

Blowback: The Effect of Sanctions on Democratic Elections*

Matthieu Crozet[†] and Julian Hinz[‡]

December 7, 2023

Abstract

In international relations, sanctions are meant to coerce political adversaries through economic measures. However, evidence of their effectiveness is scarce. In this paper we assess the impact of sanctions on a democracy — France — by studying the electoral consequences of the sanctions and countermeasures imposed between Russia and Western countries. Contrary to most existing literature, we find clear evidence that exposure to the sanctions causes an increase in the vote share for pro-Russian (and far-right) candidates during the French 2017 presidential election. Locally, the impact on voting is substantial. Back-of-the-envelope calculations indicate that about 15,700 votes for the main far-right candidate can be directly attributed to the sanctions' impact. This is the total number of votes cast in a medium-sized French city. However, it is not nearly enough to have affected the outcome of the election at the national level.

Keywords: Sanctions, Elections, Embargo, Russia

JEL Classification: F51, D72, D74, F13.

*We are grateful to Pamina Koenig for her kind help in collecting the election data and to Michele Valsecchi for helpful discussions during the early stages of the project.

[†]Université Paris-Saclay, RITM. E-Mail: matthieu.crozet@universite-paris-saclay.fr.

[‡]Bielefeld University, Kiel Institute for the World Economy & Kiel Centre for Globalization. E-Mail: mail@julianhinz.com.

1 Introduction

Do international sanctions work? The answer to this question largely depends on the precise definition of the sanctions’ expected and credibly achievable objectives. Even if effectiveness is narrowly defined as the ability to erode popular support for the targeted country’s leaders and induce policy changes, the debate in political science and economics is lively, and most evidence is inconclusive or contradictory.¹ There is some evidence that sanctions can lead to a — counterproductive — strengthening of popular support of the targeted political power,² especially in illiberal regimes.³ Sanctions by Western democracies could hence be less effective in adversarial illiberal regimes, while paradoxically leaving them more exposed to political “blowback” in case of countermeasures. Assessing the sensitivity of democracies to (counter)sanctions is therefore critical to measuring the effectiveness of this instrument, and to better prepare democracies for potential responses.

In this paper, we investigate this question by studying the political impact of imposing a trade embargo on a large democratic target country. Specifically, we examine the case of France, which, in response to its own sanctions against the Russian Federation for its invasion and annexation of parts of Ukraine in 2014, was targeted — along with 37 other countries — with an embargo on select food and agricultural products. The policy measures from both sides, Western sanctions and the Russian embargo, had non-negligible economic costs in France (Crozet and Hinz, 2020; Crozet et al., 2021). Politically, relations between France and Russia therefore remained a hot topic: In the presidential election in 2017, a number of contenders campaigned against the sanctions. Among them, the candidate with the most explicit support for Putin’s Russia - and the most successful at the polls - was Marine Le Pen, of the far-right party *Front National*. She went so far as to visit Russian President Putin, just one month before the election, in a highly visible media stunt.⁴

The question we are addressing in this paper is whether exposure to the embargo had a measurable causal impact on the outcome of the 2017 French presidential elections. We do so by combining georeferenced French customs data and highly-detailed election data. The former dataset contains firm-level information on exported products and their destinations, thus providing a local measure of exposure to the Russian embargo. The latter dataset then provides the details of the election results for 30,910 municipalities in mainland France. In a difference-in-differences setup we assess whether changes in

¹See, e.g., Allen (2005), Lektzian and Souva (2007), Escribà-Folch and Wright (2010), Bapat et al. (2013), and Felbermayr et al. (2020) for comprehensive reviews of empirical findings and original results.

²See Peksen and Drury (2010), Grossman et al. (2018), and Alexseev and Hale (2020) for evidence of this kind of “backfiring” effects.

³E.g., Escribà-Folch and Wright (2010), Bapat et al. (2013), and Gold et al. (2023). This does not mean that there is no “backfiring” in democracies (Grossman et al., 2018).

⁴See, e.g., <https://www.theguardian.com/world/2017/mar/24/vladimir-putin-hosts-marine-le-pen-in-moscow> for the corresponding media coverage.

the political outcomes can be attributed to the local exposure to the Russian embargo, exploiting rich spatial heterogeneity in the data.

As such, our paper is closely related to a lively literature that analyzes the connection between trade and electoral outcomes. Dippel et al. (2022), e.g., find that exposure to imports from low-wage origin countries helps nationalist parties, whereas export exposure shows the opposite impact. Malgouyres (2017) supports this finding, analyzing fine-grained French election data — the same we employ in this paper.⁵ These results are complemented by findings of Colantone and Stanig (2018), who show for 15 Western European countries that districts with greater exposure to import competition from China increased political support to isolationist parties — primarily through a general shift to the right of the electorate. In a similar vein, Che et al. (2021) find that China’s integration into the world trading system helped US Democrats — then seen as rather protectionist. In a context closely related to sanctions, Blanchard et al. (2019) show that Republican candidates in US electoral districts that were targeted in response to the Trump administration’s trade war fared comparatively worse. Fetzer and Schwarz (2021) show this targeting was likely a deliberate policy choice.

Most related to this present research endeavor are two papers studying the impact of the 2014 Western sanctions on elections in Russia. Using polling station-level data and a structurally estimated local sanctions shock, Gold et al. (2023) show that the regime’s support *increased* in those districts experiencing higher exposure to sanctions. Peeva (2018) also studies this sanctions case, looking at geographic proximity between sanctioned firms and polling stations in Russia. She confirms that Western sanctions have had the opposite impact to that intended. Both papers suggest that the illiberal nature of the Russian political system has played a part in generating this “rally-around-the-flag” effect.

We examine the other side of the coin, studying the impact of Russian counter-sanctions. Our contribution therefore lies in identifying and quantifying the effectiveness of sanctions against a liberal democracy. We document and econometrically show that electoral districts in France that were exposed to the Russian embargo on certain food and agricultural products saw a shift to the electoral right — an increase in support for parties being perceived or openly stating as being “pro-Russian”. For the first round of the 2017 presidential election, we can ascribe about 15,700 additional votes in favor of Marine Le Pen to the Russian embargo. This is both a little and a lot. On the one hand, the absolute number is far too small to have significantly influenced the results of a national election (Le Pen qualified for the second round of the 2017 presidential election with a lead of more than 460,000 votes over the third-placed candidate). On the other hand, however, it is certainly not an insignificant amount, as it is equivalent to the total number of votes

⁵Another paper employing this local-level election data from France is Schneider-Strawczynsk (2021), who studies the impact of the presence of migration centers for far-right support.

cast in a medium-sized French city, like Biarritz. Moreover, this back-of-the-envelope quantification is the result of a difference-in-differences estimation that is, by its nature, a lower bound estimate of the overall effect. Finally, it is important to notice that the average treatment effect on the treated units is substantial. If the overall impact of the embargo is modest, it is not because its influence on votes is weak, but because the scope of the treatment is limited. The number of treated municipalities is quite small (172), which additionally, are, on average, relatively small in terms of population. We obviously cannot know what the impact would have been in case of sanctions affecting activities accounting for a larger fraction of the working population and cities of France.⁶ Yet, as our results show, at the very least, it is possible for sanctions to influence electoral outcomes in a large democracy. Our analysis highlights a vulnerability that democracies should not ignore if they are to prepare for the possibility of more severe sanctions.

The remainder of the paper first presents the political context of the analysis, the data and the identification strategy (sections 2 and 3). We then present the econometric results and various robustness tests and extensions in sections 4 and 5. Technical details and complementary analyses are provided in an online appendix

2 Political context

2.1 The Russia sanctions and countermeasures

In March 2014, an internationally non-recognized referendum endorsed the annexation of the Ukrainian province of Crimea to the Russian Federation. In response, 37 countries (including all EU countries) put in place a series of economic and diplomatic sanctions against Russia. Russia retaliated with a simple and clear action: An embargo on imports of select food and agricultural products from sanctioning countries. Exports to Russia of embargoed products, especially those from the European Union and France, were stopped suddenly and almost completely (see, e.g., Chepeta and Gaigné, 2020; Hinz and Monastyrenko, 2022).

Our empirical strategy is based on the fact that this embargo is both narrowly focused on a limited list of products and highly effective in its implementation. This allows us to identify those French municipalities that have been directly affected by the measures taken by the Russian Federation. It was also adopted very quickly and implemented uniformly on imports from 38 Western countries. We can therefore safely consider this to be an exogenous shock, neither anticipated nor designed to explicitly target specific French municipalities.

⁶See List (2022) on the risk of extrapolating the consequences of scaling up an experiment.

2.2 French presidential elections

Our empirical analysis is based on the electoral results of the 2017 French presidential election at municipal level. This is a fairly detailed geographical breakdown. The French territory is divided into more than 35,000 municipalities.⁷ We focus on mainland France only, excluding overseas territories and Corsica. This leaves us with a comfortable sample of 30,910 municipalities.

French presidents are elected every 5 years by direct universal suffrage, in two rounds. The two candidates who come first and second in the first vote are competing once again in the second round. Its winner then becomes the new French president. In 2017, the two candidates who qualified for the second round were Emmanuel Macron and Marine Le Pen, with Emmanuel Macron winning the final election.

Somewhat surprisingly for a foreign policy topic, Franco-Russian diplomatic relations were hotly debated and featured prominently in the 2017 presidential elections. This was used by the campaign teams and the medias to draw a dividing line between the mainstream / pro-EU candidates and the more anti-system / populist ones. A great deal of time was devoted to this subject during the televised debates and it was one of the specific points of the program comparison tool offered by France's leading daily newspaper, *Le Monde*. Although a number of candidates were more or less in favor of a reconciliatory attitude towards Russia, two candidates stood out for explicit calls for a unilateral exit from the sanctions regime.⁸ These are two populist, far-right candidates: Nicolas Dupont-Aignan ("*Debout la France*") and Marine Le Pen ("*Front National*"). Dupont-Aignan is a fringe candidate who received less than 5% of the votes in the first round of the 2017 election. He officially rallied to Marine Le Pen for the second round. The latter holds a much more prominent position in French politics. In 2011, she succeeded her father as head of the *Front National*, France's main far-right party. Since then, her popularity has steadily grown. In 2017, she had the second-highest first-round score (21.3% of the vote, just behind Macron's 24%.) She received 33.51% of the vote in the second round.

In 2017, both Dupont-Aignan and Le Pen campaigned for the end of the sanctions against Russia. Dupont-Aignan called for a deep partnership with Russia and openly called for lifting the sanctions.⁹ Marine Le Pen also repeatedly expressed her admiration for Vladimir

⁷We use the terms "city" and "municipality" interchangeably.

⁸For a detailed description of each candidate's position on Russia and France's participation in the sanctions regime, see the appendix.

⁹"Unilaterally exit the sanctions regime against Russia" is point 6 of the "Foreign Affairs" chapter of Dupont-Aignan's 2017 programme.

Putin and called for closer relations with Russia.¹⁰ The *Front National* also obtained several loans granted by Russian banks for various campaign funds in the last decades. Moreover, Marine Le Pen had a widely publicized official meeting with Vladimir Putin in the Kremlin in March 2017, which was a significant campaign event.¹¹

3 Identification strategy

3.1 Exposure to sanctions

We seek to assess the extent to which exposure to the Russian embargo on food and agricultural products influenced voter choices and, in particular, votes for Marine Le Pen, the main “pro-Russian” candidate. Our identification strategy is based on the observation of votes in cities directly affected by the Russian embargo. For information on the exposure to this sanction, we use firm-level custom data.

The French customs database provides all French export declarations, by firm, 8-digit classification product, destination and year. For non-EU destinations, the database covers the universe of export flows, with more than 2.6 millions observations per year. We use the product codes to precisely identify exports of products embargoed by Russia.¹² In the dataset, each firm has a unique identifier. This allows to merge the customs data with the SIRENE database (INSEE), which provides information on the location of the firm’s headquarters and its various establishments, as well as an indication of the number of employees in each establishment. For exporters located in multiple municipalities, we allocate the trade flows in proportion to the local employment of the firm. In this way, we compute the structure of exports, by product and destination country, of each of the French municipalities.

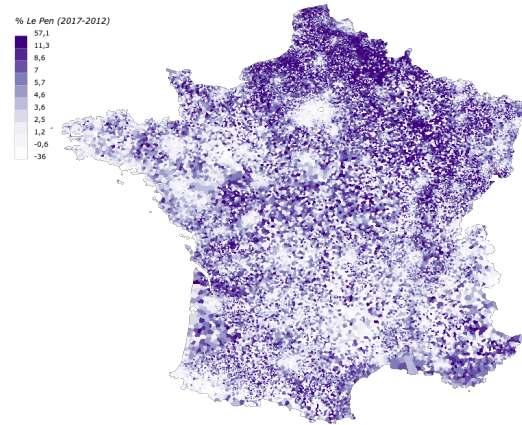
Our treatment variable characterizes municipalities exposed to the Russian sanctions: They are those hosting one or several firms that exported embargoed products to Russia in either

¹⁰Marine Le Pen, for example, claimed that the annexation of Crimea in 2014 was not illegal, suggesting that sanctions against Russia were not justified: “There has been a referendum in Crimea [...] The population has decided, by an overwhelming majority, to return to the bosom of Russia [...] Crimea has always been Russian.” (CNN, 2017). She also pointed out the inefficiency of the sanctions and the cost to French agribusiness: “The sanctions [...] ruined part of our agricultural sectors and they had no impact in reality on the Russian economy. [...] So, yes, when it’s not good for France [...], of course, we defend the French.” (BFM-TV, 2017).

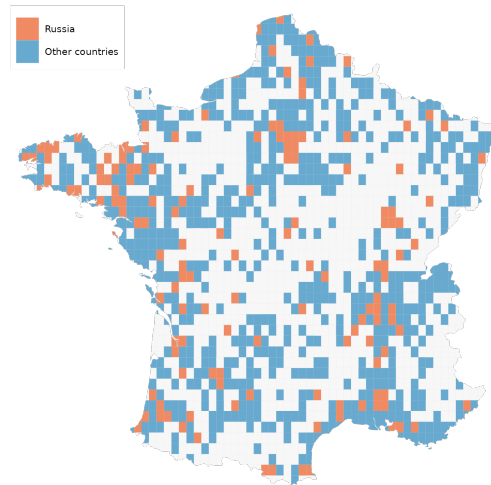
¹¹Jean-Luc Mélenchon (La France insoumise) is the only left-wing candidate to have displayed opinions that can be described as pro-Russian. But his opinion was clearly not one of definitive and strong support for Russia. Rather, it was motivated by a vision of international relations marked by structuralism, which tends to lead to anti-Americanism and opposition to interventionism by Western powers.

¹²The list of embargoed products is of course public. It is shown in the online appendix. It consists of a series of 4-digit products of the Harmonized system classification, which can be matched exactly with the product categories in the French custom data.

Figure 1: Change in vote shares for Le Pen and exports of embargoed products



(a) Percentage points difference in vote shares for Le Pen, 2012-2017



(b) Exports of embargoed products by destination

Note: To preserve the confidentiality of firm-level data, municipalities are grouped in figure (b) by aggregation so that there are no fewer than 5 firms per cell. The econometric analysis is based on the detailed spatial breakdown visible on map (a)

2013 or 2014.¹³

There are two potential problems with the choice of this treatment. The first is that the treatment variable may include municipalities for which the export of embargoed products — and, even more, the export of embargoed products to Russia — is hardly relevant. It will be the case, for instance, for all major cities that host a large and highly diversified set

¹³Including only municipalities that exported these products to Russia in 2014 alone would be too restrictive. Since the embargo was enacted in August 2014, this would exclude from the treatment group municipalities that host firms that had planned to export only in the fall.

of exporters. Smaller municipalities may be also of concern if they host one establishment of a big company with a large export portfolio (e.g. wholesale or retail firms). In these cases, the exposure to the Russian embargo is so diluted that we cannot expect that voters will perceive it. We therefore enforce a (very small) threshold on the importance of these exposed exports. The treated municipalities are the ones for which exports of embargoed products to Russia account for more than 0.01% of the total city exports. This excludes 50 cities from the treatment group.

Second, one may be concerned that our treatment is defined by the location of the firms affected by the embargo, and not by the location in which the employees or the owners of these companies vote. In fact, it is very likely that some of the people who suffered directly from the embargo do not live — and do not vote — in the city where they work. There is no right way to deal with this problem, as we do not have information on the polling stations where the people working in the affected firms are registered. Nevertheless, it is not clear that this should be a legitimate concern. Actually, we consider that this treatment is actually the most relevant. If a local company has suffered from the embargo, it is not only a blow for its employees and owners, but potentially also all the surrounding businesses and households. Firms that are large enough to export often play an important role in municipalities' economic and social life, especially in small, rural towns. They sometimes make a significant contribution to the town's budget, and their employees share important news with residents by taking part in social gatherings. Town hall staff, shopkeepers or, for example, members of the local sports associations can be just as impacted by a negative shock affecting a major company in the municipality. Therefore, assigning the shock resulting from the embargo to the cities that host the affected firms does not seem to be a risky approximation.¹⁴

Our treatment group contains 172 municipalities exposed to sanctions. They are shown on map 1b, along with those that export embargoed goods to other destinations.¹⁵ A careful analysis of the study sample is available in the appendix. It confirms that the socio-economic characteristics of the treated cities do not differ significantly from the ones of the control group and that the votes for Le Pen's party over 15 years verifies the parallel trend assumption.

3.2 Econometric specification

Our econometric analysis relates the municipalities' exposure to the Russian embargo to the electoral results in the 2017 election. An interesting and useful feature of this election

¹⁴Note that the impact of the embargo can extend over larger areas, the limits thereof are hard to define. In a robustness test, we extend the treatment to all employment zones where affected firms are located. The results show no significant effect, which suggests that the perception of the economic consequences of the sanctions remains spatially limited within the municipalities.

¹⁵For confidentiality purposes, this map shows aggregates of municipalities. However, the empirical analysis is based on the municipal divisions shown in map 1a.

is that the main “pro-Russian” candidates were also candidate in 2012. This paves the way for a difference-in-differences identification strategy that controls for unobservable local characteristics by comparing electoral performance across elections.¹⁶ Our benchmark specification is:

$$[Vote_{c,i,2017} - Vote_{c,i,2012}] = X_i + [Z_{i,2016} - Z_{i,2011}] + \theta_{i \in z} + \mu_{c,i}, \quad (1)$$

where i denotes a municipality and c a candidate. $\mu_{c,i}$ is an error term. The dependent variable is the change in the share of votes cast for candidate c in municipality i between 2012 and 2017. As said above, the two candidates who most advocated a “pro-Russian” leaning during the 2017 campaign – Le Pen and Dupont-Aignan – were candidates in both elections, and the vote shares they received in 2017 are matched with those they received in 2012 to construct our first-difference dependent variable, $[Vote_{c,i,2017} - Vote_{c,i,2012}]$. It is also the case for the radical left candidate, Jean-Luc Mélenchon. For other candidates we match the 2017 line-up to the 2012 one based on party affiliation. We match François Fillon (2017) to Nicolas Sarkozy (2012), both belonging to the same party. Emmanuel Macron (2017) received the official backing of the 2012 centrist candidate François Bayrou. In the years preceding the election, Macron was also a member of François Hollande’s socialist government. In 2017, he received the support of several Socialist Party leaders, and post-election polls showed that voters who had voted for Hollande in 2012 split between Macron and Hamon, with Macron capturing about 40 percent of this electorate (Dabi, 2018). So we match Macron with François Bayrou and 40% of the votes for François Hollande. Benoît Hamon (2017) was the official candidate of both the Socialist party and the Greens. We match his 2017 score with an aggregate made of the 2012 votes for Eva Joly from the Green party, and 60% of the ones for François Hollande.¹⁷

The vector of control variables $[Z_{i,2016} - Z_{i,2011}]$ captures the changing demographic and economic characteristics of municipalities that may influence voting. It includes the log of population; the log of median income per household consumption unit; the unemployment rate; the share of the working population of the city in agricultural, blue and white-collar employment; the share of residents above 65; the share of residents below 25; exports per capita, and the share of the foreign-born population. Data for all these variables are provided by the French statistical institute, INSEE.

The employment zone fixed effect $\theta_{i \in z}$ ensures that the electoral outcomes in a municipality

¹⁶See section 5.1 below for a discussion of the limitations of this specification and alternative approaches.

¹⁷This pairing between candidates in two different elections – and the DID approach that ensues – is rightfully debatable. In the online appendix, we use the Manifesto project (Lehmann et al., 2023) to compare the political positions of the 2012 and 2017 candidates and confirm the relevance of the matching. Moreover, the section 5.1 below presents an alternative empirical specification that does not require such a match.

are compared to the ones in neighboring, likely very similar, municipalities.¹⁸ We are therefore controlling for all time-invariant local — cultural or economic — particularities, but also for local public policies (carried out at the level of departments or regions) and the involvement of political activists.

Finally, X_i is a vector of dummy variables that characterize municipality i 's involvement in exporting activities. Identifying the municipalities affected by the embargo is not sufficient to properly estimate the impact of the sanctions because this treatment overlaps with other municipality characteristics that may be associated with voting behavior. Therefore, X_i consists of four dummy variables taking respectively the value 1 if municipality i hosted firms that (i) exported any product to any country in 2013 and/or 2014; (ii) exported any product to Russia in 2013 and/or 2014; (iii) exported embargoed products in 2013 and/or 2014; and (iv) exported embargoed products to Russia in 2013 and/or 2014. The latter dummy is our variable of interest.¹⁹

4 Benchmark results

Table 1 shows the estimates of equation (1) for each of the main candidates running in the 2017 election and the abstention rate.

As the results clearly show, local exposure to the Russian embargo has had a significant — and very specific — impact on votes: Municipalities that host firms directly hurt by the Russian embargo significantly increased their vote share for Le Pen and Dupont-Aignan, the two major candidates who called explicit for an end to the sanctions against Russia. Interestingly, we find an impact for these two candidates only. The absence of a significant effect on votes for Mélenchon or on the share of abstentions is also relevant. It suggests that what we observe for the two main pro-Russian candidates is not the result of a mere rejection of politics or mainstream parties.

Politically, the order of magnitude of the estimated impact on far right votes is also meaningful. We estimate that the increase in percentage points of votes cast for Le Pen was 0.536 percentage points higher in the exposed municipalities than elsewhere. On average across all French metropolitan municipalities, the percentage of votes for Le Pen increased by 4.57 percentage points between the presidential elections of 2012 and 2017. Therefore, exposure to the embargo boosted Le Pen's performance by 12% in the treated cities. Another way to assess the size of the impact is to compare its magnitude to the influence of the control variables. One of the most important variables in the vote for Le Pen is

¹⁸Employment zones are quite small areas, containing 10,000 to 4 million jobs. The French metropolitan territory is divided into more than 280 employment zones, which are much smaller than the regions and departments (i.e. NUTS2 and NUTS3 respectively in the Eurostat classification), which are the official administrative divisions.

¹⁹An alternative approach is to restrain the control group to cities with export activity comparable to that of the treated cities. See Table 2.

Table 1: Exposure to the embargo and voting in the 2017 presidential elections (First differences)

	Le Pen	Dupont Aignan	Mélenchon	Fillon	Macron	Hamon	Abstention
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Export Embargoed Products to Russia	0.536a (0.204)	0.175c (0.093)	-0.406 (0.272)	-0.278 (0.192)	0.259 (0.193)	0.443 (0.286)	-0.121 (0.159)
Export Embargoed Products	-0.520a (0.078)	-0.233a (0.041)	0.511a (0.116)	0.353a (0.079)	-0.375a (0.084)	-0.811a (0.112)	0.083 (0.070)
Export Any Product to Russia	-0.497a (0.078)	-0.309a (0.043)	0.822a (0.095)	0.293a (0.074)	-0.631a (0.080)	-1.170a (0.105)	0.318a (0.070)
Export Any Product	-0.326a (0.068)	-0.115a (0.030)	0.304a (0.057)	-0.064 (0.056)	-0.292a (0.055)	-0.550a (0.072)	0.176a (0.049)
$\Delta \ln$ Population	0.606c (0.353)	0.576a (0.187)	1.226a (0.293)	-2.275a (0.359)	-1.191a (0.261)	-0.605b (0.303)	-0.570c (0.322)
$\Delta \ln$ Income	-0.637 (0.749)	0.227 (0.328)	-1.204c (0.651)	0.718 (0.792)	0.987c (0.568)	0.645 (0.671)	0.657 (0.561)
Δ Unemp. rate	1.824b (0.833)	-1.170b (0.453)	1.106 (0.772)	0.180 (0.853)	-1.465b (0.638)	-1.452c (0.761)	1.652b (0.639)
Δ Sh. L-Skills	-0.592a (0.222)	0.358a (0.125)	-0.494a (0.184)	-0.317 (0.213)	-0.713a (0.144)	0.461b (0.184)	-0.182 (0.189)
Δ Sh. H-Skills	-1.457a (0.487)	0.340 (0.227)	-0.083 (0.439)	0.174 (0.433)	-0.686b (0.327)	0.031 (0.379)	0.720c (0.375)
Δ Sh. Farmers.	0.040 (0.497)	-0.568b (0.240)	0.389 (0.424)	0.589 (0.501)	-0.018 (0.340)	-0.938b (0.384)	0.310 (0.390)
Δ Sh Young	4.237a (1.513)	-0.535 (0.737)	-3.557a (1.311)	3.028b (1.379)	-1.371 (1.112)	-1.011 (1.123)	-0.466 (1.168)
Δ Sh Old	-12.652a (1.416)	-2.353a (0.707)	-7.130a (1.062)	12.826a (1.267)	-5.878a (1.098)	-6.197a (1.137)	1.673 (1.143)
Δ Sh. immigrants	-8.198a (2.577)	-1.863 (1.170)	3.525 (2.357)	2.787 (2.144)	-1.794 (1.856)	-6.124a (2.339)	3.110 (1.890)
Observations	30910	30910	30910	30910	30910	30910	30912
R^2	0.017	0.007	0.013	0.012	0.012	0.026	0.003

Notes: All variables except for treatment dummies are in first-differences. Employment zone fixed effects. Heteroskedasticity-robust standard errors clustered at the employment zone level appear in parentheses. ^a, ^b and ^c indicate significance at the 1%, 5% and 10% confidence level respectively.

the unemployment rate, which reports a coefficient of 1.824 in column (1). Therefore, a comparable increase in the unemployment rate needed to boost votes for the Le Pen by as much as the embargo did is slightly over 29 percentage points ($0.536/0.01824 = 29.4$).

Importantly, the impact is strong locally, but it is illusory to imagine that it could have significantly influenced the results at the national level. There are only 172 treated cities, which account for 3.7 million voters all together, among which only 2.9 million cast a vote in 2017 (about 8.1% of the total number of French voters in 2017). A back-of-the-envelope calculation leads to the estimate that the Russian embargo gave 15,732 additional votes in favor of Le Pen — a non-negligible number equivalent to the total votes cast in 2017 in a medium-sized city like Biarritz. However, this is only 0.2% of the total votes cast at the national level for Le Pen, and about 1.6% of the difference in the number of votes between Macron and Le Pen in the first round of the election.

Finally, the coefficients associated with the dummy variables characterizing the municipality-level exposure to trade are also informative. They indicate that the far-right has grown

Table 2: Robustness checks: Alternative control variables, fixed effects and control groups

Dep. var. Model	Δ Vote share Le Pen (2012-2017) First-difference					Vote share Le Pen 2017 Lagged dependant variable	
Elections	1st rounds 2012-2017					2017 #1	2017 #2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Export Embargoed Products to Russia	0.491b (0.210)	0.515b (0.208)	0.579b (0.208)	0.472b (0.202)	0.453b (0.209)	0.489a (0.165)	0.667a (0.245)
Export Embargoed Product	-0.553a (0.085)	-0.557a (0.085)	-0.614a (0.097)			-0.277a (0.058)	-3.50a (0.090)
Export Any Product to Russia	-0.528a (0.085)	-0.549a (0.088)	-0.638b (0.208)	-0.522a (0.186)		-0.326a (0.069)	-0.498a (0.090)
Export Any Product	-0.382a (0.081)	-0.352a (0.078)	-0.368b (0.167)			-0.145a (0.046)	-0.850a (0.768)
Control var.	No	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects	EZ	Dep	Reg	Dep	Dep	EZ	EZ
Sample	A	A	A	B	C	A	A
Obs.	30910	30910	30910	1745	846	30910	30910
R^2	0.005	0.018	0.019	0.041	0.070	0.727	0.724

Notes: Sample A: All municipalities. Sample B: Municipalities exporting embargoed products. Sample C: Municipalities exporting embargoed products and at least one product to Russia. Cols 1-5: All variables except for treatment dummies are in first-differences. Non-reported coefficients: City-level variables as in table 1. Employment zone fixed effects. Heteroskedasticity-robust standard errors clustered at the employment zone level (cols. 1, 6 and 7), department level (col. 2, 4 and 5), or region level (col. 3) appear in parentheses. ^a, ^b and ^c indicate significance at the 1%, 5% and 10% confidence level respectively.

less in municipalities that host exporting firms, and even less when these firms exported to Russia in 2013 or 2014. Insofar as large firms (therefore, exporters, and in particular exporters large and competitive enough to reach distant countries) tend to locate in relatively big and economically attractive cities, this confirms the fact that the electorate of the far-right has grown mainly in peripheral and less dynamic localities. In this respect, the contrast with the results obtained for Mélenchon are striking. The latter relies on a very different electoral base, made up of young urban elites and the working classes of major cities (see, e.g. Algan et al., 2018; Ivaldi, 2018). This explains why, despite his skepticism about the sanctions, voters in cities affected by the Russian embargo did not see his candidacy as a credible political option.²⁰

5 Additional results

5.1 Robustness tests

This section presents a series of robustness checks of our central result on the impact of the embargo on votes for Le Pen. Column 1 is a response to the concern about the inclusion of potential bad controls. The municipality-level characteristics used as control variables may be bad controls insofar as they may capture part of the effect of sanctions on voting for the *Front National* (e.g., if the embargo increased unemployment or reduced income) or

²⁰Moreover, a poll conducted in France in May 2017, just a few days after the presidential election, confirms that the left-wing electorate shows very little pro-Russian or pro-Putin leanings (ODOXA and IRIS, 2017). Only 24% of left-wing sympathizers say they have a "good" or "very good" opinion of Russia, compared with 65% of those who support the *Front National*.

magnify it (e.g., if a fraction of unemployed residents left the city). We therefore estimate a specification without control variables, retaining only the dummies describing the export activity of the municipalities and the fixed effects.

In columns 2 and 3 we use different sets of fixed effects. Instead of employment zones, which may be considered too small, we use department (column 2) and region (column 3) fixed effects.

In columns 4 and 5, we restrain the control group to municipalities whose export activity is comparable to that of the treated cities. In Column 4, the control group includes cities that export embargoed products (not to Russia). Column 5 further restricts the sample to cities that also export non-embargoed products to Russia.²¹

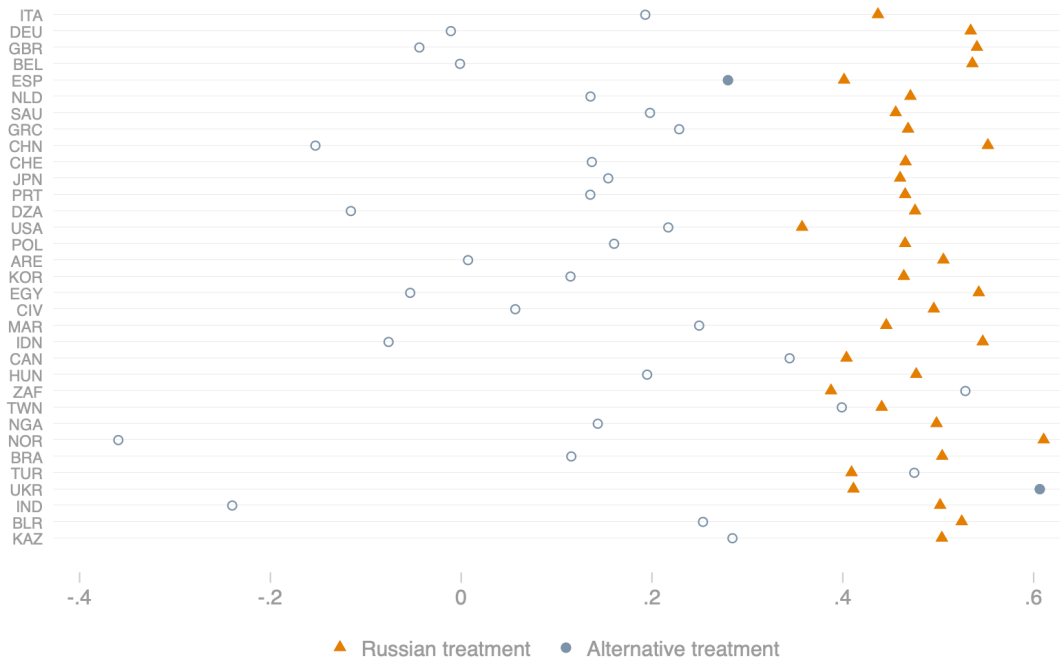
Columns 6 and 7 show the estimates obtained with a lagged dependant variable model. This specification is a cross-section for the year 2017. Rather than eliminating time-invariant co-founding factors with a first difference setting, we control for each municipality's pre-existing political situation using a vector of variables that includes the details of city's previous electoral results (i.e. the share of votes cast for each candidate in the 2012 presidential election, as well as the results obtained by the *Front National* in the 2015 regional elections). This specification offers a better control of omitted variables when they are not time-invariant (which may be the case here, as local electoral dynamics and campaigning efforts tend to build on the successes and failures of past elections). It also provides an answer to the concern that Le Pen's opinion and major campaign topics may have changed between 2012 and 2017. Finally, it offers the opportunity to estimate the impact of the sanctions on the second round of the 2017 election (column 7).

All these robustness checks, together with the results of the second round, unambiguously confirm the result shown in table 1.

Another robustness check consists of a series of placebo tests shown in Figure 2. Here, we add two dummy variables to our benchmark specification. They characterize municipalities exporting in 2013-2014 to another country than Russia, for non-embargoed products and embargoed products, respectively. The figure reports the coefficients associated to the latter dummy, for a selection of 35 alternative destinations. Those are either major destinations for French exports or middle income countries more or less comparable to Russia in terms of geographical location, political alignment or economic structure. As in the main specification, in all regressions the dependent variable is the change of votes (in percentage points) received by Le Pen between 2012 and 2017. Two conclusion emerge from this exercise. First, the introduction of these placebo treatment dummies does not change the results on our variable of interest. All the coefficients are very stable in magnitude

²¹The drawback is that identification with employment zone fixed effects becomes fragile, as we multiply the cases of treated cities with an extremely small (or even empty) control group. We therefore use department fixed effects.

Figure 2: Placebo tests: Treatments using alternative countries



Notes: The figure reports our treatment variable (triangles) and a comparable treatment characterizing municipalities exporting to an alternative country (circles). Hollow markers denote non-significant coefficients (10% confidence level). Countries are ranked according to the value of French exports of embargoed products.

(around 0.5) and significant. This suggests that the link we observe between votes and exposure to the Russian embargo is not driven by a correlation between the geographical distribution of French firms exporting to Russia and that of exporters to other countries. Second, for almost all alternative destinations, the placebo treatment is small and not statistically significant. There are only two country for which we observe an effect on the electoral results comparable to that observed for Russia. One, interestingly, is Ukraine. The other is Spain. This is probably the consequence of the strong tensions that exist between farmers on both sides of the Pyrenees, which — in France — fuel an anti-European and protectionist sentiment among the most exposed farmers.²²

5.2 Treatment intensity

This last section expands upon our benchmark results which are based on simple treatment dummies, and investigate whether the *intensity* of the treatment is heterogeneous across treated municipalities. The political impact of the embargo is likely related to the

²²This was particularly the case in 2016 and 2017, when there were demonstrations by French wine makers against Spanish imports (e.g. The Guardian, April 2016). Interestingly, the coefficient observed for Spain is much lower when we eliminate from the sample the French departments close to Spain, whose agricultural production of wines and fruits is in direct competition with Spanish production.

Table 3: Treatment intensity

Candidate	Intensity measure	Intensity	Treatment coef.	s.e.	Nb. obs.
Le Pen	Share of agricultural workers	High	1.373a	(0.253)	30824
		Low	-0.297	(0.247)	30824
	Share of embargoed exports	High	0.562b	(0.276)	30824
		Low	0.511b	(0.252)	30824
	Value of embargoed exports p.c.	High	0.941a	(0.264)	30824
		Low	0.130	(261)	30824
	Drop in total exports	High	0.772a	(0.262)	30824
		Low	0.299	(0.299)	30824

Notes: Each line shows a regression. Coefficients not reported: All regressions include control variables as shown in Table 1); we only report the coefficient on our dummy indicating cities that exported embargoed products to Russian in 2013 and/or 2014. Heteroskedasticity-robust standard errors clustered at the employment zone level appear in parentheses. ^a, ^b and ^c indicate significance at the 1%, 5% and 10% confidence level respectively. For each intensity measure, in separate regressions, we retain cities with high and low intensity alternately in the treatment group. The control group remains unchanged.

importance, for the local economy, of affected exports. This is explored, for Marine Le Pen, in table 3.

Here we divide the treated group into municipalities that are highly exposed to the embargo and those that are less affected. We use the two treated subgroups alternately in separate regressions. The control group is unchanged. We construct four indicators of intensity of the treatment: The presence of farmers in the active population; The share of embargoed products exported to Russia in total municipality's exports in 2013/14; The value per inhabitant of embargoed products exported to Russia in 2013/14; The change in total exports between 2013/14 and 2015/16. For each of these four indicators, we simply divide the treated group according to whether the value is above or below the median.

The results match with expectations: The electoral benefits of the Russian embargo for Le Pen are greatest in cities where the treatment is most severe.²³

6 Conclusion

In this paper, we identify and quantify the impact of sanctions on democratic elections. We document and show econometrically that French municipalities that have been exposed to the Russian embargo since summer 2014 have seen a shift in the electorate towards far-right candidates, voicing their opposition to sanctions against Russia.

The overall impact on the general election outcome is non-negligible, but relatively small. In the 2017 French presidential election, local exposure to the Russian embargo on food and agricultural products led to an increase in the number of votes for the pro-Russian right-wing politician Le Pen by 15,732 — far from making a dent in the vote difference

²³However, there is no difference in impact depending on the share of exports directly affected by the embargo in the municipality's total exports.

of almost 1 million votes to the winner, Emmanuel Macron. It should be noted that the limited magnitude of this impact on the general election is not the result of a moderate reaction of voters. On the contrary, the average treatment effect is large, implying that citizens directly affected by the sanctions reacted quite strongly. If the embargo did not alter the final outcome of the election, this was due more to its limited scope than to any lack of influence on voting.

Russia was not a major destination for French exports, and the embargo targeted a relatively low number of products. As a result, the embargo impacted only a small fraction of French foreign trade, affecting relatively few exporting firms and municipalities. It is difficult to gauge the political consequences of sanctions with broader and more devastating economic effects (for instance, in the case of sanctions imposed by a major trading partner such as China). However, our results are a reminder that democracies can be fragile and easily destabilized. This should lead democratic governments not to neglect the possible consequences of countermeasures to their own sanctions and to take precautions accordingly, for example by providing compensatory aid to individuals and firms directly affected.

References

- Alexseev, Mikhail A and Henry E Hale, "Crimea come what may: Do economic sanctions backfire politically?," *Journal of Peace Research*, 2020, 57(2), 344–359.
- Algan, Yann, Elizabeth Beasley, Daniel Cohen, and Martial Foucault, "The rise of populism and the collapse of the left-right paradigm: Lessons from the 2017 French presidential election," *CEPREMAP Working papers*, no 1805, 2018.
- Allen, Susan Hannah, "The Determinants of Economic Sanctions Success and Failure," *International Interactions*, 2005, 31:2, 117–138.
- Bapat, Navin A., Tobias Heinrich, Yoshiharu Kobayashi, and T. Clifton Morgan, "Determinants of Sanctions Effectiveness: Sensitivity Analysis Using New Data," *International Interactions*, 2013, 39(1), 79–98.
- Blanchard, Emily, Chad Brown, and Davin Chor, "Did Trump's Trade War Impact the 2018 Election?," *CEPR Discussion Paper 14091*, 2019.
- Che, Yi, Yi Lu, Justin R. Pierce, Peter K. Schott, and Zhigang Tao, "Did Trade Liberalization with China Influence US Elections?," *Mimeo*, 2021.
- Cheptea, Angela and Carl Gaigné, "Russian Food Embargo and the Lost Trade," *European Review of Agricultural Economics*, 2020, 47 (2), 684–718.
- Colantone, Italo and Piero Stanig, "The Trade Origins of Economic Nationalism: Import Competition and Voting Behavior in Western Europe," *American Journal of Political Science*, 2018, 62 (4), 936–953.
- Crozet, Matthieu and Julian Hinz, "Friendly fire: The trade impact of the Russia sanctions and counter-sanctions," *Economic Policy*, 2020, 35 (1), 97–146.
- , —, Amrei Stammann, and Joschka Wanner, "Worth the pain? Firms' exporting behaviour to countries under sanctions," *European Economic Review*, 2021, 134, 103683.
- Dabi, Frédéric, "Sociologie des électors après la présidentielle : de la tripartition au champ politique à un "jeu à cinq"," *Revue Politique et Parlementaire*, 2018, 1083-1084.
- Dippel, Christian, Robert Gold, Stephan Heblich, and Rodrigo Pinto, "The Effect of Trade on Workers and Voters," *Economic Journal*, 2022, 132(641), 199–217.
- Escribà-Folch, Abel and Joseph Wright, "Dealing with Tyranny: International Sanctions and the Survival of Authoritarian Rulers," *International Studies Quarterly*, 2010, 54(2), 103720.

- Felbermayr, Gabriel, Aleksandra Kirilakha, Constantinos Syropoulos, Erdal Yalcin, and Yoto V. Yotov**, “The global sanctions data base,” *European Economic Review*, 2020, 129, 103561.
- Fetzer, Thiemo and Carlo Schwarz**, “Tariffs and politics: evidence from Trump’s trade wars,” *The Economic Journal*, 2021, 131 (636), 1717–1741.
- Gold, Robert, Julian Hinz, and Michele Valsecchi**, “To Russia with Love? The Impact of Sanctions on Regime Support,” Technical Report 2212, Kiel Institute for the World Economy 2023.
- Grossman, Guy, Devorah Manekin, and Yotam Margalit**, “How Sanctions Affect Public Opinion in Target Countries: Experimental Evidence From Israel,” *Comparative Political Studies*, 2018, 51(14), 1823–1857.
- Hinz, Julian and Evgenii Monastyrchenko**, “Bearing the cost of politics: Consumer prices and welfare in Russia,” *Journal of International Economics*, 2022, 137.
- Ivaldi, Gilles**, “Populisme et choix électoral: analyse des effets des attitudes populistes sur l’orientation du vote,” *Revue française de science politique*, 2018, 68:5, 847–872.
- Lehmann, Pola, Simon Franzmann, Tobias Burst, Sven Regel, Felicia Riethmüller, Andrea Volkens, Bernhard Weßels, and Lisa Zehnter**, “The Manifesto Data Collection,” Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB) / Göttingen: Institut für Demokratieforschung (IfDem), 2023.
- Lektzian, David and Mark Souva**, “An Institutional Theory of Sanctions Onset and Success,” *The Journal of Conflict Resolution*, 2007, 51(6), 848–871.
- List, John A.**, *The Voltage Effect: How to Make Good Ideas Great and Great Ideas Scale*, Currency, 2022.
- Malgouyres, Clément**, “Trade Shocks and Far-Right Voting: Evidence from French Presidential Elections,” *EUI Working Paper RSCAS 2017/21*, 2017.
- ODOXA and IRIS**, “La Russie de Vladimir Poutine : partenaire ou adversaire ?,” 2017.
- Peeva, Aleksandra**, “Did sanctions help Putin?,” Available at SSRN 3403261, 2018.
- Peksen, Dursun and A. Cooper Drury**, “Coercive or Corrosive: The Negative Impact of Economic Sanctions on Democracy,” *International Interactions*, 2010, 36:3, 240–264.
- Schneider-Strawczynski, Sarah**, “When is Contact Effective? Evidence on Refugee-Hosting and Far-Right Support in France,” *Mimeo*, 2021.
- The Guardian**, “Outraged Spain hits back as wine tankers are hijacked and ‘guerre des vins’ erupts,” by Kim Willsher and Alistair Dawber, in *The Guardian*, April 2016.

Appendix A Descriptive statistics

Table T.1: Summary Statistics

Municipalities	All	Exporting			
Products		Embargoed	Embargoed	All	All
Destinations		Russia	All	Russia	All
Number of cities	30910	172	1646	1860	9739
% of cities	100	0.56	5.32	6.01	31.5
% of Population	100	9.58	41.45	47.46	80.47
% of Registered voters	100	8.51	38.07	43.59	78.28
Unweighted Averages					
Population	2,066.4	35,594.9	16,085.5	16,300.4	5,278.3
Density (pop/km ²)	182.7	1,293.2	1,053.9	1,219.1	445.1
Median income	20,922.1	20,522.5	21,274.1	2,1492.5	21,555.6
Unemployment rate	10.8	13.3	12.8	12.9	11.4
Share population above 65	20.7	20.8	20.6	19.7	20.6
Share non-native population	4.2	6.5	7.2	7.6	5.3
Share farm workers	5.1	1.9	2.0	1.4	2.9
Share low skilled jobs	45.9	44.2	43.6	43.4	44.9
Share high skilled jobs	16.6	18.3	19.2	19.4	18.3
2017 Abstention Rate	19.0	21.2	21.2	21.7	20.01
2017 % Macron	20.4	24.8	23.5	23.4	21.8
2017 % Le Pen	26.4	20.9	22.2	22.7	24.8
2017 % Fillon	19.9	19.0	20.0	19.8	20.1
2017 % Mélenchon	17.3	19.6	19.0	19.0	17.8
2017 % Hamon	5.2	6.9	6.1	5.9	5.4
2017 % Dupont-Aignan	5.8	4.7	5.0	5.1	5.6
2017 % Lassale	2.0	1.3	1.4	1.1	1.5
2017 % Poutou	1.3	1.2	1.1	1.1	1.2
2017 % Asselineau	0.8	0.8	0.9	0.9	0.9
2017 % Arthaud	0.8	0.6	0.6	0.7	0.7
2017 % Cheminade	0.2	0.2	0.2	0.2	0.2

Appendix B Check of the study sample and pre-trend analysis

This section describes the characteristics of our samples of municipalities to verify that the results are not simply due to the initial pattern of socio-economic structures or political in the treated cities.

The figures F.1 and F.2 show the kernel distributions of key characteristics for the municipalities in our treated and untreated groups. For each variable, the distribution for the group of treated cities is compared with the distributions obtained for all municipalities in mainland France, and for the smaller group of municipalities hosting firms that export embargoed products, but not to Russia (all variables are expressed as deviations from the departmental average). Each figure show also the Kolmogorov-Smirnov test of equality of the distributions for the latter group and the one of treated municipalities, with the corresponding p-value in parentheses.

Figure F.1: Distribution of municipalities' characteristics

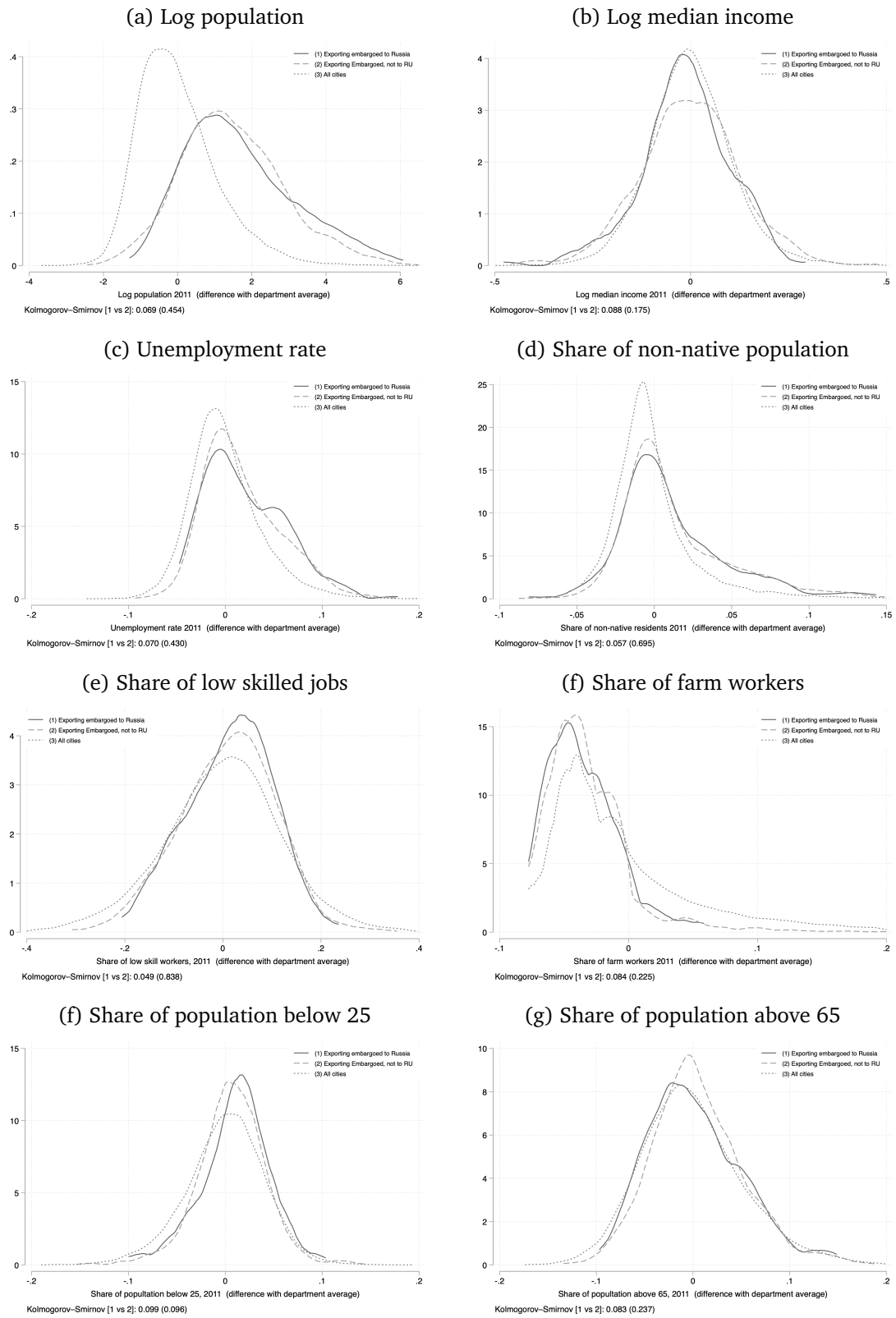


Figure F.2: Distribution of municipalities' electoral results (Presidential election 2012)

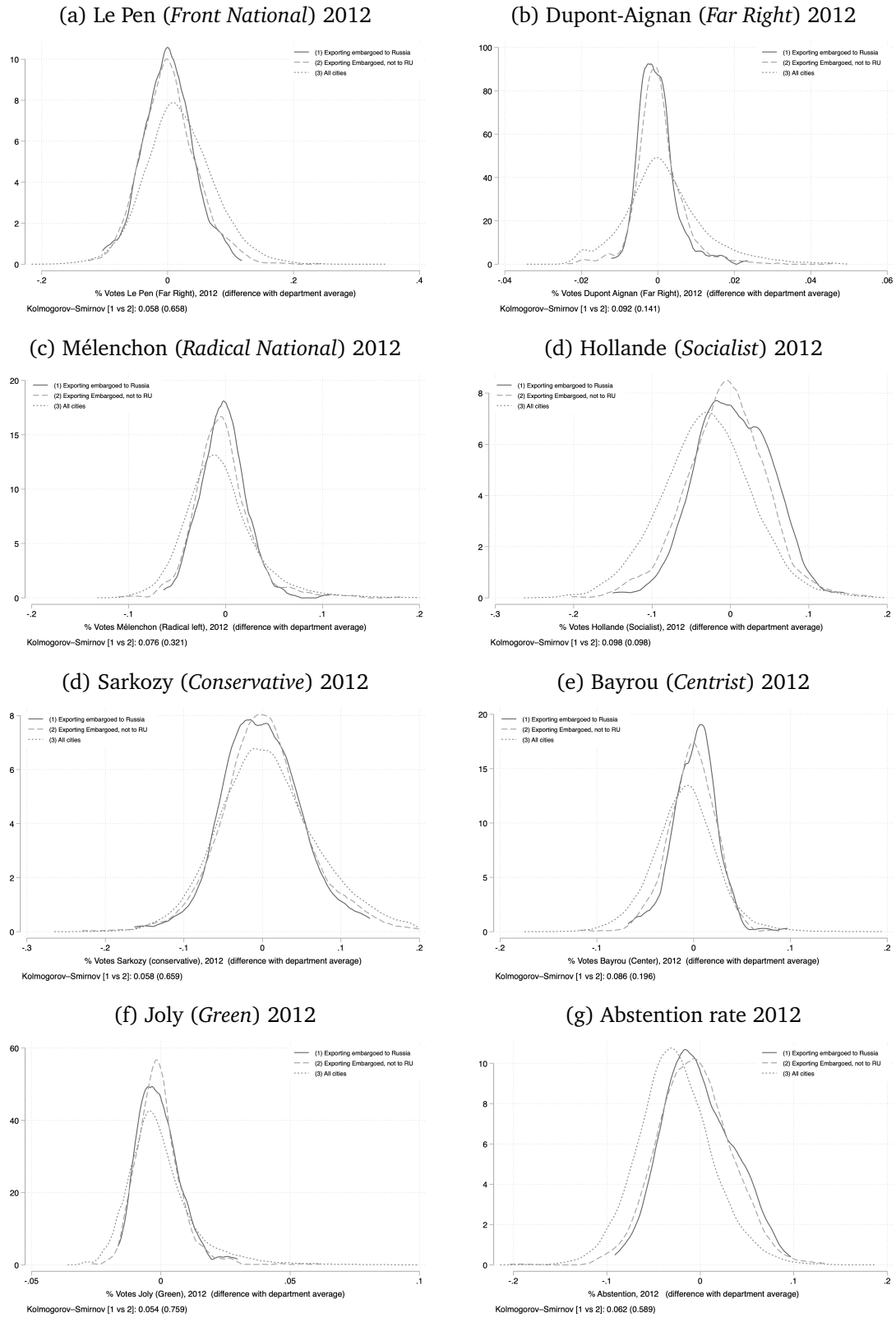


Figure F.1 focuses on economic and social characteristics of the cities in 2011, i.e. the year before the first election considered in our empirical analysis. Cities exporting embargoed goods (to Russia or not) are quite different from the whole sample of French municipalities. Whereas France has a very large number of very small villages, the municipalities that host exporting firms – unsurprisingly – are a little larger and have a higher proportion of unemployed or foreign-born population. But it is reassuring to see that the characteristics of our treated municipalities do not differ substantially from those that also export embargoed products but not to Russia. The distributions for the two groups are very similar and not statistically different, except for the share of the population under 25 (at the 10% threshold only).

Even more reassuringly, Figure F.2 shows that initial electoral preferences in the treated cities were not measurably different from those in the control group. The figure compares the distributions of 2012 election results in municipalities exporting embargoed goods to Russia with those exporting the same goods to other countries. The distributions of votes for Le Pen or Dupont-Aignan are not statistically different from a group to the other. The same applies to abstention rates and the main candidates in the 2012 election (for François Hollande, however, the p-value of the Kolmogorov-Smirnov test is 0.098, slightly below the 10% significance level).

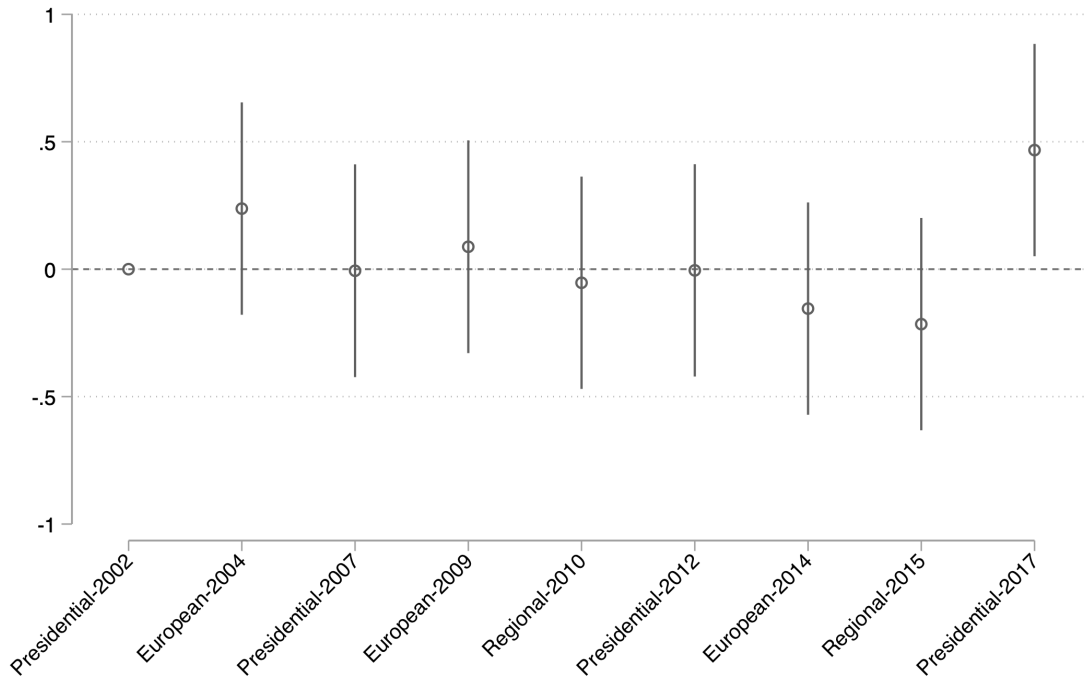
In addition to the similarity of the initial conditions in the treated and control groups, we need to ensure that the parallel trend hypothesis holds. One may be concerned, for instance, that voter support for the *Front National* was, prior to 2012, on a particularly favorable trend in municipalities exporting embargoed goods to Russia. Addressing this concern is challenging. The political climate, campaign platforms, and voter interests are constantly evolving, making it difficult to compare elections over long periods. This is particularly true for the *Front National*. When Marine Le Pen succeeded her father at the head of the party in 2011, she initiated a profound change in electoral strategy. By developing new campaign themes and avoiding verbal provocations, she has attracted a much broader electorate (attracting more young voters, the middle classes and women). Marine Le Pen's *Front National* is very different from the one before 2011 and this is why we have only included the 2012 and 2017 presidential elections in our main analysis.

It is nevertheless possible to observe the evolution of votes for *Front National* candidates over a longer period.²⁴ We collect vote shares for Le Pen's party in 9 presidential, regional and European elections, starting with the 2002 presidential election.²⁵ For each municipality, we compute the percentage point changes in votes shares from one election to the next, and regress them on a full set of interactions between years fixed effects and

²⁴This analysis cannot be carried out for Dupont-Aignan's party. "Debout la France" was founded in 2014 and has not fielded candidates in all constituencies in the subsequent regional and European elections.

²⁵The *Front National* candidate in the 2002 and 2007 presidential elections was Marine Le Pen's father, Jean-Marie Le Pen.

Figure F.3: Pre-trend analysis



Notes: The graph plots the coefficients on interactions between years dummies and the treatment group dummy (i.e. municipalities that export embargoed products to Russia in 2014-2015). Dependent variable: Variation in vote shares for *Front national* candidates, in each commune, from one election to the next. Fixed effects: Year-department. Sample: Municipalities exporting embargoed products. Reference year: 2002 presidential election.

the dummy variable characterizing our treated municipalities. Figure F.3 displays the estimated coefficients on these interaction terms. The sample is limited to cities exporting embargoed products and the specification includes year-department fixed effects.²⁶

None of the estimated coefficients, except the last one corresponding to the evolution of votes between the 2015 regional elections and the 2017 presidential elections, are significantly different from zero. This supports the parallel trends assumption: The long-term trend in voting for the far-right party was not significantly different in the treatment group and comparable cities until the issue of Russian sanctions emerged as a major topic of public debate nationwide, in 2017.

Appendix C Robustness checks

This section presents a series of additional robustness tests.

Table T.2 looks at the sensitivity of the results for Marine Le Pen to the presence of outliers

²⁶The results are very similar when using year-employment zone or year-region fixed effects

Table T.2: Robustness check: Excluding one geographical zones at a time

Dep. var.	Δ Share of votes for Le Pen (2017-2012)							
	Treated cities		Employment zones		Departments		Regions	
	(1) Min	(2) Max	(3) Min	(4) Max	(5) Min	(6) Max	(7) Min	(8) Max
Export Embargoed products to Russia	0.495b (0.200)	0.562a (0.201)	0.492b (0.202)	0.598a (0.199)	0.469ab (0.203)	0.612a (0.206)	0.443b (0.221)	0.660a (0.237)

Notes: The specification is the same as in table 1. Columns (1) and (2): Min and max coefficients obtained from 172 regressions where each city in the treated group is dropped in turn. Columns (3) and (4): Min and max coefficients obtained from 297 regressions where each employment zone is dropped at in turn. Columns (5) and (6): Min and max coefficients obtained from 94 regressions where each department zone is dropped in turn. Columns (7) and (8): Min and max coefficients obtained from 12 regressions where each region zone is dropped in turn. Employment zone fixed effects. Heteroskedasticity-robust standard errors clustered at the employment zone level appear in parentheses. ^a and ^b indicate significance at the 1% and 5% confidence level respectively.

in the geographical areas considered. For this, we estimate the specification in table 1 - column 1, on samples that exclude one treated municipality at a time. The minimum and maximum of the various regression estimates for our treatment variable are shown in columns 1 and 2 respectively. Both coefficients are very close to our baseline result obtained on the whole sample of treated municipalities. In a similar vein, columns 3 through 8 verify that our results hold when we exclude observations from one employment zone, one department, or one region at a time. Again, the estimates confirm that our main result is not driven by a specific geographic location.

Table T.3: Lagged dependant variable model

	Round 1							Round 2
	Le Pen	Dupont Aignan	Mélenchon	Fillon	Macron	Hamon	Abstention	Le Pen
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Export Embargoed Products to Russia	0.489a (0.165)	0.144b (0.073)	-0.105 (0.155)	-0.003c (0.002)	0.000 (0.002)	-0.001 (0.001)	-0.182 (0.167)	0.667a (0.245)
Export Embargoed Products	-0.277a (0.058)	-0.125a (0.038)	-0.026 (0.069)	0.003a (0.001)	-0.001 (0.001)	0.001a (0.000)	0.213a (0.073)	-0.350a (0.090)
Export Any Product to Russia	-0.326a (0.069)	-0.132a (0.038)	-0.010 (0.057)	0.002a (0.001)	0.001b (0.001)	0.001 (0.000)	0.411a (0.070)	-0.498a (0.090)
Export Any Product	-0.145a (0.046)	-0.040 (0.026)	-0.019 (0.039)	0.002a (0.000)	0.001c (0.000)	-0.000 (0.000)	0.136a (0.047)	-0.244a (0.063)
Observations	30910	30910	30910	30910	30910	30910	30910	30910
R ²	0.727	0.145	0.614	0.709	0.456	0.275	0.471	0.724

Notes: The dependent variables are the shares of votes cast for the candidate in 2017 (as a proportion of total votes cast), except in (column 7) where it is the number of abstentions out of the number of people on the electoral roll. Control variables: all electoral results in 2012 presidential election and 2015 regional election, and city-level controls as in table 1 but in 2016 levels. Employment zone fixed effects. Heteroskedasticity-robust standard errors clustered at the employment zone level appear in parentheses. ^a, ^b, ^c and ^d indicate significance at the 1%, 5%, 10% and 12% confidence level respectively.

Table T.3 replicates Table 1, but reports the estimates of the lagged dependent variable specification (LDV) – the results for Le Pen are also shown in table 2. Here, unobserved preconditions are not taken into account by a first difference. Instead, we control for each municipality's pre-existing political situation using a vector of variables that includes the city's previous electoral results. The specification is thus a cross-section for the year

2017. It includes fixed effects for employment zones and a large set of control variables. The latter include city characteristics (as in Table 1, but in 2016 levels instead of first differences) and all vote shares for each candidate in the 2012 presidential election. We also include the 2015 regional election results.

In the paper, Table 3 shows how the estimated impact on Marine Le Pen’s electoral results varies with the intensity of the treatment. Table T.4 replicates this table for Dupont-Aignan. While our baseline estimates suggested that the embargo had only a limited influence on Dupont-Aignan’s results, we can see here that the votes for this other pro-Russian candidate were boosted significantly in cities that were heavily impacted. Of course, given the small number of votes received by Dupont-Aignan, this effect had no significant influence on the course of the national elections.

Table T.4: Treatment intensity

Candidate	Intensity measure	Intensity	Treatment coef.	s.e.	Nb. obs.
Dupont-Aignan	Share of agricultural workers	High	0.576a	(0.139)	30824
		Low	-0.221b	(0.109)	30824
	Share of embargoed exports	High	0.306b	(0.122)	30824
		Low	0.047	(0.140)	30824
	Value of embargoed exports p.c.	High	0.324a	(0.107)	30824
		Low	0.026	(150)	30824
	Drop in total exports	High	0.383a	(0.118)	30824
		Low	-0.030	(0.128)	30824

Notes: Each line shows a regression. Coefficients not reported: All regressions include control variables as shown in Table 1); we only report the coefficient on our dummy indicating cities that exported embargoed products to Russian in 2013 and/or 2014. Heteroskedasticity-robust standard errors clustered at the employment zone level appear in parentheses. ^a, ^b and ^c indicate significance at the 1%, 5% and 10% confidence level respectively. For each intensity measure, in separate regressions, we retain cities with high and low intensity alternately in the treatment group. The control group remains unchanged.

Appendix D Comparison of political platforms 2012/2017

Our difference-in-difference analysis requires to match the 2017 candidates to those of 2012. This pairing was based on a careful reading of the candidates’ campaign literature and websites, as well as on reports from opinion polls (e.g. Dabi (2018)).

Obviously, we match Marine Le Pen (2017) with Marine Le Pen (2012), Nicolas Dupont-Aignan (2017) with Nicolas Dupont-Aignan (2012) and Jean-Luc Mélenchon (2017) with Jean-Luc Mélenchon (2012). François Fillon (2017) is matched with Nicolas Sarkozy (2012). Emmanuel Macron (2017) is matched with François Bayrou and 40% of the votes for François Hollande. Benoît Hamon (2017)’s score is paired with an aggregate made of the 2012 votes for Eva Joly from the Green party, and 60% of the ones for François Hollande.

This pairing is legitimately questionable, including for the three candidates present at both

elections, who may have changed their political stances from one election to the next. In an attempt to address this concern, we estimate a lagged dependent variable model, which does not require the matching of candidates (see table 2 in the main text and T.3 above). Alternatively, we exploit here the information collected by the *Manifesto project* to verify the accuracy of our matching (Lehmann et al., 2023).

The idea here is to compare, for each of the political parties that participated in the 2017 presidential election, the political positions expressed at that time with the positions expressed by all French political parties in 2012. Unfortunately, for France, the Manifesto Project only reports analyses of the main parties running in the legislative elections. This is a limitation of the exercise, as there may be significant differences between the programs defended during the presidential and legislative elections.²⁷ Note however that these differences are limited in France by the fact that legislative elections are held just a few weeks after each presidential election.

Our comparison of policy preferences in 2012 and 2017 is made as follows. We associate each of the main 2017 presidential candidates with their party of affiliation. We then extract from the Manifesto Project data the key indicators of that party's program for the 2017 legislative elections (for Benoît Hamon, who was running in 2017 for both the Socialist Party and the Greens, we take the average of the scores of these two parties). We also take the same indicators of political orientation for each of the main parties present at the 2012 legislative elections. The composite indicators we use are the positions on the following spectrums: Right vs Left; State vs Market (Economy indicator); Conservative vs Progressive (Society indicator); pro- vs anti-EU; and pro- vs anti-Multiculturalism. Then, for each of the 2017 candidates, and each of the indicators, we calculate a proximity index (in absolute value) with each of the 2012 political platforms. These indices are shown in Figure F.4. They have a value of zero when the difference between political stances is maximal and 100 when the scores are of the same value.²⁸

This exploration of political programs corroborates our matching choices between 2017 and 2012 candidates.

Notably, the *Front National* program for 2017 is very similar to its 2012 program (cf. panel F.4b). On the left/right scale, the 2017 program is closest to that of the conservative party in 2012. But on economic issues, the preference for multiculturalism and European

²⁷Also, the political platforms of Dupont-Aignan's party, which has only a handful of deputies, are not examined by the Manifesto Project.

²⁸Between 2012 and 2017, the names of some French parties changed. To simplify and clarify the presentation, the figure shows generic names for each of them. The "Conservative" party was Sarkozy's "UMP" in 2012 and Fillon's "Les Républicains" in 2017; "Socialist" stands of the Socialist Party (whose 2017 presidential candidate was Benoît Hamon); "Greens" refers to "Europe-Ecologie-Les Verts" (with also Benoît Hamon for 2017 presidential candidate); "Centrist" designates Macron's party "En Marche !" in 2017 and Bayrou's "Modem" in 2012; "Radical Left" stands for Mélenchon's party ("Front de Gauche" in 2012 and "La France Insoumise" in 2017); "Front National" is naturally for Le Pen's party in both years.

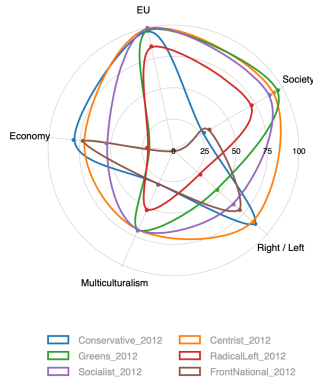
integration, it's the 2012 *Front National* program that most closely resembles the 2017 *Front National* program. The average proximity index, on the 5 dimensions, between the *Front National-2017* and the *Front National-2012* is 88.7. It is followed by the *Conservative-2012* with an average proximity index of just over 64. The greatest distance is with the Greens (*Greens-2012*), for whom the average proximity index is 28.4.

Similarly, we confirm the relevance of matching the votes cast for Mélenchon in 2017 with those he received in 2012 (cf. panel F.4d). On the graph, the line corresponding to *Radical Left - 2012* covers the largest area. The average proximity between *Radical Left-2017* and *Radical Left-2012* is the highest (78.7), above *Greens-2012* with an average index of 62 (the smallest average proximity score is with the *Conservative-2012*: 20.6).

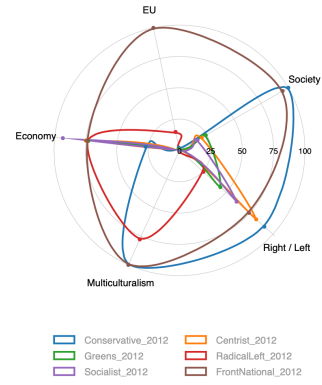
In the same way, we confirm the proximity between Fillon's *Conservative-2017* and Sarkozy's *Conservative-2012* (panel F.4c, with an average proximity index of 89.8). As expected, panel F.4a shows that Macron's *Centrist-2017* is closest to Bayrou's *Centrist-2012* (highest average proximity index of 84) and the *Socialist-2012* (second highest score: 75.3). Similarly, panel F.4e confirms that Hamon's *Socialist and Greens-2017* can be matched with a mix between the *Greens-2012* (highest score: 90.3) and the *Socialist-2012* (second highest score: 84.2).

Figure F.4: Similarity of political platforms - 2017 candidates' parties vs 2012 main parties

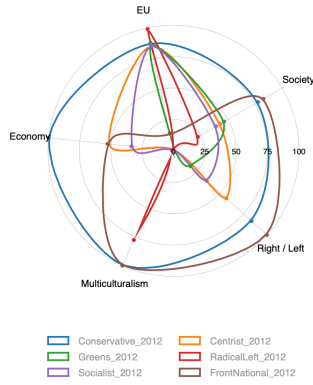
(a) E. Macron - *Centrist-2017*



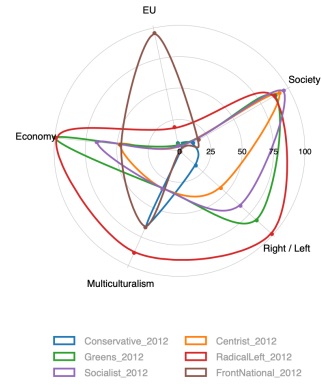
(b) M. Le Pen - *Front National-2017*



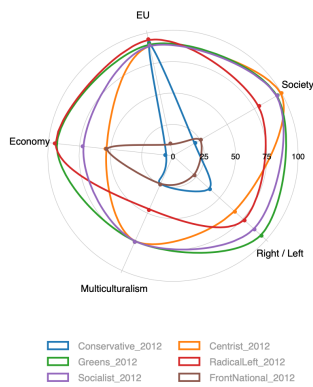
(c) F. Fillon - *Conservative-2017*



(d) JL. Mélenchon - *Radical Left-2017*



(e) B. Hamon - *Socialist and Greens-2017*



Note: The figures above show the level of similarity between the party programs of the 2017 candidates, and the 2012 programs of the main French parties (source: Authors' calculation from the Manifesto Project).

Appendix E Public positions on Russia taken by the 2017 election candidates

In 2017, The main French newspaper, *Le Monde*, offered on its web edition a comparison of candidates' platforms on a range of key topics. The issue of diplomatic relations with Russia was one of them. We reproduce the classification of candidates proposed by *Le Monde* in table T.5.

Table T.5: Candidates to the 2017 presidential election and first round results

Name	Party	Political orientation	Pro-Russia	Results	
				National	Treated
Emmanuel Macron	<i>En Marche!</i>	Center	–	24.0 %	30.1 %
Marine Le Pen	<i>Front National</i>	Far-right	++	21.3 %	11.1 %
François Fillon	<i>Les républicains</i>	Conservative	+	20.1 %	21.9 %
Jean-Luc Mélenchon	<i>La France insoumise</i>	Far-Left	+	19.6 %	21.7 %
Benoît Hamon	<i>Parti Socialiste</i>	Social democrat	–	6.4 %	9.2 %
Nicolas Dupont-Aignan	<i>Debout la France</i>	Conservative/Far-right	++	4.7 %	2.8 %
Jean Lassale	<i>Résistons!</i>	Independent	n.a.	1.2 %	0.7 %
Philippe Poutou	<i>Nouveau parti anticapitaliste</i>	Trotskyist	n.a.	1.1 %	0.9 %
François Asselineau	<i>Union Populaire Républicaine</i>	Independent	+	0.9 %	0.9 %
Nathalie Arthaud	<i>Lutte Ouvrière</i>	Trotskyist	n.a.	0.6 %	0.4 %
Jacques Cheminade	<i>Solidarité et progrès</i>	Independent	+	0.2 %	0.2 %

In addition, we present below some facts and quotes from the 2017 election candidates illustrating their view about Russia and Russia sanctions. The quotes are taken from the candidates' official propaganda, campaign websites or interviews to major French and international medias.

Marine Le Pen (*Front National*)

Marine Le Pen repeatedly expressed her admiration for Vladimir Putin and called for closer relations with Russia. This pro-Russian stance was made perfectly clear during the 2017 election campaign. Marine Le Pen made numerous public statements to this effect.

“[...] Several of her positions suggest that she would like to see closer relations with Russia. In particular, she expressed her support for a “strategic partnership” to fight against the Islamic State. In addition, she considers that the annexation of Crimea in 2014 is not illegal, which suggests that the sanctions that have been decided by the European Union and the United States against Russia as a result of this annexation are not justified. Marine Le Pen was also invited to the Kremlin by Vladimir Putin during the presidential campaign.”

Le Monde, 2017.

“There has been a referendum in Crimea [...] The population has decided, by an overwhelming majority, to return to the bosom of Russia [...] Crimea has

always been Russian. It was given to Ukraine not so long ago by the Soviets. But the population feels Russian.”

Marine Le Pen, CNN, Interview, 2017.

“These sanctions are totally stupid. They haven’t solved anything, they’ve just created economic problems for the European Union. They make no sense.”

Marine Le Pen, CNN, Interview, 2017.

“The sanctions were decided in 2014, they ruined part of our agricultural sectors and they had no impact in reality on the Russian economy. The only impact they’ve had is on the French economy. So, yes, when it’s not good for France [...] yes, of course, we defend the French.”

Marine Le Pen, BFM-TV, Interview, 2017.

Nicolas Dupont-Aignan (*Debout la France*)

Nicolas Dupont-Aignan is politically very close to Marine Le Pen’s National Front. In his 2017 election platform, he explicitly proposed an end to sanctions against Russia, something he has repeated on a number of occasions in interviews.

“Unilateral exit from the sanctions regime against Russia.”

Nicolas Dupont-Aignan, *Official campaign program*, P. 21, 2017.

“Sanctions against Russia must be lifted as a matter of urgency. The Minsk agreements must be enforced, but I note that it is Ukraine that has not complied with them.”

Nicolas Dupont-Aignan, *Radio France Internationale*, interview, 2015.

François Fillon (*Les Républicains*)

François Fillon (“Les républicains”) also had a pro-Russian stand. However, even if this position was likely sincere, it was less marked than for the two far-right candidates. Fillon was the candidate of the mainstream conservative political party, which is significantly different from the populist, illiberal and anti-EU line of Le Pen and Dupont-Aignan. Importantly, Fillon’s personal views on Russia were not widely supported within his party and neither were an official stance of the party. François Fillon was nominated by the leading French conservative party (affiliated with the European People’s Party). This prevented him from openly distancing himself from the positions of France’s diplomatic commitments and those of his main EU partners.

“I want to re-establish dialogue and relations of trust with Russia, which must

once again become a major partner. Together with our European partners, and in compliance with the Minsk agreements, I will initiate to lift the sanctions against Russia, which unfairly penalize our farmers and businesses.”

François Fillon , *Official campaign program* p. 76, 2017.

“Russia is drifting, that’s undeniable, but why is it drifting? Because we originally had the wrong policy towards Russia [...] we pushed Russia away, and imposed sanctions. [...] What did these sanctions lead to? They led to a hardening of Russia’s position. They must be lifted in exchange for a change in Russia’s position. There’s an agreement, there’s a part that has to be respected by the Russian side and a part that has to be respected by the Ukrainian side, for the moment nobody’s respecting anything.”

François Fillon , *Europe 1*, Interview, 2017.

Jean-Luc Mélenchon (*La France Insoumise*)

Jean-Luc Mélenchon (“La France insoumise”) is the only left-wing candidate who showed some pro-Russia stance. But, his opinion was not a definitive and strong support for Russia. Rather, it was mainly motivated by two elements.

First, a vision of international relations marked by Marxism and structuralism, which tends to lead to anti-Americanism and an opposition to interventionism by Western powers. Second, a populist bias leading to a focus on French people’s expectations and a disinterest in diplomatic issues. Mélenchon’s pro-Russian position is more a form of neutrality or indifference than a strong anti-sanctions stance. Mélenchon is thus in line with a tradition of non-alignment of French diplomacy, reinforced by a deep distrust of the United States and a sympathy with ex-communist regimes inherited from the Cold War.

“The Russians are not our enemies but our partners [...] and I don’t want sanctions against the Russians.”

Jean-Luc Mélenchon, *BFM TV*, Interview, 2016.

“I am only interested in the interests of France. And France’s interest is to get along with Russia. The Russians are partners. De Gaulle himself recognized Stalin’s Russia and Mao Zedong’s China.”

Jean-Luc Mélenchon, *France 2*, Interview, 2017.

“Sanctions against Russia make no sense. They are not enforced by the Americans themselves [...]. This policy will not force Russia to do anything. [...] I

don't believe in an aggressive attitude from Russia or China. I know these countries, I know their international strategy and their approach to international relations. Only the Anglo-Saxon world has a vision of international relations based on aggression. Other peoples don't think like that."

Jean-Luc Mélenchon, *Le Figaro*, Interview, 2021.

"I am not related in any way to Mr. Putin. I absolutely fight against his policy. And if I were Russian, I would not vote for him." Jean-Luc Mélenchon, *Twitter*, March 29, 2017.

Emmanuel Macron (*En Marche* !)

"Europe has a vocation to get along with Russia. Sanctions exist and will be necessary until the Minsk agreements are respected. We will seek to lift them, if the situation in Ukraine commits us to do so."

Emmanuel Macron, *Campaign website*, 2017.

Benoît Hamon (*Parti Socialiste*)

"France will remain committed to the United Nations. Far from the unilateralism and brutality outlined by Vladimir Putin's Russia, Xi Jinping's China or Donald Trump's United States, it will defend another vision in Syria, Ukraine, the Sahel and around the world. France will preserve international policies that are in line with our vision of the world, fair and humanistic."

Benoît Hamon, *Campaign website*, 2017.

"Mr. Putin wants to redraw borders. [...] There were 10,000 deaths in Ukraine. Since when do we bow to the Kremlin and its demands? If France has a Gaullist and Mitterrandian heritage [...], it shall resist Russia's territorial claims. [...] I don't belong to the Kremlin's fraternity."

Benoît Hamon, *BFM TV*, interview, 2017.

François Asselineau and Jacques Cheminade

François Asselineau and Jacques Cheminade were two minor fringe candidates who both expressed sympathy for Putin's Russia. However, taken together, they barely received 1% of the votes and had a negligible influence on the election.

Appendix F List of embargoed products

Table T.6: HS codes banned by the Russian Federation embargo

Code	Simplified description	Code	Simplified description
0201	Meat of bovine animals, fresh or chilled	0202	Meat of bovine animals, frozen
0203	Meat of swine, fresh, chilled or frozen	0207	Meat and edible offal, fresh, chilled or frozen
0210*	Meat and edible offal, salted, in brine, dried or smoked	0301*	Live fish
0302	Fish, fresh or chilled	0303	Fish, frozen
0304	Fish fillets and other fish meat, etc	0305	Fish, dried, salted, smoked or in brine
0306	Crustaceans, etc.	0307	Molluscs, etc.
0308	Other aquatic invertebrates	0401*	Milk and cream
0402*	Milk and cream, concentrated or containing sweetening matter	0403*	Buttermilk, yogurt and other fermented milk and cream
0404*	Whey ; products consisting of natural milk constituents	0405*	Butter and fats derived from milk; dairy spreads
0406*	Cheese and curd	0701*	Potatoes, fresh or chilled
0702	Tomatoes, fresh or chilled	0703*	Onions, leeks and other alliaceous vegetables, fresh or chilled
0704	Cabbages and similar edible brassicas, fresh or chilled	0705	Lettuce and chicory , fresh or chilled
0706	Carrots and similar edible roots, fresh or chilled	0707	Cucumbers and gherkins, fresh or chilled
0708	Leguminous vegetables, fresh or chilled	0709	Other vegetables, fresh or chilled
0710	Vegetables, frozen	0711	Vegetables provisionally preserved
0712*	Dried vegetables, whole, cut, sliced, broken or in powder	0713*	Dried leguminous vegetables, shelled
0714	Manioc, arrowroot and similar roots	0801	Coconuts, Brazil nuts and cashew nuts
0802	Other nuts, fresh or dried	0803	Bananas, including plantains, fresh or dried
0804	Dates, figs, pineapples, avocados, guavas, mangoes	0805	Citrus fruit, fresh or dried
0806	Grapes, fresh or dried	0807	Melons (including watermelons) and papaws (papayas), fresh
0808	Apples, pears and quinces, fresh	0809	Apricots, cherries, peaches, plums and sloes, fresh
0810	Other fruit, fresh	0811	Fruit and nuts, frozen
0813	Fruit and nuts, provisionally preserved	1601	Sausages and similar products, of meat, meat offal or blood
1901*	Malt extract; food preparations of flour, groats, meal, starch or malt extract, etc.	2106*	Food preparations not elsewhere specified or included