Online Appendix

"Within Occupation Changes Dominate Changes in What Workers Do:
A Shift-Share Decomposition, 2005-2015"

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Table A1. O*NET attributes and shift-share decomposition, 2005-2015 for Work Context Variables using Means

	Mean			Decomposition		
	2005	**2015**	**Δ**	**Within**	**Between**	**Interaction**
Physical Work						
(1) Degree of Automation	2.224	2.183	-0.041	-0.027	-0.024	0.011
(2) Time Making Repetitive Motions	3.254	3.276	0.023	0.036	-0.018	0.006
(3) Pace Determined by Equipment	1.906	1.834	-0.072	-0.046	-0.043	0.018
(4) Time Bending or Twisting	2.469	2.455	-0.014	-0.019	-0.008	0.013
Decision latitude						
(5) Unstructured Work	3.856	3.867	0.011	0.012	0.007	-0.007
(6) Freedom to Make Decisions	3.935	3.833	-0.102	-0.1	0.009	-0.011
Social Skills						
(7) Public Speaking	1.905	2.047	0.142	0.132	0.001	0.01
(8) Face-to-Face Discussions	4.482	4.52	0.038	0.041	0.005	-0.008
(9) Work With Group or Team	4.088	4.245	0.157	0.147	0.016	-0.005

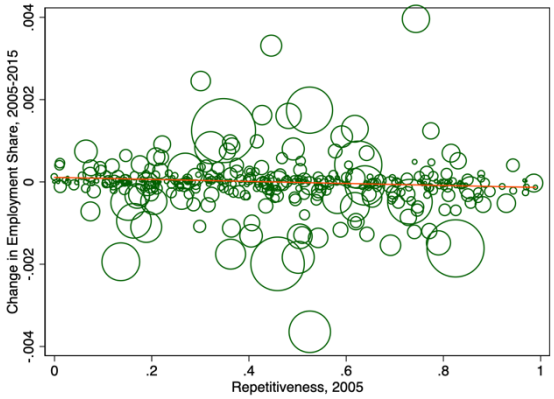
Notes: The Work Context variables are measured on a 5-point scale and the means reported are the average across all respondents in an occupation, which are averaged across the 371 occupations in our sample.

Table A2. Regression, Change in Employment Share (2005 – 2015) on 2005 Measures

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Degree of Automation	-0.0006*					-0.0006*	
	(0.0003)					(0.0003)	
Repetitive Motions		-0.0002					-0.0002
		(0.0002)					(0.0002)
F2F Discussions			0.0001				
			(0.0004)				
Group or Team Work				0.0005*			
				(0.0002)			
High School Diploma					-0.0003*		
					(0.0001)		
Bachelor's Degree							
Constant	0.0001	0.0001	-0.0001	-0.0004*	0.0001	0.0001	0.0001
	(0.0001)	(0.0001)	(0.0003)	(0.0002)	(0.0001)	(0.0001)	(0.0001)
Nb. of Observations	371	371	371	371	371	371	371
R2	0.008	0.003	0.000	0.007	0.006	0.008	0.003

Notes: Estimation is by OLS with robust standard errors in parentheses. The dependent variable is the change in the share of employment in each occupation from 2005 to 2015, measured in percentage points. The variables in rows 1-4 are measured as the proportion of respondents in the top two categories (4 or 5) on a 5-point scale across all occupations in our sample in 2005. Variables in rows 5-6 are measured as the proportion reporting that education level is required to be hired for their job in 2005.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

Figure A1. Repetitiveness and Change in an Occupation's Employment Share



Notes: Each circle is one of 371 occupation in our sample. The Y-axis is the change in the share of employment in each occupation from 2005 to 2015. It is measured in shares, so the occupation with the largest value of 0.004 means that the occupation increased its share of employment by 4 tenths of a percentage point. The X-axis is the share of the respondents in the top two categories (4 or 5) in 2005 for the question Time Making Repetitive Motions ("How much time in your current job do you spend making repetitive motions?"), where 4=More than half the time, 5=Continually or almost continually, all 371 occupations in our sample. Here, a value of 0.4 means that 40 percent of the incumbents surveyed in the occupation reported either a 4 or a 5.