Labor Demand and the Rise of Disabled Employment

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Extended Abstract

After two decades of decline, the disabled employment-to-population ratio rose from 33 to 45 percent between 2008 and 2024, narrowing the disability employment gap by 12 percentage points and reversing two decades of decline in disabled employment (Ne'eman and Maestas, 2022). This reversal coincided with a prolonged period of economic growth, as well as the consolidation of long-run trends in the structure of work, such as the continued expansion of professional and service-sector employment, a decline in the physical intensity of jobs (Autor, Levy, and Murnane, 2003; Acemoglu, Mühlbach, and Scott, 2022), and the proliferation of flexible work arrangements (Bloom, Dahl, and Rooth, 2024). We provide the first causal estimates of the contribution of labor demand on employment and earnings among people with disabilities over this sample period. We decompose how changes in the features and non-wage amenities of 'in-demand occupations' underpin this trend.

Using a canonical Bartik instrument, we predict labor demand by apportioning shocks in aggregate employment per occupation to commuting zones using baseline employment shares. We estimate two-stage least squares regressions at the commuting-zone–year level using the ACS for 2008–2024 (approximately 178 million person-year observations, including 18.4 million with disabilities). We assess robustness with industry-based and vacancy-based Bartik instruments (the latter constructed from Lightcast job postings), alternative outcome transformations, leave-out construction, and the Borusyak, Hull, and Jaravel (2022) framework for shift-share identification.

Findings.

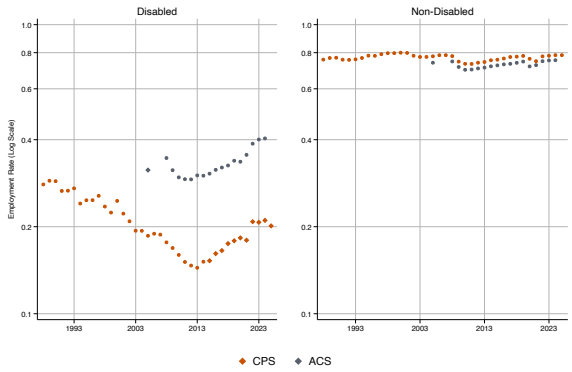
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First, disabled employment is substantially more responsive to labor demand than non-disabled employment. A one percentage-point increase in predicted labor demand growth raises the disabled employment rate by 1.3 percentage points—roughly 40 percent more than the non-disabled response. This holds across all instrument variants, outcome transformations, and sample restrictions. Wage elasticities are positive but modest for both groups, consistent with labor demand operating primarily at the extensive margin. Among groups marginal to the labor force—single mothers, non-white men, older workers—disabled workers exhibit the largest employment response.

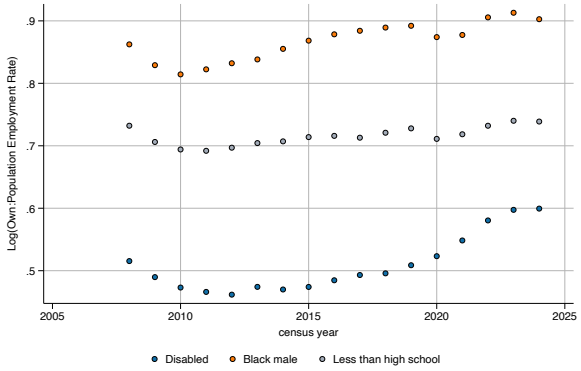
Second, the response varies by disability type and age. Workers with cognitive and ambulatory disabilities show the largest employment elasticities. The response declines monotonically with age, and wage effects concentrate among younger workers, consistent with labor demand operating almost exclusively at the extensive margin for older disabled workers.

Third, professional and managerial occupations -drive the disability employment response. We decompose the Bartik instrument into occupation-group-specific components. The coefficient on professional and managerial demand growth is several times larger than for any other sector; the low-skill services coefficient is near zero. Because professional occupations also account for the largest base-year employment share, they dominate total disabled employment growth over the sample period. This contrasts with the general population, where responses are more evenly distributed across sectors, and with recent work on SSDI enrollment (Deshpande et al., 2025), which identifies growth in low-skill employment as the key margin. In ongoing work, we use natural-language processing on the universe of US job postings to construct occupation-level indices of physical intensity, cognitive demand, and workplace flexibility, and assess the extent to which shifts in these features across in-demand occupations account for the disproportionate employment gains of disabled workers.

Figure 1: Descriptive Trends

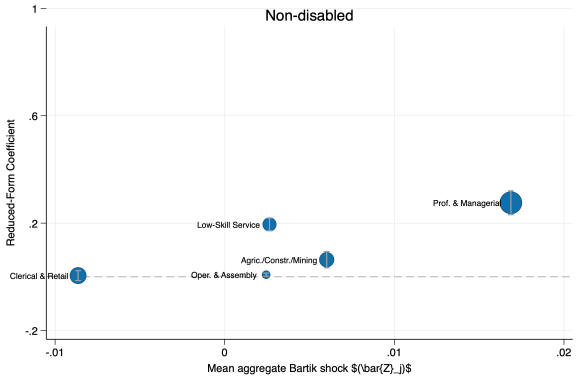


(a) Employment Rate by Disability Status, ACS and CPS

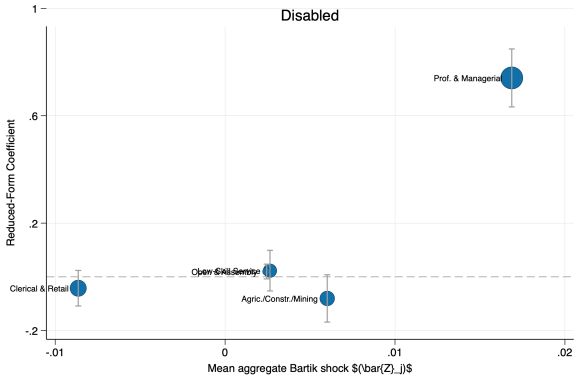


(b) Employment Gap Relative to Population, by Group

Figure 2: Occupation Decomposition of Employment Rate Response (Log Levels)



(a) Non-Disabled



(b) Disabled

Notes: Each bubble plots the reduced-form coefficient from a regression of the log employment rate on occupation-group-specific Bartik instruments. x-axis: mean aggregate Bartik shock for the occupation group. Bubble size proportional to national base-year employment share. Capped lines are 95% confidence intervals. Sample: ACS 2010–2024, working-age adults, commuting-zone level, with commuting-zone fixed effects and demographic controls.

Table 1: OLS and 2SLS Estimates: Employment Rate and Wages

	All		Disabled		Non-disabled	
	Δ Employment Rate	Δ Wage	Δ Employment Rate	Δ Wage	Δ Employment Rate	Δ Wage
OLS:						
Δ Employment	0.754***	0.337***	1.295***	0.661***	0.678***	0.268***
	(0.019)	(0.035)	(0.091)	(0.115)	(0.024)	(0.037)
2SLS:						
Δ Labor Demand	0.968***	-0.033	1.305***	-0.047	0.927***	-0.051
	(0.019)	(0.071)	(0.128)	(0.183)	(0.020)	(0.071)
Unit FE						
Dependent mean	0.006	0.014	0.033	0.036	0.005	0.013
First stage F	358.24	358.24	478.65	478.65	364.83	364.83
A-R F $H_0 :_1 = 0$	308.87	0.22	94.36	0.07	275.37	0.54
N (Avg. per year)	196,399,254	196,399,254	21,463,009	21,463,009	174,936,244	174,936,244

Table 2: 2SLS Estimates by Group: Δ Employment Rate

	Δ Employment Rate	
Disabled:		
Any disability	1.259***	0.320*
	(0.103)	(0.151)
Any cognitive disability	1.733***	0.648*
	(0.219)	(0.253)
Any mobility disability	1.752***	0.745**
	(0.191)	(0.251)
Other Marginal Groups		
Mother	0.845***	0.051
	(0.043)	(0.067)
Non-white male	0.850***	0.429***
	(0.033)	(0.122)
Aged 62-70	0.915***	0.361***
	(0.076)	(0.103)
Aged 18-24	1.774***	1.719***
	(0.097)	(0.090)
New immigrant	1.133*	0.175
	(0.534)	(0.728)
No high school	1.458***	0.557***
	(0.108)	(0.111)

Notes: 2SLS estimates of the effect of a one percentage-point increase in predicted labor demand growth on the employment rate. Standard errors clustered at the commuting-zone level in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

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