Labor Demand and the Rise of Disabled Employment

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March 2026

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, more than other groups marginal to the labor force. 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 (Bartik, 1991; Blanchard and Katz, 1992), we isolate 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, for the full and disabled populations (defined by the ACS 6-Q measure) separately.

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. Among groups marginal to the labor force – mothers, non-white men,

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older workers disabled workers – individuals with cognitive and mobility disabilities display the greatest the largest employment responses (1.7pp each, on par with young workers). Amongst disabled workers, employment responses declines monotonically with age.

Professional and managerial occupations, drive the disability employment response. We decompose the Bartik instrument into occupation-group-specific components. Whilst the non-disabled response is distributed evenly across sectors, the coefficient on professional and managerial demand growth is several times larger than for any other sector, dominating total disabled employment growth over the sample period. This also contrasts with Deshpande et al. (2025), who identify low-skill employment as the key margin for SSDI enrollment. In ongoing work, we use Lightcast—a near-universe of U.S. job postings—to construct occupation-level indices of physical intensity, cognitive demand, and workplace flexibility using natural-language processing, and assess the extent to which shifts in these features across in-demand occupations account for the disproportionate employment gains of disabled workers.

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

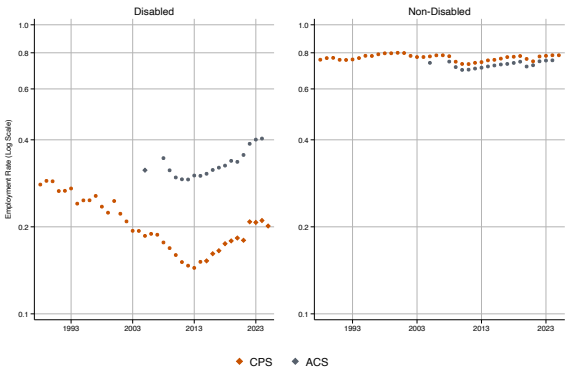
	All		Disabled		Non-disabled	
	Δ Employment Rate	Δ Wage	Δ Employment Rate	Δ Wage	Δ Employment Rate	Δ Wage
OLS:						
Δ Employment	0.754***	0.337***	1.295***	0.661***	0.678***	0.268***
	(0.019)	(0.035)	(0.091)	(0.115)	(0.024)	(0.037)
2SLS:						
Δ Labor Demand	0.968***	-0.033	1.305***	-0.047	0.927***	-0.051
	(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

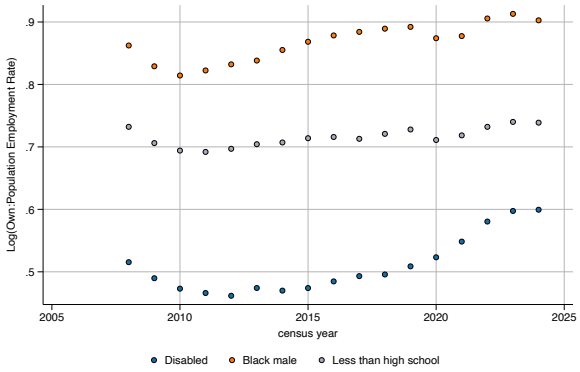
	Δ Employment Rate	
Disabled:		
Any disability	1.259***	0.320*
	(0.103)	(0.151)
Any cognitive disability	1.733***	0.648*
	(0.219)	(0.253)
Any mobility disability	1.752***	0.745**
	(0.191)	(0.251)
Other Marginal Groups		
Mother	0.845***	0.051
	(0.043)	(0.067)
Non-white male	0.850***	0.429***
	(0.033)	(0.122)
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. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$.

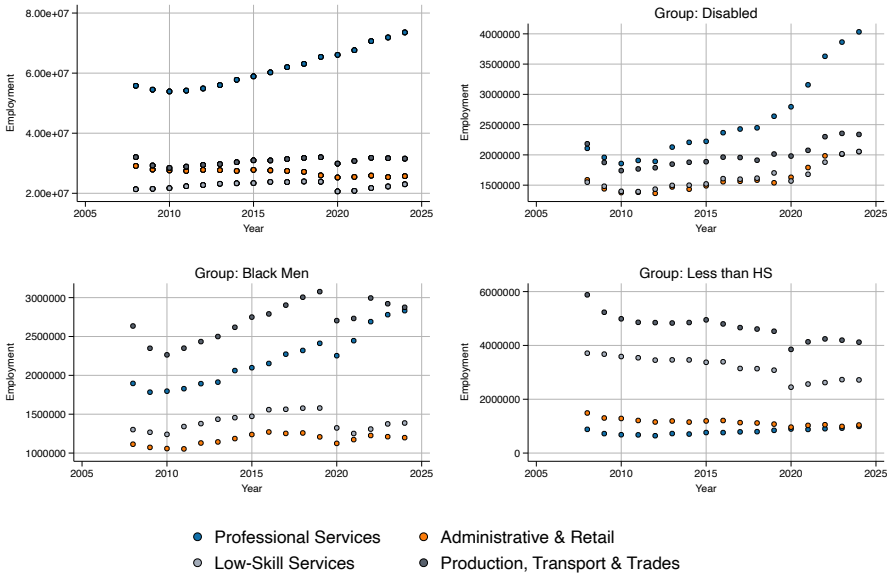
Figure 1: Descriptive Evidence



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

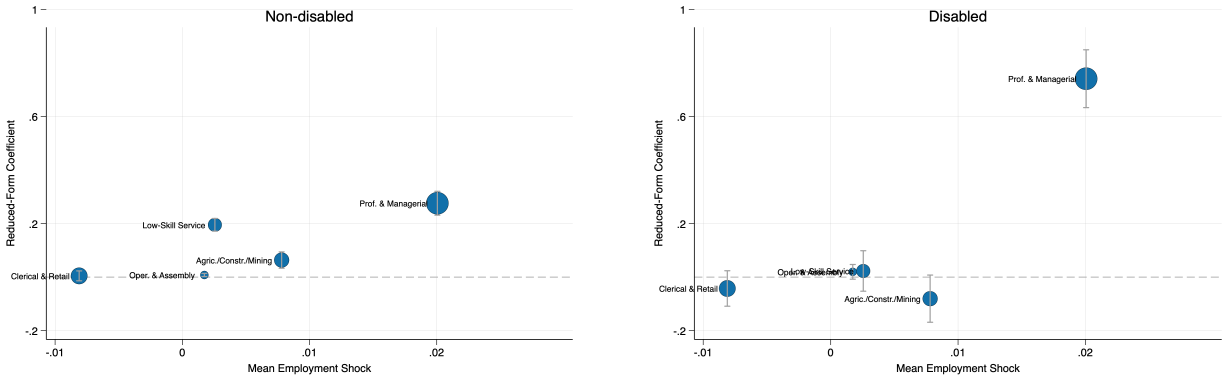


(b) Employment Gap Relative to Population, by Group



(c) Employment by Major Occupation Group and Disability Status

Figure 2: Occupation Decomposition of Employment Rate Response



(a) Non-Disabled

(b) Disabled

Notes: Each figure plots the reduced-form coefficient $\hat{\beta}_j$ (y-axis) against the mean national employment shock $\overline{\Delta \log E}_j$ (x-axis), for $j \in \{$Professional & Managerial, Clerical & Retail, Low-Skill Service, Operative & Assembly, Agriculture/Construction/Mining$\}$. The shock is the within-group employment-share-weighted average of $\Delta \log E_{k,\text{nat}}$ across occupations k in group j, averaged across years. Bubble size is proportional to the group's base-year national employment share. Sample: ACS 2010–2024, working-age adults, commuting-zone level, with commuting-zone fixed effects and demographic controls.

References

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