Online Appendix to the Paper Money and Ideology: Evidence from Candidate Manifestos

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November 30, 2021

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A Data

A.1 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, whose 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 mailing is taken in charge by an official local propaganda committee, if the format of the manifestos respects 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, together with ballots, maximum four days before the election (for the first round), and three days before the second round (in case of 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 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 much fewer communication media were available to individual politicians. Of course, television was already an important medium of communication. But while 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 – 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.

| 1993 | 1997 |
|--------------------|--------------------------|
| mouvement ecologie | jacques chaban delmas |
| pierre joxe | francoise panafieu |
| pen | alain poher |
| rpr | jacques toubon |
| jacques toubon | rassemblement republique |
| sarkozy | alain juppe |
| jacques chirac | mamere |
| pasqua | fabius |
| matignon | louis mermaz |
| nicolas sarkozy | elysee |

Table A.1: Examples of national references

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

A.2 Text as data

A.2.1 Text pre-processing

We turn the collected PDF versions of candidate manifestos into machine-readable text using the Tesseract OCR engine: https://github.com/tesseract-ocr/tesseract. We then pre-process the content of each document following standard steps from the literature. We tokenize documents at the single word level and remove stopwords and special characters.

A.2.2 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 full name and the last name of each party leader; (c) the full name and the last name of the President as well as 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 (taken randomly from our full list of keywords) are presented in Table A.1.

A.2.3 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 left-right scale, we define the probability of document j using 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 or the gain in utility from using this word for a right-wing candidate over a left-wing one. 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 partial score of document j: a negative (positive) score means that document j uses a lot of words used by other left-(right-)wing candidates but never by the other side, while 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:

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

where N is the number of documents in the corpus, λ is a standard Lasso penalty, and γ is the penalty scale.¹ This penalized estimator shrinks noisy loadings to zero, resulting in a

¹For details on the advantages of concave regularization and Gamma Lasso versus Lasso penalization, see Taddy (2017).

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 an 1997 as 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.² 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:

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

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

²The intercept of this model corresponds to the baseline utility of using word w when issuing a question to any non-classified minister.

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 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.2.4 Latent Semantinc 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.³ 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.3 Corporate donations

Data on corporate 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 corporate donors and the amounts given. An example of the data is shown in Figure D.2. In total, 14,770 donations were received by 1,647 candidates (so around one third of the candidates). We show descriptive statistics on these corporate donations in Table 2.

A.3.1 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 and 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*, *COLAS*

 $^{^{3}}$ The number of dimensions is chosen arbitrarily and motivated from existing research.

SUD OUEST or COLAS MEDITERRANNEE. To separate firms including a geographical attribute in its legal denomination from local branches, we use an algorithm to check on the website https://www.societe.com/ whether the company was considered as the mother entity. Yet, a certain number of firms active in 1993 have ceased activity since the election 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 the 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. Further, 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 of Section 5. This allows us to test for the robustness of our heterogeneity results when defining multiple donors as entities giving alternatively more than one, two, or five donations (see Section 5 and Table E.14).

A.3.2 Sectors of activity

To complement our donor dataset, we look at their sector of activity. Given the format of the raw data that only provide the name of the donor without any further information or firm identifier, and the fact 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 Francaise* (NAF).⁴ We link the NAF code with a broader sector of activity, as a parallel to the topic classification performed on manifesto content (Section 2.5). Table A.2 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 corporations.⁵ At the end of the procedure, we manage to identify the sector of activity of about half of the firms in our sample: not surprisingly, larger donors are more likely to be tied to a sector and there is a wide and significant imbalance between the average donation made by sector-identified firms and others (see Table E.4). Table E.5 shows summary statistics across sectors of activity: the most represented sector is construction, followed by the retail sector, which encompasses large retail companies or smaller businesses. Discrepancies in terms of donations by sector

⁴For more details, see https://www.insee.fr/fr/information/2120875 (in French)

⁵Note 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.2: Correspondances 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)

\mathbf{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)

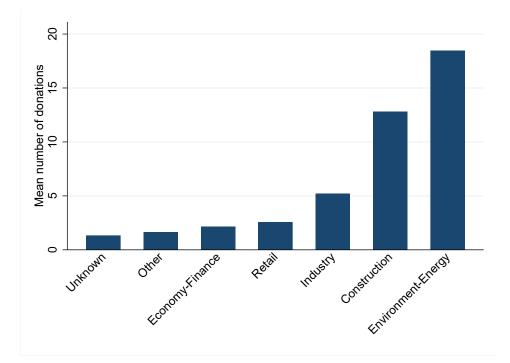
are also to be highlighted: as shown in Figure A.1, both the number of donations per donor and the average donation amount are higher among donors from the environment/energy and the construction sectors.

A.4 Other data

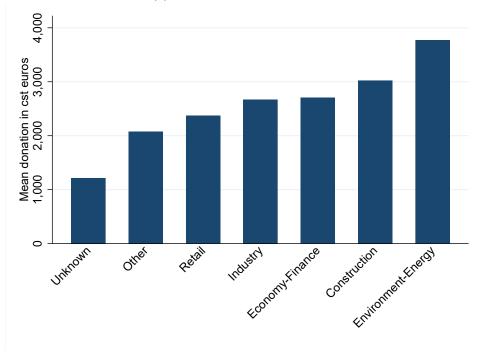
Finally, we collect time-varying district-level demographic covariates. Demographic and unemployment data are from the French census. To understand the determinants of corporate donations, we build a new dataset on the revenues and annual spending in infrastructure of the French municipalities with more than 10,000 inhabitants, from the paper-format archives of the Ministry of Finances covering the 1993-1997 time period.

Our dataset also includes the annual number of firms, of employees, the total payroll, as well as the share of the employees who are part of the top 1% of the income distribution. These are from the "Déclaration Annuelle de Données Sociales" (DADS), a detailed French database on wages.

Other available district-level factors include the number of municipalities in the district, rural-urban status, and whether the capital of the region belongs to the district. Summary statistics on these covariates are shown in Table E.9.



(a) Mean number of donations



(b) Mean amount in 2020 constant euros

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".

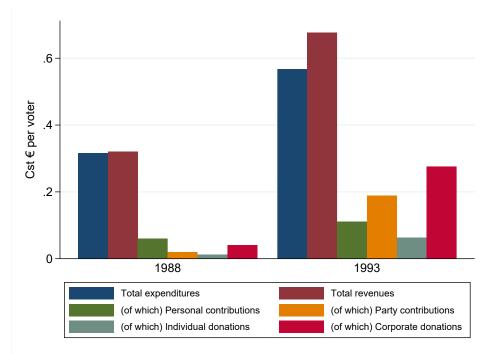
Figure A.1: Descriptive statistics on donations, depending on the sector of activity

B The 1988 legislative elections

Donations were first allowed with the laws passed in March 1988, and candidates at the 1988 legislative elections that took place on June 5th and 12th were thus entitled to receive contributions both from individuals and corporations. 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). A careful reading of the administrative rules in place and numerous interactions with archivists led us on the trail of the departmental archives. A number of these archives indeed store as of today the 1988 candidates' campaign accounts. 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 and thus imperfect, this allows us to get a sense of the structure of the donations and expenditures at the 1988 legislative elections for 74 electoral districts and 363 candidates, including 143 candidates who also ran in 1993. We compare their revenues and expenses during these two electoral years. Figure B.1 reports the results.

It appears clearly that candidates both received and spent much less in 1988 than in 1993. It is not surprising given the possibility of receiving donations was a new opportunity, offered to the candidates only three months before the elections. In particular, the average amount of corporate donations received by a candidate was seven times higher in 1993 as compared to 1988. 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 revenues 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.

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

C Robustness checks

C.1 Alternative specifications

Clustering In our preferred specification, 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.21, column 1).

Measuring corporate donations We test for the robustness of our estimates to using alternative measures of corporate donations. Column 2 of Appendix Table E.21 shows that estimating equation (2) with the (standardized) log of corporate donations⁶ as independent variable yields an estimated impact of donations on a manifesto's local index that is slightly larger (0.18) to the point estimate from column 1 of Table 3. In column 3, we use an indicator variable for receiving any corporate donation as independent variable, which shows that the effect of corporate donations is even higher at the extensive margin, with an estimated effect corresponding to 24% of a standard deviation in the local index, significant at the 1% level.

Column 4 shows a smaller (0.02) but significant estimate for the effect of the number of (distinct) corporate donations received by each candidate. In column 5 we estimate a quadratic version of equation (2) and find that the effect of corporate donations on the prevalence of local references over national ones follows a convex pattern, indicating that the positive impact wears off as candidates receive larger and larger amounts of donations. Interestingly, these two columns suggest that receiving few important donations – rather than many – is what affects campaign communication the most. This pattern is consistent with our preferred interpretation of the results, presented in Section 5: the support of a few committed corporate donors is likely to increase the salience of certain issues and push candidates to address these issues in their campaign communication. Receiving a large amount of contributions but from a wide array of different donors may not provide such a clear signal of which issues constituents care about

C.2 Sample selection

Our difference-in-differences approach relies on the inclusion of candidate fixed effects. While this strategy controls for the endogenous allocation of corporate donations among candidates with different unobserved attributes – which is arguably the greatest threat to causal identification – it mechanically restricts the sample to candidates who run both in 1993 and 1997. The subsample of re-runners differs significantly from the overall sample of candidates: as shown in Appendix Table C.1, among all candidates running in 1993, those who ran again in

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

| Table C.1: | Comparison | of included | and exc | luded o | bservations |
|------------|------------|-------------|---------|---------|-------------|
|------------|------------|-------------|---------|---------|-------------|

| | 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 |
| Corp.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 |
| Personnal.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.

1997 are more likely to be men, to have already run in the past, to have won the previous election, to hold another electoral mandate and to enjoy higher campaign revenues – including corporate donations. These systematic differences may threaten the external validity of our results, as they may not apply to candidates who ran only once. It may also threaten the internal validity of our approach, if the amount of corporate donations received in 1993 pushes candidates of a certain type and with certain communication skills to run again in 1997. Column 1 of Appendix Table C.2 suggests that a one-standard-deviation increase in corporate donations received in 1993 raises the probability that a candidate runs again in 1997 by 3.4 percentage points – an estimate significant at the 1% level. This specification includes all candidates who run either in 1993 or in 1997. We estimate a regression model of the form of equation (2), where the outcome is an indicator variable equal to 1 if the candidate runs again in the next election (1997 or 2002) and where we replace candidate fixed effects with district fixed effects. Column 2 of Appendix Table C.2 shows, however, that corporate donations have no impact on manifesto availability, which also determines whether a candidate is included in our sample or not.

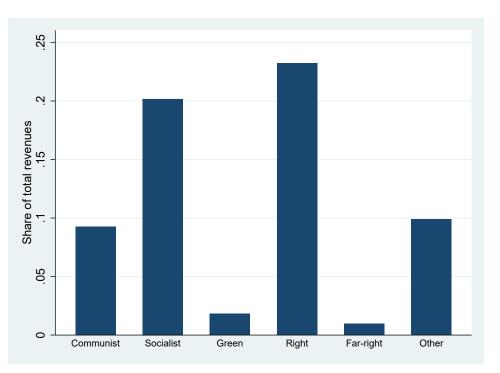
To alleviate this concern of endogenous sample selection, we test for the robustness of our results to a less conservative approach, in which we replace candidate fixed effects with party times district fixed effects and include all candidates whose party is present in the same district twice – even if it was not the same candidate running in both years. This specification excludes independent candidates. Column 9 of Appendix Table E.21 shows a positive estimate of corporate donations on the local index, significant at the 1% level. Interestingly, the point estimate is smaller in magnitude (.1) as compared to column 1 of Table 3, suggesting that the within-party allocation of corporate donations in 1993 is biased toward individual politicians who, absent any donation, would be *less* likely to make local references in their manifesto.

| | Runs in next election | Manifesto available |
|------------------------|--------------------------|------------------------|
| | (1) | (2) |
| Corporate donations | 0.017^{*} | -0.000 |
| | (0.010) | (0.005) |
| Observations | 11308 | 2828 |
| Mean outcome after ban | 0.199 | 0.930 |
| R2-Within | 0.016 | 0.012 |
| District FE | \checkmark | |
| Candidate FE | | \checkmark |
| Controls | | \checkmark |

Table C.2: Impact of corporate donations on selection into sample

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 per year. In column 1 the outcome is an indicator variable indicating if the candidate ran again in the next election (in the same district and for the same party). We control for district fixed effects and party×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. In column 2 the outcome is an indicator variable indicating if the candidate has a first-round manifesto available and the sample includes candidates who ran both in 1993 and 1997. We control for candidate fixed effects and party×year fixed effects as well as time-varying individual controls.

D Additional figures



Notes: The figure shows the ratio of the mean revenues from corporate donations over the mean revenue of candidates affiliated with the party in 1993, for the five main parties. The category "Other" includes independent candidates and candidates running for a minor party without a national foothold in 1993. N=5,141.

Figure D.1: Share of mean corporate donations in mean total revenue across parties

ÉLECTIONS LÉGISLATIVES GÉNÉRALES DES 21 MARS ET 28 MARS 1993

AISNE (1^{re} circonscription)

Plafond de dépenses : 500 000 F

Décision C.C.F.P. du : 05-11-93

Scrutin non contesté

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

Listes des dons de personnes morales versés à partir du 1^{er} février 1993 (loi nº 9³-122 du 29 janvier 1993)

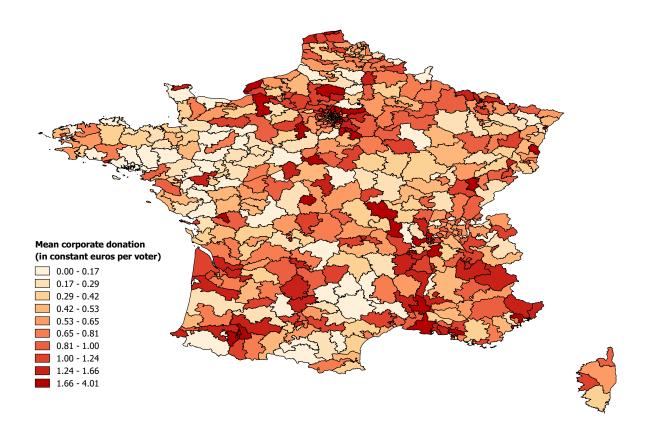
AISNE (1^{re} circonscription)

René DOSIERE

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

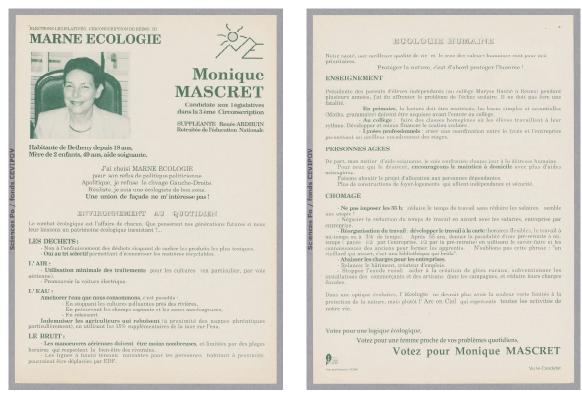
Notes: The figure provides an example of the CNCCFP's paper archives from which we have collected information on the corporate donations received by the 1993 legislative elections candidates, including the name of the corporate donors and the amount of their donation.

Figure D.2: Example of corporate donations data



Notes: The map shows the mean value of corporate donations received by candidates running in a district in 1993, in 2020 constant euros per voter. Districts are split in deciles: districts in the lightest orange bracket belong to the 10% of districts with the lowest average of corporate donations per candidates (between 0 and .17 euro per voter on average in the district), the darkest red standing for the 10% districts with the highest value of corporate donations (between 1.66 and 4 euro per voter). N=555.

Figure D.3: Mean corporate donations in 1993



Source: Electoral archives of CEVIPOF SciencesPo, EL192L199303051031PFPdfmasterocr https://archive.org/details/archiveselectoralesducevipof

Translation: Legislative elections. Third constituency of Reims. Marne Ecology.

Monique Mascret. Candidate for the legislative elections in the third constituency of Reims.

Deputy: Renée Ardhuin. Retired from the National Education. Resident of Betheny for 18 years. Mother of 2 children, 49 years old, caregiver. I chose "Marne Ecology" for its refusal of party politics. Apolitical, I refuse the left-right division. Realistically, I am a commonsense environmentalist. I am not interested in a facade union.

DAILY ENVIRONMENT – The ecological fight is everyone's business. What will our future generations think if we leave them a non-existent ecological heritage?

WASTE: – No to the burial of waste that may hide the most toxic products. - Yes, to selective sorting to save recyclable materials.

AIR: - Minimal use of crop treatments (especially aerial). - Promoting the electric car.

WATER: – Improving water we consume is possible: o Stopping polluting crops near rivers. o Preserving catchment areas and wetlands. o By reforesting. Compensate farmers who reforest (especially near groundwater), using the extra 15% of the tax.

NOISE: – - Aerial maneuvers must be reduced in number and limited by time slots that respect the well-being of local residents. - High-voltage lines that are harmful to people living nearby could be moved by EDF.

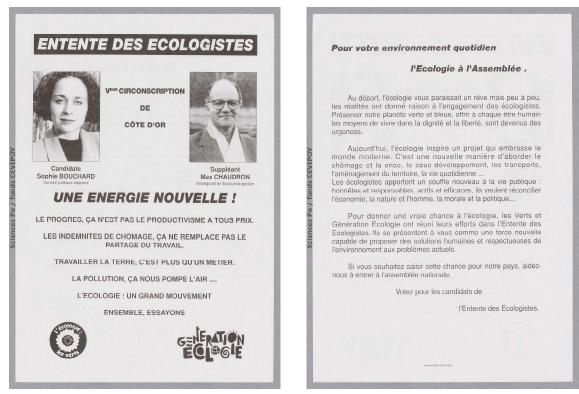
HUMAN ECOLOGY – Our health, a better quality of life and a sense of human values are my priorities. Protecting nature is first and foremost protecting humans.

EDUCATION – As president of the independent parents' association (at the Maryse Bastié school in Reims) for several years, I had to deal with the problem of school failure. It should not be a fatality. - In primary school, reading must be mastered, the simple and essential basics (maths, grammar) must be acquired before entering secondary school. - In secondary schools: create homogeneous classes where pupils work at their own pace. Develop and better financing tutoring. - Vocational schools: Create a coordination between the school and the company allowing a better supervision of the internships.

ELDERLY – As a caregiver, I am confronted with human distress every day. For those who wish to do so, let's encourage home care with more household help. Let's make the project for an allowance for dependent persons a success. Let's build more residential homes that combine independence and security.

UNEMPLOYMENT – - Do not impose the 35-hour week: reducing working time without reducing wages seems utopian. - Negotiate the reduction of working time in agreement with the employees, company by company. - Reorganization of work: developing à la carte work (flexible working hours, part-time or three-quarters time work). After the age of 55, offer the possibility of part-time early retirement (paid half by the company, half by the early retirement scheme) using the know-how and knowledge of older workers to train apprentices. Let's not forget this sentence: "An old man who dies is a burning library". - Lowering the burden on business. - Relaunching the construction industry, which creates jobs. - Stop the rural exodus: help in the creation of rural lodging, subsidize the installation of traders and craftsmen in the countryside, and reduce their tax burden. In an evolutionary perspective, ecology should no longer have the colour green limited to the protection of nature, but rather the Rainbow which represents all the activities of our life. Vote for a logical ecology, Vote for a woman who is close to your daily problems, Vote for Monique MASCRET!

Figure D.4: Manifesto from a Green candidate with corporate donations



Source: Electoral archives of CEVIPOF SciencesPo, EL190L199303021051PFPdfmasterocr https://archive.org/details/archiveselectoralesducevipof

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...

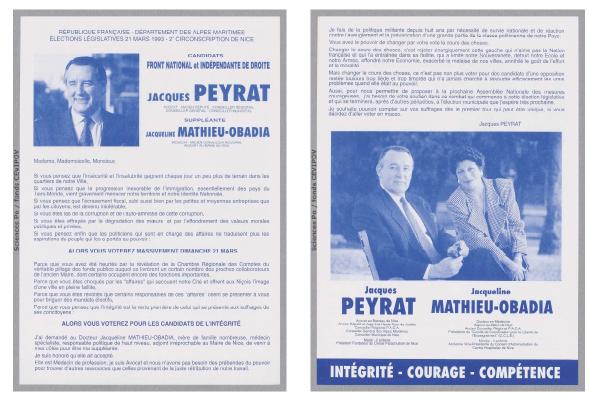
The ecologists bring a new breath to public life: honest and responsible, active and efficient, they want to reconcile the economy, nature and man, morality and politics...

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.5: Manifesto from a Green candidate with no corporate donation



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 unique, if you decide to vote en masse. Jacques Peyrat.

Figure D.6: Manifesto from a far-right candidate with corporate 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.6: Manifesto from a far-right candidate with corporate donations (continued)



Source: Electoral archives of CEVIPOF SciencesPo, EL194L199303064061PFPdfmasterocr—https://archive.org/details/archiveselectoralesducevipof

Translation: Front National. French people first! With Jean Marie Le Pen.

Vote for FERDINAND GINOUX (Author- Editor).

Deputy: PHILIPPE HOVELACQUE (Retired).

Dear compatriots, Unemployment, insecurity, immigration, poverty, taxes, "business"... It is clear that nothing is going well in France today! This dramatic, but unfortunately very real, observation worries you. However, there are those responsible for this state of affairs: they are politicians of both the left and the right who, for more than twenty years, have proved incapable of governing our country properly. You rightly see the future as frightening. However, in politics, there is no such thing as fatality. It is up to us to take our destiny into our own hands. If you want France to regain its strength and greatness, if you want justice, honesty, education, well-being, fraternity, to be words that have real value, if you want the voice of common sense and truth to be heard, I invite you on 21 March to vote Front National for the renaissance of France. Enough of socialism! - 4.5 million unemployed - 4 million offences and crimes - 7 million immigrants - 500,000 homeless! - 500,000 HIV positive. Environmentalists, beware! Wherever the ecologists are elected, they want to raise taxes, encourage immigration and persecute motorists.

Figure D.7: Manifesto from a far-right candidate with no corporate donation

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 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 \dot{a} 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.

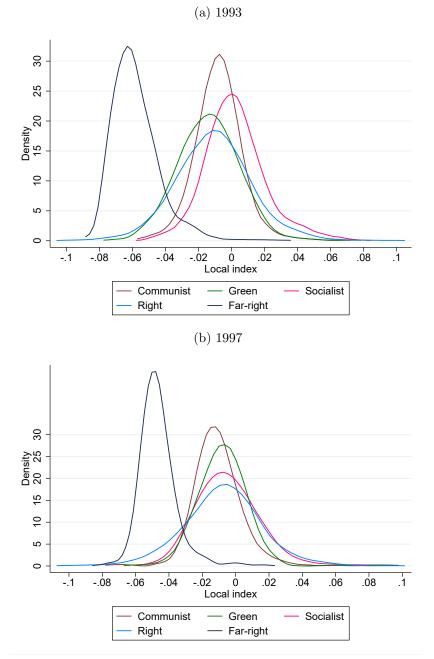
20) Restore our national defense by increasing its budgetary means and improving material and personal conditions.

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.

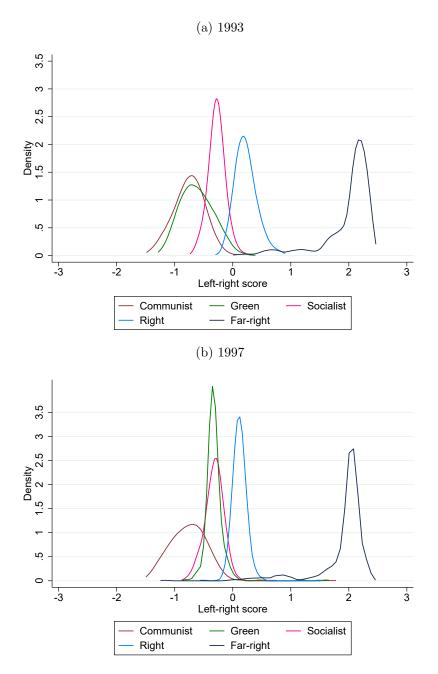
Vote Front National! French people first!

Figure D.7: Manifesto from a far-right candidate with no corporate donation (continued)



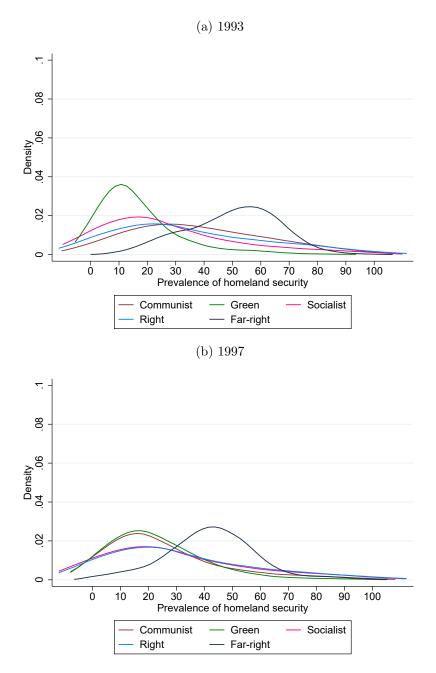
Notes: We plot–for each of the five main parties in our sample–the kernel density of manifestos' local index, which measures the prevalence of local references over national ones, in 1993 and in 1997 separately. The sample includes all candidates from the Communist party, the Green party, the Socialist party, the conservative right-wing party and the far-right party, whose first-round manifesto is available and non-empty after text pre-processing. Large outliers are excluded for visual purposes. N=2,535 and N=2,528 (resp.).

Figure D.8: Kernel density of the local index by party



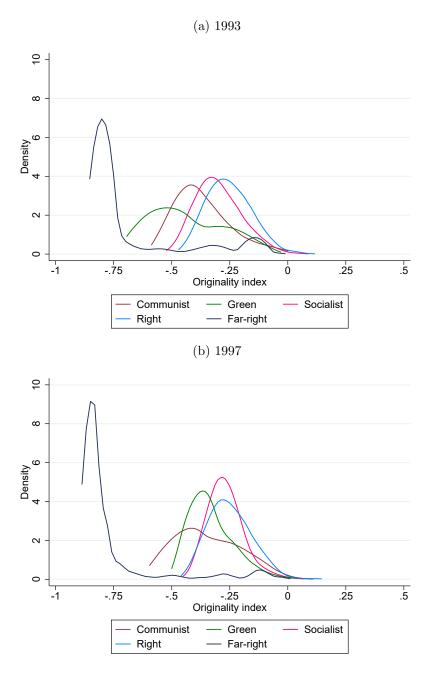
Notes: We plot–for each of the five main parties in our sample–the kernel density of left-right scores from manifestos (issued before the first election round), in 1993 and in 1997 separately. This score indicates the partisan leaning of each manifesto from left-wing (negative score) to right-wing (positive score), based on the words it contains. Other notes as in Appendix Figure D.8.

Figure D.9: Kernel density of left-right score by party



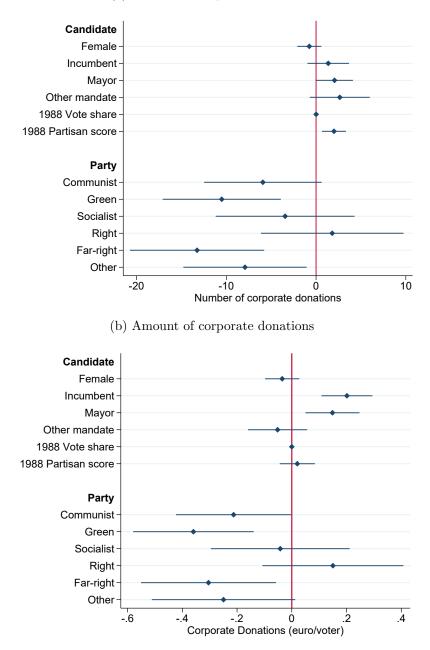
Notes: We plot–for each of the five main parties in our sample–the kernel density of homeland security prevalence in manifestos (issued before the first election round), in 1993 and in 1997 separately. The prevalence of homeland security indicates the probability (in percentage points) that the manifesto focuses primarily on homeland security issues out of 17 policy topics, based on the words it contains. Other notes as in Appendix Figure D.8.

Figure D.10: Kernel density of homeland security prevalence by party



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 originality index indicates whether a manifesto is similar to (lower value) or distinct from (higher value) other manifestos from the same party. Other notes as in Appendix Figure D.8.

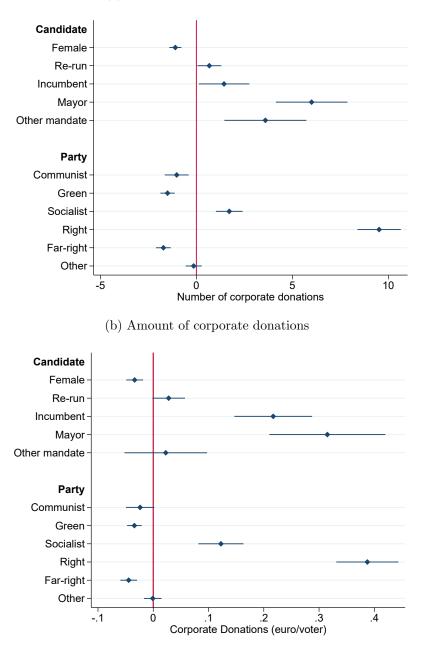
Figure D.11: Kernel density of candidate originality by party



(a) Number of corporate donations

Notes: The figure shows the coefficients and their 95% confidence intervals from a regression of the number of corporate donations (Figure D.12a) or the amount of corporate donations in 2020 constant euros per voter (Figure D.12b) received by each candidate on a set of party fixed effects (omitting independent candidates) and candidate characteristics. We use one observation per candidate in 1993. The sample is restricted to candidates who ran both in 1988 and 1993 and whose 1988 manifesto is available. Standard errors are clustered at the district level.

Figure D.12: Candidate-level determinants of corporate donations in 1993, Controlling for 1988 left-right score

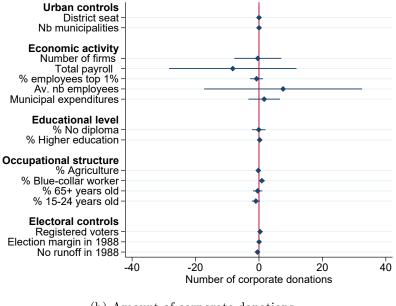


(a) Number of corporate donations

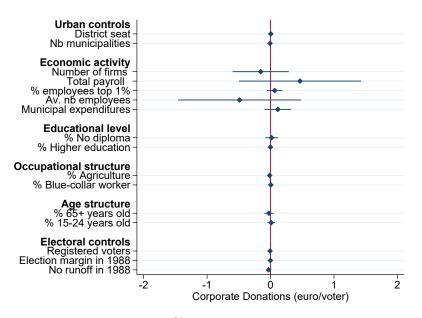
Notes: The figure shows the coefficients and their 95% confidence intervals from a regression of the number of corporate donations (Figure D.13a) or the amount of corporate donations in 2020 constant euros per voter (Figure D.13b) received by each candidate on a set of district fixed effects, party fixed effects (omitting independent candidates), and candidate characteristics. We use one observation per candidate in 1993. Standard errors are clustered at the district level.

Figure D.13: Candidate-level determinants of corporate donations in 1993, Controlling for district fixed effects



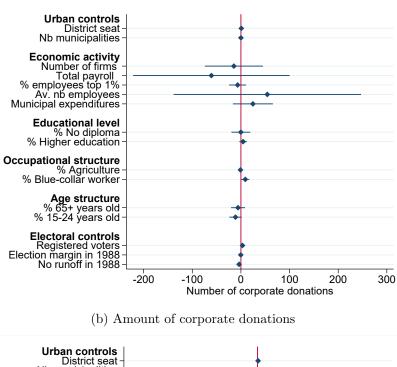




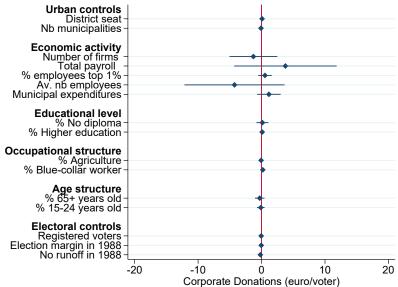


Notes: This figure shows the coefficients and their 95% confidence intervals from a regression of the number of corporate donations (Figure D.14a) or the amount of corporate donations in 2020 constant euros per voter (Figure D.14b) received by each candidate on a set of party fixed effects, candidate 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.14: District-level determinants of corporate donations in 1993

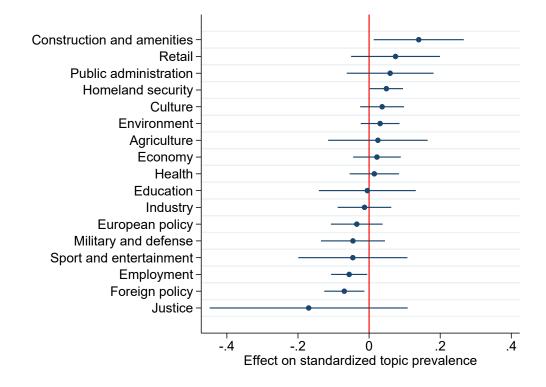


(a) Number of corporate donations



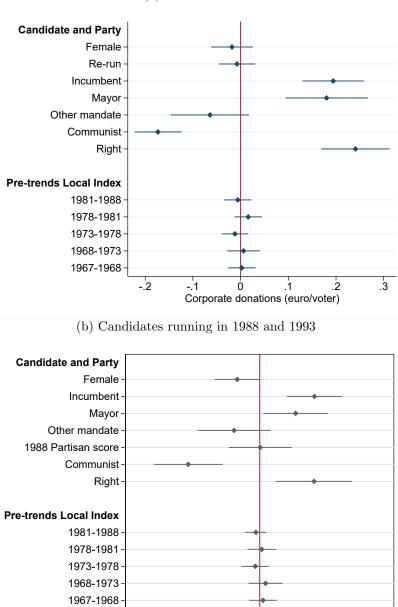
Notes: This figure shows the coefficients and their 95% confidence intervals from a regression of the total number of corporate donations (Figure D.15a) or the total amount of corporate donations in 2020 constant euros per voter (Figure D.15b) received in the district (summed over all the candidates) on a set of candidate characteristics averaged at the district-level (not shown) and district characteristics. Non-dichotomous explanatory variables are standardized. We use one observation per district in 1993. Standard errors are robust.

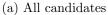
Figure D.15: District-level determinants of corporate donations in 1993, Considering the overall amount and number of corporate donations received in the district (summed over all candidates)



Notes: The figure shows the coefficients and their 95% confidence intervals from a regression policy topic prevalence on corporate donations. We use one observation per candidate per year. The sample includes all candidates who run both in 1993 and 1997, and whose manifesto is available. In column 6, the sample is further restricted to candidates affiliated with the five main party organizations. 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. The amount of corporate donations per voter is divided by its standard deviation in 1993. 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 levels of mean prevalence.

Figure D.16: Impact of corporate donations on policy topics in the manifestos





Notes: The figure shows the coefficients and their 95% confidence intervals from a regression of the amount of corporate donations in 2020 constant euros per voter received by each candidate on a set of party fixed effects, candidate characteristics and pre-trends in local index at department × party level. We use one observation per candidate in 1993. In Figure D.17a the sample includes all candidates from the Communist, the Socialist or the right-wing party (omitting candidates from the Socialist party). In Figure D.17b the sample is further restricted to candidates who run both in 1988 and 1993. Standard errors are clustered at the district level.

-.2

Ò Corporate donations (euro/voter)

.2

4

-.4

Figure D.17: Corporate donations and trends in local index before 1988

E Additional tables

| Table E.1: Summary statistics: | corporate donations in | n 1993, Sub-sample | e of candidates who |
|------------------------------------|------------------------|--------------------|---------------------|
| received at least one corporate of | donation | | |

| | Mean | St.Dev | Min | Max | Ν |
|------------------------------------|------------|--------|------|---------|-------|
| # Corp. Donations | 8.79 | 9.49 | 1.00 | 63.00 | 1,701 |
| Corp. Donations in cst euros | $24,\!406$ | 30,026 | 2 | 330,208 | 1,701 |
| Corp. Donation (euro/voter) | 0.37 | 0.48 | 0.00 | 6.28 | 1,701 |
| % Corp. Donations in total revenue | 37.44 | 27.73 | 0.00 | 100.00 | 1,701 |

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

| | Mean | St.Dev. | Min | Max | Ν |
|-----------------------------------|---------------|--------------|------------|-------------|-----|
| Electoral district | | | | | |
| Registered voters | $68,\!238$ | $11,\!293$ | $26,\!468$ | 111,715 | 555 |
| # Candidates | 9 | 2 | 5 | 18 | 555 |
| # Candidates with Corp. Donations | 3 | 1 | 0 | 8 | 555 |
| Corporate donations | | | | | |
| # Corp. Donations | 26 | 19 | 1 | 109 | 555 |
| Mean Corp. Donations | $2,\!239.65$ | $1,\!256.23$ | 0 | $8,\!479$ | 555 |
| Total Corp. Donations | $53,\!786.89$ | 40,162.12 | 0 | $218,\!872$ | 555 |
| Total Corp. Donations | | | | | |
| Small donors | $1,\!690.70$ | $1,\!279.12$ | 10 | 9,842 | 545 |
| Multiple donors | $3,\!107.58$ | $1,\!648.21$ | 0 | $9,\!842$ | 533 |
| Single-district donors | 1,407.17 | $1,\!447.82$ | 20 | $7,\!874$ | 151 |
| Multi-district donors | 3,200.28 | $1,\!643.90$ | 0 | $9,\!842$ | 531 |
| Left-wing parties donors | $2,\!683.41$ | 2,233.45 | 20 | 9,842 | 210 |
| Right-wing parties donors | $2,\!800.90$ | $2,\!457.54$ | 46 | 9,842 | 368 |
| Non-partisan donors | $3,\!316.84$ | 1,889.82 | 197 | $9,\!842$ | 514 |
| Share Corp. Donations | | | | | |
| Small donors | 0.46 | 0.23 | 0 | 1 | 555 |
| Multiple donors | 0.54 | 0.23 | 0 | 1 | 555 |
| Single-district donors | 0.02 | 0.06 | 0 | 1 | 555 |
| Multi-district donors | 0.51 | 0.24 | 0 | 1 | 555 |
| Left-wing parties donors | 0.03 | 0.06 | 0 | 0 | 555 |
| Right-wing parties donors | 0.10 | 0.14 | 0 | 1 | 555 |
| Non-partisan donors | 0.44 | 0.23 | 0 | 1 | 555 |

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

Notes: The table presents summary statistics on electoral district and corporate donations in 1993 at the district level. Mean and total corporate donations are in 2020 constant euros. Total Corp. Donations is the sum of corporate donations in a district in 2020 constant euros. Share Corporate Donations is the share of corporate donations out of total revenues in a district. Small donors are donors who made only one donation in 1993, multiple donors made more than one donation. Single-district donors (resp. multi-district) are donors who gave to multiple candidates running in the same district (different districts). Left-wing parties (resp. right-wing parties) donors are multiple donors are multiple donors who made all the donations to candidates endorsed by left-wing (resp. right-wing) parties, non-partisan donors are multiple donors who gave to both left-wing and right-wing candidates.

| Donor name | Total donations | # Donations |
|------------------|-----------------|-------------|
| COLAS | 401367.8 | 96 |
| BOUYGUES | 314952.6 | 47 |
| SOGEA | 312590.5 | 82 |
| SPIE | 304126.1 | 59 |
| SAUR | 258851.7 | 62 |
| SCREG | 244875.7 | 60 |
| SOCIETE DES EAUX | 225781.7 | 53 |
| DUMEZ | 168302.8 | 35 |
| CAMPENON BERNARD | 165350.1 | 38 |
| OMNIUM | 163184.8 | 38 |
| VIA TRANSPORT | 139760.2 | 31 |
| GTM TP | 120075.7 | 23 |
| SAE | 119091.5 | 21 |
| SODEXHO | 116926.2 | 21 |
| BEUGNET | 113776.6 | 31 |
| ESSYS MONTENAY | 106296.5 | 25 |
| STREICHENBERGER | 101965.9 | 26 |
| JEAN LEFEBVRE | 92763.39 | 41 |
| SUPAE | 90548.88 | 14 |
| MONOPRIX | 87989.89 | 18 |

Table E.3: Largest corporate donors in 1993

Notes: The table presents the largest 20 donors in 1993, the number of donations and the amount they spent in the campaign. Total donations are in 2020 constant euros.

| | Mean (a) | N (a) | Mean (b) | N (b) | Diff | p-value |
|--|--------------|-------|--------------|-----------|-----------|---------|
| # Donations | | | | | | |
| (a) Left vs (b) right-only donors | 3.05 | 404 | 2.49 | $1,\!044$ | 0.56 | 0.00 |
| (a) Left or right-only vs (b) non-partial donors | 2.62 | 1,562 | 14.74 | $4,\!110$ | -12.12 | 0.00 |
| (a) Non-identified sector vs (b) identified sector | 1.34 | 6,704 | 8.29 | 7,780 | -6.95 | 0.00 |
| Mean donation (2020 cst euros) | | | | | | |
| (a) Left vs (b) right-only donors | 2,574.86 | 404 | $2,\!615.47$ | $1,\!044$ | -40.61 | 0.80 |
| (a) Left or right-only vs (b) non-partisan donors | $2,\!584.12$ | 1,562 | $3,\!139.83$ | $4,\!109$ | -555.71 | 0.00 |
| (a) Non-identified sector vs (b) identified sector | $1,\!216.79$ | 6,701 | 2,795.81 | 7,780 | -1,579.03 | 0.00 |

Table E.4: Comparison of donation patterns across donors' characteristics

Notes: This table compares the number of donations and the mean donations of corporate donors in 1993 included in our sample across the following criteria: if multiple donors gave to left-wing of right-wing parties only, if they gave to one side only (left or right) or both (non-partisan), and if their sector of activity was found during the cleaning procedure or not. For each observed donor characteristic, we report mean values and number of non-missing observations for each group (a) and (b), the difference in mean values between the two groups and the *p*-value associated with the test that this difference is zero.

| | mean | sd | min | max | count |
|--------------------|--------------|---------------------|-----------------|------------|-----------------|
| Agriculture | | | | | |
| Mean donation | $1,\!225.65$ | 2,242.82 | 6 | 9,842 | 184 |
| Sum donations | 1,790.31 | $4,\!155.91$ | 6 | $37,\!401$ | 184 |
| Construction | , | , | | , | |
| Mean donation | $2,\!295.53$ | 2,584.94 | 20 | 10,138 | $1,\!615$ |
| Sum donations | $6,\!151.99$ | $20,\!623.13$ | 20 | 401,368 | $1,\!615$ |
| Culture | -, | -) | - | -) |) |
| Mean donation | 1,908.16 | 2,576.25 | 20 | 9,842 | 157 |
| Sum donations | 2,448.34 | 4,720.40 | 20 | 49,211 | 157 |
| Economy-Finance | , | , | | , | |
| Mean donation | $2,\!454.39$ | 3,007.26 | 6 | 9,842 | 586 |
| Sum donations | 3,711.16 | 5,499.71 | 6 | 39,369 | 586 |
| Environment-Energy | -, | -, | | ,000 | |
| Mean donation | $3,\!576.80$ | 2,760.29 | 30 | 9,842 | 160 |
| Sum donations | 12,990.71 | 32,432.74 | 30 | 304,126 | 160 |
| Health | , | - , | | , 9 | |
| Mean donation | 1,825.77 | 2,823.38 | 10 | 9,842 | 256 |
| Sum donations | 2,793.78 | 6,624.57 | 10 | 76,770 | 256 |
| Industry | _, | 0,020.00 | | , | |
| Mean donation | $2,\!198.35$ | 2,797.01 | 10 | 29,527 | 746 |
| Sum donations | 4,402.45 | 10,967.34 | 10 | 163,185 | 746 |
| Justice | 1,102110 | 10,001101 | | 100,100 | |
| Mean donation | 757.85 | 818.28 | 98 | 2,362 | 10 |
| Sum donations | 757.85 | 818.28 | 98 | 2,362 | 10 |
| NGOs | | | | _, | |
| Mean donation | 3,908.34 | $3,\!153.35$ | 49 | 9,842 | 35 |
| Sum donations | 7,305.05 | 8,189.27 | 49 | 36,416 | 35 |
| Retail | ., | 0,200.21 | 10 | | |
| Mean donation | 1,963.44 | $2,\!681.33$ | 10 | 9,842 | 805 |
| Sum donations | 3,150.20 | 7,770.07 | 10 | 116,926 | 805 |
| Sport | 0,100.20 | 1,110.01 | 10 | 110,020 | 000 |
| Mean donation | 1,074.95 | 2,231.77 | 20 | 9,842 | 23 |
| Sum donations | 1,661.20 | 4,084.58 | $\frac{20}{20}$ | 17,716 | 23 23 |
| Travel | _, | -, | | | |
| Mean donation | 478.76 | 489.81 | 39 | $1,\!968$ | 21 |
| Sum donations | 576.01 | 583.17 | $\frac{39}{39}$ | 1,968 | $\frac{21}{21}$ |
| Unknown | 010101 | 000.11 | | 1,000 | <u>~</u> 1 |
| Mean donation | $1,\!189.47$ | 1,623.73 | 10 | $9,\!842$ | $5,\!870$ |
| Sum donations | 1,389.04 | 2,088.76 | 10 | 47,243 | 5,870 |
| Total | 1,000.01 | _, | 10 | ,=10 | 3,510 |
| Mean donation | 1,632.80 | 2,234.93 | 6 | 29,527 | 10,468 |
| Sum donations | 2,856.81 | 10,277.75 | 6 | 401,368 | 10,468 |
| | 2,000.01 | 10,211.10 | 0 | -101,000 | 10,400 |

Table E.5: Summary statistics by sector of activity

Notes: An observation is a donor in 1993. Donations are in 2020 constant euros.

| Left | \mathbf{Right} |
|------------------|------------------|
| dividend | terrorist |
| antidemocratic | criminal |
| poverty | immigration |
| disarmament | deportation |
| benefits | decadence |
| capitalist | patriot |
| abortion | europe |
| railroad workers | persecution |
| law | taxation |
| strike | utopia |

Table E.6: Left-right words

Notes: This table shows examples of words-translated in English-with lowest (left-wing) and highest (right-wing) ideological 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.

| $\begin{array}{c} \mathbf{Homeland} \\ \mathbf{security} \end{array}$ | Education | Environment | Retail | Health |
|---|-----------------|----------------|----------------|------------------|
| vote by proxy | geology | birds | bakery | speech therapy |
| police | tenure | fishermen | hairdresser | paramedical |
| firefigther | 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 | anesthesy |

Table E.7: Topic-specific words

| 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 | prisonner | 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 |

| 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 | | |
| alcohol | common agricultural policy | | |

Table E.7: Topic-specific words (continued)

Notes: This table shows, for each policy topic, examples of words-translated in English-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 dummies incating which topic (based on targeted Ministry) the questions are adressed to.

Table E.8: 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.

| | Mean | sd | Min | Max | Count |
|---|----------------|-------------|-----------|-------------|-------|
| # 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 revenues | $227,\!104$ | $736,\!528$ | 0 | 3,843,893 | 555 |
| Number of firms | 3 | 10 | 0 | 55 | 555 |
| Mean number of employees per municipality | 53.76 | 173.03 | 0 | 917 | 555 |
| Total payroll (in thousand euros) | 8,691.32 | 30,619.26 | 0 | 161,998 | 555 |
| % employees in top $1%$ | 0 | 2 | 0 | 8 | 555 |
| Covariates 1997 | | | | | |
| District municipalities revenues | $266,\!059.67$ | 871,395.55 | 0 | 4,552,347 | 555 |
| Number of firms | 4 | 11 | 0 | 61 | 555 |
| Mean number of employees per municipality | 54 | 173 | 0 | 918 | 555 |
| Total payroll (in thousand euros) | 9,309.73 | 32,369.09 | 9 | $171,\!363$ | 555 |
| % employees in top $1%$ | 0.45 | 1.48 | 0 | 8 | 555 |

Table E.9: Summary statistics for covariates at the district level

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 revenues and annual spending in infrastructure of the French municipalities with more than 10,000 inhabitants summed at the district level (municipalities' revenues 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 revenues. Municipalities' revenues and payroll are in 2020 constant euros.

Table E.10: Summary statistics: corporate donations in 1993, Sub-sample of candidates who run both in 1993 and 1997

| | Mean | St.Dev | Min | Max | Ν |
|------------------------------------|------------|--------|------|-------------|-----------|
| Corp. Donations > 0 | 0.46 | 0.50 | 0.00 | 1.00 | 1,425 |
| # Corp. Donations | 4.98 | 9.01 | 0.00 | 63.00 | $1,\!425$ |
| Corp. Donations in cst euros | $14,\!822$ | 26,750 | 0 | $201,\!274$ | $1,\!425$ |
| Corp. Donation (euro/voter) | 0.22 | 0.41 | 0.00 | 3.46 | $1,\!425$ |
| % Corp. Donations in total revenue | 18.47 | 26.71 | 0.00 | 98.23 | $1,\!425$ |

Notes: The table presents summary statistics on corporate 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.11: | Robust im | pact on | different | samples, | depending | on the | availability | of donations |
|-------------|-----------|---------|-----------|----------|-----------|--------|--------------|--------------|
| data | | | D. | | | | | |

| | Local index | Local references | National references | Left-right score | Extremeness | Originality index |
|------------------------|----------------|---------------------|------------------------|------------------|-------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Corporate donations | 0.161^{***} | 0.249*** | -0.132*** | 0.007 | -0.007 | 0.025^{*} |
| | (0.030) | (0.054) | (0.050) | (0.005) | (0.004) | (0.013) |
| Observations | 2620 | 2620 | 2620 | 2620 | 2620 | 2088 |
| Mean outcome after ban | -0.660 | 1.198 | 2.662 | -0.016 | 0.737 | -1.675 |
| R2-Within | 0.029 | 0.024 | 0.008 | 0.005 | 0.007 | 0.003 |

(a) Disaggregated donations unavailable

(b) Disaggregated donations equal to aggregate amount

| | Local index | Local references | National references | Left-right score | Extremeness | Originality index |
|------------------------|----------------|---------------------|------------------------|---------------------|-------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Corporate donations | 0.172^{***} | 0.279^{***} | -0.144** | 0.005 | -0.010 | -0.007 |
| | (0.051) | (0.098) | (0.071) | (0.007) | (0.006) | (0.023) |
| Observations | 1968 | 1968 | 1968 | 1968 | 1968 | 1472 |
| Mean outcome after ban | -0.769 | 0.987 | 2.700 | -0.028 | 0.901 | -1.885 |
| R2-Within | 0.017 | 0.022 | 0.006 | 0.009 | 0.006 | 0.004 |

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 corporate donations is available but the data on disaggregated donations is not. Panel (b) includes candidates for whom the aggregate amount of corporate donations is exactly equal to the sum of individual corporate donations from the *Journal Officiel*. Other notes as in Table 3.

| | Economy | Social | Homeland and administration | Foreign policy |
|------------------------|---------------|---------------|-----------------------------|-------------------|
| | (1) | (2) | (3) | (4) |
| Mainstream*Corp.Don. | 1.034^{*} | -1.209^{**} | 1.027^{*} | -0.340** |
| | (0.529) | (0.567) | (0.564) | (0.140) |
| Niche*Corp.Don. | 31.729*** | -13.633 | -2.213 | -2.404*** |
| | (9.337) | (8.581) | (17.578) | (0.876) |
| Independent*Corp.Don. | 6.163^{***} | -4.319* | 0.068 | -0.978 |
| | (2.212) | (2.527) | (2.026) | (0.855) |
| Observations | 2602 | 2602 | 2602 | 2602 |
| Mean outcome after ban | 22.913 | 36.174 | 19.297 | 3.765 |
| R2-Within | 0.025 | 0.013 | 0.006 | 0.006 |

Table E.12: Impact of corporate donations on broad policy topics by party type

Notes: The outcome is the predicted probability, for each policy topic, that a candidate manifesto focuses primarily on that topic out of 4 broad topics-based on the words it contains. It is measured in percentage points. Mainstream parties are the Communist, Socialist and right-wing parties. Niche parties are the Green and far-right parties as well as smaller parties. Independent candidates are not affiliated with any party. Other notes as in Tables 3 and 5.

| | Local index | Local references | National references | Left-right score | Extremeness | Originality index |
|--------------------------|----------------|---------------------|------------------------|---------------------|-------------|----------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Corporate donations | 0.185^{***} | 0.341*** | -0.113 | 0.006 | -0.023*** | 0.015 |
| | (0.058) | (0.110) | (0.087) | (0.009) | (0.008) | (0.022) |
| Corp.Don.*Female | -0.064 | -0.033 | 0.133 | -0.014 | 0.016 | 0.029 |
| | (0.088) | (0.145) | (0.164) | (0.011) | (0.011) | (0.030) |
| Corp.Don.*Re-run | -0.146 | -0.259 | 0.134 | 0.004 | 0.024^{*} | -0.015 |
| | (0.095) | (0.184) | (0.145) | (0.013) | (0.012) | (0.037) |
| Corp.Don.*Incumbent | 0.100 | 0.087 | -0.172 | -0.002 | -0.006 | 0.039 |
| | (0.084) | (0.150) | (0.142) | (0.011) | (0.011) | (0.032) |
| Corp.Don.*Mayor | 0.083 | 0.146 | -0.061 | 0.007 | 0.009 | -0.007 |
| | (0.061) | (0.108) | (0.107) | (0.011) | (0.011) | (0.025) |
| Corp.Don.*Other mandates | 0.127 | 0.227** | -0.063 | -0.019 | 0.003 | -0.106*** |
| | (0.077) | (0.116) | (0.193) | (0.012) | (0.010) | (0.035) |
| Observations | 2602 | 2602 | 2602 | 2602 | 2602 | 2070 |
| Mean outcome after ban | -0.658 | 1.199 | 2.658 | -0.020 | 0.736 | -1.672 |
| R2-Within | 0.036 | 0.031 | 0.010 | 0.007 | 0.009 | 0.007 |

Table E.13: Impact of corporate donations on campaign communication by candidate type

Notes: The amount of corporate donations per voter (divided by its standard deviation in 1993) 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.14: Heterogeneous effect on local index by donor size

| | Ι | Local inde | x |
|---------------------------------------|-------------------------|-------------------------|-------------------------|
| | (1) | (2) | (3) |
| Corp.Don from: small donors ≤ 2 | 0.070^{*} (0.036) | | |
| Corp.Don from: multiple donors >2 | 0.061^{**} (0.027) | | |
| Corp.Don from: small donors ${\leq}3$ | | 0.070^{**} (0.036) | |
| Corp.Don from: multiple donors >3 | | 0.062^{**} (0.026) | |
| Corp.Don from: small donors ${\leq}5$ | | | 0.090^{**} (0.036) |
| Corp.Don from: multiple donors >5 | | | $0.040 \\ (0.026)$ |
| Observations | 2602 | 2602 | 2602 |
| Mean outcome after ban | -0.658 | -0.658 | -0.658 |
| R2-Within | 0.022 | 0.022 | 0.022 |

Notes: We define small donors as donors who make 1 or 2 donations (column 1), up to 3 donations (column 2), and up to 5 donations (column 3). Other notes as in Table 6.

| | Frequ | uency of lo | ocal refere | ences |
|-------------------------------------|---|--|-------------------------|---|
| | (1) | (2) | (3) | (4) |
| Corporate donations | $\begin{array}{c} 0.283^{***} \\ (0.055) \end{array}$ | | | |
| Individual donations | -0.027 (0.053) | | | |
| Personnal contributions | $\begin{array}{c} 0.041 \\ (0.033) \end{array}$ | | | |
| Party contributions | $0.089 \\ (0.065)$ | | | |
| Donations from small donors | | $\begin{array}{c} 0.137^{**} \\ (0.069) \end{array}$ | 0.132^{*} (0.068) | 0.135^{*} (0.069) |
| Donations from multiple donors | | 0.127^{**} (0.054) | | |
| Multiple donors: multi-districts | | | 0.102^{*} (0.053) | |
| Multiple donors: single-district | | | 0.155^{**} (0.068) | |
| Multiple donors: left-only | | | | -0.061 (0.071) |
| Multiple donors: right-only | | | | $0.080 \\ (0.056)$ |
| Multiple donors: non-partisan | | | | 0.110^{**} (0.049) |
| Observations | 2602 | 2602 | 2602 | 2602 |
| Mean outcome after ban R2-Within | $1.199 \\ 0.027$ | $1.199 \\ 0.024$ | $1.199 \\ 0.029$ | $\begin{array}{c} 1.199 \\ 0.028 \end{array}$ |

Table E.15: Heterogeneous effect on frequency of local references by sources of funding and type of donor

Notes: The outcome is the normalized frequency of local references measured in percentage points. Other notes as in Table 6.

| | Freque | ncy of nat | tional refe | erences |
|-------------------------------------|--------------------------|---|--------------------|------------------------|
| | (1) | (2) | (3) | (4) |
| Corporate donations | -0.148^{**} (0.058) | | | |
| Individual donations | -0.029 (0.057) | | | |
| Personnal contributions | -0.019 (0.039) | | | |
| Party contributions | -0.024 (0.056) | | | |
| Donations from small donors | | -0.061 (0.055) | -0.060 (0.055) | -0.069 $(0.055$ |
| Donations from multiple donors | | $0.004 \\ (0.056)$ | | |
| Multiple donors: multi-districts | | | $0.010 \\ (0.055)$ | |
| Multiple donors: single-district | | | -0.035 (0.042) | |
| Multiple donors: left-only | | | | -0.028 (0.030 |
| Multiple donors: right-only | | | | 0.082^{*} (0.048) |
| Multiple donors: non-partisan | | | | -0.032 (0.053 |
| Observations | 2602 | 2602 | 2602 | 2602 |
| Mean outcome after ban R2-Within | $2.658 \\ 0.008$ | $\begin{array}{c} 2.658 \\ 0.004 \end{array}$ | $2.658 \\ 0.005$ | $2.658 \\ 0.007$ |

Table E.16: Heterogeneous effect on frequency of national references by sources of funding and type of donor

Notes: The outcome is the normalized frequency of national references measured in percentage points. Other notes as in Table 6.

| | Local index | Local references | National references |
|------------------------------|----------------|---------------------|------------------------|
| | (1) | (2) | (3) |
| Corp.Don from: other sectors | 0.006 | 0.061 | 0.044 |
| | (0.029) | (0.054) | (0.041) |
| Corp.Don from: construction | 0.006 | -0.007 | -0.014 |
| | (0.029) | (0.054) | (0.052) |
| Corp.Don from: economy | -0.001 | 0.022 | 0.020 |
| | (0.033) | (0.058) | (0.048) |
| Corp.Don from: environment | 0.051^{*} | 0.103^{**} | -0.024 |
| - | (0.030) | (0.050) | (0.052) |
| Corp.Don from: industry | 0.008 | 0.007 | -0.020 |
| L U | (0.030) | (0.053) | (0.051) |
| Corp.Don from: retail | -0.013 | 0.056 | 0.094^{**} |
| | (0.031) | (0.058) | (0.046) |
| Corp.Don from: unknown | 0.103** | 0.134 | -0.117^{*} |
| | (0.045) | (0.085) | (0.061) |
| Observations | 2602 | 2602 | 2602 |
| Mean outcome | -0.658 | 1.199 | 2.658 |
| R2-Within | 0.027 | 0.029 | 0.011 |

Table E.17: Heterogeneity by donor's sector of activity

| | Local index | Local references | National references |
|------------------------|----------------|---------------------|------------------------|
| | (1) | (2) | (3) |
| Corporate donations | 0.113^{**} | 0.186^{**} | -0.071 |
| | (0.045) | (0.078) | (0.084) |
| Observations | 448 | 448 | 448 |
| Mean outcome after ban | -0.361 | 1.804 | 2.605 |
| R2-Within | 0.040 | 0.032 | 0.011 |

Table E.18: Impact of corporate donations on local prevalence, Sub-sample of elected representatives

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

Notes: The amount of corporate donations per voter received by each candidate is broken down into amounts received by donors form different sectors of activity. Other notes as in Table 3, columns 1-3.

Table E.19: Impact of corporate donations on interventions in low- and high-visibility debates

| (a) Low-Visibility debates | | | | | | |
|----------------------------|----------------------------|----------------|---------------------|------------------------|--|--|
| | Number of interventions | Local index | Local references | National references | | |
| | (1) | (2) | (3) | (4) | | |
| Corporate donations | 0.414 | 0.091 | -0.043 | -0.303 | | |
| | (0.627) | (0.089) | (0.032) | (0.246) | | |
| Observations | 222 | 214 | 214 | 214 | | |
| Mean outcome | 6.617 | -1.332 | 0.254 | 3.096 | | |
| R2-Within | 0.088 | 0.034 | 0.053 | 0.032 | | |

(a) Low-visibility debates

| (b) High-visibility debates | | | | | | |
|-----------------------------|----------------------------|----------------|---------------------|------------------------|--|--|
| | Number of interventions | Local index | Local references | National references | | |
| | (1) | (2) | (3) | (4) | | |
| Corporate donations | 2.129 | -0.110 | -0.016 | 0.314 | | |
| | (3.116) | (0.076) | (0.025) | (0.251) | | |
| Observations | 330 | 322 | 322 | 322 | | |
| Mean outcome | 38.233 | -1.428 | 0.226 | 3.771 | | |
| R2-Within | 0.050 | 0.047 | 0.004 | 0.045 | | |

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.20: Impact of corporate donations on broad policy topics in legislative discourse

| | Economy | Social | Homeland and administration | Foreign policy |
|---------------------|---------|---------|-----------------------------|-------------------|
| | (1) | (2) | (3) | (4) |
| Corporate donations | 0.689 | 0.182 | -0.855 | -0.022 |
| | (0.896) | (0.983) | (0.727) | (0.015) |
| Observations | 416 | 416 | 416 | 416 |
| Mean outcome | 38.452 | 47.383 | 9.572 | 0.164 |
| R2-Within | 0.052 | 0.044 | 0.049 | 0.018 |

(a) Written questions to the government

(b) Debate interventions

| | Economy | Social | Homeland and administration | Foreign policy |
|---------------------|--------------|---------|-----------------------------|-------------------|
| | (1) | (2) | (3) | (4) |
| Corporate donations | -2.479^{*} | 1.897 | -0.681 | 0.625 |
| | (1.422) | (1.681) | (1.154) | (0.852) |
| Observations | 356 | 356 | 356 | 356 |
| Mean outcome | 32.968 | 28.440 | 15.535 | 7.464 |
| R2-Within | 0.032 | 0.020 | 0.019 | 0.034 |

Notes: Same notes as in Tables 7 and E.12.

| | (1) | (2) | (3) | (4) | (5) | (9) | (2) | (8) | (6) | (10) | (11) |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Corp.Don. | 0.162^{***} (0.033) | | | | 0.272^{***} (0.056) | 0.159^{***} (0.040) | 0.162^{***} (0.030) | 0.137^{***} (0.030) | 0.143^{***} (0.027) | 0.096^{***} (0.022) | |
| Log Corp.Don. | | 0.183^{***} (0.031) | | | | | | | | | |
| Receiving any Corp.Don. | | | 0.238^{***} (0.080) | | | | | | | | |
| Number of Corp.Don. | | | | 0.022^{***} (0.005) | | | | | | | |
| Corp.Don. ² | | | | | -0.021^{***} (0.008) | | | | | | |
| Share Corp.Don./Revenue | | | | | | | | | | | 0.008^{***} (0.002) |
| Observations | 2602 | 2602 | 2602 | 2602 | 2602 | 2602 | 2602 | 2602 | 2602 | 5430 | 2518 |
| Mean outcome after ban | -0.658 | -0.658 | -0.658 | -0.658 | -0.658 | -0.658 | -0.658 | -0.658 | -0.658 | -0.729 | -0.660 |
| R2-Within | 0.030 | 0.032 | 0.014 | 0.028 | 0.032 | 0.037 | 0.055 | 0.044 | 0.025 | 0.013 | 0.028 |
| Candidate FE | > | > | > | > | > | > | > | > | > | | > |
| $Party^*Year FE$ | > | > | > | > | > | > | > | > | > | > | > |
| District*Year FE | | | | | | > | | | | | |
| Party*District FE | | | | | | | | | | > | |
| Main controls | > | > | > | > | > | > | > | | | > | > |
| District controls | | | | | | | > | | | | |
| Controls*Year FE | | | | | | | | > | | | |
| Contributions1988 [*] Year FE | | | | | | | | | > | | |
| Larger clusters | > | | | | | | | | | | |

the level index Ę Jonations 0+0 ب ر + Pohnet im Table F 91.

Notes: Standard errors are clustered by department (column 1) or by district (columns 2 through 10) and shown in parentheses (***, **, * indicate significance at 1, 5, and 10 percent, respectively). We use one observation per cardidate per year. In all columns but column 10, the sample includes all candidates who run both in 1993 and 1997, and whose manifesto is available. In column 10, the sample includes all candidates who run for a party that was present in the same district both in 1993 and 1997, and excludes independent candidates without a clear party affiliation. In all columns, the outcome is the local index of each candidate manifesto, which measures the prevalence of local 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. In column 6, we add district×year fixed effects. In column 7, we control for time-varying district characteristics. In column 8, the main candidate controls are interacted with the year fixed effects, as well as past controls measured in 1988. In column 9, the year fixed effects are interacted with corporate donations, individual donations, party contributions and personal contributions from 1988, as well as a set of indicator variables for their availability. In column 10, candidate fixed effects are replaced references over national ones (divided by its standard deviation). In columns 1-2 and 5-10, the amount of corporate donations per voter and the log of this amount (plus one) are divided by their respective standard deviation in 1993. In column 11, the share of corporate donations in a candidate's total revenue is measured in percentage points. We control with party×district fixed effects.

| | Total revenue | Donations from individuals | Party contributions | Personal contributions |
|------------------------|------------------|-------------------------------|------------------------|------------------------|
| | (1) | (2) | (3) | (4) |
| Corp.Don. (euro/voter) | 0.735^{***} | -0.054*** | -0.138*** | -0.112*** |
| | (0.026) | (0.016) | (0.021) | (0.020) |
| Observations | 2828 | 2828 | 2828 | 2828 |
| Mean outcome after ban | 0.432 | 0.054 | 0.075 | 0.287 |
| R2-Within | 0.593 | 0.041 | 0.065 | 0.056 |

Table E.22: Impact of corporate donations on total revenue and other sources of revenue

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 total revenues (column 1) or different sources of revenue (columns 2-4) are known. 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. The amount of corporate donations as well as all outcomes are measured in 2020 constant euros per voter.

| | Donations from individuals | Party contributions | Personal contributions |
|------------------------------|-------------------------------|------------------------|------------------------|
| | (1) | (2) | (3) |
| Share of corporate donations | -0.177*** | -0.486*** | -0.317*** |
| | (0.021) | (0.036) | (0.038) |
| Observations | 2726 | 2726 | 2726 |
| Mean outcome after ban | 10.829 | 19.375 | 66.783 |
| R2-Within | 0.043 | 0.124 | 0.056 |

Table E.23: Impact of corporate donations on shares of different sources in total revenue

Notes: The share of campaign revenue coming from each source is measured in percentage points. Other notes as in Table E.22.

References

- Bertrand, M., Bombardini, M., Fisman, R., Hackinen, B., and Trebbi, F. (2021). Hall of Mirrors: Corporate Philanthropy and Strategic Advocacy. *The Quarterly Journal of Economics*, 136(4):2413–2465.
- Cook, R. D. and Others (2007). Fisher lecture: Dimension reduction in regression. *Statistical Science*, 22(1):1–26.
- Gentzkow, M., Shapiro, J. M., and Taddy, M. (2019). Measuring Group Differences in High-Dimensional Choices: Method and Application to Congressional Speech. *Econometrica*, 87(4):1307–1340.
- OpinionWay (2017). Les Français et les programmes électoraux. Sondage OpinionWay pour Le Printemps de l'Economie.
- Taddy, M. (2013). Multinomial Inverse Regression for Text Analysis. Journal of the American Statistical Association, 108(503):755–770.
- Taddy, M. (2015). Distributed multinomial regression. *The Annals of Applied Statistics*, 9(3):1394–1414.
- Taddy, M. (2017). One-step estimator paths for concave regularization. Journal of Computational and Graphical Statistics, 26(3):525–536.