

Online Appendix to “Firm Donations and Political Rhetoric: Evidence from a National Ban” (Cagé, Le Penneç and Mougin)

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A Data

A.1 Firm donations

Data on firm donations to candidates in 1993 come from the reports published by the CNCCFP after the examination of candidates' account. For each candidate, we digitize the campaign accounts that include the comprehensive list of contributing firms and the amounts given. An example of the data is shown in Figure D.1. In total, 14,770 donations were received by 1,647 candidates (so around one third of the candidates). We show descriptive statistics on these firm donations in Table 2.

A.1.1 Donor identification

The first step of the cleaning consisted in creating a unique donor identifier. We retrieve the list of all donors' name as they appear in the reports, remove stopwords, and homogenize numeric characters in plain words. For national companies where the local branch was specified in the donor name, we attribute a common donor code. For instance, the firm *COLAS* gave to candidates through its subsidiaries *COLAS MEDITERRANNEE* or *COLAS SUD OUEST*. To separate firms including a geographical attribute in its legal denomination from local branches, we use an algorithm to check on the website Societe.com whether the company was considered as the mother entity. Yet, a certain number of firms active in 1993 have ceased activity since then and their record is not available online. We conduct a second search using data from the INSEE (the French national statistical institute) database of French firms active in 1993. At the end of this procedure, we are left with 10,470 unique donors.

As a note of caution, we cannot exclude that a firm appearing with two different names and not matched with the INSEE dataset (for instance, an entity named both with an acronym and with the plain denomination) is not considered as two different donors. We conduct further manual checks to ensure that the scale of such measurement error is limited. Moreover, to avoid bias stemming from this type of error, we choose to distinguish between single and multiple donors rather than considering the number of donations of each donor in the empirical analysis performed in Table E.27.

A.1.2 Sectors of activity

To complement our donor dataset, we look at their sector of activity. Given that the raw data only provide the name of the donor, without any further information or firm identifier, and that the data date back to 1993, retrieving this sector is a challenging exercise. To do so, we first merge the donors with firm records from the INSEE or from societe.com. These two datasets provide the company's economic sector, following the French economic sector

nomenclature (the *Nomenclature d'Activité Française* – NAF).¹ We link the NAF code with a broader sector of activity, as a parallel to the topic classification performed on manifesto content. Table A.1 shows the equivalences we propose.

Second, we take advantage of the fact that firms' names are sometimes explicit about the type of activity of the donor and therefore use those to manually classify firms.² At the end of the procedure, we manage to identify the sector of activity of about half of the firms in our sample:

Table E.4 shows summary statistics across sectors of activity: the most represented sectors are the construction and the retail sectors. Donations vary noticeably across sectors: as shown in Figure A.1, both the number of donations per donor and the average donation amount are higher among donors from the environment/energy and the construction sectors.

A.2 Campaign manifestos

Campaign manifestos are a key part of the French electoral campaigns, and represent one of the three main parts of official electoral propaganda (together with ballots and election posters). Candidates are responsible for the printing of these manifestos; this cost can be refunded by the state if they gather at least 5% of the votes during the first round of the election (Electoral law, articles R39 and L216). The format of the manifestos must follow certain criteria. More specifically, electoral manifestos must have a maximum size of 210x297 millimeters, and a weight ranging between 60 and 80 grams per square meter (Electoral law, article R29). Furthermore, they cannot combine the three colors of the French flag (blue, white and red, article R27 of the electoral law), except if they are part of a party's emblem. If these constraints are met, the manifestos are mailed to voters by an official local propaganda committee, together with ballots, maximum four days before the election (for the first round), and three days before the second round when there is a runoff (Electoral law, articles R34 and R38).

In a survey published before the 2017 Presidential election (OpinionWay, 2017), 24% of citizens declared that manifestos were among the three most important ways of getting information about the candidates. By comparison, television was mentioned by 64% of them, online media by 26%, paper news by 18% and radio by 15%. The fact that, in 2017, candidates' manifestos were mentioned about as often as online media suggests that they are not a negligible part of the heavy campaign communication voters receive during the few weeks leading to the election. In all likelihood, this number is a lower bound for the share of voters who learnt about their candidates thanks to the manifestos over our sample period, when

¹For more details, see <https://www.insee.fr/fr/information/2120875> (in French).

²Note that we use the set of firms that we successfully allocated to a sector of activity to refine the manual name cleaning strategy.

Table A.1: Correspondences between sector codes (NAF) and ministries

Agriculture

- Culture et production animale, chasse et services annexes (01) ; - Sylviculture et exploitation forestière (02) ; - Pêche et aquaculture (03) ; - Activités vétérinaires (75) ;

Construction

- Captage, traitement et distribution d'eau (36) ; - Collecte et traitement des eaux usées (37) ; - Collecte, traitement et élimination des déchets ; récupération (38) ; - Dépollution et autres services de gestion des déchets (39) ; - Construction de bâtiments (41) ; - Génie civil (42) ; - Travaux de construction spécialisés (43) ; - Transports terrestres et transport par conduites (49) ; - Transports par eau (50) ; - Transports aériens (51) ; - Entreposage et services auxiliaires des transports (52) ; - Activités d'architecture et d'ingénierie ; activités de contrôle et analyses techniques (71) ; - Services relatifs aux bâtiments et aménagement paysager (81)

Culture

- Édition (Édition) ; - Production de films cinématographiques, de vidéo et de programmes de télévision ; enregistrement sonore et édition musicale (59) ; - Programmation et diffusion (60) ; - Activités créatives, artistiques et de spectacle (90) ; - Bibliothèques, archives, musées et autres activités culturelles (91)

Defense

none

Economy

- Programmation, conseil et autres activités informatiques ; - Services d'information (62) ; - Activités des services financiers, hors assurance et caisses de retraite (64) ; - Assurance (65) ; - Activités auxiliaires de services financiers et d'assurance (66) ; - Activités immobilières (68) ; - Activités juridiques et comptables (69) ; - Activités des sièges sociaux ; conseil de gestion (70) ; - Recherche-développement scientifique (72) ; - Publicité et études de marché (73) ; - Autres activités spécialisées, scientifiques et techniques (74) ; - Activités des agences de voyage, voyagistes, services de réservation et activités connexes (79) ; - Activités administratives et autres activités de soutien aux entreprises (82) ; - Organisation de jeux de hasard et d'argent (92)

Education

- Enseignement (85) ; **Employment** ; - Activités liées à l'emploi (78) ; - Activités des ménages en tant qu'employeurs de personnel domestique (97) ; - Activités des organisations associatives (94) ; - Activités indifférenciées des ménages en tant que producteurs de biens et services pour usage propre (98)

Environment

- Captage, traitement et distribution d'eau (36) ; - Collecte et traitement des eaux usées (37) ; - Collecte, traitement et élimination des déchets ; récupération (38) ; - Dépollution et autres services de gestion des déchets (39) ; - Services relatifs aux bâtiments et aménagement paysager (81)

Europe

none

Foreign

- Activités des agences de voyage, voyagistes, services de réservation et activités connexes (79)

Health

- Activités vétérinaires (75) ; - Activités pour la santé humaine ; - Hébergement médico-social et social (86)

Industry

- Extraction de houille et de lignite (05) ; - Extraction d'hydrocarbures (06) ; - Extraction de minerais métalliques (07) ; - Autres industries extractives (08) ; - Services de soutien aux industries extractives (09) ; - Industries alimentaires (10) ; - Fabrication de boissons (11) ; - Fabrication de produits à base de tabac (12) ; - Fabrication de textiles (13) ; - Industrie de l'habillement (14) ; - Industrie du cuir et de la chaussure (15) ; - Travail du bois et fabrication d'articles en bois et en liège, à l'exception des meubles ; fabrication d'articles en vannerie et sparterie (16) ; - Industrie du papier et du carton (17) ; - Imprimerie et reproduction d'enregistrements (18) ; - Cokéfaction et raffinage (19) ; - Industrie chimique (20) ; - Industrie pharmaceutique (21) ; - Fabrication de produits en caoutchouc et en plastique (22) ; - Fabrication d'autres produits minéraux non métalliques (23) ; - Métallurgie (24) ; - Fabrication de produits métalliques, à l'exception des machines et des équipements (25) ; - Fabrication de produits informatiques, électroniques et optiques (26) ; - Fabrication d'équipements électriques (27) ; - Fabrication de machines et équipements n.c.a. (28) ; - Industrie automobile (29) ; - Fabrication d'autres matériels de transport (30) ; - Fabrication de meubles (31) ; - Autres industries manufacturières (32) ; - Réparation et installation de machines et d'équipements (33) ; - Production et distribution d'électricité, de gaz, de vapeur et d'air conditionné (35) ; - Activités de poste et de courrier (53) ; - Télécommunications (61)

Homeland affairs

- Enquêtes et sécurité (80) ; - Administration publique et défense ; sécurité sociale obligatoire (84) ; - Action sociale sans hébergement (88)

Justice

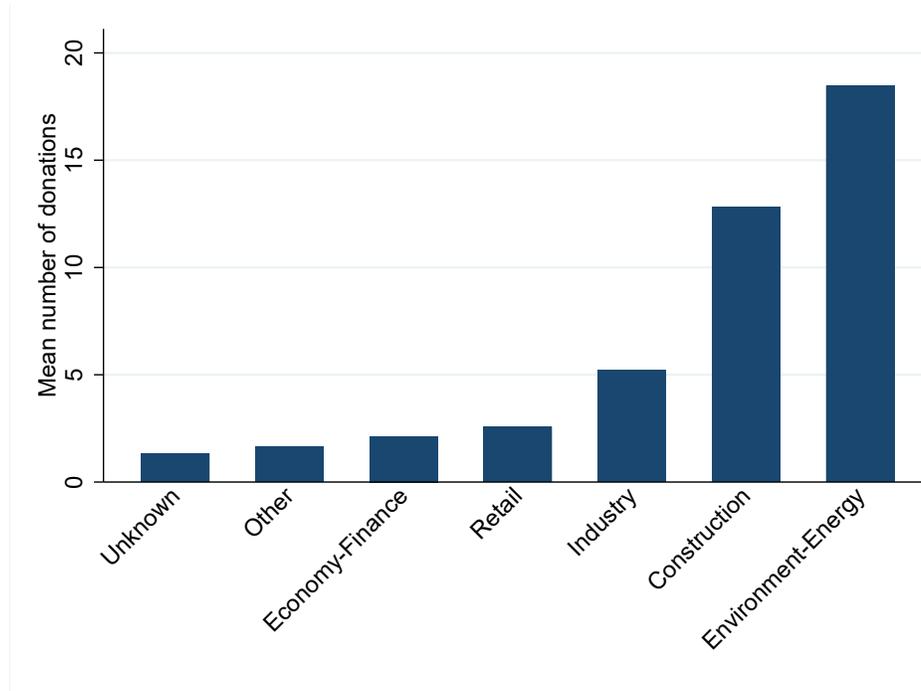
none

Small and medium business

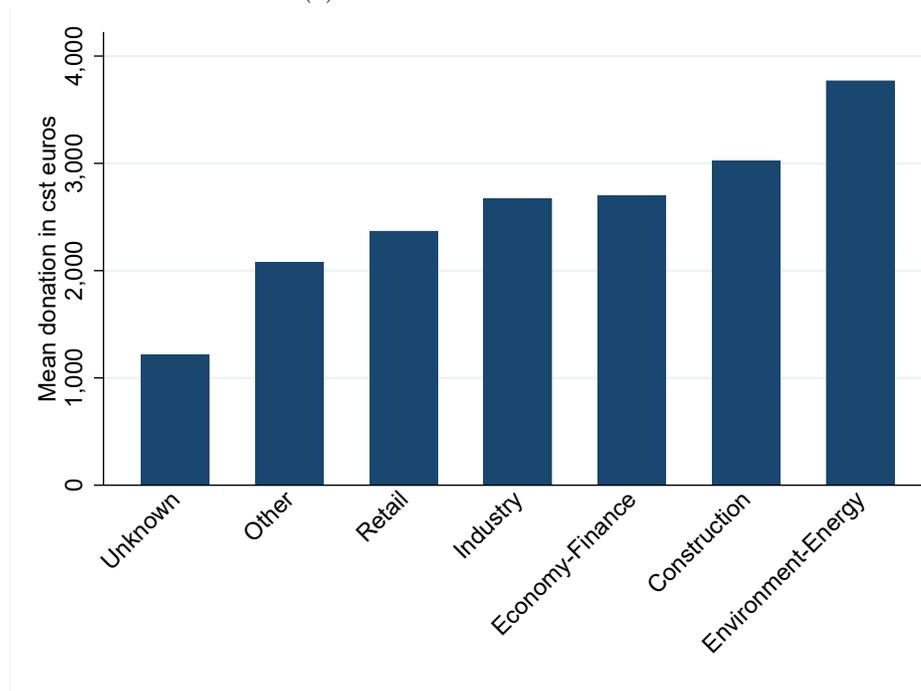
- Commerce et réparation d'automobiles et de motocycles (45) ; - Commerce de gros, à l'exception des automobiles et des motocycles (46) ; - Commerce de détail, à l'exception des automobiles et des motocycles (47) ; - Hébergement (55) ; - Restauration (56) ; - Activités immobilières (68) ; - Activités de location et location-bail (77)

Public Sector

Activités des organisations et organismes extraterritoriaux (99)



(a) Mean number of donations



(b) Mean amount of donations

Notes: Figure A.1a displays the mean number of donations per donor, and Figure A.1b displays the mean donation in 2020 constant euros, by sector of activity. Sectors with less than 500 donations are grouped in the category “Other”.

Figure A.1: Descriptive statistics on firm donations, depending on the sector of activity

much fewer communication media were available to individual politicians. Of course, television was already an important medium of communication. TV shows, debates and ads are the prominent media for candidates who campaign at the national level, such as candidates to the presidential elections or party leaders who advertise their national platform before the legislative elections. However, it is unlikely that voters learn much about the individual candidates running in their district on TV. Conversely, individual manifestos are a prime method of communication for candidates to run their own campaign and tailor the message to the specific voters in their district.

Anecdotal evidence To illustrate the type of information that is provided in manifestos and how communication strategies may differ across candidates of the same party, depending on the amount of firm donations they receive, we first provide and compare two concrete examples. Figures D.3 and D.4 show the campaign manifestos issued by two different Green candidates in 1993. Monique Mascret (Figure D.3) received more than €10,000 in firm donations and issued a rather personal manifesto in which she highlights her family, her occupation and her local roots, emphasizing the fact that she has lived in the district for 18 years. She advertises the key policy positions of the Green party regarding waste management and pollution, with very concrete proposals such as subsidizing farmers who reforest their land. Interestingly, she also advocates for pro-business economic policies, including the reduction of corporate taxes and the support of construction projects to boost employment. Conversely, Sophie Bouchard (Figure D.4) did not receive any firm donations in 1993 and issued a more generic manifesto that highlights the core values of the Green platform (productivism, pollution, redistribution) without any concrete proposal, and provides very little information about the candidate herself or her background.

Next, Figures D.5 and D.6 show the campaign manifestos issued by two different candidates endorsed by the far-right party. Jacques Peyrat (Figure D.5) received close to €16,000 in firm donations in 1993 and issued a manifesto that mixes proposals from the national platform of the party (immigration, tax reduction and conservative moral values) and a local corruption scandal involving the misuse of public funds by a previous mayor. Conversely, Ferdinand Ginoux (Figure D.6) did not receive any firm donations and used a manifesto template that was common to almost all far-right candidates that year, with very little personalization. This template describes the national party platform and its most controversial policy proposals, such as re-enacting the death penalty, and attacks all the other parties for their alleged political failures.

We use computational text analysis to construct quantitative measures associated with these different aspects of electoral discourse and estimate the causal impact of banning firm donations on communication strategies.

A.3 Text as data

A.3.1 Text pre-processing

We turn the collected PDF versions of candidate manifestos issued in 1997 into machine-readable text using the Tesseract OCR engine: <https://github.com/tesseract-ocr/tesseract>. We then merge manifestos’ content with electoral data using fuzzing string matching on candidate names. Candidate manifestos issued in previous elections were collected and digitized by the Cevipof, using the ABBYY FineReader OCR engine. The identification of each manifesto’s author and the merge with electoral data for these earlier years was performed by [Le Penec \(2020\)](#). Before running any analysis, we pre-process the content of each document following standard steps from the literature: we remove stopwords and special characters.

A.3.2 Local and national references

Our dictionary of local references includes the names of all 95 French departments. For departments whose name contains multiple words (e.g., Seine-Saint-Denis), we include all the possible versions found in pre-processed manifestos (e.g., “seine saint denis”, “seinestdenis” or “seine stdenis”). This dictionary also includes the names of the 36,827 French municipalities. In a given manifesto, we count the number of times the candidate’s department or a municipality in that specific department are mentioned.

Our dictionary of national references includes, for each election year in our sample: (a) the names of the main parties in the race; (b) the name of each party leader; (c) the names of the President and of each member of the incumbent government; (d) names referring to national institutions (e.g., “elysee” is the Presidential residence and refers to the Presidency more generally). Examples of these national references are presented in [Table A.2](#). Note that we first search for the full name of each party leader or member of the government (e.g. “jacques chirac”) and then for their last name only (e.g. “chirac”) to increase the probability of identifying a national reference in case the first name is omitted or misspelled. We also search for parties’ full names and for their abbreviations (e.g., “rassemblement republicque” and “rpr”).

We remove stopwords and special characters from both local and national references to match the pre-processing steps applied to the content of each manifesto.

A.3.3 Multinomial inverse regression

We describe here the framework introduced by [Taddy \(2013\)](#). The frequency of word w in document j , c_{wj} , is derived from a discrete choice model over the vocabulary of size W and is assumed to follow a multinomial distribution of the form $c_{wj} \sim MN(q_{wj}, m_j)$, where m_j is the number of words in document j . To construct a document’s left-right score on the

Table A.2: Examples of national references

1993	1997
mouvement ecologie	jacques chaban delmas
pierre joxe	francoise panafieu
jean marie pen	alain poher
rpr	jacques toubon
jacques toubon	rassemblement republique
nicolas sarkozy	alain juppe
jacques chirac	noel mamere
charles pasqua	laurent fabius
matignon	louis mermaz
georges marchais	elysee

Notes: This table shows examples of names included in our dictionary of references to national politics – for 1993 and 1997 separately.

left-right scale, we define the probability that document j uses word w as:

$$q_{wj} = \frac{\exp(\alpha_w + \phi_w D_j)}{\sum_{k=1}^W \exp(\alpha_k + \phi_k D_j)}$$

where D_j is an indicator variable equal to one if j is issued by a right-wing candidate, as opposed to a left-wing one. Non-classified and centrist candidates are excluded. ϕ_w is a word *loading* that measures sensitivity to party affiliation; that is, the gain in utility from using this word for a right-wing candidate as compared to a left-wing candidate. A sufficient reduction (Cook and Others, 2007) for j 's partisanship given the observed vector of word frequencies is the following projection:

$$Z_j = \sum_{w=1}^W \phi_w \cdot \frac{c_{wj}}{m_j}$$

where Z_j is the left-right partisan score of document j : a negative (positive) score means that document j uses a lot of words used by other left-(right-)wing candidates, and never by the other side. Conversely, a score close to zero means that document j uses either neutral words used by both sides indifferently or a mix of polarizing words from both sides.

The parameters of interest α_w and ϕ_w are estimated through distributed multinomial regression (Taddy, 2015), where a Poisson approximation for the distribution of c_{wj} allows for faster and more efficient distributed computing. The implied negative log-likelihood for each word is proportional to:

$$l(\alpha_w, \phi_w) = \sum_{j=1}^N [m_j \exp(\alpha_w + \phi_w D_j) - c_{wj}(\alpha_w + \phi_w D_j)]$$

Following Gentzkow et al. (2019), we control bias through penalization. In particular, we

apply the gamma-lasso procedure described in [Taddy \(2017\)](#) so that the preferred estimator is:

$$\hat{\alpha}_w, \hat{\phi}_w = \operatorname{argmin}[l(\alpha_w, \phi_w) + N\lambda\gamma^{-1}\log(1 + \gamma|\phi_w|)]$$

where N is the number of documents in the corpus, λ is a standard Lasso penalty, and γ is the penalty scale.³ This penalized estimator shrinks noisy loadings to zero, resulting in a sparse solution that downweights the artificially high influence of rare words in the corpus.

We estimate this model with the `textir` library in R, for each election year separately. We restrict the vocabulary to words used by at least 0.5% and at most 50% of the manifestos, which leaves us with an average vocabulary of 5,000 words per year.

Policy topics We follow essentially the same strategy to project manifestos onto latent policy topics, using the sample of written questions to the government issued between 1988 and 1997 as a training set. More specifically, we define the probability of document j using word w as:

$$q_{wj} = \frac{\exp(\alpha_w + \sum_{s=1}^S \phi_w^s D_j^s)}{\sum_{k=1}^W \exp(\alpha_k + \sum_{s=1}^S \phi_k^s D_j^s)}$$

D_j^s is an indicator variable equal to one if question j is addressed to a minister about topic s . ϕ_w^s is a word *loading* that measures the lift in utility from using word w when issuing a question about topic s as opposed to targeting a non-classified ministry.⁴ The sufficient reduction for the topic assignment of any document j , given the observed vector of word frequencies, is the following projection:

$$Z_j^s = \sum_{w=1}^W \phi_w^s \cdot \frac{c_{wj}}{m_j}$$

This quantity provides a continuous measure for the prevalence of topic s in document j . Intuitively, a document with a high positive Z^s is a document that uses many words whose loading – or predictive power – for topic s is also high. We can use the set of parameters ϕ_w^s estimated from written questions to the government to project manifestos onto each latent topic space and obtain a set of topic prevalence measures for each manifesto.

To further obtain measures of topic prevalence that are easily interpretable, we feed the set of continuous measures Z^s into a multinomial logistic regression of the form:

$$P(D_j = s) = \frac{\exp(\alpha_s + \sum_{s'=1}^S \delta_s^{s'} Z_j^{s'})}{\sum_{s'=1}^S \exp(\alpha_{s'} + \sum_{s'=1}^S \delta_{s'}^{s'} Z_j^{s'})}$$

³For details on the advantages of concave regularization and Gamma Lasso versus Lasso penalization, see [Taddy \(2017\)](#).

⁴The intercept of this model corresponds to the baseline utility of using word w when issuing a question to any non-classified minister.

where $P(D_j = s)$ is the probability that document j refers primarily to topic s . We fit the model on the sample of written questions to the government, using 80% of the observations (randomly chosen) as training set and the other 20% as a test set to evaluate the out-of-sample performance of the model. We obtain 86% accuracy with 17 topics and 87% accuracy with 4 broader topics. We then use the estimated set of δ_s coefficients, as well as the manifesto projections Z^s , to assign each manifesto to a set of estimated probabilities, each indicating the likelihood that the manifesto focuses primarily on a given topic over the others.

We estimate this model with the `textir` library in R as well, and we restrict the vocabulary to words used by at most 50% and at least 0.1% of all written questions issued between 1988 and 1997, due to the large number of such questions (close to 200,000). This leaves us with a vocabulary size of about 6,500 words.

A.3.4 Latent Semantic Indexing

Following [Bertrand et al. \(2021\)](#), we use Latent Semantic Indexing to construct measures of pairwise similarity between each pair of manifestos among candidates from the same party. To implement this simple bag-of-words approach, we first represent our corpus of manifestos as a document-term matrix, where each manifesto is represented as a vector of Tf-Idf weights over the pre-processed vocabulary – which excludes words used by less than 0.5% of the manifestos in a given election year. These weights increase with document specificity: a word with a large Tf-Idf weight is a word that is frequent in a given document but not so frequent across the whole corpus. We then apply a singular value decomposition to this large and sparse document-term matrix to reduce its dimensionality and obtain a dense matrix, where each document is represented as a vector of 200 latent dimensions.⁵ We measure the cosine similarity between each pair of such dense vectors, and define the originality index as the mean (negative) similarity between a candidate manifesto and each other manifesto from the same party. This measure is further standardized by year for interpretability.

A.4 District-level controls

Finally, we collect time-varying district-level covariates. First, we use information on socio-demographic characteristics and unemployment from the French census. Second, we build a new dataset on the revenue and annual spending in infrastructure of the French municipalities with more than 10,000 inhabitants, from the paper-format archives of the Ministry of Finances covering the 1993-1997 time period. Third, we identify the annual number of firms, the annual number of employees, the total payroll, and the share of the employees who are part of the top 1% of the income distribution, from the “*Déclaration Annuelle de Données Sociales*” (DADS) – a detailed French database on wages.

⁵The number of dimensions is chosen arbitrarily and motivated from existing research.

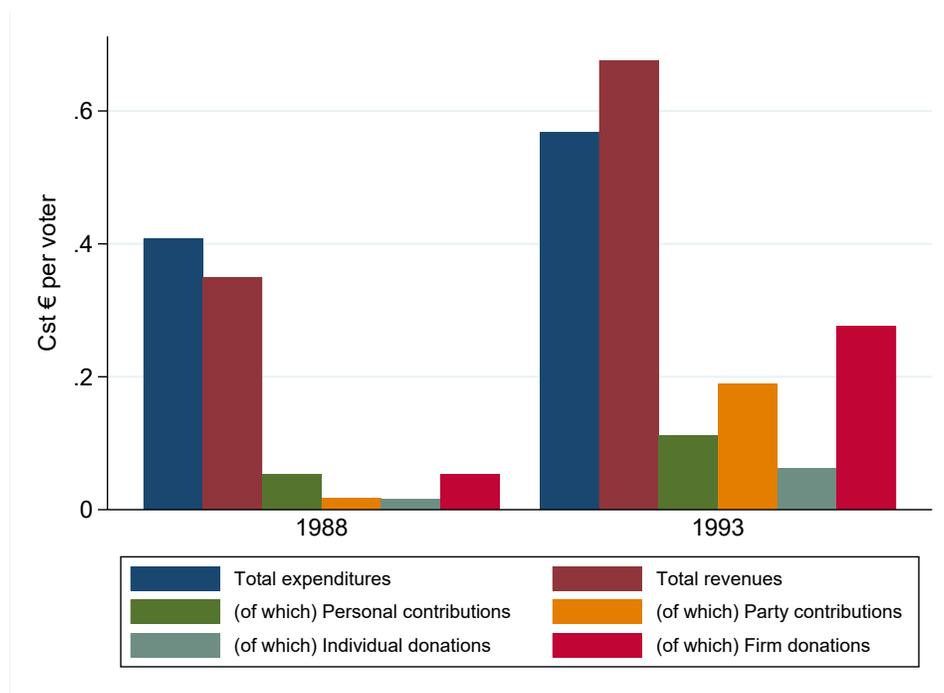
Other available district-level factors include the number of municipalities in the district, whether it is considered a rural or an urban district, and whether the capital of the region is located in the district. Summary statistics on these covariates are shown in Table [E.8](#).

B The 1988 legislative elections

Private donations were first allowed with the laws passed in March 1988. Thus, candidates at the 1988 legislative elections that took place on June 5th and 12th were entitled to receive contributions both from individuals and firms. Yet, the campaign accounts of the 1988 candidates have never been studied until now, including by historians. This is due to the fact that, in the absence of a centralized regulatory agency – the “*Commission Nationale des Comptes de Campagne et des Finances Politiques*” (the French equivalent of the US FEC) was only created in 1990 – these accounts have not been validated neither assembled in the National archives (or in the archives of the Commission). Following a careful reading of the administrative rules in place and numerous interactions with archivists, we contacted departmental archives. A number of these archives have stored the 1988 candidates’ campaign accounts until today. However, because the identity of the individual donors has not been anonymized, the documents are still classified.

We have contacted separately the persons in charge of each of the departmental archives holding the accounts (96 departments in Metropolitan France), and asked officially for the declassification of the documents (given our approach is purely research driven). We were able to collect data for 15 departments: Ain, Aube, Calvados, Corrèze, Creuse, Dordogne, Eure, Indre, Loir et Cher, Maine-et-Loire, Moselle, Haute-Savoie, Seine Maritime, Haute-Vienne, and Yonne. While obviously incomplete, this dataset sheds some light on the structure of donations and expenditure at the 1988 legislative elections, for 74 electoral districts and 363 candidates – including 143 candidates who also ran in 1993. We compare their revenue and expenditure during these two electoral years. Figure B.1 reports the results.

Candidates both received and spent much less in 1988, as compared to 1993. Specifically, the average amount of firm donations received by a candidate was seven times higher in 1993 as compared to 1988. This is not surprising, given that the possibility of receiving donations was a new opportunity, offered to the candidates only three months before election day. We note that party contributions were much higher in 1993 as well, possibly because parties were not publicly funded before March 1988 and had scarce resources to spare on their candidates’ campaigns before the 1988 elections in June.



Notes: The figure provides summary statistics on candidates' expenses and revenue at the 1988 and 1993 elections. All amounts are measured in 2020 constant euros per voter. The data cover the sub-sample of candidates who ran both in 1988 and in 1993 at the legislative elections in the 15 departments for which the 1988 data are available: Ain, Aube, Calvados, Corrèze, Creuse, Dordogne, Eure, Indre, Loir et Cher, Maine-et-Loire, Moselle, Haute-Savoie, Seine Maritime, Haute-Vienne, and Yonne.

Figure B.1: Candidates' accounts: 1988 and 1993, Anecdotal evidence from 15 departments

C Robustness checks

Clustering In our preferred difference-in-differences specification (equation (2)), we cluster the standard errors at the district level. The estimates remain significant when clustering standard errors at the department level instead (Appendix Table E.15).

Measuring the local index Our local index, which measures the prevalence of local references over national ones, is defined as: $\ln\left(\frac{1+Local}{1+National}\right)$. Since the choice of the constant 1 is arbitrary, we test the robustness of our results to alternative definitions in Appendix Table E.16. Column 1 replicates our main result from Table 3 (column 1). We then change the arbitrary constant to 1000 (column 2) and to 0.001 (column 3). In column 4 the outcome is defined as the standardized ratio of local frequency over the sum of local frequency and national frequency. In column 5 the outcome is that same ratio, without standardization.

Measuring loss in firm donations We test for the robustness of our estimates to alternative measures of firm donations loss. Appendix Table E.17 (Panel a) shows that estimating equation (2) with the (standardized) log of firm donations (multiplied by -1) as independent variable yields an estimated impact of donations on a manifesto’s local index that is larger in magnitude (-0.19) to the point estimate from column 1 of Table 3.⁶ In Panel b, we use an indicator variable for receiving any firm donation (also multiplied by -1) as independent variable, which shows that the effect of banning firm donations is slightly larger in size at the extensive margin, with an estimated negative effect on the local index corresponding to 14% of a standard deviation in the local index, significant at the 10% level. Panel c shows a less negative (-0.02) but significant estimate for the effect of the number of (distinct) firm donations lost by each candidate. In Panel d, we estimate a quadratic version of equation (2) (where both linear and quadratic terms are multiplied by -1) and find that the effect of losing firm donations on the prevalence of local references over national ones follows a concave pattern, indicating that the negative impact get larger as candidates lose increasingly large amounts of donations. This pattern is confirmed by Panel e, in which we include a separate indicator variable for each firm donations quintile: the effect is not significant for the first two quintiles (candidates who lose few donations), while it is particularly large for the fifth quintile (those who lose a large amount of firm donations).

⁶More precisely we use $\ln(\text{Firm Donations}_{ipdt} + 1)$ as independent variable to account for the many zeros in the data. We then divide this quantity by its standard deviation in 1993.

D Additional figures

ÉLECTIONS LÉGISLATIVES GÉNÉRALES DES 21 MARS ET 28 MARS 1993

AISNÉ (1^{re} circonscription)

Plafond de dépenses : 500 000 F

Décision C.C.F.P. du : 05-11-93

Scrutin non contesté

DÉPENSES				RECETTES							NOMS DES CANDIDATS	Décisions C.C.F.P.
Total déclaré	Base R. 39	Réforma-tions	Total retenu	Dons P.P.	Dons P.M.	Apport personnel net	Apport parti net	Autres	Réforma-tions	Total retenu		
18 473	0	0	18 473	0	0	0	18 473	0	0	18 473	PERNELLE Jean-Loup	A
236 465	58 501	+40 852	218 816	34 200	77 750	49 695	40 852	19 614	0	222 111	DOSIERE René	AR
98 344	36 536	0	61 808	4 350	0	57 458	0	0	0	61 808	SALECK Michel	A
392 614	59 862	0	332 752	85 750	159 800	0	200 000	55 328	0	500 878	LAMANT Jean-Claude	A
53 567	16 395	0	37 172	0	0	26 131	10 041	1 000	0	37 172	DEGEMBE Patrick	A
74 570	26 131	0	48 439	1 000	0	47 439	0	0	0	48 439	LACOMBE Dominique	A
33 173	0	+ 300	33 473	0	0	0	33 173	0	+ 300	33 473	BERDAL Michelle	HD
0	0	0	0	0	0	0	0	0	0	0	JARNO Philippe	ND

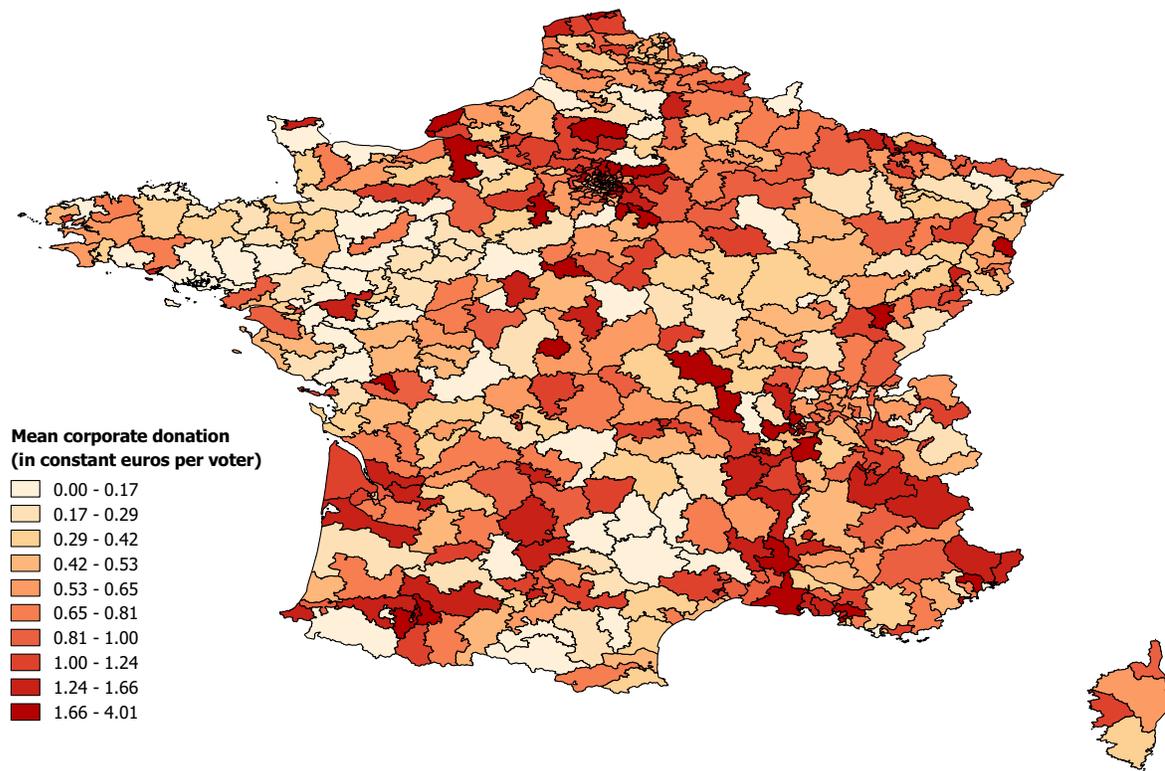
Listes des dons de personnes morales versés à partir du 1^{er} février 1993 (loi n° 92-122 du 29 janvier 1993)

AISNE (1^{re} circonscription)

<i>René DOSIERE</i>		<i>Jean-Claude LAMANT</i>	
STE ANIZIENNE DE CONSTRUCTION	10 000 F	ETS CAILLE SA	1 000 F
STE ANIZIENNE DE VIABILITE ET D'ASSAINISSEMENT	3 000 F	ENTREPRISE DRAPIER	8 000 F
ENTREPRISE DE CONSTRUCTION DE LA THIERACHE	1 000 F	SA DU PARC	3 000 F
SARL SCOP CHAUFFAGE SANITAIRE	2 000 F	SA LE BETON ARME FERRARI	5 000 F
CAISSE MUTUELLE D'ASSURANCES	1 000 F	SA BPF	2 000 F
ARCHITECTES ASSOCIES BORDERIOUX DI LEGGE	7 000 F	SARL GARAGE LESOUDARD	1 000 F
SA BOUCARD	2 500 F	SA CHAMBRY DISTRIBUTION	15 000 F
SA EUROP ALU	750 F	ENTREPRISE CHEMERY	1 500 F
		ENTREPRISE CHEMERY	1 000 F
		SAB ENTREPRISE BOUCARD	2 500 F
		SARL VITRANT	5 000 F
		GENERALE DE TRANSPORT ET D'INDUSTRIE	30 000 F
		SA THOURAUD	5 000 F
		S.G.S.T SAVE	10 000 F

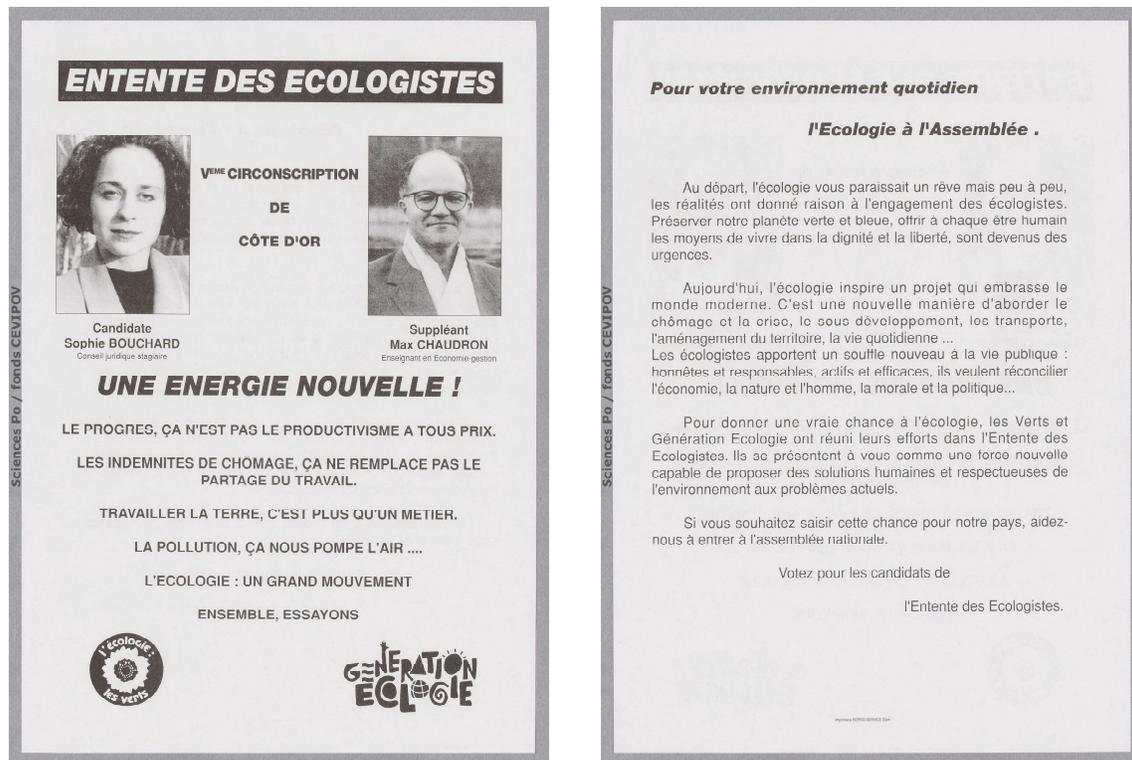
Notes: This figure provides an example of the CNCCFP's paper archives used to collect information on the firm donations received by candidates running in 1993, including the name of the donors and the amount of their donation.

Figure D.1: Example of firm donations data



Notes: The map shows the mean value of firm donations, measured in 2020 constant euros per voter, received by candidates running in a given district in 1993. Districts are split in deciles: the lightest orange stands for the 10% districts with the lowest average amount of firm donations (i.e., districts where candidates receive between 0 and 0.17 euro per voter, on average); the darkest red stands for the 10% districts with the largest average amount of firm donations (i.e., districts where candidates receive between 1.66 and 4 euro per voter, on average). N=555.

Figure D.2: Mean firm donations in 1993



Source: Electoral archives of CEVIPOF SciencesPo, EL190L199303021051PFPdfmasterocr <https://archive.org/details/archiveselectoralesducevipo>

Translation: Environmentalists' agreement! Fifth constituency of Côte d'Or.

Candidate: Sophie BOUCHARD. Trainee legal adviser.

Deputy: Max CHAUDRON. Teacher in Economics and Management

A NEW ENERGY! Progress is not productivism at all costs. Unemployment benefits are no substitute for work sharing. Working the land is more than a job; Pollution, it sucks the air out of us... Ecology: a great movement! Let's try it together! For your daily environment ecology in the National assembly.

At first, ecology seemed like a dream, but little by little, the realities have given reason to the commitment of environmentalists. Preserving our green and blue planet, offering every human being the means to live in dignity and freedom, have become urgent.

Today, ecology inspires a project that embraces the modern world. It is a new way of tackling unemployment and the crisis, underdevelopment, transport, regional planning, daily life...

The ecologists bring a new breath to public life: honest and responsible, active and efficient, they want to reconcile the economy, nature and man, morality and politics...

To give ecology a real chance, "les Verts" and "Génération Ecologie" have joined forces in the Environmentalists' agreement. They present themselves to you as a new force capable of proposing humane and environmentally friendly solutions to current problems.

If you want to seize this opportunity for our country, help us enter the national assembly.

Vote for the candidates of Environmentalists' agreement.

Figure D.4: Manifesto from a Green candidate with no firm donation

REPUBLIQUE FRANÇAISE - DÉPARTEMENT DES ALPES-MARITIMES
ELECTIONS LÉGISLATIVES 21 MARS 1993 - 2^e CIRCONSCRIPTION DE NICE



CANDIDATS
FRONT NATIONAL et INDÉPENDANTE DE DROITE

JACQUES PEYRAT
AVOCAT - ANCIEN DÉPUTÉ - CONSEILLER RÉGIONAL
CONSEILLER GÉNÉRAL - CONSEILLER MUNICIPAL

SUPPLÉANTE
JACQUELINE MATHIEU-OBADIA
MÉDECIN - ANCIENNE CONSEILLÈRE RÉGIONALE
ADJUTE AU MAIRE DE NICE

Madame, Mademoiselle, Monsieur,

Si vous pensez que l'insécurité et l'insalubrité gagnent chaque jour un peu plus de terrain dans les quartiers de notre Ville,
Si vous pensez que la progression inexorable de l'immigration, essentiellement des pays du tiers-monde, vient gravement menacer notre territoire et notre identité Nationale,
Si vous pensez que l'écrasement fiscal, subi aussi bien par les petites et moyennes entreprises que par les citoyens, est devenu intolérable,
Si vous êtes las de la corruption et de l'auto-amnistie de cette corruption,
Si vous êtes effrayés par la dégradation des mœurs et par l'effondrement des valeurs morales publiques et privées,
Si vous pensez enfin que les politiciens qui sont en charge des affaires ne traduisent plus les aspirations du peuple qui les a portés au pouvoir :

ALORS VOUS VOTREZ MASSIVEMENT DIMANCHE 21 MARS

Parce que vous avez été heurtés par la révélation de la Chambre Régionale des Comptes du véritable pillage des fonds publics auquel se livrent un certain nombre des proches collaborateurs de l'ancien Maire, dont certains occupent encore des fonctions importantes.
Parce que vous êtes choqués par les "affaires" qui secouent notre Cité et offrent aux Nippoïis l'image d'une ville en pleine faillite.
Parce que vous êtes révoltés que certains responsables de ces "affaires" osent se présenter à vous pour briguer des mandats électifs,
Parce que vous pensez que l'intégrité est la vertu première de celui qui se présente aux suffrages de ses concitoyens

ALORS VOUS VOTEREZ POUR LES CANDIDATS DE L'INTÉGRITÉ

J'ai demandé au Docteur Jacqueline MATHIEU-OBADIA, mère de famille nombreuse, médecin spécialiste, responsable politique de haut niveau, adjoint irréprochable au Maire de Nice, de venir à mes côtés pour être ma suppléante.
Je suis honoré qu'elle ait accepté.
Fils est Médecin de profession, je suis Avocat et nous n'avons pas besoin des prébendes du pouvoir pour trouver d'autres ressources que celles provenant de la juste rétribution de notre travail.

Je fais de la politique militante depuis huit ans par nécessité de survie nationale et de réaction contre l'avilissement et la prévarication d'une grande partie de la classe politique de notre Pays.
Vous avez le pouvoir de changer par votre vote le cours des choses.
Changer le cours des choses, c'est rejeter énergiquement cette gauche qui n'aime pas la Nation française et qui l'a entraînée dans sa faillite, qui a limité notre Souveraineté, détruit notre Ecole et notre Armée, effondré notre Economie, exacerbé le malaise de nos villes, annihilé le goût de l'effort et la moralité.
Mais changer le cours des choses, ce n'est pas non plus voter pour des candidats d'une opposition résignée toujours trop tiède et trop timorée qui n'a jamais cherché à résoudre efficacement les vrais problèmes quand elle était au pouvoir.
Aussi, pour nous permettre de proposer à la prochaine Assemblée Nationale des mesures énergiques, j'ai besoin de votre soutien dans ce combat qui commence à cette élection législative et qui se terminera, après d'autres péripéties, à l'élection municipale que j'espère très prochaine.
Je souhaite trouver compteur sur vos suffrages dès le premier tour qui peut être unique, si vous décidez d'aller voter en masse.

Jacques PEYRAT



Jacques PEYRAT
Avocat au Barreau de Nice
Ancien Député et Ange de la Haute Cour de Justice
Conseiller Régional P.V.C.A.
Conseiller Général des Alpes Maritimes
Conseiller Municipal de Nice
Maire - 2^e adjoint
Président Fédérateur du Centre Francophone de Nice

Jacqueline MATHIEU-OBADIA
Docteur en Médecine
Adjoint au Maire de Nice
Ancienne Conseillère Régionale P.V.C.A.
Présidente du Comité de Coordination pour la Liberté de l'Enseignement (C.C.L.E.)
Membre - 1^{er} adjoint
Ancienne Vice-Présidente du Conseil d'Administration du Centre Hospitalier de Nice

INTÉGRITÉ - COURAGE - COMPÉTENCE

Source: Electoral archives of CEVIPOF SciencesPo, EL189L199303006021PFPdfmasterocr—<https://archive.org/details/archiveselectoralesducevipof>

Translation: French Republic - Department of the Alpes-Maritimes. Legislative elections 21 March 1993 - second constituency of Nice.

Candidates from Front National and Indépendante de droite. Jacques Peyrat. Lawyer, former deputy, regional councilor, departmental councilor, municipal councilor.

Deputy: Jacqueline Mathieu-Obadia. Doctor, former deputy, regional councilor, deputy mayor of Nice.

Madam, Miss, Sir, If you think that insecurity and insalubrity are gaining ground every day in the neighborhoods of our city, If you think that the inexorable progression of immigration, essentially from Third World countries, is seriously threatening our territory and our national identity, If you think that the tax burden, suffered by small and medium-sized businesses as well as by citizens, has become intolerable, If you are tired of corruption and the self-amnesty of this corruption. If you are frightened by the degradation of morals and the collapse of public and private moral values, If you think that the politicians in charge of affairs no longer reflect the aspirations of the people who brought them to power: Then you will vote massively on Sunday 21 March.

Because you were shocked by the revelation of the Chambre Régionale des Comptes of the real plundering of public funds by a certain number of the former Mayor's close collaborators, some of whom still hold key positions. Because you are shocked by the "affairs" that are shaking our city and offer the people of Nice the image of a city in full bankruptcy. Because you are outraged that some of those responsible for these "affairs" dare to come to you to run for elected office. Because you think that integrity is the first virtue of someone who is running for the votes of his fellow citizens, Then you will vote for the candidates of integrity.

I asked Doctor Jacqueline Mathieu-Obadia, mother of a large family, medical specialist, high-level politician, irreproachable deputy mayor of Nice, to come to my side to be my deputy. I am honored that she has accepted. She is a doctor; I am a lawyer and we do not need the prebends of power to find other resources than those coming from the fair remuneration of our work.

I have been involved in militant politics for eight years out of a need for national survival and as a reaction against the blindness and prevarication of a large part of the political class in our country. You have the power to make a difference through your vote. To change the course of things is to reject energetically this Left which does not love the French Nation and which has dragged it into its family, which has limited our sovereignty, destroyed our School and our Army, collapsed our Economy, exacerbated the malaise of our cities, annihilated the taste for effort and morality. But changing the course of things does not mean voting for the candidates of an opposition that has always remained too lukewarm and timid and has never sought to effectively solve the real problems when it was in power. Also, to enable us to propose courageous measures to the next National Assembly, I need your support in this fight which begins with this legislative election and which will end, after other twists and turns, in the municipal election which I hope will be very soon. I hope to be able to count on your vote in the first round, which can be the single one, if you decide to vote en masse. Jacques Peyrat.

Figure D.5: Manifesto from a far-right candidate with firm donations

Translation - continued:

Jacques Peyrat. Lawyer at the Bar of Nice, Former Member of Parliament and Judge at the High Court of Justice Regional Councilor P.A.C.A Departmental Councilor of the Alpes Maritimes. Municipal Councilor of Nice. Married, 2 children. Founding President of the Parachute Circle of Nice/

Jacqueline MATHIEY-OBADIA. Doctor of Medicine. Deputy Mayor of Nice. Former Regional Councilor P.A.C.A. President of the “Comité de Coordination pour la liberté de l’enseignement”. Married, 4 children, Former Vice-President of the Board of Directors of the Nice Hospital.

INTEGRITY - COURAGE - SKILLS

Figure D.5: Manifesto from a far-right candidate with firm donations (continued)

Translation - continued:

In the regions, they always sell themselves to the highest bidder: in Lorraine to the UDF, in the North to the PS, in Ile-de-France to the RPR. RPR-UDF, they lie to you! They tell you they are against immigration. In reality together with the PS and the PC, the RPR and the UDF voted for the 10-year renewable residence permit for immigrants. They tell you that they will reform the Nationality Code. In reality they had already promised it in 1986, but they did nothing about it. They tell you that they will restore security. In reality the elected members of the RPR and the UDF still refuse today to reinstate the death penalty. They tell you that they will save agriculture. In reality the RPR and the UDF approved the CAP 92 and said YES to the Maastrich Treaty. RPR-PS-UDF-PC: All responsible, all guilty! Immigration, unemployment, taxes, insecurity, injustice, corruption... enough is enough! With FERDINAND GINOUX: the courage to say, the will to act...

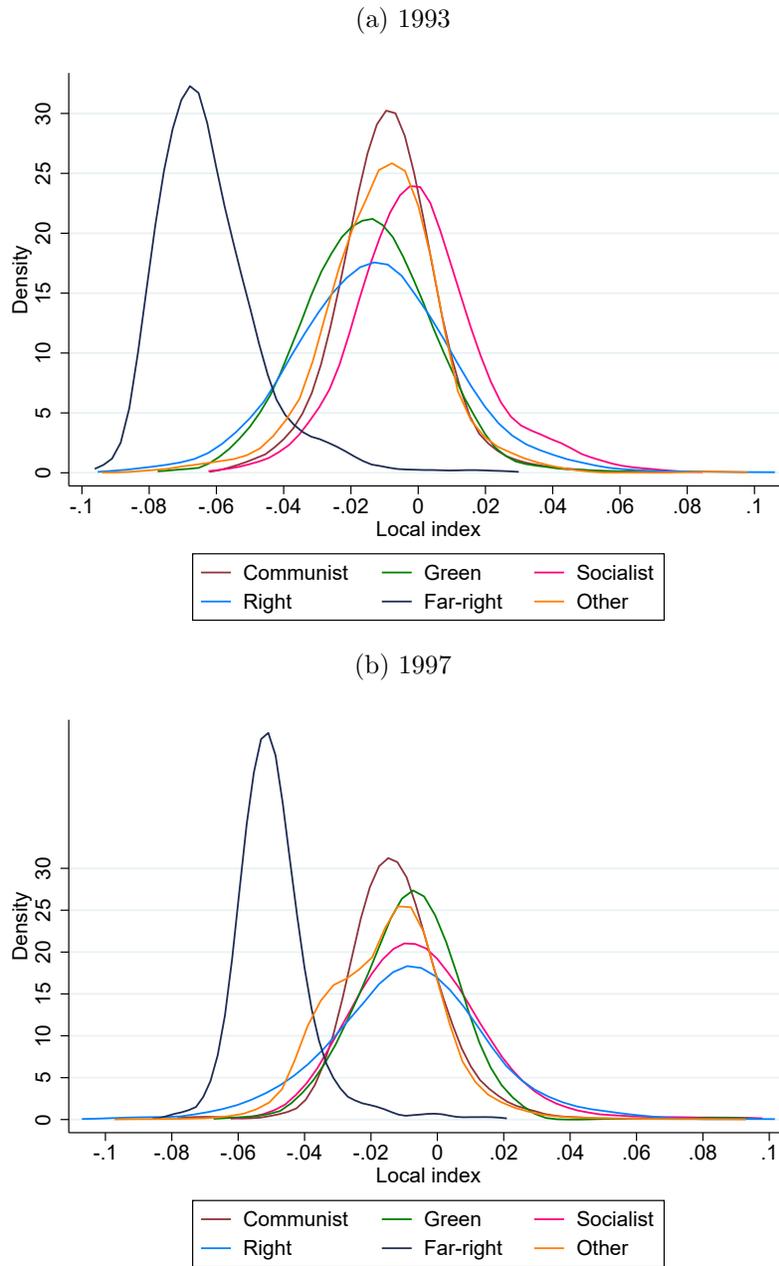
- 1) Organize the return of immigrants to their homes by repealing the 10-year renewable residence permit.
- 2) Reform the nationality code by abolishing the automatic acquisition of French nationality.
- 3) Give priority to the French for jobs, welfare, housing...
- 4) Give work to the French by keeping French workers in their jobs in the event of economic layoffs and by organising the return of immigrants to their homes.
- 5) Free SMEs from constraints that prevent hiring.
- 6) Reducing the burden on business.
- 7) Reinstate the death penalty and the certainty of punishment for all offenders and criminals.
- 8) Deporting foreign offenders and illegals.
- 9) Create a parental income for French families by paying a salary of 6,000 francs for raising children full-time.
- 10) Allocate a school voucher to French families to ensure free choice and neutrality of school.
- 11) Fight against French poverty by creating a national solidarity allowance.
- 12) Re-evaluate low wages by combating the use of cheap immigrant labour.
- 13) Protect our economy from unbridled competition from outside Europe by re-establishing borders.
- 14) Reduce taxes by ending the waste of public money and phasing out income tax.
- 15) Save social security by separating the funds for French and immigrants.
- 16) Guarantee pensions and index them by creating *à la carte* and funded pensions.
- 17) Save French agriculture by abolishing the tax on undeveloped land and re-establishing the Community preference provided for in the Treaty of Rome and by introducing a debt moratorium.
- 18) Give the French people a say by instituting a popular initiative referendum.
- 19) Protecting our environment by defending our natural and cultural heritage.
- 20) Restore our national defense by increasing its budgetary means and improving material and personal conditions.

IF YOU WANT AN MP... 1) with clean hands. 2) who is patriotic, free and independent of lobbies and mafias. 3) who tells you the truth. 4) who will put France's house in order. 5) who fights immigration, unemployment, insecurity and fiscal excesses as well as corruption. VOTE FOR FERDINAND GINOUX!

VOTE USEFUL! One more RPR-UDF vote will not change anything... On the other hand, one more F.N vote is really useful: - to democracy, to avoid that millions of French people are deprived of any representation in the National Assembly. - to France to allow the voice of those who say out loud what a majority of French people think in silence to be heard.

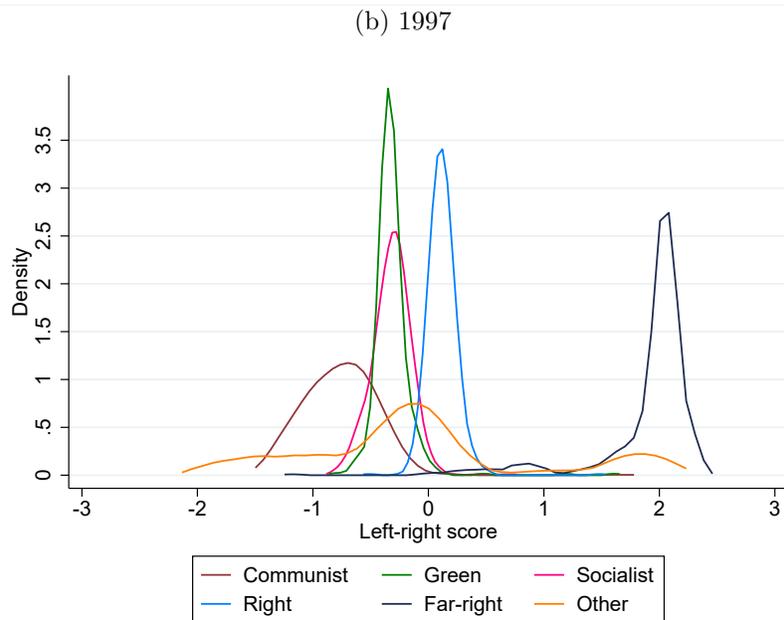
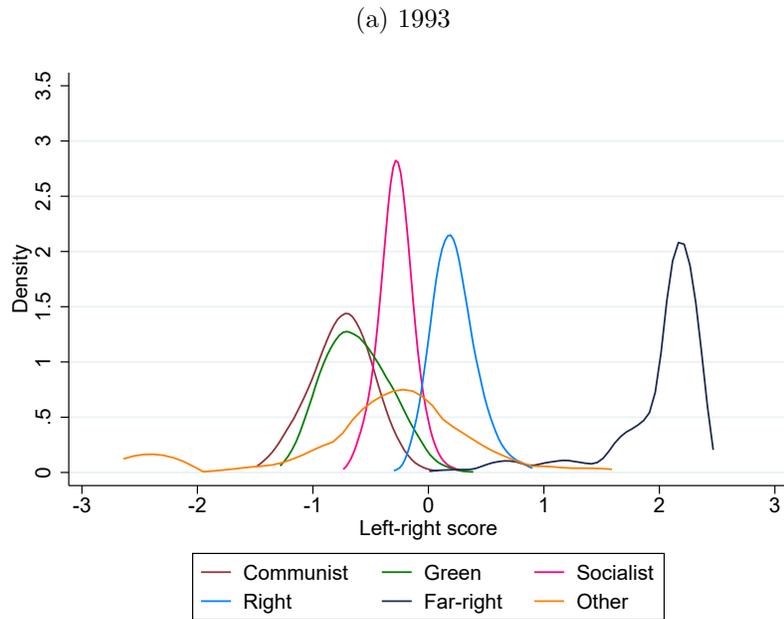
Vote Front National! French people first!

Figure D.6: Manifesto from a far-right candidate with no firm donations (continued)



Notes: We plot, for each of the five main parties in our sample as well as for candidates from smaller parties and independents, the kernel density of manifestos' local index, which measures the prevalence of local references over national ones, in 1993 and in 1997 separately. The sample includes all candidates whose first-round manifesto is available and non-empty after text pre-processing. Large outliers are excluded for visual purposes. $N=4,866$ and $N=5,419$ (resp.).

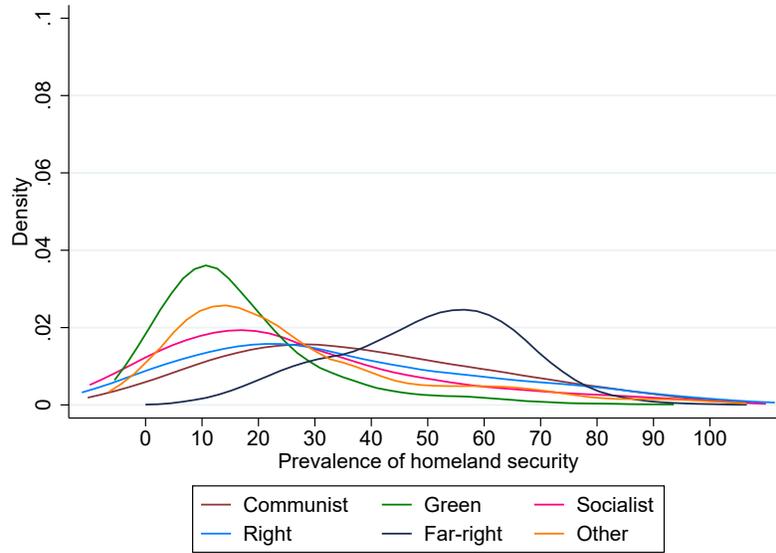
Figure D.7: Kernel density of the local index by party



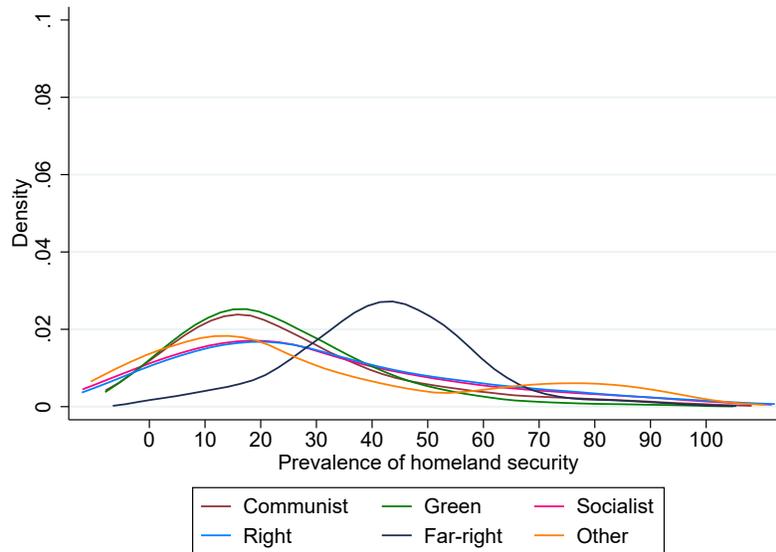
Notes: We plot, for each of the five main parties in our sample as well as for candidates from smaller parties and independents, the kernel density of left-right scores from manifestos (issued before the first election round), in 1993 and in 1997 separately. This score indicates the partisan leaning of each manifesto from left-wing (negative score) to right-wing (positive score), based on the words it contains. Other notes as in Figure D.7.

Figure D.8: Kernel density of left-right score by party

(a) 1993



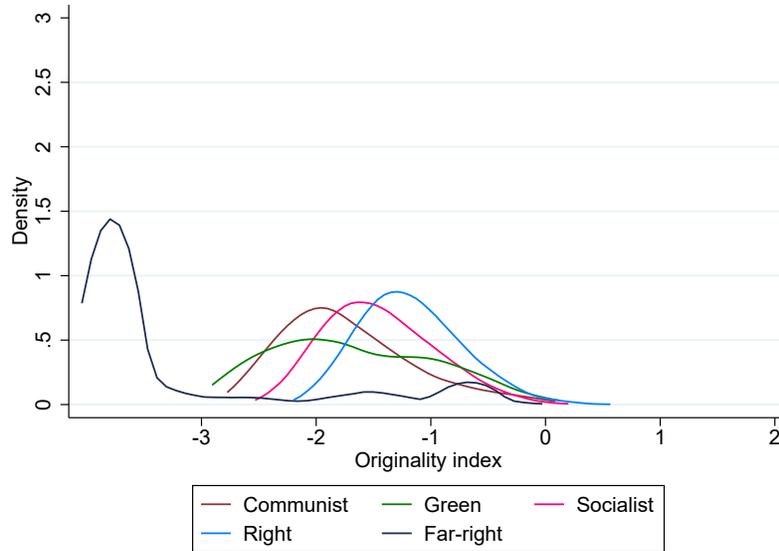
(b) 1997



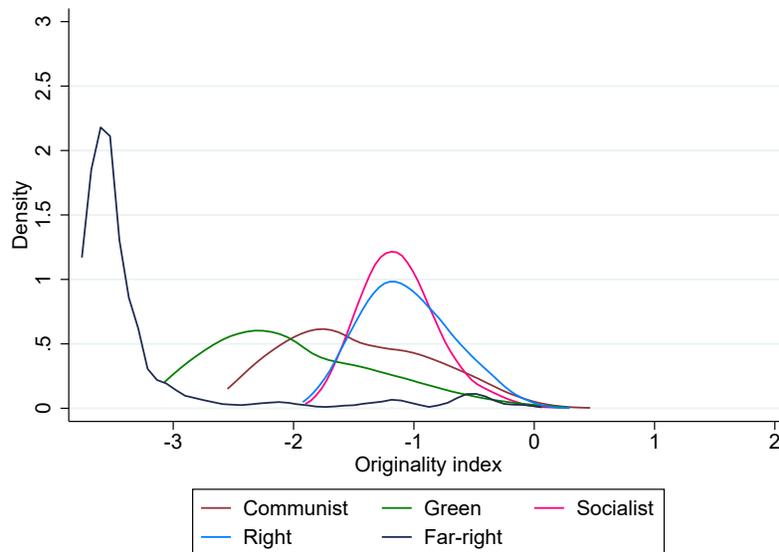
Notes: We plot, for each of the five main parties in our sample as well as for candidates from smaller parties and independents, the kernel density of homeland security prevalence in manifestos (issued before the first election round), in 1993 and in 1997 separately. The prevalence of homeland security indicates the probability (in percentage points) that the manifesto focuses primarily on homeland security issues out of 17 policy topics, based on the words it contains. Other notes as in Figure D.7.

Figure D.9: Kernel density of homeland security prevalence by party

(a) 1993



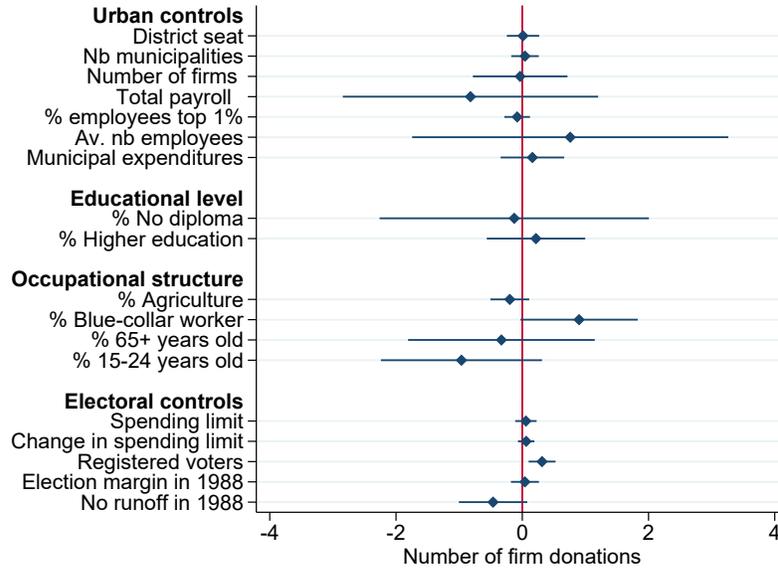
(b) 1997



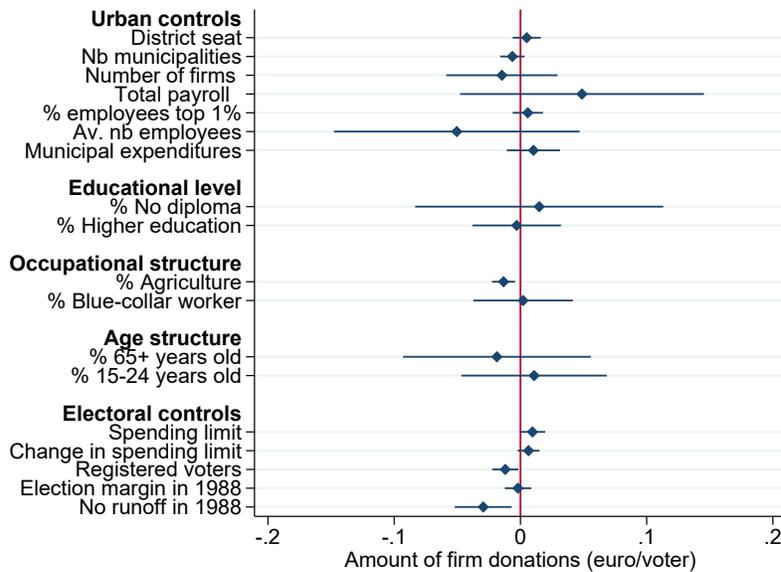
Notes: We plot, for each of the five main parties in our sample, the kernel density of candidate originality (issued before the first election round), in 1993 and in 1997 separately. The sample is restricted to candidates from the Communist party, the Green party, the Socialist party, the conservative right-wing party and the far-right party. The originality index indicates whether a manifesto is similar to (lower value) or distinct from (higher value) other manifestos from the same party. $N=2,535$ and $N=2,529$ (resp.). Other notes as in Appendix Figure D.7.

Figure D.10: Kernel density of candidate originality by party

(a) Number of firm donations

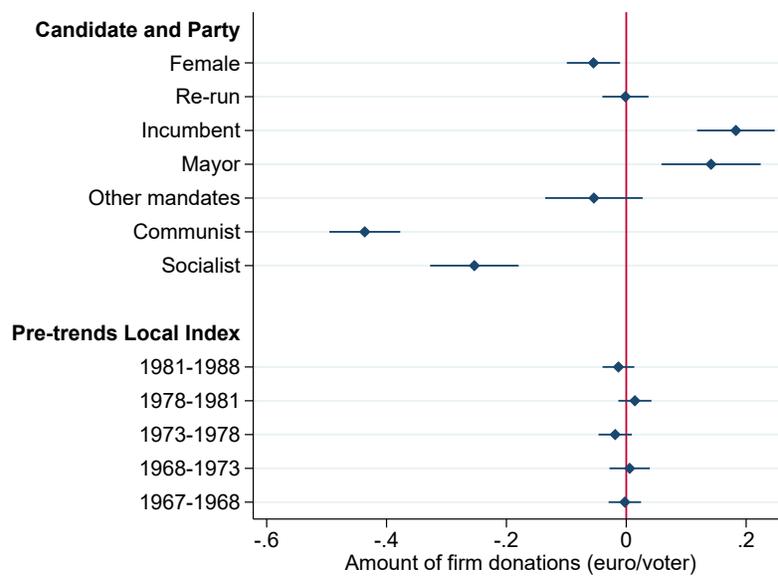


(b) Amount of firm donations



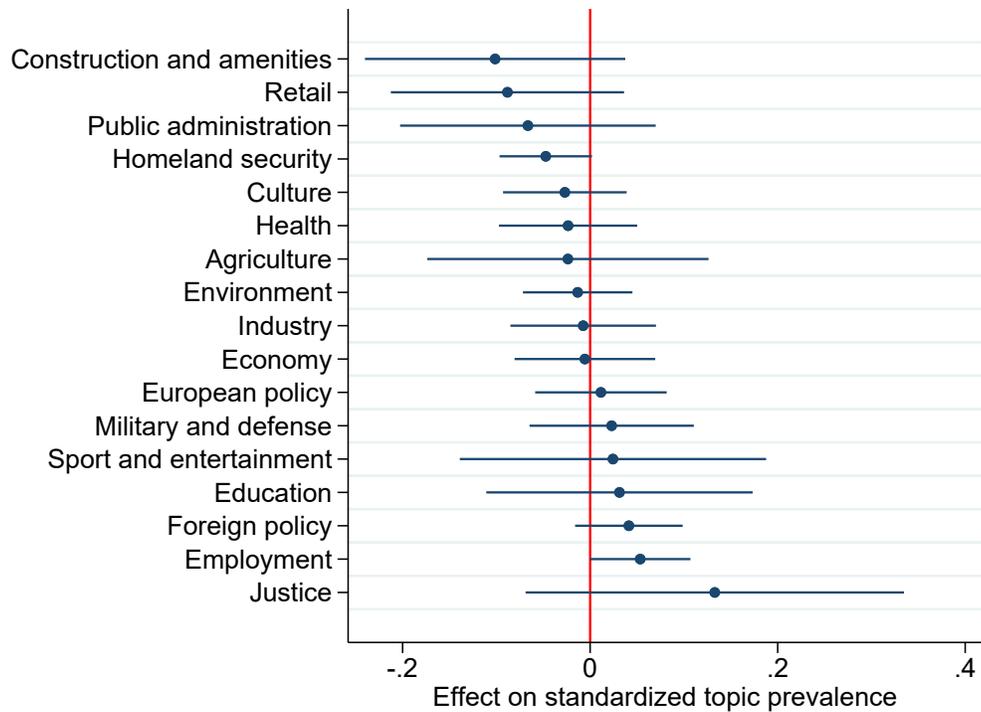
Notes: This figure shows the coefficients and their 95% confidence intervals from a regression of the number of firm donations (Figure D.11a) or the amount of firm donations per voter (in 2020 constant euros) (Figure D.11b) received by each candidate on a set of party fixed effects, candidate characteristics, and district characteristics (estimation of equation (1)). All explanatory variables are standardized. We use one observation per candidate in 1993. Standard errors are clustered at the district level.

Figure D.11: District-level determinants of firm donations in 1993



Notes: The figure shows the coefficients and their 95% confidence intervals from a regression of the amount of firm donations per voter (in 2020 constant euros) received by each candidate on a set of party fixed effects, candidate characteristics and pre-trends in local index at department \times party level. We use one observation per candidate in 1993 and the sample includes all candidates from the Communist, the Socialist or the right-wing party (omitting candidates from the Socialist party). Standard errors are clustered at the district level.

Figure D.12: Firm donations and trends in local index before 1988



Notes: The figure shows the coefficients and their 95% confidence intervals from a regression of policy topic prevalence on the amount of firm donations per voter divided by its standard deviation in 1993 and multiplied by -1. We use one observation per candidate per year. The outcome is the predicted probability, for each policy topic, that a candidate manifesto focuses primarily on that topic, based on the words it contains. It is standardized by year to facilitate the comparison across topics with different mean prevalences. The sample includes all candidates who run both in 1993 and 1997, and whose manifesto is available. We control for candidate fixed effects and party×year fixed effects, as well as time-varying individual controls: indicator variables for having run in the past, for being the incumbent, and for holding other electoral mandates. We also control for the predicted amount of firm donations, based on observable characteristics, interacted with a post-ban indicator.

Figure D.13: Impact of firm donations on policy topics in the manifestos

E Additional tables

Table E.1: Summary statistics: Firm donations in 1993, Sub-sample of candidates who received at least one firm donation

	Mean	Median	p75	sd	N
# Firm donations	8.79	6.00	12.00	9.49	1,701
Firm donations (euros)	24,406	12,795	38,326	30,026	1,701
Firm donations (euros/voter)	0.37	0.19	0.55	0.48	1,701
% Firm donations in total revenue	37.44	34.14	59.33	28	1,701

Notes: The table presents summary statistics on firm donations received by candidates in 1993. An observation is a candidate and the sample includes candidates who received at least one firm donations. Other notes as in Table 1.

Table E.2: Summary statistics: Firm donations in 1993 at the district level

	Mean	sd	Min	Max	N
Electoral district					
Registered voters	68,238	11,293	26,468	111,715	555
# Candidates	9.26	2.21	5	18	555
# Candidates with firm donations	3.07	1.29	0	8	555
Firm donations					
# Firm donations	26.10	18.58	1	109	555
Mean firm donations (€)	2,240	1,256	0	8,479	555
Total firm donations (€)	53,787	40,162	0	218,872	555

Notes: The table presents summary statistics on electoral districts and firm donations in 1993, at the district level. Mean and total firm donations are in 2020 constant euros. Total firm donations is the sum of firm donations in the district.

Table E.3: Largest donors in 1993

Donor name	Total donations	# Donations
COLAS	391,525	95
BOUYGUES	314,953	47
SOGEA	312,590	82
SPIE	304,126	59
SAUR	258,852	62
SCREG	207,475	54
SOCIETE DES EAUX	194,180	44
DUMEZ	168,303	35
OMNIUM	168,303	35
CAMPENON BERNARD	153,539	36
STREICHENBERGER	92,124	25
BEUGNET	88,187	25
SODEXHO	86,612	16
ESSYS MONTENAY	82,675	20
SUPAE	77,754	12
PIERRE FABRE	76,770	9
GENERALE RESTAURATION	76,770	12
JEAN LEFEBVRE	70,608	32
SOCAE	93,975	8
MAILLARD DUCLOS	62,991	8

Notes: The table presents the largest 20 donors in 1993 along with the total value and the number of donations they made. Total donations are in 2020 constant euros.

Table E.4: Summary statistics by sector of activity

	Mean	sd	Min	Max	N
Agriculture					
Mean donation	1,226	2,243	6	9,842	184
Total donations	1,790	4,156	6	37,401	184
Construction					
Mean donation	2,296	2,585	20	10,138	1,615
Total donations	6,152	20,623	20	401,368	1,615
Culture					
Mean donation	1,908	2,576	20	9,842	157
Total donations	2,448	4,720	20	49,211	157
Economy-Finance					
Mean donation	2,454	3,007	6	9,842	586
Total donations	3,711	5,500	6	39,369	586
Environment-Energy					
Mean donation	3,577	2,760	30	9,842	160
Total donations	12,991	32,433	30	304,126	160
Health					
Mean donation	1,826	2,823	10	9,842	256
Total donations	2,794	6,625	10	76,770	256
Industry					
Mean donation	2,198	2,797	10	29,527	746
Total donations	4,402	10,967	10	163,185	746
Justice/Legal					
Mean donation	758	818	98	2,362	10
Total donations	758	818	98	2,362	10
NGOs					
Mean donation	3,908	3,153	49	9,842	35
Total donations	7,305	8,189	49	36,416	35
Retail					
Mean donation	1,963	2,681	10	9,842	805
Total donations	3,150	7,770	10	116,926	805
Sport					
Mean donation	1,075	2,232	20	9,842	23
Total donations	1,661	4,085	20	17,716	23
Travel					
Mean donation	479	490	39	1,968	21
Total donations	576	583	39	1,968	21
Unknown					
Mean donation	1,189	1,624	10	9,842	5,870
Total donations	1,389	2,089	10	47,243	5,870
Total					
Mean donation	1,633	2,235	6	29,527	10,468
Total donations	2,857	10,278	6	401,368	10,468

Notes: We show both the mean value and the total value of donations made by each donor in 1993, for each sector separately. Donations are in 2020 constant euros.

Table E.5: Left-right words

Left	Right
dividend	terrorist
antidemocratic	criminal
poverty	immigration
disarmament	deportation
benefits	decadence
capitalist	patriot
abortion	europe
railroad workers	persecution
law	taxation
strike	utopia

Notes: This table shows examples of words, translated in English, among words with lowest (left-wing) and highest (right-wing) partisan scores, both in 1993 and in 1997. These scores (or loadings) are obtained by fitting a multinomial regression of word frequency in manifestos on an indicator variable equal to one if the candidate is from a well-identified right-wing party as opposed to a well-identified left-wing party – for 1993 and 1997 separately.

Table E.6: Topic-specific words

Homeland security	Education	Environment	Retail	Health
vote by proxy	geology	birds	bakery	speech therapy
police	tenure	fishermen	hairdresser	paramedical
firefighter	bilingual	game (animals)	craftmanship	hepatitis
electoral	school district	hunting	butcher	spokesperson
homeland	school board	fauna	slaughterhouse	physical therapy
passport	academia	waste	retail	transfusion
tobacco shops	geography	gas	organic	addict
violation	highschool	pollution	tobacco shops	midwife
library	teacher	farming	business	surgery
arrest	trainer	flood	taxi	anesthesia

Economy	Construction and amenities	Public administration	Employment	Justice
tobacco shop	national road	decentralisation	healthcare	seal
bank customer	river	rank	job training	clerk
value added	tourism	library	pension	prosecutor
gas	railroad	secretary	job seeking	prison
slaughterhouse	gas	assignment	disabled	lawyer
butcher	traveler	territory	solidarity	accountable
retail	freeway	city hall	trainee	magistrate
russian	aviation	citizenship	benefits	jurisdiction
deductible	car	exam	occasional worker	justice
taxation	traffic	application	internship	offense

Agriculture	Military and defense	Foreign policy	Industry	Culture
sheep	officer	execution	telecommunications	archeology
farmers	veteran	arrest	postal service	library
pig	prisoner	torture	gas provider	bicentennial
fishing	resistance	russian	textile	disc
milk	police	amnesty	electricity	french speaking
cereals	army	united nations	energy	movie theater
cow	troop	french speaking	oil	museum
vegetable	mutilation	diplomacy	diversification	culture
flock	deportation	turkey	industry	channel
harvest	defense	foreign	phone	music

Table E.6: Topic-specific words (continued)

Sport and entertainment	European policy
olympic games	turkey
soccer	english
ski	textile
youth	parliament
sport club	translation
physical education	trade agreement
swimming pool	cereals
amateur	belgian
organizer	greek
	common
alcohol	agricultural policy

Notes: This table shows, for each policy topic, examples of words, translated in English, among words with highest topic loadings. These loadings are obtained by fitting a multinomial inverse regression of word frequency in written questions to the government on a set of 17 indicator variables indicating which topic each question is about, based on the Ministry it is addressed to.

Table E.7: Prevalence of policy topics in candidate manifestos

	Mean	sd
Topic		
Agriculture	1.28	4.06
Construction and amenities	2.90	4.94
Culture	1.45	2.38
Military and defense	3.57	4.32
Economy	5.80	8.22
Education	3.83	5.90
Employment	15.75	15.87
Environment	3.24	10.50
European policy	0.27	1.36
Foreign policy	8.03	8.67
Health	4.14	5.72
Industry	2.23	3.00
Homeland security	30.53	24.34
Justice	0.24	1.31
Retail	0.16	0.59
Public administration	0.16	1.15
Sport and entertainment	0.20	0.35

Notes: The table displays the mean and standard deviation for the prevalence of each policy topic, defined as the predicted probability (in percentage points) that a candidate manifesto focuses primarily on that topic. The sample contains all first round manifestos from 1993 and 1997 that are non-empty after text pre-processing. N=10,284.

Table E.8: Summary statistics for covariates at the district level

	Mean	sd	Min	Max	N
# Municipalities in the district	62.83	61.46	1	342	555
Region capital in the district	0.10	0.29	0	1	555
Urban district	0.25	0.43	0	1	555
Census 1990					
No diploma	47,264	41,845	3,521	358,972	555
Higher education	9,491	11,486	280	70,057	555
Agriculture	1,165	1,233	0	6,056	555
Blue-collar worker	11,090	7,474	604	61,394	555
65+ years old	16,320	16,467	1,052	134,100	555
25-34 years old	17,390	15,029	1,128	118,764	555
Covariates 1993					
District municipalities revenue	227,104	736,528	0	3,843,893	555
District municipalities expenditure	203,077	658,821	0	3,439,955	555
Number of firms	3.25	10.39	0	55	555
Mean number of employees per municipality	53.76	173.03	0	917	555
Total payroll (in thousand euros)	8,691	30,619	0	161,998	555
% employees in top 1%	0.45	1.54	0	8	555
Covariates 1997					
District municipalities revenue	266,060	871,396	0	4,552,347	555
District municipalities expenditure	249,126	830,695	0	4,340,313	555
Number of firms	3.58	11.44	0	61	555
Mean number of employees per municipality	54.39	173.02	0	918	555
Total payroll (in thousand euros)	9,310	32,369	9	171,363	555
% employees in top 1%	0.45	1.48	0	8	555

Notes: The table presents summary statistics on district covariates. An observation is a district. Census in 1990 are municipality-level census data averaged at the district level. Covariates in 1993 and 1997 are from the revenue and annual spending in infrastructure of the French municipalities with more than 10,000 inhabitants summed at the district level (municipalities' revenue and operating expenses) and from the "Déclaration Annuelle de Données Sociales" (DADS), a detailed French database on wages, summed at the district level (number of firms, employees per municipality, total payroll, share of employees in the top 1% of revenue. Municipalities' revenue and expenditure are in 2020 constant euros.

Table E.9: Summary statistics: firm donations in 1993, Sub-sample of candidates who run both in 1993 and 1997

	Mean	Median	p75	sd	N
A. Candidates					
Firm donations 0	0.44	0.00	1.00	0.50	1,725
# Firm donations	4.82	0.00	7.00	8.96	1,725
Firm donations (euros)	14,097	0	16,732	26,343	1,725
Firm donations (euros/voter)	0.21	0.00	0.25	0.41	1,725
% Firm donations in total revenue	17.64	0.00	32.32	26	1,725

Notes: The table presents summary statistics on firm donations received by candidates in 1993. An observation is a candidate and the sample includes candidates who run both in 1993 and 1997. Other notes as in Table 1.

Table E.10: Comparison of included and excluded observations

	Mean included	N included	Mean excluded	N excluded	Diff	p-value
Female	0.14	1,414	0.22	3,668	-0.08	0.00
Re-run	0.41	1,414	0.15	3,668	0.26	0.00
Incumbent	0.19	1,414	0.04	3,668	0.15	0.00
Mayor	0.07	1,414	0.02	3,668	0.05	0.00
Other mandates	0.04	1,414	0.02	3,668	0.02	0.00
Revenues (euro/voter)	0.54	1,414	0.27	3,668	0.28	0.00
Firm don. (euro/voter)	0.22	1,414	0.08	3,668	0.14	0.00
Indiv don. (euro/voter)	0.06	1,414	0.03	3,668	0.03	0.00
Personal contrib. (euro/voter)	0.09	1,414	0.07	3,668	0.02	0.00
Party contrib. (euro/voter)	0.14	1,414	0.07	3,668	0.07	0.00

Notes: The table compares candidates included in our sample (i.e. candidates who ran both 1993 and 1997) to excluded ones. For each observed candidate characteristic and source of campaign revenue, we report mean values and number of non-missing observations for each group, the difference in mean values between the two groups and the *p-value* associated with the test that this difference is zero.

Table E.11: Firm donations and selection into sample

	Candidate in next election	Manifesto available	Party in next election
	(1)	(2)	(3)
Firm donations	0.026** (0.011)	-0.003 (0.008)	0.004 (0.003)
Observations	5082	1713	2508
Mean outcome before ban	0.337	0.256	0.959
R2-Within	0.028	0.011	0.005

Notes: Standard errors are clustered by district and shown in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We use one observation per candidate in 1993. In column 1, the outcome is an indicator variable indicating if the candidate runs again in 1997 (in the same district and for the same party). We control for party \times year fixed effects as well as individual controls: indicator variables for being a woman, having run in the past, for being the incumbent, and for holding other electoral mandates. We also control for the predicted amount of firm donations based on the regression coefficients obtained from estimating equation (1). In column 2, the outcome is an indicator variable indicating if the candidate has a first-round manifesto available in both 1993 and 1997, and the sample includes candidates who ran both in 1993 and 1997. In column 3, the outcome is an indicator variable indicating if the candidate's party is present in the same district in 1997 and the sample is restricted to candidates from the Communist party, the Green party, the Socialist party, the conservative right-wing party and the far-right party.

Table E.12: Impact of firm donations on total revenue and other contributions

	Total revenue	Donations from individuals	Party contributions	Personal contributions
	(1)	(2)	(3)	(4)
Firm donations (loss)	-0.688*** (0.027)	0.055*** (0.018)	0.165*** (0.023)	0.092*** (0.021)
Observations	2828	2828	2828	2828
Mean outcome before ban	0.515	0.060	0.145	0.089
R2-Within	0.564	0.041	0.088	0.072

Notes: Standard errors are clustered by district and shown in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We use one observation per candidate and per year. The sample includes all candidates who run both in 1993 and 1997, and for whom the amount of firm donations, individual donations, party contributions and personal contributions are known. Total revenue is the sum of contributions across all four sources. We control for candidate fixed effects and party×year fixed effects, as well as individual controls: indicator variables for having run in the past, for being the incumbent, and for holding other electoral mandates. We also control for the predicted amount of firm donations, based on observable characteristics, interacted with a post-ban indicator. The amount of firm donations is multiplied by -1. Like all outcomes in the table, it is measured in 2020 constant euros per voter and .

Table E.13: Impact of firm donations on shares of other contributions in total revenue

	Share of donations from individuals	Share of party contributions	Share of personal contributions
	(1)	(2)	(3)
Share of firm don. (loss)	0.159*** (0.023)	0.517*** (0.037)	0.324*** (0.039)
Observations	2678	2678	2678
Mean outcome before ban	10.306	33.399	35.833
R2-Within	0.043	0.141	0.065

Notes: The share of campaign revenue coming from each source is measured in percentage points and multiplied by -1. Other notes as in Table E.12.

Table E.14: Robust impact on local vs. national campaigning, Depending on the availability of donations data

(a) Disaggregated donations unavailable

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.128*** (0.029)	-0.214*** (0.053)	0.098* (0.054)
Observations	2620	2620	2620
Mean outcome before ban	-0.654	1.373	3.035
R2-Within	0.037	0.027	0.012

(b) Disaggregated donations equal to aggregate amount

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.136*** (0.050)	-0.243** (0.098)	0.109 (0.079)
Observations	1968	1968	1968
Mean outcome before ban	-0.793	1.131	3.146
R2-Within	0.022	0.025	0.008

Notes: Standard errors are clustered by district and shown in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). Panel a includes all candidates for whom the aggregate amount of firm donations is available but the data on disaggregated donations is not. Panel b includes candidates for whom the aggregate amount of firm donations is exactly equal to the sum of individual firm donations from the *Journal Officiel*. Other notes as in Table 3.

Table E.15: Robust impact on local vs. national campaigning, Clustering standard errors at the department level

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.130*** (0.031)	-0.219*** (0.055)	0.098* (0.058)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.037	0.027	0.012

Notes: Standard errors are clustered by department. Other notes as in Table 3.

Table E.16: Robust impact on local vs. national campaigning, Alternative definitions of the local index

	Local index				
	(1)	(2)	(3)	(4)	(5)
Firm donations (loss)	-0.130*** (0.029)	-0.130*** (0.030)	-0.135*** (0.028)	-0.136*** (0.029)	-0.034*** (0.007)
Observations	2602	2602	2602	2576	2576
Mean outcome before ban	-0.652	-0.649	-0.646	1.274	0.320
R2-Within	0.037	0.035	0.030	0.032	0.033

Notes: The outcome is the local index as defined in the main text (column 1), the same local index using 1000 as arbitrary constant (column 2), the same local index using 0.001 as arbitrary constant (column 3), the standardized ratio of local frequency over the sum of local frequency and national frequency (column 4), and the (unstandardized) ratio of local frequency over the sum of local frequency and national frequency (column 5). Other notes as in Table 3.

Table E.17: Robust impact on local vs. national campaigning, Alternative definitions of firm donations loss

(a) Log firm donations loss

	Local index	Local references	National references
	(1)	(2)	(3)
Log Firm donations (loss)	-0.189*** (0.040)	-0.302*** (0.070)	0.162** (0.074)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.039	0.027	0.013

(b) Losing any firm donations

	Local index	Local references	National references
	(1)	(2)	(3)
Losing Firm donations	-0.144* (0.081)	-0.152 (0.123)	0.283* (0.154)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.026	0.017	0.011

(c) Number of firm donations lost

	Local index	Local references	National references
	(1)	(2)	(3)
Number of Firm donations	-0.018*** (0.005)	-0.025*** (0.008)	0.022** (0.009)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.038	0.023	0.015

Table E.17: Robust impact on local vs. national campaigning, Alternative definitions of firm donations loss (continuing)

(d) Quadratic loss in firm donations

	Local index	Local references	National references
	(1)	(2)	(3)
Firm don.	-0.217*** (0.057)	-0.281*** (0.098)	0.267*** (0.103)
Firm don. ²	-0.016** (0.008)	-0.011 (0.014)	0.031** (0.015)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.039	0.028	0.013

(e) Quintiles of loss in firm donations

	Local index	Local references	National references
	(1)	(2)	(3)
1st quintile	0.097 (0.140)	0.280 (0.229)	0.098 (0.251)
2nd quintile	-0.043 (0.105)	-0.136 (0.178)	0.068 (0.192)
3rd quintile	-0.253** (0.128)	-0.231 (0.216)	0.480** (0.221)
4th quintile	-0.227 (0.170)	-0.234 (0.347)	0.410* (0.235)
5th quintile	-0.555*** (0.128)	-0.763*** (0.222)	0.660*** (0.229)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.040	0.026	0.016

Notes: We define the loss in firm donations as (negative) the log amount of firm donations (Panel a), an indicator variable indicating if the candidate lost any firm donation (Panel b), (negative) the number of firm donations (Panel c), (negative) the amount of firm donations and its squared value (Panel d), and a set of indicator variables corresponding to quintiles of firm donation loss (Panel e). Other notes as in Table 3.

Table E.18: Robust impact on local vs. national campaigning, Changing the set of controls

(a) Including district times year fixed effects

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.131*** (0.040)	-0.228*** (0.070)	0.094 (0.074)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.042	0.033	0.013

(b) Including district-level characteristics

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.130*** (0.029)	-0.216*** (0.050)	0.099* (0.055)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.062	0.050	0.031

(c) Interacting a post-ban indicator with 1993 controls

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.137*** (0.030)	-0.241*** (0.054)	0.093* (0.056)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.072	0.059	0.047

Table E.18: Robust impact on local vs. national campaigning, Changing the set of controls (continuing)

(d) Interacting a post-ban indicator with 1993 controls and contributions

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.156*** (0.034)	-0.268*** (0.064)	0.117* (0.061)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.076	0.063	0.053

(e) Interacting a post-ban indicator with 1993 controls and 1988 contributions

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.138*** (0.030)	-0.243*** (0.054)	0.094* (0.056)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.077	0.063	0.050

(f) Excluding time-varying individual controls

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.113*** (0.027)	-0.192*** (0.044)	0.082 (0.054)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.025	0.018	0.006

Notes: In addition to the controls included in equation (2), we control either for district×year fixed effects (Panel a) or district-level controls (Panel b). In Panel c, we replace the interaction term between the post-ban indicator and the predicted amount of firm donations received in 1993 with a set of interaction terms between the post-ban indicator and each of the individual- and district-level characteristics, measured in 1993. In Panel d, we add interaction terms between the post-ban indicator and other types of contributions in 1993 (personal contributions, party contributions and individual donations). In Panel d, we add interaction terms between the post-ban indicator and contributions in 1988 (as well as indicator variables indicating if these quantities are missing). In Panel e, we exclude time-varying individual controls (indicator variables for having run in the past, for being the incumbent, and for holding other electoral mandates). Other notes as in Table 3.

Table E.19: Robust impact on local vs. national campaigning, Nearest-neighbor matching estimation

	Local index		Local references		National references	
	(1)	(2)	(3)	(4)	(5)	(6)
Any Firm donation in 1993	-0.153 (0.146)	-0.230* (0.139)	-0.156 (0.208)	-0.440** (0.187)	0.284 (0.278)	0.184 (0.267)
Match on candidate characteristics	✓	✓	✓	✓	✓	✓
Match on district characteristics		✓		✓		✓
Observations	1,301	1,301	1,301	1,301	1,301	1,301

Notes: Robust standard errors are shown in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We use one observation per candidate in 1993. The outcome is the change in local prevalence (columns 1 and 2), the change in frequency of local references (columns 3 and 4) and the change in frequency of national references (columns 5 and 6), between 1993 and 1997. We match candidates who received any firm donation in 1993 to those who did not using nearest-neighbor matching. All specifications match on political parties (exactly), classified in seven different categories: Communist party, Green party, Socialist party, right-wing party, far-right party, other well-identified parties and a common category for smaller parties and independents. In odd columns, specifications also match on candidate-level characteristics from Figure 2. In even columns, specifications further match on district-level characteristics from Figure D.11. Estimates are bias-adjusted.

Table E.20: Robust impact on local vs. national campaigning, Within-party approach

	Local index	Local references	National references
	(1)	(2)	(3)
Firm donations (loss)	-0.079*** (0.023)	-0.167*** (0.039)	0.023 (0.043)
Observations	4585	4585	4585
Mean outcome before ban	-0.845	1.387	3.536
R2-Within	0.016	0.015	0.005

Notes: Candidate fixed effects are replaced with party times district fixed effects. The sample includes all candidates from the Communist party, the Green party, the Socialist party, the conservative right-wing party and the far-right party, in districts where their party is present both in 1993 and 1997. Other notes as in Table 3.

Table E.21: Impact on partisan leaning, Additional results

	Left-right score		Extremeness		Mean word extremeness	
	(1)	(2)	(3)	(4)	(5)	(6)
Firm donations (loss)	-0.006 (0.005)		0.008* (0.005)		0.007 (0.008)	
Communist*Firm don.		-0.006 (0.015)		0.024 (0.015)		0.010 (0.022)
Green*Firm don.		-0.534*** (0.098)		0.521*** (0.109)		1.082*** (0.128)
Socialist*Firm don.		-0.012 (0.009)		0.008 (0.008)		0.016 (0.015)
Right*Firm don.		-0.004 (0.007)		0.002 (0.006)		-0.001 (0.010)
Far-right*Firm don.		0.441 (0.539)		0.480 (0.538)		0.600 (0.779)
Other*Firm don.		0.006 (0.022)		0.056*** (0.019)		0.031 (0.025)
Observations	2600	2600	2600	2600	2602	2602
Mean outcome	-0.047	-0.047	0.862	0.862	2.125	2.125
R2-Within	0.006	0.008	0.007	0.013	0.005	0.008

Notes: In columns 1 through 4, local references are excluded from the vocabulary before calculating the left-right score. In columns 5 and 6, the outcome is the absolute word loading averaged across words contained in the manifesto. Other notes as in Tables 4 and 5.

Table E.22: Impact on total revenue and other contributions by party

	Total revenue	Donations from individuals	Party contributions	Personal contributions
	(1)	(2)	(3)	(4)
Communist*Firm don.	-0.640*** (0.063)	0.022 (0.060)	0.141*** (0.053)	0.197*** (0.053)
Green*Firm don.	0.253 (0.297)	0.075 (0.099)	-1.331*** (0.100)	2.508*** (0.178)
Socialist*Firm don.	-0.650*** (0.037)	0.093*** (0.021)	0.153*** (0.032)	0.104*** (0.030)
Right*Firm don.	-0.709*** (0.037)	0.044* (0.025)	0.181*** (0.031)	0.066*** (0.026)
Far-right*Firm don.	-1.658** (0.725)	-0.524** (0.255)	0.129* (0.077)	-0.263 (0.554)
Other*Firm don.	-0.689*** (0.117)	0.026 (0.059)	0.089 (0.056)	0.196*** (0.074)
Observations	2828	2828	2828	2828
Mean outcome	0.515	0.060	0.145	0.089
R2-Within	0.566	0.050	0.090	0.084

Notes: The amount of firm donations per voter (divided by its standard deviation in 1993) is interacted with indicator variables indicating whether the candidate is endorsed by any of the five main parties or if they are endorsed by a smaller party or running as independents. Other notes as in Table E.12.

Table E.23: Impact on broad policy topics by party type

	Economic policy	Social policy	Homeland and administration	Foreign policy
	(1)	(2)	(3)	(4)
Mainstream*Firm don.	-0.854 (0.560)	1.123* (0.607)	-1.045* (0.581)	0.239* (0.133)
Non-mainstream*Firm don.	-27.123 (29.322)	25.740* (15.057)	-24.160* (14.609)	3.822 (2.744)
Other*Firm don.	-6.810*** (2.399)	4.345* (2.505)	0.306 (2.143)	0.806 (0.829)
Observations	2602	2602	2602	2602
Mean outcome before ban	23.507	36.203	19.243	4.244
R2-Within	0.021	0.013	0.008	0.010

Notes: Mainstream parties are the Communist, Socialist and right-wing parties. Non-mainstream parties are the Green and far-right parties. Other parties are candidates from smaller parties as well as independents. Other notes as in Tables 6 and 5.

Table E.24: Impact on manifesto quality

	Manifesto length	Personal references	Topic concentration
	(1)	(2)	(3)
Firm donations (loss)	-0.662 (2.569)	-0.007 (0.045)	-0.006 (0.005)
Observations	2606	2602	2602
Mean outcome	266.520	1.398	0.356
R2-Within	0.004	0.006	0.008

Notes: In column 1, the outcome is the number of words in a manifesto. In column 2, the outcome is the frequency of references to the candidate's own first name or last name (normalized by the total number of words in the manifesto), and it is measured in percentage points. In column 3, the outcome is the concentration of broad policy topics, defined as the sum of squared probabilities of referring primarily to each topic (including a fifth "other" topic). Other notes as in Tables 4.

Table E.25: Impact on local vs. national campaigning by contribution sources

	Local index	Local frequency	National frequency
	(1)	(2)	(3)
Firm donations (loss)	-0.151*** (0.033)	-0.249*** (0.053)	0.117* (0.064)
Individual donations	0.000 (0.031)	-0.029 (0.053)	-0.033 (0.058)
Personal contributions	0.032 (0.020)	0.047 (0.034)	-0.029 (0.039)
Party contributions	0.039 (0.036)	0.074 (0.067)	-0.011 (0.059)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.039	0.030	0.012

Notes: The revenue from each source of contributions (per voter) is divided by its respective standard deviation in 1993 and the amount of firm donations is multiplied by -1. Other notes as in Table 4.

Table E.26: Impact on local vs. campaigning, Share of firm donations in total revenue

	Local index	Local frequency	National frequency
	(1)	(2)	(3)
Share of Firm don. (loss)	-0.006*** (0.002)	-0.007** (0.003)	0.008*** (0.003)
Observations	2492	2492	2492
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.036	0.021	0.016

Notes: The share of firm donations in total revenue is measured in percentage points. Other notes as in Table 4.

Table E.27: Heterogeneity by type of contributing firms

	Local index			Frequency of local references			Frequency of national references		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Firm don. from: small donors	-0.064*	-0.062*	-0.066*	-0.117*	-0.112*	-0.118*	0.043	0.042	0.048
	(0.037)	(0.036)	(0.037)	(0.068)	(0.067)	(0.068)	(0.058)	(0.058)	(0.058)
Firm don. from: multiple donors	-0.031			-0.112**			-0.033		
	(0.029)			(0.054)			(0.059)		
Firm don. from: multi-district donors		-0.020			-0.087			-0.036	
		(0.029)			(0.053)			(0.057)	
Firm don. from: single-district donors		-0.067**			-0.153**			0.023	
		(0.029)			(0.065)			(0.044)	
Firm don. from: one-party donors			0.024			-0.009			-0.060
			(0.032)			(0.060)			(0.052)
Firm don. from: multi-party donors			-0.048*			-0.110**			0.006
			(0.027)			(0.049)			(0.056)
Observations	2602	2602	2602	2602	2602	2602	2602	2602	2602
Mean outcome before ban	-0.652	-0.652	-0.652	1.375	1.375	1.375	3.031	3.031	3.031
R2-Within	0.031	0.034	0.032	0.027	0.032	0.028	0.010	0.010	0.011

Notes: The amount of firm donations per voter received by each candidate is broken down into several categories depending on which type of donor they are from, and the sample is restricted to candidates for whom data on disaggregated donations is available. In column 1, small donors make one single donation and multiple donors make donations to multiple candidates. In column 2, donors having made more than one donation are split between multi-district (donations to candidates running in different districts) and single-district donors (donations to candidates running in the same district). In column 3, donors having made more than one donation are split between multi-party (donations to candidates endorsed by different parties) and single-party donors (donations to candidates endorsed by the same party). Other notes as in Table 3, column 1.

Table E.28: Heterogeneity by candidate type

	Local index	Local references	National references
	(1)	(2)	(3)
Corportate donations (loss)	-0.176*** (0.056)	-0.344*** (0.111)	0.110 (0.091)
Firm don.*Female	0.041 (0.086)	0.025 (0.146)	-0.090 (0.161)
Firm don.*Re-run	0.117 (0.092)	0.239 (0.180)	-0.097 (0.149)
Firm don.*Incumbent	-0.057 (0.082)	-0.046 (0.145)	0.113 (0.146)
Firm don.*Mayor	0.014 (0.075)	-0.038 (0.132)	-0.059 (0.140)
Firm don.*Other mandates	-0.133* (0.077)	-0.227* (0.118)	0.087 (0.196)
Observations	2602	2602	2602
Mean outcome before ban	-0.652	1.375	3.031
R2-Within	0.041	0.032	0.013

Notes: The amount of firm donations per voter (divided by its standard deviation in 1993 and multiplied by -1) is interacted with indicator variables for being a woman, for having run in the past, for being the incumbent, for being a mayor and for holding any other electoral mandate (senator, departmental mandate or European MP) in 1993. Other notes as in Table 3.

Table E.29: Heterogeneity by donor's sector of activity

	Local index	Local references	National references
	(1)	(2)	(3)
Firm don. from: other sectors	0.006 (0.028)	-0.053 (0.053)	-0.066 (0.044)
Firm don. from: construction	-0.003 (0.029)	0.014 (0.054)	0.013 (0.054)
Firm don. from: economy	-0.001 (0.033)	-0.024 (0.058)	-0.017 (0.051)
Firm don. from: environment	-0.043 (0.029)	-0.100** (0.050)	0.011 (0.053)
Firm don. from: industry	-0.000 (0.029)	-0.002 (0.053)	0.008 (0.054)
Firm don. from: retail	0.021 (0.029)	-0.050 (0.057)	-0.109** (0.045)
Firm don. from: unknown	-0.090** (0.044)	-0.120 (0.084)	0.107* (0.062)
Observations	2602	2602	2602
Mean outcome	-0.652	1.375	3.031
R2-Within	0.036	0.032	0.017

Notes: The amount of firm donations per voter is broken down into amounts received by donors from different sectors of activity, divided by its standard deviation in 1993 and multiplied by -1. Other notes as in Tables 3.

Table E.30: Heterogeneous effect on policy topics by donor's sector of activity

	Economic policy	Social policy	Homeland and administration	Foreign policy
	(1)	(2)	(3)	(4)
Firm don. from: other sectors	0.261 (0.354)	0.005 (0.401)	-0.223 (0.597)	0.019 (0.106)
Firm don. from: construction	-0.757 (0.600)	0.186 (0.505)	-0.263 (0.504)	0.142 (0.132)
Firm don. from: economy	-0.894* (0.464)	0.192 (0.464)	0.725 (0.577)	-0.009 (0.103)
Firm don. from: environment	-0.786 (0.504)	0.743 (0.483)	-0.345 (0.456)	0.189* (0.111)
Firm don. from: industry	-0.717 (0.490)	0.785 (0.507)	-0.037 (0.499)	0.132 (0.125)
Firm don. from: retail	-0.340 (0.508)	0.072 (0.544)	0.825 (0.691)	-0.014 (0.118)
Firm don. from: unknown	0.332 (0.601)	0.035 (0.655)	-0.831 (0.660)	0.114 (0.127)
Observations	2602	2602	2602	2602
Mean outcome	23.507	36.203	19.243	4.244
R2-Within	0.025	0.013	0.010	0.013

Notes: The amount of firm donations per voter is broken down into amounts received by donors from different sectors of activity, divided by its standard deviation in 1993 and multiplied by -1. Other notes as in Table 6.

Table E.31: Impact on local vs. national campaigning, Sub-sample of elected representatives

	Local index	Local references	National references	Left-right score	Extremeness
	(1)	(2)	(3)	(4)	(5)
Firm donations (loss)	-0.099** (0.045)	-0.163** (0.077)	0.065 (0.089)	-0.011 (0.008)	0.000 (0.008)
Observations	448	448	448	448	448
Mean outcome before ban	-0.163	2.221	2.629	0.079	0.241
R2-Within	0.047	0.041	0.013	0.027	0.010

Notes: The sample is restricted to politicians elected both in 1993 and 1997. Other notes as in Table 3.

Table E.32: Impact on interventions, Low- and high-visibility debates

(a) Low-visibility debates				
	Number of interventions	Local index	Local references	National references
	(1)	(2)	(3)	(4)
Firm donations (loss)	-0.405 (0.669)	-0.087 (0.087)	0.044 (0.033)	0.302 (0.245)
Observations	222	214	214	214
Mean outcome	5.207	-1.106	0.252	3.878
R2-Within	0.088	0.041	0.054	0.035

(b) High-visibility debates				
	Number of interventions	Local index	Local references	National references
	(1)	(2)	(3)	(4)
Firm donations (loss)	-2.739 (3.151)	0.106 (0.074)	0.014 (0.026)	-0.303 (0.247)
Observations	330	322	322	322
Mean outcome	25.764	-1.763	0.246	4.022
R2-Within	0.058	0.050	0.006	0.046

Notes: We distinguish interventions made in low-visibility debates (generating a below-median number of interventions) from interventions made in high-visibility debates (generating an above-median number of interventions). Other notes as in Table 7, Panel b.

Table E.33: Impact on broad policy topics in legislative discourse

(a) Written questions to the government

	Economic policy	Social policy	Homeland and administration	Foreign policy
	(1)	(2)	(3)	(4)
Firm donations (loss)	-0.874 (0.926)	-0.107 (1.013)	0.954 (0.786)	0.023 (0.014)
Observations	416	416	416	416
Mean outcome	40.469	44.157	9.945	0.179
R2-Within	0.055	0.045	0.052	0.018

(b) Debate interventions

	Economic policy	Social policy	Homeland and administration	Foreign policy
	(1)	(2)	(3)	(4)
Firm donations (loss)	2.438* (1.472)	-2.026 (1.715)	0.688 (1.187)	-0.607 (0.827)
Observations	352	352	352	352
Mean outcome	36.023	26.555	14.473	7.076
R2-Within	0.034	0.026	0.019	0.057

Notes: Same notes as in Tables 7 and E.23.

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