



HAL
open science

Urbanization and Electoral Success: Lawyers and Workers in Interwar France

Raphaël Franck, Victor Gay

► **To cite this version:**

Raphaël Franck, Victor Gay. Urbanization and Electoral Success: Lawyers and Workers in Interwar France. 2024. hal-04364519v2

HAL Id: hal-04364519

<https://hal.science/hal-04364519v2>

Preprint submitted on 8 Aug 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

Urbanization and Electoral Success: Lawyers and Workers in Interwar France*

Raphaël Franck[†] Victor Gay[‡]

August 2024

Abstract

This study argues that urbanization altered 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 was detrimental to the electoral success of lawyers, but beneficial to that of employees and workers. This effect was concentrated on the left of the political spectrum, whereby left-wing employees and workers crowded out left-wing lawyers.

Keywords: Election, Political representation, Urbanization.

*We thank Gerda Asmus, Richard Bluhm, Charlotte Cavaillé, David de la Croix, Anne Degrave, Michael Denly, Michael Donnelly, Shari Eli, Katherine Eriksson, James Fenske, Paula Gobbi, David Mitch, Claudia Rei, Harm Rienks, Michele Rosenberg, Noam Yutchman, as well as seminar and conference participants at Heidelberg University, Hohenheim University, Université Libre de Bruxelles, the Institute for Advanced Study in Toulouse, the Virtual Economic History seminar, and the European Public Choice conference for helpful conversations and comments. Victor Gay gratefully acknowledges funding from the ANR under grant ANR-17-EURE-0010 (Investissements d'Avenir program).

[†]Hebrew University of Jerusalem, Department of Economics, Mount Scopus, Jerusalem 91905, Israel, CEPR, Cesifo & GLO. Email: raphael.franck@mail.huji.ac.il.

[‡]Department of Social and Behavioral Sciences, Toulouse School of Economics and Institute for Advanced Study in Toulouse, University of Toulouse Capitole, Toulouse, France. Email: victor.gay@tse-fr.eu.

1. Introduction

Lawyers dominated parliamentary representation in many countries at the turn of the twentieth century. After the First World War, however, their importance began to decline to the benefit of candidates from other occupations, especially employees and workers. This is best illustrated by the two countries that introduced universal male suffrage in the late nineteenth century: France and the United States. In 1876, lawyers held 68 and 36 percent of seats in their respective Lower Houses. These shares subsequently declined to 38 percent in 2012 in the United States and to 6 percent in France.¹ Likewise, lawyers represent less than 15 percent of representatives in the current Lower Houses of Germany, Italy, and the United Kingdom (Kintz, 2010; McGuinness, 2010; Petersen, 2012).² These long-term trends in political representation have important implications for policy and welfare as highly-educated politicians, such as lawyers, are much less likely to enact policies favorable to working-class voters than other politicians (see, e.g. Besley, Montalvo and Reynal-Querol, 2011; Carnes and Lupu, 2015; Carnes and Lupu, 2016a; Carnes and Lupu, 2023).

In this study, we argue that the historical decline of lawyers' parliamentary representation in France, and the mirroring rise of working-class politicians, can be explained by the process of urbanization, which eroded lawyers' advantage over other candidates: their professional networks of clients were essentially rural and played the role of political machines to mobilize voters on election day in a context where parties were yet institutionalized. In contrast, working-class politicians benefited from urbanization as their professional networks, linked to local trade unions, were more developed in urban areas.

We focus on the 1928, 1932, and 1936 elections to the Lower House of the French Parliament and exploit changes in the boundaries of electoral constituencies as a source of exogenous variation in the density of registered voters – our main measure of urbanization – to assess how it affected the electoral success of lawyers relative to that of employees and workers. For this purpose, we mobilize two novel sources of historical data. First, through archival work, we collect information on the occupations of both successful and unsuccessful candidates to parliamentary elections. Second, we develop an original historical geographic information system (GIS) of French electoral constituencies to determine

¹In the United States, “lawyers” are individuals with a *Juris Diploma*, i.e., jurists, but not trial lawyers in the strict sense as in Western European countries. This difference in definition explains why the proportion of lawyers in the House of Representatives remains higher than in Western European parliaments.

²These trends in parliamentary representation do not contradict previous research showing that lawyers are more likely to become political leaders (Besley and Reynal-Querol, 2011). However, they suggest that changing circumstances have affected lawyers' ability to win parliamentary elections but have not prevented them from becoming political leaders. We can speculate that lawyers benefit from the connections they share with each other, their oratorical skills, or the comparative advantage their legal studies give them in parliament since the bulk of parliamentary work involves writing laws.

their precise boundaries during the interwar period. This enables us to compute the density of registered voters in each constituency and election as well as various constituency-level characteristics.

We consider the interwar period because it represents a critical juncture when the balance shifted from the initial political elites of the Third Republic – typically, lawyers – to working-class politicians of the left-wing *Front Populaire* coalition. In addition, this period was characterized by the stability of electoral rules in the form of a two-round majority single-member district system (Marty, 2013; Ehrhard and Passard, 2020).³ Legal and political institutions also severely limited the ability of candidates to the Lower House – including incumbents – to manipulate the boundaries of electoral constituencies. In fact, changes in the electoral geography that occurred during this period were ultimately enacted by members of the Upper House and by *préfets*, i.e., high-level civil servants appointed by the central administration. We support the validity of this design through several empirical tests: we show that electoral outcomes did not predict future boundary changes, that constituencies that experienced boundary changes were similar to those that did not, and that changes in voter density due to these boundary changes did not affect the socio-economic composition of these constituencies *ex post*.

Our results suggest that the increasing density of registered voters depressed the share of lawyers in the Lower House while it increased that of employees and workers. Quantitatively, a one-standard deviation increase in the density of voters within a constituency decreased the average electoral probability of success of lawyers by 5 percent, while it increased that of the employees and workers by 15 percent. This effect was concentrated on the left of the political spectrum, whereby left-wing employees and workers crowded out left-wing lawyers in urbanizing constituencies.

Finally, we perform several tests to establish the robustness of our results. In particular, to ensure that they are not driven by unobservable factors that could lead to both changes in the boundaries of electoral constituencies and variations in voter density over time, we conduct a placebo test on the sample of counterfactual constituencies whose boundary changes were debated by members of the Lower House but ultimately rejected by their counterparts in the Upper House. We also show that our results are robust to alternative measures of urbanization, estimation methods, and sampling strategies.

³Throughout this period, all men aged 21 could vote, and those aged 25 were eligible, while literacy was not a requirement for voting. In any case, literacy was nearly universal in France after World War I—the 1926 census reports that more than 95 percent of adult French men could read and write.

2. How does urbanization shape political representation?

In this section, we discuss the theoretical underpinnings of the relationship between urbanization and political representation. We also review alternative theories that are unlikely to fully account for changes in the occupations of parliamentarians in interwar France.

2.1. Urbanization and the occupations of parliamentarians

Urbanization may have affected parliamentary representation through voter mobilization. Since candidates can only be successful if they mobilize enough voters on election day, they must operate a political machine with operatives who can canvass their constituencies to mobilize voters (Stokes, 2005; Larreguy, Marshall and Querubin, 2016). In interwar France, however, political parties were not developed enough as national organizations to sustain such political machines (Kreuzer, 2001).⁴ As a result, candidates had to rely on their own pre-existing professional networks to garner votes in a country that was predominantly rural at the turn of the century. In this respect, lawyers had a comparative advantage over other candidates because their professional client networks were essentially rural: through their professional activities, lawyers knew middlemen, i.e., men of importance in rural villages, on whom they could rely to mobilize voters (Le Béguec, 2003). However, with the urban population increasing from 31 percent in 1872 to 47 percent in 1926, and 52 percent in 1936, the electoral advantage of lawyers' professional networks declined. Conversely, employees and workers benefited from urbanization because their professional networks, linked to local trade unions and to national political parties, were more developed in urban areas (Lefranc, 1968; Moss, 1976). This argument is consistent with Lupu and Pontusson (2024) who find that working-class candidates are more likely to be elected in constituencies with higher union density, as well as with studies that emphasize the informational value of (even loose) party affiliations and of professional connections, in light of the rational ignorance of voters who cannot know all the candidates in an election on a personal basis (for a survey, see, e.g., Prat, 2004).

Our perspective is also related to studies showing that redistricting can affect the outcome of elections (e.g., Ansolabehere, Snyder and Stewart, 2000; Hetherington, Larson and Globetti, 2003; Carson, Engstrom and Roberts, 2006; Hayes and McKee, 2009). This lit-

⁴The dominant political parties of the Third Republic were “officially” founded at the turn of the twentieth century: the *Parti Radical et Radical-Socialiste* and the *Alliance Démocratique* held their first congress in 1901, the *Fédération Républicaine* in 1903, while the various socialist groups agreed to unite in 1905 as the *Section Française de l'Internationale Ouvrière* (SFIO). In 1920, the majority of socialist activists formed the *Section Française de l'Internationale Communiste* which would soon be renamed *Parti Communiste Français* (PCF).

erature has emphasized strategic entry decisions by politicians, incumbency advantage, or even turnout, often in conjunction with gerrymandering. These channels are however unlikely to have had a substantial impact on political representation in interwar France. As our discussion of the institutional framework in Section 3 suggests, and our series of balance tests in Section 5 confirm, both candidates and incumbents could not strategically shape the boundaries of the electoral constituencies.

2.2. Alternative theories

Contemporary commentators on interwar French politics had already noticed the decline of lawyers in Parliament after WWI, despite their dominance at the expense of the landed aristocracy in the early years of the Third Republic (Thibaudet, 1927; Halévy, 1930). In particular, Thibaudet (1927) argued that this trend resulted from the cultural change within the leadership of the then dominant party – the center left-wing *Parti Radical et Radical-Socialiste* – as a delayed outcome of the Dreyfus Affair that divided France along political and religious lines between 1894 and 1906 (Thomas, 1978). Such a cultural and historical explanation tied to the French political context cannot however explain the decline of lawyers in countries other than France. Later, Gaudemet (1968) suggested that this trend may instead have resulted from increased opportunities offered by legal practice during this period. This explanation is however at odds with census data, as the number of lawyers remained stable at 160 per million inhabitants between 1876 and 1936.

Another strand of literature has emphasized structural transformation and special-interest politics as drivers of political change (Rueschemeyer, Stephens and Stephens, 1992; Aidt and Jensen, 2016; Ashraf et al., 2024). Peasants voted for lawyers instead of landed aristocrats because they came from comparable social backgrounds and differed only in their educational attainment. However, employees and workers supported members of their own occupational groups rather than lawyers, whom they viewed as less likely to implement their preferred policies—see, e.g., Barnes and Saxton (2019), Carnes and Lupu (2016b), and specifically Duverger (1954) and Gouault (1954) on France before WWII.

Nevertheless, the historical and economic context of interwar France makes it unlikely that changes in population density would significantly alter the social or occupational composition of the voting population. In fact, urbanization in interwar France was not spatially correlated with industrialization or the share of employees and workers in the labor force.⁵ Historical patterns of French industrialization were rather characterized by the presence of small industrial firms in rural areas relying on water-powered engines rather than steam

⁵Galor (2011) and Gollin, Jedwab and Vollrath (2016) discuss why income, urbanization, and industrialization were not necessarily correlated in the post-Malthusian period.

power, as coal was relatively scarce in France (Cameron and Neal, 2003; Franck and Galor, 2021).⁶ Even with the advent of more technologically advanced steam engines that were less reliant on coal, French industries remained equally likely to be located in urban or rural areas, and continued to be characterized by their small size. For instance, the 1931 census reports that 88 percent of industrial establishments had fewer than 10 employees, while 9 percent had between 11 and 50 employees. Only 0.07 percent, usually in heavy industries such as mining, had more than 1,000 employees.

Overall, anecdotal evidence suggests that gerrymandering, industrialization, wages, the social composition of the labor force within constituencies, or the opportunity cost of practicing law are unlikely to provide convincing explanations for the declining share of lawyers in Parliament in interwar France. This is confirmed by the empirical tests we perform in Section 5.

3. Boundary Changes to Electoral Constituencies in 1928–36

This section describes 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 territory into *départements*, *arrondissements*, and *cantons*, and how it constrained and shaped electoral constituencies. Section 3.2 then discusses the two types of legal processes that resulted into the electoral boundary changes we use for identification: electoral reforms and territorial reforms. Finally, Section 3.3 describes the counterfactual reforms that we use in a series of robustness tests, i.e., electoral reforms which were debated in the Parliament but ultimately not enacted.

3.1. Administrative divisions and electoral constituencies

The administrative organization of France’s territory during the interwar period dated back to the aftermath of the 1789 Revolution, long before the formal establishment of the Third Republic in 1875 (Ozouf-Marignier, 1989; Gros, 2014, pp. 307–35). *Départements* represented the upper level of territorial administration. They were originally designed to be small enough so that it would take at most a one-day journey by horse ride to reach their administrative center, the *préfecture*. The *préfecture* was headed by a *préfet*, a high-ranking official appointed by the central government to implement its policies and manage the local administration of the *département*. He was assisted by several *sous-préfets* who headed each *arrondissement* of the *département* at the *sous-préfecture*—*départements* were divided

⁶In other countries, such as Germany and the United States, industrialization also began in rural areas (Hornung, 2015; Atack, Margo and Rhode, 2022). Only later did industrial firms move to urban areas due to the development of railroads and to more efficient steam engines.

into an average of three arrondissements. Each arrondissement was in turn divided into cantons – eleven on average – which were territorial divisions with no administrative prerogatives beyond centralizing election results and transmitting them to the sous-préfecture. Panel (a) of Appendix Figure A1 displays this territorial organization. Finally, below cantons, the territory was organized into *communes*, administered by a municipal council and headed by a mayor. In 1928, France had 90 départements, 279 arrondissements, 3,024 cantons, and 38,014 communes.⁷

Throughout the Third Republic, boundaries of electoral constituencies closely followed the administrative divisions of the territory described above (Gaudillère, 1995; Marty, 2013; Gay, 2021). First, electoral constituencies were confined to départements – whose borders were not modified between 1928 and 1936 – so that no electoral constituency spanned several départements. Second, boundaries of electoral constituencies followed those of arrondissements and cantons.⁸ Third, electoral constituencies had to encompass contiguous territorial divisions, preventing the existence of disjointed constituencies and enclaves. Thus, while changes to electoral constituencies were feasible, the ability of politicians to manipulate their shapes for electoral gain was limited by the pre-existing administrative structure. As a result, the 593 electoral constituencies of interwar France in 1928 were relatively homogeneous, small, and compact, as shown in Panel (b) of Appendix Figure A1.⁹

3.2. Types of boundary changes to electoral constituencies

Boundaries of electoral constituencies could be modified in two ways: either explicitly through “electoral” reforms that were *in fine* approved by members of the Upper House, or implicitly through “territorial” reforms that were *in fine* approved by the département’s préfet. Between 1928 and 1936, 34 electoral constituencies underwent changes in their boundaries. These electoral constituencies spanned 11 départements, which also included 74 other constituencies whose boundaries were not modified, as shown in Panel (a) of Appendix Figure A2. Our main sample therefore includes 108 constituencies.¹⁰ In Appendix Table B1, we

⁷The average territory of départements covered 6,094 square kilometers (standard deviation of 1,674), that of arrondissements, 1,966 square kilometers (standard deviation of 995), that of cantons, 179 square kilometers (standard deviation of 90), and that of communes, 14 square kilometers (standard deviation of 15) (Gay, 2021).

⁸As noted in Appendix B, the boundaries of several arrondissements and cantons underwent minor changes between 1928 and 1936. These arrondissements and cantons are not part of our analysis because these changes did not modify the boundaries of electoral constituencies.

⁹These sets of rules imply that redistricting in interwar France differed substantially from that of the United States, where gerrymandering for partisan advantage has been a major determinant of changes to electoral constituency boundaries (for a survey, see McGhee, 2020).

¹⁰We do not include the 39 constituencies in the city of Paris (in the Seine département) in our analysis because boundary changes did not modify the density of voters in this highly urbanized area. Additional regressions

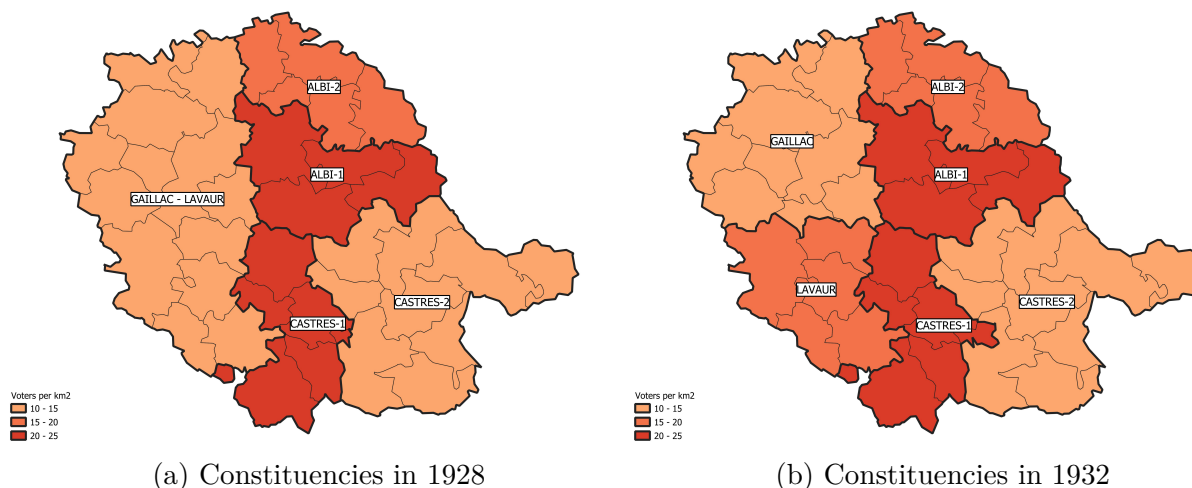


Figure 1. Boundary Change: Constituencies of Gaillac and Lavour, Département of Tarn, 1928–32

Notes. Thick black lines represent electoral constituencies, thin black lines represent cantons.

provide a summary of the boundary changes that we use for identification. In Appendix B, we further discuss each of these changes in detail, providing their type, legal rationale, parliamentary support, archival sources, and how we integrate them in our dataset.

3.2.1. Electoral reforms

Members of the Lower and Upper Houses of Parliament could initiate direct modifications to the boundaries of electoral constituencies by amending the electoral law regulating the upcoming election. They enacted seven amendments enacted during the drafting of the 1932 and 1936 electoral laws. In four cases, changes aimed at balancing the size of the electorate between constituencies: two of them resulted in the creation of new constituencies and two of them involved the transfer of several cantons between constituencies. In three other cases, boundary changes involved the re-establishment of former constituencies that had been abolished before the 1928 elections. For example, Figure 1 displays the division of the constituency of Gaillac-Lavour in the département of Tarn into two constituencies, while Figure 2 shows the creation of the constituency of Sedan in the département of Ardennes following the division of the constituencies of Vouziers and Mézières-1. Appendix Figures B2–B6 further display the other five boundary changes entailed by electoral reforms.

Several institutional features of electoral reforms made it unlikely that members of the Lower House could strategically manipulate the boundaries of electoral constituencies. First, changes to electoral boundaries were *in fine* approved by members of the Upper House, who nonetheless show that our results are similar when they are included.

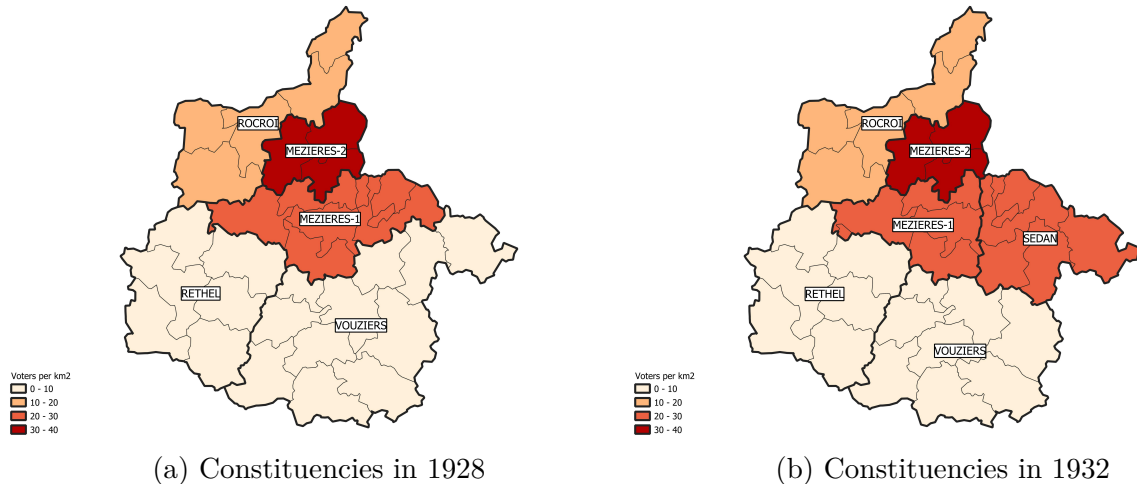


Figure 2. Boundary Change: Constituencies of Sedan and Mézières-1, Département of Ardennes, 1928–32

Notes. Thick black lines represent electoral constituencies, thin black lines represent cantons.

had *de facto* veto power in the matter (Berstein, 2014). Moreover, their electoral incentives were different from those of their counterparts in the Lower House: Upper House members were elected under different electoral rules (their constituencies were départements), under indirect suffrage (the franchise was restricted to those with a local political mandate such as mayors), and under a different electoral cycle (they served a nine-year term within an Upper House that was renewed by a third every three years). Members of the Upper House also exhibited little connivance with their counterparts in the Lower House and were often in opposition (Berstein, 2014).

Second, not only was there *ex ante* uncertainty about which amendment would pass, as only seven of the nineteen proposed electoral reforms were ultimately enacted in 1932 and 1936, but the timing between the adoption of the laws and the first round of the elections was also relatively short: electoral laws modifying constituencies were adopted on March 25, 1932 and March 20, 1936, only a month before the parliamentary elections on May 1st, 1932 and April 26, 1936. Moreover, in both instances, the list of qualified voters in each constituency was closed only five days after the enactment of the electoral laws. It is therefore unlikely that candidates could swiftly and massively move their supporters across constituencies to alter the composition of the electorate and win the election. It is also unlikely that incumbents could quickly target public spending towards the newly qualified voters.

Third, there is no historical evidence that members of the Upper House sought to promote one or several occupational groups at the expense of others. Even if they were aware of

the declining electoral success of lawyers, they would probably have attributed this decline to the cultural explanations that were *en vogue* during the interwar period rather than to urbanization as discussed above (Thibaudet, 1927; Halévy, 1930). In fact, changes to the boundaries of electoral constituencies often resulted from the joint efforts of parliamentarians with different occupations and across the political spectrum, as we discuss in detail in Appendix B. For instance, the constituency of Sedan displayed in Figure 2 was established through the bipartisan efforts of four Lower House members, none of whom were lawyers or workers.

3.2.2. Territorial reforms

Territorial reforms indirectly modified electoral constituencies: the transfer of one or two communes between cantons changed the boundaries of constituencies that followed those of cantons. Between 1928 and 1936, there were seven such changes.

A careful reading of the administrative reports motivating these territorial reforms suggests that they emanated from the municipal councils of the communes directly affected by the transfer, with the aim of increasing their geographic proximity to the administrative center of their canton. These changes were then enacted by the local préfet in agreement with high-ranking officials of the Ministry of the Interior. Therefore, the local nature of these territorial reforms made it unlikely that they were driven by the candidates' strategic electoral motives at the constituency level.

3.3. Counterfactual reforms

During the drafting of the 1932 and 1936 electoral laws, twelve amendments proposing electoral reforms to the boundaries of twenty-eight constituencies in ten départements were debated but ultimately not adopted, as shown in Panel (b) of Appendix Figure A2. While these proposals were initiated by members of the Lower House, they were ultimately rejected by their counterparts in the Upper House. We summarize these counterfactual boundary changes in Appendix Table B2 and provide more details in Appendix B. Figures therein further display the other counterfactual boundary changes. We use these counterfactual reforms in some of our robustness tests to support the validity of our empirical strategy.

4. Data

This section presents the main variables of our analysis. Section 3.1 discusses the construction of our main explanatory variable, i.e., the density of registered voters. Section 3.2 focuses on candidates' occupations and electoral performance, and Section 3.3 presents

constituency-level characteristics. Appendix Tables A1–A4 provide summary statistics. The mapping from political affiliation to political leaning into left, right, and independent for each election is detailed in Appendix Tables A5 and A6. Appendix C provides additional details on the sources of the historical data we use and on the construction of the panel of constituencies.

4.1. Urbanization

Our main measure of urbanization is the (log) density of registered voters per square kilometer in each electoral constituency and election. To compute the area of a constituency, we use Gay (2020; 2021)’s *Third-Republic France GIS* shapefiles, which we supplement by drawing the exact boundaries of infra-municipal constituencies. For each constituency, we further collect the number of registered voters from archival records of official election results (Lachapelle 1928; 1932; 1936).

In the 108 electoral constituencies of our main sample, the average number of registered voters was stable throughout the period at around 21 thousand, while voter density remained at around 450 per square kilometer. This apparent stability, however, masks large spatial disparities caused by boundary changes. For instance, between 1928 and 1936, voter density of the constituency of Saint-Denis-12 in the département of Seine decreased by 39 percent while that of the constituency of Caen-1 in the département of Calvados increased by 89 percent over the same period. These large disparities are also apparent when comparing changes in (log) voter density between elections across treated and untreated constituencies in Appendix Table A7: while treated and untreated constituencies became equally more dense on average, the standard deviation of the change in voter density was nearly four times greater in treated constituencies (0.23) than in untreated ones (0.06).

To ensure that our results are not driven by this specific definition of voter density, we construct an alternative measure to test the robustness of our results based on census data: the share of the urban population. From the perspective of our study, however, the density of registered voters remains a better measure of urbanization than the share of the urban population. First, it measures the spatial distribution of registered voters at the precise moment of the elections. In contrast, information on the urban population is from the census and is therefore not synchronized with the timing of elections. Second, the density of registered voters is an objective measure that does not depend on some arbitrary classification of the population into urban and rural categories, however stable over time.

4.2. Candidates' occupations and electoral performance

There were 1,614 candidates in the 108 constituencies we analyze in the 1928, 1932, and 1936 elections. Using the archival records of official election results, we collect vote shares for each candidate in each round (Lachapelle 1928; 1932; 1936). We also collect the political affiliations of all candidates in our sample, which we then match to their occupations using Robert and Cougny's (1889) and Jolly's (1960) dictionaries of French parliamentarians. Information on candidates' occupations in these dictionaries is based on political manifestos, which we supplement with secondary sources listed in Appendix C.8.

Based on these archival records, we classify each candidate into one of twelve occupations: artists, businessmen, clergymen, doctors (including pharmacists and veterinarians), engineers (including scientists other than doctors), workers (including employees in the private sector), mid- or low-level civil servants, high-level civil servants, judges, journalists, landowners, lawyers (including solicitors), professors (including primary school teachers), and notaries.¹¹ In our sample of 1,614 candidates, lawyers were among the most common occupation (263 candidates), as well as employees and workers (472 candidates), representing 16 and 29 percent of all candidates, respectively. Businessmen (301 candidates) and landowners (158 candidates) were also frequent occupations, representing 19 and 10 percent of all candidates. Doctors represented 6 percent of all candidates. In addition, 69 percent of candidates were on the left of the political spectrum.

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

Over time, the share of lawyers among winners declined from 26 percent in 1928 to 19 percent in 1936, although their share among candidates remained stable at 16 percent. In contrast, while the share of employees and workers among candidates declined from 32 percent in 1928 to 26 percent in 1936, their share among winners increased from 10 to 25 percent. These trends suggest that lawyers were displaced by employees and workers during the interwar period.

¹¹Military professionals on active duty could neither vote nor run in elections. However, a few retired military professionals ran for office. Because of their limited numbers and the fact that they usually owned land, we classify them as landowners.

4.3. Constituency characteristics

Some of the specifications in our empirical analysis account for constituency characteristics that may have affected electoral outcomes. These characteristics include voter turnout, the number of candidates in each constituency and election, as well as an indicator variable that equals one if an incumbent candidate ran in a given election. We also compute a measure electoral competitiveness as in, e.g., Gavaille and Verschelde (2017), which is defined as the inverse of a Herfindahl index in candidates' vote shares ($1 - \sum \text{vote_share}^2$) and scaled between zero and one.

In the 324 electoral contests held in 1928, 1932, and 1936 in 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 twelve. In 69 percent of these contests, a second round was held because no candidate received more than half the vote in the first round. In addition, 16 percent of candidates were incumbents, while average turnout represented 84 percent of registered voters.

These variables could however be endogenous to the density of registered voters. Reassuringly, we show in robustness checks below that this is not the case and that including them does not alter our main results.

5. Empirical Framework

This section presents our empirical framework. Section 5.1 discusses the econometric specification while Section 5.2 provides empirical tests supporting the validity of our identifying assumptions.

5.1. Estimation strategy

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

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

where elected_{i_ocrdt} is an indicator variable that equals one if candidate i with occupation o in constituency c of département d in election t was elected. The coefficient of interest, β_3 , captures the interaction between the log density of registered voters in constituency c and election t (density_{ct}) and an indicator variable for whether candidate i holds occupation o ($\mathbb{1}_{[i=o]}$). We use the panel structure of our data by including constituency (α_c) and

département-by-election fixed effects (α_{dt}), so that β_3 estimates the electoral (dis)advantage of candidates with a given occupation across constituencies of the same département whose voter density changed over time. We cluster standard errors at the level of electoral constituencies. Moreover, to ensure that our results are not driven by political competition, we include fixed effects for the set of the candidates with other occupations competing in a given election and constituency. We also control for constituency-level characteristics that capture local electoral circumstances.

We also assess heterogeneity across the political spectrum by estimating a triple interaction for candidates with occupation o affiliated to party p :

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

where $\text{elected}_{i_{op}cdt}$ is an indicator variable that equals one if candidate i of party p with occupation o in constituency c of département d in election t was elected. Other variables are the same as in Equation 1. We then test the following hypothesis:

$$(3) \quad H_0: \hat{\beta}_4 + \overline{\text{density}_{ct}} \cdot \hat{\beta}_6 = 0,$$

where $\overline{\text{density}_{ct}}$ is the average log density in constituency c in election t , and $\hat{\beta}_4$ and $\hat{\beta}_6$ are estimates from Equation 2. Failure to reject the null would imply no heterogeneity in the effect of voter density for occupation o across parties.

5.2. Identifying assumptions

Our empirical framework identifies the electoral effects of variation in voter density induced by exogenous changes in the boundaries of electoral constituencies. The internal validity of this strategy faces three challenges. First, boundary changes in a given election should not be driven by electoral outcomes from the previous election. Second, treated constituencies should be balanced relative to untreated ones in the same département. And third, the Stable Unit Treatment Value Assumption (SUTVA) should hold: changes in voter density should not affect other economic and political constituency characteristics post treatment. As discussed in Section 2, the economic, institutional, and political context of interwar France makes it likely that these assumptions hold. Nevertheless, we conduct a series of empirical tests to support their validity using additional variables whose sources are listed in the Appendix and whose summary statistics are given in Appendix Tables A8 and A9.

Table 1. Previous Electoral Outcomes and Boundary Changes

Outcome:	Boundary Change in the Following Election						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Turnout	-0.007 [0.013]						
Number of candidates		0.031 [0.026]					
Competitiveness			0.183 [0.392]				
<i>Elected</i>							
Lawyer				0.082 [0.110]			
Worker					0.163 [0.250]		
Left wing						0.035 [0.103]	
Right wing							-0.109 [0.102]
Within R ²	0.005	0.013	0.002	0.006	0.009	0.002	0.017
Constituencies	108	108	108	108	108	108	108
Observations	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 inverse 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. *** $p \leq 0.01$. ** $p \leq 0.05$. * $p \leq 0.10$.

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

$$(4) \quad \text{boundary_change}_{cd,t} = \beta X_{c,t-1} + \alpha_c + \alpha_{dt} + \varepsilon_{cd,t}$$

where $\text{boundary_change}_{cd,t}$ is an indicator variable that equals one if constituency c in département d experienced a boundary change in the period leading to election t and $X_{c,t-1}$ is a variable pertaining to the nature of political competition in the previous election: turnout, competitiveness, and indicators for whether the elected candidate was a lawyer, a worker, left wing, or right wing. As in Equation 1, we include constituency (α_c) and département-by-election fixed effects (α_{dt}). This specification thus consists in a two-period panel: electoral

outcomes refer to the 1928 and the 1932 elections, while boundary changes refer to those that occurred in the lead-up to the 1932 and 1936 elections. We report the results in Table 1. We find small and insignificant coefficients associated with each right-hand side variable, thereby relieving concerns that political outcomes in one electoral contest drove boundary changes in the following election.

Next, we assess whether treated constituencies exhibit balancedness relative to untreated ones in the same *département* with the following specification:

$$(5) \quad X_{cdt} = \beta \text{treated}_c + \alpha_d + \alpha_t + \varepsilon_{cdt}$$

where $X_{cd,t}$ is a constituency-level characteristic measured in election year t and treated_{cd} is 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 effects.¹² These characteristics consist in measures of judicial and economic activity that are possible to reconstruct at the level of electoral constituencies: the number of civil, commercial, and police cases, the number of firm failures, the number of labor disputes, a consumer price index, and a wage index for all occupations—all these variables are logged in the analysis. We report the results in Table 2, where we find small and insignificant coefficients, suggesting that treated and untreated constituencies are balanced.

Table 2. Balance Tests: Characteristics of Constituencies With and Without Modified Electoral Boundaries

Outcome:	Civil cases	Commercial cases	Police cases	Firm failures	Labor disputes	Wage index	Price index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treated constituency	0.152 [0.108]	0.142 [0.111]	0.072 [0.073]	0.066 [0.105]	-0.017 [0.432]	0.010 [0.009]	0.002 [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. One observation is a constituency-election. All specifications include *département* and election fixed effects. All variables are logged. See the main text of a definition of variables. Standard errors in brackets are clustered at the constituency level. *** $p \leq 0.01$. ** $p \leq 0.05$. * $p \leq 0.10$.

Finally, we test whether changes in voter density affected constituencies’ judicial and economic characteristics post treatment—the SUTVA assumption—with the following spec-

¹²Note that we do not include constituency or *département*-by-election fixed effects because the treated_c variable is fixed over time at the constituency level.

ification:

$$(6) \quad X_{cd,t+1} = \beta \text{density}_{c,t} + \alpha_c + \alpha_{dt} + \varepsilon_{cd,t}$$

where $X_{cd,t+1}$ is a constituency-level characteristic – the same ones as before – measured one year after election year t and $\text{density}_{c,t}$ is the log density of registered voters in election year t . As in Equation 1, we include constituency (α_c) and département-by-election fixed effects (α_{dt}). We report the results in Table 3. Again, we find small and insignificant coefficients, suggesting that the SUTVA assumption holds as changes to constituencies’ boundaries did not alter their underlying socio-economic composition.

Table 3. SUTVA Tests: Voter Density and Constituency Characteristics

Outcome:	Civil cases	Commercial cases	Police cases	Firm failures	Labor disputes	Wage index	Price index
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log density	-0.131 [0.411]	0.097 [0.463]	0.016 [0.337]	0.121 [0.563]	-0.103 [0.333]	0.040 [0.024]	0.001 [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. One observation is a constituency-election. All specifications include constituency and département-by-election fixed effects. All variables are logged. See the main text of a definition of variables. Standard errors in brackets are clustered at the constituency level.

*** $p \leq 0.01$. ** $p \leq 0.05$. * $p \leq 0.10$.

A final potential concern with our identification strategy is that it relies on variation in a selected set of départements, i.e., the 11 départements with electoral constituencies whose boundaries were modified over the 1928–36 period. While it is impossible to formally test the external validity of our results, we provide evidence that these départements were no different from the 79 other départements on a wide range of characteristics. Specifically, Panel A of Appendix Table A10 tests for differences in socio-demographic characteristics, i.e., the number of lawyers and registered voters, fertility and literacy rates, and road density. Panel B tests for differences in the characteristics of préfets as they played a role in the implementation of territorial reforms: their age, whether they were lawyers, had another occupation, or were members of the Lower House before joining the civil service, and their turnover rate, i.e., the number of years they remained in the same département. Panel C tests for differences in the occupations and party affiliations of sitting members of the Upper House in départements with and without treated constituencies before each election. Panel D

tests for those of candidates to the Lower House in each election. Reassuringly, all these balance tests show no significant difference between départements with and without treated constituencies, supporting the external validity of our results.

6. Results

Section 6.1 presents our baseline results of the causal relationship between voter density and the electoral success of lawyers and workers. Next, Section 6.2 assesses heterogeneity in this relationship across the political spectrum. Finally, Section 6.3 provides a series of robustness checks that support the validity of our empirical strategy.

6.1. Voter density and electoral success by occupation

Table 4. Voter Density and Electoral Success of Lawyers and Workers

Outcome:	Elected			Vote share		
	(1)	(2)	(3)	(4)	(5)	(6)
A. Occupation: Lawyer						
Log density \times lawyer	-0.061*** [0.016]	-0.061*** [0.016]	-0.030*** [0.010]	-3.783*** [0.783]	-3.794*** [0.784]	-2.163*** [0.496]
Département \times 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 \times worker	0.068*** [0.010]	0.070*** [0.010]	0.044*** [0.008]	4.860*** [0.536]	4.967*** [0.558]	3.707*** [0.450]
Département \times 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. *** $p \leq 0.01$. ** $p \leq 0.05$. * $p \leq 0.10$.

Table 4 reports results from estimating Equation 1 for lawyer as well as for employee-and-worker candidates. They suggest that a higher density of registered voters was detrimental to the electoral success of lawyers (Panel A) but beneficial to that of employees and workers (Panel B). When including département-by-election fixed effects in Column (2), estimates

imply that a ten-percent increase in the density of registered voters decreased the probability of electoral success for lawyers by 0.6 percentage points but increased that for employees and workers by 0.7 percentage points. Put differently to gauge magnitudes, a one-standard deviation increase in the change in log density of registered voters among treated constituencies (0.23, corresponding to 400 registered voters per square kilometer) was associated with a decrease in the success probability of lawyers by 1.4 percentage points, i.e., 5.1 percent of their average probability of electoral success (27.4 percent). Conversely, a similar increase in voter density improved the success probability of employees and workers by 1.6 percentage points, i.e., 14.5 percent of their average probability of electoral success (11.0 percent). 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 positive and significant effect on the vote share of employees and workers.

In Columns (3) and (6), we further control for local electoral conditions through a set of fixed effects for the occupations of other candidates, the number of candidates, the number of rounds, first round turnout, and for the presence of the incumbent. Coefficients decline slightly but remain statistically significant, suggesting that potential mediating effects through local electoral conditions do not account for the results, which we confirm in robustness checks below. Nevertheless, given the potential endogeneity of these controls, we do not include them further in the analysis—although all the results are robust to their inclusion.

In Figure 3, we display the coefficients from Column (2) of Table 4 for lawyers and workers along those for candidates with other occupations—the full set of estimates for these occupations are reported in Panel A of Appendix Table A12. These results show that changes in voter density did not have a robust significant effect on the electoral success of candidates with other occupations, e.g., businessmen, except for doctors and landowners, for whom urbanization was also detrimental. Indeed, like lawyers, doctors were educated and self-employed individuals who could use their professional influence to build network in rural constituencies. Landowners also used to mobilize their rural networks in electoral contests. They were however smaller groups, with 92 candidate doctors and 158 candidate landowners, compared to 263 candidate lawyers.¹³

¹³Results are also marginally significant for engineers, who represented a group of only 26 candidates.

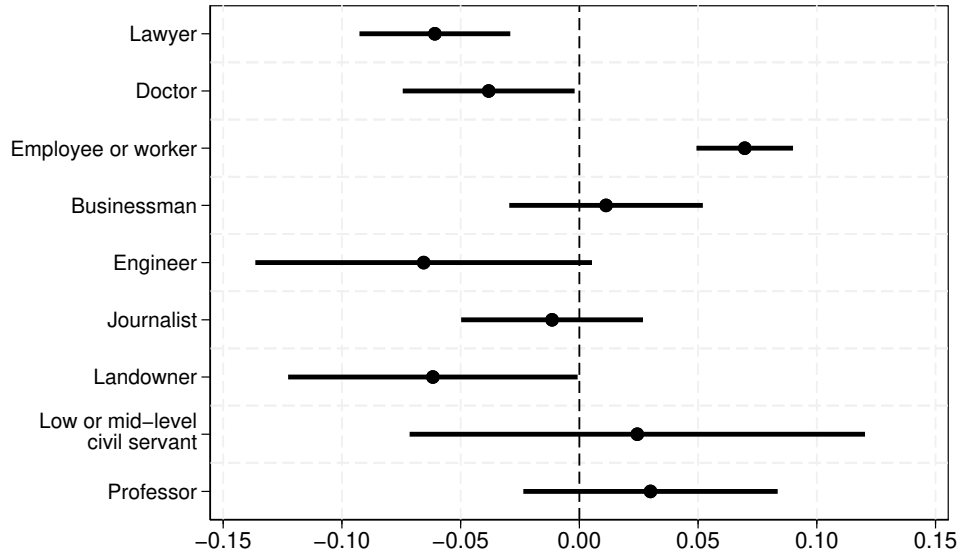


Figure 3. Voter Density and Electoral Success Across Occupations

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

6.2. Heterogeneity across the political spectrum

In Table 5, we examine whether changes in voter density had heterogeneous electoral implications across the political spectrum by running Equation 1 separately for left- and right-wing candidates. Estimates in Columns (2) and (3) suggest that higher voter density had a negative effect on the electoral success of left-wing lawyers, but a positive effect on the electoral success of left-wing employees and workers. In contrast, higher voter density had no effect on the electoral success of right-wing lawyers and workers. Results are similar when considering vote shares in Columns (5) and (6). Looking more broadly across all occupations (Figure 4 and Appendix Table A12), results suggest that higher voter density did not have a significant impact on the electoral success of left- or right-wing candidates with occupations other than lawyers and workers.

These findings prompt us to further investigate whether higher voter density had heterogeneous implications for left-wing lawyers and workers depending on their political affiliation. In Equation 2, we distinguish between communists from the *Parti Communiste Français* (PCF, 318 candidates or 28 percent of left-wing candidates), socialists from the *Section Française de l'Internationale Ouvrière* (SFIO, 319 candidates, 28 percent), left-wing centrists from the *Parti Radical et Radical-Socialiste* (280 candidates, 25 percent), and inde-

Table 5. Voter Density and Electoral Success of Left- and Right-Wing Lawyers and Workers

Outcome:	Elected			Vote share		
	Baseline	Left	Right	Baseline	Left	Right
Sample:	(1)	(2)	(3)	(4)	(5)	(6)
A. Occupation: Lawyer						
Log density \times 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 \times 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. *** $p \leq 0.01$. ** $p \leq 0.05$. * $p \leq 0.10$.

pendent left-wing candidates (204 candidates, 18 percent). Results in Table 6 suggest that urbanization was detrimental to the success of socialist, center left-wing and independent left-wing lawyers. They also show that urbanization had no heterogeneous effect by party on the electoral success of left-wing employees and workers.

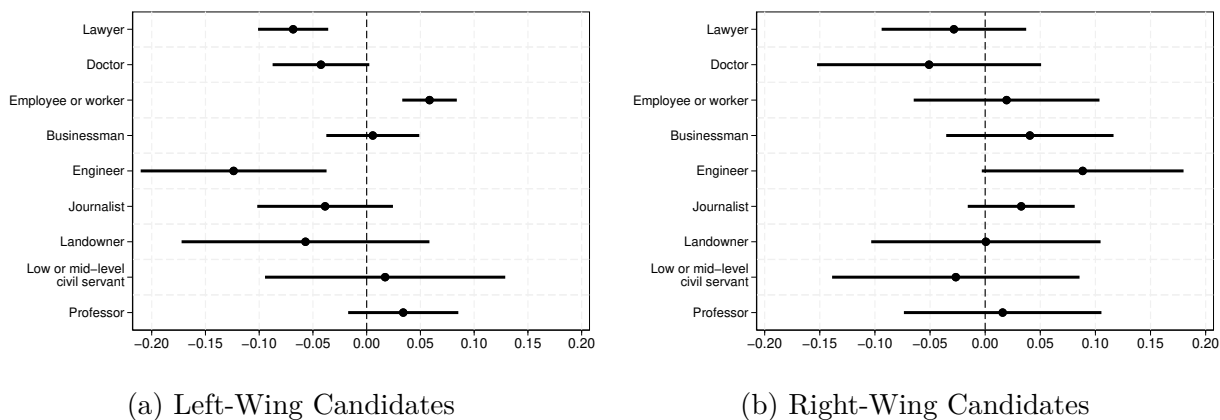


Figure 4. Voter Density and Electoral Success Across Occupations for Left-Wing and Right-Wing Candidates

Notes. This figure displays coefficients from estimating Equation 1 along with 95 percent confidence intervals for all occupations, on the subset of left-wing candidates (Panel a) or right-wing candidates (Panel b). Results for the 11 artist and 17 high-level civil servant candidates not shown for readability.

Table 6. Voter Density and the Electoral Success of Left-Wing Lawyers and Workers

Outcome:	Elected				
	Left	Comm.	Soc	Rad. Soc.	Indep.
Sample:	(1)	(2)	(3)	(4)	(5)
A. Occupation: Lawyer					
Log density \times lawyer	-0.068*** [0.016]	-0.048** [0.019]	-0.078*** [0.018]	-0.094*** [0.026]	-0.063*** [0.019]
Log density \times lawyer \times party		-0.088 [0.267]	0.052 [0.036]	0.068 [0.041]	-0.054 [0.039]
Within R ²	0.019	0.070	0.026	0.031	0.040
Constituencies	108	108	108	108	108
Observations	1,121	1,121	1,121	1,121	1,121
$\frac{\widehat{\beta}_{\text{density} \times \text{lawyer}} + \widehat{\beta}_{\text{density} \times \text{lawyer} \times \text{party}}}{\text{density} \times \text{lawyer}}$		-0.108 [0.182]	-0.042** [0.021]	-0.047** [0.022]	-0.100*** [0.021]
Lawyer-party elected	36	3	2	23	8
Lawyer-party candidates	157	7	16	100	34
B. Occupation: Employee or worker					
Sample:	Left	Comm.	Soc.	Rad. Soc.	Indep.
	(1)	(2)	(3)	(4)	(5)
Log density \times worker	0.058*** [0.013]	0.044** [0.018]	0.061*** [0.015]	0.048*** [0.015]	0.065*** [0.014]
Log density \times worker \times party		-0.083** [0.041]	-0.010 [0.035]	-0.004 [0.036]	-0.002 [0.022]
Within R ²	0.041	0.078	0.045	0.044	0.058
Constituencies	108	108	108	108	108
Observations	1,121	1,121	1,121	1,121	1,121
$\frac{\widehat{\beta}_{\text{density} \times \text{worker}} + \widehat{\beta}_{\text{density} \times \text{worker} \times \text{party}}}{\text{density} \times \text{worker}}$		-0.113 [0.069]	0.042 [0.061]	0.040 [0.063]	0.062 [0.039]
Worker-party elected	51	27	22	0	2
Worker-party candidates	443	244	137	5	57

Notes. This table reports regression results for left-wing lawyers and left-wing employees and workers. Each observation is a left-wing candidate. All specifications include constituency and election fixed effects, log voter density, an occupation indicator, and département-by-election fixed effects. Column 1 reports results for all left-wing candidates; Column 2, for candidates affiliated with the communist party (PCF); Column 3, for candidates affiliated with the socialist party (SFIO); Column 4, for candidates affiliated with the center left-wing radical party (Parti Radical et Radical-Socialiste); Column 5, for independent left-wing candidates. Standard errors in brackets are clustered at the constituency level. *** $p \leq 0.01$. ** $p \leq 0.05$. * $p \leq 0.10$.

6.3. Robustness checks

This section provides a series of robustness checks that support the validity of our baseline results. We analyze counterfactual reforms and show that our results are not driven by

unobservable factors, which could entail both boundary changes and variations in voter density over time. We also show that our results are robust to alternative measurement strategies, estimation methods, and subsamples.

Table 7. Voter Density and the Electoral Success of Lawyers and Workers Across Subsamples

Outcome:	Elected			
	(1)	(2)	(3)	(4)
A. Occupation: Lawyer				
Log density \times lawyer	-0.061*** [0.016]	-0.060*** [0.014]	-0.024 [0.021]	-0.072** [0.030]
Within R ²	0.019	0.029	0.050	0.020
Constituencies	108	157	54	34
Observations	1,614	2,267	743	524
B. Occupation: Employee or worker				
Log density \times worker	0.070*** [0.010]	0.052*** [0.013]	-0.004 [0.018]	0.069*** [0.009]
Within R ²	0.049	0.053	0.079	0.028
Constituencies	108	157	54	34
Observations	1,614	2,267	743	524
<u>Sample restriction</u>				
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. *** $p \leq 0.01$. ** $p \leq 0.05$. * $p \leq 0.10$.

Counterfactual reforms To ensure that our results are not driven by unobservable factors that could have entailed both changes to boundaries of electoral constituencies and variations in voter density over time, we consider the sample of counterfactual constituencies whose boundary changes were debated by members of the Lower House but ultimately rejected by their counterparts in the Upper House. In Table 7, Column (1) reports baseline estimates. Column (2) augments the sample with the départements that contained counterfactual constituencies. Importantly, in Column (3), we only consider départements that comprised counterfactual constituencies. This specification can be seen as a rigorous placebo

test: since there was no actual boundary change in this sample, there should be no effect of voter density on the electoral success of lawyers and workers. Finally, in Column (4), we restrict the sample to the 34 constituencies that actually experienced boundary changes. Overall, with the exception of Column (3) where we do not find a significant effect as expected, results are similar with those obtained in our baseline analysis, thus supporting the validity of our empirical analysis.

Mediating effects We noted above in Table 4 that our main results were robust to the inclusion of local electoral conditions which could have been correlated with both urbanization and electoral outcomes. Nonetheless, to assuage concerns that urbanization and local electoral circumstances would be systematically significantly correlated, we show in Appendix Table A11 that greater density of registered voters did not affect turnout, the number of rounds, or the competitiveness of the elections. While we find that it slightly reduced the total number of candidates in the first round of the elections, it did not have a significant impact on the total number of lawyers or workers who ran. Moreover, greater urbanization did not affect the likelihood that incumbents would run, whether they were lawyers, workers, or had any other occupation.

Alternative measures We now consider three alternative measures of voter density. First, we use the share of the urban population. To construct this measure, we follow the definition of the urban population that had been used in the French censuses since the mid-nineteenth century (Le Mée, 1972; Dupeux, 1974; Roncayolo, 1987). We thus classify as urban communes that counted at least two thousand inhabitants in their agglomerated population (*population agglomérée*). This measure of urban population included individuals residing in the immediate vicinity of the commune’s center – generally defined as the neighborhood of the town hall – as opposed to the sparse population (*population éparse*) that resided in hamlets located on the outskirts of a commune’s center. We rely on the interwar censuses to collect information on the agglomerated population and compute the share of the urban population for each of the six thousand communes that make up the 108 electoral constituencies in our baseline sample.¹⁴ 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). Using this measure instead of the log density of registered voters yields results which are similar to those in the baseline analysis: as shown in Column (2) of Appendix Table A13, a one-standard deviation increase in the

¹⁴As we mentioned above in Section 3, the timing of the census was not that of the elections. We rely on the March 1926 census for the April 1928 elections, on the census of May 1931 for the elections of May 1932, and on the census of March 1936 for the elections of May 1936.

change in the share of urban population (0.07) was associated with a decrease in the success probability of lawyers by 2.3 percentage points. Conversely, a similar increase improved the success probability of employees and workers by 2.8 percentage points.

Second, we discretize our baseline measure by creating an indicator variable that equals one if the log density of registered voter is above the sample median. We find in Column (3) of Appendix Table A13 that our results are robust to this alternative measure. We also show that the results hold across quartiles of density measures in Appendix Table A14.

Third, population density may vary over time for reasons other than boundary changes, because of factors affecting the numerator such as trends in migration, fertility, and mortality. This raises concerns that the results are driven by changes over time in the number of registered voters and not by the allocation of those voters across constituencies. As a robustness check, we match the baseline number of registered voters in the previous election to the constituency boundaries in the current election, and only exploit the variation in voter density originating from redistricting. Specifically, we assign the voting population of 1928 to the 1932 election, and of 1932 to the 1936 election. Given that we can only run this specification on the 1932 and 1936 elections, we reproduce baseline estimates when excluding the 1928 election from the sample in Column (6) of Appendix Table A13, finding similar results. Estimates in Column (7) of Appendix Table A13 when using the population of registered voters in the preceding election are similar, suggesting that our results are not driven by differential demographic trends in treated constituencies.

Alternative estimation methods In Column (4) of Appendix Table A13, we show that the baseline results are robust to a more stringent clustering strategy by which standard errors are clustered two-way at the level of constituencies and département-election.

Furthermore, by construction, only one candidate is elected in a constituency. We account for the potential dependence across equations by re-estimating Equation 1 with seemingly unrelated regressions (SUR) across occupations, where outcomes are set to zero when the candidates' occupations are different from o . Column (5) of Appendix Table A13 shows that estimates from this methodology are in line with the baseline results.¹⁵

Alternative samples We also verify that baseline results hold in more restrictive samples besides those highlighted in Table 7. First, we show in Appendix Figure A3 that no

¹⁵Although our setting bears similarities with a difference-in-difference framework, it is nonetheless different since our variable of interest is an interaction term between the occupation indicator variable and the voter density variable whereby the source of exogenous variation is the change in voter density entailed by electoral and territorial reforms. Therefore, we cannot implement the various robust estimators proposed by de Chaisemartin and d'Haultfoeuille (2023).

single département drives the results. Second, given the institutional uncertainty and timing of the reforms, it was unlikely that some candidates would strategically run in different constituencies across elections to take advantage of the changing boundaries of electoral constituencies. In fact, this strategic behavior was marginal and usually unsuccessful: between 1928 and 1936, 52 candidates ran in different constituencies within the same département and only 4 were elected, while 38 ran in different départements and none won. Nevertheless, to alleviate concerns that such strategic behavior is related to changes in voter density, we re-run the baseline analysis without the candidates who ran in two different constituencies across elections. Again, estimates in Column (9) of Appendix Table A13 are similar to the baseline.

7. Conclusion and discussion

This study shows that increased urbanization negatively affected the electoral success of lawyers in Lower House of the French Parliament during the interwar period, while it benefited employees and workers, an effect concentrated on the left of the political spectrum. Left-wing lawyers had indeed been instrumental in passing the early reforms of the Third Republic, notably the secular transformation of the school system as well as the separation of Church and State (Franck, 2016). At a time when most voters lived in rural areas, electoral constituencies were a collection of isolated villages where a handful of individuals could know each potential voter on a personal basis. These individuals could then act as middlemen for candidates seeking to mobilize local voters. Because their professional networks relied on long-term business relationships, lawyers were likely to know these middlemen and thus could turn their professional networks into political machines during electoral campaigns. For instance, 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, wrote in his memoirs:

“Anyone who has never seen, outside Paris, on a market day in a small town, the antechamber of a lawyer’s office filled with peasants who have come for a yes, for a no, for nothing, cannot know how influence is patiently built up, how authority is developed in a constituency.” (Barthou, 1923, p. 18).

As urbanization intensified, the professional network of these left-wing lawyers became less effective in mobilizing voters than that of employees and workers. Indeed, anecdotal evidence suggests that they had historically invested more effort in organizing political machines in urban than in rural areas (Tilly, 1986; Barzman, 1997; Vigna, 2021). The role of unions in the electoral success of employees and workers is evident in Appendix Table A15,

which provides biographical information for the elected employees and workers in our sample of 108 constituencies. Out of those 33 elected employees and workers, 28 had a union affiliation. A case in point is that of Maurice Thorez (1900–64), who became the leader of the French Communist Party in the 1930s (Robrieux, 1975). As such, our analysis also provides an explanation for the growing political dominance of employees and workers in the interwar period, culminating in the victory of the left-wing *Front Populaire* coalition in 1936.

Future work could provide more detailed evidence on the relative importance of middlemen and networks in mobilizing voters in rural and urban constituencies. Another avenue for research could pertain to the long-term trends in the rise of “career politicians” whose sole work experience pertains to political affairs (O’Grady, 2019; Elsässer, 2024). It may be worth analyzing how urbanization increased the monetary costs of developing a political network and therefore made it impossible for most citizens, aside from millionaires, to simultaneously manage a professional and a political career (Carnes, 2018).

References

- Aidt, Toke S., and Peter S. Jensen.** 2016. “From Open to Secret Ballot: Vote Buying and Modernization.” *Comparative Political Studies*, 50(5): 555–93.
- Ansolabehere, Stephen, James M. Snyder, and Charles Stewart.** 2000. “Old Voters, New Voters, and the Personal Vote: Using Redistricting to Measure the Incumbency Advantages.” *American Journal of Political Science*, 44(1): 17–34.
- Ashraf, Quamrul H., Francesco Cinnirella, Oded Galor, Boris Gershman, and Erik Hornung.** 2024. “Structural Change, Elite Capitalism, and the Emergence of Labour Emancipation.” *Review of Economic Studies*, forthcoming: rdae043.
- Atack, Jeremy, Robert A. Margo, and Paul W. Rhode.** 2022. “Industrialization and Urbanization in Nineteenth Century America.” *Regional Science and Urban Economics*, 94: 103678.
- Barnes, Tiffany D., and Gregory W. Saxton.** 2019. “Working-Class Legislators and Perceptions of Representation in Latin America.” *Political Research Quarterly*, 72(4): 910–28.
- Barthou, Louis.** 1923. *Le politique*. Paris: Hachette.
- Barzman, John.** 1997. *Dockers, métallos, ménagères : Mouvements sociaux et cultures militantes au Havre (1912–1923)*. Mont-Saint-Aignan: Presses universitaires de Rouen et du Havre.
- Berstein, Gisèle.** 2014. *Le Sénat sous la IIIe République*. Paris: CNRS Editions.
- Besley, Timothy, and Marta Reynal-Querol.** 2011. “Do Democracies Select More Educated Leaders?” *American Political Science Review*, 105(3): 552–66.
- Besley, Timothy, Jose G. Montalvo, and Marta Reynal-Querol.** 2011. “Do Educated Leaders Matter?” *Quarterly Journal of Economics*, 121(554): F205–27.

- Cameron, Rondo, and Larry Neal.** 2003. *A Concise Economic History of the World, From Paleolithic Times to the Present*. Oxford: Oxford University Press.
- Carnes, Nicholas.** 2018. *The Cash Ceiling: Why Only the Rich Run for Office – and What We Can Do About It*. Princeton: Princeton University Press.
- Carnes, Nicholas, and Noam Lupu.** 2015. “Rethinking the Comparative Perspective on Class and Representation: Evidence from Latin America.” *American Journal of Political Science*, 59: 1–18.
- Carnes, Nicholas, and Noam Lupu.** 2016a. “Do Voters Dislike Working-Class Candidates? Voter Biases and the Descriptive Underrepresentation of the Working Class.” *American Political Science Review*, 110(4): 832–44.
- Carnes, Nicholas, and Noam Lupu.** 2016b. “What Good is a College Degree? Education and Leader Quality Reconsidered.” *Journal of Politics*, 78(1): 35–49.
- Carnes, Nicholas, and Noam Lupu.** 2023. “The Economic Backgrounds of Politicians.” *Annual Review of Political Science*, 26: 253–70.
- Carson, Jamie L., Erik J. Engstrom, and Jason M. Roberts.** 2006. “Redistricting, Candidate Entry, and the Politics of Nineteenth-Century U.S. House Elections.” *American Journal of Political Science*, 50(2): 283–93.
- de Chaisemartin, Clément, and Xavier d’Haultfoeuille.** 2023. *Difference-in-Differences for Simple and Complex Natural Experiments*. Princeton: Princeton University Press.
- Dupeux, Georges.** 1974. “La croissance urbaine en France au XIXe siècle.” *Revue d’Histoire Économique et Sociale*, 52(2): 173–89.
- Duverger, Maurice.** 1954. *Political Parties: Their Organization and Activity in the Modern State*. London: Methuen.
- Ehrhard, Thomas, and Cédric Passard.** 2020. “The Politics of Electoral System Choice in a Context of Democratization. Electoral Reform and Institutional Change in the French Third Republic (1870–1940).” *Parliaments, Estates and Representation*, 40(1): 59–77.
- Elsässer, Lea.** 2024. “Careerism and Working-Class Decline: The Role of Party Selectorates in Explaining Trends in Descriptive (Mis-)Representation.” *Electoral Studies*, 89: 102788.
- Franck, Raphaël.** 2016. “The Political Consequences of Income Shocks: Explaining the Consolidation of Democracy in France.” *Review of Economics and Statistics*, 98(1): 57–83.
- Franck, Raphaël, and Oded Galor.** 2021. “Flowers of Evil? Industrialization and Long-Run Development.” *Journal of Monetary Economics*, 117: 108–28.
- Galor, Oded.** 2011. *Unified Growth Theory*. Princeton: Princeton University Press.
- Gaudemet, Yves.** 1968. *Les juristes et la vie politique de la IIIe République*. Paris: Presses universitaires de France.
- Gaudillère, Bernard.** 1995. *Atlas historique des circonscriptions électorales françaises*. Geneva: Droz.
- Gavoille, Nicolas, and Marijn Verschelde.** 2017. “Electoral Competition and Political Selection: An Analysis of the Activity of French Deputies, 1958–2012.” *European Economic Review*, 92: 180–95.

- Gay, Victor.** 2020. *TRF-GIS Circonscriptions (1870–1940)*. Harvard Dataverse. <https://doi.org/10.7910/DVN/L2LGDW>.
- Gay, Victor.** 2021. “Mapping the Third Republic. A Geographic Information System of France (1870–1940).” *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 54(4): 189–207.
- Gollin, Douglas, Remi Jedwab, and Dietrich Vollrath.** 2016. “Urbanization with and without Industrialization.” *Journal of Economic Growth*, 21(1): 35–70.
- Gouault, Jacques.** 1954. *Comment la France est devenue Républicaine. Les élections générales et partielles à l’Assemblée Nationale, 1870–1875*. Paris: Armand Colin.
- Gros, Damien.** 2014. *Naissance de la Troisième République*. Paris: Presses universitaires de France.
- Halévy, Daniel.** 1930. *La fin des notables*. Paris: Grasset.
- Hayes, Danny, and Seth C. McKee.** 2009. “The Participatory Effects of Redistricting.” *American Journal of Political Science*, 53(4): 1006–23.
- Hetherington, Marc J., Bruce Larson, and Suzanne Globetti.** 2003. “The Redistricting Cycle and Strategic Candidate Decisions in U.S. House Races.” *Journal of Politics*, 65(4): 283–93.
- Hornung, Erik.** 2015. “Railroads and Growth in Prussia.” *Journal of the European Economic Association*, 13(4): 699–736.
- Jolly, Jean.** 1960. *Dictionnaire des parlementaires français, 1889–1940*. Paris: Presses universitaires de France.
- Kintz, Melanie.** 2010. “Die Berufsstruktur der Abgeordneten des 17. Deutschen Bundestages.” *Zeitschrift für Parlament*, 2010(3): S.491–503.
- Kreuzer, Marcus.** 2001. *Institutions and Innovation: Voters, Parties and Interest groups in the Consolidation of Democracy. France and Germany*. Ann Arbor: University of Michigan Press.
- Lachapelle, Georges.** 1928. *Élections législatives. 22–29 avril 1928. Résultats officiels*. Paris: Collection des Politiques Contemporains.
- Lachapelle, Georges.** 1932. *Élections législatives. 1er & 8 mai 1932. Résultats officiels*. Paris: Le Temps.
- Lachapelle, Georges.** 1936. *Élections législatives. 26 Avril & 3 mai 1936. Résultats officiels*. Paris: Le Temps.
- Larreguy, Horacio, John Marshall, and Pablo Querubin.** 2016. “Parties, Brokers and Voter Mobilization: How Turnout Buying Depends Upon the Party’s Capacity to Monitor Brokers.” *American Political Science Review*, 110(1): 160–79.
- Le Béguet, Gilles.** 2003. *La République des avocats*. Paris: Armand Collin.
- Lefranc, Georges.** 1968. *Le mouvement syndical en France sous la Troisième République*. Paris: Payot.
- Le Mée, René.** 1972. “Population agglomérée, population éparses au début du XIXe siècle.” *Annales de Démographie Historique*, 1971(1): 455–510.
- Lupu, Noam, and Jonas Pontusson.** 2024. “Working-Class Officeholding in the OECD.” In *Unequal Democracies: Public Policy, Responsiveness, and Redistribution in an Era of Rising Economic Inequality*, edited by Noam Lupu and Jonas Pontusson, 177–95. Cambridge: Cambridge University Press.

- Marty, Thomas.** 2013. “From Electoral Space to “Gerrymandering”: Single-Member Districts and Multi-Member Plurality Districts During the Third Republic in France.” *Norvois. Environnement, Aménagement, Société*, 226: 91–106.
- McGhee, Eric.** 2020. “Partisan Gerrymandering and Political science.” *Annual Review of Political Science*, 23: 171–85.
- McGuinness, Feargal.** 2010. “Social Background of MPs.” Standard Note 1528, House of Commons.
- Moss, Bernard H.** 1976. *The Origins of the French Labor Movement, 1830–1914*. Berkeley and Los Angeles: University of California Press.
- O’Grady, Tom.** 2019. “Careerists versus Coal-Miners: Welfare Reforms and the Substantive Representation of Social Groups in the British Labour Party.” *Comparative Political Studies*, 52(4): 544–78.
- Ozouf-Marignier, Marie-Vic.** 1989. *La formation des départements. La représentation du territoire français à la fin du 18ème siècle*. Paris: Editions de l’EHESS.
- Petersen, Eric R.** 2012. “Representatives and Senators: Trends in Member Characteristics since 1945.” Congressional Research Service R42365.
- Prat, Andrea.** 2004. “Rational voters and political advertising.” In *The Oxford Handbook of Political Economy*, edited by Donald Wittman and Barry R. Weingast, 50–63. Oxford: Oxford University Press.
- Robert, Adolphe, and Gaston Cougny.** 1889. *Dictionnaire des parlementaires français*. Paris: Bourlotton.
- Robrieux, Philippe.** 1975. *Maurice Thorez: vie secrète et vie publique*. Paris: Fayard.
- Roncayolo, Marcel.** 1987. “Population agglomérée, villes et bourgs en France: réflexions sur les enquêtes de 1809–1811.” *Villes et territoire pendant la période napoléonienne (France et Italie). Actes du colloque de Rome (3–5 mai 1984)*. Paris: École française de Rome.
- Rueschemeyer, Dietrich, Evelyne Huber Stephens, and John D. Stephens.** 1992. *Capitalist Development and Democracy*. Chicago: University of Chicago Press.
- Stokes, Susan.** 2005. “Perverse Accountability: A Formal Model of Machine Politics with Evidence from Argentina.” *American Political Science Review*, 99(3): 315–25.
- Thibaudet, Albert.** 1927. *La République des professeurs*. Paris: Grasset.
- Thomas, Marcel.** 1978. *L’Affaire sans Dreyfus*. Geneva: Idégraf.
- Tilly, Charles.** 1986. *The Contentious French*. Cambridge: Harvard University Press.
- Vigna, Xavier.** 2021. *Histoire des ouvriers en France au XXe siècle*. Paris: Perrin - Tempus.