

# **ONLINE APPENDIX FOR: Destined for democracy? Labour markets and political change in colonial British America**

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## Online Appendix

This online appendix consists of four parts. Part 1 presents additional figures and tables. Part 2 presents additional robustness checks. Part 3 presents a detailed description of the data used in the regressions (to complement the discussion in the main text). Part 4 presents historical evidence.

### Part 1: Additional figures and tables

Table A1: Summary statistics

	Before 1700					After 1700				
	North	South	Difference	N North	N South	North	South	Difference	N North	N South
Suffrage	3.066 (1.502)	4.331 (1.092)	-1.265***	130	73	4.159 (0.769)	2.642 (1.078)	1.518***	200	100
Inequality (%white landless)	0.264 (0.122)	0.301 (0.041)	-0.037**	79	45	0.246 (0.083)	0.358 (0.070)	-0.112***	200	100
Labour (%black)	0.037 (0.034)	0.096 (0.104)	-0.059***	130	73	0.057 (0.041)	0.355 (0.182)	-0.298***	200	100
Crop Index	-0.195 (0.123)	-0.331 (0.043)	0.136***	116	60	-0.161 (0.109)	-0.042 (0.103)	-0.119***	200	100
Population density	1.503 (1.693)	0.633 (0.694)	0.870***	130	73	10.182 (10.638)	4.626 (4.809)	5.556***	200	100
Urbanization	0.158 (0.221)	0.050 (0.141)	0.108***	130	73	0.092 (0.106)	0.039 (0.077)	0.053***	200	100
Proprietary col.	0.421 (0.490)	0.580 (0.494)	-0.159**	130	73	0.253 (0.435)	0.350 (0.475)	-0.097*	200	100
Charter col.	0.331 (0.472)	0.027 (0.164)	0.303***	130	73	0.250 (0.434)	0.000 (0.000)	0.250***	200	100
Royal col.	0.246 (0.432)	0.384 (0.490)	-0.137**	130	73	0.495 (0.501)	0.650 (0.479)	-0.155***	200	100

Sources: See text. Notes: This table shows means and standard variations of relevant variables by time period and region. The panel is obtained by taking three-year averages. The “Difference”-columns give the difference in means between North and South for the respective period and the significance based on a simple t-test. Standard errors are in parentheses. \*\*\* $p \leq 0.01$ , \*\* $p \leq 0.05$ , \* $p \leq 0.1$ .

Table A2: Estimated share of blacks in the South, 1610-1780

Year	Virginia	Maryland	North Carolina	South Carolina	Georgia
1610	0.00%				
1620	0.91%				
1630	2.00%				
1640	1.44%	3.43%			
1650	2.16%	6.66%			
1660	3.52%	9.00%	2.00%		
1670	5.66%	9.00%	3.90%	15.00%	
1680	6.88%	9.00%	3.87%	16.67%	
1690	17.62%	9.00%	3.95%	38.46%	
1700	27.99%	10.90%	3.87%	47.92%	
1710	25.97%	18.59%	5.95%	55.34%	
1720	30.26%	18.90%	14.10%	64.54%	
1730	30.35%	18.90%	20.00%	66.67%	
1740	33.25%	20.70%	21.25%	72.32%	0.00%
1750	45.25%	30.80%	27.13%	66.22%	19.23%
1760	41.38%	30.20%	30.38%	60.95%	37.36%
1770	41.97%	31.50%	35.29%	60.51%	45.45%
1780	41.00%	33.47%	33.69%	53.89%	37.15%

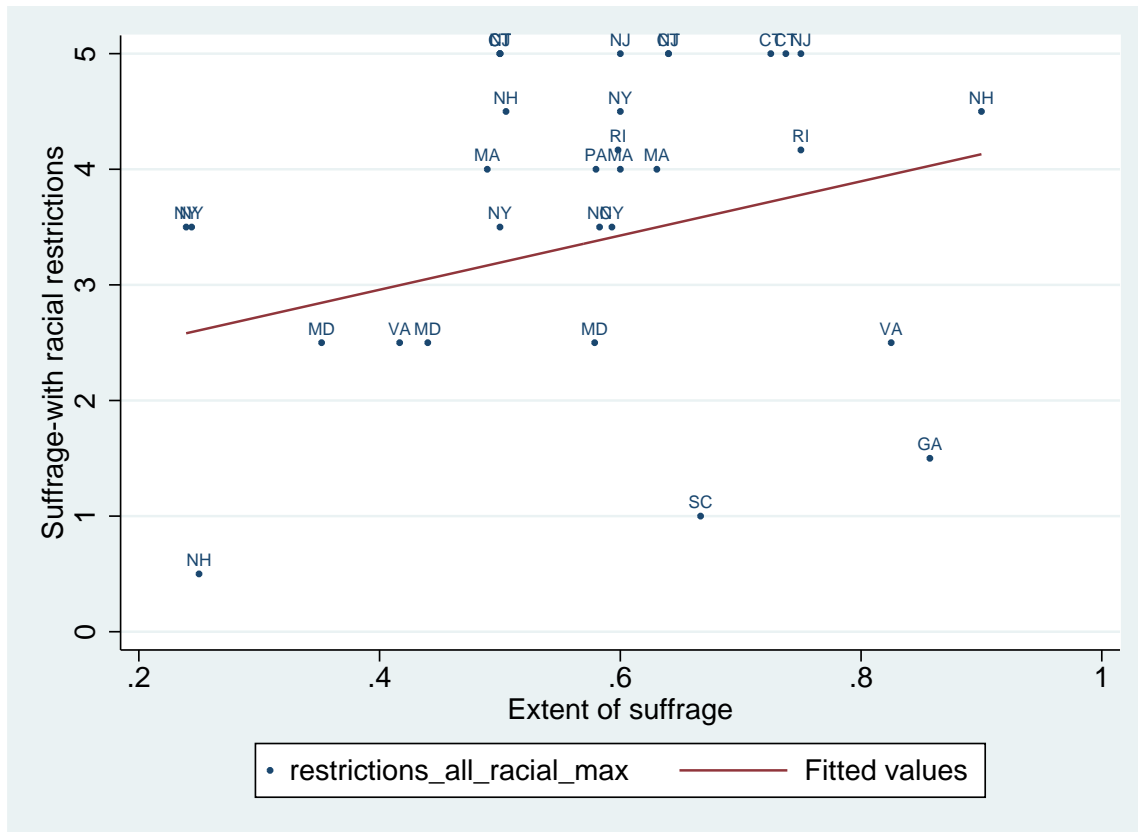
Source: Historical Statistics of the US Millennial Edition Online (2006), Table Eg1-59.

Notes: This table shows the growth of the black population in the South. Slavery was forbidden in Georgia until 1749.

Figure A1: Colonial British America in 1763

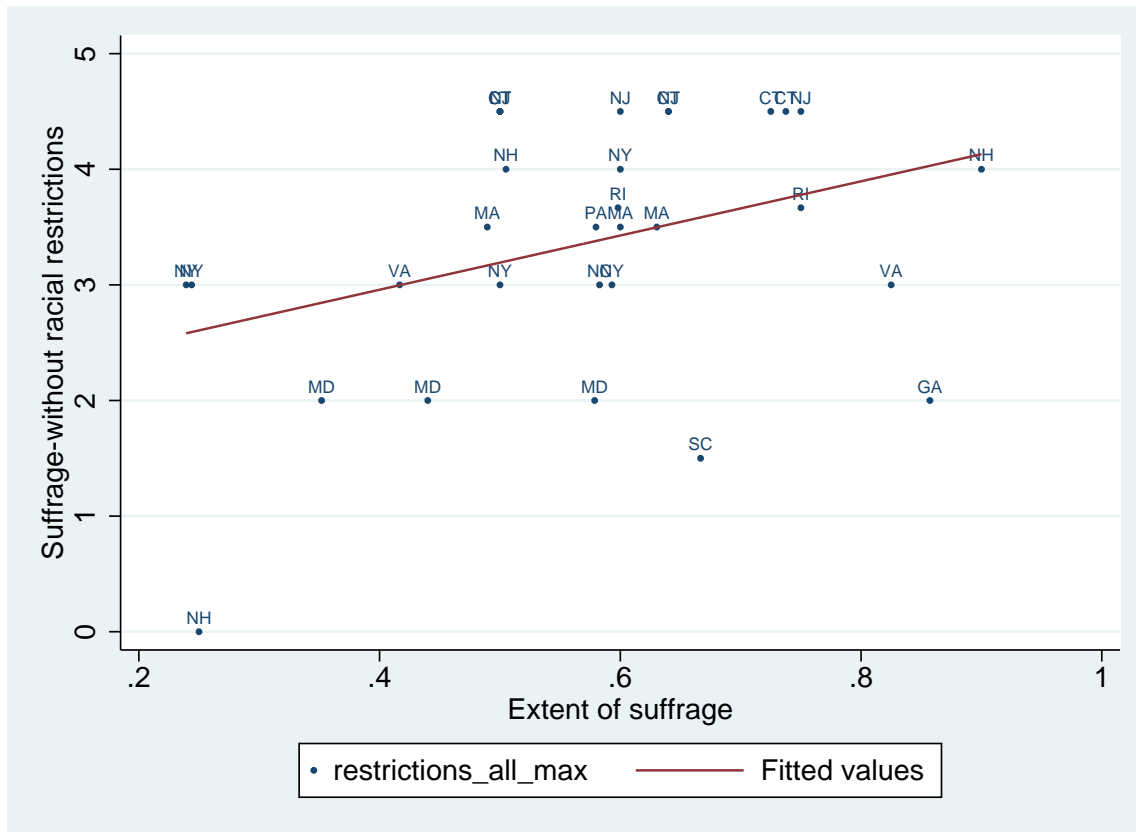


Figure A2: Correlation between the suffrage index (including restrictions for race) and suffrage extensiveness



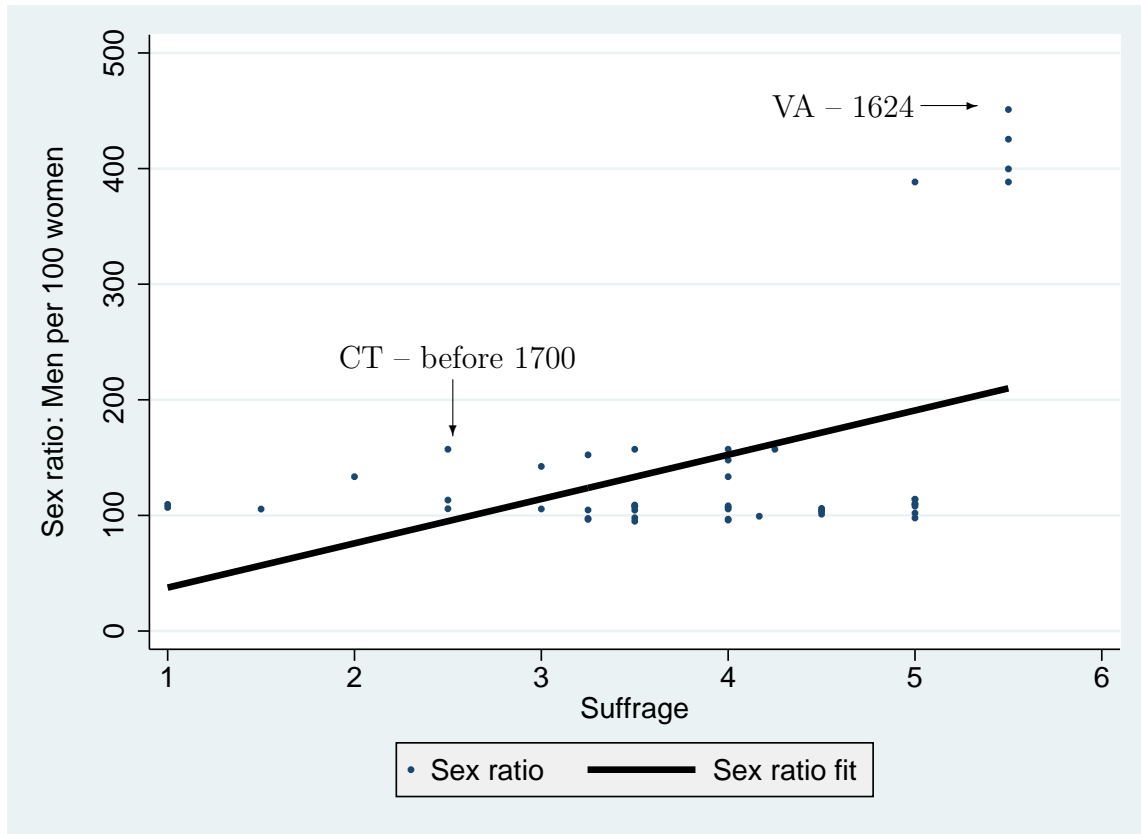
Sources: McKinley (1905) and Dinkin (1977). Notes: This figure presents the correlation between suffrage (including restrictions for race) and fragmentary suffrage extensiveness numbers for the period 1730-1775. A higher value of suffrage implies a more liberal political system.

Figure A3: Correlation between the suffrage index (excluding restrictions for race) and suffrage extensiveness



Sources: McKinley (1905) and Dinkin (1977). Notes: This figure presents the correlation between suffrage (excluding restrictions for race) and fragmentary suffrage extensiveness numbers for the period 1730-1775. A higher value of suffrage implies a more liberal political system.

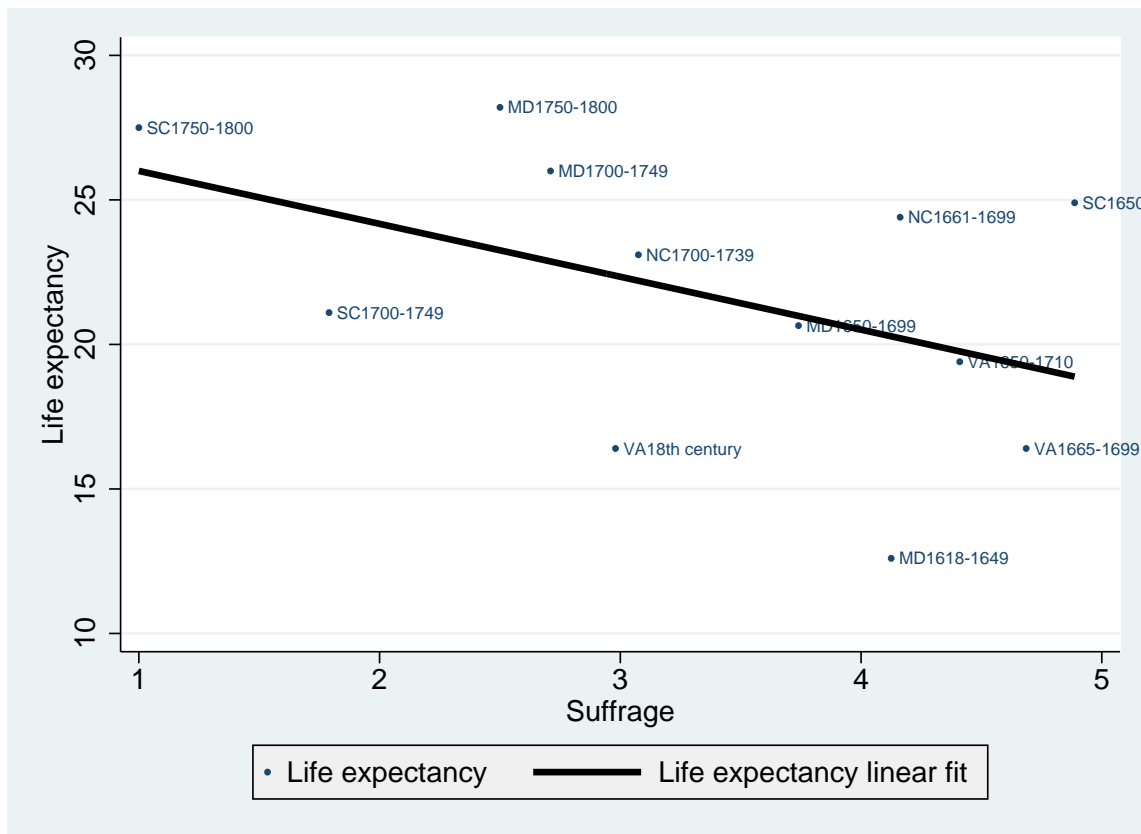
Figure A4: Sex ratio and the suffrage



Sources: Wells (1975) and Moller (1945). Notes: This graph shows the relationship between suffrage and the sex ratio for selected Northern and Southern colonies over time. The sex ratio is calculated as the number of men per 100 women. The solid line is obtained by locally weighted least squares smoothing over all observations.

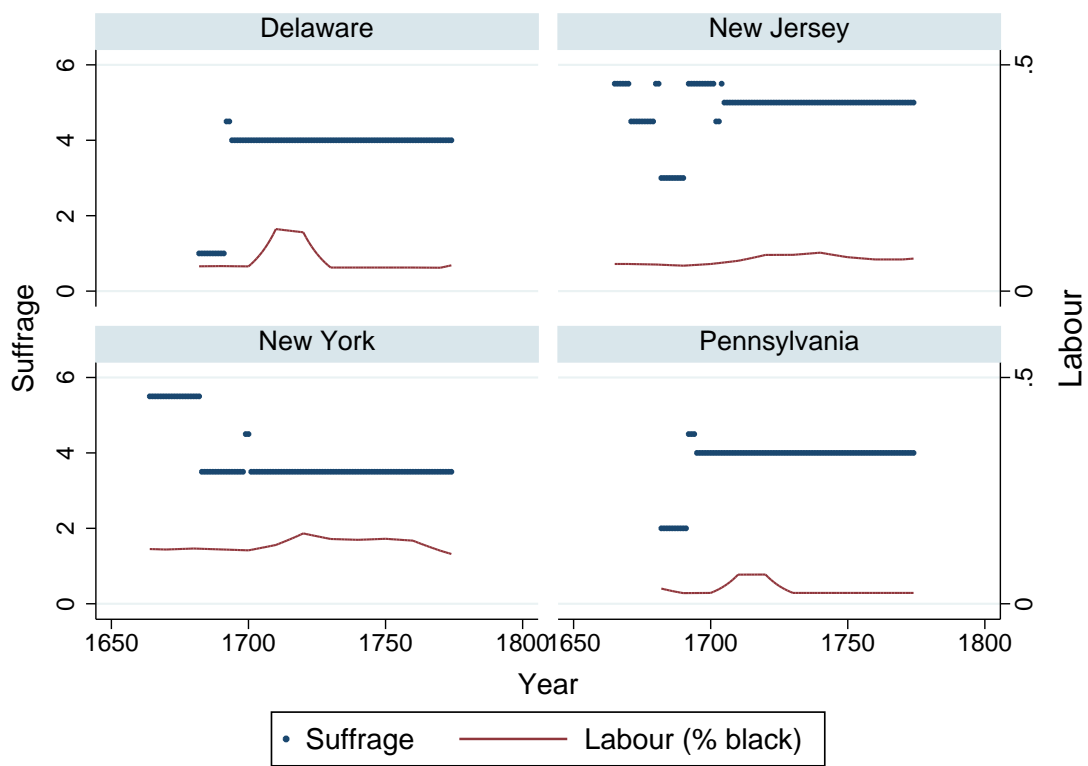


Figure A5: Life expectancy and the suffrage - South



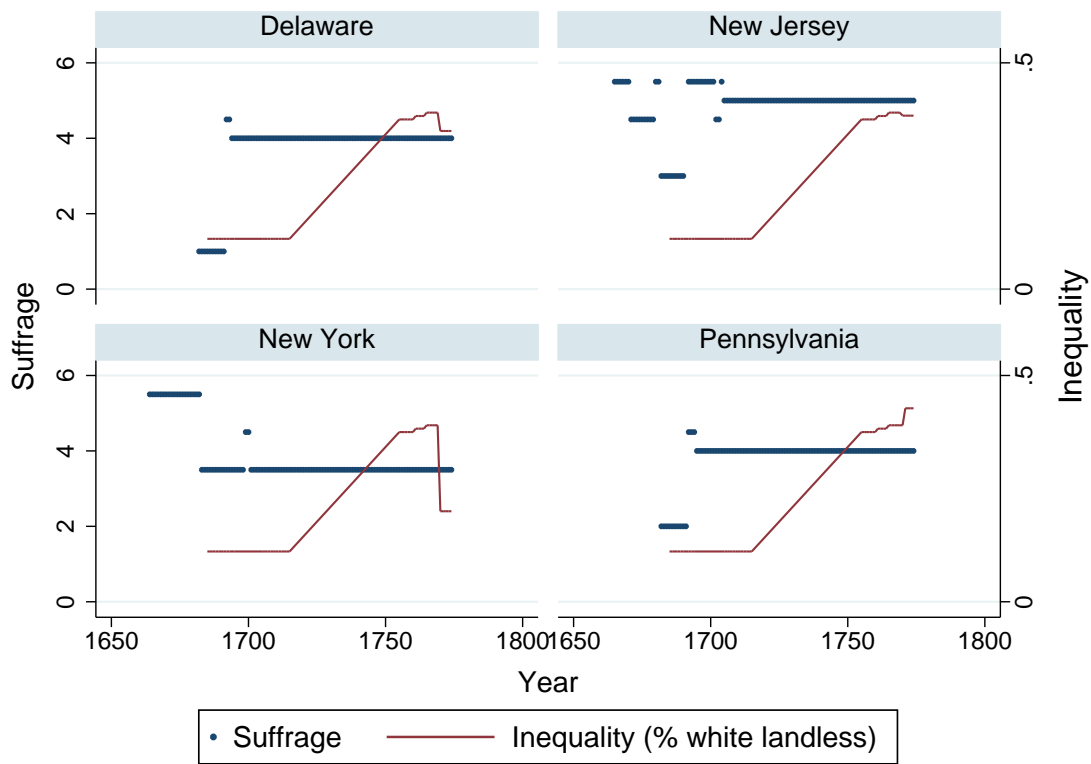
Sources: Galenson (1996) and Purvis (1999). Notes: This graph shows the relationship between suffrage and life expectancy for selected Southern colonies. Life expectancy is male life expectancy at age 30. The solid line is obtained by a linear fit.

Figure A6: Suffrage and labour markets within the North (Middle colonies)



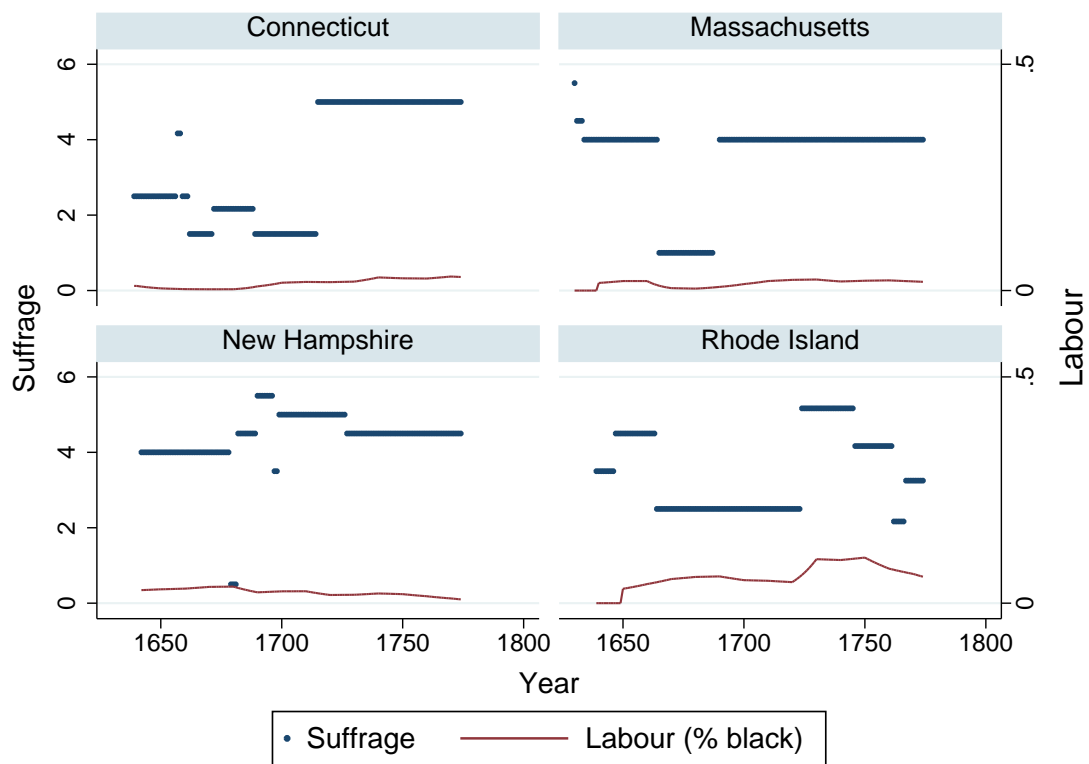
Sources: see text. Notes: This graph shows how suffrage and labour markets evolved over time for each of the Middle colonies.

Figure A7: Suffrage and inequality within the North (Middle colonies)



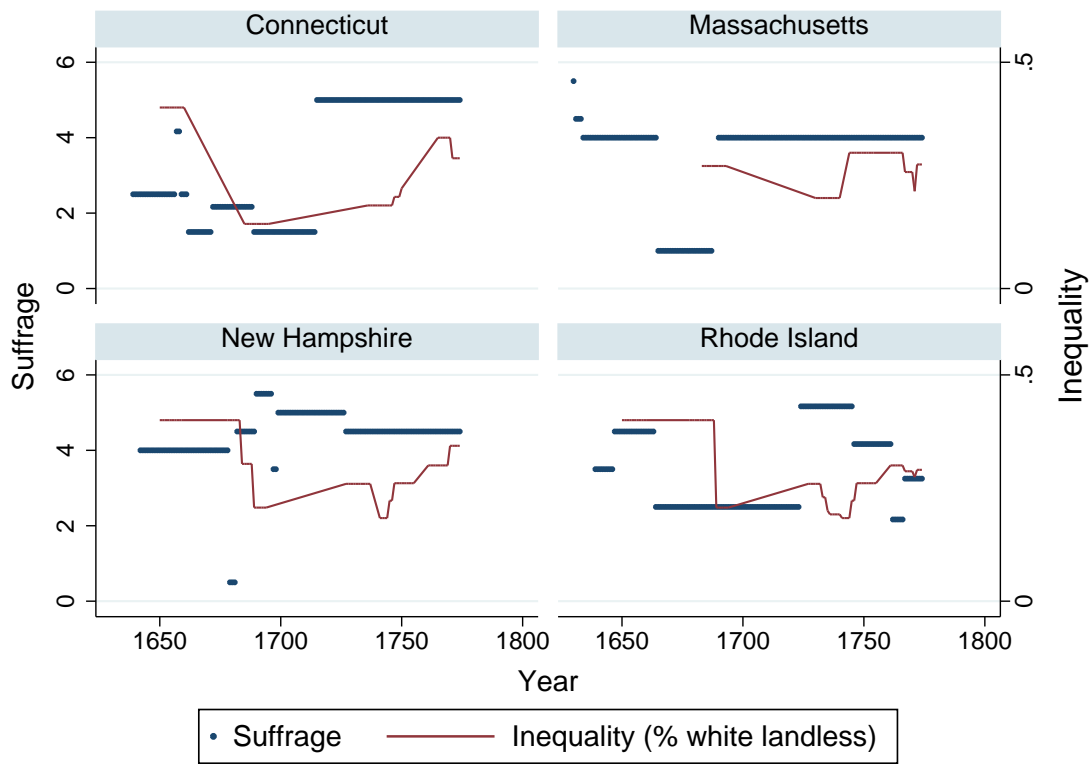
Sources: see text. Notes: This graph shows how suffrage and inequality evolved over time for each of the Middle colonies.

Figure A8: Suffrage and labour markets within the North (New England colonies)



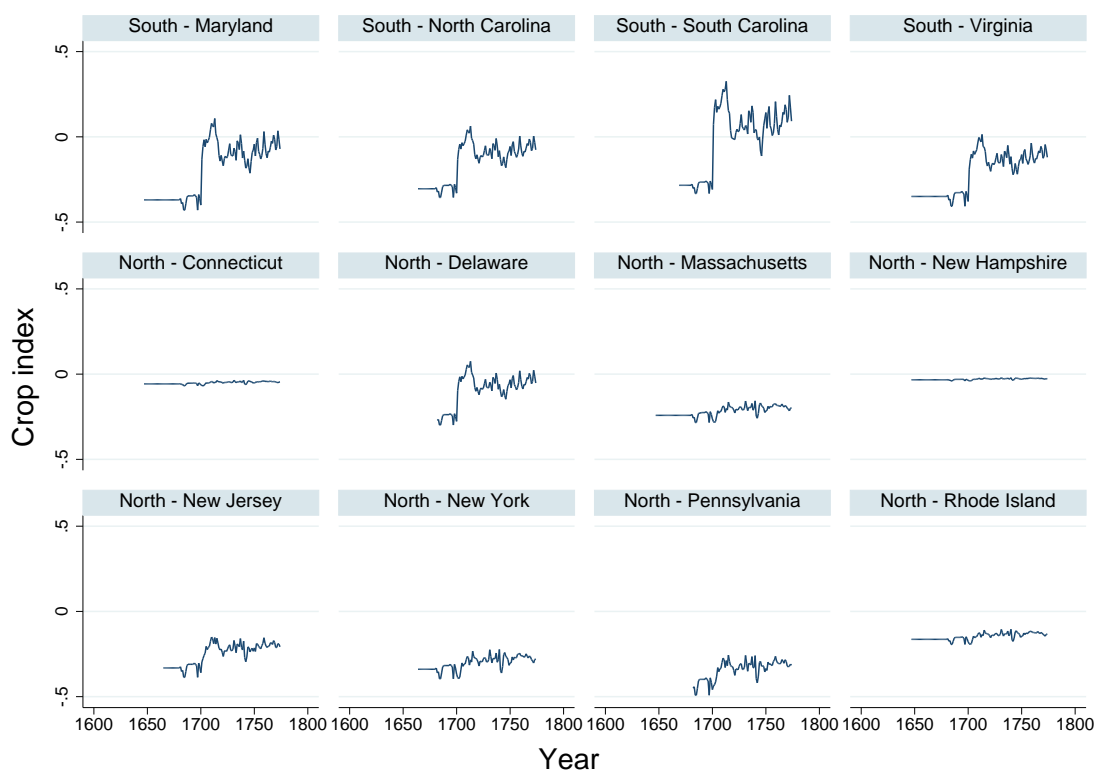
Sources: see text. Notes: This graph shows how suffrage and labour markets evolved over time for each of the New England colonies.

Figure A9: Suffrage and inequality within the North (New England colonies)



Sources: see text. Notes: This graph shows how suffrage and inequality evolved over time for each of the New England colonies.

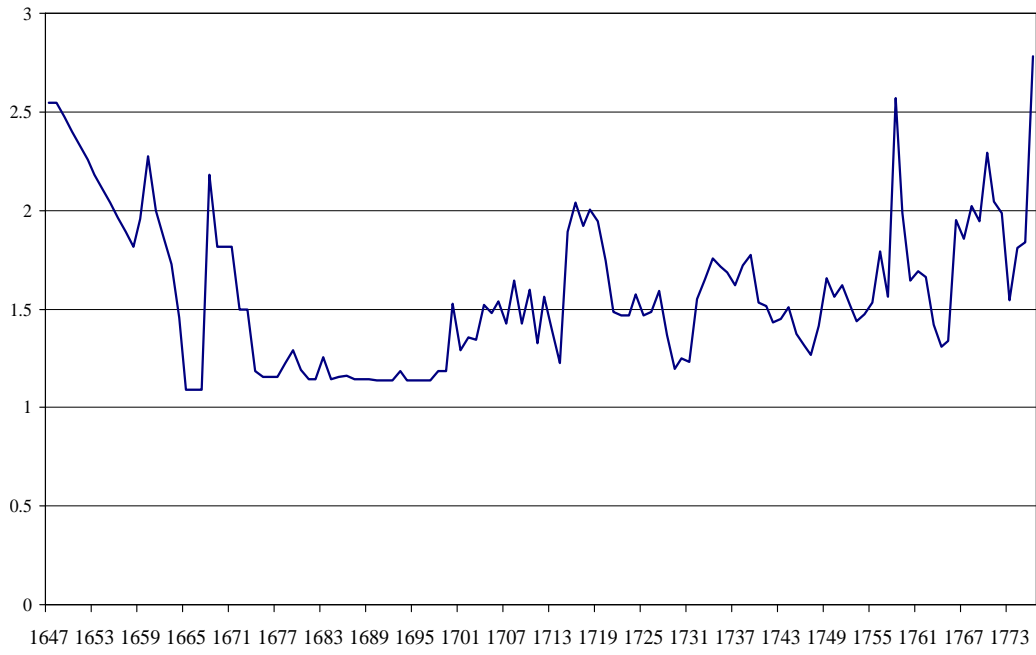
Figure A10: Evolution of the crop index instrument, by colony



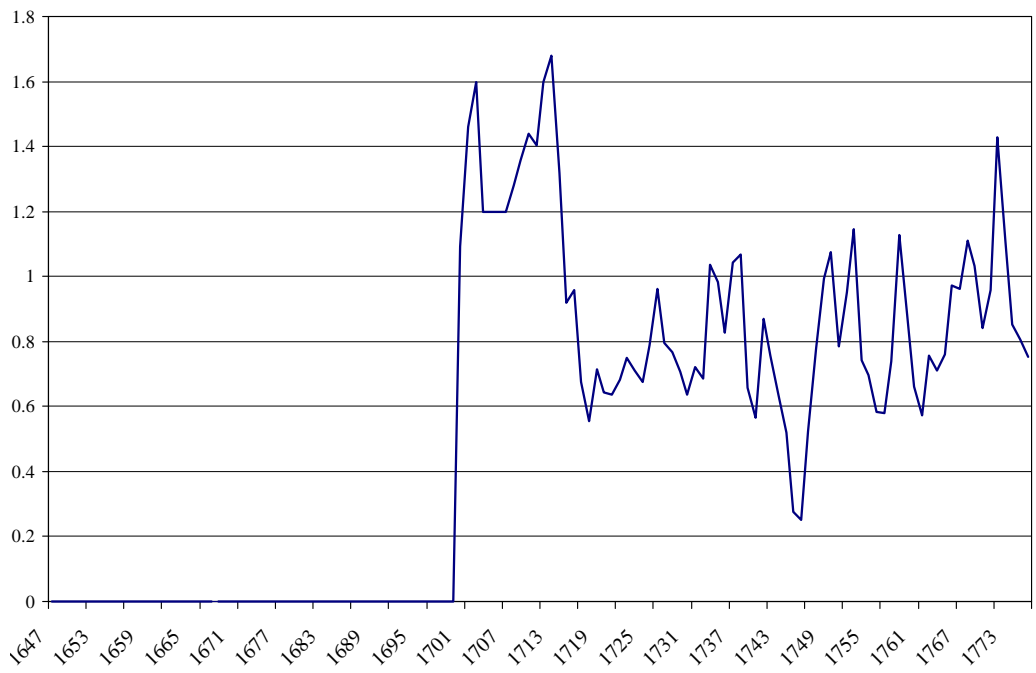
Sources: see text. Notes: This graph shows the evolution of the crop index instrument over time for each of the British American colonies. See the text for more information on how the instrument is calculated.

Figure A11: Price series for tobacco, rice and wheat (English pence per pound)

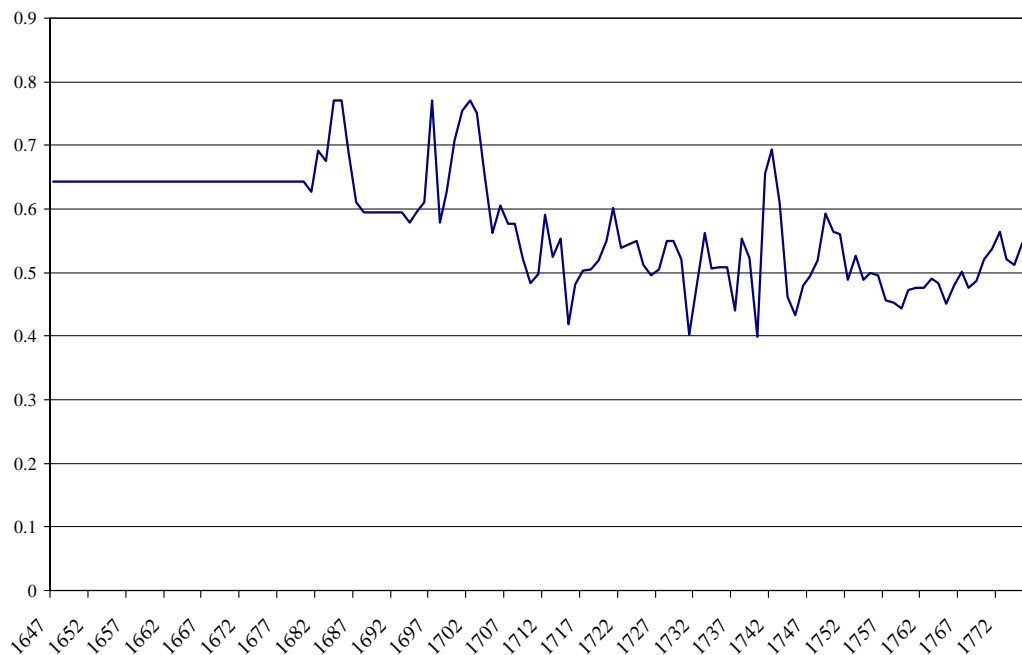
(a) Tobacco – Virginia



(b) Rice – Charleston, South Carolina



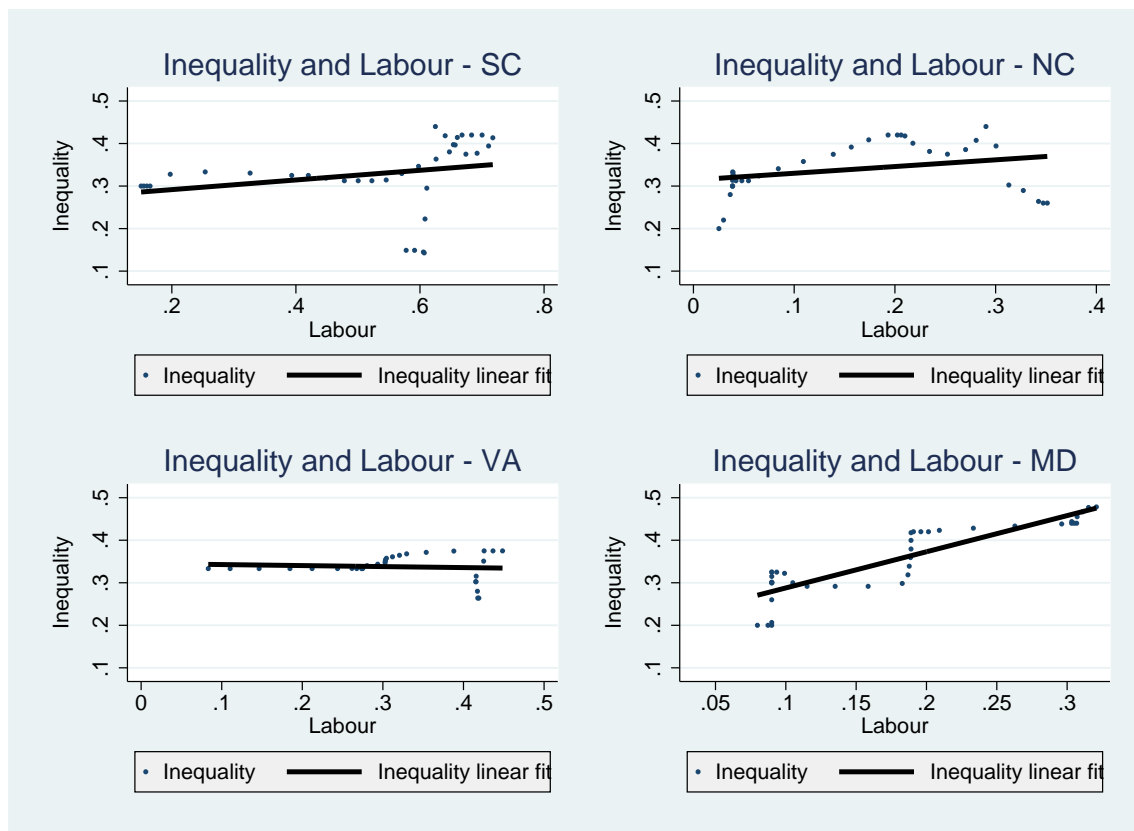
(c) Wheat – Talbot County, Maryland



Sources: Historical Statistics of the US Millennial Edition Online (2006) and Purvis (1999). Notes: These graphs show the price movements for the three main export crops of colonial British America.

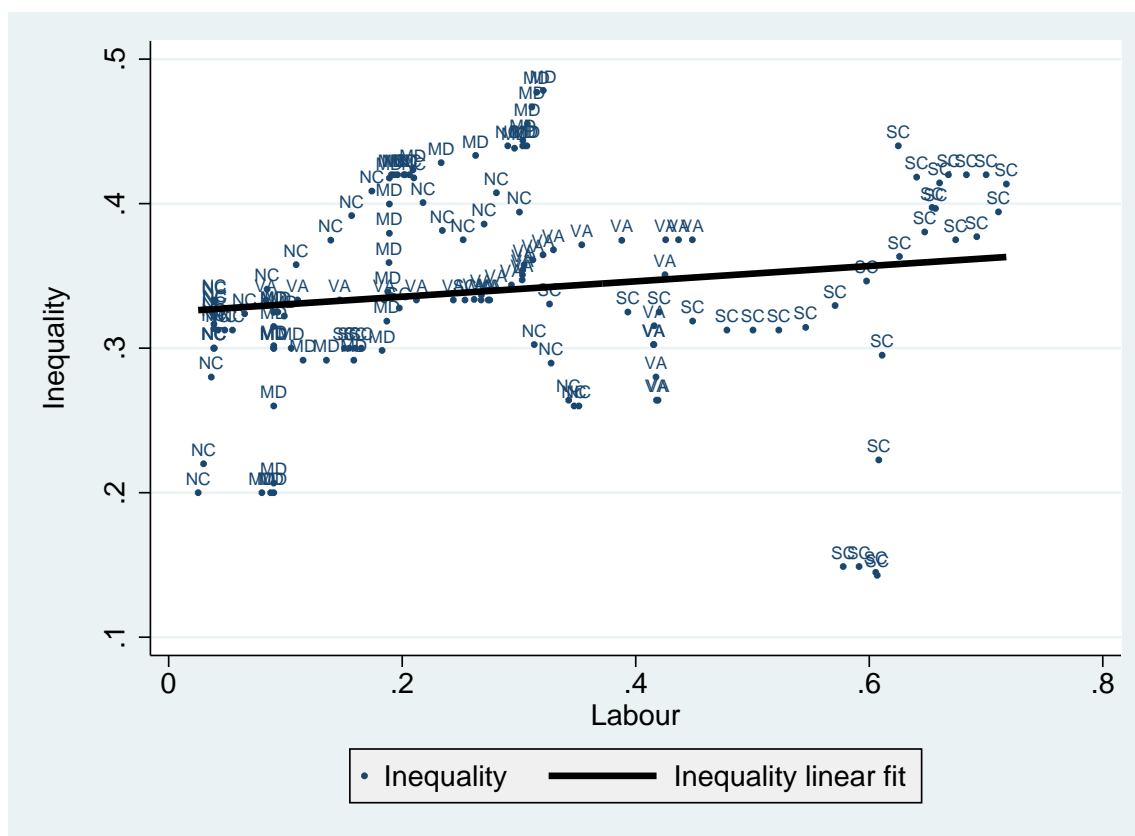


Figure A11: Inequality and labour markets by colony, South



Sources: see text. Notes: This graph shows the unconditional correlation between inequality (percent white landless) and labour markets (percent black) in North Carolina, South Carolina, Virginia and Maryland. The data set is obtained by taking every third observation for each colony. Each dot represents an observation for a particular colony and year. The solid line is obtained through a linear fit.

Figure A12: Inequality and labour markets - South



Sources: see text. Notes: This graph shows the unconditional correlation between inequality (percent white landless) and labour markets (percent black) in the South. The data set is obtained by taking every third observation for each colony. Each dot represents an observation for a particular colony and year. The solid line is obtained through a linear fit.

Figure A13: Inequality and labour markets - North and South



Sources: see text. Notes: This graph shows the unconditional correlation between inequality (percent white landless) and labour markets (percent black) in the entire sample. The data set is obtained by taking every third observation for each colony. Each dot represents an observation for a particular colony and year. The solid line is obtained through a linear fit.

## **Part 2: Additional threats to validity and robustness checks**

### **The importance of the Scotch-Irish**

There are several reasons why the tightening of the Southern franchise in the early eighteenth century is unlikely to have been prompted by the Scotch-Irish migration wave of 1717-1775. First, the Scotch-Irish were never a majority of the population: even in South Carolina, the colony with the greatest share of Scotch-Irish settlers, they were only 18.9% of the total population in 1790. Second, as Figures 1 and 2 show, the tightening of the Southern franchise took place before 1717. Moreover, a great number of Scotch-Irish settlers also arrived in Pennsylvania, Delaware and New York, yet the franchise in these colonies followed a very different pattern compared to that in the South.

Even so, I test to what extent my results are influenced by Scotch-Irish migration patterns in Table A5. In column 5, I include a variable which interacts a dummy for the period 1717-1775 with dummies for those colonies in which the share of the Scotch-Irish population was above 10% in 1790 (PA, MD, VA, NC and SC). In column 6, I instead consider colonies where the percentage of the Scotch-Irish was above 8% (all of the previous colonies, as well as DE, ME and NY). In both cases, the coefficient on labour is negative, significant and similar in magnitude as compared to the estimates in the baseline specification.

### **Racially motivated conflicts**

A final scenario is that elites opted to tighten the suffrage in colonies with large black populations not because they no longer needed to attract white labourers, but in order to pre-empt conflicts along racial lines. First, it is possible that colonies that depended on slavery also had diverse white populations, which found it harder to agree on the design of political regimes and therefore ended up with more author-

itarian institutions (Alesina et al., 1999). I deal with this possibility by including controls for the ethnic and religious fractionalisation of the white population in 1790 in Table A5. I collect colony-level data on the ancestral origins of the white population in 1790 and on the distribution of different types of churches in 1750, from which I calculate Herfindahl-Hirschman Index-type indices of ethnic fractionalisation and religious fractionalisation and include those in the regressions (columns 1-4). Because these variables are fixed over time, I am unable to include colony fixed effects and instead only control for latitude in the regressions. If the colonies were highly divided on these dimensions, it could have been more difficult for actors to coordinate on the democratic outcome, and more autocratic institutions would have emerged (Alesina et al. 1999 and Easterly and Levine 1997).<sup>1</sup> The coefficients on ethnic fractionalisation and religious fractionalisation are mostly insignificant and unstable across regression aggregations, without affecting the significance and magnitude of the coefficients on the rest of the variables.

Alternatively, it is also possible that Southern elites adopted a less democratic political system after the arrival of slavery due to fears that new white settlers may try to abolish the institution of slavery. However, with the exception of a few Quaker activists who had limited success in persuading other Quakers to stop using slaves, abolitionist sentiments were rare during colonial times, and slaveholders dominated political life both before and after 1775. Last, there is little evidence that Southern elites tightened the suffrage after the arrival of slavery in order to prevent joint white-black rebellions. In fact, the colonies experienced few insurrections in the eighteenth century, and most of them involved blacks rebelling against whites (Harrold, 2001; Olasiji, 1995).

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<sup>1</sup>The correlation between these two measures is 0.87.

## Additional robustness checks

In Table A3, I experiment with alternative definitions of the dependent variable. First, suffrage is non-negative and censored above by 6.5, so I present a Tobit regression in column (1). In columns 2-3, I run regressions with an annual panel which also includes all observations. In the last two columns, I run a specification which only keeps those restrictions on the suffrage that were identified as important by Dinkin (1977).<sup>2</sup> The coefficients in these specification are in line with those in Table 1, while the impact of inequality is slightly weaker.

In Table A4, I present additional aggregations of the suffrage index. I try different weighting schemes in columns (1-4): no accounting for substitutability among restrictions (columns 1-2) as well as an alternative substitutability weighting (columns 3-4). I also calculate the suffrage index using principal component analysis on each suffrage restriction (columns 5-6). Last, in columns (7)-(8), I present a specification where suffrage is recoded as 1 if there are restrictions related to any of the following categories: income, freeholding, the existence of minimum freeholding or property, tax, residency or religion; and is 0 otherwise. The OLS and 2SLS coefficients on labour in columns (7) and (8) are much smaller in magnitude - likely because all of these restrictions matter in determining the quality of colonial representative institutions.

In Table A6, I show that the baseline results are robust to dropping the colony fixed effects (columns 1-2), the lagged dependent variable (columns 3-4), both (columns 5-6), and to using a ten-year average panel (column 7). Not surprisingly, results are much stronger when the lagged dependent variable is excluded. In Tables A7 and A8, I show that the results change little when (1) inequality is dropped from the regressions and (2) when different independent variables are excluded from the 2SLS specifications.

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<sup>2</sup>Suffrage Dinkin drops the restrictions for: freemanship, formal patenting of lands, householding, and being a good person.

Table A3: Suffrage in the 13 colonies: Robustness checks 2

	(1) Tobit	(2) OLS All obs & years	(3) 2SLS All obs & year	(4) OLS Suffrage Dinkin	(5) 2SLS Suffrage Dinkin
Lagged Suffrage	0.806*** (0.0407)	0.870*** (0.0330)	0.866*** (0.0378)	0.790*** (0.0440)	0.775*** (0.0626)
Labour (%black)	-1.977*** (0.578)	-1.141*** (0.321)	-1.318* (0.688)	-1.615*** (0.445)	-2.056 (1.337)
Inequality (%white l.less)	-0.681** (0.322)	-0.255 (0.173)	-0.257 (0.175)	-0.464* (0.244)	-0.465* (0.239)
Urbanisation	0.207 (0.273)	0.136 (0.0982)	0.132 (0.0976)	0.190 (0.202)	0.185 (0.192)
Population density	0.00712 (0.00617)	0.00431 (0.00317)	0.00392 (0.00320)	0.00412 (0.00527)	0.00355 (0.00530)
Year control	✓	✓	✓	✓	✓
Colony fixed effects	✓	✓	✓	✓	✓
Additional controls	✓	✓	✓	✓	✓
Observations	412	1316	1316	412	412
Mean suffrage	3.633	3.543	3.543	3.491	3.491
$R^2$	0.868	0.885	0.885	0.841	0.841
<b>First-Stage Results</b>					
Instrument Coefficient			0.299*** (0.025)		0.280*** (0.044)
1 <sup>st</sup> stage $R^2$			0.918		0.928

Sources: See text. Notes: This table shows results from OLS, 2SLS and Tobit regressions explaining the suffrage in the 13 British American colonies (robustness checks). All independent variables are lagged by one period (three years for columns 1; 2-5; one year for columns 2-3). A linear trend is used as “Year control”. Additional controls include a dummy for when each colony was proprietary or charter (with royal as omitted category). Robust standard errors are in parentheses. \*\*\* $p \leq 0.01$ , \*\* $p \leq 0.05$ , \* $p \leq 0.1$ .

Table A4: Suffrage in the 13 colonies: Robustness checks 3

	(1) OLS Unweighted Suffrage	(2) 2SLS Unweighted Suffrage	(3) OLS Alternative Weighting	(4) 2SLS Alternative Weighting	(5) OLS PCA	(6) 2SLS PCA	(7) OLS Suffrage binary	(8) 2SLS Suffrage binary
Lagged Suffrage	0.798*** (0.0472)	0.735*** (0.0667)	0.789*** (0.0435)	0.752*** (0.0592)	0.761*** (0.0841)	0.671*** (0.0904)	0.773*** (0.0749)	0.788*** (0.0851)
Labour (%black)	-1.987*** (0.628)	-4.482*** (1.712)	-1.745*** (0.533)	-3.144** (1.429)	-1.696*** (0.634)	-4.678*** (1.574)	-0.368** (0.165)	-0.253 (0.330)
Inequality (%white l.less)	-0.649** (0.327)	-0.677** (0.335)	-0.673** (0.304)	-0.689** (0.303)	-0.397* (0.216)	-0.448* (0.233)	0.00117 (0.0392)	-0.00641 (0.0351)
Urbanisation	0.782*** (0.283)	0.894*** (0.280)	0.311 (0.227)	0.310 (0.207)	0.492** (0.203)	0.534* (0.295)	-0.0125 (0.0433)	-0.00563 (0.0468)
Population density	-0.00480 (0.00560)	-0.0116* (0.00687)	0.00441 (0.00592)	0.00202 (0.00601)	0.00264 (0.00316)	-0.00442 (0.00409)	0.00126 (0.00102)	0.00154* (0.000808)
Year control	✓	✓	✓	✓	✓	✓	✓	✓
Colony fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Additional controls	✓	✓	✓	✓	✓	✓	✓	✓
Observations	412	412	412	412	412	412	412	412
Mean suffrage	4.189	4.189	3.841	3.841	0.563	0.563	0.0558	0.0558
$R^2$	0.883	0.876	0.852	0.848	0.866	0.849	0.804	0.803
<b>First-Stage Results</b>								
Instrument Coefficient		0.279*** (0.046)		0.303*** (0.046)		0.332*** (0.047)		0.309*** (0.047)
1 <sup>st</sup> stage $R^2$		0.927		0.925		0.926		0.924

Sources: See text. Notes: This table shows results from OLS and 2SLS regressions explaining suffrage in the 13 British American colonies (robustness checks). All independent variables are lagged by one period (three years). A linear trend is used as “Year control”. Additional controls include a dummy for when each colony was proprietary or charter (with royal as omitted category). “Unweighted suffrage” means that the index does not account for restrictions that can be substituted with one or more other restrictions. “Alternative weighting” gives a weight of 1/2 to restrictions that can be substituted with one other restriction, and 1/3 to restrictions that can be substituted with two other restrictions. Columns 5-6 calculate suffrage via principal component analysis. Columns 7-8 create a binary suffrage index which takes a value of 1 if *any* of the following restrictions are in place: income, freeholding, the existence of minimum freeholding or property, tax, residency or religion; and 0 otherwise. Robust standard errors are in parentheses. \*\*\* $p \leq 0.01$ , \*\* $p \leq 0.05$ , \* $p \leq 0.1$ .



Table A5: Suffrage in the 13 colonies: Robustness checks 4

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	2SLS	OLS	2SLS	OLS	2SLS
	Ethnic fract.	Ethnic fract.	Rel. fract.	Rel. fract.	Scotch-Irish	Scotch-Irish
Lagged Suffrage	0.820*** (0.0361)	0.821*** (0.0442)	0.820*** (0.0361)	0.822*** (0.0449)	0.750*** (0.0486)	0.743*** (0.0497)
Labour (%black)	-1.314*** (0.444)	-1.263 (0.780)	-1.318*** (0.443)	-1.265 (0.850)	-1.347** (0.584)	-2.879* (1.702)
Inequality (%white l.less)	-0.663** (0.286)	-0.665** (0.276)	-0.651** (0.289)	-0.653** (0.278)	-0.812** (0.333)	-0.850** (0.336)
Ethnic fractionalization	-0.0720 (0.183)	-0.0691 (0.190)				
Religious fractionalization			-0.0697 (0.122)	-0.0669 (0.132)		
Urbanisation	-0.0148 (0.159)	-0.0223 (0.171)	-0.0371 (0.164)	-0.0440 (0.170)	-0.00505 (0.246)	-0.0262 (0.243)
Population density	0.00324 (0.00430)	0.00325 (0.00422)	0.00310 (0.00414)	0.00312 (0.00405)	0.00886 (0.00656)	0.00815 (0.00640)
Year control	✓	✓	✓	✓	✓	✓
Colony fixed effects					✓	✓
Additional controls	✓	✓	✓	✓	✓	✓
Scotch-Irish migration trends					✓	✓
Observations	412	412	412	412	412	412
Mean suffrage	3.633	3.633	3.633	3.633	3.633	3.633
$R^2$	0.841	0.841	0.841	0.841	0.848	0.846
<b>First-Stage Results</b>						
Instrument Coefficient		0.394*** (0.042)		0.332*** (0.040)		0.249*** (0.048)
1 <sup>st</sup> stage $R^2$		0.825		0.818		0.952

Sources: See text. Notes: This table shows results from OLS and 2SLS regressions explaining suffrage in the 13 British American colonies (robustness checks). All independent variables are lagged by one period (three years). A linear trend is used as “Year control”. Additional controls include a dummy for when each colony was proprietary or charter (with royal as omitted category). Robust standard errors are in parentheses. \*\*\* $p \leq 0.01$ , \*\* $p \leq 0.05$ , \* $p \leq 0.1$ .

Table A6: Suffrage in the 13 colonies: Robustness checks 5

	(1) OLS No FEs	(2) 2SLS No FEs	(3) OLS No Lagged Dep. Var	(4) 2SLS No Lagged Dep. Var	(5) OLS No Lagged Dep. Var No FEs	(6) 2SLS No Lagged Dep. Var No FEs	(7) OLS 10 year avg.
Lagged Suffrage	0.820*** (0.0360)	0.817*** (0.0484)					0.493*** (0.0906)
Labour (%black)	-1.307*** (0.439)	-1.404 (1.012)	-7.449*** (0.679)	-11.05*** (1.873)	-5.962*** (0.549)	-6.943*** (1.594)	-2.980** (1.231)
Inequality (%white l.less)	-0.673** (0.285)	-0.670** (0.275)	-1.615*** (0.512)	-1.523*** (0.518)	-1.415*** (0.477)	-1.340*** (0.481)	-1.880*** (0.656)
Urbanisation	-0.000913 (0.154)	0.0146 (0.196)	1.190** (0.579)	0.958* (0.535)	0.482 (0.383)	0.652 (0.414)	-0.549 (0.668)
Population density	0.00277 (0.00406)	0.00271 (0.00398)	0.0462*** (0.0129)	0.0345** (0.0136)	0.0233*** (0.00850)	0.0215** (0.00857)	0.00530 (0.0151)
Latitude	-0.0300 (0.0228)	-0.0341 (0.0439)			-0.150*** (0.0338)	-0.195*** (0.0734)	
Year control	✓	✓	✓	✓	✓	✓	✓
Colony fixed effects			✓	✓			✓
Additional controls	✓	✓	✓	✓	✓	✓	✓
Observations	412	412	412	412	412	412	123
Mean suffrage	3.633	3.633	3.633	3.633	3.633	3.633	3.627
$R^2$	0.841	0.841	0.498	0.469	0.376	0.371	0.749
<b>First-Stage Results</b>							
Instrument Coefficient		0.248*** (0.036)		0.390*** (0.053)		0.311*** (0.033)	
1 <sup>st</sup> stage $R^2$		0.803		0.915		0.764	

Sources: See text. Notes: All independent variables are lagged by one period (three years for column 1 - 6, ten years for column 7). A linear trend is used as “Year control”. Additional controls include a dummy for when each colony was proprietary or charter (with royal as omitted category). Robust standard errors are in parentheses. \*\*\* $p \leq 0.01$ , \*\* $p \leq 0.05$ , \* $p \leq 0.1$ .

Table A7: Suffrage in the 13 colonies: Main specification, without inequality (percent landless)

	(1) OLS	(2) OLS	(3) 2SLS	(4) OLS Inequality above median
Lagged Suffrage	0.785*** (0.0429)	0.750*** (0.0550)	0.824*** (0.0377)	0.666*** (0.0880)
Labour (%black)	-1.149*** (0.226)	-1.554** (0.606)	-1.730* (0.947)	-1.855*** (0.678)
Urbanisation	0.0478 (0.172)	0.395 (0.296)	0.309 (0.221)	1.065* (0.557)
Population density	0.00216 (0.00552)	0.0138 (0.00942)	0.00493 (0.00619)	0.0265 (0.0209)
Year control	✓	✓	✓	✓
Colony fixed effects		✓	✓	✓
Additional controls	✓	✓	✓	✓
Observations	491	491	464	279
Mean suffrage	3.618	3.618	3.594	3.497
$R^2$	0.766	0.775	0.843	0.737
<b>First-Stage Results</b>				
Instrument Coefficient			0.386*** (0.045)	
1 <sup>st</sup> stage $R^2$			0.894	

Sources: see text. Notes: This table shows results from OLS and 2SLS regressions explaining the suffrage in the 13 British American colonies, excluding inequality (percent landless). Independent variables are lagged by one period (three years). Additional controls include a dummy for when each colony was proprietary or charter (with royal as omitted category). A linear trend is used as “Year control”. Robust standard errors are in parentheses. \*\*\* $p \leq 0.01$ , \*\* $p \leq 0.05$ , \* $p \leq 0.1$ .

Table A8: Suffrage in the 13 colonies: different specifications of the IV estimating equation

	(1) 2SLS Baseline	(2) 2SLS No col. f.e.	(3) 2SLS No urb. pop.dens.	(4) 2SLS No urb., pop.dens. ineq.
Lagged Suffrage	0.769*** (0.0529)	0.816*** (0.0494)	0.772*** (0.0532)	0.829*** (0.0377)
Labour (%black)	-2.608** (1.324)	-1.121* (0.672)	-2.737** (1.314)	-1.802** (0.918)
Inequality (%white l.less)	-0.691** (0.316)	-0.516* (0.310)	-0.663** (0.317)	
Urbanisation	0.140 (0.223)	-0.0475 (0.160)		
Population density	0.00554 (0.00621)	0.000966 (0.00471)		
Year control	✓	✓	✓	✓
Colony fixed effects	✓		✓	✓
Additional controls	✓	✓	✓	✓
Observations	412	412	412	464
Mean suffrage	3.633	3.633	3.633	3.594
$R^2$	0.842	0.839	0.841	0.842
<b>First-Stage Results</b>				
Instrument Coefficient	0.320*** (0.046)	0.372*** (0.064)	0.325*** (0.046)	0.402*** (0.044)
1 <sup>st</sup> stage $R^2$	0.924	0.509	0.923	0.893

Sources: see text. Notes: This table shows results from SLS regressions explaining the suffrage in the 13 British American colonies, using different specifications of the IV estimating equation. Independent variables are lagged by one period (three years). Additional controls include a dummy for when each colony was proprietary or charter (with royal as omitted category). A linear trend is used as “Year control”. Robust standard errors are in parentheses. \*\*\* $p \leq 0.01$ , \*\* $p \leq 0.05$ , \* $p \leq 0.1$ .

### **Part 3: Detailed description of the data (to complement discussion of data in main text)**

**Suffrage** These data are available annually from the first year of a colony's settlement to 1775 from McKinley (1905). The list of coded suffrage restrictions includes: (1) being a free person (indentured servants were not considered free during the terms of the indenture); (2) the possession of land, or the combination of house and land ("freeholding"); (3) the possession of income or property; (4) whether a minimum freeholding, property or income amounts were required; (5) tax paying (such as income or poll taxes); (6) residency in the colony in which voting was taking place; (7) holding any particular religious belief; (8) being a non-felon; (9) being white; (10) the possession of a house; (11) having a particular social status, such as men with a family, being the son of a freeholder, or being a person of "good moral character"; (12) any other requirements, such as having one's land formally patented. Since all colonies allowed only men aged 21 and above to vote, I do not account separately for restrictions related to gender or age.

**Labour markets: percent black and white population density** The data are available from Historical Statistics of the United States, Millennial Edition Online (2006), in ten-year periods from 1610-1780. Missing values are filled in by linear interpolation. The size of each colony is from Purvis (1999, p.19) and Purvis and Balkin (1995, p.243-244). Note that for Maine I use the settled area by 1800 instead of the area of the modern state.

**Labour markets: Caribbean slave prices** Eltis et al. (2005) provide these data in sterling per slave, based on constant prices. The years covered are 1674, as well as five-year periods from then onward until 1775 (for instance, 1675-1679). Data for the period 1638-1672 are also only available in five-year periods and come from

United States Bureau of the Census (1975, p. 1174). Unfortunately, the latter data are not adjusted for inflation, as the US-wide consumer price index (CPI) only starts in 1665. Potential biases should be mitigated by the use of English pounds sterling, which should absorb to some extent inflationary shocks to the domestic currency (see also the discussion on the crop index IV below).

**Labour markets: instrumental variable** I compile the time-invariant **crop suitability** weights from the Food and Agriculture Organization of the United Nations Global Agro-Ecological Zones (GAEZ) 2010 database (FAO, accessed April 5, 2012).

**Crop prices** are from Historical Statistics of the United States, Millennial Edition Online (2006). Prices for tobacco are an average of the prices for all sweet-scented Virginia tobacco, which are available annually for the period 1647-1775. Missing years (1670, 1672 and 1673) are calculated via linear interpolation. The regions included in the calculation of the tobacco prices include: York River Basin, New Kent And King William Counties, Rappahannock River Basin, Potomac River Basin, Hanover And Louisa Counties, and Virginia Piedmont.

Wheat prices cover the period 1680-1775. The data are annual, and those from 1680-1763 are from Purvis (1999, p.77) (covering Talbot County, Maryland), while prices for 1763-1775 are from Historical Statistics of the United States, Millennial Edition Online (2006) (calculated as an average of the prices in Maryland's Eastern and Western shores). Missing years (1689-1693; 1695) are filled via linear interpolation. The 1680 prices are used to fill in the missing prices for the period 1647-1680.

Rice prices are available annually from 1701-1775 and cover Charleston, SC.

**Exchange rate data.** The crop prices are converted from local currency to English pence per pound using exchange rate data from Historical Statistics of the United States, Millennial Edition Online (2006). For Virginia, the data are available

for 1691, and then annually from 1708 to 1775. Years between 1691-1708 are filled via linear interpolation, and the 1691 values are assumed to persist backward to 1647. For Maryland, I use data on hard currency exchange rates, which are available for the years 1702, 1709, as well as annually for the period 1715-1776. Missing values are filled via linear interpolation, and the 1702 values are assumed to persist backward to 1647. For South Carolina, the data are available annually for 1699-1775. The 1699 values are used to fill in the missing values for the period 1647-1699.

Since general price data are not available on a colony-by-colony basis (West, 1978), the crop prices are, unfortunately, not adjusted for inflation. To address this, I adopt three approaches. First, as explained in the main text, when calculating the crop index, I divide the suitability of growing rice or tobacco, multiplied by the respective crop price, by the suitability of growing wheat, multiplied by its price. As a result, each colony's revenue earning potential for tobacco and rice is calculated *relative* to price changes in wheat. Moreover, inflationary pressures during the colonial era were relatively low, at least when the colonies were not at war. For example, even in colonial New England, which was considered to have managed its bills of credit relatively badly, inflation during peacetime was only 5% per annum. In contrast, during wartime, such as King George's war of 1744-1748, inflation in New England was around 35% per year (Michener, 2003). To the extent that wars were a shock common to all colonies, their effects should be captured by the time fixed effects which I include in all regressions. In addition, colony and regional trends should address the possibility that wars affected the price index in some colonies (and regions) more disproportionately than in others (see the robustness checks presented in Table 3). Finally, given the paucity of price indices that cover both individual colonies as well as all colonies, the behaviour of the sterling exchange rate should capture to a large extent fluctuations in the colonial currencies (personal communication with Ron Michener, 20 March 2014).

**Inequality: percent white landless** I assemble the data set on the share of each colony’s white male landless population from Kulikoff (1986, 2000), Main (1965), and Nash (1979). Because the data are only available for certain years, I assign colonies with missing values regional-level data whenever they are available, and fill in any remaining missings via linear interpolation. The data set covers a total of 103 observations for the period 1655 to 1775, with around 15% of the observations covering the period 1655-1710. While the sources generally give a particular year for each landless data point, sometimes they are less precise, and I use my best judgement to handle such cases. For instance, Kulikoff (2000) indicates that in the early eighteenth century, around 1/9 of Pennsylvania residents were without land. I therefore assume that the share of Pennsylvania’s white landless was 1/9 from 1700 to 1710.

To fill in missing values, I proceed in two steps. I first use non-missing regional-level values based on a *narrow* regional classification: Lower South (NC, SC); Upper South (VA, MD); New England (MA, NH, RI, ME, CT) and the Middle Colonies (NY, NJ, PA and DE). I then fill in the remaining missing values using linear interpolation.

While the adopted approach is only a second-best solution to using detailed historical data on income inequality, there are several reasons why the inequality data used in this paper should yield adequate estimates of the income distribution in each colony. First, filling in missing values with data from either neighbouring countries or regional-level averages is a widely used tool in the literature. For instance, when calculating world-wide inequality in the period 1820-1992, Bourguignon and Morrisson (2002) face the problem of missing data for GDP per capita and population for a large group of Eastern European and non-European countries. To fill in the gaps, the authors make use of growth data for comparable neighbouring countries. To minimise the number of missing values, Acemoglu et al. (2001) assign colonial



settler mortality rates (covering the late eighteenth and early nineteenth century) to neighbouring countries, since closely located countries are likely to have similar disease environments. A somewhat similar - albeit arguably less precise - approach is also undertaken by Pritchett (1997), who simply proxies income per capita in the world's poorest countries by estimating a lower bound of USD 250.

Second, linear interpolation between data values that are not available annually is also a standard approach in the literature using historical - as well as contemporary - inequality measures (see, for instance Boix (2003) and Lupu and Pontusson (2011)). Third, one can employ at least two econometric techniques to mitigate the potential biases arising from the implemented estimation technique. The issue of within-colony and within-region clustering should be alleviated by clustering the standard errors as well as by using colony and regional trends, along with colony fixed effects (Albouy, 2012). As already discussed, these results are available in Table 3 and are remarkably similar to those in the baseline specification. Moreover, dropping inequality (Table A7) from the baseline regressions changes the coefficients of interest very little, suggesting that my results are not likely to be driven by coding peculiarities in the inequality variable.

Although percent landless should capture to a considerable extent movements in colonial inequality, it is of course possible that this variable also accounts for other factors that may have an important - and independent - effect on the evolution of representative institutions. A first possibility is that it simply is a proxy for differences in poverty rates across colonies. Colonies with many poor people may be less likely to extend the suffrage, possibly because of the high cost of sustaining a democratic system. Similarly, poor constituents may be less informed and may be less likely to demand a change in political institutions. Alternatively, it is possible that disgruntled and disenfranchised poor colonists may mobilise themselves in a rebellion with the aim of obtaining the suffrage.

Even though I cannot rule out *a priori* that percent landless *also* proxies for these other factors, there are several pieces of evidence that point against their importance. First, persistent cross-colony income differences should be captured by the colony fixed effects, while time-varying shifts in economic development are likely correlated with population density and urbanisation for which the regressions also control. Second, adequate government financing was never really an issue for any of the colonies (Rabushka, 2010). Moreover, literacy rates were uniformly high throughout the colonial period in both the Northern and the Southern colonies (mostly in the range 60%-80%), suggesting that information asymmetries across voters were less extensive (Grubb, 1990). Finally, although some colonies did experience revolts by disenfranchised poor voters, the discussion in the penultimate section of the paper suggests that their impact on political institutions was less clear-cut and short-lived.

**Additional controls** Data on the **type of colonial settlement** (proprietary, charter or royal) is available annually from Purvis (1999).

**Urbanisation** is calculated by dividing each colony's total urban population (from Purvis (1999) and Purvis and Balkin (1995)) by the settled area (for the latter, see the sources in the description of population density). The urban population data include the following years and cities: Boston, MA, 1630-1775 (every 5 years); Charleston, SC - 1680-1690 (every 5 years); 1710-1760 (every 10 years) and 1775; New York, NY: 1630-1775 (every 5 years); Newport, RI: 1640-1780, also including 1775 (every 10 years); Philadelphia, PA: 1685-1775 (every 5 years); Albany, NY: 1775; Baltimore, MD: 1775; Gloucester, MA: 1790 - assumed that this value was the same as in 1775; Hartford, CT: 1775; Lancaster, PA: 1780 - assumed that this value was the same as in 1775, Marblehead, MA: 1760, 1775; New Haven, CT: 1780 - assumed that this value was the same as in 1775; New London, CT: 1700 - assumed that this value was the same as in 1775, Newburyport, MA: 1775, Norfolk, VA: 1775,

Norwich, CT: 1775, Portsmouth, NH: 1775, Providence, RI: 1780 - assumed that this value was the same as in 1775, Richmond, VA: 1790 - assumed that this value was the same as in 1775, Salem, MA: 1760 and 1775, Savannah, GA: 1775. Missing values between years with available data are calculated via linear interpolation. Missing data prior to each colony's first year of available data are given a 0 value.

The **latitude** data were obtained from Tiger Map (Census Bureau). I use the latitude for each colony's state capital.

To calculate **ethnic and religious fractionalisation**, I collect colony-level data on the ancestral origins of the white population in 1790 and on the distribution of different types of churches in 1750 from Purvis (1999).

## **Part 4: Historical evidence**

This subsection moves away from the large econometric tests undertaken in the rest of the paper. Instead, I test the proposed theory linking labour market structure and suffrage extensiveness by marshalling a number of primary and secondary historical sources, ranging from assembly records to promotional pamphlets.<sup>3</sup> This micro-historical approach makes me more confident that labour markets did indeed have a causal effect on political institutions in the thirteen colonies.

I start by examining some (fragmentary) migration data covering the Northern and Southern colonies in the seventeenth and eighteenth centuries. If a liberal suffrage was indeed one of the effective ways to attract labour in the South in the seventeenth century, then the number of migrants coming to the South during this period should be higher than those in the North. In contrast, we should expect a reversal of this pattern after 1700. This is precisely what Table A9 demonstrates. The first panel contains information on the number of migrants in selected Southern

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<sup>3</sup>See also Nikolova (2014) for a detailed historical analysis of the evolution of suffrage institutions in Virginia.

and Northern colonies in the seventeenth century and shows that the flow of settlers coming to Virginia and Maryland during this period was nearly three times more than those choosing New England and Delaware. Due to lack of direct migration data, the second panel in the table proxies the number of foreign migrants with the share of the foreign-born population in each colony. With the exception of Maryland, eighteenth-century foreign migration had decreased substantially in the three remaining Southern colonies, at a level on a par with that in Massachusetts, and was significantly lower than the respective figures in Pennsylvania and Delaware.

### **Evidence from the South**

Although detailed accounts of the motives of English migrants to the colonies are scant, several pieces of historical evidence support the idea that liberal representative institutions in the early South were used to attract labour. First, historians point out that assemblies appeared early in *all* colonies because they allowed rich planters to influence not only how each colony was governed, but also the fate of their own county or village (Cooper, 2000). In the seventeenth-century South, the most pressing issue for planters was securing a constant supply of English indentured servants. As one of Maryland's first promotional pamphlets (published in 1635) explains, a planter "may doe well to furnish himselfe with as many [servants] as he can, of useful and necessary Arts: A Carpenter, of all others the most necessary;... but any lusty young able man, that is willing to labour and take paines, although he have no particular trade, will be beneficial enough to his Master" (Hall, 1910, p. 98-99).

Southern elites, such as Edward Sandys, the treasurer of the Virginia Company, understood well that English immigration was instrumental for colonial development as well as for the profits of the Company, and that assemblies could play a crucial role in attracting migrants (Perry and Cooper 1959, p.48; Bruce 1910, p.404). Early Southern assemblies offered various concessions to indentured servants by issuing a

Table A9: Migration to colonial British America, 1607-1775

(a) Before 1700: Total number of migrants

Years	Virginia	Maryland	New England	Delaware Valley
1607-1624	6,000	...	400	...
1625-1633	3,000	...	2,500	...
1634-1640	8,800	700	17,500	...
1641-1650	12,000	1,800	4,800	...
1651-1660	18,500	4,600	3,600	...
1661-1670	7,600	12,200	10,000	...
1671-1680	7,400	12,400	...	1,000
1681-1700	18,200	10,800	...	8,000
1607-1700	81,500	42,500	38,800	9,000

(b) After 1700: Percent of foreign-born residing in each colony

Colony	Per cent
Maryland	56%
Virginia	20%
South Carolina	16%
North Carolina	9%
Pennsylvania	74%
Delaware	61%
New York	10%
Massachusetts	17%
New Hampshire	10%
Maine	9%
Connecticut	5%

Sources: Before 1700: Purvis (1999); after 1700: Villaflor and Sokoloff (1982). Notes: This table shows the number of migrants in selected colonies. Since data on the total number of migrants are not available after 1700, it uses data on the share of the foreign-born from the colonial militia muster rolls covering the French and Indian war and the pre-revolutionary years.

number of acts that regulated servant-master relations, sometimes as many as six annually. In Virginia in 1642, servants were given the right to seek the support of the local commissioner, who was the head of the county court appointed by the governor and the Council, for complaints about “harsh or vnchristianlike vsage or otherways for want of diet, or convenient necessaryes” (see Hening, 1819-1823, vol. 1, p. 255, ACT XXII).<sup>4</sup> Several other acts also required masters to provide servants with decent clothing, food and lodging. To prevent the exploitation of indentured labourers, the Assembly issued statutes specifying the punishment that a master could enforce when a runaway servant was apprehended, such as the number of extra days such a servant had to serve (Smith, 1971, p. 266).

In the absence of a developed court system, the credibility of these regulations could only be sustained if migrant workers were allowed to participate in representative government as well, something which elites quickly realised. In Maryland, the proprietors decided to establish a liberal voting regime in order to compete for settlers with other colonies, especially because a Catholic proprietor could have discouraged some prospective colonists (Jordan, 2002, p.5). Similarly, although the North Carolina proprietors initially wanted to govern alone, a liberal franchise was implemented, at least until the province became more thickly settled (Raper, 1904, p.16). As a result, despite an English franchise restricted to freeholders, which excluded nearly 97% of the electorate, the majority of seventeenth-century Southern colonists were voters.<sup>5</sup> In pre-slavery Virginia, indentured servants could in fact vote until 1655, while freemen held the franchise in Maryland, North Carolina and South Carolina for most of the seventeenth century.

Moreover, the extensiveness of the suffrage was an important consideration for mi-

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<sup>4</sup>The local commissioner was a type of assembly representative who was appointed by the governor and the Council.

<sup>5</sup>The size of the English electorate is from Acemoglu and Robinson (2012).

grants. In 1624, all Virginia colonists issued a declaration stating that participation in representative government not only encouraged them to “follow their particular labours with singular alacrity and industry,” but also had led to the establishment of many new plantations (Perry and Cooper, 1959, 49). Chute (1969) also gives an example of a group of highly-skilled Poles hired by the Virginia company which decided to settle in the colony because they were enfranchised and made inhabitants. The suffrage rights of new migrants also featured prominently in the Southern promotional literature. For example, a pamphlet published for the (South and North) Carolina proprietors in 1666 advertised both the generous land grants for which new settlers were eligible, and the fact that all free newcomers would be given the right to vote. Not only did these incentives attract a large number of migrants a few years later, but the early records of the colony also suggest that the proprietors did not renege on any of the promises made to new migrants (Salley, 1959).

In Maryland, the 1635 promotional pamphlet discussed earlier contains a section explaining that the proprietor could only implement laws that were also approved by the assembly, which in turn was to be elected by the greater number of free males in the colony (Hall, 1910, p. 104-105). In 1666, to recruit indentured servants, Maryland’s proprietor Lord Baltimore commissioned a promotional narrative from a George Alsop, a former servant.<sup>6</sup> An entire chapter is devoted to a discussion of Maryland’s political system, and the existence of an annual assembly, elected by the consent of the people, is highlighted. Alsop also “advertises” several servant-friendly laws enacted by the Assembly, such as a law specifying that, upon completion of the indenture, a servant must receive from his master fifty acres of land, corn, three suits of clothes, as well as tools needed to set up his own farm. The book concludes that “The Servant of this Province, which are stigmatiz’d for Slaves by the clappermouth

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<sup>6</sup>Although the language of this pamphlet is exaggerated, historians agree that most statements were truthful (Hall, 1910, p. 338).

jaws of the vulgar in England, live more like Freemen then the most Mechanick Apprentices in London, wanting for nothing that is convenient and necessary, and according to their several capacities, are extraordinary well used and respected” (p. 378).

If liberal suffrage institutions were so prevalent in the South in the early seventeenth century, then how and why did they decline? Consistent with the theoretical and econometric analysis in the rest of the paper, the historical record suggests that the Southern political reversal was underpinned by the substitution of indentured servants with slaves. As labour market pressures subsided, political concessions to poor white workers were no longer profitable and the franchise was tightened in the late seventeenth and early eighteenth centuries. For instance, Cooper (2000, p. 9) argues that a major benefit of Africans, as compared to indentured servants, was that blacks could be permanently banned not only from landowning, but also from political life. In Maryland, the law to limit the franchise to freeholders, implemented in 1670, was debated intensely between the assembly and the Council. In the end, the winning argument was that even if such a policy drives out the majority of “able bodied” freemen, it is the welfare of the freeholders - and not that of the freemen - that matters most. Similarly, in South Carolina, in sharp contrast to the rhetoric of the promotional pamphlets from only a few decades earlier, non-freeholding freemen were deemed not to “have an interest in this province” and excluded from voting in several laws enacted in the late 1600s and early 1700s (McKinley, 1905, p.146).<sup>7</sup>

### **Evidence from the North**

While indentured servants comprised the majority of the Southern workforce for most of the seventeenth century, labour demand in the Northern colonies was met

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<sup>7</sup>Election-related complaints were also considered to take too much time and to interfere with public business.



mainly by family labour and only a small number of hired labourers. The temperate climate, along with the dominance of small-scale crops like wheat, kept the demand for additional workers low. As a result, political institutions in New England and the Middle colonies remained largely unchanged throughout the colonial period.

Instead of attracting labourers, suffrage institutions in the New England colonies were aimed at creating a closed community dominated by the initial settlers and emphasising the importance of religion.<sup>8</sup> As a result, from the very beginning, a strict franchise including only church members emerged in Massachusetts, New Hampshire and Maine. Although Connecticut did not formally limit the suffrage on the basis of religion, historians suggest that church membership was likely as important as in Massachusetts, given the close link between church and township (McKinley, 1905, p. 389). Even in Rhode Island, which implemented the most liberal franchise regime of all the New England colonies, a religious qualification, limiting the freemanship and the suffrage to only Christians (excluding Roman Catholics), was adopted in 1719. Although less restrictive than the church-members' suffrage in the rest of the New England colonies, this regulation remained in force until the Revolution (McKinley, 1905, p. 430-462).

Even in those colonies where the religious qualification was eventually abolished, it was substituted with equally limiting freeholding requirements. In Massachusetts in 1664, ten new requirements for voting replaced those related to church membership, among which freeholding, residency and the need for a certificate from the "selectmen of one's town" (McKinley, 1905, p. 325). A similar - and likely even more restrictive - law was also adopted in New Hampshire in 1677 (McKinley, 1905,

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<sup>8</sup>In Massachusetts, John Cotton, a pre-eminent minister, believed that "Democracy I do not conceive that God ever did ordain as a fit Government for Church or commonwealth" and that the liberty of electing deputies can only be entrusted to "churchmembers; for the liberties of the freemen of this commonwealth are such as require men of faithful integrity to God and the state to preserve the same" (McKinley, 1905, p. 305, 310).

p. 374). What is more, New England elites could also influence who voted by controlling the admission of freemen in each township. Unlike in the Southern colonies where any person not bound to service was considered a freeman, new freemen in New England were accepted by deliberation of the respective towns. Some of the requirements that candidate freemen had to satisfy - such as freeholding or church membership - were similar to those imposed on voters. But there were also others, including provisions for good moral character, a tax and a monetary payment, as well as a probationary period, and a lengthy and laborious admissions process (McKinley p. 307-310, 382-387). Not surprisingly, the suffrage and freemanship requirements severely limited the number of eligible voters. In Massachusetts in 1631, the religious qualification excluded more than one half of the adult males, and freemen were only between one tenth to one twentieth of the population (McKinley, p. 313). Nearly forty years later, the colony had only 350 freemen out of a total population of 5,000 (McKinley, 1905, p. 307-310, 349, 382-387).

In the Middle colonies, English proprietors overtook a network of Dutch and Swedish settlements established in the early seventeenth century, which made attracting additional migrants less pressing. What is more, the English had fewer incentives to grant broad political freedoms to existing settlers, as Dutch and Swedish representative institutions were largely closed to the general population (McKinley, 1905, p. 259).<sup>9</sup>

This is not to say that colonial elites were unaware of how important political

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<sup>9</sup>For example, although a quasi-representative board did come into existence in New York in 1642, its members were appointed by the director in consultation with a rather narrow group composed of “masters and heads of families.” In New Jersey, the only type of government that existed under the Dutch was in Bergen county and consisted of a four-person local court appointed by the New Amsterdam authorities. In Delaware and Pennsylvania, popular participation in government was similarly haphazard and never permanently established (McKinley, 1905, p. 176, 227, 273, 266-267).

participation was for attracting settlers; rather, the evidence suggests that European and colonial governments simply had fewer incentives to make use of such policies. For instance, in a petition to the Dutch government in 1644, New York's governing body advocated, albeit unsuccessfully, establishing a representative assembly in which inhabitants "settle in suitable places, one near the other, in the form of villages or hamlets, and elect from among themselves a Bailiff or Schout and Schepens, who will be empowered to send their deputies and give their votes on public affairs with the Director and Council" (McKinley, 1905, p. 176-177).

In Delaware, the city of New Amstel, in an attempt to enlarge its population following its transfer from the Dutch West India company to Stuyvesant in 1656, advertised political privileges along with economic inducements to new settlers. However, the promised political institutions did not allow for popular elections of officeholders, but only for the "body of the burghers" to nominate fourteen magistrates, out of which the New Amsterdam director would appoint seven. Further political concessions, including an "election of commissaries" were implemented in the period 1657-1663, aimed at preventing the colonists from fleeing to English settlements, but ultimately none of these policies were successful and the city fell to the English in 1663 (McKinley, 1905, p. 262-264).

The availability of settlers, along with the limited governmental institutions under the Dutch and the Swedish, prompted English proprietors in the Middle colonies to opt for a relatively stable franchise regime which was limited to freeholders. In New York, the freeholder-only suffrage was implemented shortly after the transfer of the colony to the English in 1664, and with few additional changes (such as the exclusion of Catholics and Jews in 1701 and 1737, respectively), remained unchanged until the Revolution. Remaining Dutch settlers were offered additional concessions, such as the choice to become English citizens upon recognising the King's authority; the protection of property and land rights; the enforcement of Dutch rules of inheritance;

and the freedom of conscience and worship (McKinley, 1905, p. 197). In New Jersey, where the original Dutch settlements were smaller and more sparsely populated, the inducements offered to current settlers were even broader. In addition to cheap land and “liberty of conscience,” colonists were also promised a general assembly as well as chartered towns and cities. However, from very early on the suffrage was limited to freeholders, a policy which paralleled the franchise regimes adopted in Delaware and Pennsylvania. Similarly to New York, political institutions in these three colonies changed little throughout the colonial period (McKinley, 1905, p. 228; 274).<sup>10</sup>

In short, the historical evidence analysed in this sub-section supports the conclusions of the extensive econometric analysis undertaken in the rest of the paper. Representative institutions in the thirteen colonies were tightly linked to the structure of colonial labour markets. In the seventeenth-century South, a broad franchise (which in some cases allowed even indentured servants to vote) was aimed at attracting poor migrants from England. As bound labourers were replaced by slaves in the late 1700s and early 1800s, Southern political institutions deteriorated. In contrast, Northern political institutions, which were less inclusive than those in the pre-slavery South, remained largely unchanged throughout the colonial period, as Northern agriculture, conducted mainly on small family farms, did not require additional inflows of labour. In the New England colonies, a strict religious requirement for voting, along with a cumbersome procedure for gaining freemanship, created a closed community which favoured the original settlers. In the Middle colonies, a network of existing Dutch and Swedish settlements, along with their autocratic form of political organisation, enabled English proprietors to implement a restrictive franchise regime that was limited to freeholders.

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<sup>10</sup>In Delaware, there were no popular elections from its overtake by the English in 1665 until 1682. From 1682 until 1702, the colony was part of Pennsylvania (McKinley, 1905, p. 266-270).

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