

## Is Charitable Giving Political? Evidence from Wealth and Income Tax Return

Julia Cagé  
Malka Guillot

June 2023



**WID.WORLD**  
THE SOURCE FOR  
GLOBAL INEQUALITY DATA

# Is Charitable Giving Political? Evidence from Wealth and Income Tax Returns\*

Julia Cagé<sup>†</sup>, Malka Guillot<sup>‡1</sup>

<sup>1</sup>Sciences Po Paris and CEPR

<sup>2</sup>University of Liège

October 7, 2022

## Abstract

Is charitable giving politically motivated? In this article, we use exhaustive administrative household panel data and a natural experiment to quantify empirically the motivations for giving. Our dataset includes all the households filing their income tax and/or their wealth tax returns in France between 2006 and 2019. In France, both charitable and political donations benefit from a 66% income tax credit, but only the charitable ones are eligible for the 75% wealth tax credit. We exploit the 2017 wealth-tax reform – a change in the taxable base that led to a drop of two third in the number of liable households and, as a result, an increase in the price of charitable giving – and show that charitable and political donations are substitute. According to our estimates, a one-percent increase in the price of charitable giving leads to an increase of around 0.12% in political donations. Next, using city-level information, we show that the increase in the price of charitable giving mostly benefits pro-business political parties. Finally, we document that the drop in charitable donations is mostly driven by politically-involved nonprofit organizations, pointing toward political motivations behind charitable giving.

**Keywords:** charitable giving, political donations, tax incentives for giving, tax deductions, wealth tax credit, cross-elasticity of donations, nonprofit organizations

**JEL No:** H24, H31, L38

---

\*We are grateful for the valuable comments from Ghazala Azmat, Pierre Boyer, Marius Brühlhart, Micael Castanheira, Gabrielle Fack, Germain Gauthier, Moritz Hengel, Elise Huillery, Jonathan Meer, Anne Monier, Dylan Moore, Daniel Prinz, Lukas Schmid, and Camille Urvoy. We also thank seminar participants at CREST, HEC Lausanne, HEC Liège, the University of Lucerne, the Paris School of Economics, the University Saint-Louis Bruxelles, Stockholm University, the University Paris Dauphine – PSL, and the University of York, as well as conference participants at the 2021 Swiss Workshop on “Political Economy and Development”, the 8th Annual Mannheim Taxation Conference, the XIII RIDGE Workshop on Public Economics, the CREI-IPEG Workshop on Political Economy, the GT Fiscalité, and the ZEW Public Finance Conference. Romain Angotti, Agathe Denis and Romane Surel provided outstanding research assistance. Finally, we thank Gérard Forgeot and the *Direction Générale des Finances Publiques* for providing access to the tax data, Frédérique Dooghe and the *Commission nationale des comptes de campagne et des financements politiques* for their help with the information on political donations, and Nicolas Hervé for his help with the left-right classification of the foundations using Twitter data. The research leading to this project has received funding from the European Research Council under the European Union’s Horizon 2020 research and innovation programme (Grant Agreement no. 948516). It was also supported by a public grant overseen by the French National Research Agency (ANR) as part of the “Investissements d’avenir” program (reference: ANR-10-EQPX-17 – Centre d’accès sécurisé aux données – CASD). An online Appendix with additional empirical material is available [here](#). All errors remain our own.

<sup>†</sup>Sciences Po Paris and CEPR ([julia \[dot\] cage \[at\] sciencespo \[dot\] fr](mailto:julia [dot] cage [at] sciencespo [dot] fr)).

<sup>‡</sup>Université de Liège ([mguillot \[at\] uliege \[dot\] be](mailto:mguillot [at] uliege [dot] be)).

# 1 Introduction

There has been a rise in philanthropy in Western democracies in recent years. In the United States, charitable giving increased by 121% between 2000 and 2019 – from 203 billion dollars to 450 billion; in Switzerland, we similarly observe a 78.3% increase between 2003 and 2019, and in France, a 78.6% increase between 2006 and 2019, from €1.465 billion to €2.617 billion.<sup>1</sup> How to explain such a rise? In many countries, increases in tax policies offering substantial incentives to donate to charities provide an initial explanation. This increase has also been related to individuals' growing desire to be seen to be doing good (e.g. the so-called warm-glow motive for giving described by Andreoni, 1989, 1990). Yet, philanthropy may not be just about giving, and can also serve political objectives (Reich, 2018; Bertrand et al., 2020a).

In this article, we study how charitable giving and political donations intertwine, and investigate in particular the extent to which charitable giving is politically motivated. To do so, we proceed in two steps. First, using exhaustive tax data and a natural experiment, we estimate the cross-price elasticity of charitable and political giving. Then, we discuss various interpretations for the observed substitutability between charitable and political donations, and use political party information and nonprofits' accounts to provide evidence that charitable giving is partly driven by political motivations.

Our dataset includes all the households filling their income tax and/or their wealth tax returns in France between 2006 and 2019, i.e. around 39 million households per year that we can follow over time and across wealth and income tax returns thanks to a unique household identifier. France provides a unique empirical framework to investigate whether donations to charities and to political parties are substitutes or complements. Both charitable and political donations can indeed benefit from tax deductions that are relatively generous in international comparisons. On the one hand, charitable and political giving can benefit from a nonrefundable income tax credit equal to 66% of the gift.<sup>2</sup> On the other hand, charitable donations (but not the political ones) can benefit from a nonrefundable wealth tax credit equal to 75% of the amount of the donations made (up to a limit of €50,000 per year<sup>3</sup>). Taxpayers liable to the wealth tax can choose to declare their charitable donations either to the wealth tax or to the income tax (but they cannot declare it twice). Importantly, charitable donations and political donations are reported separately on the tax forms.

Estimating the cross-elasticity of political and charitable donations raises a number of empirical challenges, reverse causality to begin with. In this article, we overcome these chal-

---

<sup>1</sup>US data are from Giving US: <https://givingusa.org/>. Data for Switzerland and France were computed by the authors. See Section 3 for detailed information on the data sources.

<sup>2</sup>The gift can be deducted from the income tax up to a ceiling currently equal to 20% of taxable income (see Section 2 for details).

<sup>3</sup>However, households are offered the possibility to fiscally report excess donations from one year to the other.

lenges by exploiting the panel dimension of our data and using a tax reform to instrument the price of charitable giving in a difference-in-differences framework. In 2017, the solidarity tax on wealth became a real-estate tax<sup>4</sup>. This reform did not modify the tax schedule but restricted the definition of the tax base to real-estate assets, excluding other investments (in particular financial assets) which were previously included. With this transformation of the wealth tax, two thirds of the households liable to the wealth tax on their 2016 wealth are no longer liable for their 2017 wealth, and thus can no longer benefit from the 75% wealth tax deductions for charitable giving.<sup>5</sup> In other words, the reform created a shock on the price of charitable giving – which increases from 25 to 34% of the amount of the gift, given that the income tax credit is “only” equal to 66% of the donations<sup>6</sup> – but not on the price of political donations, given that political giving was not eligible to the wealth tax deduction before the reform. This is illustrated in Figure 1 where we plot the underlying variations in the price of charitable giving we exploit in our analysis. While the 115,013 “control” households who continue paying the real-estate tax following the reform still benefit from a 75% tax credit, the price of charitable giving increases from 25 to 34% for the 236,216 “treated” households in 2017. These tax units represent 1% of the households, but 4.8% of the total gross income, 16% of the charitable donations declared in the income tax returns, and 13.8% of the declared political donations. Furthermore, they represent 22.5% of the total (non-political) income and wealth tax donations.

In practice, to estimate the cross-elasticity of political and charitable donations, we first employ an instrumental variable strategy where we use the 2017 wealth tax reform as an instrument for the price of charitable giving. To take into account the fact that the wealth tax reform led to a decrease in the amount of taxes paid for the households in the treated and the control group, i.e. an increase in the resources at their disposal (a phenomenon that we can approach just like a positive “income effect”<sup>7</sup>), we reduce our sample of analysis to the treated and control households who face approximately the same tax saving (between €0 and €15,000 in wealth tax gains in our preferred specification<sup>8</sup>) following the reform (282,999 households).

<sup>4</sup>The solidarity tax on wealth was called ISF or “*impôt de solidarité sur la fortune*”. The real-estate tax is called IFI or “*impôt sur la fortune immobilière*”.

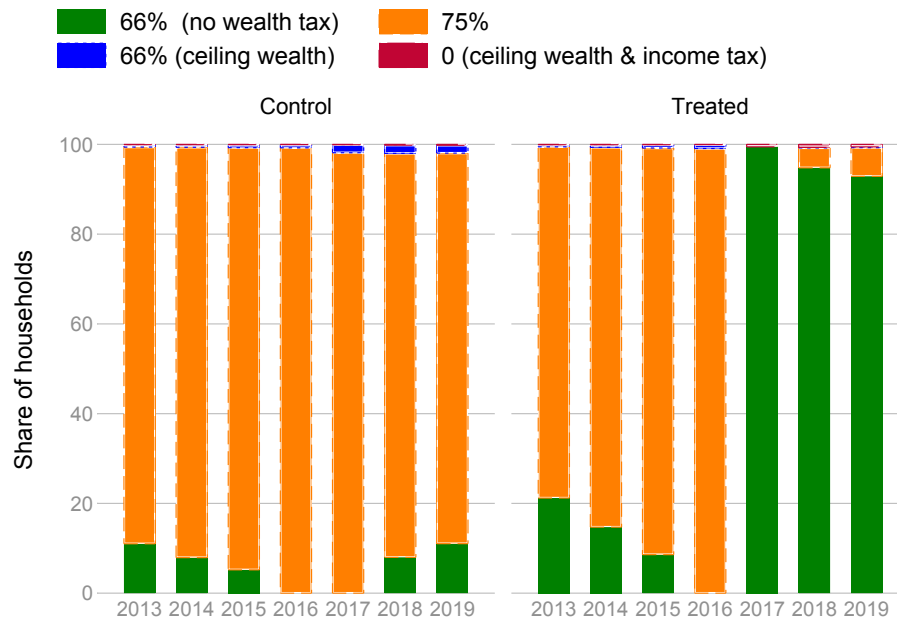
<sup>5</sup>In France, a wealth tax for year  $t$  is levied on the wealth evaluated at the end of year  $t - 1$ , so that the reform is effective from the 2017 wealth on, even though it corresponds to tax levied in 2018. 351,229 households were liable to the wealth tax on their 2016 wealth, out of which 236,216 were no longer liable in 2017.

<sup>6</sup>Compared to 75% for the wealth tax credit. The price of charitable giving corresponds to the cost of giving an additional euro: 25% if the household is liable to the wealth tax, 34% if the ceiling of the wealth tax deduction is reached, 0 if the income tax cap is reached (see Section 3.4 for detailed explanations).

<sup>7</sup>We observe a decrease of €10,820 and €7,702 for households in the control and treated group, respectively. This positive shock might have had a direct effect on either or both political and charitable donations through a resource effect (with more cash at their disposal, households decide to contribute more). See for example Bakija and Heim (2011) who show that the elasticity of charitable giving with respect to a persistent income change is equal to 0.51.

<sup>8</sup>We show below that our findings are robust to the use of different thresholds.

Figure 1: Evolution of the marginal price of charitable giving following the 2017 wealth tax reform



**Notes:** The Figure plots the change in the marginal price of charitable giving separately for the 115,013 “control” households who continue paying the real-estate tax following the 2017 wealth tax reform (on the left) and the 236,216 “treated” households (on the right) who are no longer liable to the wealth tax in 2017. Green bars show the share of the households who are not liable to the wealth tax and can thus only benefit from the 66% income tax credit. Orange bars show the share of the households who are liable to the wealth tax and can thus benefit from the 75% wealth tax credit. Blue bars report the share of the households who are liable to the wealth tax but who face the €50,000 wealth tax credit cap. Finally, red bars show the share of the households who are liable to the wealth tax but who face both the €50,000 wealth tax credit cap and the income tax ceiling.

According to our first-stage estimations, the wealth tax reform led to an increase in the marginal price of charitable giving for the treated group compared to the control group by around 26%. In the second stage, we investigate how the (instrumented) price of charitable giving affects political giving. Our identification assumption is that, given that political giving was not eligible to wealth tax deductions and thus not directly affected by the reform, the 2017 wealth tax reform only affected political donations through its effect on the tax price of charitable giving (remember that our sample of analysis is reduced to the households who face a similar wealth tax change following the reform). If we consider the reduced-form relationship, we document a 3.0 to 3.4% increase in political donations for the treated group compared to the control group following the reform. Importantly for the validity of our empirical strategy, we show that the two groups were following parallel trends with respect to both charitable and political giving before the reform. Further, in the spirit of a placebo test, we show that, on the contrary, the reform did not affect trade union subscriptions although they are subject to similar tax treatment as political donations.

Regarding the cross-price elasticity of political donations (second stage of the estimation), we show that a one-percent increase in the price of charitable giving leads to an increase of around 0.12% in political donations. This effect happens both at the intensive and at the extensive margin of donations, and is economically significant for the political parties, which strongly rely on private donations. E.g. the estimated increase in political donations is equivalent to 11.6% of the total political donations made by wealth tax donors in 2017. These results are robust to the use of a number of different empirical strategies. In particular, we show that they are qualitatively similar if, rather than relying on the IV strategy, we use propensity score matching where we match the two groups on their pre-treatment observables.

How to interpret this substitutability? In the second part of the paper, we provide evidence pointing toward the fact that charitable donations may be at least partly driven by political motivations. More precisely, we begin by investigating whether the increase in the price of charitable giving benefits all the political parties in a similar way. To do so, we collect novel data on annual city-level donations received by each political party and merge them with information on “treatment intensity” at the level of the city. “Treatment intensity” is defined as the share of the households in the city eligible to the wealth tax in 2016 but not in 2017, normalized by the total number of households eligible to the wealth tax in 2016. We show that the tax reform mostly benefited the right-wing Les Républicains party. On the contrary, if anything, we observe a small decrease in the donations received by the parties on the left of the political spectrum.

Next, we list all the public-utility nonprofit organizations that could benefit both from the income tax and the wealth tax credit in France<sup>9</sup>, and the annual amount of donations they receive, which we hand-collected from their paper-format “auditor’s reports on the annual accounts”. Using their stated purpose, we classify the organizations depending on their object, and study aggregate changes in the amount of donations received by the nonprofit organizations whose purpose is classified as “politics” and the ones whose purpose is not (e.g. the foundations that are classified as “humanitarian” or “solidarity”). We document that the drop in the charitable donations received is larger for the charities whose purpose is political than for the non-political ones. We provide both suggestive and anecdotal evidence pointing towards the fact that former contributors to right-wing political foundations might have decided, following the increase in the price of charitable giving, to instead contribute directly to the right-wing political parties.

Our results have important policy implications. If donations to charities are (at least) partly driven by political considerations, then one might question the relevance of having different tax deductions for charitable and political giving. Next, given that political donations are capped in France (as well as in a number of other countries) to assure political equity, it

---

<sup>9</sup>The so-called *Fondations Reconnues d’Utilité Publiques*. See Section 2.1.2 for details.

may also be relevant to limit (politically-driven) charitable contributions. We discuss these implications at the end of the paper.

**Literature review** Our paper first contributes to the long tradition of research analyzing philanthropic giving, and in particular estimating the tax-price elasticity of giving (Feldstein and Taylor, 1976; Randolph, 1995; Bakija and Heim, 2011; Andreoni and Payne, 2013; Meer and Priday, 2020).<sup>10</sup> Several articles in this literature have estimated the effect of tax incentives for charitable contributions. Fack and Landaïs (2010) use two reforms in France that increased the nonrefundable tax credit rate in 2003 and 2005, and Fack and Landaïs (2016b) exploit the 1983 tightening of the requirements to claim charitable deductions.<sup>11</sup> Fack and Landaïs (2010) find that the elasticity price of gifts is around  $-0.2$  to  $-0.6$  depending on income; in the US context, Bakija and Heim (2011) estimate an elasticity in excess of  $-1$ .

Compared to this literature, our contribution is fourfold. First, while the focus of these papers is on charitable contributions, we also consider political donations that benefit from similar tax incentives but may be driven by different motivations. Campaign contributions and charitable giving are indeed most often not analyzed in conjunction, while they may be considered as two sides of the same coin.<sup>12</sup> An exception is Petrova et al. (2020) who provide evidence that individuals substitute between political contributions and charitable contributions using data from the US and shocks on charitable and political giving (see also Yörük (2015) who uses survey data to investigate the spillover effects of charitable subsidies on political giving in the US between 1990 and 2001 and finds complementarity between the two kinds of donations).<sup>13</sup> We contribute to this literature by looking at substitution effects *within the same donors*. Our data indeed allow us to investigate at the taxpayer level the propensity of individuals to contribute to both political parties and charities and, thanks to our empirical strategy, we can isolate the causal effect of an increase in the price of charitable giving (driven by a change in tax incentives) on political donations (not affected directly by

---

<sup>10</sup>See also Bakija (2013) and Fack and Landaïs (2016a) for a literature review on tax policy and philanthropy.

<sup>11</sup>See also Doerrenberg et al. (2017) who exploit several tax reforms implemented in Germany between 2001 and 2008 to estimate both the elasticity of taxable income and the elasticity of deductions with respect to net-of-tax rate. In the French context, Guillot (2019) and Aghion et al. (2019) study behavioral responses to changes in taxation.

<sup>12</sup>Ansolabehere et al. (2003) argue, for example, that both political and charitable giving should be regarded as a form of consumption. There is a growing literature that examines the non-tax determinants of donations, whose primary focus is on changes in societal needs: Deryugina and Marx (2021), using deadly tornadoes, find that giving to one cause needs not come at the expense of another; Fong and Luttmer (2009) investigate the role of racial group loyalty in the context of donations to hurricane Katrina victims (on giving to disasters, see also Scharf et al., 2022). Next, DellaVigna et al. (2012) and Andreoni et al. (2017) investigate the importance of the social context, and in particular of social pressure in charitable giving.

<sup>13</sup>Hungerman et al. (2018) investigate the effect of campaign activity on non-political donations, and document an increase in collections for nearby churches the week following a campaign stop by a presidential candidate. Perroni et al. (2022) study the role of salience in charitable giving, using a dataset on phone text donations.



this change).<sup>14</sup>

Second, while the focus of the existing literature has been on the income tax, our paper also exploits variations in the wealth tax and estimates the cross-price elasticity of giving. While there exists a large literature investigating the impact of wealth taxation ([Brülhart et al., 2016](#); [Seim, 2017](#); [Jakobsen et al., 2019](#)), to the extent of our knowledge, we are the first to study the extent to which wealth tax deductions impact donations. Furthermore, while the existing research mostly considers direct variations in the price of giving (through changes in the tax treatment that donations benefit from), we consider indirect shocks (exploiting a wealth tax reform).

Third, while the existing research mostly uses survey data or sample of tax payers<sup>15</sup>, or focuses on the top of the income distribution when using tax returns, we rely on an exhaustive administrative panel dataset and estimate the elasticities at different levels of the distribution.<sup>16</sup> [Almunia et al. \(2020\)](#) similarly use administrative tax return data (from the UK) and exploit a tax reform. But while they only consider the income tax and focus on charitable giving, we study both income and wealth tax in this paper, and investigate whether there are substitution effects between charitable and political donations.

Finally, this paper contributes to the growing literature on the political economy of charitable giving. In the US context, [Bertrand et al. \(2020a\)](#) analyze the role of corporate charitable giving as a means of political influence. They estimate that 16.1 percent of total US corporate charitable giving can be interpreted as politically motivated (see also [Bertrand et al., 2021](#), who provide evidence that corporate foundations' charitable grants reach targeted nonprofits just before those same nonprofits engage in public commentary).<sup>17</sup> Compared to this work, we contribute to the literature by estimating whether charitable giving and political donations act as substitutes or complements. This is of particular importance in contexts where political donations are limited, but not charitable contributions. Furthermore, we provide novel evidence on political motivations driving donations by *individuals* (not corporations), and in particular, thanks to our exhaustive fiscal data covering both income and wealth tax payers,

---

<sup>14</sup>There is a large literature on the determinants of campaign contributions (for a literature review, see [Dawood, 2015](#)), but this literature mostly overlooks the issue of the tax price of political giving. This may be due to the fact that political donations in the US do not give rise to tax deductions – while this is the case in France (as well as in many others Western democracies), and so can be studied in our context. The main determinants of campaign donations that have been highlighted in the literature are political influence (see [Gordon et al. \(2007\)](#); [Chamon and Kaplan \(2013\)](#); [Barber \(2016\)](#) for empirical evidence, and [Grossman and Helpman \(1994, 1996\)](#) for the leading theoretical models); the willingness to affect election outcomes ([Poole and Romer, 1985](#); [Wand, 2007](#)); a consumption motive ([Ansolabehere et al., 2003](#); [Gimpel et al., 2008](#)); and the effect of political advertising (see e.g. [Green et al., 2015](#), on the impact of non-partisan messages).

<sup>15</sup>For papers using survey data, see [Brown and Lankford \(1992\)](#); ?; [Yörük \(2015\)](#); [Backus and Grant \(2016\)](#). [Fack and Landaïs \(2010\)](#) use a repeated cross-section of 500,000 tax payers drawn every year by the tax administration; [Bakija and Heim \(2011\)](#) relies on a panel of 550,000 disproportionately high-income tax returns.

<sup>16</sup>A strand of the literature also relies on charities' tax filings. See in particular [Duquette \(2016\)](#).

<sup>17</sup>For a review of the most recent empirical literature on lobbying in political economy, see [Bombardini and Trebbi \(2020\)](#).



donors at the very top of the income and/or wealth distribution who tend to be absent from surveys while they drive a large share of the observed donations.<sup>18</sup>

The rest of the paper is organized as follows. In Section 2 below, we provide historical background on tax deductions for charitable and political contributions in France, and describe the tax reforms that took place during our period of interest. Section 3 presents the unique panel data we use, provides descriptive statistics and exposes our identification strategy. Section 4 presents our main empirical results, shows their robustness, and investigates the heterogeneity of the effect across various dimensions. In Section 5, we show that the substitutability between charitable and political giving is at least partly driven by political motivations behind charitable donations. Finally, Section 6 concludes.

## 2 Historical background and tax legislation

In this section, we first describe the French regulatory background for charitable and political contributions. We then outline the main tax reforms that took place during our period of interest (2006-2019). The time period considered is determined by data availability reasons: the wealth tax return data at the households level are only available between 2006 and 2019.

### 2.1 Tax deductions for charitable and political contributions

#### 2.1.1 Income tax credit

**Tax credit for charitable giving** A tax incentive toward charitable giving has existed in France since 1954, but has been significantly modified over time (Fack and Landais, 2010). The initial deduction mechanism, which worked as a deduction from taxable income, was replaced in 1989 by a nonrefundable tax credit of 40 percent. With a nonrefundable tax credit, all taxpayers benefit from the same tax credit rate equal to  $x\%$  of the gift, regardless of their income level. However, the gift can only be deducted up to a ceiling currently equal to 20% of the taxable income.<sup>19</sup> Further, given that the tax credit is nonrefundable, the deduction cannot exceed the income tax that is due for taxable households.

The tax credit rate has been raised three times since the late 1980s: from 40 to 50 percent in 1996, from 50 to 60 percent in 2003, and from 60 to 66 percent in 2005, a rate that has remained unchanged since then (and in particular during our period of interest).

---

<sup>18</sup>An exception is Levin et al. (2016) who use a natural field experiment to explore the motivations of the wealthiest donors.

<sup>19</sup>However, if the gift exceeds the ceiling, its reporting can be spread out over five years. We show in online Appendix Table D.5 that our results are robust to including the reported donations in the computation of the price of charitable giving (see Section 4.5).

**Tax credit for political giving** Political donations, i.e. donations to political parties and to campaigns, have been allowed in France since 1988 (Cagé, 2018; Bekkouche et al., 2022). Tax deductions for these donations were introduced at the exact same time, with the same rate as for other charitable donations (i.e., a 66% nonrefundable income tax credit as of today). However, contrary to charitable donations, political donations are limited by law in France. A natural person may contribute up to €4,600 to each campaign, and donate an annual maximum of €7,500 to political parties or groups.<sup>20</sup>

We observe donations to political parties directly in the income tax returns data since 2013 (they were previously bundled with charitable donations).<sup>21</sup> We report descriptive statistics on these donations in Section 3.2 below.

### 2.1.2 Wealth tax credit

The wealth tax credit for charitable donations – political donations are not eligible to this tax credit – was introduced in 2007 as part of the “*loi TEPA*”, a fiscal package aiming at lightening the fiscal burden on businesses, liberalizing the labor market and stimulating investment. Interestingly, Section 6 of this Law – introducing the wealth tax deductions – went relatively unnoticed at the time, with virtually no media coverage.<sup>22</sup> The wealth tax credit is very generous, though, with a wealth tax reduction equal to 75% of the amount of the donations made, up to a limit of €50,000 per year.<sup>23</sup>

Taxpayers liable to the wealth tax can choose to declare their charitable donations either in the wealth tax or the income tax return, but they cannot declare it twice. However, contrary to the income tax credit, not all nonprofit organizations are eligible to the wealth tax credit. Indeed, only a subset of the nonprofit organizations that are recognized as “being of public utility” (the so-called *Fondations Reconnues d’Utilité Publique* or FRUP) can benefit from it, as well as the nonprofit research, higher education or artistic institutions of general interest.

<sup>20</sup>Corporations are not allowed to contribute to political parties or campaigns since 1995 (Bekkouche et al., 2022; Cagé et al., 2021b). Until 2012, individuals were allowed to give €7,500 annually to each of the political parties of their choice. The rule was changed in 2012 – €7,500 overall, taking into account the donations made to all the political parties – because parties were increasingly creating micro-parties to augment the donations they could receive.

<sup>21</sup>Taxpayers report their charitable and political giving on the same page of their income tax form, but on different rows (see online Appendix Figure B.1 for an illustration). Donations to electoral campaigns are bundled with charitable donations in the tax data. We provide below descriptive statistics on these donations that we compute from the electoral campaign records.

<sup>22</sup>We have gone through all the articles published by the five main daily newspapers (*Le Monde*, *L’Humanité*, *La Croix*, *Le Figaro*, and *Libération*) at the time about the law, and found nearly no mention of Section 6. All the media attention was focused on Articles 1 to 4 of the law that introduced a tax exemption for overtime, a reform of the inheritance tax, a change of the tax shield, and an experimentation of the “active solidarity revenue” (RSA).

<sup>23</sup>There were also very few discussions at the time in the parliament about this specific section of the law – with the exception of some debate about whether political donations should also benefit from it. In particular, no specific estimation was made of the cost of the reform. The only estimation provided was the joint estimated cost of this reduction together with other measures in favor of SMBs (overall, the estimated cost was equal to €410 million per year).

As of today, there are 661 FRUPs in France. While this number might seem small, in particular compared to the 1.3 million associations, in fact it is not. Indeed, while the majority of the associations are very small structures, with nearly no funding and most often no employees, FRUPs tend to be much larger and represent a larger part of the not-for-profit sector. Two thirds of the associations have annual budgets of less than €7,500, and only 5% of the associations have an annual budget of more than €150,000.<sup>24</sup> On the contrary, to become a FRUP, a foundation needs to have an endowment of at least €1.5 million.<sup>25</sup> We come back to this point in Section 5, where we discuss the political dimension of a number of foundations and present the novel data we collect on FRUPs.

## 2.2 The 2017 wealth tax reform

The first goal of this paper is to estimate the cross-elasticity of political and charitable donations. However, doing so raises a number of empirical challenges given reverse causality and omitted variable bias. To obtain a causal estimate, we propose to exploit the 2017 wealth tax reform. We present our empirical strategy in Section 3 below; here, we simply describe the reform.

In 2017, the solidarity tax on wealth became a real-estate tax. While the tax schedule was unchanged<sup>26</sup>, the taxable base was not: compared to the previous solidarity tax on wealth, the real-estate tax only covers real-estate assets and excludes other investments (in particular financial assets). Because of the reform, two thirds of the households who were liable to the wealth tax in 2016 were no longer liable in 2017 anymore, i.e. 236,216 out of 351,229 households.

Hence, this wealth tax reform led to a drop in the number of households liable to the wealth tax, and so in the number of households eligible to the wealth tax deduction. For the households no longer liable to the wealth tax following the reform, it also implied an increase in the price of charitable giving – given that they could no longer benefit from the 75% wealth tax credit, as illustrated in Figure 1 above – but no changes for political donations, which have never been eligible to this credit.

<sup>24</sup>According to the Ministry of the interior: <https://www.associations.gouv.fr/les-associations-en-france.html#Les-chiffres>. 92% of the associations have annual budgets of less than €75,000.

<sup>25</sup>Law n°87-571 of July 23, 1987 on the development of patronage.

<sup>26</sup>Only the households whose net taxable wealth is above €1.3 million are liable to the wealth tax. The tax rates are equal to (i) 0% between €0 and €800,000, (ii) 0.5% between €800,000 and €1,300,000, (iii) 0.7% between €1,300,000 and €2,570,000, (iv) 1% between €2,570,000 and €5,000,000, (v) 1.25% between €5,000,000 and €10,000,000, and (vi) 1.5% above €10,000,000.

### 3 Data, descriptive analysis and identification strategy

The confidential data used in this paper are from the General Directorate of Public Finance, and access has been made possible within a secure environment offered by the CASD (“*Centre d’accès sécurisé aux données*”)<sup>27</sup>. We briefly describe the dataset here and provide more details on data construction in the online Appendix Section A.

#### 3.1 An exhaustive panel dataset of income- and wealth-tax returns

Our dataset includes all the households who must declare their taxes in France, i.e. all the households filing their income-tax and/or their wealth-tax returns. An individual must file an annual tax return if she is in one of the following situations: (i) she resides in France; (ii) her main professional activity is in France; (iii) she turned 18 in year  $N$  and she is no longer attached to her parents’ tax household; (iv) she lives abroad but her income is from a French source. The tax return is *mandatory* regardless of the amount of her income, even if it is zero or low.<sup>28</sup> Overall, around 38.5 million households file an income tax return as of 2018. There is a single tax return per tax household, unless there is a change in the household definition during the year (e.g. because of a marriage or a divorce). For single persons (single, divorced, widowed, cohabiting), the tax household is made up of the taxpayer and her dependents. For married and civil union partners, the tax household consists of the taxpayer, his/her spouse and dependents. The income and expenses of all members of the tax household are taken into account to establish a single tax assessment (in the empirical analysis below, we always control for the number of fiscal shares).

Regarding the wealth tax, since the 2017 wealth tax reform, individuals whose real-estate assets have a net taxable value strictly superior to the tax threshold, i.e. €1,300,000, are required to file a declaration.<sup>29</sup> Online Appendix Figure B.2 reports the evolution of the number of households filing their income tax and/or their wealth returns during our period of interest.

Thanks to a unique household identifier, we follow households over time for both income and wealth tax. Our tax return data contains information on households’ composition, detailed

---

<sup>27</sup>Ref. 10.34724CASD.

<sup>28</sup>Note that in 2019, a reform introduced the “*prélèvement à la source*” or tax withholding in France. Before January 2019, French tax residents paid income tax on their wages via self-assessment; income tax was payable after completion and submission of the tax return and employers were not involved in this collection. Since January 2019, the income tax is paid to the government by the payer of the income rather than by the recipient of the income. However, this new income tax withholding did not change the obligation to file the tax return.

<sup>29</sup>An individual domiciled outside of France for tax purposes (and so not filing an income tax return) has to file a wealth-tax declaration if her real-estate assets and rights located in France, as well as her shares in companies or organizations (established in France or abroad) for the portion of their value representing these real-estate assets or rights, are above €1,300,000. 1.4% of the households filing a wealth-tax return are not liable to French income tax. We do not include these households in our sample.

income composition, wealth<sup>30</sup> (if they file a wealth tax return), and all reductions and rebates claimed. The data also contains output variables of the income tax computation such as the tax due and the amounts deducted for it. In this article, we mainly rely on the information on income, wealth, charitable and political donations, department of residency, number of dependents and age, as well as on the panel structure of the data. Table 1 provides summary statistics on these variables when we consider all the households filing an income-tax return.

Regarding donations, we have information on the total amount of donations eligible for income- and wealth-tax deductions, i.e. both charitable and political donations that are declared by the households on their tax form(s).<sup>31</sup>

### 3.2 Charitable donations

As highlighted above, donations can be declared either on the income-tax form or on the wealth-tax form for the households liable to both income and wealth tax. However, households cannot declare the same donation twice.

Figure 2 plots the evolution of the number of households who declare a charitable donation during our period of interest. We observe a large increase in the number of households declaring a donation on their wealth-tax form (henceforward the wealth-tax donors, dashed red line) between 2008 and 2009<sup>32</sup>, a drop in 2010, and then a continuous increase until 2016. The drop in 2010 is most probably due to the 2011 wealth-tax reform that increased the amount of net property assets above which individuals were liable for the wealth tax from €0.8 to €1.3 million (thus decreasing the number of liable households – see Figure B.2).<sup>33</sup> Similarly, the 2017 drop can be explained by the 2017 wealth-tax reform that led to a decrease in the number of liable donors and which we exploit in this paper. However, while we observe a drop in the absolute number of wealth-tax donors in 2017, the *share* of donors among households liable to the wealth tax increases, as shown in the online Appendix Figure B.3.

The picture is quite different if we consider the households who declare a donation on their income tax form (henceforward the income tax donors). We observe a continuous decline in the share of donors since the mid-2010s, as illustrated in the online Appendix Figure B.4. In

<sup>30</sup>Detailed wealth composition is only available for the households liable to the wealth tax with a wealth above €2,507,000. Indeed, those with a wealth below €2,507,000 did not have to file in a detailed wealth tax returns until 2018.

<sup>31</sup>We do not observe in the data the detailed composition of the giving made by households, e.g. how much they contribute to different associations and the associations they contribute to. We come back to this point in Section 5.2 below where we collect novel data on the foundations' financial accounts to investigate whether foundations were differentially affected by the wealth-tax reform depending on their purpose. Similarly, the tax data only provide us with aggregate political giving, but give no information on the identity of the parties that benefit from the political donations. We overcome this limitation of the data in Section 5.1 by collecting city-level information on the donations received by each party.

<sup>32</sup>In 2006, this number is equal to zero given that the wealth-tax deduction was introduced in 2007.

<sup>33</sup>Contrary to the 2017 reform, we cannot exploit the 2011 change in our empirical analysis given that the data on political donations is only available since 2013.

Table 1: Descriptive statistics: characteristics of the households filing an income-tax return (2016)

(a) All households liable to income tax

|                                   | Mean       | Std. Dev. | p25    | p50    | p75    | Frac. > 0 |
|-----------------------------------|------------|-----------|--------|--------|--------|-----------|
| Gross Taxable Income              | 26,004     | 38,496    | 11,504 | 19,249 | 32,392 | 0.94      |
| Number of fiscal dependents       | 1.8        | 0.9       | 1.0    | 2.0    | 2.0    | 0.28      |
| Age (individual 1)                | 51         | 19        | 35     | 50     | 65     | 1.00      |
| Total donations (income tax)      | 63.4       | 1,216.3   | 0.0    | 0.0    | 0.0    | 0.14      |
| Political donations (income tax)  | 2.2        | 92.4      | 0.0    | 0.0    | 0.0    | 0.0075    |
| Charitable donations (income tax) | 50.0       | 1,167.6   | 0.0    | 0.0    | 0.0    | 0.11      |
| Coluche donations (income tax)    | 11.2       | 294.1     | 0.0    | 0.0    | 0.0    | 0.050     |
| Observations                      | 37,551,043 |           |        |        |        |           |

(b) All households liable to wealth tax

|                                         | Mean      | Std. Dev. | p25       | p50       | p75       | Frac. > 0 |
|-----------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Gross Taxable Income                    | 134,867   | 265,361   | 52,462    | 85,993    | 143,663   | 0.99      |
| Number of fiscal dependents             | 1.9       | 1.0       | 1.0       | 2.0       | 2.0       | 0.19      |
| Age (individual 1)                      | 68        | 13        | 60        | 68        | 77        | 1.00      |
| Total donations (income tax)            | 1,002.4   | 9,882.6   | 0.0       | 60.0      | 588.0     | 0.55      |
| Political donations (income tax)        | 33.0      | 445.4     | 0.0       | 0.0       | 0.0       | 0.050     |
| Charitable donations (income tax)       | 888.8     | 9,828.1   | 0.0       | 0.0       | 426.0     | 0.49      |
| Coluche donations (income tax)          | 80.6      | 240.9     | 0.0       | 0.0       | 0.0       | 0.23      |
| Total gross wealth                      | 2,962,612 | 3,997,285 | 1,685,420 | 2,123,300 | 2,971,474 | 0.99      |
| Total donation (wealth tax)             | 749.1     | 4,885.4   | 0.0       | 0.0       | 0.0       | 0.15      |
| Charitable donation (wealth tax)        | 740.8     | 4,859.6   | 0.0       | 0.0       | 0.0       | 0.14      |
| Charitable donation in E.U (wealth tax) | 8.3       | 492.5     | 0.0       | 0.0       | 0.0       | 0.0019    |
| Charitable giving (income & wealth tax) | 1,637.9   | 11,730.3  | 0.0       | 50.0      | 645.0     | 0.54      |
| Observations                            | 351,229   |           |           |           |           |           |

(c) Households giving to a political party

|                                          | Mean    | Std. Dev. | p25    | p50    | p75    | Frac. > 0 |
|------------------------------------------|---------|-----------|--------|--------|--------|-----------|
| Gross Taxable Income                     | 55,779  | 118,322   | 26,707 | 40,614 | 61,194 | 1.00      |
| Number of fiscal dependents              | 1.8     | 0.9       | 1.0    | 2.0    | 2.0    | 0.26      |
| Age (individual 1)                       | 61      | 15        | 50     | 63     | 72     | 1.00      |
| Total donations (income tax)             | 773.0   | 5,144.1   | 76.0   | 210.0  | 622.0  | 1         |
| Political donations (income tax)         | 287.3   | 1,027.6   | 40.0   | 80.0   | 170.0  | 1         |
| Charitable donations (income tax)        | 414.2   | 4,943.8   | 0.0    | 22.0   | 230.0  | 0.54      |
| Coluche donations (income tax)           | 71.5    | 185.0     | 0.0    | 0.0    | 30.0   | 0.27      |
| Total gross wealth                       | 242,613 | 2,242,111 | 0      | 0      | 0      | 0.062     |
| Total donations (wealth tax)             | 115.2   | 1,741.6   | 0.0    | 0.0    | 0.0    | 0.016     |
| Charitable donations (wealth tax)        | 114.0   | 1,719.1   | 0.0    | 0.0    | 0.0    | 0.016     |
| Charitable donations in E.U (wealth tax) | 1.2     | 271.8     | 0.0    | 0.0    | 0.0    | 0.00018   |
| Observations                             | 281,538 |           |        |        |        |           |

**Notes:** The table shows descriptive statistics for the characteristics of the households filing an income-tax return in 2016. Panel (a) includes all the households liable to the income tax while panel (b) is restricted to the households liable to the wealth tax as well. Finally, panel (c) shows the characteristics of the households who declare a political donation that year. All the variables but age (in years) and the number of fiscal dependents are in euros. We call “Coluche donations” the donations to charities that help people in need (see Section 4.5). The total donations to the wealth tax correspond to the sum of the donations for a French-based charity and a E.U-based charity.

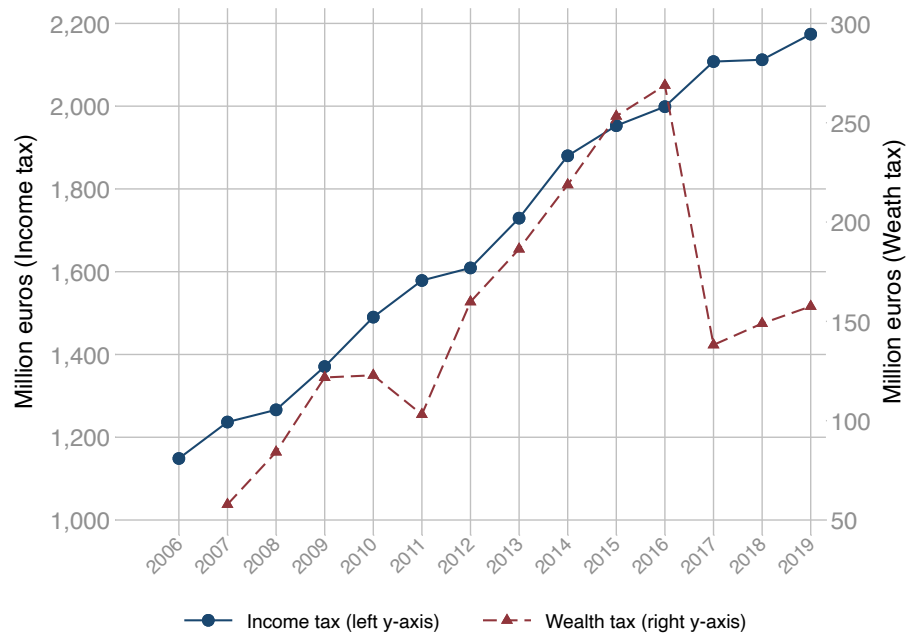
Figure 2: Evolution of the number of households who declare a charitable donation, Income-tax and wealth-tax donors, 2006-2019



**Notes:** The figure plots the evolution of the number of households who declare a charitable donation on their income and wealth tax forms per year. The time period covered is 2006-2019. The number of income-tax donors is reported in millions on the left y-axis (blue line with dots) and the number of wealth-tax donors on the right y-axis (dashed red line with triangle).



Figure 3: Evolution of the total amount of income tax and wealth tax donations, 2006-2019



**Notes:** The figure plots the evolution of the total amount of income tax and wealth tax donations. The time period covered is 2006-2019. The amount of donations declared to the income tax is reported on the left y-axis (blue line with dots) and the amount of the donations declared to the wealth tax on the right y-axis (dashed red line with triangle).

2019, around 9% of the households declared a charitable donation on their income tax form compared to more than 12% in 2014.

This decrease in the share of income tax donors was not accompanied by a decline in the amount of total donations, however. Figure 3 plots this amount for both income tax and wealth tax donations. Income tax donations increased from around €1.1 billion in 2006 to more than €2.1 billion in 2019. This is due to the fact that the average amount declared increased during the same time period, from €33 (€317 among donors) to €55 (€579 among donors) (online Appendix Figure B.5).

**Incentives to report** One legitimate concern regarding the data we are using in the paper comes from the fact that, given the tax credit is non refundable, only the households who actually pay income tax have a fiscal incentive to report their donations given they are the only ones who can benefit from the tax rebate. However, according to Fack and Landais (2010), given it is almost costless for a household to report its contributions, the vast majority of contributions to charities are reported in the tax data, even those made by nontaxable households. In this paper, using an alternative data source – the *Panorama des générosités 2020* – to compute the aggregated evolution of the donations made to general interest organizations (“organismes d’intérêt général”), we show that the overall picture is fully consistent across the

two sources (online Appendix Figure [B.6](#)).

Further, the focus of this article is on the households who were liable to the wealth tax in 2016; nearly all these households are also at the top of the income distribution and so do actually pay the income tax. The possibility of misreporting is thus less of a concern for us given our empirical setting. What is more, unlike for the income tax, all the households who have to fill in a wealth tax form are taxable households from the wealth tax point of view, and could actually benefit from a tax rebate. Given this tax rebate is higher than for the income tax (75 vs. 66%), misreporting should be even less of an issue for the wealth tax.

### 3.3 Political donations

If we now turn to political donations, we see that less than one percent of the households make a donation to political parties every year (online Appendix Figure [B.4](#)), and that, during our period of interest, the annual amount of political donations has varied between around €60 million and €120 million (Figure [B.7](#)).

While these figures might seem small – both in international comparisons and compared to charitable giving – they are in fact of importance in the French context where campaign expenditures are limited by law ([Cagé, 2018](#)). In the 2022 presidential elections for example, first-round candidates could not spend more than €16,851,000, out of which up to €8,004,225 could be reimbursed by the State. Hence, the maximum differential spending between candidates stemming from private donations was around €8.8 million. Further, due to the spending caps, the marginal price of a vote is relatively low in France (e.g. between €10 and €35 for the legislative elections according to the estimations of [Bekkouche et al., 2022](#)).

Finally, note that these aggregated political donations are higher overall than the direct public subsidies received by the political parties. In 2020, the direct public subsidies to political parties amounted to €66,080,892. E.g. the Socialist party received €6,001,343 in public subsidies, compared to €8,477,653 in total donations. Overall, even if we observe variations depending on the parties and over time, private donations tend to represent a very large share of the political parties' total revenues; 70% for both La France Insoumise (LFI, the left-wing party of Jean-Luc Mélenchon) and La République en Marche (LREM, the presidential party of Emmanuel Macron) in 2017 for example, and nearly 50% for the Socialist party in 2020 (online Appendix Figure [B.8](#)).

**Who benefits from political donations?** Unfortunately, from the fiscal data, we do not know which political party each donor contributes to. But we can study the aggregate change in political donations by using the accounts of the political parties that have to report annually the donations they receive; online Appendix Figure [B.7](#) plots this number together with the

fiscal data and show that they are roughly consistent.<sup>34</sup>

Further, we collect additional data on the individual donations received by the main political parties between 2016 and 2020 with precise information on the location of the donor. This data is quite unique in the French context where, unlike other countries such as Germany, the UK or the US, there is no transparency as to the identity of the donors (Cagé, 2018). Besides, it has the advantage of including information on *all the donations* received, independently of the amount of the donation, while the data used in the existing literature tend to only include information about individual donations above a certain amount (see e.g. Bouton et al., 2022). These data come from the *Commission Nationale des Comptes de Campagne et des Financements Politiques* (CNCCFP), the French agency in charge of approving candidates' campaigns accounts, which anonymized the donation data before transmitting them to us as part of a research agreement.<sup>35</sup> Donations include donations from individual donors, membership dues, and contributions from elected representatives; we can disentangle between the three different sources and will mainly focus here on individual donations.

We have information for the following main political parties (from the left to the right), whose candidate obtained more than 5% of the votes during the first round of the 2017 presidential election: La France Insoumise (LFI), the Parti socialiste (PS), La République en marche (LREM), Les Républicains (LR), and the Rassemblement National.<sup>36</sup> Online Appendix Figure B.9 details the overall donations reported by these parties between 2016 and 2020, and Figure B.10 illustrates their geographical allocation for LREM. In the discussion section, when analyzing the mechanisms at play, we rely on the geographic heterogeneity in the distribution of the donations – combined with geographic variation in the intensity of the wealth tax reform treatment – to determine which political parties mostly benefited from the substitutability between charitable and political donations.<sup>37</sup>

### 3.4 Empirical challenges and identification strategy

Ideally, we would like to estimate the cross-elasticity of charitable and political giving, i.e. the following equation:

---

<sup>34</sup>One exception is 2013 and 2014, the first two years when households had to declare their political donations separately on their income tax form. For these two years, we observe some over-declaration in the fiscal data compared to the political party accounts. While it is hard to fully explain this discrepancy, it might be due to a learning effect: during the first two years, households might have declared other donations together with their donations to political parties (e.g. donations to campaigns) in the dedicated rows. In the robustness Section 4.5 below, we show that our results are unchanged if we drop these two years.

<sup>35</sup>No data is available before 2016 given the CNCCFP destroys the reported information on a regular basis.

<sup>36</sup>Together, these five parties alone account for more than 56% of all the political donations received by parties in 2017. See online Appendix Section A.4 for additional details on data construction.

<sup>37</sup>The focus of this paper is on donations to political parties and movements. This is due to the fact that, while citizens can also contribute to electoral campaigns, donations to elections are not reported separately in the income tax form (they are bundled with the charitable donations). However, we can compute their aggregate amount from the campaign records. Online Appendix Figure B.11 reports these numbers and shows that these donations only account for a very small share of total political giving.

$$\text{political giving}_{i,t} = \beta_0 + \beta_1 \text{charitable giving}_{i,t} + \mathbf{X}'_{i,t} \beta_2 + \eta_i + \gamma_t + u_{it} \quad (1)$$

where  $i$  indexes the households and  $t$  the years. We focus on 2013-2019, given that political donations have been reported separately on the tax form only since 2013, and 2019 is the last year for which the data is available. The dependent variable,  $\text{political giving}_{i,t}$ , is the total amount of political donations made by household  $i$  in year  $t$ , and our explanatory variable of interest,  $\text{charitable giving}_{i,t}$ , is the total amount of charitable donations made by household  $i$  in year  $t$ . We use the inverse hyperbolic sine (IHS) transformation for these two variables rather than their logarithm, given they are often equal to zero.<sup>38</sup>  $\mathbf{X}'_{i,t}$  is a vector of annual household-level controls – including the number of fiscal shares, the marital status, a categorical variable for the age, 10-splines in income, the average gross wealth and wealth tax donations for 2013-2016 (interacted with year dummies) – and  $\eta_i$  and  $\gamma_t$  are respectively household and year fixed effects. Standard errors are clustered at the household level.

Online Appendix Table C.1 reports the results of the estimation of equation (1) using OLS. We find a negative correlation between political and charitable giving: a one-percent increase in charitable donations is associated with a 0.02-percent decrease in political donations. This negative correlation is consistent with the substitution effect documented in Petrova et al. (2020). However, this relationship cannot be interpreted as causal given the endogeneity of charitable giving in political giving behaviour. Further, it may also be biased by omitted variables (e.g. the intrinsic generosity or political ideology of the donors<sup>39</sup>). To overcome these challenges, we propose a new instrumental variable approach based on a reform affecting the tax price of (charitable) giving but not political giving.

### 3.4.1 The 2017 wealth tax reform and the change in the price of giving

More precisely, we use the 2017 wealth tax reform described in Section 2.2 as an instrumental variable. This reform transformed the existing wealth tax (*ISF*) into a tax on housing assets (*IFI*). Following its introduction, two thirds of the 351,229 households who were liable to the wealth tax in 2016 were no longer liable in 2017, and so could no longer benefit from the 75% wealth tax deduction on their charitable donations. In other words, for these households, this reform was a shock on the price of charitable giving. However, it did not directly affect political donations, given political donations were not eligible for the wealth tax deduction before the reform (nor after).

To make sure to isolate the impact of the reform only through its effect on the price of charitable giving, we reduce our sample of analysis to treated and control households who face

<sup>38</sup>In Section 4.5 below, we show that all the results are robust to instead using the logarithm of the donations plus one.

<sup>39</sup>See for example Brown and Taylor (2019).

similar wealth tax gains following the reform.<sup>40</sup> A potential threat could otherwise come from the fact that households may decide to give more because of the wealth tax gains produced by the reform – i.e. because of the increased resources available as a result.<sup>41</sup> To do so, we compute the wealth tax gain each household made from the reform. The wealth tax gain is computed as the difference between the observed wealth tax due in 2016 and the wealth tax due in 2017.<sup>42</sup>

Figure 4 plots the distribution of the wealth tax gain due to the 2017 wealth tax reform both for the treated and control households. On average, households liable to the wealth tax in 2016 benefited from a €8,803 decrease in their wealth tax (€10,598 in the control group, €7,918 in the treated group). In the remainder of the analysis, we focus on the subgroup of households who enjoy a wealth tax gain of between €0 and €15,000<sup>43</sup>, i.e. 282,999 households out of the 351,229 households who were liable to the wealth tax in 2016.

Table C.2 presents descriptive statistics for these households in 2016. On average, they have an annual income<sup>44</sup> equal to €111,981, and a total taxable wealth of €2,254,074. The average amount of charitable donations declared by these households on their income tax form is €645.4, compared to €437 for their wealth tax donations. 48% of the households liable to the wealth tax in 2016 declared a charitable donation, a share much higher than when we consider the overall population. While the share of political donors – 4.6% – may seem small, it is similarly much higher than for the overall population (less than 1%).

### 3.4.2 Estimation strategy

We estimate the following two equations:

$$\ln(1 - \tau)_{i,t} = \pi_0 + \pi_1 \text{Treatment}_i * \text{Post}_t + \mathbf{X}'_{i,t} \boldsymbol{\pi}_2 + \eta_i + \gamma_t + u_{it} \quad (2)$$

<sup>40</sup>Both treated and control households may have enjoyed a positive income shock thanks to the change in the taxable base, given control households no longer pay the wealth tax on their financial assets.

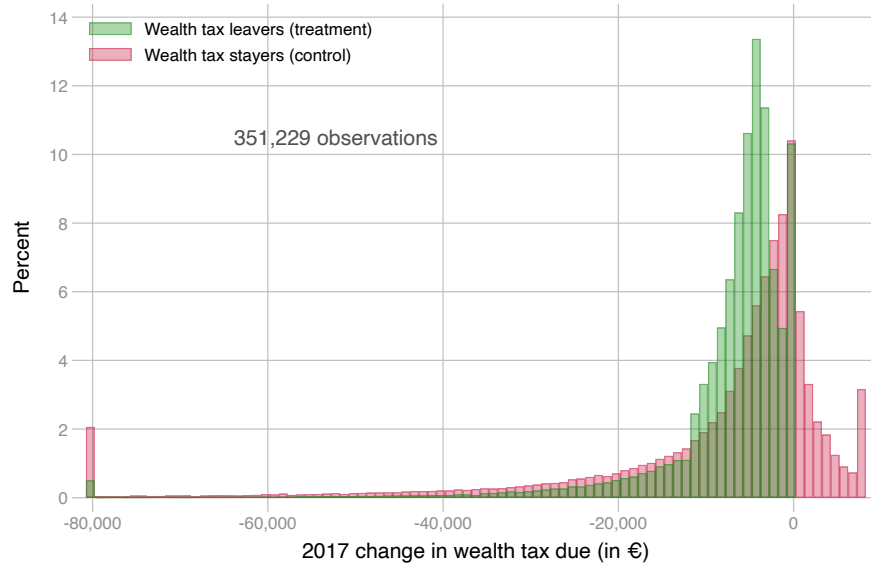
<sup>41</sup>Note, however, that such an effect would lead us to underestimate the impact of the tax reform (which acts as a negative shock on the price of giving).

<sup>42</sup>Ideally, we would like to use the asset distribution of each household in 2016 – i.e. before the reform – between financial and real-estate assets, so as to compute the tax gain we would have observed if the reform had happened one year before. One may indeed be concerned by the fact that households might have partly consumed their wealth – or increased their propensity to avoid tax – following the reform (note however that this is very unlikely, given the reform only decreased the taxable base, with no change in the tax schedule). The difficulty comes from the fact that the asset composition is only known for the subset of the households who own more than €2.5 million (i.e. around 25% of the households). Households who own between €1.3 and €2.57 millions indeed only have to report their overall wealth. Reassuringly, in the online Appendix Figure B.12, we show that for the subset of the households for which we have information on the asset distribution, these two figures are strongly correlated.

<sup>43</sup>In Section 4.5 below, we show that our results are robust to the use of different windows.

<sup>44</sup>We use a broad income concept here, summing up all the household income components from labor and capital, before taking into account any deduction of the tax base (the so-called “*revenu brut global*”). See online Appendix Section A for details on the dataset construction.

Figure 4: Distribution of the changes in the amount of the wealth tax due at the time of the wealth tax reform



**Notes:** The figure plots the distribution (winsorized at 1% for the sake of readability) of the change in the wealth tax liability at the household level at the time of the wealth tax reform (2017 vs. 2016 wealth tax) for all households liable to the wealth tax on their 2016 wealth. Households still liable to the wealth tax in 2017 are in red while the ones who are no longer liable are in green. A negative number means that the amount of tax due decreased following the reform.

$$\text{political giving}_{i,t} = \beta_0 + \beta_1 \ln(1 - \tau)_{i,t} + \mathbf{X}'_{i,t} \beta_2 + \eta_i + \gamma_t + u_{it} \quad (3)$$

where, as before,  $i$  indexes the households and  $t$  the years.  $\mathbf{X}'_{i,t}$  is a vector of household-level controls, including the number of fiscal shares, the marital status, a categorical variable for the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016.

We control for household and year fixed effects (respectively  $\eta_i$  and  $\gamma_t$ ), i.e. we rely for identification on within-household variations, and cluster the standard errors at the household level.

**First stage** In the first stage (equation (2)), the dependent variable,  $\ln(1 - \tau)_{i,t}$ , is the marginal tax price of charitable giving.<sup>45</sup> Our main explanatory variable of interest,  $\text{Treatment}_i * \text{Post}_t$ , is the interaction between  $\text{Treatment}_i$ , an indicator variable equal to one for the households liable to the wealth tax in 2016 but who no longer pay the wealth tax in 2017, and to zero for the households liable to the wealth tax in 2016 and who pay the new tax on housing assets in 2017; and  $\text{Post}_t$ , an indicator variable equal to one for the years following the reform

<sup>45</sup>In line with the existing literature, in our preferred specification, we consider this marginal tax price. In the robustness Section, we show that our findings are unchanged if we instead use the first-euro price.

(2017-2019) and to zero for the pre-reform period (2013-2016).

Hence, our treated group comprises the households who left the wealth tax returns following the reform – and who can thus no longer benefit from the 75% wealth tax deduction from 2017 onward – while our control group is composed of the households who are liable to the new wealth tax (whose tax schedule is unchanged), and who can still benefit from the 75% wealth tax deduction (Figure 1). Online Appendix Table C.3 compares the characteristics of these two groups before the reform. The control group consists of richer households, who also declare higher givings than the treated group on average. In all our specifications, we control for these observables (measured before the reform).

**Second stage** In the second stage (equation (3)), we investigate how the instrumented price of charitable giving ( $\ln(\widehat{1 - \tau})_{i,t}$ ) affects political giving (political giving $_{i,t}$ ).<sup>46</sup>

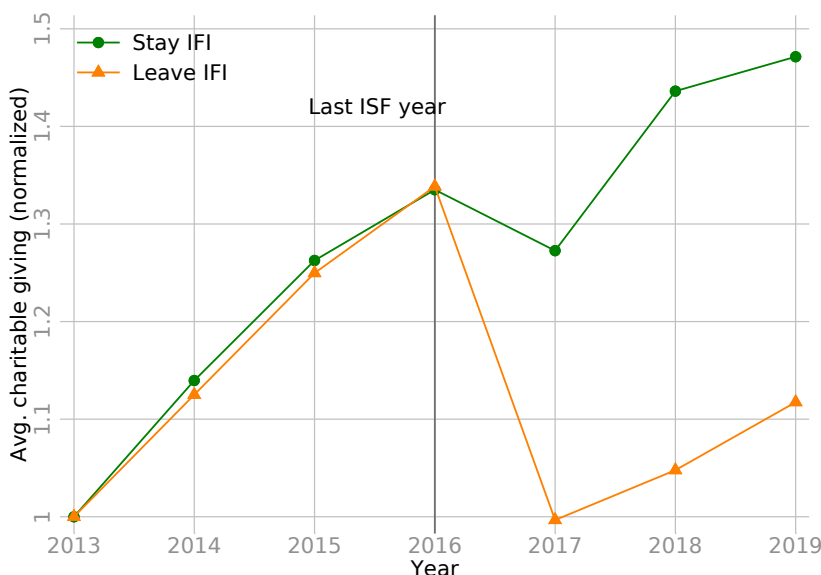
Our identification assumption is the following: for the subset of the households that face similar wealth tax gains, the 2017 wealth tax reform only affected political donations through its effect on the marginal tax price of charitable giving. This assumption sounds reasonable given political giving was not eligible for wealth tax deductions, and so not directly affected by the reform.<sup>47</sup> We show below that the two groups were following parallel trends with respect to both charitable and political giving before the reform, and perform a placebo test using trade union subscriptions that further ensure the validity of our identification assumption. Indeed, trade union subscriptions are eligible for a tax deduction that is similar to that of the political donations in terms of its price, but this deduction is *a priori* governed by completely different motives.

**Discussion** Given that we are ultimately willing to estimate the relationship between charitable and political giving (as in equation (1)), one might be surprised by the fact that in the second stage we instrument the tax price of charitable donations ( $\ln(1 - \tau)_{i,t}$ ) rather than the charitable donations themselves, as in Yörük (2015). We decided to do so for the following reason: if we were to instrument charitable donations, we would need to assume that the tax price of giving is uncorrelated with the unobservable covariates which might affect political giving. While this assumption sounds reasonable in the US context considered by Yörük

<sup>46</sup>As highlighted above, given political donations are equal to zero for a number of households, we use the inverse hyperbolic sine transformation of the dependent variable in our preferred specification, and show in the robustness Section 4.5 that our results are robust to instead using the logarithm of the dependent variable plus one.

<sup>47</sup>Note that a possible concern may come from the fact that the social acceptance may not be the same for the wealth tax and for the income tax (Fack et al., 2021). Hence, households might decide to make charitable donations to avoid paying the wealth tax, but do not do so when they are only liable to the income tax. If this were to be the case, the wealth tax reform may have led to a drop in charitable donations independently of the change in their tax price, and our IV estimates will only partly capture the overall effect of the reform. In other words, our estimates should be considered as lower-bound effects.

Figure 5: Impact of the wealth tax reform on charitable giving



**Notes:** The Figure plots the average amount of charitable donations (normalized to one in 2013) separately for the “control” households (“stay IFI” – green line with dots) who continue paying the real-estate tax following the 2017 wealth tax reform and the “treated” households (“leave IFI” – orange line with triangles) who are no longer liable to the wealth tax in 2017. Our sample of analysis include all the households subject to the wealth tax in 2016 who face wealth tax gain between €0 and €15,000 following the reform. Charitable giving includes all the charitable donations declared on both the income tax and the wealth tax returns.

(2015), it does not hold in the French context given that political donations also benefit from tax deductions.

The identification assumption needed here is much weaker given that we only need to assume that – conditional on similar wealth tax gains – the wealth tax reform only affected political donations through its effect on the marginal tax price of charitable giving. But the mechanism we have in mind is similar to the one in Yörük (2015): the change in the marginal tax price of charitable giving led to a change in the amount of charitable contributions which might have affected the amount of political donations. Figure 5 plots the evolution of the average amount of charitable donations separately for the control households who continue paying the real-estate tax following the wealth tax reform – and thus continue to benefit from the 75% wealth tax deduction – and the treated households who are no longer liable to the wealth tax in 2017 – or, therefore, to the 75% deduction. While the amount given by these two groups were following similar trends until 2016, the reform led to a striking drop in the amount given by the treated households compared to the control group.



## 4 Empirical results

In this section, we report the results of our IV estimations. We first present the first- and second-stage estimates, before discussing the heterogeneity of our effects. We then investigate whether they mostly happen at the intensive or at the extensive margin.

### 4.1 First-stage estimates

Table 2 reports the results of the first stage. Column (1) only controls for year fixed effects, in Column (2) we add the household fixed effects, and the full set of controls in Column (3). We show that the tax reform led to an increase in the marginal price of charitable giving for the treated group by around 26%, and that the magnitude of the result is robust to the use of different specifications.

This result is not surprising given that the wealth-tax reform implied a change in the price of charitable giving for the households who leave the wealth tax following the reform and who can thus no longer benefit from the 75% tax deduction. Note, however, that the magnitude of the drop in the price of giving varies depending on the households, as illustrated in the online Appendix Figure B.13.<sup>48</sup> First, a number of households eligible for the wealth tax in 2016 were not eligible in 2013-2015 and so only benefited from a 66% income-tax deduction before. Second, among the households who were eligible for the wealth tax, some were facing the ceiling on wealth-tax deductions, whose amount cannot exceed €50,000 per year. For those households, the marginal tax price of charitable giving was already equal to 34% of the amount of the gift before the reform if they were able to take advantage of the income-tax deduction, or to 100% if they were also facing the ceiling on the income-tax deduction (which cannot exceed 20% of the taxable income).

**Reduced-form estimates** Before turning to the second stage, we report the reduced-form estimations in Table 2. The dependent variable is the (inverse hyperbolic sine transformation of the) total amount of political donations made by household  $i$  in year  $t$ . As before, we include year fixed effects in Column (4), add the household fixed effects in Column (5) and finally the full set of controls in Column (6). We obtain a 3.0 to 3.4% increase in political donations for the treated group compared to the control group following the reform. This impact is statistically significant at the one-percent level and robust to the use of different specifications.

These reduced-form estimates point toward a substitution effect between charitable and political giving. However, one might be afraid of the fact that our results might be biased if the treated and control households were characterized by different giving behaviours *before* the

---

<sup>48</sup>The figure is similar to Figure 1 but only for the sub-sample of households who face a wealth-tax gain between €0 and €15,000 following the wealth-tax reform.

Table 2: First-stage and reduced-form estimations

|                                       | First stage ( $(1-\tau)$ ) |                     |                     | Reduced form (political donations) |                     |                     |
|---------------------------------------|----------------------------|---------------------|---------------------|------------------------------------|---------------------|---------------------|
|                                       | (1)                        | (2)                 | (3)                 | (4)                                | (5)                 | (6)                 |
| <i>Treated<math>\times</math>Post</i> | 0.260***<br>(0.000)        | 0.260***<br>(0.000) | 0.259***<br>(0.000) | 0.032***<br>(0.004)                | 0.030***<br>(0.004) | 0.030***<br>(0.004) |
| Year FE                               | ✓                          | ✓                   | ✓                   | ✓                                  | ✓                   | ✓                   |
| Household FE                          |                            | ✓                   | ✓                   |                                    | ✓                   | ✓                   |
| Controls                              |                            |                     | ✓                   |                                    |                     | ✓                   |
| Observations                          | 1,882,701                  | 1,882,185           | 1,882,087           | 1,882,701                          | 1,882,185           | 1,882,087           |
| Cluster(households)                   | 282,999                    | 282,483             | 282,473             | 282,999                            | 282,483             | 282,473             |
| Mean Dep Var                          | -1.268                     | -1.268              | -1.268              | 0.245                              | 0.245               | 0.245               |
| Sd Dep Var                            | 0.159                      | 0.159               | 0.159               | 1.185                              | 1.185               | 1.185               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using an OLS (standard errors clustered at the household level between parentheses). An observation is a household-year. Our sample of analysis include all the households subject to the wealth tax in 2016 who face wealth-tax gain between €0 and €15,000 following the reform. The dependent variable is the logarithm of the marginal tax price of charitable donations in Columns (1) to (3) (“First stage”) and the IHS transformation of political giving in Columns (4) to (6) (“Reduced form”). The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth-tax donations for 2013-2016. All specifications control for year fixed effects, and Columns (2), (3), (5) and (6) also include household fixed effects. More details are provided in the text.

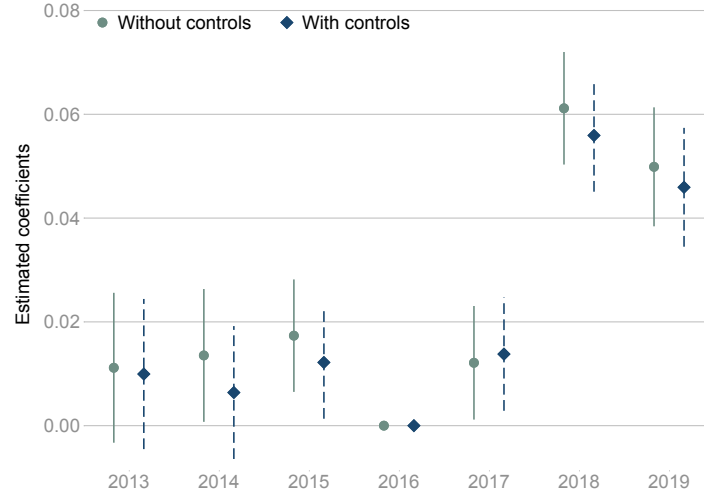
reform. Figure 5 is reassuring with respect to this concern, given that it clearly shows that the two groups were following parallel trends with respect to charitable giving between 2013 and 2016. Online Appendix Figure B.14 provides similar evidence regarding political donations. Further, in Figure 6, we plot the coefficients we obtain when estimating the reduced-form model with indicator variables for each year interacted with the treatment effect rather than the  $Post_t$  indicator variable. It appears clearly that the treatment status has no impact on the political giving behavior before the wealth-tax reform, while we observe a jump in the amount contributed by the treated households compared to the control ones after 2017.

## 4.2 Second-stage estimates

We then turn to the second-stage estimates that are reported in Table 3. In the first three columns, for the sake of comparison, we report the OLS estimates; the second-stage coefficients are presented in Columns (4) to (6). We find that a one-percent increase in the price of charitable giving leads to a 0.12% increase in political donations; these estimates are statistically significant at the one-percent level and are robust to our different specifications. In other words, political and charitable donations seem to be substitute.

In terms of magnitude, our estimates imply that a 36% increase in the tax price of charitable giving (from 25 to 34%) is associated with a 4.32% increase in political donations. To perform a simple back-of-the-envelope calculation, we estimate the effect of the rise in the

Figure 6: Reduced-form estimation: The impact of the 2017 wealth-tax reform on political donations, Controlling for parallel trends



**Notes:** The Figure shows the coefficients from the following estimation:  $\text{political giving}_{i,t} = \alpha_0 + \sum_{t=2013}^{2019} \alpha_t (\lambda_t * \text{Treatment}_i) + \mathbf{X}'_{i,t} \beta_2 + \eta_i + \gamma_t + u_{it}$ . 2016 is the baseline year. Standard errors are clustered at the household level. Statistical significance is measured at the five-percent level. Our sample of analysis include all the households subject to the wealth tax in 2016 who face wealth tax gain between €0 and €15,000 following the reform. More details are provided in the text.

Table 3: Second-stage estimation: The impact of the instrumented price of charitable donations on political donations

|                     | OLS              |                    |                   | 2SLS                |                     |                     |
|---------------------|------------------|--------------------|-------------------|---------------------|---------------------|---------------------|
|                     | (1)              | (2)                | (3)               | (4)                 | (5)                 | (6)                 |
| $\ln(1 - \tau)$     | 0.003<br>(0.008) | 0.018**<br>(0.008) | 0.015*<br>(0.008) | 0.114***<br>(0.015) | 0.118***<br>(0.015) | 0.118***<br>(0.015) |
| Year FE             | ✓                | ✓                  | ✓                 | ✓                   | ✓                   | ✓                   |
| Household FE        | ✓                | ✓                  | ✓                 | ✓                   | ✓                   | ✓                   |
| Controls            |                  | ✓                  | ✓                 |                     | ✓                   | ✓                   |
| Wealth-tax gain     |                  |                    | ✓                 |                     |                     | ✓                   |
| Observations        | 1,882,185        | 1,882,087          | 1,882,087         | 1,882,185           | 1,882,087           | 1,882,087           |
| Cluster(households) | 282,483          | 282,473            | 282,473           | 282,483             | 282,473             | 282,473             |
| Mean Dep Var        | 0.245            | 0.245              | 0.245             | 0.245               | 0.245               | 0.245               |
| Sd Dep Var          | 1.185            | 1.185              | 1.185             | 1.185               | 1.185               | 1.185               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (3) and 2SLS in Columns (4) to (6) (standard errors clustered at the household level between parentheses). In Columns (4) to (6), the price of charitable giving is instrumented by the interaction between  $\text{Treatment}_i$  and  $\text{Post}_t$  (see equation (2)). Our sample of analysis include all the households subject to the wealth tax in 2016 who face a wealth tax gain between €0 and €15,000 following the reform. An observation is a household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

price of charitable giving on charitable donations: we find that a one-percent increase in the price of charitable giving leads to a 0.90% decrease in charitable donations (online Appendix Table C.5). Therefore the 36% increase in the tax price of charitable giving leads to a 32.4% decrease in charitable donations. Hence, at average charitable giving (€1,087.1) and political donations (€22) (online Appendix Table C.2), a €352.2 decrease in charitable giving is associated with a €1 increase in political donations. Between 2016 and 2017, wealth tax charitable donations decreased by €267.0 millions; according to our estimates, this can be associated with a €758,117 increase in political donations, which corresponds to 11.6% of the total political donations made by wealth tax donors in 2017. This can also be related to the €593,396 in total donations received by the Socialist party this year. Hence, our estimated effects are both statistically but also economically significant.

In terms of magnitude, the IV estimates are higher than the OLS ones. Where does this difference come from? While the OLS estimates capture the correlation between the price of charitable giving and political donations – in a context where, for a large share of the households, the price of charitable and of political giving is similar (34% of the amount of the gift) and does not vary over time – the IV estimates capture the local impact of a large change only in the price of charitable giving (its increase from 25 to 34% following the wealth tax reform).

To put it another way, the OLS estimates provide us with the Average Treatment Effect (ATE) of the price of charitable giving on political giving on the whole population, including two thirds of the households for which this price did not change during our period of interest (and for whom there is thus no variation that we can exploit). On the contrary, the IV estimates measure the Local Average Treatment Effect (LATE) of the price of charitable giving, i.e. its effect on the sub-sample of compliers – in our empirical framework, this is nearly all the households who are no longer liable to the wealth tax following the tax reform and who were not facing the ceiling on tax deductions before (see online Appendix Figure B.13). Hence, it is not surprising that the IV estimates are larger than the OLS ones.

### 4.3 Heterogeneity of the effects

Until now, we have shown that there is substitutability between charitable and political donations, with a 0.12% increase in political donations following a one-percent increase in the price of charitable giving. In this section, we consider a number of dimensions of heterogeneity that we present in turn. For each dimension, we report the point estimates corresponding to our most demanding 2SLS specification (with year and household fixed effects and the full set of controls, as in Column (6) of Table 3).

Figure 7 reports the results. First, we investigate whether the magnitude of the effects varies depending on the wealth of the households (sub-Figure 7a). To do so, we split our sample

of households into five quintiles depending on their 2016 wealth (before the reform). We find that the magnitude of the effect is higher for the households in the upper wealth quintile compared to the households in the first four quintiles for which it is relatively similar (further, the effect is not statistically significant at the 5% level for the households in the first and third wealth quintiles). However, the difference is not statistically significant. Consistently with this finding, we show in Figure 7b that the magnitude of the effect is larger for the households who benefited from a wealth tax deductions in 2016 than for those who did not, but that the difference is not statistically significant at the five-percent level.

In Figure 7c, we perform the estimation separately depending on the 2016 income. Just as for wealth, we separate the households into five income quintiles. We find that the magnitude of the effect is statistically significantly higher for the households in the fifth income quintile compared to the households in the first four quintiles. This is not surprising given that, on average, households whose income is higher tend to contribute more. (Online Appendix Figure B.15 plots the share of donors and the average amount of the charitable donations depending on the position of the household in the income distribution. While there are less than 10% of donors in the first six deciles, this share is equal to nearly 60% for the top 0.001% of the income distribution. Similarly, the average value of the donations made is much higher at the top than at the bottom of the income distribution.)

Last, we use the pre-2010 information on wealth composition to estimate the elasticity depending on the share of housing wealth in total wealth in Figure 7d.<sup>49</sup> Decomposing our sample into quartile of housing wealth, we find that the elasticity decreases with the share of housing wealth. While the difference between the first three quartiles is not statistically significant, the fourth quartile stands out and the elasticity becomes marginally insignificantly different from zero in the sample. This last point suggests that the elasticity is driven by households owning some financial assets (and so who were more affected by the reform).

#### 4.4 Disentangling between the extensive and the intensive margin

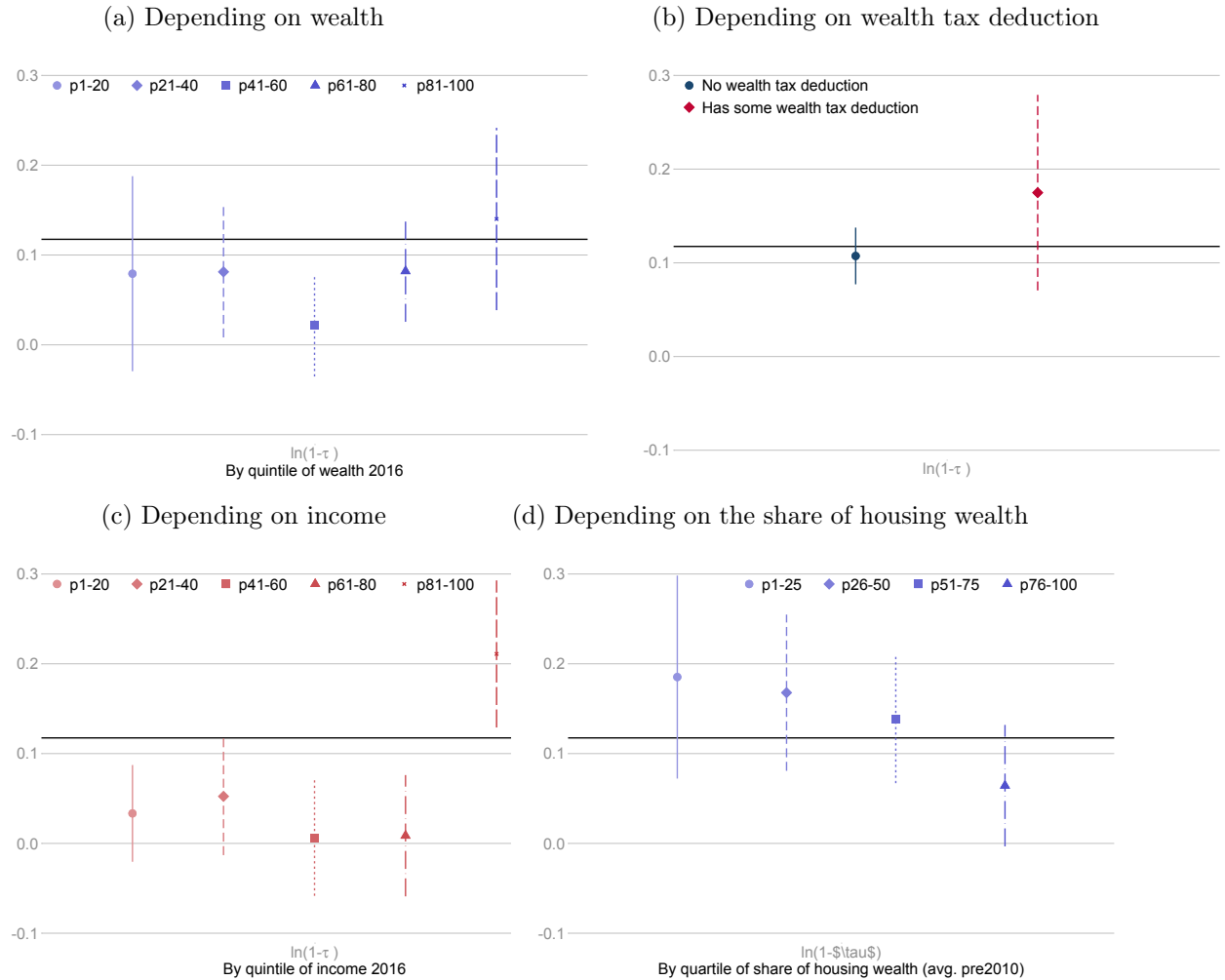
Heretofore, we have considered the overall relationship between political giving and the marginal price of charitable donations, and documented a positive cross relationship. Our effect may happen at the extensive margin – through an increase in the number of households who make a political donation – and/or at the intensive margin – through an increase in the average value of the political donations. We consider these two margins separately in this section.

**The probability of giving** First, we investigate whether a change in the marginal price of charitable donations affects the probability of making a political donation. To do so, we esti-

---

<sup>49</sup>Before 2010, all the households liable to the wealth tax indeed had to provide on their wealth-tax form their detailed wealth composition. Since the 2011 wealth tax reform (and until 2018), only the households whose wealth is above €2,507,000 have to do so.

Figure 7: Second-stage estimation: The impact of the instrumented price of charitable donations on political donations, Heterogeneity of the effects



**Notes:** The Figure reports the coefficient and 95% confidence interval we obtain when estimating equation (3) with year and household fixed effects as well as the full set of controls (specification similar to the one reported in Column (6) of Table 3). Panel (a) shows the estimation of this coefficient separately for the households in our sample depending on their quintile of wealth in 2016. In Panel (b), we perform the estimation separately depending on whether the households benefited from a wealth tax deduction for charitable givings in 2016. In Panel (c), we estimate the effect separately for the households in our sample depending on their quintile of income in 2016. Finally, in Panel (d), we estimate the effect separately for the households in our sample depending on their quintile of housing wealth computed using the pre-2010 information.

mate a linear probability model using a similar approach to the one presented in equation (3), but where the dependent variable  $\text{political giving}_{i,t}$  is now a binary variable equal to one if households  $i$  made a political donation in year  $t$  and to zero otherwise.

First, we report the results of the reduced-form estimation. Online Appendix Table C.6 shows the results: compared to the households who are still liable to the wealth tax in 2017, the households who left the wealth tax and are no longer eligible for the 75% tax credit have a probability of making a political donation that is 0.5 percentage points higher following the reform.

Table 4a reports the results of the second-stage estimates. As before, in the first three columns, we report the OLS estimates for the sake of comparison; the second-stage coefficients are presented in Columns (4) to (6). We find that a one-percent increase in the price of charitable giving leads to a 0.017 to 0.018% increase in the probability of making a political donation (Columns (4) to (6)); these estimates are statistically significant at the one-percent level. Hence, there is substitutability happening at the extensive margin of the giving behavior.

**The intensive margin** Next, we focus on the subset of donors, i.e. only consider the households who make at least one political donation between 2013 and 2016 (i.e. before the reform), and investigate how this amount varies with the (instrumented) price of charitable giving.<sup>50</sup> Doing so obviously reduces the size of our sample that now includes 40,721 households.

Table 4b provides the results. We find that, for the subset of political donors, a one-percent increase in the price of charitable giving increases the amount of their political donations by 0.22%. This effect is both economically and statistically significant at the one-percent level. Overall, both margins are thus at play in the substitutability between charitable and political donations.

## 4.5 Robustness checks

We perform several robustness checks. This section briefly describes them; the detailed results for these tests are available in the online Appendix Section D.

**Placebo** In the spirit of a placebo test, we examine how our empirical strategy performs on trade union subscriptions. In France, trade union subscriptions are eligible for a refundable tax credit equal to 66% of the amount of the subscription, and are thus also reported on the tax form. However, contrarily to political donations, we do not expect them to be affected by a change in charitable giving. The literature on the determinants of trade union member-

<sup>50</sup>We decided to rely here on the sample of households who make at least one political donation in the pre-reform period rather than redefining in each year the set of households who make a political donation, as with the latter method it would not have been possible to fully exploit the panel dimension of our data (with households entering and exiting the sample from one year to the next).

Table 4: Second-stage estimation: Disentangling between the extensive and the intensive margins

| (a) Extensive margin |                  |                    |                  |                     |                     |                     |
|----------------------|------------------|--------------------|------------------|---------------------|---------------------|---------------------|
|                      | OLS              |                    |                  | 2SLS                |                     |                     |
|                      | (1)              | (2)                | (3)              | (4)                 | (5)                 | (6)                 |
| $\ln(1 - \tau)$      | 0.001<br>(0.001) | 0.003**<br>(0.001) | 0.002<br>(0.001) | 0.017***<br>(0.003) | 0.018***<br>(0.003) | 0.018***<br>(0.003) |
| Year FE              | ✓                | ✓                  | ✓                | ✓                   | ✓                   | ✓                   |
| Households FE        | ✓                | ✓                  | ✓                | ✓                   | ✓                   | ✓                   |
| Controls             |                  | ✓                  | ✓                |                     | ✓                   | ✓                   |
| Wealth-tax gain      |                  |                    | ✓                |                     |                     | ✓                   |
| Observations         | 1,882,185        | 1,882,087          | 1,882,087        | 1,882,185           | 1,882,087           | 1,882,087           |
| Cluster(households)  | 282,483          | 282,473            | 282,473          | 282,483             | 282,473             | 282,473             |
| Mean Dep Var         | 0.043            | 0.043              | 0.043            | 0.043               | 0.043               | 0.043               |
| Sd Dep Var           | 0.203            | 0.203              | 0.203            | 0.203               | 0.203               | 0.203               |

| (b) Intensive margin |                   |                  |                  |                     |                     |                     |
|----------------------|-------------------|------------------|------------------|---------------------|---------------------|---------------------|
|                      | OLS               |                  |                  | 2SLS                |                     |                     |
|                      | (1)               | (2)              | (3)              | (4)                 | (5)                 | (6)                 |
| $\ln(1 - \tau)$      | -0.029<br>(0.046) | 0.037<br>(0.047) | 0.037<br>(0.047) | 0.194***<br>(0.072) | 0.214***<br>(0.074) | 0.223***<br>(0.075) |
| Year FE              | ✓                 | ✓                | ✓                | ✓                   | ✓                   | ✓                   |
| Households FE        | ✓                 | ✓                | ✓                | ✓                   | ✓                   | ✓                   |
| Controls             |                   | ✓                | ✓                |                     | ✓                   | ✓                   |
| Wealt-tax gain       |                   |                  | ✓                |                     |                     | ✓                   |
| Observations         | 275,516           | 275,516          | 275,516          | 275,516             | 275,516             | 275,516             |
| Cluster(households)  | 40,657            | 40,657           | 40,657           | 40,657              | 40,657              | 40,657              |
| Mean Dep Var         | 2.066             | 2.066            | 2.066            | 2.066               | 2.066               | 2.066               |
| Sd Dep Var           | 2.903             | 2.903            | 2.903            | 2.903               | 2.903               | 2.903               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (3) and 2SLS in Columns (4) to (6) (standard errors clustered at the household level between parentheses). In the upper Table 4a, the dependent variable is an indicator variable equal to one if the household declares a non-zero political donation, and to zero otherwise. An observation is a household-year, and all the households subject to the wealth tax in 2016 who face a wealth tax gain between €0 and €15,000 following the reform are included. In the bottom Table 4b, an observation is also a household year, but among the previously defined households, only those that make at least one political donation between 2013 and 2016 are included. The dependent variable is the (IHS transformation of the) amount of their political donations. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and household fixed effects.



ship indeed highlights the role played by reputation concerns and the existence of excludable benefits, as well as individual-level factors such as age, education or the type of job contract (see e.g. [Guillot et al., 2019](#); [Blanchflower and Bryson, 2020](#); [Murphy, 2020](#)), but does not relate trade union subscriptions to mechanisms that drive charitable giving, such as altruism or awareness of need. Online Appendix Table [C.4](#) provides the results. As we had expected, we find no impact of the wealth tax reform on the amount of these subscriptions.

**First-euro price** Until now, we have considered the marginal tax price of donations. Table [D.4](#) shows that our results are robust to rather using the first-euro price.<sup>51</sup> The estimated coefficients are both qualitatively and quantitatively similar.<sup>52</sup>

**Donations reported over several years of tax returns** The possibility for households to report charitable donations over several years in case they exceed the maximum amount of donation deductible (20% of taxable income) justifies another variation in the price of charitable giving. So far, we excluded these donations from our analysis, as the timing of the fiscal incentive differs from that of the effective marginal price. Including these reported donations in the computation of the marginal tax price of charitable donations does not modify our conclusion, as shown in Appendix Table [D.5](#).

**Logarithm** Given political donations are equal to zero for a number of households, we use the inverse hyperbolic sine transformation of the dependent variable in our preferred specification. In the online Appendix Table [D.6](#), we show that our results are robust to instead using the logarithm of the donations plus 1.

**Sample** Next, we show that our results are robust to a number of sample changes. First, we show that they do not vary if we consider a balanced panel, i.e. only include the households that we observe for each year during our entire time period (online Appendix Table [D.7](#)). Second, we show that our results are robust to dropping 2017; 2017 was indeed an electoral year in France (with both the presidential and the legislative elections), and so might be specific in terms of political donations (online Appendix Table [D.8](#)). Further, there might be a concern that 2017 was also the year in which the wealth tax reform was announced (in December 2017). Third, we show that our findings do not vary if we drop the year 2016 and instead use 2015 as a reference point (online Appendix Table [D.9](#)). Candidates fundraise

---

<sup>51</sup>[Bakija and Heim \(2011\)](#) use the first-dollar price as an instrument for the actual price of a donation; see also [Fack and Landaïs \(2010\)](#).

<sup>52</sup>Note however that we cannot implement our baseline strategy in this case since the first-euro price is defined theoretically, which makes it collinear with the instrument. We thus restrict our estimation to the OLS strategy.

a number of months in advance of the election, and we observe a large increase in political donations in 2016 for top-income earners (Cagé, 2018).

Moreover, as discussed in Section 2, in 2013 and 2014, more donations to political parties are declared in the income tax forms than reported in the political party accounts. Online Appendix Table D.10 shows that our results are robust to dropping these two years.

Last, we show that the results are robust to dropping the top 5% wealth owners (online Appendix Table D.11). Indeed, there might be a concern that the households owning very high wealth demonstrate extreme giving behavior.

**Tax credit for Coluche giving** In 1989, a specific rate was created for donations to charities that help people in need – the so-called “Coluche giving”.<sup>53</sup> These donations – which have to be below a certain threshold (€546 in 2019) – benefit from a nonrefundable income tax credit of 75% percent.<sup>54</sup>

Until now, we have not included the “Coluche giving” in our measures of charitable donations given the specifics of these donations (in terms of ceiling and of deduction rate). In the online Appendix Table D.12, we perform the same estimations as before but on the “Coluche giving” rather than on the non-Coluche charitable giving (which we have considered so far).<sup>55</sup> One may expect Coluche giving to increase following the wealth tax reform, given that Coluche giving allows the treated households to continue making a charitable donation at a price of 25%. It is indeed what we find with a price elasticity that is three to four times larger than for political donations (Columns (4) to (6)). Note however that this result should be taken with a grain of salt given that Coluche giving is also eligible for the wealth tax deduction (contrary to political party donations).

**Using a different threshold to define similar wealth tax gains** In addition, we show that our results are robust to using a different threshold to identify the sample of households who face a similar wealth tax gain following the wealth tax reform. Until now, based on the wealth tax gain distribution plotted in Figure 4, we have taken into account all the households whose gain is between €0 and €15,000. Online Appendix Tables D.13 and D.14 show that the results are unchanged if we instead use a smaller window (between €0 and €10,000) or a larger one (between €0 and €20,000) to define these gains.

---

<sup>53</sup>Coluche is a French stage comedian and cinema actor who launched the charity “*Les Restaurants du Coeur*” in 1985. This nonprofit organization provides free meals and other products to people in need.

<sup>54</sup>This rate was equal to 50% at the time of its creation; it then increased from 50 to 60% in 2003 and from 60 to 75% in 2005.

<sup>55</sup>Note that Coluche donations only represent a very low share of the overall charitable donations. They represent around €400 million on average each year, compared to nearly €2.2 billions for non-Coluche charitable donations in 2019 (see online Appendix Figure B.16).

**Matching** Finally, we show that our results are robust to the use of a matching strategy. We match households who leave the wealth tax in 2017 to “similar” households who pay the new tax on housing assets in 2017, based on a number of observable variables measured in 2016 (i.e. before the reform): the (logarithm of the winsorized) income and wealth (current, one lag, two lags), the winsorized amount of charitable donations declared on the wealth-tax forms, the winsorized amount of political donations, the wealth tax gain, the number of fiscal shares, the marital status, a categorical variable for age, the percentile of income and wealth tax gain. More precisely, we rely on propensity score matching to adjust for the pre-treatment observable differences between the group of households who leave the wealth tax and the group of those who are still liable.<sup>56</sup> The result is a group of 179,616 treated households with features that closely mirror those of the control households.

First, we provide evidence of the fact that the observables have a better balanced between the two groups than in our baseline analysis. Online Appendix Table D.1 shows the characteristics of the reweighed groups by treatment status. Then, Figure D.1 reports the propensity score histogram by treatment status, showing that the common support condition is satisfied. Overall, the comparison of treated and matched households shows no significant differences between the two groups in any of the household covariates. We can thus be confident as to the validity of our matching approach. Next, in online Appendix Table D.2, we estimate the price elasticity of political donations using the matching weights, and obtain qualitatively similar results to that of the baseline two-stage least-squares approach (Table 3). Finally, we can use the matching sample to propose an estimation of the cross-elasticity of political to charitable giving (equation (1)). Online Appendix Table D.3 provides the results, which are very similar to those presented in Table C.1 on the main sample, with a negative elasticity of  $-2.3\%$ .

Overall, our results point towards substitutability between charitable and political donations. This substitutability happens both at the extensive and at the intensive margins, is statistically and economically significant, and is robust to a number of different specifications.

## 5 Discussion: Politically motivated donations to charities

In this article, we have shown evidence of substitutability between charitable and political donations: when there is an increase in the tax price of charitable giving – i.e. a decrease in the tax incentives for households to make charitable donations – we observe an increase in political donations. One possible interpretation for this substitutability between charitable and political giving is the fact that charitable donations may be at least partially driven by political motivations (see e.g. Bertrand et al., 2020a, for evidence on US corporate charitable

---

<sup>56</sup>We rely on a nearest neighbour matching estimator (with five neighbours), and estimate the propensity score using a logit model. To do so, we rely on the Stata command *psmatch2*. See Leuven and Sianesi (2003).

giving).

In this section, we investigate this proposed explanation following two directions. First, we study the donations received by the five main political parties at the local level, to explore whether there is heterogeneity depending on the parties. Then, we analyze the evolution of the donations received by nonprofit organizations. By doing so, we aim to identify whether the change in the giving incentive impacted differently the nonprofit organizations depending on whether they are politically involved and on their political affiliation.

## 5.1 Who benefited from the rise in political donations? Evidence from commune-level variations

Who benefited from the increase in political donations? To answer this question, we use information on commune-level donations received by each political party (described in Section 3.3), merged with treatment intensity by commune. The intensity of the treatment is defined at the commune level as follows:

$$\left( \frac{\# \text{ hh leaving wealth tax returns}}{\# \text{ hh leaving wealth tax returns} + \# \text{ hh liable to new wealth tax}} \right) * 100$$

In other words, it is equal to the share of the households eligible for the wealth tax in 2016 but not in 2017 ( $\# \text{ hh leaving wealth tax returns}$ ) normalized by the total number of households eligible for the wealth tax in 2016 ( $\# \text{ hh leaving wealth tax returns} + \# \text{ hh liable to new wealth tax}$ ).<sup>57</sup> Because of statistical secrecy, the information on treatment intensity is “only” available for 22,076 communes. These unique data were produced by the General Directorate of Public Finance (DGFIP), which provided us with a communal-level aggregation of some of our most important variables (the household’s commune is indeed highly sensitivity information that researchers cannot directly access with the household panel data). Online Appendix Figure B.17 plots the treatment intensity at the commune level.

We then estimate the following model:

$$\text{political donations}_{p,c,t} = \alpha + \beta_1 \text{Treatment intensity}_c * \text{Post}_t + \mathbf{X}'_{c,t} \boldsymbol{\beta}_2 + \eta_c + \gamma_t + \mu_{pc} \quad (4)$$

where  $c$  index the communes,  $t$  the years (from 2016 to 2019), and  $p$  the political parties.  $\text{Treatment intensity}_c$  is a binary variable equal to one if the intensity of the treatment is equal to 100, and to zero otherwise. We use 100 as a threshold to define the treatment given that it corresponds to the median value of the treatment intensity variable (see online Appendix

<sup>57</sup>Note that this intensity does not include the households that were not liable to the wealth tax in 2016 but became liable in 2017 or later.

Figure B.18 for its distribution).<sup>58</sup>

We focus on the five main political parties that presented a candidate during the 2017 French presidential elections (LFI, PS, LREM, LR and RN), and estimate equation (4) for each political party  $p$ . The dependent variable  $\text{political\_donations}_{p,c,t}$  is the (IHS transformation of the) total amount of donations received by party  $p$  in commune  $c$  and year  $t$ . Political donations are normalized by the number of fiscal households in the commune.  $\mathbf{X}'_{c,t}$  is a vector of time-varying commune-level controls, including the (log of) the number of income tax households, the reference tax income, the total net tax, the number of retirees, and the total pensions. We also control for commune and year fixed effects, and standard errors are clustered at the commune level.<sup>59</sup>

Table 5 presents the results separately for each of the political parties, ranked from the left (LFI, Columns (3) and (4)) to the right (RN, Columns (11) and (12)). For the sake of comparison, we first report in Columns (1) and (2) the estimated coefficients we obtain when we use as our left-hand side variable the total amount of donations received by these five parties pulled together. We show that, following the wealth tax reform, there is a 1.3 to 1.5% increase in the overall political donations (normalized by the number of tax households) made in the “treated” communes compared to the “control” communes. Overall in 2016, these 5 parties received €12,355,671 in political donations in the 21,182 communes for which we have information on treatment intensity; hence this change corresponds to a €160,624 increase in donations. This is an economically meaningful effect given that it corresponds to 3.1% of the donations received by these 5 parties in 2017, or is equivalent to 13.1% of the donations received in 2017 by LREM alone.

Importantly, if we compare the magnitude of these results to the one we obtain when doing the reduced-form estimation using the tax data in Section 4.1, we see that they are roughly consistent (the coefficients reported in Table 2 correspond to an increase of around 3% in political donations), despite the fact that we are not using the same specification here. Furthermore, they are robust to using an alternative definition of the Treatment intensity <sub>$c$</sub>  indicator variable, where we put as missing the communes whose treatment intensity is between 66.6% and 100% (to make sure that the treated communes are really different from the control ones; online Appendix Table C.8), and to dropping the (electoral) year 2017 (Table C.9).

Interestingly, if we investigate whether this increase in donations benefited all the political

---

<sup>58</sup>We show below that our results are robust to the use of different thresholds. Of course, “treated” and “control” communes are not similar from a number of points of view, as reflected in the online Appendix Table C.7. In particular, “treated” communes tend to be smaller on average, and the reference tax income of their households is also much smaller than that of the “control” communes. For this reason, all the results presented in this section should be taken with a grain of salt and considered more as suggestive evidence of the political dimension of donations than as a causal estimation; indeed we cannot identify causal effects at the commune level as properly as we do with individual-level information in Section 4.

<sup>59</sup>Unfortunately, as highlighted in Section 3.3, we only have these commune-level donations by party data since 2016; hence, we cannot perform here a pre-trend analysis as in the rest of the article.

parties in a similar way, we see that this is far from being the case. From Table 5, we document that the tax reform mostly benefited the right-wing / pro-business Les Républicains (LR) party whose donations in treated communes increase by 2.3 to 2.5% following the reform compared to the control ones (Columns (9) and (10)). Note that this increase in LR donations can hardly be explained by an increase in the popularity or political support for this party since 2017, given that, on the contrary, the electoral results of the party collapse by more than 15 percentage points between the first round of the 2017 presidential elections (François Fillon, 20.01%) and the first round of the 2022 presidential ones (Valérie Pécresse, 4.78%). If anything, the treated communes vote even less for LR than the control ones since the wealth tax reform, as illustrated in online Appendix Table C.10 where we perform an analysis similar to the one in Table 5, but where our outcome of interest is the vote share obtained by the different political parties. On the contrary, our findings regarding the increase in the political donations received by LR is consistent with the observed drop in the charitable donations received by politically-involved nonprofit organizations (see Section 5.2 below for evidence), such as the right-wing iFRAP foundation.

Besides, we observe a small decrease in the donations received by the left-wing parties (Columns (3) to (6)), particularly strong for the Socialist party (PS). Donations to the presidential party LREM (as well as to the RN but from a smaller baseline) do not seem to be affected. This no-result for LREM is reassuring with respect to the fact that our findings do not seem to be driven by a “return of favor”. Indeed, we do not observe a larger increase in donations to the presidential party in places that benefited the most from the wealth tax reform implemented by Emmanuel Macron. These findings are robust to introducing time-varying commune-level controls.

Overall, these results suggest that the rise in political donations driven by the increase in the price of charitable giving mostly benefited the right-wing parties. If anything, we observe a drop in the donations received by the parties on the left of the political spectrum. This increase reflects a substitution between charitable and political giving; it is thus of interest to also consider the other side of the coin and determine the characteristics of the nonprofit organizations that suffer the most from the drop in giving.

## 5.2 Who suffer from the drop in charitable donations? Evidence from nonprofit organizations

In France, as highlighted in the background section 2.1.2, only the nonprofit organizations recognized as “being of public utility” (the so-called FRUPs) and the nonprofit research, higher education or artistic institutions of general interest can benefit from the wealth tax deductions (while all the nonprofit associations can benefit from the income tax deductions). This category includes politically-involved think-tanks such as the *Fondation Jean Jaurès* on the left and the

Table 5: Commune-level estimation: The impact of the 2017 wealth tax reform on political donations, depending on the political parties

|                        | Overall             |                     |                   | LFI                |                      | PS                   |                  | LREM             |                     | LR                  |                  | RN               |  |
|------------------------|---------------------|---------------------|-------------------|--------------------|----------------------|----------------------|------------------|------------------|---------------------|---------------------|------------------|------------------|--|
|                        | (1)                 | (2)                 | (3)               | (4)                | (5)                  | (6)                  | (7)              | (8)              | (9)                 | (10)                | (11)             | (12)             |  |
| Treated x Post         | 0.015***<br>(0.004) | 0.013***<br>(0.004) | -0.001<br>(0.001) | -0.002*<br>(0.001) | -0.011***<br>(0.002) | -0.012***<br>(0.002) | 0.002<br>(0.002) | 0.001<br>(0.002) | 0.025***<br>(0.003) | 0.023***<br>(0.003) | 0.002<br>(0.001) | 0.001<br>(0.001) |  |
| Year FEs               | ✓                   | ✓                   | ✓                 | ✓                  | ✓                    | ✓                    | ✓                | ✓                | ✓                   | ✓                   | ✓                | ✓                |  |
| Commune FEs            | ✓                   | ✓                   | ✓                 | ✓                  | ✓                    | ✓                    | ✓                | ✓                | ✓                   | ✓                   | ✓                | ✓                |  |
| Commune-level controls |                     | ✓                   |                   | ✓                  |                      | ✓                    |                  | ✓                |                     | ✓                   |                  | ✓                |  |
| Observations           | 105,633             | 105,190             | 105,633           | 105,190            | 105,633              | 105,190              | 105,633          | 105,190          | 105,633             | 105,190             | 105,633          | 105,190          |  |
| Clusters (communes)    | 21,182              | 21,133              | 21,182            | 21,133             | 21,182               | 21,133               | 21,182           | 21,133           | 21,182              | 21,133              | 21,182           | 21,133           |  |
| Mean DepVar            | 0.140               | 0.140               | 0.013             | 0.013              | 0.010                | 0.010                | 0.030            | 0.031            | 0.076               | 0.076               | 0.014            | 0.014            |  |
| Sd DepVar              | 0.303               | 0.303               | 0.080             | 0.080              | 0.087                | 0.087                | 0.139            | 0.139            | 0.226               | 0.225               | 0.092            | 0.092            |  |

**Notes:** \* p<0.10, \*\* p<0.05, \*\*\* p<0.01. The time period is 2016-2020. Models are estimated using an OLS (standard errors clustered at the commune level between parentheses). An observation is a commune-year. The dependent variable is the inverse hyperbolic sine transformation of the total amount of political donations normalized by the number of fiscal households. The vector of commune-level controls includes the (log of) the number of income tax households, the reference tax income, the total net tax, the number of retirees, and the total pensions. All specifications control for year and commune fixed effects. More details are provided in the text.

*Fondation pour la recherche sur les administrations et les politiques publiques* (iFRAP) on the right, i.e. nonprofit organizations whose purpose is clearly at least partly political, but also organizations whose purpose is not – at least directly – political (e.g. “ATD Quart Monde” which works towards the eradication of chronic poverty).

**Data and methodology** To estimate the relative importance of politically motivated donations, we have collected the list of all the FRUPs in France during our period of interest. For each of these FRUPs, we have their name as well as their declared purpose<sup>60</sup>, e.g. for the iFRAP: “*the purpose of the iFRAP Foundation is to carry out scientific studies and research on the effectiveness of public policies, particularly those aimed at achieving full employment and economic development, to make the results of these studies known to public opinion, to propose measures for improvement and to carry out all actions with a view to the implementation of the proposed measures by the Government and Parliament*”<sup>61</sup>. We complement this description with the longer purpose provided by the organizations on their website (when available).

Next, for all the FRUPs for which this information is available<sup>62</sup>, we rely on their financial accounts to study the evolution of the donations they receive between 2013 and 2020 (we also collect information on their operating expenses and revenues). Online Appendix Figure B.19 plots the evolution of the overall donations received by these FRUPs. In the financial accounts, the information on the “donations” received include donations by both legal and moral persons (unfortunately, the existing data do not allow us to isolate donations by individuals). Bequests are reported separately and, given that they do not respond to the same incentives (and they are furthermore one-time shocks), we decided not to include them as part of the donations figures.

We then categorize these foundations according to their stated purpose. To do so, we manually assign the foundations to the following 11 categories built from Reich (2018): (i) Education, (ii) Religion, (iii) Health, (iv) Politics, (v) Environment, (vi) Animals, (vii) Arts and culture, (viii) Solidarity, (ix) Research, (x) Humanitarian, and (xi) Other. Online Appendix Figure B.20 reports the share of the FRUPs in each category: around one third of the foundations are in the “solidarity” category (e.g. *la Fondation Abbé Pierre*), 16.8% are related

<sup>60</sup>By law, all FRUPs, at the time of their creation (and with the aim of obtaining their specific tax status) have to send to the Ministry of the Interior a statement of the organization’s origin, public purpose and means of action. This statement is then public information.

<sup>61</sup>“*La Fondation iFRAP a pour but d’effectuer des études et des recherches scientifiques sur l’efficacité des politiques publiques, notamment celles visant la recherche du plein emploi et le développement économique, de faire connaître le fruit de ces études à l’opinion publique, de proposer des mesures d’amélioration et de mener toutes les actions en vue de la mise en œuvre par le Gouvernement et le Parlement des mesures proposées.*”

<sup>62</sup>By law, the completed financial accounts and audit reports of the FRUPs must be published in the *Journal Officiel des Associations et Fondations d’Entreprises* (JOAFE) if the total of the donations or subsidies received that year exceeds €153,000. For the FRUPs that do not file their financial accounts on the “Journal Officiel” website, we draw when accessible on alternative data sources, including the website pappers.fr and the FRUPs’ own websites; we also directly contacted the organizations but only received a few answers.



to “arts and culture” (e.g. la *Fondation des Ecoles d’art américaines de Fontainebleau*), and foundations classified in the “politics” category represent 6.1% of the FRUPs (e.g. la *Fondation de l’écologie politique*). For some FRUPs, we also determine a sub-category: 4 foundations are classified in the “politics” sub-category.<sup>63</sup>

This classification allow us study the overall amount of charitable donations received by the FRUPs between 2013 and 2020 depending on their purpose. (For the sake of simplicity, we use alternatively the terminology “politically involved FRUPs” or “political FRUPs” to designate the FRUPs that are classified in the “politics” category.)

**Empirical approach** We investigate whether – at the aggregate level – the politically involved FRUPs received more donations following the wealth tax reform compared to the non-politically involved ones, by estimating the following empirical model:

$$donations_{f,t} = \alpha + \zeta_1 \text{Political FRUP}_f * Post_t + \mathbf{Y}'_{f,t} \boldsymbol{\zeta}_2 + \eta_f + \gamma_t + u_{ft} \quad (5)$$

where, as before,  $t$  index the years (2013-2020) and  $f$  index the foundations. The dependent variable,  $donations_{f,t}$ , is (the IHS transformation of) the amount of donations received by the foundation  $f$  in year  $t$ .

Political FRUP $_f$  is an indicator variable equal to one for the political FRUPs and to zero otherwise.  $Post_t$  is, as before, an indicator variable equal to one for the years following the reform (2017-2020) and to zero for the pre-reform period (2013-2016), and  $\mathbf{Y}'_{f,t}$  is a vector of time-varying foundation-level controls, including the (logarithm of the) operating costs and an indicator variable equal to one if the foundation is based in Paris interacted with year dummies. We also control for foundation ( $\eta_f$ ) and year ( $\gamma_t$ ) fixed effects, and cluster the standard errors at the level of the foundation.

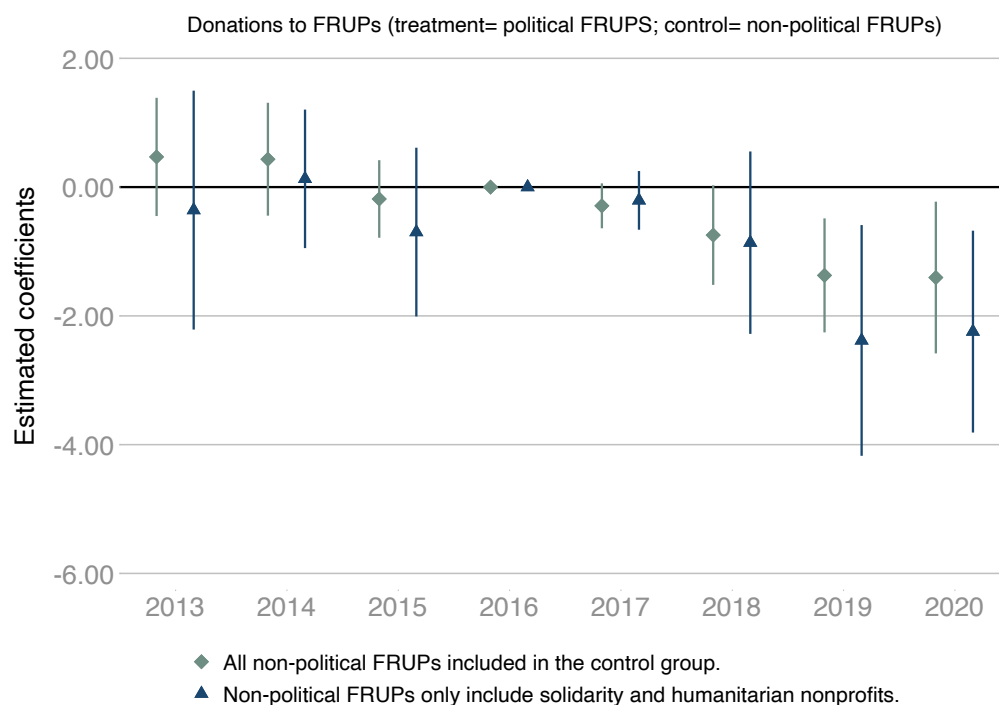
Figure 8 presents the results. If we first consider the grey lines with diamonds, we see a decline in the donations received by the political FRUPs compared to the non-political ones following the wealth tax reform that is statistically significant at the 5% level (reassuringly, there is no trends before the shock). Regarding the magnitude of the effect, in 2017, the estimated coefficients is equal to  $-0.257$ ; in other words, we estimate a 29% drop in donations to political charities compared to non-political ones following the reform.

It might be hard to distinguish between political and non-political FRUPs, in particular because some foundations, e.g. related to the protection of the environment, can also have political motivations. Hence, to be sure not to have politically involved organizations in the control group, we also report the estimations when we only include in the non-political FRUPs

---

<sup>63</sup>E.g. the IDDRI (*Institut du développement durable et des relations internationales* – Institute for Sustainable Development and International Relations) whose main classification is “environment” and sub-classification is “politics”.

Figure 8: Donations to FRUPs, Depending on whether political



**Notes:** The figure reports the coefficients and 95% confidence interval we obtain when estimating equation (5). The time period is 2013-2020. Models are estimated using an OLS (standard errors are clustered at the foundation level). An observation is a foundation-year. The dependent variable is (the IHS transformation of) the amount of the political donations received by the foundations. The vector of controls include the (logarithm of the) operating costs and an indicator variable equal to one if the foundation is based in Paris interacted with year fixed effects. All specifications control for year and foundation fixed effects. More details are provided in the text.

category the foundations classified as “humanitarian” or “solidarity” (and drop the remaining foundations from the estimation). This corresponds to the blue lines with triangles on the figure. If anything, doing so increases the magnitude of our estimated effects.

Anecdotally, the example of the previously described pro-business iFRAP foundation is striking. While the donations received by the organization slightly increased between 2013 and 2016, they began a decline from 2017, which accelerated sharply in 2020 (online Appendix Figure B.21). Obviously, we cannot determine with certainty that some former iFRAP contributors decided to substitute their charitable donation with a political donation made directly to Les Républicains party (that benefited – as documented above – from the relative rise in political donations). But the anecdotal evidence we just presented on both parties and foundations points toward this direction.

To reinforce this suggestive evidence, we finally go one step further and classify the FRUPs on a left-right axis. To do so, we collect the Twitter handle of each foundation – out of the 655 FRUPs, 252 have a Twitter account – and of members of the French parliaments (see Hervé,

2021, for details). Using simple retweets, we situate each foundation in the French political space (for a similar approach, see Cagé et al., 2021a). In the online Appendix Figure B.22, we report the results of the estimation of equation (5) but where we only include in the treated group the foundations that are classified on the left (pink lines with squares) or on the right (blue lines with circles) of the political spectrum. Both kinds of foundations are affected by the wealth tax reform, but the figures point towards a larger drop for the right-wing foundations in the long run.

### 5.3 Discussion

Obviously, these results have to be interpreted with a pinch of salt given that we are simply relying on foundation-level variations over time; overall, we think that they give interesting suggestive evidence of the fact that, following the wealth tax reform, the substitution between charitable and political giving mostly comes at the expense of politically related charitable organizations. Combined with the above evidence on the heterogeneity of the effects depending on the political parties, they suggest that the substitution between charitable and political giving documented in Section 4 may be at least partly driven by political motivations behind charitable donations.

Furthermore, note that even donations to non-political charities can be driven by political considerations.<sup>64</sup> E.g. if donations are used by large donors as a way to substitute for the State, for instance if one believes that successful entrepreneurs are more efficient than the State at allocating resources for public goods such as health or education. As of today in France, the main contemporary art collections are exhibited in museums owned by billionaires such as François Pinault or Bernard Arnault.<sup>65</sup> While these museums enter in direct competition with public institutions<sup>66</sup> – and, in the case of Arnault, benefit from very large tax deductions – they can be used by the donors as a way to promote their companies. Bernard Arnault’s museum, the Louis Vuitton Foundation, is named after the billionaire’s main brand; as highlighted by the Cour des Comptes, this museum “*constitutes a case, exceptional in its scope, of using the possibilities offered by the tax legislation in terms of patronage in order to develop an ambitious cultural project while ensuring the promotion of the main brand of a group, in a logic of corporate communication that articulates contemporary art, fashion and luxury.*”<sup>67</sup>

<sup>64</sup>Using French data on public subsidies to nonprofits, Urvoy (2020) has shown that politicians partly allocate governmental transfers to nonprofit organizations to improve their electoral prospects.

<sup>65</sup>François Pinault – whose wealth is estimated at \$53.6 billion – opened in 2021 a 10,500 square meter private museum in a former 18th-century grain exchange near Les Halles, the “Bourse de Commerce-Pinault Collection”. The collection contains around 10,000 works by nearly 400 artists. Bernard Arnault opened the Louis Vuitton Foundation in 2017.

<sup>66</sup>Some argue that public institutions are weakened by this competition. E.g. according to the “Art Newspaper”, the rise of these private museums partly happened “*to the detriment of [public] museums such as the Grand Palais, Orsay, the Louvre and Pompidou.*”

<sup>67</sup>“*Constitue un cas, exceptionnel par son ampleur, d’utilisation des possibilités offertes par la législation*

Similarly, the President of the Centre Georges-Pompidou museum, Serge Lasvignes, said in 2017 about the Pinault foundation: *“it is about showing contemporary art from the collection of François Pinault. Some will say that there will be an echo between his way of exhibiting and his commercial activities”*<sup>68</sup>. An increasing number of observers similarly question the growing funding of higher education by philanthropy in France (see e.g. [Chambard, 2020](#)).<sup>69</sup>

Furthermore, charitable donations can be a way for large donors to open a few doors. E.g. for a donor, sitting on the board of directors of a foundation and/or participating in the various events organized by this foundation, can allow her to expand her social capital (see e.g. [Depecker et al. \(2018\)](#) and [Monier \(2019\)](#) for recent work, and [Ostrower \(1997\)](#) for a seminal study). In other words, it can be seen as an “investment”<sup>70</sup>; to paraphrase [McGoey \(2015\)](#) whose focus is on the Gates foundation, there is “no such thing as a free gift”.

**Welfare implications and policy relevance** Finally, we discuss the policy implications of our findings, with respect to the tax treatment of giving and to the regulation of political and charitable donations. In many countries, tax deductions for charitable giving have been introduced with the justification that charitable organizations may provide valuable societal services while being more responsive than the government (see e.g. [Meer and Priday, 2020](#)). Our findings pointing to political motivations behind charitable giving partly challenge such a choice; in particular, one might wonder whether the existing set of foundations that can benefit from such tax deductions should not be more precisely defined, at least in countries where there are no tax deductions for political donations.<sup>71</sup> Further, it also questions the relevance of having tax policies for charitable giving that are much more generous than for political donations (which is the case in a large number of countries).

Next, while in many Western democracies (Belgium, France, Italy, Spain, etc.) campaign finance laws place limits on political donations, to the extent of our knowledge, no country has introduced a cap on charitable giving. Yet, our findings question this absence of regulation. Indeed, for a politically motivated donor who faces a cap on her political donations, giving to a think tank can be a relatively easy alternative.

---

*fiscale en matière de mécénat afin de développer un projet culturel ambitieux tout en assurant la promotion de la marque principale d'un groupe, dans une logique de communication d'entreprise qui articule art contemporain, mode et luxe*” (cited in [Cagé, 2020](#)). The Cour des Comptes – Court of Accounts – is the government institution that performs financial audit on the executive branch of power.

<sup>68</sup>“Il s’agit de montrer l’art contemporain à partir de la collection de François Pinault. Certains diront qu’il y aura écho entre sa façon d’exposer et ses activités commerciales.” (<https://www.parismatch.com/Culture/Art/Le-centre-Pompidou-a-40-ans-Son-ADN-c-est-la-thematique-1175552>). On the disproportionate power of François Pinault on the art market and the benefits he can get from it through the auction house *Christie’s*, which he owns, see also [Vivant \(2009\)](#).

<sup>69</sup>Note, however, that this is not a new phenomenon. See e.g. [Durand \(2016\)](#).

<sup>70</sup>See also [Bertrand et al. \(2020b\)](#) on political giving as a way for donors to invest in influence.

<sup>71</sup>The US for example, unlike France, Germany, Italy and Spain (as well as Belgium between 1985 and 1993), do not have tax deductions for political donations (see e.g. [Cagé, 2018](#)).

**Other mechanisms** Note, however, that while our preferred explanation for the substitutability between charitable and political donations is the fact that charitable giving is partly driven by political motivations, we obviously do not claim here that political motivations are the only motivations behind giving (many other motivations have indeed been carefully documented in the literature, from warm glow to fairness and social pressure<sup>72</sup>). Further, one may argue that other mechanisms could drive our findings. First, if citizens have an “altruism budget” – i.e. if people have a fixed budget of altruistic acts –, then when donations increase to one recipient, they may decrease for others (see [Gee and Meer, 2019](#), for a review of the state of the research). However, for such an argument to drive our findings, it would imply that political donations are considered as “altruistic”. Yet, according to the existing literature, political donations could be viewed either as a strategic investment or as a consumption good (see e.g. [Gordon et al., 2007](#)), but not as reflecting the generosity of the donors.

Second, the observed substitutability between political and charitable giving could reflect the fact that donors love variety – i.e. they prefer to make a donation to a foundation and a donation to a party rather than two donations to a foundation. It may also be driven by a decreasing marginal utility from donating to a given organization. However, if this were to be the case absent any political motivation for giving, we should not observe that the political foundations suffered more than the non-political ones from the increase in the tax price of giving.

Last, following the reform, citizens might have faced different levels of solicitation and opportunities to give to political parties and charities. Both charities and parties may indeed have an active role to play in extracting donations from potential givers ([Andreoni, 2006](#)). While this may indeed partly drive our results – and we cannot control for it – it does not imply that these solicitations do not involve the political dimension of charitable donations.

## 6 Conclusion

Why do people make charitable donations?

This paper uses a reform of the wealth tax that decreased the tax price for charitable contributions in France to evidence the substitutability of these contributions with political donations. More precisely, the reform restricted the definition of the wealth tax base to real-estate assets excluding the financial assets which were previously included. We rely on a new panel dataset including all the households filing their income tax and/or their wealth tax returns in France between 2006 and 2019. We focus on the sample of households liable to the wealth tax in 2016 and use the panel dimension of the data to follow these households over time and across taxes.

---

<sup>72</sup>See e.g. [Andreoni \(2006\)](#).

Using a number of different empirical strategies, we show that political and charitable giving are substitute. A one-percent increase in the price of charitable giving leads to a 0.12% increase in political donations. We also study the heterogeneity of this cross-tax price elasticity among the distribution of wealth and income. The magnitude of the effect is particularly strong among the top 20% of income taxpayers.

Our findings – which rely on donations by the very wealthy that have been mostly overlooked in the existing literature – suggest that philanthropy may be at least partly politically motivated. This idea is supported by novel foundation-level data: for all the nonprofit organizations that are recognized as “being of public utility” and that can benefit from the wealth tax deduction, we collect information on the donations they receive and classify them depending on their purpose, separating in particular foundations that are politically involved from those that are not. Further, we provide additional evidence based on political party donations, and document in particular that the drop in charitable donations mostly benefited the pro-business political movements. Our findings have important implications for the optimal regulation of tax incentives.

## References

- Aghion, P., Ciornohuz, V., Gravouelle, M., and Stantcheva, S. (2019). Reforms and Dynamics of Income Evidence Using New Panel Data. Working paper.
- Almunia, M., Guceri, I., Lockwood, B., and Scharf, K. (2020). More giving or more givers? The effects of tax incentives on charitable donations in the UK. *Journal of Public Economics*, 183:104114.
- Andreoni, J. (1989). Giving with Impure Altruism: Applications to Charity and Ricardian Equivalence. *Journal of Political Economy*, 97(6):pp. 1447–1458.
- Andreoni, J. (1990). Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving. *The Economic Journal*, 100(401):pp. 464–477.
- Andreoni, J. (2006). Philanthropy. In Kolm, S. and Ythier, J. M., editors, *Handbook of the Economics of Giving, Altruism and Reciprocity*, volume 1 of *Handbook on the Economics of Giving, Reciprocity and Altruism*, chapter 18, pages 1201–1269. Elsevier.
- Andreoni, J. and Payne, A. A. (2013). Charitable Giving. In Auerbach, A. J., Chetty, R., Feldstein, M., and Saez, E., editors, *Handbook of Public Economics*, volume 5 of *Handbook of Public Economics*, pages 1–50. Elsevier.
- Andreoni, J., Rao, J. M., and Trachtman, H. (2017). Avoiding the Ask: A Field Experiment on Altruism, Empathy, and Charitable Giving. *Journal of Political Economy*, 125(3):625–653.
- Ansolabehere, S., de Figueiredo, J. M., and Snyder, J. M. J. (2003). Why is There so Little Money in U.S. Politics? *Journal of Economic Perspectives*, 17(1):105–130.
- Backus, P. and Grant, N. (2016). Consistent Estimation of the Tax-Price Elasticity of Charitable Giving with Survey Data. Technical report.
- Bakija, J. (2013). Tax Policy and Philanthropy: A Primer on the Empirical Evidence for the United States and Its Implications. *Social Research*, 80(2):557–584.
- Bakija, J. and Heim, B. T. (2011). How Does Charitable Giving Respond to Incentives and Income? New Estimates From Panel Data. *National Tax Journal*, 64(2):615–650.
- Barber, M. J. (2016). Ideological Donors, Contribution Limits, and the Polarization of American Legislatures. *The Journal of Politics*, 78(1):296–310.
- Bekkouche, Y., Cagé, J., and Dewitte, E. (2022). The heterogeneous price of a vote: Evidence from multiparty systems, 1993-2017. *Journal of Public Economics*, 206:104559.
- 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.
- Bertrand, M., Bombardini, M., Fisman, R., and Trebbi, F. (2020a). Tax-Exempt Lobbying: Corporate Philanthropy as a Tool for Political Influence. *American Economic Review*, 110(7):2065–2102.
- Bertrand, M., Bombardini, M., Fisman, R., Trebbi, F., and Yegen, E. (2020b). Investing in

- influence: Investors, portfolio firms, and political giving. Working paper.
- Blanchflower, D. G. and Bryson, A. (2020). Now Unions Increase Job Satisfaction and Well-being. Working Paper 27720, National Bureau of Economic Research.
- Bombardini, M. and Trebbi, F. (2020). Empirical Models of Lobbying. *Annual Review of Economics*, 12(1):391–413.
- Bouton, L., Cagé, J., Dewitte, E., and Pons, V. (2022). Small Campaign Donors. Working Paper 30050, National Bureau of Economic Research.
- Brown, E. and Lankford, H. (1992). Gifts of money and gifts of time estimating the effects of tax prices and available time. *Journal of Public Economics*, 47(3):321–341.
- Brown, S. and Taylor, K. (2019). Charitable Behaviour and Political Ideology: Evidence for the UK. Working Papers 2019002, The University of Sheffield, Department of Economics.
- Brühlhart, M., Gruber, J., Krapf, M., and Schmidheiny, K. (2016). Taxing Wealth: Evidence from Switzerland. Working Paper 22376, National Bureau of Economic Research.
- Cagé, J. (2018). *Le prix de la démocratie*. Fayard (English version: The Price of Democracy, Harvard University Press, 2020).
- Cagé, J. (2020). *Libres et égaux en voix*. Fayard.
- Cagé, J., Hengel, M., Hervé, N., and Urvoy, C. (2021a). Hosting Media Bias: Evidence from the Universe of French Broadcasts, 2002-2020. Working paper.
- Cagé, J., Le Pennec, C., and Mougin, E. (2021b). Corporate Donations and Political Rhetoric: Evidence from a National Ban. CEPR Discussion Papers 16774, C.E.P.R. Discussion Papers.
- Chambard, O. (2020). *Business Model: l'université, nouveau laboratoire de l'idéologie entrepreneuriale*. Collection Laboratoire des sciences sociales. La Découverte.
- Chamon, M. and Kaplan, E. (2013). The Iceberg Theory of Campaign Contributions: Political Threats and Interest Group Behavior. *American Economic Journal: Economic Policy*, 5(1):1–31.
- Dawood, Y. (2015). Campaign Finance and American Democracy. *Annual Review of Political Science*, 18(1):329–348.
- DellaVigna, S., List, J. A., and Malmendier, U. (2012). Testing for Altruism and Social Pressure in Charitable Giving. *The Quarterly Journal of Economics*, 127(1):1–56.
- Depecker, T., Déplaudé, M.-O., and Larchet, N. (2018). La philanthropie comme investissement. Contribution à l'étude des stratégies de reproduction et de légitimation des élites économiques. *Politix*, 121(1):9–27.
- Deryugina, T. and Marx, B. M. (2021). Is the Supply of Charitable Donations Fixed? Evidence from Deadly Tornadoes. *American Economic Review: Insights*, 3(3):383–398.
- Doerrenberg, P., Peichl, A., and Siegloch, S. (2017). The elasticity of taxable income in the presence of deduction possibilities. *Journal of Public Economics*, 151:41–55.
- Duquette, N. J. (2016). Do tax incentives affect charitable contributions? Evidence from



- public charities' reported revenues. *Journal of Public Economics*, 137:51–69.
- Durand, A. (2016). L'odeur de l'argent. Dons et legs dans le financement de l'Université de Paris (1885-années 1930). *Revue d'histoire moderne & contemporaine*, 63-3(3):64–87.
- Fack, G., Garbinti, B., and Goupille, J. (2021). The Effect of Tax Incentives for Charitable Giving: Does the Social Acceptance of Taxes Matter? Mimeo.
- Fack, G. and Landais, C. (2010). Are Tax Incentives for Charitable Giving Efficient? Evidence from France. *American Economic Journal: Economic Policy*, 2(2):117–141.
- Fack, G. and Landais, C., editors (2016a). *Charitable Giving and Tax Policy: A Historical and Comparative Perspective*. Number 9780198723660 in OUP Catalogue. Oxford University Press.
- Fack, G. and Landais, C. (2016b). The effect of tax enforcement on tax elasticities: Evidence from charitable contributions in France. *Journal of Public Economics*, 133:23–40.
- Feldstein, M. and Taylor, A. (1976). The Income Tax and Charitable Contributions. *Econometrica*, 44(6):1201–1222.
- Fong, C. M. and Luttmer, E. F. P. (2009). What Determines Giving to Hurricane Katrina Victims? Experimental Evidence on Racial Group Loyalty. *American Economic Journal: Applied Economics*, 1(2):64–87.
- Gee, L. K. and Meer, J. (2019). The Altruism Budget: Measuring and Encouraging Charitable Giving. Working Paper 25938, National Bureau of Economic Research.
- Gimpel, J. G., Lee, F. E., and Pearson-Merkowitz, S. (2008). The Check Is in the Mail: Inter-district Funding Flows in Congressional Elections. *American Journal of Political Science*, 52(2):373–394.
- Gordon, S. C., Hafer, C., and Landa, D. (2007). Consumption or Investment? On Motivations for Political Giving. *The Journal of Politics*, 69(4):1057–1072.
- Green, D. P., Krasno, J. S., Panagopoulos, C., Farrer, B., and Schwam-Baird, M. (2015). Encouraging Small Donor Contributions: A Field Experiment Testing the Effects of Non-partisan Messages. *Journal of Experimental Political Science*, 2(2):183–191.
- Grossman, G. M. and Helpman, E. (1994). Protection for Sale. *American Economic Review*, 84(4):833–850.
- Grossman, G. M. and Helpman, E. (1996). Electoral Competition and Special Interest Politics. *The Review of Economic Studies*, 63(2):265–286.
- Guillot, M. (2019). Who Paid the 75and Incidence in France. Working paper.
- Guillot, O., Jaoul-Grammare, M., and Terraz, I. (2019). Union Membership in France: An Empirical Study. Technical report.
- Hervé, N. (2021). Quelle modélisation de l'espace politique français sur Twitter. *Revue des Nouvelles Technologies de l'Information*, Extraction:503–504.
- Hungerman, D., Rinz, K., Weninger, T., and Yoon, C. (2018). Political campaigns and church

- contributions. *Journal of Economic Behavior and Organization*, 155:403–426.
- Jakobsen, K., Jakobsen, K., Kleven, H., and Zucman, G. (2019). Wealth Taxation and Wealth Accumulation: Theory and Evidence From Denmark. *The Quarterly Journal of Economics*, 135(1):329–388.
- Leuven, E. and Sianesi, B. (2003). PSMATCH2: Stata module to perform full Mahalanobis and propensity score matching, common support graphing, and covariate imbalance testing. Statistical Software Components, Boston College Department of Economics.
- Levin, T., Levitt, S. D., and List, J. A. (2016). A Glimpse into the World of High Capacity Givers: Experimental Evidence from a University Capital Campaign. Working Paper 22099, National Bureau of Economic Research.
- McGoey, L. (2015). *No Such Thing as a Free Gift: The Gates Foundation and the Price of Philanthropy*. Verso Books.
- Meer, J. and Priday, B. A. (2020). Tax Prices and Charitable Giving: Projected Changes in Donations under the 2017 Tax Cuts and Jobs Act. *Tax Policy and the Economy*, 34:113–138.
- Monier, A. (2019). *Nos chers "Amis américains"*. Hors collection. Presses Universitaires de France.
- Murphy, R. (2020). Why Unions Survive: Understanding How Unions Overcome the Free-Rider Problem. *Journal of Labor Economics*, 38(4):1141–1188.
- Ostrower, F. (1997). *Why the Wealthy Give: The Culture of Elite Philanthropy*. Princeton University Press.
- Perroni, C., Scharf, K., Talavera, O., and Vi, L. (2022). Does online salience predict charitable giving? Evidence from SMS text donations. *Journal of Economic Behavior and Organization*, 197:134–149.
- Petrova, M., Perez-Truglia, R., Simonov, A., and Yildirim, P. (2020). Are Political and Charitable Giving Substitutes? Evidence from the United States. Working Paper 26616, National Bureau of Economic Research.
- Poole, K. T. and Romer, T. (1985). Patterns of political action committee contributions to the 1980 campaigns for the United States House of Representatives. *Public Choice*, 47(1):63–111.
- Randolph, W. C. (1995). Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions. *Journal of Political Economy*, 103(4):709–738.
- Reich, R. (2018). *Just Giving: Why Philanthropy Is Failing Democracy and How It Can Do Better*. Princeton University Press.
- Scharf, K., Smith, S., and Ottoni-Wilhelm, M. (2022). Lift and Shift: The Effect of Fundraising Interventions in Charity Space and Time. *American Economic Journal: Economic Policy*, 14(3):296–321.
- Seim, D. (2017). Behavioral Responses to Wealth Taxes: Evidence from Sweden. *American Economic Journal: Economic Policy*, 9(4):395–421.

- Urvoy, C. (2020). Political Profit from Nonprofits? Evidence from Governmental Transfers. Working paper.
- Vivant, E. (2009). Inconstance du collectionneur ou calcul de l'entrepreneur ? L'échec du projet de fondation François Pinault, révélateur des évolutions des mondes de l'art et de la production urbaine. *Politix*, 88(4):187–207.
- Wand, J. (2007). The Allocation of Campaign Contributions by Interest Groups and the Rise of Elite Polarization.
- Yörük, B. K. (2015). Do Charitable Subsidies Crowd Out Political Giving? The Missing Link between Charitable and Political Contributions. *The B.E. Journal of Economic Analysis & Policy*, 15(1):1–29.

Online Appendix to the paper:  
Is Charitable Giving Political? Evidence from Wealth and  
Income Tax Returns

Julia Cagé\*, Malka Guillot†

October 7, 2022

**Contents**

|          |                                     |           |
|----------|-------------------------------------|-----------|
| <b>A</b> | <b>Details on data construction</b> | <b>2</b>  |
| <b>B</b> | <b>Additional figures</b>           | <b>6</b>  |
| <b>C</b> | <b>Additional tables</b>            | <b>28</b> |
| <b>D</b> | <b>Robustness checks</b>            | <b>38</b> |

---

\*Sciences Po Paris and CEPR (`julia [dot] cage [at] sciencespo [dot] fr`).

†Université de Liège (`mguillot [at] uliege [dot] be`).

## A Details on data construction

In this section, we provide details on the different steps we use for the data construction. Section A.1 details the step regarding the income tax returns data, and Section A.2 concentrates on the wealth-tax returns data. Section A.3 explains how we merge the previous two datasets and construct our variables of interest. Finally, Section A.4 describes the data steps we go through for the commune-level political donations analysis.

### A.1 Income tax returns

**Cleaning** Before performing our main analysis, we go through a cleaning step, required by the administrative nature of the data. First, we deal with the multiple declarations that households can file in case of divorce or death of one spouse during the fiscal year by aggregating the information. Second, we clean the charitable giving declarations by removing the extreme values (above €1,000,000), which are due to misdeclaration<sup>1</sup>

**Variables definition** The main variables used for the analysis come from the income tax declarations. Some variables are computed by the tax administration based on the information declared.

- *Charitable giving* is declared in the cell 7UF for the “general” charitable donations (with the 66% rebate), and in the cell 7UD for the donations to charities helping people in need (with the 75% rebate) (see Figure B.1). We consider the two categories separately, as they benefit from different rebate rates, and donations to charities that help people in need are capped at €546. Our main analysis concentrates on the general 7UF donations.
- *Gross taxable income* aggregates all income declared, before any rebates, and corresponds to the `rbg` variable.
- *Marital status* is directly given by the tax declaration and contains five categories: married, divorced, civil union, single, and widowed.
- The *number of fiscal shares* is computed by the administration based on the household composition and is used to scale the income and the tax due. We use it as an indication of the size of the household.
- The *net income tax* is computed by the administration (DGFIP). It corresponds to the `mnirp8` variable before 2016, and to the `nirp8` variable since 2017.

---

<sup>1</sup>According to the tax administration, households typically include more information than just the amount given in the form (year of the declaration, for instance). We clean these obvious cases, but some (less than 10 observations a year) remain unclear so we drop them.

- The *net taxable income* is the income tax base (after deducing numerous rebates) and corresponds to the `rimp` variable.
- *Political giving* is declared in the 7UH box (see Figure B.1) starting in 2013.
- *Union contributions* are declared in boxes 7AC for the main taxpayers, 7AE for the partner, and 7AG for the dependents. We sum these three boxes at the household level to obtain the total union contribution of the household.

## A.2 Wealth tax returns

**Cleaning** Similarly to what we do for the income tax returns data, we go through a cleaning step for the wealth tax returns.

- We drop the households for which data on wealth is top coded at €200 million (14 in 2016). Indeed, the fiscal administration does not disclose the precise information for the very top of the wealth distribution. Considering that very few households are affected, we prefer to drop them, since we only can access partial fiscal information.

## Variables definitions

- *Gross and net wealth* are given in boxes FG and HI, respectively.
- *Charitable giving* is declared in boxes NC and NG. The two boxes are intended to disentangle the donations going to French foundations from the ones going to European foundations<sup>2</sup>. Since both types of donation benefit from the same reduction and same cap, we add them up to obtain our charitable giving to the wealth tax variable.
- We compute the *share of housing wealth* in total wealth using information from the 2010 wealth tax returns, as this is the last year when households had to declare the detailed composition of their wealth. The housing wealth corresponds to the sum of all the boxes related to housing :  $AB + AC + BD + BF + BG + BI + BJ + BK$ . We then scale this sum by the gross wealth (FG) to obtain the share of housing wealth. This information is also available after 2010 for households with a gross wealth larger than €2.57 million, but this only concerns a share of our sample.
- *Wealth tax gain*: we define the gain from the wealth tax reform by computing the observed change in the wealth tax due between 2017 and 2016. If no wealth tax is due in 2017, we set the value of the wealth tax to 0. A negative wealth tax gain means that the wealth tax due in 2017 is lower than that due in 2016.

---

<sup>2</sup>Only 31 European Foundations are eligible for the tax reduction, see <https://www.impots.gouv.fr/liste-des-organismes-europeens-agrees> for a list.

- *Predicted wealth tax gain*: we also compute a predicted wealth tax gain, using the pre-2010 information on the wealth composition for the households that we can find in that period. We approach the new tax base, restricted to housing assets, by multiplying the last wealth tax base with the average share of housing assets observed before 2010. We then apply the wealth tax schedule to compute a predicted tax on housing assets. The predicted wealth tax gain corresponds to the change between the predicted wealth tax for 2017 and the observed wealth tax in 2016.

### A.3 Merging the income- and wealth tax returns

We merge the income and the wealth tax returns data using the unique household identifier for each year. We construct our main sample by keeping all the households that declare their wealth in 2016, the year when we define the treatment and control groups (we relax this assumption in our robustness tests). Second, we drop the households who file a wealth tax return (based on some assets owned in France) but do not file any income tax return. Indeed, we cannot study the political donations for these households (note however that they only represent a very minor part of the sample).

**Variables definitions** We describe here how we construct the household-level variables that depend on both sources of data.

- We compute the *price of charitable giving* by applying the tax rules to the information declared. If the household is liable to the wealth tax and declares a donation inferior to the threshold (€50,000) and to the gross tax due, it benefits from a 75% reduction rate. If the household is not eligible to a 75% rate, it can benefit from a 66% rebate through the income tax reduction. We attribute the rate of 66% if the household has not already reached its cap (20% of taxable income) with the donations declared. In this case, the reduction rate is equal to 0. The price finally corresponds to 1 minus the reduction rate.
- The *total charitable giving* is the sum of the charitable giving declared in the income (7UF) and the wealth tax returns (NC and NG).

### A.4 Commune-level political donations

We collect annual information on the donations received by the political parties at the city level from the *Commission Nationale des Comptes de Campagne et des Financements Politiques* (CNCCFP), which has anonymized the donation data before transmitting them to us as part of a research agreement. We recover the data for the five parties that obtain more than 5% of the votes in the first round of the 2017 elections: La France Insoumise (LFI), the

Parti socialiste (PS), La République en marche (LREM), Les Républicains (LR), and the Rassemblement National.

Donations include (i) donations from individual donors, (ii) membership dues, and (iii) contributions from elected representatives. These three categories are reported separately – which allows us to focus on individual donations – except for the Socialist Party (PS) in 2016 (unfortunately, we cannot gain access to the original data because it has been destroyed by the CNCCFP). For this party/year, we approximate the three categories from the total donations received by the PS by using, for each city, the observed share represented by each category in 2017 that we apply to 2016.

Note that, for the sake of comparison over time, data on donations for La France Insoumise also include the donations received by the Parti de Gauche in 2016, and data for Les Républicains also include information for La Force Républicaine in 2017.



## B Additional figures

Figure B.1: Illustration of the income tax form

The image shows a screenshot of the French income tax form 'Déclaration Revenus 2018'. The form is titled '2042 RICI cerfa N°15637\*03 DÉCLARATION REVENUS 2018'. It features the French Republic logo and the text 'Liberté • Égalité • Fraternité RÉPUBLIQUE FRANÇAISE' and 'DIRECTION GÉNÉRALE DES FINANCES PUBLIQUES'. The form is divided into sections for 'RÉDUCTIONS D'IMPÔT' and 'CRÉDITS D'IMPÔT'. Below these sections, there are fields for 'Nom', 'Prénom', and 'Adresse'. At the bottom, there are three rows for reporting donations: 'Dons versés à des organismes établis en France', 'Dons versés à des organismes d'aide aux personnes en difficulté (maximum 537€)', and 'Dons versés à d'autres organismes d'intérêt général'. The last row is for 'Dons et cotisations versés aux partis politiques'. Each row has a corresponding box for the amount, labeled 7UD, 7UF, and 7UH respectively.

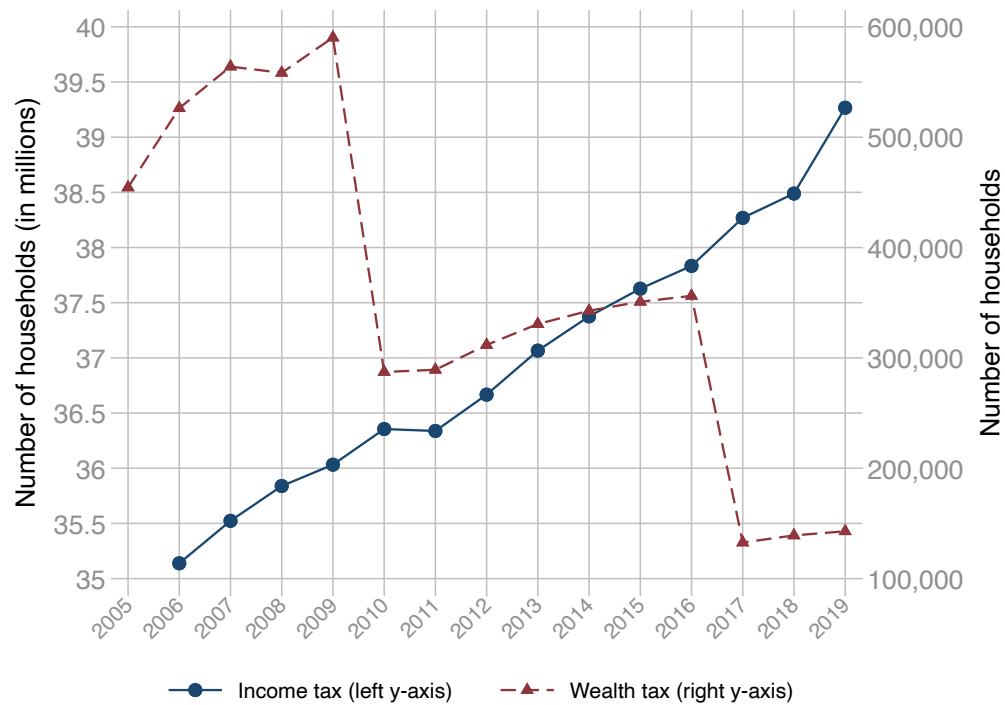
| RÉDUCTIONS D'IMPÔT |  |
|--------------------|--|
| CRÉDITS D'IMPÔT    |  |
| Nom                |  |
| Prénom             |  |
| Adresse            |  |

| Dons versés à des organismes établis en France                                 |     |
|--------------------------------------------------------------------------------|-----|
| Dons versés à des organismes d'aide aux personnes en difficulté (maximum 537€) | 7UD |
| Dons versés à d'autres organismes d'intérêt général                            | 7UF |
| Dons et cotisations versés aux partis politiques                               | 7UH |

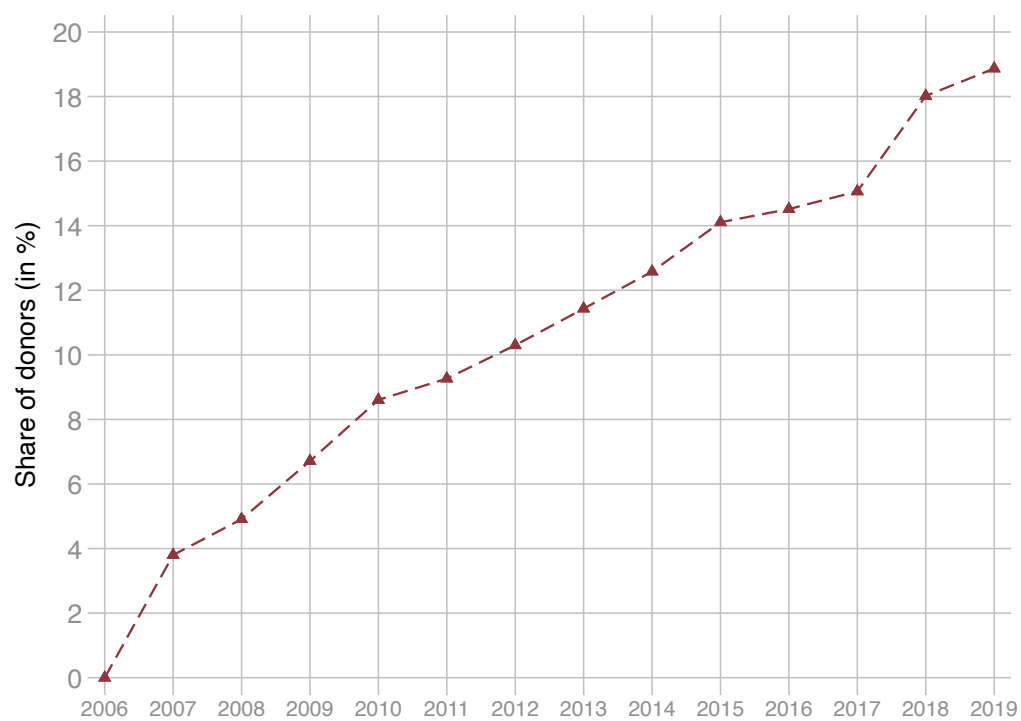
**Notes:** The Figure reports a screen shot of the income tax form for 2018. Taxpayers report their charitable donations on the row 7UF (“*dons versés à d'autres organismes d'intérêt général*”) and their political donations on the row 7UH (“*dons et cotisations versés aux partis politiques*”). (In 1989, a specific rate was created for the donations to charities that help people in need; these donations are reported in the row 7UD – “*Dons versés à des organismes d'aide aux personnes en difficulté*”. See Section 4.5 for details.)

Figure B.2: Total number of households liable to income tax and / or to wealth tax



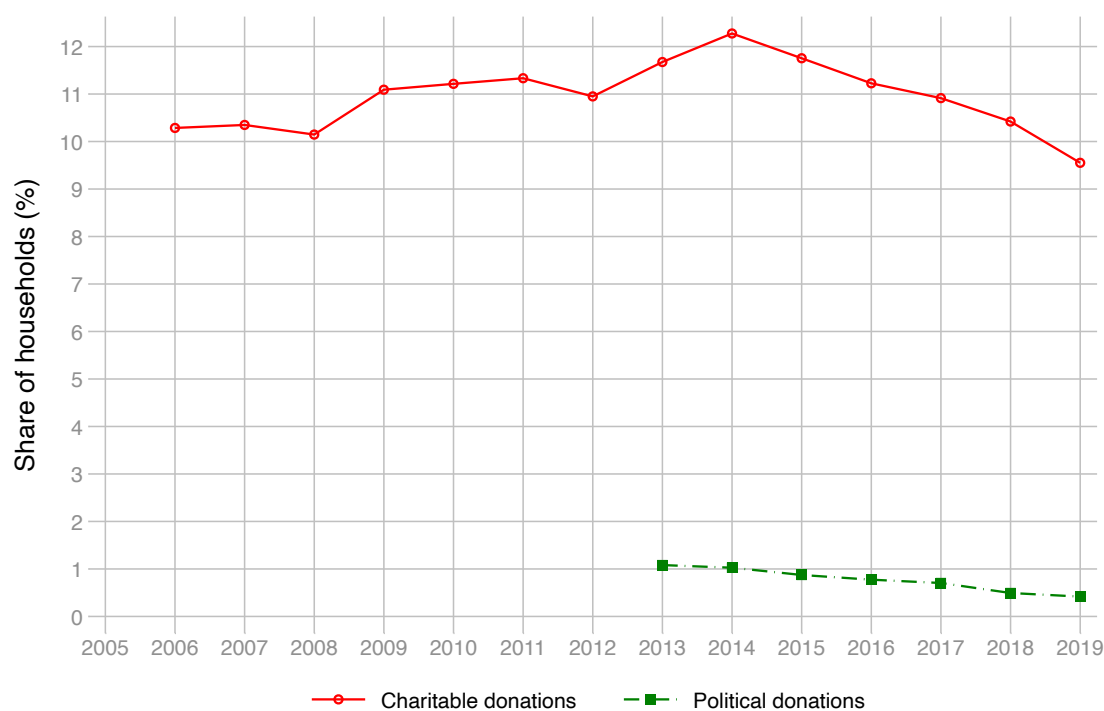
**Notes:** The Figure plots the evolution of the number of households who file an income tax and a wealth tax declaration per year. The time period covered is 2006-2019. The number of households liable to the income tax is reported on the left y-axis (blue line with dots) and the number of households liable to the wealth tax on the right y-axis (dashed red line with triangle). The drop in the number of wealth tax payers observed in 2010 is due to the 2011 wealth tax reform: the amount of net property assets above which individuals are liable for the wealth tax was increased from €0.8 to €1.3 millions. The drop in the number of wealth tax payers observed in 2017 is due to the 2017 wealth tax reform described in Section 2.2.

Figure B.3: Wealth tax donations: Evolution of the share of the households who declare a charitable donation on their wealth tax return, 2006-2019



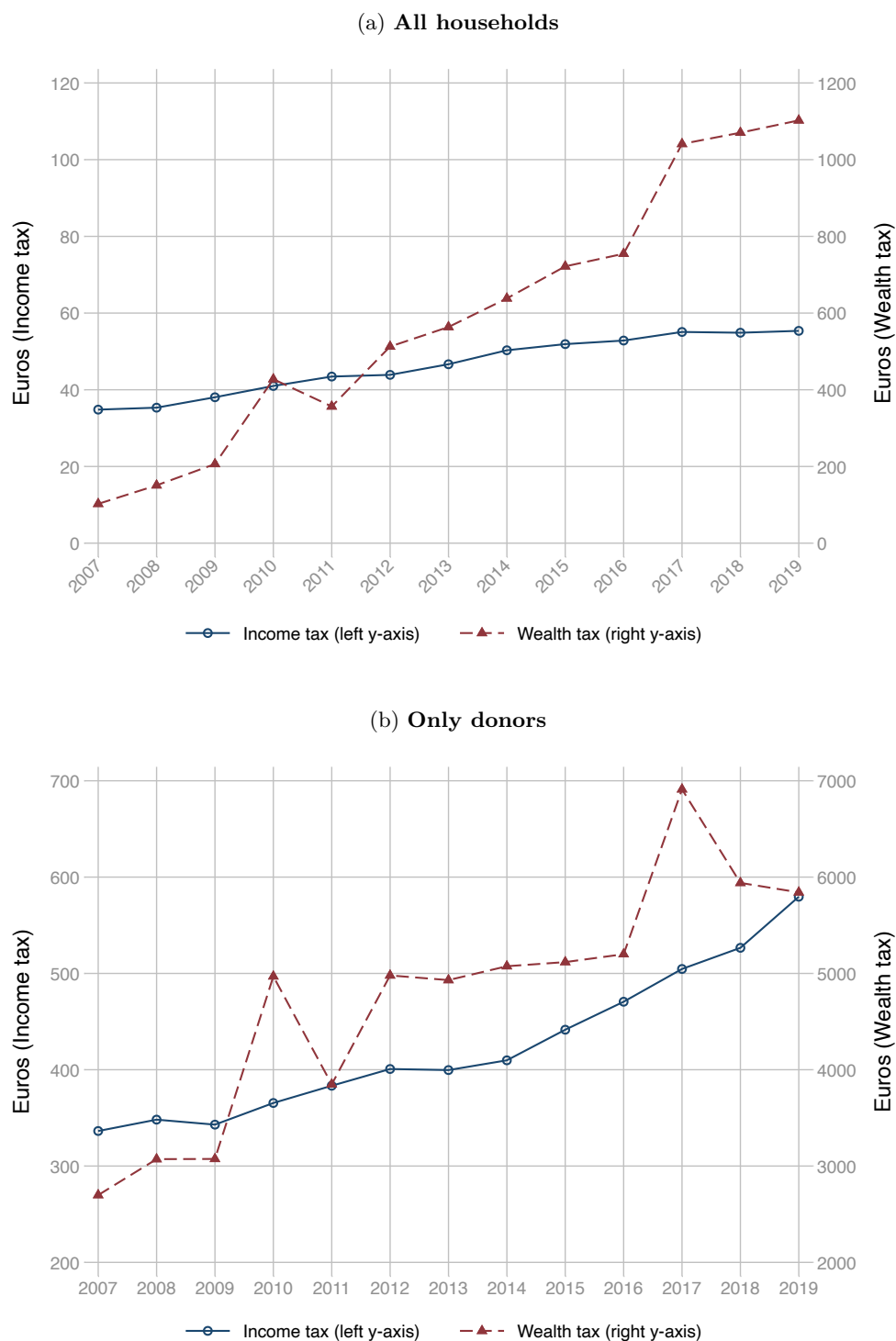
**Notes:** The Figure plots the evolution of the share of the households liable to the wealth tax who declare a charitable donation on their wealth tax form per year. The time period covered is 2006-2019.

Figure B.4: Income tax donations: Evolution of the share of the households who declare a charitable donation and of the share of the households who declare a political donation on their income tax return, 2006-2019



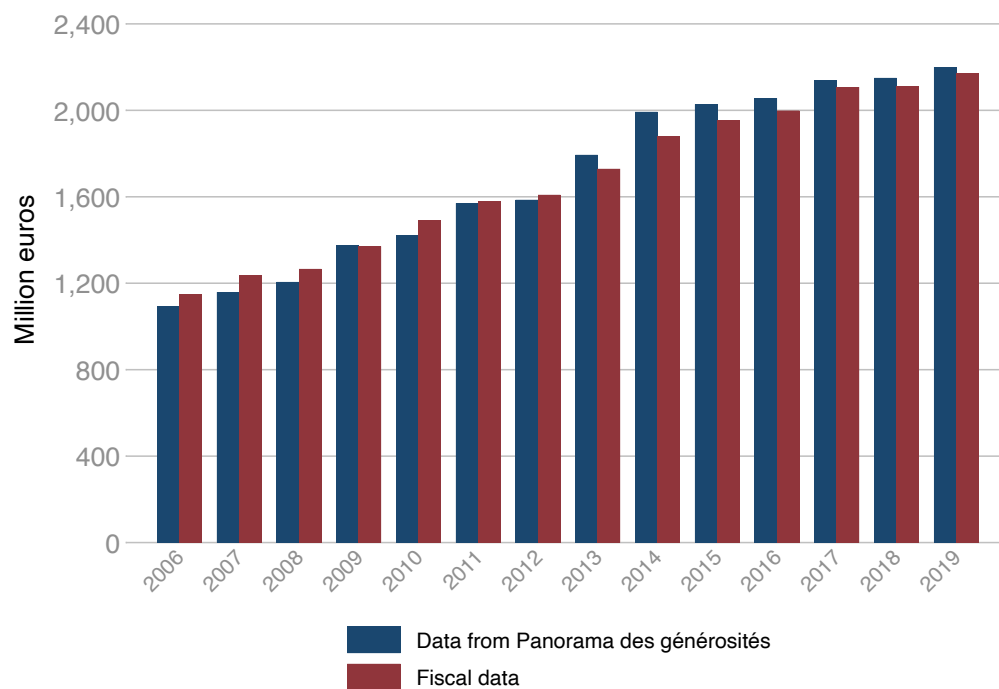
**Notes:** The figure plots the evolution of the share of the households liable to the income tax who declare a donation on their income tax form per year. The time period covered is 2006-2019. The red line with dots plots this share for the charitable donations and the dash-dot green line with squares for the political donations. Political donations are reported separately on the income tax form only since 2013.

Figure B.5: Evolution of the average amount of the charitable donations declared on the income and the wealth tax forms, 2006-2019



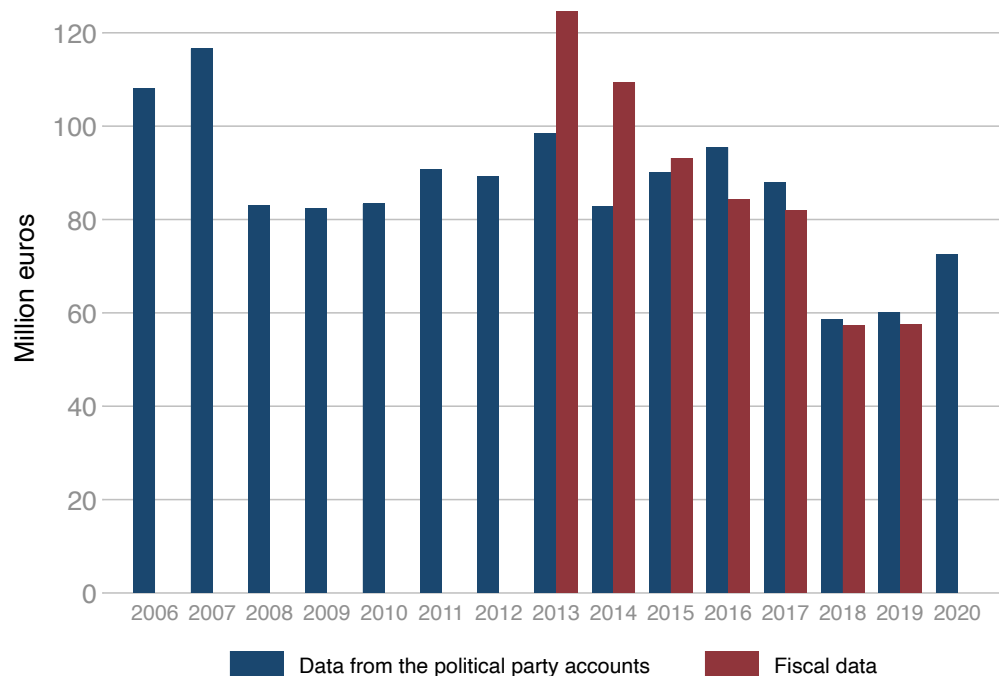
**Notes:** The Figure reports the evolution of the average amount of the charitable donations reported on the income tax and wealth tax forms. The time period covered is 2006-2019. The income tax donations are reported on the left y-axis (blue line with dots) and the wealth tax donations on the right y-axis (dashed red line with triangle). The upper Figure B.5a plots the average amount given when all the households are included (i.e. including the households who declare no donation and for which the amount of charitable donations is set to 0). The bottom Figure B.5b plots the average amount given by donors.

Figure B.6: Evolution of the total amount of donations made to general interest organizations vs. the total amount declared on the income tax: data from the *Panorama des générosités 2020* vs. fiscal data, 2006-2019



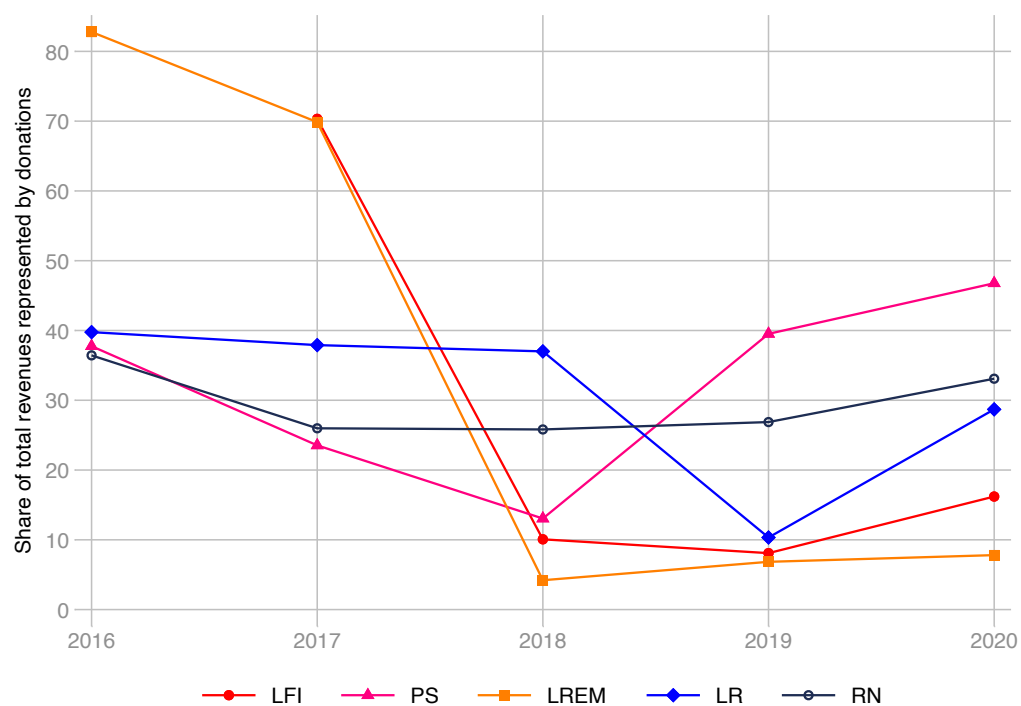
**Notes:** The Figure plots the annual evolution of the aggregate donations received by the general interest organizations as reported by the “*Panorama des Générosités*” (blue bars) and the aggregate amount of charitable donations as reported on the household income tax forms (red bars). The time period covered is 2006-2019.

Figure B.7: Evolution of the total amount of donations received by the political parties: data from the political party accounts vs. fiscal data, 2006-2020



**Notes:** The Figure plots the evolution of the total amount of the donations received by the political parties depending on whether we consider the political parties' accounts (blue bars) or the overall amount of political giving declared on the income tax returns (red bars). The time period covered is 2006-2020. Total donations include the donations from individuals, as well as the party membership fees and the contributions from elected officials that benefit from the same tax treatment (tax rebate equal to 66% of the amount of the donation). Fiscal data is not yet available for 2020.

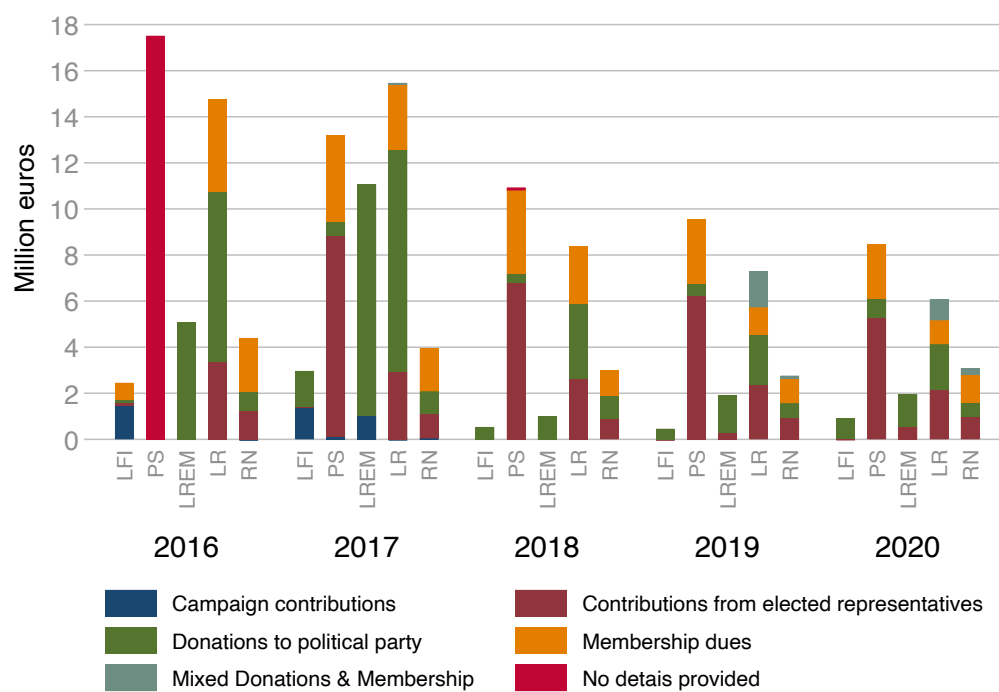
Figure B.8: Political donations: Share of political parties' total revenues accounted for by private donations, 2016-2020



**Notes:** The figure plots the evolution of the share of the political parties' total revenues accounted by donations made by private households. The time period covered is 2016-2020.



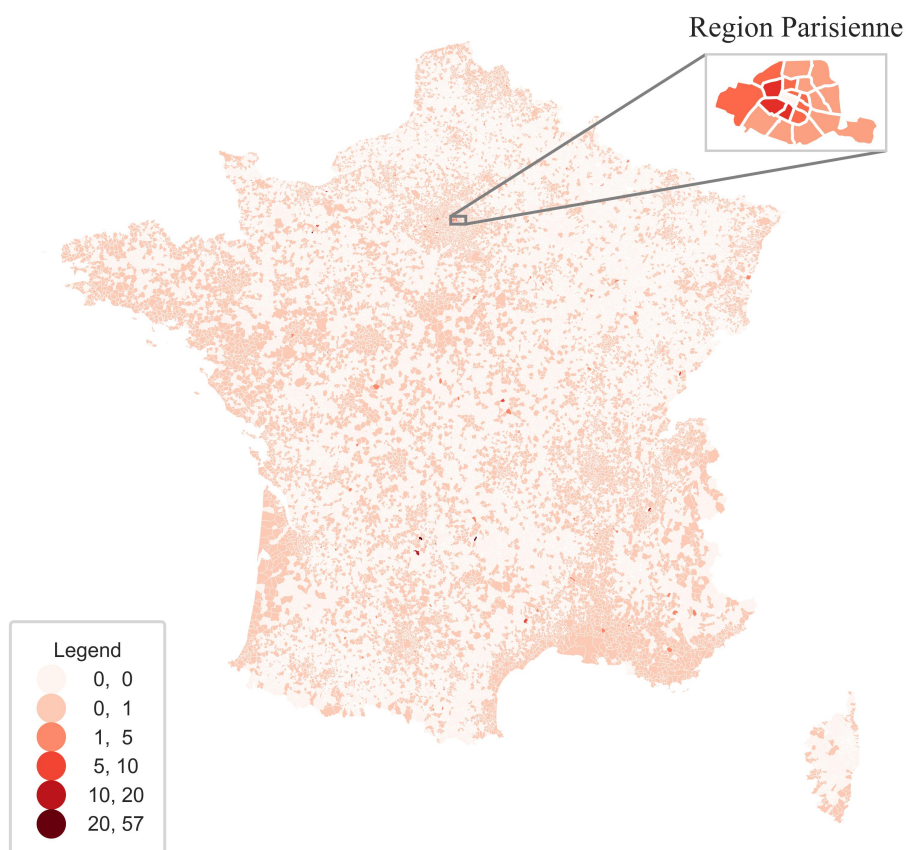
Figure B.9: Total amount of donations received by the political parties: Main political parties, 2016-2020



**Notes:** The Figure plots the total amount of donations – including donations from individual donors, membership dues, and contributions from elected representatives – received by the five political parties whose candidate obtained more than 5% of the votes during the first round of the 2017 presidential elections. The data come from the CNCCFP.

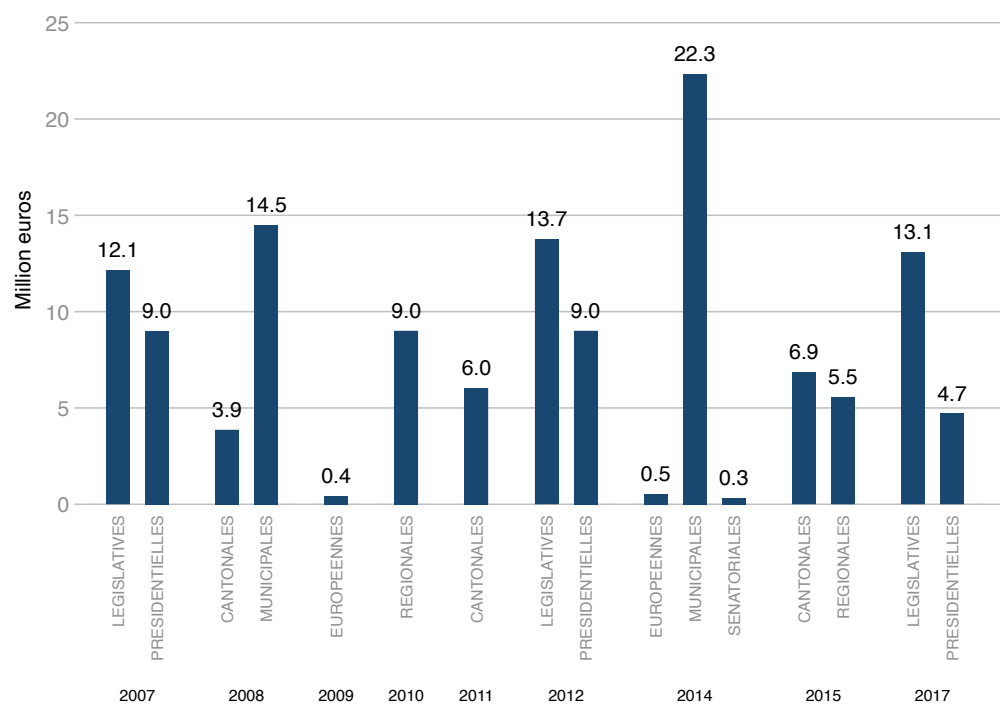
Figure B.10: Geography of the political donations received by the parties: La République en Marche (LREM)

### Average annual donations by hh made to LREM (2016-2020)



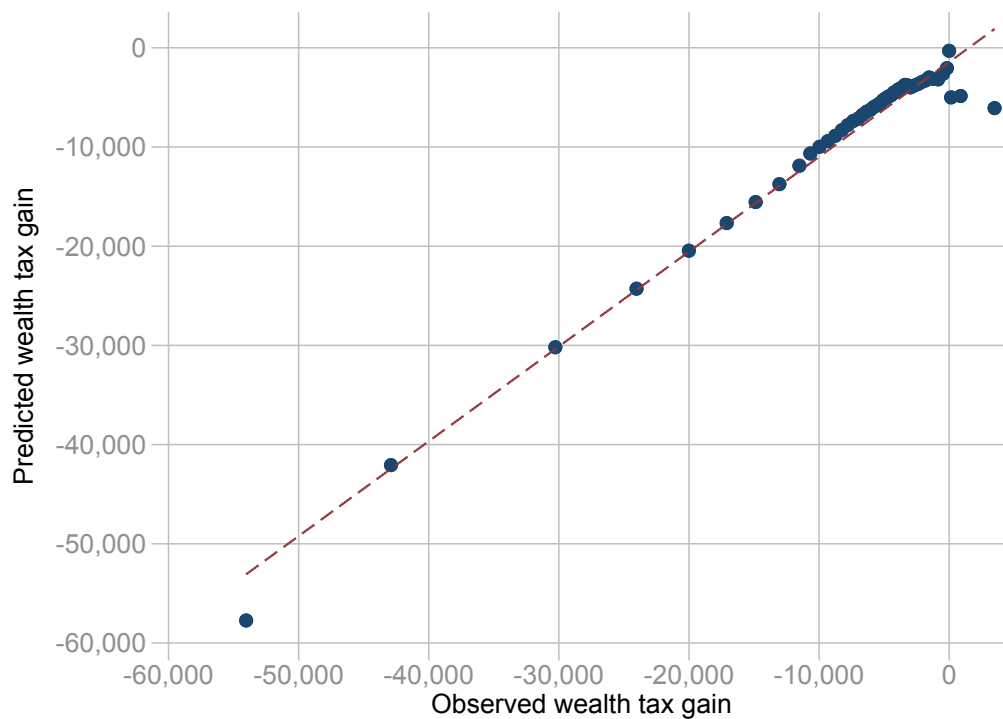
**Notes:** The map reports, for each commune, the average amount of the annual donations made by the households to “La République en Marche” between 2016 and 2020. For the sake of readability, we report separately the different “arrondissements” for Paris.

Figure B.11: Total amount of donations received by the electoral campaigns



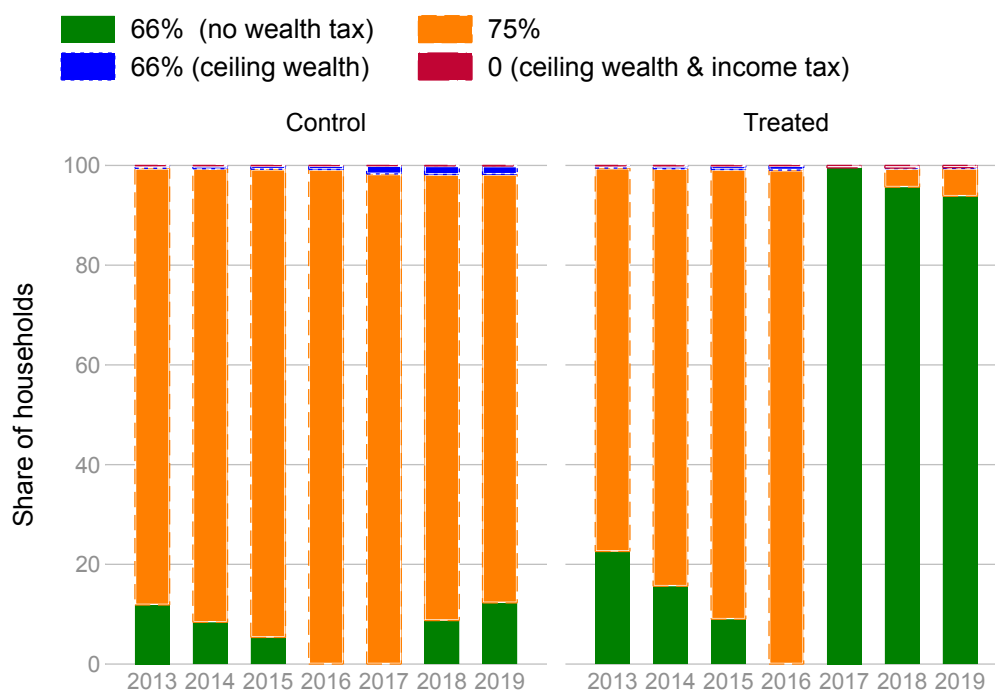
**Notes:** The Figure plots the evolution of the total amount of donations received by the electoral campaigns. Data are from Cagé (2018) for 2007-2015 and from the CNCCFP reports for recent years.

Figure B.12: Predicted vs. observed wealth tax gain



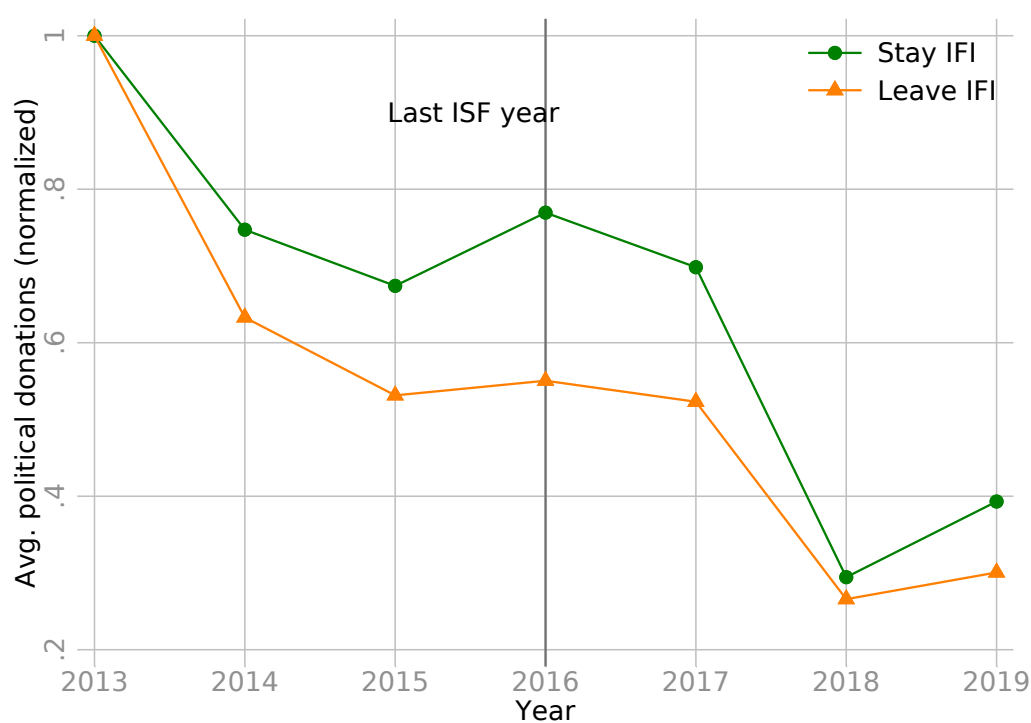
**Notes:** The Figure represents the observed wealth tax gain (= tax on housing assets for 2017 – wealth tax for 2016) on the x-axis (50 bins) against a prediction of the wealth tax gain, based on the observed pre-2010 wealth composition. To do so, we compute a predicted tax base for the tax on housing asset by applying the observed pre-2010 wealth composition to the last pre-reform wealth tax schedule. We then apply the tax schedule (including the reductions observed for 2016) to the predicted tax base to compute the predicted tax on housing assets. Finally, the predicted wealth tax gain is defined by the difference between the predicted tax on housing assets and the observed 2016 wealth tax.

Figure B.13: Change in the price of charitable giving following the 2017 wealth tax reform, Households who face a wealth tax gain between €0 and €15,000 following the wealth tax reform



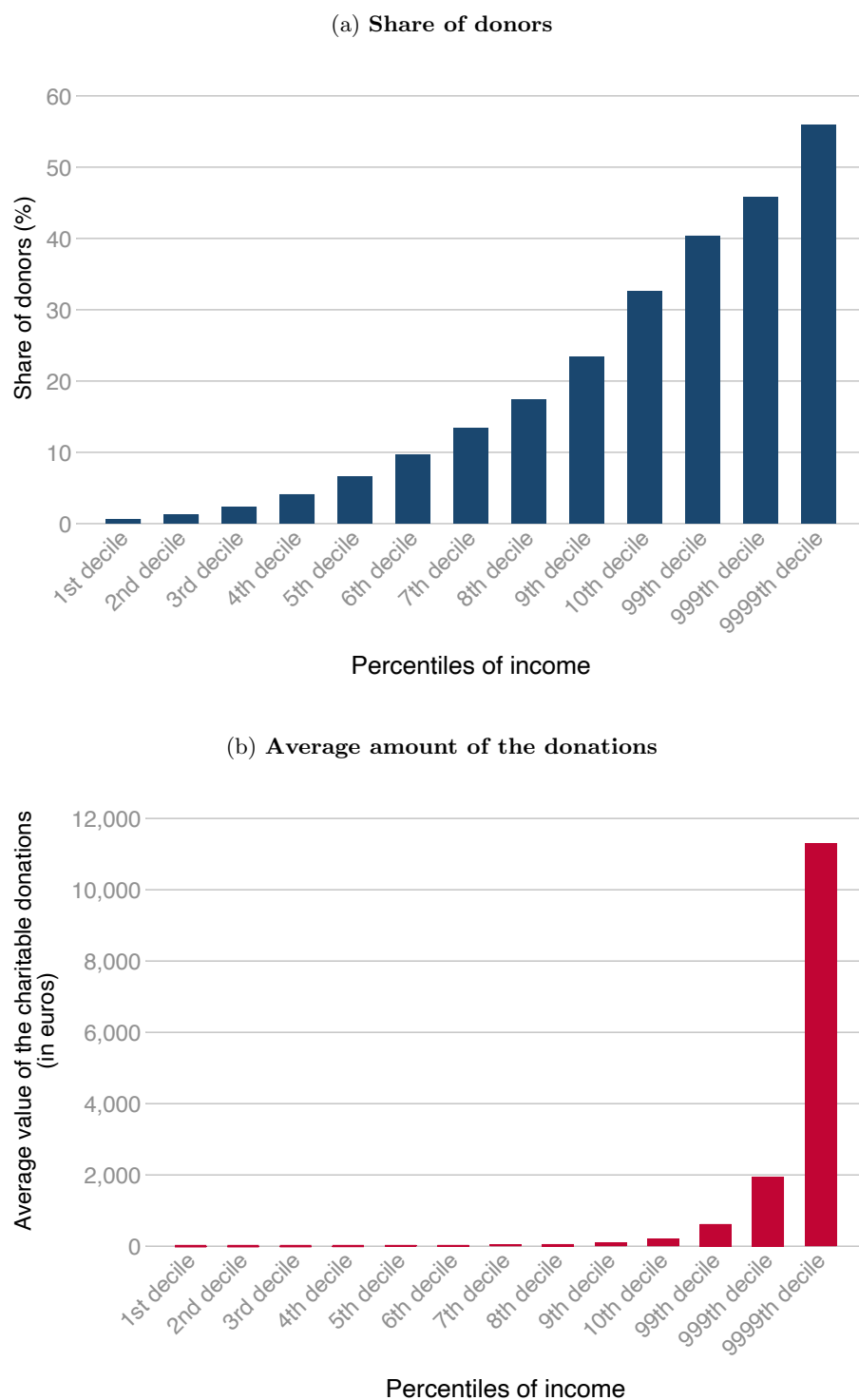
**Notes:** The Figure plots the change in the price of charitable giving separately for the “control” households who continue paying the real-estate tax following the 2017 wealth tax reform and the “treated” households who are no longer liable to the wealth tax in 2017. Our sample contains the 282,999 households of the “similar wealth tax gain” sample.

Figure B.14: Impact of the wealth tax reform on political giving



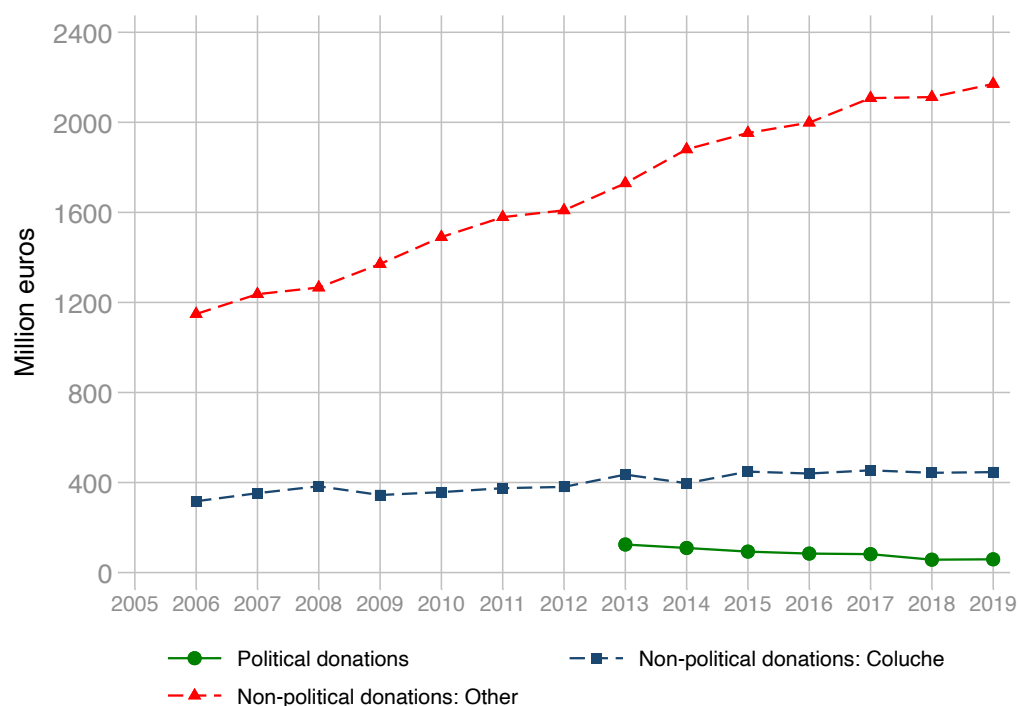
**Notes:** The Figure plots the average amount of political donations (normalized to one in 2013) separately for the “control” households (“stay IFI” – green line with dots) who continue paying the real-estate tax following the 2017 wealth tax reform and the “treated” households (“leave IFI” – orange line with triangles) who are no longer liable to the wealth tax in 2017. Our sample of analysis include all the households subject to the wealth tax in 2016 who face wealth tax gain between €0 and €15,000 following the reform.

Figure B.15: Probability to contribute (charitable giving) depending on the income percentile



**Notes:** The upper Figure B.15a plots the share of donors in 2016 depending on the income percentile. The bottom Figure B.15b plots the average amount of the donations depending on the income percentile.

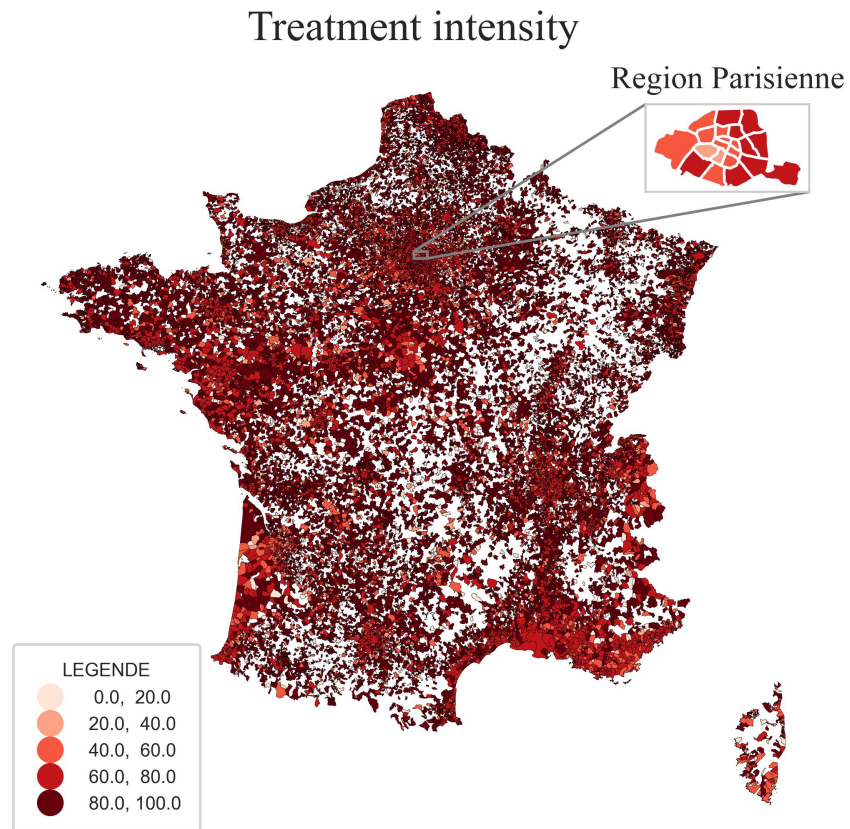
Figure B.16: Evolution of the total amount of income tax donations: political donations, non-Coluche charitable donations, Coluche charitable donations



**Notes:** The Figure plots the evolution of the total amount of income tax donations. The time period covered is 2006-2019. The dashed red line with triangles reports the evolution of the non-Coluche charitable donations; the dash blue line with squares, the Coluche charitable donations (i.e. the donations to charities that help people in need that benefit from a 75% tax credit); and the continuous green line with dots the political donations. Political donations are reported separately on the income tax form only since 2013.

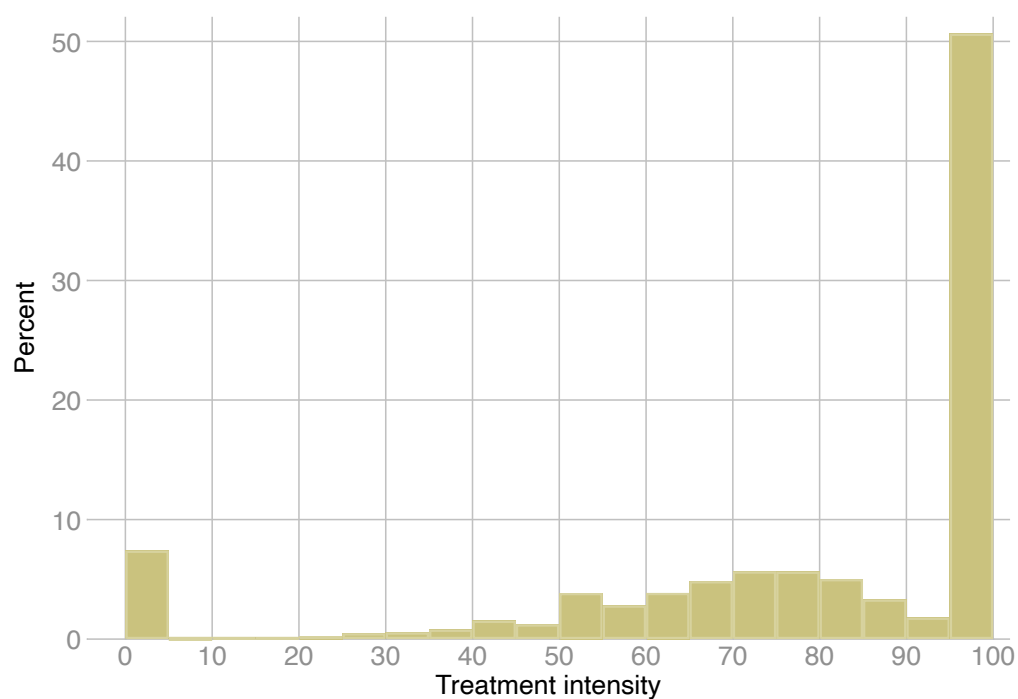


Figure B.17: Treatment intensity by commune



**Notes:** The Figure plots the intensity of the wealth tax reform treatment at the level of the commune. The intensity of the treatment is defined as follows:  $\left( \frac{\# \text{ hh leaving wealth tax returns}}{\# \text{ hh leaving wealth tax returns} + \# \text{ hh liable to new wealth tax}} \right) * 100$  (see Section 5.1), and varies between 0 and 100. Because of statistical secrecy, the intensity of the treatment is only available for 22,076 communes (hence the blanks on the map for the remaining communes).

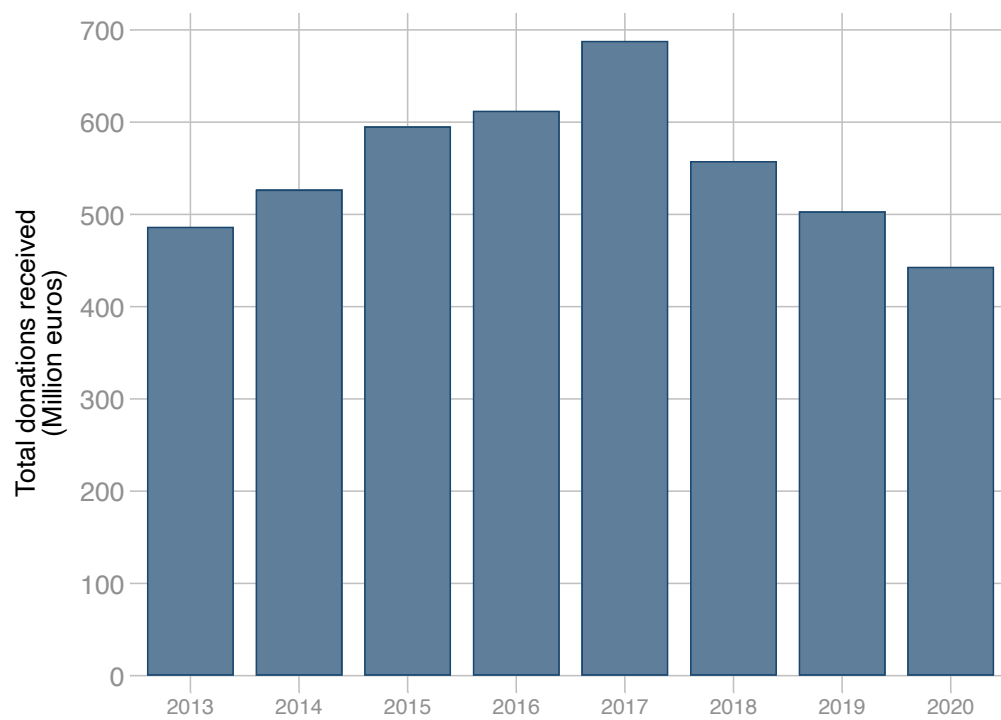
Figure B.18: Distribution of the treatment intensity variable



Notes: N=21,934. Bins of width 5.

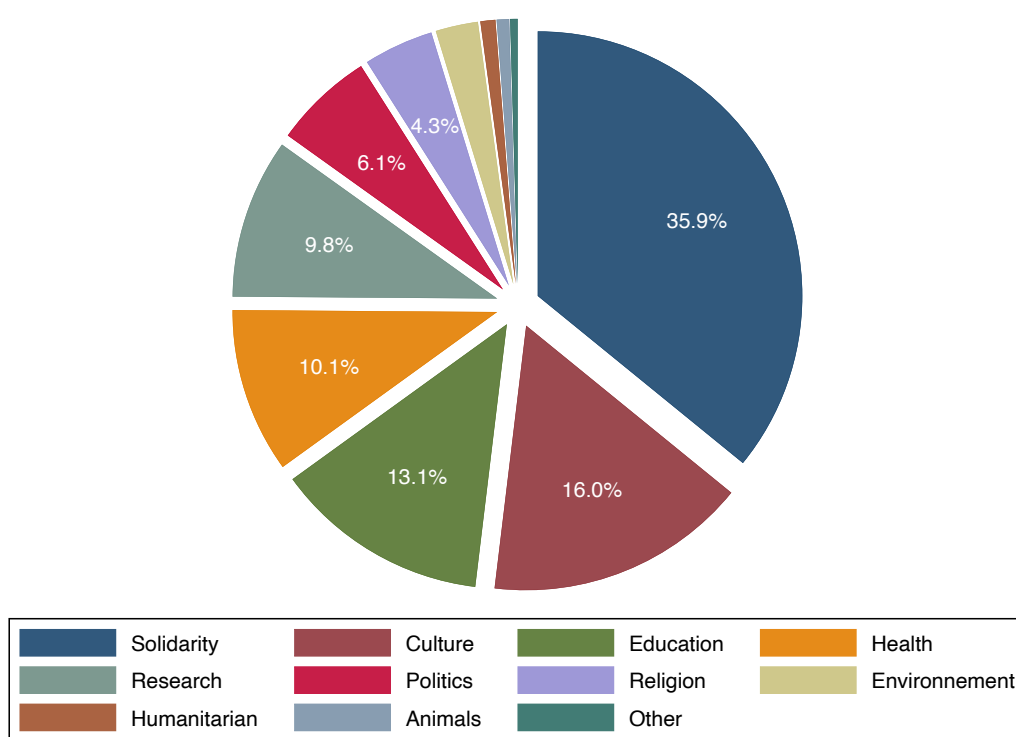
**Notes:** The Figure plots the distribution of the intensity of the wealth tax treatment. See notes of Figure B.17.

Figure B.19: Total amount of donations received by the FRUPs



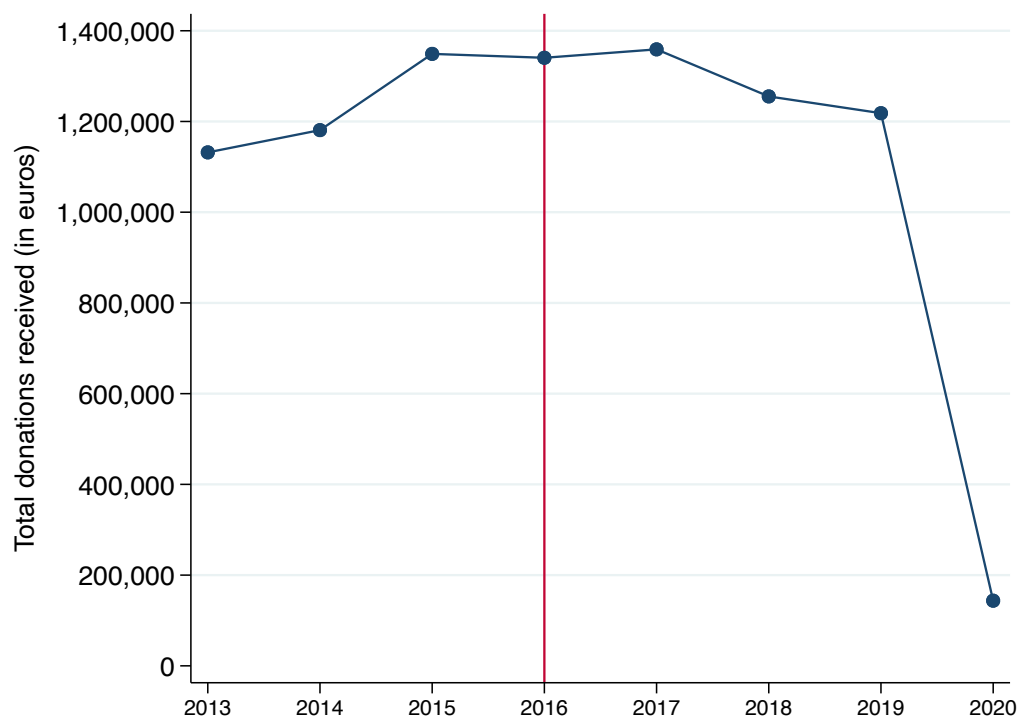
**Notes:** The Figure plots the evolution of the total amount of donations received by the FRUPs. The time period covered is 2013-2020. Data are from the foundations' reports.

Figure B.20: Share of the FRUPs in our sample depending on their “category”



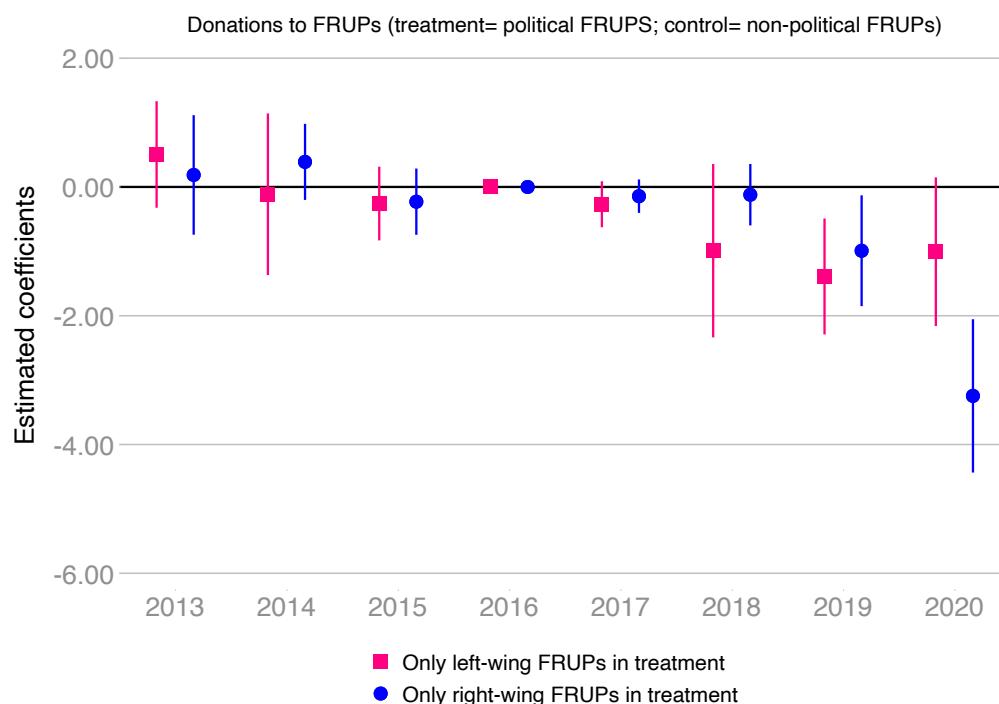
**Notes:** Authors’ own manual classification based on the FRUPs’ stated purpose (categories defined according to Reich (2018)).

Figure B.21: Drop in the donations received by right-wing politically-involved FRUPS: Anecdotal evidence from the iFRAP Foundation



**Notes:** The Figure plots the evolution of the annual donations received by the iFRAP Foundation.

Figure B.22: Donations to FRUPs, Depending on whether political – Heterogeneity depending on whether the FRUP is on the Left or on the Right of the political spectrum



**Notes:** The figure reports the coefficients and 95% confidence interval we obtain when estimating equation (5). The time period is 2013-2020. Models are estimated using an OLS (standard errors are clustered at the foundation level). An observation is a foundation-year. The dependent variable is (the IHS transformation of) the amount of the political donations received by the foundations. The pink lines with square report the estimated coefficients when only the left-wing FRUPs (defined following Hervé (2021)) are included in the treated group; the blue lines with circles similarly report the estimated coefficients when only the right-wing FRUPs are included in the treated group. The vector of controls include the (logarithm of the) operating costs and an indicator variable equal to one if the foundation is based in Paris interacted with year dummies. All specifications control for year and foundation fixed effects. More details are provided in the text.

## C Additional tables

Table C.1: Political giving and charitable giving: Correlation

|                       | ihs political donations |                      |                      |
|-----------------------|-------------------------|----------------------|----------------------|
|                       | (1)                     | (2)                  | (3)                  |
| ihs charitable giving | -0.021***<br>(0.001)    | -0.022***<br>(0.001) | -0.022***<br>(0.001) |
| Year FE               | ✓                       | ✓                    | ✓                    |
| Household FE          | ✓                       | ✓                    | ✓                    |
| Controls              |                         | ✓                    | ✓                    |
| Wealth-tax gain       |                         |                      | ✓                    |
| Observations          | 1,882,185               | 1,882,087            | 1,882,087            |
| Cluster(households)   | 282,483                 | 282,473              | 282,473              |
| Mean Dep Var          | 0.245                   | 0.245                | 0.245                |
| Sd Dep Var            | 1.185                   | 1.185                | 1.185                |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS. Standard errors clustered at the household level are reported between parentheses. An observation is a household-year. All specifications include household and year fixed effects. Columns (2) and (3) also control for household-level observables, and Column (3) for the wealth tax gain. More details are provided in the text.

Table C.2: Descriptive statistics: Households liable to the wealth tax in 2016 with similar wealth tax gain

|                                           | Mean      | Std. Dev. | p25       | p50       | p75       | Frac. > 0 |
|-------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Gross Taxable Income                      | 111,981   | 134,839   | 49,533    | 79,981    | 128,622   | 0.99      |
| Number of fiscal dependents               | 1.9       | 0.9       | 1.0       | 2.0       | 2.0       | 0.18      |
| Age (individual 1)                        | 68        | 13        | 60        | 68        | 77        | 1.00      |
| Total donations (income tax)              | 747.1     | 4,589.1   | 0.0       | 50.0      | 530.0     | 0.55      |
| Political donations (income tax)          | 22.0      | 329.0     | 0.0       | 0.0       | 0.0       | 0.046     |
| Charitable donations (income tax)         | 645.4     | 4,537.6   | 0.0       | 0.0       | 380.0     | 0.48      |
| Coluche donations (income tax)            | 79.7      | 244.2     | 0.0       | 0.0       | 0.0       | 0.23      |
| Total gross wealth                        | 2,254,074 | 1,815,677 | 1,628,515 | 1,967,794 | 2,484,079 | 0.99      |
| Total donation (wealth tax)               | 442.0     | 2,578.0   | 0.0       | 0.0       | 0.0       | 0.14      |
| Charitable donation (wealth tax)          | 437.0     | 2,552.9   | 0.0       | 0.0       | 0.0       | 0.14      |
| Charitable donation in E.U (wealth tax)   | 5.0       | 358.6     | 0.0       | 0.0       | 0.0       | 0.0019    |
| Charitable donation (income & wealth tax) | 1,087.4   | 5,610.7   | 0.0       | 46.0      | 570.0     | 0.53      |
| Observations                              | 282,999   |           |           |           |           |           |

**Notes:** The table shows descriptive statistics of the main variables used in the analysis for 2016. The sample consists of all the households liable to the wealth tax on their 2016 wealth and who face a wealth tax gain between €0 and €15,000 following the 2017 wealth tax reform. With the exception of the “Nb. of fiscal shares” and the “Age” variables, all the variables are in euros. We call “Coluche donations” the donations to charities that help people in need (see Section 4.5).



Table C.3: Descriptive statistics: Characteristics of the treated and of the control households in 2016

|                                         | Control   | Treatment | Diff/se               |
|-----------------------------------------|-----------|-----------|-----------------------|
| Age (individual 1)                      | 68        | 68        | -1***<br>(0)          |
| <b>Households characteristics</b>       |           |           |                       |
| Single                                  | 0.06      | 0.09      | -0.03***<br>(0.00)    |
| Divorced                                | 0.08      | 0.07      | 0.00***<br>(0.00)     |
| Married                                 | 0.69      | 0.64      | 0.05***<br>(0.00)     |
| Civil agreement                         | 0.02      | 0.02      | 0.00<br>(0.00)        |
| Widowed                                 | 0.15      | 0.17      | -0.02***<br>(0.00)    |
| Number of fiscal shares                 | 2.1       | 2.0       | 0.1***<br>(0.0)       |
| <b>Income and wealth</b>                |           |           |                       |
| Gross Taxable Income                    | 149,633   | 99,742    | 49,891***<br>(582)    |
| Taxable wealth                          | 2,772,574 | 1,901,945 | 870,629***<br>(6,779) |
| Share of housing wealth                 | 0.59      | 0.42      | 0.18***<br>(0.00)     |
| <b>Political and charitable givings</b> |           |           |                       |
| Charitable donations (income tax)       | 850       | 579       | 271***<br>(20)        |
| Total donation (wealth tax)             | 653       | 373       | 280***<br>(11)        |
| Charitable giving (income & wealth tax) | 1,503     | 952       | 551***<br>(24)        |
| Political donations (income tax)        | 38        | 17        | 21***<br>(1)          |
| <b>Tax policy variables</b>             |           |           |                       |
| Price of giving                         | 0.25      | 0.25      | -0.00*<br>(0.00)      |
| Wealth tax change                       | -4,741    | -5,051    | 310***<br>(15)        |
| Observations                            | 282,999   |           |                       |

**Notes:** The table shows descriptive statistics for the main variables used in the analysis for 2016 for the two groups. The sample consists of all the households liable to the wealth tax on their 2016 wealth who face wealth tax gain between €0 and €15,000 following the reform. The control group (Column (1)) corresponds to the households who are still liable to the wealth tax in 2017, while the households included in the treated group (Column (2)) are not.

Table C.4: Second-stage estimation for trade union subscriptions

|                     | OLS              |                   |                    | 2SLS              |                   |                   |
|---------------------|------------------|-------------------|--------------------|-------------------|-------------------|-------------------|
|                     | (1)              | (2)               | (3)                | (4)               | (5)               | (6)               |
| $\ln(1 - \tau)$     | 0.000<br>(0.005) | 0.010*<br>(0.005) | 0.012**<br>(0.005) | -0.014<br>(0.010) | -0.008<br>(0.010) | -0.008<br>(0.010) |
| Year FE             | ✓                | ✓                 | ✓                  | ✓                 | ✓                 | ✓                 |
| Household FE        | ✓                | ✓                 | ✓                  | ✓                 | ✓                 | ✓                 |
| Controls            |                  | ✓                 | ✓                  |                   | ✓                 | ✓                 |
| Wealth-tax gain     |                  |                   | ✓                  |                   |                   | ✓                 |
| Observations        | 1,882,185        | 1,882,087         | 1,882,087          | 1,882,185         | 1,882,087         | 1,882,087         |
| Cluster(households) | 282,483          | 282,473           | 282,473            | 282,483           | 282,473           | 282,473           |
| Mean Dep Var        | 0.189            | 0.189             | 0.189              | 0.189             | 0.189             | 0.189             |
| Sd Dep Var          | 1.026            | 1.026             | 1.026              | 1.026             | 1.026             | 1.026             |

**Notes:** The time period is 2013-2019. Models are estimated using an OLS (standard errors clustered at the household level between parentheses). Our sample of analysis includes all the households subject to the wealth tax in 2016 who face a wealth tax gain between €0 and €15,000 following the reform. An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table C.5: Second-stage estimation: The impact of the instrumented price of charitable donations on charitable donations

|                     | OLS                  |                      |                      | 2SLS                 |                      |                      |
|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                     | (1)                  | (2)                  | (3)                  | (4)                  | (5)                  | (6)                  |
| $\ln(1 - \tau)$     | -0.421***<br>(0.020) | -0.288***<br>(0.020) | -0.262***<br>(0.021) | -0.928***<br>(0.033) | -0.898***<br>(0.034) | -0.898***<br>(0.034) |
| Year FE             | ✓                    | ✓                    | ✓                    | ✓                    | ✓                    | ✓                    |
| Household FE        | ✓                    | ✓                    | ✓                    | ✓                    | ✓                    | ✓                    |
| Controls            |                      | ✓                    | ✓                    |                      | ✓                    | ✓                    |
| Wealth-tax gain     |                      |                      | ✓                    |                      |                      | ✓                    |
| Observations        | 1,882,185            | 1,882,087            | 1,882,087            | 1,882,185            | 1,882,087            | 1,882,087            |
| Cluster(households) | 282,483              | 282,473              | 282,473              | 282,483              | 282,473              | 282,473              |
| Mean Dep Var        | 3.617                | 3.617                | 3.617                | 3.617                | 3.617                | 3.617                |
| Sd Dep Var          | 3.635                | 3.635                | 3.635                | 3.635                | 3.635                | 3.635                |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (3) and 2SLS in Columns (4) to (6) (standard errors clustered at the household level between parentheses). In Columns (4) to (6), the price of charitable giving is instrumented by the interaction between  $Treatment_i$  and  $Post_t$  (see equation 2). Our sample of analysis includes all the households subject to the wealth tax in 2016 who face a wealth tax gain between €0 and €15,000 following the reform. An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table C.6: Reduced-form estimation: The impact of the 2017 wealth tax reform on the probability to make a political donation – Extensive margin

|                     | 1 if political donation > 0 |                     |                     |
|---------------------|-----------------------------|---------------------|---------------------|
|                     | (1)                         | (2)                 | (3)                 |
| Treated x Post      | 0.005***<br>(0.001)         | 0.004***<br>(0.001) | 0.005***<br>(0.001) |
| Year FE             | ✓                           | ✓                   | ✓                   |
| Households FE       |                             | ✓                   | ✓                   |
| Controls            |                             |                     | ✓                   |
| Observations        | 1,882,701                   | 1,882,185           | 1,882,087           |
| Cluster(households) | 282,999                     | 282,483             | 282,473             |
| Mean Dep Var        | 0.043                       | 0.043               | 0.043               |
| Sd Dep Var          | 0.203                       | 0.203               | 0.203               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using an OLS (standard errors clustered at the household level between parentheses). The dependent variable is an indicator variable equal to one if the household declares a non-zero political donation, and to zero otherwise. An observation is a household-year. Our sample of analysis includes all the households subject to the wealth tax in 2016 who face a wealth tax gain between €0 and €15,000 following the reform. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year fixed effects.

Table C.7: Descriptive statistics: Characteristics of the communes depending on their treatment status

|                                        | Control | Treatment | Diff/se              |
|----------------------------------------|---------|-----------|----------------------|
| Number of tax households               | 2,753   | 469       | 2,284***<br>(84)     |
| Reference tax income of tax households | 75,648  | 11,438    | 64,210***<br>(2,485) |
| Total net tax                          | 5,447   | 489       | 4,958***<br>(291)    |
| # of retirees                          | 944     | 183       | 761***<br>(25)       |
| Total pensions                         | 22,456  | 3,913     | 18,542***<br>(619)   |
| Vote share LFI 2012 Pres. elections    | 10.3    | 10.6      | -0.2***<br>(0)       |
| Vote share PS 2012 Pres. elections     | 25.1    | 24.6      | 0.5***<br>(0)        |
| Vote share Modem 2012 Pres. elections  | 9.6     | 9.4       | 0.1**<br>(0)         |
| Vote share LR 2012 Pres. elections     | 28.7    | 27.1      | 1.6***<br>(0)        |
| Vote share RN 2012 Pres. elections     | 20.0    | 21.8      | -1.8***<br>(0)       |
| Observations                           | 21,837  |           |                      |

**Notes:** The table provides descriptive statistics on the communes depending on their treatment status. “Control” communes are communes whose treatment intensity is below 100, and “treatment” communes are communes whose treatment intensity is equal to 100. The treatment intensity is defined as follows:  $\left( \frac{\# \text{ hh leaving wealth tax returns}}{\# \text{ hh leaving wealth tax returns} + \# \text{ hh liable to new wealth tax}} \right) * 100$  (see Section 5.1).

Table C.8: Commune-level estimation: The impact of the 2017 wealth tax reform on political donations, depending on the political parties – Robustness to an alternative definition of the treatment indicator variable

|                        | Overall             |                     |                   | LFI               |                      | PS                   |                  | LREM              |                     | LR                  |                  | RN               |  |
|------------------------|---------------------|---------------------|-------------------|-------------------|----------------------|----------------------|------------------|-------------------|---------------------|---------------------|------------------|------------------|--|
|                        | (1)                 | (2)                 | (3)               | (4)               | (5)                  | (6)                  | (7)              | (8)               | (9)                 | (10)                | (11)             | (12)             |  |
| Treated x Post         | 0.012***<br>(0.004) | 0.010***<br>(0.004) | -0.001<br>(0.001) | -0.001<br>(0.001) | -0.013***<br>(0.002) | -0.015***<br>(0.002) | 0.000<br>(0.002) | -0.000<br>(0.002) | 0.023***<br>(0.003) | 0.024***<br>(0.003) | 0.002<br>(0.001) | 0.001<br>(0.001) |  |
| Year FEs               | ✓                   | ✓                   | ✓                 | ✓                 | ✓                    | ✓                    | ✓                | ✓                 | ✓                   | ✓                   | ✓                | ✓                |  |
| Commune FEs            | ✓                   | ✓                   | ✓                 | ✓                 | ✓                    | ✓                    | ✓                | ✓                 | ✓                   | ✓                   | ✓                | ✓                |  |
| Commune-level controls |                     | ✓                   |                   | ✓                 |                      | ✓                    |                  | ✓                 |                     | ✓                   |                  | ✓                |  |
| Observations           | 80,253              | 79,921              | 80,253            | 79,921            | 80,253               | 79,921               | 80,253           | 79,921            | 80,253              | 79,921              | 80,253           | 79,921           |  |
| Clusters (communes)    | 16,090              | 16,053              | 16,090            | 16,053            | 16,090               | 16,053               | 16,090           | 16,053            | 16,090              | 16,053              | 16,090           | 16,053           |  |
| Mean DepVar            | 0.133               | 0.133               | 0.013             | 0.013             | 0.010                | 0.010                | 0.028            | 0.028             | 0.071               | 0.072               | 0.014            | 0.014            |  |
| Sd DepVar              | 0.288               | 0.288               | 0.076             | 0.076             | 0.085                | 0.085                | 0.126            | 0.126             | 0.215               | 0.214               | 0.092            | 0.092            |  |

**Notes:** \* p<0.10, \*\* p<0.05, \*\*\* p<0.01. The time period is 2016-2020. Models are estimated using an OLS (standard errors clustered at the commune level between parentheses). An observation is a commune-year. The dependent variable is the inverse hyperbolic sine transformation of the total amount of political donations normalized by the number of fiscal households. The vector of commune-level controls includes the (log of) the number of income tax households, the reference tax income, the total net tax, the number of retirees, and the total pensions. All specifications control for year and commune fixed effects. More details are provided in the text.

Table C.9: Commune-level estimation: The impact of the 2017 wealth tax reform on political donations, depending on the political parties – Robustness to dropping 2017

|                        | Overall             |                     |                   | LFI               |                      | PS                   |                     | LREM                |                     | LR                  |                  | RN               |  |
|------------------------|---------------------|---------------------|-------------------|-------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|------------------|------------------|--|
|                        | (1)                 | (2)                 | (3)               | (4)               | (5)                  | (6)                  | (7)                 | (8)                 | (9)                 | (10)                | (11)             | (12)             |  |
| Treated x Post         | 0.035***<br>(0.004) | 0.033***<br>(0.004) | -0.001<br>(0.001) | -0.001<br>(0.001) | -0.012***<br>(0.002) | -0.012***<br>(0.002) | 0.010***<br>(0.002) | 0.010***<br>(0.002) | 0.038***<br>(0.003) | 0.037***<br>(0.003) | 0.002<br>(0.001) | 0.001<br>(0.001) |  |
| Year FEs               | ✓                   | ✓                   | ✓                 | ✓                 | ✓                    | ✓                    | ✓                   | ✓                   | ✓                   | ✓                   | ✓                | ✓                |  |
| Commune FEs            | ✓                   | ✓                   | ✓                 | ✓                 | ✓                    | ✓                    | ✓                   | ✓                   | ✓                   | ✓                   | ✓                | ✓                |  |
| Commune-level controls |                     | ✓                   |                   | ✓                 |                      | ✓                    |                     | ✓                   |                     | ✓                   |                  | ✓                |  |
| Observations           | 84,451              | 84,059              | 84,451            | 84,059            | 84,451               | 84,059               | 84,451              | 84,059              | 84,451              | 84,059              | 84,451           | 84,059           |  |
| Clusters (communes)    | 21,182              | 21,130              | 21,182            | 21,130            | 21,182               | 21,130               | 21,182              | 21,130              | 21,182              | 21,130              | 21,182           | 21,130           |  |
| Mean DepVar            | 0.109               | 0.109               | 0.009             | 0.009             | 0.011                | 0.011                | 0.017               | 0.017               | 0.060               | 0.060               | 0.013            | 0.014            |  |
| Sd DepVar              | 0.263               | 0.263               | 0.068             | 0.068             | 0.092                | 0.092                | 0.103               | 0.102               | 0.195               | 0.195               | 0.092            | 0.092            |  |

**Notes:** \* p<0.10, \*\* p<0.05, \*\*\* p<0.01. The time period is 2016-2020 but the year 2017 is excluded. Models are estimated using an OLS (standard errors clustered at the commune level between parentheses). An observation is a commune-year. The dependent variable is the inverse hyperbolic sine transformation of the total amount of political donations normalized by the number of fiscal households. The vector of commune-level controls includes the (log of) the number of income tax households, the reference tax income, the total net tax, the number of retirees, and the total pensions. All specifications control for year and commune fixed effects. More details are provided in the text.

Table C.10: Change in the political preferences of the communes as measured by the votes in the first round of the presidential elections (2012, 2017 and 2022), depending on their treatment status

|                        | LFI                 |                     | PS                 |                   | LREM                 |                      | LR                   |                      | RN                  |                     |
|------------------------|---------------------|---------------------|--------------------|-------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|
|                        | (1)                 | (2)                 | (3)                | (4)               | (5)                  | (6)                  | (7)                  | (8)                  | (9)                 | (10)                |
| Treated x Post         | 0.012***<br>(0.003) | 0.012***<br>(0.003) | 0.011**<br>(0.005) | 0.010*<br>(0.005) | -0.033***<br>(0.004) | -0.033***<br>(0.004) | -0.012***<br>(0.003) | -0.014***<br>(0.003) | 0.038***<br>(0.002) | 0.039***<br>(0.002) |
| Year FEs               | ✓                   | ✓                   | ✓                  | ✓                 | ✓                    | ✓                    | ✓                    | ✓                    | ✓                   | ✓                   |
| Commune FEs            | ✓                   | ✓                   | ✓                  | ✓                 | ✓                    | ✓                    | ✓                    | ✓                    | ✓                   | ✓                   |
| Commune-level controls |                     | ✓                   |                    | ✓                 |                      | ✓                    |                      | ✓                    |                     | ✓                   |
| Observations           | 62,831              | 61,581              | 62,831             | 61,581            | 62,831               | 61,581               | 62,831               | 61,581               | 62,831              | 61,581              |
| Clusters (communes)    | 21,153              | 21,071              | 21,153             | 21,071            | 21,153               | 21,071               | 21,153               | 21,071               | 21,153              | 21,071              |
| Mean DepVar            | 3.345               | 3.345               | 2.836              | 2.850             | 3.512                | 3.507                | 3.283                | 3.299                | 3.931               | 3.926               |
| Sd DepVar              | 0.475               | 0.469               | 0.898              | 0.894             | 0.545                | 0.544                | 0.850                | 0.841                | 0.400               | 0.397               |

**Notes:** \* p<0.10, \*\* p<0.05, \*\*\* p<0.01. Models are estimated using an OLS (standard errors clustered at the commune level between parentheses). An observation is a commune-election; the 2012, 2017 and 2022 presidential elections are included. The dependent variable is the inverse hyperbolic sine transformation of the share of the votes (normalized by the number of caste votes) obtained by La France Insoumise (LFI) (Columns (1) and (2)), the Socialist Party (PS) (Columns (3) and (4)), La République en Marche (LREM) (Columns (5) and (6)), Les Républicains (LR) (Columns (7) and (8)), and the Rassemblement National (RN) (Columns (9) and (10)) in the commune in the presidential elections. For the sake of comparison over time, we include the Communist party with the LFI in 2022 (given they had a unique candidate in 2012 and 2017), the Greens with the Socialist Party in 2012 and 2022 (given they had a unique candidate in 2017) and Reconquête ! (Eric Zemmour) with the Rassemblement National in 2022. In 2012, for the sake of simplicity, we call LREM the party of François Bayrou. The vector of commune-level controls includes the (log of) the number of income tax households, the reference tax income, the total net tax, the number of retirees, and the total pensions. All specifications control for year and commune fixed effects. More details are provided in the text.



## D Robustness checks

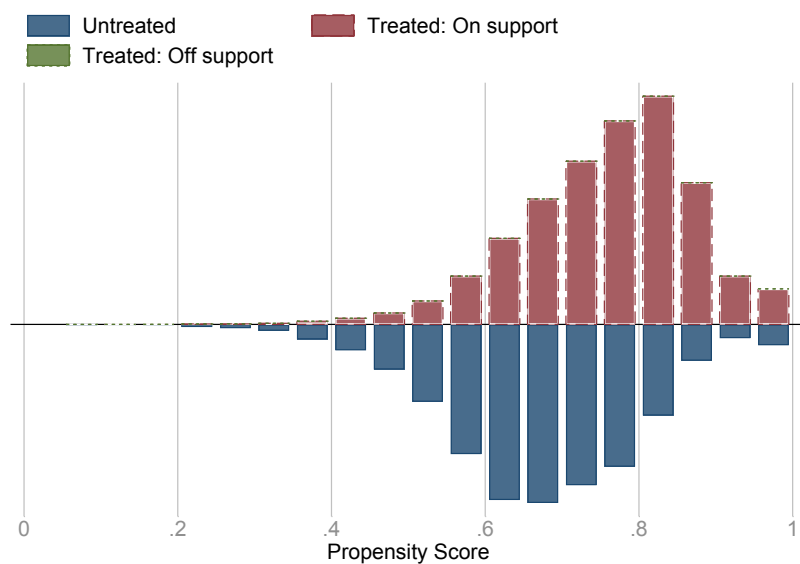
### D.1 Matching strategy

Table D.1: Descriptive statistics: Characteristics of the treated and of the control groups in 2016 (Matching sample)

|                                         | Control | Treatment | Diff/se             |
|-----------------------------------------|---------|-----------|---------------------|
| <b>Households characteristics</b>       |         |           |                     |
| Age (individual 1)                      | 68.7    | 69.4      | -0.8***<br>( 0.00)  |
| Single                                  | 0.09    | 0.09      | 0.00<br>( 0.47)     |
| Divorced                                | 0.07    | 0.07      | 0.00<br>( 0.61)     |
| Married                                 | 0.65    | 0.65      | 0.00<br>( 0.73)     |
| Civil agreement                         | 0.02    | 0.02      | 0.00**<br>( 0.02)   |
| Widowed                                 | 0.16    | 0.17      | -0.00**<br>( 0.03)  |
| Number of fiscal shares                 | 2.0     | 2.0       | 0.0***<br>( 0.00)   |
| <b>Income and wealth</b>                |         |           |                     |
| Gross Taxable Income                    | 99,749  | 96,132    | 3,617***<br>( 0.00) |
| Share of housing wealth                 | 0.57    | 0.41      | 0.17***<br>( 0.00)  |
| <b>Political and charitable givings</b> |         |           |                     |
| Charitable donations (income tax)       | 558     | 581       | -23<br>( 0.16)      |
| Total donation (wealth tax)             | 373     | 398       | -25**<br>( 0.05)    |
| Charitable giving (income & wealth tax) | 931     | 979       | -48**<br>( 0.03)    |
| Political donations (income tax)        | 25      | 17        | 9***<br>( 0.00)     |
| <b>Tax policy variables</b>             |         |           |                     |
| Price of giving                         | 0.25    | 0.25      | -0.00***<br>( 0.00) |
| Wealth tax change                       | -5,342  | -5,214    | -128***<br>( 0.00)  |
| Observations                            | 224,249 |           |                     |

**Notes:** The table shows descriptive statistics for the main variables used in the analysis for 2016 for the two groups using matching weights. The sample consists of all the households liable to the wealth tax on their 2016 wealth. The control group corresponds to the households who are still liable to the wealth tax in 2017, while the households included in the treated group are not.

Figure D.1: Propensity score histogram by treatment status



**Notes:** The Figure shows the distribution of the propensity scores in both treated and control groups using a propensity score matching with 5 neighbours based on 2016 households information.

Table D.2: Matching strategy: The impact of the price of charitable donations on political donations

|                     | OLS              |                   |                   | 2SLS               |                     |                     |
|---------------------|------------------|-------------------|-------------------|--------------------|---------------------|---------------------|
|                     | (1)              | (2)               | (3)               | (4)                | (5)                 | (6)                 |
| $\ln(1 - \tau)$     | 0.010<br>(0.012) | 0.023*<br>(0.013) | 0.022*<br>(0.013) | 0.041**<br>(0.018) | 0.049***<br>(0.018) | 0.049***<br>(0.018) |
| Year FE             | ✓                | ✓                 | ✓                 | ✓                  | ✓                   | ✓                   |
| Household FE        | ✓                | ✓                 | ✓                 | ✓                  | ✓                   | ✓                   |
| Controls            |                  | ✓                 | ✓                 |                    | ✓                   | ✓                   |
| Wealth-tax gain     |                  |                   | ✓                 |                    |                     | ✓                   |
| Observations        | 1,526,095        | 1,526,079         | 1,526,079         | 1,526,095          | 1,526,079           | 1,526,079           |
| Cluster(households) | 224,249          | 224,249           | 224,249           | 224,249            | 224,249             | 224,249             |
| Mean Dep Var        | 0.246            | 0.246             | 0.246             | 0.246              | 0.246               | 0.246               |
| Sd Dep Var          | 1.186            | 1.186             | 1.186             | 1.186              | 1.186               | 1.186               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019 and the sample is the nearest neighbour matching sample. Models are estimated using OLS (standard errors clustered at the household level between parentheses) using matching weights. An observation is a household-year. The dependent variable is the inverse hyperbolic sine transformation of the total amount of political donations. The vector of controls includes the number fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year fixed effects, and Columns (2) and (3) also include household fixed effects.

Table D.3: Cross-elasticity: matching strategy

|                       | ihs political donations |                      |                      |
|-----------------------|-------------------------|----------------------|----------------------|
|                       | (1)                     | (2)                  | (3)                  |
| ihs charitable giving | -0.022***<br>(0.001)    | -0.023***<br>(0.001) | -0.023***<br>(0.001) |
| Year FE               | ✓                       | ✓                    | ✓                    |
| Household FE          | ✓                       | ✓                    | ✓                    |
| Controls              |                         | ✓                    | ✓                    |
| Wealth-tax gain       |                         |                      | ✓                    |
| Observations          | 1,526,095               | 1,526,079            | 1,526,079            |
| Cluster(households)   | 224,249                 | 224,249              | 224,249              |
| Mean Dep Var          | 0.246                   | 0.246                | 0.246                |
| Sd Dep Var            | 1.186                   | 1.186                | 1.186                |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019 and the sample is the 1-5 matching sample. Models are estimated using OLS (standard errors clustered at the household level between parentheses) with matching weights. An observation is a household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

## D.2 Additional robustness checks

Table D.4: Second-stage estimation: Robustness check, Using the first-euro price of charitable donations

|                                  | OLS                 |                     |                     |
|----------------------------------|---------------------|---------------------|---------------------|
|                                  | (1)                 | (2)                 | (3)                 |
| $\ln(1\text{-first euro } \tau)$ | 0.097***<br>(0.013) | 0.099***<br>(0.013) | 0.098***<br>(0.013) |
| Year FE                          | ✓                   | ✓                   | ✓                   |
| Households FE                    | ✓                   | ✓                   | ✓                   |
| Controls                         |                     | ✓                   | ✓                   |
| Wealth-tax gain                  |                     |                     | ✓                   |
| Observations                     | 1,882,185           | 1,882,087           | 1,882,087           |
| Cluster(households)              | 282,483             | 282,473             | 282,473             |
| Mean Dep Var                     | 0.245               | 0.245               | 0.245               |
| Sd Dep Var                       | 1.185               | 1.185               | 1.185               |

**Notes:** The marginal price takes into account the amounts of donations that households can report over a four-years period if they exceed the maximum allowed (20% of taxable income). The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (3) and 2SLS in Columns (4) to (6) (standard errors clustered at the household level between parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.5: Second-stage estimation: Robustness check, Including reported donations

|                                   | OLS               |                  |                  | 2SLS                |                     |                     |
|-----------------------------------|-------------------|------------------|------------------|---------------------|---------------------|---------------------|
|                                   | (1)               | (2)              | (3)              | (4)                 | (5)                 | (6)                 |
| $\ln(1\text{-alternative } \tau)$ | -0.003<br>(0.009) | 0.010<br>(0.009) | 0.006<br>(0.009) | 0.116***<br>(0.015) | 0.120***<br>(0.016) | 0.120***<br>(0.016) |
| Year FE                           | ✓                 | ✓                | ✓                | ✓                   | ✓                   | ✓                   |
| Households FE                     | ✓                 | ✓                | ✓                | ✓                   | ✓                   | ✓                   |
| Controls                          |                   | ✓                | ✓                |                     | ✓                   | ✓                   |
| Wealth-tax gain                   |                   |                  | ✓                |                     |                     | ✓                   |
| Observations                      | 1,882,185         | 1,882,087        | 1,882,087        | 1,882,185           | 1,882,087           | 1,882,087           |
| Cluster(households)               | 282,483           | 282,473          | 282,473          | 282,483             | 282,473             | 282,473             |
| Mean Dep Var                      | 0.245             | 0.245            | 0.245            | 0.245               | 0.245               | 0.245               |
| Sd Dep Var                        | 1.185             | 1.185            | 1.185            | 1.185               | 1.185               | 1.185               |

**Notes:** The first-euro price is used instead of the marginal price. The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (3) and 2SLS in Columns (4) to (6) (standard errors clustered at the household level between parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.6: Second-stage estimation: Robustness check, Using the logarithm of (political donations +1)

|                     | OLS                 |                     | 2SLS                |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|
|                     | (1)                 | (2)                 | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | 0.022***<br>(0.007) | 0.032***<br>(0.007) | 0.145***<br>(0.011) | 0.133***<br>(0.011) |
| Year FE             | ✓                   | ✓                   | ✓                   | ✓                   |
| Households FE       | ✓                   | ✓                   | ✓                   | ✓                   |
| Controls            |                     | ✓                   |                     | ✓                   |
| Observations        | 2,336,311           | 2,336,176           | 2,336,311           | 2,336,176           |
| Cluster(households) | 350,665             | 350,651             | 350,665             | 350,651             |
| Mean Dep Var        | 0.232               | 0.232               | 0.232               | 0.232               |
| Sd Dep Var          | 1.106               | 1.106               | 1.106               | 1.106               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (3) and 2SLS in Columns (4) to (6) (standard errors clustered at the household level between parentheses). An observation is a household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.



Table D.7: Second-stage estimation: Robustness check, Balanced panel

|                     | OLS              |                     | 2SLS                |                     |
|---------------------|------------------|---------------------|---------------------|---------------------|
|                     | (1)              | (2)                 | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | 0.012<br>(0.009) | 0.024***<br>(0.009) | 0.122***<br>(0.016) | 0.122***<br>(0.016) |
| Year FE             | ✓                | ✓                   | ✓                   | ✓                   |
| Households FE       | ✓                | ✓                   | ✓                   | ✓                   |
| Controls            |                  | ✓                   |                     | ✓                   |
| Observations        | 1,645,000        | 1,644,936           | 1,645,000           | 1,644,936           |
| Cluster(households) | 235,000          | 234,994             | 235,000             | 234,994             |
| Mean Dep Var        | 0.251            | 0.251               | 0.251               | 0.251               |
| Sd Dep Var          | 1.200            | 1.200               | 1.200               | 1.200               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using an OLS in Columns (1) to (2) and 2SLS in Columns (3) to (4) (standard errors clustered at the household level between parentheses). An observation is a household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.8: Second-stage estimation: Robustness check, Dropping 2017

|                     | OLS              |                     | 2SLS                |                     |
|---------------------|------------------|---------------------|---------------------|---------------------|
|                     | (1)              | (2)                 | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | 0.010<br>(0.009) | 0.024***<br>(0.009) | 0.186***<br>(0.018) | 0.180***<br>(0.018) |
| Year FE             | ✓                | ✓                   | ✓                   | ✓                   |
| Households FE       | ✓                | ✓                   | ✓                   | ✓                   |
| Controls            |                  | ✓                   |                     | ✓                   |
| Observations        | 1,605,693        | 1,605,604           | 1,605,693           | 1,605,604           |
| Cluster(households) | 282,007          | 281,997             | 282,007             | 281,997             |
| Mean Dep Var        | 0.244            | 0.244               | 0.244               | 0.244               |
| Sd Dep Var          | 1.183            | 1.183               | 1.183               | 1.183               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (2) and 2SLS in Columns (3) to (4) (standard errors clustered at the household level between parentheses). An observation is a household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.9: Second-stage estimation: Robustness check, Dropping 2016

|                     | OLS               |                  | 2SLS                |                     |
|---------------------|-------------------|------------------|---------------------|---------------------|
|                     | (1)               | (2)              | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | -0.009<br>(0.009) | 0.011<br>(0.009) | 0.103***<br>(0.018) | 0.112***<br>(0.018) |
| Year FE             | ✓                 | ✓                | ✓                   | ✓                   |
| Households FE       | ✓                 | ✓                | ✓                   | ✓                   |
| Controls            |                   | ✓                |                     | ✓                   |
| Observations        | 1,598,820         | 1,598,733        | 1,598,820           | 1,598,733           |
| Cluster(households) | 281,601           | 281,590          | 281,601             | 281,590             |
| Mean Dep Var        | 0.242             | 0.242            | 0.242               | 0.242               |
| Sd Dep Var          | 1.181             | 1.181            | 1.181               | 1.181               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (2) and 2SLS in Columns (3) to (4) (standard errors clustered at the household level between parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.10: Second-stage estimation: Robustness check, Dropping 2013-14

|                     | OLS                 |                     | 2SLS                |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|
|                     | (1)                 | (2)                 | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | 0.042***<br>(0.009) | 0.047***<br>(0.009) | 0.115***<br>(0.015) | 0.115***<br>(0.015) |
| Year FE             | ✓                   | ✓                   | ✓                   | ✓                   |
| Households FE       | ✓                   | ✓                   | ✓                   | ✓                   |
| Controls            |                     | ✓                   |                     | ✓                   |
| Observations        | 1,353,275           | 1,353,224           | 1,353,275           | 1,353,224           |
| Cluster(households) | 282,437             | 282,428             | 282,437             | 282,428             |
| Mean Dep Var        | 0.212               | 0.212               | 0.212               | 0.212               |
| Sd Dep Var          | 1.101               | 1.101               | 1.101               | 1.101               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (2) and 2SLS in Columns (3) to (4) (standard errors clustered at the household level between parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.11: Second-stage estimation: Robustness check, Dropping the households in the top 5% of the wealth distribution

|                     | OLS              |                     | 2SLS                |                     |
|---------------------|------------------|---------------------|---------------------|---------------------|
|                     | (1)              | (2)                 | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | 0.003<br>(0.008) | 0.033***<br>(0.011) | 0.114***<br>(0.015) | 0.122***<br>(0.021) |
| Year FE             | ✓                | ✓                   | ✓                   | ✓                   |
| Households FE       | ✓                | ✓                   | ✓                   | ✓                   |
| Controls            |                  | ✓                   |                     | ✓                   |
| Observations        | 1,882,185        | 1,315,257           | 1,882,185           | 1,315,257           |
| Cluster(households) | 282,483          | 192,614             | 282,483             | 192,614             |
| Mean Dep Var        | 0.245            | 0.276               | 0.245               | 0.276               |
| Sd Dep Var          | 1.185            | 1.256               | 1.185               | 1.256               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (2) and 2SLS in Columns (3) to (4) (standard errors clustered at the household level between parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects. The sample excludes households whose wealth is in the top 5% of our sample in 2016.

Table D.12: Second-stage estimation: Robustness check, Giving to Coluche

|                     | OLS                 |                     |                     | 2SLS                |                     |                     |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|                     | (1)                 | (2)                 | (3)                 | (4)                 | (5)                 | (6)                 |
| $\ln(1 - \tau)$     | 0.076***<br>(0.014) | 0.160***<br>(0.014) | 0.162***<br>(0.014) | 0.384***<br>(0.026) | 0.494***<br>(0.026) | 0.497***<br>(0.027) |
| Year FE             | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   |
| Household FE        | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   |
| Controls            |                     | ✓                   | ✓                   |                     | ✓                   | ✓                   |
| Wealth-tax gain     |                     |                     | ✓                   |                     |                     | ✓                   |
| Observations        | 1,882,185           | 1,882,087           | 1,882,087           | 1,882,185           | 1,882,087           | 1,882,087           |
| Cluster(households) | 282,483             | 282,473             | 282,473             | 282,483             | 282,473             | 282,473             |
| Mean Dep Var        | 1.461               | 1.462               | 1.462               | 1.461               | 1.462               | 1.462               |
| Sd Dep Var          | 2.678               | 2.678               | 2.678               | 2.678               | 2.678               | 2.678               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using an OLS (parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.13: Second-stage estimation: Robustness check, Similar wealth tax gain between €0 and €10,000

|                     | OLS              |                   | 2SLS                |                     |
|---------------------|------------------|-------------------|---------------------|---------------------|
|                     | (1)              | (2)               | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | 0.000<br>(0.008) | 0.016*<br>(0.008) | 0.103***<br>(0.016) | 0.109***<br>(0.016) |
| Year FE             | ✓                | ✓                 | ✓                   | ✓                   |
| Households FE       | ✓                | ✓                 | ✓                   | ✓                   |
| Controls            |                  | ✓                 |                     | ✓                   |
| Observations        | 1,695,852        | 1,695,778         | 1,695,852           | 1,695,778           |
| Cluster(households) | 254,355          | 254,348           | 254,355             | 254,348             |
| Mean Dep Var        | 0.242            | 0.242             | 0.242               | 0.242               |
| Sd Dep Var          | 1.176            | 1.176             | 1.176               | 1.176               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. Models are estimated using OLS in Columns (1) to (2) and 2SLS in Columns (3) to (4) (standard errors clustered at the household level between parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.

Table D.14: Second-stage estimation: Robustness check, Similar wealth tax gain between €0 and €20,000

|                     | OLS              |                     | 2SLS                |                     |
|---------------------|------------------|---------------------|---------------------|---------------------|
|                     | (1)              | (2)                 | (3)                 | (4)                 |
| $\ln(1 - \tau)$     | 0.010<br>(0.008) | 0.023***<br>(0.008) | 0.126***<br>(0.015) | 0.127***<br>(0.015) |
| Year FE             | ✓                | ✓                   | ✓                   | ✓                   |
| Households FE       | ✓                | ✓                   | ✓                   | ✓                   |
| Controls            |                  | ✓                   |                     | ✓                   |
| Observations        | 1,971,993        | 1,971,895           | 1,971,993           | 1,971,895           |
| Cluster(households) | 295,992          | 295,982             | 295,992             | 295,982             |
| Mean Dep Var        | 0.248            | 0.248               | 0.248               | 0.248               |
| Sd Dep Var          | 1.195            | 1.195               | 1.195               | 1.195               |

**Notes:** \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The time period is 2013-2019. OLS in Columns (1) to (2) and 2SLS in Columns (3) to (4) (standard errors clustered at the household level between parentheses). An observation is an household-year. The vector of controls includes the number of fiscal shares, the age, 10-splines in income, the average gross wealth for 2013-2016, and the average wealth tax donations for 2013-2016. All specifications control for year and households fixed effects.



## References

- Cagé, J. (2018). *Le prix de la démocratie*. Fayard (English version: *The Price of Democracy*, Harvard University Press, 2020).
- Hervé, N. (2021). Quelle modélisation de l'espace politique français sur Twitter. *Revue des Nouvelles Technologies de l'Information*, Extraction:503–504.
- Reich, R. (2018). *Just Giving: Why Philanthropy Is Failing Democracy and How It Can Do Better*. Princeton University Press.