Online Data Appendix Supplement

This data appendix supplement provides additional information about the data used in the published version of the paper.

<u>Inconsistencies in the U.S. Bureau of the Census' annual *Mortality Statistics* series:</u>
The following inconsistencies appear to be present in the official historical mortality statistics volumes rather than reflecting data entry errors:

- 1902: total deaths summed by cause and total deaths summed by age and sex for all reporting states do not agree
- 1912 and 1913: deaths by state and age are not disaggregated by gender in the historical volumes
- 1916: total deaths and the sum of age-specific deaths for females by age in Ohio do not agree
- 1919: total deaths and the sum of age-specific deaths for males by age in Kentucky do not agree
- 1920: total deaths and the sum of age-specific deaths for males in California and for females in Indiana do not agree; total deaths and the sums by age and sex for Kentucky do not agree
- 1924 through 1936: deaths by age are aggregated for ages 1- 4 (for earlier years they are provided by single years of age in this interval)
- 1935: total deaths by cause and total deaths by age for Massachusetts do not agree

<u>Cities Present in the U.S. Bureau of the Census' municipal public finance statistics</u>
The following table summarizes the number of cities present in each year of the annual *Statistics of Cities Having a Population of Over 30,000* and *Financial Statistics of Cities Having a Population of Over 30,000*:

Number of Cities by Year

Year	Number of Cities	Year	Number of Cities
1905	154	1918	227
1906	158	1919	227
1907	159	1921	183
1908	159	1922	261
1909	159	1923	249
1910	184	1924	248
1911	193	1925	247
1912	195	1926	251
1913	199	1927	251
1915	204	1928	251
1916	213	1929	251
1917	219	1930	311

Additional data sources used for supplemental analyses:

IPUMS Population Census 1% Samples: 1900, 1910, 1920, and 1940
      For analyses of how fertility responded to women's suffrage, I use the 1% sample of the 1940 population census made available through the Integrated Public Use Microdata Series (IPUMS) by the University of Minnesota's Population Center. Although not all women were asked questions about children ever born, sample-line women married and of fertile age (defined as 14+ years of age) at the time of the population census were asked to how many children they had ever given birth.
      Analyses of internal migration utilize 1% samples from the 1900 and 1920 population censuses and a 1.6% sample from the 1910 census. Weights provided are used to correct for oversampling: 20% oversampling of Alaskans, Hawaiians, and persons enumerated on the American Indian schedules in 1900 and oversampling of Hispanics, Blacks, Alaskans, Hawaiians, and persons enumerated on the American Indian schedules in 1910. The population census did not ask explicit migration questions until 1940, and this information is limited to self-reported information about internal movement in the preceding five years. I construct an alternative measure using self-reported state of birth and current state of residence, treating the share of current residents born in different states as a proxy for cumulative internal migration across state boundaries (the appropriate level of analysis for the purposes of this paper).

Other Progressive Era Reform Dates
      Additional validity tests examine the correlation between women's suffrage law dates and the dates of other major state-level Progressive Era reforms and events. Most of these dates were obtained from Skocpol (1992): divorce/alimony laws, mother's pension laws, state General Federation of Women's Clubs (GFWC) chapter establishment, women's maximum hour laws, women's minimum wage laws, and prohibition laws. State workers' compensation law dates were obtained from Fishback and Kantor (1996). Adriana Lleras-Muney provided the dates of state child labor and compulsory education laws (Lleras-Muney 2002).

Data references not cited in the published version of the paper:

Fishback, Price and Shawn Kantor, "Precautionary Saving, Insurance, and the Origins of Workers' Compensation," *Journal of Political Economy*, 104 (1996), 419-442.

Lleras-Muney, Adriana, "Were Compulsory Attendance and Child Labor Laws Effective: An Analysis from 1915 to 1939," *Journal of Law and Economics*, 45 (2002), 401-435.

ONLINE APPENDIX TABLE 1
Correlates of Death Registration Area Entry

	Estimate	Standard Error
Year of Women's Suffrage	-0.169	(0.178)
Year of State Alimony/Divorce Law	0.097	(0.244)
Year of State GFWC Chapter	0.068	(0.060)
Year of State Mother's Pension Law	-0.040	(0.993)
Year of Women's Minimum Wage Law	1.410	(0.916)
Year of Workers Compensation Law	0.297	(0.247)
Year of First Child Labor Permit Age Law	0.510	(0.487)
Year of First Compulsory Schooling Law	-0.718	(0.484)
Year of Women's Maximum Hour Law	0.369	(0.458)
Year of Prohibition Law	-0.469	(0.339)

Death registration area entry dates from the U.S. National Office of Vital Statistics' *Vital Statistics of the United States: 1950*; divorce/alimony laws, mother's pension laws, state General Federation of Women's Clubs chapter establishment, women's maximum hour laws, women's minimum wage laws, and prohibition laws from Skocpol (1992); workers compensation laws from Fishback and Kantor (1996); first child labor and compulsory education laws from Lleras-Muney (personal communication and http://www.princeton.edu/~alleras/papers/comp.dta). Coefficient estimates and standard errors in parentheses shown from bivariate regressions.

ONLINE APPENDIX TABLE 2
States in Unbalanced Mortality Sample by Year Relative to Suffrage Law

Year -5	Year -4	Year -3	Year -2	Year -1	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
CA	CA	CA	CA	CA	CA	CA	CA	CA	CA	CA
CT	CT	CT	CT	CT	CT	CT	CT	CT	CT	CT
IN	IN	IN	IN	DE	DE	DE	DE	DE	DE	DE
KY	KY	KY	KY	FL	FL	FL	FL	FL	FL	FL
MA	MA	MA	LA	IN	IN	IN	GA	GA	GA	IA
MD	MD	MD	MA	KY	KY	KY	IN	IN	IA	IL
ME	ME	ME	MD	LA	LA	LA	KS	KS	IN	IN
MI	MI	MI	ME	MA	MA	MA	KY	KY	KS	KS
MN	MN	MN	MI	MD	MD	MD	LA	LA	KY	KY
MO	MO	MO	MN	ME	ME	ME	MA	MA	LA	LA
NC	MT	MT	MO	MI	MI	MI	MD	MD	MA	MA
NH	NC	NC	MT	MN	MN	MN	ME	ME	MD	MD
NJ	NH	NH	NC	MO	MO	MO	MI	MI	ME	ME
NY	NJ	NJ	NH	MS	MS	MS	MN	MN	MI	MI
OH	NY	NY	NJ	MT	MT	MT	MO	MO	MN	MN
PA	OH	OH	NY	NC	NC	NC	MS	MS	MO	MO
RI	PA	PA	OH	NH	NH	NH	MT	MT	MS	MS
VA	RI	RI	PA	NJ	NJ	NJ	NC	NC	MT	MT
VT	SC	SC	RI	NY	NY	NY	NH	NE	NC	NC
WI	VA	VA	SC	OH	OH	OH	NJ	NH	NE	NE
	VT	VT	TN	PA	PA	PA	NY	NJ	NH	NH
	WI	WI	VA	RI	RI	RI	OH	NY	NJ	NJ
			VT	SC	SC	SC	PA	OH	NY	NY
			WA	TN	TN	TN	RI	PA	OH	OH
			WI	VA	VA	VA	SC	RI	PA	PA
				VT	VT	VT	TN	SC	RI	RI
				WA	WA	WA	VA	TN	SC	SC
				WI	WI	WI	VT	VA	TN	TN
							WA	VT	VA	VA
							WI	WA	VT	VT
								WI	WA	WA
									WI	WI
										WV

All states present in the unbalanced mortality sample hown by year relative to suffrage law.

ONLINE APPENDIX TABLE 3
Pre-Suffrage Trend Breaks

Dependent Variable	1-2 Years Before Law		1-4 Years Before Law		1-6 Years Before Law	
	Estimate	Standard Error	Estimate	Standard Error	Estimate	Standard Error
ln(Male Deaths Under 1)	-0.002	(0.028)	0.041	(0.066)	0.068	(0.070)
ln(Male Deaths 1-4)	0.038	(0.035)	0.086	(0.074)	0.114	(0.077)
ln(Male Deaths 5-9)	-0.005	(0.044)	0.033	(0.072)	0.082	(0.081)
ln(Male Deaths 10-14)	-0.024	(0.027)	-0.007	(0.069)	0.017	(0.070)
ln(Male Deaths 15-19)	-0.003	(0.030)	0.034	(0.061)	0.024	(0.047)
ln(Female Deaths Under 1)	-0.029	(0.023)	0.025	(0.063)	0.047	(0.068)
ln(Female Deaths 1-4)	0.049	(0.040)	0.083	(0.079)	0.117	(0.084)
ln(Female Deaths 5-9)	0.022	(0.043)	0.058	(0.074)	0.092	(0.092)
ln(Female Deaths 10-14)	-0.022	(0.035)	0.017	(0.068)	0.020	(0.054)
ln(Female Deaths 15-19)	-0.031	(0.027)	0.021	(0.052)	0.058	(0.042)
ln(Diphtheria Deaths)	-0.110	(0.096)	-0.049	(0.104)	0.129	(0.117)
ln(Meningitis Deaths)	0.050	(0.087)	0.058	(0.113)	0.006	(0.111)
ln(Diarrhea Deaths Under Two)	-0.056	(0.054)	0.001	(0.075)	0.119	(0.090)
ln(State Social Service Spending)	0.129	(0.106)	-0.038	(0.159)	-0.053	(0.145)
ln(Municipal Health Conservation and Sanitation Spending)	-0.053	(0.250)	0.213	(0.270)	0.449	(0.330)
ln(Municipal Charities, Hospitals, and Corrections Spending)	0.131	(0.121)	0.080	(0.180)	0.059	(0.197)
ln("Progressive" Senate Votes)	-0.046	(0.119)	0.036	(0.096)	0.130	(0.088)

Municipal public finance data from the U.S. Bureau of the Census' *Statistics of Cities Having a Population of Over 30,000* and *Financial Statistics of Cities Having a Population of Over 30,000* ; state public finance data from Sylla, Legler, and Wallis ICPSR Study # 9728 and the U.S. Bureau of the Census' *Financial Statistics of States* ; Legislative roll call data from the Voteview database (coding of Progressive voting done by author as described in the data appendix); Mortality data from the U.S. Bureau of the Census' annual *Mortality Statistics* . Estimates and standard errors (in parentheses, clustered by state) shown for dummy variables denoting time periods relative to women's suffrage laws (controlling for the presence of a women's suffrage law, state and year fixed effects, and state-specific linear time trends, with city fixed effects subsitituted for state fixed effects in the municipal public finance regressions). The municipal public finance sample contains city-year observations from years 1905-1909, 1909-1913, 1915-1919, and 1921-1930; the state public finance sample contains state-year observations from years 1900-1919 and 1921-1930; the Voteview sample contains state-year observations from years 1900-1930; the unbalanced mortality sample contains state-year observations from years 1900-1936. *p<0.10, **p<0.05, ***p<0.01.

ONLINE APPENDIX TABLE 4
Correlates of Women's Suffage Law Timing

Independent Variable	Estimate	Standard Error
Year Joined Death Registration Area	-0.114	(0.120)
Year of State Alimony/Divorce Law	0.184	(0.279)
Year of State General Federation of Women's Clubs Chapter	-0.085	(0.337)
Year of State Mother's Pension Law	1.335	(0.835)
Year of Women's Maximum Hour Law	-0.079	(0.460)
Year of Women's Minimum Wage Law	1.105	(0.984)
Year of Prohibition	-0.162	(0.283)
Year of Workers' Compensation Law	0.097	(0.205)
Year of First Child Labor Law	-0.131	(0.432)
Year of First Compulsory Schooling Law	0.220	(0.319)
Population in 1000s, 1900	0.002*	(0.001)
Total Mortality Rate per 1000, 1900	0.071	(0.233)
Percent of the Native White Population 21+ Illiterate, 1900	0.449	(0.400)
Per Capita Capital Investment in Manufacturing, 1900	-10.297	(14.148)
Per Capita Wage in Manufacturing, 1900	-0.080	(0.057)

Death registration area entry dates from the U.S. National Office of Vital Statistics' *Vital Statistics of the United States: 1950* ; 1900 state characteristics from the U.S. Bureau of the Census' *1900 Census of Housing and Population* ; dates for divorce/alimony laws, mother's pension laws, General Federation of Women's Clubs chapter establishment, women's maximum hour laws, women's minimum wage laws, and prohibition laws from Skocpol (1992); workers' compensation law dates from Fishback and Kantor (1996); and first child labor and compulsory education laws from Lleras-Muney (personal communication and http://www.princeton.edu/~alleras/papers/comp.dta). Coefficient estimates and standard errors in parentheses shown from bivariate regressions.

ONLINE APPENDIX TABLE 5
Women's Suffrage Laws and Mortality in Voluntary vs. Mandatory States

Dependent Variable	Estimate	Standard Error	N	R^2
ln(Male Deaths Under 1)	0.000	(0.094)	1062	0.99
ln(Male Deaths 1-4)	0.021	(0.104)	1062	0.99
ln(Male Deaths 5-9)	0.135	(0.099)	1062	0.98
ln(Male Deaths 10-14)	0.079	(0.085)	1062	0.98
ln(Male Deaths 15-19)	0.024	(0.075)	1062	0.99
ln(Female Deaths Under 1)	-0.001	(0.092)	1062	0.99
ln(Female Deaths 1-4)	0.030	(0.099)	1062	0.99
ln(Female Deaths 5-9)	0.108	(0.098)	1062	0.98
ln(Female Deaths 10-14)	0.131	(0.090)	1062	0.98
ln(Female Deaths 15-19)	0.004	(0.067)	1062	0.99
ln(Diphtheria Deaths)	0.060	(0.151)	1106	0.95
ln(Meningitis Deaths)	0.167	(0.160)	1107	0.93
ln(Diarrhea Deaths Under Two)	-0.002	(0.131)	1109	0.98
ln(State Social Service Spending)	0.008	(0.093)	688	0.84
ln(Municipal Health Conservation and Sanitation Spending)	0.307	(0.274)	3661	0.26
ln(Municipal Charities, Hospitals, and Corrections Spending)	0.518	(0.684)	3454	0.42
ln("Progressive" Senate Votes)	-0.025	(0.129)	1110	0.83

Municipal public finance data from the U.S. Bureau of the Census' *Statistics of Cities Having a Population of Over 30,000* and *Financial Statistics of Cities Having a Population of Over 30,000*; state public finance data from Sylla, Legler, and Wallis ICPSR Study # 9728 and the U.S. Bureau of the Census' *Financial Statistics of States*; Legislative roll call data from the Voteview database (coding of Progressive voting done by author as described in the data appendix); Mortality data from the U.S. Bureau of the Census' annual *Mortality Statistics*. Estimates and standard errors (in parentheses, clustered by state) shown for interactions between a women's suffrage law dummy variable and a dummy variable indicating whether or not a state "voluntarily" chose suffrage (controlling for the presence of a women's suffrage law, state and year fixed effects, and state-specific linear time trends, with city fixed effects substituted for state fixed effects in the municipal public finance regressions). The municipal public finance sample contains city-year observations from years 1905-1909, 1909-1913, 1915-1919, and 1921-1930; the state public finance sample contains state-year observations from years 1900-1919 and 1921-1930; the Voteview sample contains state-year observations from years 1900-1930; the unbalanced mortality sample contains state-year observations from years 1900-1936. *p<0.10, **p<0.05, ***p<0.01.

ONLINE APPENDIX TABLE 6
Constitutional Convention and Referendum Placebo Estimates

Dependent Variable	Constitutional Convention		Referendum	
	Estimate	Standard Error	Estimate	Standard Error
ln(Male Deaths Under 1)	-0.002	(0.032)	-0.028	(0.056)
ln(Male Deaths 1-4)	0.034	(0.040)	0.005	(0.063)
ln(Male Deaths 5-9)	0.027	(0.040)	-0.018	(0.065)
ln(Male Deaths 10-14)	-0.038	(0.033)	-0.072	(0.052)
ln(Male Deaths 15-19)	-0.036	(0.032)	-0.060	(0.046)
ln(Female Deaths Under 1)	-0.004	(0.032)	-0.022	(0.051)
ln(Female Deaths 1-4)	0.033	(0.044)	0.016	(0.061)
ln(Female Deaths 5-9)	0.019	(0.037)	-0.030	(0.067)
ln(Female Deaths 10-14)	-0.041	(0.035)	-0.057	(0.049)
ln(Female Deaths 15-19)	-0.063**	(0.027)	-0.076	(0.040)
ln(Diphtheria Deaths)	0.098	(0.088)	0.010	(0.111)
ln(Meningitis Deaths)	0.080	(0.079)	-0.057	(0.096)
ln(Diarrhea Deaths Under Two)	-0.013	(0.080)	-0.044	(0.078)
ln(Social Service Spending)	-0.185	(0.176)	0.104	(0.241)
ln(Municipal Health Conservation and Sanitation Spending)	0.013	(0.134)	-0.022	(0.147)
ln(Municipal Charities, Hospitals, and Corrections Spending)	-0.011	(0.175)	0.347	(0.447)
ln("Progressive" Senate Votes)	0.119	(0.110)	0.032	(0.110)

Municipal public finance data from the U.S. Bureau of the Census' *Statistics of Cities Having a Population of Over 30,000* and *Financial Statistics of Cities Having a Population of Over 30,000*; state public finance data from Sylla, Legler, and Wallis ICPSR Study # 9728 and the U.S. Bureau of the Census' *Financial Statistics of States*; Legislative roll call data from the Voteview database (coding of Progressive voting done by author as described in the data appendix); Mortality data from the U.S. Bureau of the Census' annual *Mortality Statistics*. Estimates and standard errors (in parentheses, clustered by state) shown for dummy variables denoting the whether or not a (failed) referendum initiative or constitutional convention attempting to enfranchise women had occurred (in separate regressions, controlling for state and year fixed effects, and state-specific linear time trends, with city fixed effects substituted for state fixed effects in the municipal public finance regressions). The municipal public finance sample contains city-year observations from years 1905-1909, 1909-1913, 1915-1919, and 1921-1930; the state public finance sample contains state-year observations from years 1900-1919 and 1921-1930; the Voteview sample contains state-year observations from years 1900-1930; the unbalanced mortality sample contains state-year observations from years 1900-1936. *p<0.10, **p<0.05, ***p<0.01.

ONLINE APPENDIX TABLE 7
Women's Suffrage Laws and Internal Migration

	(1)	(2)	(3)	(4)	(5)
Years in Sample:	1900, 1910, 1920	1910, 1920	1920	1900, 1910, 1920	1910, 1920
Years of Women's Suffrage	-0.002	-0.001	-0.002	0.000	-0.002
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
State Fixed Effects	No	No	No	Yes	Yes
N	144	96	48	144	96
R^2	0.8074	0.8385	0.8122	0.9889	0.997

Data from the IPUMS 1% samples of the U.S. Bureau of the Census' 1900, 1910, and 1920 *Census of Population and Housing*. Estimates and standard errors shown for years of women's suffrage (with and without controlling for state fixed effects, as indicated. All regressions controlling for mean state Duncan socio-economic index score, family size, and number of children in each household as well as the share of each state's population: married, living in urban areas, literate (among those ages 10+), in the labor force (among those ages 16+), owning their home, in broad age groups (0-4, 5-14, 15-24, 25-44, and 45+), and in racial groups (White, Black, American Indian, and other). *p<0.10, **p<0.05, ***p<0.01.

Women's Suffrage Laws and Municipal and State Public Finance

Dependent Variable	Main Estimate (1)	w/ Region*Year Fixed Effects (2)	w/ Conley Standard Error Corrections (3)	w/ Time Varying State Level Covariates (4)	Recoding Partial Suffrage States (5)	w/o 1920 Suffrage States (6)
Panel A: Municipal Public Finance						
ln(Total Cost Payments)	0.077**	0.062**	0.077**	0.088***	0.090*	0.098**
	(0.031)	(0.029)	(0.034)	(0.029)	(0.050)	(0.035)
ln(Health Conservation and Sanitation Cost Payments)	0.063*	0.037	0.063	0.084**	0.096*	0.089*
	(0.036)	(0.034)	(0.041)	(0.035)	(0.052)	(0.048)
ln(Charities, Hospitals, and Corrections Cost Payments)	0.451***	0.303***	0.451***	0.301***	0.468**	0.401***
	(0.115)	(0.087)	(0.115)	(0.093)	(0.183)	(0.113)
ln(Total Outlays)	0.005	-0.053	0.005	0.028	-0.053	0.003
	(0.085)	(0.088)	(0.077)	(0.079)	(0.112)	(0.102)
ln(Health Conservation and Sanitation Outlays)	0.157	0.155	0.157	0.179	-0.021	0.134
	(0.112)	(0.129)	(0.108)	(0.130)	(0.136)	(0.132)
ln(Charities, Hospitals, and Corrections Outlays)	0.486	0.503	0.486*	0.518**	0.617*	0.814*
	(0.337)	(0.412)	(0.267)	(0.247)	(0.319)	(0.400)
Panel B: State Public Finance						
ln(Total Revenue)	0.010	0.013	0.010	-0.005	-0.128	0.072
	(0.084)	(0.081)	(0.073)	(0.093)	(0.130)	(0.112)
ln(Property Tax Revenue)	0.070	0.084	0.070	-0.115	0.166	0.318
	(0.209)	(0.188)	(0.153)	(0.132)	(0.264)	(0.310)
ln(Total Spending)	-0.057	-0.017	-0.057	-0.078	-0.077	-0.005
	(0.088)	(0.076)	(0.083)	(0.096)	(0.122)	(0.124)
ln(Highway Spending)	0.300	0.283	0.300	0.259	0.408	0.002
	(0.215)	(0.210)	(0.181)	(0.208)	(0.130)	(0.237)
ln(Education Spending)	0.137	-0.034	0.137	0.070	0.183	0.028
	(0.157)	(0.161)	(0.142)	(0.092)	(0.211)	(0.233)
ln(Social Service Spending)	0.206***	0.101*	0.206***	0.184***	0.202**	0.199*
	(0.071)	(0.065)	(0.066)	(0.060)	(0.090)	(0.107)

Municipal public finance data from the U.S. Bureau of the Census' *Statistics of Cities Having a Population of Over 30,000* and *Financial Statistics of Cities Having a Population of Over 30,000*; state public finance data from Sylla, Legler, and Wallis *ICPSR Study # 9728* and the U.S. Bureau of the Census' *Financial Statistics of States*. The municipal public finance sample contains city-year observations from years 1905-1909, 1909-1913, 1915-1919, and 1921-1930; the state public finance sample contains state-year observations from years 1900-1919 and 1921 1930; All estimates and standard errors (in parentheses, clustered by state except for Column 3) shown for the women's suffrage law dummy variable are obtained by estimating equation 1, including state and year fixed effects, and state-specific linear time trends (with city fixed effects substituted for state fixed effects in the municipal public finance regressions). Column 2 includes census region × year dummy variables; Column 3 reports standard errors calculated allowing spatial correlation among states within one standard deviation of each other in the distribution of distance between states (following Conley 1999); Column 4 includes time-varying state covariates (population over age 10 in gainful occupations, population over age 10 in clerical occupations, total population, urban population (in cities with 25,000 or more), total black population, total male population, fraction of girls ages 10-15 enrolled in school, fraction of boys ages 10-15 enrolled in school, total illiterate population over age 10, average value per acre of farmland and buildings, average acres per farm, population density, population share foreign born, rural surface road mileage per 1,000 population, value of all crops, and total number of farms); Column 5 reports estimates obtained by re-coding partial suffrage states as having enfranchised women when full rights were extended; and Column 6 excludes 1920 suffrage states. *p<0.10, **p<0.05, ***p<0.01.

ONLINE APPENDIX TABLE 9
Women's Suffrage Laws and Legislative Behavior

Dependent Variable	Main Estimate	w/ Region*Year Fixed Effects	w/ Conley Standard Error Corrections	w/ Time Varying State Level Covariates	Recoding Partial Suffrage States	w/o 1920 Suffrage States
	(1)	(2)	(3)	(4)	(5)	(6)
ln('Progressive' Senate Votes)	0.228***	0.225**	0.228***	0.192**	0.293***	0.213**
	(0.079)	(0.090)	(0.072)	(0.073)	(0.091)	(0.098)
ln('Progressive' House Votes)	0.010	-0.021	0.010	-0.005	-0.001	0.000
	(0.051)	(0.044)	(0.054)	(0.045)	(0.067)	(0.062)

Legislative roll call data from the *Voteview* database; coding of Progressive voting done by author as described in the data appendix. The Voteview sample contains state-year observations from years 1900-1930. All estimates and standard errors (in parentheses, clustered by state except for Column 3) shown for the women's suffrage law dummy variable are obtained by estimating equation 1, including state and year fixed effects, and state-specific linear time trends (with city fixed effects substituted for state fixed effects in the municipal public finance regressions). Column 2 includes census region × year dummy variables; Column 3 reports standard errors calculated allowing spatial correlation among states within one standard deviation of each other in the distribution of distance between states (following Conley 1999); Column 4 includes time-varying state covariates (population over age 10 in gainful occupations, population over age 10 in clerical occupations, total population, urban population (in cities with 25,000 or more), total black population, total male population, fraction of girls ages 10-15 enrolled in school, fraction of boys ages 10-15 enrolled in school, total illiterate population over age 10, average value per acre of farmland and buildings, average acres per farm, population density, population share foreign born, rural surface road mileage per 1,000 population, value of all crops, and total number of farms); Column 5 reports estimates obtained by re-coding partial suffrage states as having enfranchised women when full rights were extended; and Column 6 excludes 1920 suffrage states. *p<0.10, **p<0.05, ***p<0.01.

Women's Suffrage Laws and Cause-Specific Mortality

| Dependent Variable	Main Estimate	w/ Region*Year Fixed Effects	w/ Conley Standard Error Corrections	w/ Time Varying State Level Covariates	Recoding Partial Suffrage States	w/o 1920 Suffrage States
	(1)	(2)	(3)	(4)	(5)	(6)
ln(Typhoid Deaths)	-0.058	-0.053	-0.058	-0.024	-0.091	-0.055
	(0.070)	(0.065)	(0.052)	(0.071)	(0.080)	(0.084)
ln(Malaria Deaths)	-0.067	-0.127	-0.067	-0.173	0.040	-0.129
	(0.130)	(0.142)	(0.119)	(0.108)	(0.129)	(0.183)
ln(Small Pox Deaths)	-0.237	-0.133	-0.237	-0.204	-0.234	-0.158
	(0.233)	(0.303)	(0.202)	(0.259)	(0.256)	(0.280)
ln(Measles Deaths)	-0.061	-0.094	-0.061	-0.066	-0.028	0.178
	(0.133)	(0.191)	(0.132)	(0.141)	(0.143)	(0.136)
ln(Scarlet Fever Deaths)	0.174	0.158	0.174	0.045	0.202	0.105
	(0.162)	(0.138)	(0.153)	(0.136)	(0.196)	(0.212)
ln(Whooping Cough Deaths)	-0.052	-0.031	-0.052	-0.081	-0.132	-0.132
	(0.090)	(0.122)	(0.084)	(0.105)	(0.096)	(0.099)
ln(Diphtheria Deaths)	-0.241*	-0.242***	-0.241*	-0.283**	-0.345**	-0.279*
	(0.125)	(0.072)	(0.135)	(0.128)	(0.145)	(0.145)
ln(Influenza Deaths)	-0.089	-0.065	-0.089	-0.106	-0.059	-0.064
	(0.085)	(0.078)	(0.066)	(0.078)	(0.088)	(0.115)
ln(Meningitis Deaths)	-0.234**	-0.236**	-0.234**	-0.052	-0.344***	-0.209*
	(0.097)	(0.109)	(0.099)	(0.106)	(0.105)	(0.124)
ln(Pneumonia Deaths)	-0.050	-0.040	-0.050	-0.074*	-0.045	0.003
	(0.042)	(0.039)	(0.038)	(0.041)	(0.049)	(0.041)
ln(Diarrhea Deaths Under Two)	-0.114*	-0.084	-0.114**	-0.125**	-0.103**	-0.092**
	(0.065)	(0.072)	(0.051)	(0.063)	(0.046)	(0.034)
ln(TB Deaths)	-0.044	-0.034	-0.044	-0.015	-0.023	-0.036
	(0.042)	(0.028)	(0.034)	(0.034)	(0.034)	(0.047)
ln(Childbirth Deaths)	0.001	0.006	0.001	-0.010	0.026	0.029
	(0.053)	(0.053)	(0.045)	(0.055)	(0.060)	(0.051)
ln(Heart Disease Deaths)	-0.002	0.003	-0.002	-0.016	0.011	0.015
	(0.030)	(0.029)	(0.020)	(0.026)	(0.026)	(0.022)
ln(Diabetes Deaths)	0.038	0.041	0.038	0.029	0.065	0.017
	(0.042)	(0.034)	(0.035)	(0.042)	(0.039)	(0.046)
ln(Nephritis Deaths)	-0.003	0.006	-0.003	-0.033	0.013	0.008
	(0.034)	(0.032)	(0.028)	(0.030)	(0.030)	(0.031)
ln(Cancer Deaths)	-0.014	-0.016	-0.014	-0.015	0.001	-0.004
	(0.030)	(0.018)	(0.020)	(0.027)	(0.027)	(0.023)
ln(Accidents/Violent Deaths)	-0.022	-0.014	-0.022	-0.024	-0.014	0.008
	(0.041)	(0.034)	(0.035)	(0.045)	(0.044)	(0.041)
ln(Suicide Deaths)	-0.029	-0.032	-0.029	-0.035	-0.046	0.009
	(0.030)	(0.046)	(0.026)	(0.037)	(0.033)	(0.032)

Mortality data from the U.S. Bureau of the Census' annual *Mortality Statistics* . The unbalanced mortality sample contains state-year observations from years 1900-1936. All estimates and standard errors (in parentheses, clustered by state except for Column 3) shown for the women's suffrage law dummy variable are obtained by estimating equation 1, including state and year fixed effects, and state-specific linear time trends (with city fixed effects substituted for state fixed effects in the municipal public finance regressions). Column 2 includes census region × year dummy variables; Column 3 reports standard errors calculated allowing spatial correlation among states within one standard deviation of each other in the distribution of distance between states (following Conley 1999); Column 4 includes time-varying state covariates (population over age 10 in gainful occupations, population over age 10 in clerical occupations, total population, urban population (in cities with 25,000 or more), total black population, total male population, fraction of girls ages 10-15 enrolled in school, fraction of boys ages 10-15 enrolled in school, total illiterate population over age 10, average value per acre of farmland and buildings, average acres per farm, population density, population share foreign born, rural surface road mileage per 1,000 population, value of all crops, and total number of farms); Column 5 reports estimates obtained by re-coding partial suffrage states as having enfranchised women when full rights were extended; and Column 6 excludes 1920 suffrage states. *p<0.10, **p<0.05, ***p<0.01.

| Dependent Variable	Main Estimate	w/ Region*Year Fixed Effects	w/ Conley Standard Error Corrections	w/ Time Varying State Level Covariates	Recoding Partial Suffrage States	w/o 1920 Suffrage States
	(1)	(2)	(3)	(4)	(5)	(6)
ln(Female Deaths Under Age 1)	-0.057	-0.037	-0.057*	-0.061	-0.059	-0.009
	(0.039)	(0.039)	(0.031)	(0.037)	(0.042)	(0.038)
ln(Female Deaths Age 1-4)	-0.081*	-0.067	-0.081**	-0.102**	-0.094**	-0.083**
	(0.042)	(0.045)	(0.033)	(0.040)	(0.049)	(0.039)
ln(Female Deaths Age 5-9)	-0.116**	-0.098*	-0.116**	-0.149***	-0.133***	-0.100**
	(0.051)	(0.056)	(0.049)	(0.056)	(0.049)	(0.047)
ln(Female Deaths Age 10-14)	-0.151***	-0.081**	-0.151***	-0.162***	-0.142***	-0.085**
	(0.039)	(0.041)	(0.036)	(0.040)	(0.037)	(0.040)
ln(Female Deaths Age 15-19)	-0.081**	-0.092**	-0.081***	-0.083**	-0.074*	-0.053*
	(0.038)	(0.042)	(0.030)	(0.036)	(0.046)	(0.029)
ln(Female Deaths Age 20-24)	-0.032	0.021	-0.032	-0.031	-0.039	0.015
	(0.050)	(0.038)	(0.043)	(0.051)	(0.058)	(0.058)
ln(Male Deaths Under Age 1)	-0.046	-0.050	-0.046	-0.057	-0.042	0.011
	(0.044)	(0.039)	(0.041)	(0.044)	(0.049)	(0.045)
ln(Male Deaths Age 1-4)	-0.070	-0.080*	-0.070*	-0.096**	-0.091**	-0.042*
	(0.044)	(0.045)	(0.037)	(0.047)	(0.047)	(0.047)
ln(Male Deaths Age 5-9)	-0.133***	-0.075*	-0.133***	-0.160***	-0.149***	0.025
	(0.048)	(0.042)	(0.043)	(0.052)	(0.049)	(0.055)
ln(Male Deaths Age 10-14)	-0.121***	-0.065*	-0.121***	-0.145***	-0.120***	-0.075*
	(0.042)	(0.033)	(0.036)	(0.041)	(0.045)	(0.041)
ln(Male Deaths Age 15-19)	-0.101**	-0.078*	-0.101**	-0.095**	-0.096**	-0.071*
	(0.040)	(0.041)	(0.034)	(0.041)	(0.044)	(0.039)
ln(Male Deaths Age 20-24)	-0.076	-0.036	-0.076*	-0.072	-0.054	-0.028
	(0.057)	(0.032)	(0.045)	(0.054)	(0.068)	(0.064)

Mortality data from the U.S. Bureau of the Census' annual *Mortality Statistics*. The unbalanced mortality sample contains state-year observations from years 1900-1936. All estimates and standard errors (in parentheses, clustered by state except for Column 3) shown for the women's suffrage law dummy variable are obtained by estimating equation 1, including state and year fixed effects, and state-specific linear time trends (with city fixed effects substituted for state fixed effects in the municipal public finance regressions). Column 2 includes census region × year dummy variables; Column 3 reports standard errors calculated allowing spatial correlation among states within one standard deviation of each other in the distribution of distance between states (following Conley 1999); Column 4 includes time-varying state covariates (population over age 10 in gainful occupations, population over age 10 in clerical occupations, total population, urban population (in cities with 25,000 or more), total black population, total male population, fraction of girls ages 10-15 enrolled in school, fraction of boys ages 10-15 enrolled in school, total illiterate population over age 10, average value per acre of farmland and buildings, average acres per farm, population density, population share foreign born, rural surface road mileage per 1,000 population, value of all crops, and total number of farms); Column 5 reports estimates obtained by re-coding partial suffrage states as having enfranchised women when full rights were extended; and Column 6 excludes 1920 suffrage states. *p<0.10, **p<0.05, ***p<0.01.

ONLINE APPENDIX FIGURE 1
The Distribution of Progressive Era Events over Time
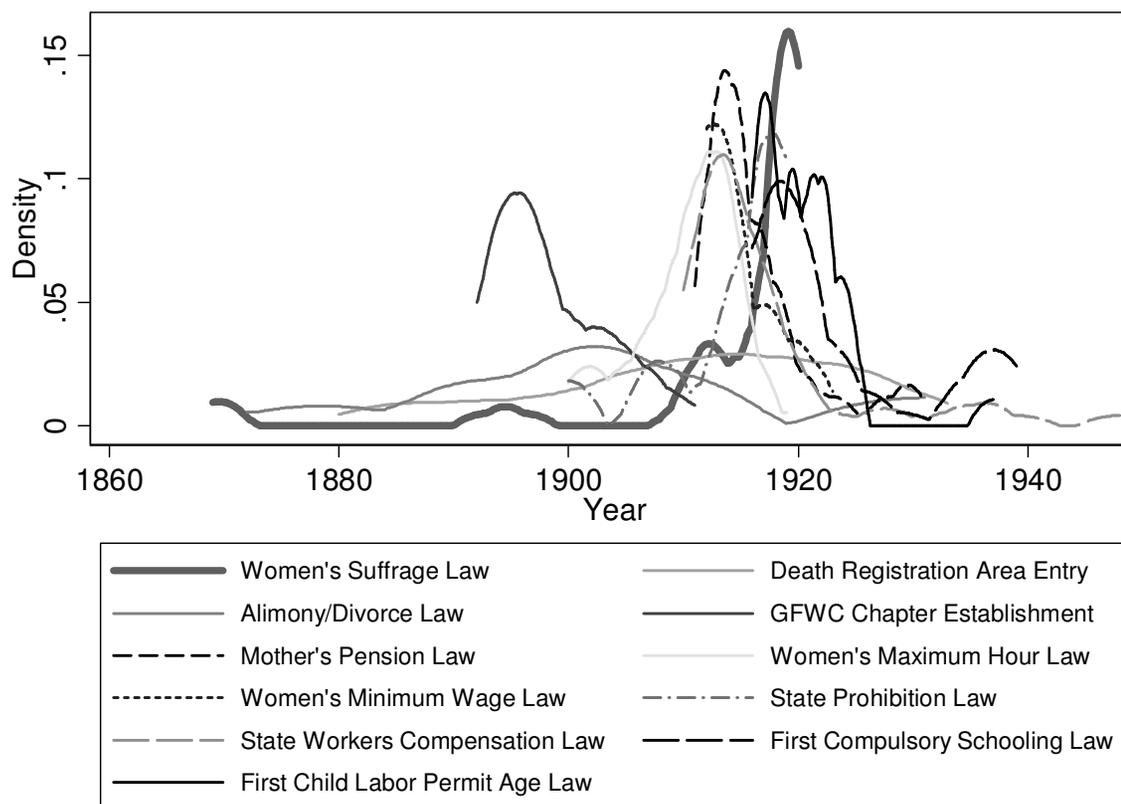
Data on the distribution of state-level Progressive Era events obtained from United States National Office of Vital Statistics (1954) (death registration area entry dates); the U.S. Bureau of the Census *1900 Census of Housing and Population* (1900 state characteristics); Skocpol (1992) (divorce/alimony laws, mother's pension laws, state General Federation of Women's Clubs chapter establishment, women's maximum hour laws, women's minimum wage laws, and prohibition laws); Fishback and Kantor (1996) (workers compensation laws); and Lleras-Muney (2002 and personal communication) (first child labor and compulsory education laws).

ONLINE APPENDIX FIGURE 2
Women's Lifetime Fertility by Age at Suffrage Law Enactment
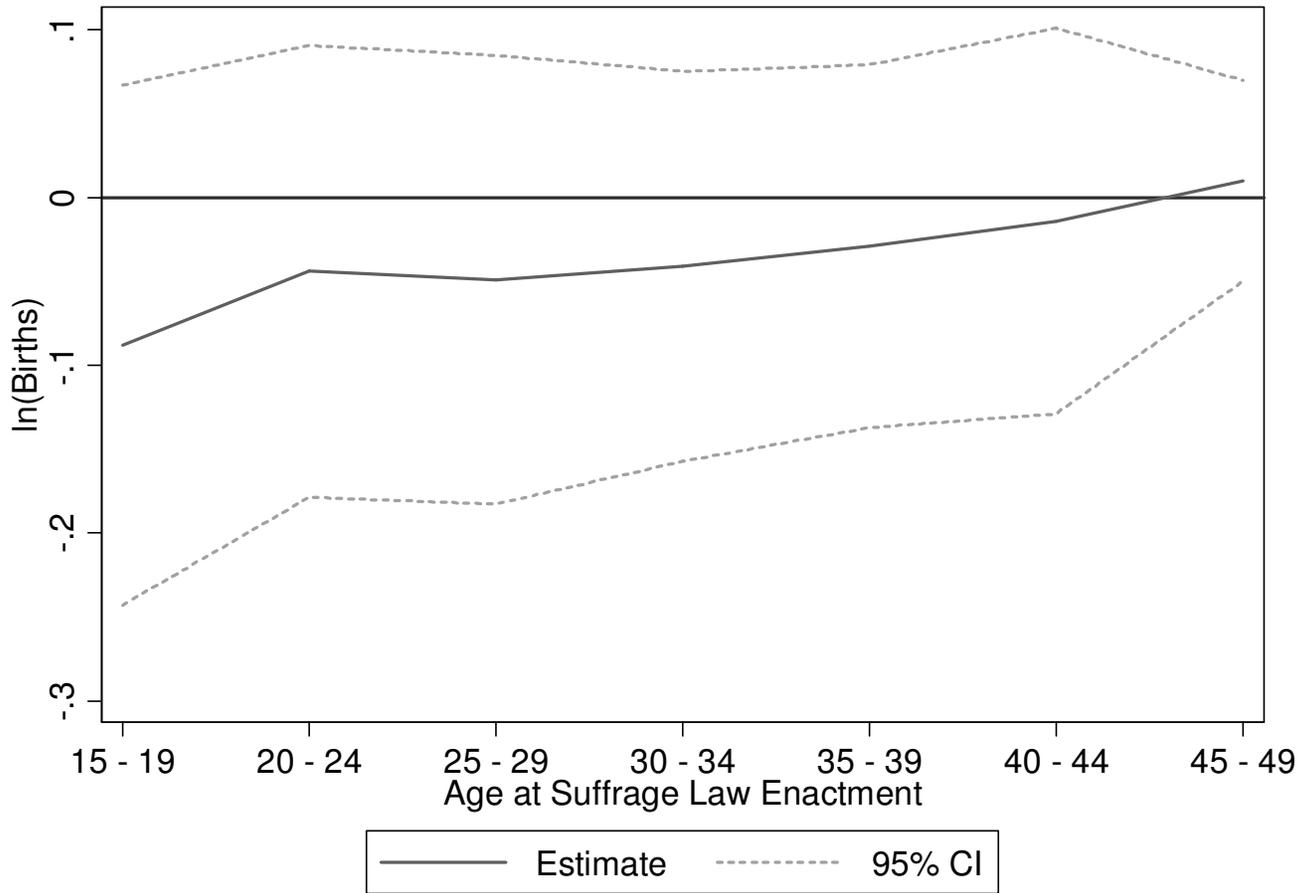
Data on lifetime births to sample-line women married and of fertile age (defined as 14+ years of age) in the 1940 population census obtained from the 1% sample made available by the University of Minnesota Population Center's Integrated Public Use Microdata Series (IPUMS). Negative binomial estimates and 95% confidence intervals for women in each age interval when suffrage laws were enacted in their state of birth obtained by estimating the equation shown in Footnote 33 by maximum likelihood.

ONLINE APPENDIX FIGURE 3
The Timing of Death Registration Area Entry among American States

Data on the year that each state entered the death registration was obtained from the U.S. National Office of Vital Statistics' *Vital Statistics of the United States: 1950*. Delaware technically entered the death registration area in 1890 but does not appear in the annual *Mortality Statistics* until 1919.