



**HAS REMOTE WORK IMPROVED EMPLOYMENT OUTCOMES
FOR OLDER PEOPLE WITH DISABILITIES?**

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Abstract

One aspect of the pandemic that has persisted is the increased relevance of remote work. This shift could help older people with disabilities, who might otherwise find it hard to get or keep jobs. Indeed, this group has a higher employment rate post-pandemic than pre-pandemic. Remote work, though, might not be the only factor contributing to this trend. More people report having a work-limiting impairment, which could lead to a higher employment rate among this group if the new health conditions are relatively mild. And the labor market has been extremely tight in recent years, which also helps boost employment. This study uses the 2012-2022 *Health and Retirement Study* to examine how remote work has contributed to the rising employment rate of older people with disabilities. Specifically, it estimates the gain in teleworkable employment from 2018 to 2022 controlling for potentially confounding factors, and attributes this gain to remote work. It then explores which types of older people with disabilities – based on their recent work history – have benefitted the most.

The paper found that:

- Between 2018 and 2022, remote work contributed to a 10-percent increase in the employment rate of older people with disabilities.
- In particular, remote work encouraged some older people with disabilities to reenter the labor force and allowed others to switch jobs instead of exiting work.
- Changes in disability severity and the tight labor market played only minor roles.

The policy implications are:

- Remote work could potentially reduce reliance on Social Security Disability Insurance benefits and improve the program's finances.
- However, the desirability and availability of remote work might change going forward.

Introduction

One aspect of the pandemic that has persisted is the increased relevance of remote work. This shift may have improved job prospects for older people with disabilities, as productivity-enhancing accommodations are often already present in the home and travel for work is limited or non-existent. Indeed, ample evidence suggests that this group has a higher employment rate post-pandemic than pre-pandemic. Improved employment outcomes could reduce the number of new applicants to Social Security Disability Insurance (DI), thus improving the program's finances in the short run. Moreover, if the availability of remote work persists, as many have predicted, the shift to more flexible work arrangements may result in sustained employment gains for people with disabilities and have long-run implications for DI.

Remote work, though, might not be the only factor contributing to the gain in employment for older people with disabilities. Prior research has pointed to two other post-pandemic changes that may have also played a role. First, more people report having a work-limiting impairment than before the pandemic. If these new health conditions are relatively mild, then the rising prevalence of disability, by itself, could lead to a higher employment rate among this group. Second, the labor market has been extremely tight in recent years, which could also help boost employment rates among those with disabilities. However, limited empirical evidence exists on the impact of remote work after accounting for these other factors.

This paper uses the 2012-2022 *Health and Retirement Study* (HRS) to examine the extent to which remote work has contributed to the rising employment rate of older individuals with disabilities. Specifically, it contrasts the employment gains in jobs amenable to remote work with those that require in-person presence after controlling for changes in disability severity and labor market tightness. Additionally, it uses the rich longitudinal data in the HRS to study which types of older workers – based on their recent work history – have benefitted the most from the rise of remote work.

The results show that nearly all of the post-pandemic employment gain for older people with disabilities has been in teleworkable occupations, and this pattern holds even after controlling for other factors. Overall, remote work contributed to a 10-percent increase in the employment-to-population ratio of older people with disabilities between 2018 and 2022 by allowing some to reenter the labor force and others to switch jobs instead of exiting work.

The rest of the paper proceeds as follows. The next section provides background on the employment gain experienced by older people with disabilities and introduces potential explanations including the rise of remote work. The third section describes the data and methodology for the empirical analysis, while the fourth section presents results. The fifth section concludes that remote work has helped substantially increase the employment rate of older workers with disabilities.

Background

A striking feature of the pandemic was the sudden shift towards remote work, which remains a fixture in the labor market (see Figure 1).¹ This shift could be particularly beneficial for people with disabilities, who may struggle to convince employers that their productivity merits necessary workplace accommodations or who may find it too expensive or time consuming to commute.² For people with disabilities, remote work lowers the fixed cost of having a job by reducing commuting expenses, providing greater flexibility, and potentially allowing them to access the national labor market. For employers, remote jobs can reduce the costs of hiring because required accommodations are already available in the worker's home.³

The notion that remote work may be helping older people with disabilities stay in the labor force is supported by recent employment trends.⁴ Historically, people with disabilities were hit harder by recessions and their employment recovered more slowly than people without disabilities; however, COVID-19 is a notable exception. The employment rate for older people with disabilities rebounded rapidly after the pandemic and has even risen above pre-pandemic levels since late 2021 (see Figure 2). This pattern also holds for younger people with disabilities who – although not the focus of this study – could see the same benefit from remote work.⁵ Interestingly, however, older people without disabilities did not experience the same trend;

¹ A growing literature suggests that remote work is here to stay, largely driven by worker preferences (Adrjan et al. 2021; Barrero, Bloom, and Davis 2021; and Hansen et al. 2023).

² Examples include sight-assistive computing technology, wheelchair accessible facilities, or a private office to reduce background noise. In principle, the Americans with Disabilities Act prohibits employers from discriminating in hiring, but evidence abounds on employer bias against workers with disabilities (for a recent example, see Ameri et al. 2018).

³ Ne'eman and Maestas (2023), Barrero, Bloom and Davis (2023), Marks and Rubinton (2024), and O'Trakoun (2024).

⁴ Marks and Rubinton (2024) and O'Trakoun (2024).

⁵ Office of Disability Employment Policy (2020), Deitz (2022), Ne'eman and Maestas (2023), Marks and Rubinton (2024), and O'Trakoun (2024).

instead, they had slightly decreasing employment rates over this period driven by early retirement.⁶ In this context, the employment gain for people with disabilities is especially notable amid the significant negative health impacts from the pandemic: people with disabilities were at greater risk for severe health outcomes from contracting COVID-19.⁷

Apart from the rise of remote work, however, prior research has pointed to two other factors that could also be driving up employment: the growing share of people reporting disabilities and the tight labor market. First, a higher share of the working-age population now reports having a disability.⁸ Much of this increase can be attributed to a rise in self-reported cognitive impairments.⁹ Prior studies suggest that these new impairments might be cases of “brain fog,” a condition related to long COVID.¹⁰ If long COVID is the dominant reason for the increase in disability counts, it could result in a shift in the composition of people with disabilities to those with relatively mild impairments, higher remaining work capacity, and greater attachment to the labor force.¹¹ Under this hypothesis, the rising prevalence of disability, by itself, could lead to a higher employment rate among this group.

Yet, this argument is less relevant for older workers. As shown in Figure 3, the rise in disability is concentrated among younger workers (ages 18-50). Moreover, it seems unlikely that the impairments of older people with disabilities have grown less severe post-pandemic. Although people over age 50 are less likely to be diagnosed with long COVID than younger age groups (Adjaye-Gbewonyo et al. 2023), the pandemic posed particularly high health risks for them, with the virus and lack of access to medical care exacerbating existing health issues.¹²

A second, more convincing, factor that could explain the rise in employment is the unusual tightness of the labor market in recent years, with the number of job openings rapidly outpacing the number of unemployed job seekers (see Figure 4). As a result, more – and higher-

⁶ Montes, Smith, and Dajon (2022) and Davis et al. (2023).

⁷ Schur, Rodgers, and Kruse (2021), Shenk et al. (2022), and Yuan et al. (2022).

⁸ See Ne’eman and Maestas (2023) and U.S. Bureau of Labor Statistics (2023) on the rising prevalence of disability.

⁹ Deitz (2022) and Gascon, Martorana, and Moore (2024).

¹⁰ Ne’eman and Maestas (2023), Deitz (2022), and Guo and Krolkowski (2024). Another explanation is that employees may be more inclined to report a disability to employers in order to obtain a telework arrangement, increasing the rate of self-reported disabilities in the *Current Population Survey* as well.

¹¹ Long-COVID impairments are often temporary and may not be severe enough for DI eligibility (Cabrera et al. 2021 and Del Brutto et al. 2022). Another possibility is that people whose impairments were previously mild developed more severe disability during COVID (Kavanagh et al. 2022; Schur, Rodgers, and Kruse 2021; Shenk et al. 2022; and Yuan et al. 2022).

¹² Treskova-Schwarzbach et al. (2021) and Williams et al. (2021).

paying – job opportunities have emerged for workers who traditionally face barriers in the labor market.¹³ In the case of workers with disabilities, employers may be more willing to offer accommodations, such as more flexible hours and more frequent breaks, to hire and retain talent. Additionally, the tight labor market has led to wage compression – low-wage workers have seen more rapid wage growth than higher-wage workers.¹⁴ The increased work incentive may disproportionately affect people with disabilities given their concentration in low-wage occupations.¹⁵

Hence, the goal of this study is to identify the impact of remote work on the employment of older people with disabilities, controlling for the confounding influences of the rising prevalence of disability and a tight labor market. While labor market tightness appears more likely to affect employment rates, the analysis will consider both factors just in case. The focus is on those ages 51-64, partly due to data limitations, but also because they are the most likely to enter DI.¹⁶

Additionally, this study provides evidence on the channels through which remote work improves employment for people with disabilities. One hypothesis is that remote work entices those with more severe impairments – who were not working before – to re-enter the labor force. Another possibility is that remote work makes continued employment more appealing to those already working and delays their exit from the labor force. Hence the analysis explores which types of older people with disabilities – based on their recent work history – have benefitted the most.

Data and Methodology

The data for the majority of our analysis come from the 2012-2022 HRS conducted by the University of Michigan. The HRS is chosen for its rich set of information on workers' health conditions and employment. Crucially, it also contains detailed longitudinal information, allowing us to track changes in an individual's disability status and employment back to pre-pandemic periods. We also supplement the HRS with the U.S. Census Bureau's *Current*

¹³ Domash and Summers (2022).

¹⁴ Autor, Dube, and McGrew (2023).

¹⁵ Cheeseman Day and Taylor (2019).

¹⁶ Center on Budget and Policy Priorities (2023) and Office of the Chief Actuary (2022).

Population Survey – the most up-to-date and commonly used dataset – to benchmark our results against prior studies of employment for prime-age people with disabilities.

The HRS sample includes individuals ages 51-64 with at least three consecutive interviews between 2012 and 2022.¹⁷ Crucially, the sample only includes individuals who do not consider themselves completely retired because the 2022 HRS – the interview wave of focus in this paper – does not contain information on work-limiting disabilities for retirees. Ultimately, these selection criteria yield 3,649 observations for individuals with a disability, non-zero weights, and non-missing employment history.¹⁸ Information on work-limiting impairments is self-reported.

The analysis then tracks the post-pandemic change in employment outcomes for older people with disabilities in three stages. In the initial stage, it simply documents how the rising employment rate for older people with disabilities breaks down by whether the occupation of workers is amenable to remote work. Occupations are classified as teleworkable if the share of jobs that can be done remotely exceeds 28 percent according to Dingel and Neiman (2021). Although the Dingle and Neiman measure of telework potential is *ex-ante* and based on the nature of job tasks, prior research has established a positive correlation between this measure and the observed share of workers teleworking during the pandemic.¹⁹ If remote work has had an impact, then we would expect the increase in the employment-to-population ratio of people in teleworkable jobs to be much larger than the increase for those whose jobs are not amenable to remote work.

This simple comparison, however, does not consider the potential effects of the other post-pandemic changes discussed in the previous section. Hence, the second stage of the analysis estimates the likelihood of older people with disabilities being employed in teleworkable and non-teleworkable occupations, controlling for disability severity and the tight labor market. Specifically, the following equation is run on our HRS sample (which is structured as a repeated cross-section):

¹⁷ The sample does not include waves before 2012 as only the post-2012 occupation code for the respondent's longest held job is consistent with the current Standard Occupational Classification system used by the Bureau of Labor Statistics (BLS) and allows us to define teleworkable occupations based on Dingel and Neiman (2021).

¹⁸ 15,765 individual-year observations without a work-limiting condition are also included in the regressions to obtain more precise estimates of certain control variables.

¹⁹ Barrero, Bloom, and Davis (2021) and Bick, Blandin and Mertens (2024). As a robustness test, we also switch to an alternative definition of teleworkable employment that includes the broad occupation groups of management, professional, sales, and administration. The results are robust to this alternative specification.

$$Y_{i,t} = \alpha + \beta_1 T_t + \beta_2 H_{it} + \beta_3 L_{jt} + \beta_4 X_i + \varepsilon_i \quad (1)$$

Where $Y_{i,t}$ is a binary variable equal to one if individual i is working in a teleworkable job in year t . T_t indicates a vector of year dummies, with 2018 as the omitted baseline year. H_{it} represents a vector of variables capturing the severity of the individual's disability, including indicators for major health conditions and difficulties with Activities of Daily Living (ADLs) or Instrumental Activities of Daily Living (IADLs). L_{jt} is a measure of labor market tightness for the individual's longest career industry (j) as of time t . This measure is calculated monthly as the number of job openings in each industry divided by the number of unemployed job seekers in that industry, as determined by the Bureau of Labor Statistics.²⁰ Since the impact of a tight labor market on older workers' employment might depend on the characteristics of the job – for instance, employers struggling to hire in retail might be more likely look at older workers than employers in construction – the coefficient on L_{jt} is allowed to vary across industries. Finally, X_i is a vector of demographic characteristics that could affect current employment, such as age, gender, race, and indicators for whether the individuals have worked in the recent past.²¹

β_1 is the coefficient of interest and captures the change in teleworkable employment over time relative to 2018. Hence, we interpret a positive coefficient for the year 2022 dummy as the impact of remote work on teleworkable employment between 2018 and 2022, after controlling for worker health and labor market tightness.²²

The analysis then repeats the exercise with employment in non-teleworkable jobs as the dependent variable. If remote work has had an important effect on the employment rate – after accounting for disability severity and labor market tightness – then the coefficient on the year 2022 dummy should be much larger in the regression for teleworkable employment than in the

²⁰ Industry-specific job openings come from the *Job Openings and Labor Turnover Survey (JOLTS)*.

Unemployment level by industry comes from BLS estimates based on the CPS, which has questions on current employment status and industry of last job if not currently working.

²¹ The regression sample also includes people without disabilities to obtain more precise estimates for these demographic variables. The regression interacts the year dummy variables (T_t) with a binary indicator for having a work-limiting disability in order to obtain the impact of remote work for people with disabilities specifically.

²² It is worth noting that we may be overestimating the effect of remote work on employment with simple controls for labor market tightness. Remote work may be one recruitment tool that employers turn to in a tight labor market, and remote work allows workers access to the national labor market, which may be tighter than their local labor market. However, in this case the impact of remote work should be similar for older people without disabilities. Hence, as a robustness check, we re-run the analysis on a sample of older people without disabilities; we do not find the same impact of remote work (results discussed in the next section).

non-teleworkable regression. In other words, we expect little employment gain in non-teleworkable occupations between 2018 and 2022 as remote work should not affect the accessibility of these types of jobs, after controlling for the tight labor market.

The final stage of the analysis explores the channels through which remote work helps older workers with disabilities stay in the labor force. Specifically, it asks two questions: 1) did remote work convince those on the sidelines to reenter work, or did it help those who were already working to delay exiting the labor force? and 2) was the impact limited to those who had prior experience with remote work, or did all workers benefit?

To answer these questions, the regression analysis outlined above is repeated for four subgroups of older people with disabilities based on two factors: 1) whether they have worked in the past four years; and 2) whether they have had prior experience in a teleworkable job. Individuals are considered to have prior experience in a teleworkable job if one of the following is true: their career job is/was teleworkable; their longest held job after age 50 is teleworkable; or they worked in a teleworkable job less than four years ago. An indicator variable for each of the four subgroups is then interacted with the year dummy variables in equation (1) to obtain separate coefficients on year 2022 for each type of worker:

$$Y_{i,t} = \alpha + \beta_1(T_t * G_i) + \beta_2H_{it} + \beta_3L_{jt} + \beta_4X_i + \varepsilon_i \quad (2)$$

Where G_i is a vector of dummy variables indexing each subgroup ("not working in past 4 years and no prior telework experience;" "not working in past 4 years but has telework experience;" "working in past 4 years with telework experience;" and "working in past 4 years but no telework experience").

Results

This section first discusses the characteristics of older people with disabilities before and after the pandemic, then shows that remote work is behind most of their post-pandemic employment gain, explores which types of older workers with disabilities saw the greatest benefits from remote work, and performs robustness checks.

Characteristics of Older People with Disabilities Before and After the Pandemic

To set the stage, Table 1 shows summary statistics for the HRS analysis sample. The employment rate of older people with disabilities grew from 47 percent in 2018 to 52 percent in 2022 – a 12-percent increase – after a temporary drop in 2020. This level of improvement is consistent with trends in the CPS.²³ Consequently, the share of people with disabilities who have recent work history has also risen slightly over time.

Turning to demographic and health characteristics, the average age of our sample increased slightly in 2022 compared to 2018, and they are also less likely to be married; other demographic characteristics stayed more consistent over time. The small changes in age and marital status are partly due to the structure of the HRS data (information for the new early Gen-X cohort is not yet publicly available).²⁴ However, the severity of disability in our sample – measured by subjective health and difficulties with daily activities – stayed at roughly the same level as before the pandemic. If anything, the share of older people with disabilities reporting a significant health condition seems to have increased.

How Did Remote Work Affect Older People with Disabilities?

To present some intuition for the regression results, Figure 5 simply compares the employment rate for older people with disabilities in 2018 and 2022, without controlling for disability severity, labor market tightness, or demographics. The first set of bars shows the share of older people with disabilities employed in teleworkable jobs, before and after the pandemic, while the second set of bars does the same for their employment in non-teleworkable jobs (adding the teleworkable and non-teleworkable employment rates in each year yields the total employment rate shown in Table 1). As expected, teleworkable employment increased by 5.4 percentage points – from 23.2 percent in 2018 to 28.6 percent in 2022 – whereas non-teleworkable employment changed very little. Dividing this 5.4-percentage-point increase by the total employment rate in 2018 (46.8 percent) translates to an 11.6-percent change in employment overall, which is consistent with the CPS data in Figure 2. Similarly, the near-zero change in

²³ See Figure 2 and Ne’eman and Maestas (2023).

²⁴ Consequently, we see similar demographic shifts for the sample of those without disabilities (see Appendix Table A1).

non-teleworkable employment corresponds to a 0.1-percent change in overall employment (see the black bars in Figure 6).

The next step is to confirm that these patterns persist after controlling for changing health and labor market conditions. To this end, Tables 2 and 3 show the regression results for teleworkable and non-teleworkable employment, respectively. Column 3 of both tables presents the result from our preferred specification with controls for changing health and labor market tightness. Looking at the coefficient on the year 2022 variables confirms that remote work increased the employment rate in teleworkable jobs by 6 percentage points, but had no impact on non-teleworkable employment.²⁵ This percentage-point change in teleworkable employment translates to a 10-percent increase in total employment (dividing 6 percentage points by the total employment level predicted by the regression in 2018; see the red bars in Figure 6). Hence, remote work remains extremely important even after controlling for disability severity and labor market tightness.²⁶

Who Benefitted the Most from Remote Work?

Given that remote work has helped boost employment outcomes for older workers with disabilities, the next question is whether some of them benefitted more than others. As noted earlier, remote work may entice those out of the labor force to return to work or allow those currently working to delay labor market exits. Additionally, it remains unclear whether remote work only helps those with prior experience in teleworkable jobs, or if all workers benefit.

To explore these questions, Figure 7 compares the percentage change in the employment rate for teleworkable occupations across four different groups of older workers with disabilities (full regression results presented in Table 4). These groups are determined based on two aspects of their recent work history. The first aspect is whether or not they were employed in the last four years, while the second is whether or not they had prior experience in teleworkable jobs.

To understand the story, take each result in turn. The first group – those who have not worked in the past four years and have no experience in teleworkable jobs – unsurprisingly saw no improvement and stayed out of work. In contrast, the second group – who *did* have

²⁵ It turns out that adding in the demographic controls slightly increases the estimated change in teleworkable employment, possibly due to the aging of the sample shown in Table 1.

²⁶ The regression-adjusted employment rate for older people with disabilities is 59 percent in 2018. The regression-adjusted total employment gain is 6.1 percentage points and statistically significant (see Appendix Table A2).

experience in teleworkable jobs – saw an 18-percent increase in employment, indicating that they were better prepared to reenter work as remote jobs surged. The third group is perhaps most interesting. Workers in this group had been employed recently and, despite their lack of familiarity with telework, were able to move into these jobs rather than exiting the labor force because of their disability. The fact that their employment gain was of a similar magnitude to the second group with prior experience highlights that older workers with disabilities are able to adapt to the changing dynamics of the labor market. Finally, the fourth group – recently working in teleworkable jobs – saw less benefit from the shift to remote work, perhaps because they had already received employer accommodations prior to the pandemic, including the ability to telework.

Overall, the results show that remote work has improved employment through two channels: encouraging some older individuals to re-enter the labor force and allowing others to switch jobs instead of exiting.

Robustness Checks

To probe the robustness of these findings, we re-run equation (1) under a number of alternative specifications (see Table 5). These include limiting the sample to only the 2018, 2020, and 2022 HRS waves, adding control variables for homeownership status and the change in housing wealth (due to the rise in house values during the pandemic) and adopting an alternative definition of teleworkable jobs that includes the broad occupation groups of management, professional, sales, and administrative. The impact of remote work barely changes across these specifications.

Another concern is sample selection – workers with health challenges who secure a remote work arrangement may be less likely to perceive their condition as work-limiting, so that they no longer self-report a disability and thus drop out of our sample. However, in this case our estimates of the positive impact of remote work are likely an underestimate rather than an overestimate. A more pressing concern is that we are unable to account for all the other changes brought about by the pandemic – such as changing preferences for leisure, financial pressure from high inflation, and the temporary closure of Social Security Administration (SSA) field offices, which made it more difficult for workers with disabilities to apply for DI benefits (leading them instead to exit the labor force). Consequently, the impact of remote work

estimated here should be interpreted within this unique post-pandemic context. But the bottom line is that the shift to remote work seems to have increased employment for older workers with disabilities, at least in the short run. Supporting this interpretation, recent research suggests that the employment rate for working-age people with disabilities remains elevated in 2024 despite recent loosening of the labor market.²⁷

Lastly, we ask whether older workers with disabilities saw a disproportionate benefit from remote work, relative to their counterparts without disabilities. Table 6 shows the results from equation (1) run on a sample of older people without disabilities in the HRS (who otherwise meet the same sample selection criteria discussed previously).²⁸ It turns out that older people without disabilities experienced a much smaller increase in teleworkable employment and a small decrease in non-teleworkable employment between 2018 and 2022, with neither change statistically significant after controlling for worker demographics, health, and labor market tightness.²⁹ As expected, remote work seems to have particularly benefitted older people with disabilities during this period. However, more research is needed to fully understand the discrepancy since people with and without disabilities may have had very different experiences during the pandemic and subsequent recovery that influenced their decision to work.³⁰

Conclusion

The employment rate of older people with disabilities increased substantially after the pandemic, yet empirical evidence on the factors driving this improvement has been limited. This study examines whether the widespread shift to remote work may have improved job prospects for older people with disabilities by reducing barriers to employment. Consistent with this view, the analysis finds that nearly all of the post-pandemic employment gain for older people with disabilities has been in teleworkable occupations, even after controlling for other factors that may have also affected employment – in particular, changes in the severity of disability and

²⁷ Gascon and Moore (2024).

²⁸ Namely, they are in the HRS for three consecutive waves between 2012 and 2022 and they do not consider themselves fully retired. Appendix Table A1 presents summary statistics for this group.

²⁹ Similarly, Gascon and Moore (2024) find that the employment-to-population ratio among working-age people without disabilities has not fully returned to pre-pandemic levels as of 2024.

³⁰ Maestas and Mullen (2022) and Goda et al. (2023) suggest that the decisions of people with disabilities to work or apply to the Social Security Disability Insurance program may be affected by the temporary expansion and expiration of unemployment insurance benefits and economic stimulus payments, in addition to the temporary closure of SSA field offices.

tightening labor markets. Additionally, it shows that remote work benefitted older workers with disabilities by allowing some to reenter the labor force and others to switch jobs instead of exiting work. Taken together, the evidence suggests that the shift to remote work could reduce the number of new applicants to the Social Security Disability Insurance program, at least in the short run.

Yet, the extent to which these dynamics will persist over the long run remains an open question. This analysis covers a period when remote work was particularly widespread. The availability of remote work may decline as the labor market eases back toward more normal conditions. And, the extent to which older workers with disabilities need or want to work might also decline as the impact of unusual pandemic-era conditions – including the temporary closure of Social Security field offices – subsides. Future work that extends beyond the immediate recovery of the pandemic will be useful to determine whether the shift in labor supply of people with disabilities is long-lasting. Hence, how remote work impacts older people with disabilities should remain a topic of interest.

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Tables and Figures

Table 1. *Summary Statistics*

Characteristics	Older people with disabilities		
	Before pandemic (2018)	During pandemic (2020)	After pandemic (2022)
N	498	746	476
<i>Panel A. Employment</i>			
Currently employed	47%	39%***	52%*
Has worked in the last four years	22%	24%	25%
Labor market tightness for career job industry	142%	76%***	221%***
<i>Panel B. Demographics</i>			
Age	60.3	59.0***	60.7**
Female	55%	56%	57%
Race: Black	12%	14%	11%
Race: Hispanic	12%	11%	13%
College-educated	25%	27%	28%
Married	62%	50%***	53%***
<i>Panel C. Health</i>			
Impairment is new	29%	29%	35%*
Self-reported health is poor	11%	10%	10%
Has significant health conditions	43%	43%	49%**
Has difficulty with ADLs/IADLs	33%	36%	33%

Notes: The sample includes HRS respondents ages 51-64 reporting a work-limiting health condition. We use the 2018 HRS wave for pre-pandemic, the 2020 wave for mid-pandemic, and the 2022 wave for post-pandemic results. Stars indicate that the mean is statistically different from 2018. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: Authors' calculations from University of Michigan, *Health and Retirement Study* (HRS) (2018-2022).

Table 2. *Regression Results for Employment in Teleworkable Jobs for Older People with Disabilities, 2012-2022*

Dependent variable	(1)	(2)	(3)
	Teleworkable employment	Teleworkable employment	Teleworkable employment
Year 2022 vs. 2018	0.054 (0.033)	0.060** (0.026)	0.061** (0.025)
Age		-0.008*** (0.002)	-0.008*** (0.002)
Married		0.041** (0.015)	0.035** (0.015)
Female		0.078 (0.049)	0.094* (0.049)
Black		-0.084*** (0.028)	-0.052* (0.027)
Hispanic		-0.139*** (0.029)	-0.108*** (0.026)
College-educated		0.228*** (0.061)	0.220*** (0.059)
Working two years ago			0.211*** (0.047)
Working four years ago			0.120*** (0.034)
Any difficulty with ADLs			-0.029* (0.016)
Any difficulty with IADLs			-0.041** (0.018)
Any major health condition			-0.009 (0.011)
Industry labor market tightness			0.112** (0.045)
Career job industry controls	No	Yes	Yes
Career job interacted with labor market tightness	No	No	Yes
Year dummies 2012, 2014, 2016, and 2020	Yes	Yes	Yes
N	19,414	19,414	19,414
R-squared	0.039	0.222	0.262

Notes: Teleworkable employment includes employment in occupations classified as having more than 28 percent of teleworkable jobs according to Dingel and Neiman (2021). Except for the year dummies, coefficients for other covariates are estimated from a pooled sample of older people with disabilities and those who do not report a work-limiting condition between 2012 and 2022. Career job industry dummies are interacted with industry-level labor market tightness, with retail trade as the omitted category. Standard errors clustered at the career job occupation level are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Source: Authors' estimates from the HRS (2012-2022).

Table 3. *Regression Results for Employment in Non-Teleworkable Jobs for Older People with Disabilities, 2012-2022*

Dependent variable	(1)	(2)	(3)
	Nonteleworkable employment	Nonteleworkable employment	Nonteleworkable employment
Year 2022 vs. 2018	3*10 ⁻⁴ (0.032)	-3*10 ⁻⁵ (0.027)	4*10 ⁻⁴ (0.031)
Age		-0.006*** (0.002)	-0.006*** (0.002)
Married		-0.043** (0.015)	-0.047*** (0.014)
Female		-0.130** (0.047)	-0.120** (0.046)
Black		0.000 (0.034)	0.020 (0.028)
Hispanic		0.065** (0.023)	0.085*** (0.020)
College-educated		-0.197*** (0.055)	-0.202*** (0.057)
Working two years ago			0.136** (0.052)
Working four years ago			0.075** (0.030)
Any difficulty with ADLs			-0.004 (0.020)
Any difficulty with IADLs			-0.049* (0.028)
Any major health condition			-0.010 (0.010)
Industry labor market tightness			-0.004 (0.044)
Career job industry controls	No	Yes	Yes
Career job interacted with labor market tightness	No	No	Yes
Year dummies 2012, 2014, 2016, and 2020	Yes	Yes	Yes
N	19,414	19,414	19,414
R-squared	0.008	0.196	0.217

Notes: Non-teleworkable employment includes employment in occupations classified as having less than 28 percent of teleworkable jobs according to Dingel and Neiman (2021). Except for the year dummies, coefficients for other covariates are estimated based on a pooled sample of older people with disabilities and those who do not report a work-limiting condition between 2012 and 2022. Career job industry dummies are interacted with industry-level labor market tightness, with retail trade as the omitted category. Standard errors clustered at the career job occupation level are in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.
Source: Authors' estimates from the HRS (2012-2022).

Table 4. *Regression Results for Employment in Teleworkable Jobs for Older People with Disabilities by Work Status and Prior Experience in Teleworkable Occupations, 2012-2022*

Dependent variable	(1)	(2)	(3)
	Teleworkable employment	Teleworkable employment	Teleworkable employment
Year 2022 vs. 2018: Group 1 Not recently working, no prior telework	0.004 (0.004)	0.004 (0.010)	-0.008 (0.021)
Year 2022 vs. 2018: Group 2 Not recently working, prior telework	0.081* (0.046)	0.103** (0.043)	0.063** (0.022)
Year 2022 vs. 2018: Group 3 Recently working, no prior telework	0.098** (0.038)	0.103*** (0.035)	0.101** (0.048)
Year 2022 vs. 2018: Group 4 Recently working, prior telework	0.049 (0.048)	0.050 (0.044)	0.043 (0.045)
Age		-0.010*** (0.002)	-0.009*** (0.002)
Married		0.013 (0.011)	0.007 (0.010)
Female		0.014 (0.018)	0.016 (0.017)
Black		-0.030*** (0.007)	-0.020** (0.008)
Hispanic		-0.038*** (0.008)	-0.026*** (0.009)
College-educated		0.059*** (0.016)	0.058*** (0.015)
Working two years ago			0.180*** (0.049)
Working four years ago			0.101** (0.038)
Any difficulty with ADLs			-0.027** (0.012)
Any difficulty with IADLs			-0.035** (0.013)
Any major health condition			-0.008 (0.008)
Industry labor market tightness			0.105*** (0.037)
Career job industry controls	No	Yes	Yes
Career job industry interacted with labor market tightness	No	No	Yes

Table 4. *Regression Results for Employment in Teleworkable Jobs for Older People with Disabilities by Work Status and Prior Experience in Teleworkable Occupations, 2012-2022* (continued)

	(1)	(2)	(3)
	Teleworkable employment	Teleworkable employment	Teleworkable employment
Year dummies 2012, 2014, 2016, and 2020	Yes	Yes	Yes
N	19,414	19,414	19,414
R-squared	0.505	0.517	0.530

Notes: Teleworkable employment includes employment in occupations classified as having more than 28 percent of teleworkable jobs according to Dingel and Neiman (2021). Except for the year dummies, coefficients for other covariates are estimated based on a pooled sample of older people with disabilities and those who do not report a work-limiting condition between 2012 and 2022. Career job industry dummies are interacted with industry-level labor market tightness, with retail trade as the omitted category. Regression-adjusted total employment levels in 2018 for groups 1 through 4 are 45%, 46%, 57%, and 62%, respectively. Standard errors clustered at the career job occupation level are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: Authors' estimates from the HRS (2012-2022).

Table 5. *Regression Results for Employment in Teleworkable Jobs for Older People with Disabilities, Alternative Specifications, 2012-2022*

Dependent variable	(1)	(2)	(3)
	Teleworkable employment	Teleworkable employment	Teleworkable employment
Year 2022 vs. 2018	0.061** (0.028)	0.055** (0.024)	0.065** (0.025)
Age	-0.009** (0.004)		-0.008*** (0.002)
Married	0.030 (0.019)	0.020 (0.012)	0.036** (0.014)
Female	0.080* (0.045)	0.093* (0.048)	0.105** (0.046)
Black	-0.057** (0.026)	-0.043* (0.024)	-0.093*** (0.022)
Hispanic	-0.114*** (0.030)	-0.100*** (0.023)	-0.141*** (0.026)
College-educated	0.210*** (0.057)	0.201*** (0.055)	0.252*** (0.050)
Working two years ago	0.191*** (0.043)	0.212*** (0.047)	0.238*** (0.045)
Working four years ago	0.146*** (0.037)	0.117*** (0.035)	0.128*** (0.031)
Any difficulty with ADLs	-0.050** (0.022)	-0.026* (0.015)	-0.017 (0.018)
Any difficulty with IADLs	-0.033 (0.026)	-0.031 (0.018)	-0.065*** (0.022)
Any major health condition	0.009 (0.013)	-0.005 (0.013)	-0.018* (0.013)
Industry labor market tightness	0.141*** (0.049)	0.112** (0.047)	0.133*** (0.043)
Homeowner		-0.532*** (0.160)	
Log housing value		0.045*** (0.014)	
Change in log household value in two years		-0.025** (0.011)	
Career job industry controls	Yes	Yes	Yes
Career job industry interacted with labor market tightness	Yes	Yes	Yes
Nonlinear age controls	No	Yes	No
Year dummies 2012, 2014, 2016, and 2020	Yes	Yes	Yes

Table 5. *Regression Results for Employment in Teleworkable Jobs for Older People with Disabilities, Alternative Specifications, 2012-2022* (continued)

	(1)	(2)	(3)
	Teleworkable employment	Teleworkable employment	Teleworkable employment
Specification	Post-2018 waves only	Additional controls	Alternative definition of teleworkable jobs
N	8,639	19,414	19,414
R-squared	0.273	0.268	0.300

Notes: Teleworkable employment includes employment in occupations classified as having more than 28 percent of teleworkable jobs according to Dingel and Neiman (2021). Covariates also include a set of dummies for career job industry. Except for the year dummies, coefficients for other covariates are estimated based on a pooled sample of older people with disabilities and those who do not report a work-limiting condition. The regression with additional controls also include disability status in the last four years. Alternative definition of teleworkable employment includes employment in broad occupation groups of management, professional, and sales and administrative occupations. Standard errors clustered at the career job occupation level are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: Authors' estimates from the HRS (2012-2022).

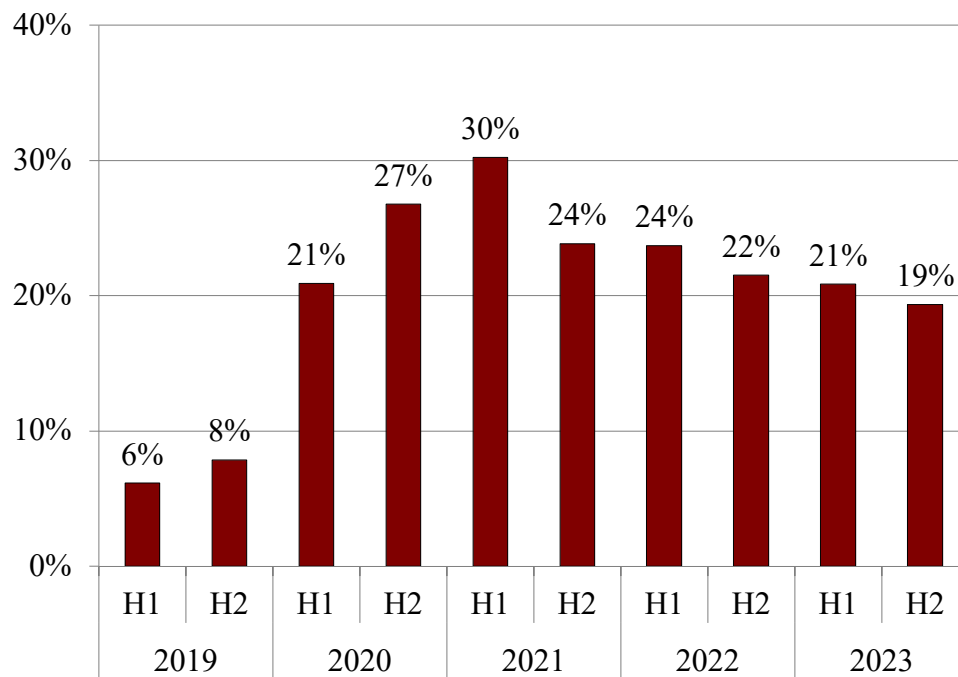
Table 6. *Regression Results for Employment in Teleworkable and Nonteleworkable Jobs for Older People Without Disabilities, 2012-2022*

Dependent variable	(1)	(2)
	Teleworkable employment	Nonteleworkable employment
Year 2022 vs. 2018	0.007 (0.027)	-0.023 (0.023)
Age	-0.008*** (0.002)	-0.006*** (0.002)
Married	0.035** (0.015)	-0.047*** (0.014)
Female	0.094* (0.049)	-0.120** (0.046)
Black	-0.052* (0.027)	0.020 (0.028)
Hispanic	-0.108*** (0.026)	0.085*** (0.020)
College-educated	0.220*** (0.059)	-0.202*** (0.057)
Working two years ago	0.211*** (0.047)	0.136** (0.052)
Working four years ago	0.120*** (0.034)	0.075** (0.030)
Any difficulty with ADLs	-0.029* (0.016)	-0.004 (0.020)
Any difficulty with IADLs	-0.041** (0.018)	-0.049* (0.028)
Any major health condition	-0.009 (0.011)	-0.010 (0.010)
Industry labor market tightness	0.112** (0.045)	-0.004 (0.044)
Career job industry controls	Yes	Yes
Career job industry interacted with labor market tightness	Yes	Yes
Year dummies 2012, 2014, 2016, and 2020	Yes	Yes
N	19,414	19,414
R-squared	0.262	0.217

Notes: Teleworkable employment includes employment in occupations classified as having more than 28 percent of teleworkable jobs according to Dingel and Neiman (2021). Except for the year dummies, coefficients for other covariates are estimated based on a pooled sample of older people with disabilities and those who do not report a work-limiting condition between 2012 and 2022. Career job industry dummies are interacted with industry-level labor market tightness, with retail trade as the omitted category. Standard errors clustered at the career job occupation level are in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Source: Authors' estimates from the HRS (2012-2022).

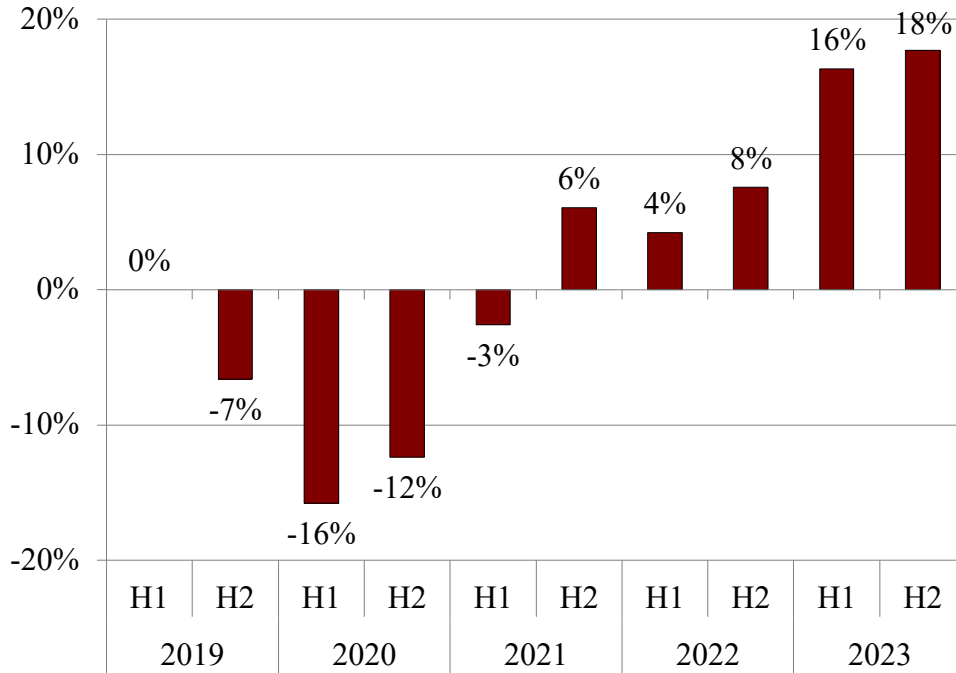
Figure 1. *Days Worked Remotely as a Share of Paid Workdays, Semiannual Averages, 2019-2023*



Notes: Bars reflect semiannual averages and capture the average share of work done remotely for individuals ages 18-64 with annual earnings of more than \$20,000 (in 2019 dollars). Paid workdays are days where the respondent works six or more hours in their main job. Paid workdays are done remotely if the respondent works six or more hours at home.

Sources: Barrero, Bloom, and Davis (2023) and authors' calculations from the U.S. Census Bureau, *American Time Use Survey* (2024).

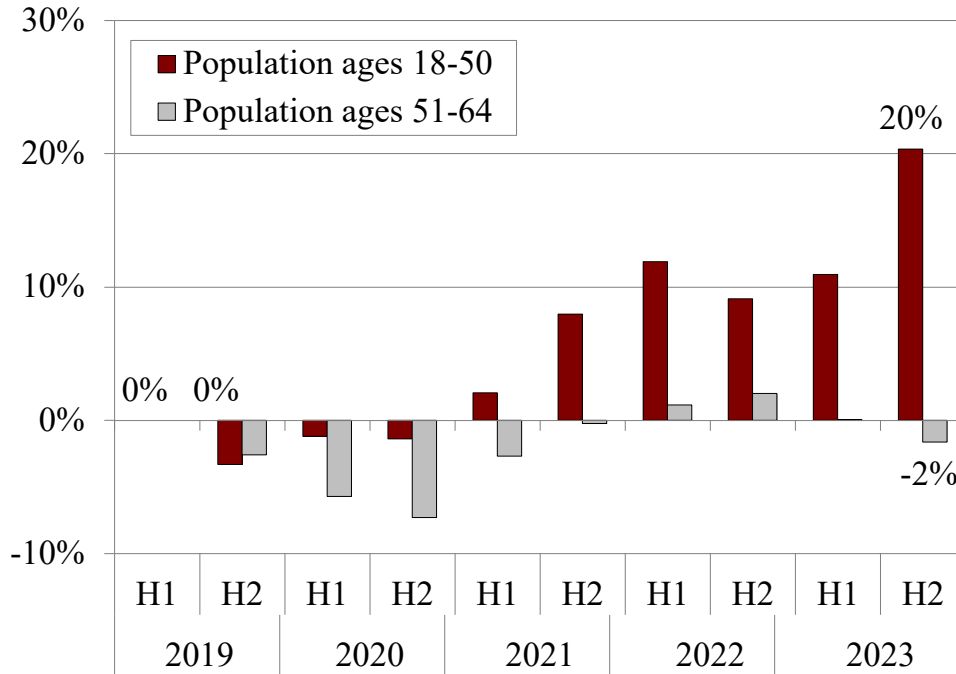
Figure 2. *Percentage Change in the Employment-to-Population Ratio among Individuals Ages 51-64 with Disabilities, Relative to the First Half of 2019 (H1)*



Note: Bars reflect changes in semiannual averages relative to the employment-to-population ratio in the first half of 2019.

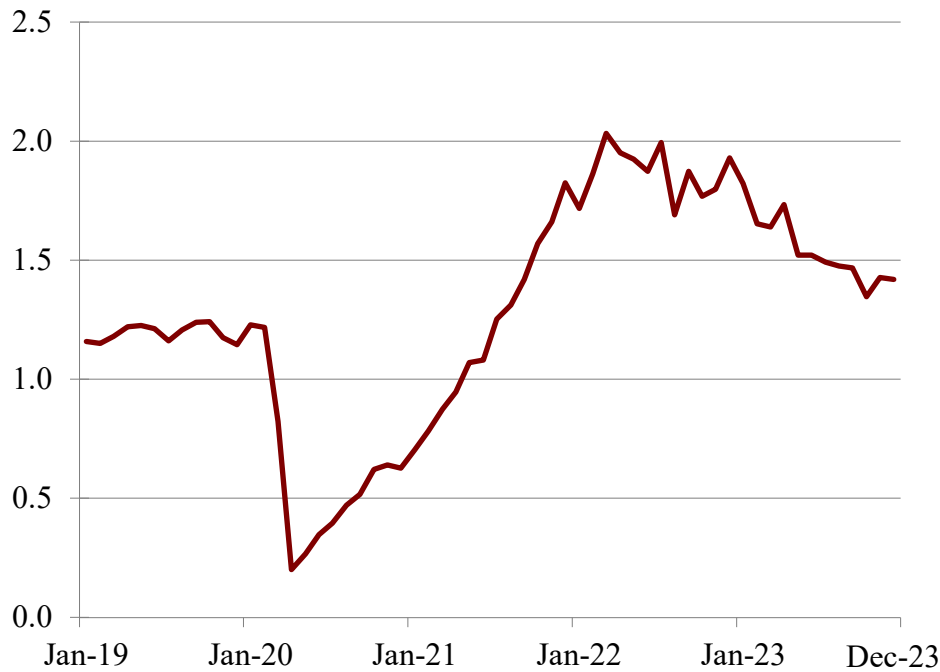
Source: Authors' calculations from the U.S. Census Bureau, *Current Population Survey (CPS)* (2019-2024).

Figure 3. *Percentage Change in the Share of Individuals Reporting a Disability by Age, Relative to the First Half of 2019 (H1), 2019-2023*



Source: CPS (2019-2024).

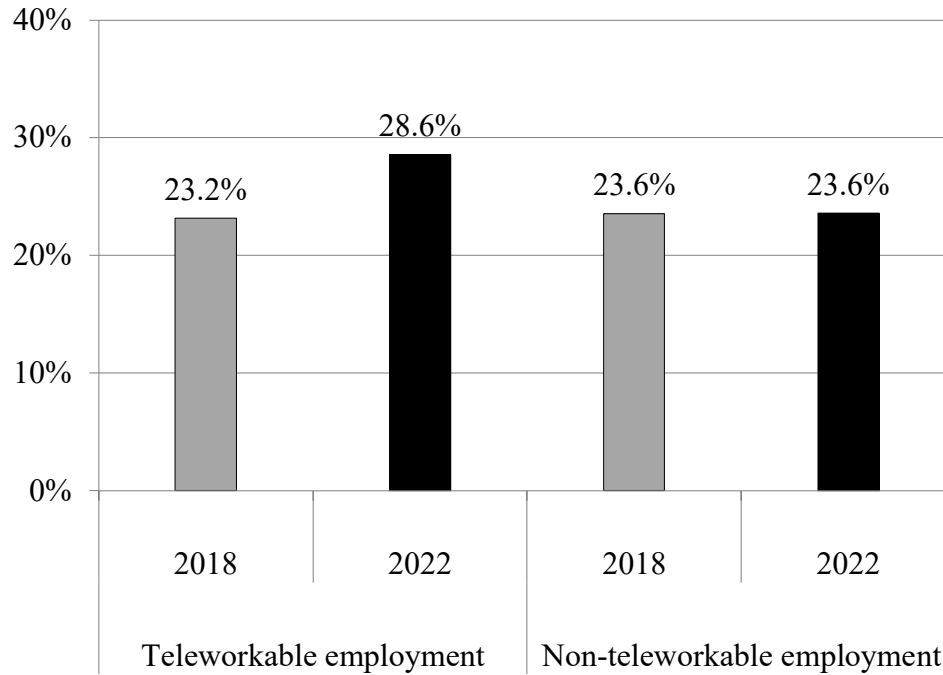
Figure 4. *Job Openings Relative to Unemployed Job Seekers, 2019-2023*



Note: The measure shown is the number of monthly job openings divided by the unemployment level.

Source: Authors' calculations from the U.S. Census Bureau, *Job Openings and Labor Turnover Survey* (2019-2024).

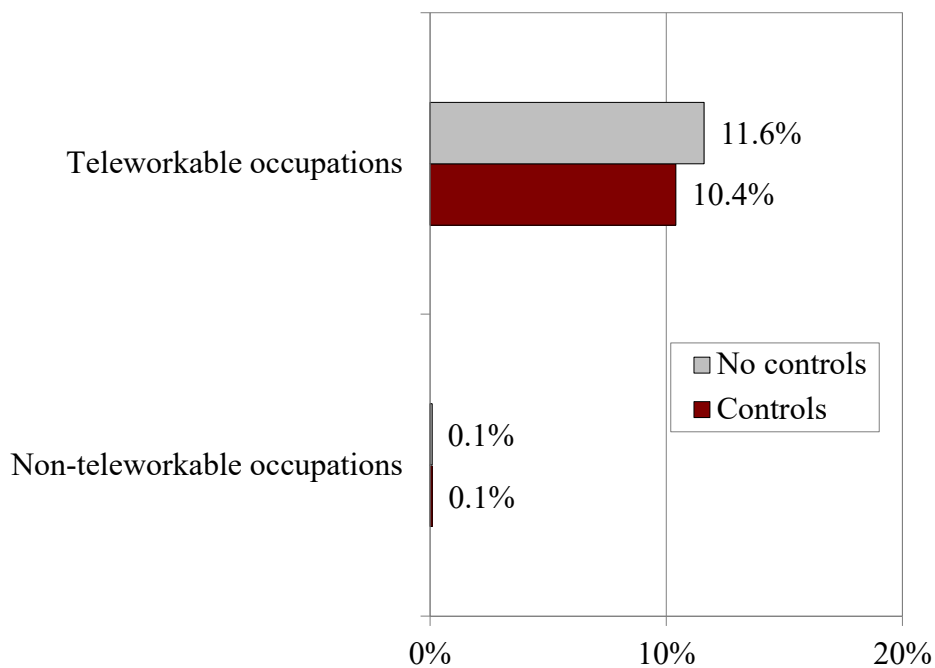
Figure 5. *Employment Rate for People with Disabilities by Occupation, 2018 and 2022*



Note: The sample includes HRS respondents ages 51-64 reporting a work-limiting health condition in the 2018 or 2022 HRS wave.

Source: Author's calculations from HRS (2018-2022).

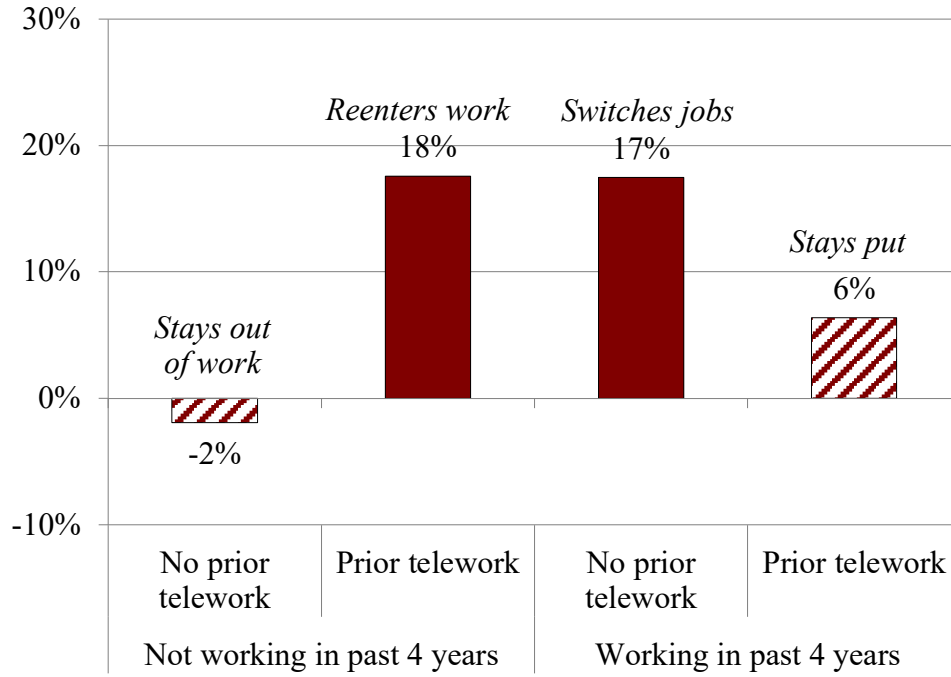
Figure 6. *Employment Gain for Individuals Ages 51-64 with Disabilities, by Occupation, 2022 vs. 2018*



Note: Solid bars are statistically significant at the 5-percent level.

Source: Authors' estimates from HRS (2018-2022).

Figure 7. *Employment Gain in Teleworkable Occupations for Individuals Ages 51-64 with Disabilities, by Work Status and Prior Experience in Teleworkable Occupations, 2022 vs. 2018*



Notes: The regressions control for worker demographics, impairment types, and labor market tightness of the worker's longest-held industry. The solid bar indicates a statistically significant difference between 2018 and 2022 at the 5-percent level.

Source: Authors' estimates from HRS (2018-2022).

Appendix

Table A1. *Summary Statistics for Older People Without Disabilities*

Characteristics	Older people without disabilities		
	Before pandemic (2018)	During pandemic (2020)	After pandemic (2022)
N	2,153	3,003	1,763
<i>Panel A. Employment</i>			
Currently employed	84%	78%***	82%
Has worked in the last four years	5%	5%	5%
Labor market tightness for career job industry	140%	76%***	237%***
<i>Panel B. Demographics</i>			
Age	60.2	59.2***	60.6***
Female	54%	51%**	52%
Race: Black	9%	10%	11%**
Race: Hispanic	10%	12%**	12%*
College-educated	39%	39%	41%
Married	74%	68%***	65%***
<i>Panel C. Health</i>			
Impairment is new	92%	90%*	91%
Self-reported health is poor	1%	1%	1%
Has significant health conditions	24%	22%*	22%
Has difficulty with ADLs/IADLs	4%	4%	4%

Notes: The sample includes HRS respondents ages 51-64 not reporting a work-limiting health condition. We use the 2018 HRS wave for pre-pandemic, the 2020 wave for mid-pandemic, and the 2022 wave for post-pandemic results. Stars indicate that the mean is statistically different from 2018. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Source: Author's calculations from HRS (2018-2022).

Table A2. *Regression Results for Employment for Older People with Disabilities, 2012-2022*

	(1)	(2)	(3)
	Employment	Employment	Employment
Year 2022 vs. 2018	0.054* (0.029)	0.060* (0.029)	0.061** (0.027)
Age		-0.014*** (0.001)	-0.014*** (0.001)
Married		-0.002 (0.013)	-0.011 (0.010)
Female		-0.052*** (0.013)	-0.026** (0.011)
Black		-0.083*** (0.021)	-0.033** (0.016)
Hispanic		-0.073*** (0.023)	-0.023 (0.015)
College-educated		0.030* (0.015)	0.018** (0.008)
Working two years ago			0.347*** (0.016)
Working four years ago			0.195*** (0.020)
Any difficulty with ADLs			-0.032** (0.015)
Any difficulty with IADLs			-0.089*** (0.022)
Any major health condition			-0.020*** (0.006)
Industry labor market tightness			0.108** (0.043)
Career job industry controls	No	Yes	Yes
Career job industry interacted with labor market tightness	No	No	Yes
Year dummies 2012, 2014, 2016, and 2020	Yes	Yes	Yes
N	19,414	19,414	19,414
R-squared	0.104	0.127	0.278

Notes: Except for the year dummies, coefficients for other covariates are estimated based on a pooled sample of older people with disabilities and those who do not report a work-limiting condition between 2012 and 2022. Career job industry dummies are interacted with industry-level labor market tightness, with retail trade as the omitted category. Mean predicted values of 2018 total employment are 47%, 49%, and 59% for each specification, respectively. Standard errors clustered at the career job occupation level are in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Source: Authors' estimates from HRS (2012-2022).

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