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113

Urbanization and electoral success: lawyers and workers in interwar France

Raphaël Franck
Department of Economics and Management, Tel Hai University, Kiryat Shmona, Israel, and Institute of Economics and Law, University of Stuttgart, Stuttgart, Germany, and

Victor Gay
Toulouse School of Economics, Université Toulouse Capitole, Toulouse, France

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Abstract

This study argues that urbanization changed the relationship between candidates' occupation and their electoral success. To identify the causal effect of local variation in urbanization, we exploit exogenous changes in the boundaries of electoral constituencies in the 1928, 1932 and 1936 French parliamentary elections. We find that urbanization reduced the electoral success of lawyers – who had historically dominated electoral politics – while benefiting employees and workers. This effect was concentrated on the left of the political spectrum, whereby left-wing employees and workers displaced left-wing lawyers.

Keywords Election, Political representation, Urbanization, France, Third Republic

Paper type Research paper

1. Introduction

At the turn of the 20th century, lawyers dominated parliamentary representation in many countries. Following the First World War, however, their prominence began to decline, giving way to candidates from other occupational backgrounds – particularly employees and workers. This shift is especially evident in the two countries that had introduced universal male suffrage by the late 19th century: France and the USA. In 1876, lawyers accounted for 68% of seats in the US House of Representatives and 36% in the French *Chambre des députés*. By 2012, these shares had declined to 38% in the USA and to just 6% in France (Bonica, 2020) [1]. Similarly, lawyers currently make up less than 15% of representatives in the lower houses of Germany, Italy and the UK (Kintz, 2010; McGuinness, 2010; Petersen, 2012) [2]. These long-term changes in the occupational composition of legislatures have significant implications for policy and welfare, as highly educated politicians – such as lawyers – are considerably less likely than other representatives to advance policies that benefit working-class voters (e.g., Besley *et al.*, 2011; Carnes, 2012; Carnes and Lupu, 2015, 2016a, 2023).

We argue that the historical decline in lawyers' parliamentary representation in France – and the corresponding rise of working-class politicians – can be partly attributed to the process of urbanization (Dupâquier, 1988, 1989). We hypothesize that urbanization gradually undermined the electoral advantage lawyers once held over other candidates, as lawyers' professional networks, rooted primarily in rural areas, functioned as political machines that mobilized voters in an era when political parties remained weakly institutionalized. As urbanization progressed, these rural networks lost influence. By contrast, working-class candidates may have benefited from urban growth, as their

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occupational ties – especially those connected to trade unions – were more deeply embedded in urban environments.

We focus on the 1928, 1932 and 1936 elections to the lower house of the French Parliament (*Chambre des députés*) and exploit exogenous changes in constituency boundaries as a source of variation in the density of registered voters – our primary measure of urbanization – to assess its impact on the electoral success of lawyers relative to that of employees and workers. To do so, we draw on two novel sources of historical data. First, using archival research, we compile detailed information on the occupations of both winning and losing parliamentary candidates. Second, we develop an original historical geographic information system of French electoral constituencies to reconstruct their precise boundaries during the interwar period. This dataset enables us to calculate voter density and a range of constituency-level characteristics for each election.

We consider the interwar period because it marked an important moment in French political history, when the balance of power began to shift from the traditional elites of the early Third Republic – typically lawyers – to the emerging working-class politicians of the left-wing *Front Populaire* coalition (Mayeur, 1984; Rémond, 2002). This period also offers a stable institutional setting: elections were held under a consistent two-round majority system in single-member districts (Marty, 2013; Ehrhard and Passard, 2020) [3]. Importantly, legal and political constraints during this period significantly limited the ability of lower-house candidates – including incumbents – to manipulate constituency boundaries. Instead, changes to the electoral map were ultimately enacted by members of the upper house and by *préfets*, high-ranking civil servants appointed by the central government to administer *départements*. We validate our research design through several empirical tests: we demonstrate that electoral outcomes did not predict future boundary changes, that constituencies undergoing such changes were similar to those that did not, and that changes in voter density caused by redistricting did not alter the socio-economic composition of constituencies in subsequent elections.

Our results imply that rising voter density reduced the electoral success of lawyers while increasing that of employees and workers. Quantitatively, a one standard deviation increase in voter density lowered the average probability of electoral success for lawyers by 5%, while raising it by 15% for employees and workers. These effects were concentrated on the left of the political spectrum: left-wing employee and worker candidates progressively displaced left-wing lawyers in increasingly urban constituencies.

Finally, we conduct a series of robustness checks to ensure that our results are not driven by unobserved factors that could simultaneously influence both changes in constituency boundaries and variations in voter density over time. In particular, we implement a placebo test using a sample of counterfactual constituencies whose proposed boundary changes were debated in the lower house but ultimately rejected by the upper house. We further demonstrate that our findings are robust to alternative measures of urbanization, estimation methods and sampling strategies.

2. Urbanization and political representation

We argue that urbanization may have shaped parliamentary representation through voter mobilization. Since electoral success depends on candidates' ability to mobilize sufficient support on election day, effective campaigns require a political machine with networks of operatives capable of canvassing constituencies and turning out voters (Stokes, 2005; Larreguy *et al.*, 2016). In interwar France, however, national political parties were not yet fully institutionalized and lacked the organizational capacity to sustain such machines (Kreuzer, 2001) [4]. In the absence of strong party infrastructure, candidates were thus

compelled to rely on their own professional networks to mobilize voters. In a country that remained predominantly rural during this period, lawyers held a comparative advantage over other candidates. Indeed, their professional client networks – largely rooted in rural areas – connected them to influential local middlemen who could be mobilized to secure electoral support within their rural communities (Le Béguec, 2003). However, this advantage eroded as France urbanized, with the share of the population living in urban areas rising from 31% in 1872 to 47% in 1926 and 52% by 1936. In contrast, employees and workers gained from urbanization. Their occupational networks – especially those linked to local trade unions – were more deeply embedded in urban areas and better suited to urban mobilization (Lefranc, 1968; Moss, 1976). This argument aligns with findings by Lupu and Pontusson (2024), who show that working-class candidates are more likely to be elected in constituencies with higher union density. It is also consistent with research emphasizing the informational value of (even loose) party affiliations and professional ties, which help guide voter behavior in contexts of rational ignorance, where most voters cannot personally know all candidates (Prat, 2004).

Our approach also relates to a broader literature demonstrating that redistricting can influence electoral outcomes (e.g., Ansolabehere *et al.*, 2000; Hetherington *et al.*, 2003; Carson *et al.*, 2006; Hayes and McKee, 2009; Imai, 2022). This body of work has highlighted mechanisms such as strategic entry by candidates, incumbency advantages and changes in voter turnout, often in the context of gerrymandering or malapportionment. However, these channels are unlikely to have played a significant role in shaping political representation in interwar France. As discussed in Section 3 and supported by our balance tests in Section 5, neither lower-house candidates nor incumbents had the ability to strategically manipulate constituency boundaries during this period.

2.1 Alternative theories

Contemporary observers of interwar French politics had already noted the post-World War I decline of lawyers in parliamentary representation, despite their earlier dominance at the expense of the landed aristocracy during the formative years of the Third Republic (Thibaudet, 1927; Halévy, 1930). Notably, Thibaudet (1927) attributed this decline to a cultural shift within the leadership of the then-dominant *Parti radical et radical-socialiste* – a transformation he viewed as a delayed consequence of the Dreyfus Affair, which had polarized French society along political and religious lines between 1894 and 1906 (Thomas, 1978). But this explanation – tied to the French political context – cannot account for similar trends observed in other countries. A different perspective was offered by Gaudemet (1968), who proposed that the decline of lawyers reflected improved professional opportunities in legal practice during this period. However, this hypothesis is not supported by census data, as the number of lawyers remained stable at around 160 per million inhabitants between 1876 and 1936.

Another strand of literature emphasizes structural transformation and special-interest politics as key drivers of political change (Rueschemeyer *et al.*, 1992; Aidt and Jensen, 2016; Ashraf *et al.*, 2025). In this view, peasants supported lawyers over landed aristocrats because the two groups shared similar social origins and differed primarily in their level of education. By contrast, employees and workers increasingly favored candidates from their own occupational backgrounds, perceiving them as more likely to advance their policy preferences – see, e.g., Barnes and Saxton (2019), Carnes and Lupu (2016b), and specifically Duverger (1954) and Gouault (1954) on pre–World War II France.

Nevertheless, the historical and economic context of interwar France makes it unlikely that changes in population density significantly altered the social or occupational

composition of the electorate. Crucially, urbanization during this period was not spatially correlated with industrialization or with the share of employees and workers in the labor force [5]. Unlike in many other countries, French industrialization was shaped by the prevalence of small-scale industrial firms located in rural areas and powered by water rather than steam, reflecting the relative scarcity of coal in France (Woronoff, 1994; Franck and Galor, 2021) [6]. Even after the introduction of more efficient, coal-independent steam engines, French industry remained geographically dispersed and dominated by small firms [7]. In Section 5, we report empirical tests that support the hypothesis that industrialization and shifts in the social composition of the labor force within constituencies cannot account for the declining share of lawyers in Parliament in interwar France.

3. Changes to electoral constituency boundaries, 1928–36

We now outline the institutional context of the 1928–36 elections to the lower house of the French Parliament. Section 3.1 provides an overview of the administrative organization of the French territory into *départements*, *arrondissements* and *cantons*, and explains how this structure shaped and constrained the delineation of electoral constituencies. Section 3.2 then examines the two types of legal processes that led to the boundary changes we exploit for identification: electoral reforms and territorial reforms. Finally, Section 3.3 discusses the counterfactual reforms used in our robustness checks, i.e., proposed electoral reforms that were debated in Parliament but ultimately not enacted.

3.1 Administrative divisions and electoral constituencies

The administrative organization of France's territory during the interwar period had its roots in the aftermath of the 1789 Revolution, well before the formal establishment of the Third Republic in 1875 (Ozouf-Marignier, 1989; Gros, 2014, pp. 307–335). At the highest level of this structure were the *départements*, originally designed to be small enough that any resident could reach its administrative center – the *préfecture* – within a day's travel on horseback. Each préfecture was headed by a *préfet*, a civil servant appointed by the central government to implement its policies and oversee the local administration of the département. Each département was subdivided into arrondissements – three per département on average – each administered by a *sous-préfet* from a *sous-préfecture*. These arrondissements were further subdivided into *cantons* – 11 per arrondissement on average. Although cantons held no administrative authority, they served as electoral units for centralizing and transmitting election results to the sous-préfecture. This territorial structure is illustrated in Panel a of Figure A1 (Supplementary Material). At the lowest level of this administrative hierarchy were the *communes*, administered by a municipal council and headed by a mayor. As of 1928, France comprised 90 départements, 279 arrondissements, 3,024 cantons and 38,014 communes (Gay, 2021).

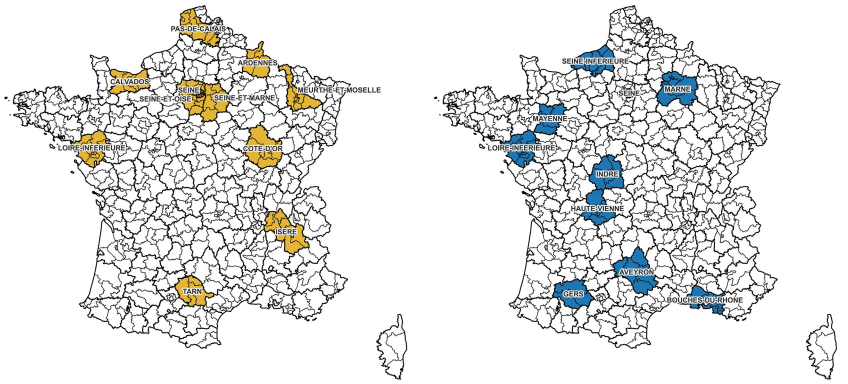
Throughout the Third Republic, the boundaries of electoral constituencies were legally required to closely follow the administrative divisions described above (Gaudillère, 1995; Marty, 2013; Gay, 2021). First, constituencies were confined to single départements – whose borders remained unchanged between 1928 and 1936 – so that no constituency spanned multiple départements. Second, constituency boundaries had to follow those of arrondissements and cantons [8]. And third, constituencies were required to encompass contiguous territorial divisions, thereby preventing disjointed constituencies and enclaves. Thus, although electoral constituency boundaries could be modified in principle, the administrative framework imposed strict constraints that limited politicians' ability to manipulate them for electoral gains. As a result, the 593 electoral constituencies that France

had in 1928 were relatively small, homogeneous and spatially compact, as illustrated in Panel b of Figure A1 (Supplementary Material) [9].

3.2 Types of electoral constituency boundary changes

Electoral constituency boundaries could be modified in two ways: either explicitly, through electoral reforms ultimately approved by members of the upper house, or implicitly, through territorial reforms authorized by the préfet of the relevant département. Between 1928 and 1936, boundary changes affected 34 constituencies, spanning 11 départements. These départements also contained 74 other constituencies whose boundaries remained unchanged, as shown in Panel a of Figure 1. Our main sample therefore consists of 108 constituencies [10]. Table B1 (Supplementary Material) summarizes the boundary changes we exploit for identification. In Appendix B (Supplementary Material), we further provide a detailed account of each boundary change, including its legal basis, reform type, parliamentary support, archival sources and the procedure we use to incorporate it into our panel dataset.

3.2.1 Electoral reforms. Members of both the lower and upper houses of Parliament could initiate modifications to electoral constituency boundaries by introducing amendments to the electoral law governing the upcoming election. In total, seven such amendments were enacted during the drafting of the 1932 and 1936 electoral laws. In four cases, the changes aimed to equalize the size of the electorate across constituencies. Two of them resulted in the creation of new constituencies, while the other two involved the transfer of several cantons between existing constituencies. The remaining three cases consisted in the reinstatement of former constituencies that had been abolished prior to the 1928 elections. Figure 2 illustrates the division of the Gaillac-Lavaur constituency in the département of Tarn into two separate constituencies, Gaillac and Lavaur. Figure 3 shows the creation of the Sedan constituency in

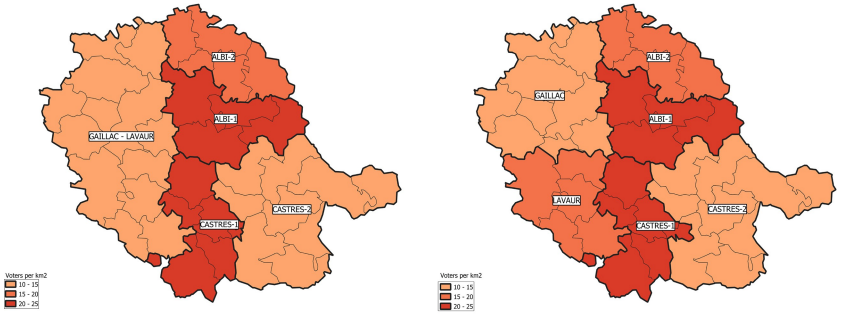


(a) Modified Boundaries **(b)** "Counterfactual Reforms"

Figure 1. Départements encompassing constituencies with modified boundaries and "counterfactual reforms" in 1928–36

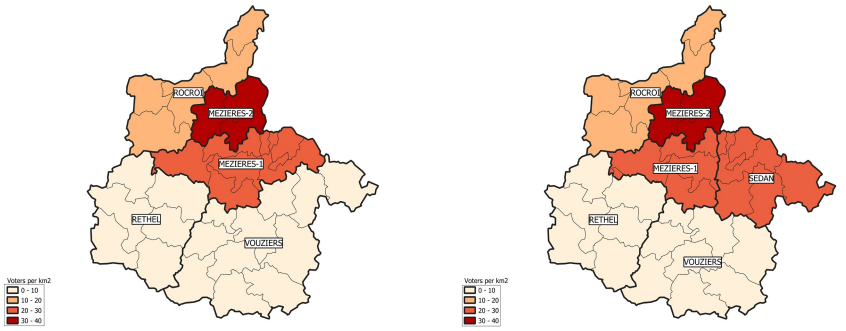
Notes: Panel a highlights départements encompassing electoral constituencies whose boundaries were modified between 1928 and 1936. Panel b highlights those whose boundary changes were debated in Parliament but ultimately not enacted. The underlying electoral constituencies in thin black lines correspond to 1928

Source(s): Shapefiles from Gay (2020a, 2020b)



(a) Constituencies in 1928 **(b)** Constituencies in 1932

Figure 2. Boundary change: constituencies of Gaillac and Lavaur, département of Tarn, 1928–32
Notes: Thick black lines represent electoral constituencies, thin black lines represent cantons
Source(s): Shapefiles based on Gay (2020a)



(a) Constituencies in 1928 **(b)** Constituencies in 1932

Figure 3. Boundary change: constituencies of Sedan and Mézières-1, département of Ardennes, 1928–32
Notes: Thick black lines represent electoral constituencies, thin black lines represent cantons
Source(s): Shapefiles based on Gay (2020a)

the département of Ardennes following the division of the Vouziers and Mézières-1 constituencies. The other five boundary changes resulting from electoral reforms are shown in Figures B2–B6 (Supplementary Material).

Several institutional features of these electoral reforms made it unlikely that members of the lower house could strategically manipulate constituency boundaries for electoral gain. First, these boundary changes were ultimately approved by members of the upper house, who effectively held veto power over such reforms (Berstein, 2014). The electoral incentives of upper-house members differed markedly from those of their lower-house counterparts. Indeed, members of the upper house were elected through different constituencies (départements), under indirect rather than direct suffrage (through an electoral college composed of local office holders such as mayors) and under a different electoral cycle (they served nine-year instead of four-year terms). In addition, they exhibited little cooperation or partisan coordination with members of the lower house (Berstein, 2014).

Second, there was substantial ex ante uncertainty over which proposed amendments would ultimately be enacted. Of the 19 proposed electoral reforms in 1932 and 1936, only seven were adopted. Moreover, the interval between the passage of these laws and the elections was relatively short: the reforms were enacted on March 25, 1932, and March 20, 1936 – just over a month before the first rounds of the parliamentary elections on May 1, 1932, and April 26, 1936, respectively. In both cases, voter rolls in each constituency were closed only five days after the laws were passed. Given this tight timeline, it is highly unlikely that candidates could have swiftly and systematically relocated supporters across constituencies to influence the composition of the electorate. It is equally implausible that incumbents could have quickly redirected public spending to target newly qualified voters in the affected constituencies.

Third, there is no historical evidence that members of the upper house sought to advance the interests of specific occupational groups at the expense of others. Even if they were aware of the declining electoral success of lawyers, they likely attributed this trend to the cultural explanations that were prevalent during the interwar period, rather than to structural factors such as urbanization (Thibaudet, 1927; Halévy, 1930). In practice, changes to constituency boundaries often resulted from the joint collaboration among parliamentarians of diverse professional and political backgrounds, as detailed in Appendix B (Supplementary Material). For instance, the creation of the Sedan constituency shown in Figure 3 was the outcome of bipartisan cooperation among four lower-house members, none of whom were lawyers or workers.

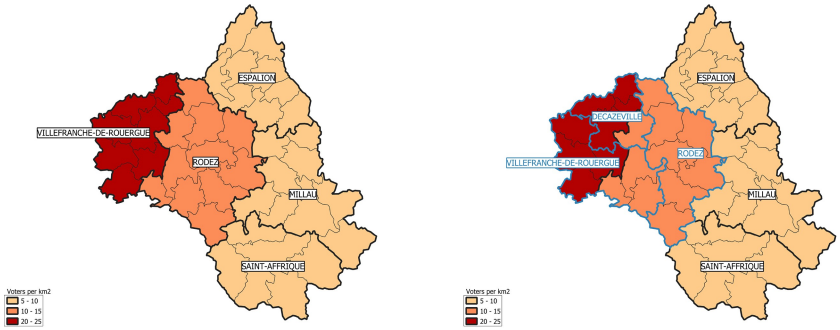
3.2.2 Territorial reforms. Territorial reforms indirectly altered electoral constituency boundaries by transferring one or two communes between cantons, thereby modifying the constituencies whose borders were aligned with those of these cantons. Between 1928 and 1936, seven such changes took place. A close examination of the administrative reports motivating these territorial reforms indicates that they were initiated by the municipal councils of the communes directly affected by the transfers. Their primary objective was to improve their geographic proximity to the administrative center of their canton. These changes were ultimately enacted by the local préfet, in coordination with senior officials at the Ministry of the Interior. Given their local nature, it is therefore unlikely that these reforms were driven by strategic electoral considerations on the part of candidates at the constituency level.

3.3 Counterfactual reforms

During the drafting of the 1932 and 1936 electoral laws, 12 amendments proposing boundary changes in 28 constituencies across 10 départements were debated but ultimately not enacted, as shown in Panel b of Figure 1. For instance, in 1932, representatives of the département of Aveyron proposed that the constituencies of Rodez and Villefranche-de-Rouergue be subdivided to create the constituency of Decazeville (see Figure 4). Although these proposals originated in the lower house, they were ultimately rejected by the upper house. Table B2 (Supplementary Material) summarizes these counterfactual boundary changes, with additional details and figures provided in Appendix B (Supplementary Material). We use these counterfactual reforms in a series of robustness tests to further support the validity of our empirical strategy.

4. Data

This section introduces the main variables used in our analysis. Section 4.1 details the construction of our key explanatory variable: the density of registered voters. Section 4.2 examines candidates' occupations and electoral performance, while Section 4.3 describes



(a) Constituencies in 1928 **(b)** Constituencies in 1932

Figure 4. Counterfactual boundary change: constituencies of Rodez, Villefranche-de-Rouergue and Decazeville, département of Aveyron, 1928–32

Notes: Thick black lines represent electoral constituencies, thin black lines represent cantons. Thick blue lines represent counterfactual reforms to electoral constituencies

Source(s): Shapefiles based on Gay (2020a)

additional constituency-level characteristics. We report summary statistics at the level of elected officials, candidates and constituencies for the 1928–36 elections in Table 1 [11]. We provide the classification of political affiliations into left, right and independent for each election in Tables 3 and 4 (Supplementary Material). Further information on data sources and the construction of the constituency-level panel is presented in Appendix C (Supplementary Material).

4.1 Urbanization

Our primary measure of urbanization is the (log) density of registered voters per square kilometer in each electoral constituency and election. To calculate the area of each constituency, we rely on Gay (2020a) constituency shapefiles, which we supplement by manually tracing the exact boundaries of infra-municipal constituencies. The number of registered voters in each constituency is drawn from archival records of official election results (Lachapelle, 1928, 1932, 1936).

In the 108 electoral constituencies included in our sample, both the average number of registered voters and voter density remained stable throughout the period, at about 21,000 and 450 per square kilometer, respectively. This apparent stability, however, conceals substantial spatial variation resulting from boundary changes. For instance, between 1928 and 1936, voter density in the constituency of Saint-Denis-12 in the département of Seine decreased by 39%, while in Caen-1 in Calvados, it increased by 89% over the same period. These disparities are evident when comparing changes in (log) voter density between elections across treated and untreated constituencies in Table 2. While both groups experienced similar average increases in density, the standard deviation of the change was nearly four times larger in treated constituencies (0.23) than in untreated ones (0.06).

To ensure that our findings are not sensitive to the specific definition of voter density, we construct an alternative measure of urbanization based on census data: the share of the urban population – we provide more details on this measure in Section 6.3. While this serves as a useful robustness check, voter density remains a more appropriate measure for the purposes

Table 1. Summary statistics: elected officials, candidates and constituencies, 1928–36

Variable	Mean	SD	Min.	Max.	*N*
A. Elected officials					
Employee or worker	0.16	0.37	0	1	324
Incumbent	0.52	0.50	0	1	324
Lawyer	0.22	0.42	0	1	324
Left	0.61	0.49	0	1	324
Right	0.36	0.48	0	1	324
Vote share (%)	44.6	14.7	18.1	92.0	324
B. Candidates					
Elected	0.20	0.40	0	1	1,614
Employee or worker	0.29	0.46	0	1	1,614
Incumbent	0.16	0.37	0	1	1,614
Lawyer	0.16	0.37	0	1	1,614
Left	0.69	0.46	0	1	1,614
Right	0.28	0.45	0	1	1,614
Vote share (%)	20.2	17.5	0.0	92.0	1,614
C. Constituencies					
Area (km^2)	631	583	4	2,963	324
Candidates	5.37	1.77	2	12	324
Registered voters	21,093	6,718	10,010	49,659	324
Turnout (%)	83.8	4.0	63.6	95.1	324
Competitiveness	0.53	0.09	0.15	0.74	324
Voter density	453	962	5	6,380	324
Voter log density	4.31	1.86	1.54	8.76	324
Share urban (%)	57.4	33.6	3.3	100.0	324

Notes: This table provides summary statistics for the regression sample. Data for the legislative elections of 1928, 1932 and 1936 are pooled. Turnout and the number of candidates pertain to the first round. Competitiveness pertains to the decisive round. Competitiveness is the complement of a Herfindahl–Hirschman index in the candidates' vote shares, scaled between 0 and 1

Table 2. Changes across elections by type of constituency

	Δ Voters		Δ Area		Δ Log density		Δ Share urban	
Type of constituency	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Unmodified boundaries ($N = 74$)	1,055	1,374	0.00	0.00	0.04	0.06	0.01	0.03
Modified boundaries ($N = 34$)	− 1, 414	6,494	− 81.19	246.55	0.03	0.23	0.01	0.07

Notes: This table reports summary statistics of the changes across elections of various variables, by types of constituencies. Changes between the elections of 1928 and 1932, and between the elections of 1932 and 1936 are pooled, so that the number of observations in the first row is 148, and in the second row, 68

of our study. Indeed, it captures the spatial distribution of registered voters at the exact time of each election, whereas census-based measures are not temporally aligned with the electoral cycle. In addition, voter density is an objective measure that does not rely on some arbitrary classification of the population into urban and rural, however stable over time.

4.2 Candidates' occupations and electoral performance

Our dataset includes 1,614 candidates in 108 constituencies over the 1928, 1932 and 1936 legislative elections. Based on archival records of official election results, we compile vote shares and political affiliations for each candidate in each election (Lachapelle, 1928, 1932, 1936). We also collect information on candidates' occupations using Robert and Cougny (1889) and Jolly (1960) dictionaries of French parliamentarians. Occupational information in these sources is based primarily on candidates' political manifestos, which we supplement with additional secondary sources detailed in Appendix C.8 (Supplementary Material).

We classify each candidate into one of twelve occupational categories: artists, businessmen, clergymen, doctors (including pharmacists and veterinarians), engineers (including scientists other than medical doctors), employees and workers, low- and mid-level civil servants, high-level civil servants, journalists, landowners, lawyers (including solicitors) and professors (including primary school teachers) [12]. We show in Table 3 that, among the 1,614 candidates in our sample, lawyers were among the most common occupations (263 candidates), as well as employees and workers (472 candidates), accounting for 16% and 29% of all candidates, respectively. Businessmen (301 candidates) and landowners (158 candidates) were also frequent occupations, with 19% and 10% of all candidates, while doctors made up 6% of them. In addition, 69% of candidates were on the left of the political spectrum.

Among the elected candidates in our sample, lawyers as well as employees and workers were also among the most common occupational groups, representing 22% and 16% of all winners, respectively. Businessmen were also relatively successful, accounting for 24% of elected candidates, while landowners and doctors comprised only 14% and 5% of them, respectively. Overall, 61% of winning candidates were on the left of the political spectrum.

Over time, the share of lawyers among elected candidates declined from 26% in 1928 to 19% in 1936, even though their share among candidates remained stable at 16% (see Table A2) (Supplementary Material). In contrast, the share of employees and workers among candidates fell from 32% in 1928 to 26% in 1936, yet their share among winners rose markedly from

Table 3. Distribution of occupations among candidates and elected officials, 1928–36

	A. Candidates				B. Elected officials			
Occupation	Left	Right	All	Share	Left	Right	All	Share
Artists	11	0	11	0.01	1	0	1	0.00
Businessmen	166	125	301	0.19	41	35	79	0.24
Clergymen	0	0	0	0.00	0	0	0	0.00
Doctors	63	27	92	0.06	9	7	16	0.05
Employees and workers	443	19	472	0.29	51	1	52	0.16
Engineers	19	7	26	0.02	7	2	9	0.03
High-level civil servants	11	6	17	0.01	3	2	5	0.02
Journalists	89	53	147	0.09	17	3	20	0.06
Landowners	52	98	158	0.10	10	31	45	0.14
Lawyers	157	104	263	0.16	36	36	72	0.22
Low and mid-level civil servants	23	5	28	0.02	4	0	4	0.01
Professors	87	11	99	0.06	20	0	21	0.06
All	1,121	455	1,614	1.00	199	117	324	1.00

Notes: This table shows the distribution of occupations among candidates in the 1928, 1932 and 1936 parliamentary elections in the 11 départements that encompass constituencies whose boundaries were modified. It does not provide the distribution of occupations among independent candidates so that the *Left* and *Right* columns do not add up to the *All* columns

10% to 25%. These trends already suggest that lawyers were increasingly displaced by employees and workers during the interwar period.

4.3 Constituency characteristics

Some specifications in our empirical analysis account for constituency characteristics that may have influenced electoral outcomes. These include voter turnout, the number of candidates competing in each constituency and election, and an indicator variable that equals one if an incumbent ran in a given race. We also construct a measure of electoral competitiveness, as shown in Gavoille and Verschelde (2017). This measure is defined as the complement of the Herfindahl-Hirschman index of candidates' vote shares ($1 - \sum \text{vote\_share}^2$) [13].

Across the 324 electoral contests held in 1928, 1932 and 1936 within the 108 constituencies in our sample, an average of five candidates competed in the first round, with a minimum of two and a maximum of 12. A second round was required in 69% of contests, as no candidate secured an absolute majority in the first round. Incumbents accounted for 16% of candidates, and voter turnout averaged 84% of registered voters.

5. Empirical framework

This section outlines our empirical framework. Section 5.1 describes the estimation strategy, while Section 5.2 presents empirical tests that support the validity of our identifying assumptions.

5.1 Estimation strategy

To assess the effect of voter density on the electoral success of candidates with a given occupation, we estimate the following regression equation separately for each of the 12 occupations on the pooled sample of all candidates and 1928, 1932 and 1936 elections:

$$\texttt{elected}_{i_o cdt} = \beta_1 \mathbb{1}_{[i=o]} + \beta_2 \texttt{density}_{ct} + \beta_3 \texttt{density}_{ct} \times \mathbb{1}_{[i=o]} + \alpha_c + \alpha_{dt} + \varepsilon_{i_o cdt}, \quad (1)$$

where $\texttt{elected}_{i_o cdt}$ is an indicator variable that equals one if candidate *i* with occupation *o* in constituency *c* of département *d* was elected in election *t*. The coefficient of interest, β_3, captures the interaction between the log density of registered voters in constituency *c* and election *t* ($\texttt{density}_{ct}$) and an indicator variable for whether candidate *i* holds occupation *o* ($\mathbb{1}_{[i=o]}$). We exploit the panel structure of the data by including constituency (α_c) and département-by-election fixed effects (α_{dt}), so that β_3 identifies the electoral (dis)advantage of candidates with occupation *o* across constituencies within the same département as their voter density changes over time. To account for political competition, we then augment this specification with fixed effects for the set of other occupations represented among the candidates in constituency *c* and election *t*. In some specifications, we further control for (potentially endogenous) constituency-level characteristics that capture local electoral conditions: voter turnout, the number of candidates and rounds and an indicator variable that equals one if candidate *i* is the incumbent. We cluster standard errors at the constituency level.

In a separate set of analyses, we examine heterogeneity across the political spectrum by estimating a triple interaction for candidates with occupation *o* affiliated with party *p*:

$$\begin{aligned}\texttt{elected}_{i_{op} cdt} = {} & \beta_1 \mathbb{1}_{[i=o]} + \beta_2 \mathbb{1}_{[i=p]} + \beta_3 \texttt{density}_{ct} + \beta_4 \texttt{density}_{ct} \times \mathbb{1}_{[i=o]} \\ & + \beta_5 \texttt{density}_{ct} \times \mathbb{1}_{[i=p]} + \beta_6 \texttt{density}_{ct} \times \mathbb{1}_{[i=o]} \times \mathbb{1}_{[i=p]} + \alpha_c + \alpha_{dt} \\ & + \varepsilon_{i_{op} cdt}, \end{aligned} \quad (2)$$

where $\texttt{elected}_{iopcdt}$ is an indicator variable that equals one if candidate *i* of party *p* with occupation *o* in constituency *c* of département *d* was elected in election *t*. All other variables are defined as shown in equation (1). We then test the following hypothesis:

$$H_0: \ \widehat{\beta}_4 + \overline{\text{density}}_{ct} \cdot \widehat{\beta}_6 = 0, \tag{3}$$

where $\overline{\text{density}}_{ct}$ denotes the average log density in constituency *c* in election *t*, and $\widehat{\beta}_4$ and $\widehat{\beta}_6$ are the corresponding estimates from equation (2). Failure to reject the null hypothesis would indicate that the effect of voter density on the electoral success of candidates with occupation *o* does not vary across parties.

5.2 Identifying assumptions

Our empirical strategy identifies the occupation-specific electoral effects of changes in voter density induced by modifications in electoral constituency boundaries. The internal validity of this approach rests on three key identifying assumptions. First, electoral outcomes in an election must not predict boundary changes in the next election. Second, treated constituencies should be comparable to untreated ones within the same département. And third, the Stable Unit Treatment Value Assumption (SUTVA) must hold, i.e., changes in voter density should not affect other economic or political characteristics of constituencies after treatment. As discussed above, the economic, institutional and political context of interwar France supports the plausibility of these assumptions. Nevertheless, we conduct a series of empirical tests to assess their validity [14].

We first test whether electoral outcomes in an election predict boundary changes in the subsequent one by estimating the following specification:

$$\texttt{boundary\_change}_{cd,t} = \beta X_{c,t-1} + \alpha_c + \alpha_{dt} + \varepsilon_{cd,t} \tag{4}$$

where $\texttt{boundary\_change}_{cd,t}$ is an indicator variable that equals one if constituency *c* in département *d* experienced a boundary change in the period leading to election *t*. $X_{c,t-1}$ represents an electoral outcome in the previous election: turnout, the number of candidates, electoral competitiveness and indicators for whether the elected candidate was a lawyer, an employee or worker, left wing or right wing. As shown in equation (1), we include constituency fixed effects (α_c) and département-by-election fixed effects (α_{dt}). This specification is thus estimated on a two-period panel: electoral outcomes are drawn from the 1928 and 1932 elections, while boundary changes correspond to those implemented before the 1932 and 1936 elections, respectively. We report the results in Table 4. Across all specifications, the coefficients on past electoral outcomes are small and statistically insignificant, suggesting that they do not systematically influence future boundary changes. Including all variables simultaneously – except *Right wing*, which is omitted to avoid collinearity – leads to the same conclusion.

Next, we assess whether treated constituencies are comparable to untreated ones within the same département along various socio-economic characteristics, estimating the following specification:

$$X_{cdt} = \beta \, \texttt{treated}_{cd} + \alpha_d + \alpha_t + \varepsilon_{cdt} \tag{5}$$

where $X_{cd,t}$ is a constituency characteristic measured in election year *t* and $\texttt{treated}_{cd}$, an indicator variable that equals one if constituency *c* in département *d* experienced a boundary change over the period 1928–36. We further include election (α_t) and département (α_d) fixed

Table 4. Electoral outcomes and future boundary changes

	Boundary change in the following election							
Outcome	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Turnout	− 0.007							− 0.016
	[0.013]							[0.013]
Number of candidates		0.031						0.042
		[0.026]						[0.028]
Competitiveness			0.183					0.417
			[0.392]					[0.351]
Elected candidate								
Lawyer				0.082				0.068
				[0.110]				[0.111]
Employee or worker					0.163			0.184
					[0.250]			[0.246]
Left wing						0.035		0.029
						[0.103]		[0.098]
Right wing							− 0.109	
							[0.102]	
Within R^2	0.005	0.013	0.002	0.006	0.009	0.002	0.017	0.049
Constituencies	108	108	108	108	108	108	108	108
Observations	216	216	216	216	216	216	216	216

Notes: This table reports coefficients from estimating equation (4). Each observation is a constituency-election. All specifications include constituency and département-by-election fixed effects. Competitiveness is the complement of a Herfindahl–Hirschman index in the candidates' vote shares, scaled between 0 and 1. Standard errors in brackets are clustered at the constituency level. $***p \leq 0.01$, $**p \leq 0.05$, $*p \leq 0.10$

effects [15]. The characteristics we consider are measures of economic and judicial activity that can be reconstructed at the constituency level for the interwar period: the number of civil, commercial and police cases, firm failures, labor disputes, a consumer price index and a wage index for all occupations [16]. All these variables are logged in the analysis. Results, reported in Table 5, show small and statistically insignificant coefficients, suggesting that treated and untreated constituencies are well balanced within départements.

Finally, we test whether changes in voter density affected constituencies' characteristics after treatment, estimating the following specification:

$$X_{cd,t+1} = \beta \, \texttt{density}_{c,t} + \alpha_c + \alpha_{dt} + \varepsilon_{cd,t} \tag{6}$$

where $X_{cd,t+1}$ is a constituency-level characteristic – the same as shown in equation (5) – measured one year after election year t and $\texttt{density}_{c,t}$, the log density of registered voters in election year t. As shown in equation (1), we include constituency (α_c) and département-by-election fixed effects (α_{dt}). The results, reported in Table 6, show small and statistically insignificant coefficients, indicating that boundary changes did not affect the underlying socio-economic characteristics of constituencies. This supports the validity of the SUTVA assumption.

A final potential concern with our approach is that it draws on variation from a selected subset of départements – specifically, the 11 départements containing electoral constituencies whose boundaries were modified over 1928–36. While it is not possible to formally test the external validity of our results, we provide evidence that these départements do not systematically differ from the remaining 79 on a broad range of characteristics. First, Panel A of Table A7 (Supplementary Material) examines socio-demographic indicators: the number of lawyers and registered voters, fertility and literacy rates and road density. Second, Panel B assesses characteristics of préfets, as they played a role in enacting territorial reforms: their age, occupational background, prior membership to the lower house and their turnover rate, measured as the number of years they remained in a given département. Third, Panel C compares the occupations and party affiliations of sitting members of the upper house across départements with and without treated constituencies prior to each election. Finally, Panel D conducts the same comparison for candidates to the lower house in each election. Reassuringly, we find no statistically significant differences between treated and untreated départements across all panels, lending support to the external validity of our findings.

6. Results

Section 6.1 presents our baseline results on the causal relationship between voter density and the electoral success of lawyers and workers. Section 6.2 then explores how this relationship varies across the political spectrum. Finally, Section 6.3 reports a series of robustness checks that reinforce the credibility of our empirical findings.

6.1 Voter density and electoral success

Table 7 reports the coefficients from estimating equation (1) for candidates who were lawyers (Panel A) and employees or workers (Panel B). The results suggest that higher voter density reduced the electoral success of lawyers but increased that of employees and workers. When including département-by-election fixed effects in Column 2, estimates imply that a 10% increase in the density of registered voters lowered the probability of electoral success for lawyers by 0.6 percentage points, while raising it for employees and workers by 0.7 percentage points. Put differently, a one standard deviation increase in the change in log voter density among treated constituencies (0.23, equivalent to about 400

Table 5. Balance tests: boundary changes and constituency characteristics

Outcome:	Civil Cases (1)	Commercial Cases (2)	Police Cases (3)	Firm Failures (4)	Labor Disputes (5)	Wage Index (6)	Price Index (7)
Treated constituency	0.152	0.142	0.072	0.066	− 0.017	0.010	0.002
	[0.108]	[0.111]	[0.073]	[0.105]	[0.432]	[0.009]	[0.004]
Within R^2	0.010	0.007	0.006	0.001	0.000	0.005	0.001
Constituencies	108	108	108	108	108	108	108
Observations	324	324	324	324	324	324	324

Notes: This table reports coefficients from estimating equation (5). Each observation is a constituency-election. All specifications include département and election fixed effects. All outcome variables are logged. Standard errors in brackets are clustered at the constituency level. $***p \leq 0.01$, $**p \leq 0.05$, $*p \leq 0.10$

Table 6. SUTVA tests: voter density and constituency characteristics

Outcome:	Civil cases (1)	Commercial Cases (2)	Police cases (3)	Firm failures (4)	Labor disputes (5)	Wage index (6)	Price index (7)
Log density	– 0.131	0.097	0.016	0.121	– 0.103	0.040	0.001
	[0.411]	[0.463]	[0.337]	[0.563]	[0.333]	[0.024]	[0.012]
Within R^2	0.002	0.001	0.000	0.001	0.001	0.011	0.000
Constituencies	108	108	108	108	108	108	108
Observations	324	324	324	324	324	324	324

Notes: This table reports coefficients from estimating equation (6). Each observation is a constituency-election. All specifications include constituency and département-by-election fixed effects. All outcome variables are logged. Standard errors in brackets are clustered at the constituency level
$***p \leq 0.01$, $**p \leq 0.05$, $*p \leq 0.10$

registered voters per square kilometer) is associated with a 1.4 percentage point decline in the probability of success for lawyers, representing 5.1% of their average electoral success rate (27.4%). Conversely, a similar increase in voter density improved the probability of success for employees and workers by 1.6 percentage points, representing 14.5% of their average electoral success rate (11.0%). These results are corroborated by estimates in Column 5, which imply that higher voter density had a negative and significant effect on the first-round vote share of lawyers, but a reverse effect for employees and workers.

In Columns 3 and 6, we further control for local electoral conditions by including fixed effects for the occupations of other candidates, along with controls for the number of candidates, the number of rounds, first-round turnout and the presence of the incumbent. While the coefficients decrease slightly, they remain statistically significant, indicating that the potential mediating role of these local conditions does not drive our main results – a conclusion further supported by robustness checks presented below. However, due to the potential endogeneity of these controls, we do not include them in further analyses – though all results remain robust to their inclusion.

Figure 5 plots the coefficients from Column 2 of Table 7 for lawyers and workers, alongside those for candidates with other occupations. The full set of estimates is reported in Panel A of Table A8 (Supplementary Material). The results indicate that changes in voter density generally did not have a robust or statistically significant effect on the electoral success of candidates from other occupational groups – e.g., businessmen – with the exception of doctors and landowners, for whom increased urbanization was also detrimental. Indeed, like lawyers, doctors were educated, self-employed professionals who could leverage their professional influence to build networks in rural constituencies. Landowners similarly relied on longstanding rural ties for electoral mobilization. However, these groups were smaller in number, with 92 doctor candidates and 158 landowner candidates, compared to 263 lawyer candidates [17].

6.2 Heterogeneity across the political spectrum

In Table 8, we investigate whether changes in voter density had heterogeneous electoral effects across the political spectrum by estimating equation (1) separately for left- and right-wing candidates. Estimates in Columns 2 and 3 indicate that higher voter density reduced the electoral success of left-wing lawyers, while it increased that of left-wing employees and workers. In contrast, higher voter density does not significantly affect the electoral success of right-wing lawyers and workers, with noisier point estimates. These patterns hold when examining vote shares in Columns 5 and 6. Extending the analysis to all occupations, we find that voter density had no significant effect on the electoral performance of left- or right-wing candidates with occupations other than lawyers and workers (Figure A2 and Table A8 (Supplementary Material)).

These findings lead us to further examine whether the effects of higher voter density on left-wing lawyers and workers varied by political affiliation. In equation (2), we distinguish among four groups: communists from the PCF (318 candidates, or 28% of left-wing candidates), socialists from the SFIO (319 candidates, 28%), center-left candidates from the Parti radical (280 candidates, 25%) and independent left-wing candidates (204 candidates, 18%). The results, reported in Appendix Table A9, suggest that urbanization had a negative effect on the electoral success of socialist, center-left and independent left-wing lawyers. By contrast, urbanization did not have a differential effect by party on the electoral performance of left-wing employees and workers.

Table 7. Voter density and electoral success of lawyers and workers

	Elected			Vote share		
Outcome:	(1)	(2)	(3)	(4)	(5)	(6)
A. Occupation: Lawyer						
Log density × lawyer	−0.061***	−0.061***	−0.030***	−3.783***	−3.794***	−2.163***
	[0.016]	[0.016]	[0.010]	[0.783]	[0.784]	[0.496]
Département × election FE	No	Yes	Yes	No	Yes	Yes
Other occupations FE	No	No	Yes	No	No	Yes
Controls	No	No	Yes	No	No	Yes
Within R^2	0.019	0.019	0.251	0.042	0.042	0.417
Constituencies	108	108	108	108	108	108
Observations	1,614	1,614	1,614	1,614	1,614	1,614
B. Occupation: Employee or worker						
Log density × worker	0.068***	0.070***	0.044***	4.860***	4.967***	3.707***
	[0.010]	[0.010]	[0.008]	[0.536]	[0.558]	[0.450]
Département × election FE	No	Yes	Yes	No	Yes	Yes
Other occupations FE	No	No	Yes	No	No	Yes
Controls	No	No	Yes	No	No	Yes
Within R^2	0.047	0.049	0.263	0.119	0.125	0.464
Constituencies	108	108	108	108	108	108
Observations	1,614	1,614	1,614	1,614	1,614	1,614

Notes: Each observation is a candidate. All specifications include constituency and election fixed effects, log voter density and an occupation indicator. *Controls* include an incumbent indicator and constituency controls (first round number of candidates, first round turnout, number of rounds). *Vote share* is relative to the first round. Standard errors in brackets are clustered at the constituency level. $***p \leq 0.01$, $**p \leq 0.05$, $*p \leq 0.10$

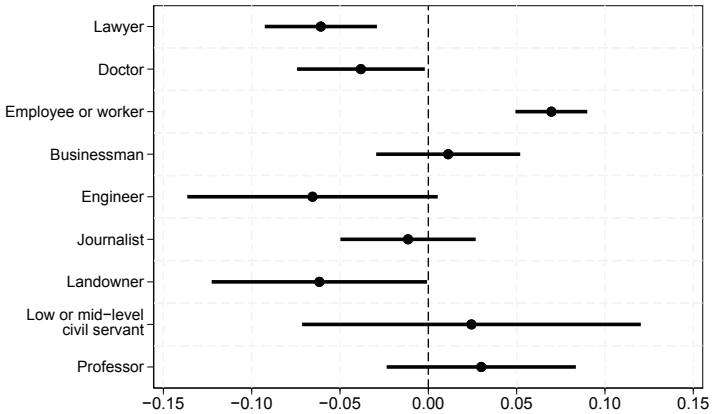


Figure 5. Voter density and electoral success across occupations

Notes: This figure displays coefficients from estimating equation (1) along with 95% confidence intervals for all occupations. Results for the 11 artist and 17 high-level civil servant candidates are not shown for readability

6.3 Robustness checks

This section presents a series of robustness checks that reinforce the validity of our baseline results. First, we examine counterfactual reforms to demonstrate that our findings are not driven by unobserved factors that could simultaneously influence both boundary changes and voter density over time. We then show that the results hold under alternative measurement strategies, estimation methods and across different subsamples.

6.3.1 Counterfactual reforms. To ensure that our results are not driven by unobserved factors that may have simultaneously influenced both constituency boundary changes and voter density over time, we examine a sample of counterfactual constituencies – those for which boundary reforms were proposed by members of the lower house but ultimately rejected by the upper house. Table 9 presents the results. Column 1 reproduces baseline estimates. Column 2 expands the sample to include départements containing counterfactual constituencies. Column 3 focuses exclusively on départements with counterfactual constituencies. This specification serves as a stringent placebo test: since no boundary changes occurred in this sample, we should observe no effect of voter density on the electoral success of lawyers and workers. Finally, Column 4 restricts the analysis to the 34 constituencies that actually experienced boundary changes. Consistent with our hypothesis, Column 3 shows no significant effect, while the results in Columns 2 and 4 closely mirror those from the baseline analysis. Taken together, these findings support the credibility of our empirical strategy.

6.3.2 Mediating effects. Our main results in Table 7 remain robust when controlling for local electoral conditions that could plausibly be correlated with both urbanization and electoral outcomes. To further address concerns that voter density may be systematically related to local electoral dynamics, Table A10 (Supplementary Material) examines whether greater density of registered voters affected key electoral features. The results show that voter density had no significant effect on turnout, the number of rounds or electoral competitiveness. And while it slightly reduced the total number of first-round candidates, it did not significantly affect the number of lawyer or worker candidates. In addition, increased

Table 8. Voter density and electoral success of left- and right-wing lawyers and workers

Outcome		Elected			Vote share	
Sample	Baseline (1)	Left (2)	Right (3)	Baseline (4)	Left (5)	Right (6)
A. Occupation: Lawyer						
Log density × lawyer	– 0.061*** [0.016]	– 0.068*** [0.016]	– 0.028 [0.033]	– 3.794*** [0.784]	– 4.365*** [0.744]	– 1.012 [1.513]
Within R^2	0.019	0.019	0.006	0.042	0.045	0.019
Constituencies	108	108	102	108	108	102
Observations	1,614	1,121	448	1,614	1,121	448
B. Occupation: Employee or worker						
Log density × worker	0.070*** [0.010]	0.058*** [0.013]	0.019 [0.042]	4.967*** [0.558]	4.116*** [0.502]	1.803 [2.067]
Within R^2	0.049	0.041	0.001	0.125	0.100	0.014
Constituencies	108	108	102	108	108	102
Observations	1,614	1,121	448	1,614	1,121	448

Notes: Each observation is a candidate. All specifications include constituency and election fixed effects, log voter density, an occupation indicator and département-by-election fixed effects. *Vote share* is relative to the first round. Standard errors in brackets are clustered at the constituency level.
$***p \leq 0.01$, $**p \leq 0.05$, $*p \leq 0.10$

Table 9. Voter density and electoral success across subsamples

Outcome	Elected (1)	(2)	(3)	(4)
A. Occupation: Lawyer				
Log density × lawyer	−0.061***	−0.060***	−0.024	−0.057*
	[0.016]	[0.014]	[0.021]	[0.031]
Within R^2	0.019	0.029	0.050	0.028
Constituencies	108	157	54	34
Observations	1,614	2,267	743	524
B. Occupation: Employee or worker				
Log density × worker	0.070***	0.052***	−0.004	0.078***
	[0.010]	[0.013]	[0.018]	[0.010]
Within R^2	0.049	0.053	0.079	0.080
Constituencies	108	157	54	34
Observations	1,614	2,267	743	524
Sample restriction				
Actual départements	Yes	Yes	No	No
Actual constituencies	Yes	Yes	No	Yes
Counterfact. départements	No	Yes	Yes	No
Counterfact. constituencies	No	Yes	Yes	No

Notes: Each observation is a candidate. All specifications include constituency and election fixed effects, log voter density, an occupation indicator and département-by-election fixed effects. Standard errors in brackets are clustered at the constituency level. $***p \leq 0.01$, $**p \leq 0.05$, $*p \leq 0.10$

urbanization had no impact on the likelihood that incumbents – whether lawyers, workers or others – chose to run. These findings suggest that our results are unlikely to be driven by mediating variation in local electoral conditions.

6.3.3 Alternative measures. We now examine the robustness of our results using three alternative measures of voter density. First, we use the share of the urban population. To construct this measure, we follow the definition that had been used in the census since the mid-19th century (Le Mée, 1972; Dupeux, 1974; Roncayolo, 1987), classifying as urban any commune with at least 2,000 inhabitants in its agglomerated population (*population agglomérée*). This includes individuals living in the immediate vicinity of the commune center – typically defined as the area surrounding the town hall – as opposed to the dispersed population (*population éparse*) residing in outlying hamlets. Using interwar census data, we compute the share of the urban population for each of the 6,000 communes that constitute the 108 electoral constituencies in our baseline sample [18]. As with our baseline measure of voter density, the standard deviation of the change in the share of urban population was nearly four times greater in treated constituencies (0.07) than in untreated ones (0.02). Substituting our baseline voter density for this urbanization measure yields similar results. As shown in Column 2 of Table 10, a one standard deviation increase in the urban population share reduced the probability of electoral success for lawyers by 2.3 percentage points, while increasing that for employees and workers by 2.8 percentage points.

Second, we test the robustness of our findings by discretizing our baseline measure of voter density. Specifically, we create an indicator variable that equals one if the log density of

registered voters in a constituency is above the sample median. As shown in Column 3 of Table 10, the results are robust to this alternative measure. We further show that the results hold across quartiles of density measures in Table A11 (Supplementary Material).

Third, changes in population density may reflect demographic trends – such as migration, fertility or mortality – rather than boundary changes alone. This raises the concern that our results might be driven by temporal changes in the number of registered voters, rather than by their redistribution across constituencies. To address this, we perform a robustness check that isolates the variation in voter density due solely to redistricting. Specifically, we fix the number of registered voters from the previous election and apply it to the constituency boundaries of the current election – assigning the 1928 voting population to the 1932 elections and the 1932 voting population to the 1936 elections. Because this approach requires matching earlier voter data to later constituency boundaries, it can only be implemented for the 1932 and 1936 elections. To ensure comparability, Column 6 of Table 10 reproduces our baseline estimates when excluding the 1928 election, yielding similar results. Column 7 then presents estimates using the lagged voter population, which remain consistent with the baseline findings. These results suggest that differential demographic trends in treated constituencies are not driving our main effects.

6.3.4 Alternative estimation methods. In Column 4 of Table 10, we show that the baseline results remain robust under a more stringent clustering strategy, in which standard errors are clustered two-way at the constituency and département-by-election levels.

Furthermore, since only one candidate can be elected per constituency, outcomes may be mechanically dependent across candidates with different occupations. To account for this potential interdependence across equations, we reestimate equation (1) using seemingly unrelated regressions across occupations, treating outcomes as zero for candidates whose occupation differs from *o*. As shown in Column 5 of Table 10, the estimates obtained using this approach closely align with our baseline results.

6.3.5 Alternative samples. Finally, we show that our baseline results remain robust in more restrictive samples, beyond the subsamples analyzed in Table 9. First, Figure A3 (Supplementary Material) demonstrates that no single département drives the results. Second, while institutional uncertainty and the timing of reforms made it unlikely that candidates could strategically switch constituencies to benefit from boundary changes, we examine this possibility directly. Strategic behavior of this kind was both rare and largely unsuccessful: between 1928 and 1936, only 52 candidates ran in different constituencies within the same département – of whom just 4 were elected – and 38 ran in different départements, with none elected. To address any remaining concerns that such strategic candidacies might be correlated with changes in voter density, we reestimate our baseline specification excluding all candidates who contested elections in two different constituencies across the period. As shown in Column 8 of Table 10, the results remain consistent with our baseline findings.

7. Conclusion

This study shows that increased urbanization during the interwar period negatively affected the electoral success of lawyers in the French lower house, while benefiting employees and workers – particularly on the left of the political spectrum. Left-wing lawyers had played a central role in enacting the early reforms of the Third Republic, most notably the secularization of the education system and the separation of Church and State (Franck, 2016). At a time when the majority of voters lived in rural areas, electoral constituencies were composed of scattered villages where a small number of intermediaries often knew

Table 10. Voter density and electoral success of lawyers and workers: robustness

Outcome	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Elected							
A. Occupation: Lawyer								
Density measure × lawyer	−0.061***	−0.328***	−0.171**	−0.061***	−0.060***	−0.047***	−0.049***	−0.066***
	[0.016]	[0.117]	[0.077]	[0.017]	[0.012]	[0.016]	[0.016]	[0.018]
Specification	Baseline	Share urban	Above median	Cluster two-way	Sur	No 1928	Lagged density	No rerun
Within R^2	0.019	0.017	0.014	0.019	0.358	0.011	0.011	0.023
Constituencies	108	108	108	108	108	108	108	108
Observations	1,614	1,614	1,614	1,614	1,614	1,084	1,084	1,492
B. Occupation: Employee or worker								
Density measure × worker	0.070***	0.401***	0.256***	0.070***	0.028***	0.077***	0.079***	0.075***
	[0.010]	[0.058]	[0.043]	[0.015]	[0.007]	[0.012]	[0.012]	[0.010]
Specification	Baseline	Share urban	Above median	Cluster two-way	Sur	No 1928	Lagged density	No rerun
Within R^2	0.049	0.048	0.045	0.049	0.358	0.041	0.041	0.058
Constituencies	108	108	108	108	108	108	108	108
Observations	1,614	1,614	1,614	1,614	1,614	1,084	1,084	1,492

Notes: Each observation is a candidate. Estimates are based on estimating equation (1), except in Column 5, where they are based on estimating a seemingly unrelated regression (SUR). All specifications include constituency and election fixed effects, the main term of the measure of voter density, an occupation indicator and département-by-election fixed effects. The measure of voter density is the log density of registered voters, except in Column 2, where it is the share of urban population, and in Column 3, where it is an indicator variable that equals one if the log density of registered voters is above the sample median. In Column 7, the density of registered voters is based on registered voters in the preceding election. In Column 8, we exclude candidates who ran in different constituencies across years. The R-squared in Column 5 is the overall R-squared. Standard errors in brackets are clustered at the constituency level, except in Column 4 where they are clustered two-way at the constituency and département-election level. $***p \leq 0.01$, $**p \leq 0.05$, $*p \leq 0.10$

every voter personally. These local figures acted as middlemen for candidates seeking to mobilize support. Lawyers, whose professional networks were built on long-standing client relationships, were well positioned to connect with these middlemen and turn their professional networks into political machines during campaigns. One such example is Louis Barthou (1862–1934), a lawyer who represented the département of Basses-Pyrénées in the lower house from 1889 to 1922 and in the upper house from 1922 to 1934. As he recounted in his memoirs:

> Anyone who has never seen, outside Paris, on market day in a small town, the waiting room of a lawyer's office filled with peasants—there for a yes, a no, or nothing at all—cannot understand how influence is patiently cultivated, how authority takes root and grows within a constituency (Barthou, 1923, p. 18).

As urbanization intensified, the professional networks of left-wing lawyers became less effective at mobilizing voters compared to those of employees and workers. Indeed, anecdotal evidence suggests that the latter had historically invested greater effort in building political organizations in urban than in rural areas (Tilly, 1986; Barzman, 1997; Vigna, 2021). The influence of unions in the electoral success of employee and worker candidates is clear from Table A12 (Supplementary Material), which compiles biographical information for the 33 elected employees and workers in our sample of 108 constituencies. Of these, 28 had documented union affiliations. A notable example is Maurice Thorez (1900–1964), who rose to lead the French Communist Party in the 1930s (Robrieux, 1975). In this light, our findings also offer a complementary explanation for the growing political prominence of employees and workers during the interwar period, culminating in the electoral victory of the left-wing Front Populaire coalition in 1936.

While our empirical design draws on the specific historical setting of interwar France, future research could examine whether the mechanisms we identify also help explain the declining dominance of lawyers in legislatures in other settings during the early 20th century, such as Germany, Italy, the UK and the USA (Bonica, 2020). More broadly, future research could offer more detailed evidence on the role of middlemen and professional networks in mobilizing voters across rural and urban constituencies. Another promising avenue involves examining the long-term rise of "career politicians" whose professional experience is limited to political roles (O'Grady, 2019; Elsässer, 2024). It would be worthwhile to explore whether urbanization raised the financial barriers to building and sustaining a political network, thereby making it increasingly difficult for ordinary citizens – aside from the very wealthy – to simultaneously pursue a professional and a political career (Carnes, 2018).

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Notes

[1.] In the United States, "lawyers" are defined as individuals holding a *Juris Doctor* degree, i.e., jurists rather than trial attorneys in the narrower Western European sense. This broader definition helps explain why the proportion of lawyers in the US House of Representatives remains higher than in most Western European parliaments.

[2.] These trends in parliamentary representation are not at odds with existing research showing that lawyers are disproportionately likely to become political leaders (Besley and Reynal-Querol, 2011; Bonica, 2020). Rather, they suggest that changing political and social conditions have reduced lawyers' electoral appeal in legislative elections without eliminating their advantage in leadership selection.

[3.] During this period, all men aged 21 and over had the right to vote, while those aged 25 and over were eligible to stand for election. Literacy was not a formal requirement for voting; in any case, it was nearly universal by the postwar period – according to the 1926 census, over 95% of adult French men were literate.

[4.] The dominant political parties of the Third Republic were formally established only in the early 20th century. The *Parti radical et radical-socialiste* and the *Alliance démocratique* held their first congresses in 1901, followed by the *Fédération républicaine* in 1903. In 1905, various socialist factions unified to form the *Section française de l'Internationale ouvrière* (*SFIO*). In 1920, a majority of SFIO activists broke away to form the *Section française de l'Internationale communiste*, soon renamed the *Parti communiste français* (*PCF*).

[5.] Galor (2011) and Gollin *et al.* (2016) explain why income, urbanization and industrialization were not necessarily correlated during the post-Malthusian era.

[6.] In countries such as Germany, Britain and the USA, industrialization also initially emerged in rural areas (Hornung, 2015; Atack *et al.*, 2022; Bogart *et al.*, 2022). Large-scale urban industrialization followed only later, driven by advances in transportation and steam technology.

[7.] According to the 1931 census, 88% of industrial establishments employed fewer than 10 workers, and another 9% employed between 11 and 50. Only 0.07% – typically in heavy industries such as mining – had more than 1,000 employees.

[8.] As noted in Appendix B (Supplementary Material), some arrondissements and cantons experienced minor boundary changes between 1928 and 1936. However, these changes did not affect the boundaries of electoral constituencies and are excluded from our analysis.

[9.] These legal constraints stand in stark contrast to the US redistricting process, where gerrymandering for partisan purposes has been a key driver of electoral district boundary changes (McGhee, 2020).

[10.] We exclude the 39 constituencies located in Paris (within the Seine département) from our main analysis, as the boundary changes there did not affect voter density in this already highly urbanized area. However, supplementary regressions indicate that including them does not materially alter our results.

[11.] We report election-specific summary statistics in Table A1 (Supplementary Material).

[12.] Military personnel on active duty were barred from voting and standing for election. However, a small number of retired military professionals did run for office. Given their limited number and their frequent association with land ownership, we classify them as landowners. We further classify the three law students and 19 notary candidates in our data as lawyers.

[13.] These variables could, in principle, be endogenous to the density of registered voters. Reassuringly, our robustness checks indicate that including them in the analysis does not affect the results.

[14.] These tests draw on additional variables, whose sources we detail in Appendix C (Supplementary Material). We provide summary statistics for these variables in Tables A5 and A6 (Supplementary Material).

[15.] We do not include constituency or département-by-election fixed effects because the variable $\texttt{treated}_c$ is time-invariant at the constituency level in this specification.

[16.] Electoral constituencies are not a standard unit of statistical reporting – aside from electoral data – and census statistics are not available at levels of aggregation smaller than the département – aside from population data. To overcome this limitation, we draw on judicial statistics reported at the arrondissement level, which closely approximates electoral constituencies (Gay, 2021, pp. 195–196). In addition, we use price and wage data collected at the city level, which we aggregate up to the level of electoral constituencies. See Appendix C (Supplementary Material) for details.

[17.] Results are also marginally significant for engineers, though this group consisted of only 26 candidates.

[18.] As noted in Section 3, census dates do not coincide exactly with election dates. We use the March 1926 census for the April 1928 election, the May 1931 census for the May 1932 election and the March 1936 census for the May 1936 election.

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Supplementary material

The supplementary material for this article can be found online.

Corresponding author

Victor Gay can be contacted at: victor.gay@tse-fr.eu