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Top Income Tax Evasion and Redistribution Preferences: Evidence from the Panama Papers

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Abstract

This paper provides empirical evidence that, after fiscal scandals, individuals substantially revise their views on redistribution. I exploit as a quasi-natural experiment the 2016 Panama Papers scandal which revealed top-income tax evasion behaviour simultaneously worldwide. The empirical investigation relies on two original sources of data: a longitudinal dataset on United Kingdom households and a survey conducted in twenty-two European countries. Using a difference-in-differences strategy, I find an increase in pro-redistribution statements post-scandal ranging between 2% and 3.3%. Responses are heterogeneous on income levels and on political affiliations, with larger responses from right-wing individuals. The change in redistribution preferences is moderately translated into votes: I find an increase in voting intentions for the left and negative for the right-wing parties. Complementary estimations at the European-level indicate that pro-redistribution responses increase with media coverage and shock intensity (i.e., number of individuals involved).

JEL codes: D63, H24, H26.

Keywords: Panama Papers, Tax Evasion; Tax Avoidance; Redistribution; Tax Morale; Inequality; Mass media.

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1 Introduction

Do people revise their views on inequality and taxation after an informational shock? Over the past decade leaks have uncovered tax evasion behaviours in the media, exposing successively firms and top-income earners both at the country-level and worldwide. Tax avoidance leads to an approximate \$600 billion annual tax loss, divided roughly into \$400 billion in OECD countries and \$200 billion elsewhere (as estimated by Crivelli et al., 2015). A recent and substantial strand of literature studies the extent of tax evasion and aims at quantifying it. Alstadsæter et al. (2017) show that top-income tax evasion is substantial and especially within the very top of the income distribution. Using Panama Papers' information, they find that on average 3% of personal taxes are evaded whereas the top 0.01% evades between 25% and 30%. Therefore, such information could trigger an update of inequality beliefs.

Tax havens generate more inequalities, which in turn questions the optimality of taxation systems. The possibility to resort to offshore firms is not included in the design of optimal taxation policies. That is why it is interesting to test whether individuals are sensitive to the existence of more inequalities and update their stated preferences accordingly. Whether they do so would advocate in favour of an inclusion of these behaviours in the design of optimal policies.

Another strand of the literature tests the impact of informational shocks on individuals (Cruces et al., 2013, De Neve et al., 2017, Kuziemko et al., 2015, Sides, 2011). According to Alesina and Giuliano (2011) and Margalit (2013), negative experiences can change individuals' preferences and make them less optimistic or more risk-averse. Fiscal scandals can be felt as a negative experience triggering a revision of beliefs. Reactions have been tested on firms, as in Johannesen and Stolper (2017) for the 2008 Liechtenstein tax affair, or O'Donovan et al. (2016) for the Panama Papers. They find that leaks increase tax havens withdrawals and decrease the market value of firms involved in the scandal. More precisely, O'Donovan et al. (2016) find that the Panama Papers erased \$135 billion in market capitalization among 397 public firms.

To the best of my knowledge, this study is the first one providing an estimation of the Panama Papers' impact on individual preferences. This paper uses this fiscal scandal as a quasi-natural experiment. The Panama Papers generate a time discontinuity: it was leaked worldwide on April 3rd, 2016 in various media where members of a journalists' consortium (ICIJ) were active. Information on potential tax evasion leaked from a source working in Mossack Fonseca, a Panamean law firm involved with offshore companies: the motivations of the anonymous source (named "John Doe") were ethical and exogeneous. Therefore, the leak was unanticipated by individuals.

The Panama Papers does not constitute a clear proof of illegal activity. This scandal only leaked names of people involved in offshore companies; in addition, resorting to offshore companies is not necessarily illegal. Yet, offshore companies still constitute a means to avoid taxes. Therefore, the Panama Papers is a signal of top-income tax evasion: this scandal highlights how easy it is to conceal wealth in tax havens (\$32 trillion offshore, according to the Tax Justice Network). It is also treated as such by the media. Therefore, the informational shock presents the Panama Papers as a signal of top-income tax evasion.

I use panel data survey from the British Election Study (BES hereafter) for years 2014-2016. This dataset follows the same individuals in the United Kingdom and contains indicators of media exposure. I resort to a differences-in-differences methodology where the treated individuals are those who are informed on politics and current affairs through a various set of media: radio, television, internet and newspapers. This choice of treatment is rooted in the fact that mass media is the major source of information for the public. Both theoretical and empirical studies find that information incentivize individuals into updating their beliefs on the matters of taxation and redistribution: Petrova (2008) shows that incomplete or biased information affect redistribution preferences within countries with high inequality levels.

This study focuses on both redistribution and voting outcomes. Results show that preferences for top-income redistribution strongly and abruptly increase after the Panama Papers. I find that the probability to 'Strongly Agree' with redistribution statements increases by 15 percentage points after the scandal. In addition, the legal system is perceived as less fair after the scandal (*i.e.*, more people agree with the statement: "There is one law for the rich, one for the poor"). In line with Senik (2009), the preferences for redistribution are larger when individuals have a strong preference for low inequalities but consider it is not fulfilled in the country. By exposing tax avoiders, the Panama Papers scandal highlights a source of inequality, which triggers the revision of beliefs. Falsification tests indicate that this change in preferences is not only driven by the political context and the perception of the government but also appeared through the redistribution channel. I find no differentiated effect based on socio-demographic variables (age, gender). However, I notice heterogeneity based on the household income level, with a larger effect on household earning between £10,000 and £39,999/year. I observe heterogeneous responses on political affiliation. The propensity to update one's beliefs is larger for right-wing individuals. The absence of heterogeneous effect for left-wing individuals could be attributed to a 'ceiling' effect (Margalit, 2013).

Second, I test whether the scandal affects voting outcomes. Relying on the median-voter model, it is expected that a larger gap between the average and the median income should lead to an increase in preferences for redistribution (Meltzer and Richard, 1981). I find

post-scandal an increase in the voting intentions for the left and the centre, and no effects for the right. Therefore, this scandal indicates polarisation; yet, I find a decrease in the certainty of the voting intention for right-wing parties. This indicates a large instability triggered by the scandal. Therefore, fiscal scandals encourage individuals in taking a stand and stating stronger preferences for redistribution.

I use the European Social Survey (ESS hereafter) to get information at the European level and complement the analysis over 2014-2016 at the European level and using the same differences-in-differences methodology. I find stable results on preferences for redistribution, which indicates that the effects of the scandal are verified at the European level. Additional estimations at the European-level indicate that the increase of pro-redistribution statement is positively correlated with the media coverage intensity. Among all European countries, a subset did not have individuals of their nationality involved in the scandal. I test for a differentiated response with respect to the intensity of the scandal (*i.e.*, whether the country is directly involved, as well as the number of individuals involved) and I find that the increase of pro-redistribution statements increases with the intensity of the scandal in the country.

This paper contributes to the literature as it provides a quantification of how elastic are redistribution preferences to the provision of information. It checks whether this change in the perception of inequalities triggers a change in stated voting intentions. This study uses this event as a quasi-natural experiment, given that the informational shock is unanticipated and exogeneous. This scandal provides evidence of the existence of top-income tax evasion in real-life, which provides a larger external validity to our findings than randomized controlled experiments which rely on internet survey responses.

The framework in this paper aims at bringing a stronger identification strategy and a wider external validity. The drivers of redistribution preferences are the subject of a large literature which often use survey data to link individual traits to preferences (Alesina and Giuliano, 2011, Alesina and La Ferrara, 2005, Senik, 2009, Weinzierl, 2012): in these studies, respondents simply answer non-experimental survey questions on views about policy and social preferences. The differences-in-differences methodology in this paper disentangle the influence of the shock and identifies causal effects instead of correlations. A more recent strand of the literature resorts to randomized online survey experiments to seize any update in preferences after an informational intake. Kuziemko et al. (2015) and Cruces et al. (2013) find that informational shocks influence individuals' stated views on inequality. Although experiments increases the quality of the identification strategy compared to simple survey studies, they are undermined by a limited external validity ¹:

¹Randomized controlled experiments that use mTurk (e.g. Kuziemko et al. (2015)) have participants who are incentivized into complying to the expected responses, as it may affect their rating on the

this study provides a real-life experiment that corroborates their findings.

The rest of this paper is organized as follows. Section 2 introduces and explains the tax evasion mechanism uncovered by the Panama Papers scandal. Section 3 presents the empirical strategy along with the data. The fourth part shows that the leak increased individuals' redistribution preferences and alters voting outcomes; it also provides robustness checks. Section 5 presents complementary estimations and corroborates the effects of the scandal at the European level. Section 6 concludes.

2 The Panama Papers scandal

An exogeneous leak. The Panama Papers scandal started with a leak from an anonymous source working in a law firm in Panama called Mossack Fonseca. This source contacted a German investigative reporter from the Süddeutsche Zeitung through an encrypted messaging service. The motivations of this whistle-blower (named 'John Doe') were exogeneous, as her stated motivation is to "make these crimes public"². The documents were first examined within a consortium of journalists, the International Consortium of Investigative Journalists (ICIJ hereafter), which is also at the origin of other leaks such as the Swiss Leaks or the Offshore Leaks. It is important to note that the magnitude of the leak is larger than any of the previous leaks uncovered by the ICIJ: the anonymous source shared over 11.5 million documents on 241,488 companies where 14,153 individuals are involved. Data covers a large span (1977-2015) and weighs 2.6 terabytes. The exogeneous nature of this leak and the fact that it was unanticipated by the public is what motivated its use as a quasi-natural experiment.

A signal of tax evasion. The Panama Papers does not constitute a clear proof of illegal activity. The Panama Papers essentially leaked names of people involved in offshore companies. Resorting to offshore companies is not necessarily illegal. However, offshore companies constitute a means to avoid taxes. The mechanism behind the Panama Papers is rather simple and explained in Figure A.1 in Appendix A. It is possible to summarize it in two steps. The first step is to create a "shell company" registered in a tax haven. This shell company is run by a nominee so that the name of the avoider does not directly appear. The second step is to open a bank account in the same tax haven and wire money from the corporation to the bank account. Therefore, it is possible to access and spend that money.

Therefore, the Panama Papers is a signal of top-income tax evasion: this scandal highlights how easy it is to conceal wealth in tax havens (\$32 trillion offshore, according to

platform therefore their future earnings.

²The excerpt from this conversation can be found in the dedicated Süddeutsche Zeitung webpage.

the Tax Justice Network). Moreover, it is treated as such by the media: Figure A.4 and A.3 in Appendix A show a large press coverage of the Panama Papers by all journals in the UK over year 2016. Table A.2 in Appendix A shows that even right-wing newspapers are very condemning of the top-income earners involved in the Panama Papers. Therefore, the informational shock presents the Panama Papers as a signal of top-income tax evasion.

Magnitude of the scandal. Although the information initially came through a German reporter, this leak and documents were then treated by ICIJ reporters working in various media worldwide. Figure A.2 in Appendix A provides the list of the reporting partners of the ICIJ in both Europe and the US, which encompasses numerous sources with a wide audience.

It is crucial to document the intensity and extent of individuals' media exposure on which relies the assumption that most individuals got the information on the existence of the Panama Papers. Figure 1 presents the evolution of web search intensity for keywords "Panama Papers": a sudden increase in search intensity is recorded on April 3rd, 2016. Using discontinuity based on an informational leak from various media worldwide is then a strategy that holds. The right side of Figure 1 presents search intensities for the keywords "Panama Papers" by geographic area worldwide. This provides evidence that this leak was taken over from the ICIJ worldwide, which in turn motivates further the European analysis of respondents' variation in responses post-scandal³.

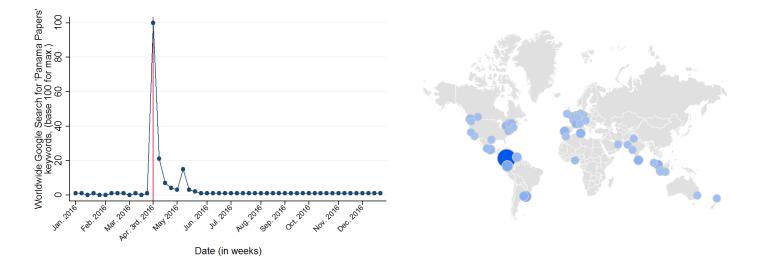


Figure 1: Internet search intensities worldwide for keywords "Panama Papers" in 2016: in volume (left) and geographically (right) - Source: Google Trends.

³Figure 1 presents a major increase in web searches for the keywords 'Panama Papers', with a second surge in May. This is probably due to a context of intense political debates (i.e., the Brexit campaign). However, falsification tests highlight redistribution preferences is the main channel.

3 Empirical Strategy and Data

3.1 Empirical Model and Identification

A differences-in-differences methodology is used in this paper. This strategy uses the exact date of the leak worldwide (April 3rd, 2016) as a time discontinuity. The main identifying assumption is that, conditional on both the vector of socioeconomic characteristics, time trends, and on individual unobserved heterogeneity, the interview date is exogenous to the Panama Papers scandal. In 2016, roughly half of all respondents in this sample completed interviews on each side of the cut-off, *i.e.* before and after April 3rd⁴. It is difficult to think of an unobservable that systematically affects outcomes in 2016 and not in 2015 and which is also correlated with the Panama Papers.

The control group encompasses all uninformed individuals. More precisely, the BES dataset contains questions respondents on the intensity (time) at which they follow politics and current affairs from a set of sources: (i) media (TV, internet, radio, newspapers) and (ii) through people. Uninformed individuals are defined as who spend no time getting news through any of these channels: they constitute the control group. Informed individuals encompass all individuals who are informed before and after the scandal through at least one of the previously mentioned channels.

All dependent variables in this study share a common structure. They question whether individuals agree or disagree with a given statement: the scale goes from 1 (completely disagree) to 5 (completely agree). One another variable of interest constitutes an exception: the statement "the government should redistribute from the better to the worse off" should be rated on a scale of 1 to 10. The following specification is used for all outcomes of interest:

$$y_{it} = \beta_0 + \sum_{k=1}^n \beta_k x_{it}^k + \delta_1 Post_{it} + \delta_2 Informed_{it} + \delta_3 Post_{it} * Informed_{it} + \phi_i + \epsilon_{it}$$
(1)

where y_{it} defines the dependent variable, x_i^k is the vector of individual observable characteristics and time controls, ϵ_{it} is the error term. *Informed_i* is a dummy variable equal to 1 if individuals are informed through any of the following media: TV, internet, radio, newspapers and being informed through other individuals, and 0 otherwise. *Post_i* is a dummy variable equal to 1 if the interview takes place after April 3rd, 2016, and 0 otherwise. ϕ_i represent individual fixed effects - they are included only for the panel fixed

⁴Datasets provided at the time of this study with relevant variables do not have a consistent inflow of individuals around the cutoff date, which impairs the possibility to use a regression discontinuity framework.

effects regressions.

The average treatment effect on the treated is encompassed by the coefficient δ_3 linked to the interaction term $Post_i * Informed_i$. Following the previous findings in the literature, I expect an increase of preferences for redistribution for treated individuals post-leak: that is, I expect $\delta_3 > 0$.

Given that all interest variables are ordinal variables with five cases, I use ordered probit specifications for all regressions over the next sections.

3.2 Data

3.2.1 UK and European data

Data used in this paper is two-fold: I use successively longitudinal UK data and European survey data. This section presents the characteristics of both datasets. Longitudinal survey data is from the British Election Survey⁵ (BES) for years 2015 and 2016. It constitutes a sample of 101,304 observations covering 53,604 respondents. Data contains detailed questions on personal redistribution preferences and interview dates. I use the latter as a means to define whether one is exposed to the Panama Papers scandal, which is the case if she is interviewed after April 3rd, 2016. Waves are led on a very recurrent basis, which provides us with enough counterfactuals. The BES interviewed 2 times. Using the same individuals constitutes a means to record any personal shifts by controlling for unobserved characteristics when it comes to the empirical analysis. Summary statistics are presented in Table B.3: a comparison to census data highlights that the BES is representative of the population.

The BES dataset provides two types of information that is relevant for this study. Firstly, it contains information on information habits. Respondents state how much time they spend following politics and current affairs on a standard week. This question is asked for each type of media: (i) TV, (ii) radio, (iii) newspapers, and (iv) internet. They are also asked how much time they spend following news and politics through people. This set of information is relevant to define the treated (informed) and control groups. The BES questionnaire also contains relevant information on redistribution preferences. Each respondent faces a series of statements and has to say how much they agree or disagree with them on a scale of 1 (completely disagree) to 5 (completely agree). The statements used in this paper are the following: "Government should redistribute income from the better to the worse off", "Government should try to make income more equal", "There is one law for the rich and one law for the poor".

⁵See Fieldhouse et al. (2017) for information on the source.

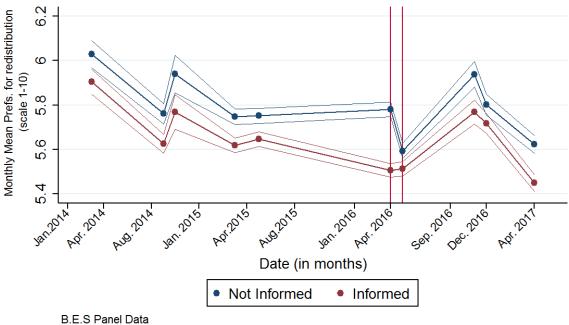
The second database used in this analysis is the European Social Survey (ESS hereafter) for years 2015 and 2016, which records information for 22 European countries. The final sample contains 100,322 observations. Similar to the BES, this dataset contains detailed questions on personal redistribution preferences and interview dates as well. That is why it is also used to define exposure to the Panama Papers scandal.

3.2.2 Descriptive Statistics

This section presents descriptive statistics that anticipate and illustrate the main findings. Table B.4 in Appendix B highlight that the socio-demographic characteristics of both the control and the treated groups are rather similar. Informed individuals' characteristics are more like all respondents than the non-informed individuals.

Figure 2 below provides a graphical proof of the common trend between the 'informed' (treated) and 'not informed' (control) groups. It shows a clear parallel trend between the two groups in their preferences for redistribution over time until the Panama Papers' leak. Then, right when the scandal happens in April 2016, the difference between groups becomes significantly larger. Therefore, the common trend is clear and post-leak variations do not present overlapping areas. The only break in the common trend (i.e., difference between control and treated groups) happens right after the scandal broke out in April 2016.

The distribution of treated and control groups is as follows: individuals who are informed represent hat they are distributed who are uninformed (5,127, i.e. 8.03%) and those who are informed (58,700 individuals, i.e. 91.97%).



Question: Do you agree w/ the statement: Gvt. should redistribute income from the better to the worse off? (1-completely disagree ; 10-completely agree)

Figure 2: Evolution of stated redistribution preferences over time

4 Results

4.1 Baseline Results

4.1.1 Socio-demographics and economic variables

Estimates of the impact of socio-demographics and economic variables are presented in Table C.5 in Appendix C. The observation of socio-demographics highlights that characteristics influence the propensity to be prone to redistribution. Older people are significantly more likely to agree with pro-redistribution statements. Political affiliation influences preferences, which is opposed to Kuziemko et al. (2015) as they find mild to no effects. I find that the support of more redistributive policies seems to be inversely related to one's position in the income scale; this corroborates the main finding in the literature (Corneo and Grüner (2002) among others).

Table C.5 also captures an effect by occupation. Retired people have lower redistribution preferences; the unemployed have higher preferences compared to full-time workers. This corroborates Margalit (2013) who find that the personal experience of economic hardship, particularly the loss of a job, had a major effect on increasing support for welfare spending. It corroborates an increase in preferences of the unemployed and individuals with lower wages. Finally, a larger trust in government and members of parliament is associated with a larger propensity to decrease the preferences for redistribution. Kuziemko et al.

(2015) find that perceiving larger inequality levels decreases the share of individuals who trust the government. Therefore, Table C.5 results comparable to the findings in the literature.

4.1.2 Effects of the scandal on preferences for redistribution

The main results of our analysis are summarized in Table 1. The Panama Papers' scandal triggers a response at the extensive margin.

First, across all specifications, I consistently find that agreeing with the fact that "workers do not get their fair share of the nation's wealth" increased after the Panama Papers. Besides, I find that individuals are more likely to agree with statements that "government should try to make income more equal" and "government should redistribute wealth from the better to the worse off" after the scandal. This indicates a positive impact of the informational shock on the perception of inequality. As such, it corroborates the findings in Kuziemko et al. (2015) where informed individuals increase their stated redistribution preferences post-scandal. In their experiment, individuals they prefer a larger tax rate on 1% top income, encourage significantly the scope of government activity and are more in favour of an increase of the minimum wage. Therefore, our quasi-natural experiment validates laboratory experiment findings.

Results are stable to both panel fixed effects and OLS specifications, that are available in TablesC.6 and C.7 in Appendix C.

	Governme	nt should	Ordinary people do not
	redist. from better	try to make income	get their fair share of
	to worse off	more equal	nation's wealth
	(1)	(2)	(3)
Post Apr. 3rd, 2016 (Yes=1)	-0.135***	-0.110***	-0.142***
	(0.0258)	(0.0340)	(0.0269)
Informed (Yes=1)	-0.0276*	-0.122***	0.0455^{**}
	(0.0148)	(0.0180)	(0.0180)
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.0581^{**}	0.0952^{***}	0.0881^{***}
	(0.0241)	(0.0274)	(0.0283)
Time Controls	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes
Control income	Yes	Yes	Yes
Observations	63,293	94,035	63,921

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table 1: Effect of the Panama Papers on preferences: Ordered Probit Estimates

4.1.3 Marginal Effects

I use estimates from all ordered probit regressions led previously to determine the marginal responses for all dependent variables of the Panama Papers and for each possible statement on redistribution preferences that has been used as a dependent variable. Marginal increases in probabilities essentially highlight that post-leak, neutral and very positive outcomes are the most likely to appear. Figure 3 below and Fig. C.8 and C.9 in Appendix C visually corroborates these conclusions for each statement on redistribution preferences. More precisely, I find an increase in positive statements by 2.5% for the statement "ordinary working people do not get their fair share of the nation's wealth", and there is an increase in 2% pro "government should redistribute from better to worse off". Finally, post-scandal, agreement with the statement "government should try to make income equal" increases by 3.3%.

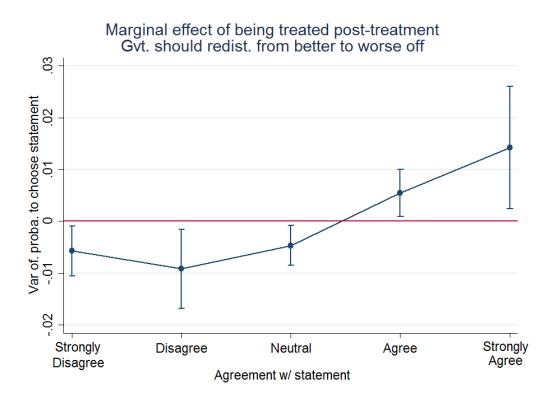


Figure 3: Marginal Effects from Ordered Probit Estimates (source: BES data, own calculations)

Numerous drivers of redistribution preferences have been explored in the literature (see Senik, 2009 for a complete review). This sub-section above was dedicated to the variation of responses to statements on redistribution post Panama Papers. Effects related to the Panama Papers are not significantly narrowed once I add income controls in regressions. This indicates that individuals' reactions are not driven essentially by socio-demographics and economic variables.

4.2 Heterogeneous Effects

In this sub-section, I test for the existence of a differentiated effect of the scandal with respect to a set of variables, such as (i) gender, (ii) income, (iii) trust levels and (iv) political affiliation. Heterogeneity is captured on subgroups.

4.2.1 Heterogeneity on socio-demographics

This specification captures weak heterogeneous effects, as presented in Table 2 below, as well as Tables C.9 and C.8 in Appendix for all statements. First, I test for heterogeneity based on income levels. Table C.8 provides strong evidence that the leak incurred an increase only for individuals with a gross household income lower than $\pounds 9,999/\text{year}$, and a decrease for individuals higher than $\pounds 40,000/\text{year}$. The latter point is interesting considering the discussion about the conceptual idea behind redistribution as an action compared to the perception of inequalities *per se*. In addition, I observe no clear-cut gender heterogeneity. On differentiated effects by gender, coefficients show no gender effect *per se*. However, the observation of the interaction term yields a positive effect on redistribution preferences post-scandal for men.

Besides, individuals with large trust levels in MPs increase more their preferences for redistribution: they are more likely to trust the media and update their beliefs upon receiving information on tax evasion. When it comes to differentiated responses with respect to the level of embedded trust in politics, the table highlights heterogeneity stemming from trust levels, with a positive and significant effect those with the higher trust levels (5 and above). This corroborates the literature on beliefs revisions and trust: according to Kuziemko et al. (2015), low trust in government implies small effects for all other redistribution policies. The first potential channel is that distrust in government inhibits interviewees from translating concern for inequality into support for redistribution by the government. The variation in responses is the most important for the perception of the legal system fairness.

		Dep. Var.:	Government sh	ould redist. from	Dep. Var.: Government should redist. from the better to the worse off						
VARIABLES	Men	>50 y.o.	$< \pounds$ 9,999 /	>£ 10,000 &	>£ 40,000/	No trust in	Full trust in				
VARIABLES	Men	>50 y.o.	year	${<}39{,}999/{\rm year}$	year	gvt.	gvt.				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)				
Post Apr. 3rd, 2016 (Yes=1)	-0.0404	-0.0626*	-0.123**	-0.0677**	0.0244	-0.0728**	-0.142**				
	(0.0331)	(0.0323)	(0.0528)	(0.0302)	(0.0439)	(0.0313)	(0.0621)				
Informed (Yes=1)	0.212***	-0.0411*	0.195***	0.0872***	0.185^{***}	0.0774^{***}	0.0852				
	(0.0288)	(0.0217)	(0.0395)	(0.0214)	(0.0295)	(0.0219)	(0.0559)				
Post Apr. 3rd 2016 & Informed (Yes=1)	0.00652	0.0587^{*}	0.0612	0.0364	-0.0383	0.0411	0.143**				
	(0.0379)	(0.0326)	(0.0533)	(0.0339)	(0.0483)	(0.0352)	(0.0711)				
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Controls socio dem	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Control income	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Observations	39,948	41,562	7,721	46,139	29,871	23,051	14,901				

Standard errors are in parentheses and clustered at the interview date level. *** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, own calculations

Question: How much do you agree or disagree with the statement: "Government should redistribute income from the better off to those who are less well off"?

Table 2: Heterogeneity of responses by socio-demographics and trust

4.2.2 Heterogeneity on political variables

Finally, I test for the existence of differentiated responses of individuals with respect to their political affiliation. Table C.11 below and Tables C.10 and 3 in Appendix present the corresponding results. In BES data, the political affiliation is self-declared. Notice that this defines general beliefs and not necessarily political parties. To verify the validity of the results, I led complementary regressions on the stated newspaper read by the respondent. Individuals are aware of the existence and the nature of newspapers' political affiliation (see the corresponding survey in Figure A.7 in Appendix A). From this information, it is possible to imply that readers of *The Times* (respectively *The Guardian*) are more likely to define themselves as right-wing (respectively left-wing).

First, Column (3) shows no clear heterogeneous effects from left-wing individuals. This effect is confirmed by additional regressions on the Guardian readership, presented in Column (4). Column (1) yields that those who declare themselves as "right-wing" have a significantly larger update of their beliefs. This differential in responses by political affiliation is in line with Margalit (2013) which explains that the belief update can be stronger is stronger among Republicans than Democrats due to a "ceiling effect". This "ceiling effect" can be described as the fact that most Democrats (and left-wing individuals in general) are supportive of welfare expansion even before the crisis. More precisely, for the statement "Government should redistribute from the better to the worse off", the average response of left-wing individuals is "Agree" (level 4) whereas the average response of right-wing individuals is "Agree" (level 4) whereas the average response of Times

readers is "Neither Agree nor Disagree" (level 3).

As in Margalit (2013), our analysis captures essentially short-term effects, and effects related to the Panama Papers scandal might be transient on individuals' social policy preferences.

	Dep. Var.: G	vt. should redis	stribute from better to	o worse off
	Pro Right-wing	Times	Pro Left-wing	Guardian
	(1)	(2)	(3)	(4)
Post Apr. 3rd, 2016 (Yes=1)	-0.0790*	-0.210	-0.00290	0.127
	(0.0474)	(0.243)	(0.0772)	(0.167)
Informed (Yes=1)	-0.152***	-0.236	0.309***	0.503***
	(0.0220)	(0.165)	(0.0556)	(0.115)
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.108^{***}	0.264	-0.0925	-0.195
	(0.0380)	(0.252)	(0.0813)	(0.165)
Time Controls	Yes	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes	Yes
Control income	Yes	Yes	Yes	Yes
Observations	31,886	3,792	22,573	$5,\!639$

Standard errors are in parentheses and clustered at the interview date level. *** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, ESS W8 v.1, own calculations.

Question: How much do you agree or disagree with the statement: "Government should redistribute income from the better off to those who are less well off" ?

Table 3: Effects on redistribution preferences by political affiliation

These results highlight a difference in individual responses after the Panama Papers scandal. The fact that right-wing voters increase their stated preferences for redistribution indicates that a necessary next step is to check voting outcomes.

4.3 Voting Outcomes

The previous section was dedicated to the study of changes in stated redistribution preferences after the Panama Papers. It highlighted that individuals update their stated preferences post-scandal. However, does this effect translate into actions? This is what motivates the study of voting outcomes.

Table 4 presents the results of the regressions led on stated voting intentions for the main political parties. Additional information on tax evasion committed by top-income earners appears to bridge a gap between "right-wing" and "left-wing" individuals (see Columns (1) and (2)). In addition, voting intention decreases for the UKIP too. This result is in line with Kuziemko et al. (2015), according to whom the information on inequality bridges the gap between individuals who have different voting preferences. The decrease in Tory support can indeed be related to the former PM's (David Cameron) family being directly involved in the Panama Papers. Moreover, the increase in voting intentions for the left and centre is in line with both J. Corbyn (Labour leader) calling ministers to publish their tax in the aftermath of the leak, and Farron (LibDem leader) stating that D. Cameron's conduct is 'morally murky'.

These results indicate significant grounds for a larger instability in terms of voting decisions among respondents. Partisans remain loyal to their party, yet the certainty of their voting intention is weakened. Redistribution preferences only represents one dimension of the voting behaviour, which is why the scandal does not affect massively the behaviour of partisans and influences more respondents who tend to not know who they would vote for.

Overall, the observation of voting outcomes indicates a move in favor of pro-redistribution parties following the scandal, added to a decrease in the propensity to abstain. This probably indicates that the scandal could have an impact on potential switchers, although there is no variation from the undecided (Column (6)). It seems to indicate that respondents tend to take a stand after the Panama Papers, and I note a clear displacement from respondents saying they would not vote for to people in favour of Labour.

	Tories	Labour	LibDem	UKIP	WillAbstain	DontKnow
	(1)	(2)	(3)	(4)	(5)	(6)
Post Apr. 3rd, 2016 (Yes=1)	0.130***	0.0536^{**}	0.0803***	0.222***	-0.661***	-0.143***
	(0.0254)	(0.0228)	(0.0204)	(0.0215)	(0.0268)	(0.0233)
Informed (Yes=1)	0.115***	-0.0551^{**}	0.116^{***}	-0.0629**	-0.0534	0.291***
	(0.0325)	(0.0274)	(0.0329)	(0.0284)	(0.0693)	(0.0661)
Post Apr. 3rd, 2016 & Informed (Yes=1)	-0.0748^{**}	0.0474^{*}	0.0434	-0.0528*	-0.0920***	0.0424
	(0.0323)	(0.0287)	(0.0309)	(0.0271)	(0.0342)	(0.0324)
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes	Yes	Yes	Yes
Control income	Yes	Yes	Yes	Yes	Yes	Yes
Observations	81,292	81,233	80,846	82,108	120,010	120,010

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table 4: Effect of the Panama Papers scandal on voting outcomes

Estimates in Table 5 below present on the certainty of the stated voting intention show ni significant effect on the certainty of votes for all parties except the LibDems. It indicates the scandal may not have a sustained impact over time. Also, voting decisions are not unidimensional, so the scandal may affect voters immediately without changing their whole voting behaviours in the long run.

	Tories	Labour	LibDem	UKIP
	(1)	(2)	(3)	(4)
Post Apr. 3rd, 2016 (Yes=1)	-0.220***	-0.0429	0.0499	0.288***
	(0.0371)	(0.0325)	(0.0327)	(0.0238)
Informed (Yes=1)	-0.0270	0.0911^{*}	-0.0388	-0.143***
	(0.0613)	(0.0549)	(0.0678)	(0.0390)
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.0818	-0.0589	0.127^{**}	0.0111
	(0.0603)	(0.0589)	(0.0613)	(0.0376)
Time Controls	Yes	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes	Yes
Control income	Yes	Yes	Yes	Yes
Observations	20,523	21,763	120,010	120,010

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table 5: Effect of the Panama Papers on the certainty of the stated voting intention

4.4 Robustness Checks

For all outcomes of interest, the effects registered by differences-in-differences strategy are significant. I consistently find an increase in preferences for redistribution after the Panama Papers scandal. In the previous estimations, it was always assumed that individuals were aware of the Panama Papers' scandal through media exposure. It requires a common trend assumption; its validity is tested in the following section.

4.4.1 Placebo Test

To support the validity of the parallel trend assumption, I first visually inspect the pretreatment trends in labour supply measures: Figure 2 supports graphically the common trend. Then I analyse the dynamic impact of the reform, before estimating a set of placebo reform on the main outcomes of interest. Figure 4 provides a graphical analysis of the treatment dynamics.

The choice of a test of lags and leads as a placebo test is motivated by the willingness to account for dynamics of the parallel trend. This methodology is preferable to the replication of the same regressions on a previous year, as it encompasses all coefficients on being informed for each period. Therefore, we expect the coefficients on lags to be jointly insignificant, which would indicate that being informed before the scandal has no impact on redistribution preferences. This works as a dynamic placebo test.

In particular, it shows the coefficients of the leads and lags in the treatment. It is estimated using the following specification:

$$y_{it} = \beta_0 + \sum_k \beta_i^k x_{it}^k + \delta_1 Post_{it} + \delta_2 Informed_{it} + \sum_k \gamma_k * Informed_{it} * Leads_Lags_k + \epsilon_{it}$$

where k goes from -5 to 4 and define the period used. The first thing to be noticed is that the coefficients on the lags are jointly insignificant: $\sum_k \gamma_k \neq 0$ if k < 0, and that the coefficients on the leads are jointly significant: $\sum_k \gamma_k \neq 0$ if k > 0. This suggests strongly that this identification strategy truly identifies the impact of the Panama Papers' scandal and does not pick up the effect of other elements that were affecting treatment and control groups differently already before the leak. In addition, this complementary analysis rules out significant anticipation effects. These regressions allow for an implicit placebo test. Figure 4 presents the value of the coefficients γ_k for each period. Before April 3rd, 2016, being informed should not have any impact on preferences for redistribution. In addition, when we look at the impact of the scandal for another statement, this is exactly what we observe (see Figure C.10 in Appendix D).



Figure 4: Estimates yielded from the test of lags and leads (BES data)

4.4.2 Falsification Tests

Falsification tests indicate that this change in preferences is not only driven by the political context and the perception of the government and this effect goes through the redistribution channel. Table C.12 in Appendix C presents results for the main outcomes. The questions used in this paper as dependent variables are a series of statements, where individuals say how much they agree or disagree with each one of them. The scale of the response goes on a scale of 1 (completely disagree) to 5 (completely agree). It helps testing the perception of the political action on various matters, such as: (i) "Do you agree of the government policies towards immigration"? (ii) "Did measures to protect environment go too far"? (iii) "What do you think of the death penalty"? Results indicate that individuals were not affected by these side topics.

4.4.3 Definition of the control and treated groups

The identification strategy used so far implies that the treatment is random among the treated and control groups, respectively informed and non-informed individuals. Yet, informed individuals have different sociodemographic distributions compared to uninformed individuals. Therefore, it is necessary to test whether the difference in the outcome variable between the two is only due to the treatment status. If so, the treatment may not be random.

Belonging to a group instead of another one may result from a choice, that is getting informed through one media instead of another one. That is what motivates the implementation of a robustness check while modifying its definition. It is interesting to see whether results are maintained. The definition has been modified as follows: individuals in the control group are those who follow current affairs and politics through none of the media channels (TV, radio, internet, newspapers). However, there is no restriction regarding information from others. The corresponding results are presented in Table 6 below.

Results highlight a difference-in-differences effect that is maintained under this new definition of information. The effect is larger in the table below compared to Table 1.

	Governme	nt should	Ordinary people do not
	redist. from better	try to make income	get their fair share of
	to worse off	more equal	nation's wealth
	(1)	(2)	(3)
Post Apr. 3rd, 2016 (Yes=1)	-0.120***	-0.0906***	-0.135***
	(0.0238)	(0.0317)	(0.0238)
Informed (Yes=1)	0.0242	-0.0709***	0.0733***
	(0.0148)	(0.0172)	(0.0181)
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.0410*	0.0744^{***}	0.0808***
	(0.0236)	(0.0263)	(0.0257)
Time Controls	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes
Control income	Yes	Yes	Yes
Observations	63,293	94,035	63,921

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table 6: Robustness Check on Informed: Effect of the Panama Papers on preferences (Ordered Probit Estimates)

5 European Comparisons

Data. In this section, I resort to a cross-sectional dataset from the European Social Survey (ESS). The survey is led on 22 European countries. It amounts to 100,322 total observations over the period 2014 to 2016. It contains information on (i) redistribution preferences with statements on which individuals give their opinion on a scale of 1 (strongly disagree) to 5 (strongly agree), and (ii) on the level of information that is contained in questions asking how much time per week individuals spend getting news about politics and current affairs, whether they have been watching, reading or listening to news.

Consistency at the European level. First, I check whether the Panama Papers had a similar effect on redistribution preferences at the European level. In this first subsection, the estimated regressions follow the same specification as in equation 1) for a redistribution statement that is comparable over both datasets. The statement used asks whether the government should try to make income more equal. Table 7 shows that fiscal scandal effects are consistent at the European level. Column (1) highlights that effects are comparable to the UK panel. Results are comparable to those in Table 1 for the UK data. Note that the magnitude of the effect is larger in the ESS than in the BES dataset; this is rooted in the fact that both datasets (ESS and BES) have different structures. Columns (2) and (3) shows that post-leak, the treatment generates a positive effect on stated redistribution outcomes over all European countries. Let us observe the difference between countries. Luttmer (2001) states that redistributive preferences may have "cultural" determinants that are very stable over time. Between Columns (2) and (3) with the latter including country dummies, effects of the scandal remain comparable. Therefore, even though there may be a difference in the base-level of redistribution preferences by country, the variation of redistribution preferences post-leak is not really affected much by country-specific differences in preferences.

Aside from that, I lead a falsification test on trust outcomes. Trust outcomes in the ESS dataset post-leak are like those of the BES (cf. Table C.12 in Appendix C): I observe no effect of the Panama Papers on trust levels (see Table D.13 in Appendix D).

	Dep. Var.: Gvt.	should try to make	income more equal
	GB	All Countries	All Countries
	(1)	(2)	(3)
Post Apr. 3rd (Yes=1)	0.0522	-0.499***	-0.0796
	(0.226)	(0.0861)	(0.0764)
Informed (Yes=1)	-0.0328	-0.0544	-0.0722*
	(0.134)	(0.0385)	(0.0370)
Post Apr. 3rd & Informed (Yes=1)	0.275^{*}	0.102^{*}	0.111**
	(0.162)	(0.0534)	(0.0524)
Constant	3.549^{***}	4.113***	4.021***
	(0.287)	(0.0748)	(0.0782)
Country FE	-	No	Yes
Observations	1,169	17,140	17,140
R-squared	0.045	0.058	0.102

Table 7: Effect of the Panama Papers on redistribution preferences: validation at the EU level (OLS)

Standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, own calculations.

Cross-country comparisons. At time of leak, 124 personalities were mentioned in the media in Europe. They come from various backgrounds (politics, music, sports among others). The distribution of individuals leaked in the press by category is available in Table A.1 in Appendix A. Yet, in several EU countries, nobody was mentioned. These countries are different from one another and include: Albania, Bulgaria, Croatia, Cyprus, Czech Rep, Lithuania, Norway, Portugal, Slovakia, Slovenia, Turkey. Therefore, it is interesting to test for heterogeneous effects based on whether the country is involved in the leak: it means that at least one person was named in the media for being involved in the Panama Papers at the time of the scandal.

Magnitude of the scandal by country. In this subsection, the estimated regressions slightly change from the previous specification. I use a triple differences specification using "being interviewed after the Panama Papers", "being in a country that had at least one person involved in the scandal" and "the number of individuals involved in the Panama Papers scandal". Column (1) does not capture an heterogeneity of responses if the country has at least one individual involved in the scandal. Yet, Column (2) in Table 8 below shows that individuals increase more their stated preferences for redistribution essentially the more fellow citizens are involved in scandal. This effect could be attributed to either the perception of the individual involved in the leak or to the intensity of the media coverage. Column (4) shows the more individuals from one country are involved in the scandal, the larger the response of individuals in favour of redistribution will be in this country, and that a conjugated increased media coverage magnify this change in stated preferences.

	Dep. Var.:	Gvt. should try	to make income	more equal
	(1)	(2)	(3)	(4)
Post Apr 3rd (Yes=1)	-0.276***	-0.180***	-0.228***	0.0296
	(0.0620)	(0.0360)	(0.0361)	(0.162)
Media Coverage			-0.000825***	0.000688***
			(0.000146)	(0.000140)
Post Apr. 3rd (Yes=1) & Media Coverage			4.61e-05***	-0.00151**
			(1.03e-05)	(0.0007)
Country Involved (Yes=1)	-0.429***			-0.507***
	(0.0931)			(0.151)
Post Apr. 3rd & Country Involved (Yes=1)	0.113			-0.224
	(0.0688)			(0.169)
Post Apr 3rd & Country Involved & Media Coverage (Yes=1)				0.00155^{**}
				(0.000700)
Nb Indivs. Involved		-0.332***		
		(0.0634)		
Post Apr 3rd & Nb. Indivs. Involved		0.00764^{**}		
		(0.00338)		
Time Controls	Yes	Yes	Yes	Yes
Socio-demographic controls	Yes	Yes	Yes	Yes
Income level controls	Yes	Yes	Yes	Yes
Observations	17,586	16,333	16,333	16,333

Standard errors in parentheses and clustered at the itw date level.

*** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, own calculations.

Table 8: Effect of scandal intensity and media coverage by country on redistribution preferences

Media coverage intensity. This subsection is dedicated to the observation of differentiated responses of individuals based on the media coverage intensity. This is helpful to test whether the beliefs' update is triggered by the magnitude of the scandal in the current news flow. To measure the impact of the scandal with respect to the media coverage intensity, I use a specification using "being interviewed after the Panama Papers", "the intensity of the media coverage" (measured as the number of articles covering the scandal in the media) and "whether the country had at last one national involved in the Panama Papers scandal". Column (3) shows that the larger the media coverage, the larger the increase in stated preferences for redistribution post-leak. Besides, notice that the press coverage is larger in countries where personalities were named and involved in the leak (see Table A.5 in Appendix A). However, column (5) indicate that the pro-redistribution adjustment is larger in countries with individuals involved and where the media coverage of the leak is more important: therefore, media coverage effects add up to the effect of being in a country where at least one individual is involved in the leak.

6 Conclusion

This study tests whether individuals revised their beliefs after the scandal of the Panama Papers, which provided information on tax evasion from top-income households. I find that this informational shock influences individual beliefs. Stated redistribution preferences increases and individuals also perceive the legal system as less fair. Estimates using ordered probit, OLS and panel fixed effects models yield consistent results.

Estimates indicate that individual reactions are differentiated by age and political affiliation, but I notice a milder heterogeneity based on income levels. I test for heterogeneity by political affiliation: estimates yield that right-wing individuals update more their beliefs than left-wing ones. This is consistent with the fact that left-wing individuals are more subject to a "ceiling effect" compared to the right-wing, the latter being more likely to move upwards their preferences for redistribution.

In a second step, I assess the effects of the scandal on voting outcomes. I test for potential dissonance in voting decisions, i.e. whether partisans remain loyal to their party: I find that the scandal appears to incentivize more right-wing individuals into revising their beliefs. Less individuals state they will abstain, and voting intentions for the left increases while that for right wing parties decrease. It indicates that the scandal incentivizes individuals into taking a stand. The moderate impact of fiscal scandals on voting outcomes is not surprising given that preferences for redistribution only constitutes one dimension of the voting behaviour. Yet, fiscal scandals seem to encourage individuals with no clear voting intentions to take a stand in favour of more pro-redistribution parties.

Complementary estimations at the European level indicate that results are consistent over countries. Moreover, a cross-country comparative analysis show that shock intensity (i.e., number of individuals involved) and the intensity of the media coverage increasingly affects the propensity to react to the scandal.

This analysis corroborates results on the recent literature on the elasticity of preferences for redistribution. Besides, I also find that an informational shock trigger a change in individuals' beliefs towards redistribution. In addition, this study contributes to the literature on the impact of fiscal scandals and constitutes the counterpart of the study of firm responses to informational leaks.

The existence of tax havens generates more inequalities, which in turn questions the optimality of taxation systems; the possibility to resort to offshore firms is not included in the design of optimal taxation policies. However, this study shows that individuals are sensitive to the existence of more inequalities and update their stated preferences accordingly. Therefore, the observation of the reaction of individuals on information related to taxation systems advocates in favour of an inclusion of these behaviours in the design of optimal policies.

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A General Context

A.1 The Panama Papers scandal

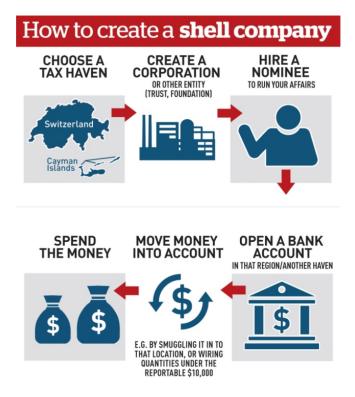


Figure A.1: Panama Papers: Tax evasion mechanism (Source: ICIJ, CNBC)

15 ISmin.lt Lithuania	24 VACA 24Chasa Bulgaria	Aftenpofien Aftenposten Norway	BBC BBC Panorama United Kingdom	Che Charlotte Observer United States	DE TIJD ^{De_Tild} Belgium
DELO Belo Siorenia	DIREKT Direkt36 Hungary	DR Denmark	El Confidencial El Confidencial España	Expresso Portugal	FALTER Falter Austria
Fusion USA	Gazeta Gazeta Wyborcza Poland	<mark>theguardian</mark> Guardian United Kingdom	Etel Inanciele Dagblad Netherlands	Knack Knack Belgium	KRIK KRIK Serbia
KyivPost Kyiv Post Ukraine	L'Espresso Hay	<mark>la Sexta</mark> La Sexta Spain	CLe Matin Le Matin Dimanche Switzerland	Le Monde France	LE SOIR Le Soir Belgium
MCCLATCHY McCLATCHY United States	MO* Belgium	NDR Germany	BACCRP Eastern Europe	HOBASI Novaya Gazeta Russia	ORF ORF Austria
POLITIKEN Politiken Benmark	PREMIERES LIGNES Premières Lignes France	POLITIKEN Politiken Denmark	PREMIERES LIGNES Premières Lignes France	Protagon. Protagon Greece, Cyprus	Events were the transmission of transmission of the transmission of transmissi
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Ehe Washington Dost <u>The Washington Post</u> United States	TIMES # MALTA <u>Times of Malta</u> _{Malta}	Trouw Irouw Netherlands	tvi 24 IVI2 (Portugal) Portugal	Univision <u>Univisión</u> United States	BEIONOCTII Vedemosti Russia
WDR Germany	yle YLE Friland	České centrum pro Investigativní žurnálistiku (COZ) Czech Republic			

Figure A.2: ICIJ Reporting Partners in Europe (source: ICIJ)

Country	Government	Business	Culture & Art	Sport	Miscellaneous	Total
Albania	-	-	-	-	-	0
Austria	0	1	0	0	0	1
Belgium	1	13	1	2	1	18
Bulgaria	-	-	-	-	-	0
Croatia	-	-	-	-	-	0
Cyprus	-	-	-	-	-	0
Czech Republic	-	-	-	-	-	0
Denmark	0	0	0	2	0	2
Estonia	-	-	-	-	-	0
Finland	-	-	-	-	-	0
France	7	23	0	2	2	34
Germany	0	2	0	1	1	4
Greece	1	0	1	0	1	3
Hungary	1	0	0	0	0	1
Iceland	5	0	0	0	1	6
Ireland	1	0	0	0	0	1
Italy	1	1	3	2	0	7
Latvia	1	0	0	0	0	1
Lithuania	-	-	-	-	-	0
Luxembourg	0	0	0	0	1	1
Netherlands	0	2	0	1	0	3
Norway	-	-	-	-	-	0
Poland	1	1	0	0	0	2
Portugal	-	-	-	-	-	0
Romania	0	1	0	1	0	2
Slovakia	-	-	-	-	-	0
Slovenia	-	-	-	-	-	0
Spain	5	1	4	8	1	19
Sweden	1	0	0	0	0	1
Switzerland	1	0	0	1	1	3
Turkey	-	-	-	-	-	0
Ukraine	1	0	0	0	0	1
United Kingdom	6	1	2	2	3	14
					Total indivs. involved	124

Table A.1: Number of individuals involved in the Panama Papers' leak in Europe, by country (source: ICIJ)

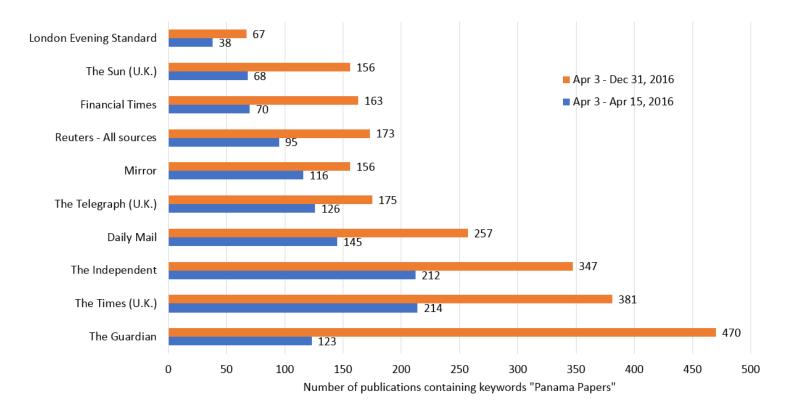


Figure A.3: Publications in UK newspapers containing "Panama Papers" keywords in 2016 by newspaper (source: Factiva)

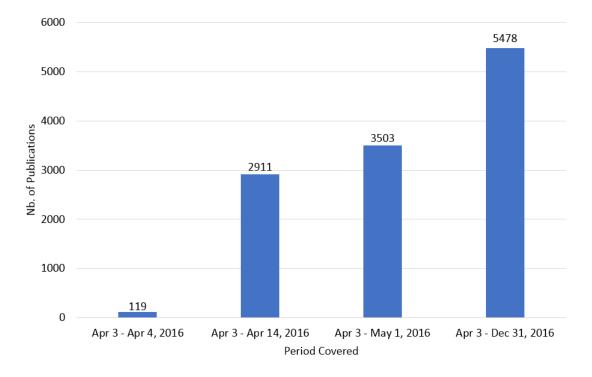
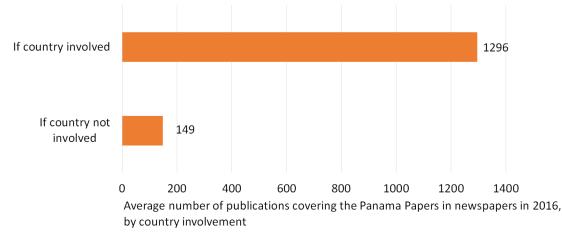


Figure A.4: Number of UK newspaper publications containing "Panama Papers" keywords over 2016 (source: Factiva)



Source: Factiva

Figure A.5: Average number of publications containing "Panama Papers" keywords in European newspapers in 2016, by country involvement (source: Factiva)

Title of publication	Date of publication
They're milking us for water	1 mai 2016
Wealth is not a dirty wordbut tax needs to be paid 17 avril 2016 PM dad in tax leaks	5 avril 2016
Heist gold 'hid'	5 avril 2016
Cam's panned for his dad's Panama plan	5 avril 2016
A \in 32 trillion tax con that exposes corruption of the rich and famous	6 avril 2016
Cam clear	6 avril 2016
\pounds 7bn UK pad link	6 avril 2016
Will tax-dodging elite face same penalties as us?	7 avril 2016
Tax-dodging elite must get punished	7 avril 2016
I had £31k shares in my dad's offshore tax haven	8 avril 2016
It's getting a bit Messi	11 avril 2016
Camback	12 avril 2016
Collapsico	15 avril 2016
Exposed: Secrets of the rich & powerful	17 avril 2016
Tax dodge scandal	1 mai 2016

Table A.2: Press coverage of the Panama Papers in 'The Sun' over year 2016 (selection)

A.2 UK Context

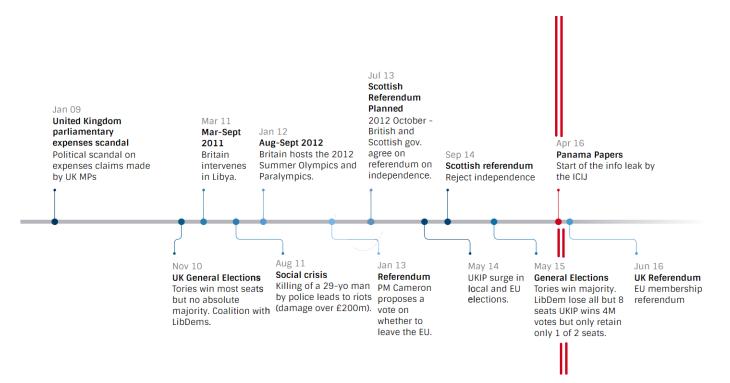
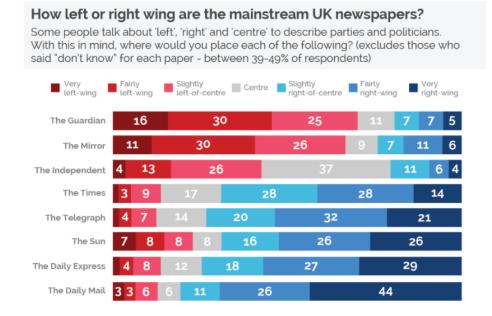


Figure A.6: Timeline of the main political events in the United Kingdom, 2009-2016

A.3 Newspapers political affiliation

Figure A.7: Perception of political tendencies of mainstream UK newspapers - (Source: YouGov)



B Descriptive Statistics

	BES Data	Census
	(1)	(2)
Demographics		
Share of women	0.51	0.49
Nb Children	1.69	1.8
Married	0.47	0.49
Median Age	50 (Above 18)	40 (All)
Gross Household Income		
Median Bracket	$\pounds 25,000 - \pounds 29,999$	£26,000-£31,999
Education		
A-levels and above	0.51	0.41
Percentage of pp. employed	0,744	0,78
Courses DEC W12 Depel - 1 f)	

Source: BES W13 Panel v.1.2.

Table B.3: Summary Statistics and Comparison to Census Data

	All	Informed	Not Informed
	(1)	(2)	(3)
Demographics			
Age	50.88	51.02	49.61
	(16.77)	(16.90)	(15.57)
Male	0.47	0.48	0.34
	(0.50)	(0.50)	(0.47)
Have children	0.40	0.40	0.46
	(0.83)	(0.83)	(0.86)
Married	0.47	0.47	0.44
	(0.50)	(0.50)	(0.50)
Gross household income	$\pounds 25,000 - \pounds 29,999$	$\pounds 25,000 - \pounds 29,999$	$\pounds20,000-\pounds24,999$
Education			
No diploma	0.08	0.07	0.15
	(0.27)	(0.26)	(0.36)
A-Levels	0.27	0.27	0.28
	(0.45)	(0.45)	(0.45)
Undergrad.	0.40	0.41	0.29
	(0.49)	(0.49)	(0.46)
Postgrad.	0.11	0.11	0.05
	(0.31)	(0.31)	(0.22)
Political Prefs.			
Left-wing	0.29	0.31	0.12
	(0.45)	(0.46)	(0.32)
Right-wing	0.19	0.20	0.11
	(0.39)	(0.40)	(0.31)

Standard-errors in parentheses.

Source: BES W13 Panel v.1.2.

Table B.4: Summary Statistics of the sample, split by informed and non-informed

C Complementary Specifications

	Governme	nt should	Ordinary people do not
	redist. from better	try to make income	get their fair share of
	to worse off	more equal	nation's wealth
	(1)	(2)	(3)
Demographics			
Age	0.00297***	0.00131^{***}	0.00474^{***}
	(0.000457)	(0.000372)	(0.000456)
Male (yes=1)	0.0640***	-0.0550***	0.0170^{*}
	(0.00882)	(0.00663)	(0.00995)
Demographics			
Right-wing (yes=1)	-0.323***	-0.453***	-0.298***
	(0.0155)	(0.0135)	(0.0184)
Left-wing (yes=1)	0.742^{***}	0.507***	0.629^{***}
	(0.0148)	(0.0152)	(0.0215)
Household Gross Income (ref: <£9,999/year)			
£10,000 - £29,999	-0.133***	-0.122***	-0.0661***
	(0.0167)	(0.0119)	(0.0183)
£30,000 - £49,999	-0.332***	-0.318***	-0.207***
	(0.0187)	(0.0146)	(0.0173)
£50,000 - £69,999	-0.457***	-0.441***	-0.332***
	(0.0216)	(0.0155)	(0.0192)
£70,000 - £99,999	-0.605***	-0.567***	-0.459***
	(0.0275)	(0.0197)	(0.0242)
$\geq \pounds 100,000$	-0.730***	-0.742***	-0.709***
	(0.0352)	(0.0239)	(0.0309)
Trust in government	-0.101***	-0.0942***	-0.197***
	(0.00385)	(0.00267)	(0.00335)
Employment situation (ref: full-time work)			
Retired	-0.0937***	-0.108***	-0.136***
	(0.0162)	(0.0107)	(0.0152)
Unemployed	0.211***	0.228***	0.116***
	(0.0239)	(0.0235)	(0.0272)
Time Controls	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes
Control income	Yes	Yes	Yes
Observations	63,293	94,035	63,921

C.1 Socio-demographics and Economic Variables

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table C.5: Ordered Probit Estimates: Effect of Socio-economic variables

C.2 OLS and Panel Complementary Estimations

	Governme	nt should	Ordinary people do not
	redist. from better	try to make income	get their fair share of
	to worse off	more equal	nation's wealth
	(1)	(2)	(3)
Post Apr. 3rd, 2016 (Yes=1)	-0.123***	-0.251***	-0.0994***
	(0.0247)	(0.0822)	(0.0216)
Informed (Yes=1)	-0.0380***	-0.301***	0.0189
	(0.0141)	(0.0459)	(0.0146)
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.0611^{***}	0.230^{***}	0.0705^{***}
	(0.0228)	(0.0679)	(0.0226)
Constant	3.806***	7.207***	4.269***
	(0.0376)	(0.0891)	(0.0311)
Time Controls	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes
Control income	Yes	Yes	Yes
Observations	63,293	94,035	63,921
R-squared	0.236	0.240	0.230

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table C.6: Effect of the Panama Papers on preferences: OLS Estimates

	Governme	nt should	Ordinary people do not
	redist. from better	try to make income	get their fair share of
	to worse off	more equal	nation's wealth
	(1)	(2)	(3)
Post Apr. 3rd, 2016 (Yes=1)	-0.104***	-0.195***	-0.112***
	(0.0179)	(0.0475)	(0.0169)
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.0525^{***}	0.185^{***}	0.0885^{***}
	(0.0183)	(0.0492)	(0.0173)
Constant	3.572***	5.715***	4.055***
	(0.0179)	(0.0411)	(0.0170)
Time Controls	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes
Control income	Yes	Yes	Yes
Observations	63,293	94,035	63,921
R-squared	0.007	0.002	0.006
Number of id	21,594	21,285	21,638

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table C.7: Effect of the Panama Papers on preferences: Panel Estimates

C.3 Marginal Effects

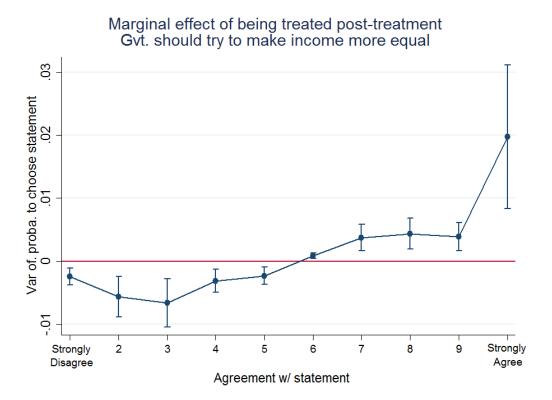


Figure C.8: Marginal Effects from Ordered Probit Estimates (source: BES data, own calculations)

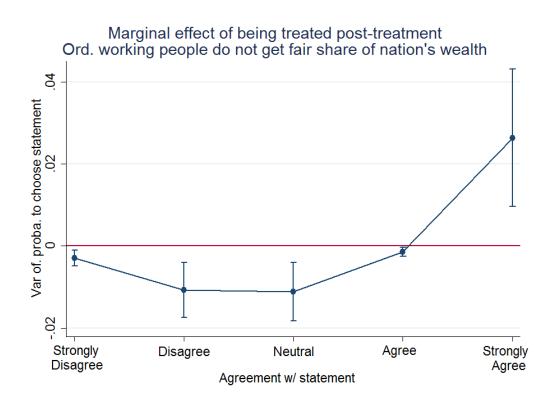


Figure C.9: Marginal Effects from Ordered Probit Estimates (source: BES data, own calculations)

C.4 Heterogeneity Checks

	Dep. Var.: Government should try to make income more equal							
VARIABLES	Men	>50 y.o.	<£ 9,999 /	>£ 10,000 &	>£ 40,000/	No trust in	Full trust in	
VARIABLES	Men	>50 y.o.	year	${<}39{,}999/{\rm year}$	year	gvt.	gvt.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Post Apr. 3rd, 2016 (Yes=1)	-0.0781**	-0.0786***	-0.223***	-0.0846**	0.0851*	-0.118***	-0.124*	
	(0.0380)	(0.0304)	(0.0592)	(0.0340)	(0.0449)	(0.0363)	(0.0712)	
Informed (Yes=1)	0.0786***	-0.115***	-0.0241	-0.0315	0.149^{***}	-0.0629***	0.0296	
	(0.0213)	(0.0199)	(0.0350)	(0.0192)	(0.0267)	(0.0217)	(0.0364)	
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.0567	0.0652^{**}	0.136^{**}	0.0332	-0.0809*	0.0693^{*}	0.113^{*}	
	(0.0387)	(0.0305)	(0.0628)	(0.0327)	(0.0433)	(0.0355)	(0.0684)	
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Controls socio dem	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Control income	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Observations	64,672	64,668	11,284	71,686	47,583	33,724	22,045	

Standard errors are in parentheses and clustered at the interview date level. *** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, own calculations

Question: How much do you agree or disagree with the statement: "Government should try to make income more equal"?

Table C.8: Heterogeneity of responses by socio-demographics and trust

	Dep. Var.: Ord. working people do not get their fair share of the nation's wealth						
- VARIABLES	Men	>50 y.o.	<£ 9,999 /	>£ 10,000 &	>£ 40,000/	No trust in	Full trust in
VARIABLES	Men	>50 y.o.	year	${<}39{,}999/{\rm year}$	year	gvt.	gvt.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Post Apr. 3rd, 2016 (Yes=1)	-0.0400	-0.106***	-0.155***	-0.0967***	0.0284	-0.152***	-0.0288
	(0.0359)	(0.0356)	(0.0553)	(0.0286)	(0.0415)	(0.0305)	(0.0814)
Informed (Yes=1)	0.230***	-0.0367	0.263***	0.164^{***}	0.186^{***}	0.134^{***}	0.0763
	(0.0271)	(0.0227)	(0.0465)	(0.0243)	(0.0269)	(0.0206)	(0.0565)
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.00914	0.109^{***}	0.0752	0.0499	-0.0214	0.0830**	0.0664
	(0.0422)	(0.0372)	(0.0638)	(0.0363)	(0.0403)	(0.0353)	(0.0855)
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls socio dem	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Control income	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	40,128	41,902	7,809	46,668	30,068	23,397	14,943

Standard errors are in parentheses and clustered at the interview date level. *** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, own calculations

Question: How much do you agree or disagree with the statement: "Ord. working people do not get their fair share of the nation's wealth"?

Table C.9: Heterogeneity of responses by socio-demographics and trust

	Dep. Var.:	Dep. Var.: Gvt. should try to make income more equal				
	Pro Right-wing	Times	Pro Left-wing	Guardian		
	(1)	(2)	(3)	(4)		
Post Apr. 3rd, 2016 (Yes=1)	-0.0790*	-0.210	-0.00290	0.127		
	(0.0474)	(0.243)	(0.0772)	(0.167)		
Informed (Yes=1)	-0.152***	-0.236	0.309***	0.503***		
	(0.0220)	(0.165)	(0.0556)	(0.115)		
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.108***	0.264	-0.0925	-0.195		
	(0.0380)	(0.252)	(0.0813)	(0.165)		
Time Controls	Yes	Yes	Yes	Yes		
Controls socio dem	Yes	Yes	Yes	Yes		
Control income	Yes	Yes	Yes	Yes		
Observations	31,886	3,792	22,573	$5,\!639$		

Standard errors are in parentheses and clustered at the interview date level. *** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, ESS W8 v.1, own calculations.

Question: How much do you agree or disagree with the statement: "Gvt. should try to make income more equal"

Table C.10: Effects on redistribution preferences by political affiliation

	Dep. Var	Dep. Var.: Gvt. should try to make income more equal			
	Pro Right-wing	Times	Pro Left-wing	Guardian	
	(1)	(2)	(3)	(4)	
Post Apr. 3rd, 2016 (Yes=1)	-0.0795*	0.174	-0.0464	-0.108	
	(0.0442)	(0.261)	(0.0719)	(0.180)	
Informed (Yes=1)	-0.0674***	0.0694	0.313***	0.292***	
	(0.0249)	(0.202)	(0.0475)	(0.113)	
Post Apr. 3rd, 2016 & Informed (Yes=1)	0.126^{***}	-0.0626	-0.0595	0.0552	
	(0.0440)	(0.270)	(0.0709)	(0.176)	
Time Controls	Yes	Yes	Yes	Yes	
Controls socio dem	Yes	Yes	Yes	Yes	
Control income	Yes	Yes	Yes	Yes	
Observations	32,050	3,807	22,745	5,655	

Standard errors are in parentheses and clustered at the interview date level. *** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, ESS W8 v.1, own calculations.

Question: How much do you agree or disagree with the statement: "Government should redist. from the better to the worse off"

Table C.11: Effects on redistribution preferences by political affiliation

C.5 Falsification Tests

	Falsification Tests				
	Env. Issues	Cap. Penalty			
	(1)	(2)	(3)		
Post Apr. 3rd, 2016 (Yes=1)	0.0369	-0.161	-0.142***		
	(0.0325)	(0.132)	(0.0224)		
Informed (Yes=1)	-0.00671	0.186^{**}	-0.267***		
	(0.0155)	(0.0807)	(0.0188)		
Post Apr. 3rd, 2016 & Informed (Yes=1)	-0.0385	0.0895	-0.0216		
	(0.0355)	(0.115)	(0.0249)		
Time Controls	Yes	Yes	Yes		
Controls socio dem	Yes	Yes	Yes		
Control income	Yes	Yes	Yes		
Observations	20,523	21,763	120,010		

Standard errors are in parentheses and clustered at the interview date level.

*** p<0.01, ** p<0.05, * p<0.1 Source: BES W13 Panel v1.2, own calculations.

Table C.12: Falsification Tests on Preferences for Redistribution: Main Outcomes

C.6 Placebo Tests

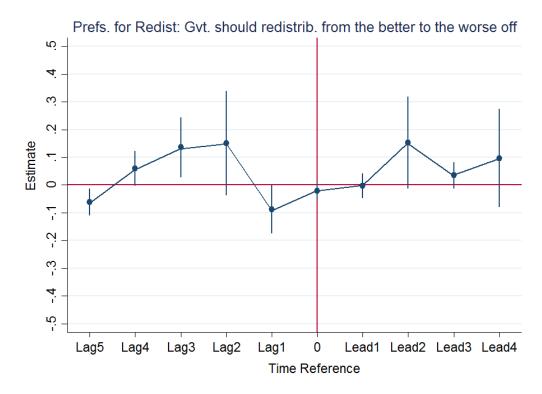


Figure C.10: Estimates yielded from the test of the lags and the leads (BES data)

D European Comparisons

	Ι	Dep. Var.: Trust in g	zvt.
	GB	All Countries	All Countries
	(1)	(2)	(3)
Post Apr. 3rd (Yes=1)	-0.0252	0.356***	0.208***
	(0.210)	(0.0714)	(0.0721)
Informed (Yes=1)	0.160	0.194***	0.215***
	(0.184)	(0.0558)	(0.0550)
Post Apr. 3rd & Informed (Yes=1)	0.0593	0.0457	-0.0545
	(0.234)	(0.0740)	(0.0742)
Country FE	-	No	Yes
Observations	$1,\!116$	15,058	15,058

Table D.13: Dep. Var.: Trust in government (OLS)

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Source: BES W13 Panel v1.2, own calculations.