Extended Appendix for "The German Trade Shock and the Rise of the Neo-Welfare State in Early 20th Century Britain"

LIST OF TABLES

A-1 Industry categories . . . 2
A-2 Effects of import competition on average economic status . . . 6
A-3 Rotemberg weights for economic regressions . . . 7
A-4 Robustness checks for economic variables . . . 8
A-5 Effects of import competition on voting for different parties . . . 11
A-6 Effects of import competition on voting for combined Liberals and Labour . . . 12
A-7 First-difference effects of import competition on voting . . . 13
A-8 Rotemberg weights for post-1900 voting regressions . . . 14
A-9 Robustness checks for post-1900 voting regressions . . . 15
A-10 Effects of import competition on voting, dropping certain years . . . 16
A-11 Moderating effect of unions on effect of import competition on voting . . . 17
A-12 Effects of import competition on voting, by period . . . 18
A-13 Effects of import competition on voting, controlling for exports and wheat imports . . . 19
A-14 Checks for pre-trends . . . 20
A-15 Robustness of post-1900 voting results to Chaisemartin-D'Haultfoeuille estimator . . . 21
A-16 Effects of import competition on incumbency . . . 22
A-17 Effects of import competition on newspaper references terms overused in Beveridge's analysis of unemployment . . . 24
A-18 Effects of import competition on newspaper references to Germany and the naval race . . . 25
A-19 Effects of import competition on manifesto references to Germany and the naval race . . . 26
A-20 Effect of local trade shocks on references to immigration in Conservative campaign manifestos . . . 27
A-21 Effect of local trade shocks on newspaper coverage of immigration . . . 28
A-22 Effects of import competition on local economies, exposure-robust standard erors . . . 30
A-23 Effects of import competition on voting, exposure-robust standard errors . . . 31
A-24 Effects of import competition on newspaper references to trade, exposure-robust standard errors . . . 32
A-25 Effect of local trade shocks on references to social reform in Liberal campaign manifestos, exposure-robust standard errors . . . 33
A-26 Effects of import competition on newspaper references to unemployment, vagrancy, and pauperism, exposure-robust standard errors . . . 34
A-27 Effects of import competition on average economic status, exposure-robust standard errors . . . 35
A-28 Robustness checks for economic variables, exposure-robust standard errors . . . 36

A-29 Effects of import competition on voting for different parties, exposure-robust standard errors . . . 37
A-30 Effects of import competition on voting for combined Liberals and Labour, exposure-robust standard errors . . . 38
A-31 First-difference effects of import competition on voting, exposure-robust standard errors . . . 39
A-32 Robustness checks for post-1900 voting regressions, exposure-robust standard errors . . . 40
A-33 Effects of import competition on voting, dropping certain years, exposure-robust standard errors . . . 41
A-34 Moderating effect of unions on effect of import competition on voting, exposure-robust standard errors . . . 42
A-35 Effects of import competition on voting, by period, with exposure-robust standard errors . . . 43
A-36 Effects of import competition on voting, controlling for exports and wheat imports, with exposure-robust standard errors . . . 44
A-37 Checks for pre-trends, with exposure-robust standard errors . . . 45
A-38 Effects of import competition on incumbency, exposure-robust standard errors 46
A-39 Effects of import competition on newspaper references terms overused in Beveridge's analysis of unemployment, exposure-robust standard errors . . . 47
A-40 Effects of import competition on newspaper references to Germany and the naval race, exposure-robust standard errors . . . 48
A-41 Effects of import competition on manifesto references to Germany and the naval race, exposure-robust standard errors . . . 49
A-42 Effect of local trade shocks on references to immigration in Conservative campaign manifestos, exposure-robust standard errors . . . 50
A-43 Effect of local trade shocks on newspaper coverage of immigration, exposure-robust standard errors . . . 51
A-44 Evolution of Conservative voting by 1900–1910 change in imports, with full and matched panel . . . 52

LIST OF FIGURES

A-1 Comparing value of imports by country according to pre- and post-1908 classification systems . . . 5
A-2 German exports and UK imports 1880–1910, data from TRADHIST (note the change in UK import attribution in 1908) . . . 9

A ADDITIONAL INFORMATION ON TRADE SHOCK MEASURES

Table A-1: Industry categories

Industry	1881 Employment	ΔIPW (1885-1910)

Apparel And Haberdashery	587,889	2.376
Coal Coke And Patent Fuel	381,825	-0.009
Cotton Manufactures	290,772	17.322
Shoes	209,525	0.159
Cotton Yarn	186,136	-0.754
Machinery	172,153	9.483
Wool Manufactures	139,740	5.556
Iron Manufactures	129,884	12.342
Printed Matter	95,949	0.322
Hats	85,334	0.411
Wood Products	83,723	0.800
Sheet Iron And Steel	67,794	51.355
Carriages	55,182	0.254
Silk Manufactures	53,361	-9.635
Wool Yarn	47,485	5.997
Stone	42,543	5.075
Lace	42,406	18.281
China And Earthenware	42,320	6.408
Leather Manufactures	42,015	10.029
Paper	34,895	57.654
Beer	33,438	2.814
Hardware And Cutlery	29,569	35.075
Brass Manufactures	28,273	4.284
Fish	26,667	-1.204
Iron Ore	26,072	0.483
Leather	25,327	37.490
Dairy	24,430	-77.293
Clocks And Watches	23,345	3.241
Glass	21,963	55.714
Art	21,291	15.661
Plaiting Of Straw	16,320	19.085
Chemicals	15,360	77.730
Bristles And Brushes	15,170	27.145
Gloves	14,926	22.578
Implements And Tools	12,859	6.689
Linen	12,850	108.301
Tin Ore	12,807	1.109
Silk Yarn	11,715	26.929
Lead Ore	11,607	0.000
Arms And Ammunition	11,355	-3.686
Slate	10,824	0.000

Cordage	10,716	17.905
Tobacco Manufactures	10,528	4.988
Jewellery	9,257	34.175
Musical Instruments	7,787	29.650
Umbrellas And Sticks	7,363	4.252
Dyes And Paints	7,077	268.612
Skins And Furs	7,071	256.483
Electricals	7,010	198.564
Buttons	5,976	12.485
Meat	5,087	98.880
Soft Drinks	4,809	30.954
Artificial Flowers	4,800	68.442
Oil Seed And Oil Cake	4,790	61.247
Scientific Instruments	4,767	89.464
Alkali	4,634	16.585
Sand Flint Clay Gravel Chalk	4,552	13.875
Chocolate	4,501	133.220
Copper Ore	4,341	1.213
Matches	4,266	31.966
Sheet Copper	4,143	12.086
Toys	4,136	139.194
Copper Manufactures	3,721	81.646
Cement	3,670	19.297
Refined Sugar	3,443	500.000
Candles And Grease	3,395	74.711
Fancy Goods	3,384	137.369
Lamps	3,221	5.059
Tobacco Pipes	3,175	14.261
Embroidery	2,668	500.000
Sheet Lead	2,468	-56.958
Soap	2,445	1.062
Jute Manufactures	2,205	54.536
Mats	1,989	11.924
Sheet Zinc	1,950	500.000
Manure	1,924	120.665
Rubber	1,923	495.493
Feathers	1,807	80.503
Tin	1,602	-9.023
Motor Cars	1,358	500.000
Sheet Gold Silver	1,333	-27.131
Waterproof Goods	962	188.389

Bicycles	949	140.551
Mustard Vinegar Spice Pickle	924	18.902
Hay	902	43.167
Spirits	850	-32.727
Sheet Other Metals	774	-74.398
Silver Ore	682	-3.554
Floor Cloth And Oil Cloth	653	75.790
Jams And Sweets	515	500.000
Glue	399	500.000
Zinc Manufactures	203	500.000
Gold Ore	116	0.000
Gum	107	500.000

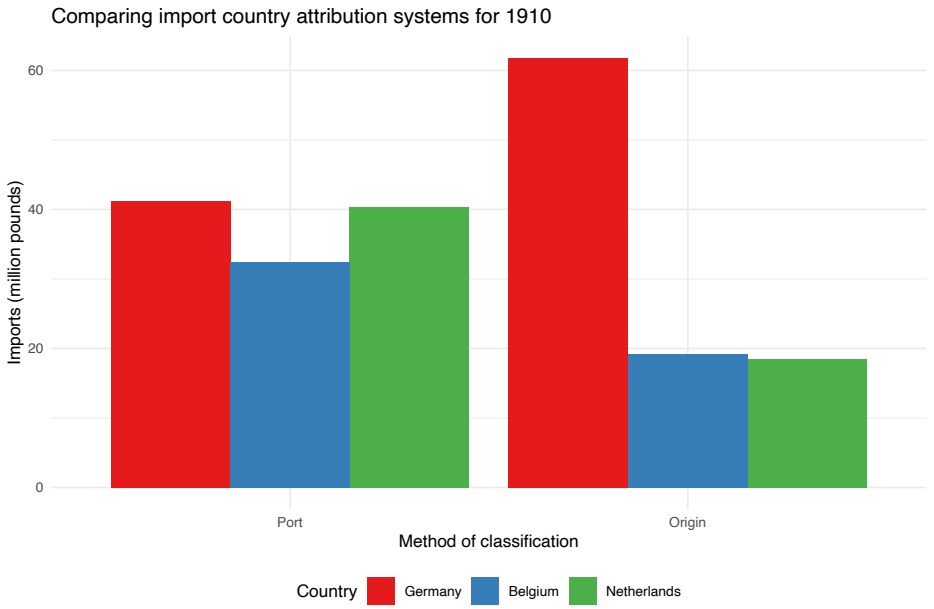

Figure A-1: Comparing value of imports by country according to pre- and post-1908 classification systems

B ADDITIONAL REGRESSIONS AND ROBUSTNESS CHECKS FOR ECONOMIC REGRESSIONS

As an additional measure, we compute the average economic status of people in the constituency, using occupational titles, and scores from the HISCAM project (Lambert et al., 2013). The HISCAM project uses historical data on the jobs of parents and their children to infer the relative social status of different occupations. The key assumption in constructing these status scores is that children tend to hold similar status jobs to those of their parents, and so if a pair of occupations occur frequently in parent-child pairs, those occupations are likely similar status. We use a version of the scores estimated from 19th century UK parish registers and genealogical data. Regressions using this variable are shown in Table A-2.

We also show Rotemberg weights for the industry-year combinations for which our regressions of economic outcome variables on import competition are most sensitive to misspecification, following Goldsmith-Pinkham, Sorkin and Swift (2020), in Table A-3. We then re-estimate these models in Table A-4, adding controls for these industry shares interacted with year fixed effects.

Table A-2: Effects of import competition on average economic status

	(1)	(2)	(3)	(4)
ΔIPW_t	-0.067^{**}	-0.073^{***}	-0.047^{**}	-0.101^{***}
	(0.026)	(0.026)	(0.020)	(0.037)
Controls		x	x	x
Initial Mf x year			x	
Constituency trends				x
Observations	1,389	1,389	1,389	1,389
R^2	0.240	0.243	0.306	0.675
Adjusted R^2	0.239	0.240	0.302	0.510
Note:	*p<0.1; **p<0.05; ***p<0.01			
	Stacked first difference estimates, at the constituency level, for 1880–1890, 1890–1900, 1900-1910. Dependent variable is change in average economic status. All models include year fixed effects. (2)–(4) add controls for lagged manufacturing employment and lagged average economic status; (3) includes 1880 manufacturing employment interacted with year dummy variables, (4) includes constituency fixed effects, which adjust for constituency-specific time trends. Standard errors clustered by county in parentheses.			

Table A-3: Rotemberg weights for economic regressions

No controls			Controls and Mf x year		
Industry	Year	Weight	Industry	Year	Weight
sheet iron and steel	1910	0.106	sheet zinc	1910	0.133
sheet zinc	1910	0.093	sheet iron and steel	1910	0.127
refined sugar	1900	0.065	refined sugar	1900	0.073
cotton manufactures	1910	0.064	sheet zinc	1890	0.068
refined sugar	1890	0.055	refined sugar	1890	0.059
hardware and cutlery	1910	0.047	gloves	1890	0.058
sheet zinc	1890	0.047	hardware and cutlery	1910	0.055
refined sugar	1910	0.042	wool manufactures	1910	0.049
skins and furs	1910	0.037	refined sugar	1910	0.043
gloves	1890	0.036	skins and furs	1910	0.035
cotton manufactures	1900	0.029	sheet copper	1890	0.030
glass	1900	0.026	glass	1900	0.028
lace	1910	0.023	lace	1910	0.025
sheet copper	1890	0.021	cotton manufactures	1910	0.017
wool manufactures	1910	0.012	silk manufactures	1900	0.012
electricals	1910	0.012	electricals	1910	0.012
linen	1910	0.012	linen	1890	0.011
dyes and paints	1910	0.011	linen	1910	0.010
chemicals	1910	0.010	jewellery	1910	0.010
jewellery	1910	0.010	silk manufactures	1890	0.009

Table A-4: Robustness checks for economic variables

	Δ ln % vagrants				Δ ln % unskilled jobs			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_t$	0.175***	0.170***	0.173***	0.134***	0.017***	0.020***	0.021***	0.024***
	(0.039)	(0.047)	(0.048)	(0.029)	(0.005)	(0.006)	(0.004)	(0.006)
Initial steel x year	x				x			
Initial zinc x year		x				x		
Initial sugar x year			x				x	
Initial shares PCA x year				x				x
Observations	1,389	1,389	1,389	1,389	1,389	1,389	1,389	1,389
R^2	0.883	0.880	0.883	0.890	0.089	0.071	0.070	0.160
Adjusted R^2	0.883	0.880	0.883	0.889	0.083	0.065	0.064	0.151

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

Stacked first difference estimates, at the constituency level, for 1880–1890, 1890–1900, 1900-1910. All models include year fixed effects, and controls for lagged share unskilled, lagged manufacturing employment and lagged fraction of vagrants; (1) and (5) include the share of employment in 1881 in sheet iron and steel interacted with year fixed effects, (2) and (6) do the same for employment in sheet zinc, (3) and (7) the same for sugar. (4) and (8) add the first three principal components for the 1881 industry shares interacted with year fixed effects. Standard errors clustered by county in parentheses.

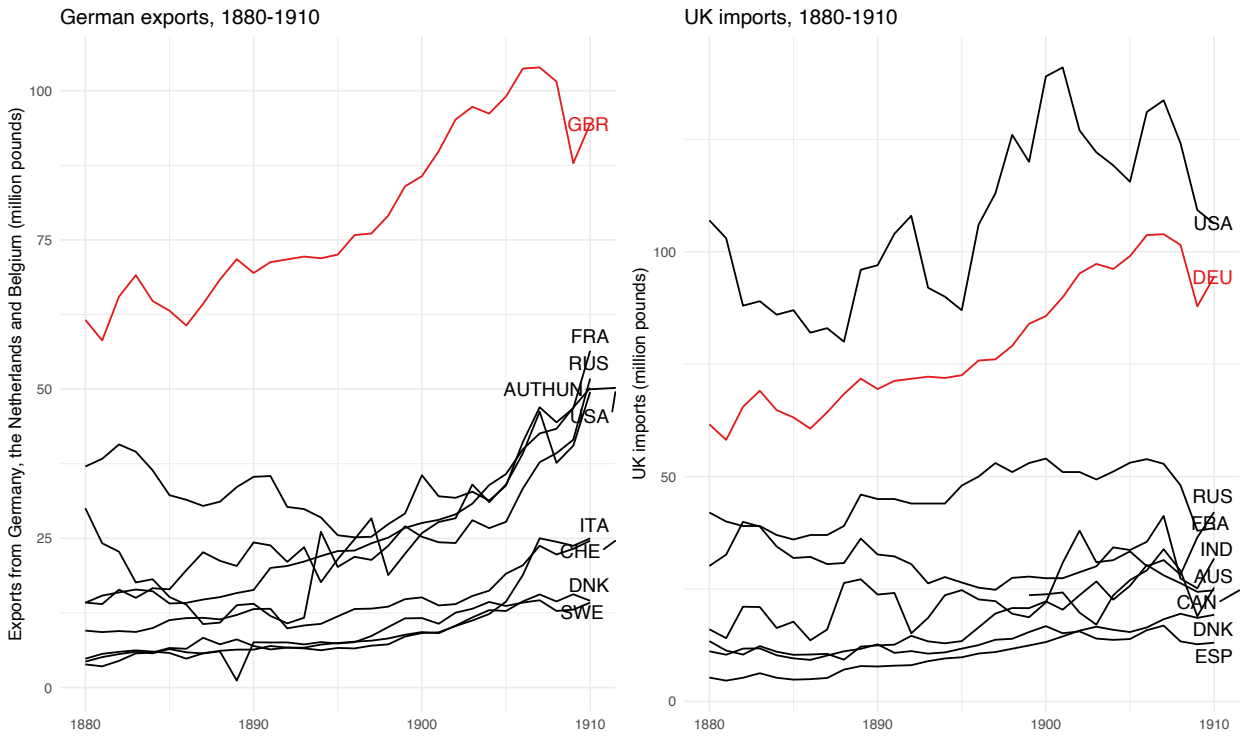

Figure A-2: German exports and UK imports 1880–1910, data from TRADHIST (note the change in UK import attribution in 1908)

C ADDITIONAL REGRESSIONS AND ROBUSTNESS CHECKS FOR VOTING REGRESSIONS

This section shows additional information and robustness checks relevant to our estimates of the effects of import competition on voting. Table A-5 shows the results with the voteshare of different parties as the dependent variable, and Table A-6 shows equivalent regressions using the combined voteshare for the Liberals and Labour as the dependent variable. Table A-7 shows that estimating the models in first-differences rather than levels give similar results, and also confirms that leads of the trade shock variable are not correlated with changes in voting. Table A-8 shows the largest industry-year Rotemberg weights in these models, and Table A-9 shows results controlling for the most important industry shares interacted with year fixed effects. Table A-10 re-estimates our main voting regressions of Conservative vote share on import competition for the 1900–1910 period, dropping specific elections. Table A-11 examines the moderating effect of a cross-sectional measure of union membership on these voting results, and shows that the main results are robust to controlling for this variable interacted with year fixed effects. Table A-12 further breaks down our results by period, to verify that our conclusion of an anti-Conservative result post-1900 and a null result pre-1900 is not sensitive to the precise choice of starting year. Table A-13 controls for the change in exports to Germany, which may pick up common demand and technological shocks, and exposure to wheat imports from the US. Table A-14 provides additional checks for pre-trends, controlling for constituency trends in Conservative voting and verifying that the change in

German imports after 1895 did not affect pred-1895 outcomes. Table A-15 replicates the main post-1900 results using the estimator proposed by de Chaisemartin and D'Haultfœuille (2020), which is robust to negative weights issues in two-way fixed effects estimation. Table A-16 examines the effects of the change in German imports on three types of incumbency, at the MP, constituency-level party, and national-level party level.

Table A-5: Effects of import competition on voting for different parties

	Conservative			Labour		Liberal vote share		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1885}$	−0.003	0.014**		0.014*	−0.016***	−0.026***		
	(0.004)	(0.006)		(0.008)	(0.005)	(0.009)		
ΔIPW$_{1900}$			−0.021***				0.008	0.019***
			(0.006)				(0.007)	(0.005)
Years	All	1885–1900	1900-1910	All	All	1885-1900	1900–1910	1900-1910
Excluding Labour								x
Observations	3,133	1,860	1,578	3,133	3,133	1,860	1,578	1,336
R^2	0.709	0.720	0.834	0.502	0.533	0.693	0.739	0.811
Adjusted R^2	0.657	0.626	0.765	0.414	0.451	0.590	0.631	0.721

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

Constituency-level fixed effects regression, dependent variable is share of the vote for specified party. All models include constituency and election fixed effects. Model 8 excludes elections contested by Labour. Standard errors clustered by county in parentheses.

Table A-6: Effects of import competition on voting for combined Liberals and Labour

	(1)	(2)	(3)	(4)
ΔIPW$_{1885}$	-0.020^{***}	-0.013		
	(0.007)	(0.008)		
ΔIPW$_{1900}$			0.019^{***}	0.015^{***}
			(0.005)	(0.005)
Years	1885–1900	1885–1900	1900–1910	1900-1910
Initial MF x election		x		x
Observations	1,860	1,860	1,578	1,578
R^2	0.709	0.713	0.822	0.823
Adjusted R^2	0.611	0.616	0.748	0.748
Note:	*p<0.1; **p<0.05; ***p<0.01			
	Constituency-level fixed effects regression, dependent variable is combined share of the vote for the Liberal and Labour parties. All models include constituency and election fixed effects, (2) and (4) add the manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by county in parentheses.			

Table A-7: First-difference effects of import competition on voting

	(1)	(2)	(3)	(4)	(5)	(6)
ΔIPW$_t$	0.018**	0.016**	−0.027***	−0.020***	0.017	0.017
	(0.007)	(0.008)	(0.009)	(0.007)	(0.010)	(0.011)
ΔIPW$_{t+1}$					0.001	−0.002
					(0.007)	(0.009)
Years	1885–1900	1885–1900	1900–1910	1900-1910	1885–1900	1885–1900
Initial Mf x election		x		x		x
Observations	712	712	578	578	712	712
R^2	0.015	0.017	0.072	0.086	0.015	0.017
Adjusted R^2	0.013	0.011	0.069	0.079	0.011	0.010

Note: *p<0.1; **p<0.05; ***p<0.01
Constituency-level stacked first-difference regressions, for waves 1885–1892, 1892–1900, 1900-1910 (note there were two elections in 1910). Dependent variable is change in share of the vote for the Conservative Party. All models include constituency and election fixed effects, (2), (4) and (6) add controls for manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by county in parentheses.

Table A-8: Rotemberg weights for post-1900 voting regressions

No controls			Initial Mf x election		
Industry	Year	Weight	Industry	Year	Weight
cotton manufactures	1910	0.095	lace	1906	0.120
cotton manufactures	1911	0.089	sheet iron and steel	1910	0.091
lace	1906	0.085	refined sugar	1910	0.091
sheet iron and steel	1910	0.085	refined sugar	1911	0.089
refined sugar	1910	0.071	sheet iron and steel	1911	0.069
refined sugar	1911	0.069	wool manufactures	1910	0.055
sheet iron and steel	1911	0.063	cotton manufactures	1910	0.045
skins and furs	1910	0.042	skins and furs	1910	0.043
skins and furs	1911	0.040	skins and furs	1911	0.041
hardware and cutlery	1910	0.028	wool manufactures	1911	0.040
hardware and cutlery	1911	0.027	cotton manufactures	1911	0.037
refined sugar	1906	0.016	hardware and cutlery	1910	0.027
linen	1910	0.016	hardware and cutlery	1911	0.025
sheet zinc	1910	0.015	refined sugar	1906	0.021
sheet zinc	1911	0.015	silver ore	1906	0.019
wool manufactures	1910	0.014	sheet zinc	1911	0.018
dyes and paints	1910	0.014	sheet zinc	1910	0.016
linen	1911	0.013	sheet zinc	1906	0.014
dyes and paints	1911	0.012	linen	1910	0.014
silver ore	1906	0.012	electricals	1910	0.012

Table A-9: Robustness checks for post-1900 voting regressions

	(1)	(2)	(3)	(4)	(5)
ΔIPW_{1900}	-0.018^{***}	-0.017^{***}	-0.011^{**}	-0.019^{***}	-0.015^{**}
	(0.006)	(0.006)	(0.005)	(0.006)	(0.006)
Initial steel x year	x				
Initial cotton x year		x			
Initial sugar x year			x		
Initial lace x year				x	
Initial shares PCA x year					x
Observations	1,578	1,578	1,578	1,578	1,578
R^2	0.839	0.840	0.838	0.838	0.842
Adjusted R^2	0.771	0.772	0.769	0.770	0.773

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

Constituency-level fixed effects regressions, for 1900–1910. Dependent variable is share of the vote for Conservative candidates. All models include constituency and year fixed effects, and initial manufacturing by year controls. (1) includes the share of employment in 1881 in sheet iron and steel interacted with year fixed effects, (2) does the same for employment in sheet zinc, (3) does the same for sugar, (4) does the same for lace. (5) adds the first three principal components for the 1881 industry shares interacted with year fixed effects. Standard errors clustered by county in parentheses.

Table A-10: Effects of import competition on voting, dropping certain years

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW_{1900}	-0.017^{***}	-0.017^{***}	-0.026^{***}	-0.020^{**}	-0.020^{***}	-0.016^{***}	-0.020^{***}	-0.012^{*}
	(0.005)	(0.003)	(0.009)	(0.007)	(0.005)	(0.005)	(0.008)	(0.006)
Excluding	1900	1900	1906	1906	1910J	1910J	1910D	1910D
Initial MF x election		x		x		x		x
Observations	1,273	1,273	1,145	1,145	1,122	1,122	1,194	1,194
R^2	0.903	0.904	0.857	0.859	0.831	0.834	0.833	0.837
Adjusted R^2	0.848	0.849	0.761	0.763	0.715	0.718	0.728	0.733

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

Constituency-level fixed effects regression, dependent variable is share of the vote for the Conservative Party, for the period 1900–1910. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Each model drops one election from the period. Standard errors clustered by county in parentheses.

Table A-11: Moderating effect of unions on effect of import competition on voting

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ΔIPW$_{1885}$	0.009	0.008			−0.001	−0.009				
	(0.008)	(0.009)			(0.002)	(0.006)				
ΔIPW$_{1885} \times$ % Union	−0.189	−0.195								
	(0.131)	(0.125)								
ΔIPW$_{1900}$			0.003	0.005			−0.011	−0.025***	−0.015***	−0.013**
			(0.014)	(0.014)			(0.008)	(0.006)	(0.005)	(0.005)
ΔIPW$_{1900} \times$ % Union			−0.429**	−0.385*						
			(0.205)	(0.203)						
Years	All	All	1900–1910	1900–1910	All	All	1900–1910	1900–1910	1900–1910	1900–1910
Union sub-sample	All	All	All	All	2H	1H	2H	1H	All	All
Union x election									x	x
Initial MF x election		x		x	x	x	x	x		x
Observations	3,134	3,134	1,578	1,578	1,564	1,570	785	793	1,578	1,578
R^2	0.704	0.708	0.837	0.839	0.702	0.679	0.827	0.822	0.841	0.842
Adjusted R^2	0.652	0.656	0.768	0.771	0.647	0.618	0.755	0.744	0.774	0.775

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

Constituency-level fixed effects regression, dependent variable is share of the vote for the Conservative Party. Data on union membership relative to population in 1892 at the county level is taken from Sidney and Beatrice Webb, *The History of Trade Unionism* (London: Longmans, Green and Co., 1896). Models (5) and (7) are estimated for constituencies with above-median unionization, (6) and (8) for constituencies with below-median unionization. Models (9) and (10) replicate regressions from table 3, adding controls for unionization interacted with year dummy variables. All models include constituency and election fixed effects, Standard errors clustered by county in parentheses.

Table A-12: Effects of import competition on voting, by period

	1885–1895		1895–1906		1906–1910		1895–1910	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW_{1885}	0.006	−0.0002						
	(0.007)	(0.008)						
ΔIPW_{1900}			−0.005	0.001	−0.017***	−0.017***	−0.013***	−0.010***
			(0.004)	(0.004)	(0.005)	(0.003)	(0.004)	(0.002)
Initial MF x election		x		x		x		x
Observations	1,555	1,555	1,086	1,086	1,273	1,273	1,926	1,926
R^2	0.750	0.753	0.785	0.789	0.903	0.904	0.788	0.791
Adjusted R^2	0.643	0.646	0.624	0.630	0.848	0.849	0.721	0.724

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

Constituency-level fixed effects regression, dependent variable is share of the vote for the Conservative Party, subset by different groups of years. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by county in parentheses.

Table A-13: Effects of import competition on voting, controlling for exports and wheat imports

	(1)	(2)	(3)	(4)
ΔIPW$_{1900}$	-0.021^{***}	-0.016^{***}	-0.016^{***}	-0.014^{**}
	(0.005)	(0.006)	(0.006)	(0.005)
ΔExports per worker$_{1900}$	-0.010^{**}	-0.0002		
	(0.004)	(0.007)		
ΔUS wheat imports per worker$_{1900}$			-0.033^{***}	-0.026^{**}
			(0.009)	(0.010)
Initial MF x election		x		x
Observations	1,578	1,578	1,578	1,578
R^2	0.835	0.837	0.837	0.838
Adjusted R^2	0.767	0.768	0.769	0.770

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

Constituency-level fixed effects regression, dependent variable is share of the vote for the Conservative Party, for the period 1900–1910. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Models 1 and 2 in addition control for exports to Germany per worker, computed the same way as ΔIPW, models 3 and 4 control for US wheat imports per worker, with wheat employment calculated using agricultural laborers weighted by the share of county land devoted to wheat cultivation. Standard errors clustered by county in parentheses.

Table A-14: Checks for pre-trends

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1900}$	−0.017***	−0.011**	−0.022***	−0.017***				
	(0.005)	(0.005)	(0.005)	(0.005)				
Constituency Conservative trend (1885–1910)	0.872***	0.861***						
	(0.177)	(0.175)						
Constituency Conservative trend (1885–1900)			−0.228*	−0.223*				
			(0.121)	(0.119)				
ΔIPW$_{t+2}$					0.005	0.001		
					(0.007)	(0.006)		
ΔIPW$_{t+3}$							0.005	0.003
							(0.006)	(0.006)
Years	1900–1910	1900–1910	1900–1910	1900–1910	1885–1895	1885–1895	1885–1895	1885–1895
Initial MF x election		x		x		x		x
Observations	1,578	1,578	1,549	1,549	1,555	1,555	1,555	1,555
R^2	0.843	0.845	0.839	0.842	0.750	0.753	0.750	0.753
Adjusted R^2	0.777	0.780	0.773	0.775	0.643	0.646	0.643	0.646

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

Constituency-level fixed effects regression, dependent variable is share of the vote for the Conservative Party. Models (1)–(4) re-estimate the main voting result, for the 1900–1910 period, adding controls for Conservative vote share as predicted by constituency-specific time trends, based on the 1885–1910 period for models (1) and (2), and based on the 1885–1900 period for (3) and (4). Models (5)–(8) test for differential trends in Conservative voting prior to the acceleration of German imports after 1895, regressing Conservative vote share 1885–1895 on import penetration 1892–1906 and 1895–1910. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by county in parentheses.

	TWFE estimator		CH estimator	
	(1)	(2)	(3)	(4)
ΔIPW$_{1900}$ (rounded)	-0.019^{*}	-0.013^{*}	-0.034^{*}	-0.022^{*}
	(0.006)	(0.005)	$[-0.052; -0.013]$	$[-0.060; -0.002]$
Initial Mf x year		x		x
N	1196	1196	730	730
N switchers			410	410

This table shows the results of regressions of Conservative vote share, 1900–1910 on the change in imports per worker. Models (1) and (2) use the conventional two-way fixed effects estimator used throughout the article. Models (3) and (4) use the estimator proposed by Chaisemartin and D'Haultfoeuille, which corrects for negative weights. This estimator directly compares units which changed treatment status from one period to the next against units which did not. In order to use this estimator, we round our ΔIPW measure to the nearest 0.5, and average the dependent variable over the two 1910 elections (for which the treatment is unchanged). All models control for constituency and year fixed effects, and (2) and (4) control for initial manufacturing interacted with year fixed effects. For models (1) and (2), standard errors clustered by county are shown in parentheses, for (3) and (4) we cluster bootstrap at the county level and report 95% confidence intervals. $^{*}p < 0.05$ (or Null hypothesis value outside the confidence interval).

Table A-15: Robustness of post-1900 voting results to Chaisemartin-D'Haultfoeuille estimator

D additional regressions using news and manifesto data

This section provides additional results using the newspaper and manifesto data. Table A-17 examines the link between import competition and the new notion of unemployment in more detail. For models (1) and (2) the dependent variable is a standardized measure of the use of a number of terms which were overused in Beveridge's analysis of unemployment, relative to other writings supportive of the existing poor law system.[16] Following Gentzkow and Shapiro (2010), we compute a χ^2 measure for each word, which gives the test statistic for the null hypothesis that the probability of the word being used is the same in both corpuses. We then select the twenty words with the highest χ^2 statistics for which their relative frequency in the Beveridge text minus their relative frequency in the other texts divided by their frequency across both texts is greater than three. The idea is to select terms which distinguish the new concept of unemployment as the product of economic frictions from the old concept of unemployment as the product of character defects. The terms selected by this method refer to industrial dislocation—"fluctuation," "depression" and "cyclical"—and unemployment, as well as to the economy more broadly, and the industries Beveridge was concerned about, such as the docks. The trade shock was associated with a statistically significant within-newspaper shift towards the use of these terms, which is robust to the inclusion of manufacturing by year controls. The positive coefficient in models (1) and (2) is driven by attention to industrial dislocation and unemployment. This evidence supports the

[16]The texts in question are Helen Bosanquet's summary of the Poor Law Report of 1909 (1911), an anonymous criticism of the Poor Law Minority Report (1910), F.C. Montague's *The Old Poor Law and the New Socialism* (1886), the Poor Law Commissioners' Report (1834), *Self Help* by Samuel Smiles (1863), and William Dawson's *The Vagrancy Problem* (1910)

Table A-16: Effects of import competition on incumbency

	MP		Local Party		National Party	
	(1)	(2)	(3)	(4)	(5)	(6)
ΔIPW$_{1885}$	0.002		0.010*			
	(0.006)		(0.005)			
ΔIPW$_{1900}$		0.009		0.001		
		(0.025)		(0.007)		
ΔIPW$_t$					0.004	−0.0004
					(0.003)	(0.004)
Years	All	1900-1910	All	1900-1910	All	1900-1910
Observations	3,133	1,578	3,133	1,578	2,025	1,098
R^2	0.336	0.434	0.500	0.487	0.229	0.183
Adjusted R^2	0.219	0.199	0.412	0.273	0.227	0.181

Note: *p<0.1; **p<0.05; ***p<0.01
Constituency-level regressions, (1)–(4) are estimated in levels and include constituency and year fixed effects, (5) and (6) in stacked first-differences, and include year fixed effects. For (1) and (2) the dependent variable is the share of the vote won by incumbent MPs, for (3) and (4), the share of the vote won by incumbent parties at the local level, for (5) and (6), the change in voteshare by the nationally-incumbent party. Standard errors clustered by county in parentheses.

interpretation that updated perceptions of the risk of unemployment led to increased support for the welfare state, in suggesting the trade shock led to increased focus on economic risk. Yet it is also consistent with changing attitudes towards the unemployed: elite newspaper writers responded to an uptick in the prevalence of vagrants and casual laborers by reporting on the disruptive effects of impersonal market forces.

Tables A-18 and A-19 document the relationship between German import competition, and attention to Germany and to the arms race with Germany, in newspapers and campaign addresses. They show a positive effect of import competition on news coverage of Germany, but not of the navy or militarist organizations.

Tables A-20 and A-21 study the effects of German import penetration on xenophobia. Scholarship on the China trade shock documents an anti-immigrant and authoritarian shift (see for instance Ballard-Rosa et al. (2021)). It is natural to ask whether import penetration had a similar effect in early 20th century Britain, especially since the Conservative government introduced Britain's first serious controls on immigration in 1905. The Aliens Act was introduced with an aim of limiting Jewish immigration from Eastern Europe. We study whether newspapers and Conservative MPs devoted more attention to this issue in places affected by the trade shock.

In all these regressions we control for the 1880 share of immigrants—which we compute using the full-count census data—interacted with year fixed effects. We do so because a regression of xenophobia on the trade shock could however be biased, if, for instance, areas affected by the shock happened to have more immigrants, and the prevalence of immigration-related issues at a national level changed over time. Flexibly controlling for initial immigration allows us to adjust for the changing prevalence of immigration as a political issue over time. It is also preferable to directly controlling for the share of immigrants, which may be affected by changes in xenophobia and so is a bad control. We exclude Irish immigrants as Ireland was legally part of the domestic British Isles and so Irish immigrants were not considered Aliens and were not subject to anti-immigration legislation.

We find that Conservative candidates did mention terms relevant to immigration in places affected by the trade shock, suggesting that they attempted to capitalize on increased xenophobia by drawing attention to the Conservatives' anti-immigration policies. We also find some evidence that newspapers in these areas devoted more coverage to immigration. However, these results cannot drive our main result that the trade shock decreased support for the Conservatives: an anti-immigrant backlash should have bolstered the Conservative vote.

Table A-17: Effects of import competition on newspaper references terms overused in Beveridge's analysis of unemployment

	Beveridge terms		"fluctuation"		"depression"		"(un)employment"		"exchange"	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ΔIPW$_{1885}$	0.115***	0.116***	0.124***	0.116**	0.137**	0.159**	0.061*	0.062	0.124***	0.167***
	(0.031)	(0.029)	(0.034)	(0.044)	(0.054)	(0.074)	(0.034)	(0.038)	(0.037)	(0.041)
Initial Mf x year		x		x		x		x		x
Observations	2,365	2,365	2,365	2,365	2,365	2,365	2,365	2,365	2,365	2,365
R^2	0.787	0.788	0.744	0.745	0.764	0.766	0.731	0.733	0.798	0.800
Adjusted R^2	0.732	0.733	0.678	0.678	0.704	0.704	0.661	0.663	0.745	0.747

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

Newspaper-level regressions. Dependent variable is number of uses of specified term per newspaper issue, standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. "Beveridge terms" refers to terms overused in Beveridge's *Unemployment: A Problem of Industry*, relative to other contemporary writings supportive of the existing Poor Law system. Terms were selected using the χ^2 test statistic proposed by Gentzkow and Shapiro (2010). The terms in question are "unemployed," "unemployment," "industrial," "exchange," "table," "fluctuation," "demand," "depression," "trades," "reserve," "percentage," "organisation," "situation," "cyclical," "skilled," "dock," "note," "seasonal," "unskilled," and "production." Standard errors clustered by county in parentheses.

Table A-18: Effects of import competition on newspaper references to Germany and the naval race

	"germany"		German terms		Navy terms		Militarist groups	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1885}$	0.083**	0.055	0.091**	0.062*	−0.004	0.009	−0.116*	−0.033
	(0.038)	(0.033)	(0.036)	(0.035)	(0.036)	(0.040)	(0.062)	(0.048)
Initial Mf x year		x		x		x		x
Observations	2,365	2,365	2,365	2,365	2,365	2,365	2,365	2,365
R^2	0.740	0.743	0.758	0.760	0.861	0.861	0.514	0.521
Adjusted R^2	0.673	0.676	0.695	0.697	0.825	0.825	0.389	0.395

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

Newspaper-level regressions. Dependent variable is number of uses of specified term per newspaper issue, standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. "German terms" are "germany," "kaiser," "teuton," "prussia," and "fatherland," "Navy terms" are "navy," "naval," "dreadnought," "battleship," and "fleet," "Militarist groups" are "national service league" and "navy league." Standard errors clustered by county in parentheses.

Table A-19: Effects of import competition on manifesto references to Germany and the naval race

	"germany"		German terms		Navy terms		Militarist groups	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1885}$	0.038	0.058	0.034	0.054	−0.035	0.004	−0.041*	−0.035
	(0.029)	(0.042)	(0.030)	(0.041)	(0.027)	(0.022)	(0.021)	(0.024)
Initial Mf x year		x		x		x		x
Observations	5,147	5,147	5,147	5,147	5,147	5,147	5,147	5,147
R^2	0.146	0.149	0.145	0.148	0.356	0.358	0.104	0.106
Adjusted R^2	0.060	0.062	0.060	0.062	0.292	0.293	0.015	0.015

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

Manifesto-level regressions. Dependent variable is number of uses of specified term relative to total length of manifesto, standardized. All models include constituency, party, and year fixed effects. "German terms" are "germany," "kaiser," "teuton," "prussia," and "fatherland," "Navy terms" are "navy," "naval," "dreadnought," "battleship," and "fleet," "Militarist groups" are "national service league" and "navy league." Standard errors clustered by county in parentheses.

Table A-20: Effect of local trade shocks on references to immigration in Conservative campaign manifestos

	"immigrant"		"alien"		"jew"		"foreigner"		All	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ΔIPW$_{1885}$	0.059*	0.087***	0.084*	0.215***	0.069*	0.095*	−0.006	0.025	0.061	0.165**
	(0.033)	(0.031)	(0.050)	(0.060)	(0.038)	(0.056)	(0.065)	(0.075)	(0.071)	(0.080)
Initial immigrants x year	x	x	x	x	x	x	x	x	x	x
Initial Mf x year		x		x		x		x		x
Observations	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679	2,679
R^2	0.183	0.183	0.296	0.306	0.217	0.218	0.325	0.326	0.343	0.348
Adjusted R^2	0.008	0.007	0.145	0.157	0.050	0.049	0.181	0.180	0.203	0.207

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

Manifesto-level regressions. Dependent variable is number of uses of specified term relative to total length of manifesto, by Conservative candidates, standardized. All models include constituency and election fixed effects. Standard errors clustered by county in parentheses.

Table A-21: Effect of local trade shocks on newspaper coverage of immigration

	"immigrant"		"alien"		"jew"		"foreigner"		All	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ΔIPW$_{1885}$	0.054*	0.045	0.037	0.029	0.068*	0.028	0.118***	0.116***	0.123***	0.111***
	(0.031)	(0.039)	(0.027)	(0.033)	(0.036)	(0.037)	(0.025)	(0.029)	(0.024)	(0.029)
Initial immigrants x year x		x	x	x	x	x	x	x	x	x
Initial Mf x year		x		x		x		x		x
Observations	2,365	2,365	2,365	2,365	2,365	2,365	2,365	2,365	2,365	2,365
R^2	0.652	0.655	0.705	0.705	0.804	0.805	0.779	0.781	0.798	0.799
Adjusted R^2	0.561	0.563	0.627	0.627	0.752	0.753	0.721	0.722	0.745	0.746

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

Newspaper-level regressions. Dependent variable is number of uses of specified term per newspaper issue, standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. (9) and (10) use mentions of all four terms. Standard errors clustered by county in parentheses.

E REGRESSIONS USING EXPOSURE-ROBUST STANDARD ERRORS

We re-estimate all models in the article using the aggregation and standard error calculation method recommended by Borusyak, Hull and Jaravel (2022). This method entails aggregating constituency-level data at the industry-year level, and gives identical point estimates to constituency-level regressions, but standard errors which account for correlated errors between constituencies with similar industry shares.

Table A-22: Effects of import competition on local economies, exposure-robust standard erors

	Δ ln % vagrants				Δ ln % unskilled jobs			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_t$	0.150***	0.143**	0.077*	0.373***	0.014**	0.018***	0.016**	0.017**
	(0.035)	(0.057)	(0.045)	(0.096)	(0.007)	(0.006)	(0.006)	(0.007)
Controls		x	x	x		x	x	x
Initial Mf x year			x				x	
Constituency trends				x				x
First stage F-stat	19.2	16.1	16.7	5.8	19.2	16.1	16.7	5.8
Observations	285	285	285	285	285	285	285	285

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

This table replicates the results of Table 2 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Stacked first difference estimates, at the constituency level, aggregated to the industry level, for 1880–1890, 1890–1900, 1900-1910. All models include year fixed effects. (2)–(4) and (6)–(8) add controls for lagged manufacturing employment, lagged fraction in unskilled jobs, lagged fraction of vagrants, and lagged average economic status; (3) and (7) include 1880 manufacturing employment interacted with year dummy variables, (4) and (8) include constituency fixed effects, which adjust for constituency-specific time trends. Standard errors clustered by industry in parentheses.

Table A-23: Effects of import competition on voting, exposure-robust standard errors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW	−0.003	−0.003	0.014**	0.008	−0.021***	−0.016**	−0.018***	−0.018**
	(0.004)	(0.006)	(0.006)	(0.008)	(0.006)	(0.006)	(0.005)	(0.007)
Years	All	All	1885–1900	1885–1900	1900–1910	1900-1910	1900–1910	1900–1910
Initial MF x election		x		x		x		x
Matched panel							x	x
First stage F-stat	11.5	14.3	5.4	7.2	12.2	13	16.5	15
Observations	760	760	475	475	380	380	380	380

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

This table replicates the results of Table 3 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated up to the industry level, dependent variable is share of the vote for the Conservative Party. All models include constituency and election fixed effects, (2) and (4), (6), and (8) add manufacturing employment in 1880 interacted with election dummies. (7) and (8) use a panel matched on Conservative vote share in 1885, 1892, and 1900. Standard errors clustered by county in parentheses.

Table A-24: Effects of import competition on newspaper references to trade, exposure-robust standard errors

	"import"				"trade"			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW	0.089***	0.100***	0.198***	0.192**	0.146***	0.111***	0.253***	0.206***
	(0.023)	(0.032)	(0.058)	(0.080)	(0.028)	(0.031)	(0.052)	(0.067)
Years	All	All	1900–1910	1900–1910	All	All	1900–1910	1900–1910
Initial Mf x year		x		x		x		x
First stage F-stat	7.4	7.2	8.2	7.4	7.4	7.2	8.2	7.4
Observations	665	665	285	285	665	665	285	285

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

This table replicates the results of Table 4 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Newspaper-level variables aggregated up to the industry level. Dependent variable is number of uses of specified term per newspaper issue, standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. Standard errors clustered by industry in parentheses.

Table A-25: Effect of local trade shocks on references to social reform in Liberal campaign manifestos, exposure-robust standard errors

	"social reform"		"poor law"		"labour exchange"		All	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1885}$	0.094**	0.062	0.071***	0.067*	0.079**	0.088*	0.124***	0.101**
	(0.037)	(0.042)	(0.026)	(0.036)	(0.035)	(0.045)	(0.031)	(0.039)
Initial Mf x year		x		x		x		x
First stage F-stat	10.3	9.7	10.3	9.7	10.3	9.7	10.3	9.7
Observations	570	570	570	570	570	570	570	570

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

This table replicates the results of Table 5 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Manifesto-level data aggregated to the industry level. Dependent variable is number of uses of specified term relative to total length of manifesto, by Liberal candidates, standardized. All models include constituency and election fixed effects. Standard errors clustered by industry in parentheses.

Table A-26: Effects of import competition on newspaper references to unemployment, vagrancy, and pauperism, exposure-robust standard errors

	(1)	(2)	(3)	(4)
ΔIPW	0.095***	0.073*	0.204***	0.170
	(0.027)	(0.038)	(0.074)	(0.105)
Years	All	All	1900–1910	1900–1910
Initial Mf x year		x		x
First stage F-state	7.4	7.2	8.2	7.4
Observations	665	665	285	285

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

This table replicates the results of Table 6 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Newspaper-level variables aggregated to the industry level. Dependent variable is the number of references to "unemployed," "unemployment," and "employment," minus the number of references to "vagrants," "vagrancy," "pauper," and "pauperism," standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. Standard errors clustered by industry in parentheses.

Table A-27: Effects of import competition on average economic status, exposure-robust standard errors

	(1)	(2)	(3)	(4)
ΔIPW_t	-0.067^{**}	-0.073^{**}	-0.047^{*}	-0.101^{**}
	(0.026)	(0.032)	(0.025)	(0.047)
Controls		x	x	x
Initial Mf x year			x	
Constituency trends				x
First stage F-stat	19.2	21.1	21.8	5.8
Observations	285	285	285	285

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

This table replicates the results of Table A-2 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Stacked first difference estimates, at the constituency level, aggregated to the industry level, for 1880–1890, 1890–1900, 1900-1910. Dependent variable is change in average economic status. All models include year fixed effects. (2)–(4) add controls for lagged manufacturing employment and lagged average economic status; (3) includes 1880 manufacturing employment interacted with year dummy variables, (4) includes constituency fixed effects, which adjust for constituency-specific time trends. Standard errors clustered by industry in parentheses.

Table A-28: Robustness checks for economic variables, exposure-robust standard errors

	Δ ln % vagrants				Δ ln % unskilled jobs			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_t$	0.175***	0.170**	0.173***	0.134***	0.017***	0.020***	0.021***	0.024***
	(0.062)	(0.077)	(0.065)	(0.051)	(0.007)	(0.007)	(0.007)	(0.005)
Initial steel x year	x				x			
Initial zinc x year		x				x		
Initial sugar x year			x				x	
Initial shares PCA x year				x				x
First stage F-stat	23.2	15.7	6.4	17.2	23.2	15.7	6.4	17.2
Observations	285	285	285	285	285	285	285	285

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

This Table replicates the results in Table A-4 using the aggregation and standard error calculation method recommended by Borusyak, Hull, and Jaravel (2022). Stacked first difference estimates, at the constituency level, aggregated to the industry level, for 1880–1890, 1890–1900, 1900-1910. All models include year fixed effects, and controls for lagged share unskilled, lagged manufacturing employment and lagged fraction of vagrants; (1) and (5) include the share of employment in 1881 in sheet iron and steel interacted with year fixed effects, (2) and (6) do the same for employment in sheet zinc, (3) and (7) the same for sugar. (4) and (8) add the first three principal components for the 1881 industry shares interacted with year fixed effects. Standard errors clustered by industry in parentheses.

Table A-29: Effects of import competition on voting for different parties, exposure-robust standard errors

	Conservative			Labour		Liberal vote share		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW	−0.003	0.014**	−0.021***	0.014*	−0.016***	−0.026***	0.008	0.019***
	(0.004)	(0.006)	(0.006)	(0.007)	(0.006)	(0.005)	(0.014)	(0.004)
Years	All	1885–1900	1900-1910	All	All	1885-1900	1900–1910	1900-1910
Excluding Labour								x
First stage F-stat	11.5	5.4	12.2	11.5	11.5	5.4	12.2	13
Observations	760	475	380	760	760	475	380	380

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

This table replicates the results of Table A-5 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated to the shock level, exposure-robust standard errors clustered by industry in parentheses, all models include constituency and election fixed effects. Model 8 excludes elections contested by Labour.

Table A-30: Effects of import competition on voting for combined Liberals and Labour, exposure-robust standard errors

	(1)	(2)	(3)	(4)
ΔIPW	−0.020***	−0.013**	0.019***	0.015***
	(0.004)	(0.005)	(0.005)	(0.005)
Years	1885–1900	1885–1900	1900–1910	1900-1910
Initial MF x election		x		x
First stage F-stat	5.4	7.2	12.2	13
Observations	475	475	380	380

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

This table replicates the results of Table A-6 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated up to the industry level, dependent variable is combined share of the vote for the Liberal and Labour parties. All models include constituency and election fixed effects, (2) and (4) add the manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by industry in parentheses.

Table A-31: First-difference effects of import competition on voting, exposure-robust standard errors

	(1)	(2)	(3)	(4)	(5)	(6)
Shock	0.018*	0.016	−0.027***	−0.020**	0.001	−0.002
	(0.009)	(0.010)	(0.009)	(0.009)	(0.007)	(0.008)
Shock variable	ΔIPW$_t$	ΔIPW$_t$	ΔIPW$_t$	ΔIPW$_t$	ΔIPW$_{t+1}$	ΔIPW$_{t+1}$
Years	1885–1900	1885–1900	1900–1910	1900-1910	1885–1900	1885–1900
Initial Mf x election		x		x		x
First stage F stat	9.9	13	15.8	14.4	12.8	16.9
Observations	190	190	190	190	190	190

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

This table replicates the results of Table A-7 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Stacked first-difference regressions, for waves 1885–1892, 1892–1900, 1900-1910 (note there were two elections in 1910), with constituency-level variables aggregated up to the industry level. Dependent variable is change in share of the vote for the Conservative Party. All models include constituency and election fixed effects, (2), (4) and (6) add controls for manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by industry in parentheses, (5) and (6) control for Δ IPW for the correct period.

Table A-32: Robustness checks for post-1900 voting regressions, exposure-robust standard errors

	(1)	(2)	(3)	(4)	(5)
ΔIPW$_{1900}$	-0.018^{**}	-0.017^{***}	-0.011^{*}	-0.019^{***}	-0.015^{**}
	(0.007)	(0.005)	(0.007)	(0.005)	(0.007)
Initial steel x year	x				
Initial cotton x year		x			
Initial sugar x year			x		
Initial lace x year				x	
Initial shares PCA x year					x
First stage F-stat	11.7	12.4	8.1	13.1	12.4
Observations	380	380	380	380	380

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

This table replicates the results of Table A-9 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level fixed effects regressions, aggregated to the industry level for exposure-robust standard errors, for 1900–1910. Dependent variable is share of the vote for Conservative candidates. All models include constituency and year fixed effects, and initial manufacturing by year controls. (1) includes the share of employment in 1881 in sheet iron and steel interacted with year fixed effects, (2) does the same for employment in sheet zinc, (3) does the same for sugar, (4) does the same for lace. (5) adds the first three principal components for the 1881 industry shares interacted with year fixed effects. Standard errors clustered by industry in parentheses.

Table A-33: Effects of import competition on voting, dropping certain years, exposure-robust standard errors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1900}$	-0.017^{**}	-0.017^{**}	-0.026^{***}	-0.020^{**}	-0.020^{***}	-0.016^{**}	-0.020^{**}	-0.012
	(0.007)	(0.008)	(0.009)	(0.010)	(0.005)	(0.007)	(0.008)	(0.007)
Excluding	1900	1900	1906	1906	1910J	1910J	1910D	1910D
Initial MF x election		x		x		x		x
First stage F-stat	5.9	5.7	14	13.4	12.1	12.3	11	11.1
Observations	285	285	285	285	285	285	285	285

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

This table replicates the results of Table A-10 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated up to the industry level, dependent variable is share of the vote for the Conservative Party, for the period 1900–1910. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Each model drops one election from the period. Standard errors clustered by industry in parentheses.

Table A-34: Moderating effect of unions on effect of import competition on voting, exposure-robust standard errors

	(1)	(2)	(3)	(4)	(5)	(6)
ΔIPW	−0.001	−0.009	−0.011	−0.025***	−0.015***	−0.013*
	(0.008)	(0.006)	(0.009)	(0.008)	(0.006)	(0.007)
Years	All	All	1900–1910	1900–1910	1900–1910	1900–1910
Union sub-sample	2H	1H	2H	1H	All	All
Union x election					x	x
Initial MF x election	x	x	x	x		x
First stage F-stat	9.5	21.4	8.2	7.6	13.8	13.5
Observations	760	760	380	380	380	380

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

This table replicates the results of models (5)–(10) of Table A-11 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). (their method does not allow us to estimate standard errors for variables interacted with the shock). Constituency-level variables aggregated up to the industry level, dependent variable is share of the vote for the Conservative Party. Data on union membership relative to population in 1892 at the county level is taken from Sidney and Beatrice Webb, *The History of Trade Unionism* (London: Longmans, Green and Co., 1896). Models (1) and (3) are estimated for constituencies with above-median unionization, (2) and (4) for constituencies with below-median unionization. Models (5) and (6) replicate regressions from table 3, adding controls for unionization interacted with year dummy variables. All models include constituency and election fixed effects, Standard errors clustered by industry in parentheses.

Table A-35: Effects of import competition on voting, by period, with exposure-robust standard errors

	1885–1895		1895–1906		1906–1910		1895–1910	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW	0.006	−0.0002	−0.005	0.001	−0.017**	−0.017**	−0.013***	−0.010**
	(0.009)	(0.011)	(0.004)	(0.004)	(0.007)	(0.008)	(0.004)	(0.004)
Initial MF x election		x		x		x		x
First stage F-stat	3.6	4.6	17.8	16	5.9	5.7	26.5	28.7
Observations	380	380	285	285	285	285	475	475

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

This table replicates the results of Table A-12 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated up to the industry level, dependent variable is share of the vote for the Conservative Party, subset by different groups of years. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by industry in parentheses.

Table A-36: Effects of import competition on voting, controlling for exports and wheat imports, with exposure-robust standard errors

	(1)	(2)	(3)	(4)
ΔIPW_{1900}	-0.021^{***}	-0.016^{**}	-0.016^{***}	-0.014^{**}
	(0.004)	(0.008)	(0.006)	(0.007)
Initial MF x election		x		x
First stage F-stat	12.2	12.7	11.8	12.8
Observations	380	380	380	380

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

This table replicates the results of Table A-13 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated up to the industry level, dependent variable is share of the vote for the Conservative Party, for the period 1900–1910. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Models 1 and 2 in addition control for exports to Germany per worker, computed the same way as ΔIPW, models 3 and 4 control for US wheat imports per worker, with wheat employment calculated using agricultural laborers weighted by the share of county land devoted to wheat cultivation. Standard errors clustered by industry in parentheses.

Table A-37: Checks for pre-trends, with exposure-robust standard errors

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW	−0.017***	−0.011**	−0.022***	−0.017***	0.005	0.001	0.005	0.003
	(0.004)	(0.005)	(0.006)	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)
Years	1900–1910	1900–1910	1900–1910	1900–1910	1885–1895	1885–1895	1885–1895	1885–1895
Shock	ΔIPW_{1900}	ΔIPW_{1900}	ΔIPW_{1900}	ΔIPW_{1900}	ΔIPW_{t+2}	ΔIPW_{t+2}	ΔIPW_{t+3}	ΔIPW_{t+3}
Constituency time trend	1885–1910	1885–1910	1885–1900	1885–1900				
Initial MF x election		x		x		x		x
First stage F-state	12.4	12.9	12.4	13.2	16.8	16.1	18.8	18.5
Observations	380	380	380	380	380	380	380	380

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

This table replicates the results of Table A-14 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated up to the industry level, dependent variable is share of the vote for the Conservative Party. Models (1)–(4) re-estimate the main voting result, for the 1900–1910 period, adding controls for Conservative vote share as predicted by constituency-specific time trends, based on the 1885–1910 period for models (1) and (2), and based on the 1885–1900 period for (3) and (4). Models (5)–(8) test for differential trends in Conservative voting prior to the acceleration of German imports after 1895, regressing Conservative vote share 1885–1895 on import penetration 1892–1906 and 1895–1910. All models include constituency and election fixed effects, even numbers add manufacturing employment in 1880 interacted with election dummies. Standard errors clustered by industry in parentheses.

Table A-38: Effects of import competition on incumbency, exposure-robust standard errors

	MP		Local Party		National Party	
	(1)	(2)	(3)	(4)	(5)	(6)
ΔIPW	0.002	0.009	0.010**	0.001	0.004	−0.0004
	(0.007)	(0.025)	(0.004)	(0.008)	(0.004)	(0.004)
Years	All	1900-1910	All	1900-1910	All	1900-1910
First stage F-stat	11.5	12.2	11.5	12.2	17.2	11.5
Observations	760	380	760	380	570	285

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

This table replicates the results of Table A-16 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Constituency-level variables aggregated to the industry level, (1)–(4) are estimated in levels and include constituency and year fixed effects, (5) and (6) in stacked first-differences, and include year fixed effects. For (1) and (2) the dependent variable is the share of the vote won by incumbent MPs, for (3) and (4), the share of the vote won by incumbent parties at the local level, for (5) and (6), the change in voteshare by the nationally-incumbent party. Standard errors clustered by industry in parentheses.

Table A-39: Effects of import competition on newspaper references terms overused in Beveridge's analysis of unemployment, exposure-robust standard errors

	Beveridge terms		"fluctuation"		"depression"		"(un)employment"		"exchange"	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ΔIPW$_{1885}$	0.115***	0.116***	0.124***	0.116***	0.137***	0.159***	0.061***	0.062*	0.124***	0.167***
	(0.020)	(0.026)	(0.025)	(0.036)	(0.032)	(0.050)	(0.023)	(0.035)	(0.035)	(0.046)
Initial Mf x year		x		x		x		x		x
First stage F-stat	7.4	7.2	7.4	7.2	7.4	7.2	7.4	7.2	7.4	7.2
Observations	665	665	665	665	665	665	665	665	665	665

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

This table replicates the results of Table A-17 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Newspaper-level variables aggregated up to the industry level. Dependent variable is number of uses of specified term per newspaper issue, standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. "Beveridge terms" refers to terms overused in Beveridge's *Unemployment: A Problem of Industry*, relative to other contemporary writings supportive of the existing Poor Law system. Terms were selected using the χ^2 test statistic proposed by Gentzkow and Shapiro (2010). The terms in question are "unemployed," "unemployment," "industrial," "exchange," "table," "fluctuation," "demand," "depression," "trades," "reserve," "percentage," "organisation," "situation," "cyclical," "skilled," "dock," "note," "seasonal," "unskilled," and "production." Standard errors clustered by industry in parentheses.

Table A-40: Effects of import competition on newspaper references to Germany and the naval race, exposure-robust standard errors

	"germany"		German terms		Navy terms		Militarist groups	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1885}$	0.083***	0.055*	0.091***	0.062**	−0.004	0.009	−0.116**	−0.033
	(0.031)	(0.032)	(0.028)	(0.031)	(0.013)	(0.017)	(0.048)	(0.052)
Initial Mf x year		x		x		x		x
First stage F-stat	7.4	7.2	7.4	7.2	7.4	7.2	7.4	7.2
Observations	665	665	665	665	665	665	665	665

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

This table replicates the results of Table A-18 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Newspaper-level data aggregated to the industry level. Dependent variable is number of uses of specified term per newspaper issue, standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. "German terms" are "germany," "kaiser," "teuton," "prussia," and "fatherland," "Navy terms" are "navy," "naval," "dreadnought," "battleship," and "fleet," "Militarist groups" are "national service league" and "navy league." Standard errors clustered by industry in parentheses.

Table A-41: Effects of import competition on manifesto references to Germany and the naval race, exposure-robust standard errors

	"germany"		German terms		Navy terms		Militarist groups	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ΔIPW$_{1885}$	0.038*	0.058	0.034	0.054	−0.035	0.004	−0.041**	−0.035
	(0.022)	(0.036)	(0.023)	(0.037)	(0.034)	(0.030)	(0.018)	(0.025)
Initial Mf x year		x		x		x		x
First stage F-stat	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Observations	570	570	570	570	570	570	570	570

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

This table replicates the results of Table A-19 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Manifesto-level data aggregated to the industry level. Dependent variable is number of uses of specified term relative to total length of manifesto, standardized. All models include constituency, party, and year fixed effects. "German terms" are "germany," "kaiser," "teuton," "prussia," and "fatherland," "Navy terms" are "navy," "naval," "dreadnought," "battleship," and "fleet," "Militarist groups" are "national service league" and "navy league." Standard errors clustered by industry in parentheses.

Table A-42: Effect of local trade shocks on references to immigration in Conservative campaign manifestos, exposure-robust standard errors

	"immigrant"		"alien"		"jew"		"foreigner"		All	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ΔIPW$_{1885}$	0.059***	0.087***	0.084	0.215***	0.069*	0.095*	−0.006	0.025	0.061	0.165**
	(0.022)	(0.032)	(0.063)	(0.064)	(0.036)	(0.053)	(0.041)	(0.057)	(0.061)	(0.065)
Initial immigrants x year	x	x	x	x	x	x	x	x	x	x
Initial Mf x year		x		x		x		x		x
First stage F-stat	8.6	9.1	8.6	9.1	8.6	9.1	8.6	9.1	8.6	9.1
Observations	570	570	570	570	570	570	570	570	570	570

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

This table replicates the results of Table A-20 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Manifesto-level data aggregated to the industry level. Dependent variable is number of uses of specified term relative to total length of manifesto, by Conservative candidates, standardized. All models include constituency and election fixed effects. Standard errors clustered by industry in parentheses.

Table A-43: Effect of local trade shocks on newspaper coverage of immigration, exposure-robust standard errors

	"immigrant'		"alien"		"jew"		"foreigner"		All	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ΔIPW$_{1885}$	0.054*	0.045	0.037*	0.029	0.068***	0.028	0.118***	0.116***	0.123***	0.111***
	(0.028)	(0.046)	(0.022)	(0.034)	(0.026)	(0.044)	(0.026)	(0.038)	(0.025)	(0.038)
Initial immigrants x year	x	x	x	x	x	x	x	x	x	x
Initial Mf x year		x		x		x		x		x
First stage F-stat	6.5	5.9	6.5	5.9	6.5	5.9	6.5	5.9	6.5	5.9
Observations	665	665	665	665	665	665	665	665	665	665

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

This table replicates the results of Table A-21 using the aggregation and standard error calculation methods recommended by Borusyak, Hull, and Jaravel (2022). Newspaper-level variables aggregated to the industry level. Dependent variable is number of uses of specified term per newspaper issue, standardized. All models include newspaper and year fixed effects. For newspapers in cities, ΔIPW is calculated at the city-, not constituency-level. (9) and (10) use mentions of all four terms. Standard errors clustered by industry in parentheses.

F REGRESSION EQUIVALENT FOR FIGURE 5

Table A-44: Evolution of Conservative voting by 1900–1910 change in imports, with full and matched panel

	(1)	(2)
ΔIPW$_{1900}$, 1900–1910 above median		
×election = 1885	−0.029***	−0.004
	(0.011)	(0.007)
×election = 1886	−0.034**	−0.009
	(0.016)	(0.011)
×election = 1892	−0.024**	−0.008
	(0.012)	(0.006)
×election = 1895	0.001	0.008
	(0.012)	(0.008)
×election = 1900	0.008	0.005
	(0.021)	(0.010)
×election = 1906	−0.034**	−0.029***
	(0.014)	(0.011)
×election = 1910J	−0.042***	−0.033***
	(0.015)	(0.012)
×election = 1910D	−0.046***	−0.029***
	(0.010)	(0.008)
Matched panel		x
Observations	3,134	1,343
Note:	*p<0.1; **p<0.05; ***p<0.01	
	This table reports the results of regressions of Conservative vote share on a dummy variable which takes a value of 1 if the change in imports per worker between 1900 and 1910 was above the median, and zero if otherwise, interacted with election fixed effects. This provides a regression-based complement to Figure 5. Model (1) is estimated using the full panel, (2) is estimated using a panel matched on 1885, 1892, and 1900 Conservative vote shares. All models include election fixed effects. Standard errors clustered by county in parentheses.	