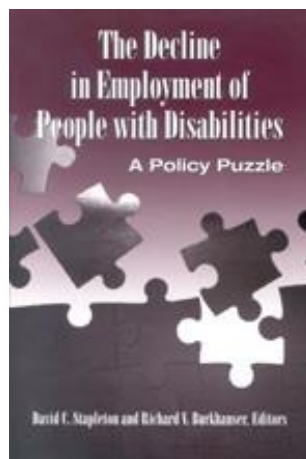

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3

Employment Declines among People with Disabilities

Population Movements, Isolated Experience, or Broad Policy Concern?

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Chapter 2 showed that the decline in employment rates among working-aged men and women with disabilities during the 1990s was not an artifact of measurement choices or research design, but robust across definitions of disability and data sources. Although this overall trend is disturbing, a greater understanding of what underlies it is needed before an appropriate policy response can be crafted. Specifically, policymakers need to know whether the recent employment decline was broad-based or concentrated among a few subgroups of the population, whether it reflects changes in the characteristics of the population with disabilities or changes in their behavior or labor market opportunities, and finally, whether it was associated with exogenous changes in health or changes in environmental factors.

With these questions in mind, we look beyond the overall decline in employment among people with disabilities to track the importance of three factors on the observed changes: 1) trends among key subgroups, especially those with employment-risk factors other than disability; 2) population shifts toward subgroups with lower than average employment rates; and 3) changes in self-reported health status. Our analysis is based on the same cross-sectional data from the Current Population Survey (CPS) discussed in Chapter 2. Throughout the analyses we rely on descriptive analyses and more formal decomposition

methods to evaluate the contribution of each of these three factors to the average employment decline described in Chapter 2.

Our results suggest that the decline in employment among those with disabilities was broad-based, present in a wide range of demographic and educational subgroups. In terms of population shifts, we find no evidence that compositional changes in the population with disabilities during the 1990s account for the average employment decline during the period. In contrast, we find that compositional changes were important to the increase in employment among those with disabilities during the 1980s. Finally, we show that self-reported health among those with disabilities remained relatively stable in the latter half of the 1990s, making changes in health status an unlikely cause of declining employment rates.

DATA AND MEASUREMENT

We base our analyses on data from the March CPS discussed in Chapter 2. We focus on working-aged men and women, aged 25–61, who self-report a work-limitation-based disability (defined below).¹ To avoid attributing cyclical fluctuations to secular trends, we make comparisons of employment rates at similar points in the business cycle (see Burkhauser et al. 2002 for a complete description of the relationship between employment rates and business cycles for those with disabilities).

Defining Disability

We use the same conceptualization of disability discussed in Chapter 2.² We operationalize this concept using the work-limitation-based definition of disability in the CPS.³ Although not an ideal measure of disability, the work-limitation-based question in the CPS has been shown to provide a consistent measure of trends in the employment status of people with disabilities.⁴ Important for our purpose, the sample size in the CPS is large enough to allow us to focus on the employment of key subgroups within the working-aged population with disabilities and to do so over a long period of time. The CPS question

we use is “[D]oes anyone in this household have a health problem or disability which prevents them from working or which limits the kind or amount of work they can do? [If so,] Who is that? (Anyone else?)”

Defining Employment

For consistency, we define employment as in Chapter 2. People are classified as employed if they worked 52 hours or more in the previous year.⁵ The use of last year’s employment introduces minor time inconsistencies, given that our disability and population characteristics data are for the “current” or survey year. To reduce confusion, we use the employment year to anchor our analysis. We choose the employment year as our point of reference, rather than the survey year, to better control for business cycle effects.

Defining Key Subpopulations

Throughout the analyses we divide the population with disabilities into broad, and frequently overlapping, subgroups based on gender, age, race, and education. Specifically, we compare employment and disability patterns for men, women, whites, nonwhites, individuals aged 25–34, 35–44, 45–54, and 55–61, and individuals with less than high school, high school degree, some college, and college or more. Small sample sizes prohibit us from making more detailed comparisons.

Individuals are classified into as many of these groups as they fit based on responses to survey questions. The CPS questions regarding age and gender are straightforward. Race information comes from the question, “What is [person’s] race? Probe: [Is person] White, Black, American Indian, Aleut or Eskimo, Asian or Pacific Islander or something else?” We divide individuals into whites and all others. Education information is derived from two different questions. Prior to 1992, the CPS asked, “[W]hat is the highest grade or year of regular school [person] has ever attended? Did [person] complete that grade (year)?” In 1992, the CPS switched from a “grade/years attended” characterization of education to a “credential” characterization of education: “[W]hat is the highest level of school [person] has completed or the highest

degree [person] has received?” To provide continuity, we converted these credentials to years completed using standard assumptions.

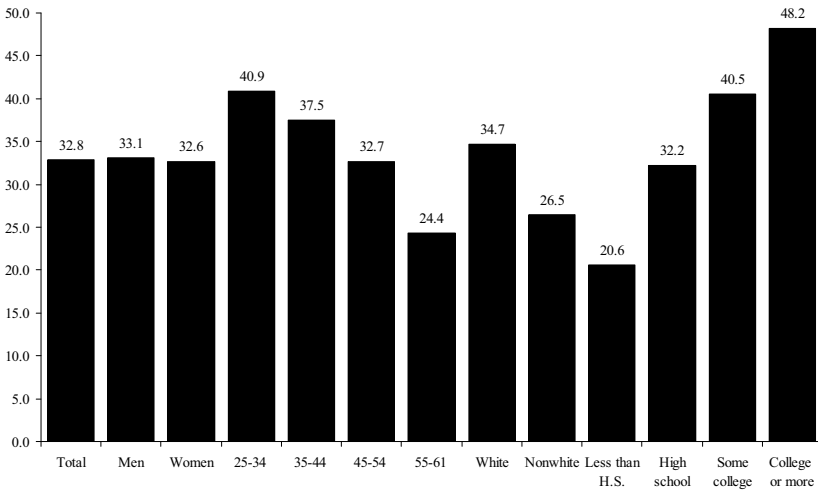
Measuring Health

In 1996, the CPS began to include questions regarding self-reported health status. The health question we use is: “Would you say (name’s/your) health in general is excellent, very good, good, fair, poor?” Although the short history of this question limits its usefulness in our analyses, we incorporate it as a first indication of the role that health plays in the employment decline among those with disabilities.

SHIFTS IN POPULATION COMPOSITION

As in the U.S. population as a whole, employment rates for those with disabilities vary greatly across key subgroups. Figure 3.1 shows

Figure 3.1 Employment Rates in 2000 of Those Reporting Work Limitations, by Gender, Age, Race, and Education (percentages)



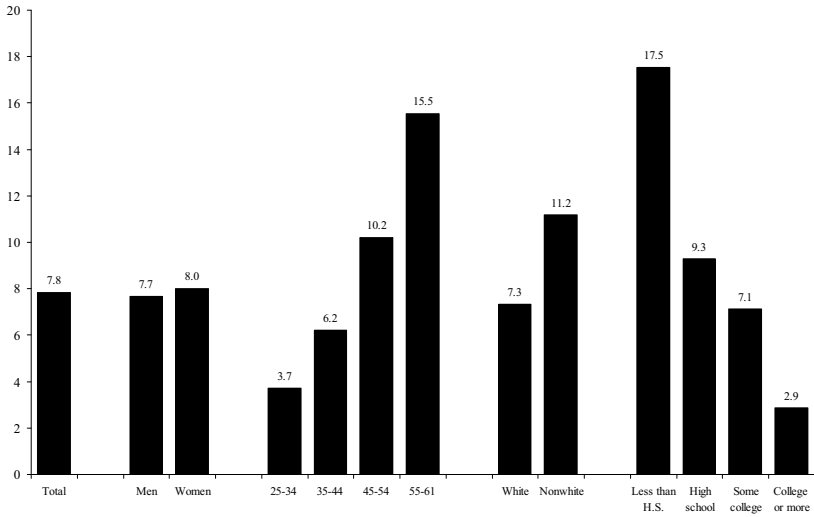
SOURCE: Authors’ calculations using the March Current Population Survey, 2001.

employment rates in 2000 of those reporting work limitations, by gender, age, race, and educational attainment. As the figure indicates, among working-aged adults reporting work limitations, employment rates were lower for women than for men, for older than younger workers, and for nonwhites relative to whites. Employment rates also were strongly correlated with educational attainment, being more than twice as high for someone with a college education or more as for someone with less than a high school education.

Although this pattern is not surprising and follows general population trends fairly closely, the different patterns of employment across groups opens the possibility that changes in population shares among those reporting work limitations may be driving the overall decline in the employment of working-aged people with disabilities documented in Chapter 2. This concern is especially salient when one recognizes that these same correlates also are good predictors of disability, as shown in Figure 3.2.⁶ For example, the prevalence of disability among those with less than a high school education is six times that of someone with a college education or more.

Figures 3.3–3.6 provide a first look at the role that population shifts may have played in the decline in employment among those with disabilities.⁷ The figures display changes in population characteristics (gender, age, race, and education) among those with disabilities from 1980 through 2000. As the figures indicate, there have been some movements in the composition of the population with disabilities during the past two decades. As in the U.S. population more generally, the largest movements have occurred in the age (Figure 3.4) and education (Figure 3.6) distributions. Shifts in the gender (Figure 3.3) and race (Figure 3.5) composition have been substantially smaller. For example, between 1989 and 2000, the share of women in the population with disabilities rose from 48.3 percent to 52.2 percent, an increase of 3.9 percentage points. In the prior decade, the share of women fell slightly, from 50.1 percent in 1980 to 48.3 percent in 1989. Shifts in the racial composition of those with disabilities also have been small. Between 1989 the share of nonwhites increased just slightly, from 19.7 percent in 1980 to 19.8 percent in 1989. Movements in the 1990s also were modest, with the share of nonwhites rising to 22.3 percent by 2000, an increase of 2.5 percentage points from 1989.

Figure 3.2 Prevalence of Work Limitations in Employment in 2000, by Gender, Age, Race, and Education (percentages)

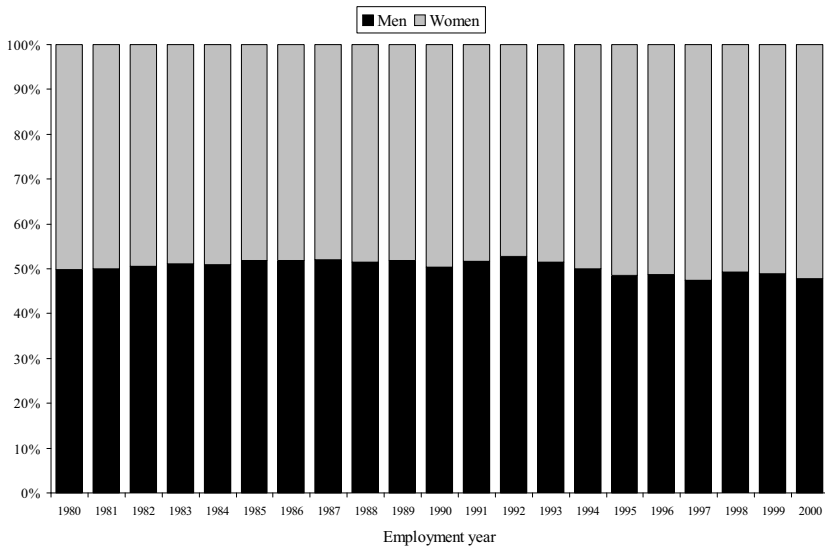


SOURCE: Authors’ calculations using the March Current Population Survey, 2001.

Shifts in the distribution of age and education among those with disabilities were far more dramatic. For example, the share of the population with disabilities aged 25–34 fell from 20.3 percent in 1989 to 12.8 percent in 2000, a drop of 7.5 percentage points. In the previous decade, the share of 25–34-year-olds rose slightly. The share of 55–61-year-olds also declined, although the drop was substantially smaller, 2.2 percentage points between 1989 and 2000. The decline in the share of 55–61-year-olds represented a continuation of a trend begun in the 1980s. The population share of the remaining two age groups—35–44 and 45–54—increased during the 1990s. As a result of these shifts, in 2000, 61.5 percent of the population with disabilities was between the ages of 35 and 54, a 10 percentage point increase from 1989.

In considering whether shifts in the age distribution of those with disabilities can explain the relative decline in employment (compared with those without disabilities and over time) two things emerge from these figures. First, although large, movements in the distribution of age among those with disabilities largely mirror shifts in the rest of the

Figure 3.3 Yearly Trends (1980–2000) of Those Reporting Work Limitations, by Gender

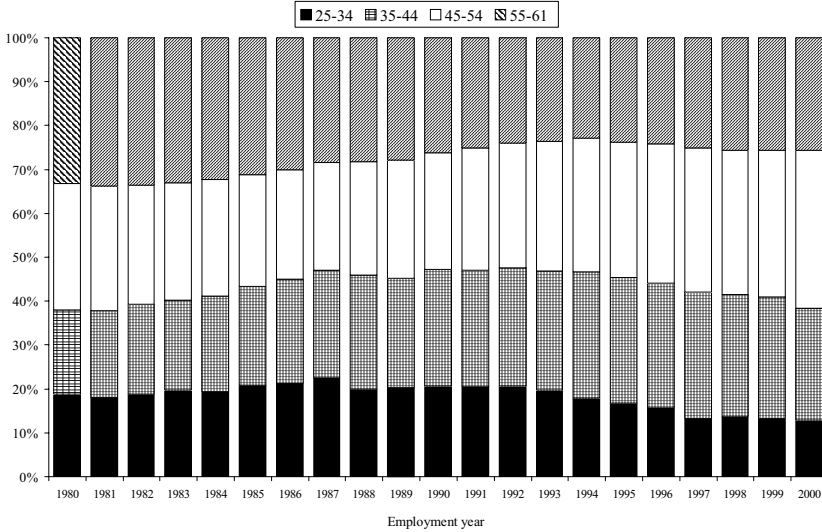


SOURCE: Authors' calculations using the March Current Population Survey, 1981–2001.

population.⁸ In 2000, for example, 59.9 percent of the working-aged population without disabilities was between the ages of 35 and 54; in 1989, 51.9 percent of those without disabilities fell within this age range. Thus, differing shifts in age are unlikely to account for the divergent employment experiences of those with disabilities during the 1990s. Second, the effect of shifts in the population with disabilities on the time series of employment trends for those with disabilities is more complicated. The decline in the share of younger adults (aged 25–34) with disabilities should pull down the overall employment rate while the decline in the share of older adults (aged 55–61) should boost it. More formal decomposition analysis, presented later in this chapter, is necessary to quantify the net results of these joint movements.

Turning to education (Figure 3.6), the link between population shifts and employment patterns is clearer. As in the population as a whole, educational attainment among those with disabilities surged during the past two decades. Between 1989 and 2000, the share of the

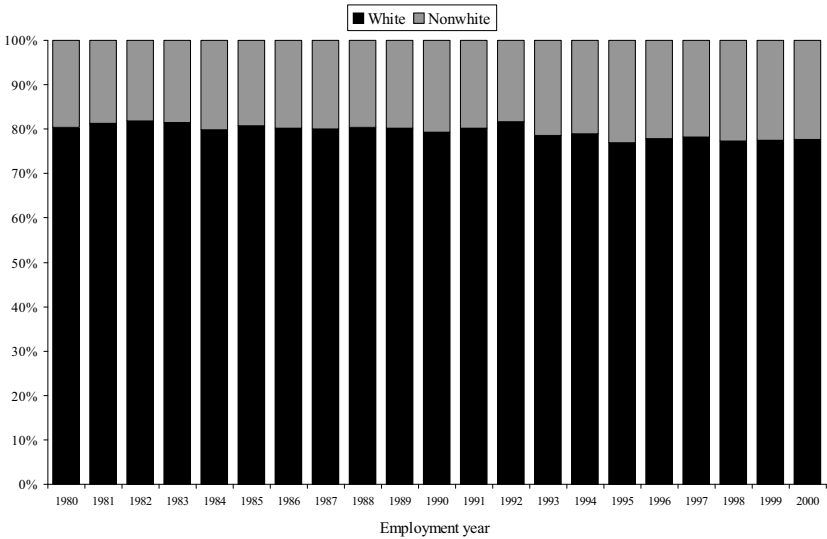
Figure 3.4 Yearly Trends (1980–2000) of Those Reporting Work Limitations, by Age



SOURCE: Authors’ calculations using the March Current Population Survey, 1981–2001.

population with disabilities and less than a high school education fell by more than 10 percentage points, about the same decline recorded during the 1980s. The share of those with a high school degree also fell, although by a much smaller amount. By 2000, 35.5 percent of the population with disabilities had at least some college; in 1989, only 22.8 percent had some college, and in 1980, about 18 percent had any college.⁹ Again, these shifts in educational attainment mirror those for the population without disabilities. More important, given the relationship between education and employment documented in Figure 3.1, the movement toward higher educational attainment should have boosted, rather than pushed down, the population employment rate for those with disabilities. This will be formally examined in the section, “Decomposition of Employment Decline.”

Figure 3.5 Yearly Trends (1980–2000) of Those Reporting Work Limitations, by Race (percentages)



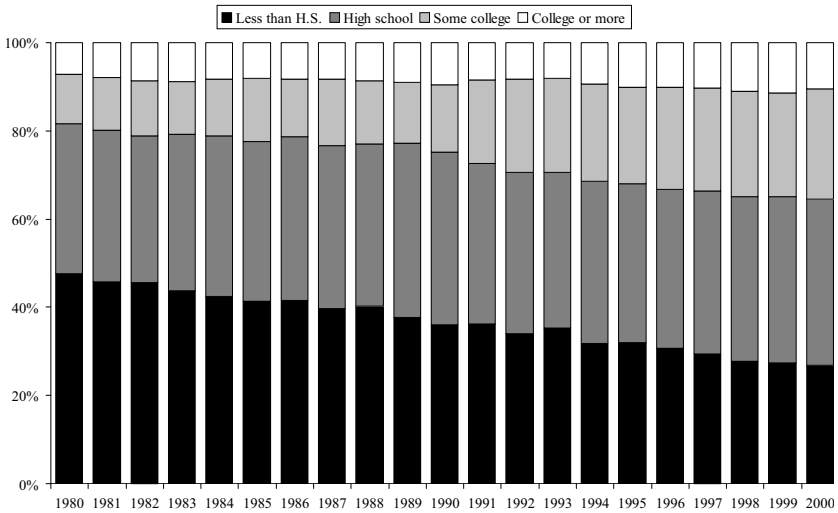
SOURCE: Authors’ calculations using the March Current Population Survey, 1981–2001.

ISOLATED OCCURRENCE OR WIDESPREAD DECLINE?

The prior section showed that shifts in population shares toward those with lower than average employment rates is not likely to explain much of the overall decline in employment among working-aged adults with disabilities observed during the 1990s. Nevertheless, this leaves the possibility that decline for one or more subgroups is driving the overall decline, and that this decline is not representative of the experience of all, or even most, subgroups of the population with disabilities. Given the different employment experiences in the cross-section shown in Figure 3.1, such an outcome certainly is plausible.

To examine whether the recent decline in employment rates, as well as the increases during the 1980s, were broad-based across the population with disabilities, Figures 3.7–3.10 show employment rate trends (1980 through 2000) by gender, age group, race, and educational

Figure 3.6 Yearly Trends (1980–2000) of Those Reporting Work Limitations, by Education

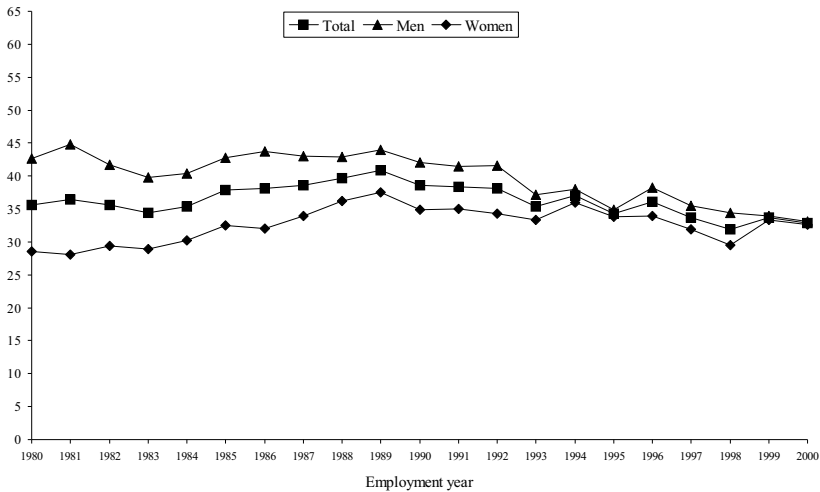


SOURCE: Authors’ calculations using the March Current Population Survey, 1981–2001.

attainment.¹⁰ Similar to Chapter 2, Figure 3.7 points to a substantial decline in employment among both men and women with disabilities during the 1990s. Between 1989 and 2000, the employment rate of men with disabilities declined more than 10 percentage points, from 44.0 percent in 1989 to 33.1 percent in 2000. The decline for women was about half as large, five percentage points, but still sizeable. These declines contrast sharply with the patterns observed for those without disabilities as well as the patterns observed in the previous decade. Over the same period, the employment rate of men without disabilities fell one percentage point, while the employment rate for women without disabilities rose by 4.3 percentage points.¹¹ Between 1980 and 1989, employment rates for men and women with disabilities rose 1.4 and 9.0 percentage points, respectively.

Figure 3.8 displays employment rates for those with disabilities by four major age groups. As the figure indicates, no age group was immune to the 1990s trend toward lower employment rates. Younger men and women with disabilities aged 25–34 and 35–44 experienced

Figure 3.7 Yearly Employment Rate Trends (1980–2000) of Those Reporting Work Limitations, Total and by Gender (percentages)

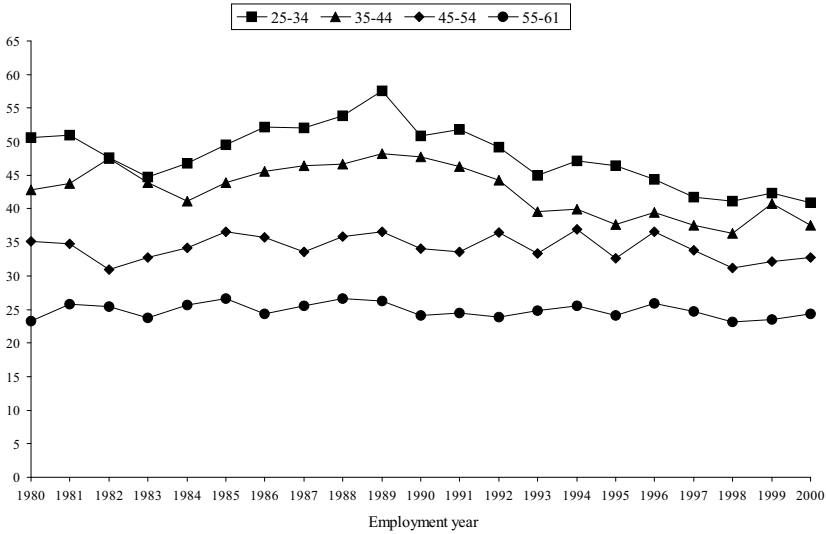


SOURCE: Authors' calculations using the March Current Population Survey, 1981–2001.

the largest declines. Between 1989 and 2000, the employment rate of those with disabilities aged 25–34 fell from 57.5 percent to 40.9 percent, a drop of more than 16 percentage points. The employment rate for those aged 35–44 also fell precipitously, dropping by nearly 11 percentage points over the period. Employment rates of individuals in these age groups without disabilities rose slightly between 1989 and 2000. The 1990s decline in employment among younger adults with disabilities contrasts sharply with the previous decade, when employment rates for 25–34-year-olds with disabilities rose 9 percentage points and employment rates for 35–44-year-olds with disabilities rose 5.3 percentage points.

Declines in employment rates of older men and women with disabilities (aged 45–54 and 55–61) were more modest than those of younger adults during the 1990s. Employment rates dropped 3.8 percentage points for those aged 45–54 and 1.8 percentage points for those aged 55–61. This trend contrasts with the previous decade, when employment rates rose for both age groups with disabilities. It also

Figure 3.8 Yearly Employment Rate Trends (1980–2000) of Those Reporting Work Limitations, by Age (percentages)



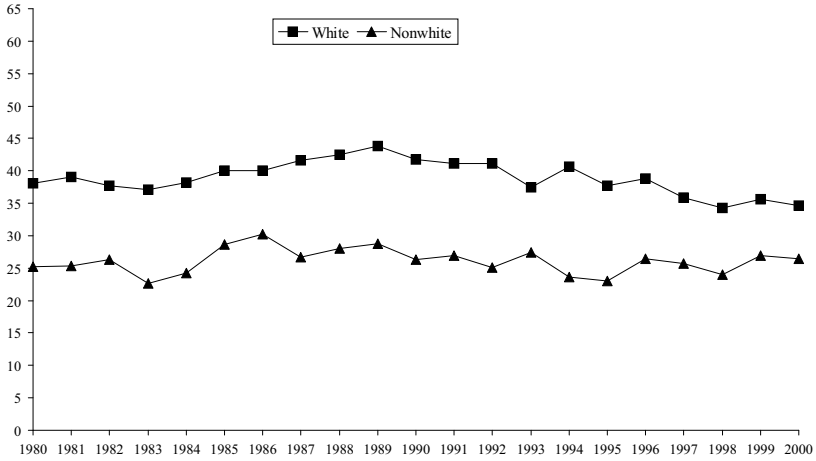
SOURCE: Authors’ calculations using the March Current Population Survey, 1981–2001.

contrasts with the trend among same-aged individuals without disabilities during the 1990s, who experienced rising employment rates.

Employment trends by race reveal similar patterns, with employment rates of both whites and nonwhites with disabilities falling during the 1990s (Figure 3.9). The largest declines occurred for whites, with employment falling 9.1 percentage points (from 43.8 to 34.7 percent) between 1989 and 2000. Employment rates for nonwhites fell 2.3 percentage points (from 28.8 to 26.5 percent) over the period. During the previous decade employment rates for whites with disabilities rose 5.7 percentage points, while employment rates for nonwhites increased 3.6 percentage points. Again, the reversal of fortune in employment between the 1980s and 1990s was limited to those with disabilities, with employment rates for whites and nonwhites without disabilities rising between 1989 and 2000.

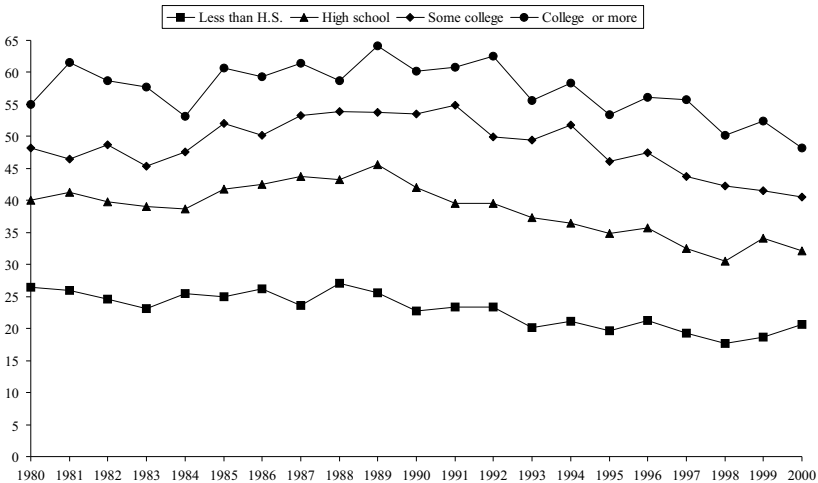
Figures 3.7–3.9 showed that the decline in employment among working-aged adults with disabilities documented in Chapter 2 was broad-based across gender, age, and racial subgroups. As Figure 3.10

Figure 3.9 Yearly Employment Rate Trends (1980–2000) of Those Reporting Work Limitations, by Race (percentages)



SOURCE: Authors’ calculations using the March Current Population Survey, 1981–2001.

Figure 3.10 Yearly Employment Rate Trends (1980–2000) of Those Reporting Work Limitations, by Education (percentages)



SOURCE: Authors’ calculations using the March Current Population Survey, 1981–2001.

shows, the employment decline also was broad-based across subpopulations characterized by different levels of educational attainment. Employment rates of those with disabilities and less than a high school education fell 4.9 percentage points between 1989 and 2000. For similarly educated adults without disabilities, employment rose during the period, hitting a two-decade high in 2000. In contrast to other groups with disabilities, the 1990s decline in employment among those with less than high school represented an acceleration in a downward trend that extended back to 1980; the employment rate for adults with disabilities and less than a high school education fell 0.9 percentage points between 1980 and 1989.

The remaining graphs in Figure 3.10 display the familiar pattern of solid employment gains among those with disabilities during the 1980s followed by substantial employment losses during the 1990s. Employment rates for adults with disabilities and a high school degree or some college fell 13.4 and 13.0 percentage points, respectively, between 1989 and 2000. During the prior decade, employment rates for both groups increased by 5.6 percentage points. The most pronounced declines occurred among college-educated adults with disabilities. Between 1989 and 2000, the employment rate of those with at least a college degree fell 16 percentage points, from 64.2 percent to 48.2 percent. Like most other subpopulations examined, employment rates among college-educated adults with disabilities rose during the previous decade. With the exception of those with college or more, employment rates for comparable educational groups without disabilities increased during the 1990s.

Figures 3.7–3.10 and Appendix Tables 3A.4 and 3A.5 show that the decline in employment among those with disabilities during the 1990s expansion was broad-based, occurring in all major subgroups of the population. The results also indicate that in nearly every case, the 1990s decline represented a significant reversal in the positive employment trends recorded during the 1980s expansion. Finally, the figures highlight the divergence of employment trends for those with disabilities from those in the rest of the population.

DECOMPOSITION OF EMPLOYMENT DECLINE

As shown in Figure 3.7, the overall employment rate of those reporting work limitations declined from 40.8 percent in 1989 (the peak of the 1980s business cycle) to 32.8 percent by 2000 (the peak of the 1990s business cycle). This 8.0 percentage point decline in employment may be due to a change in the characteristics of the population, changes in the employment rates of various subgroups within the population, or to some combination of both factors. The evidence reported above in “Shifts in Population Composition” suggests that the characteristics of the population with disabilities changed substantially during the past two decades. Still, the evidence presented in the prior section indicates that all subgroups experienced declining employment rates during this period, implying that the employment rate of those with disabilities would have declined absent compositional changes. Hence, it is likely that some combination of compositional shifts and subgroup-specific employment rate changes affected the overall decline in employment observed in the data.

To quantify the relative influence of compositional changes and subgroup-specific declines in employment, we rely on a decomposition technique that breaks the 8.0 percentage point employment decline into two components: 1) the change in the composition of the population, and 2) the change in subgroup employment rates. The overall employment rate in any given year (E) is the sum of subgroup employment rates (E_g^t) weighted by subgroup population shares (S_g^t) over all subgroups ($g = 1, 2, \dots, G$). This calculation requires mutually exclusive subgroups. The change in overall employment rates from one year (t) to another year (t') is

$$(1) \quad E^{t'} - E^t = \sum_{g=1}^G (E_g^{t'} S_g^{t'}) - \sum_{g=1}^G (E_g^t S_g^t).$$

To facilitate decomposition, this change can be rewritten as

$$(2) \quad E^{t'} - E^t = \sum_{g=1}^G \left((S_g^{t'} - S_g^t) (E_g^t - E^t) \right) + \sum_{g=1}^G \left((E_g^{t'} - E_g^t) S_g^t \right) \\ = \sum_{g=1}^G (\Delta S_g e_g^t) + \sum_{g=1}^G (\Delta E_g S_g^t).$$

In other words, the impact of the change in subgroup composition (the first term) is the weighted sum of changes in subgroup population shares (ΔS_g) over all subgroups, where each subgroup is weighted by the deviation of its initial employment rate from the initial overall employment rate (e_g^t). A rise in a population share of a subgroup with a below-average employment rate will reduce the overall employment rate. The change owing to changes in subgroup employment rates (the second term) is the weighted sum of changes in subgroup employment rates (ΔE_g) over all subgroups, where each subgroup is weighted by its population share in the second year (S_g^t). A rise in the employment rate of any subgroup will increase the overall employment rate.

To perform the decomposition, we divide the population with disabilities into 16 mutually exclusive subgroups based on male, female, white, nonwhite, aged 25–44, aged 45–61, high school or less, and more than high school.¹² Table 3.1 reports the population shares and employment rates for the 16 mutually exclusive subgroups used in the decomposition as well as how they changed between 1980 and 2000 (in percentage point terms).¹³ Looking first at changes in population shares, Table 3.1 points to a shift in the population with disabilities towards greater educational attainment. With the exception of white men aged 25–44, educational attainment among all subgroups increased between 1989 and 2000. In most cases, this continued a pattern of improvement begun in the 1980s.

As the last five columns of Table 3.1 show, the patterns for employment rates were much different. Of the 16 subgroups displayed, 5 experienced employment declines between 1980 and 1989, and 13 experienced declines between 1989 and 2000. During the 1990s, the most notable declines in employment were among white men and women aged 25–44 with more than a high school education—27.6 and 20.0 percentage points, respectively. The smallest declines were among white and nonwhite women aged 45–61 with high school or less; employment among white women declined 4.1 percentage points, while nonwhite women in this group experienced a 3.2 percentage point decline in employment between 1989 and 2000. Only nonwhite men aged 45–61 and nonwhite women aged 45–61 with more than high school saw substantial increases in their employment rates over the 1990s. In contrast, during the previous decade employment rates rose for all groups except certain nonwhites and white men with high

Table 3.1 Population Shares and Employment Rates of Those Reporting Work Limitation, by Gender, Age, Race, and Education (16 mutually exclusive groups) (percentages and percentage point changes)

| Group | Population shares | | | | | Employment rate | | | | |
|--------------------------------------|-------------------|-------|-------|-----------|-----------|-----------------|------|------|-----------|-----------|
| | Employment year | | | Change | | Employment year | | | Change | |
| | 1980 | 1989 | 2000 | 1980–1989 | 1989–2000 | 1980 | 1989 | 2000 | 1980–1989 | 1989–2000 |
| Total population | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 | 35.5 | 40.8 | 32.8 | 5.3 | –8.0 |
| Men, 25–44, white, HS or less | 11.3 | 14.7 | 9.9 | 3.4 | –4.8 | 53.9 | 50.9 | 37.6 | –3.0 | –13.3 |
| Men, 25–44, white, more than HS | 4.2 | 5.2 | 4.4 | 1.0 | –0.8 | 70.0 | 74.4 | 46.8 | 4.4 | –27.6 |
| Men, 25–44, nonwhite, HS or less | 3.4 | 3.4 | 3.5 | 0.0 | 0.1 | 24.3 | 34.2 | 27.3 | 9.9 | –6.9 |
| Men, 25–44, nonwhite, more than HS | 0.8 | 1.1 | 1.3 | 0.3 | 0.2 | 54.6 | 47.4 | 39.1 | –7.2 | –8.3 |
| Men, 45–61, white, HS or less | 20.3 | 17.0 | 14.6 | –3.3 | –2.4 | 36.5 | 34.4 | 26.5 | –2.1 | –7.9 |
| Men, 45–61, white, more than HS | 4.5 | 5.2 | 8.9 | 0.7 | 3.7 | 48.6 | 53.0 | 38.1 | 4.4 | –14.9 |
| Men, 45–61, nonwhite, HS or less | 4.6 | 4.4 | 3.9 | –0.2 | –0.5 | 23.4 | 21.1 | 21.2 | –2.3 | 0.1 |
| Men, 45–61, nonwhite, more than HS | 0.6 | 0.9 | 1.4 | 0.3 | 0.5 | 36.0 | 27.1 | 36.0 | –8.9 | 8.9 |
| Women, 25–44, white, HS or less | 10.8 | 11.5 | 8.9 | 0.7 | –2.6 | 40.3 | 47.4 | 34.6 | 7.1 | –12.8 |
| Women, 25–44, white, more than HS | 3.4 | 5.1 | 5.7 | 1.7 | 0.6 | 55.8 | 71.2 | 51.2 | 15.4 | –20.0 |
| Women, 25–44, nonwhite, HS or less | 3.2 | 3.2 | 3.1 | 0.0 | –0.1 | 26.4 | 33.6 | 28.5 | 7.2 | –5.1 |
| Women, 25–44, nonwhite, more than HS | 0.8 | 0.9 | 1.8 | 0.1 | 0.9 | 40.0 | 49.3 | 43.0 | 9.3 | –6.3 |
| Women, 45–61, white, HS or less | 22.1 | 17.9 | 15.9 | –4.2 | –2.0 | 20.0 | 26.2 | 22.1 | 6.2 | –4.1 |
| Women, 45–61, white, more than HS | 3.6 | 3.7 | 9.4 | 0.1 | 5.7 | 34.0 | 39.0 | 46.3 | 5.0 | 7.3 |
| Women, 45–61, nonwhite, HS or less | 5.7 | 5.2 | 4.8 | –0.5 | –0.4 | 19.3 | 20.1 | 16.9 | 0.8 | –3.2 |
| Women, 45–61, nonwhite, more than HS | 0.4 | 0.7 | 2.6 | 0.3 | 1.9 | 25.5 | 38.4 | 26.0 | 12.9 | –12.4 |

SOURCE: Authors' calculations using the March Current Population Survey, 1981, 1990, and 2001.

school or less. These simple descriptive statistics point to a broad-based decline in employment among those with disabilities, a decline not fully accounted for by employment reductions among high-risk groups such as nonwhites, older workers, and individuals with below-average educational attainment.

Table 3.2 reports the results of the decompositions. For comparison purposes, we perform the decompositions for both business cycle periods in our sample, 1980–1989 and 1989–2000.¹⁴ The first row of Table 3.2 shows that between 1989 and 2000, changes in employment rates, rather than changes in population shares, account for the 8.0 percentage point decline in overall employment among those with disabilities. Indeed, changes in subgroup population shares contributed positively, albeit modestly, to changes in the overall employment rate during the period, boosting it by 0.2 percentage points. Changes in subgroup employment rates contributed negatively to changes in the overall employment rate, reducing it 8.2 percentage points. This experience contrasts with that of the previous decade, when movements in population shares and changes in subgroup employment rates moved together to boost employment among those with disabilities. Between 1980 and 1989, employment among working-aged adults increased 5.3 percentage points; changes in population shares accounted for 2.2 percentage points while changes in employment rates contributed 3.1 percentage points.¹⁵

The remaining rows of Table 3.2 display the patterns for each of the 16 subgroups; the third and sixth columns (“Total”) show the contribution of each subgroup to the change in the overall employment rate over the period. For example, white men aged 25–44 with more than a high school education contributed negatively to the employment rate of those with disabilities between 1989 and 2000, lowering it 1.5 percentage points. Measured this way, white men aged 25–44 at all levels of education and white women aged 25–44 with high school or less contributed the most to the overall decline in employment, accounting for 4.6 percentage points of the 8.0 percentage point decline. Only three groups contributed positively to the overall employment rate: nonwhite men aged 45–61 in either education group (a total of 0.1 percentage points) and white women aged 45–61 with more than a high school education (0.6 percentage points).

Table 3.2 Decomposition of the Percentage Point Change in the Employment Rate of Those Reporting Work Limitation, by Changes in Population Shares and Employment Rates and by Gender, Age, Race, and Education

| Group | Contribution to change in the overall employment rate | | | | | | | |
|--------------------------------------|---|-----------------|-------|-------------------------------|------------------|-----------------|-------|-------------------------------|
| | 1980–1989 | | | | 1989–2000 | | | |
| | Percentage point | | | Percent of total ^a | Percentage point | | | Percent of total ^a |
| | Population share | Employment rate | Total | | Population share | Employment rate | Total | |
| Total population | 2.2 | 3.1 | 5.3 | 100.0 | 0.2 | -8.2 | -8.0 | 100.0 |
| Men, 25–44, white, HS or less | 0.6 | -0.4 | 0.2 | 3.2 | -0.5 | -1.3 | -1.8 | -22.4 |
| Men, 25–44, white, more than HS | 0.3 | 0.2 | 0.6 | 10.6 | -0.3 | -1.2 | -1.5 | -18.4 |
| Men, 25–44, nonwhite, HS or less | 0.0 | 0.3 | 0.3 | 6.4 | 0.0 | -0.2 | -0.2 | -3.0 |
| Men, 25–44, nonwhite, more than HS | 0.1 | -0.1 | 0.0 | -0.4 | 0.0 | -0.1 | -0.1 | -1.1 |
| Men, 45–61, white, HS or less | 0.0 | -0.4 | -0.4 | -7.4 | 0.2 | -1.1 | -1.0 | -12.4 |
| Men, 45–61, white, more than HS | 0.1 | 0.2 | 0.3 | 5.9 | 0.5 | -1.3 | -0.9 | -10.9 |
| Men, 45–61, nonwhite, HS or less | 0.0 | -0.1 | -0.1 | -1.3 | 0.1 | 0.0 | 0.1 | 1.1 |
| Men, 45–61, nonwhite, more than HS | 0.0 | -0.1 | -0.1 | -1.5 | -0.1 | 0.1 | 0.1 | 0.6 |
| Women, 25–44, white, HS or less | 0.0 | 0.8 | 0.8 | 15.9 | -0.2 | -1.1 | -1.3 | -16.3 |
| Women, 25–44, white, more than HS | 0.4 | 0.8 | 1.2 | 21.7 | 0.2 | -1.1 | -1.0 | -12.1 |
| Women, 25–44, nonwhite, HS or less | 0.0 | 0.2 | 0.2 | 4.4 | 0.0 | -0.2 | -0.2 | -1.9 |
| Women, 25–44, nonwhite, more than HS | 0.0 | 0.1 | 0.1 | 1.1 | 0.1 | -0.1 | 0.0 | -0.5 |
| Women, 45–61, white, HS or less | 0.7 | 1.1 | 1.8 | 33.3 | 0.3 | -0.6 | -0.4 | -4.5 |
| Women, 45–61, white, more than HS | 0.0 | 0.2 | 0.2 | 3.4 | -0.1 | 0.7 | 0.6 | 7.4 |

| | | | | | | | | |
|--------------------------------------|-----|-----|-----|-----|-----|------|------|------|
| Women, 45–61, nonwhite, HS or less | 0.1 | 0.0 | 0.1 | 2.5 | 0.1 | –0.2 | –0.1 | –1.0 |
| Women, 45–61, nonwhite, more than HS | 0.0 | 0.1 | 0.1 | 1.1 | 0.0 | –0.3 | –0.4 | –4.6 |

^a Percent of total is calculated as the total percentage point contribution for each subgroup, divided by the total percentage point change in employment.

SOURCE: Authors' calculations using the March Current Population Survey, 1981, 1990, and 2001.

Another useful way to think about the relative contributions of each subgroup to the total decline is to compare their percent of total contributions to the overall employment decline (columns 4 and 8 of Table 3.2) with their population shares (columns 1–3 of Table 3.1). This comparison shows that white men and women of all educational levels contributed disproportionately to the overall decline in employment among those with disabilities during the 1990s. For example, white men with high school or less made up about 12 percent of the population over the 1989–2000 period, but accounted for 22.4 percent of the employment decline among those with disabilities. The relative contribution of white men with more than high school was even larger. Based on their population shares, they should have accounted for about 5 percent of the overall employment decline between 1989 and 2000. Instead, they accounted for 18.4 percent of the decline, roughly four times their population share. The patterns for white women are similar. Overall, this comparison indicates that although nonwhites with lower than average educational attainment make up a disproportionate share of the population with disabilities (15.3 percent in 2000), they accounted for just 4 percent (0.4 percentage points) of the total decline in employment rates among those with disabilities. Taken together, these results support the earlier descriptive evidence that population shifts or narrowly focused employment declines cannot account for the sharp decline in employment among working-aged adults with disabilities during the 1990s.

Finally, some simple counterfactual exercises illustrate these findings. If population shares did not change over this period, and the change in the employment rate for each group were the same, the decline in the employment rate would have been larger, assuming no behavioral or policy responses. Instead of the 8.0 percentage point decline, there would have been an 8.2 percentage point decline. Conversely, if the employment rate within each group did not change over this period, and the population share changes were the same, the employment rate would have increased by 0.2 percentage points.

The results of the decompositions underscore the descriptive analyses in prior sections, pointing to broad-based reductions in employment rates among nearly every subgroup. More important, the results suggest that the largest relative declines in employment were among those groups best prepared to take advantage of the economic expan-

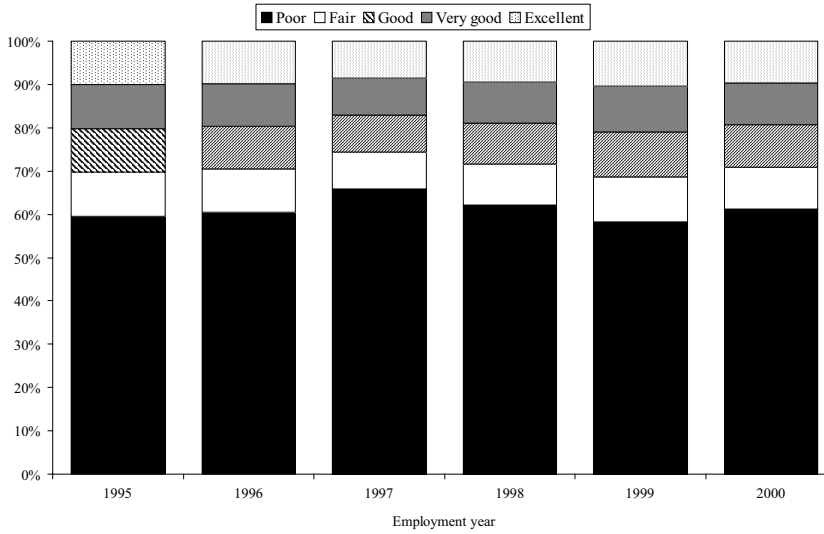
sion of the 1990s (i.e., individuals with more than a high school education). The groups traditionally least attached to the labor market—nonwhites with high school or less—experienced the smallest relative declines in employment. These patterns contrast sharply with those of the 1980s, when large shifts in educational attainment and demographic characteristics helped boost employment rates for those with disabilities.

WITHIN-GROUP CHANGES IN HEALTH

The analyses in the previous sections rule out the possibility that simple shifts in population shares or employment declines among narrowly defined groups explain the aggregate employment trends for the population with disabilities during the 1990s business cycle. The final element of change we consider is the extent to which the population with disabilities is becoming less healthy. The use of self-reported health is not without its problems. However, unlike measures such as the ability to work, it is not directly tied to the employment variable we are tracking in our analysis. Thus, it provides one method of checking whether changes in health, unrelated to changes in labor markets, may be driving the employment declines observed in the 1990s.

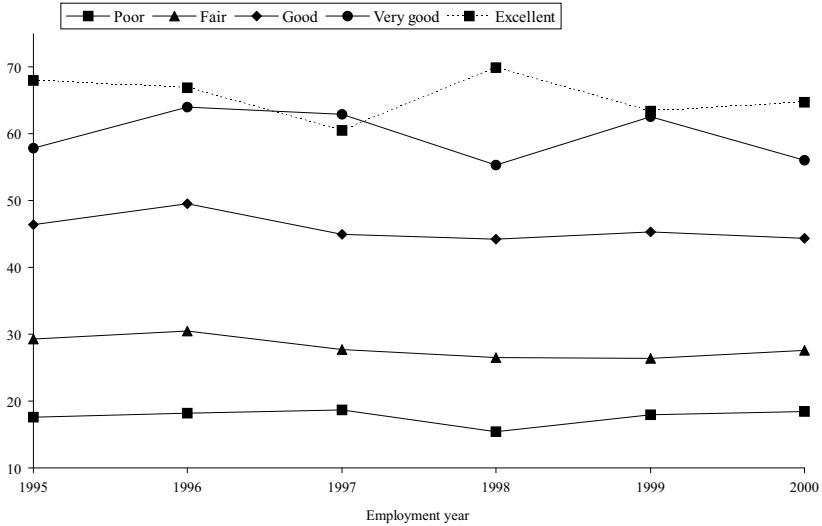
Figure 3.11 shows the share of the population with disabilities reporting poor, fair, good, very good, and excellent health. The data are for 1995–2000, the only years these questions appear in the CPS.¹⁶ Although the time series is too short to draw many conclusions about changes in self-reported health, we see no indication of shifts in this variable. There is no visible consistent upward or downward trend. Figure 3.12 considers employment trends among those with disabilities by self-reported health status, once again asking whether the overall decline in employment can be traced to pronounced reductions among one group, such as those with poor health. As the figure shows, there is little evidence that one subgroup accounts for the decline. Rather, the reductions in employment appear broad-based, or evenly slightly weighted toward those with better health.

Figure 3.11 Yearly Trends of Those Reporting Work Limitations, by Self-Reported Health Status (percentages)



SOURCE: Authors' calculations using the March Current Population Survey, 1996–2001.

Figure 3.12 Yearly Employment Rate Trends (1980–2000) of Those Reporting Work Limitations, by Self-Reported Health Status (percentages)



SOURCE: Authors’ calculations using the March Current Population Survey, 1996–2001.

CONCLUSION

We began this chapter by asking whether the decline in employment among those with disabilities documented in Chapter 2 was broad-based or narrowly focused, explained by population shifts or changes in behavior or opportunities among those with disabilities, or simply reflective of exogenous deteriorations in health, relatively immune from policy corrections. Our findings point strongly to changes in behavior or opportunities as the key to understanding the recent decline. We show that employment declines were very broad-based across key population subgroups, that the largest contributions to the decline were among subgroups most connected to the labor market, and that shifts in population shares actually contributed positively, rather than negatively, to employment among those with disabilities during the 1990s. These findings tell us that there are no simple

answers to the disturbing trend in employment. Instead, the decline appears due to a complex combination of behavioral and policy changes that came together to dramatically alter the connection of people with disabilities to the labor market during the 1990s.

Notes

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1. Using this age range avoids confusing reductions in work or economic well-being associated with disabilities, with reductions or declines associated with retirement at older ages, and initial transitions into the labor force related to job shopping at younger ages.
2. Nagi (1991) and the recently developed International Classification of Functioning, Disability, and Health (ICF) provide similar frameworks to conceptualize the definition of disability within the context of social roles and environmental influences.
3. The CPS is a monthly survey of the noninstitutionalized population of the United States. Information is collected on labor force characteristics (e.g., employment, earnings, hours of work). In March of each year, the CPS basic monthly survey is supplemented with the Annual Demographic Survey. This supplement focuses on sources of income, government program participation, annual employment, insurance, and a variety of demographic characteristics. In 1981, the March supplement was expanded to include several questions about disability and income derived from disability programs and insurance. The CPS and the Annual Demographic Survey are used extensively by government agencies, academic researchers, policymakers, journalists, and the general public to evaluate government programs, economic well-being, and behavior of individuals, families, and households.
4. See Burkhauser et al. (2002).
5. Although the CPS obtains information on current employment, the question changed notably in 1994, limiting its usefulness for time series analysis.
6. Appendix Table 3A.1 provides disability prevalence rates by population subgroup from 1980 through 2000. The data show that the patterns described in Figure 3.2 persist across time.
7. The data for Figures 3.3–3.6 are provided in Appendix Table 3A.2. Data for those without disabilities are provided in Appendix Table 3A.3.
8. Although volatile from year to year, the prevalence of disability by age group was largely the same in 2000 as in 1980. The largest changes were for individuals

aged 35–44 and 45–54, for whom prevalence increased in the late 1980s and early 1990s.

9. Decomposing the shift into that associated with general population trends versus that associated with changes in prevalence indicates that for those with high school or some college, the prevalence of work limitation rose substantially in the 1990s (especially for the high school group). This change in prevalence of self-reported work limitation is consistent with the story of Autor and Duggan (2003) which states that replacement rates on earnings for those with relatively low levels of education (i.e., high school only) have risen, inducing more to apply for benefits.
10. The underlying numbers for these figures, referred to in the text, are provided in Appendix Table 3A.4.
11. The figures reported for those without disabilities can be found in Appendix Table 3A.5.
12. Limited sample sizes prohibit us from splitting the population into mutually exclusive subgroups based on the full set of subgroups in the previous sections.
13. Appendix Table 3A.6 provides the data for the population without disabilities.
14. Decomposition results for those without disabilities are provided in Appendix Table 3A.7.
15. To check the robustness of our findings, we pooled the data into three-year periods 1987–1989 and 1998–2000. The results were very similar. We also tried different education subcategories (less than high school and high school or more), and again the results were very similar. These results are available upon request.
16. Appendix Table 3A.8 provides similar information for those without disabilities.

Appendix 3A

Supplementary Tables

Table 3A.1 Prevalence of Work Limitation, by Gender, Age, Race, and Education (percentages)

| Employ- ment year | Gender | | | Age | | | | Race | | Education | | | |
|-------------------------|--------|-----|-------|-------|-------|-------|-------|-------|----------|----------------------|----------------|-----------------|--------------------|
| | Total | Men | Women | 25–34 | 35–44 | 45–54 | 55–61 | White | Nonwhite | Less than H.S. | High school | Some college | College or more |
| 1980 | 7.9 | 8.2 | 7.6 | 4.0 | 5.9 | 10.3 | 16.8 | 7.3 | 12.9 | 16.3 | 6.6 | 5.3 | 2.9 |
| 1981 | 7.9 | 8.2 | 7.6 | 3.9 | 5.9 | 10.4 | 17.4 | 7.4 | 12.2 | 16.5 | 6.7 | 5.6 | 3.1 |
| 1982 | 7.5 | 7.8 | 7.2 | 3.8 | 5.7 | 9.7 | 16.7 | 7.1 | 11.1 | 16.2 | 6.2 | 5.4 | 3.0 |
| 1983 | 7.6 | 8.0 | 7.2 | 4.1 | 5.6 | 9.8 | 17.1 | 7.1 | 11.2 | 16.6 | 6.6 | 5.2 | 3.1 |
| 1984 | 7.8 | 8.2 | 7.5 | 4.1 | 6.0 | 10.2 | 17.5 | 7.2 | 12.4 | 17.3 | 7.0 | 5.6 | 2.9 |
| 1985 | 7.7 | 8.3 | 7.2 | 4.4 | 6.0 | 9.8 | 17.2 | 7.2 | 11.5 | 17.2 | 6.9 | 5.9 | 2.8 |
| 1986 | 7.7 | 8.2 | 7.2 | 4.4 | 6.2 | 9.5 | 17.0 | 7.2 | 11.6 | 17.7 | 7.0 | 5.3 | 2.8 |
| 1987 | 7.2 | 7.7 | 6.7 | 4.4 | 5.9 | 8.6 | 15.6 | 6.7 | 11.0 | 16.1 | 6.6 | 5.8 | 2.6 |
| 1988 | 7.2 | 7.6 | 6.8 | 4.0 | 6.3 | 9.0 | 16.0 | 6.8 | 10.4 | 16.9 | 6.7 | 5.5 | 2.6 |
| 1989 | 7.4 | 7.9 | 7.0 | 4.2 | 6.0 | 9.5 | 16.6 | 7.0 | 10.9 | 17.0 | 7.3 | 5.1 | 2.8 |
| 1990 | 7.5 | 7.7 | 7.2 | 4.4 | 6.3 | 9.4 | 15.8 | 6.9 | 11.1 | 16.8 | 7.4 | 5.6 | 3.0 |
| 1991 | 7.6 | 8.1 | 7.2 | 4.6 | 6.4 | 9.7 | 15.9 | 7.2 | 10.6 | 18.1 | 7.6 | 6.0 | 2.7 |
| 1992 | 7.8 | 8.4 | 7.2 | 4.8 | 6.5 | 9.7 | 15.6 | 7.5 | 10.0 | 18.2 | 8.0 | 6.5 | 2.6 |
| 1993 | 8.4 | 8.8 | 8.0 | 5.1 | 7.0 | 10.7 | 17.1 | 7.8 | 12.5 | 20.6 | 8.6 | 6.7 | 2.7 |
| 1994 | 8.3 | 8.5 | 8.2 | 4.7 | 7.3 | 10.6 | 16.7 | 7.8 | 12.5 | 19.3 | 9.1 | 6.9 | 3.0 |
| 1995 | 8.3 | 8.2 | 8.4 | 4.5 | 7.3 | 10.5 | 16.8 | 7.6 | 12.6 | 19.0 | 8.9 | 6.9 | 3.2 |
| 1996 | 8.3 | 8.3 | 8.3 | 4.3 | 7.1 | 10.6 | 16.9 | 7.7 | 12.2 | 18.7 | 8.9 | 7.3 | 3.2 |
| 1997 | 8.1 | 7.8 | 8.3 | 3.6 | 7.0 | 10.5 | 16.5 | 7.6 | 11.2 | 18.1 | 8.9 | 7.0 | 3.1 |
| 1998 | 7.9 | 8.0 | 7.9 | 3.8 | 6.7 | 10.0 | 16.2 | 7.3 | 11.8 | 17.3 | 9.0 | 7.1 | 3.1 |
| 1999 | 7.9 | 8.0 | 7.9 | 3.8 | 6.7 | 9.8 | 16.1 | 7.4 | 11.7 | 17.9 | 9.2 | 6.9 | 3.2 |
| 2000 | 7.8 | 7.7 | 8.0 | 3.7 | 6.2 | 10.2 | 15.5 | 7.3 | 11.2 | 17.5 | 9.3 | 7.1 | 2.9 |

SOURCE: Authors' calculations using the March Current Population Survey, 1981–2001.

Table 3A.2 Share Composition of Those Reporting Work Limitation, by Gender, Age, Race, and Education (percentages)

| Employ- ment year | Gender | | Age | | | | Race | | Education | | | |
|----------------------|--------|-------|-------|-------|-------|-------|-------|----------|-------------------|----------------|-----------------|--------------------|
| | Men | Women | 25–34 | 35–44 | 45–54 | 55–61 | White | Nonwhite | Less than H.S. | High school | Some college | College or more |
| 1980 | 49.9 | 50.1 | 18.8 | 19.2 | 28.8 | 33.2 | 80.3 | 19.7 | 47.7 | 33.9 | 11.2 | 7.2 |
| 1981 | 50.0 | 50.0 | 18.2 | 19.7 | 28.4 | 33.8 | 81.4 | 18.6 | 45.8 | 34.4 | 12.0 | 7.8 |
| 1982 | 50.5 | 49.5 | 18.8 | 20.5 | 27.2 | 33.5 | 81.8 | 18.2 | 45.5 | 33.3 | 12.6 | 8.6 |
| 1983 | 51.0 | 49.0 | 19.8 | 20.4 | 26.8 | 33.1 | 81.4 | 18.6 | 43.8 | 35.4 | 12.1 | 8.8 |
| 1984 | 50.9 | 49.1 | 19.3 | 21.8 | 26.6 | 32.2 | 79.8 | 20.2 | 42.5 | 36.3 | 12.9 | 8.3 |
| 1985 | 51.9 | 48.1 | 20.8 | 22.4 | 25.5 | 31.2 | 80.7 | 19.3 | 41.4 | 36.2 | 14.3 | 8.2 |
| 1986 | 51.9 | 48.1 | 21.3 | 23.7 | 24.9 | 30.2 | 80.3 | 19.7 | 41.5 | 37.2 | 13.0 | 8.3 |
| 1987 | 52.1 | 47.9 | 22.6 | 24.5 | 24.5 | 28.5 | 80.0 | 20.0 | 39.8 | 36.9 | 15.1 | 8.3 |
| 1988 | 51.4 | 48.6 | 19.9 | 26.1 | 25.8 | 28.2 | 80.5 | 19.5 | 40.2 | 36.8 | 14.5 | 8.6 |
| 1989 | 51.7 | 48.3 | 20.3 | 24.9 | 27.0 | 27.8 | 80.2 | 19.8 | 37.7 | 39.5 | 13.8 | 9.0 |
| 1990 | 50.4 | 49.6 | 20.6 | 26.6 | 26.5 | 26.3 | 79.4 | 20.6 | 36.0 | 39.2 | 15.3 | 9.5 |
| 1991 | 51.6 | 48.4 | 20.5 | 26.5 | 27.9 | 25.1 | 80.2 | 19.8 | 36.3 | 36.3 | 18.9 | 8.5 |
| 1992 | 52.8 | 47.2 | 20.6 | 26.9 | 28.4 | 24.0 | 81.6 | 18.4 | 33.9 | 36.6 | 21.2 | 8.3 |
| 1993 | 51.5 | 48.5 | 19.8 | 27.0 | 29.5 | 23.7 | 78.6 | 21.4 | 35.3 | 35.2 | 21.4 | 8.1 |
| 1994 | 50.0 | 50.0 | 17.9 | 28.8 | 30.4 | 22.9 | 78.9 | 21.1 | 31.8 | 36.8 | 22.1 | 9.3 |
| 1995 | 48.5 | 51.5 | 16.7 | 28.7 | 30.7 | 23.9 | 77.0 | 23.0 | 31.9 | 36.0 | 22.0 | 10.0 |
| 1996 | 48.8 | 51.2 | 15.7 | 28.4 | 31.7 | 24.2 | 77.8 | 22.2 | 30.7 | 36.0 | 23.3 | 10.1 |
| 1997 | 47.5 | 52.5 | 13.2 | 28.8 | 33.0 | 25.0 | 78.3 | 21.7 | 29.5 | 36.9 | 23.3 | 10.3 |
| 1998 | 49.2 | 50.8 | 13.6 | 27.9 | 32.8 | 25.6 | 77.2 | 22.8 | 27.7 | 37.3 | 23.9 | 11.0 |
| 1999 | 48.9 | 51.1 | 13.3 | 27.7 | 33.3 | 25.7 | 77.5 | 22.5 | 27.4 | 37.7 | 23.6 | 11.3 |
| 2000 | 47.8 | 52.2 | 12.8 | 25.6 | 35.9 | 25.6 | 77.7 | 22.3 | 26.8 | 37.7 | 25.0 | 10.5 |

SOURCE: Authors' calculations using the March Current Population Survey, 1981–2001.

Table 3A.3 Share Composition of Those Reporting No Work Limitation, by Gender, Age, Race, and Education (percentages)

| Employ- ment year | Gender | | Age | | | | Race | | Education | | | |
|----------------------|--------|-------|-------|-------|-------|-------|-------|----------|-------------------|----------------|-----------------|--------------------|
| | Men | Women | 25–34 | 35–44 | 45–54 | 55–61 | White | Nonwhite | Less than H.S. | High school | Some college | College or more |
| 1980 | 48.1 | 51.9 | 38.4 | 26.1 | 21.5 | 14.0 | 87.8 | 12.2 | 20.9 | 41.3 | 17.3 | 20.5 |
| 1981 | 48.2 | 51.8 | 38.6 | 26.8 | 20.9 | 13.7 | 87.6 | 12.4 | 19.9 | 41.4 | 17.5 | 21.3 |
| 1982 | 48.2 | 51.8 | 38.4 | 27.6 | 20.5 | 13.5 | 87.1 | 12.9 | 19.1 | 40.8 | 17.7 | 22.3 |
| 1983 | 48.2 | 51.8 | 38.4 | 28.4 | 20.1 | 13.1 | 87.1 | 12.9 | 18.1 | 41.1 | 18.0 | 22.8 |
| 1984 | 48.2 | 51.8 | 38.4 | 28.9 | 19.9 | 12.9 | 86.9 | 13.1 | 17.3 | 40.8 | 18.6 | 23.3 |
| 1985 | 48.3 | 51.7 | 38.4 | 29.3 | 19.7 | 12.6 | 86.7 | 13.3 | 16.7 | 40.8 | 19.1 | 23.3 |
| 1986 | 48.3 | 51.7 | 38.3 | 29.7 | 19.7 | 12.2 | 86.4 | 13.6 | 16.0 | 40.9 | 19.4 | 23.7 |
| 1987 | 48.4 | 51.6 | 37.8 | 30.1 | 20.2 | 11.9 | 86.3 | 13.7 | 16.1 | 40.6 | 19.2 | 24.1 |
| 1988 | 48.5 | 51.5 | 37.5 | 30.5 | 20.4 | 11.6 | 86.0 | 14.0 | 15.4 | 40.1 | 19.4 | 25.1 |
| 1989 | 48.5 | 51.5 | 36.9 | 31.3 | 20.6 | 11.2 | 85.8 | 14.2 | 14.8 | 39.9 | 20.3 | 25.1 |
| 1990 | 48.7 | 51.3 | 36.1 | 32.0 | 20.6 | 11.3 | 85.8 | 14.2 | 14.4 | 39.8 | 20.7 | 25.2 |
| 1991 | 48.6 | 51.4 | 35.3 | 32.3 | 21.4 | 11.0 | 85.4 | 14.6 | 13.6 | 36.4 | 24.8 | 25.3 |
| 1992 | 48.6 | 51.4 | 34.2 | 32.5 | 22.3 | 11.0 | 85.2 | 14.8 | 12.8 | 35.4 | 25.8 | 25.9 |
| 1993 | 48.8 | 51.2 | 33.9 | 33.0 | 22.6 | 10.5 | 85.1 | 14.9 | 12.4 | 34.3 | 27.0 | 26.3 |
| 1994 | 48.9 | 51.1 | 33.2 | 33.1 | 23.3 | 10.4 | 85.3 | 14.7 | 12.0 | 33.6 | 27.3 | 27.1 |
| 1995 | 49.0 | 51.0 | 32.4 | 33.2 | 23.6 | 10.7 | 84.5 | 15.5 | 12.3 | 33.2 | 27.0 | 27.5 |
| 1996 | 49.1 | 50.9 | 31.5 | 33.5 | 24.3 | 10.7 | 84.2 | 15.8 | 12.1 | 33.3 | 26.9 | 27.7 |
| 1997 | 49.1 | 50.9 | 30.6 | 33.5 | 24.8 | 11.1 | 83.9 | 16.1 | 11.7 | 33.0 | 27.0 | 28.3 |
| 1998 | 48.8 | 51.2 | 29.6 | 33.4 | 25.5 | 11.4 | 83.9 | 16.1 | 11.4 | 32.4 | 26.9 | 29.2 |
| 1999 | 48.8 | 51.2 | 28.8 | 33.2 | 26.4 | 11.6 | 83.8 | 16.2 | 10.8 | 32.0 | 27.5 | 29.6 |
| 2000 | 48.9 | 51.1 | 28.3 | 33.0 | 26.9 | 11.9 | 83.4 | 16.6 | 10.7 | 31.4 | 27.7 | 30.2 |

SOURCE: Authors' calculations using the March Current Population Survey, 1981–2001.

Table 3A.4 Employment Rates of Those Reporting Work Limitations, by Gender, Age, Race, and Education (percentages)

| Employ- ment year | Gender | | Age | | | | Race | | Education | | | | |
|----------------------|--------|------|-------|-------|-------|-------|-------|-------|-----------|-------------------|----------------|-----------------|--------------------|
| | Total | Men | Women | 25–34 | 35–44 | 45–54 | 55–61 | White | Nonwhite | Less than H.S. | High school | Some college | College or more |
| 1980 | 35.5 | 42.6 | 28.5 | 50.6 | 42.9 | 35.1 | 23.2 | 38.1 | 25.2 | 26.4 | 40.0 | 48.2 | 55.0 |
| 1981 | 36.5 | 44.8 | 28.1 | 51.0 | 43.7 | 34.7 | 25.8 | 39.0 | 25.3 | 26.0 | 41.2 | 46.5 | 61.5 |
| 1982 | 35.6 | 41.8 | 29.3 | 47.6 | 47.4 | 31.0 | 25.4 | 37.7 | 26.4 | 24.6 | 39.8 | 48.7 | 58.7 |
| 1983 | 34.4 | 39.7 | 28.9 | 44.8 | 43.9 | 32.7 | 23.8 | 37.1 | 22.6 | 23.1 | 39.0 | 45.4 | 57.7 |
| 1984 | 35.4 | 40.4 | 30.2 | 46.8 | 41.2 | 34.1 | 25.7 | 38.2 | 24.3 | 25.5 | 38.7 | 47.6 | 53.1 |
| 1985 | 37.8 | 42.8 | 32.4 | 49.5 | 43.9 | 36.6 | 26.7 | 40.0 | 28.6 | 25.0 | 41.8 | 52.0 | 60.7 |
| 1986 | 38.1 | 43.8 | 32.1 | 52.2 | 45.6 | 35.7 | 24.4 | 40.1 | 30.2 | 26.2 | 42.5 | 50.2 | 59.3 |
| 1987 | 38.6 | 43.0 | 33.9 | 52.1 | 46.5 | 33.6 | 25.6 | 41.6 | 26.7 | 23.6 | 43.8 | 53.3 | 61.5 |
| 1988 | 39.6 | 42.9 | 36.2 | 53.8 | 46.6 | 35.8 | 26.6 | 42.4 | 28.0 | 27.1 | 43.2 | 53.9 | 58.7 |
| 1989 | 40.8 | 44.0 | 37.5 | 57.5 | 48.2 | 36.5 | 26.2 | 43.8 | 28.8 | 25.5 | 45.6 | 53.8 | 64.2 |
| 1990 | 38.5 | 42.1 | 34.9 | 50.9 | 47.8 | 34.1 | 24.1 | 41.7 | 26.3 | 22.8 | 42.0 | 53.5 | 60.2 |
| 1991 | 38.4 | 41.5 | 35.0 | 51.8 | 46.3 | 33.6 | 24.5 | 41.2 | 27.0 | 23.4 | 39.5 | 54.9 | 60.9 |
| 1992 | 38.2 | 41.6 | 34.3 | 49.2 | 44.2 | 36.5 | 23.9 | 41.1 | 25.1 | 23.4 | 39.5 | 50.0 | 62.5 |
| 1993 | 35.3 | 37.2 | 33.4 | 45.0 | 39.6 | 33.4 | 24.8 | 37.5 | 27.4 | 20.2 | 37.3 | 49.5 | 55.6 |
| 1994 | 37.0 | 38.0 | 36.0 | 47.1 | 39.9 | 36.9 | 25.6 | 40.6 | 23.7 | 21.1 | 36.5 | 51.8 | 58.4 |
| 1995 | 34.3 | 34.9 | 33.9 | 46.4 | 37.7 | 32.6 | 24.1 | 37.7 | 23.1 | 19.7 | 34.8 | 46.1 | 53.3 |
| 1996 | 36.0 | 38.2 | 33.9 | 44.3 | 39.5 | 36.6 | 25.9 | 38.8 | 26.5 | 21.2 | 35.7 | 47.4 | 56.1 |
| 1997 | 33.6 | 35.5 | 31.9 | 41.8 | 37.5 | 33.8 | 24.7 | 35.8 | 25.8 | 19.3 | 32.5 | 43.8 | 55.7 |
| 1998 | 31.9 | 34.4 | 29.5 | 41.1 | 36.4 | 31.2 | 23.2 | 34.3 | 24.0 | 17.7 | 30.6 | 42.2 | 50.1 |
| 1999 | 33.7 | 34.0 | 33.4 | 42.3 | 40.8 | 32.2 | 23.6 | 35.6 | 27.0 | 18.7 | 34.1 | 41.5 | 52.3 |
| 2000 | 32.8 | 33.1 | 32.6 | 40.9 | 37.5 | 32.7 | 24.4 | 34.7 | 26.5 | 20.6 | 32.2 | 40.5 | 48.2 |

SOURCE: Authors' calculations using the March Current Population Survey, 1981–2001.

Table 3A.5 Employment Rates of Those Reporting No Work Limitation, by Gender, Age, Race, and Education (percentages)

| Employment year | Total | Gender | | Age | | | | Race | | Education | | | |
|-----------------|-------|--------|-------|-------|-------|-------|-------|-------|-----------|----------------|-------------|--------------|-----------------|
| | | Men | Women | 25–34 | 35–44 | 45–54 | 55–61 | White | Non-white | Less than H.S. | High school | Some college | College or more |
| 1980 | 82.5 | 96.7 | 69.3 | 84.4 | 84.2 | 82.7 | 73.8 | 82.8 | 80.6 | 74.2 | 81.3 | 85.6 | 90.8 |
| 1981 | 82.7 | 96.4 | 69.9 | 84.3 | 85.1 | 82.6 | 73.9 | 83.0 | 81.0 | 74.2 | 81.3 | 85.9 | 90.8 |
| 1982 | 81.7 | 95.1 | 69.3 | 83.4 | 84.3 | 81.3 | 72.2 | 82.2 | 78.2 | 71.2 | 80.0 | 85.3 | 90.9 |
| 1983 | 82.2 | 94.7 | 70.7 | 83.5 | 84.9 | 82.4 | 72.7 | 82.8 | 78.6 | 71.4 | 80.6 | 85.6 | 91.1 |
| 1984 | 83.7 | 95.7 | 72.6 | 85.5 | 85.9 | 83.9 | 73.4 | 84.1 | 81.1 | 72.7 | 82.6 | 87.4 | 91.1 |
| 1985 | 84.0 | 95.7 | 73.1 | 85.4 | 86.7 | 84.7 | 72.7 | 84.4 | 81.9 | 73.2 | 82.9 | 86.9 | 91.5 |
| 1986 | 84.9 | 96.1 | 74.4 | 85.9 | 87.9 | 85.5 | 73.4 | 85.2 | 82.7 | 74.1 | 83.5 | 87.9 | 92.1 |
| 1987 | 85.2 | 95.7 | 75.2 | 86.5 | 88.0 | 85.5 | 73.2 | 85.7 | 82.0 | 73.6 | 84.1 | 88.5 | 91.9 |
| 1988 | 85.9 | 95.8 | 76.7 | 86.7 | 88.9 | 86.3 | 75.0 | 86.5 | 82.5 | 73.7 | 85.0 | 89.4 | 92.3 |
| 1989 | 86.3 | 96.1 | 77.0 | 87.3 | 88.8 | 87.0 | 74.8 | 86.8 | 83.3 | 74.5 | 85.6 | 88.7 | 92.3 |
| 1990 | 86.5 | 95.9 | 77.6 | 87.1 | 89.0 | 87.4 | 75.9 | 87.1 | 82.9 | 75.1 | 85.6 | 88.9 | 92.4 |
| 1991 | 86.4 | 95.4 | 77.8 | 86.7 | 88.7 | 87.8 | 75.5 | 87.1 | 82.3 | 73.5 | 85.5 | 88.9 | 92.1 |
| 1992 | 86.0 | 94.8 | 77.6 | 86.4 | 88.1 | 87.3 | 75.6 | 86.8 | 81.3 | 72.4 | 84.7 | 88.7 | 91.7 |
| 1993 | 86.2 | 94.5 | 78.3 | 86.4 | 88.0 | 88.0 | 76.2 | 87.0 | 81.9 | 73.7 | 84.8 | 88.5 | 91.6 |
| 1994 | 86.8 | 94.8 | 79.1 | 86.6 | 88.5 | 88.8 | 77.6 | 87.3 | 83.6 | 74.2 | 85.5 | 89.0 | 91.8 |
| 1995 | 87.1 | 94.8 | 79.7 | 86.8 | 89.0 | 88.9 | 77.9 | 87.7 | 83.5 | 74.5 | 85.9 | 89.7 | 91.6 |
| 1996 | 87.3 | 94.9 | 80.1 | 87.3 | 88.7 | 89.4 | 78.6 | 88.0 | 84.0 | 74.7 | 86.6 | 89.4 | 91.8 |
| 1997 | 87.8 | 95.2 | 80.7 | 88.2 | 88.9 | 89.8 | 78.9 | 88.2 | 85.6 | 77.1 | 86.6 | 89.6 | 92.0 |
| 1998 | 87.8 | 95.1 | 80.8 | 87.9 | 89.3 | 89.6 | 79.0 | 88.2 | 85.8 | 76.5 | 86.9 | 89.6 | 91.5 |
| 1999 | 88.2 | 95.2 | 81.6 | 88.5 | 89.7 | 90.3 | 78.6 | 88.4 | 87.4 | 77.3 | 87.2 | 89.9 | 91.7 |
| 2000 | 88.1 | 95.2 | 81.3 | 88.4 | 89.7 | 90.1 | 78.3 | 88.3 | 86.9 | 77.7 | 87.5 | 89.7 | 90.8 |

SOURCE: Authors' calculations using the March Current Population Survey, 1981–2001.

Table 3A.6 Population Shares and Employment Rates of Those Reporting No Work Limitations, by Gender, Age, Race, and Education (16 mutually exclusive groups) (percentages and percentage point changes)

| Group | Population shares | | | | | Employment rate | | | | |
|--------------------------------------|-------------------|-------|-------|---------------|---------------|-----------------|------|------|---------------|---------------|
| | Employment year | | | Change | | Employment year | | | Change | |
| | 1980 | 1989 | 2000 | 1980– 1989 | 1989– 2000 | 1980 | 1989 | 2000 | 1980– 1989 | 1989– 2000 |
| Total population | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 | 82.5 | 86.3 | 88.1 | 3.8 | 1.8 |
| Men, 25–44, white, HS or less | 14.2 | 14.2 | 11.1 | 0.0 | –3.1 | 98.1 | 97.3 | 96.5 | –0.8 | –0.8 |
| Men, 25–44, white, more than HS | 13.3 | 14.5 | 13.9 | 1.2 | –0.6 | 98.2 | 98.2 | 97.6 | 0.0 | –0.6 |
| Men, 25–44, nonwhite, HS or less | 2.3 | 2.5 | 2.3 | 0.2 | –0.2 | 90.5 | 88.6 | 89.7 | –1.9 | 1.1 |
| Men, 25–44, nonwhite, more than HS | 1.5 | 2.0 | 2.8 | 0.5 | 0.8 | 91.7 | 95.1 | 94.3 | 3.4 | –0.8 |
| Men, 45–61, white, HS or less | 9.8 | 7.4 | 6.3 | –2.4 | –1.1 | 95.2 | 93.6 | 92.6 | –1.6 | –1.0 |
| Men, 45–61, white, more than HS | 5.4 | 6.1 | 10.0 | 0.7 | 3.9 | 97.6 | 96.1 | 94.7 | –1.5 | –1.4 |
| Men, 45–61, nonwhite, HS or less | 1.3 | 1.2 | 1.2 | –0.1 | 0.0 | 92.2 | 89.8 | 86.1 | –2.4 | –3.7 |
| Men, 45–61, nonwhite, more than HS | 0.4 | 0.6 | 1.4 | 0.2 | 0.8 | 92.6 | 94.9 | 93.5 | 2.3 | –1.4 |
| Women, 25–44, white, HS or less | 17.3 | 15.3 | 9.9 | –2.0 | –5.4 | 67.5 | 75.0 | 76.5 | 7.5 | 1.5 |
| Women, 25–44, white, more than HS | 11.2 | 14.0 | 15.3 | 2.8 | 1.3 | 79.0 | 85.0 | 85.0 | 6.0 | 0.0 |
| Women, 25–44, nonwhite, HS or less | 3.1 | 3.2 | 2.5 | 0.1 | –0.7 | 66.7 | 71.3 | 82.2 | 4.6 | 10.9 |
| Women, 25–44, nonwhite, more than HS | 1.6 | 2.4 | 3.5 | 0.8 | 1.1 | 83.5 | 86.2 | 85.7 | 2.7 | –0.5 |
| Women, 45–61, white, HS or less | 12.5 | 9.3 | 7.4 | –3.2 | –1.9 | 61.2 | 67.7 | 74.2 | 6.5 | 6.5 |
| Women, 45–61, white, more than HS | 4.1 | 5.0 | 9.5 | 0.9 | 4.5 | 70.6 | 78.9 | 84.3 | 8.3 | 5.4 |
| Women, 45–61, nonwhite, HS or less | 1.7 | 1.5 | 1.5 | –0.2 | 0.0 | 67.2 | 69.2 | 74.0 | 2.0 | 4.8 |
| Women, 45–61, nonwhite, more than HS | 0.4 | 0.7 | 1.5 | 0.3 | 0.8 | 86.2 | 85.1 | 86.3 | –1.1 | 1.2 |

SOURCE: Authors' calculations using the March Current Population Survey, 1981, 1990, and 2001.

Table 3A.7 Decomposition of the 1.8 Percentage Point Increase in the Employment Rate of Those Reporting No Work Limitations, by Changes in Population Shares and Employment Rates and by Gender, Age, Race, and Education

| Group | Contribution to change in the overall employment rate | | | | | | | |
|--------------------------------------|---|-----------------|-------|-------------------------------|------------------|-----------------|-------|-------------------------------|
| | 1980–1989 | | | | 1989–2000 | | | |
| | Percentage point | | | | Percentage point | | | |
| | Population share | Employment rate | Total | Percent of total ^a | Population share | Employment rate | Total | Percent of total ^a |
| Total population | 0.9 | 2.9 | 3.8 | 100.0 | 0.7 | 1.0 | 1.8 | 100.0 |
| Men, 25–44, white, HS or less | 0.0 | –0.1 | –0.1 | –2.9 | –0.3 | –0.1 | –0.4 | –24.1 |
| Men, 25–44, white, more than HS | 0.2 | 0.0 | 0.2 | 5.0 | –0.1 | –0.1 | –0.2 | –9.0 |
| Men, 25–44, nonwhite, HS or less | 0.0 | 0.0 | 0.0 | –0.8 | 0.0 | 0.0 | 0.0 | 1.1 |
| Men, 25–44, nonwhite, more than HS | 0.1 | 0.1 | 0.1 | 3.2 | 0.1 | 0.0 | 0.0 | 2.2 |
| Men, 45–61, white, HS or less | –0.3 | –0.1 | –0.4 | –11.1 | –0.1 | –0.1 | –0.1 | –7.8 |
| Men, 45–61, white, more than HS | 0.1 | –0.1 | 0.0 | 0.0 | 0.4 | –0.1 | 0.3 | 14.0 |
| Men, 45–61, nonwhite, HS or less | 0.0 | 0.0 | 0.0 | –1.1 | 0.0 | 0.0 | 0.0 | –2.2 |
| Men, 45–61, nonwhite, more than HS | 0.0 | 0.0 | 0.0 | 1.1 | 0.1 | 0.0 | 0.1 | 2.8 |
| Women, 25–44, white, HS or less | 0.3 | 1.1 | 1.4 | 38.0 | 0.6 | 0.1 | 0.8 | 42.6 |
| Women, 25–44, white, more than HS | –0.1 | 0.9 | 0.8 | 19.8 | 0.0 | 0.0 | 0.0 | –1.7 |
| Women, 25–44, nonwhite, HS or less | 0.0 | 0.1 | 0.1 | 3.7 | 0.1 | 0.3 | 0.4 | 21.3 |
| Women, 25–44, nonwhite, more than HS | 0.0 | 0.1 | 0.1 | 1.8 | 0.0 | 0.0 | 0.0 | –1.1 |
| Women, 45–61, white, HS or less | 0.7 | 0.6 | 1.3 | 34.0 | 0.4 | 0.5 | 0.8 | 46.5 |
| Women, 45–61, white, more than HS | –0.1 | 0.4 | 0.3 | 8.2 | –0.3 | 0.5 | 0.2 | 10.1 |
| Women, 45–61, nonwhite, HS or less | 0.0 | 0.0 | 0.1 | 1.3 | 0.0 | 0.1 | 0.1 | 3.9 |
| Women, 45–61, nonwhite, more than HS | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |

^a Percent of total is calculated as the total percentage point contribution for each subgroup, divided by the total percentage point change in employment.

SOURCE: Authors' calculations using the March Current Population survey, 1981, 1990, and 2001.

Table 3A.8 Population Shares and Employment Rates of Those Reporting No Work Limitations, by Self-Reported Health (percentages)

| Year | Population share Self-reported health status | | | | |
|------|---|------|------|-----------|-----------|
| | Poor | Fair | Good | Very good | Excellent |
| 1995 | 30.3 | 32.9 | 21.6 | 10.1 | 5.1 |
| 1996 | 30.8 | 32.2 | 22.6 | 9.4 | 5.0 |
| 1997 | 30.2 | 33.0 | 23.5 | 9.4 | 3.9 |
| 1998 | 29.6 | 34.0 | 22.2 | 9.7 | 4.5 |
| 1999 | 29.5 | 32.5 | 23.4 | 9.3 | 5.3 |
| 2000 | 30.6 | 33.9 | 21.4 | 9.3 | 4.8 |
| | Employment rate | | | | |
| 1995 | 17.6 | 29.3 | 46.4 | 57.8 | 68.0 |
| 1996 | 18.2 | 30.5 | 49.6 | 64.0 | 67.0 |
| 1997 | 18.7 | 27.7 | 45.0 | 63.0 | 60.5 |
| 1998 | 15.4 | 26.5 | 44.3 | 55.3 | 69.9 |
| 1999 | 18.0 | 26.4 | 45.3 | 62.6 | 63.5 |
| 2000 | 18.4 | 27.6 | 44.4 | 56.1 | 64.7 |

NOTE: Survey years 1998–2001.

SOURCE: Authors' calculations using the March Current Population Survey, 1996–2001.

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