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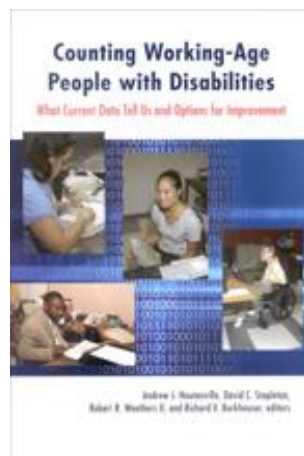
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## Household Income

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# 5

## Household Income

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The economic well-being of households in market economies like the United States is most easily measured by income. So it is not surprising that U.S. statistical agencies have been tracking household income and its sources for representative samples of the American population with the Decennial Census since 1940 and annually with the Current Population Survey (CPS) since 1968. These data are used by the research and public policy communities to measure average income, income distribution (income inequality), and the share of the population with very low income (poverty rates). The data are also used to track changes in these values over time and to assess how income differs among subpopulations based on family structure, race, ethnicity, and age (DeNavas-Walt, Proctor, and Smith 2008). It is surprising, however, how little progress has been made in using such measures to track the economic well-being of working-age people with disabilities and how it has changed over time.

In this chapter, we use data from the CPS to examine the economic well-being of people with disabilities. We focus on the CPS because it is the primary data set that annually examines the economic well-being of people with disabilities, measures long-term economic well-being trends of this population, and it alone has used the same set of questions to capture both the income and disability status of working-age people since 1981. We also evaluate the economic well-being of people with

disabilities using the new American Community Survey (ACS) because it offers a far richer set of questions to capture this population.

Our analysis of the CPS compares how working-age men (aged 21–58) with and without work limitations have fared over the last two business cycles of the twentieth century.<sup>1</sup> In so doing, we also show the dramatic shifts from private to public sources of income, particularly to Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) benefits. These shifts are evident when the standard, single-period work-limitation measure of this population is used in the CPS data. It is even more pronounced when a two-period measure (having a work limitation in two consecutive Demographic Supplements to the CPS, hereafter the “March CPS”) is used because it better captures the population with longer term, severe disabilities that government transfer programs like SSDI and SSI were designed to protect.

As discussed in Weathers (2009), a major limitation of the CPS data is that its measure of disability is whether a work limitation is reported. To show the sensitivity of the results, we compare levels of income for people with disabilities using the work-limitation-based disability measure in the CPS with results using a work-limitation-based measure of disability in the ACS. This comparison illustrates how income levels can change when broader definitions of disability are used. The comparison also shows that the income difference between those with and without disabilities, using the same definition of work limitation, do not change much between the two data sets. But income differences are much larger across the various definitions of disability captured in the ACS. When we use the broadest definition of working-age people with disabilities captured in the ACS, we find that this population is much better off than the subset of that population that report work limitations. Nonetheless, the income of this broader population with disabilities is still far below that of working-age people who do not report a disability. Finally, using the full power of the much larger samples collected by the ACS, we show that substantial differences in the relative economic well-being of those with and without disability persist across sex, race, educational attainment, and state.

## USING THE CPS TO CAPTURE THE POPULATION WITH DISABILITIES

The March CPS is a nationally representative, annual cross-sectional survey of approximately 150,000 noninstitutionalized civilians. It is collected by the Census Bureau and the Bureau of Labor Statistics (BLS) and is the main source of official U.S. employment and income statistics.

Since 1981, the CPS has consistently included a work-limitation question. Because a subsample of the March respondents is reinterviewed in the following March, the CPS allows researchers to create matched samples containing a second round of information on these individuals. Thus, researchers can measure the household income of people with work limitations as well as the sources of that income, in the same way that these values are officially measured for other at-risk populations.<sup>2</sup>

A major drawback of the CPS, however, is that it has very limited information on disability. Researchers must rely on its work-limitation questions alone to capture working-age people with disabilities. Nonetheless, the CPS has been widely used in the economics literature to look at the employment and/or economic well-being of working-age people with disabilities (Acemoglu and Angrist 2001; Autor and Duggan 2003; Bound and Waidmann 1992, 2002; Burkhauser, Daly, and Houtenville 2001; Burkhauser et al. 2002; Daly and Burkhauser 2003; Houtenville and Burkhauser 2005; Hotchkiss 2003, 2004; Jolls and Prescott 2005).

Although any self-reported disability questions must be used with caution, particularly if the answers are sensitive to the respondent's socioeconomic environment (as discussed in detail in Weathers 2009), the CPS is the only data set available for those interested in tracing the long-term economic outcomes of working-age people with disabilities.

We will follow convention in the literature by looking at the yearly household income of working-age men with and without disabilities adjusted for household size. Hence, our unit of analysis is the household (all those living in the house). Using a one-period measure of disability, we look at the yearly household income of men in the year prior to the

March survey and the sources of that income. We assumed that income is shared equally in the household and the household size adjusted income of each household member is equal to the total household income divided by the number of members of the household to the 0.5 power.<sup>3</sup> Income is adjusted for inflation using the Urban Consumer Price Index (CPI-U) estimated by the BLS. Unless otherwise indicated, all incomes reported are adjusted for household size and for inflation to 2004 dollars.

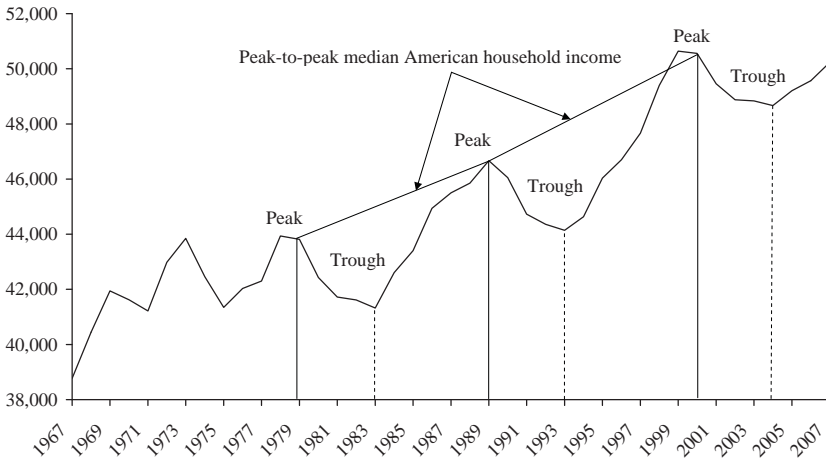
We look at the yearly household income of men in the year prior to the March CPS response. We only consider a respondent to have a longer term disability if he also reported a work limitation in the previous March. This two-period measure of disability is superior to the one-period measure because it brackets the yearly income measure being used, and it better captures those most likely to be targeted by public programs.

## **THE ECONOMIC WELL-BEING OF WORKING-AGE MEN WITH AND WITHOUT DISABILITIES**

Although the United States economy has grown substantially, the long periods of economic growth that have substantially improved the economic well-being of the average American (as measured by median household income; Figure 5.1) have also been punctuated by periods of recessions and drops in economic well-being. We were able to use the CPS data to examine the incomes of men with and without disabilities from 1980 to 2005, a period that contains two complete business cycles.

Table 5.1 reports the mean household size-adjusted income for working-age men with and without work limitations from 1980 through 2005 using both a one- and a two-period measure of work limitations. Inter-temporal comparisons of household incomes are sensitive to the years over which the comparisons are made, and mean income is sensitive to the business cycle. Mean household income rises during periods of economic growth, only to fall as the economy goes into recession. As can be seen in Table 5.1, underlying business conditions affect the

**Figure 5.1 Real Median Household Income (in 2007 Dollars) in the United States, 1967–2007**



SOURCE: DeNavas-Walt, Proctor, and Smith (2008).

mean household income of working-age men both with and without work limitations over this period. To disentangle the impact of short-run business conditions from longer term economic trends on the relative incomes of these two populations, we looked at similar points in the business cycle over the entire period. Ideally, we would compare business cycle peaks, but the starting period of our sample just misses the 1979 peak. Hence, in our discussion of Table 5.1, we examined the two complete business cycles defined by the three business cycle troughs in 1983, 1993, and 2004.<sup>4</sup>

The recessionary trough of 1983 marked the low point in mean income over the entire period. It was followed by seven years of rising mean income to a business cycle peak in 1989. But this was followed by four years of decline in mean income to a business cycle trough in 1993. Using our one-period measure of work limitations, we found that the household income of men without work limitations rose in real terms over the entire business cycle of the 1980s (i.e., 1983 to 1993) from \$38,264 to \$42,394, while the household income of men with work limitations remained almost stationary, going from \$23,720 to \$23,599.

**Table 5.1 Mean Household Size-Adjusted Income (in 2004 Dollars) for Working-Age Men (Aged 21–58) with and without Work Limitations from the March CPS**

Year	One-period sample				Two-period sample			
	Total	With (1)	Without (2)	Ratio (1)/(2)	Total	With (1)	Without (2)	Ratio (1)/(2)
1980	37,721	24,119	38,681	0.62	—	—	—	—
1981	36,988	24,305	37,865	0.64	38,243	21,278	38,920	0.55
1982	36,519	23,640	37,376	0.63	37,916	21,473	38,589	0.56
<b>1983</b>	<b>37,346</b>	<b>23,720</b>	<b>38,264</b>	<b>0.62</b>	<b>38,284</b>	<b>21,333</b>	<b>38,923</b>	<b>0.55</b>
1984	38,438	24,281	39,450	0.62	40,357	22,477	41,033	0.55
1985	39,331	24,715	40,398	0.61	—	—	—	—
1986	40,959	25,438	42,086	0.60	42,427	22,277	43,289	0.51
1987	41,592	26,223	42,655	0.61	43,889	24,345	44,650	0.55
1988	42,233	25,576	43,384	0.59	43,896	24,042	44,674	0.54
1989	42,813	26,173	43,981	0.60	44,634	23,077	45,483	0.51
1990	41,540	24,766	42,710	0.58	43,635	22,861	44,516	0.51
1991	40,771	25,245	41,898	0.60	42,692	21,146	43,538	0.49
1992	40,700	24,771	41,930	0.59	42,509	23,889	43,380	0.55
<b>1993</b>	<b>41,009</b>	<b>23,599</b>	<b>42,394</b>	<b>0.56</b>	<b>43,106</b>	<b>22,415</b>	<b>44,114</b>	<b>0.51</b>
1994	41,638	24,245	42,984	0.56	44,542	22,370	45,520	0.49

1995	41,846	24,758	43,092	0.57	—	—	—	—
1996	42,325	24,930	43,632	0.57	44,039	23,228	44,927	0.52
1997	43,891	24,803	45,234	0.55	45,860	21,944	47,017	0.47
1998	45,368	26,064	46,782	0.56	47,266	23,254	48,345	0.48
1999	46,655	26,615	48,144	0.55	48,505	24,132	49,686	0.49
2000	46,710	25,183	48,250	0.52	48,757	23,214	49,937	0.46
2001	46,409	25,072	47,902	0.52	48,553	22,109	49,782	0.44
2002	45,412	24,581	46,809	0.53	47,388	22,660	48,417	0.47
2003	45,744	24,568	47,306	0.52	47,931	21,359	49,201	0.43
<b>2004</b>	<b>44,674</b>	<b>25,333</b>	<b>46,108</b>	<b>0.55</b>	<b>47,976</b>	<b>23,241</b>	<b>49,157</b>	<b>0.47</b>
2005	45,112	24,424	46,562	0.52	47,569	23,001	48,725	0.47

NOTE: Years in bold are trough years in the business cycle.

SOURCE: Authors' calculations using the March CPS, 1981–2006.



This resulted in a decline in the relative mean household income of working-age men with work limitations from 62 to 56 percent of that for men without work limitations. Note that the decline in the relative income of men with work limitations began during the growth period of the 1980s—well before the decline in overall income after the business cycle peak year of 1989 and the passage of the Americans with Disabilities Act in 1990.

Seven years of economic growth between 1993 and 2000 increased the mean household income of men with and without work limitations. By the trough year of 2004, the income of men with and without work limitations was substantially above their 1993 lows. Nonetheless, the decline in the relative income of men with work limitations that began in the 1980s continued over the growth period of the 1990s, hitting a low of 52 percent of those without work limitations in 2000 (Table 5.1). This percentage stayed roughly constant as mean household income fell for men with and without work limitations between 2000 and 2003. It then rose to 55 percent in 2004, as the mean household income of men with work limitations actually rose while the mean household income of men without work limitations continued to fall. However, in 2005, the last year of our income data, the mean household income of men with work limitations was once again 52 percent of that for men without work limitations.

The general trends portrayed for those with disabilities, measured by the one-period work limitations measure, are not dramatically different from those found with the two-period work limitation measure. But there are differences. As expected, the mean household income of working-age men with longer term work limitations is lower in every year than that of both their counterparts in the one-period population and their counterparts without longer term work limitations. In 1983, the relative household income of men with a longer term work limitation was 55 percent of the value for their counterparts without such limitations. This ratio trended downward over the rest of the business cycle and was 51 percent by 1993. It continued to trend downward over the next 10 years and hit a low of 43 percent in 2003 before rising to 47 percent in 2004 as the mean household income of men with longer term work limitations rose, while the corresponding value remained roughly

constant for those without such limitations (see Table 5.1). It remains to be seen if this higher relative value will continue, but it did so in 2005.

Although the mean household income of men with work limitations increased over the last two business cycles of the twentieth century, it has steadily fallen relative to the much greater growth in the mean household income of working-age men without work limitations.

The median household income for these populations is illustrated in Table 5.2. Although the levels are lower over the entire period, the trend is similar. Using the one-period definition, the median household income of working-age men with work limitations declined substantially relative to that of men without work limitations over the 1980s business cycle, but then it was relatively stable at this low ratio during the 1990s. But unlike for mean household income, the rise in median household income over the 1990s was insufficient to make up for its fall over the 1980s. So the median household income of men with work limitations (\$19,592) was slightly lower in 2004 than it was in 1983 (\$19,606), while the median income for men without limitations in 2004 (\$39,900) was substantially greater than it was in 1983 (\$35,357).

While the median household income of men with longer term work limitations in 2004 (\$18,305) was slightly greater than it was in 1983 (\$17,440), its growth was much smaller than that of men without work limitations (\$42,943 in 2004 versus \$36,474 in 1983) over the same period, and the ratio of these income values fell from 48 to 43 percent over the entire period.

## Sources of Income

The relative importance of various sources of household income for men with and without disabilities (using the one-period work limitation measure of disability) has changed over these two business cycles. In Table 5.3, we disaggregate mean total household income (unadjusted for household size) into five income components to show not only the dramatic decline in the importance of their own labor earnings as a share of total income but also which sources of income offset this decline. The mean income value for each source is reported in Table 5.4.

The share of income from the five sources—own labor earnings, labor earnings of other household members, own public disability trans-

**Table 5.2 Median Household Size-Adjusted Income (in 2004 Dollars) for Working-Age Men (Aged 21–58) with and without Work Limitations from the March CPS**

Year	One-period sample				Two-period sample			
	Total	With (1)	Without (2)	Ratio (1)/(2)	Total	With (1)	Without (2)	Ratio (1)/(2)
1980	35,516	20,214	36,413	0.56	—	—	—	—
1981	34,595	20,243	35,642	0.57	36,293	17,184	36,928	0.47
1982	33,969	19,750	34,816	0.57	35,536	17,527	36,315	0.48
<b>1983</b>	<b>34,423</b>	<b>19,606</b>	<b>35,357</b>	<b>0.55</b>	<b>35,734</b>	<b>17,440</b>	<b>36,474</b>	<b>0.48</b>
1984	35,398	20,028	36,432	0.55	37,708	19,347	38,465	0.50
1985	36,256	20,242	37,108	0.55	—	—	—	—
1986	37,358	21,295	38,511	0.55	38,776	18,872	39,609	0.48
1987	38,251	21,552	39,246	0.55	40,962	20,575	41,591	0.49
1988	38,632	20,505	39,658	0.52	40,709	18,663	41,441	0.45
1989	38,620	20,982	39,755	0.53	40,728	18,295	41,461	0.44
1990	37,439	19,919	38,670	0.52	39,837	19,155	40,658	0.47
1991	36,940	19,895	38,006	0.52	39,016	17,060	40,000	0.43
1992	36,624	19,631	37,872	0.52	38,451	18,471	39,314	0.47
<b>1993</b>	<b>36,444</b>	<b>18,660</b>	<b>37,829</b>	<b>0.49</b>	<b>38,706</b>	<b>18,321</b>	<b>39,791</b>	<b>0.46</b>
1994	37,019	18,373	38,271	0.48	39,685	17,330	40,594	0.43

1995	36,973	19,273	38,385	0.50	—	—	—	—
1996	37,507	18,757	38,796	0.48	39,790	16,606	40,518	0.41
1997	38,673	18,651	40,032	0.47	40,890	16,818	42,059	0.40
1998	40,055	19,952	41,501	0.48	42,310	18,159	43,407	0.42
1999	40,690	20,415	42,159	0.48	42,873	18,205	44,042	0.41
2000	40,795	19,635	42,306	0.46	42,826	19,149	43,816	0.44
2001	40,501	19,235	41,832	0.46	42,692	16,745	44,102	0.38
2002	39,260	19,219	40,685	0.47	41,296	16,064	42,327	0.38
2003	39,599	19,500	41,095	0.47	42,013	17,468	43,162	0.40
<b>2004</b>	<b>38,373</b>	<b>19,592</b>	<b>39,900</b>	<b>0.49</b>	<b>42,011</b>	<b>18,305</b>	<b>42,943</b>	<b>0.43</b>
2005	38,616	18,592	39,950	0.47	41,281	17,878	42,373	0.42

NOTE: Years in bold are trough years in the business cycle.

SOURCE: Authors' calculations using the March CPS, 1981–2006.

**Table 5.3 Share (%) of Various Sources of Household Income for Working-Age Men (Aged 21–58) with and without Work Limitations from the March CPS (one-period sample)**

Year	Own earnings			Earnings of other household members			Own public disability transfers			All other public transfers in household			All other sources of household income		
	With (1)	Without (2)	Ratio <sup>a</sup> (3)	With (4)	Without (5)	Ratio (6)	With (7)	Without (8)	Ratio (9)	With (10)	Without (11)	Ratio (12)	With (13)	Without (14)	Ratio (15)
1980	28.02	57.11	0.49	35.29	28.84	1.22	8.03	0.08	—	13.20	2.60	5.07	15.45	11.37	1.36
1981	29.80	56.66	0.53	33.49	29.24	1.15	7.89	0.09	—	12.30	2.53	4.85	16.52	11.48	1.44
1982	25.80	54.88	0.47	36.90	30.34	1.22	7.19	0.08	—	12.98	3.08	4.21	17.13	11.62	1.47
<b>1983</b>	<b>25.89</b>	<b>54.25</b>	<b>0.48</b>	<b>36.68</b>	<b>30.83</b>	<b>1.19</b>	<b>6.92</b>	<b>0.08</b>	—	<b>12.98</b>	<b>2.87</b>	<b>4.53</b>	<b>17.54</b>	<b>11.97</b>	<b>1.46</b>
1984	26.80	54.81	0.49	35.19	30.55	1.15	7.54	0.06	—	12.63	2.25	5.61	17.84	12.33	1.45
1985	27.35	54.98	0.50	37.23	30.79	1.21	7.26	0.05	—	12.47	2.18	5.72	15.69	12.00	1.31
1986	26.83	54.24	0.49	38.32	31.75	1.21	7.20	0.05	—	12.92	2.12	6.10	14.73	11.84	1.24
1987	26.04	53.48	0.49	35.87	31.71	1.13	7.70	0.08	—	12.76	1.96	6.51	17.63	12.77	1.38
1988	24.69	54.11	0.46	36.06	31.47	1.15	7.87	0.07	—	14.93	1.87	7.96	16.46	12.47	1.32
1989	24.68	52.54	0.47	36.53	32.41	1.13	7.59	0.06	—	13.51	1.92	7.03	17.69	13.06	1.35
1990	23.15	52.25	0.44	38.28	32.39	1.18	8.03	0.08	—	13.10	2.17	6.05	17.44	13.11	1.33
1991	23.47	51.95	0.45	38.37	32.99	1.16	8.34	0.08	—	14.31	2.41	5.95	15.51	12.58	1.23
1992	22.54	51.79	0.44	38.35	33.25	1.15	8.87	0.10	—	14.01	2.57	5.45	16.23	12.29	1.32
<b>1993</b>	<b>20.96</b>	<b>52.20</b>	<b>0.40</b>	<b>37.65</b>	<b>33.24</b>	<b>1.13</b>	<b>9.72</b>	<b>0.08</b>	—	<b>14.82</b>	<b>2.54</b>	<b>5.84</b>	<b>16.86</b>	<b>11.95</b>	<b>1.41</b>
1994	22.79	53.27	0.43	38.06	33.20	1.15	9.73	0.08	—	13.13	2.34	5.62	16.29	11.10	1.47
1995	23.06	54.01	0.43	37.71	33.07	1.14	10.30	0.10	—	13.58	2.31	5.87	15.35	10.51	1.46
1996	24.00	53.28	0.45	37.96	33.59	1.13	10.44	0.08	—	11.91	2.13	5.60	15.69	10.92	1.44
1997	20.05	52.94	0.38	39.17	32.98	1.19	11.89	0.08	—	13.09	1.91	6.85	15.80	12.08	1.31
1998	20.22	53.01	0.38	40.65	33.23	1.22	10.43	0.08	—	11.25	1.77	6.36	17.44	11.91	1.46

1999	19.74	52.69	0.37	40.86	33.68	1.21	10.68	0.09	—	11.32	1.77	6.38	17.39	11.76	1.48
2000	18.24	53.69	0.34	40.55	33.65	1.20	11.68	0.10	—	11.27	1.74	6.48	18.26	10.82	1.69
2001	20.70	54.49	0.38	38.76	33.54	1.16	11.36	0.10	—	13.15	1.84	7.13	16.03	10.02	1.60
2002	18.09	54.41	0.33	42.99	33.94	1.27	11.36	0.12	—	12.93	2.11	6.12	14.63	9.42	1.55
2003	17.27	53.50	0.32	40.83	34.29	1.19	12.08	0.10	—	14.84	2.05	7.23	14.98	10.05	1.49
<b>2004</b>	<b>17.00</b>	<b>53.85</b>	<b>0.32</b>	<b>41.51</b>	<b>34.18</b>	<b>1.21</b>	<b>11.96</b>	<b>0.11</b>	—	<b>13.49</b>	<b>1.85</b>	<b>7.28</b>	<b>16.03</b>	<b>10.00</b>	<b>1.60</b>
2005	16.09	52.94	0.30	42.34	34.34	1.23	12.43	0.12	—	13.38	1.78	7.53	15.77	10.83	1.46

NOTE: Years in bold are trough years in the business cycle.

<sup>a</sup>The ratio is with/without for each category.

SOURCE: Authors' calculations using the March CPS, 1981–2006.

**Table 5.4 Mean Real Income (in 2004 Dollars) from Various Household Income Sources for Working-Age Men (Aged 21–58) with and without Work Limitations from the March CPS (one-period sample)**

Year	Own earnings			Earnings of other household members			Own public disability transfers			All other public transfers in household			All other sources of household income			Total household income		
	With (1)	W/out (2)	Ratio <sup>a</sup> (3)	With (4)	W/out (5)	Ratio (6)	With (7)	W/out (8)	Ratio (9)	With (10)	W/out (11)	Ratio (12)	With (13)	W/out (14)	Ratio (15)	With (16)	W/out (17)	Ratio (18)
1980	10,725	34,513	0.31	13,506	17,431	0.77	3,075	47	—	5,053	1,574	3.21	5,914	6,869	0.86	38,273	60,434	0.63
1981	11,410	33,446	0.34	12,826	17,261	0.74	3,023	53	—	4,710	1,496	3.15	6,325	6,775	0.93	38,293	59,031	0.65
1982	9,816	32,116	0.31	14,039	17,757	0.79	2,737	44	—	4,938	1,804	2.74	6,517	6,800	0.96	38,047	58,520	0.65
<b>1983</b>	<b>9,786</b>	<b>32,379</b>	<b>0.30</b>	<b>13,864</b>	<b>18,401</b>	<b>0.75</b>	<b>2,614</b>	<b>47</b>	<b>—</b>	<b>4,906</b>	<b>1,712</b>	<b>2.87</b>	<b>6,630</b>	<b>7,146</b>	<b>0.93</b>	<b>37,801</b>	<b>59,684</b>	<b>0.63</b>
1984	10,311	33,596	0.31	13,537	18,725	0.72	2,901	38	—	4,860	1,379	3.52	6,865	7,561	0.91	38,473	61,299	0.63
1985	10,741	34,385	0.31	14,622	19,258	0.76	2,850	32	—	4,897	1,363	3.59	6,161	7,502	0.82	39,271	62,540	0.63
1986	10,722	35,421	0.30	15,317	20,730	0.74	2,878	33	—	5,164	1,383	3.73	5,886	7,732	0.76	39,968	65,299	0.61
1987	10,583	35,259	0.30	14,574	20,906	0.70	3,130	50	—	5,185	1,292	4.01	7,163	8,419	0.85	40,636	65,925	0.62
1988	9,823	35,998	0.27	14,347	20,938	0.69	3,132	46	—	5,940	1,247	4.76	6,548	8,295	0.79	39,790	66,524	0.60
1989	9,966	35,648	0.28	14,754	21,987	0.67	3,066	43	—	5,458	1,305	4.18	7,144	8,863	0.81	40,388	67,845	0.60
1990	8,972	34,297	0.26	14,837	21,259	0.70	3,112	51	—	5,078	1,423	3.57	6,758	8,607	0.79	38,758	65,636	0.59
1991	9,110	33,358	0.27	14,894	21,183	0.70	3,237	54	—	5,555	1,544	3.60	6,019	8,077	0.75	38,815	64,216	0.60
1992	8,645	33,250	0.26	14,706	21,348	0.69	3,401	62	—	5,371	1,649	3.26	6,223	7,889	0.79	38,346	64,198	0.60
<b>1993</b>	<b>7,643</b>	<b>33,927</b>	<b>0.23</b>	<b>13,730</b>	<b>21,603</b>	<b>0.64</b>	<b>3,543</b>	<b>49</b>	<b>—</b>	<b>5,403</b>	<b>1,648</b>	<b>3.28</b>	<b>6,147</b>	<b>7,769</b>	<b>0.79</b>	<b>36,464</b>	<b>64,996</b>	<b>0.56</b>
1994	8,433	34,995	0.24	14,086	21,811	0.65	3,601	56	—	4,859	1,535	3.16	6,029	7,291	0.83	37,009	65,688	0.56
1995	8,750	35,469	0.25	14,308	21,717	0.66	3,907	64	—	5,151	1,520	3.39	5,826	6,904	0.84	37,941	65,674	0.58
1996	9,200	35,490	0.26	14,551	22,375	0.65	4,002	56	—	4,567	1,416	3.22	6,016	7,274	0.83	38,335	66,611	0.58
1997	7,642	36,472	0.21	14,928	22,724	0.66	4,531	56	—	4,989	1,317	3.79	6,024	8,325	0.72	38,114	68,893	0.55
1998	8,056	37,722	0.21	16,193	23,643	0.68	4,156	56	—	4,482	1,259	3.56	6,947	8,476	0.82	39,835	71,155	0.56
1999	8,018	38,794	0.21	16,591	24,800	0.67	4,337	69	—	4,599	1,306	3.52	7,061	8,657	0.82	40,605	73,627	0.55
2000	7,080	39,521	0.18	15,737	24,773	0.64	4,533	72	—	4,375	1,281	3.42	7,088	7,968	0.89	38,813	73,614	0.53

2001	7,986	39,893	0.20	14,949	24,550	0.61	4,381	75	—	5,072	1,351	3.76	6,184	7,337	0.84	38,571	73,205	0.53
2002	6,861	39,061	0.18	16,308	24,364	0.67	4,308	88	—	4,905	1,518	3.23	5,550	6,762	0.82	37,932	71,794	0.53
2003	6,616	38,919	0.17	15,641	24,942	0.63	4,626	76	—	5,684	1,493	3.81	5,738	7,314	0.78	38,305	72,745	0.53
<b>2004</b>	<b>6,697</b>	<b>38,227</b>	<b>0.18</b>	<b>16,355</b>	<b>24,264</b>	<b>0.67</b>	<b>4,714</b>	<b>80</b>	—	<b>5,316</b>	<b>1,315</b>	<b>4.04</b>	<b>6,315</b>	<b>7,098</b>	<b>0.89</b>	<b>39,396</b>	<b>70,984</b>	<b>0.55</b>
2005	6,113	38,010	0.16	16,091	24,655	0.65	4,723	86	—	5,084	1,275	3.99	5,992	7,778	0.77	38,002	71,805	0.53

NOTE: Years in bold are trough years in the business cycle.

<sup>a</sup> The ratio is with/without for each category.

SOURCE: Authors' calculations using the March CPS, 1981–2006.



fers, all other public transfers, and all other private income—and their mean levels are sensitive to the business cycle. But long-term patterns clearly emerge.

Over the two business cycles, for men with work limitations there is a dramatic drop in the share of income from own labor earnings. As can be seen in Table 5.3 (column 1), own earnings fell as a share of income from 25.9 percent in 1983 to 21.0 percent in 1993, the end of the first cycle. It then continued to fall to 17.0 percent in 2004, the end of the second cycle. The share of income from own labor earnings in households of men without limitations also fell, but much less so over this period. So, as can be seen in column 3, the share of labor earnings of men with work limitations dropped relative to the share for men without work limitations. The ratio between the two fell from 48 percent in 1983 to 40 percent in 1993 to 32 percent in 2004.

Additional information on changes in the importance of income from different sources in households of men with and without work limitations can be found in Table 5.4. Over the same time period, and using the one-period measure of work limitations, the mean labor earnings for men with limitations (column 1) fell, while the corresponding mean for men without limitations rose (column 2). The ratio of the mean for men with work limitations to that for men without work limitations declined remarkably, from 30 percent in 1983 to 23 percent in 1993 to just 18 percent in 2004 (column 3).

The share of income coming from the labor earnings of other household members in the households of men with work limitations increased substantially over this same period (Table 5.3, column 4). This was also the case in households of men without work limitations (column 5), but the ratio between the two (column 6) shows that the pace of the increase was more rapid for men with work limitations in the 1980s and more rapid for men without work limitations in the 1990s. Thus, the share of household income from the labor earnings of others in the household for men with work limitations initially fell relative to that of men without work limitations (through 1993) and then returned to its 1982 level by 2004. Over the entire period, the labor earnings of others remained a more important source of income in the households of men with work limitations than in those of men without disabilities.

Mean labor earnings fell for other members of households of men with work limitations over the 1980s, rose in the 1990s, and were substantially higher in 2004 than in 1983 (Table 5.4, column 4). In contrast, the mean labor earnings of other household members of working-age men without work limitations (column 5) rose over the entire period. As a result, the ratio of these two values (column 6) fell dramatically in the 1980s but remained about the same over the 1990s. Hence, over the entire period the ratio fell from 75 percent in 1983 to 67 percent in 2004. Even so, the labor earnings of other household members in households of men with work limitations rose over the entire period, replacing a substantial share of the decline in own earnings for this group.

The major public source of income that replaces the earnings of men with work limitations—their own income from SSDI and SSI—was 7.9 percent of household income in 1981 (Table 5.3, column 7). There were significant administrative efforts to cut the SSDI and SSI rolls in 1982 and 1983, and this share of income fell to 7.2 percent in 1982 and to a series low of 6.9 percent in 1983. But legislation ending these administrative practices stemmed this decline in 1984, and a further loosening of the eligibility rules in 1985, especially for those with mental conditions, was followed by a return of own SSDI and SSI benefits as a share of household income in 1990 to its pre-1981 level and to 9.7 percent by 1993. Own SSDI and SSI income continued to increase as a share of household income to 11.9 percent in 1997. It then fell for two years, but as the economic expansion ended in 2000, own SSDI and SSI income started to grow, reaching a high of 12.4 percent in 2005. Over the business cycle trough years of 1983, 1993, and 2004, own disability transfers from SSDI and SSI grew from 7.2 to 9.7 to 12.0 percent of the household income for men with work limitations. Thus mean income from own SSDI and SSI benefits (Table 5.4, column 7) rose substantially over this period in the households of men with work limitations, whereas both share and income from this source for men without work limitations was trivial in all years (column 8 in Tables 5.3 and 5.4).

Autor and Duggan (2006) and Duggan, Singleton, and Song (2007) provide empirical evidence, after controlling for compositional changes, that three factors led to the increases in SSDI and SSI benefits over this period: the changes in the screening rules discussed above; a rise in the

after-tax SSDI replacement rate for low-skill workers; and the projected change in the normal retirement age from 65 to 67, set in motion by the Amendments to the Social Security Act of 1983.<sup>5</sup>

As can be seen in columns 10 and 11 of Table 5.3, the share of income from other public transfer programs rose in the households of men with work limitations and fell in the households of men without work limitations over this period, resulting in a rise in the relative importance of this source of income for men with work limitations from 4.53 in 1983 to 7.28 in 2004 (column 12).

The mean income from other public transfers for men with work limitations rose in the 1980s and fell slightly in the 1990s (Table 5.4, column 10). In contrast, other public transfers in the households of men without work limitations (column 11) fell over both business cycles. The ratio of mean income from other public transfers grew over the entire period from 2.9 in 1983 to 4.0 in 2004 (column 12). Overall, mean income from all government sources for this population (column 7 plus column 10) rose from \$7,520 in 1983 to \$8,946 in 1993 to \$10,030 in 2004, a rise of more than 33 percent over the entire period. In contrast, the mean income from all government sources in the household of working-age men without work limitations fell from \$1,759 in 1983 to \$1,395 in 2004.

As can be seen in columns 13 and 14 of Table 5.3, there was a modest decline (rise) in the share of all other private sources of income (rents, dividends, etc.) in the households of working-age men with (without) work limitations in the 1980s. In the 1990s, there was a decline in the share of this income source, especially for men without work limitations. Hence, other sources of private income, which were always a larger share of the household income of working-age men with work limitations, took on more importance relative to their income share in the households of working-age men without work limitations, as seen in column 15.

The mean income from all other private sources of income in the households of working-age men with work limitations fell modestly in the 1980s and rose slightly in the 1990s, resulting in little change over the period (\$6,630 in 1983 versus \$6,315 in 2004; Table 5.4, column 13). The pattern in households of working-age men without work limitations (column 14) was different, up in the 1980s and down in the

1990s, but the overall change was about the same, a modest decrease from \$7,146 in 1983 to \$7,098 in 2004. Nonetheless, the ratio of this source of private income also fell over the entire period, as did that of all other private sources of income.

The information in Tables 5.3 and 5.4 provides several important insights into the dramatic transformation in the sources of income in households of men with work limitations over the last two business cycles. First, their labor earnings, which were never the primary source of their household income, have dramatically declined in real dollars, as a share of household total income, and relative to the households of men without work limitations.

Second, there has been a rapid rise in the importance of SSDI and SSI income in the households of men with work limitations, especially relative to own labor earnings. In 1983, own labor earnings accounted for 3.7 times as much of their household's income as did own SSDI and SSI benefits. By 1993, this relationship had fallen to 2.2 times as much. In 2004, it was only 1.4 times as much. Own SSDI and SSI benefits increased as a share of income in the households of men with work limitations by 73 percent between 1983 and 2004.

Third, the rise in the importance of labor earnings from other household members has also been substantial for men with work limitations, relative to both own labor earnings and especially when compared to the households of men without work limitations. In 1983, own labor earnings for men with work limitations accounted for 71 percent as much household income as did the labor earnings of other household members. This value had fallen to 56 percent by 1993 and only 41 percent by 2004. In contrast, the labor earnings of other household members increased as a share of income in the same households by 13 percent between 1983 and 2004. Over this same period, the share of household income provided by the labor earnings of other household members in the households of men without work limitations declined.

Fourth, in the households of men with work limitations, the share of mean household income coming from all private sources fell from 80 percent in 1983 to 75 percent in 2004, with most of the decline coming from the drop in their own labor earnings. In contrast, the share of household income from private sources remained essentially constant

(97 percent) in the households of men without work limitations over the same period.

Fifth, the labor earnings of men with work limitations have fallen from \$9,786 in 1983 to \$6,697 in 2004, a decline of \$3,089. Increases in income from total public sources over that same period have only amounted to \$2,510 (\$7,520 in 1983 to \$10,030 in 2004), replacing only about 81 percent of the decline in earnings. Increases in the earnings of other household members have more than made up the gap between the decline in own earnings and the rise in public income, resulting in a modest rise in household income from \$37,801 in 1983 to \$39,396 in 2004. But this rise pales in comparison to the increase in the household income of men without work limitations, which rose from \$59,684 to \$70,984 over the same period.

Tables 5.5 and 5.6 present similar information for working-age men with and without a longer term work limitation, using the two-period work limitation measure instead of the one-period measure used for Tables 5.3 and 5.4. Not surprisingly, the share of own labor earnings in the household income of men with longer term work limitations is smaller than the corresponding share for men with one-period work limitations. The long-term trends, however, are very similar for both groups.

The labor earnings of men with longer term work limitations were just 13 percent of their household's total income in the 1983 recession trough, but they fell even further, to 11 percent, in the 1993 trough and to just 6 percent in the 2004 trough. In contrast, the share of own labor earnings in household income of men without work limitations remained about the same. As a result, the relative share for those with work limitations as compared with those without work limitations fell from 23 percent in 1983 to 11 percent in 2004 (Table 5.5, column 3).

The share of income contributed by other household members in the households of men with longer term work limitations increased over the period but fell relative to the share contributed by the other household members of men without longer term limitations (Table 5.5, columns 4–6).

As was the case in the one-period measure, the major public source of income growth for men with longer term work limitations came from SSDI and SSI benefits. They rose from 11.9 percent of total household

income in 1983 to 14.6 percent in 1993 to 19.0 percent in 2004 (Table 5.5, columns 7–9). In contrast, the share of income coming from all other transfer programs fell over the period from 17.2 percent in 1983 to 18.2 percent in 1993 to 14.5 percent in 2004 (Table 5.5, column 10). Hence, some of the increase in the public share of income coming from SSDI and SSI benefits, especially in the 1990s, appears to represent a shift toward federally funded disability programs and away from other public programs (e.g., state welfare and unemployment insurance programs or Workers Compensation). The share of all other private income in the households of men with longer term work limitations fell over the 1980s but rose over the 1990s; for households of men without limitations, it first rose and then fell. Over the entire period, the importance of this source of income in the households of men with longer term work limitations rose relative to its importance in households of men without limitations (columns 13–15).

For men with longer term work limitations, own labor earnings was never a major source of household income, and this share decreased across the two business cycles. The major public source of income growth has come from SSDI and SSI benefits. In most years prior to 1987, the share of own earnings in the household income of men with longer term work limitations approximately equaled or even exceeded the share coming from own SSDI and SSI benefits. Since then, the share coming from own labor earnings has fallen, while the share provided by own SSDI and SSI has grown. By 1993, SSDI and SSI benefits provided 135 percent as much as own labor earnings to the household income of men with longer term work limitations. By 2004, this had increased to 306 percent (Table 5.6).

The values shown in Table 5.7, derived from the values in Tables 5.3 and 5.5, provide a more focused look at how dramatically the own earnings of men with work limitations fell as a share of household income over the last two business cycles. As can be seen in column 1, the share of own earnings in household income based on the one-period work measure fell 4.9 percentage points between 1983 and 1993. This decline was offset, to some degree, by a rise in the share of labor earnings from other household members (1.0 percentage point). Because the share of all other sources of private income also fell slightly (0.7 percentage points), the total income from private sources fell by 4.6

**Table 5.5 Share (%) of Various Sources of Household Income for Working-Age Men (Aged 21–58) with and without Longer Term Work Limitations in the Matched CPS Data (two-period sample)**

Year	Own earnings			Earnings of other household members			Own public disability transfers			All other public transfers in household			All other sources of household income		
	With (1)	Without (2)	Ratio (3)	With (4)	Without (5)	Ratio (6)	With (7)	Without (8)	Ratio (9)	With (10)	Without (11)	Ratio (12)	With (13)	Without (14)	Ratio (15)
1980	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1981	19.60	57.44	0.34	33.15	28.67	1.16	13.04	0.11	—	17.25	2.34	7.38	16.97	11.45	1.48
1982	12.38	55.58	0.22	38.55	29.24	1.32	13.34	0.12	—	16.53	3.01	5.49	19.20	12.06	1.59
<b>1983</b>	<b>12.62</b>	<b>54.38</b>	<b>0.23</b>	<b>39.26</b>	<b>30.60</b>	<b>1.28</b>	<b>11.90</b>	<b>0.11</b>	—	<b>17.23</b>	<b>2.86</b>	<b>6.03</b>	<b>18.98</b>	<b>12.05</b>	<b>1.58</b>
1984	11.15	54.41	0.20	41.07	30.76	1.34	11.86	0.10	—	16.82	2.22	7.59	19.11	12.51	1.53
1985	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1986	15.73	54.82	0.29	38.07	30.57	1.25	12.35	0.08	—	18.33	2.20	8.32	15.51	12.33	1.26
1987	12.59	53.47	0.24	42.54	30.94	1.37	13.06	0.11	—	14.49	1.88	7.69	17.32	13.60	1.27
1988	11.20	55.09	0.20	35.48	30.37	1.17	12.30	0.13	—	22.73	1.94	11.74	18.30	12.47	1.47
1989	13.18	54.14	0.24	36.20	30.65	1.18	14.25	0.12	—	17.34	1.92	9.05	19.04	13.18	1.44
1990	12.10	52.91	0.23	40.22	31.61	1.27	13.71	0.13	—	16.41	2.11	7.76	17.56	13.24	1.33
1991	13.11	52.92	0.25	42.66	31.81	1.34	14.44	0.12	—	15.79	2.42	6.52	14.02	12.73	1.10
1992	10.08	52.16	0.19	41.54	32.76	1.27	13.74	0.14	—	15.93	2.59	6.14	18.71	12.35	1.51
<b>1993</b>	<b>10.78</b>	<b>52.56</b>	<b>0.21</b>	<b>40.02</b>	<b>32.26</b>	<b>1.24</b>	<b>14.58</b>	<b>0.13</b>	—	<b>18.21</b>	<b>2.47</b>	<b>7.38</b>	<b>16.41</b>	<b>12.59</b>	<b>1.30</b>
1994	9.60	53.05	0.18	42.32	33.06	1.28	15.10	0.14	—	15.92	2.31	6.88	17.06	11.43	1.49
1995	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1996	14.76	54.04	0.27	36.56	32.33	1.13	15.38	0.15	—	14.98	2.29	6.53	18.32	11.20	1.64
1997	9.63	52.69	0.18	40.06	32.61	1.23	17.04	0.14	—	15.87	1.98	8.02	17.40	12.58	1.38
1998	9.31	54.10	0.17	40.32	32.05	1.26	16.68	0.14	—	15.17	1.77	8.58	18.52	11.94	1.55
1999	7.57	53.04	0.14	48.36	32.38	1.49	15.98	0.17	—	13.29	1.80	7.38	14.79	12.61	1.17

2000	8.63	54.22	0.16	41.80	32.97	1.27	17.44	0.16	—	13.25	1.76	7.52	18.88	10.89	1.73
2001	8.44	54.25	0.16	40.87	32.80	1.25	18.25	0.19	—	14.74	1.99	7.41	17.70	10.78	1.64
2002	8.09	55.28	0.15	43.13	33.02	1.31	16.98	0.16	—	15.22	2.10	7.26	16.57	9.44	1.75
2003	9.08	53.89	0.17	40.47	33.37	1.21	17.10	0.18	—	16.40	2.12	7.73	16.95	10.44	1.62
<b>2004</b>	<b>6.21</b>	<b>54.69</b>	<b>0.11</b>	<b>40.71</b>	<b>33.23</b>	<b>1.23</b>	<b>18.98</b>	<b>0.23</b>	—	<b>14.52</b>	<b>2.04</b>	<b>7.11</b>	<b>19.59</b>	<b>9.81</b>	<b>2.00</b>
2005	8.12	53.92	0.15	42.29	33.02	1.28	18.81	0.21	—	15.16	1.84	8.23	15.62	11.00	1.42

NOTE: Years in bold are trough years in the business cycle.

<sup>a</sup>The ratio is with/without for each category.

SOURCE: Authors' calculations using the March CPS, 1981–2006.



**Table 5.6 Mean Real Income (in 2004 Dollars) from Various Household Income Sources for Working-Age Men (Aged 21–58) with and without Longer Term Work Limitations in the Matched CPS Data (two-period sample)**

Year	Own earnings			Earnings of other household members			Own public disability transfers			All other public transfers in household			All other sources of household income			Total household income		
	With (1)	W/out (2)	Ratio (3)	With (4)	W/out (5)	Ratio (6)	With (7)	W/out (8)	Ratio (9)	With (10)	W/out (11)	Ratio (12)	With (13)	W/out (14)	Ratio (15)	With (16)	W/out (17)	Ratio (18)
1980	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1981	6,764	35,310	0.19	11,439	17,624	0.65	4,500	65	—	5,952	1,437	4.14	5,855	7,039	0.83	34,510	61,475	0.56
1982	4,346	33,896	0.13	13,538	17,830	0.76	4,684	71	—	5,806	1,837	3.16	6,741	7,354	0.92	35,114	60,987	0.58
<b>1983</b>	<b>4,370</b>	<b>33,656</b>	<b>0.13</b>	<b>13,593</b>	<b>18,937</b>	<b>0.72</b>	<b>4,120</b>	<b>65</b>	—	<b>5,966</b>	<b>1,769</b>	<b>3.37</b>	<b>6,573</b>	<b>7,458</b>	<b>0.88</b>	<b>34,623</b>	<b>61,886</b>	<b>0.56</b>
1984	4,183	35,293	0.12	15,415	19,953	0.77	4,450	66	—	6,311	1,437	4.39	7,172	8,114	0.88	37,530	64,864	0.58
1985	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1986	5,565	37,176	0.15	13,473	20,731	0.65	4,371	54	—	6,487	1,495	4.34	5,490	8,360	0.66	35,387	67,816	0.52
1987	4,940	37,386	0.13	16,691	21,636	0.77	5,124	75	—	5,685	1,317	4.32	6,797	9,510	0.71	39,238	69,924	0.56
1988	4,344	38,149	0.11	13,765	21,031	0.65	4,774	90	—	8,818	1,341	6.57	7,101	8,639	0.82	38,801	69,251	0.56
1989	4,610	38,051	0.12	12,662	21,537	0.59	4,984	81	—	6,065	1,347	4.50	6,659	9,261	0.72	34,980	70,277	0.50
1990	4,313	36,482	0.12	14,334	21,794	0.66	4,886	87	—	5,848	1,458	4.01	6,259	9,126	0.69	35,640	68,948	0.52
1991	4,337	35,499	0.12	14,117	21,339	0.66	4,777	82	—	5,224	1,625	3.22	4,640	8,537	0.54	33,093	67,081	0.49
1992	3,781	34,882	0.11	15,580	21,904	0.71	5,153	92	—	5,974	1,735	3.44	7,018	8,260	0.85	37,507	66,872	0.56
<b>1993</b>	<b>3,756</b>	<b>35,837</b>	<b>0.10</b>	<b>13,947</b>	<b>21,999</b>	<b>0.63</b>	<b>5,080</b>	<b>88</b>	—	<b>6,346</b>	<b>1,682</b>	<b>3.77</b>	<b>5,720</b>	<b>8,582</b>	<b>0.67</b>	<b>34,849</b>	<b>68,187</b>	<b>0.51</b>
1994	3,394	37,309	0.09	14,953	23,252	0.64	5,336	101	—	5,626	1,628	3.46	6,029	8,039	0.75	35,337	70,328	0.50
1995	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1996	5,242	37,287	0.14	12,988	22,308	0.58	5,463	101	—	5,322	1,582	3.36	6,509	7,727	0.84	35,524	69,004	0.51
1997	3,287	38,042	0.09	13,672	23,549	0.58	5,815	100	—	5,417	1,429	3.79	5,938	9,087	0.65	34,130	72,206	0.47
1998	3,282	39,843	0.08	14,218	23,606	0.60	5,882	104	—	5,351	1,303	4.11	6,530	8,795	0.74	35,263	73,650	0.48

1999	2,859	40,448	0.07	18,266	24,692	0.74	6,037	132	—	5,020	1,373	3.66	5,587	9,614	0.58	37,769	76,259	0.50
2000	3,102	41,508	0.07	15,024	25,242	0.60	6,269	119	—	4,762	1,349	3.53	6,786	8,334	0.81	35,943	76,552	0.47
2001	2,885	41,382	0.07	13,968	25,021	0.56	6,237	142	—	5,036	1,518	3.32	6,050	8,222	0.74	34,176	76,284	0.45
2002	2,776	40,696	0.07	14,795	24,309	0.61	5,825	121	—	5,220	1,543	3.38	5,685	6,953	0.82	34,301	73,621	0.47
2003	2,997	40,862	0.07	13,362	25,306	0.53	5,644	135	—	5,414	1,609	3.36	5,597	7,915	0.71	33,014	75,828	0.44
<b>2004</b>	<b>2,143</b>	<b>41,383</b>	<b>0.05</b>	<b>14,057</b>	<b>25,141</b>	<b>0.56</b>	<b>6,554</b>	<b>175</b>	—	<b>5,013</b>	<b>1,544</b>	<b>3.25</b>	<b>6,763</b>	<b>7,419</b>	<b>0.91</b>	<b>34,530</b>	<b>75,663</b>	<b>0.46</b>
2005	2,824	40,386	0.07	14,714	24,737	0.59	6,546	160	—	5,274	1,380	3.82	5,436	8,241	0.66	34,794	74,904	0.46

NOTE: Years in bold are trough years in the business cycle.

<sup>a</sup> The ratio is with/without for each category.

SOURCE: Authors' calculations using the March CPS, 1981–2006.

**Table 5.7 Change in the Share (percentage points) of Household Income of Working-Age Men (Aged 21–58) with Work Limitations by Source over the 1980s and 1990s Business Cycles from the March CPS**

Sources	One-period sample			Two-period sample		
	1983–1993 (1)	1993–2004 (2)	1983–2004 (3)	1983–1993 (4)	1993–2004 (5)	1983–2004 (6)
Private	–4.64	–0.93	–5.57	–3.65	–0.70	–4.35
Own labor earnings	–4.93	–3.96	–8.89	–1.84	–4.57	–6.41
Others' labor earnings	0.97	3.86	4.83	0.76	0.69	1.45
Other private	–0.68	–0.83	–1.51	–2.57	3.18	0.61
Public	4.52	0.91	5.55	3.58	0.71	4.37
Own SSDI/SSI	2.68	2.24	5.04	2.68	4.40	7.08
Other public	1.84	–1.33	0.51	0.98	–3.69	–2.71

SOURCE: Calculated from values presented in Tables 5.3 and 5.4. Public and private do not sum to zero due to rounding.

percentage points over the 1980s business cycle. This decline was offset by a 2.7 percentage point increase in the share of income coming from own SSDI and SSI benefits and a 1.8 percentage point increase in the share of income from other public transfers.

Over the 1990s, the share of household income coming from own labor earnings for this same group fell another 4.0 percentage points (Table 5.7, column 2). But the share of coming from private sources as a whole only declined by 0.9 percentage points in this period because the share of labor earnings of other household members grew by 3.9 percentage points and the share from all other private income sources fell by 0.8 percentage points. Public transfers from own SSDI and SSI benefits continued to grow as a share of household income (2.2 percentage points), but that increase was substantially offset by a decline (1.3 percentage points) in the share of household income coming from all other public transfers.

During the last two business cycles (1983–2004) combined, the share of own earnings in the household incomes of men with one-period work limitations dropped dramatically—by 8.9 percentage points (column 3). But the decline in the share of income from all private sources dropped less precipitously (5.6 percentage points) because the share of labor earnings of other household members grew by 4.8 percentage points. The major source of the rise in public income offsetting the loss in private income came from the 5.0 percentage point increase in the share of income from own SSDI and SSI payments.

There is a similar pattern for men with longer term disabilities. Over the entire period (Table 5.7, column 6), own labor earnings fell as a share of household income by 6.4 percentage points, and own SSDI and SSI payments increased by 7.1 percentage points. Once the increase in the labor earnings of others and other private income as a source of household income is factored in, total private income fell by 4.4 percentage points. Hence, regardless of which measure of disability is used, the households of men with disabilities were much more dependent on public transfers in 2004 than was the case in 1983.

## **INCOME LEVELS USING BROADER DISABILITY DEFINITIONS**

The ACS is a continuous data collection effort by the Census Bureau, started on a small scale in 2001. By 2003, the ACS collected information from more than 500,000 households, and by 2006, the sample had grown to about 3 million. The ACS sample is now many times larger than the number of sample households included in the CPS. Like the CPS, the ACS asks about work limitations of household members, but it also asks questions about other disabilities. For further discussion of the value of the ACS for disability research, see Weathers (2009) and Weathers (2005).

In the CPS, income is reported for the previous calendar year; for the ACS, income is reported for the previous 12 months. Because the ACS is administered throughout the calendar year, the income reporting periods differ across sample members in the annual ACS file. The Census Bureau indexes the values so that they are representative of the survey year.<sup>6</sup> Definitions of the income measures in each of the surveys are presented in Appendix 5A.

### **Comparing Income Using Work Limitation in the CPS and ACS**

Median household income and median household size-adjusted income for working-age people (men and women, aged 25–61) estimated from the 2004 March CPS (income year 2003) and the corresponding estimates from the 2003 ACS (income year 2003) are presented in Table 5.8.<sup>7</sup>

Not surprisingly, the median income values for those with any disability, which includes those reporting any of the six types of limitation (including a work limitation) in the ACS but only those reporting a work limitation in the CPS, are substantially different because the ACS captures a much broader population with disabilities. However, ACS medians based on the work-limitation measure alone are remarkably similar to CPS medians: \$28,000 in the ACS and \$27,955 in the CPS. The corresponding size-adjusted medians are also very similar: \$17,487 in the ACS and \$17,967 in the CPS. There are far greater differences in median income across alternative subpopulations of men with disabili-

**Table 5.8 Median Household Income and Median Household Size-Adjusted Income (2003 dollars) Estimates for Working-Age Persons (Aged 25–61) with and without Disabilities, by Data Source and Disability Definition**

Measure and data source	No disability	Disability	Ratio <sup>a</sup>	Work limitation	IADL	ADL	Mental	Physical	Sensory
Median household income									
2003 ACS	60,000	34,600	0.58	28,000	28,600	28,000	27,400	32,100	38,000
2004 CPS <sup>b</sup>	61,999	27,955	0.45	27,955	NA	NA	NA	NA	NA
Median household size-adjusted income									
2003 ACS	35,796	21,304	0.60	17,487	17,615	17,667	17,321	20,207	23,415
2004 CPS <sup>b</sup>	36,770	17,967	0.49	17,967	NA	NA	NA	NA	NA

<sup>a</sup> The (disability)/(no disability) ratio.

<sup>b</sup> The 2004 CPS collects income data for the 2003 calendar year.

SOURCE: Weathers (2005).

ties in the ACS data. Medians for the broadest ACS definition are substantially larger than for the work limitation definition, likely reflecting the fact that many of those identified as having “any disability” do not report a work limitation.

Although the ACS, with its more nuanced questions and larger sample size, will likely be the data set of choice for most future research on the economic well-being of working-age people with disabilities, with respect to both levels and trends, it cannot replace the CPS as the only data set providing consistent information since 1980. The work-limitation measures in the ACS, as shown in Table 5.8, yield remarkably similar median income estimates to those found in the CPS. This allows researchers to be more confident that these two data sets are capturing the same population when their work limitation definitions of disability are used to evaluate the economic well-being of working-age people with disabilities.

### **ACS Income Statistics by Sex, Race, Education, and State**

Because of the broad set of disability questions and large sample size in the ACS, detailed income statistics can be generated for important subgroups using alternative measures of those with disabilities. Using data from the 2006 ACS, Table 5.9 presents median household income and median household size-adjusted income for working-age people (aged 25–61) with and without any disability, defined by inclusion in any of the six ACS disability subgroups, as well as for subgroups defined by sex, race, and education. There are large differences between those with and without disabilities. The median household income for persons with any disability was \$37,000, compared with \$66,500 for those without any disability; thus, the median household income of persons with a disability was only 56 percent of the median for persons without one. Although the magnitude of income changes when size-adjusted income is used, the relative value is almost the same—58 percent. There are differences among subgroups defined by sex, race, or education, and median income levels are consistently higher for those who have a sensory or physical impairment as compared to other disability groups.

The ACS can also provide more detailed income data at the state level using alternative measures of working-age people with and without disabilities. Using data from the 2006 ACS, Table 5.10 presents median household size-adjusted income of those with and without disabilities as well as for those in each disability subgroup by state and for the District of Columbia. For all states, the median income of people with disabilities is substantially below that of people without disabilities. But the differences vary widely, as depicted in Figure 5.2. Median household size-adjusted income for those with disabilities in the District of Columbia is only 30.6 percent of that for those without disabilities, well below that in any state. Among the states, the value ranges from a low of 50.6 percent in Kentucky to a high of 79.7 percent in Utah.

## **DISCUSSION AND CONCLUSIONS**

Using data from the CPS and ACS we looked at levels and long-term trends in the economic well-being of working-age men with and without disabilities and how the sources of that economic well-being have changed over the last two business cycles (1983–1993 and 1993–2004). The real household (size-adjusted) income of men with work limitations stagnated between 1983 and 2004, while it rose substantially for men without such limitations, thus widening the income gap between the two. The median income of men with a one-period work limitation was 55 percent as large as the median income of men without a work limitation in 1983, but fell to 49 percent by 2004. The two-period work limitation population began with an even lower—48 percent—relative median income in 1983 and fell to 43 percent by 2004.

Dramatic changes also occurred in the sources of household income of men with disabilities both in the level of income gained from individual sources and its importance as a share of income relative to those without disabilities. First, and foremost, the importance of own labor earnings of men with work limitations, which were never the primary source of income in their households, dramatically declined in real dollars, as a share of household total income, and relative to their importance in the households of men without work limitations. Second, there



**Table 5.9 2006 Median Household Income and Median Household Size-Adjusted Income (2006 dollars) for Persons with and without Disabilities (Aged 25–61) by Demographic Subgroups**

Description	No disability	ACS disability	Ratio <sup>a</sup>	Sensory	Physical	Mental	ADL	IADL	Work limitation
All									
Household income	66,500	37,000	0.56	39,800	34,900	30,000	30,400	30,704	30,500
Adjusted income	39,598	22,910	0.58	24,700	21,779	18,764	19,024	18,850	19,021
Men									
Household income	68,700	39,200	0.57	43,000	36,000	32,100	31,200	31,700	31,800
Adjusted income	40,500	24,324	0.60	26,870	22,600	20,207	19,500	19,550	19,800
Women, Age 25–61									
Household income	65,000	35,000	0.54	35,010	33,600	28,100	30,000	30,000	29,800
Adjusted income	38,184	21,500	0.56	21,600	21,131	17,500	18,668	18,385	18,336
White									
Household income	70,300	40,000	0.57	43,200	37,200	32,100	33,100	32,710	32,600
Adjusted Income	42,410	25,000	0.59	27,210	23,688	20,435	20,943	20,435	20,577
Black									
Household income	49,000	26,000	0.53	25,600	25,000	21,120	21,700	22,800	22,200
Adjusted Income	29,698	16,000	0.54	16,044	15,600	13,250	13,500	13,789	13,741
Hispanic									
Household income	50,000	33,500	0.67	33,500	31,600	29,600	28,320	28,900	29,800
Adjusted income	26,163	18,694	0.71	18,861	17,764	16,466	16,166	16,234	16,750

Native American									
Household income	48,000	28,100	0.59	30,000	27,950	22,600	28,100	24,400	24,000
Adjusted income	27,482	17,436	0.63	18,244	17,352	14,000	15,762	15,011	15,146
Asian									
Household income	79,000	53,000	0.67	50,000	53,400	45,500	50,000	51,600	50,000
Adjusted income	44,050	29,445	0.67	28,284	30,022	25,000	26,550	28,284	27,414
Less than high school education									
Household income	40,000	24,900	0.62	25,000	23,000	22,600	23,000	24,500	22,400
Adjusted income	21,511	14,779	0.69	15,000	14,000	13,733	13,845	14,491	13,600
Greater than high school education									
Household income	79,000	48,000	0.61	52,500	45,000	38,500	39,004	38,000	39,000
Adjusted income	47,500	30,406	0.64	33,850	29,000	24,826	24,826	23,960	24,789

<sup>a</sup> The (ACS disability)/(no disability) ratio.

SOURCE: Authors' calculations from the 2006 ACS PUMS file.

**Table 5.10 2006 State-Level Estimates of Median Household Size-Adjusted Income (2006 dollars), Working-Age Population (Aged 25–61)**

State	No disability	Disability	Ratio <sup>a</sup>	Sensory	Physical	Mental	ADL	IADL	Work limitation
All States	39,598	22,910	0.57	24,700	21,779	18,764	19,024	18,850	19,021
Alabama	34,500	18,940	0.55	20,750	18,000	15,966	16,681	16,000	15,750
Alaska	43,879	31,678	0.72	35,907	27,150	27,250	34,701	31,841	27,235
Arizona	37,355	23,971	0.64	23,622	23,274	21,824	23,135	21,377	21,939
Arkansas	31,466	18,385	0.58	21,131	17,050	15,000	13,576	14,400	14,849
California	41,569	26,558	0.64	27,713	25,491	22,173	21,362	21,593	22,748
Colorado	42,500	26,905	0.63	29,698	25,385	23,094	21,189	21,567	21,779
Connecticut	49,999	30,321	0.61	37,335	27,078	21,600	27,000	22,769	24,480
Delaware	44,398	26,304	0.59	30,000	24,042	24,597	23,759	22,000	22,000
District of Columbia	53,160	16,263	0.31	18,385	16,019	12,000	10,324	14,142	13,700
Florida	37,194	24,000	0.65	25,288	22,800	20,751	20,500	20,265	20,754
Georgia	37,500	21,420	0.57	23,000	20,050	18,668	18,102	17,956	17,678
Hawaii	44,907	29,353	0.65	35,350	28,666	23,789	20,888	22,910	25,527
Idaho	33,446	22,274	0.67	22,000	22,910	18,407	19,767	20,648	18,031
Illinois	41,200	25,189	0.61	26,000	24,060	21,920	21,064	20,718	21,100
Indiana	37,066	22,700	0.61	25,500	21,651	17,567	18,235	17,961	18,700
Iowa	37,400	22,500	0.60	25,324	21,265	16,327	21,246	16,263	17,257
Kansas	38,049	21,300	0.56	24,249	20,150	16,200	19,163	18,314	18,455
Kentucky	34,927	17,678	0.51	18,850	16,859	12,471	14,637	12,875	13,856

Louisiana	33,944	20,082	0.59	19,799	19,658	17,378	17,678	17,805	16,829
Maine	37,597	21,920	0.58	26,905	20,785	17,667	17,106	13,378	16,900
Maryland	50,250	31,000	0.62	31,678	30,187	27,648	26,770	27,100	25,825
Massachusetts	50,000	26,163	0.52	31,537	25,250	20,785	21,066	20,700	20,785
Michigan	39,386	22,632	0.58	25,000	21,500	18,417	17,146	18,173	19,163
Minnesota	43,948	27,506	0.63	33,234	25,550	23,476	26,296	24,600	22,769
Mississippi	30,193	16,108	0.53	16,971	14,924	13,625	12,162	13,506	12,924
Missouri	36,100	21,637	0.60	22,944	19,870	18,000	17,491	18,071	17,800
Montana	32,870	20,153	0.61	24,000	19,514	15,146	19,514	14,656	15,473
Nebraska	36,900	22,486	0.61	26,000	21,213	18,591	21,213	15,415	17,494
Nevada	40,000	28,426	0.71	31,820	27,224	24,254	21,680	22,981	22,981
New Hampshire	46,669	28,500	0.61	32,909	29,874	21,355	24,950	24,950	22,800
New Jersey	49,992	30,604	0.61	30,426	28,868	25,223	25,000	25,000	27,153
New Mexico	32,000	22,000	0.69	22,627	21,939	18,000	18,475	19,050	19,050
New York	42,426	22,650	0.53	25,057	21,284	16,971	18,550	17,840	19,092
North Carolina	35,500	20,657	0.58	21,991	20,000	17,400	17,150	17,840	17,250
North Dakota	36,062	19,799	0.55	23,000	19,799	19,000	13,950	15,600	18,000
Ohio	38,013	21,355	0.56	24,507	20,082	17,250	17,782	18,470	17,678
Oklahoma	32,600	20,600	0.63	21,016	19,764	15,556	16,674	16,800	16,674
Oregon	37,500	24,042	0.64	27,000	24,466	18,000	18,385	19,300	20,577
Pennsylvania	39,723	22,250	0.56	25,152	21,311	18,100	18,850	18,533	18,187
Rhode Island	44,090	25,050	0.57	25,178	24,884	20,290	18,000	19,000	21,517
South Carolina	34,295	20,207	0.59	20,506	19,500	18,013	18,783	18,455	17,395

(continued)

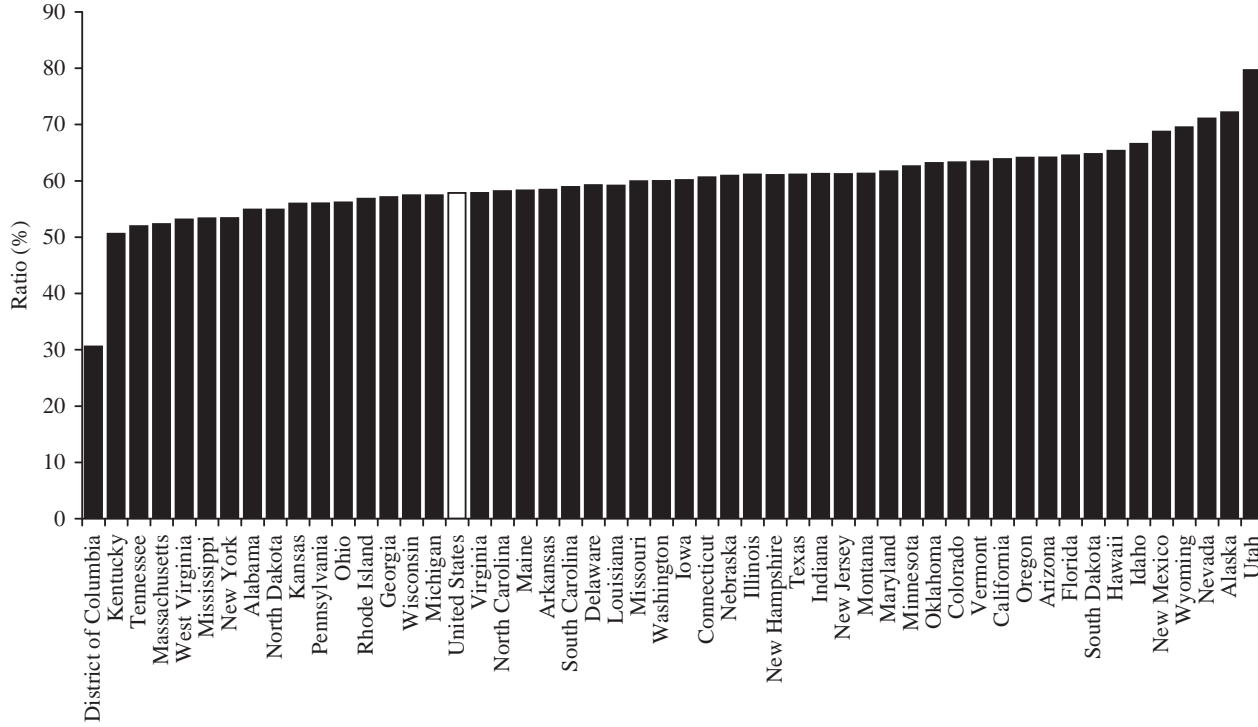
**Table 5.10 (continued)**

State	No disability	Disability	Ratio <sup>a</sup>	Sensory	Physical	Mental	ADL	IADL	Work limitation
South Dakota	34,930	22,627	0.65	26,300	21,300	16,949	29,500	19,750	19,000
Tennessee	35,000	18,187	0.52	19,600	16,971	14,549	15,300	15,698	15,698
Texas	35,000	21,391	0.61	22,500	20,365	17,973	17,536	17,665	17,956
Utah	35,796	28,521	0.80	29,791	28,085	25,000	25,271	25,314	24,042
Vermont	38,983	24,749	0.64	28,510	22,979	18,246	21,392	17,378	16,758
Virginia	45,091	26,096	0.58	28,200	24,537	21,850	22,013	22,401	21,213
Washington	42,426	25,456	0.60	29,840	24,798	20,000	20,435	19,427	20,000
West Virginia	32,043	17,032	0.53	16,971	16,476	13,314	13,750	14,300	14,400
Wisconsin	39,664	22,780	0.57	26,460	21,920	18,157	19,942	19,587	18,943
Wyoming	38,749	26,941	0.70	27,761	25,456	24,500	22,585	23,267	20,572

<sup>a</sup>The disability/no disability ratio.

SOURCE: Authors' calculations from the 2006 ACS PUMS file.

**Figure 5.2 Median Household Size-Adjusted Income of Working-Age Persons with Any Disability Relative to the Median for Those without a Disability in 2006, by State**



has been a rapid rise in the importance of own SSDI and SSI income as a share of household income of men with work limitations, especially relative to own labor earnings. Third, the rise in the importance of labor earnings from other household members as a share of the household income of men with work limitations has also been substantial and larger than in the households of men without limitations, especially relative to own labor earnings. Fourth, in the households of men with work limitations, the share of household income from all private sources fell over the period examined, with most of the decline coming from a drop in own labor earnings. In contrast, the share of income from private sources for men without work limitations rose over the same period. Finally, the labor earnings of men with work limitations have fallen by more than the increase in income from all public sources over that same period. The increases in the labor earnings of other household members have offset the decline in own labor earnings, thus preventing total household income from falling over the last two business cycles. But this modest growth in household incomes pales next to the substantial increase in the household income of men without work limitations over the same period.

Because no other data set has consistently used the same questions to capture the population with disabilities, only the CPS provides information that can trace the economic well-being of working-age people as far back as 1980. But recent improvements in data now allow us to better capture the working-age population with disabilities and its economic well-being. Using data from the 2003 ACS (income year 2003), we are able to compare the ACS measure of the population with work limitations with that of the 2004 March CPS (income year 2003). We found that the results are remarkably close—there is little difference in the median household income of these similarly defined populations. However, there is considerable difference in median household income across alternatively defined disability populations captured in the ACS data. The broadest population with disabilities captured in the survey has a much higher median household income than does the population with work limitations. This is not too surprising given the heterogeneous nature of disability and the fact that a large share of those in the broadest disability population do not report work limitations. But even

this broader population has a median household income considerably below that of people without such disabilities.

The ACS provides researchers with a much broader range of measures of the working-age population with disabilities, and in this way is superior to the CPS in capturing social outcomes for working-age people with disabilities. Eventually, the ACS will allow researchers to trace changes in the economic well-being of those with and without disabilities over time. But the CPS will remain the one data set that allows researchers to trace patterns in economic well-being both absolutely and relative to those without disabilities back to the 1980s. It is critical that work-limitation questions remain in the ACS so that researchers will be able to link findings on this population with those based on long-term CPS-based results.



**Appendix 5A**  
**Definitions of Disability and Income**

**Table 5A.1 Definitions of Disability and Income**

Measure/data source	Definitions
Disability: one-period work limitation	
March CPS	The CPS March Supplement asks “[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?)” Those who answer yes to this question are considered to report a work limitation.
ACS	Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities: b. Working at a job or business?
Disability: two-period work limitation	
March CPS	A portion of the March Supplement participants are asked about work limitations in two consecutive years. Those who report work limitations in two consecutive years (March to March) are considered to report a two-period work limitation. The years 1986 and 1996 are not applicable because the Census Bureau changed the sampling frame and the thus housing units were not consecutively interviewed. Also note, the CPS follows housing units, not the people in the households, so that matched files do not contain movers.
ACS	Not available.
Instrumental activity of daily living (IADL)	
March CPS	Not available.
ACS	Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities: a. Going outside the home alone to shop or visit a doctor’s office?

Activities of daily living (ADL)

March CPS Not available

ACS Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities: b. Dressing, bathing, or getting around inside the home?

Mental impairments

March CPS Not available.

ACS Because of a physical, mental, or emotional condition lasting 6 months or more, does this person have any difficulty in doing any of the following activities: a. Learning, remembering, or concentrating?

Physical impairments

March CPS Not available

ACS Does this person have any of the following long lasting conditions: b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?

Sensory impairments

March CPS Not available.

ACS Does this person have any of the following long lasting conditions: a. Blindness, deafness, or a severe vision or hearing impairment?

*(continued)*

**Table 5A.1 (continued)**

Measure/data source	Definitions
Income sources	
March CPS	<p>The CPS collects data on 23 sources of income for each person: 1) labor earnings, 2) self-employment income, 3) farm income, 4) public assistance and welfare, 5) unemployment compensation, 6) workers' compensation, 7) veteran's benefits, 8) Supplemental Security Income program, 9) Social Security Old Age, Survivors and Disability program, 10) educational assistance, 11) dividends, 12) interest income, 13) rental income, 14) alimony, 15) child support, 16, 17) two sources of private retirement income, 18,19) two sources of private disability income, 20, 21) two sources of private survivor's income, 22) financial assistance from outside the household, and 23) any other income. Capital gains or capital losses, taxes, and the value of noncash benefits (such as Food Stamps and housing subsidies) are not considered in this measure of income. If a person lives with a family, add up the income of all family members. (Nonrelatives, such as housemates, do not count.)</p>
ACS	<p>Asks the person to list the amount of income that each person in the household age 15 and older received from the following sources: 1) wages, salary, commissions, bonuses, or tips from all jobs (before deductions for taxes, bonds, dues or other items); 2) self-employment income from own nonfarm businesses or farm businesses, including proprietorships and partnerships (net income after business expenses); 3) interest, dividends, net rental income, royalty income, or income from real estate and trusts; 4) Social Security or Railroad Retirement; 5) Supplemental Security Income (SSI); 6) any public assistance or welfare payments from the state or local welfare office; 7) retirement, survivor or disability pensions (not including Social Security); and 8) any other sources of income received regularly such as Veterans' (VA) payments, unemployment compensation, child support, or alimony (not including lump sum payments such as money from an inheritance or the sale of a home).</p>

Household income

March CPS            The sum of income for each household member age 15 and older in the household unit.

ACS                    The sum of income for each household member age 15 and older in the household unit.

Household size

March CPS            Author's calculations using the household sequence number.

ACS                    Number of persons in the household variable in ACS PUMS household file.

Household size-adjusted income

March CPS            Household income divided by the square root of household size. See Citro and Michael (1995) page 176 for further information.

ACS                    Household income divided by the square root of household size. See Citro and Michael (1995) page 176 for further information.

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SOURCE: Adapted from Burkhauser and Houtenville (2006) and Weathers (2005).

## Notes

1. We focus on working-age men in this paper only because of space limitations, but the story for working-age women is similar. Despite the increased labor force participation of women over the period we examine (1980–2005), the labor earnings of men continue to be the most important source of married-couple household income. Thus, the differences between the economic well-being of households of working-age women with and without disabilities, although similar in direction, are smaller in magnitude than the ones for working-age men with and without disabilities.
2. For example, each year the Census Bureau provides official yearly income, poverty, and employment values by sex, race/ethnicity, and age based on March CPS data. It does not provide such values, however, for working-age people with disabilities. Burkhauser, Houtenville, and Rovba (2009) uses CPS data to provide the first such multi-year estimates of poverty, using the official Office of Management and Budget poverty line criteria, for the working-age population with disabilities.
3. This is a standard way of controlling for differences in household size in the economic well-being literature and is a variation of the Office of Management and Budget method of determining poverty levels for households of different sizes.
4. A business cycle trough is defined as the year in which household mean income hit its lowest absolute level over the cycle. This method of choosing comparison years only approximates the official National Bureau of Economic Research measure of business cycle peaks and troughs using overall economic growth. This is done for ease of exposition; the results do not change substantively if an alternative comparison of business cycles is chosen.
5. See Daly and Burkhauser (2003) and Berkowitz and Burkhauser (1996) for histories of Social Security disability policies over these years.
6. For example, the 2003 ACS was administered to a portion of its survey respondents in June 2003, and they were asked about their incomes from June 2002 to May 2003. The Census Bureau indexes the values so that they are comparable to those collected by 2003 ACS survey respondents interviewed in December 2003.
7. Because the ACS is collected over the entire year and the March CPS is collected only in March, it is not possible to precisely produce estimates from the two surveys for exactly the same period.

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