Table S1. Description of demographic characteristics, work conditions, and health indicators of workers from 2001 to 2016, stratified by automation probability of jobs. P value for trend analysis tests were shown.

	2001	2004	2007	2010	2013	2016	*p*
Number of workers							
All workers	14691	15288	17042	17263	16530	14948	<0.001
High automation probability	45.64%	44.86%	46.65%	45.08%	38.24%	38.48%	<0.001
Median automation probability	36.26%	35.11%	36.09%	35.89%	43.18%	43.67%	<0.001
Low automation probability	18.10%	20.04%	18.26%	19.02%	18.58%	17.85%	<0.001
Average age							
All workers	38.50±9.04	39.11±9.24	39.48±9.65	40.15±9.86	41.02±10.10	41.84±10.32	<0.001
High automation probability	38.80±9.34	39.30±9.39	39.47±9.90	40.02±10.02	40.10±10.10	40.92±10.13	<0.001
Median automation probability	37.77±8.64	38.73±9.07	39.60±9.45	40.25±9.80	42.46±10.12	43.20±10.50	<0.001
Low automation probability	39.20±8.96	39.34±9.18	39.26±9.40	40.26±9.61	39.54±9.61	40.36±9.89	<0.001
Age>55							
All workers	4.45%	4.44%	5.98%	7.60%	9.66%	11.81%	<0.001
High automation probability	5.21%	4.65%	6.54%	7.68%	8.31%	9.47%	<0.001
Median automation probability	3.25%	4.04%	5.45%	7.47%	11.93%	15.04%	<0.001
Low automation probability	4.96%	4.67%	5.62%	7.64%	7.14%	8.96%	<0.001
Female gender							
All workers	40.75%	41.75%	43.46%	45.03%	44.20%	43.40%	<0.001
High automation probability	57.72%	58.21%	59.29%	60.00%	55.05%	54.09%	<0.001
Median automation probability	20.63%	21.80%	23.87%	26.95%	34.56%	34.16%	<0.001
Low automation probability	38.25%	39.83%	42.58%	43.64%	44.32%	42.95%	<0.001
University or above education							
All workers	16.57%	21.58%	24.08%	30.28%	33.21%	36.11%	<0.001
High automation probability	7.53%	11.11%	14.79%	20.97%	21.63%	25.52%	<0.001
Median automation probability	7.45%	12.00%	14.50%	20.77%	24.87%	29.20%	<0.001
Low automation probability	57.65%	61.80%	66.23%	70.31%	76.48%	75.86%	<0.001
Work conditions							
Weekly working hours							
All workers	42.64±9.31	43.38±8.22	43.49±8.15	43.05±8.45	43.07±8.06	42.55±10.89	<0.001
High automation probability	42.95±8.04	43.38±7.15	43.40±7.29	42.78±7.84	43.12±7.24	41.87±8.73	<0.001
Median automation probability	42.98±10.71	44.20±8.96	44.20±8.95	43.70±9.44	43.32±8.89	42.16±10.00	<0.001

Low automation probability	41.09±9.10	41.96±8.84	42.32±8.40	42.47±7.75	42.37±7.55	41.11±9.18	0.436
Long working hours (>48 weekly hours)							
All workers	9.44%	11.20%	12.84%	12.35%	13.21%	10.69%	<0.001
High automation probability	7.02%	8.21%	9.61%	8.94%	10.41%	8.65%	<0.001
Median automation probability	13.27%	15.54%	17.02%	16.58%	15.80%	12.56%	0.243
Low automation probability	7.86%	10.32%	12.63%	12.45%	12.95%	10.52%	<0.001
Shift work							
All workers	14.70%	19.55%	19.36%	22.95%	20.28%	21.46%	<0.001
High automation probability	15.09%	18.51%	18.34%	21.16%	21.08%	21.26%	<0.001
Median automation probability	16.40%	24.27%	21.37%	24.96%	20.64%	21.84%	<0.001
Low automation probability	10.33%	13.62%	15.91%	19.87%	17.79%	20.95%	<0.001
Job demand score							
All workers	-	57.24±15.46	57.70±15.43	-	56.21±17.26	58.38±18.15	0.163
High automation probability	-	55.44±15.66	55.93±15.31	-	54.94±17.12	56.64±17.87	0.672
Median automation probability	-	58.03±14.75	58.71±14.92	-	56.39±17.20	58.39±18.01	0.637
Low automation probability	-	59.87±15.75	60.12±16.19	-	58.39±17.43	62.09±18.53	0.001
Job control score							
All workers	-	51.74±14.56	51.48±14.00	-	49.49±13.73	48.46±14.00	<0.001
High automation probability	-	47.46±13.66	47.28±13.17	-	45.99±12.72	44.94±12.75	<0.001
Median automation probability	-	51.51±13.89	51.77±13.16	-	48.67±13.46	47.69±13.64	<0.001
Low automation probability	-	61.64±12.77	61.41±12.43	-	58.62±12.30	57.98±13.22	<0.001
Job insecurity							
All workers	49.85%	56.05%	53.78%	47.37%	51.82%	47.86%	<0.001
High automation probability	53.04%	60.02%	57.21%	50.37%	57.05%	52.25%	<0.001
Median automation probability	55.27%	62.08%	58.55%	51.71%	54.20%	50.74%	<0.001
Low automation probability	30.96%	36.61%	35.80%	32.06%	35.52%	31.33%	0.399
Health conditions							
Poor self-rated health							
All workers	4.60%	3.99%	3.19%	3.21%	3.53%	4.14%	0.005
High automation probability	5.27%	4.13%	3.38%	3.64%	3.36%	4.20%	<0.001
Median automation probability	4.08%	3.80%	3.27%	2.83%	3.99%	4.70%	0.063
Low automation probability	3.97%	4.02%	2.57%	2.90%	2.82%	2.67%	<0.001
Burnout (score>50)							
All workers	-	15.36%	14.08%	-	11.71%	12.42%	<0.001
High automation probability	-	14.84%	13.89%	-	10.72%	11.65%	<0.001
Median automation probability	-	14.83%	13.48%	-	11.98%	12.18%	<0.001
Low automation probability	-	17.43%	15.71%	-	13.11%	14.69%	<0.001