

## **Appendix A Tables and Figures**

Table A1: Task usage and subcomponents

<b>(1) Manual tasks (= non-routine manual)</b>			
Job hazards (vibrations)	Q29a	Are you exposed at work to vibrations from hand tools, machinery, etc.	All of the time,
Posture-related issues (tiring positions)	Q30a	Does your main paid job involve tiring or painful positions	Almost all of the time,
Posture-related issues (heavy loads)	Q30c	Does your main paid job involve carrying or moving heavy loads	Around 3/4 of the time,
<b>(2) Routine tasks (= routine manual + routine cognitive)</b>			
Posture-related issues (repetitive movements)	Q30e	Does your main paid job involve repetitive hand or arm movements	Around 1/4 of the time,
Repetitive tasks (1 minute)	Q48a	Does your job involve short repetitive tasks of less than 1 minute	Almost never, or Never
Repetitive tasks (10 minutes)	Q48b	Does your job involve short repetitive tasks of less than 10 minutes	
Constraints on pace of work	Factors of pace (colleagues)	Q50a	Is your pace of work dependent on the work done by colleagues
	Factors of pace (customer demands)	Q50b	Is your pace of work dependent on direct demands from people such as customers, passengers, pupils, patients, etc.
Factors of pace (production targets)	Q50c	Is your pace of work dependent on numerical production targets or performance targets	Yes or No
	Factors of pace (machine speed)	Q50d	Is your pace of work dependent on automatic speed of a machine or movement of a product
Factors of pace (boss)	Q50e	Is your pace of work dependent on the direct control of your boss	
Cognitive dimensions (monotonous tasks)	Q53d	Generally, does your main paid job involve monotonous tasks	
<b>(3) Abstract tasks (= nonroutine cognitive)</b>			
Cognitive dimensions (self assess quality)	Q53b	Generally, does your main paid job involve assessing yourself the quality of your own work	
Cognitive dimensions (problem solving)	Q53c	Generally, does your main paid job involve solving unforeseen problems on your own	Yes or No
Cognitive dimensions (complex tasks)	Q53e	Generally, does your main paid job involve complex tasks	
Cognitive dimensions (learning)	Q53f	Generally, does your main paid job involve learning new things	
Autonomy (apply own ideas)	Q61i	You are able to apply your own ideas in your work	Always, Most of the time, Sometimes, Rarely, or Never
<b>(4) Social skills</b>			
Client work (dealing with people)	Q30f	Does your main paid job involve dealing directly with people who are not employees at your workplace such as customers, passengers, pupils, patients, etc.	All of the time, Almost all of the time, Around 3/4 of the time, Around half of the time, Around 1/4 of the time, Almost never, or Never
Working in a team	Teamwork	Q58	Do you work in a group or team that has common tasks and can plan its work?
	Team autonomy (task division)	Q60a	For the team in which you work mostly, do the members decide by themselves on the division of tasks?
	Team autonomy (head)	Q60b	For the team in which you work mostly, do the members decide by themselves who will be head of the team?
	Team autonomy (timetable)	Q60c	For the team in which you work mostly, do the members decide by themselves the timetable of the work?

The variables are modified to take values between 0 to 1 as follows: 1 for All of the time and Always, 0.9 for Almost of all of the time, 0.75 for Around 3/4 of the time, 0.5 for Around half of the time, 0.25 for Around 1/4 of the time, 0.1 for Almost never, 0 for Never, 1 for Yes, 0 for No, 0.8 for Most of the time, 0.5 for Sometimes, and 0.2 for Rarely. The constraints on pace of work variable is defined as the average of the five modified component items. The working in a team variable is defined as the average of the four modified component items. Finally, we define the task variables as averages of the survey items, where the values of each item have been modified to have values between 0 and 1 as defined above.

**Table A2:** Industry by Displacement Status

	All	Displaced	Non-displaced
D - Manufacturing	37.64	38.18	37.10
E - Electricity, gas, and water supply	0.18	0.15	0.20
F - Construction	5.57	5.37	5.78
G - Wholesale and retail trade; repair of motor vehicles and motorcycles	13.25	13.16	13.35
H - Hotels and restaurants	1.60	1.49	1.72
I - Transport, storage and communication	16.89	16.59	17.20
J - Financial intermediation	0.78	0.79	0.76
K - Real estate activities	18.65	19.00	18.30
L - Public administration and defence; compulsory social security	0.05	0.05	0.06
M - Education	1.83	1.90	1.75
N - Health and social work	2.11	1.96	2.25
O - Other service activities	1.44	1.35	1.53
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

See Table 1 for table notes.

**Table A3:** Job Loss, Task Usage, and Employment

Displacement dummy $\times$ time dummy interactions					
Time	Displaced	Routine task usage	Social task usage	Abstract task usage	Manual task usage
-5	-0.039** (0.019)	-0.012* (0.006)	-0.000 (0.005)	-0.004 (0.007)	0.001 (0.008)
-4	-0.002 (0.019)	-0.007 (0.006)	0.004 (0.005)	-0.009 (0.007)	-0.003 (0.008)
-3	0.003 (0.020)	0.000 (0.006)	-0.000 (0.005)	-0.001 (0.007)	-0.000 (0.008)
-2	0.002 (0.020)	0.000 (0.006)	-0.000 (0.005)	-0.000 (0.007)	-0.000 (0.008)
0	-0.002 (0.020)	-0.000 (0.006)	0.000 (0.005)	0.000 (0.007)	0.000 (0.008)
1	-0.095*** (0.020)	-0.039*** (0.006)	0.083*** (0.005)	0.008 (0.007)	0.003 (0.008)
2	-0.077*** (0.020)	-0.037*** (0.006)	0.054*** (0.005)	-0.001 (0.007)	0.013 (0.008)
3	-0.072*** (0.020)	-0.023*** (0.006)	0.051*** (0.005)	-0.003 (0.007)	0.010 (0.008)
4	-0.033* (0.020)	-0.020*** (0.006)	0.045*** (0.005)	0.002 (0.007)	0.004 (0.008)
5	-0.069*** (0.020)	-0.008 (0.006)	0.031*** (0.005)	0.004 (0.007)	-0.011 (0.008)
6	-0.067*** (0.020)	-0.007 (0.006)	0.030*** (0.005)	0.009 (0.007)	-0.007 (0.008)
7	-0.050** (0.020)	-0.011* (0.006)	0.020*** (0.005)	0.010 (0.007)	-0.009 (0.008)
8	-0.069*** (0.020)	-0.006 (0.006)	0.017*** (0.005)	0.008 (0.007)	-0.004 (0.008)
9	-0.086*** (0.020)	-0.001 (0.006)	0.019*** (0.005)	0.005 (0.007)	-0.001 (0.008)
10	-0.110*** (0.020)	-0.005 (0.006)	0.015*** (0.005)	0.003 (0.007)	-0.004 (0.008)
Observations				336,363	
Number of worker-base-year combinations				21,126	

Results from equation 1 for displacement dummy  $\times$  time dummy interactions and base year task usage interactions with the displacement dummy  $\times$  time dummy interactions. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Sample consists of workers who were 20-50 years old in base year (2004-06). The controls include time dummy  $\times$  base-year dummy interactions (not reported), other base year plant and worker characteristics interactions with displacement dummy  $\times$  time dummies (results shown in Tables A4 and A5), year dummies and age, and age squared (not reported).

**Table A4:** Job Loss, Worker and Plant Base Year Characteristics, and Employment

Time	Interactions with displacement dummy × time dummy interactions									
	Tenure (centered)	Experience (centered)	Female	Secondary education	Tertiary education	Plant size -20 workers	Plant size 21-50 workers	Plant size 51-100 workers	Plant size 101-200 workers	Capital region
-5	0.030*** (0.001)	0.004*** (0.000)	-0.033*** (0.007)	0.031*** (0.009)	0.051*** (0.012)	-0.023** (0.011)	-0.010 (0.010)	-0.013 (0.011)	-0.000 (0.011)	0.041*** (0.007)
-4	0.023*** (0.001)	0.002*** (0.000)	-0.018** (0.007)	0.005 (0.009)	0.018 (0.012)	-0.018 (0.011)	-0.018* (0.010)	-0.017 (0.011)	-0.008 (0.011)	0.031*** (0.007)
-3	-0.000 (0.001)	-0.001** (0.000)	-0.001 (0.007)	-0.003 (0.009)	-0.008 (0.012)	0.000 (0.011)	0.000 (0.010)	-0.000 (0.011)	-0.000 (0.011)	0.000 (0.007)
-2	-0.000 (0.001)	-0.000 (0.000)	-0.000 (0.007)	-0.002 (0.009)	-0.004 (0.012)	0.000 (0.011)	0.000 (0.010)	-0.000 (0.011)	-0.000 (0.011)	0.000 (0.007)
0	0.000 (0.001)	0.000 (0.000)	0.000 (0.007)	0.002 (0.009)	0.004 (0.012)	-0.000 (0.011)	-0.000 (0.010)	0.000 (0.011)	0.000 (0.011)	-0.000 (0.007)
1	-0.002* (0.001)	0.001* (0.000)	-0.113*** (0.007)	0.037*** (0.009)	0.050*** (0.012)	0.022** (0.011)	0.072*** (0.010)	0.040*** (0.011)	0.077*** (0.011)	0.054*** (0.007)
2	0.001 (0.001)	0.000 (0.000)	-0.086*** (0.007)	0.030*** (0.009)	0.063*** (0.012)	0.025** (0.011)	0.036*** (0.010)	0.025** (0.011)	0.035*** (0.011)	0.035*** (0.007)
3	0.003** (0.001)	0.001* (0.000)	-0.065*** (0.007)	0.026*** (0.009)	0.057*** (0.012)	0.001 (0.011)	0.016 (0.010)	0.022** (0.011)	0.007 (0.011)	0.028*** (0.007)
4	0.003** (0.001)	0.001** (0.000)	-0.036*** (0.007)	0.023** (0.009)	0.050*** (0.012)	-0.010 (0.011)	0.005 (0.010)	-0.005 (0.011)	-0.012 (0.011)	0.012 (0.007)
5	0.002* (0.001)	0.001** (0.000)	-0.022*** (0.007)	0.038*** (0.010)	0.069*** (0.012)	0.005 (0.011)	0.013 (0.010)	0.005 (0.011)	0.003 (0.011)	0.019*** (0.007)
6	0.003** (0.001)	0.000 (0.000)	-0.010 (0.007)	0.042*** (0.010)	0.074*** (0.012)	0.024** (0.011)	0.019* (0.010)	0.026** (0.011)	0.016 (0.011)	0.018** (0.007)
7	0.002* (0.001)	0.000 (0.000)	-0.007 (0.007)	0.044*** (0.010)	0.074*** (0.012)	0.021* (0.011)	0.028*** (0.010)	0.007 (0.011)	0.011 (0.011)	0.006 (0.007)
8	0.006*** (0.001)	0.000 (0.000)	0.007 (0.007)	0.036*** (0.010)	0.069*** (0.012)	0.020* (0.011)	0.015 (0.010)	0.023** (0.011)	0.006 (0.011)	0.009 (0.007)
9	0.008*** (0.001)	-0.001** (0.000)	0.004 (0.007)	0.040*** (0.010)	0.080*** (0.012)	0.035*** (0.011)	0.033*** (0.010)	0.019* (0.011)	0.022** (0.011)	0.001 (0.007)
10	0.005*** (0.001)	-0.001*** (0.000)	0.009 (0.007)	0.055*** (0.010)	0.105*** (0.012)	0.044*** (0.011)	0.047*** (0.010)	0.045*** (0.011)	0.033*** (0.011)	-0.005 (0.007)
Observations						336,363				
Number of worker-base-year combinations						21,126				

Results from equation 1 for base year worker and plant characteristics interactions with the displacement dummy × time dummy interactions. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Sample consists of workers who were 20-50 years old in base year (2004-06). The controls include time dummy × base-year dummy interactions (not reported), other base year plant and worker characteristics interactions with displacement dummy × time dummies (results shown in Tables A3 and A5), year dummies and age, and age squared (not reported).

**Table A5:** Job Loss, Occupation, and Employment

Interactions with displacement dummy $\times$ time dummy interactions							
Time	Managers	Professionals	Technicians and associate prof.	Clerical support workers	Service and sales workers	Craft and related trade workers	Plant and machine operators
-5	0.065** (0.030)	0.062** (0.026)	0.043* (0.024)	0.026 (0.022)	0.023 (0.022)	0.022 (0.021)	0.037*** (0.014)
-4	0.040 (0.030)	0.040 (0.026)	0.024 (0.024)	0.020 (0.022)	-0.011 (0.022)	0.008 (0.021)	0.003 (0.014)
-3	0.001 (0.030)	-0.000 (0.026)	0.001 (0.024)	0.002 (0.022)	0.002 (0.022)	0.001 (0.021)	0.000 (0.014)
-2	0.000 (0.030)	-0.000 (0.026)	0.000 (0.024)	0.001 (0.022)	0.001 (0.022)	0.000 (0.021)	0.000 (0.014)
0	-0.000 (0.030)	0.000 (0.026)	-0.000 (0.024)	-0.001 (0.022)	-0.001 (0.022)	-0.000 (0.021)	-0.000 (0.014)
1	-0.074** (0.030)	-0.003 (0.026)	-0.079*** (0.024)	-0.018 (0.022)	-0.185*** (0.022)	-0.114*** (0.021)	-0.145*** (0.014)
2	-0.035 (0.030)	0.028 (0.026)	-0.027 (0.024)	0.007 (0.022)	-0.100*** (0.022)	-0.052** (0.021)	-0.070*** (0.014)
3	-0.005 (0.030)	0.047* (0.026)	0.010 (0.024)	0.042* (0.022)	-0.050** (0.022)	-0.048** (0.021)	-0.055*** (0.014)
4	-0.016 (0.031)	0.033 (0.027)	-0.014 (0.024)	0.012 (0.022)	-0.082*** (0.022)	-0.075*** (0.021)	-0.051*** (0.014)
5	-0.016 (0.031)	0.032 (0.027)	-0.004 (0.024)	0.017 (0.022)	-0.052** (0.022)	-0.041** (0.021)	-0.033** (0.014)
6	-0.028 (0.031)	0.001 (0.027)	-0.025 (0.024)	-0.018 (0.022)	-0.081*** (0.022)	-0.044** (0.021)	-0.041*** (0.014)
7	-0.044 (0.031)	-0.014 (0.027)	-0.039 (0.024)	-0.025 (0.022)	-0.056** (0.022)	-0.050** (0.021)	-0.052*** (0.014)
8	0.007 (0.031)	0.023 (0.027)	0.000 (0.024)	0.001 (0.022)	-0.025 (0.022)	-0.043** (0.021)	-0.038*** (0.014)
9	0.009 (0.031)	0.042 (0.027)	0.012 (0.024)	0.005 (0.022)	-0.030 (0.022)	-0.045** (0.021)	-0.050*** (0.014)
10	0.009 (0.031)	0.023 (0.027)	-0.000 (0.024)	-0.008 (0.022)	-0.045** (0.022)	-0.028 (0.021)	-0.057*** (0.014)
Observations							336,363
Number of worker-base-year combinations							21,126

Results from equation 1 for base year occupation interactions with the displacement dummy  $\times$  time dummy interactions. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Sample consists of workers who were 20-50 years old in base year (2004-06). The controls include time dummy  $\times$  base-year dummy interactions (not reported), other base year plant and worker characteristics interactions with displacement dummy  $\times$  time dummies (results shown in Tables A4 and A3), year dummies and age, and age squared (not reported).

**Table A6:** Job Loss, Task Usage, and Relative Earnings

Displacement dummy $\times$ time dummy interactions					
Time	Displaced	Routine task usage	Social task usage	Abstract task usage	Manual task usage
-5	-0.033*** (0.012)	-0.002 (0.004)	-0.002 (0.003)	-0.002 (0.004)	-0.006 (0.005)
-4	-0.021* (0.012)	-0.001 (0.004)	-0.000 (0.003)	-0.001 (0.004)	-0.006 (0.005)
-3	-0.015 (0.012)	-0.000 (0.004)	0.002 (0.003)	-0.001 (0.004)	-0.001 (0.005)
-2	-0.014 (0.012)	-0.001 (0.004)	-0.000 (0.003)	-0.001 (0.004)	0.001 (0.005)
0	-0.000 (0.012)	-0.002 (0.004)	0.001 (0.003)	0.004 (0.004)	0.000 (0.005)
1	-0.013 (0.012)	-0.006* (0.004)	0.015*** (0.003)	0.003 (0.004)	0.002 (0.005)
2	-0.041*** (0.012)	-0.017*** (0.004)	0.033*** (0.003)	-0.002 (0.004)	0.003 (0.005)
3	-0.027** (0.012)	-0.016*** (0.004)	0.028*** (0.003)	-0.004 (0.004)	-0.004 (0.005)
4	-0.017 (0.012)	-0.013*** (0.004)	0.031*** (0.003)	-0.001 (0.004)	0.003 (0.005)
5	-0.026** (0.012)	-0.014*** (0.004)	0.030*** (0.003)	0.001 (0.004)	0.001 (0.005)
6	-0.033*** (0.012)	-0.012*** (0.004)	0.029*** (0.003)	-0.002 (0.004)	-0.003 (0.005)
7	-0.035*** (0.012)	-0.014*** (0.004)	0.026*** (0.003)	-0.001 (0.004)	0.001 (0.005)
8	-0.049*** (0.012)	-0.013*** (0.004)	0.025*** (0.003)	-0.001 (0.004)	0.003 (0.005)
9	-0.060*** (0.012)	-0.009** (0.004)	0.019*** (0.003)	-0.000 (0.004)	-0.003 (0.005)
10	-0.061*** (0.012)	-0.007* (0.004)	0.021*** (0.003)	0.001 (0.004)	-0.004 (0.005)
Observations				336,363	
Number of worker-base-year combinations				21,126	

Results from equation 1 for displacement dummy  $\times$  time dummy interactions and base year task usage interactions with the displacement dummy  $\times$  time dummy interactions. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Sample consists of workers who were 20-50 years old in base year (2004-06). Earnings for those not employed in given year  $t$  are coded to be missing. The controls include time dummy  $\times$  base-year dummy interactions (not reported), other base year plant and worker characteristics interactions with displacement dummy  $\times$  time dummies (results shown in Tables A7 and A8), year dummies and age, and age squared (not reported).

**Table A7:** Job Loss, Worker and Plant Base Year Characteristics, and Relative Earnings

Time	Interactions with displacement dummy $\times$ time dummy interactions									
	Tenure (centered)	Experience (centered)	Female	Secondary education	Tertiary education	Plant size -20 workers	Plant size 21-50 workers	Plant size 51-100 workers	Plant size 101-200 workers	Capital region
-5	0.013*** (0.001)	0.001*** (0.000)	-0.008* (0.004)	0.013** (0.006)	0.027*** (0.007)	0.001 (0.007)	0.001 (0.006)	0.002 (0.007)	0.012** (0.006)	0.019*** (0.004)
-4	0.011*** (0.001)	0.001*** (0.000)	-0.009** (0.004)	0.011* (0.006)	0.019*** (0.007)	0.007 (0.007)	0.002 (0.006)	0.003 (0.007)	0.014** (0.006)	0.019*** (0.004)
-3	0.005*** (0.001)	0.000 (0.000)	-0.003 (0.004)	0.005 (0.006)	0.010 (0.007)	0.004 (0.007)	0.004 (0.006)	0.004 (0.007)	0.012* (0.006)	0.008* (0.004)
-2	0.001 (0.001)	-0.000 (0.000)	0.003 (0.004)	0.001 (0.006)	0.003 (0.007)	0.002 (0.007)	0.002 (0.006)	0.002 (0.007)	0.007 (0.006)	0.002 (0.004)
0	0.000 (0.001)	0.000 (0.000)	0.002 (0.004)	0.000 (0.006)	0.002 (0.007)	0.003 (0.007)	0.002 (0.006)	0.008 (0.007)	0.004 (0.006)	0.001 (0.004)
1	0.001 (0.001)	0.000 (0.000)	-0.012*** (0.004)	0.009 (0.006)	0.015** (0.007)	-0.005 (0.007)	-0.007 (0.006)	0.003 (0.007)	0.002 (0.006)	0.007* (0.004)
2	-0.001 (0.001)	-0.000 (0.000)	-0.035*** (0.004)	0.015*** (0.006)	0.026*** (0.007)	0.020*** (0.007)	0.026*** (0.006)	0.022*** (0.007)	0.020*** (0.006)	0.018*** (0.004)
3	-0.000 (0.001)	-0.000 (0.000)	-0.026*** (0.004)	0.015*** (0.006)	0.028*** (0.007)	0.014** (0.007)	0.013** (0.006)	0.011* (0.007)	0.007 (0.006)	0.012*** (0.004)
4	-0.001 (0.001)	0.000 (0.000)	-0.013*** (0.004)	0.014** (0.006)	0.024*** (0.007)	0.015** (0.007)	0.007 (0.006)	0.006 (0.007)	-0.002 (0.006)	0.008* (0.004)
5	-0.000 (0.001)	0.000 (0.000)	-0.002 (0.004)	0.018*** (0.006)	0.027*** (0.007)	0.022*** (0.007)	0.016*** (0.006)	0.014** (0.007)	0.006 (0.006)	0.001 (0.004)
6	-0.001 (0.001)	-0.000 (0.000)	0.006 (0.004)	0.023*** (0.006)	0.030*** (0.007)	0.019*** (0.007)	0.010* (0.006)	0.013** (0.007)	0.005 (0.006)	0.002 (0.004)
7	-0.000 (0.001)	-0.000 (0.000)	0.014*** (0.004)	0.027*** (0.006)	0.036*** (0.007)	0.023*** (0.007)	0.013** (0.006)	0.014** (0.007)	0.001 (0.006)	-0.001 (0.004)
8	-0.000 (0.001)	-0.000 (0.000)	0.016*** (0.004)	0.028*** (0.006)	0.039*** (0.007)	0.025*** (0.007)	0.014** (0.006)	0.016** (0.007)	0.005 (0.006)	0.003 (0.004)
9	0.001 (0.001)	-0.000* (0.000)	0.016*** (0.004)	0.029*** (0.006)	0.045*** (0.007)	0.032*** (0.007)	0.023*** (0.006)	0.022*** (0.007)	0.011* (0.006)	-0.000 (0.004)
10	0.001* (0.001)	-0.001** (0.000)	0.017*** (0.004)	0.028*** (0.006)	0.053*** (0.007)	0.033*** (0.007)	0.027*** (0.006)	0.028*** (0.007)	0.017*** (0.006)	-0.003 (0.004)
Observations							336,363			
Number of worker-base-year combinations							21,126			

Results from equation 1 for base year worker and plant characteristics time dummy displacement interactions. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\* p $\leq$ 0.01, \*\* p $\leq$ 0.05, \* p $\leq$ 0.1. Sample consists of workers who were 20-50 years old in base year (2004-06). Earnings for those not employed in a given year  $t$  are coded to be missing. The controls include time dummy  $\times$  base-year dummy interactions (not reported), other base year plant and worker characteristics interactions with displacement dummy  $\times$  time dummies (results shown in Tables A6 and A8), year dummies and age, and age squared (not reported).



**Table A8:** Job Loss, Occupation, and Relative Earnings

Interactions with displacement dummy $\times$ time dummy interactions							
Time	Managers	Professionals	Technicians and associate prof.	Clerical support workers	Service and sales workers	Craft and related trade workers	Plant and machine operators
-5	0.006 (0.018)	0.011 (0.016)	0.017 (0.014)	0.018 (0.013)	0.023* (0.013)	0.036*** (0.012)	0.026*** (0.008)
-4	-0.009 (0.018)	0.006 (0.016)	0.005 (0.014)	0.008 (0.013)	0.011 (0.013)	0.019 (0.012)	0.011 (0.008)
-3	-0.007 (0.018)	0.010 (0.016)	0.002 (0.014)	0.013 (0.013)	0.001 (0.013)	0.014 (0.012)	0.009 (0.008)
-2	0.005 (0.018)	0.008 (0.016)	0.006 (0.014)	0.013 (0.013)	0.011 (0.013)	0.013 (0.012)	0.014* (0.008)
0	-0.009 (0.018)	-0.002 (0.016)	-0.005 (0.014)	-0.007 (0.013)	-0.006 (0.013)	-0.004 (0.012)	0.001 (0.008)
1	-0.002 (0.018)	0.014 (0.016)	0.002 (0.014)	0.004 (0.013)	-0.020 (0.013)	-0.027** (0.012)	-0.003 (0.008)
2	-0.036** (0.018)	0.010 (0.016)	-0.017 (0.014)	-0.001 (0.013)	-0.066*** (0.013)	-0.049*** (0.012)	-0.059*** (0.008)
3	-0.040** (0.018)	0.011 (0.016)	-0.014 (0.014)	0.001 (0.013)	-0.053*** (0.013)	-0.050*** (0.012)	-0.061*** (0.008)
4	-0.049*** (0.018)	0.017 (0.016)	-0.012 (0.014)	-0.003 (0.013)	-0.069*** (0.013)	-0.056*** (0.012)	-0.061*** (0.008)
5	-0.047*** (0.018)	0.016 (0.016)	-0.014 (0.014)	-0.006 (0.013)	-0.060*** (0.013)	-0.061*** (0.012)	-0.048*** (0.008)
6	-0.045** (0.018)	0.027* (0.016)	-0.011 (0.014)	-0.007 (0.013)	-0.048*** (0.013)	-0.047*** (0.012)	-0.041*** (0.008)
7	-0.058*** (0.018)	0.016 (0.016)	-0.010 (0.014)	-0.014 (0.013)	-0.054*** (0.013)	-0.050*** (0.012)	-0.050*** (0.008)
8	-0.048*** (0.018)	0.032** (0.016)	-0.000 (0.014)	-0.003 (0.013)	-0.036*** (0.013)	-0.046*** (0.012)	-0.042*** (0.008)
9	-0.047** (0.018)	0.030* (0.016)	0.004 (0.014)	0.009 (0.013)	-0.021 (0.013)	-0.037*** (0.012)	-0.044*** (0.008)
10	-0.050*** (0.018)	0.021 (0.016)	-0.000 (0.014)	-0.002 (0.013)	-0.031** (0.013)	-0.038*** (0.012)	-0.050*** (0.008)
Observations							336,363
Number of worker-base-year combinations							21,126

Results from equation 1 for base year occupation interactions with the displacement dummy  $\times$  time dummy interactions. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Sample consists of workers who were 20-50 years old in base year (2004-06). Earnings for those not employed in a given year  $t$  are coded to be missing. The controls include time dummy  $\times$  base-year dummy interactions (not reported), other base year plant and worker characteristics interactions with displacement dummy  $\times$  time dummies (results shown in Tables A7 and A6), year dummies and age, and age squared (not reported).

**Table A9:** Job Loss, Task Usage, and Employment for High- and Low-Tenure Workers

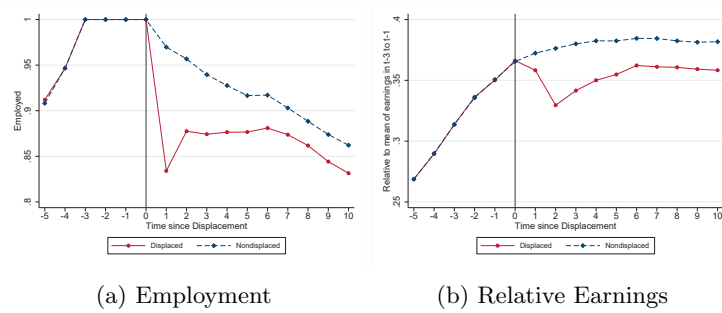
Time	High-tenure workers (tenure $\geq 5$ years)					Low-tenure workers (tenure $< 5$ years)				
	Displaced	Displacement dummy $\times$ time dummy interactions				Displaced	Displacement dummy $\times$ time dummy interactions			
		Routine task usage	Social task usage	Abstract task usage	Manual task usage		Routine task usage	Social task usage	Abstract task usage	Manual task usage
-5	0.006 (0.024)	0.000 (0.008)	-0.000 (0.006)	-0.001 (0.009)	-0.000 (0.010)	-0.372*** (0.049)	-0.030*** (0.010)	0.019** (0.009)	-0.008 (0.010)	0.003 (0.014)
-4	0.005 (0.024)	0.000 (0.008)	-0.000 (0.006)	-0.001 (0.009)	-0.000 (0.010)	0.694*** (0.049)	-0.017* (0.010)	0.014 (0.009)	-0.032*** (0.010)	-0.023* (0.014)
-3	0.003 (0.024)	0.000 (0.008)	-0.000 (0.006)	-0.000 (0.009)	-0.000 (0.010)	0.003 (0.049)	0.000 (0.010)	-0.001 (0.009)	-0.001 (0.010)	0.000 (0.014)
-2	0.002 (0.024)	0.000 (0.008)	-0.000 (0.006)	-0.000 (0.009)	-0.000 (0.010)	0.002 (0.049)	0.000 (0.010)	-0.000 (0.009)	-0.000 (0.010)	0.000 (0.014)
0	-0.002 (0.024)	-0.000 (0.008)	0.000 (0.006)	0.000 (0.009)	0.000 (0.010)	-0.002 (0.049)	-0.000 (0.010)	0.000 (0.009)	0.000 (0.010)	-0.000 (0.014)
1	-0.060** (0.024)	-0.045*** (0.008)	0.108*** (0.006)	0.020** (0.009)	0.001 (0.010)	-0.137*** (0.049)	-0.027*** (0.010)	0.044*** (0.009)	-0.001 (0.010)	-0.006 (0.014)
2	-0.048** (0.024)	-0.035*** (0.008)	0.069*** (0.006)	0.008 (0.009)	0.014 (0.010)	-0.132*** (0.049)	-0.036*** (0.010)	0.035*** (0.009)	-0.008 (0.010)	0.003 (0.014)
3	-0.039 (0.024)	-0.019** (0.008)	0.067*** (0.006)	0.008 (0.009)	0.011 (0.010)	-0.122** (0.049)	-0.025** (0.010)	0.033*** (0.009)	-0.013 (0.010)	0.001 (0.014)
4	-0.017 (0.024)	-0.018** (0.008)	0.054*** (0.006)	0.005 (0.009)	-0.001 (0.010)	-0.073 (0.049)	-0.023** (0.010)	0.035*** (0.009)	0.002 (0.010)	0.007 (0.014)
5	-0.009 (0.024)	-0.005 (0.008)	0.039*** (0.006)	0.022** (0.009)	-0.024** (0.010)	-0.135*** (0.049)	-0.010 (0.010)	0.025*** (0.009)	-0.011 (0.010)	-0.001 (0.014)
6	-0.031 (0.024)	-0.005 (0.008)	0.036*** (0.006)	0.014 (0.009)	-0.012 (0.010)	-0.099** (0.049)	-0.007 (0.010)	0.026*** (0.009)	0.001 (0.010)	-0.006 (0.014)
7	-0.016 (0.024)	0.003 (0.008)	0.024*** (0.006)	0.023** (0.009)	-0.015 (0.010)	-0.079 (0.049)	-0.026*** (0.010)	0.018** (0.009)	-0.004 (0.010)	-0.005 (0.014)
8	-0.036 (0.024)	0.016** (0.008)	0.016** (0.006)	0.022** (0.009)	-0.018* (0.010)	-0.100** (0.049)	-0.032*** (0.010)	0.028*** (0.009)	-0.007 (0.010)	0.013 (0.014)
9	-0.074*** (0.024)	0.015* (0.008)	0.015** (0.006)	0.012 (0.009)	-0.007 (0.010)	-0.044 (0.049)	-0.016 (0.010)	0.031*** (0.009)	-0.004 (0.010)	0.005 (0.014)
10	-0.117*** (0.024)	0.008 (0.008)	0.014** (0.006)	0.001 (0.009)	-0.004 (0.010)	-0.038 (0.049)	-0.020** (0.010)	0.023** (0.009)	0.000 (0.010)	-0.004 (0.014)
	Observations				208,502	Observations				127,861
	Number of worker-base-year combinations				13,092	Number of worker-base-year combinations				8,034

Results from equation 1 for displacement dummy  $\times$  time dummy interactions and base year task usage interactions with the displacement dummy  $\times$  time dummy interactions. High-tenure workers have a tenure of five or more years, low-tenure workers less than five years. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Sample consists of workers who were 20-50 years old in base year (2004-06). The controls include time dummy  $\times$  base-year dummy interactions, other base year plant and worker characteristics interactions with displacement dummy  $\times$  time dummy interactions, year dummies and age, and age squared (not reported).

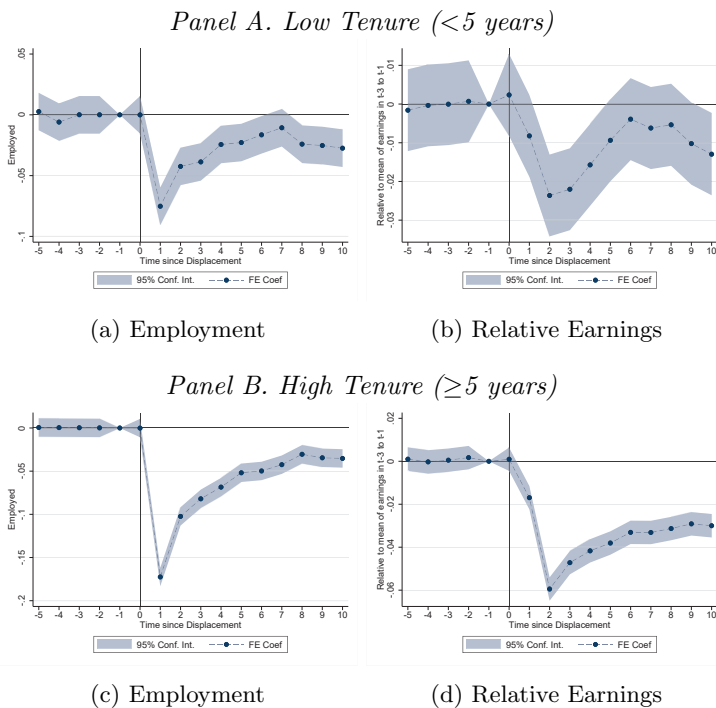
**Table A10:** Job Loss, Task Usage, and Relative Earnings for High- and Low-Tenure Workers

High-tenure workers (tenure $\geq$ 5 years)						Low-tenure workers (tenure $<$ 5 years)					
Time	Displaced	Displacement dummy $\times$ time dummy interactions				Displaced	Displacement dummy $\times$ time dummy interactions				
		Routine task usage	Social task usage	Abstract task usage	Manual task usage		Routine task usage	Social task usage	Abstract task usage	Manual task usage	
-5	-0.027** (0.012)	-0.001 (0.004)	-0.003 (0.003)	-0.000 (0.005)	-0.003 (0.005)	-0.076** (0.034)	-0.003 (0.007)	0.005 (0.006)	-0.004 (0.007)	-0.013 (0.010)	
-4	-0.018 (0.012)	0.002 (0.004)	-0.000 (0.003)	0.001 (0.005)	-0.002 (0.005)	0.071** (0.034)	-0.003 (0.007)	0.004 (0.006)	-0.006 (0.007)	-0.014 (0.010)	
-3	-0.010 (0.012)	0.000 (0.004)	0.001 (0.003)	-0.001 (0.005)	0.001 (0.005)	0.087*** (0.034)	-0.001 (0.007)	0.003 (0.006)	-0.003 (0.007)	-0.007 (0.010)	
-2	-0.015 (0.012)	-0.001 (0.004)	-0.001 (0.003)	-0.001 (0.005)	0.002 (0.005)	0.003 (0.034)	-0.000 (0.007)	0.001 (0.006)	-0.001 (0.007)	-0.000 (0.010)	
0	-0.001 (0.012)	-0.004 (0.004)	-0.000 (0.003)	0.004 (0.005)	-0.000 (0.005)	-0.021 (0.034)	0.001 (0.007)	0.002 (0.006)	0.004 (0.007)	0.001 (0.010)	
1	-0.010 (0.012)	-0.008* (0.004)	0.018*** (0.003)	0.007 (0.005)	0.002 (0.005)	-0.031 (0.034)	-0.005 (0.007)	0.010 (0.006)	0.003 (0.007)	0.002 (0.010)	
2	-0.029** (0.012)	-0.017*** (0.004)	0.039*** (0.003)	0.006 (0.005)	0.003 (0.005)	-0.075** (0.034)	-0.015** (0.007)	0.025*** (0.006)	-0.006 (0.007)	-0.001 (0.010)	
3	-0.019 (0.012)	-0.017*** (0.004)	0.034*** (0.003)	0.003 (0.005)	0.010* (0.005)	-0.066* (0.034)	-0.014** (0.007)	0.021*** (0.006)	-0.009 (0.007)	-0.008 (0.010)	
4	-0.008 (0.012)	-0.014*** (0.004)	0.034*** (0.003)	0.008 (0.005)	0.008 (0.005)	-0.085** (0.034)	-0.011 (0.007)	0.028*** (0.006)	-0.004 (0.007)	-0.009 (0.010)	
5	-0.015 (0.012)	-0.018*** (0.004)	0.031*** (0.003)	0.008* (0.005)	0.004 (0.005)	-0.106*** (0.034)	-0.011 (0.007)	0.030*** (0.006)	-0.001 (0.007)	-0.006 (0.010)	
6	-0.011 (0.012)	-0.017*** (0.004)	0.028*** (0.003)	0.008* (0.005)	-0.003 (0.005)	-0.143*** (0.034)	-0.008 (0.007)	0.031*** (0.006)	-0.005 (0.007)	-0.005 (0.010)	
7	-0.023* (0.012)	-0.015*** (0.004)	0.023*** (0.003)	0.007 (0.005)	-0.001 (0.005)	-0.145*** (0.034)	-0.013* (0.007)	0.032*** (0.006)	-0.003 (0.007)	0.004 (0.010)	
8	-0.038*** (0.012)	-0.012*** (0.004)	0.016*** (0.003)	0.008 (0.005)	0.001 (0.005)	-0.155*** (0.034)	-0.015** (0.007)	0.038*** (0.006)	-0.003 (0.007)	0.004 (0.010)	
9	-0.049*** (0.012)	-0.007* (0.004)	0.015*** (0.003)	0.007 (0.005)	0.001 (0.005)	-0.125*** (0.034)	-0.012* (0.007)	0.027*** (0.006)	-0.003 (0.007)	-0.011 (0.010)	
10	-0.050*** (0.012)	-0.007* (0.004)	0.012*** (0.003)	0.007 (0.005)	0.000 (0.005)	-0.134*** (0.034)	-0.007 (0.007)	0.034*** (0.006)	-0.002 (0.007)	-0.012 (0.010)	
Observations					208,502	Observations					127,861
Number of worker-base-year combinations					13,092	Number of worker-base-year combinations					8,034

Results from equation 1 for displacement dummy  $\times$  time dummy interactions and base year task usage interactions with the displacement dummy  $\times$  time dummy interactions. High-tenure workers have a tenure of five or more years, low-tenure workers less than five years. Earnings for those not employed in a given year  $t$  are coded to be missing. Standard errors in parentheses and clustered at the worker-base-year level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Sample consists of workers who were 20-50 years old in base year (2004-06). The controls include time dummy  $\times$  base-year dummy interactions, other base year plant and worker characteristics interactions with displacement dummy  $\times$  time dummy interactions, year dummies and age, and age squared (not reported).

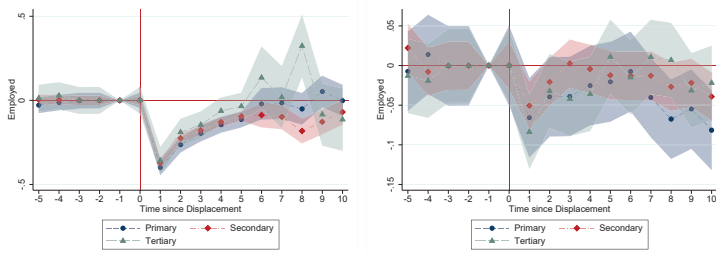


**Fig. A1:** Labour Market Outcomes by Displacement Status. Solid lines describe the outcomes for displaced workers. Dashed lines are the outcomes of non-displaced workers.



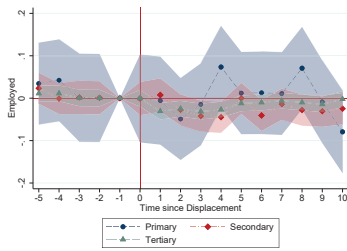
**Fig. A2:** Job Loss and Labor Market Outcomes by Tenure

## Panel A. Employment

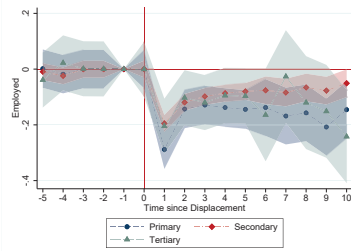


(a) Routine-intensive workers

(b) Social-intensive workers

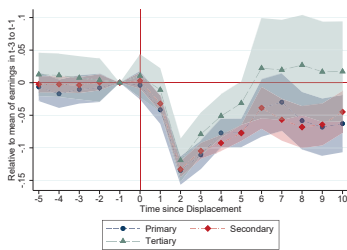


(c) Abstract-intensive workers

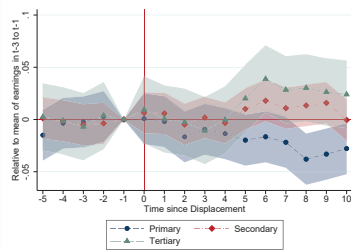


(d) Manual-intensive workers

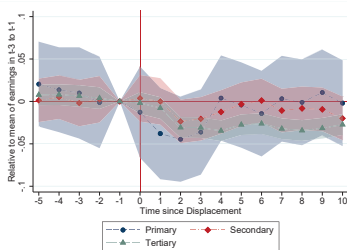
## Panel B. Relative Earnings



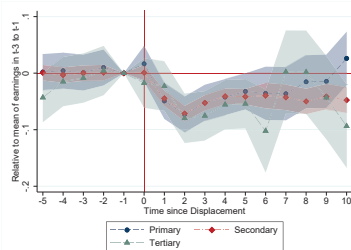
(e) Routine-intensive workers



(f) Social-intensive workers

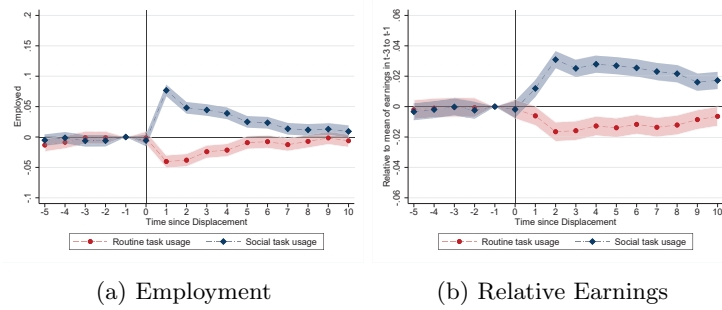


(g) Abstract-intensive workers



(h) Manual-intensive workers

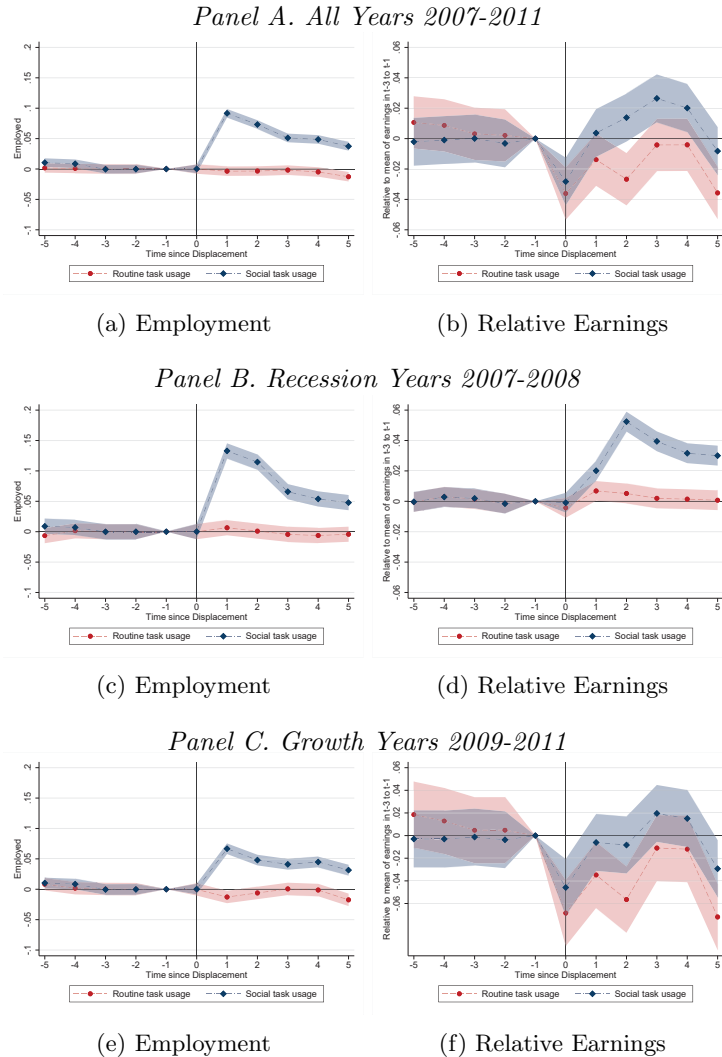
**Fig. A3:** Job Loss and Labor Market Outcomes by Task Usage Category and Education



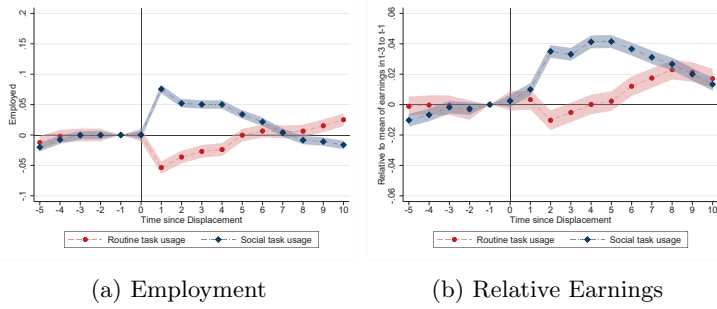
(a) Employment

(b) Relative Earnings

**Fig. A4:** Job Loss, Task Usage, and Labor Market Outcomes for Displaced Workers with Plant Fixed Effects



**Fig. A5:** Job Loss, Task Usage, and Labor Market Outcomes for Base Years 2007-2011



**Fig. A6:** Job Loss, Task Usage, and Labor Market Outcomes for Mass Layoff Sample