Percentage of nonwhite women in United States labor force, 1970-1986, by limitation status and age.

percent. The proportion of nonwhite women with activity limitation in the labor force—regardless of age—wavered dramatically over the course of the last two decades, but on average did not change much (figure 10). All the growth in labor-force participation among nonwhite women, therefore, occurred among those free of activity limitation.

But if the effect of activity limitation has been to accentuate labor-market trends over time, its absolute cross-sectional impacts are also profound. In 1986, white men and women aged 55 to 64 with activity limitation had one-half the labor-force participation rates of those without. The corresponding figures for nonwhite men and women were 40 and 30 percent, respectively. One would be hard put to ascribe differences of these magnitudes to reporting bias.

The proportion of people with and without severe limitation who are in the labor force might provide a measure of the impact of chronic disease less prone to reporting bias. Unfortunately, the definition of work-related severe limitation used in the National Health Interview Survey changed in 1982, precluding estimates of the time trend in labor-force participation among those with and without severe limitation. Using the current more-work-specific definition from the 1986 survey, however, I found that white men aged 55 to 64 with severe work limitations were about 15 percent as likely to be in the labor force as those without. The corresponding figure for nonwhite men was 10 percent; for white women, 28 percent; and for nonwhite women, 26 percent.

## Social Security Disability Insurance Program

The SSDI program was initiated in 1956 to provide income to people who could no longer work because of illnesses expected to last into the future (this discussion of changes in the SSDI programs draws upon Stein 1980 and Berkowitz 1987). The program expanded upon a prior Social Security program to secure retirement benefits of those forced out of the labor market for health reasons. Unlike workers' compensation, which required that an illness or injury occur at work, or disabled veterans' pensions, which were granted only in the event of service-related disability, SSDI benefits were to be available to all those aged 50 or over who had been paying into the Social Security

trust fund. In 1958 coverage was extended to dependents. In 1960 the age requirement was lifted, enabling younger individuals to qualify for benefits. Finally, in 1972 SSDI beneficiaries became eligible for Medicare benefits two years after first receiving entitlement to the program.

These programmatic changes were probably sufficient to spawn the growth which was to occur in the SSDI program, but they occurred at the same time as the prevalence of severe activity limitation increased at all ages, as the overall population aged, as the economy began to sputter, and as the first studies implicating SSDI in the decline of male labor-force participation appeared. As a result of these trends, the Carter administration proposed legislation, later adopted by Congress, to lower the absolute level of benefits and the proportion of one's working income SSDI would replace. This legislation also liberalized the benefits provided to SSDI beneficiaries during a trial work period in the hope that this would enable more of them to secure employment after a period of recovery. Finally, President Carter proposed more frequent and more stringent reviews of the entitlement of current beneficiaries, criteria which the Reagan administration implemented almost immediately after taking office. These changes did more than stem the growth in the SSDI program; they reversed it.

But they did so at great political cost and not at a propitious time. Hundreds of thousands of SSDI beneficiaries were removed from the rolls in 1981 and 1982 on the basis of an administrative judgment that their conditions had improved, reviews which were frequently incorrect and almost always easy to disprove if one hired a "physician expert" to testify. Moreover, the purging came as the worst postwar recession precluded even the healthy from finding work. As expected, the Democratic-controlled House held hearings to attack these changes; unexpectedly, the Republican-controlled Senate did so as well. As a result of the political backlash, the Reagan administration was forced to rescind the most egregious aspect of the new policy of periodic reviews: purging beneficiaries prior to a full hearing. This made removing people from the rolls far more difficult.

## Trends in the Flow, Stock of Beneficiaries

The number of SSDI beneficiaries is, first and foremost, a function of the number of people who know about the program, believe them-

selves eligible for entitlement because of a health-related problem, and who proceed to apply for benefits. But the beneficiary stock also depends upon the number of applicants certified as meeting the health and employment criteria for entitlement (the Social Security Administration uses the term "allowance" to connote those so certified), the length of time to process the application, the length of time between an allowance and the start of benefits (connoted by the term "award"), and the number of people who are pushed off the rolls when decertified ("terminated").

The Social Security Administration exercises direct control over entitlement once someone applies for benefits by the speed with which they decide each case and by altering the proportion of people who pass each screen. The way SSA treats applications already in the stream as well as current recipients, however, affects the thinking of potential beneficiaries, causing the number of applications to rise or fall as perceptions of the likely success of the endeavor ebb and flow. Thus, allowances and awards peaked in the years immediately after Medicare benefits were added to SSDI, and this led to a continuing increase in the application rate (table 3). After the initial efforts of the Carter administration to constrain program growth in the late 1970s, by 1980 the application rate had declined by 15 percent, but the allowance and award rates declined even faster, by one-half in fact. As a result, the odds that an application would result in an award fell from 46 to 27 percent within five years. The efforts of the Reagan administration in its first year in office, in contrast, suppressed applications more than allowances or awards and so the ratio of awards to applications rose slightly. Overall, the efforts of the Carter and Reagan administrations worked to slow the growth in new beneficiaries by over one-half, from over 711 per 100,000 insured in 1975 to less than 300 in 1982. But Reagan suffered politically from doing so and he was forced to rescind some of the most stringent regulations. Applications, allowances, and awards subsequently rose, but remain far below what they had been in the mid-1970s.

To reduce the number of new beneficiaries significantly took two administrations almost seven years. The Reagan administration took only two years to effect a dramatic change in the number of current beneficiaries purged from the rolls (table 4). Between 1980 and 1982, the number of people forced off SSDI rose from 400 to 500,000 a year. This represents an increase of over one-third in the termination rate among disabled workers and almost one-half if one includes

TABLE 3  
 Size of Population Insured for; Number of Applications for; Number of Allowances of; and Awards of Social Security Disability Insurance Benefits, by Year

Year	Number insured (millions)	Applications		Allowances		Awards		Awards/ Application
		Number (100,000s)	100,000 Insured	Number (100,000s)	100,000 Insured	Number (100,000s)	100,000 Insured	
1960	46.4	NA	NA	NA	NA	2.08	448	NA
1965	53.3	5.29	993	2.72	510	2.54	476	.48
1970	72.4	8.70	1,201	3.71	512	3.56	484	.40
1975	83.3	12.84	1,542	6.15	738	5.92	711	.46
1980	95.6	12.64	1,322	3.92	410	3.45	357	.27
1982	102.4	10.21	997	2.99	292	2.97	290	.29
1985	106.7	11.69	1,096	3.77	353	4.09	383	.35

Source: Author's analysis of data from U.S. Department of Health and Human Services, Social Security Administration 1982, 3-14; 1987, 114, 131, 135.

TABLE 4  
Number of Terminations of Social Security Disability Insurance Benefits,  
by Year

Year	Number of terminations (100,000s)	Number of terminations per disabled-worker beneficiaries	Number of terminations per all beneficiaries
1960	.89	.20	.13
1965	1.57	.16	.09
1970	2.60	.18	.10
1975	3.30	.13	.08
1980	4.08	.14	.09
1982	5.05	.19	.13
1985	3.40	.13	.09

*Source:* Author's analysis of data from U.S. Department of Health and Human Services, Social Security Administration 1985, 199; 1986a, 226; 1987, 232; 1986b, 34-37.

dependents. The termination rate has since fallen to 1975 levels, in part because of the political backlash and in part because enforcing more stringent entitlement criteria reduces the number of people who can be terminated because they no longer meet the medical listings.

Reducing the number of new beneficiaries receiving entitlement and increasing the number of old beneficiaries purged from the rolls affects the stock of current beneficiaries, but at a lag (table 5). The application and award rates peaked in 1975, but the total number of disabled-worker and all beneficiaries was highest in 1980. At that point the number of SSDI recipients approached 3 percent of the labor force and the number of beneficiaries including dependents exceeded 2 percent of the United States population, both rates having risen by about 50 percent in a decade. Between 1980 and 1982 the number of disabled worker beneficiaries fell by 260,000 in absolute terms; the number of disabled-worker beneficiaries per labor-force participant fell by 40 percent. The number of dependents receiving SSDI benefits declined by 450,000 (about 20 percent in relative terms) during this time. This occurred while unemployment was reaching a 30-year high. The confluence of severe recession and program re-trenchment was a volatile mix politically and so it should come as no surprise that the regulations making the reductions in the SSDI rolls possible were partially rescinded.



TABLE 5  
 Number of Persons in Current Payment Status for Social Security Disability Insurance Benefits, by Year

Year	Number of disabled- worker beneficiaries	Number of disabled- worker beneficiaries per 100,000 insured	Number of all beneficiaries	Number of all beneficiaries per 100,000 U.S. population
1960	455,371	571	687,451	381
1965	988,074	1,854	1,739,051	900
1970	1,492,948	2,062	2,664,995	1,300
1975	2,488,774	2,047	4,352,200	2,015
1980	2,861,253	2,993	4,682,172	2,100
1982	2,603,713	1,796	3,973,465	1,709
1985	2,656,500	2,440	3,907,169	1,600

Sources: Author's analysis of data from U.S. Department of Health and Human Services, Social Security Administration 1986b, 37; 1985, 93.

As a result, since 1982 the number of disabled-worker beneficiaries has resumed its long-term rise. Because there are now fewer dependents per disabled worker beneficiary, however, the number of all beneficiaries per population has continued to fall. SSDI is gradually becoming more of what it was intended to be: compensation for those who cannot work due to illness, not a general income support program.

## Trends in the Level of SSDI Awards and Benefits

Growth in the magnitude of SSDI benefits during the 1970s matched the growth in the number of beneficiaries. This was of concern in its own right because SSDI began to take a sizable portion of the federal social budget and because program expenditures depleted the disability trust fund. But program analysts worried more about the effect of rising SSDI benefits on the incentive to work or to seek entitlement because, relative to means-tested transfer programs, SSDI benefits were substantial.

Table 6 charts the growth in SSDI awards (benefit levels for newly entitled recipients) and average benefits among all beneficiaries. These figures underestimate the real value of the SSDI entitlement because, after 1972, beneficiaries could begin to receive Medicare. This is especially valuable for those whose alternative is Medicaid which accompanies means-tested transfers since many fewer physicians and hospitals accept Medicaid payments. Although the nominal values in the first three columns of table 6 convey little information about the value of SSDI benefits, I include them because they do indicate that even this, the best of the income-support programs, confers relatively small levels of payment. The average SSDI disabled-worker beneficiary receives less than \$5,000 a year. The average beneficiary—disabled workers and dependents—receives just over \$3,700 a year.

Although the absolute level of SSDI payments has always been quite low, the relative value increased dramatically in the 1970s. After rising by just 10 percent during the 1960s, the average SSDI benefit among disabled-worker beneficiaries rose by one-third in the 1970s. The average award to new beneficiaries grew even faster, however. After about a 20 percent rise in the 1960s, new awards were almost 40 percent larger in 1980 than 1970. And new awards were 10 percent larger than average benefits in that year. This was

TABLE 6  
Amount of SSDI Awards and Benefits for Disabled Workers and All Beneficiaries in Current and 1985 Dollars, by Year  
(dollars per month)

Year	Average SSDI award amount for disabled workers	Average SSDI benefit amount for disabled workers	Average SSDI benefit amount for all beneficiaries	Average SSDI award amount for disabled workers, 1985 \$s	Average SSDI benefit amount for disabled workers, 1985 \$s	Average SSDI benefit amount for all beneficiaries 1985 \$s
1960	\$ 91	\$ 89	\$ 70	\$327	\$326	\$251
1965	97	98	70	327	327	236
1970	140	131	91	383	359	249
1975	241	226	156	477	448	309
1980	406	371	270	524	478	348
1982	444	441	333	444	441	333
1985	474	484	312	474	484	312

Source: Author's analysis of data from U.S. Department of Health and Human Services, Social Security Administration 1986b, 37-38, 58.

because newly entitled beneficiaries had paid into Social Security at higher levels than those who had begun to receive SSDI in prior years. The 1980 reforms instituted by the Carter administration stopped both the increase in payments to all disabled-worker beneficiaries (new and old) and the relatively larger increase in payment levels for new beneficiaries. Even after recovering some of their value in the last few years, average benefit levels among all disabled-worker beneficiaries are about what they had been in 1980 and new awards are now smaller than average benefits, having fallen to 1975 levels. The number of dependents receiving benefits has declined in this decade (table 5). The magnitude of their benefits has also fallen, by 10 percent and, unlike benefits for disabled-worker beneficiaries, this trend continues.

The reforms of the early 1980s provided short-term, albeit dramatic, respite from the growth in the number of disabled-worker beneficiaries and in the magnitude of awards and average benefits that had been occurring. But the pressures for program growth being what they are, the historical rise in beneficiaries and benefits soon resumed, although at a slower pace than before. The reforms did succeed in reshaping SSDI from a general income-support program for workers and their families into one more sharply focused on disabled workers alone. Since the preponderance of program costs derive from benefits paid to disabled-worker beneficiaries, however, the reforms in the 1980s may have provided only a severe downward ratchet, albeit one that removed 700,000 people from the rolls and decreased the incomes of the remaining beneficiaries.

## The Microeconomic Context of SSDI Benefits

SSDI is an alternative to work and with rising benefit levels, an increasingly attractive one. But it is also an alternative to other categorical disability programs for which the potential SSDI beneficiary might qualify, as well as such means-tested programs as SSI and welfare. Thus, SSDI probably grew both by enticing those in the labor force with incomes higher than its benefits to stop work and by enticing beneficiaries of other programs with lower ones.

There are two principal nonmeans-tested national disability compensation programs other than SSDI (I exclude workers' compensation because, although it is a government mandated program, it is privately

run and data on the level of workers' compensation benefits are fragmentary). The "black lung" program, instituted in 1970 to compensate coal miners with this disease, paid \$325 a month in 1975 (in 1985 terms), but benefits have declined about 10 percent in the interim. By 1985, the average black lung benefit was only 60 percent of the amount received by disabled-worker beneficiaries of SSDI. Likewise, veterans with a service-connected disability are eligible for compensation. But even after steady increases in the real value of monthly benefits, disabled veterans average less than two-thirds of the amount SSDI beneficiaries receive (table 7).

First instituted in the mid-1970s to replace separate programs for the aged poor, blind, and disabled, supplemental security income (SSI) is the principal income support for disabled individuals whose employment histories are not sufficient to qualify them for SSDI. SSI benefits for the disabled have always been just slightly over one-half of SSDI, amounting to \$263 per month in 1985. Thus, SSDI pays monthly benefits from 40 to 100 percent more than other disability compensation programs and the gap has widened over time.

Although persons with activity-limiting chronic conditions would rarely draw upon the nondisability income-support programs (aid to families with dependent children [AFDC] and general assistance), I have included the average benefit levels for these programs to indicate how much better persons receiving SSDI have fared. While the average benefits of disabled-worker beneficiaries were as high as they had ever been in 1985, AFDC benefits have declined steadily since 1970, the value of payments to individuals having fallen by one-half and to families by 15 percent. Likewise, since the mid-1970s the value of general assistance payments to individuals has declined by one-third and to families by one-fifth. Thus, we have established a hierarchy of income-support programs and have chosen to maintain the incomes of the disabled who meet Social Security eligibility criteria better than those who do not and to support both groups better than beneficiaries of the AFDC and general assistance programs.

When the first energy crisis hit in 1973, the real wages of workers started to fall. Even after a period of recovery in the mid-1980s, wages are still substantially below what they were when they peaked in the early 1970s and, given the exceptional growth that occurred throughout the 1950s and 1960s, much below what we had come to expect they would be (table 8, second column). During this time,

TABLE 7  
Amount of Transfer Payments per Month in 1985 Dollars, by Kind and Year

Year	SSI <sup>1</sup>		AFDC <sup>2</sup>		General assistance <sup>3</sup>		Disabled veterans <sup>4</sup>		Black lung <sup>5</sup>	
	Average federal, state SSI benefits, all entitlements	Average federal, state SSI benefits, disabled beneficiaries	Average payments for individuals	Average payments for families	Average payments to individuals	Average payments to families	Average payments to beneficiaries, including dependents	Average payments to beneficiaries, including dependents	Average payments to beneficiaries, including dependents	Average payments to beneficiaries, including dependents
1960	—	—	\$381	\$101	\$248	\$ 90	—	—	—	—
1965	—	—	448	108	226	105	\$243	—	—	—
1970	—	—	501	132	296	148	260	\$227	—	—
1975	\$223	\$283	434	135	281	194	283	283	325	325
1980	219	258	361	124	205	164	289	289	277	277
1982	219	255	333	114	195	156	305	305	278	278
1985	229	263	342	116	196	157	308	308	290	290

Source: Author's analysis of data from U.S. Department of Health and Human Services, Social Security Administration 1985, 242<sup>1</sup>, 230<sup>1</sup>, 1986b, 48<sup>2,3</sup>; U.S. Bureau of the Census 1983<sup>4</sup>.

TABLE 8  
 Personal Income, Wage and Salary Disbursements, and Social Security Disability Awards in 1985 Dollars, by Year

Year	Personal income per capita	Wage and salary disbursements per labor-force participant	Social Security disability awards	Social Security disability awards divided by personal income per capita	Social Security disability awards divided by wage and salary disbursements per labor-force participant
1950	\$ 6,595	\$10,250	—	—	—
1960	7,991	13,653	\$3,924	49%	29%
1965	9,497	16,385	3,924	41	24
1970	10,837	17,709	4,596	42	26
1975	12,040	15,616	5,724	48	37
1980	12,267	16,130	6,288	51	39
1982	12,635	15,832	5,328	42	34
1985	13,852	16,806	5,688	41	34

Source: Author's analysis of data from U.S. Bureau of the Census 1983, 6, 405; 1986, 8, 421; U.S. Department of Health and Human Services, Social Security Administration 1985, 66.

TABLE 9  
Average Hourly and Weekly Wages in 1985 Dollars and Average Number  
of Hours Worked per Week, by Year

Year	Average hourly wages	Average weekly wages	Average hours worked per week
1950	\$5.92	\$234	39.5
1960	7.50	291	38.8
1965	8.29	324	39.1
1970	8.85	329	37.2
1975	8.97	325	36.2
1980	8.59	303	35.3
1982	8.45	294	34.8
1985	8.57	299	34.9

Source: U.S. Department of Labor, Bureau of Labor Statistics 1985, 194, 201.

average hourly wages have declined by about 4 percent from their early 1970s' peak (table 9). Average weekly wages have declined much faster, by about 10 percent. Weekly earnings are declining faster than hourly earnings primarily because the work week is shorter, whether by choice or design.

To maintain consistency with the other tables in this article, I have tracked changes in income levels over five-year periods. Because real wages did not peak until 1973, the table indicates less of a decline than actually occurred. Between 1973 and 1982, real wages declined by about one-quarter. After the recent recovery, real wages are still lower than their 1973 levels by 20 percent.

Paradoxically, per capita income has been rising for the 15 years that real wages have been falling (table 8, first column). This is because nonwage income (transfers, including all forms of Social Security and welfare, as well as interest and dividends) has increased by about 17 percent since 1970.

As part of the increase in nonwage income, SSDI awards rose by over one-third since 1970, even taking the post-1980 decline into account. In 1980, someone newly entitled to SSDI benefits received 40 percent as much as the typical worker and about one-half of per capita income—more when the tax benefits of lower gross income and the value of Medicare are taken into account. In contrast, real wages



rose very quickly during the 1960s. During this time SSDI awards were only about one-quarter of the typical worker's income.

Until the recent reforms in Social Security, almost all of each year's expenditures derived from that year's payroll taxes. Thus, workers whose own incomes were falling financed substantial increases in the standard of living of SSDI beneficiaries. Some suggest that SSDI awards approaching 40 percent of wages enticed a large number of workers to leave employment, further exacerbating the burden this program placed on those still in the labor force.

Of course, workers also financed increases in Social Security retirement (46 percent since 1970). And with the tax cuts in the early 1980s, they witnessed even larger increases in interest and dividend payments (51 percent). Net of declines in the real value of two kinds of nonwage income—means-tested income programs and proprietor's income (predominantly small businesses suffering from the problems in manufacturing)—all nonwage income soared 42 percent between 1970 and 1985 while real wages declined. Despite this tremendous transfer of wealth from the working to nonworking populations and despite the important part Social Security played in this, SSDI and Social Security retirement remain very popular programs. If the neo-conservatives were selling the argument that entitlement was to blame for economic stagnation, the public refused to buy it.

## The Macroeconomic Context of the SSDI Program

The cost of the Social Security disability insurance program is a function of the number of beneficiaries and the magnitude of their benefits. Both peaked about 1980 (tables 5 and 6) at which point SSDI expenditures consumed about six-tenths of one percent of the gross national product (GNP) (table 10). During the 1960's SSDI grew three-fold in real terms and it doubled in the 1970s. The growth in the earlier decade, however, was a result of the initiation of the program. The growth in the 1970s was primarily due to its liberalization and led to the reforms instituted by the Carter and Reagan administrations at the beginning of this decade. After the reforms took effect, expenditures for SSDI declined by one-sixth. Since the number of beneficiaries and the average level of their benefits are

TABLE 10  
 Federal Government, Federal Government Social, and Federal Social Security Disability Insurance Expenditures (in billions of dollars) as a Percentage of the GNP, by Year

Year	Federal government expenditures		Federal government social expenditures		Federal government social expenditures as % of total federal government expenditures	Social Security disability insurance*	
	GNP	Total	% GNP	Total		Expenditures	
						Total	% GNP
1950	286.5	42.6	14.87%	10.54	24.74%	—	—
1960	506.5	92.2	18.20	24.96	27.07	.53	.021%
1965	673.6	118.2	17.55	37.70	31.90	1.39	.037
1970	992.7	195.7	19.71	77.34	39.52	2.78	.036
1975	1,598.4	332.3	20.79	167.40	50.38	7.63	.046
1980	2,631.7	590.9	22.45	302.63	51.22	14.89	.049
1982	3,166.0	745.7	23.55	367.70	49.31	17.40	.047
1985	4,010.3	946.3	23.60	451.20	47.68	18.65	.047

Source: Author's analysis of data from U.S. Bureau of the Census 1986, 305, 354, 431; U.S. Department of Health and Human Services, Social Security Administration 1986b, 31.

\* SSDI began paying benefits in 1957.

growing again (trends which continue to the present time), however, these may be one-time savings.

The growth in the SSDI program prior to 1980 occurred in the context of a dramatically expanding federal role in the economy. Between 1950 and 1980 federal expenditures grew by one-half in real terms (to almost 23 percent of the GNP) while federal social expenditures grew over three-fold (from less than 4 to more than 11 percent of the GNP). Since then, substantial relative declines in SSDI (about 17 percent) and in all social expenditures (about 2 percent) have occurred while the federal role in the economy as a whole continues to grow. Thus, the social budget, in general, and the SSDI program, in particular, are financing substantial growth in debt service (60 percent in real terms) and the military budget (24 percent in real terms).

These transfers might be stated in more personal terms. The real wages of military personnel changed little between 1980 and 1985, but military contracts for the private sector grew from 87 to 140 billion dollars (in 1985 terms). Likewise, the rising levels of interest and dividend income noted above at least in part reflect the relative growth in federal deficits. Thus, incomes which derive from the federal budget are being transferred from the recipients of social wages to the employees and stockholders of military contractors and individuals holding federal notes (including many foreigners). While many of the recipients of social wages are not poor, many are. On the other hand, the people benefiting from the growth in military contracts and government debt are almost never poor. As a result of these shifts due to changes in the federal budget and of the declining real wages noted above, the distribution of incomes is much less equal than it was as this decade began. The income share of the poorest quintile of families declined by a tenth and the share of the richest quintile rose by about the same percentage during this time (Levy 1987; U.S. Bureau of the Census 1987).

The effect of these income transfers differs among social programs. Recipients of Social Security retirement have fared the best, sustaining neither cuts in the number of recipients nor in the value of benefits. Recipients of means-tested income programs have fared the worst, suffering losses of as much as one-half in the value of their benefits. Recipients of SSDI fall somewhere in between. Within the SSDI program itself, the number of dependents relative to disabled-worker

beneficiaries receiving SSDI fell (table 5). And the value of newly awarded benefits relative to average benefits among all disabled-worker beneficiaries declined (table 6). Thus, younger workers and dependents bore a disproportionate share of the retrenchment in the SSDI program.

## Conclusion

Work disability and the programs to deal with it are almost never considered on their own terms. Instead, work disability provides a vehicle through which concerns about other social phenomena become manifest and because disability is a flexible concept, a vehicle through which more general problems can be attacked.

Thus, we do not worry about the worsening health of the working-age population. This despite substantial increases since 1970 in the prevalence of severe activity limitation for all but nonwhite women aged 55 to 64 and nonwhites of both sexes aged 45 to 54 (nonwhites have substantially higher rates than whites, so one might infer that the rates among whites are merely catching up). Rising levels of activity-limiting chronic disease bother us only as the individuals so afflicted withdraw from the labor market in greater numbers and more of them apply for and receive SSDI benefits.

In truth, we do not worry so much about the absolute decline in the labor-force participation of people with activity limitation (15 percent among white men, for example) or the rising level of their disability benefits (from 29 to 39 percent of mean wages before the recent decline). We worry that their labor-force participation is the leading edge of a more general withdrawal from work. Or that the SSDI program entices those not really disabled to define themselves as such. Or that the SSDI program sets a standard of income replacement with profound repercussions for nondisabled workers. Finally, we may not even worry about the growth in the overall cost of the SSDI program per se. Instead, we indict its growth only because of the more general growth in social spending and we indict the growth in social spending only because of the long-term decline in real wages.

This displacement of the work-disability problem is not necessarily all bad. Dealing with the problems of the disabled in the context of other people's problems may be the social policy analog to "main-

streaming." Many European countries do just this (Burkhauser and Hirvonen 1989; Berkowitz 1989). They establish full-employment policies to maintain a strong demand for labor without regard to the reason a particular individual may be out of work. And they use the same income-support programs to compensate all whose incomes fall below a certain level. In pursuing these policies, however, they have recognized that their economies are not creating enough work and they have absolved individuals—including those with activity limitation due to chronic disease—for this.

In this country over the last eight years we have had displacement of a different sort in our disability policy. We have held disability and other government transfer programs responsible for the low levels of growth in the economy as a whole both because taxes had been raised to support the welfare state (taking monies away from other investment opportunities) and because recipients would not work, robbing the economy of their efforts. In the years to follow we reduced the level of newly awarded SSDI benefits by one-tenth, the number of beneficiaries by one-fifth, and the cost of the whole program by one-sixth. This had no effect whatsoever in altering the long-term trend in the labor-force participation rate of persons with activity limitation. Nor was there much effect on the work status of those in the immediate preretirement years without disabilities. In pursuing the notion that the SSDI program sapped the economy as a whole, we forced three-quarters of a million people to lose their SSDI benefits, precluded several hundred thousand from receiving entitlements for which they would have qualified in earlier years, and dramatically reduced the incomes of the remaining four million beneficiaries for whom a monthly check of less than \$400 was the principal means of support.

The SSDI program was initiated in the belief that there is a straight-line path from the onset of illness or injury to the development of activity limitation and finally to work loss. At some point in this process, functional capacity would be insufficient to sustain work and physicians ought be able to certify when this occurred. This view was easy to discredit. Except at the extremes of perfect health and complete disability, predicting who will stop working is impossible (Haber 1971; Nagi 1976; Yelin, Nevitt, and Epstein 1980). Asking physicians to certify who can work has proven to be an even more difficult muddle (Stone 1984; Berkowitz 1987). A considerable number of

those who meet the most-stringent criteria for SSDI work, while many with seemingly minor ailments claim that illness precludes their employment. The norms seem to be changing rapidly as well. Late middle age and activity limitation were once much smaller impediments to maintaining employment. As recently as 1970, almost 85 percent of white men aged 55 to 64 were in the labor force (now two-thirds) as were 55 percent of such men with activity limitation (now 40 percent). When viewed from the medical perspective which underlies the SSDI program, the decline in the proportion of those with activity limitation who are in the labor force is perplexing. The growth of service-sector employment and within manufacturing the growth of automated production ought to have improved, not worsened, the capacity of individuals to work. When viewed in the context of overall labor-force trends, the decline of the participation of the disabled makes perfect sense. If increasing numbers of people without limited function are leaving work, it is hardly surprising that the disabled are doing so as well.

The medical model which underlies the SSDI program—that poor health breeds work loss and subsequent entitlement—failed to explain the explosive growth in the prevalence of work disability because health plays only a small part in determining labor-force participation. After this became clear, we turned full circle, implementing policies with the implicit assumption that liberal entitlement fueled the withdrawal from work in the guise of poor health. But this set of policies failed, too: both work loss associated with activity limitation and disability entitlement are again on the rise. The initial failure of the medical model of disability forced us to consider work disability as part of a larger set of phenomena, to displace our concern for disability itself with our concerns about the economy as a whole. The failure of the policies that followed may force us to stop blaming the disabled for their own plight and an economy gone sour.

At the present time, there is no all-encompassing vision to replace the notion that disability benefits are to blame for the decline in labor-force participation of the disabled. We just assume that the disabled have been victimized, like many others, by fifteen years of slow growth. Disability policy, like social policy in general, is adrift. Compared to the attack they sustained in the early 1980s, the disabled may consider this latest round of displacement a benign state of affairs. In the current arena, there seems to be no room for a more systematic

and directed effort to keep individuals with activity limitations in the labor force. This despite an awareness that there are interventions which would keep such people at work, some at very little cost, and that the disabled do not differ in their commitment to work from the rest of the population (Yelin, Henke, and Epstein 1986). The service economy may not offer high wages, but service work is not as physically demanding as manufacturing and it does not require the same adherence to regimented work rules. Flexible rules of employment allow the person with activity limitation to schedule work around episodes of illness and the need to procure health care (Yelin 1986). Thus, the unfortunate paradox is that disability policy is adrift just as we are developing the tools with which to reduce the prevalence of the problem.

Many analysts view the flexibility inherent in the concept of work disability as a wedge to open the door to federal social spending. Others may see in this flexibility one of the few opportunities to clamp down on expenditures. To judge from the data presented here on the prevalence of severe activity limitation, work disability is a growing phenomenon and likely to remain so in the years to come. The problem for the people so afflicted is that everyone has a context with which to view the work-disability issue and no one views it as a concern in of itself.

## Endnote

There is a large and growing literature on the effect of Social Security generally on labor-force participation and on the effect of SSDI (or other disability compensation) on either overall labor-force participation or on that for people with chronic conditions. In both cases, the results are mixed, some studies showing that Social Security (or SSDI) reduces labor-force participation (Feldstein 1974; Hurd and Boskin 1984; Tuma and Sandefur 1988; Sunshine 1981; Parsons 1980), some showing little to no effect (Chirikos 1986; Haveman and Wolfe 1984; Haveman, Wolfe, and Warlick 1982; Yelin 1986; Moffitt 1986; Crimmins and Pramaggiore 1988). Wolfe (1984) makes the interesting observation that the magnitude of the effect of replacement rate on labor-force participation in the disability studies she reviewed in 1984 declines as the sensitivity of the measure of

health status increases, a trend which was to continue in the Chirikos (1986), Yelin (1986), Moffitt (1986), and Crimmins and Parmaggiore (1988) papers. The principal recent paper indicating that Social Security reduces labor-force participation substantially (Tuma and Sandefur 1988) includes no measures of health status and so may be the exception which proves Wolfe's rule.

The first studies to implicate a slack demand for labor as a cause of rising work disability were Berkowitz, Johnson, and Murphy (1976) and Levitan and Taggart (1977). Later, Yelin, Nevitt, and Epstein (1980) and Yelin, Henke, and Epstein (1986) reported in cross-sectional and longitudinal studies, respectively, that the unemployment rate at the onset of a chronic disease affects the work disability rate, although the effect is weak when one controls for the nature of work.

## References

- Baily, M. 1987. Aging and the Ability to Work: Policy Issues and Recent Trends. In *Work, Health, and Income Among the Elderly*, ed. G. Burtless, 59–102. New York: Norton.
- Berkowitz, E. 1987. *Disabled Policy: America's Programs for the Handicapped*. New York: Cambridge University Press.
- . 1989. Domestic Politics and International Expertise in the History of American Disability Policy. *Milbank Quarterly* 67 (Suppl. 2, Pt. 1):195–227.
- Berkowitz, M., W. Johnson, and E. Murphy. 1976. *Public Policy toward Disability*. New York: Praeger.
- Bluestone, B., and B. Harrison. 1986. *The Great American Job Machine: The Proliferation of Low Wage Employment in the U.S. Economy*. Report prepared for the U.S. Congress Joint Economic Committee. Washington.
- Burkhauser, R.V., and P. Hirvonen. 1989. United States Disability Policy in a Time of Economic Crisis: A Comparison with Sweden and the Federal Republic of Germany. *Milbank Quarterly* 67 (Suppl. 2, Pt. 1):166–194.
- Chapman, S., M. LaPlante, and G. Wilensky. 1986. Life Expectancy and Health Status of the Aged. *Social Security Bulletin* 49(10):24–48.
- Chirikos, T. 1986. Accounting for the Historical Rise in Work Disability Prevalence. *Milbank Quarterly* 64(2):271–301.



- Cohen, S., and J. Zysman. 1987. *Manufacturing Matters: The Myth of the Post-industrial Economy*. New York: Basic Books.
- Colvez, A., and M. Blanchet. 1981. Disability Trends in the United States Population, 1966–1976. *American Journal of Public Health* 71(5):464–71.
- Crimmins, E., and M. Pramaggiore. 1988. Changing Health of the Older Working Age Population and Retirement Patterns over Time. In *Issues in Contemporary Retirement*, ed. R. Ricardo-Campbell and E. Lazear, 132–61. Stanford: Hoover Institution Press.
- Ellwood, D., and L. Summers. 1986. Is Welfare Really the Problem? *Public Interest* 83(Spring):61–78.
- Feldman, J. 1983. Work Ability of the Aged under Conditions of Improving Mortality. *Milbank Memorial Fund Quarterly/Health and Society* 61(3):430–44.
- Feldstein, M. 1974. Social Security, Induced Retirement, and Aggregate Capital Accumulation. *Journal of Political Economy* 82:905–26.
- Fries, J. 1980. Aging, Natural Death, and the Compression of Morbidity. *New England Journal of Medicine* 303(3):130–35.
- . 1989. Aging, Illness, and Health Policy: Implications of the Compression of Morbidity. *Perspectives in Biology and Medicine*. (In press.)
- Gilder, G. 1981. *Wealth and Poverty*. New York: Basic Books.
- Haber, L. 1971. Disabling Effects of Chronic Disease and Impairments. *Journal of Chronic Disease* 24(7):469–87.
- Haveman, R., and B. Wolfe. 1984. The Decline of Male Labor Force Participation: A Comment. *Journal of Political Economy* 92:532–41.
- Haveman, R., B. Wolfe, and J. Warlick. 1982. *Disability Transfers, Early Retirement, and Retrenchment*. Madison: Department of Economics, University of Wisconsin, Madison.
- Hurd, M., and M. Boskin. 1984. The Effect of Social Security on Retirement in the Early 1970's. *Quarterly Journal of Economics* 99:767–90.
- Kasarda, J. 1985. Urban Change and Minority Opportunities. In *The New Urban Reality*, ed. P. Peterson, 33–67. Washington: Brookings Institution.
- Lando, M., R. Cutler, and E. Gamber. 1982. *Data Book Preliminary: 1978 Survey of Disability and Work*. Washington: U.S. Department of Health and Human Services, Social Security Administration, Office of Policy.
- Levitan, S., and R. Taggart. 1977. *Jobs for the Disabled*. Baltimore: Johns Hopkins University Press.

- Levitan, S., and D. Werneke. 1984. *Productivity: Problems, Prospects, and Policies*. Baltimore: Johns Hopkins University Press.
- Levy, F. 1987. *Dollars and Dreams: The Changing American Income Distribution*. New York: Russell Sage Foundation.
- Manton, K. 1984. Changing Concepts of Morbidity and Mortality in the Elderly Population. *Milbank Memorial Fund Quarterly/Health and Society* 60(2):183-244.
- Moffitt, R. 1986. Life-cycle Labor Supply and Social Security: A Time-Series Analysis. In *Work, Health, and Income among the Elderly*, ed. G. Burtless, 183-228. Washington: Brookings Institution.
- Myers, G., and K. Manton. 1984. Compression of Mortality: Myth or Reality? *Gerontologist* 24(4):346-53.
- Murray, C. 1984. *Losing Ground: American Social Policy, 1950-1980*. New York: Basic Books.
- Nagi, S. 1976. An Epidemiology of Disability among Adults in the United States. *Milbank Memorial Fund Quarterly/Health and Society* 54(4):439-68.
- Newacheck, P., P. Budetti, and N. Halfon. Trends in Activity-limiting Chronic Conditions among Children. *American Journal of Public Health* 76(2):178-84.
- Parnes, H. 1981. Introduction and Overview. In *Work and Retirement: A Longitudinal Study of Men*, ed. H. Parnes, 1-41. Cambridge: MIT Press.
- Parsons, D. 1980. The Decline of Male Labor Force Participation. *Journal of Political Economy* 88:117-34.
- Piore, M., and C. Sabel. 1984. *The Second Industrial Divide: Possibilities for Prosperity*. New York: Basic Books.
- Rice, D., and J. Feldman. 1983. Living Longer in the United States: Demographic Changes and Health Needs of the Elderly. *Milbank Memorial Fund Quarterly/Health and Society* 61(3):362-96.
- Rice, D., and M. LaPlante. 1988. Chronic Illness, Disability, and Increasing Longevity. In *The Economics and Ethics of Long-term Care and Disability*, ed. S. Sullivan and M. Lewin, 9-55. Washington: American Enterprise Institute for Public Policy Research.
- Rothschild, E. 1988. The Reagan Economic Legacy. *New York Review of Books* 35(12):33-41.
- Schorr, L., and D. Schorr. 1988. *Within Our Reach: Breaking the Cycle of Disadvantage*. New York: Doubleday.
- Starr, P. 1982. *The Social Transformation of American Medicine*. New York: Basic Books.
- Stein, B. 1980. *Social Security and Pensions in Transition*. New York: Free Press.

- Stone, D. 1984. *The Disabled State*. Philadelphia: Temple University Press.
- Sunshine, J. 1981. Disability Payments Stabilizing after Era of Accelerating Growth. *Monthly Labor Review* 104:17-22.
- Tuma, N., and G. Sandefur. 1988. Trends in the Labor Force Activity of the Elderly in the United States, 1940-1980. In *Issues in Contemporary Retirement*, ed. R. Ricardo-Campbell and E. Lazear, 38-83. Stanford: Hoover Institution Press.
- U.S. Bureau of the Census. 1983. *Statistical Abstract of the United States, 1984*. Washington.
- . 1986. *Statistical Abstract of the United States, 1987*. Washington.
- . 1987. *Statistical Abstract of the United States, 1988*. Washington.
- U.S. Congress. House Select Committee on Aging. 1984. *Social Security Disability Reviews: A Costly Constitutional Crisis*. Washington.
- U.S. Congress. Senate Special Committee on Aging. 1984. *Social Security Disability Reviews: The Human Costs*. Washington.
- U.S. Department of Health and Human Services, Social Security Administration. 1982. *Social Security Bulletin* 45(8):3-14.
- . 1985. *Social Security Bulletin, Annual Statistical Supplement, 1984/1985*, 199, 232.
- . 1986a. *Social Security Bulletin, Annual Statistical Supplement, 1986*, 226.
- . 1986b. *Social Security Bulletin* 49(7):31, 34-38, 48, 58.
- . 1987. *Social Security Bulletin, Annual Statistical Supplement, 1987*, 114, 131, 135, 232.
- U.S. Department of Labor, Bureau of Labor Statistics. 1961. *Employment and Earnings Report*. Washington.
- . 1971. *Employment and Earnings Report*. Washington.
- . 1981. *Employment and Earnings Report*. Washington.
- . 1985. Bureau of Labor Statistics. U.S. Handbook of Labor Statistics. Washington.
- . 1986. *Employment and Earnings Report*. Washington.
- Verbrugge, L. 1984. Longer Life but Worsening Health?: Trends in Health and Mortality of Middle-aged and Older Persons. *Milbank Memorial Fund Quarterly/Health and Society* 62(3):475-519.
- . 1989. Recent, Present, and Future Health of American Adults. *Annual Review of Public Health*. (In press.)
- Wilson, W. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.
- Wilson, R., and T. Drury. 1984. Interpreting Trends in Illness and

- Disability: Health Statistics and Health Status. *Annual Review of Public Health* 5:83-106.
- Wolfe, B. 1984. Measuring Disability and Health. *Journal of Health Economics* 3:187-93.
- Ycas, M. 1987. Recent Trends in Health Near the Age of Retirement: New Findings from the Health Interview Survey. *Social Security Bulletin* 50(2):5-30.
- Yelin, E. 1986. The Myth of Malingering: Why Individuals Withdraw from Work in the Presence of Illness. *Milbank Quarterly* 64(4):622-49.
- Yelin, E., M. Nevitt, and W. Epstein. 1980. Toward an Epidemiology of Work Disability. *Milbank Memorial Fund Quarterly/Health and Society* 58(3):386-415.
- Yelin, E., C. Henke, and W. Epstein. 1986. Work Disability among Persons with Musculoskeletal Conditions. *Arthritis and Rheumatism* 29:1322-33.

---

*Acknowledgments:* This article was supported by grant no. AR-20684 from the National Institute of Arthritis, Musculoskeletal, and Skin Diseases to the Rosalind Russel Arthritis Center at The University of California, San Francisco, by a grant from the Robert Wood Johnson Foundation, and by a Research Career Development Award no. K04 AG00273 from the National Institute on Aging to Dr. Yelin. The opinions and conclusions do not necessarily reflect those of the funding agencies. The author wishes to thank Dr. Mitchell P. LaPlante for his consultation on the National Health Interview Survey, Ms. Sherry Markrow for computer programming, and Mr. Jim Calvert for preparation of tabular material.

*Address correspondence to:* Edward Yelin, Ph.D., Associate Adjunct Professor of Medicine and Health Policy, University of California, San Francisco, 350 Parnassus Avenue, Suite 600, San Francisco, CA 94117.