### Top income tax evasion and preferences for redistribution Evidence from the Panama Papers VERY PRELIMINARY

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#### Abstract

This paper attempts to document and explain changes in personal beliefs after fiscal scandals leaked into the media worldwide. I use the 2016 Panama Papers scandal as a quasi-experiment. This scandal reveals tax avoidance behaviors of top-income households which placed their income in offshore companies in tax havens. The scandal is unanticipated and leaked worldwide in April 2016 by ICIJ journalists operating in various media. This analysis focuses on Europe, using longitudinal data (BES) and a rich European survey (European Social Survey, ESS). On average, I find an increase in answers agreeing that (i) workers don't get their fair share of wealth (ii) there's one law for the rich and one for the poor (iii) government should redistribute from the better to the worse off. I find that the leak affects the nature of average answers up to the point that post-leak, individuals decide to take a stand on redistribution question: averages go from "neither agree nor disagree" to "agree" for the points (i) and (ii). However, this effect is not observed for all questions on redistribution: more precisely, post-leak, less people think that making equal incomes should be a priority. This implies that wage-level inequality isn't perceived to be a priority, and suggest that the leak influences only the perception of top incomes, i.e. distribution inequality. To complement this analysis, I resort to a difference-in-differences methodology, where the control group encompasses those who are not informed. European data shows consistency at the European level.

**JEL codes**: D63, H24, H26.

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## 1 Introduction

Fiscal optimisation, leading to the \$600 billion annual tax loss (as estimated by Crivelli et al. (2015), divided roughly into \$400 billion in OECD countries and \$200 billion elsewhere), is triggered essentially by the presence of different tax rates worldwide.

Large fiscal optimisation has indeed been uncovered recently through several waves, or "leaks" over the last decade. Mass media being the major info source for the general public, those leaks provided a means to inform individuals, and potentially make them update their beliefs on taxation and redistribution.

In this paper, I use the Panama Papers' leak; it started on April 3rd, 2016, and has spreaded worldwide starting from the ICIJ, a consortium of journalists active in several papers in numerous countries. Information on tax avoidance leaked from a source working in Mossack Fonseca, a Panamean law firm involved with offshore companies. It is possible to use the Panama Papers as a quasi experiment which constitutes an exogeneous shock, since the motivations of the anonymous source (named "John Doe") were ethical and exogeneous.

The Panama Papers' scandal constitutes a discontinuity which provides information on tax avoidance in numerous countries. Thus, it is interesting to test whether individuals revise their views on inequality and the tax system after an informational shock. This is what this paper aims at, as well as quantifying the extent of this variation and whether it lasts over time.

A recent and substantial strand of literature is dedicated to the study of tax evasion, namely to its quantification. Alstadsæter et al. (2017) show that top-income tax evasion is substantial: they find that on average 3% of personal taxes are evaded, versus 25%-30% in the top 0.01%. Another literature also studies the update of preferences after an informational intake through the use of randomized online survey experiments: Kuziemko et al. (2015) and Cruces et al. (2013) show that informational shocks influence people's views on inequality.

The Panama Papers' scandal have already been studied and used to measure responses of firms to the information of existing fraud. ? find that the Panama Papers decreased the market valuation of offshore firms: more precisely, they find that the leak erases \$135 billion in market capitalization among 397 public firms. This corroborates the literature on the whistleblowing effect of leaks that act as deterrents to commit fraud (Johannesen and Stolper (2017)). Indeed, this scandal increased withdrawals from tax havens and decreased the market value of firm involved in the 2008 Liechtenstein tax affair.

Concerning behavioral responses to the media, Petrova (2008) shows that incomplete or

biased information affect the preferences for redistribution in countries with high inequality levels. This strand of the literature indicates that media exposure could be a valid vector for an informational shock that would then affect preferences for redistribution.

To the best of my knowledge, this study is the first that aims at estimating the Panama Papers' impact on people's preferences, and provides a counterpart to the analysis of firms' reactions to that scandal.

Using two datasets for years 2015 and 2016, I resort to both longitudinal and cross-section data for the UK and Europe, I measure the variation in preferences for redistribution. Firstly, I use longitudinal data from the British Election Survey (BES), which follows the same individuals and contains indicators of media exposure. The channel tested here is an informational one, which starts with the informational shock from April 3rd, 2016 onwards through the media coverage of the event, that would then lead to an update of preferences for redistribution from the individuals. I then use the European Social Survey (ESS) dataset to lead an analysis over European countries as a complement to this analysis, and to corroborate results obtained on the longitudinal dataset for Great-Britain.

So far, I find post-leak increased preferences for redistribution from top incomes. More precisely, I find a significant increase of preferences for redistribution from top to bottom deciles (as more people agree with the statement that "workers don't get their fair share" and 'government should redistrib. from better to worse off"). This is also encompassed by a variation in the perception of the legal system (i.e. more people agreeing with the statement: "one law for the rich, one for the poor"). However, other preferences for redistribution, unrelated to top incomes, are not affected positively (e.g., less people agree with the statement that " Government should intervene to make incomes more equal"). We can explain it by the fact that, through the Panama Papers inequality isn't perceived as stemming from wages but from taxation and how the money is redistributed.

This first part of the analysis addresses the effects of the Panama Papers and assume that all individuals are aware of the existence of the Panama Papers scandal. As a robustness check, I compute a differences-in-differences methodology based on whether people are informed or not. Using those who do not get news from any media source (TV, radio, internet, newspapers) as a control group, I find that those informed have, post-leak, a significant increase in their preferences for redistribution.

The rest of this paper is organized as follows. Section 2 introduces the Panama Papers scandal. Section 3 presents the empirical strategy along with the data and the selection process. The fourth part shows that the leak increased individuals' preferences for redistribution from top income and provides provides robustness checks and complementary

tests. Section 5 concludes.

# 2 The Panama Papers scandal

An exogeneous leak. The Panama Papers scandal results from a leak from an anonymous source from a Panamean law firm. This source contacted Bastian Obermayer, a German investigative reporter, through an encrypted messaging service. The motivations of this whistleblower were exogeneous, as she stated she "want(s) to make these crimes public"<sup>1</sup>. The exogeneity of this leak is what motivates this study as a quasi-experiment.

Concerning the magnitude of the leak, it is important to note that it is larger than the previous leak: 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.

Tax avoidance mechanism. Resorting to offshore companies is not necessarily illegal unless it is used to launder money, dodge sanctions and avoid taxes. The mechanism behind the Panama Papers is rather simple and encompassed in Fig. A.1 in Appendix A. It is possible to summarize it in two steps. Firstly, individuals create a "shell company" registered in a tax haven; it is run by a nominee so that the name of the avoider does not directly appear. Secondly, individuals open a bank account in the same tax haven and then move money from the corporation to the bank account to be able to spend that money. Hence, although offshore companies are legal, and this fiscal strategy is officially not illegal, it still is fiscal optimisation and a means to avoid taxes; this is why the spreading of the information on who resots to it can be perceived as dodgy or scandalous.

Magnitude of the scandal. Although the information initially came through a German reporter, this leak and documents were then treated by the ICIJ reporters who are linked to various media worldwide. To provide an example, Fig. A.2 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 motivate the intensity and the extent of individuals' media exposure on which relies the assumption that most individuals got the information on the existence of the Panama Papers. Fig. A.3 in Appendix A presents the evolution of web search intensity for the keywords "Panama Papers", which registered a spike on April 3rd, 2016. Using discontinuity based on an informational leak from various media worldwide is then a strategy that holds. In addition, Fig. A.4 in Appendix presents search intensities for

 $<sup>^1{\</sup>rm The}$  excerpt from this conversation can be found in the Süddeutsche Zeitung website: http://panamapapers.sueddeutsche.de/articles/56febff0a1bb8d3c3495adf4/

the keywords "Panama Papers" by areas worldwide. This provides evidence that this leak was taken over from the ICIJ worldwide, which in turn motivates further our European analysis of responses to this scandal.

### 3 Data and Empirical Strategy

#### 3.1 UK and European data

Data used in this paper is two-fold, as I use successively longitudinal UK data and European survey data. This section presents both datasets' characteristics. I first use longitudinal survey data from the British Election Survey (BES hereafter). Data used is from years 2015 and 2016, and constitutes a sample of 101,304 obs. on over 53,604 individuals. Data contains detailed questions on personal redistribution preferences. I use the interview date as a means to define whether the individual is exposed to the reform. Individuals are interviewed successively over the period: using the same individuals constitute a means to record any personal shifts by controlling for unobserved characteristics when it comes to the empirical analysis. The BES interviewees are interviewed between 1 and 4 times in our sample of interest; on average, they are interviewed 2 times. Waves are led on a very recurrent basis, which provides us with enough counterfactuals.

The second database used in this analysis is the European Social Survey (ESS hereafter), with data kept for years 2015 and 2016 for 22 European countries. The final sample contains 100,322 observations total. Similarly to the BES, this dataset contains detailed questions on personal preferences for redistribution, and also the date of interview. Interview dates are also used here as a means to define when and if a said individual is exposed to the reform.

#### **3.2** Descriptive Statistics

This section shows that descriptive statistics anticipate and illustrate our main findings. Fig.1 presents the perception of workers' fair share, that are the mean monthly responses to the statement "Ordinary working people do not get their fair share of the nation's wealth, do you agree?". We observe an increase in the propensity to agree to that statement after the leak. In addition, Fig. B.5 and B.6 in Appendix B present the same increase in the propensity to agree to statements on redistribution, namely on (1) whether there's one law for the rich and one for the poor, and (2) whether the government should redistribute income from the better to the worse off. Descriptive statistics indicate that the informational leak is correlated to the perception of the system (legal system, fairness towards the worse off). These descriptive statistics motivate us to test whether individuals perceive more inequalities over time after the Panama Papers leak.



Figure 1: Perception of workers' fair share for workers over time

In addition, it is interesting to check whether the ESS and the BES datasets are consistent in terms of descriptive statistics. Fig. B.7 and Fig. B.8 in Appendix B present the evolution of the preferences for equal incomes, respectively for BES and ESS. They encompass effects that are the same for both databases. Complementary analysis will be led on other questions, such as whether governments should make incomes more equal.

#### 3.3 Empirical Model and Identification

To the extent that our dependent variables are level variables, we run Ordinary Least Squares (OLS) as well as panel data linear fixed effects. For all our outcomes of interest (i.e., questions related to redistribution preferences, I use the following specification:

$$y_{it} = \beta_0 + \sum_{k=1}^n \beta_k x_i^k + \delta_1 Post_i + \phi_i + \epsilon_{it}$$
(1)

where:  $x_i^k$  is the vector of observable individual characteristics and time controls,  $Post_i$  a dummy variable equal to 1 if interview takes place after April 3rd, 2016, and 0 otherwise;  $\epsilon_{it}$  is the error term and  $\phi_i$  the individual fixed effect. All models routinely control for month fixed effects<sup>2</sup>.

This specification uses April 3rd, 2016, as a time discontinuity. The main identifying assumption is that, conditional on the vector of socioeconomic characteristics and time trends, and conditional on netting out individual unobserved heterogeneity, the interview date is exogenous to the Panama Papers leak. It is very likely that this identifying assumption holds. In 2016, roughly half of all respondents completed their interviews before and after April 3rd. Finally, it is difficult to think of an unobservable that systematically affected the outcomes in 2016, but not in 2015 and which was correlated with the Panama Papers.

Finally, note that we use differences-in-differences to complement the analysis in the next section, to test whether all individuals are supposed to be exposed to the informational leak.

### 4 Results

#### 4.1 First Results

This section presents our baseline specifications where we focus on years 2015 and 2016. The first three columns estimate OLS and the next three other columns present FE-OLS models. Note that all outcome variables mentioned in this section have a similar form, as they question whether individuals agree or disagree with a given statement: the scale goes from 1 (completely disagree) to 5 (completely agree).

First, across all specifications, I consistently find that agreeing with the fact that "workers don't get their fair share of the nation's wealth" (see Table1) increased by about 0.24 points after the Panama Papers. Results are overall quite consistent between FE and OLS. Relative to the baseline level of preferences for redistribution before the Panama Papers, this represents an increase of about 6.2%. Tables C.1 and C.2 contain estimates for the two latter questions. Similarly, I find that post-leak people are more likely to agree with the statements that there is "one law for the rich and one for the poor" and "government should redistribute wealth from the better to the worse off". Respectively, this increase amounts to about 0.2 and 0.28 points after the Panama Papers. This represents an increase of about 5.1% for the legal system and 8.2% for the perceived redistribution to the worse off.

<sup>&</sup>lt;sup>2</sup>Note that when it comes to regressions led on European cross-sectional data, we are back to a usual OLS specification, although I also control for country fixed effects.

Dependent Variable: Ordinary working people do not get their their fair share								
Variables	OLS	OLS	OLS	FE	FE	FE		
	(1)	(2)	(3)	(4)	(5)	(6)		
Post Apr. 3rd, 2016	-0.0540	-0.00295	0.453***	0.201***	0.190***	0.236***		
	(0.0759)	(0.0842)	(0.112)	(0.0575)	(0.0580)	(0.0759)		
Constant	-4.418	-0.889	31.74***	13.30***	12.52***	$16.05^{***}$		
	(5.803)	(6.275)	(7.985)	(4.063)	(4.098)	(5.333)		
Controls socio dem	No	Yes	Yes	No	Yes	Yes		
Control income	No	No	Yes	No	No	Yes		
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes		
Observations	100,322	$91,\!596$	$62,\!483$	100,322	$91,\!596$	62,483		
R-squared	0.001	0.005	0.045	0.003	0.003	0.003		
Number of id				53,316	$45,\!532$	29,539		

Table 1: Results: Ordinary working people do not get their fair share

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 following statement:

"Ordinary working people do not get their fair share of the nation's wealth" ?

Table 1 presents the predicted preferences for redistribution after the Panama Papers using the average predicted effects from the model. Thus, it corroborates the effects contained in Fig.1, Fig.B.5 and B.6 previously mentioned.

Relative to the baseline level of redistribution preferences before the leak (i.e. in year 2015 and beginning of 2016), this increase in agreement with such statements implies that the leak affects the nature of average answers. Post-leak, in going from "neither agree nor disagree" to "agree", individals decide to take a stand on redistribution questions.

	Average Effects						
		Pre-Leak		Post-Leak			
Question	Mean	Corresp. Answer	Mean (Predicted)	Corresp. Answer			
Law rich/law poor	3.9	Neither agree nor disagree	4.1	Agree			
Workers don't have their fair share	3.9	Neither agree nor disagree	4.1	Agree			
Redistribute to worse off	3.4	Neither agree nor disagree	3.7	Neither agree nor disagree			

It is also interesting to test whether there is heterogeneous and a differentiated effect with respect to the income level. In Table C.3 in Appendix I investigate effect heterogeneity by income levels. More precisely, I stratify the concern levels using the preferred specification (3) of Table 1 by all the gross household income levels declared in the survey. Table C.3

provides clear and strong evidence that the leak incurred an about 0.2 point increase for the top income households in agreeing that there is one law for the rich and one law for the poor. However, we fail to find differential treatment effects by income levels for the preferences to redistribute from the better to the worse off (columns (3) and (4)). The latter point is interesting in light of the discussion about the conceptual idea behind redistribution as a action compared to the perception of inequalities per se. Another finding is that post-leak, we observe a differentiated effect for most people on the fact that workers do not get their fair share of the nation's wealth, going between 0.1 and 0.15 for all individuals in middle and upper class households (starting above £25,000 and £150,000 per year).

#### 4.2 Consistency at the European level

This section is dedicated to testing the similarity of outcomes between the ESS and the BES databases. I selected a question which is has the same label in both databases : that is the level of agreement of one interviewee with the statement "Government should try to make incomes more equal". This question, although it is related to preferences for redistribution, is different in the sense that it is completely unrelated to the perception of the top incomes.

Before using econometrics to determine effects post-leak on this aspect of the redistribution, a simple observation of descriptive statistics between the ESS and the BES prove that reactions are consistent within Europe: Fig. B.7 and B.8 in Appendix present similar paths for mean responses to the question that is labeled identically in ESS and BES databases.

I lead regressions following the main specification previously used (see equation 1). Estimates show that post-leak, less people think that making equal incomes should be a government priority.

This implies that the wage level inequality isn't perceived to be a priority by individuals. First, estimates in Table 3 implies that results are similar for the same questions between the European and the British datasets. Second, this leads us to the conclusion that the leak influences only positively preferences for the redistribution that affect the perception of top incomes, *i.e.* distribution inequality. The decrease in these preferences may imply that individuals consider "making income equal" as less of a priority after the fiscal scandal sheds light on tax avoidance.

T										
			В	ES				ES	SS	
VARIABLES	OLS	OLS	OLS	FE	FE	$\mathbf{FE}$	OLS	OLS	OLS	OLS
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)
Post Apr. 3rd, 2016	-0.896**	-0.947***	-0.742***	-0.736***	-0.709***	-0.594***	-0.766***	-0.771***	-0.750***	-0.169**
	(0.353)	(0.293)	(0.226)	(0.117)	(0.118)	(0.133)	(0.0844)	(0.0831)	(0.0820)	(0.0767)
Constant	$-42.37^{*}$	-45.28**	$-26.55^{*}$	-31.81***	-30.06***	-20.97**	-11.28***	-11.70***	-11.44***	3.239
	(25.35)	(20.79)	(15.24)	(8.165)	(8.244)	(9.316)	(3.237)	(3.187)	(3.112)	(2.649)
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls socio dem	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Control income	No	No	Yes	No	No	Yes	No	No	Yes	Yes
Country FE							No	No	No	Yes
Observations	108,557	100,305	74,563	$108,\!557$	100,305	74,563	42,156	42,029	35,163	35,163
R-squared	0.001	0.012	0.062	0.004	0.003	0.004	0.029	0.042	0.063	0.109
Number of id				49,317	42,269	29,598				

Table 3: Estimates - Government should make incomes more equal

Dependent Variable: Gvt. should increase efforts to make incomes more equal

### 4.3 Robustness Checks

In the previous estimations, it was always assumed that indivs were aware of the Panama Papers' scandal, i.e. media exposure is assumed to be constant among individuals. Hence, it is interesting to test the robustness of this assumption. I lead a differences-in-differences estimation where the control group encompasses individuals who do not get the news through any of the following media : TV, radio, internet and newspapers.

Descriptive statistics provide a first insight on the evolution of preferences with respect to being informed. Fig. 2 show that "informed" and "not informed" groups share the same trend. After the leak, their paths come closer but this effect does not seem to last long as the gap reappears after a few months. Fig. B.9 and B.10 in Appendix corroborate these remarks and motivate our use of this strategy. The difference between "informed" and "not informed" groups is negative; this can be related to differences in profiles and does not impair our results as it can be controlled for.



Figure 2: Evolution of preferences with respect to being informed

Question: Do you agree w/ the statement: 'Ordinary working people do not get their fair share of the nation's wealth'? 1- strongly disagree 5-strongly agree

Note that the time span used for these studies is the same as before and encompasses years 2015 and 2016. I use longitudinal data (BES) for Great-Britain and lead successively OLS and panel data fixed effects regressions. Our outcomes of interest are the same questions on preferences for redistribution, that are statements on (i) redistribution towards the worse off, (ii) the perception of workers' fair share of nation's wealth, (iii) whether there's one law for the rich and one for the poor. For all these outcomes of interest, the differences-in-differences specification is the following:

$$y_{it} = \beta_0 + \sum_{k=1}^n \beta_k x_i^k + \delta_1 After_i + \delta_2 Informed_i + \delta_3 After_i * Informed_i + \phi_i + \epsilon_{it}$$
(2)

where  $x_i$  is the vector of individual observable characteristics and time controls,  $\epsilon_{it}$  is the error term,  $\phi_i$  individual fixed effects,  $Informed_i$  a dummy variable equal to 1 if individuals are informed through any of the following media: TV, internet, radio and newspapers, and 0 otherwise,  $After_i$  a dummy variable equal to 1 if the interview takes place after April 3rd, 2016, and 0 otherwise. The average treatement effect on the treated is then encompassed by the coefficient  $\delta_3$  linked to the interaction term  $After_i * Informed_i$ .

Variables	OLS	OLS	OLS	FE	FE	FE
	(1)	(2)	(3)	(4)	(5)	(6)
Post	0.181***	0.181***	0.148***	0.175***	0.171***	0.149***
	(0.0315)	(0.0329)	(0.0381)	(0.0206)	(0.0207)	(0.0243)
Informed	-0.0609***	-0.0620***	0.0218			
	(0.0228)	(0.0230)	(0.0258)			
Post * Informed	0.0436	$0.0478^{*}$	$0.0856^{***}$	$0.0671^{***}$	$0.0710^{***}$	$0.0934^{***}$
	(0.0269)	(0.0275)	(0.0315)	(0.0177)	(0.0178)	(0.0205)
Constant	12.39***	$12.56^{***}$	12.25***	11.91***	11.92***	11.97***
	(0.816)	(0.911)	(1.086)	(0.557)	(0.562)	(0.678)
Time controls	Yes	Yes	Yes	Yes	Yes	Yes
Controls socio dem	No	Yes	Yes	No	Yes	Yes
Control income	No	No	Yes	No	No	Yes
Observations	$99,\!178$	90,572	61,872	99,178	$90,\!572$	61,872
R-squared	0.001	0.006	0.047	0.008	0.008	0.008
Number of id				53,005	45,322	29,431

Table 4: Differences-in-differences estimates - Redistribution to the worst off

Dependent Variable: Gvt. Should redistribute from better to worse off

Table 4 show estimates using this differences-in-differences strategy. In addition, tables C.4 and C.5 in Appendix present complementary estimates for the other outcomes of interest: results are similar and indicate that estimates using the difference analysis are consistent.

For all the outcomes of interest tested here, I consistently find an increase in preferences for redistribution after the Panama Papers scandal. More precisely, I find (i) an increase of 0.05 points in the agreement to the fact that workers do not get their fair share of the nation's wealth; (ii) an increase of 0.05 points in propensity to state that there is a law for the rich and one for the poor, and (iii) a rise of 0.09 points in the propensity to agree that the governement should redistribute from the better to the worse off. For all the outcomes of interest, the effects registered by differences-in-differences strategy are also significant but of smaller impact compared to the estimations yielded from the simple discontinuity framework.

Effects are significantly narrowed once we add income controls in regressions. This indicates that individuals' reactions are income-related, and it is also due to the fact that being informed is something that is substantially related to educational and income outcomes.

# 5 Conclusion

This paper attempts to test whether individuals updated their beliefs and their preferences for redistribution after the Panama Papers scandal, which provide additional information on tax avoidance.

Using databases for Great-Britain and Europe, I find that this informational leak influences the short-term perception of law and inequality. More precisely, we seize an increase in the preferences for redistribution from the top-income individuals, i.e. from from top to bottom deciles.

This has been observed through elements such as the redistribution of wealth towards the poorest ("workers don't get their fair share"), the perception of the legal system ("there is one law for the rich, one for the poor"), and redistributional aspects ("Government should redistribute from the better to the worse off"). However, when it comes to other aspects of redistribution preferences, such as the preferences for more equal incomes, we cannot come the same conclusion. It can be interpreted as follows: inequality is not perceived as stemming from wages but from taxation and on how the money is redistributed.

Estimates using both simple OLS and panel data fixed effects models yield consistent results, both at the British and the European levels.

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

Individuals' reaction is substantial up to the point that individuals take a clear stand post-leak. Average responses pre-leak indicate that individuals neither agree nor disagree to statements related to redistribution preferences, but the leak seems to increase the support for redistribution. This interpretation finds support in further evidence comparing individuals informed to those not informed, the significant increase in preferences for redistribution from top-income individuals is maintained.

Complementary descriptive statistics and econometric models indicate that responses are consistent at the European level: information about this worldwide scandal seems to have been important enough to trigger an update in individuals' beliefs although allcountries have not been proven at the time of the leak<sup>3</sup>.

 $<sup>^3\</sup>mathrm{Among}$ 169 names out in papers at the moment of the leak, members of some countries weren't mentioned (Albania, Bulgaria, Croatia, Cyprus, Czech Rep, Lithuania, Norway, Portugal, Slovakia, Slovenia, Turkey)

Finally, these estimates seem to indicate that individuals' reactions also stem from income differences given that effects have a differentiated magnitude per income decile group - this paper is still preliminary but I am currently conducting further analyses of income differences and will soon be able to present them.

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# A The Panama Papers Scandal



Figure A.1: Panama Papers: Tax avoidance mechanism - source: ICIJ website

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DELO Belo Slovenia	DIRISKT Direkt36 Hungary	DR Denmark	El Confidencial El Confidencial España	Expresso Portugal	FALTER Eatter Austria
Fusion Eusion USA	Gazeta Wyborcza Poland	theguardian Guardian United Kingdom	<b>EEE.</b> Het Financiiele Dagblad Netherlands	Knack Knack Belgium	KRIK KRIK Setbia
KyivPost KyivPost <sup>Ukraine</sup>	LEspresso Italy	<b>laSexta</b> La Soxta Spain	<b><u>Cle Matin</u></b> <u>Le Matin Dimanche</u> Switzerland	Le Monde Le Monde France	LE SOIR Le Soir Belgium
MCCLATCHY McClatchy United States	MO* Belgium	NDR Bernany	DCCRP Eastern Europe	Novaya Gazeta Russia	ORF Austria
POLITIKEN Politiken Denmark	PREMIERES LIGNES Premières Lignes France	POLITIKEN Politiken Denmark	PREMIÈRES LIGNES Premières Lignes France	Protagon . Protagon Greece, Cyprus	Evene Mark Reykjavik Media Iceland
<b>Eise</b> Romania	SVT	Stiddeutsche Stiddeutsche Zeitung Germany	THE IRISH TIMES The Irish Times Ireland	<b>The HiumiHerald</b> <b>The Miami Herald</b> United States	<b>Ebr New York Eimes</b> <u>The New York Times</u> United States
öhe Washington Post <u>The Washington Post</u> United States	TIMES <b>#MALTA</b> <u>Times of Malta</u> <sub>Malta</sub>	<b>Trouw</b> Irouw Netherlands	tvi 24 TVI24 (Portugal) Portugal	Univision <u>Univisión</u> United States	BEIOMOCTH Vedemosti Russia
WDR ® WDR Germany	yle Finland	Česki centrum pro investigativni žurnalistiku (CCIZ) Czech Republic			

Figure A.2: Reporting Partners ICIJ - Europe and US (source: ICIJ)

Figure A.3: Worldwide internet search intensity for keywords "Panama Papers" (source: Google Trends)

Interest over time 🕜		
100	٨	
75		
50		
25		
3 Jan 2016	24 Apr 2016	14 Aug 2016





# **B** Descriptive Statistics







Figure B.6: Evolution of preferences for redist. towards worse off

#### B.1 Consistency ESS/BES







Figure B.8: Evol. of prefs. for equal incomes (ESS, all individuals)

### B.2 Differences-in-differences strategy : Complements





Qu.: Do you agree w/ statement: 'There is one law for the rich and one for the poor'? 1- strongly disagree 5-strongly agree



Figure B.10: Evolution of preferences with respect to being informed

Question: Do you agree w/ the statement:'Government should redistribute income from the better off to those who are less well off'?

# C Complementary Specifications

### C.1 First Estimates : Complements

Table C.1: Results: One law for the rich and one for the poor

Variables	OLS	OLS	OLS	FE	FE	FE
	(1)	(2)	(3)	(4)	(5)	(6)
Post Apr. 3rd, 2016	-0.290**	-0.272**	0.337**	0.132**	0.123**	0.197***
	(0.119)	(0.120)	(0.151)	(0.0565)	(0.0569)	(0.0742)
Constant	-22.57**	-21.50**	21.69**	$6.689^{*}$	6.123	11.18**
	(8.845)	(8.801)	(10.69)	(3.993)	(4.021)	(5.216)
Controls socio dem	No	Yes	Yes	No	Yes	Yes
Control income	No	No	Yes	No	No	Yes
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	101,304	92,465	62,983	101,304	$92,\!465$	62,983
R-squared	0.002	0.009	0.056	0.010	0.010	0.011
Number of id				$53,\!608$	45,725	29,632

Dependent Variable: There's one law for the rich and one for the poor

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 following statement:

"There is one law for the rich and one for the poor"

Dependent Variable: Gvt. Should redistribute from better to worse off									
Variables	OLS	OLS	OLS	FE	$\mathbf{FE}$	FE			
	(1)	(2)	(3)	(4)	(5)	(6)			
Post Apr. 3rd, 2016	0.00744	0.0533	0.546***	0.305***	0.300***	0.279***			
	(0.0980)	(0.0837)	(0.113)	(0.0600)	(0.0604)	(0.0790)			
Constant	-3.233	-0.0399	35.25***	16.87***	$16.58^{***}$	15.21***			
	(7.238)	(6.196)	(7.887)	(4.240)	(4.266)	(5.548)			
Controls socio dem	No	Yes	Yes	No	Yes	Yes			
Control income	No	No	Yes	No	No	Yes			
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes			
Observations	$99,\!178$	$90,\!572$	61,872	$99,\!178$	90,572	61,872			
R-squared	0.001	0.006	0.047	0.008	0.008	0.007			
Number of id				$53,\!005$	45,322	29,431			

Table C.2: Results: Redistrib. towards worse off

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 following statement:

"Government should redistribute income from the better off to those who are less well off"

Variables	Law rich/	'Law poor	Redis. bett	ter to worse off	Workers'	fair share
	(1)	(2)	(3)	(4)	(5)	(6)
Post leak * income (ref:under £5,000 per y	ear) * [coli	ımn header	.]			
Post leak * $\pounds 5,000$ to $\pounds 9,999$ per year	0.00647	-0.0145	-0.0169	-0.0375	0.0716	0.0611
	(0.0698)	(0.0678)	(0.0691)	(0.0674)	(0.0488)	(0.0492)
Post leak * £10,000 to £14,999 per year	0.0348	0.0281	-0.00515	-0.00894	0.0673	0.0718
	(0.0638)	(0.0655)	(0.0837)	(0.0847)	(0.0493)	(0.0500)
Post leak * £15,000 to £19,999 per year	0.0779	0.0655	0.0359	0.0233	$0.0955^{*}$	0.0900
	(0.0680)	(0.0693)	(0.0823)	(0.0835)	(0.0569)	(0.0594)
Post leak * £20,000 to £24,999 per year	0.0484	0.0321	0.00858	-0.00663	$0.109^{**}$	$0.106^{**}$
	(0.0686)	(0.0703)	(0.0605)	(0.0621)	(0.0502)	(0.0500)
Post leak * £25,000 to £29,999 per year	0.0781	0.0563	0.0549	0.0416	$0.127^{**}$	$0.118^{**}$
	(0.0620)	(0.0623)	(0.0527)	(0.0542)	(0.0545)	(0.0532)
Post leak * £30,000 to £34,999 per year	0.109	0.0875	0.0297	0.0187	$0.133^{***}$	0.122**
	(0.0745)	(0.0749)	(0.0740)	(0.0749)	(0.0500)	(0.0497)
Post leak * £35,000 to £39,999 per year	$0.110^{*}$	0.0834	0.0659	0.0523	$0.125^{***}$	$0.110^{**}$
	(0.0618)	(0.0594)	(0.0701)	(0.0716)	(0.0437)	(0.0441)
Post leak * £40,000 to £44,999 per year	0.120	0.102	0.00652	0.00711	$0.141^{**}$	$0.134^{**}$
	(0.0805)	(0.0841)	(0.0650)	(0.0696)	(0.0552)	(0.0575)
Post leak * £45,000 to £49,999 per year	$0.102^{*}$	0.0772	-0.0287	-0.0345	$0.167^{***}$	$0.165^{***}$
	(0.0592)	(0.0590)	(0.0788)	(0.0810)	(0.0449)	(0.0462)
Post leak * £50,000 to £59,999 per year	$0.119^{**}$	$0.0949^{*}$	0.0347	0.0236	$0.143^{***}$	$0.136^{***}$
	(0.0556)	(0.0542)	(0.0546)	(0.0623)	(0.0433)	(0.0429)
Post leak * £60,000 to £69,999 per year	0.0711	0.0414	0.0404	0.0200	$0.132^{*}$	$0.130^{*}$
	(0.0880)	(0.0910)	(0.0900)	(0.0942)	(0.0724)	(0.0734)
Post leak * £70,000 to £99,999 per year	0.106	0.0812	0.0591	0.0446	0.133**	$0.124^{**}$
	(0.0650)	(0.0688)	(0.0784)	(0.0854)	(0.0622)	(0.0623)
Post leak * £100,000 to £149,999 per year	0.103	0.0463	0.123	0.0810	0.207***	$0.160^{**}$
	(0.0799)	(0.0794)	(0.0741)	(0.0704)	(0.0635)	(0.0630)
Post leak * £150,000 and over	$0.236^{**}$	$0.238^{**}$	0.0285	0.0668	0.155	0.170
	(0.116)	(0.119)	(0.142)	(0.142)	(0.126)	(0.124)
Constant	15.40	21.87**	27.20***	$35.49^{***}$	23.27***	32.01***
	(10.80)	(10.90)	(8.613)	(7.883)	(7.548)	(8.171)
Time Controls	Yes	Yes	Yes	Yes	Yes	Yes
Sociodemographic controls	No	Yes	No	Yes	No	Yes
Observations	67,974	62,983	66,756	61,872	$67,\!442$	$62,\!483$
R-squared	0.045	0.056	0.038	0.047	0.036	0.045

Table C.3: Effects on preferences for redistribution by income levels in Great-Britain

Robust standard errors in parentheses

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

### C.2 Differences-in-differences: Complementary Estimates

Variables	OLS	OLS	OLS	FE	FE	FE
	(1)	(2)	(3)	(4)	(5)	(6)
Post	0.0644**	0.0538**	0.0371	0.0411**	0.0391**	0.0384*
	(0.0256)	(0.0267)	(0.0315)	(0.0196)	(0.0198)	(0.0233)
Informed	-0.0902***	-0.0799***	-0.0165			
	(0.0186)	(0.0188)	(0.0216)			
Post * Informed	0.0330	$0.0372^{*}$	$0.0488^{*}$	0.0572***	0.0595***	$0.0522^{***}$
	(0.0218)	(0.0223)	(0.0260)	(0.0168)	(0.0169)	(0.0196)
Constant	6.520***	5.831***	$5.166^{***}$	5.529***	5.527***	5.364***
	(0.672)	(0.751)	(0.899)	(0.533)	(0.539)	(0.651)
Time controls	Yes	Yes	Yes	Yes	Yes	Yes
Controls socio dem	No	Yes	Yes	No	Yes	Yes
Control income	No	No	Yes	No	No	Yes
Observations	100,322	91,596	62,483	100,322	91,596	62,483
R-squared	0.001	0.006	0.044	0.003	0.003	0.003
Number of id				53,316	45,532	29,539

Table C.4: Differences-in-differences estimates - Workers' fair share of national wealthDependent Variable: Ordinary working people do not get their their fair share

Table C.5: Differences-in-differences estimates - Perception of legal systemDependent Variable : There's one law for the rich and one for the poor

Variables	OLS	OLS	OLS	FE	FE	FE
	(1)	(2)	(3)	(4)	(5)	(6)
Post	0.0331	0.0235	0.0402	0.00985	0.00719	0.0318
	(0.0362)	(0.0370)	(0.0429)	(0.0264)	(0.0266)	(0.0313)
Informed	-0.129***	-0.129***	-0.0388			
	(0.0288)	(0.0289)	(0.0329)			
Post * Informed	0.0176	0.0168	0.00991	$0.0521^{**}$	$0.0529^{**}$	0.0384
	(0.0336)	(0.0338)	(0.0390)	(0.0245)	(0.0246)	(0.0288)
Constant	2.392***	$1.365^{*}$	1.230	1.538**	1.449***	2.043***
	(0.710)	(0.784)	(0.931)	(0.524)	(0.529)	(0.637)
Time controls	Yes	Yes	Yes	Yes	Yes	Yes
Controls socio dem	No	Yes	Yes	No	Yes	Yes
Control income	No	No	Yes	No	No	Yes
Observations	101,304	92,465	62,983	101,304	92,465	62,983
R-squared	0.002	0.010	0.056	0.010	0.010	0.010
Number of id				$53,\!608$	45,725	29,632