The Fiscal Implications of Disability Employment Gaps*

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1 Introduction

Aging populations and associated increases in dependency ratios have placed substantial strains on the fiscal outlook for governments around the industrialized world. Patterns of employment, retirement, and benefit claiming among the near elderly thus have important implications for fiscal health. In this context, individuals with disabilities, who make up 9 percent of the U.S. working age population and nearly 20 percent of the population ages 55-69, are an important and understudied group. Employment rates, in particular for individuals with relatively severe disabilities, are low throughout the lifecycle and exhibit a sharper decline at earlier ages than employment among individuals without disabilities.

We explore the extent to which employment patterns among individuals with severe and non-severe disabilities are shaped by policy and environmental factors rather than being an immutable consequence of disability status itself. Our analysis uses a straightforward but novel method to assess disability severity among civilian individuals in the American Community Survey. We uncover substantial regional and cross-state heterogeneity in employment rates among individuals with similarly severe levels of disability, providing evidence

*Author emails are jeffclemens@ucsd.edu, mdgentry@tamu.edu, and jmeer@tamu.edu, respectively. Clemens thanks the Hoover Institution for its support in his capacity as an adjunct Senior Fellow. Throughout this draft we will use both person-first and identity-first language to describe the population of individuals with disabilities, as is recommended by the National Institutes of Health.

that disability status alone is far from deterministic. The regional variations we uncover are large and are persistent across age-by-severity groupings. For example, employment rates among individuals with severe disabilities in the Plains and Mountain West are roughly twice those in the Deep South and 1.5 times those in New England, the Mid-Atlantic, and Coastal Pacific states.

Our proposal is to develop estimates of the fiscal implications of these regional variations in employment among individuals with disabilities and to analyze several candidate causes of these variations. Our preliminary analyses provide evidence that these regional employment variations are substantial and that their fiscal implications are non-trivial. We preliminarily estimate, for example, that if employment among individuals with disabilities were raised nationwide to the average rate of the top-quartile states, these individuals would generate an additional $45 billion in annual earnings, which would generate an additional $6.8 billion in annual federal tax revenue and would reduce Social Security payments by $4.4 billion and Supplemental Security Income payments by $1.8 billion.

A key question is whether these regional differences in employment among individuals with disabilities reflect factors that can be influenced by policy. Our preliminary analyses provide evidence that these differences are not driven by differences in age distributions or disability severity within the cells we analyze. In particular, we find that these differentials are robust to deploying a more fine-grained adjustment of employment rates by age, suggesting that they do not stem from differences in the demographic profiles of states' near elderly populations with disabilities. In analyses not yet undertaken, we propose to descriptively investigate the relationship between these employment rates and a number of dimensions of state employment and tax law. This research will provide new evidence on the role of policy in shaping labor market outcomes for individuals with disabilities and its broader fiscal consequences.

2 Data and Methods

Our analysis relies on the 2015-2019 Integrated Public Use Microdata Series (IPUMS) extracts of the American Community Survey (ACS) (Ruggles et al. 2024). The ACS includes questions related to self care, independent living, ambulation, cognition, and vision/hearing limitations. These questions specifically exclude temporary difficulties so as to focus on long-term disabilities. For our analysis, a person who responds affirmatively to any of the different disability-related questions is considered to have a disability. The ACS also includes variables such as employment status, wage income, social security income, and supplemental security income, as well as estimates from TAXSIM on a households' federal tax liabilities.

The foundation of our analysis is the ability to predict disability severity in the ACS. First developed for use in Clemens, Gentry, and Meer (2025), this process builds off of the Veteran's Affairs (VA) service-connected disability ratings that are available for veteran respondents of the ACS. These ratings are used in determining eligibility for veteran's disability benefits and specifically rate the severity of an individual's "injury or illness that was incurred or aggravated during active military service". This rating is a 0 to 100 scale, with values assigned in increments of 10 which correlate to the predicted functional limitation associated with an individuals' disability, where a higher value indicates more limitations.

The severity scores in the ACS are binned such that veterans can report ratings of 0, 10 or 20, 30 or 40, 50 or 60, or 70+. We consider this highest bin to be veterans who are "severely disabled".

To construct our binary measure of severity for the full population, we use a logistic regression to regress this binary severity measure for veterans on various demographics including age, race, gender, and disability type(s). Disability type includes indicators for each combination of disability (vision, hearing, cognitive, self care, physical, etc.) from the standard ACS questions including those who report multiple types of disabilities. We use the coefficients from that regression in order to predict the likelihood of a severe disability among the non-veteran population. To make this measure binary, we assign individuals with a predicted severity score greater than 65% to count as "severely disabled".[1]

Figures 1, 2, and 3 enable comparisons of employment rates among veterans with the various disability severity rankings, as well as for the non-veterans we identify as having severe or non-severe disabilities. Figure 1 shows that employment rates are fairly similar for veterans with disabilities in the four lowest bins, but falls by 25 percentage points for those in the highest category. Figure 2 shows that employment rates across the life cycle are far lower for veterans with severe disabilities as compared to those with non-severe disabilities or no disability.[2] Figure 3 plots the same life-cycle patterns for our predicted measure, showing a similar pattern in which the employment rate of those whose predicted disability rating is "severe" is far lower than for those with a "non-severe" predicted rating, which is in turn lower than the non-disabled. The latter figure provides validation for our procedure for inferring disability severity, as the life-cycle employment patterns for civilian individuals we categorize as having severe vs. non-severe disabilities are very similar to the life-cycle patterns we observe in the veteran population for which severity is reported directly.

3 Preliminary Findings

The impetus for this study lies in the significant variation in employment rates for near-retirement age adults with severe and non-severe disabilities across the contiguous United States, as shown in Figures 4 and 5.[3] These maps reveal that there are persistent geographic patterns in near-retirement age employment among individuals with disabilities. Employment rates for all age groups and severity bins are consistently higher in the Midwest/Mountain West regions and parts of New England, and are consistently lower in both the "Deep South" states and Appalachia. Further, these variations are substantial. Employment rates among individuals with severe disabilities across the Plains and Mountain West, for example, are roughly twice those across the Deep South.

[1] This 65% threshold was chosen upon inspection of the distribution of the predicted severity measure. Encouragingly, our results are qualitatively robust to the selection of other thresholds ranging from 55% to 75%.

[2] Indeed, other researchers have found that veterans with higher severity ratings, and consequently higher VA benefits, also have lower labor force participation (Autor et al. 2016 and Rutledge, Sanzenbacher, and Crawford 2016).

[3] To ensure our conclusions are not being driven by differences in ages across states we also produce maps showing the age-adjusted employment rates in the Appendix, Figures A1 and A2. Reassuringly, the age-adjustment does not change the variation across states much.

Our goal in this section is to understand how federal revenues and outlays may change if we were to see increases in employment among severely and non-severely disabled near-retirement aged adults to the average level among the highest quartile employment states for each age and severity group. For this proposal, we have focused on federal aggregates but the ultimate final product would allow for a breakdown at the state-level. Table 1 shows all of the component pieces that allow us to create our counterfactuals. We start with the total population in each age and severity bin - constructed by summing the person weights from the 2019 ACS for the respective populations. Next, we list the average employment rate for the full sample along with the average employment rate in the states with the highest quartile of employment rates among individuals in the relevant age-by-severity grouping. Finally, as we are interested in federal outlays following increases in employment we list the average social security income, SSI income, wage income, and estimated federal tax liabilities for the full sample.[4]

In Table 2 we show the aggregate values obtained from our calculations. We calculate the additional people employed in each bin as the difference in employment rates in the top quartile and baseline multiplied by the total population. Next, we estimate how social security and SSI incomes change for the people gaining employment by multiplying the difference in those incomes for non-employed people and employed people in each state-by-age-by-severity group by the total number of people who gained jobs in the counterfactual. Finally, we obtain estimates of aggregate wage bill and federal tax payment increases by multiplying those average values by the total additional number of people employed.[5]

Ultimately, as shown in table 2, we find that over 1 million more near-retirement age disabled adults would be employed if we were able to increase the employment rate for these groups up to that of the highest quartile states. We preliminarily estimate that this increase in employment would lead to decreases in Social Security outlays of $4.4 billion and that SSI outlays would fall by $1.8 billion. Meanwhile, federal tax revenues would increase by approximately $6.8 billion. In total, our counterfactual exercise reveals a net budgetary impact of roughly $13 billion annually.

4 Policy Relevance and Next Steps

Going forward, we will analyze what characteristics of states' policy environments are associated with relatively high levels of employment among near-elderly individuals with disabilities. The characteristics we plan to consider fall into three categories: labor laws associated with disability, other key dimensions of labor laws, and redistributive policy.

With respect to labor law that speaks to disability, we will consider a number of features of

[4]For now, we estimate federal tax liability by plugging in our average wage estimates into SmartAsset's online tax calculator which includes FICA taxes. While the ACS does contain information related to federal tax liabilities, these values are calculated at the family/approximated tax filing unit-level. We plan to establish a way to use those values in the full project as a more comprehensive approach towards capturing federal tax changes.

[5]We recognize that the assumed wage gains we use here are derived from the average wages among those that were employed in the baseline, and therefore likely exhibit some level of positive selection. To that end, this estimate of wages and federal tax liabilities dependent on the wages may be an overestimate. In future iterations of this work we will develop an approach for correcting for this positive selection.

states' policy environments that are tracked by the National Conference of State Legislatures. These included accessibility requirements, policy towards the employment of individuals with disability by state government itself, variations in the design of Workers' Compensation systems, and disability-related transportation policy. Because the implications of laws that relate to the employment of individuals with disabilities can be subtle, a careful review of the existing literature will be required to ensure that we focus on dimensions that have the potential to be quantitatively important.

The other dimensions of labor law that we will consider are relatively straightforward. In particular, states' minimum wage laws and Right to Work status are of potential relevance.

The generosity of states' safety net policies may also have important implications for the incentives of individuals with disabilities to work as they approach retirement age. Examples include the generosity of states' Medicaid programs, as well as the generosity of states' EITC supplements, cash welfare assistance, and SNAP benefits. Additionally, we will explore the relevance of variations in the presence of state-run short-term disability insurance programs.

We may additionally expand our samples to contrast our initial analysis of the pre-pandemic labor market with ACS data from 2021 through 2023. This analysis would shed light on the short run implications of the pandemic for variations across states in employment among individuals with disabilities.

References

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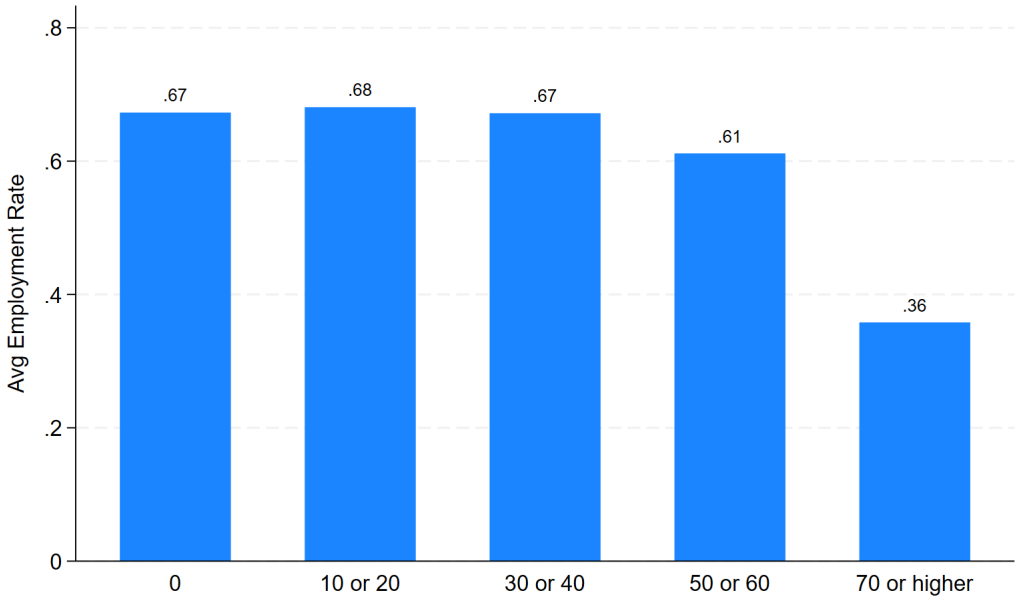
Clemens, Jeffrey, Melissa Gentry, and Jonathan Meer (2025). "Divergent Paths: Differential Impacts of Minimum Wage Increases on Individuals with Disabilities". *NBER Working Paper 33437*. DOI: 10.3386/w33437.

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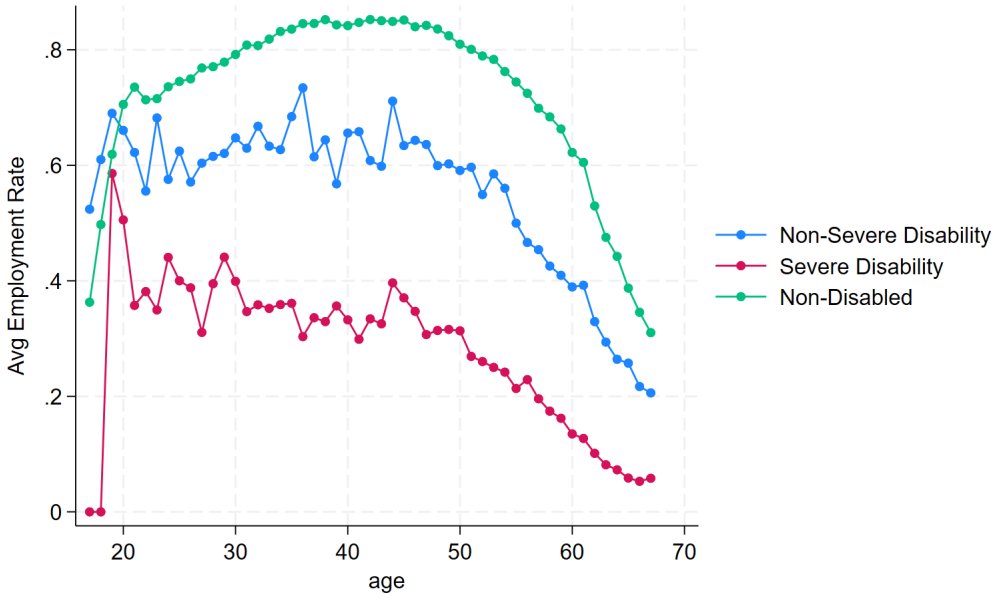
Tables and Figures

Figure 1: Average Employment Rate by VA Service-Connected Disability Rating



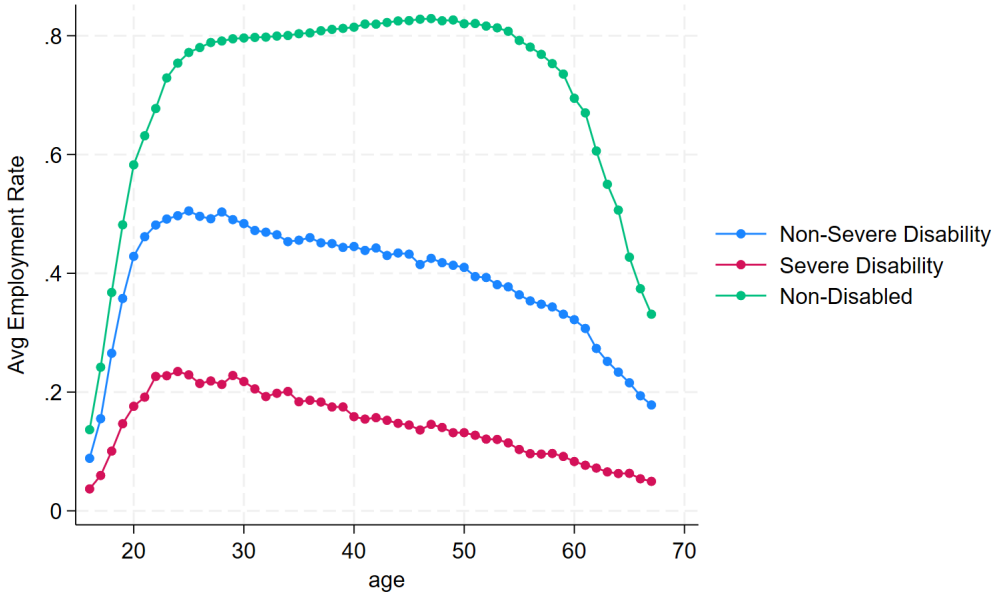
Note: Data are from the American Community Survey. VA Service-Connected Disability Rating is a discrete measure and is only available for veterans. Sample restricted to those age 16-67. Sample size for this figure is 253,965.

Figure 2: Average Employment Rate by VA Service-Connected Disability Rating (Binary)



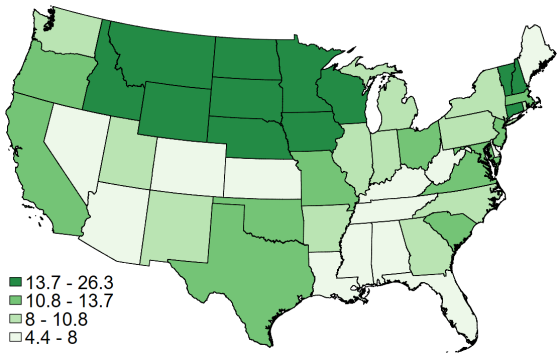
Note: Data are from the American Community Survey. VA Rating is only available for veterans. Sample restricted to those age 16-67. Sample size for non-disabled veteran group is 993,610; for veterans with non-severe disabilities, 49,527, for veterans with severe disabilities, 42,877.

Figure 3: Average Employment Rate by Predicted Disability Rating (Binary)

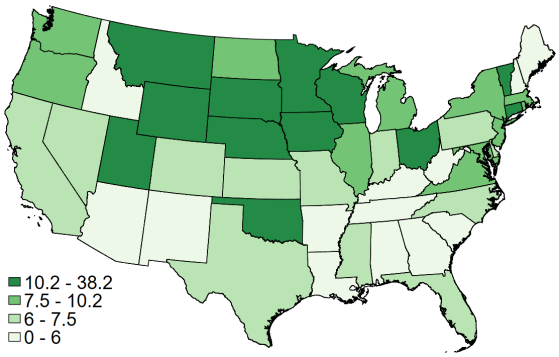


Note: Data are from the American Community Survey. VA Rating is only available for veterans. Severity scores for non-veterans were predicted via logistic regression. Sample restricted to those age 16-67. Sample size for non-disabled group is 16,744,781; for people with non-severe disabilities, 1,853,457, for people with severe disabilities, 416,292.

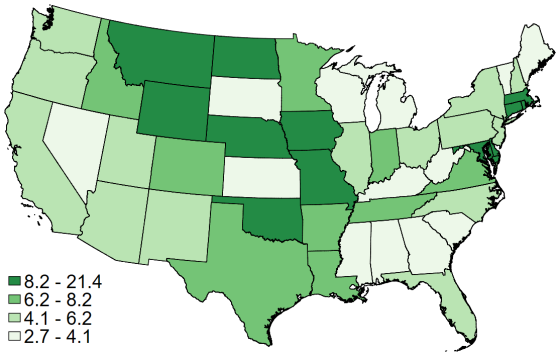
Figure 4: Employment Rates among Individuals with Severe Disabilities



(a) Ages 55-59



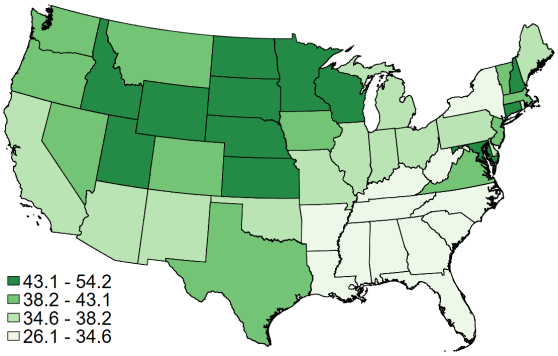
(b) Ages 60-64



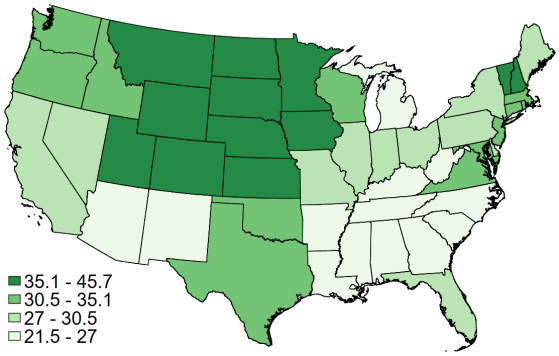
(c) Ages 65-69

Note: Figure shows employment rates by state for near-retirement age people with severe disabilities, using American Community Survey data from 2015-2019. The different colors of the map represent different quartiles of the distribution.

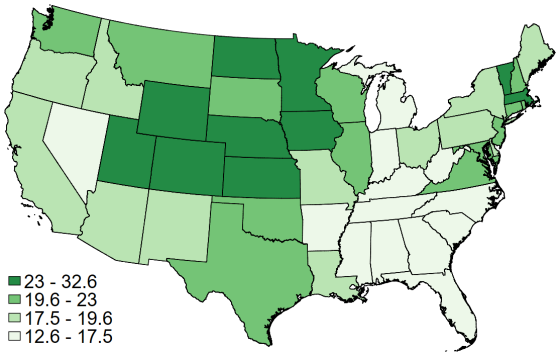
Figure 5: Employment Rates among Individuals with Non-severe Disabilities



(a) Ages 55-59



(b) Ages 60-64



(c) Ages 65-69

Note: Figure shows employment rates by state for near-retirement age people with non-severe disabilities, using American Community Survey data from 2015-2019. The different colors of the map represent different quartiles of the distribution.

Table 1: Statistics to Illustrate Approach

	Severe Group			Non-severe Group		
	55-59	**60-64**	**65-69**	**55-59**	**60-64**	**65-69**
Total Population in Group	469,454	455,230	319,299	2,955,872	3,532,956	3,414,224
Average Employment Rate in Baseline	10.2%	7.5%	6.0%	36.6%	29.4%	19.3%
Average Employment Rate in Top Quartile	17.4%	15.8%	11.8%	48.0%	40.5%	26.2%
Average Social Security Income among Employed in Baseline	2,225	2,720	7,515	444	1,355	9,205
Average Social Security Income among Non-employed in Baseline	5,163	6,425	9,643	4,763	6,824	11,399
Average SSI Income among Employed in Baseline	1,056	935	837	221	235	373
Average SSI Income among Non-employed in Baseline	3,099	2,915	1,883	2,578	2,126	977
Average Wage Income among Employed in Baseline	30,726	30,196	30,264	45,260	45,045	39,940
Average Federal Tax Liabilities among Employed in Baseline	4,054	3,949	3,963	6,909	6,867	5,864

Note: Statistics generated from 2015-2019 ACS. Federal tax liabilities are calculated using Smart Asset's federal tax calculator and includes FICA taxes.

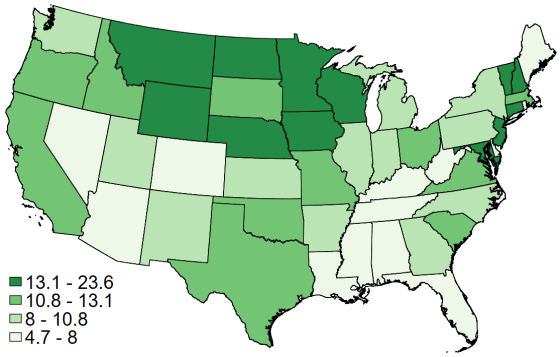
Table 2: Federal Aggregates

	Severe Group			Non-severe Group			Total
	55-59	**60-64**	**65-69**	**55-59**	**60-64**	**65-69**	**(All Groups)**
Additional People Employed (thous)	33.8	37.9	18.5	335.9	391.7	238.7	1,056.4
Aggregate Reductions in Social Security Paid Out ($ mil)	99.4	140.6	39.4	1,450.6	2,142.2	523.5	4,395.7
Aggregate Reductions in SSI Paid Out ($ mil)	69.1	75.2	19.3	791.7	740.6	144.2	1,840.1
Aggregate Increases in Wage Income ($ mil)	1,039.3	1,145.9	559.6	15,201.3	17,642.7	9,531.7	45,120.5
Aggregate Increases in Federal Tax Liabilities ($ mil)	137.1	149.9	73.3	2,320.5	2,689.6	1,399.5	6,769.8

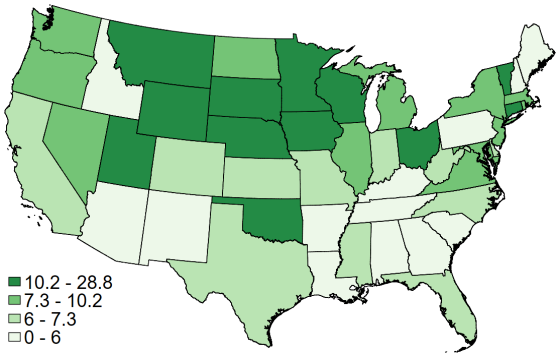
Note: Statistics generated from 2015-2019 ACS. Federal tax liabilities are calculated using Smart Asset's federal tax calculator and includes FICA taxes.

Appendix Tables and Figures

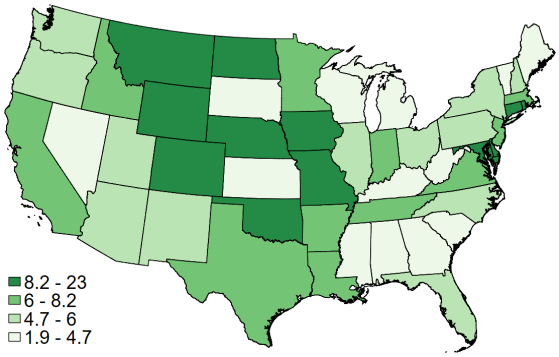
Figure A1: Age-Adjusted Employment Rates among Individuals with Severe Disabilities



(a) Ages 55-59



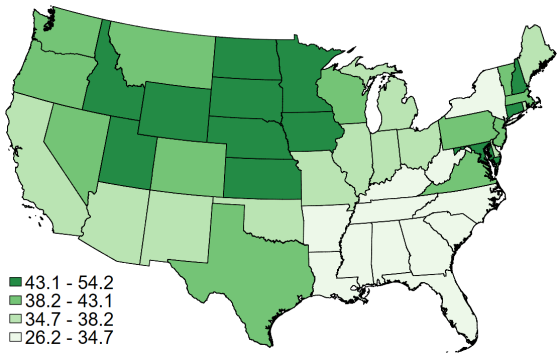
(b) Ages 60-64



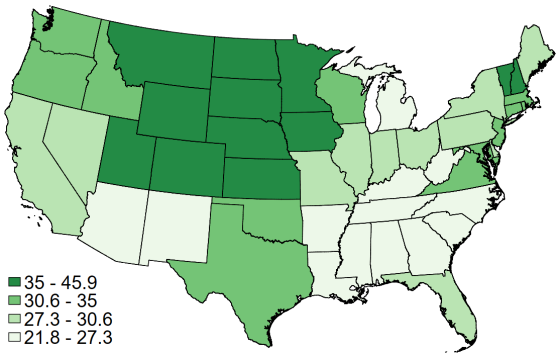
(c) Ages 65-69

Note: Figure shows the age-adjusted employment rates by state for near-retirement age people with severe disabilities, using American Community Survey data from 2015-2019. The different colors of the map represent different quartiles of the distribution.

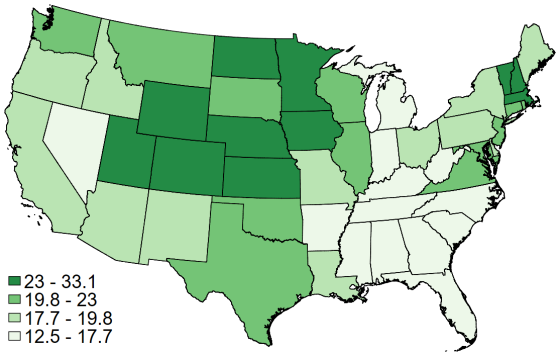
Figure A2: Age-Adjusted Employment Rates among Individuals with Non-severe Disabilities



(a) Ages 55-59



(b) Ages 60-64



(c) Ages 65-69

Note: Figure shows the age-adjusted employment rates by state for near-retirement age people with non-severe disabilities, using American Community Survey data from 2015-2019. The different colors of the map represent different quartiles of the distribution.