

Table 3: Estimating Routine-Biased Technological Change (Dependent variable: *Hours worked*)

Model 1: <i>Pooled OLS Regression Model</i>				
	(1)	(2)	(3)	(4)
Wage rate	0.011*** (0.0002)	—	—	0.011*** (0.0002)
RTI	—	−1.152***	—	−0.423*** (0.076)
Offshorability	—	—	0.439*** (0.079)	0.491*** (0.075)
Constant	29.128*** (0.143)	35.611*** (0.064)	35.797*** (0.067)	29.501*** (0.153)
Observations	5,934	5,934	5,934	5,934
R <sup>2</sup>	0.293	0.038	0.005	0.299
Adjusted R <sup>2</sup>	0.293	0.037	0.005	0.299
F Statistic	2,461.246*** (df = 1; 5932)	231.953*** (df = 1; 5932)	30.895*** (df = 1; 5932)	844.144*** (df = 3; 5930)
Model 2: <i>Least-Squares Dummy Variable Model</i>				
	(5)	(6)	(7)	(8)
Wage rate	0.015*** (0.0002)	—	—	0.015*** (0.0002)
RTI	—	−1.150*** (0.075)	—	0.133* (0.069)
Offshorability	—	—	0.445*** (0.078)	0.190*** (0.066)
Constant	28.879*** (0.291)	36.661*** (0.350)	36.851*** (0.357)	28.856*** (0.296)
Observations	5,934	5,934	5,934	5,934
R <sup>2</sup>	0.457	0.067	0.035	0.459
Adjusted R <sup>2</sup>	0.454	0.062	0.030	0.456
Residual Std. Error	3.692 (df = 5902)	4.841 (df = 5902)	4.924 (df = 5902)	3.686 (df = 5900)
F Statistic	160.404*** (df = 31; 5902)	13.639*** (df = 31; 5902)	6.824*** (df = 31; 5902)	151.868*** (df = 33; 5900)
Model 3: <i>Two-Ways "Within" Model</i>				
	(9)	(10)	(11)	(12)
Wage rate	−0.0001 (0.0002)	—	—	−0.0001 (0.0002)
RTI	—	0.361*** (0.127)	—	−0.022 (0.153)
Offshorability	—	—	0.615*** (0.116)	0.627*** (0.139)
Constant	—	—	—	—
Observations	5,934	5,934	5,934	5,934
R <sup>2</sup>	0.00003	0.001	0.005	0.005
Adjusted R <sup>2</sup>	−0.038	−0.037	−0.033	−0.034
F Statistic	0.172 (df = 1; 5713)	8.096*** (df = 1; 5713)	(df = 1; 5713)	9.517*** (df = 3; 5711)

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 2: Estimating Routine-Biased Technological Change (*Pooled OLS Regression Model*)

<i>Dependent variable:</i>	
Hours worked	
Wage rate	0.011*** (0.0002)
RTI	−0.423*** (0.076)
Offshorability	0.491*** (0.075)
Constant	29.501*** (0.153)
Observations	5,934
R <sup>2</sup>	0.299
Adjusted R <sup>2</sup>	0.299
F Statistic	844.144*** (df = 3; 5930)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 3: Estimating Routine-Biased Technological Change (*Least-Squares Dummy Variable Model*)

	<i>Dependent variable:</i>
	Hours worked
Wage rate	0.015*** (0.0002)
RTI	0.133* (0.069)
Offshorability	0.190*** (0.066)
Constant	28.856*** (0.296)
Observations	5,934
R <sup>2</sup>	0.459
Adjusted R <sup>2</sup>	0.456
Residual Std. Error	3.686 (df = 5900)
F Statistic	151.868*** (df = 33; 5900)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 4: Estimating Routine-Biased Technological Change (*Two-Ways “Within” Model*)

<i>Dependent variable:</i>	
Hours worked	
Wage rate	0.005*** (0.0003)
RTI	0.361** (0.148)
Offshorability	0.437*** (0.134)
Time trend	−0.123*** (0.006)
Observations	5,934
R <sup>2</sup>	0.079
Adjusted R <sup>2</sup>	0.039
F Statistic	122.424*** (df = 4; 5684)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 2: Horse Race Regression Results (Dependent variables: *Hours worked*, *Employment share*)

<u>Dependent variable: <i>Hours worked</i></u>			
	(1)	(2)	(3)
RTI	−0.905 (1.431)	—	−0.873 (1.698)
Offshorability	—	−0.492 (1.399)	−0.061 (1.650)
Constant	−2.459 (2.084)	−2.136 (2.014)	−2.452 (2.137)
Observations	27	27	27
R <sup>2</sup>	0.038	0.027	0.038
Adjusted R <sup>2</sup>	−0.042	−0.054	−0.087
Residual Std. Error	5.994 (df = 24)	6.028 (df = 24)	6.122 (df = 23)
F Statistic	0.474 (df = 2; 24)	0.333 (df = 2; 24)	0.304 (df = 3; 23)
<u>Dependent variable: <i>Employment share</i></u>			
	(4)	(5)	(6)
RTI	−0.901 (0.901)	—	−0.293 (1.040)
Offshorability	—	−1.305 (0.853)	−1.160 (1.011)
Constant	0.014 (1.312)	0.252 (1.229)	0.145 (1.309)
Observations	27	27	27
R <sup>2</sup>	0.043	0.091	0.095
Adjusted R <sup>2</sup>	−0.037	0.016	−0.023
Residual Std. Error	3.775 (df = 24)	3.677 (df = 24)	3.750 (df = 23)
F Statistic	0.536 (df = 2; 24)	1.209 (df = 2; 24)	0.801 (df = 3; 23)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

## Measures and Change in Employment Shares at the NOC Level, 1997-2018

NOC	Mean Occupational Wage, 1997-2018 (1)	Average employment share, 1997 (in %) (2)	Percentage point change, 1997-2018 (3)	RTI (4)	Offshorability (5)
<i>High-paying occupations</i>		<b>36.54</b>	<b>-0.05</b>		
Professional occupations in natural and applied sciences [21]	1034.78	4.18	-3.73	-0.61	0.47
Occupations in front-line public protection services [43]	993.61	4.24	4.77	-0.60	-0.94
Professional occupations in business and finance [11]	905.25	4.06	-3.65	-0.73	0.21
Professional occupations in health (except nursing) [31]	887.51	4.13	-1.77	-0.67	-0.76
Professional occupations in law and social, community and government services [41]	884.79	4.07	-5.70	-0.44	0.10
Processing, manufacturing and utilities supervisors and central control operators [92]	840.75	4.35	2.53	0.39	0.47
Professional occupations in nursing [30]	811.54	3.28	8.79	-0.67	-0.76
Technical occupations related to natural and applied sciences [22]	807.91	4.05	-0.81	-0.61	0.47
Industrial, electrical and construction trades [72]	773.54	4.19	0.55	0.85	0.35
<i>Middle-paying occupations</i>		<b>34.42</b>	<b>0.22</b>		
Transport and heavy equipment operation and related maintenance occupations [75]	640.09	4.41	-0.57	-1.50	-1.00
Technical occupations in health [32]	632.48	3.43	-1.63	-0.67	-0.76
Retail sales supervisors and specialized sales occupations [62]	628.39	4.22	-6.66	0.05	-0.89
Administrative and financial supervisors and administrative occupations [12]	611.33	3.65	0.32	-1.13	-0.48
Assemblers in manufacturing [95]	583.05	4.14	-1.00	0.49	2.35
Trades helpers, construction labourers and related occupations [76]	579.49	3.99	2.31	-0.19	-0.93
Finance, insurance and related business administrative occupations [13]	559.67	3.22	3.03	-0.73	0.21
Processing and manufacturing machine operators and related production workers [94]	552.07	4.05	3.09	0.39	0.47
Paraprofessional occupations in legal, social, community and education services [42]	492.53	3.32	4.59	-0.44	0.10

Table 1: Measures and Change in Employment Shares at the Provincial Level, 1997-2018

Province	Low-paying occupations		Middle-paying occupations		High-paying occupations	
	Employment Share in 1997 (in %)	% point change (1997-2018)	Employment Share in 1997 (in %)	% point change (1997-2018)	Employment Share in 1997 (in %)	% point change (1997-2018)
Alberta	28.76	0.50	34.58	-0.42	36.66	0.00
British Columbia	29.57	-0.03	33.56	1.47	36.87	-1.32
Manitoba	28.64	0.29	34.05	2.67	37.31	-2.67
New Brunswick	29.59	-1.27	34.26	2.65	36.15	-1.47
Newfoundland and Labrador	30.25	-6.72	31.35	13.03	38.39	-4.63
Nova Scotia	28.94	-0.10	34.53	-0.17	36.53	-0.52
Ontario	28.65	0.56	34.52	-0.50	36.84	0.03
Prince Edward Island	28.79	2.95	34.17	2.78	37.04	-4.86
Saskatchewan	28.75	0.05	34.81	-0.17	36.44	0.12
Quebec	29.46	-1.22	34.82	0.05	35.72	0.96