

**Non-Standard Work Arrangements  
And Disability Income**

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## Executive Summary

An important development in the U.S. labor market in the 1990's has been the growth of several forms of non-standard work including contingent, flexible, and part time work arrangements. Little is known about the participation of people with disabilities in these non-standard work arrangements and their relation to disability income. Such arrangements can offer advantages to many people with disabilities by accommodating health or transportation problems, but people with disabilities may also be steered into such work arrangements by earnings limits in disability income programs or employer reluctance to hire people with disabilities in regular full-time jobs.

This project uses Current Population Survey (CPS) and Survey of Income and Program Participation (SIPP) datasets on contingent work, work schedules, and home-based work collected across the 1990's to investigate the participation of people with disabilities in contingent, flexible, and part-time work arrangements. While the only disability measure in the CPS is work disability, the SIPP provides a variety of disability measures that enable examination of how non-standard work arrangements vary by type of disability. Along with prevalence and trends in non-standard work, the investigation covers the reasons for such work, the individual and job characteristics of non-standard workers, the role of labor market pressures, and the relationship to disability income. To explore more fully the issues facing people with disabilities in non-standard jobs, we also review the outcomes and issues raised in Americans with Disabilities Act (ADA) and Rehabilitation Act lawsuits brought by contingent and part-time workers with disabilities.

The key findings include:

- Prevalence of non-standard work: Workers with disabilities are much more likely than those without disabilities to be in most of the non-standard work arrangements, particularly if they have more severe disabilities (Figures 1-3). The use of several non-standard work arrangements became relatively more common among employed people with disabilities in the 1990's.
- Relation to disability income: Employment rates are very low among recipients of Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI), while contingent and part-time work arrangements are especially common among employed SSDI/SSI recipients (Figures 4-7). Examination of the 1999 rise in the earnings standard for SSDI recipients indicates that earnings standards play only a small role in the higher rates of contingent and part-time work among people with disabilities (Figure 8).
- Reasons for non-standard work: Most temporary employees with and without work disabilities desire permanent jobs, while a minority of part-time employees and independent contractors desire more standard work arrangements (Figure 9). Non-standard workers with work disabilities are more likely than those without disabilities to cite "health limitations" and less likely to cite being in school or training as the major reason for such work (Figure 10). Non-standard work is strongly tied to several

health measures, indicating that health problems play a major role in the higher rate of non-standard jobs among people with disabilities.

- Relation to other personal and household characteristics: Poverty rates are higher among workers with disabilities across all types of work arrangements. Women, blacks, and young workers in general are more likely to work in temporary agencies, whether they have work disabilities or not. Older workers with disabilities, and those with more education, have especially high rates of part-time employment relative to their counterparts without disabilities.
- Job characteristics of non-standard workers: Employed people with disabilities receive between 6% and 31% lower weekly and hourly pay than people without disabilities, and are less likely to receive employer-provided health insurance or pensions, across all types of jobs. Despite the special benefits that computer skills can have for people with disabilities, they are less likely than workers without disabilities to use computers regularly at work (Figure 11). Almost half of non-employed people with disabilities, and about one-third of non-employed SSDI/SSI recipients, either use computers regularly or say they could do so without difficulty.
- Transitions to traditional full-time work: Workers with and without disabilities appear to be about equally likely to make transitions to standard full-time jobs from part-time and temporary agency jobs. While people who stop receiving SSDI/SSI benefits and become employed are most likely to become full-time employees, they remain more likely than other non-recipients to be part-time employees (Figures 12-13).
- Job transitions as labor markets tighten: The tighter labor markets of the late 1990's gave workers in general more job options. While contingent and part-time employment decreased among people without work disabilities, these arrangements increased among people with work disabilities, indicating that such jobs are preferred by many people with disabilities entering the labor market (Figure 14).
- Disability lawsuits filed by non-standard workers: Contingent and part-time workers are less likely than other workers to pursue disability lawsuits, and those who pursue such cases prevail in only one-fourth of the lawsuits. Several legal issues with special relevance to contingent and part-time workers with disabilities are identified and discussed.

These findings clearly establish that non-standard work is a very important part of the overall employment picture for people with disabilities, and deserves substantial attention in the continuing efforts to expand their employment opportunities. While such jobs can have many benefits for people with disabilities, they generally have low pay and few benefits, and it is possible for people with disabilities to be trapped in these jobs. The final section includes a fuller summary of the findings and a brief discussion of policy implications.

## **I. Introduction**

Several types of non-standard work arrangements—which include contingent, flexible, and part-time work arrangements—have grown in the 1990's and become a source of substantial media and scholarly attention (e.g., Barker & Christensen, 1998; Blank, 1998). While there is no standard definition, contingent work generally refers to employment relationships with little or no job security; contingent workers are often defined to include temporary help service employees, independent contractors, on-call laborers, and other employees in jobs that are not expected to last long. Part-time employees include permanent employees who work less than a 35 hour week. In flexible work arrangements workers may have substantial job security, but are allowed to set their own hours and schedules—often job-sharing with other employees—or work at home.

Contingent, flexible, and part-time work arrangements can offer several advantages for people with disabilities. In particular, such arrangements often give workers some discretion in whether and when to work. People with disabilities may be more likely to experience problems with health or fatigue, making it difficult for them to commit to a full 40 hours per week schedule. They may have transportation problems, making home-based work or flexible schedules more attractive. People with disabilities may also choose to engage in temporary work relationships as a way of easing their transition into work, or testing their abilities and interests in alternative work environments.

Apart from these advantages from the individual's perspective, some perceived or actual constraints on individual choices may lead individuals with disabilities toward non-standard work arrangements: for example, recipients of Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) benefits may limit work hours and monthly earnings to avoid risking the loss of disability income and health benefits. The federal government, through efforts such as the 1999 Ticket to Work and Work Incentives Improvement Act, is working toward lessening the perceptions and realities of these limitations. It has also incorporated a number of important work incentives into its programming. From the labor demand side, if employers discriminate against people with disabilities by refusing to hire them into permanent full-time jobs, people with disabilities who want to work may be constrained to work in contingent jobs. In addition, employers often choose to hire workers on a temporary basis in order to assess worker skills and potential for permanent employment. This may be more common for workers with disabilities, given that employers may have uncertainties concerning the possibility of limiting effects of many disabilities and the productive potential of job applicants with disabilities.

Non-standard work arrangements raise a host of issues involving work opportunities for people with disabilities, including the role of disability income, the limitations associated with different types of disabilities, the importance of flexible arrangements, and the transition from non-employment to employment.

This report addresses a variety of questions regarding disability and non-standard work arrangements:

- 1) How likely are people with disabilities to be in non-standard work arrangements? How has this changed over time?
- 2) How likely are recipients of different types of disability income to be in non-standard work arrangements? How has this changed over time?
- 3) Why are people with disabilities in non-standard work arrangements? Is it for personal or job market reasons? Would they prefer to be in traditional full-time jobs?
- 4) What are the personal and household characteristics of people with disabilities in non-standard work arrangements? Do such arrangements vary by gender, race, age, and educational level?
- 5) What types of jobs are held by people with disabilities in non-standard work arrangements? What are their pay levels, occupations, industries, and union status? How likely are people with disabilities in non-standard work arrangements to be using computers and new information technologies?
- 6) How likely are people with disabilities to move from non-standard work arrangements to traditional full-time work, and how does this relate to receipt of disability income?
- 7) Did the tighter labor markets of the late 1990's, which gave workers more job options, encourage or discourage the use of non-standard work arrangements among people with disabilities?
- 8) What issues are raised in lawsuits filed by those who participate in non-standard work arrangements under the ADA and Rehabilitation Act, and what are the outcomes of those lawsuits?

## **II. Prior Research**

Research on employment levels has found that the employment rates of people reporting work disabilities has declined in the past decade (Acemoglu & Angrist, 2001; Burkhauser, Daly, & Houtenville, 2000; DeLeire, 2000). There are, however, potential limitations to the work disability measure that may affect comparisons over time (Hale, 2001; Kirchner, 1996; Schwochau & Blanck, 2000). While activity limitations-based measures are similar to the work disability measure in showing employment levels that do not increase over the 1990's (Burkhauser, Houtenville, & Wittenburg, 2001), employment rates have increased among those who report a disability but say they are able to work (Kaye, 2001). In addition, employment trends in the early 1990's appear to differ by definition of disability (Kruse & Schur, forthcoming). Disincentives—perceived and real—provided by disability income may play some role in the employment situation of people with disabilities. Growing receipt of disability income over the 1990's can be statistically linked to the worsening overall employment levels of people with work disabilities, although it remains unclear how much disability income is a cause versus



an effect of declining employment levels (Bound & Waidmann, 2000).

Regarding work arrangements in the general population, research has found that close to 10%, or 12.5 million, of American workers work as temporary employees or independent contractors with little job security, while the Bureau of Labor Statistics classifies 2.4 to 5.6 million Americans as contingent workers (Cohany, 1998; Hipple, 1998). While contingent work is attractive to some people, contingent workers have lower average pay and benefit levels, and a majority would prefer more permanent employment (Blank, 1998; Hipple & Stewart, 1996). Concerning flexible work arrangements, the percentage of wage and salary workers who have some discretion over their work schedules increased from 15.1% to 27.6% from 1991 to 1997 (BLS, 1998). Part-time work arrangements have generally increased among men over the past three decades (from about 9% to 12% of male workers), and stayed stable among women (at around 27-28% of female workers) (Blank, 1998: 265). Most part-time workers are "involuntary" part-timers, desiring full-time work. The share of all men who are involuntary part-time workers has increased from about 6% to 8% of all male workers, but decreased from about 23% to 21% of female workers (Blank, 1998: 265).

There has been very little research on how many people with disabilities are in contingent, flexible or part time work arrangements. In prior work using Current Population Survey supplements from February and March of 1997, Schur (2002) finds that workers reporting work disabilities were about twice as likely as other workers to be temporary employees, independent contractors, and part-time employees. The higher prevalence of these work arrangements appears to be partly due to personal preferences of workers with disabilities, but also to their greater difficulty in finding traditional full-time jobs. Contingent workers with disabilities were found to receive especially low pay, reflecting the negative effects of both disability and contingent work on wage levels.

Other evidence on non-standard work among people with disabilities comes from Blanck (1998), who reports case studies of 10 employees with disabilities working through the large temporary agency, Manpower, Inc. He finds that they had generally positive experiences with their training and temporary employment arrangements, and that six of the ten moved to permanent employment. In addition, Blanck, Sandler, Schmeling, and Schartz (2000) examine self-employment among people with disabilities, finding that both the desire for flexibility and experiences of discrimination led individuals with disabilities to participate in an entrepreneurship program. Over one-third of the businesses that were started through the program remained stable and showed a trend toward profitability two years later.

There is, however, no prior research on trends in non-standard work arrangements among workers with disabilities, nor on their use of computers and information technologies and their transitions into and out of disability income.

### **III. Data Sources**

The data analyzed in this study come from the Current Population Survey (CPS), the Survey of Income and Program Participation (SIPP), and a Lexis search of legal cases. The CPS

and SIPP datasets are collected by the federal government and contain representative samples of the U.S. population. There are three types of CPS data analyzed:

1. CPS March supplement data from 1992 to 2000. The March supplement includes the “work disability” question (“Does \_\_\_\_\_ have a health condition or a disability which prevents work or which limits the kind or amount of work?”) along with data on current employment and the past year’s employment, and income sources (including several types of disability income) over the past year. Results using work disability data from these supplements have been presented in Burkhauser, et al. (2000). In the current report, respondents who list the “personnel supply services” industry (industry code 731) for their primary job are designated as temporary agency employees, and those who indicate that they are employees and usually work fewer than 35 hours per week are designated as part-time employees. As shown in Table 1, the sample sizes of working-age people (age 18 to 64) in each year range from 79,657 to 94,142, while sample sizes of working-age people reporting work disabilities range from 5,903 to 6,953.
2. CPS February contingent work supplement data for 1995, 1997, and 1999. These supplements include a variety of questions on alternative work arrangements. Because three-fourths of the households interviewed in February are also interviewed in March, the data for individuals in these households can be matched between the two months in order to identify the relation of alternative work arrangements to work disability (assuming the work disability status has not changed between February and March). The matching is done using household identification numbers, person line numbers, and sex and race. As shown in Table 4, the sample sizes of working-age people without work disabilities produced by this matching, range from 43,866 to 49,711 across these three years, while the sample sizes of working-age people reporting work disabilities range from 3,825 to 4,479.
3. CPS May work schedules supplement data for 1991 and 1997. These supplements have questions on flexible work arrangements, including whether the worker has a flexible schedule and whether the worker does work at home. Because one-half of the households interviewed in May were also interviewed in March, the data for individuals in these households can be matched between the two months in order to identify the relation of flexible work arrangements to work disability (assuming the work disability status has not changed between March and May). As shown in Table 5, the sample sizes of working-age people without work disabilities produced by this matching are 34,834 in 1991 and 29,480 in 1997, while the sample sizes of working-age people with work disabilities are 2,705 in 1991 and 2,540 in 1997.

Additional data come from SIPP:

4. SIPP disability supplements for 1990-95 and 1999. While the work disability measure is the only measure of disability in the CPS, the SIPP supplements contain a variety of questions on health conditions, functional limitations, and activity limitations that permit a richer look at what types of disabilities and limitations are associated with

non-standard work arrangements. Overall results using these data have been published in McNeil (1993, 1997, 2000) and Burkhauser, et al. (2001). While the SIPP does not have the detailed data on non-standard work arrangements available in the CPS supplements, it does have information on part-time and temporary agency work, and on receipt of disability income. The 1999 supplement also contains questions on computer skills and use. The four supplements spanning the 1990-95 period collectively contain data on 204,972 working-age people, of whom 38,154 have some type of disability using the broad definition in McNeil (1993), while the 1999 supplement contains data on 44,022 working-age people, of whom 7,309 have some type of disability.<sup>1</sup>

All calculations from the CPS and SIPP are restricted to people of working age (18-64). The calculations presented use the sampling weights provided in those datasets, in order to make the figures as representative as possible of the population.<sup>2</sup>

The CPS and SIPP datasets have a number of strengths, particularly in that they are based on broad representative samples of the United States population, and use questions that are generally asked in a consistent way over time. Like all surveys, they have some limitations. The measurement of disability is not straightforward in any survey, and answers to disability questions may vary over time due to the social and economic environment (Kirchner, 1996; Kruse & Schur, forthcoming). There is an unknown bias from excluding those who refused to respond to the survey, and from attrition over time (particularly for the SIPP, which uses a panel design and attempts to follow respondents over a two- or three-year period). While all variables are subject to some degree of measurement and coding error, there may be particular problems in measuring disability income reciprocity in the CPS and SIPP. In the datasets analyzed here, SSDI reciprocity is measured as the receipt of Social Security income by someone who is under 62 years old (with the additional requirement in SIPP that the individual have a current work disability).<sup>3</sup> Some of these individuals, however, receive such income due to being retired, widowed, or the spouse or child of a Social Security earner.<sup>4</sup> While the majority of these individuals are SSDI recipients, the numbers on SSDI must be treated with this limitation in mind. Further research linking the SIPP to administrative Social Security records would be valuable in exploring the extent of this measurement problem.

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<sup>1</sup> This analysis uses the disability modules in waves 3 and 6 of the 1990 panel (interviews conducted Oct. 1990-Jan. 1991 and Oct. 1991-Jan. 1992), wave 3 of the 1991 panel (interviews conducted Oct. 1991-Jan. 1992), waves 6 and 9 of the 1992 panel (interviews conducted Oct. 1993-Jan. 1994 and Oct. 1994-Jan. 1995), waves 3 and 6 of the 1993 panel (interviews conducted Oct. 1993-Jan. 1994 and Oct. 1994-Jan. 1995), and wave 11 of the 1996 panel (interviews conducted June 1999-Sept. 1999).

<sup>2</sup> The statistical tests use Stata's "pweight" option for survey samples. By taking account of the probability that an observation was sampled, these tests account for the likely variation that would occur if the same data collection procedures were to be used on additional samples.

<sup>3</sup> This condition was not applied to the CPS data since the CPS measures income received in the previous year—a person may have received SSDI last year without having a current work disability. For the 1999 SIPP data analyzed in Figure 8, calculations are limited to those who reported receiving Social Security income due to a disability (which was consistently recorded in the 1999 data)

<sup>4</sup> The CPS started asking about reasons for Social Security reciprocity in 2001. Todd Honeycutt of Rutgers University provided information on the distribution of reasons.

The data on legal issues and outcomes come from a Lexis search:

5. The Lexis search of disability cases involved contingent and part-time workers. A total of 85 cases were identified that were brought by part-time employees, temporary employees, or independent contractors under the ADA, the Rehabilitation Act, or state disability discrimination statutes.

#### **IV. Prevalence and Trends in Work Arrangements**

Table 1 presents figures on the percent reporting work disabilities, and the employment rates, weeks worked, and annual earnings by disability status. The principal findings are:

- Between 7.4% and 8.0% of working-age people report having work disabilities in each year of the 1992-2000 period
- The percent employed in the previous year declined from 38.2% in 1992 to 34.5% in 2000 among people reporting work disabilities (consistent with figures reported in Burkhauser, et al., 2000), with a similar trend in current employment (as of the March survey date). In contrast, employment rates rose among those not reporting work disabilities.
- Among those who worked in the prior year, people with work disabilities worked fewer weeks on average and earned 55-60% of the average amounts of people without work disabilities. Their average earnings increased 34.8% over the 1992-2000 period, not keeping pace with the average 44.4% increase for people without disabilities.

How likely are people with disabilities to be in alternative work arrangements, and how has this changed over time? As shown in Tables 2 and 3:

- People with work disabilities are about twice as likely as those without work disabilities to be temporary agency workers and part-time employees. In 2000, the rates of temporary agency work among employed people among workers with and without disabilities were 2.5% and 0.9% (respectively), while the part-time employee rates were 29.4% and 14.4% (Table 3, column 9).
- Temporary agency and part-time employment have grown in importance for people with disabilities over the 1990's, while temporary agency work has increased but part-time employment has decreased in importance for people without work disabilities. (both among all people, in Table 2, and just among the employed, in Table 3). For example, the rate of temporary agency employment from 1992 to 2000 increased 1.1% among employed people without work disabilities and 0.3% among employed people with work disabilities, while part-time employees increased 1.6% among currently employed people with work disabilities but decreased 0.9% among those without work disabilities (Table 3, column 10).

- These trends, however, were stronger in the first part of the decade. When looking just at the 1996-2000 period, employed people with work disabilities also became less likely to work as part-time employees (Table 3, column 11).

Apart from temporary agency and part-time employment, are people with disabilities more likely to be in other non-standard work arrangements? Table 4 uses the CPS contingent work supplements to answer this question. The key findings are:

- Employed people with work disabilities are more likely than those without work disabilities to be in each of the non-standard work arrangements. This is illustrated in Figure 1. Only slightly more than half of employed people with work disabilities were permanent full-time employees in 1999 (52.0%, in column 7 of Table 4), compared to almost three-fourths of employed people without work disabilities (73.4%, in column 3). The employed people with work disabilities were more likely to be part-time employees (28.0% compared to 13.1%), independent contractors (9.8% compared to 6.0%), and temporary employees (8.1% compared to 5.4%).
- While people without work disabilities were more likely to become permanent full-time employees during the strong labor market period of 1995-99, people with work disabilities were relatively more likely to become contingent and part-time workers. In particular, part-time employees as a percent of all employed people declined 1.1% among those without work disabilities, but increased 2.0% (non-significant) among those with work disabilities (Table 4, columns 4 and 8). Also, workers expecting their job to last only a “limited time” decreased 0.4% among those with work disabilities, but increased 0.7% (non-significant) among those with work disabilities.

The use of home-based work and flexible schedules is explored in Table 5. The key findings are:

- The prevalence of any home-based work was similar between employed people with and without work disabilities in 1991 and 1997 (close to 18% in both years), but the prevalence of home-based work for pay appears to have been higher among employed people with work disabilities. One-seventh (13.9%) of employed people with work disabilities reported paid home-based work in 1997, compared to one-tenth (10.0%) of people without work disabilities (Table 5, columns 2 and 5). While comparisons between 1991 and 1997 must be treated with caution due to a change in the questions identifying paid home-based work, the figures appear to indicate a larger increase among employed people with work disabilities (8.9% to 13.9%) than among those without work disabilities (6.8% to 10.0%). This is illustrated in Figure 2.
- The prevalence of flexible hours is similar between workers with and without work disabilities. Just over one-third of employed people both with and without work disabilities in 1997 report that they have flexible work hours that allow them to make changes in the time they begin and end work (Table 5, columns 2 and 5). When broken-out by employees and self-employed, about one-fourth of employees and four-fifths of the self-employed report flexible work hours in 1997, which does not

differ significantly between those with and without work disabilities. While there was a change in the flexible hours questions between 1991 and 1997, the increase in reports of flexible hours was similar between employees with and without work disabilities so that any actual change is likely to have been similar between these groups.

Does the likelihood of working in non-standard arrangements vary by type of disability? Tables 6 and 7 use SIPP data to break out employment levels and temporary agency and part-time employment by several disability characteristics. The major results are:

- Employment levels are particularly low among those with severe functional and daily activity limitations.<sup>5</sup> In particular, employment levels are lowest among those with severe mobility impairments (22.9% employed in 1999), need for help getting around outside the home (13.4% employed), need for help with daily activities (19.9% employed), and those who use a wheelchair or crutches (21.4% employed)(Table 6, column 4).
- As with the CPS data on people with work disabilities, the SIPP data show decreased employment among people fitting a broader definition of disability. The overall decline in employment from the 1990-95 period to 1999 was 52.2% to 46.2%, with especially large declines among those reporting severe mobility impairments, difficulty lifting and carrying 10 pounds, and need for help with daily activities (columns 3 and 4).
- Among those who are employed, almost all types of disabilities are associated with an increased likelihood of part-time employment. Only 14.7% of employed people without disabilities were part-time employees in 1999, compared to 22.7% among those with any disability characteristic and 26.6% among those with severe functional or activity limitations (Table 7, column 4). The patterns by type of disability are illustrated in Figure 3. The rate of work as a part-time employee is especially high among those with mental impairments, difficulty getting around outside the home, need for help with daily activities, and difficulty speaking understandably.<sup>6</sup>
- The likelihood of part-time employment increased over the 1990's for employed people with disabilities. From the 1990-95 period to 1999, part-time employees increased from 19.0% to 22.7% of employed people with disabilities, with especially strong increases among those with mental impairments and difficulty lifting and carrying 10 pounds (Table 7, columns 3-4).

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<sup>5</sup> Functional limitations measured here are difficulties in seeing, hearing, speaking, lifting, climbing stairs, or walking, and severe functional limitations represent the inability to do these activities. Daily activity limitations include difficulties with activities such as dressing, preparing meals, and eating, and severe daily activity limitations represent a need for help in doing at least one of these activities.

<sup>6</sup> The only disability group with less part-time employment than among workers without disabilities is those with difficulty hearing (among whom only 12.7% of employed people were part-time employees in 1990-95).

- As with part-time employment, temporary agency work is more common among employed people with most types of disabilities compared to workers without disabilities. Temporary agency work is especially common among those with difficulty getting around outside the home (2.6% are temporary agency employees compared to 0.7% of employed people without disabilities) and those with mental impairments (1.4%) or who need help with daily activities (1.4%)(Table 7, column 5).<sup>7</sup>

To briefly summarize the main findings on prevalence and trends in non-standard work arrangements, employed people with disabilities are more likely than those without disabilities to be temporary agency workers, part-time employees, independent contractors, temporary employees, and paid home-based workers. They are not, however, more likely to have flexible schedules if they are employed. In conjunction with the overall decline in employment of people with disabilities during the 1990's, the use of several non-standard work arrangements became relatively more common among employed people with disabilities, while becoming less common among employed people without disabilities.

## V. Disability Income and Work Arrangements

What role does disability income play in non-standard work arrangements? Are recipients of SSDI, SSI, and other forms of disability income more or less likely to be in such arrangements?

The prevalence and trends in receipt of different forms of disability income are presented in Table 8. The main findings are:

- Receipt of SSI and SSDI income increased over the 1992-2000 period, balanced by a decrease in receipt of workers' compensation. The percent receiving SSI increased from 1.7% to 2.0%, and the percent receiving SSDI increased from 2.7% to 3.0%, but the overall receipt of disability income did not change significantly since the percent receiving workers' compensation decreased from 1.6% to 1.0% (Table 8, columns 1 and 9).
- Close to half of people reporting a work disability in March say that they received some form of disability income in the prior calendar year. About one-fourth of people reporting a work disability received SSDI, with the percentage increasing from 22.2% in 1992 to 26.5% in 2000. The increase was lower among those receiving SSI, from 17.5% in 1992 to 21.4% in 2000 (columns 1 and 9).

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<sup>7</sup> The temporary agency employment figures are available only for the 1990-95 period, since the 1999 SIPP did not include a detailed industry breakdown permitting identification of temporary agency workers.

- In contrast, only 3% of those without a work disability said they received disability income in the prior year, and this percentage declined over the 1992-2000 period primarily because of a decline in the percent reporting workers' compensation.

Table 9 explores the relation of disability income to employment trends by separating individuals into four groups: (a) those without a work disability or any disability income; (b) those who received SSDI and/or SSI; (c) those who did not receive SSDI or SSI but received other forms of disability income; and (d) those who report a work disability in March but no disability income in the prior year. The main findings are:

- Employment during the prior year was highest among those with no work disability or disability income (86.8% in 2000, in Table 9, column 9), next highest among those without SSI or SSDI but with some other form of disability income (71.1%), next highest among those with a work disability but no disability income (53.0%), and lowest among those who received SSDI or SSI (20.7%). This is illustrated in Figure 4. The high employment rate among those receiving other forms of disability income partly reflects the fact that workers' compensation and some of the other forms of income are designed to compensate for work-related injuries, and many of those injuries would have occurred in the prior year while the person was employed.
- Employment increased from 1992 to 2000 among those without work disabilities or disability income, but decreased among those receiving SSI/SSDI and other forms of disability income. The employment rate decreased from 25.0% to 20.7% among SSDI/SSI recipients, and 74.8% to 71.1% among recipients of other disability income (Table 9, columns 1 and 9). This is illustrated in Figure 5.
- Among employed people, part-time employment is most common among SSI/SSDI recipients. About two-fifths of employed SSI/SSDI recipients were part-time employees (39.4% in 2000), compared to one-fourth of those with work disabilities but no disability income (26.3%), and one-seventh of those without work disabilities or disability income (14.4%)(column 9). The percent working part-time declined over the 1992-2000 period (although only the decline among those without work disabilities or disability income was statistically significant).
- Among employed people, temporary agency work was most common among SSI/SSDI recipients. Compared to those without work disabilities or disability income, they were more than twice as likely to be temporary agency employees (2.5% compared to 0.9% in 2000), and appeared to have greater growth in such employment over the 1992-2000 period (1.3% compared to 0.3%, though the former is not statistically significant)(columns 9 and 10).

Do the receipt of disability income, and the relation to employment patterns, vary substantially by type of disability? Tables 10 and 11 present results from SIPP data to answer this question.



- The receipt of SSI or SSDI is highest among those with more severe disabilities, particularly among those with need for help difficulty getting around outside the home (50.9% in 1999, from Table 10, column 6), need for help with daily activities inside the home (51.0%), difficulty speaking understandably (47.4%), mental impairments (39.6%), and severe mobility impairments (36.6%). Receipt of SSDI or SSI is least likely among those with difficulty hearing (12.8%) and difficulty seeing (23.8%).
- The receipt of SSDI or SSI became more common among each of the types of disability from the 1990-95 period to 1999. The increase was particularly strong among those having difficulty with daily activities inside the home (30.8% to 43.9%)(columns 5 and 6).
- Among those not receiving SSDI or SSI, employment rates are highest among those with hearing impairments (71.5% in 1999, from column 8 of Table 10) and lowest among those needing help getting around outside the home (22.1%) or with daily activities inside the home (29.2%).
- Among SSDI and SSI recipients, employment rates were highest among those with difficulty speaking understandably (16.3% in 1999, from column 10 of Table 10) and those with mental impairments (13.8%), and lowest among those with difficulty walking one-fourth mile (2.8%) or severe mobility impairments in general (3.3%).
- The overall employment rate decreased from 1990-95 to 1999 among those with severe disabilities who did not receive SSDI or SSI (40.0% to 36.8%), but increased among several disability categories (such as those with mobility impairments, difficulty seeing, and difficulty speaking understandably)(columns 7 and 8). None of the changes in employment among SSDI and SSI recipients were strong enough to be statistically significant.
- Among employed people with disabilities who did not receive SSDI or SSI, there was an increase in part-time employment from the 1990-95 period to 1999 (18.1% to 20.5%, from columns 1 and 2 of Table 11). The changes in part-time employment among SSDI and SSI recipients were not strong enough to be statistically significant.
- Consistent with the CPS data, employed SSDI and SSI recipients are more likely than other workers with disabilities to be temporary agency workers. Temporary agency employment is especially likely among employed SSDI or SSI recipients who have difficulty getting around outside the home (7.7%, from column 6 of Table 11).

The relation of contingent, flexible, and part-time work arrangements to disability income, using the CPS contingent work and work schedules supplements, is presented in Tables 12 and 13. The major findings are:

- Employed people who received SSDI or SSI were less likely to be permanent full-time employees than those with no work disability or disability income, and those with other forms of disability income. Almost two-fifths were part-time employees in 1999 (39.6%, in column 3 of Table 12), while 17.2% were temporary employees or independent contractors, compared to 13.0% and 11.5% (respectively) for those without work disabilities or disability income. These patterns are displayed in Figure 6.
- Work arrangements were more similar between employed SSDI/SSI recipients and those with a work disability but no disability income last year. Roughly half of each group were employed as permanent full-time employees, while those without disability income were more likely to be self-employed (9.7% compared to 4.5% for employed SSDI/SSI recipients) and less likely to be part-time employees (24.6% compared to 39.6%)(column 3).
- While there was an overall decline of 1.3% in contingent and part-time work arrangements over the 1995-99 period among employed people without work disabilities or disability income, there was a measured increase of 4.5% among employed SSDI/SSI recipients (though this increase was not strong enough to be statistically significant)(column 4). Those receiving other forms of disability income again appear similar to those without work disabilities or disability income, with an apparent (non-significant) decrease in contingent and part-time work among those who are employed. This is illustrated in Figure 7.
- Employed SSDI and SSI recipients are about as likely as employed people without work disabilities or disability income to do paid home-based work, but are less likely to have flexible work hours. Close to one-tenth of each group do paid home-based work (9.0% and 10.1% respectively), while one-fourth of employed SSDI/SSI recipients have flexible work hours (26.6%) compared to one-third of those with no work disabilities or disability income (34.9%)(column 2 of Table 13). In contrast, employed people with work disabilities but no disability income are more likely to do paid home-based work (15.7%) and have flexible work hours (37.6%).

To what extent do the earnings standards used in determining eligibility for SSDI account for contingent and part-time work arrangements among people with disabilities? A natural experiment in analyzing the role of earnings standards was created by the rise in the SSDI earnings limitation level from \$500 to \$700 per month on July 1<sup>st</sup>, 1999. If earnings limitations constrain the hours worked by disability income recipients, we should see a change in the earnings distribution of recipients as they adjusted to the new limit. The SIPP dataset has month-by-month information on disability income recipiency in 1999 that allows such a comparison (described more fully in Schur, 2002). The principal finding, as shown in Figure 8's month-by-month picture of changes in the distribution, is that:

- There was a drop in July in the percent of employed recipients earning just under the old limit, and an increase in the percent earning just under the new limit, with further apparent increase at the end of the year. The overall magnitude of the shift, however,

is quite modest. Therefore it appears that the earnings distribution did change as the limit was increased, but only a small portion of recipients appear directly constrained by the limits since only about 5% of employed recipients increased their earnings in response to the raised earnings limit. Given that only a minority of employed people with work disabilities receive disability income, it appears that only 0.1% to 0.6% of all employed people with disabilities have their work hours directly constrained by the earnings limitations.<sup>8</sup> While this may be understated since some people may not have been able to change work hours as the earnings limit rose, the tiny percentage who appear to be directly constrained is much smaller than the overall disability gaps in part-time work. Therefore earnings limitations undoubtedly do constrain the work hours of some disability income recipients, but this appears to account for only a small portion of the higher rates of contingent and part-time work among people with disabilities.

In summary of the main findings on disability income and work arrangements, SSDI and SSI coverage have increased over the 1990's while other disability income coverage (particularly workers' compensation) has decreased. About one-fourth of those reporting a work disability received SSDI in the prior year, and one-fifth received SSI, with particularly high rates among those who have difficulty getting around outside the home and who need help with daily activities. Only one-fifth of SSDI/SSI recipients are employed, compared to half of those with work disabilities but no disability income, and to over four-fifths of those with no work disability or disability income. Contingent and part-time work arrangements are especially common among employed SSDI/SSI recipients, and did not decrease in 1995-99 when labor markets were strong, unlike the trend for those without work disabilities or disability income who became less likely to be in non-standard work arrangements. Flexible work hours are actually less common among employed SSDI/SSI recipients than among those with no work disability or disability income, while paid home-based work is equally common between these groups but more common among those with work disabilities but no disability income. SSDI earnings standards appear to play a small role in the higher rates of contingent and part-time work among people with disabilities.

## **VI. Reasons for Work Arrangements, and Preferences for Other Arrangements**

Why are people in these work arrangements, and do they desire other types of jobs? The CPS supplements asked contingent, part-time, and home-based workers for the major reason they were in such arrangements. The main findings for temporary employees, in Table 14, are:

- Over half of temporary employees desire permanent jobs, and the percent doing so has decreased more among those without work disabilities than those with work disabilities in the strong job market of the 1995-99 period. When labor markets tighten, workers have more options over what types of jobs to take, and are more likely to be in a desired job. Consistent with this, the percent of temporary employees without work disabilities who desire permanent jobs significantly decreased from

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<sup>8</sup> While it is possible that earnings limits discourage some recipients from any employment at all (due to fixed costs of being employed), there was a non-significant decline in the percentage employed after the limit was raised.

63.1% to 54.8% between 1995 and 1999 (Table 14, columns 1 and 3); however, there was only a non-significant decrease from 63.6% to 61.8% among temporary employees with work disabilities (columns 6 and 8). This is illustrated in Figure 9.

- Consistent with this, the percent of temporary employees without work disabilities citing job market reasons for such work (indicating it was the only type of work they could find, that they were hoping the job led to permanent employment, that they had been laid off and hired back as a temporary employee, or some other job market reason) declined from 1995 to 1999, while there was a smaller and non-significant decline in job market reasons among temporary employees with work disabilities (columns 5 and 10).
- Flexibility of schedule and being in school or training are the most important personal reasons for temporary employment among those without work disabilities (Table 14, column 4). Flexibility of schedule is also the most important personal reason among temporary employees with work disabilities, while they are more likely than those without work disabilities to simply note “health limitations” as a reason for such work, and less likely to say they are in school or training (column 9). Several of these reasons are illustrated in Figure 10.

Table 15 provides findings on reasons for independent contracting:

- In contrast to temporary employees’ desire for permanent jobs, less than one-fifth of independent contractors desire jobs as employees. The figure is higher among those with work disabilities (15.0% compared to 9.5% among those without work disabilities, in columns 4 and 9 of Table 15). There are no significant trends in desire for employee jobs over this period.
- Consistent with this, almost all independent contractors cite personal reasons for such work, most commonly the flexibility of one’s schedule and that they only wanted to work a short period of time. Those with work disabilities are somewhat less likely to say they only wanted to work a short period of time or that the “money is better”, and more likely to cite “health limitations” (columns 4 and 9).

Reasons for part-time employment are examined in Table 16, where the major findings are:

- Part-time employees with work disabilities are more likely than those without work disabilities to say they would prefer full-time work. One-fourth of those with work disabilities said they preferred full-time work in 2000 (25.0%), compared to one-sixth of those without work disabilities (16.7%)(Table 16, columns 3 and 7). The percent desiring full-time work declined over the 1994 to 2000 period among part-time employees both with and without work disabilities (although the decline was not strong enough to be statistically significant for those with disabilities).
- Part-time employees with work disabilities are about as likely as those without work disabilities to cite personal reasons for part-time work, but there is substantial

variation in the reasons cited. Those without work disabilities are most likely to cite other family/personal obligations, and being in school or training, as the major reason for part-time work. These reasons are much less likely to be cited by part-time employees with work disabilities, who are most likely to simply cite “health limitations” to explain their part-time work. They are also less likely to say that childcare problems are a major reason for their part-time work.

Finally, Table 17 provides data on reasons for home-based work:

- The most common reason for paid home-based work for both workers with and without work disabilities is to coordinate one’s schedule with personal and family needs. While over one-fourth of those without work disabilities cite this reason, only one-seventh of those with work disabilities cite this reason (28.4% compared to 14.2%, in columns 1 and 2 of Table 17). Not surprisingly, home-based workers with work disabilities are more likely to cite “illness, disability, or health reasons” as the major reason for home-based work. There are no significant differences in other reasons between the two groups.

Supplementary research using SIPP data finds that health problems are a major reason for the higher rate of non-standard work arrangements among people with disabilities. Such arrangements are strongly tied to several health measures, and people with disabilities tend to have more sick days, hospital and doctor visits, and worse self-reported health (Schur, 2002).

To briefly summarize the main results on reasons for non-standard work and desire for standard arrangements, temporary employees with work disabilities do not differ significantly from their counterparts without work disabilities in the desire for standard jobs, while independent contractors and part-time employees are more likely to desire standard jobs if they have a work disability. Those with work disabilities in these non-standard jobs are not significantly more likely to give job market-related reasons for such work, but they are more likely to simply cite “health limitations” and less likely to cite being in school or training as the major reason for such work.

## **VII. Poverty Rates and Personal Characteristics**

Who is most likely to be in non-standard work arrangements, and what are the associated poverty rates? Tables 18-22 examine the relation of work arrangements to poverty rates, gender, age, race, and education. The key findings on poverty are:

- Work disabilities and disability income are associated with higher poverty rates. Over one-fourth of SSDI and SSI recipients live in poverty households (29.0% in 2000, from column 9 of Table 18). While this is to be expected in part because poverty status is a prerequisite for SSI, the poverty rate is almost as high among those with a work disability but no disability income (26.8% in 2000). In contrast, the poverty rates are much lower among those without work disabilities or disability income (8.5%) or who receive other forms of disability income (7.7%).

- Poverty rates decreased over the 1992-2000 period among non-employed SSDI/SSI recipients and those with no work disability or disability income (Table 18, column 10). The decrease among SSDI/SSI recipients probably reflects changes in the population composition as SSDI coverage increased, as documented in Table 8.
- While poverty rates are naturally lower among employed people in all categories, the rates remain higher among employed SSDI/SSI recipients and those with work disabilities but no disability income, compared to people with no work disability or disability income. For example, the 2000 poverty rates among employed SSDI/SSI recipients were 20.6% among part-time employees and 10.9% among full-time employees outside of temporary agencies, compared to figures of only 12.7% and 4.3% among those without work disabilities or disability income (column 9, Table 18). These higher poverty rates partly reflect lower hourly and weekly earnings among employed people with disabilities, as will be seen in the next section.

The major findings with respect to demographic characteristics are as follows:

- The employment rate of men, but not women, with work disabilities declined over the 1992-2000 period. The employment rate of men with work disabilities decreased 6.3% and the rate for women with disabilities decreased a non-significant 1.1%, while the rate for men without work disabilities was stable and for women with work disabilities increased 3.2% (column 11, Table 19). Consequently in 2000, employment rates were similar between women and men with work disabilities, while women without work disabilities continued to have lower rates than men without work disabilities.
- Women both with and without work disabilities were more likely than their male counterparts to work in temporary agencies or as part-time employees (column 10, Table 19).
- Older workers with work disabilities are the least likely to be employed. While almost half of 18- to 34-year-olds with work disabilities are employed (48.2%, in column 9 of Table 20), only one-fourth of 50- to 64-year-olds are employed (25.9%). The gap in employment rates between people with and without work disabilities is significantly larger among the older cohorts (column 10).
- While temporary agency and part-time employment differ little by age among employed people with disabilities, these work arrangements are less common among older than among younger workers without disabilities. There is an especially large difference in work as a part-time employee between older workers with and without disabilities (column 10, Table 20).
- Blacks with work disabilities have especially low employment rates. Only one-fourth are employed (25.6% in column 9 of Table 21) compared to over one-third of whites

with work disabilities (36.4%), while the rates for those without work disabilities are fairly similar (84.8% and 86.8% respectively). The pattern for other races is similar to that for whites.

- Blacks both with and without work disabilities appear to be more likely than their white counterparts to be working in temporary agencies, but otherwise the rates of temporary agency and part-time employment do not differ substantially by race for those with and without work disabilities.
- People with work disabilities who do not have high school degrees have especially low employment levels. Only one-fifth are employed (19.4%, in column 9 of Table 22) compared to 38.5% of high school graduates and 53.0% of college graduates with work disabilities. Employment rates increase more modestly with education among those without work disabilities, so that the disability employment gap is especially strong among those with no high school degrees. Employment rates declined in 1992-2000 across all of the educational levels for people with work disabilities (column 11).
- Temporary agency employment does not differ significantly by educational level among the employed, while part-time employment decreases with education among those without work disabilities but not among those with work disabilities. Consequently the difference in part-time employment is significantly greater between college graduates with and without work disabilities (29.0% and 9.4% respectively, in column 9 of Table 22) than between high school dropouts with and without work disabilities (31.1% and 19.6%).

In brief summary of this section, poverty rates are higher among workers with disabilities, whether or not they receive disability income, although the poverty rates of SSDI/SSI recipients decreased during the 1990's. Poverty rates remain higher among employed people with disabilities compared to other employed workers, partly reflecting their lower average hourly and weekly pay. With regard to demographic characteristics, employment rates among people with work disabilities are especially low among men, blacks, older people, and those with low levels of education, relative to their counterparts without work disabilities. Women, blacks, and young workers in general are more likely to work in temporary agencies, whether they have work disabilities or not. While part-time employment is generally less common among older workers and those with more education, this is not true for workers with work disabilities.

### **VIII. Job Characteristics**

The findings so far show that people with disabilities are less likely to be employed and are more likely to be in non-standard work arrangements. What are the other characteristics of these jobs? This section presents data in Tables 23-30 on a variety of job characteristics, including pay, union status, occupation, industry, and use of computers and information technologies. The major findings with respect to pay and union coverage are:

- Employed people with work disabilities earn less than those without work disabilities across all of the work arrangements. While workers with disabilities in standard jobs earn on average about 16-17% less per hour than workers without disabilities, the disability gaps in average hourly pay are 20.3% for temporary agency workers, 31.0% for all temporary employees, 22.0% for independent contractors, 26.2% for paid home-based workers, 24.1% for workers on flexible schedules, and 6-23% for part-time employees (column 9 of Table 23, column 9 of Table 24, and column 3 of Table 25).
- These pay gaps are only partly explained by differences in education, labor market experience, gender, race, education, marital status, and regional location. The disability gaps in hourly pay are reduced to 7-13% when controlling for other characteristics in standard earnings equations (in the even-numbered columns of Table 26).
- Union coverage appears to be just as likely among employees with work disabilities as among employees without work disabilities. Full-time employees with work disabilities (“other employees” in Table 23) are 5.4 percentage points more likely to be covered by a union contract than those without work disabilities (column 9), largely due to their higher likelihood of being blue-collar workers. Union coverage is generally low among part-time employees, paid home-based workers, and those on flexible schedules, but there is no significant difference in coverage between people with and without work disabilities in these jobs (Tables 23 and 25). While no union coverage was found among temporary agency employees with work disabilities (columns 5-7 of Table 23), the combination of small samples and generally low union coverage among temporary agency workers prevent any firm conclusions.<sup>9</sup>

Comparisons of occupation and industry show that:

- Employed people with work disabilities are more likely than those without work disabilities to be in service and blue-collar occupations in most of the work arrangements. While about three-fifths of workers without disabilities are managers/professionals or other white-collar workers, only about half of workers with disabilities are in such occupations. This general pattern holds true among part-time employees, temporary agency workers, temporary employees, paid home-based workers, and those on flexible schedules, although the occupational distribution of independent contractors does not differ significantly between those with and without work disabilities (Tables 24, 25, and 27).
- There is little difference in the industry distributions of employed people with and without work disabilities (Table 28).

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<sup>9</sup> Union coverage questions are asked only in the outgoing rotation groups of the CPS. Because of this, the February-March matches for the contingent work supplements (for which results are presented in Table 24) do not include any information on union coverage among workers in contingent work arrangements.



Supplementary analysis regarding health insurance and pensions (Schur, forthcoming) shows that:

- Non-standard workers in general are less likely to receive employer-sponsored health insurance and pensions, while non-standard workers with disabilities are the least likely to receive these benefits. Almost three-fourths (74%) of permanent full-time employees without work disabilities participate in employer-provided health insurance, compared to 65% of permanent full-time employees with work disabilities, 24% of temporary employees without work disabilities, and only 9% of temporary employees with work disabilities. Health insurance is a particularly important issue given that health problems often accompany many disabilities. The lack of employer-sponsored health insurance is often cited as a reason why many people with disabilities remain on SSI and SSDI programs, since these provide health insurance through Medicaid and Medicare. People with disabilities are not only less likely to receive employer-sponsored health insurance across all job arrangements, but are less likely to have any health insurance at all (Schur, forthcoming).

Computers and information technologies may have special benefits for workers with disabilities, often compensating for their limitations and making their disabilities less relevant to their work performance (Krueger & Kruse, 1995). Data from the CPS and SIPP show that:

- Workers with disabilities are less likely to use computers on the job, in each type of work arrangement. Only one-third of full-time employees are regular computer users at work (35.0%, in column 2 of Table 29), compared to 45.8% of full-time employees without disabilities. Similarly, only 18.2% of part-time employees with disabilities are regular computer users, compared to 29.8% of part-time employees without disabilities. Consistent with this pattern, about half of paid home-based workers with work disabilities use computers in their home-based work, compared to three-fifths of those without work disabilities (though this difference is not strong enough to be statistically significant)(Table 30).
- Regular computer use at work is especially low among employed SSDI/SSI recipients. Only one-fifth of full-time employees, and less than one-tenth of part-time employees, who receive SSDI or SSI are regular computer users at work (20.4% and 7.6% respectively, in column 3 of Table 29)
- Workers with disabilities are also less likely to have access to the Internet either at work or elsewhere (column 2, Table 29).
- Regular computer use at work does not vary substantially among those with mobility, sensory, and mental impairments, except that part-time employees with mobility impairments appear more likely than other part-time employees with disabilities to be regular computer users at work (columns 4-6, Table 29).

- The lower likelihood of computer use at work is only partly due to increased difficulty with computers among workers with disabilities. One-third of full-time workers with work disabilities say they are not regular computer users but could use computers without difficulty (33.4%, in column 2 of Table 29), compared to 27.7% of those without disabilities (column 1). It is noteworthy that this disability gap is the reverse of the gap in regular computer use at work, meaning that the overall percent who either use or feel qualified to use computers is not at all that proportionally different between workers with and without disabilities (78.8% and 84.7% respectively) although this is still a statistically significant gap).
- Among the non-employed, one-sixth of people with disabilities are regular computer users (16.1% in column 2 of Table 29), and another 29.4% say they are not regular users but could use computers without difficulty, so that almost half would be qualified to use computers. These figures are slightly lower among non-employed SSDI/SSI recipients (11.2% and 24.1% respectively, in column 3), so that just over one-third would be qualified to use computers.
- People with disabilities are more likely than those without disabilities to say they are not regular computer users but could become regular users with special equipment. Between 0.3% and 1.6% of the people with disabilities report such a need in order to become computer users (column 2, Table 29).
- While they may be less likely to use computers in their work, paid home-based workers with work disabilities are just as likely as those without work disabilities to use other information technologies in their work (modem, fax, connection to voice mail, and other equipment), and are more likely to use the telephone in their home-based work (Table 30).

The patterns of computer use and capabilities among full-time, part-time, and non-employed people are illustrated in Figure 11.

In brief summary of this section, employed people with disabilities receive lower weekly and hourly pay than people without disabilities across all of the work arrangements, are about as likely to be covered by union contracts, and are more likely to be service and blue-collar workers. They are less likely than workers without disabilities to be regular computer users at work, but are almost as likely to feel qualified to use computers. Additionally, paid home-based workers with disabilities are as likely as those without disabilities to use other information technologies in their work. Almost half of non-employed people with disabilities, and about one-third of non-employed SSDI/SSI recipients, either use computers regularly or say they could do so without difficulty.

## **IX. Employment and Disability Income Transitions**

How likely are people with disabilities to move from contingent or part-time work to traditional full-time work? What role do non-standard work arrangements play in transitions onto

and out of disability income reciprocity? The CPS data allow matches between subsequent March supplements that can be used to follow individuals as they change jobs and begin or end receiving disability income. Tables 31-35 use such data to focus on transitions in employment and in receipt of SSDI and SSI, examining what types of jobs people hold as they begin, end, or continue receiving such income. The major findings are:

- Non-standard work arrangements do not appear to be commonly used in transitions to standard jobs among people with disabilities. The pattern of work arrangements among employed people with disabilities is similar between those who were and were not employed in the previous year (e.g., only 56.9% are permanent full-time employees in both groups, in Table 31, columns 2 and 4), indicating that workers with disabilities tend to maintain their work arrangements over time. In contrast, workers without disabilities are more likely to be part-time and contingent workers if they were not employed in the previous year, indicating that such arrangements may be transitional for many of them.
- There are not, however, significant differences between workers with and without work disabilities in transitions from part-time and temporary agency jobs to other types of jobs (Table 32, columns 5-8). About 70% of part-time and temporary agency employees with work disabilities remain employed in the following year, with 28% of part-time employees and 45% of temporary agency employees moving to full-time jobs without going through a temporary agency.
- Those who start receiving SSDI or SSI income are more likely to stop all employment, and those who remain employed are more likely to switch to part-time jobs. The employment rate across the year drops from 57.8% to 30.7% as people begin receiving SSDI or SSI (columns 4-5, Table 33), while the share of part-time employees among the employed grows by 7.3% and the share who do temporary agency work does not change (column 6). The changes in overall employment rates are illustrated in Figure 12.
- Those who stop receiving SSDI or SSI income and become employed are most likely to become full-time employees who are not in temporary agencies (“other employees” in Table 33). Overall there is a 16.1% increase in the employment rate as people stop receiving SSDI or SSI (column 9, Table 33), which is mostly accounted for by an increase in full-time employees who are not in temporary agencies (15.4%). This is not surprising given that the earnings limits in SSDI and SSI would lead people to stop receiving such income only if they can get relatively well-paying full-time stable jobs.
- Those who stop receiving SSDI or SSI income nonetheless remain less likely to be permanent full-time employees than those who have not recently received such income. Only 57.1% of the employed people who stopped receiving SSDI or SSI are permanent full-time employees, compared to 73.0% of those who did not receive such income in either the prior or current year (columns 1-2, Table 34). They are more likely to be part-time employees, and may be more likely to be temporary

employees (although this difference is not statistically significant)(column 2). These patterns are illustrated in Figure 13.

- Likewise, those who start or continue receiving SSDI or SSI, and who are employed, are less likely to be permanent full-time employees and more likely to be part-time employees than those who did not receive such income in either the prior or current year (columns 3-4, Table 34).
- Paid home-based work and flexible work schedules among the employed are not strongly related to disability income transitions. Those who are now employed and started or stopped receiving SSDI or SSI in the past year do not significantly differ in such work arrangements compared to those who did not receive such income in either the prior or current year (columns 2-3, Table 35), although the small samples due to the multiple matches do not allow strong conclusions. Paid home-based work is less common among the small number of people who are employed and received SSDI or SSI income in both years (column 4).

In brief summary of the findings on employment and disability income transitions, people with disabilities do not appear to commonly use non-standard work arrangements as a step in transitions to standard jobs. Those who stop receiving SSDI or SSI income are most likely to begin jobs as full-time employees, but nonetheless remain less likely to be permanent full-time employees than those who did not receive SSDI or SSI income in either the prior or current year. They are especially likely to be part-time employees, while there are no clear differences from other employed non-recipients with regard to temporary employment, independent contracting, paid home-based work, and flexible hours (limited by small samples from multiple matches).

## **X. Role of Labor Market Pressures**

What has been the effect of the strong labor market in the late 1990's on the types of jobs held by people with disabilities? One way to examine this is to compare the experiences of people with and without disabilities as the unemployment rate rises or falls in their states. As unemployment rates fall, employers search harder for workers and are more likely to accommodate worker preferences over work arrangements. This approach can therefore shed light on what types of work arrangements are generally preferred by workers with disabilities.

To examine this, state-level unemployment data were added to the combined 1995-99 February-March matched datasets, and multinomial logits were run to predict changes in the pattern of work arrangements as the unemployment rate changes. Logits are a type of regression that predicts the probability that an observation belongs in one of several categories. Here we use personal characteristics along with state unemployment rates to predict the probabilities that an individual will be in each of the following categories: permanent full-time employee, temporary employee, independent contractor, part-time employee, other self-employed worker, or not employed. The predictive variables include controls for age, age-squared, gender, race, educational attainment, marital status, children under age 12, urban status, and state of residence. By controlling for state of residence, the unemployment coefficients will reflect the effects of

within-state changes in unemployment levels. To control for the effects of disability income, the logits are run both including and excluding SSDI and SSI recipients. Given that blacks have a history of labor market discrimination that may help to account for the extra sensitivity of their employment rates to the business cycle, we also present results showing the predicted employment changes for blacks overall (both with and without disabilities) as labor markets tighten. The results, presented in Table 36, show the predicted employment patterns when the unemployment rate is 5.5%, or alternatively 4.5%. The major findings, which are illustrated in Figure 14, are:

- Employment rates increase as labor markets tighten, but increase less strongly among people with work disabilities. As the unemployment rate drops one point, the employment rate increases by 0.98% among people without work disabilities, but only by 0.07% among those with work disabilities (columns 3 and 6, Table 36). Blacks appear especially helped by lower unemployment rates, with an increase of 1.83% in the employment rate (column 9). Disability income is a major factor: when SSDI/SSI recipients are excluded, the employment rate of people with work disabilities goes up by 1.18% (column 6).
- Among the employed, permanent full-time employee jobs increase as labor markets tighten, but increase more strongly among people without work disabilities. As the unemployment rate drops one point, permanent full-time employee jobs increase by 1.53% among people without work disabilities and 1.98% among all blacks, but only by 0.09% among those with work disabilities (columns 3, 6 and 9, Table 36). The increase is larger among non-recipients of SSDI and SSI with work disabilities (0.65%, in column 6).
- Part-time employee jobs decrease among people without work disabilities and among all blacks, but increase among people with work disabilities, as labor markets tighten. As the unemployment rate drops one point, the percent of employed people in part-time employee jobs declines by 0.19% among people without disabilities and 0.04% among all blacks, but increases by 0.15% among those with work disabilities (columns 3, 6, and 9). This supports the idea that part-time jobs are attractive options for many people with disabilities.
- Temporary employee jobs appear to decrease among people without work disabilities and among all blacks as labor markets tighten, while independent contracting changes very little (columns 3 and 9). Among people with work disabilities who do not receive disability income, in contrast, there appear to be small increases in both temporary employment and independent contracting as labor markets tighten (column 6), indicating that these may be attractive options for people with disabilities as the labor markets opportunities open up. These patterns are illustrated in Figure 14.

In summary of the evidence on the role of labor market pressures, there is a stronger shift toward permanent full-time employee jobs among people without work disabilities than among those with work disabilities as labor markets tighten. While all forms of contingent and part-time work decrease among people without work disabilities, part-time employees increase among

people with work disabilities, indicating that such jobs are preferred by many people with disabilities entering the labor market. Among those who have work disabilities but do not receive disability income, temporary employment and independent contracting increase slightly as unemployment rates decline, also indicating that these may be desirable jobs for many people with disabilities. It is noteworthy that the pattern is very different from that of blacks, indicating that the high rates of contingent and part-time work among people with disabilities do not simply reflect a history of labor market discrimination constraining access to permanent full-time jobs.

## **XI. Issues and Outcomes in Disability Lawsuits**

The above results show that non-standard work is clearly an important component of the employment situation for people with disabilities. To explore the issues involved in such work arrangements for people with disabilities, we have analyzed data from disability lawsuits filed against employers by workers in non-standard work arrangements under the ADA, Rehabilitation Act, or state anti-discrimination statutes. We located 85 disability lawsuits brought by contingent and part-time workers that have been the subject of federal court opinions. The major findings from these 85 cases are:

- Contingent and part-time workers appear less likely than other workers to pursue disability lawsuits. Of the 85 cases, 11 were appellate-level ADA cases decided by July 1998, representing just 4.1% of the appellate ADA cases identified by Lee (2001) and 2.3% of the cases identified by Colker (1999) in their studies of appellate-level ADA cases through mid-1998. These percentages are much lower than the almost half of workers with disabilities in contingent and part-time jobs (Table 4), supporting the idea that they are less likely than workers in standard jobs to pursue ADA lawsuits (either by filing or by appealing if they lose at a lower level). This is likely due to the lower average pay and fewer benefits in contingent and part-time jobs, which will tend to decrease the value of gaining or preserving such employment (while the costs of a lawsuit will be just as high as for other workers).
- Employers have prevailed in a majority of the disability lawsuits filed by contingent and part-time workers. As shown in Table 37, only four (4.7%) of the cases represented ultimate victories for plaintiffs, while employers won verdicts in three cases (3.5%), plaintiff verdicts were reversed in two cases (2.4%), and 57 cases (67.1%) were dismissed or decided by summary judgment for the employer. In 18 additional cases (21.2%) the courts gave intermediate victories to the plaintiffs by allowing the case to proceed (denying or reversing dismissals, or denying or reversing summary judgment for the employer). Overall, decisions were favorable to plaintiffs in 23 (27.1%) of the cases. These results are similar to the pattern of outcomes of ADA cases in general: in both the cases analyzed here and the appellate cases for all ADA plaintiffs analyzed by Lee (2001), close to 70% of the cases were dismissed or decided by summary judgment in favor of the employer (Table 37, columns 3 and 4).
- Almost one-half of these 85 cases (47.1%) involved part-time employees, one-third

(34.1%) involved temporary employees, and one-fifth (18.8%) involved independent contractors (Table 38, column 2). Favorable outcomes were least likely for part-time employees (22.5%, compared to 27.6% for temporary employees, and 37.5% for independent contractors) (column 3).

- The most common issue was whether the plaintiff had a legally-recognized disability, followed by whether the employer engaged in discrimination, whether the plaintiff was qualified for the employment position, whether the employer provided reasonable accommodations, and whether the plaintiff was an employee or independent contractor (Table 38). Among these five issues, favorable outcomes were most likely for plaintiffs alleging discrimination (47.4% favorable outcomes, principally reflecting judgments that there was sufficient evidence of discrimination for a trial to proceed) and least likely for those trying to establish that they were qualified for the desired position (0%).

While several of the above issues are common in disability lawsuits in general (for example, whether the plaintiff has a legally-recognized disability), four issues deserve discussion because of their special relevance for contingent and part-time work.

a) Whether the plaintiff is "otherwise-qualified"

Plaintiffs who establish that they have legally-recognized disabilities must then prove that they are "qualified" for the desired position, with or without reasonable accommodations. As legal scholars such as Mayerson (1997) have noted, this requirement places many plaintiffs in a "catch-22" situation because evidence of disability or the need for accommodations can be used to show that they are not qualified for the position. On the other hand, the more a plaintiff is seen as being able to perform a job, the more likely he or she will not be viewed as "disabled enough" to be protected by the ADA.

Many workers with disabilities are drawn to flexible contingent work arrangements due to health limitations and other personal reasons, as was shown in Tables 14-17. As discussed, many find it difficult, if not impossible, to work full-time or fixed schedules, but their need for flexibility may make it especially hard for them to prove that they are qualified for an employment position. In fact, as Table 38 shows, none of the contingent and part-time workers prevailed in arguing that they were qualified for their desired employment positions.

Difficulty with regular attendance and fixed work schedules was an issue in several of these cases. Courts have been virtually unanimous in holding that regular, fixed attendance is an essential function of a job and that the need for unpredictable absences makes one unqualified for a position. An important opinion in this area is *Jackson v. Veterans Administration*,<sup>10</sup> in which the plaintiff, who held a temporary janitorial position, was fired for excessive disability-related absences. Although he had not exhausted his sick leave at the time he was fired, the 11<sup>th</sup> Circuit held as a matter of law that the plaintiff was not "otherwise qualified" for his job since the ability to "report to work consistently" was "a necessary part of the particular job he was

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<sup>10</sup> *Jackson v. Veterans Administration*, 22 F.3d 277 (11<sup>th</sup> Cir. 1994)

hired to do."<sup>11</sup> Courts have followed the lead of the *Jackson* majority in subsequent cases involving part-time and temporary workers.<sup>12</sup>

The dissent in *Jackson* objected to the court's ruling that employers are not legally required to make accommodations for unpredictable absences of employees with disabilities, arguing that the reasonableness of such accommodations should be decided on a case-by-case basis—what might pose an undue hardship for an employer in one situation might be reasonable in another. All employees can have health-related absences (as recognized by employer provisions for sick leave), and employers often develop methods to accommodate such absences (such as multi-skilling and job rotation plans to ensure that other employees are able to step in and cover the work). Harlan and Robert (1998) found that employers were least likely to grant accommodations involving flexible schedules, which they interpret as based on the desire to maintain control of the work process. Given that contingent and part-time workers are more likely to have severe disabilities and related health problems, it would appear especially important that they find employers who are willing to work with them on devising flexible work arrangements.

#### b) Coverage of Independent Contractors

The Rehabilitation Act and Title I of the ADA clearly apply to temporary and part-time workers but do not protect independent contractors with disabilities because they are not considered "employees" (Equal Employment Opportunity Commission (EEOC), 1997). Thus, if a worker is an independent contractor, no employer accommodations are required under Title I, even in cases where the employer openly discriminates on the basis of disability.<sup>13</sup> A threshold issue in many discrimination cases is whether the plaintiff is an independent contractor or an employee. Traditionally, courts have used the common law agency test to decide this, where the most important question is who has the right to control the manner and means in which the work is done.<sup>14</sup> Some courts, however, have used the "economic realities" test that reflects the economic dependence of the worker on the employment relationship; this test is more likely to find that the worker is an employee.<sup>15</sup>

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<sup>11</sup> *Jackson v. Veterans Administration*, 22 F.3d 277, 281 (11<sup>th</sup> Cir. 1994)

<sup>12</sup> *Gore v. GTE South*, 1996 U.S. Dist. LEXIS 3292, 917 F.Supp. 1564; *Deal v. Candid Color Systems* 1998 U.S. App. LEXIS 15018; *Tyndall v. National Education Centers*, 1993 U.S. Dist. LEXIS 20208.

<sup>13</sup> For example, in *Case v. ADT Automotive*, 1998 U.S. App. LEXIS 24411, the 8<sup>th</sup> Circuit held that since a paralyzed auctioneer who used a wheelchair was an independent contractor, the defendant was not obligated to provide a ramp so that he could reach the auction block. Independent contractors may be covered under state anti-discrimination laws, as in *Ambrosino v. Metropolitan Life Insurance Company*, 1995 U.S. Dist. LEXIS 13052, which involved a California law.

<sup>14</sup> Other considerations are: the skill required, the duration of the relationship between the parties, whether the hiring party has the right to assign additional projects to the hired party, the hired party's discretion over when and how long to work, the method of payment, the hired party's role in hiring and paying assistants, whether the work is part of the regular work of the employer, and the provision of employee benefits (*Dykes v. Depuy*, quoting *Community for Creative Non-Violence v. Reid*, 490 U.S. 730, 751-52).

<sup>15</sup> The "economic realities" test focuses on (1) the extent of the employer's control and supervision over the worker; (2) the kind of occupation and nature of skill required, including whether the skills are obtained in the workplace; (3) responsibility for the costs of operation, such as equipment, supplies, fees, licenses, workplace, and maintenance of operations; (4) method and form of payment and benefits; and 5) length of job commitment and/or



As seen in Table 38, only one of the eight cases in which the plaintiffs tried to establish that they were employees was decided in their favor. Several courts, however, have found ways around Title I's exclusion of independent contractors by holding that other sections of the ADA apply to employment discrimination cases. Contingent workers have used Title II or Title III in three cases, each time successfully. While independent contractors with disabilities who work for state or local governments are not protected under Title I of the ADA, some courts have held that they may be entitled to protection under Title II which mandates that disability shall not be the basis for excluding an individual from participating in or enjoying the benefits of the services, programs, or activities of a public entity. Circuit courts are, however, split on whether Title II can apply to employment, and the Supreme Court's *Garrett* decision raises the possibility that Title II may be declared unconstitutional.<sup>16</sup> In addition, in two cases independent contractors successfully argued that they were entitled to protection from employment discrimination under Title III's mandate that public accommodations be accessible to people with disabilities, although such broad interpretations of Title III are by no means universal.<sup>17</sup>

While some independent contractors may therefore be able to pursue claims based on Titles II or III of the ADA, most independent contractors are not covered by the ADA, and the success rate is low among those seeking coverage by establishing employee status.

### c) Employer Coverage

The definition of employer is another issue that is important for contingent workers with disabilities, particularly for temporary help agency employees. While these employees are clearly covered by the ADA, it may be unclear whether the employer is the temporary agency, the client firm, or both. EEOC Guidelines stipulate that the staffing firm and/or its client will qualify as the worker's employer if one or both businesses have the right to exercise control over the worker's employment, and they are "joint employers" if both have the right to control the work of the employee and each has at least fifteen employees (in which case both the staffing agency and the client are required to make reasonable accommodations).<sup>18</sup> The only decision in a disability case involving this issue (*Redd v. Rubin*<sup>19</sup>) held that the client employer could be

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expectations (*Hollingsworth-Hanlan v. Alliance Francaise*, 1998 NDLR (LRP) LEXIS 412, citing *Ost v. West Suburban Travelers Limousine, Inc.*, 88 F.3d 435, 438 (7<sup>th</sup> Cir. 1996)). See Carnevale et al. (1998) for further discussion.

<sup>16</sup> *Johnson v. Saline*, 151 F.3d 564; 1998 U.S.App. LEXIS 18155. As an example of the split among the circuits, the 9<sup>th</sup> Circuit ruled that the words "services, programs, or activities" in Title II apply only to "outputs" of a public agency, not to "inputs" such as employment (*Zimmerman v. Oregon*, 170 F.3d 1169, 1173, 1999 U.S.App. LEXIS 4359, 11). The Supreme Court recently ruled that state and local governments are not bound by Title I of the ADA, and a similar argument may be used to rule that Title II is unconstitutional under the 11<sup>th</sup> Amendment (*University of Alabama v. Garrett*, 531 U.S. 356, 2001; 121 S. Ct. 955; 148 L. Ed. 2d 866).

<sup>17</sup> *Martin v. PGA Tour*, 994 F.Supp. 1242; 1998 U.S.Dist. LEXIS 1980. *Menkowitz v. Pottstown Memorial Medical Center*, 154 F.3d 113; 1998 U.S.App. LEXIS 20720. Title III was held not to cover independent contractors in *Elbrecht v. HCA Health Services*, 1994 U.S.Dist. LEXIS 1887 (ND Fla).

<sup>18</sup> Plaintiffs are entitled to sue both the staffing firm and the client employer in a single cause of action under the ADA, as illustrated in *Johnson v. American Chamber of Commerce Publishers Co.*, 108 F.3d 818; 1997 U.S.App. LEXIS 5213.

<sup>19</sup> *Redd v. Rubin*, U.S. District Court, District of Columbia, 34 F.Supp.2d 1; 1998 U.S.Dist. LEXIS 20738.

named as a joint employer since it provided the plaintiff with equipment, a place of employment, and maintained control over her work.

A related issue is whether firms might use contingent and part-time workers to decrease their employee count below the 15-employee minimum for ADA coverage. While a 1996 case suggested that a firm would not be covered once the employment count was adjusted for part-time employees, in the following year the Supreme Court expressly adopted the "payroll method" that bases the employee count on how many employees appear on the payroll in a given calendar week (no matter the number of hours worked).<sup>20</sup> Independent contractors are not counted for purposes of determining ADA coverage, while temporary employees hired directly by the firm are counted. According to EEOC guidance, temporary agency employees are counted as employees of the client firm if it exercises control over their work, although no cases have dealt with the issue of whether the use of temporary agency employees allows a firm to avoid ADA coverage.<sup>21</sup> It is possible, in short, for employers to avoid ADA coverage by using independent contractors and (in certain conditions) temporary agency employees, but there is no evidence on how many firms may be trying to do this.

#### d) Reasonable accommodations

The ADA requires that employers provide reasonable accommodations for qualified employees and job applicants with disabilities. Employers are not required to make such accommodations if these would impose an "undue hardship" on the operation of the business. The Act does not define the term "undue hardship" but, according to the EEOC Technical Assistance Manual, this is "an action that requires significant difficulty or expense" in relation to the size of the employer, the resources available, and the nature of the operation.<sup>22</sup>

While the ADA requires employers to make reasonable accommodations for all employees and Congress has rejected the use of cost/benefit analysis in accommodation decisions, employers may be more reluctant to make accommodations for contingent and part-time workers than for traditional full-time employees. Temporary or leased employees may have a particularly difficult time in this regard as client firms may hesitate to modify offices, purchase equipment, or invest in other accommodations for workers who will be there for only a limited time. As shown in Table 38, plaintiffs have prevailed in only two of the nine cases involving the issue of reasonable accommodations. No cases, however, have explicitly cited the temporary or part-time nature of the work in deciding whether an accommodation was an undue hardship.

In summary of this section, contingent and part-time workers are less likely than other workers to pursue disability lawsuits, while those who do prevail in only one-fourth of the lawsuits. Among the five major issues arising in such lawsuits, plaintiffs are most likely to prevail in claims of discrimination, and least likely to prevail in claims that they are qualified for

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<sup>20</sup> *Walters v. Metropolitan Educational Enterprises, Inc.*, 519 U.S. 202; 117 S.Ct. 660; 1997 U.S. LEXIS 462. This was a Title VII case but would presumably apply to the ADA.

<sup>21</sup> "Enforcement Guidance: Application of EEO Laws to Contingent Workers Placed by Temporary Employment Agencies and Other Staffing Firms," EEOC Notice Number 915.002, December, 3<sup>rd</sup>, 1997.

<sup>22</sup> ADA Technical Assistance Manual, Sect. 1-3.9

the job. The major points from the analysis of four issues with special relevance to contingent and part-time workers with disabilities are: (a) Workers with special health needs who may especially benefit from alternative work arrangements are likely to have extra problems in establishing that they are qualified for a job and thereby protected by the ADA; (b) While independent contractors are not protected by Title I of the ADA, in some circumstances they have established coverage under Titles II or III; (c) Employers cannot get under the 15-employee minimum for ADA coverage by using temporary or part-time employees, and although they could use independent contractors to keep under this minimum there is no evidence on how many firms may be doing this; and (d) Employers may be less likely to accommodate contingent and part-time workers with disabilities due to lower expected returns of such accommodations, but there is no indication of the extent to which this is occurring. Lawsuits do not appear to have been a very successful means for contingent and part-time workers with disabilities to force employers to provide accommodations or to otherwise challenge discriminatory treatment.

## **XII. Summary and Policy Implications**

Following are the principal questions that guide this investigation, and a summary of the main findings.

- 1) How likely are people with disabilities to be in non-standard work arrangements? How has this changed over time?
  - Only half of employed people with disabilities are in permanent full-time jobs as employees, compared to three-fourths of employed people without disabilities. Workers with disabilities are more likely to be temporary agency workers, other temporary employees, part-time employees, independent contractors, and paid home-based workers (Figures 1 and 2). They are not, however, more likely to have flexible schedules if they are employed.
  - Part-time and temporary agency work are especially likely among those who have difficulty going outside alone, need help with activities of daily living, or have mental impairments (Figure 3).
  - While the overall employment of people with disabilities appeared to decline during the 1990's, the use of several non-standard work arrangements became relatively more common among employed people with disabilities. At the same time such work arrangements became less common among employed people without disabilities.
- 2) What are the employment patterns and trends among disability income recipients? How likely are they to be in contingent, flexible, and part-time work arrangements, and how has this changed over time?
  - Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) coverage have increased over the 1990's while other disability income coverage (particularly workers' compensation) has decreased. About one-fourth of those reporting a work disability received SSDI in the prior year, and one-fifth received

SSI, with particularly high rates among people who have difficulty getting around outside the home and who need help with daily activities. Only one-fifth of SSDI/SSI recipients are employed, compared to half of those with work disabilities but no disability income, and over four-fifths of those without work disabilities or disability income (Figures 4 and 5).

- Contingent and part-time work arrangements are especially common among employed SSDI/SSI recipients (Figures 6 and 7), and did not decrease in 1995-1999 when labor markets were strong. People without work disabilities or disability income, in contrast, became less likely to be in non-standard work arrangements in this period. Flexible work hours, however, are actually less common among employed SSDI/SSI recipients while paid home-based work is equally common between these recipients and those without work disabilities or disability income.
  - Employed SSDI/SSI recipients are especially likely to be part-time and temporary agency workers if they have difficulty going outside alone or have other severe mobility impairments.
  - The 1999 rise in the earnings standard for SSDI recipients, from \$500 to \$700 per month, appeared to increase the earnings of a small number of SSDI recipients, indicating that earnings standards play only a small role in the higher rates of contingent and part-time work among people with disabilities (Figure 8).
- 3) Why are people with disabilities in non-standard work arrangements? Is it for personal or job market reasons? Would they prefer to be in traditional full-time jobs?
- About three-fifths of temporary employees, one-fourth to one-third of part-time employees, and one-tenth of independent contractors desire more standard work arrangements (Figure 9). Temporary employees with work disabilities do not differ significantly from their counterparts without work disabilities in the desire for standard jobs, while independent contractors and part-time employees are more likely to desire standard jobs if they have a work disability. Non-standard workers with work disabilities are more likely to cite “health limitations” and less likely to cite being in school or training as the major reason for such work (Figure 10).
- 4) What are the poverty rates and personal characteristics of people with disabilities who are in non-standard work arrangements? Do such arrangements vary by gender, race, age, and educational level?
- Poverty rates are higher among workers with disabilities, whether or not they receive disability income. Even among employed workers, poverty rates remain higher among those with disabilities across the different types of work arrangements, in part due to their lower average hourly and weekly pay.

- Employment rates among people with work disabilities are especially low among men, blacks, older people, and those with low levels of education, relative to their counterparts without work disabilities.
  - Women, blacks, and young workers in general are more likely to work in temporary agencies, whether they have work disabilities or not. Older workers with disabilities, and those with more education, have especially high rates of part-time employment relative to their counterparts without disabilities.
- 5) What types of jobs are held by people with disabilities in non-standard work arrangements? What are their pay levels, occupations, industries, and union status? How likely are they to be using computers and new information technologies?
- Employed people with disabilities receive lower weekly and hourly pay than people without disabilities across all of the work arrangements. The average pay gaps range from 6% to 31%. They are about as likely as workers without disabilities to be covered by union contracts, and less likely to be managers, professionals, or other white-collar workers.
  - Employed people with disabilities are also less likely than those without disabilities to receive employer-provided health insurance or pensions across all of the work arrangements.
  - Computer use can have special benefits for people with disabilities. Only one-third of full-time employees and one-fifth of part-time employees with disabilities, however, use computers regularly at work, which are lower rates than among employees without disabilities (see Figure 11). This does not vary much among those with mental, sensory, or mobility impairments. Paid home-based workers with disabilities are as likely as those without disabilities to use other information technologies in their work.
  - Among employees who are not regular computer users, those with disabilities are more likely to say they could use computers without difficulty, indicating significant potential for increased computer use among them. In addition, almost half of non-employed people with disabilities, and about one-third of non-employed SSDI/SSI recipients, either use computers regularly or say they could do so without difficulty. Only 1.6% of non-employed people with disabilities would require special equipment in order to become computer users.
- 6) How likely are people with disabilities to move from non-standard work to traditional full-time work, and how does this relate to receipt of disability income?
- Using longitudinal matches to track individuals over time, we find that non-standard work arrangements do not appear to be commonly used as part of a transition to standard jobs among people with disabilities. The pattern of work arrangements

among workers with disabilities is similar between new and experienced workers, indicating that they generally maintain their initial work arrangements. In contrast, workers without disabilities who enter the workforce are more likely than experienced workers to be in contingent and part-time jobs. Transitions to standard full-time jobs from part-time and temporary agency jobs appear to be about equally likely for workers with and without disabilities.

- People who stop receiving SSDI/SSI benefits and become employed are most likely to begin jobs as full-time employees, but nonetheless remain less likely than other non-recipients to be permanent full-time employees (see Figures 12 and 13). Those who stop receiving SSDI or SSI income are especially likely to be part-time employees, while there are smaller and non-significant differences from other employed non-recipients with regard to temporary employment, independent contracting, paid home-based work, and flexible hours.
- 7) Did the tighter labor markets of the late 1990's, which gave workers in general more job options, encourage or discourage the use of non-standard work arrangements among people with disabilities?
- Using changes in state-level unemployment rates to predict changes in work arrangements over the 1995-1999 period, we find that people without work disabilities were more likely than those with work disabilities to become permanent full-time employees as labor markets tightened. While all forms of contingent and part-time employment decreased among people without work disabilities, part-time employment increased among people with work disabilities, indicating that such jobs are preferred by many people with disabilities entering the labor market (see Figure 14). Among those who have work disabilities but do not receive disability income, temporary employment and independent contracting increased slightly as unemployment rates declined, also indicating that these types of jobs may be desired by people with disabilities as labor market opportunities open.
- 8) What issues are raised in lawsuits filed by non-standard workers under the ADA and Rehabilitation Act, and what are the outcomes of such lawsuits?
- Contingent and part-time workers are less likely than other workers to pursue disability lawsuits, while those who pursue such cases prevail in only one-fourth of the lawsuits (similar to the win rate for plaintiffs in all ADA Title I lawsuits). The five major issues arising in such lawsuits are whether the plaintiff has a disability, whether the employer discriminated, whether the plaintiff is otherwise-qualified, whether the employer has provided reasonable accommodations, and whether the plaintiff is an employee or independent contractor. Plaintiffs are most likely to prevail on claims of discrimination, and least likely to prevail on claims that they are qualified for the job.
  - Legal issues with special relevance to contingent and part-time workers with disabilities are: (a) Workers with special health needs who may especially benefit

from alternative work arrangements often have extra problems in establishing that they are qualified for a job; (b) While independent contractors are not protected by Title I of the ADA, in some circumstances they have established coverage under Titles II or III; (c) Employers cannot get under the statutory 15-employee minimum for ADA coverage by using temporary or part-time employees, and although they could use independent contractors to keep under this minimum there is no evidence on how many firms may be doing this; and (d) Employers may be less likely to accommodate contingent and part-time workers with disabilities due to lower expected returns of such accommodations, but there is no evidence in the case law of the extent to which this is occurring.

What are the policy implications of these findings? The main goal of this report is to provide a detailed information resource that can be used by policy-makers. A full discussion of policy is beyond the scope of this report, but following is a brief description of some of the policy issues that should receive further attention in efforts to improve employment outcomes for people with disabilities.

- The prevalence of non-standard jobs among people with disabilities reveals the importance of flexibility. Increasing employment for people with disabilities—in both standard and non-standard jobs—will depend in part on whether jobs can include flexible schedules to accommodate unexpected health-related absences. Since courts have ruled that employers are not required to accommodate the need for unexpected absences, increasing flexibility will depend on voluntary employer policies. Sick leave policies are common and show that most employers expect to accommodate some unscheduled absences. Additional sick leave—taken either as unpaid leave or as "flextime" to be made up later—could be a reasonable accommodation for some workers with disabilities, and could be encouraged by public policy (e.g., tax credits for more generous sick leave policies). Job rotation and multi-skilling programs may also increase flexibility and help reduce the disruption that absences can cause. Unions and disability organizations can work with employers to design such policies to accommodate workers with disabilities while protecting the interests of non-disabled workers.
- While public disability income does not appear to be a major factor in the high overall rate of non-standard work among people with disabilities, non-standard work is likely to be very important in increasing employment among disability income recipients as they make the transition off of disability income. The 1999 TWWIIAA, which reduces work disincentives and provides new training opportunities and access to health insurance, has substantial promise for improving the employment of disability income recipients. The high rate of non-standard work among currently-employed disability income recipients, and the importance of health problems in accounting for non-standard work, indicates that these work arrangements should play a large role in any efforts to increase employment opportunities for disability income recipients.

- Health insurance and pension coverage are particularly low among non-standard workers with disabilities. In particular, only small minorities receive employer-provided health insurance, and many have no health insurance. The TWWIA is an encouraging development as it expands access to health care in several ways, such as by providing extended Medicare coverage for disability income recipients who return to work, and allowing states to implement a Medicaid buy-in option. Given the particular importance of health insurance for people with disabilities, continuing attention should be paid to expanding access to health insurance coverage for non-standard workers with disabilities.
- Non-standard workers with disabilities experience pay disparities, due both to being in non-standard jobs, and to receiving lower average pay within those jobs. These disparities may partly reflect employer discrimination, although the success rate for those pursuing anti-discrimination lawsuits is low. A portion of the pay disparities is due to the lower average educational levels among workers with disabilities and their concentration in low-paying occupations. This highlights the importance of continuing efforts to improve the educational attainment of people with disabilities. To further address skills gaps, employers and unions should be encouraged to ensure that workers with disabilities have full access to training programs. They should also be encouraged to develop programs that use non-standard jobs as a means to help more people with disabilities make the transition to traditional full-time work.
- Employers may be particularly reluctant to hire non-standard workers who require accommodations for their disabilities, since non-standard workers tend to work fewer hours per week or have shorter expected tenures. A variety of low-cost accommodations (such as job rotation in combination with extended sick leave, as suggested above) should continue to be developed and promoted by policy makers and disability organizations. Employers should be made aware that many accommodations for non-standard workers (e.g., ramps, voice-activated computer programs) can have wider benefits for other current and future employees and customers.
- Independent contractors are excluded from coverage under Title I of the ADA. There should be continuing attention to the issue of when workers are considered to be employees rather than independent contractors. More workers could be counted as employees rather than independent contractors if the "economic realities" is used rather than the "right of control" test. Alternatively, independent contractors can be legislatively protected from discrimination by state anti-discrimination laws (such as in California).
- Since almost half of non-employed people with disabilities, and one-third of SSDI and SSI recipients, report that they can use computers, greater efforts should be made to provide the necessary training for employment and match such individuals with jobs that can utilize their skills. Home-based work may be a good option for many of these individuals whose health or mobility limitations make on-site work difficult.



- Temporary employees sometimes face the difficult issue of who--if anyone--can be sued when discrimination occurs. Under the common law agency test, temporary employees often can sue only the temporary agency or the client firm even though both may have engaged in discrimination. Discriminatory behavior may be reduced if both parties are held liable under a more expansive definition of joint employer that can be codified in statutes.

The data in this report establish that non-standard jobs are a very important part of the overall employment picture for people with disabilities—both for those who do and do not receive disability income. Such jobs can be very beneficial because they often provide flexibility that allows individuals to accommodate special health needs, mobility problems, or other limitations. They generally provide low pay and few benefits, however, and it is possible for workers with disabilities to be trapped in these jobs if they face employer discrimination or uncertainty that limit their access to standard full-time jobs. It is noteworthy that as state-level labor markets tighten and workers have greater choice among jobs, individuals with disabilities are especially likely to become part-time employees, indicating that stable part-time jobs are attractive to many individuals with disabilities. What type of work arrangement is optimal for each person, however, will obviously depend on specific individual needs and preferences. Contingent, flexible, and part-time work arrangements deserve substantial attention in the continuing efforts to expand employment opportunities for people with disabilities.

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