

## Appendix B (for online publication)

Table B1: Remove time trends

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
<i>Panel A: Baseline result</i>			
Foreign STEM Exposure	-0.085** (0.036)	-0.058*** (0.014)	-0.037** (0.016)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	14,354	72,933	36,519
<i>Panel B: No state trends</i>			
Foreign STEM Exposure	-0.047*** (0.017)	-0.016* (0.009)	0.005 (0.007)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	14,354	72,933	36,519
<i>Panel C: Model selection of linear &amp; quadratic state trends</i>			
Foreign STEM Exposure	-0.052*** (0.017)	-0.026* (0.013)	0.005 (0.010)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	14,354	72,933	36,519

Notes: Panel A reproduces the estimates from column 1 of Table 2 Panel C, the column 3 of Table 5 Panel B, and the column 4 of Table 6 Panel B. Panel B presents estimates without state trends. Panels C and D presents estimates using the model selection method of Belloni, Chernozhukov, and Hansen (2014) and implementation by Ahrens, Hansen, and Schaffer (2018), where the model selects among linear and quadratic state trends. \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B2: Robustness of length of time horizon

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
<i>Panel A: Five years before and after</i>			
Foreign STEM Exposure	-0.101*** (0.032)	-0.054*** (0.013)	-0.019 (0.013)
Control mean	[0.252]	[0.291]	[0.864]
<i>N</i>	17,752	91,515	46,043
<i>Panel B: Six years before and after</i>			
Foreign STEM Exposure	-0.116*** (0.022)	-0.050*** (0.011)	-0.015 (0.012)
Control mean	[0.257]	[0.290]	[0.863]
<i>N</i>	21,293	110,192	55,794
<i>Panel C: Five years before (including 1990) and four years after</i>			
Foreign STEM Exposure	-0.051** (0.025)	-0.034*** (0.009)	-0.039*** (0.011)
Control mean	[0.247]	[0.293]	[0.864]
<i>N</i>	16,204	81,872	41,203

Notes: This table presents sensitivity of our results as we change the number of birth cohorts in the sample. Panel A includes those turning 18 between 1985 and 1995 (excluding 1990). Panel B includes year age 18 cohorts between 1994 and 1996 (excluding 1990). Panel C includes those turning 18 between 1986 and 1994, including 1990. \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B3: Robustness of exclusion or inclusion of various states

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
<i>Panel A: Excluding California</i>			
Foreign STEM Exposure	-0.087** (0.042)	-0.041*** (0.012)	-0.043** (0.018)
<i>N</i>	13,360	67,091	33,614
<i>Panel B: Excluding Florida</i>			
Foreign STEM Exposure	-0.081** (0.037)	-0.058*** (0.014)	-0.037** (0.016)
<i>N</i>	13,632	71,027	35,590
<i>Panel C: Excluding Illinois</i>			
Foreign STEM Exposure	-0.079** (0.040)	-0.057*** (0.016)	-0.044*** (0.015)
<i>N</i>	13,310	68,529	34,453
<i>Panel D: Excluding New York</i>			
Foreign STEM Exposure	-0.058 (0.038)	-0.061*** (0.016)	-0.031* (0.018)
<i>N</i>	12,701	66,228	33,033
<i>Panel E: Excluding Texas</i>			
Foreign STEM Exposure	-0.085** (0.035)	-0.058*** (0.014)	-0.038** (0.016)
<i>N</i>	13,453	69,227	34,689
<i>Panel F: Excluding Washington</i>			
Foreign STEM Exposure	-0.085** (0.036)	-0.057*** (0.014)	-0.038** (0.016)
<i>N</i>	14,269	71,651	35,876
<i>Panel G: Including merit states</i>			
Foreign STEM Exposure	-0.078** (0.035)	-0.053*** (0.015)	-0.036** (0.015)
<i>N</i>	15,722	77,088	38,585
<i>Panel H: Excluding 13 smallest states</i>			
Foreign STEM Exposure	-0.087** (0.036)	-0.056*** (0.015)	-0.031* (0.016)
<i>N</i>	13,687	69,293	34,586
<i>Panel I: Exclude NY and state trends</i>			
Foreign STEM Exposure	-0.048*** (0.018)	-0.015 (0.011)	0.010 (0.007)
<i>N</i>	12,701	66,228	33,033
<i>Panel J: Exclude NY, lengthen policy window</i>			
Foreign STEM Exposure	-0.097** (0.038)	-0.056*** (0.015)	-0.012 (0.014)
<i>N</i>	15,712	83,087	41,664

Notes: This table presents estimates of our three primary findings under various sample selection alternatives. We sequentially exclude the most popular immigrant destinations, as well as the 13 smallest states (each of which had population of less than 1 million in 1980). We also include the merit states and present sensitivity analyses for when New York is excluded. Due to space constraints, we exclude reports of the control group's average outcome. \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B4: Robustness of specification of state controls

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
<i>Panel A: Adding 1980 share BA working in STEM</i>			
Foreign STEM Exposure	-0.081** (0.036)	-0.055*** (0.014)	-0.038*** (0.015)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	14,354	72,933	36,519
<i>Panel B: Adding 1990 share BA working in STEM</i>			
Foreign STEM Exposure	-0.081** (0.037)	-0.058*** (0.014)	-0.037** (0.016)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	13,632	71,027	35,590
<i>Panel C: Excluding state control variables</i>			
Foreign STEM Exposure	-0.079** (0.040)	-0.057*** (0.016)	-0.044*** (0.015)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	13,310	68,529	34,453

Notes: Panel A adds as an additional control the 1980 share of native college graduates in the state employed in STEM occupations interacted with the post-IA90 dummy. Panel B adds as an additional control the 1990 share of native college graduates in the state employed in STEM occupations interacted with the post-IA90 dummy. Panel C excludes all time-varying state control variables. \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B5: Alternative definitions for foreign STEM exposure

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
<i>Panel A: Alternate definition of STEM occupations</i>			
Foreign STEM Exposure	-0.087*** (0.028)	-0.042*** (0.013)	-0.033** (0.014)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	14,354	72,933	36,519
<i>Panel B: 1980 share college of graduates instead of 1980 share of STEM workers</i>			
Foreign STEM Exposure	-0.132*** (0.041)	-0.068*** (0.022)	-0.053*** (0.019)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	14,354	72,933	36,519
<i>Panel C: 1980 share of non-STEM workers instead of 1980 share of STEM workers</i>			
Foreign STEM Exposure	-0.137*** (0.041)	-0.068*** (0.023)	-0.055*** (0.019)
<i>N</i>	14,354	72,933	36,519

Notes: This table presents estimates using alternative definitions of foreign STEM exposure. Panel A considers a broader set of STEM occupations (see Table A2). Panel B considers using the 1980 share of college graduates rather than the 1980 share of college graduates working in STEM occupations. Panel C uses the 1980 share of college graduates working in non-STEM occupations. \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B6: Additional analysis for STEM occupational outcomes using broader definition

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: Works in STEM occupation, conditional on BA graduation</i>				
Foreign STEM Exposure	0.001 (0.024)	-0.015 (0.014)	-0.022*** (0.007)	-0.000 (0.003)
Control mean	[0.133]	[0.053]	[0.150]	[0.049]
<i>N</i>	14,354	26,274	241,807	283,569
<i>Panel B: Works in STEM occupation, conditional on STEM BA graduation</i>				
Foreign STEM Exposure	0.048 (0.078)	-0.130* (0.078)	-0.063*** (0.013)	-0.027 (0.019)
Control mean	[0.347]	[0.251]	[0.368]	[0.243]
<i>N</i>	3,679	3,495	72,933	36,519
<i>Panel C: Works in STEM occupation, conditional on non-STEM BA graduation</i>				
Foreign STEM Exposure	0.004 (0.020)	0.001 (0.008)	-0.003 (0.005)	0.002 (0.003)
Control mean	[0.048]	[0.024]	[0.061]	[0.024]
<i>N</i>	10,675	22,779	168,874	247,050

Notes: This table presents results similar to Table 5, but where current STEM occupation is more broadly defined (see Table A2). \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B7: Discrete Treatment Based on Exposure State Groups

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
Medium Foreign STEM Exposure	0.049 (0.044)	-0.015 (0.019)	-0.045* (0.025)
High Foreign STEM Exposure	-0.105** (0.045)	-0.068*** (0.023)	-0.052* (0.026)
Control mean	[0.249]	[0.292]	[0.863]
<i>N</i>	14,354	72,933	36,519

Notes: This table estimates our main regression model using a discretized version of exposure. States are classified as low-, medium-, or high-exposure based on terciles of the exposure distribution. The coefficients reported represent the change in the outcome variable by moving across exposure terciles (either from low to medium or from low to high). \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B8: Detailed STEM occupation employment for STEM graduates

	Engineering	Computers	Math & Science
<i>Panel A: White Men</i>			
Foreign STEM Exposure	-0.026** (0.011)	-0.037*** (0.012)	0.002 (0.006)
Control mean	[0.123]	[0.137]	[0.034]
<i>N</i>	72,933	72,933	72,933
<i>Panel B: White Women</i>			
Foreign STEM Exposure	-0.012 (0.011)	-0.014 (0.010)	-0.012 (0.013)
Control mean	[0.036]	[0.060]	[0.038]
<i>N</i>	36,519	36,519	36,519

Notes: This table decomposes the effects reported in Panel B of Table 5 for white men and women. Here, each dependent variable is a dummy for being employed in a specific STEM occupation (rather than any STEM occupation as considered in Table 5). The sum of the coefficients across columns equals the coefficient reported in Panel B of Table 5. \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B9: Employment outcomes, conditional on graduation in a STEM field

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: Unemployment, conditional on STEM BA graduation</i>				
Foreign STEM Exposure	0.002 (0.036)	-0.039 (0.025)	0.009 (0.006)	0.001 (0.008)
Control mean	[0.035]	[0.042]	[0.022]	[0.024]
<i>N</i>	3,679	3,495	72,933	36,519
<i>Panel B: Not in Labor Force, conditional on STEM BA graduation</i>				
Foreign STEM Exposure	-0.065** (0.031)	0.072 (0.069)	0.003 (0.007)	0.027* (0.016)
Control mean	[0.049]	[0.106]	[0.030]	[0.152]
<i>N</i>	3,679	3,495	72,933	36,519
<i>Panel C: Worked at all in last five years, conditional on STEM BA</i>				
Foreign STEM Exposure	0.039 (0.028)	0.045 (0.033)	0.000 (0.005)	-0.041*** (0.012)
Control mean	[0.976]	[0.937]	[0.987]	[0.911]
<i>N</i>	3,679	3,495	72,933	36,519

Notes: Dependent variable is an indicator for either (a) unemployment; (b) not participating in labor force; or (c) working at all in the previous five years. All samples are conditional on graduation in a STEM field. \*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B10: Placebo results

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
Foreign STEM Exposure	0.062 (0.047)	-0.005 (0.011)	0.010 (0.023)
Control mean	[0.261]	[0.284]	[0.863]
<i>N</i>	15,393	83,917	38,585

Note: This table presents results from a placebo setting where we consider individuals who turn 18 years old between 1981-1989, and where we consider 1985 as the year the policy was instituted. Individuals turning 18 in 1986-1989 are considered to be treated, while those turning 18 in 1981-1984 serve as controls. The reported estimates should be compared with those reported in the first column of Table 2 Panel C, the third column of Table 5 Panel B, and the last column of Table 6 Panel B.

Table B11: Treatment of pre-1990 cohorts

Effect	Black Male STEM BA	White Male STEM Occ.	White Female Prior Yr Empl.
Foreign STEM Exposure, 86-89 cohorts	0.021 (0.035)	-0.009 (0.010)	-0.026** (0.012)
Foreign STEM Exposure, 91-94 cohorts	-0.023 (0.060)	-0.037* (0.022)	-0.053** (0.022)
Control mean	[0.268]	[0.285]	[0.861]
<i>N</i>	21,865	115,843	56,205

Note: This table presents results from a setting where we consider individuals who turn 18 years old between 1982-1994, with 1990 as the year the policy was instituted. Individuals turning 18 in 1986-1989 are considered to be one treatment group, those turning 18 in 1991-1994 as a different treatment group, and those turning 18 in 1982-1985 serve as controls. The reported estimates should be compared with those reported in the first column of Table 2 Panel C, the third column of Table 5 Panel B, and the last column of Table 6 Panel B.

Table B12: Birth-State Foreign STEM Exposure and Recently Holding a STEM Occupation

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: Conditional on college graduation in any field</i>				
Foreign STEM Exposure	-0.001 (0.029)	0.001 (0.016)	-0.021*** (0.005)	-0.001 (0.003)
Control mean	[0.096]	[0.037]	[0.124]	[0.032]
<i>N</i>	14,354	26,274	241,807	283,569
<i>Panel B: Conditional on college graduation in a STEM field</i>				
Foreign STEM Exposure	0.042 (0.075)	-0.064 (0.087)	-0.060*** (0.014)	-0.039*** (0.015)
Control mean	[0.274]	[0.176]	[0.301]	[0.142]
<i>N</i>	3,679	3,495	72,933	36,519
<i>Panel C: Conditional on college graduation in a non-STEM field</i>				
Foreign STEM Exposure	0.005 (0.019)	0.007 (0.006)	-0.004 (0.004)	0.003 (0.002)
Control mean	[0.037]	[0.018]	[0.052]	[0.018]
<i>N</i>	10,675	22,779	168,874	247,050

Notes: Dependent variable is an indicator for recently holding a STEM occupation, conditional on various educational outcomes. Compare with Table 5. \*\*Statistically significant at the .05 level; \*\*\* at the .01 level.

Table B13: Birth-State Foreign STEM Exposure and Current Employment Probability

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: Conditional on college graduation in any field</i>				
Foreign STEM Exposure	0.008 (0.023)	0.000 (0.020)	0.002 (0.003)	-0.013 (0.008)
Control mean	[0.894]	[0.873]	[0.938]	[0.808]
<i>N</i>	14,354	26,274	241,807	283,569
<i>Panel B: Conditional on college graduation in a STEM field</i>				
Foreign STEM Exposure	0.063 (0.055)	-0.033 (0.062)	-0.012 (0.008)	-0.028 (0.019)
Control mean	[0.895]	[0.878]	[0.947]	[0.824]
<i>N</i>	3,679	3,495	72,933	36,519
<i>Panel C: Conditional on college graduation in a non-STEM field</i>				
Foreign STEM Exposure	-0.014 (0.025)	0.006 (0.021)	0.009 (0.005)	-0.011 (0.008)
Control mean	[0.893]	[0.873]	[0.934]	[0.806]
<i>N</i>	10,675	22,779	168,874	247,050

Notes: Dependent variable is an indicator for being currently employed, conditional on various educational outcomes. Compare with Table 6.

Table B14: Birth-State Foreign STEM Exposure and Log Earnings

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: Conditional on college graduation in any field</i>				
Foreign STEM Exposure	-0.101 (0.083)	0.001 (0.050)	-0.016 (0.023)	0.013 (0.022)
Control mean	[10.923]	[10.679]	[11.272]	[10.620]
<i>N</i>	13,278	24,096	234,168	242,328
<i>Panel B: Conditional on college graduation in a STEM field</i>				
Foreign STEM Exposure	-0.039 (0.137)	-0.057 (0.118)	-0.053 (0.032)	-0.030 (0.063)
Control mean	[11.096]	[10.893]	[11.406]	[10.865]
<i>N</i>	3,407	3,218	70,972	31,794
<i>Panel C: Conditional on college graduation in a non-STEM field</i>				
Foreign STEM Exposure	-0.102 (0.094)	0.015 (0.064)	0.004 (0.023)	0.019 (0.024)
Control mean	[10.865]	[10.650]	[11.217]	[10.588]
<i>N</i>	9,871	20,878	163,196	210,534

Notes: Dependent variable is the log of total earned income from the year prior to the survey, conditional on various educational outcomes. See notes in Table 2 for further details.

Table B15: Separate Cross-Section Regressions for Pre- and Post-1990 Cohorts

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: STEM Major, 1986–1989 Cohorts</i>				
Foreign STEM Exposure	-0.001 (0.013)	-0.006 (0.007)	-0.017*** (0.006)	-0.001 (0.003)
Control mean	[0.249]	[0.119]	[0.291]	[0.116]
<i>N</i>	7,694	13,652	131,919	151,652
<i>Panel B: STEM Major, 1991–1994 Cohorts</i>				
Foreign STEM Exposure	-0.032* (0.017)	-0.003 (0.008)	-0.031** (0.014)	-0.005 (0.005)
Control mean	[0.253]	[0.135]	[0.306]	[0.138]
<i>N</i>	6,660	12,622	109,888	131,917
<i>Panel C: STEM Occupation given STEM BA, 1986–1989 Cohorts</i>				
Foreign STEM Exposure	-0.013 (0.027)	-0.008 (0.026)	0.000 (0.010)	-0.002 (0.008)
Control mean	[0.260]	[0.159]	[0.292]	[0.131]
<i>N</i>	1,938	1,693	38,791	17,856
<i>Panel D: STEM Occupation given STEM BA, 1991–1994 Cohorts</i>				
Foreign STEM Exposure	0.016 (0.031)	-0.047* (0.028)	-0.030*** (0.011)	-0.026** (0.011)
Control mean	[0.239]	[0.151]	[0.300]	[0.130]
<i>N</i>	1,741	1,802	34,142	18,663
<i>Panel E: Worked Last Year given STEM BA, 1986–1989 Cohorts</i>				
Foreign STEM Exposure	0.001 (0.013)	0.024 (0.016)	-0.007* (0.004)	-0.007 (0.006)
Control mean	[0.927]	[0.922]	[0.968]	[0.863]
<i>N</i>	1,938	1,693	38,791	17,856
<i>Panel F: Worked Last Year given STEM BA, 1991–1994 Cohorts</i>				
Foreign STEM Exposure	-0.013 (0.018)	-0.051** (0.023)	-0.002 (0.004)	0.003 (0.009)
Control mean	[0.928]	[0.915]	[0.975]	[0.875]
<i>N</i>	1,741	1,802	34,142	18,663

Notes: This table is a more detailed version of Table 7. See Table 7 for further details.

\*Statistically significant at the .10 level; \*\* at the .05 level; \*\*\* at the .01 level.

Table B16: Instrumental Variable Effects of Birth-State Foreign STEM Exposure on STEM Degree Completion

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: STEM graduation, unconditional of education level</i>				
Foreign STEM Exposure	-0.034*	0.000	-0.002	0.007
	(0.018)	(0.010)	(0.010)	(0.005)
Control mean	[0.041]	[0.029]	[0.101]	[0.045]
<i>N</i>	93,505	102,128	685,261	687,311
<i>Panel B: BA graduation</i>				
Foreign STEM Exposure	-0.007	-0.003	0.001	-0.009
	(0.026)	(0.028)	(0.011)	(0.011)
Control mean	[0.164]	[0.241]	[0.348]	[0.391]
<i>N</i>	93,505	102,128	685,261	687,311
<i>Panel C: STEM graduation, conditional on BA graduation</i>				
Foreign STEM Exposure	-0.174*	-0.003	-0.014	0.016
	(0.089)	(0.046)	(0.030)	(0.012)
Control mean	[0.249]	[0.119]	[0.291]	[0.116]
<i>N</i>	14,354	26,273	241,807	283,569

Notes: Dependent variable is an indicator for either (a) graduating in a STEM field, unconditional on education level; (b) graduating with a bachelor's degree in any field; or (c) graduating with a bachelor's degree in a STEM field. Each coefficient is estimated from a different linear probability model using two-stage least squares, where 1990-2000 foreign STEM growth is instrumented by 1980 foreign STEM exposure. \*Statistically significant at the .10 level.

Table B17: IV Effects of Birth-State Foreign STEM Exposure on Current Employment in a STEM Occupation

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: Conditional on college graduation in any field</i>				
Foreign STEM Exposure	0.016 (0.057)	0.003 (0.030)	-0.041*** (0.012)	-0.001 (0.005)
Control mean	[0.090]	[0.034]	[0.120]	[0.030]
<i>N</i>	14,354	26,273	241,807	283,569
<i>Panel B: Conditional on college graduation in a STEM field</i>				
Foreign STEM Exposure	0.130 (0.154)	-0.103 (0.170)	-0.115*** (0.025)	-0.073* (0.040)
Control mean	[0.260]	[0.159]	[0.292]	[0.131]
<i>N</i>	3,676	3,492	72,933	36,519
<i>Panel C: Conditional on college graduation in a non-STEM field</i>				
Foreign STEM Exposure	0.014 (0.036)	0.013 (0.012)	-0.007 (0.009)	0.007 (0.005)
Control mean	[0.033]	[0.017]	[0.050]	[0.016]
<i>N</i>	10,673	22,778	168,874	247,050

Notes: Dependent variable is an indicator for current employment in a STEM occupation, conditional on various educational outcomes. See notes in Tables 2 and 5 for further details. \*Statistically significant at the .10 level; \*\*\* at the .01 level.

Table B18: IV Effects of Birth-State Foreign STEM Exposure on Prior Year Employment Probability

Effect	Black Men	Black Women	White Men	White Women
<i>Panel A: Conditional on college graduation in any field</i>				
Foreign STEM Exposure	0.058 (0.037)	0.032 (0.037)	0.019*** (0.006)	-0.016 (0.011)
Control mean	[0.929]	[0.913]	[0.965]	[0.854]
<i>N</i>	14,354	26,273	241,807	283,569
<i>Panel B: Conditional on college graduation in a STEM field</i>				
Foreign STEM Exposure	0.098 (0.109)	-0.045 (0.084)	-0.001 (0.009)	-0.075** (0.034)
Control mean	[0.927]	[0.922]	[0.968]	[0.863]
<i>N</i>	3,676	3,492	72,933	36,519
<i>Panel C: Conditional on college graduation in a non-STEM field</i>				
Foreign STEM Exposure	0.040 (0.042)	0.046 (0.044)	0.029*** (0.009)	-0.009 (0.012)
Control mean	[0.930]	[0.912]	[0.963]	[0.852]
<i>N</i>	10,673	22,778	168,874	247,050

Notes: Dependent variable is an indicator for being employed in the prior year, conditional on various educational outcomes. See notes in Tables 2 and 6 for further details. \*\* Statistically significant at the .05 level; \*\*\* at the .01 level.

Table B19: Back-of-the-Envelope Calculations

	Coefficient Estimate	1990–2010 Change in Treatment Variable	Group Effect	Population Weight	Weighted Average Wage Effect
<b>Current Study’s Negative Effects</b>					
Wage of Black Male College Graduates	-0.101	1.487	-0.150	0.015	-0.002
Wage Effect from Non-Employment of Female STEM Graduates	-0.037	1.487	-0.055	0.050	-0.003
Wage of Other STEM Graduates	-0.053	1.487	-0.079	0.092	-0.007
<b>Subtotal</b>					<b>-0.012</b>
<b>Peri, Shih, and Sparber (2015) Net Positive Effects</b>					
Wage of College Educated	0.080	0.530	0.043	0.3	0.013
Wage of Non-College	0.038	0.530	0.020	0.7	0.014
<b>Subtotal</b>					<b>0.027</b>
<b>Gross Average Positive Effect</b>					<b>0.039</b>

Notes: Population weights for negative effects are chosen somewhat as upper bounds since STEM education by women and minorities may be historically below the steady-state that would occur in the absence of discrimination and other barriers.

Specifically, the population weights are computed from a number of simplifying assumptions as follows:

- Black male college graduates: 6% of population is black men; 25% of this group graduate from college. ( $.06 * .25 = .015$ )
- Female STEM graduates: 10% of population is STEM graduates; 50% of this group (should be) women. ( $.10 * .50 = .05$ )
- Other STEM graduates: 10% of the population is STEM graduates; don’t double count black men (6%) or women who left the labor force (3.7% of 50%). ( $[1-0.06-0.037*0.50]*0.10 = .092$ )

Coefficient estimates for the current study respectively come from the following sources:

- Table B14, Panel A
- Table 6, Panel B
- Table B14, Panel B

Coefficient estimates for Peri, Shih, and Sparber (2015) come from Table 5, Row 1 of that study.

Change in treatment variable for the current study is computed by the authors. Change in treatment variable for Peri, Shih, and Sparber (2015) is taken from Tables 2 and 3 of that study.