

# Online Appendix

## The Medieval Roots of Inclusive Institutions: From the Norman Conquest of England to the Great Reform Act

Charles Angelucci  
(Columbia)

Simone Meraglia  
(Exeter)

Nico Voigtländer  
(UCLA, NBER, and CEPR)

### A Data and Background

#### A.1 Timing: Farm Grants and Wars

Starting with Lincoln in 1130, Charters of Liberties were granted to boroughs throughout our period of interest (i.e., until 1348 and beyond). Figure A.1 presents the timing of royal and mesne Farm Grants for the period 1130-1309. Although farm grants were issued in almost every decade, John and Henry III stand out as the most active grantors. Figure A.1 also highlights England's wars with France: Periods of war often coincided with the granting of numerous farm grants to royal towns. This had two reasons: First, during wars, the need for financing was particularly large. Second, the king was often absent while fighting abroad, which rendered the monitoring issues in controlling his tax-collecting administration even more severe. Farm Grants offered a way to address both these issues, since they decentralized tax collection and also typically resulted in the payment of higher lump sums by chartered boroughs (see Section 3.5 in the paper for detail). Figure A.1 also illustrates that Farm Grants were much less common in mesne boroughs, as discussed in Section 3.6

#### A.2 Classification of Boroughs Ownership

We classify boroughs according to their ownership as *mainly royal*, *mainly mesne*, and *mixed*. For each borough, we compute the years since its foundation until 1348. We also calculate the time spent as part of the royal or mesne lords' demesne between foundation and 1348. For this, we use the following criteria: Boroughs that belonged to the king for at least 75% of the period between their foundation and 1348 are classified as *mainly royal*. Those boroughs that belonged to mesne lords for more than 75% of the time are counted as *mainly mesne*. The remaining boroughs are classified as *mixed*.<sup>1</sup> According to these criteria, 90 (380) boroughs belonged to the king (mesne

---

<sup>1</sup>During the period 1086-1348, altogether 73 boroughs changed ownership from the king to a mesne lord, or viceversa. Changes in ownership were typically due to inheritance issues and are thus unlikely to be related to our analysis in a systematic fashion. During the same period, further 6 boroughs belonged jointly to the king and a mesne lord; we classify these 6 as *mixed* ownership.

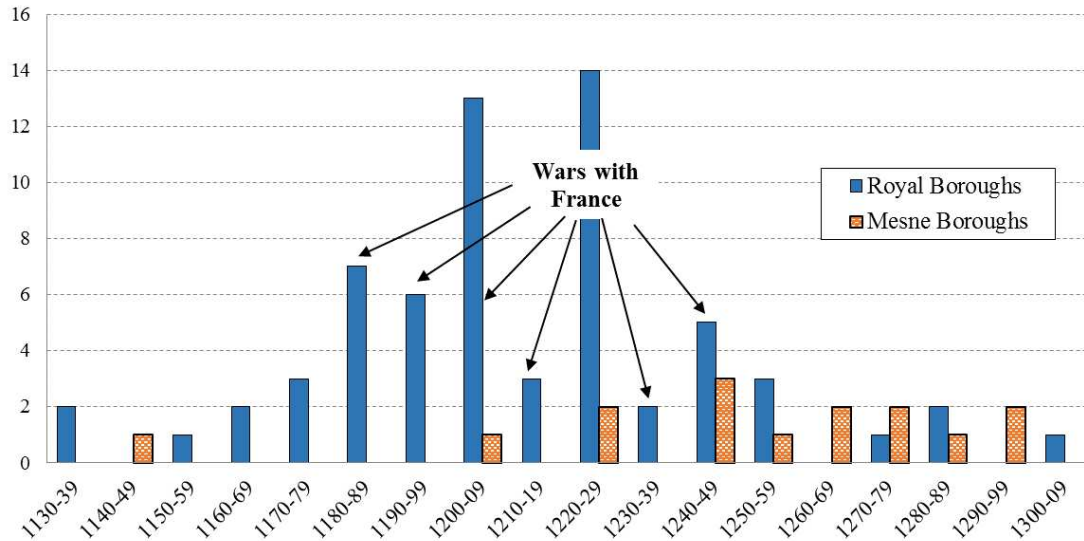


Figure A.1: Timeline of Farm Grants for Royal and Mesne Boroughs

*Note:* The figure shows that Farm Grants were often granted during periods of external wars, when the king’s absence and simultaneous need for finance led to particularly extortive behavior of his tax-collecting officials.

lord) for most of the period. An additional 55 *mixed* boroughs belonged to both the king and a mesne lord for a non-negligible part of the period 1086-1348 (i.e., more than 25% to each).<sup>2</sup> Because even relatively short ownership by the king was sufficient for charters of liberties to be granted, we include these *mixed* boroughs under “royal” in our main analysis.<sup>3</sup> This yields a total of 145 (90+55) royal boroughs for the purpose of our main analysis. Finally, there are 24 boroughs that were founded before the Black Death, but for which systematic information of ownership is not available for the full period prior to 1348. In the vast majority of cases, the scattered information at our disposal points to the presence of a mesne lord. We thus classify these boroughs as *mainly mesne*. Altogether, we thus count 404 (380+24) mesne boroughs that were founded before 1348.

<sup>2</sup>Note from footnote 1 in the appendix that there are 79 boroughs (73+6) that changed ownership at some point or were co-owned. Out of these, 55 are classified as *mixed* (including the 6 boroughs that were co-owned, for which we code royal and mesne ownership at 50% each). This leaves 24 boroughs that changed ownership and are not *mixed*. Among these, 8 (16) belonged to the king (mesne lords) for more than 75% of the time. These 8 (16) boroughs are included in the 90 *mainly royal* (380 *mainly mesne*) boroughs.

<sup>3</sup>Among the boroughs that changed ownership, there were instances of new Farm Grants being issued by the king immediately after previous mesne boroughs became royal. For example, Chester became royal in around 1237 and received a Farm Grant in 1239. There are also instances of charters being revoked after a switch from royal to mesne. For example, Liverpool and Newcastle-under-Lyme lost their liberties when they became mesne boroughs in about 1266 and 1292, respectively (Ballard and Tait, 1923, p. lvi). By contrast, there are no recorded instances of charters being revoked when boroughs became royal, and also no instances of new charters being granted in the first few years following the change in ownership from royal to mesne.

In Appendix B.1, we show that our results are robust to a more conservative definition of royal ownership, based on a 90% threshold and excluding mixed boroughs and those without systematic documents on ownership.

We also create an *index of ownership* that exploits the official standing of lords (e.g., earls and bishops) as an indicator for the size of the territory they own. We assign (i) 4 points to boroughs belonging to the king, queen, or prince (royal boroughs), (ii) 3 points to boroughs belonging to earls or archbishops,<sup>4</sup> (iii) 2 points to boroughs belonging to bishops and (iv) 1 point to boroughs belonging to either seigneurs (lesser barons) or abbots/nunneries.<sup>5</sup> According to this index, there are 145 royal boroughs, and the remaining 404 boroughs that existed by 1348 are divided as follows: 107 with size=3 (earls or archbishops), 71 with size=2 (mostly owned by bishops), and 226 with size=1 (seigneur/abbot/nunnery). These are the size categories underlying Figure 3 in the paper.

### A.3 Data on Inclusiveness of MP Elections in 1690-1831

We use several measures for the openness of borough-level MP elections. The first two measures are based on Aidt and Franck (2015):

- *Broad Franchise*: This is a dummy variable that takes value 0 if the borough elected its MPs using a “burgage” or “corporation” franchise (“narrow franchise”), and takes value 1 otherwise. Under “burgage,” the right to vote was attached to the tenancy of a house or property designated as a burgage plot for parliamentary elections. Under “corporation,” only mayor, aldermen and councilmen could vote for the MPs representing their borough.
- *Patronage Index*: This index captures both the extent to which a borough was subject to patronage and whether it was disenfranchised by the Great Reform Act of 1832. It ranges from 0 to 2. The index equals 0 (closed) for rotten boroughs *and* closed constituency (controlled by local patron); it equals 1 if the borough was either rotten *or* a closed constituency, and it takes on value 2 (open) if neither of the two apply. Note that we redefined the original coding in Aidt and Franck (2015) so that larger values reflect openness of MP elections.

Next, we define two additional indexes for openness of MP elections:

- *Contested Elections*: This index ranges from 0 to 4. It reflects the number of MP elections (altogether four between 1820-31) for which there were more local candidates than the bor-

---

<sup>4</sup>We have evidence that even after the Norman Conquest, earls were the greatest barons (Brooke, 1961, pp. 103-05).

<sup>5</sup>For boroughs that changed ownership between their date of foundation and 1348, we use the criteria described above to define royal boroughs. When boroughs changed hands between different types of mesne lords, we assign them the average number of points on the ownership index and then round to the nearest integer.

ough's seats in Parliament (typically two). Data are from the History of Parliament (Fisher, 2009).

- *Openness Index*: These measures capture the extent to which a borough's choice of its MPs was subject to the control of a patron (e.g., a local landed interest or the Treasury). It ranges from 1 to 3: The index equals 1 (closed) if both MPs were chosen by a patron, it equals 2 if only one MP was chosen by a patron, and 3 (open) if anyone could run for Parliament. Data are from the History of Parliament. We construct this index for different time periods:
  - *Openness 1820-1831*: This index takes value 3 if the borough is defined as "open" in Fisher (2009). It takes value 2 if the borough is reported as partially subject to patronage in the description of the constituency contained in Fisher (2009), and it takes value 1 if it is defined as "close" in the same source. Finally, we assign a value 1.5 to boroughs that are not listed as "open" in Fisher (2009), and for which we have been unable to fully establish the degree of patronage.
  - *Openness 1690-1715 / 1754-1790 / 1790-1820*: To construct the openness index for these earlier periods, we rely on the description of boroughs contained in Cruickshanks, Handley, and Hayton (2002), Namier and Brooke (1964), and Thorne (1986) respectively. We also make use of the more detailed boroughs' accounts available at <http://www.historyofparliamentonline.org>. Our coding criteria match those used for the index of openness 1820-1831. However, we adjust our coding because of the less clear-cut distinction between "open" vs. "closed" boroughs (especially for the period 1690-1715) made by our references. We subtract 0.5 points from boroughs that are described as generally open, but in which "interests" (e.g., a landed gentlemen owning large properties in the borough) exerted some influence over the borough's elections of MPs. Similarly, we assign a value of 2 to boroughs that are not described as "closed" or "semi-closed," but whose parliamentary seats were subject to strong "interests."
  - *Openness dummies*: For each time period, we define a dummy that takes on value one if the borough is classified as "open" (i.e., if its openness index is strictly greater than 2).

#### **A.4 The English Civil War: Background and Data**

The English Civil Wars (1642-1646 and 1648-49) and the crises and switches in political regimes that followed it ultimately strengthened the English Parliament. By the end of Oliver Cromwell's rule in 1659, Parliament had gained greater control over the king's revenues (e.g., customs, excises, and hearth tax). Following the Glorious Revolution of 1688 and the coronation of William in 1689,

the Parliament could no longer be dissolved without its consent. It also took full control over military expenses and granted the king the minimum amount of revenues necessary to cover the costs of civil government (Miller, 1983).

### *Background*

In the early 17th century, the summoning and dissolving of parliaments was still a royal prerogative. In line with his absolutist tendencies, Charles I did not summon Parliament for a period stretching 11 years (1629-40). As a result, he resorted to various unpopular means to raise extraordinary revenues (e.g., the levying of ship money in 1634). Charles also introduced highly controversial religious measures which raised suspicions that he was reintroducing Catholicism. His attempt to apply the same religious reforms to Scotland led to a Scottish rebellion and the first Bishops' War (1639). The outcome of the conflict was disastrous for England and forced Charles to summon Parliament to raise revenues. The MPs voiced many complaints about his rule – e.g., appointment of bishops, monopolies on international trade, internal licenses, and the farming of customs, (Ashton, 1979; North and Weingast, 1989) – and opposed his plans to invade Scotland. The Parliament was dissolved after only a few weeks in May 1640, and Charles attacked Scotland again, suffering a humiliating defeat and prompting the invasion of northern England by the Scots in August 1640. Forced to pay tribute to the Scots, Charles summoned the Parliament again in November 1640 (Bennett, 1995). This Parliament would sit for the next 13 years.

Although a military conflict with the king – let alone its deposition – was unimaginable then, many MPs were hostile to Charles and successfully passed legislation that strengthened Parliament (e.g., the Act for Triennial Parliaments of 1641). When a rebellion broke out in Ireland in October 1641, both king and Parliament agreed that the creation of an army was necessary to suppress the uprising. However, neither side trusted the other with the control of these forces. The county militias – the only land forces available during peacetime – were under the control of the royal appointee lord-lieutenants, who supervised and trained them (Wedgwood, 1959). After the failure to secure control of the armed forces, in March 1642 Parliament issued the *Militia Ordinance* without royal approval to appoint its own lord-lieutenants. As a response, in June 1642 the king issued the *Commissions of Array* – a long obsolete tool to raise men in the shires. The choice whether to obey the *Militia Ordinance* or the *Commissions of Array* forced boroughs (i.e., their burgesses, local officials, or the governing lords) to pick a side.

In the months leading up to the outbreak of hostilities in August 1642, royalists and parliamentarians feared the other side's possible use of force, and preparations for military conflict began on both sides. The king recruited mostly from rural areas by relying on county-level officials (sheriffs and lords-lieutenants) and gentry. In contrast, the parliamentarians successfully recruited

both in counties and boroughs, despite many boroughs' attempt to remain neutral out of fear for their liberties (Howell, 1982). London provided over 6,000 men. The parliamentarians gathered volunteers by sending orders or logistical information to their appointed lord-lieutenants and to the lords sympathetic to their cause. Mayors were also contacted for recruitment in boroughs, and MPs dispatched to their constituencies to counteract the king's effort to enforce the *Commissions of Array*. One of Hull's MPs famously convinced John Hotham, Governor of Hull, to refuse the king's entry into the town (Bennett, 1995, p. 25). This led the king to move to Nottingham, where on August, 22nd 1642 he raised the Royal Standard. Soon thereafter, fighting broke out.

Both sides initially had over 15,000 men at their disposal, and battles were fought over large areas of the country for a period lasting three years. Although royalist forces initially had the upper hand, they were eventually defeated by the parliamentary forces in 1645, and the king was captured a year later. In 1647, the king conspired with the Scots, and fighting broke out again in 1648. The forces loyal to the king were defeated in 1649, and Charles was tried and sentenced to death the same year. The monarchy was abolished in February 1649, and Oliver Cromwell ruled with the help of the Parliament until his death in 1659. Although the monarchy returned in 1660, the Parliament had gained considerable power in the process, and the transition to a full-fledge constitutional monarchy would be complete by the end of the Glorious Revolution in 1689.

### *Data*

We focus on the period immediately preceding the military conflict: January-August 1642. For each borough in our dataset, we record whether it raised volunteer troops to fight on the parliamentary side.<sup>6</sup> The information on boroughs' raising of men is collected from the House of Lords Journal (1629-42 and 1642-43) and from the Private Journals of the Long Parliament (3 January to 5 March 1642, 7 March 1642 to 1 June 1642, and 2 June to 17 September 1642).<sup>7</sup> We complement these data with those provided in Russell (1990) and Daniell (2008). Altogether, the Parliamentary records mention 31 boroughs that raised voluntary troops to support the parliamentarians. Out of these, 30 boroughs existed by 1348. We create the indicator variable *Volunteers* for these 30 boroughs.<sup>8</sup>

---

<sup>6</sup>We do not record recruitment after August 1642 because army movements across the territory render the "voluntary" nature of recruiting questionable. To the best of our knowledge, there exist no records of volunteer troops raised for the royalist side in the boroughs.

<sup>7</sup>These sources can be accessed online at the following links: <http://www.british-history.ac.uk/lords-jrnl/vol4>, <http://www.british-history.ac.uk/lords-jrnl/vol5>, and <http://www.british-history.ac.uk/commons-jrnl/vol2>.

<sup>8</sup>Information on the *number* of men raised by each borough is not available. However, the boroughs that raised men were explicitly discussed in Parliament (which underlies our data source). This suggests that the contributions of each of these boroughs must have been significant.



## A.5 The Great Reform Act: Background

The rules governing the Parliament and the composition of enfranchised constituencies were largely unchanged from the 17th century to the Reform Act of 1832 (Porritt, 1909). In essence, the Parliament was an institution inherited from medieval times. In 1830, 383 constituencies were represented, including 203 English boroughs returning a total of 405 MPs, as well as 40 English counties returning 82 MPs (Fisher, 2009). In our analysis, we focus exclusively on English boroughs. The beginning of the 19th century was marked by profound discontent with local governance and MP elections. The Industrial Revolution led some boroughs to experience rapid population growth, thereby straining the public provision of sanitation and law and order (see Lizzeri and Persico (2004) and references therein). Moreover, the parliamentary system was generally perceived as very corrupt and unrepresentative (Brock, 1973, pp. 25-8). Many rapidly growing boroughs were unrepresented (e.g., Manchester).

Within enfranchised boroughs, large portions of the population were excluded from participating in MP elections. The internal franchise rule varied greatly from borough to borough. In 1830, six franchise rules were observed (*scot and lot*, *householder*, *freeholder*, *freeman*, *burgage*, and *corporation*). Two of these rules – *burgage* and *corporation* – consisted of particularly narrow franchises. For instance, only the members of the governing body were allowed to vote in corporate boroughs. Further, MP elections were often subject to patronage.<sup>9</sup> In these cases, the borough “patron” – typically a large local landowner, and sometimes the Treasury – was effectively entitled to nominate some or all of the borough MPs. Patronage was particularly pervasive in the smaller “rotten” boroughs such as Gatton, which did not have any inhabitants left (Porritt, 1909, pp. 369-70).

Reforming the parliamentary franchise was a recurrent theme of early 19th century British politics (Brock, 1973). The chances for reform became tangible in the 1820s. By and large, Whigs and Radicals were in favor of reform, whereas Tories were against it.<sup>10</sup> Between 1822 and 1827, George Canning, the Tory Leader of the House of Commons, successfully appeased the “commercial men” and dampened their demand for a vast parliamentary reform by promoting liberal legislation (Brock, 1973). In 1828, besides the parliamentary reform, the Duke of Wellington’s Tory government faced three other major issues: the currency crisis that followed the financial crash of 1825-6, the Catholic Emancipation, and the Corn Laws. The possibility for reform presented itself when, in November 1830, during a period of general economic distress, Lord Grey formed the first Whig Government since 1806. By then, part of the Tories had turned in favor of

---

<sup>9</sup>For a comprehensive description of each franchise rule we refer to Fisher (2009).

<sup>10</sup>Among the Tories, the majority of the Huskissonites and many ultra-Tories were, however, in favor of reform (Brock, 1973, p. 76).

reform, largely because of the rotten boroughs' role in the Catholic Emancipation (Brock, 1973). However, MPs were chosen by their constituencies based not only on this possible reform, but also on other major issues (e.g., Anti-Slavery and Corn Laws, c.f. Fisher, 2009; Brock, 1973).

The first Bill was proposed in March 1831. The reform aimed at (i) harmonizing the franchise across boroughs, (ii) disenfranchising smaller boroughs, and (iii) enfranchising the newly industrialized ones. The reform undermined patrons' hold on boroughs both directly (by disenfranchising rotten boroughs) and indirectly (by making the electorate in enfranchised boroughs sufficiently large and uniform). Patrons of disenfranchised boroughs were partially compensated for the loss in the value of their property with an increase in the number of county seats.

The Bill of March 1831, although approved by the House of Commons by a narrow margin, was then rejected by the House of Lords. This event prompted the collapse of the Government and new MP elections. The general elections of April 1831 were effectively a referendum on the parliamentary reform. Two bills were proposed in June and September 1831 and, after some amendments and compromises, a new bill was voted in December 1831 and finally approved in March 1832. The reform resulted in 56 boroughs being entirely disenfranchised and 30 boroughs losing one seat. On the winning side, 43 boroughs were enfranchised, with 21 gaining one seat and the rest two seats. In each enfranchised borough, all males owning property with an annualized value of at least £10 gained voting rights. The net effect of the reform was to extend the franchise from 3% to 6-7% of the population.

## **B Empirical Appendix**

### **B.1 Conservative Classification of Borough Ownership**

In the following we show that our main results hold also when using a very conservative classification of borough ownership. In the results presented in Table A.1, we classify as royal those boroughs that were owned by the king for more than 90% of the time period between their foundation and 1348. This leaves us with 87 royal boroughs. In addition, we include as mesne boroughs only those that belonged to mesne lords for more than 90% of the time – altogether 371. We exclude mixed boroughs (based on the 90% criterion) and those with incomplete ownership records (i.e., the 24 boroughs for which the scattered evidence on ownership points towards mesne lords – see Appendix A.2).

Columns 1-4 in Table A.1 examine the determinants of Farm Grants, replicating our results from columns 1-3 in Table 3, and from column 6 in Table 4 in the paper. Columns 5-7 in Table A.1 replicate our regressions for representation in Parliament from columns 1, 2, and 10 in Table 5 in the paper. Throughout, we find highly significant coefficients of similar magnitude as those



documented in our baseline results in the paper.

## B.2 Location of Boroughs with Farm Grants by 1348

Figure A.2 shows the location of boroughs that had received Farm Grants by 1348. There is no apparent clustering – chartered boroughs are spread relatively evenly across England.

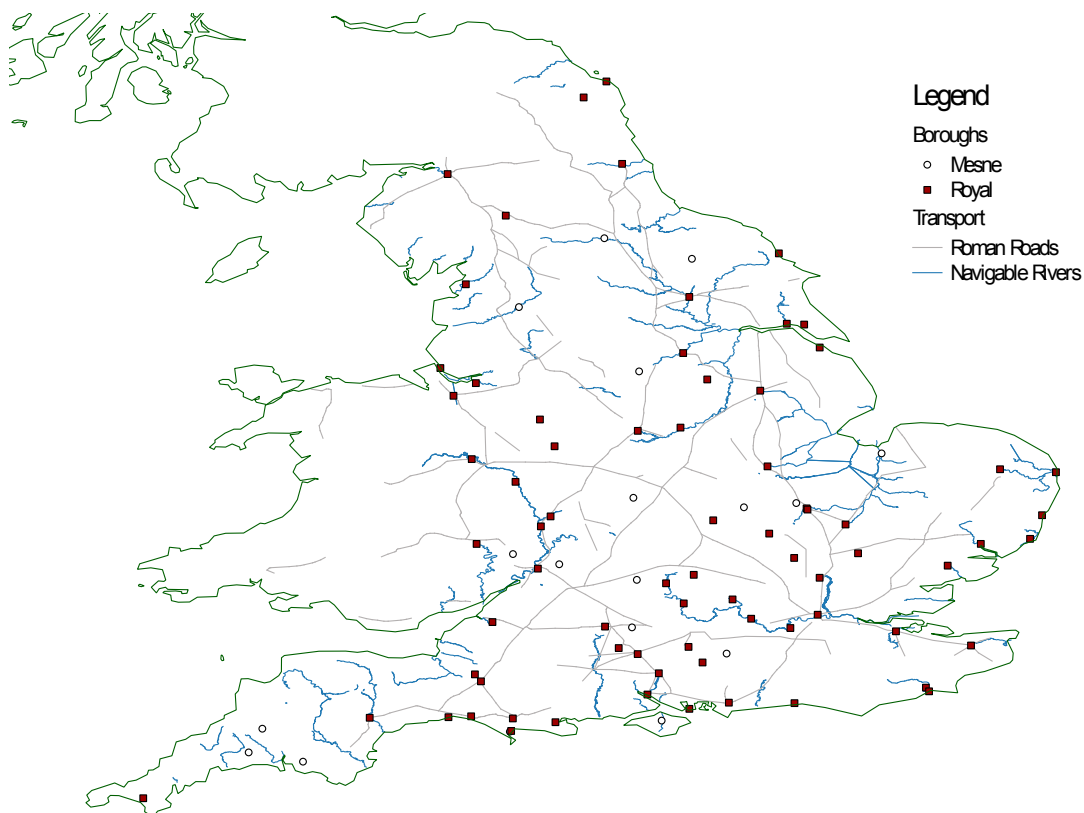


Figure A.2: Boroughs with Farm Grants, by Royal and Mesne

*Note:* This figure shows the location of the 87 boroughs in our dataset that had received Farm Grants by 1348. Solid squares indicate the 71 royal boroughs, and hollow dots, the 16 mesne boroughs (owned by local lords or by the Church). The figure also shows the location of navigable rivers and of Roman roads.

## B.3 Geography and Taxable Wealth

In Table A.2 we relate trade-favoring geography to taxable wealth. In column 1, we find that both navigable rivers and Roman roads predict taxable wealth in 1086 (with rivers showing a particularly strong relationship). Boroughs by the sea coast, on the other hand, were significantly poorer. This is likely driven by i) the fact that the Norman Conquest had left some of the boroughs

Table A.1: Conservative Classification of Borough Ownership

Dependent variables: As indicated in table header							
Dep. Var.:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Notes:	Indicator for Farm Grant by 1348				Enfranchised by 1348		
					only royal (conservative)	2SLS <sup>‡</sup>	
Farm Grant 1348					0.680*** (0.080)	0.507*** (0.123)	0.542*** (0.204)
Royal (conservative)	0.497*** (0.055)	0.484*** (0.054)	0.493*** (0.056)	0.163** (0.080)			0.111 (0.117)
River x Royal				0.404*** (0.099)			
Sea coast x Royal				0.275** (0.128)			
Roman Road x Royal				0.295*** (0.098)			
Navigable River				-0.021 (0.032)			0.002 (0.041)
Sea Coast				-0.028 (0.033)			-0.012 (0.044)
Roman Road				-0.031 (0.021)			-0.033 (0.034)
<i>p-value joint significance</i> <i>River, Coast, Road</i>				[0.446]			[0.802]
County FE			✓	✓		✓	
Terrain Controls		✓				✓	
R <sup>2</sup>	0.32	0.32	0.39	0.46	0.46	0.69	
Observations	458	456	458	458	87	86	458
Mean of dep. var.:	0.138	0.136	0.138	0.138	0.540	0.535	0.138
First stage F-stat.:							11.6

*Note:* This table verifies that our main results for Farm Grants and boroughs' representation in Parliament hold also for the conservative coding of royal borough ownership in Appendix B.1. Columns 1-3 replicate the regressions from columns 1-3 in Table 3, and column 4 replicates column 6 from Table 4 in the paper. Columns 5-7 replicate results on parliamentary franchise from columns 1, 2, and 10 in Table 5 in the paper. All regressions are run at the borough level. Robust standard errors in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Terrain controls include soil quality as well as ruggedness in a 10 km radius around each borough.

<sup>‡</sup> Two-stage least square regression that uses the following variables to predict farm grants by 1348 in the first stage: the interaction of status as royal borough (conservative definition) with the location on the sea coast, on a navigable river, and on Roman roads. The status as royal borough itself, and the three geo-variables are included as controls in both stages.

on the Channel coast devastated, and ii) by Danish attacks via the sea that were still common until the late 11th century. In the 12th century, locations by the sea had largely recovered from these negative shocks. For this reason, we do not use seacoast in the remainder of Table A.2, but we do use it for subsequent analysis that exploit data after the 11th century.<sup>11</sup> Column 2 shows that the coefficients on rivers and Roman roads are very similar when we use only these two proxies for trade. At the same time, the dummy for royal boroughs is small and insignificant, confirming our results from Section 4.2 that there are no major differences in taxable wealth across royal and mesne boroughs.

Table A.2: Farm Grants: Use Trade Geography to Predict Taxable Wealth

Dependent variable as indicated in table header					
	(1)	(2)	(3)	(4)	(5)
Dependent variable:	ln(Taxable Wealth)		Indicator for Farm Grant by 1348		
Boroughs included:	all	all	all	royal	mesne
Notes:	OLS (1st stage)		2SLS for ln(Taxable wealth in 1086)		
Navigable River	0.719*** (0.200)	0.669*** (0.199)			
Roman Road	0.292* (0.156)	0.347** (0.156)			
Sea Coast	-0.757*** (0.208)				
Royal borough	0.176 (0.168)	0.167 (0.166)	0.412*** (0.065)		
ln(Taxable wealth in 1086) <sup>†</sup>			0.135** (0.066)	0.326*** (0.112)	-0.070 (0.081)
R <sup>2</sup>	0.10	0.07			
Observations	276	276	276	73	203
Mean of dep. var.:	1.57	1.57	0.170	0.507	0.049
First stage F-stat.:			8.28	5.20	3.82

*Note:* Columns 1 and 2 in the table show that boroughs on navigable rivers or Roman roads had higher taxable wealth in 1086; due to the devastation during the Norman Conquest and frequent raids by Danes during the 11th century, boroughs on the sea coast had lower wealth in 1086. Sea coast is thus not used as an instrument in the rest of the table. Columns 3-5 use 2SLS results to show that the effect of geography on Farm Grants worked at least in part through (taxable) wealth – but this holds only in royal boroughs. All regressions are run at the borough level. Robust standard errors in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.

<sup>†</sup> Predicted using navigable river and Roman road as instruments.

Next, we turn to the 2SLS results, using rivers and Roman roads as instruments for taxable

<sup>11</sup>Results are also very similar when we exclude the 25 boroughs that were located on the sea coast (and for which data on taxable wealth in 1086 is also available).

wealth in 1086.<sup>12</sup> Column 3 shows that we obtain a significant positive coefficient that is about three times larger than the coefficient on taxable wealth in the corresponding OLS specification (column 5 in Table 3 in the paper). This is likely due to measurement error: taxable wealth in the Domesday Book was assessed not only based on traded goods, but largely on the value of land and structures (Darby, 1986). Also, trade may have affected Farm Grants not only via taxable wealth, but also via the fact that movables were harder to monitor (as discussed in Section 3). Thus, the exclusion restriction is unlikely to hold when we instrument for wealth – and correspondingly, we are reluctant to take the point estimate at face value. Next, in column 4 we restrict the sample to royal boroughs and obtain a large positive and significant coefficient on taxable wealth. This is in stark contrast to the small insignificant coefficient on wealth among mesne boroughs (column 5). Altogether, our results suggest that trade had a strong effect on the odds of receiving Farm Grants in royal boroughs, but not in mesne boroughs. In addition, this effect worked at least in part via taxable wealth – boroughs that were richer because of trade were also more likely to obtain Farm Grants.

#### **B.4 Farm Grants and Commercial Importance**

In the following we present suggestive evidence that chartered boroughs were commercially more important already in the mid-14th century. Importantly, we do not argue that Farm Grants *caused* commercial importance. Instead, the following results underline the close – possibly bi-directional – relationship between self-governance and economic development at the local level. In columns 1-3 of Table A.3 we use our first proxy for commercial importance described in Section 4.1: An indicator variable for “Freedom from tolls” – a grant of liberty that exempted a borough’s burgesses from tolls throughout the realm. This liberty was issued by the king against a fee paid by boroughs. Clearly, purchasing this liberty only made sense for burgesses from boroughs with a focus on trade. Column 1 shows that boroughs with a Farm Grant were 51 percentage points (p.p.) more likely to obtain “Freedom from tolls,” relative to an average of about 15 percent of boroughs that purchased this liberty. In column 2, we add county fixed effects and terrain controls, and in column 3, we restrict the sample to royal boroughs. In both cases we confirm the strong positive association between Farm Grants and “Freedom from tolls” (with almost identical coefficient sizes).

In columns 4-6 of Table A.3 we repeat the same specifications as in the first three columns, but now using as dependent variable our second proxy for commercial importance: An indicator variable for whether a borough was a commercial hub during the 14th century, based on Masschaele (1997). We confirm the previous results both in terms of magnitude and statistical significance:

---

<sup>12</sup>At the bottom of Table A.2 we report the first-stage F-statistics. Since these are below the rule-of-thumb of 10, the IV results in this table have to be interpreted with caution.

Table A.3: More Evidence on Commercial Importance of Boroughs with Farm Grants

Dependent Variable: As indicated in table header						
	(1)	(2)	(3)	(4)	(5)	(6)
Dependent Variable:	Freedom from Tolls by 1348 <sup>†</sup>			Commercial Importance 14C <sup>‡</sup>		
Boroughs included:	all	all	royal	all	all	royal
Farm Grant 1348	0.510*** (0.054)	0.498*** (0.054)	0.541*** (0.069)	0.395*** (0.054)	0.387*** (0.054)	0.439*** (0.065)
County FE		✓			✓	
Terrain Controls		✓			✓	
R <sup>2</sup>	0.28	0.38	0.30	0.25	0.29	0.24
Observations	549	547	145	549	547	145
Mean of dep. var.:	0.146	0.146	0.414	0.093	0.093	0.269

*Note:* The table shows that boroughs with Farm Grants were commercially more important in the 14th century, using the two indicators explained below. Section 4.1 provides more detail. All regressions are run at the borough level. Robust standard errors in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Terrain controls include soil quality as well as ruggedness in a 10 km radius around each borough.

<sup>†</sup> Indicator variable for “Freedom from tolls” – a grant of liberty that exempted a borough’s burgesses from tolls (taxes on trade) throughout the realm. This liberty was issued by the king against a fee paid by boroughs, and it was available to both royal and mesne boroughs.

<sup>‡</sup> Indicator variable for whether a borough was a commercial hub during the 14th century, based on Masschaele (1997). Criteria include the presence of merchant guilds, the classification as “urban” in the 1340 Nonae Rolls tax records, and the total tax on tradable goods levied in 1334.

boroughs with Farm Grants were much more likely to be commercial centers in the mid-14th century. We do not interpret these results causally. In fact, as by our argument, commercial centers were more likely to obtain Farm Grants in the first place. Thus, the correlations in Table A.3 merely establish (strong) suggestive evidence that commercial activity was *associated* with Farm Grants.

## B.5 Strategic Enfranchisement

As shown in Figure 6 in the paper, between 1348 and 1700, an additional 74 boroughs became enfranchised. Unlike the boroughs that gained representation in parliament before 1348, the vast majority of these boroughs did not enjoy early self-governance. As the House of Commons grew in political power in the 15th and 16th centuries, kings resorted to the enfranchisement of rural boroughs in an attempt to control the lower house. For instance, as Porritt (1909) puts it:

“Nothing except the desire of the Crown [...] to control the House of Commons [...] could account for the enfranchisement of such Cornish boroughs as Newport, Saltash, Camelford, West Looe, Grampound, Bossiney and St. Michaels. Until the reign of Edward VI (1537-1553), Cornwall had not been over-represented. [...] it was in the reign of Edward VI that Cornwall first began to attain notoriety as a county of many boroughs. It owed this notoriety to

the fact that it was a royal duchy, a county over which the Crown exercised more direct control than over most of the other counties of England.” (Porritt, 1909, pp. 373-4)

Consistent with their limited commercial importance and being under close control of the king’s allies, these newly enfranchised boroughs were significantly more likely to be considered as “rotten” – i.e., small and subject to patronage – in the period leading up to the Great Reform Act. This is illustrated in Figure A.3. The left part of the figure examines boroughs that obtained seats in Parliament by 1348. It shows that the share of “rotten boroughs” was low among the boroughs with self-governance (Farm Grants), and high (almost one-third) among the other enfranchised boroughs. This suggests that strategic enfranchisement can potentially account for some of the non-commercial boroughs that gained representation in Parliament by 1348 (in addition to the factors discussed in Section 5.2). The right part of the figure examines enfranchisement after 1700. Among the boroughs that were enfranchised later, there are much fewer boroughs with Farm Grants, and the share of rotten boroughs is even higher: Half of the boroughs without Farm Grants that were enfranchised between 1348 and 1700 became rotten, and almost all of the rotten boroughs were those without Farm Grants. Overall, these results are consistent with the strategic enfranchisement of commercially unimportant boroughs that were under close patronage of the king’s allies – in an attempt to shift the balance in the House of Commons in the king’s favor.

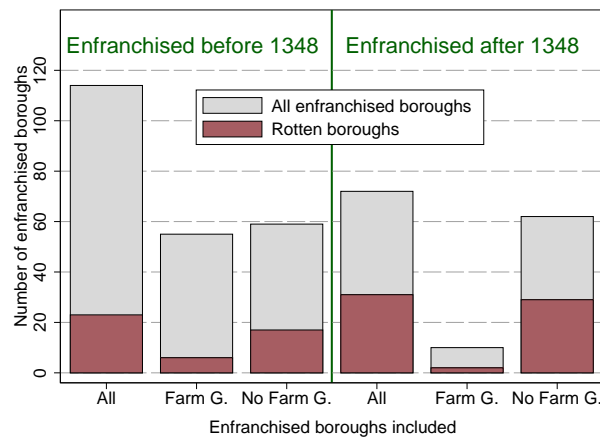


Figure A.3: Rotten boroughs: The role of Farm Grants and Timing of Enfranchisement

Note: The figure provides evidence for strategic enfranchisement: Among the boroughs without Farm Grants, the share of “rotten boroughs” was much larger, and this is particularly true for later enfranchisement (after 1348).

## B.6 Enfranchisement of Boroughs: Additional Results

Table A.4 provides additional results for boroughs’ representation in Parliament, complementing Table 5 in the paper. Columns 1 and 2 show that chartered boroughs were also significantly more



likely to be represented in the ‘Model Parliament’ of 1295. Again, the coefficient is very similar for the full sample (col 1) and for the subset of royal boroughs (col 2). Columns 3-7 return to our main period of interest – enfranchisement by 1348. Columns 3 and 4 add county fixed effects and terrain controls (soil quality and ruggedness) to our baseline specifications from Table 5 in the paper. The coefficients on Farm Grants are virtually unaffected. In column 5, we exploit the length of the time period during which boroughs held Farm Grants until 1348. We restrict the sample to the 87 boroughs that did receive these grants by 1348.<sup>13</sup> We find a strong positive coefficient: Doubling the years for which a borough held a Farm Grant increases the probability of being enfranchised by 13 p.p. (relative to a mean of 0.71 – most boroughs with Farm Grants were represented in Parliament). Next, columns 6 and 7 provide the regressions that correspond to Figure 7 in the paper: The coefficients are much larger for boroughs that also had constraints on sheriffs entering the borough (and thus restricted possibilities for central authorities to collect extra-ordinary taxes). Finally, column 8 repeats the full-sample regression for enfranchisement by 1700 and finds a strong positive coefficient on Farm Grants, which is very similar to the results for 1348, in both magnitude and significance.

Table A.5 provides a robustness check that uses an alternative, broader coding of the dummy for enfranchisement, related to the issue explained in footnote 44 in the paper: The results in the paper (Table 5) and in Table A.4 above coded as enfranchised only boroughs that retained their seats in Parliament until 1830 (and not counting those boroughs as enfranchised that let their franchise expire and were later denied re-enfranchisement). In contrast, Table A.5 codes as enfranchised *all* boroughs that were represented in Parliament at least once by the respective date (1295 / 1348), even if they later lost the franchise. This gives 24 and 25 additional enfranchised boroughs in 1295 and 1348, respectively. Columns 1 and 2 show that results are very similar for the ‘Model Parliament’ in 1295 (the comparison here are the specifications from cols 1 and 2 in Table A.4). Next, columns 3 and 4 in Table A.5 repeat the specifications from cols 1 and 3 in Table 5 in the paper. Again, results are very similar.<sup>14</sup> Consequently, our results hold (both in terms of significance and magnitude) independent of how we code boroughs that lost their seats in Parliament by the early 19th century.

---

<sup>13</sup>In a few cases, Farm Grants were revoked for intermittent years and then re-granted. We exclude these years when coding the duration of Farm Grants.

<sup>14</sup>In fact, in the full sample in column 3 the coefficient is identical to col 1 in Table 5 in the paper. What differs is the mean of the dependent variable – the share of enfranchised boroughs. This is 23.5% in col 1 in Table 5, and it is 28.1% in column 3 of Table A.5, because the latter counts an additional 25 boroughs as enfranchised.

Table A.4: Representation in Parliament by 1295, 1348, and 1700: Additional Results

Dependent variable: Indicator for borough enfranchised by 1295 / 1348 / 1700

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep.Var.: Enfranchised by	1295	1295	1348	1348	1348	1348	1348	1700
Boroughs included:	founded by 1295				Farm Grant			
	all	royal	all	royal	by 1348	all	royal	all
Farm Grant 1295	0.455*** (0.059)	0.432*** (0.078)						
Farm Grant 1348			0.539*** (0.057)	0.576*** (0.078)				0.543*** (0.047)
ln(years grant 1066-1348)					0.130*** (0.036)			
Grant and constraint on sheriff <sup>†</sup>						0.723*** (0.057)	0.631*** (0.076)	
Grant, no constraint on sheriff						0.447*** (0.072)	0.485*** (0.092)	
County FE			✓	✓				
Terrain Controls			✓	✓				
R <sup>2</sup>	0.17	0.19	0.33	0.57	0.14	0.26	0.32	0.17
Observations	454	136	547	144	87	549	145	549
Mean of dep. var.:	0.214	0.419	0.234	0.500	0.713	0.235	0.503	0.348

*Note:* The table shows that boroughs with Farm Grants were also significantly more likely to be represented in the first Parliament in 1295 ('Model Parliament'). In addition, the earlier Farm Grants were obtained, the more likely was the borough to be represented in Parliament (col 5). Finally, coefficient sizes are much larger for boroughs that also had constraints on sheriffs entering the borough (and thus restricted possibilities for central authorities to collect extraordinary taxes – cols 6 and 7). All regressions are run at the borough level. Robust standard errors in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01. Terrain controls include soil quality as well as ruggedness in a 10 km radius around each borough.

<sup>†</sup> Constraints on sheriff is a dummy variable that takes on value one if a borough possessed additional liberties that prohibited royal officials from entering the borough in their judicial functions (*non-intromittat*), in financial functions (*direct access to the Exchequer*), or to enforce royal orders (*return of writs*).

Table A.5: Representation in Parliament: Include Boroughs that Later Lost Franchise

Dependent variable: Indicator for borough enfranchised by 1295 / 1348				
	(1)	(2)	(3)	(4)
Dep.Var.: Enfranchised by	1295	1295	1348	1348
Boroughs included:	founded by 1295			
	all	royal	all	royal
Farm Grant 1295	0.454*** (0.059)	0.399*** (0.079)		
Farm Grant 1348			0.568*** (0.049)	0.521*** (0.070)
R <sup>2</sup>	0.15	0.16	0.21	0.28
Observations	454	136	549	145
Mean of dep. var.:	0.267	0.500	0.281	0.579

*Note:* Columns 1 and 2 repeat the specifications from cols 1 and 2 Table A.4 in the appendix, and columns 3 and 4 repeat the specifications from cols 1 and 3 in Table 5 in the paper. Here, enfranchisement is defined more broadly: The previous results in Tables A.4 and 5 coded as enfranchised only boroughs that retained their seats in Parliament until 1830 (and not counting those boroughs as enfranchised that lost their franchise – see footnote 44 in the paper). The present table codes as enfranchised all boroughs that were represented in Parliament at least once by the respective date (1295 / 1348), even if they later lost the franchise. This gives 24 (25) additional enfranchised boroughs in cols 1 and 2 (3 and 4).

## B.7 Inclusiveness of MP Elections 1690-1831

Table A.6 complements our analysis of inclusive local MP elections from Section 6.2 in the paper. It introduces two additional dimensions: First, instead of the openness index that is defined for values 1 to 3, Table A.6 uses dummies that take on value one if a borough's MP election is classified as "open" (values strictly greater than 2 in the openness index). Second, Table A.6 examines a longer time period, using the openness measure for four sub-periods between 1690 and 1831. Appendix A.3 describes the construction of these variables in detail. Columns 1 and 2 show that our results for the openness index for 1820-31 from Table 7 in the paper hold also when we use the dummy. The coefficient on Farm Grants is statistically highly significant, and its magnitude is large: Boroughs with medieval Farm Grants (that were also represented in Parliament) were about 17 p.p. more likely to have open elections, relative to a sample mean of 0.15. The result is almost identical when we control for county fixed effects (col 2). Next, we repeat the analysis using the election openness dummy for the periods 1790-1820 (cols 3-4), 1754-1790 (cols 5-6), and 1690-1715 (cols 7-8). We find coefficients on Farm Grants of very similar magnitude throughout.<sup>15</sup> Thus, our results imply that boroughs with medieval Farm Grants had significantly more open elections of their MPs over a long time span between 1690 and 1831.

## B.8 Obstructions to Trade

This section provides detailed information on our coding of trade obstructions and presents robustness checks of the results shown in Table 10 in the paper.

### *Background and Data Description*

For each enfranchised borough with a Farm Grant by 1348, we collect information on the occurrence of persistent negative shocks to trade *after* the borough received its Farm Grant. We focus on two types of shocks to transportation infrastructure: First, natural disasters – the silting up or destruction of harbors located on the sea coast. Second, the obstructions of parts of navigable rivers due to water mills and fish traps. Information about these events is recorded in the constituencies' descriptions for the period 1086-1832 available at <http://www.historyofparliamentonline.org>. Typically, such events were recorded because of petitions by burgesses asking for (i) a reduction of the yearly farm, (ii) subsidies for repairs, and (iii) exemptions from extra-ordinary taxation. For

---

<sup>15</sup>As the mean of the dependent variable shows, a larger fraction of boroughs had open elections in the earliest period that starts in 1690. A likely explanation is that in 1690 – right after the Glorious Revolution – the old Charters of Incorporation were reestablished after the kings' attempt to change them in the 1640s and 1660s (in an attempt to manipulate the election of MPs): Both Charles I and James II had forced numerous incorporated boroughs to hand over their Charters of Incorporation. New charters were then issued with the objective of imposing mayors and aldermen sympathetic to the royal cause (Porritt, 1909; Howell, 1982; Miller, 1983). Following the Glorious Revolution in 1688, boroughs petitioned king and Parliament to have their old charters reestablished (Henning, 1983; Cruickshanks et al., 2002). This process resulted in fresh contests for city councils and, arguably, boroughs' parliamentary seats.

Table A.6: Inclusiveness of Borough-Level MP Elections 1690-1820

Dependent variable: Indicator for open elections of MPs over the indicated period

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Period considered	1820-1831		1790-1820		1754-1790		1690-1715	
Farm Grant 1348	0.165*** (0.061)	0.164** (0.065)	0.209*** (0.068)	0.188*** (0.069)	0.218*** (0.070)	0.205*** (0.071)	0.299*** (0.079)	0.269*** (0.099)
County FE		✓		✓		✓		✓
R <sup>2</sup>	0.05	0.31	0.06	0.35	0.06	0.32	0.09	0.29
Observations	186	186	185	185	186	186	159	159
Mean of dep. var.:	0.145	0.145	0.200	0.200	0.226	0.226	0.352	0.352

*Note:* The table shows that boroughs with medieval Farm Grants had more open elections of their MPs over the period 1690-1831. The construction of the dependent variables is described in Appendix A.3. All regressions are run at the borough level. Robust standard errors in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.

instance, Dunwich was submerged by the sea in 1354 and had its harbor permanently obstructed as a result. Dunwich saw its farm reduced from £65 in 1357 to £12 under Henri VI. By 1832, “coastal erosion had reduced Dunwich to a small village.”<sup>16</sup> Similarly, New Shoreham, located at the mouth of the river Adur, suffered both from the silting of the river and obstructions to its harbor in the 15th and 16th centuries. As a consequence of these shocks, the town was exempted from the payment of several taxes.<sup>17</sup>

Obstructions of river transport by watermills were also common, especially after the 14th century. Watermills were used for agricultural purposes and in the production of textiles. They required weirs (or milldams) across rivers, which had a significant negative impact on navigability (Langdon, 2000). Goods had to be unloaded and loaded again at every mill – a process known as “backing” (Jones, 2000). This slowed down water transport and made it more expensive, thus hampering trade for the affected upstream and downstream boroughs. Often, lords (including the king) made the decision whether to build a mill on their demesne. This decision was made in disregard of the negative externalities it generated on other boroughs located on the same river. For example, Huntingdon filed a petition in the 15th century because of the obstructions to the river Great Ouse caused by watermills between St. Neots and St. Ives. The petition led to a reduction of Huntingdon’s annual farm by about 30%, while the obstruction by the watermills remained.<sup>18</sup> Information

<sup>16</sup>See <http://www.historyofparliamentonline.org/volume/1820-1832/constituencies/dunwich>. For a similar example, see the entry for Lyme Regis.

<sup>17</sup>See <http://www.historyofparliamentonline.org/volume/1509-1558/constituencies/new-shoreham>.

<sup>18</sup>See <http://www.historyofparliamentonline.org/volume/1509-1558/constituencies/huntingdon>.

on obstructions of navigable rivers are taken from Jones (2000) and Langdon (2000).<sup>19</sup> By the 14th century, the obstructions caused by the numerous water mills prompted complaints by burgesses (often voiced in parliament). Starting with the Magna Carta, numerous legislations attempted to regulate the construction of weirs, but failed notoriously (Jones, 2000).<sup>20</sup> Special commissions (*de walliis et fossatis*) were also created to investigate and remove obstructions. However, they proved largely ineffective as explicitly stated in the Patent Rolls of 1328 for the case of the river Don and further suggested by the nine commissions that were set up between 1302 and 1377 for the navigability of the Thames between Oxford and Reading (Jones, 2000).

We code negative shocks to seaports and rivers of boroughs with Farm Grants between the 13th and 17th centuries – the variable *Trade Obstruction*. These shocks typically had a detrimental economic effect that lasted for centuries (Langdon, 2000). Altogether, we count 16 boroughs (all royal) that filed petitions after suffering trade obstructions – all occurred *after* they had received a Farm Grant.

### *Additional Results*

Table A.7 replicates Table 10 in the paper, excluding the five boroughs where trade obstructions began before 1348 (but after these boroughs had received Farm Grants). For the plausibility check in the first two columns, the results are very similar to those in the paper. The same is true for the long-run outcomes in columns 3 and 4. And in column 5, the predictive power of Farm Grants is actually even stronger for the 11 boroughs that experienced trade obstructions after 1348.

---

<sup>19</sup>Jones (2000) covers all rivers except those of the Humber system. To complement these data, we rely on the constituency descriptions contained in the History of Parliament, and we analyze the 14th century Patent Rolls that contain complaints by burgesses about obstructions, as well as information about the creation of royal commissions (see below).

<sup>20</sup>Moreover, no evidence survives to indicate the existence of a market for property rights; arguably because of the large number of stakeholders involved (individual boroughs and lords).



Table A.7: Obstructions of Trade after Farm Grants – Only post-1348 obstructions

Dependent variable as indicated in table header					
	(1)	(2)	(3)	(4)	(5)
	Plausibility Checks		Long-run institutional outcomes		
Dependent variable:	Commercial Im- portance 14C <sup>†</sup>	Trade employment share in 1831	Volunteer troops during Civil War	Inclusiveness of MP elections 1820-31 <sup>‡</sup>	Vote share for Great Reform Act 1832
Farm Grant, no obstruction	1.621*** (0.189)	0.077*** (0.021)	0.234*** (0.052)	0.723*** (0.171)	0.171** (0.071)
Farm Grant, trade obstructed	1.248*** (0.385)	0.014 (0.028)	0.253* (0.135)	0.532** (0.261)	0.385*** (0.108)
<i>p-value: test for equality of coefficients</i>	<i>[0.383]</i>	<i>[0.046]</i>	<i>[0.894]</i>	<i>[0.509]</i>	<i>[0.055]</i>
R <sup>2</sup>	0.33	0.07	0.14	0.11	0.21
Observations	544	185	544	181	174
Mean of dep. var.:	[s.d.=1] <sup>†</sup>	0.391	0.055	[s.d.=1] <sup>‡</sup>	0.563

*Note:* The table replicates Table 10 from the paper, but it drops 5 boroughs where trade was obstructed already before 1348 (although after the respective borough had received a Farm Grant). Robust standard errors in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.

<sup>†</sup> First principle component of two indicators for commercial importance: “Freedom from tolls” (a grant of liberty that exempted a borough’s burgesses from tolls throughout the realm) and an indicator variable for whether a borough was a commercial hub during the 14th century, based on Masschaele (1997). The variable has mean zero and standard deviation 1.

<sup>‡</sup> First principle component of the four proxies for open MP elections used in Table 7 in the paper. The variable has mean zero and standard deviation 1.

## B.9 Matching Results

In Section 3 in the paper we discussed that Farm Grants were predominantly granted to royal territories, so that we used mesne boroughs as a ‘placebo.’ This analysis is valid if mesne boroughs were otherwise comparable to royal boroughs. However, as discussed in Section 4.2, royal boroughs were more likely to be located on navigable rivers and Roman roads (although there were *overall* more mesne boroughs located on rivers and roads). We addressed this caveat by using entropy balancing to obtain the same trade geography – on average – in royal and mesne boroughs (see Table 1 in the paper). In the following, we perform an additional analysis that renders mesne boroughs without Farm Grants comparable to royal boroughs with Farm Grants.

In Table A.8 we perform propensity score matching, where the ‘treatment group’ are royal boroughs with Farm Grants – altogether 71 in the full sample of boroughs that existed by 1348. For each ‘treated’ borough, we use propensity score matching to identify two mesne boroughs that had exactly the same trade geography (e.g., location on river and Roman road, but not on the sea coast).<sup>21</sup> The coefficient on *Farm Grant* in Table A.8 thus reflects the difference in the respective outcome variable between royal boroughs with Farm Grants and identical (in terms of trade geography) mesne boroughs without Farm Grants. For representation in Parliament (col 1), inclusiveness of MP elections (col 3), and volunteer troops during the Civil War (col 4) we find very similar coefficients as in the paper. For influence of the king (col 2 – where the sample is the smallest) the coefficient is negative as in Table 6, but quantitatively smaller and statistically insignificant. On the other hand, for votes during the Great Reform Act (col 5) we find a coefficient that is larger than in Table 9 in the paper. Overall, the results with (exact) matching confirm our main regression results.

## C Cross-Country Comparisons

### C.1 France

France and England exhibit some similarities in terms of taxation, town liberties, and representation in parliament (Estates General) – even though the overall distribution of power differed significantly in the two countries. In contrast with England, the medieval kings of France were relatively weak and controlled only a small territory. The French local lords governed much larger

---

<sup>21</sup>Note that this analysis excludes the 74 royal boroughs without Farm Grants, because we want to restrict attention to mesne boroughs as ‘control group.’ We also exclude the 16 mesne boroughs that received Farm Grants (but none of our results depend on this). This leaves a maximum of 459 (=549-90) observations, which include 388 mesne boroughs. This number is sufficiently large so that the matching algorithm finds at least two exact matches (in terms of the three trade geography variables) for each of the 71 ‘treated’ boroughs (column 1). We also find two exact matches in the cases with fewer observations – i.e., where the dependent variable is only available for incorporated boroughs (column 2) or for enfranchised boroughs (columns 3 and 5).

Table A.8: Matching Results

Dependent variable as indicated in table header					
Dependent variable:	(1)	(2)	(3)	(4)	(5)
	Seat in Parliament by 1348	Influence of king on local elections 15-17C	Inclusiveness of MP elections 1820-31 <sup>‡</sup>	Volunteer troops during Civil War	Vote share for Great Reform Act 1832
Farm Grant 1348	0.596*** (0.078)	-0.125 (0.109)	0.626*** (0.206)	0.184*** (0.054)	0.286*** (0.095)
Observations	459	125	142	457	137
'Treated' obs. (royal boroughs with Farm Grant)	71	53	57	70	56
Mean of dep. var.:	0.231	0.376	0.045	0.059	0.599

*Note:* The table replicates our main results from Tables 5-9 in the paper, performing propensity score matching with two (exact) matches. The 'treatment group' are royal boroughs with Farm Grants; the 'control group' are mesne boroughs (without Farm Grants) with the same trade geography as each 'treated' borough. Robust standard errors in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

<sup>‡</sup> First principle component of the four proxies for open MP elections used in Table 7 in the paper. The variable has mean zero and standard deviation 1.

and more 'coherent' territories than their English counterparts (Hilton, 1995). In the course of the eleventh and twelfth centuries, the rivalry between lords fostered the formation of *communes* – a bond between locals who provided a militia to defend their lord's territory (Petit-Dutaillis, 1947; Tait, 1936). Thus, town liberties in France initially (before the 13th century) served a military purpose, as opposed to tax collection as in the case of England.

Tax collection in medieval France also relied to a large extent on tax farming, with an array of local officials (e.g., *prévôtes*) in charge of farming towns (Baldwin, 1986). Complaints about officials' exactions were common. By the 13th century, many towns (*communes* and others) came to enjoy the right of self-governance to a degree similar to that found in England, i.e., farm grants and elections of officials, as well as the right to 'exclude' the *prévôtes* (Petit-Dutaillis, 1947). Towns in both royal and lords' territories received these liberties, which is compatible with our argument, since French lords ruled over much larger territories than their English counterparts and had similarly complex layers of administration as the king. Similar to England, French towns with self-governance were represented in the Estates General, where they could report complaints about royal officials, seek redress for royal officials' misconduct, and discuss extra-ordinary taxation (Hervieu, 1876).

However, there were also important differences that resulted from the powerful position of local lords in France. The strong rivalry between feudal lords and the initial relative weakness of the crown promoted localism and prevented towns and the Estates General from forming a common

identity. Regional assemblies continued to prevail, and localism failed to limit the king's power later on (Post, 1943; Ulph, 1951; Strayer and Taylor, 1939). In contrast to England, France converged towards absolutism in the 15th and 16th century. Concomitant with the rise of absolutism, the Estates General laid dormant for 175 years and towns lost their right to self-governance and – where these rights existed – self-administered tax collection (Petit-Dutaillis, 1947).

## C.2 Spain

Medieval Spain was extremely fragmented. In the 11th century, the south of the Iberian Peninsula was composed of Muslim polities, and the north, of separate Christian kingdoms. By and large, town liberties and representation of the third estate in assemblies was absent from Muslim Spain (O'Callaghan, 2013). In each Christian kingdom, feudalism was on the rise with the king owning a royal domain and powerful local lords overseeing administration, justice, and military affairs in their territories. Each kingdom had its separate councils composed of the high clergy, the lords, and high officials (O'Callaghan, 2013).

After a prolonged state of decay in the Dark Ages (and the virtual absence of municipal governance), urban life began to revive in the 11th century. The Spanish kings were in need of money to finance the Reconquista, and the rising urban bourgeoisie was a major source for tax income. Tax farmers were typically royal officials or private citizens (Ruiz, 2002). As in England and France, tax farmers were the focus of endless complaints by townsmen, who subsequently sought to collect taxes themselves. By the 12th century, many towns obtained charters (*fueros*) granting them some local autonomy over a range of administrative functions (including tax collection). However, in contrast to England, *fueros* often had a military emphasis, presumably because of towns' importance during the recurring conflicts between the various polities and local lords (O'Callaghan, 2013).

This period also marked the emergence of assemblies in which towns were represented (*Cortes*). In 1188, Alfonso IX of Leon summoned the first parliament ever recorded in Western Europe. By the 13th century, these parliaments spread to the other kingdoms. Much like the English Parliament, *Cortes* dealt with legislation, extra-ordinary taxation, and gathered grievances about local officials' abuses. Also, towns that had received *fueros* were often represented in parliaments. To avoid abuses during tax collection, towns often asked for the right to collect extraordinary taxes themselves.<sup>22</sup>

In the course of the 13th century, towns gradually lost part of their autonomy. First, Spanish kings transferred governance of many towns to local lords to gain their allegiance (O'Callaghan,

---

<sup>22</sup>Townsmen would also ask to appoint a commission to supervise tax collection. For example, in 1289, the Catalan *Cortes* nominated a commission to monitor tax collection – the *Generalitat*. In 1323, they also granted the king a subsidy for two years, with the money to be collected by individuals chosen by towns' councils (O'Callaghan, 2013).

2013). These towns tended to lose their liberties and representation in parliament in the process. Second, the king increasingly meddled in towns' affairs, for instance, by appointing royal officials (*corregidores*) who could override municipal councils' decisions (O'Callaghan, 2013).

By the 15th century, Ferdinand and Isabel brought the various Christian kingdoms under a single union. However, similar to France, the old regional Cortes survived, thereby preventing the emergence of a truly national assembly. In terms of towns' representation in general assemblies, Spain lies in between France and England. Although various factors (including the decrease in towns' administrative autonomy) weakened the *Cortes*, they still represented a constraint on the monarchy's financial decisions (Drelichman and Voth, 2014).<sup>23</sup>

Overall, the case of Spain shows similarities to the institutional dynamics in France: An initially fragmented territory gave rise to powerful local lords. Although complaints about tax collection as well as the rise in trade fostered the spread of administrative independence until the 15th century, self-governance of towns in Spain did not reach the same degree as in England, and autonomy was more strongly focused on military aspects. In addition, while towns were represented in *Cortes*, these were regional parliaments. In sum, the regionalism and the limited nature of towns' liberties led to towns never exercising as much control over the monarchy as in England.

### C.3 Sicily

We end with a discussion devoted to Sicily, which, in a period lasting less than three hundred years, underwent four conquests, each associated with large changes in land ownership. The case of Sicily confirms the patterns observed in Spain and France: In periods when the king was weak, powerful local lords exerted strong influence over towns – even if these had received liberties from the king. This process led to localism and limited the ability of the merchant class to coordinate and constrain the executive. Sicily also highlights another important dimension: In periods of strong royal rule with a highly efficient administration, liberties were not granted.

The Normans invaded Southern Italy in the 11th century and, by 1130, they founded the Kingdom of Sicily. The territory and the towns were divided between the king and local lay and ecclesiastical Norman lords. The king appointed officials (e.g., *senechals* and bailiffs) to oversee the collection of taxes in the royal demesne and the enforcement of the law throughout the realm. The Norman king ran a general inquiry on taxable wealth similar to the Domesday Inquest in England. However, in contrast to England, the king kept the highly efficient pre-existing Arab bureaucracy (Smith, 1968). Consequently, Sicily was (initially) not subject to the administrative inefficiencies that were at the root of Farm Grants in England. And indeed, town liberties are not observed in

---

<sup>23</sup>For instance, in 1575, the Castilian *Cortes* refused the king's request for a tripling of the sales tax and successfully negotiated it downwards (Drelichman and Voth, 2014, p. 76).

Sicily in the period following the conquest.

Starting in the late 12th century, the king's power began to erode. William II of Sicily's death in 1189 opened a succession crisis and, during these troubled years, royal towns obtained limited autonomy from the hold of royal bailiffs in exchange for their support to the crown (Smith, 1968). In 1194, the Hohenstaufen dynasty invaded Sicily and brought a new German landed elite. In 1197, after the death of Henri VI King of the Germans, Frederick II (the grandson of Barbarossa) succeeded to the throne, initially as a minor. The king's minority and his prolonged absence from Sicily allowed local lords to usurp royal prerogatives. This changed radically in 1220, when a by then powerful Frederick returned as Emperor and waged a war to reassert his control over the island. Frederick II had a tight grip on his administration; the legal code known as *Liber Augustalis* (1231) established that towns were under the control of royal bailiffs, and no autonomy was granted. The king summoned leading barons, clergymen, and citizens in a *colloquium* held at Melfi to 'hear and confirm his proposals' (Smith, 1968, p. 54). The "leading citizens" (from the most important towns) participating in this council were nominated by the king and charged with investigating complaints into royal officials' abuses (Smith, 1968, pp. 52-5).

After Frederick II's death in 1250, a state of near-anarchy again prevailed, with a series of conquests by the Angevins and the Spanish and subsequent redistributions of land. In this process, local lords strengthened their position vis-à-vis the king, and acquired control of a large number of towns, which, as a result, lacked self-governance (Smith, 1968). The kingdom came to resemble more France and Spain than England, with barons enjoying very wide powers for over 250 years. In royal towns, on the other hand, municipal autonomy was encouraged by the king (e.g., Palermo and Messina elected their own magistrates) to gain support in his fight against the barons. Concomitantly, royal towns obtained the right to elect the representatives they sent to parliament. Nevertheless, the long-lasting lack of self-governance had hampered the formation of a strong class of merchants and independent municipal officials. Thus, barons meddled in royal towns and acquired significant influence over their administration and their representation in parliament (Smith, 1968).<sup>24</sup> When, in the course of the 15th and 16th centuries, the king's increasing reliance on feudal subsidies (*donativo*) allowed the parliament to gain power over organizing and supervising the collection of extraordinary taxation, towns lacked the necessary independence to exert any meaningful influence. Hence, similar to France and Spain – and different from England

---

<sup>24</sup>A very similar evolution of municipal liberties is observed in other parts of the Angevins and Spanish kingdom. For example, in Calabria royal towns enjoyed a high degree of self-governance under the Angevins: Towns elected their own 'magistrati' (magistrates), 'sindaci' (mayors), and giudici (judges). 'Procuratori' (representatives) were also elected to attend the Parliament in Naples. However, as feudal lords came to acquire increasing power over towns during the Spanish rule, towns lost their self-governance, and their officials were subsequently chosen by feudal barons (Dito, 1989).



– the lack of significant autonomy made Sicilian royal towns and parliament vulnerable to the rise of absolutism (Smith, 1968).

In sum, our discussion suggests that the case of England – with a militarily strong king, a large royal territory, but an inefficient royal administration – was the ideal basis for the widespread emergence of liberties that empowered towns, which enabled the merchant class to impose constraints on the executive.

## References

- Aidt, T. S. and R. Franck (2015). Democratization under the Threat of Revolution: Evidence from the Great Reform Act of 1832. *Econometrica* 83(2), 505–547.
- Ashton, R. (1979). *The City and the Court 1603–1643*. Cambridge University Press.
- Baldwin, J. W. (1986). *The Government of Philip Augustus: Foundations of French Royal Power in the Middle Ages*. University of California Press.
- Ballard, A. and J. Tait (1923). *British Borough Charters 1216–1307* (1st ed.). Cambridge University Press.
- Bennett, M. (1995). *The English Civil War, 1640–1649*. London New York Longman.
- Brock, M. (1973). *The Great Reform Act*. Hutchinson London.
- Brooke, C. N. L. (1961). *From Alfred to Henry III, 871–1272* (1st ed.), Volume 2. Thomas Nelson and Sons Ltd, Edinburgh.
- Cruikshanks, E., S. Handley, and D. W. Hayton (2002). *The History of Parliament: The House of Commons 1690–1715* (1st ed.), Volume 1. Cambridge University Press.
- Daniell, C. (2008). *Atlas of Medieval Britain* (1st ed.). Routledge.
- Darby, H. C. (1986). *Domesday England*. Cambridge University Press.
- Dito, O. (1989). *La Storia Calabrese: E la Dimora degli Ebrei in Calabria; Dal Secolo V alla Seconda Metà del Secolo XVI; Nuovo Contributo; Per la Storia della Quistione Meridionale*. Brenner.
- Drelichman, M. and H.-J. Voth (2014). *Lending to the Borrower from Hell: Debt, Taxes, and Default in the Age of Philip II*. Princeton University Press.
- Fisher, D. R. (2009). *The History of Parliament: The House of Commons 1820–1832* (1st ed.), Volume 1. Cambridge University Press.
- Henning, B. D. (1983). *The History of Parliament: The House of Commons 1660–1690* (1st ed.), Volume 1. Secker & Warburg.
- Hervieu, H. (1876). *Recherches sur les Premiers États Généraux et les Assemblées Représentatives*. Ernest

- Thorin.
- Hilton, R. H. (1995). *English and French Towns in Feudal Society: A Comparative Study*. Cambridge University Press.
- Howell, R. (1982). Neutralism, Conservatism and Political Alignment in the English Revolution: The Case of the Towns, 1642–9. In J. Morrill (Ed.), *Reactions to the English Civil War 1642–1649*, pp. 67–87. Springer.
- Jones, E. T. (2000). River Navigation in Medieval England. *Journal of Historical Geography* 26(1), 60–75.
- Langdon, J. (2000). Inland Water Transport in Medieval England – The View from the Mills: A Response to Jones. *Journal of Historical Geography* 26(1), 75–82.
- Lizzeri, A. and N. Persico (2004). Why Did the Elite Extend the Suffrage? Democracy and the Scope of Government with an Application to Britain’s “Age of Reform”. *Quarterly Journal of Economics* 119(2), 707–765.
- Masschaele, J. (1997). *Peasants, Merchants and Markets: Inland Trade in Medieval England, 1150–1350*. New York: St. Martin’s Press.
- Miller, J. (1983). *The Glorious Revolution*. Longman Inc., New York.
- Namier, S. L. and J. Brooke (1964). *The History of Parliament: The House of Commons 1754–1790* (1st ed.), Volume 1. Her Majesty’s Stationery Office.
- North, D. C. and B. R. Weingast (1989). Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England. *The Journal of Economic History* 49(04), 803–832.
- O’Callaghan, J. F. (2013). *A History of Medieval Spain*. Cornell University Press.
- Petit-Dutaillis, C. (1947). *Les Communes Françaises: Caractères et Évolution des Origines au XVIII Siècle*. Albin Michel.
- Porritt, E. (1909). *The Unreformed House of Commons. Parliamentary Representation before 1832* (2nd ed.), Volume 1. Cambridge University Press.
- Post, G. (1943). Plena Potestas and Consent in Medieval Assemblies: A Study in Romano-Canonical Procedure and the Rise of Representation, 1150–1325. *Traditio*, 355–408.
- Ruiz, T. F. (2002). *Trading with the ‘Other’: Economic Exchanges between Muslims, Jews, and Christians in Late Medieval Northern Castile*, Chapter 4, pp. 63–78. Springer.
- Russell, C. (1990). *The Causes of the English Civil War* (1st ed.). Oxford University Press.
- Smith, D. M. (1968). *A History of Sicily. Medieval Sicily, 800–1713*. London: Chatto & Windus.
- Strayer, J. R. and C. H. Taylor (1939). *Studies in Early French Taxation*. Harvard University Press.
- Tait, J. (1936). *The Medieval English Borough: Studies on Its Origins and Constitutional History* (1st ed.). Manchester University Press.
- Thorne, R. G. (1986). *The History of Parliament: The House of Commons 1790–1820* (1st ed.), Volume 1. Secker & Warburg, London.
- Ulph, O. (1951). The Mandate System and Representation to the Estates General under the Old Regime. *Journal of Modern History* 23(3), 225–231.
- Wedgwood, C. V. (1959). *The King’s War 1641–1647*. Macmillan.