

Can Anger Demobilize?
The Political Effects of Anger about the Economic Crisis

Gabriele Magni

University of North Carolina at Chapel Hill

magni@live.unc.edu

Anger plays a central role in politics and previous studies have consistently underlined its mobilization effect. Anger has also been the most widespread emotional reaction to the economic crisis, but the aftermath of the crisis suggests that disengagement, rather than mobilization, has emerged as the dominant effect of anger. In order to address the seeming contradiction, this study explores the impact of anger about the economic crisis on political attitudes and behavior with the 2005-2010 British election panel study. Findings show that the impact of anger about the crisis – which has a systemic nature, leads to diffuse blame attribution and makes retribution harder – is conditional on individual efficacy, i.e. perception of individual political influence and resources: anger decreases political attention and participation among citizens with low efficacy, while it stimulates greater political engagement among citizens with high efficacy. At the same time, anger about the economic crisis has fueled support for anti-system parties, thanks to their refusal to compromise and the increased risk propensity of angry citizens. Sections on predicted probability of vote and party choice further explore the impact of anger, while causal mediation analysis tests the causal mechanisms suggested by the theory.

The recent economic and financial crisis has caused a deterioration in the economic conditions of many residents. Both in Europe and the US, millions of citizens have lost their jobs, undergone severe pay cuts and lost their homes because of inability to pay mortgages. The crisis has threatened their way of life and, among the emotional reactions, one has emerged as the most common response: anger.¹ How does anger about the financial crisis affect citizens' political attitudes and participation? Studies focusing on emotions have consistently shown a link between anger and mobilization. Cognitive appraisal theories of emotions explain that anger stimulates problem-focused coping, leading individuals to attack the source of their distress (see Lazarus 1991, Frijda 1986, Smith et al. 2008). Both equity theory (e.g. Adams 1965, Walster et al. 1978) and recent experimental studies (Van Zomeren et al. 2012; Van Zomeren et al. 2008) show that anger emerging from the appraisal of injustice promotes action to redress the unfairness. Studies on election campaigns also find that anger stimulates mobilization more than other emotions (Valentino et al. 2011, Weber 2013).

The aftermath of the economic and financial crisis, however, seems to point in the opposite direction. On the one hand, many citizens have turned away from politics, as the low voter turnout registered in many European countries in recent elections illustrates. Political disaffection has grown in many sectors of society and traditional participation decreased. Disengagement, rather than mobilization, has often emerged as the dominant effect of anger about the financial crisis. On the other hand, support for populist forces and anti-system parties has increased (e.g. Bosco and Verney 2012). How can we explain the contrast between findings in the literature and recent events?

In order to account for this seeming contradiction, we need to consider the type of anger developed in the context of the crisis and variation in individual-level responses. The *systemic* nature of anger about the crisis has led individuals to cast blame on the entire political-economic system and

¹ A poll conducted by USA Today/Gallup in late September 2008 found that a majority of Americans (53%) were angry about the financial crisis, while fewer Americans (41%) felt afraid: <http://www.gallup.com/poll/110914/majority-americans-angry-about-financial-crisis.aspx>. Three years later, in October 2011, 60% of respondents in a survey of the Chicago Booth/Kellogg School Financial Trust Index reported that they were angry or very angry about the economic condition. That was the highest level of anger registered by the Index since the beginning of the financial crisis. For the report, see: <http://www.financialtrustindex.org/resultswave12.htm>.

made retribution harder. This has produced a demobilizing effect on the half of the population with low political efficacy, i.e. low perceived influence over politics: among these citizens, anger has diminished political attention and electoral participation. On the other hand, anger has increased participation in the fourth of the population with the highest levels of efficacy. Indeed, anger, accompanied by a sense of injustice and a desire for change, sparks the *motivation* to act; beliefs on the availability of *resources*, then, shapes the perceived feasibility of change, thereby generating alternative responses. At the same time, anger has fueled support for anti-establishment parties. The success of anti-system forces is explained by their refusal to compromise with the elite in power, which goes well with the systemic nature of anger and the diffuse blame attribution; and by the increased risk propensity of angry citizens in search of fundamental change.

By exploring the political effects of anger about the economic crisis, this study offers several contributions to the literature on emotions and political participation. First, it challenges previous studies maintaining that anger unconditionally promotes mobilization. Instead, the effect of anger is influenced by the nature of this emotion and the perception of personal political resources. Second, causal mediation analysis shows that anger diminishes attention to politics by depressing political trust, rather than promoting reliance on heuristics. Furthermore, by linking anger to political preferences and testing the causal mechanisms behind the anger-induced support for anti-system parties, this study investigates which political actors and why benefit from the diffusion of anger.

The analysis of the impact of anger on citizens' political engagement addresses a central issue of the democratic life, which becomes even more urgent if one considers that widespread anger about economic hardship provoked serious challenges to political systems in the past. To run the analysis, I use the British Election Study, a nine-wave panel survey conducted between 2005 and 2010. The panel character of the dataset allows this work to address endogeneity concerns that often affect survey data dealing with emotions. The remainder of this paper proceeds as follows. First, the study summarizes previous contributions from the literature on the effects of emotions on behavior and political participation. Second, it outlines the impact of systemic anger about the crisis on political

attention, participation and support for anti-system parties, exploring individual variation in responses. Third, it explains the choice of the data and presents the findings of the analysis, with sections on causal mediation and predicted probability of vote and party choice. In the end, it considers the implications of the findings and suggests promising paths for future research.

Emotions, Behavior and Political Participation

Individual political participation can vary significantly over time. The same citizen may decide to cast a ballot at one election and abstain from voting in the following one, or to participate in a demonstration and not join later rallies. The literature on political participation has for a long time emphasized the importance of demographic characteristics and structural factors,² but these stable characteristics do not help us understand variation over time in individual-level responses. To understand these fluctuations we need to examine short-term motivations, and in this, emotions play an important role (Valentino et al. 2011). Anger, specifically, takes on such centrality in politics that “one can define [it] as the essential political emotion” (Lyman, 1981: 61; see also Ost 2004). This is because anger is often linked to competition (e.g. Mackie et al. 2000, Cottrell and Neuberg 2005, Cuddy et al. 2007) and politics involves competition over resources. For instance, in the context of social movements, anger matters politically because it facilitates mobilization and sustains conflict (Jasper 2011; see also Holmes 2004).

Studies in political science exploring the effects of emotions on citizens’ behavior have initially distinguished between positive and negative emotions. Affective Intelligence Theory maintains that positive emotions like enthusiasm activate the dispositional system: they emerge when goals are being met and reinforce traditional patterns of behavior. Negative emotions, instead, emerge as a result of a threat from the environment. They activate the surveillance system and stimulate new

² For instance, the basic resource model (BRM) of participation (see Wolfinger and Rosenstone 1980) includes age, education, income and other demographics. The civic voluntarism model proposed by Verba, Scholzman, and Brady (1995) includes indicators of civic skills acquired outside of politics in addition to the variables offered by the BRM. For a concise summary on the point see Valentino et al. (2011).

information seeking, since traditional habits have proved ill-suited to deal with the threat (Marcus et al. 2000). More recently, scholars have explored the specific effects of different negative emotions. MacKuen et al. (2010) maintain that aversion, which includes feelings of anger and disgust, has a negative effect on information seeking and desire to learn: “With aversion, one habituated practice is avoidance – rejecting distasteful news much in the way that one spits out a bite of a rotten apple” (442). This is because aversion – similarly to positive emotions – activates the disposition rather than the surveillance system, which in turn leads people to rely on traditional habits. Consistently, an experimental study on emotions and political learning has shown that only anxiety increases the quality and quantity of information seeking, while anger depresses search for novel information (Valentino et al. 2008). These results confirm previous findings illustrating how anxiety boosts careful information seeking, while anger leads people to rely on cognitive heuristics (Tiedens & Linton 2001).³

In psychology, cognitive appraisal theories of emotions explain that the emergence of different emotions is influenced by the assessment of the situation and the relation between the individual and the environment. Alternative negative emotions emerge in different contexts: anger develops when individuals can identify the cause of a threat with enough certainty, while anxiety derives from incertitude about the origin of the threat (Lerner and Keltner 2001). Additionally, anger is more likely to arise when people feel in control of the situation and confident about their ability to eliminate the cause of their distress (Lazarus 1991 and Frijda 1986, cited in Berkowitz and Harmon-Jones 2004). More recent experimental studies, however, suggest that coping is not a necessary mechanism for anger to arise. Indeed, even people who feel powerless and unable to eliminate the source of their distress can experience anger (Berkowitz and Harmon-Jones 2004, Harmon-Jones, Sigelman, Bohlig, and Harmon-Jones 2003).⁴

³ Some recent work, however, has shown that anger increases information seeking significantly more than anxiety when additional information is perceived as useful for retribution (Ryan 2012).

⁴ As it will become apparent below, this seems to be the case in Europe during the crisis, when the frustration derived from the inability to remove the actors blamed for the crisis arguably fueled even deeper anger.

Cognitive appraisal theories of emotions also suggest that individuals take alternative patterns of actions in order to cope with the negative emotions arising from the situation (Lazarus 1991, Frijda 1986, Folkman et al. 1986). In particular, anger stimulates problem-focused coping. Since angry individuals do not accept the negative situation as inevitable, they attack the source of their anger to eliminate it; this course of action is facilitated by their more optimistic stance on the possibility to remove the threatening source (Lazarus 1991, Smith et al. 2008).⁵ Given that the sense of control favors more optimistic risk assessments, anger also enhances risk-seeking behavior (Lerner and Keltner 2000, 2001). Indeed, a study on opinions about the Iraq War found that anger increased support for the war because of risk underestimation (Huddy et al. 2007). More generally, recent work in political science has shown that anger stimulates mobilization more than anxiety and enthusiasm (Valentino et al. 2011). During election campaigns, anger generates political engagement by increasing factors positively related to participation (Weber 2013).

The Impact of Anger about the Economic Crisis on Political Engagement

As outlined above, the implications of anger on learning and behavior are multifaceted. Anger usually discourages search for new information, encourages problem-focused coping with the goal to remove the source of one's distress, and promotes risk-seeking behavior by favoring risk underestimation. Within this framework, studies in political science have generally assumed an unconditional mobilizing effect of anger, regardless of its nature and individual characteristics. Do these findings apply to anger about the economic crisis? In particular, how do we reconcile the anger-induced mobilization effect, which is a consistent finding in the literature, with the empirical widespread political disengagement? In order to address these questions, we need to consider the *type* of anger that has developed in the context of the crisis.

⁵ See Berkowitz and Harmon-Jones (2004) for a summary on this point.

Anger about the economic crisis is characterized by its *systemic* nature, in which blame attribution – which normally accompanies anger – is cast upon the entire political-economic system. Indeed, “anger is the emotion central to politics, both as a diffuse, untargeted sentiment citizens experience, and as the emotion political organizers need to capture and channel, which they do by offering up an ‘enemy’ they identify as the source of the problem” (Ost 2004, 231). Previous work in political science has usually focused on the latter type, analyzing the effect of anger towards specific political targets, including candidates or incumbents, and specific policies.⁶ In the case of the crisis, however, anger emerges as a diffuse and systemic emotional reaction in response to a broader event.

Both at the expert and the ordinary citizen level, responsibility for the crisis has often been attributed to the entire political-economic establishment, rather than single political actors. A survey conducted among financial-crisis authors and experts between 2011 and 2014 revealed that an overwhelming majority believed that “everyone was at fault” for the crisis in the US, rather than just “Wall Street” or “the government”.⁷ Analogously, a 2013 October editorial piece in *The Washington Post* criticized a \$13 billion civil settlement with J.P. Morgan because the settlement disproportionately cast the blame on the bank, when instead “everyone, from Wall Street to Main Street to Washington, acted on widely held economic beliefs that turned out not to be true.”⁸

Ordinary people, too, have often hold the entire system accountable. In Europe, citizens have blamed globalization-related factors, *i.e.* the international system as a whole, including international investors, foreign governments, and international institutions such as the EU (Fernández-Albertos, Kuo and Balcells 2013). In the UK, an overwhelming majority (86%) considered the entire economic-financial system, represented by the banks, responsible for the crisis. Citizens have usually blamed more than one actor, indicating the national government, the US government, mortgage holders and

⁶ Items in the *American National Election Study* usually measure individuals’ emotional reactions towards specific political figures or candidates and policies.

⁷ See *Investor Home*, “The Global Financial Crisis Experts Survey,” also reported by *The New Republic*, 9 May 2014: <http://investorhome.com/gfc/>.

⁸ “Making a bad example of JPMorgan Chase.” *The Washington Post*, 23 October 2013.

others as responsible for the crisis, in addition to the banks (see Wagner 2013). This data suggests that the ubiquity of the crisis and its international nature convinced people that a systemic configuration, rather than isolated actors, made the crisis possible.

Angry people are enlivened by a desire for retribution (see Druckman and McDermott 2008) to punish the source of their distress, but retribution becomes harder in the case of systemic anger. In such a context, punishing a single actor like the incumbent is usually not a satisfying option. Instead, if the establishment as a whole is to blame, a more fundamental reshaping of the political-economic landscape in which the crisis originated is required. This demanding enterprise calls for skills and resources that are not readily available to everyone in the general population. Hence, citizens yearning for change ask: is concrete change possible? I maintain that the perception of the possibility of change depends on the resources that a citizen *believes* to possess. Anger, accompanied by a sense of injustice and a desire for change, sparks the *motivation* to act; beliefs on the availability of *resources*, then, shape perceptions about the feasibility of change. Indeed, recent work focusing on individual psychological orientations has shown that motivation alone is not sufficient for participation; resources and opportunities are necessary complements (Kam 2012: 829).⁹ Therefore, I hypothesize, the effect of anger is conditional on political efficacy.

In the case of low political efficacy, change often does not look feasible and anger leads to demobilization. Citizens angry at a system that they believe they cannot effectively change are likely to distance themselves from the environment that is causing their distress. More specifically, I hypothesize that anger leads to decreased attention to politics among citizens with low efficacy. Previous work has found that aversion, which includes feelings of anger and disgust, has a negative effect on information seeking (see MacKuen et al. 2010). I qualify this finding by restricting it to citizens with low efficacy:

⁹ Kam has shown that risk orientation predicts future political participation better than past actual participation. She explains: "This finding supports the notion that wanting to participate matters, but motivation alone is not sufficient to bring about actual participation. In order to participate, people need resources and opportunities to participate as well" (Kam 2012, 829).

H1: Anger about the economic crisis decreases attention to politics among citizens with low efficacy.

In this context, the key mechanism linking anger to decreased information seeking is different from what the literature has often suggested. Rather than reliance on habits and cognitive heuristics, I propose that it is the anger-induced distrust in the political system that causes people to pay less attention to politics. Indeed, trust decreases support for and satisfaction with political leaders, incumbent and candidates (Hetherington 1998, Sigelman et al. 1992). In the context of the crisis, because of the anger-induced distrust, citizens are not willing to lend an ear to a despised political system that is no longer considered a source of reliable political information:¹⁰

H2: The anger-induced distrust explains the lower attention to politics among citizens with low efficacy.

As a consequence of this decreased attention to politics, I also expect anger to lead to decreased political participation in the case of low efficacy. Given that anger diminishes attention to politics and lower interest is traditionally associated with lower participation, anger will depress participation in the political arena. Furthermore, the combination of anger and low efficacy is expected to reduce political participation also by making a problem-focused coping mechanism not viable. Angry citizens who have lost interest in politics, do not feel represented in the political system, and do not believe they can bring change decide to disengage from politics. Therefore, I challenge the consistent finding in the literature suggesting a link between anger and mobilization and – in the case of systemic anger – I advocate for a more nuanced approach taking into account individual variation:

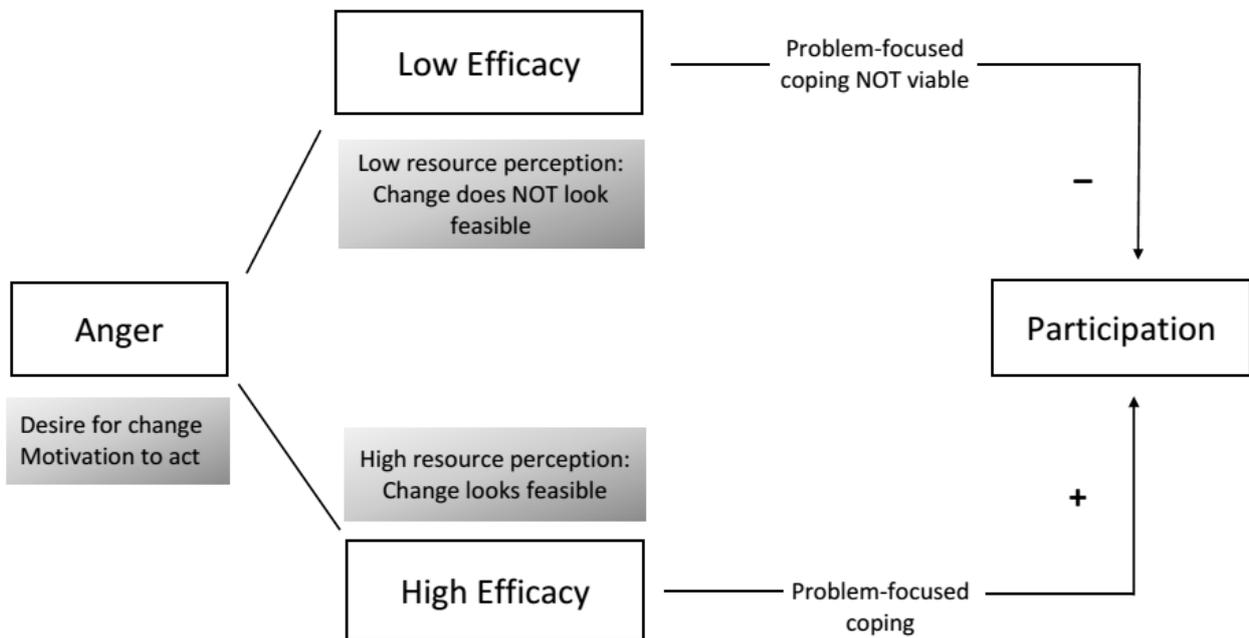
H3: Anger about the economic crisis decreases political participation among citizens with low efficacy.

¹⁰ My prediction is therefore different from what hypothesized by Chan (1997), who maintains that low levels of trust increase attention to campaign among the more educated.

On citizens with high efficacy, instead, anger produces opposite effects, leading to mobilization and higher political engagement. Indeed, not only are angry citizens with high efficacy enlivened by a desire for change and retribution; they also believe they have the resources necessary to influence politics and bring about change. When citizens feel empowered, anger sparks the motivation to take action. It is therefore the combination of perceived resources and strong motivation that favors mobilization and participation. Therefore, the problem-focused coping stimulated by anger will lead angry citizens with high levels of efficacy to get engaged in the political arena in order to change what they dislike:

H4: Anger about the economic crisis increases political participation among citizens with high efficacy.

Figure 1: Effect of anger on participation conditional on efficacy



Anger about the Economic Crisis and Anti-Political Establishment (APE) parties

As explained above, the effect of anger about the economic crisis on political participation is conditional on efficacy. However, this is only half of the story. In fact, even individuals who are less likely to go to the polls still harbor political preferences. Citizens who are currently demobilized

constitute a pool of potential voters, who could be mobilized in the future should their preferred political alternatives emerge as electorally credible contenders. In order to understand the potential longer-term effects of anger on electoral behavior we need therefore to analyze the political preferences of angry citizens. What is the impact of anger, then, on citizens' party preferences? The systemic nature of anger about the crisis, and the related diffuse blame attribution, makes angry citizens more sensitive to the appeals of actors who present themselves as anti-system forces and emerge as a possibility of fundamental change. Anti-political establishment parties (APE) are therefore well positioned to meet the demands of angry citizens. Political parties are classified as APE based on the following criteria: they raise challenges to the status quo both in terms of major policy issues and political system issues; perceive themselves as a challenge to all the parties that form the political establishment; and maintain that there exists a fundamental divide between the people and the political establishment as a whole, with no difference between the government and the opposition (Abedi and Lundberg 2009; see also Schedler 1996 and Abedi 2004).¹¹

Two factors explain why APE parties can build support among citizens angry about the economic crisis. First, their *refusal to compromise* with the elite in power capitalizes on angry individuals' reduced willingness to compromise¹² and makes retribution and punishment of the entire establishment look possible, which goes well with the systemic nature of anger about the economic crisis. As Schedler has explained, “[a]ntipolitical-establishment parties describe one specific conflict as society's fundamental cleavage: the conflict between the ‘ruled’ and the ‘rulers’” (1996, 294). Therefore, APE parties try to build support by presenting themselves as opposed to both the incumbent and the mainstream opposition; in their appeals, government and opposition are presented as colluders of an undifferentiated political class (Barr 2009, 32; Rydgren 2005, 427). By presenting themselves as opposed to the entire establishment that led to the crisis and therefore offering a path

¹¹ Some examples of APE parties that have increased their consensus in Europe during the crisis include the National Front in France, Golden Dawn and Syriza in Greece, the Five Star Movement in Italy, and the UKIP in the UK.

¹² Indeed, as a consequence of depressed exposure to novel information and biased information-seeking (MacKuen et al. 2010), aversion – which includes anger and disgust – leads to reduced willingness to compromise.

for retribution against the elite system as a whole, APE parties satisfy the demands of angry citizens casting blame diffusely and invoking systemic change.

Second, *risk-seeking* helps explain the link between anger and support for APE parties. As a matter of fact, anger induces risk-seeking behavior. Recent work on individual risk orientation has suggested that risk propensity leads to greater support for challenger candidates, characterized by uncertainty and change (Kam and Simas 2012; see also Eckles et al. 2014). Anti-establishment parties, specifically, represent a particularly risky and uncertain choice because they challenge the status quo, propose dramatic changes with unpredictable outcomes, and are often new actors who have little familiarity with government responsibility. Angry citizens who have become less risk averse, therefore, are more likely to support this option:

H5: Anger about the economic crisis increases support for anti-political establishment parties.

H6: Desire for fundamental change, which entails risky choices and refusal to compromise, explains the anger-induced support for APE parties.

Risk-seeking also helps explain why APE parties have the *potential* to succeed even, or *even more*, among demobilized citizens with low efficacy. Indeed, angry individuals with fewer resources, who have been pushed at the margins of the political system, feel they have little to lose, given their perceived inability to change the system from within. They become therefore more willing to embrace the risky option represented by anti-system parties. Furthermore, APE parties often adopt populist stances,¹³ which celebrate the people and their authenticity as opposed to the elites (Stanley 2008). Ordinariness becomes a virtue to contrast with the corruption of the establishment and marginalized citizens feel empowered by appeals targeted to outsiders: a path towards change seems to open for ordinary people with few resources. Hence, I hypothesize that:

H7: The support for anti-political establishment parties will be higher among angry citizens with low efficacy.

¹³ Populist messages often contain anti-establishment appeals. See Barr 2009, 38-39.

Context and Data: The UK, the 2010 Election and the UKIP

The recent economic crisis offers a good opportunity to explore the impact of systemic anger on citizens' attitudes towards politics. The economic crisis has emerged as a threat, caused a deterioration in the economic conditions of many citizens and stimulated negative emotions such as anger and fear (Wagner 2013).¹⁴ In Europe, the deep social distress that followed the crisis led to the growth of populist and anti-system forces in several countries. In order to test the hypotheses above, I use the 2010 British Election Study (BES). 2010 is a good time to test the effect of anger about the financial and economic crisis because at that time the impact of the crisis became fully apparent throughout Europe. Indeed, 2009 was the *annus horribilis* for most European economies, with severe negative growth, increasing deficit and quickly growing unemployment rate. By the following year, citizens were fully aware of the negative consequences of the economic turmoil and the financial crisis dominated election campaigns across Europe.

The UK also offers a hard test for my theory. The economic recession and the resulting widespread discontent were central issues in the political life of the country (Curtice and Fisher 2011), but the crisis and the related anger were arguably not as deep as they were in most southern European countries. Therefore, if the predicted political effects of anger emerge in the British context, they are likely to be amplified in the European countries where anger ran deeper. As for support for APE parties, the UK adopts single-member plurality in national elections, *i.e.* an electoral system that often penalizes third or protest parties.¹⁵ If the prediction linking anger to support for anti-system parties is

¹⁴ Wagner (2013) has shown that angry and fearful reactions to the economic crisis in the UK varied depending on blame attribution, with anger emerging among citizens who blamed accountable political actors, such as the national government and the European Union, for the crisis. The link between anger about the economic crisis and blame attribution to political actors confirms the importance of exploring the political implications of anger about the crisis.

¹⁵ One may argue that citizens are more prone to vote for APE parties in a single-member plurality system as a protest vote because of the very low chance for such parties to win the seat and the consequent low risk involved. However, this claim is not very convincing in the case of angry people. First, as explained above, angry individuals usually display a copying-focused behavior to eliminate the source of their distress. They act to change what they do not like, rather than just expressing discontent. As a result, angry citizens are expected to be more likely to vote for APE parties in contexts where they think the parties have a real chance to succeed and bring change. Second, the fact that more risk

confirmed despite the unfavorable electoral system, we can be more confident about the possibility for the findings to travel to political contexts in which proportional representation may facilitate the electoral success of APE parties.¹⁶ In the British context, one political force offers a telling example of APE parties: the United Kingdom Independence Party (UKIP). The UKIP promotes a populist, anti-politician message that expresses dissatisfaction with all the mainstream political forces and aims to recruit protest voters by branding itself as the “real opposition.” Furthermore, it advocates a major policy change, *i.e.* the withdrawal of the UK from the European Union, and has raised major challenges to the political system by calling for the repeal of the Human Rights Act and the dismantling of regional assemblies (Ford, Goodwin and Cutts 2012, Abedi and Lundberg 2009).¹⁷

The British Election Study offers several advantages because it contains panel data with nine waves of surveys conducted between the 2005 and the 2010 election. Panel data raise fewer concerns about causal direction and endogeneity between emotions, on the one hand, and political attention, participation and preferences, on the other.¹⁸ The panel nature of the dataset allows me to control for participation and support for APE parties before the crisis and evaluate how anger about the crisis has modified patterns of political behavior and electoral choice. Moreover, survey data from the British elections nicely complement the existing literature on the political effects of anger, which has often been conducted in experimental settings¹⁹ in the context of American politics. This study, which

is involved in PR systems, since APE parties could actually win seats, should not discourage angry people from expressing their preference for these parties, given that anger usually induces risk-seeking behavior.

¹⁶ Different elections in the UK suggest that the electoral system influences the electoral results of APE parties, with PR systems favoring their success. For instance, in national elections conducted with a plurality system, the UKIP – the best example of APE party, as described below – won 2.3% of the total votes in 2005 and 3.1% of the vote in 2010. In both cases, the UKIP failed to win any parliamentary seats. In the elections for the European Parliament, which are conducted under a PR system, the UKIP won 16.1% of the votes in 2004 and 16.5% in 2010.

¹⁷ It is certainly true that the UKIP has an ideological bent towards the right and, as a result, offers a more attractive opportunity for protest vote to the conservative electorate. However, this point does not weaken the theoretical claims of this study. To the contrary, the theory gains even more plausibility if the study can prove that angry voters are more likely in general to support the UKIP regardless of their party identification. Indeed, if this is the case, the effect of anger on party choice is so strong that it is detected even after controlling for ideological preferences.

¹⁸ This is a concern raised by some authors about cross-sectional data: “Do emotions produce information seeking or do those who seek information experience strong emotions as a result?” (Valentino et al. 2008, 252). Since a question on feelings about the economic crisis was asked in the 2010 pre-campaign wave, I can observe how anger influenced later interest and participation both during the campaign and at the election, as captured by following waves.

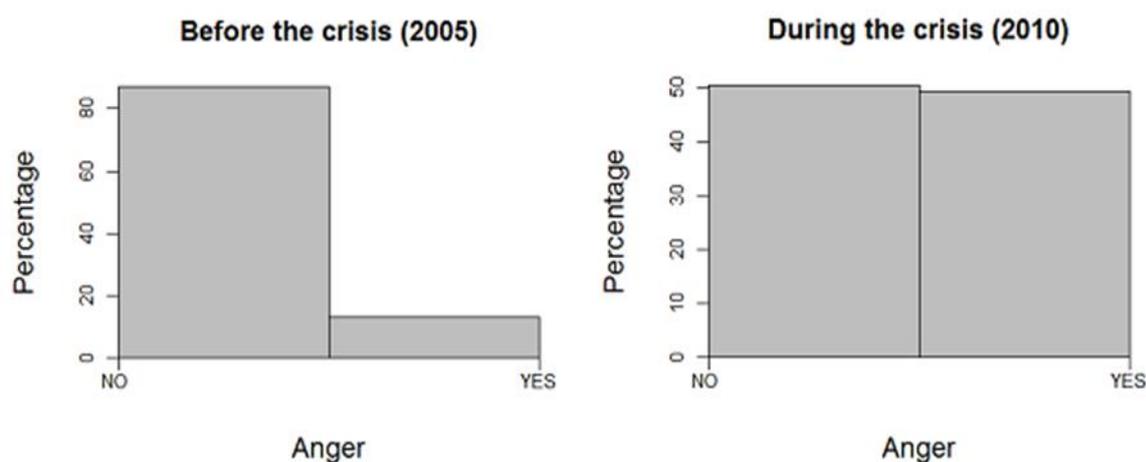
¹⁹ For an exception, see Valentino et al. (2011), who conjugate experimental and observational data from U.S. elections.

explores the effects of anger naturally experienced in response to a serious threat like the economic crisis, offers increased external validity by focusing on a different geographical context.

Testing the Hypotheses

A preliminary analysis reveals that anger has been the dominant emotional reaction to the crisis. Indeed, anger about the economic conditions of the country has increased substantially among British citizens since the beginning of the crisis. In 2005, before the crisis unfolded, only 13% of the respondents expressed anger about the general economic situation; five years later, in the middle of the financial crisis, the percentage had increased to almost 50% of the sample.²⁰ Among the negative emotions potentially related to the crisis, anger has emerged as a reaction more common than fear, with about half of the sample expressing anger about the crisis, as compared to less than one third of the respondents who reported fear. While individuals expressing fear increased from 17 to 32.5% between 2005 and 2010, anger jumped from 13 to 46%. This widespread diffusion of anger calls for an analysis of its implications on political attitudes and behavior.

Figure 2: Anger about the general economic situation



²⁰ The question asked in the survey reads: "Which, if any, of the following words describe your feelings about the country's general economic situation?"

Anger and low efficacy

To measure the effect of anger about the economic crisis on attention to politics, I observe how anger influenced citizens' attention to the 2010 election campaign,²¹ measured on a 10-point scale.²² The main independent variable is anger about the financial crisis, which is a dummy obtained from the 2010 pre-campaign wave.²³ Anger enters the equation also in interaction with efficacy, which measures individuals' confidence in their ability to influence politics and public affairs. Since the anger coefficient corresponds to the effect of anger on individuals with no efficacy, for whom the interaction term is eliminated, I expect this coefficient to be negative: anger is predicted to depress political attention in case of low efficacy. Several controls are introduced to isolate the impact of anger. In addition to demographic covariates, I control for people's general interest and attention to politics, because these two factors likely influence how much attention individuals paid specifically to the 2010 campaign.²⁴ Accounting for general political predisposition, thus, allows me to gauge

²¹ Two reasons explain why I chose attention to the 2010 election campaign as the dependent variable, rather than more general measures of interest or attention to politics. First, this is a more specific question that should better capture respondents' attitudes at the time when it is asked. A question on general interest in politics may instead induce respondents to give an average answer on their interest over time. Therefore, by choosing the more specific option, I can better capture the specific effect of anger in the context of the crisis. Second, this study explores the implication of anger on traditional participation. A question about the 2010 election campaign best captures this concept. Indeed, an angry citizen may preserve a general interest in politics even when she is turned away from traditional participation. A list with the survey questions from which the variables are operationalized can be found in the appendix.

²² Since the values of the variable are spread across its entire range (see histogram of the distribution of the dependent variable in the appendix), I estimate an OLS model. An ordered categorical model with the same controls, which produced essentially similar results, can be found in the appendix.

²³ The independent variable of interest, *i.e.* anger, is measured in the pre-campaign wave, while the dependent variable attention to politics is measured in the campaign-period wave. The temporal priority of the measure of anger, therefore, helps address endogeneity concerns (e.g., are people who don't pay attention to politics more likely to feel anger?). As explained below, a robustness check (model 5) further addresses endogeneity concerns by controlling for attention paid to campaigns before the crisis.

²⁴ This is, admittedly, a hard test for my hypothesis since general interest in politics is presumably strongly correlated to the attention displayed in the 2010 election campaign. General interest in politics is a relevant control because it captures habitual engagement in politics. Since this study considers emotions, which play an important role in short-term motivations, it is important to control for the individual background in terms of political interest, against which emotions may explain variation in interest and participation over time. However, out of concern of very high correlation between general interest in politics and the dependent variable attention to the campaign, I also ran a model without general interest as a control, which can be found in the appendix. As shown in the appendix, the coefficient of anger is still statistically significant and very similar in terms of size. However, the R^2 of the model without general interest decreases considerably. Since general interest explains a significant part of the variation in the dependent variable, excluding it may lead to omitted variable issues. For this reason, general interest in politics is maintained as a control in the main models presented in the paper.

how the impact of anger about the financial crisis has modified citizens' attention to politics. Two additional political indicators are plugged into the basic model: strength of party identification and party contact during the campaign, since strong partisans and citizens who interact with candidates are more likely to pay greater attention.

Four additional models test the robustness of the findings. Model 2 considers the possibly non-linear effect of age on political attention.²⁵ Given that anger has often emerged among citizens

Table 1: Attention to the 2010 Campaign

| | | | | | |
|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| (Intercept) | -0.67 (0.46) | 0.56 (0.81) | -0.67 (0.46) | -0.72 (0.46) | -0.57 (0.43) |
| anger | -0.29* (0.14) | -0.28* (0.14) | -0.30* (0.14) | -0.32* (0.14) | -0.28* (0.14) |
| interest | 1.06*** (0.08) | 1.06*** (0.08) | 1.06*** (0.08) | 1.06*** (0.08) | 0.87*** (0.09) |
| att.pol | 0.37*** (0.03) | 0.37*** (0.03) | 0.37*** (0.03) | 0.37*** (0.03) | 0.30*** (0.04) |
| education | 0.02 (0.04) | 0.02 (0.04) | 0.02 (0.04) | 0.03 (0.04) | 0.03 (0.03) |
| income | 0.01 (0.01) | 0.01 (0.01) | 0.01 (0.01) | 0.01 (0.01) | 0.00 (0.01) |
| age | -0.00 (0.00) | -0.05 (0.03) | -0.00 (0.00) | -0.00 (0.00) | -0.00 (0.00) |
| male | -0.24* (0.10) | -0.24* (0.10) | -0.23* (0.10) | -0.23* (0.10) | -0.25** (0.10) |
| white | 0.59 (0.33) | 0.59 (0.33) | 0.59 (0.33) | 0.60 (0.33) | 0.52 (0.31) |
| efficacy | -0.01 (0.03) | -0.01 (0.03) | -0.01 (0.03) | -0.01 (0.03) | -0.02 (0.03) |
| pid.strength | 0.12 (0.07) | 0.11 (0.07) | 0.12 (0.07) | 0.12 (0.07) | 0.11 (0.07) |
| contact | 0.10 (0.14) | 0.11 (0.14) | 0.10 (0.14) | 0.10 (0.14) | 0.05 (0.12) |
| anger:efficacy | 0.05 (0.04) | 0.05 (0.04) | 0.05 (0.04) | 0.05 (0.04) | 0.06 (0.04) |
| age.squared | | 0.05 (0.02) | | | |
| blame.gov | | | 0.02 (0.10) | | |
| afraid | | | | 0.10 (0.11) | |
| attention.2005 | | | | | 0.22*** (0.03) |
| R ² | 0.50 | 0.50 | 0.50 | 0.50 | 0.53 |
| Adj. R ² | 0.50 | 0.50 | 0.50 | 0.50 | 0.53 |
| Num. obs. | 1334 | 1334 | 1334 | 1334 | 1330 |

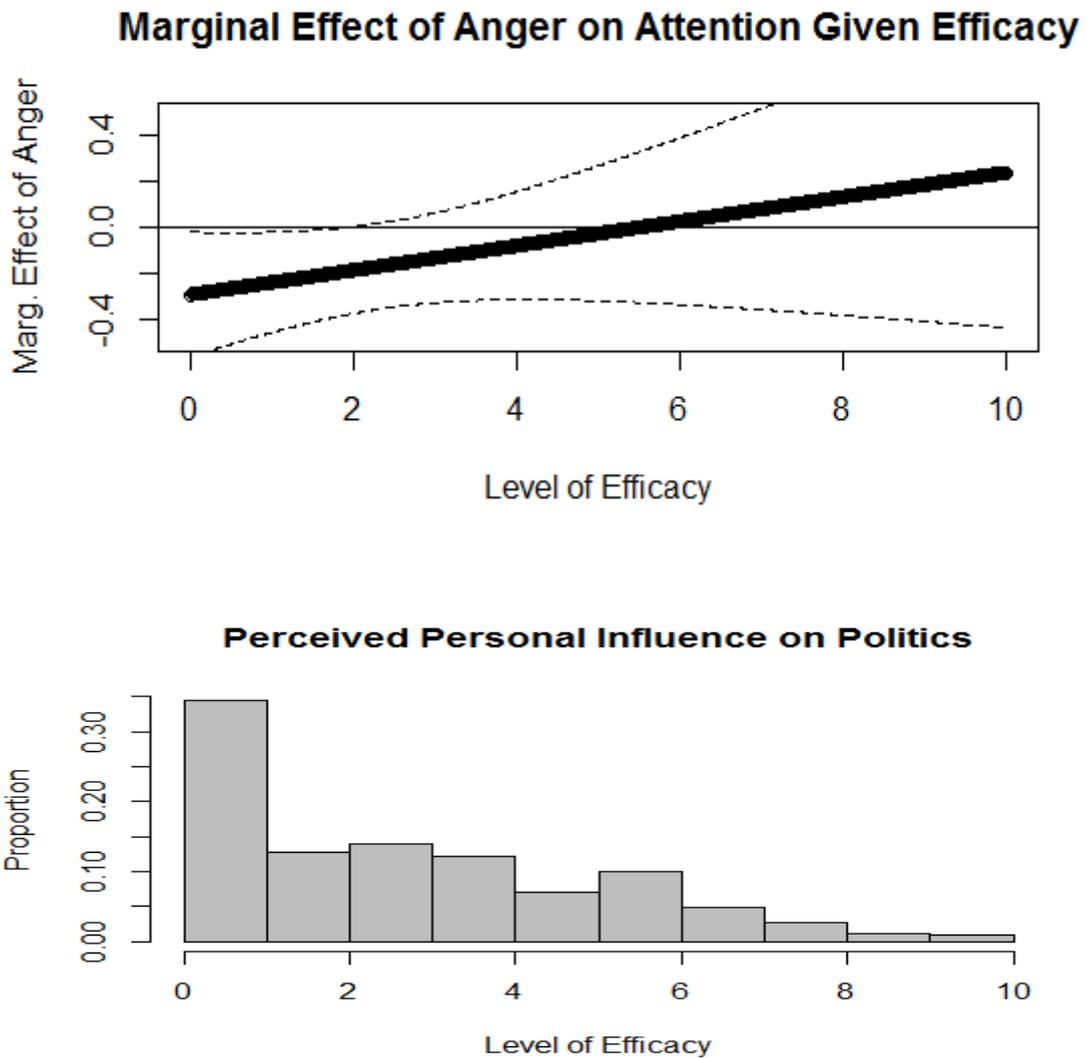
*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

who held the government responsible for the crisis (Wagner 2013), model 3 verifies that anger is not just a proxy for blame attribution. Model 4 controls for fear about the crisis, in order to isolate the effect of anger within the more general category of negative emotions. Thanks to the panel character of the data, the last model controls for the degree of attention paid to the 2005 election campaign, *i.e.* before the development of the crisis and the diffusion of anger.²⁶

²⁵ Studies have found that middle-aged individuals are more politically engaged than both younger and older citizens.

²⁶ Model 5 was estimated with robust standard errors to deal with heteroskedasticity.

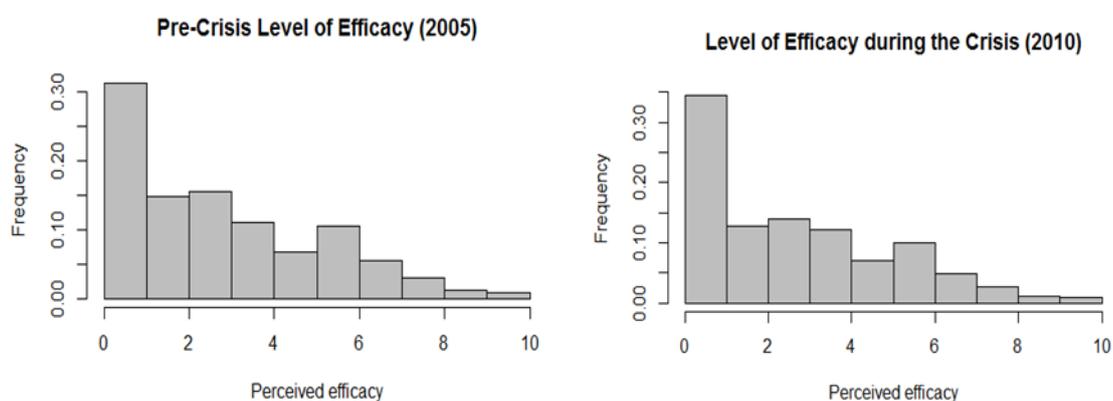
Figure 3: Marginal effect of anger given efficacy and distribution of efficacy



As the table and the plot of the marginal effect of anger given efficacy illustrate, anger about the economic crisis has diminished attention to politics during the 2010 campaign among individuals feeling inefficacious. This effect, which was the result of the interaction of anger with low efficacy, should not be underestimated, considering that almost 50% of the sample reported one of the two lowest levels of efficacy. This data also show that the vast majority of respondents in the survey feels inefficacious: is this a factor that shapes response to the crisis by mediating the effect of anger – as my hypothesis maintains – or is low efficacy a byproduct of the crisis? The panel nature of the BES dataset allows me to directly address these endogeneity concerns. A comparison of perceived efficacy

in the population before and during the crisis reveals that the distribution of efficacy has not changed substantially between 2005 and 2010. The proportions of respondents reporting levels of efficacy equal to 0 and 1 were .31 and .15 respectively in 2005 and .34 and .13 in 2010. This indicates that possible changes that may have happened at the individual level were not unidirectional. As a whole, the economic crisis does not seem to have decreased the level of efficacy in the population. Rather than being a by-product of the crisis, (in)efficacy emerges therefore as a factor mediating the response to the crisis.²⁷

Figure 4: Distribution of efficacy, before and during the crisis



The analysis presented so far therefore confirms the first hypothesis: anger has decreased attention to politics among the very large sector of society with low efficacy. How can we account for this finding? I hypothesize that the effect of anger is mediated by the anger-induced political distrust, rather than reliance on habits and heuristics. Causal mediation analysis allows me to assess

²⁷ Another way to deal with potential endogeneity could be to interact the level of efficacy expressed in 2005 with anger about the economic crisis, since this earlier measure of efficacy could not be affected by the crisis that unfolded later on. However, I rejected this alternative because it would yield even bigger problems. Indeed, in order to test my hypotheses and capture the effect of the interaction between anger and efficacy, I need to evaluate these two factors at the same point in time. As I warned above, changes in perceived efficacy at the individual level may have happened. Consider the scenario in which one citizen displayed a low level of efficacy in 2005 and became then more confident in her means to influence politics in 2010 after being promoting to a higher job position. If this citizen is angry about the financial crisis and I interact this expressed anger with her level of efficacy in 2005 I would measure the wrong effect. Instead of measuring the interaction displayed in 2010 (anger with high efficacy) I would measure the interaction between anger and low efficacy, whose effects are predicted to be opposite.

the suggested causal mechanism. I use the R mediation package developed by Tingley and others²⁸ and specify two models: the outcome model, which is the first model on attention to the 2010 campaign presented in table 1, with the addition of the mediator trust; and the mediator model, in which the dependent variable is trust in politicians and the independent variables are the same as model 1. To account for the diversified effect of anger conditional on efficacy, I test the moderated mediation (captured by the interaction between trust and efficacy) and estimate the impact of the average causal mechanism (ACME) for citizens with the lowest level of efficacy. As the table shows, the ACME is statistically significant, but the average direct effect is not: these findings suggest that anger about the crisis has increased political distrust, which in turn has diminished attention to politics.²⁹ The mediation analysis, therefore, supports the second hypothesis.

Causal Mediation Analysis: Quasi-Bayesian Confidence Intervals

| | <i>Estimate</i> | <i>95% CI Lower</i> | <i>95% CI Upper</i> | <i>p-value</i> |
|-----------------------|-----------------|---------------------|---------------------|----------------|
| <i>ACME</i> | -0.0817 | -0.1551 | -0.0213 | 0.01 |
| <i>ADE</i> | -0.2047 | -0.4625 | 0.0545 | 0.14 |
| <i>Total Effect</i> | -0.2864 | -0.5418 | -0.0237 | 0.03 |
| <i>Prop. Mediated</i> | 0.2796 | 0.0445 | 1.6593 | 0.04 |

Simulations: 1000

Sample Size Used: 1330

The significant impact of anger on political attention suggests to also explore the effect of anger on political participation, which is evaluated through a logit model measuring the act of voting or not at the 2010 election. The main independent variable is still anger, also plugged into the model in interaction with efficacy, since I expect anger to depress participation among citizens with low

²⁸ See *mediation: R Package for Causal Mediation Analysis*, <http://cran.r-project.org/web/packages/mediation/mediation.pdf>.

²⁹ The results of the causal mediation analysis are largely the same with a heteroskedasticity-consistent estimator (with robust standard errors) and with the nonparametric bootstrap. A caveat, however, must be raised about the results. Since the model-based inference in mediation analysis relies on the sequential ignorability assumption, sensitivity analysis was conducted to assess the possible existence of pre-treatment covariates and verify how much the key assumptions would need to be violated in order for the findings to go away. The analysis reveals that when ρ (*i.e.* the correlation between the residuals of the outcome and the mediator regression) equals .1, the confidence interval for ACME contains 0. For an explanation on sensitivity analysis, see Imai, Keele and Tingley (2010).

efficacy. To assess the robustness of the findings, two alternative operationalization of efficacy are adopted: efficacy is entered as either an 11-category variable or a binary variable measuring low and high efficacy. The controls can be grouped into the following sets. The first category includes socio-economic resources that can influence political participation: education, income, efficacy, age and age squared (see Wolfinger and Rosenstone 1980). The second group focuses on the degree of individual social involvement and the potential effect of civic skills acquired outside of politics on political behavior (see Verba, Schlozman and Brady 1995): home ownership and union membership. Third, the impact of mobilization on participation (see Rosenstone and Hansen 1993) is operationalized by party contact during the campaign. Fourth, following Valentino and co-authors (2011) in their assessment of the impact of emotions, I control for long-term political interest by including general interest, attention to politics and strength of partisan identification. Demographic controls for gender and race are also added. Finally, since voting may be habit forming and casting a ballot at one election may increase the likelihood to vote at the following ones (Gerber, Green and Shachar 2003), I

Table 2: Participation:Vote

| | Model 1 | Model 2 |
|----------------------|------------------------------|-------------------|
| (Intercept) | 2.92 (3.04) | 3.06 (3.06) |
| anger | -0.78 ⁺ (0.46) | -0.97* (0.48) |
| vote.2005 | 0.91* (0.41) | 0.91* (0.41) |
| vote.2009 | 1.83*** (0.36) | 1.82*** (0.36) |
| education | -0.16 (0.13) | -0.17 (0.13) |
| income | 0.07 (0.06) | 0.07 (0.06) |
| age | -0.14 (0.11) | -0.15 (0.11) |
| age.squared | 0.00 (0.00) | 0.00 (0.00) |
| pid.strength | 0.86** (0.32) | 0.88** (0.32) |
| interest | 0.30 (0.27) | 0.31 (0.27) |
| att.pol | -0.06 (0.11) | -0.06 (0.11) |
| home | 0.17 (0.42) | 0.20 (0.42) |
| union | 0.22 (0.49) | 0.24 (0.49) |
| contact | 1.07 (0.76) | 1.04 (0.76) |
| male | -0.43 (0.36) | -0.45 (0.36) |
| white | 0.76 (0.76) | 0.81 (0.77) |
| efficacy | -0.12 (0.12) | |
| efficacy.dummy | | -0.69 (0.52) |
| anger:efficacy | 0.26 (0.18) | |
| anger:efficacy.dummy | | 1.44* (0.73) |
| AIC | 320.97 | 318.87 |
| BIC | 409.93 | 407.83 |
| Log Likelihood | -142.49 | -141.44 |
| Deviance | 284.97 | 282.87 |
| Num. obs. | 1035 | 1035 |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$

control for previous participation, which is possible given the panel character of the data. Vote in 2005 and 2009, therefore, account for electoral participation before the crisis fully unfolded, thereby allowing me to analyze how anger about has modified citizens' political engagement.

The two models return similar results; since the AIC and BIC values are lower for the model with efficacy as a binary variable, the discussion focuses on this second model. Anger has decreased electoral participation for citizens who perceive a low personal influence on politics, which amount to about half of the sample. This is the specific effect of the interaction between anger and low efficacy, and not simply of the feeling of political inefficaciousness, as shown by the non-significance of the efficacy coefficient for citizens who did not express anger. In particular, controlling for the other covariates, the odds of voting for angry citizens with low efficacy are about 24 percentage points lower than the odds for non-angry individuals. Furthermore, many of the factors that capture long-term resources and are usually associated with participation are not significant, inasmuch as their effect is likely captured by the variables controlling for vote in 2005 and 2009. Anger about the crisis, instead, has developed after the previous electoral appointments to modify political behavior.

Taken together, the results of the models above on the effects of anger on political attention and participation tell a different story from what previous studies have usually narrated. Indeed, the literature has repeatedly maintained that anger produces a powerful mobilization effect. This study, instead, shows that the impact of anger is conditional on individual characteristics: anger about the economic crisis has had a powerful demobilizing effect for the half of citizens who do not believe they have the resources to influence politics.

Anger and high efficacy

The two models on participation above show that the interaction between anger and efficacy goes in the expected positive direction, thereby indicating that anger favors a greater political participation as efficacy increases. In the model with efficacy as a dummy, the anger coefficient is indeed positive for citizens with high efficacy. However, analysis on the marginal effect of anger on

interest given efficacy (not shown) reveals that the positive impact of anger for higher levels of

Table 3: Participation: Vote and Intention to Vote (high efficacy)

| | Vote | Vote Intention |
|----------------|---------------------|--------------------|
| (Intercept) | 13.17 (4562.25) | -8.74* (4.03) |
| anger | 2.16* (0.99) | 1.29* (0.64) |
| vote.2009 | 2.03* (0.94) | 2.35*** (0.60) |
| trust.polit | -0.14 (0.22) | -0.08 (0.14) |
| dem.satisf | 1.00 (0.57) | 0.60 (0.39) |
| education | -0.06 (0.29) | -0.06 (0.21) |
| income | -0.02 (0.14) | -0.22* (0.09) |
| age | 0.13 (0.22) | 0.36** (0.14) |
| age.sq | -0.13 (0.22) | -0.35** (0.13) |
| attention | 0.87*** (0.24) | 0.48** (0.15) |
| pid.strength | 0.51 (0.70) | 0.40 (0.55) |
| interest | -0.76 (0.59) | 0.10 (0.39) |
| home | -1.19 (1.32) | -1.36 (0.94) |
| union | 2.51 (1.34) | 1.27 (0.71) |
| male | -0.78 (0.86) | -0.30 (0.57) |
| white | -18.87 (4562.25) | -1.50 (1.87) |
| contact | 16.96 (2122.60) | 17.61 (1272.17) |
| AIC | 89.64 | 138.26 |
| BIC | 154.78 | 203.40 |
| Log Likelihood | -27.82 | -52.13 |
| Deviance | 55.64 | 104.26 |
| Num. obs. | 341 | 341 |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

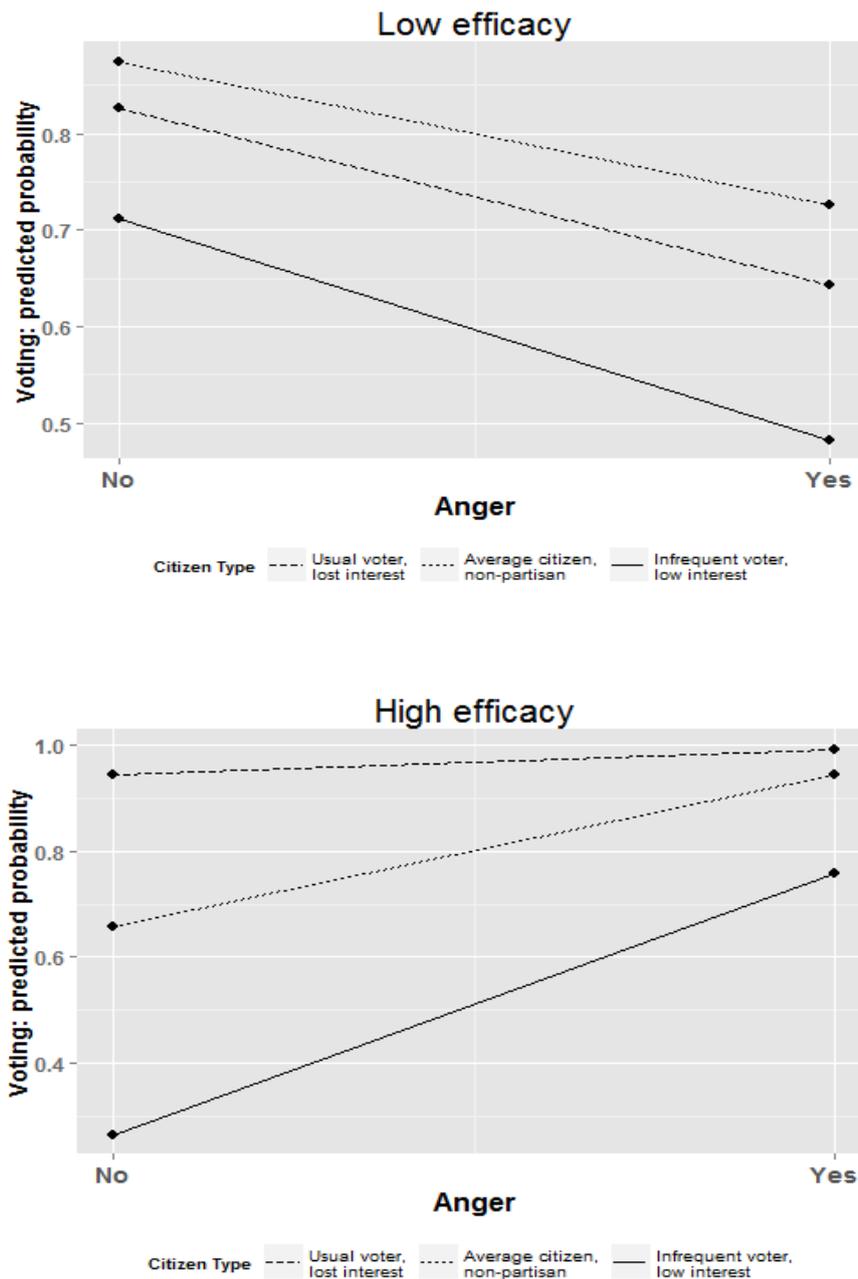
efficacy is not statistically significant. These findings can be explained by the anger-induced distrust in political actors. As a vast literature on political trust has shown, and the causal mediation analysis above suggests, distrust may affect political participation (see Levi and Stoker 2000). Indeed, in the context of systemic anger and diffuse distrust, even citizens with more resources may lose confidence in the possibility of change if they perceive the system as a whole as untrustworthy. For this reason, in order to assess the impact of anger on participation for citizens who believe to possess the resources to influence politics, we need to control for the effect of political trust. Once we account for distrust towards political actors and the system as a whole, anger produces a positive impact on the likelihood of participation in the upper quartile of the population displaying the highest levels of efficacy. This suggests that the combination of anger and perceptions of political influence has provided citizens with the motivation

and the resources that stimulate political engagement.³⁰ The graphs below on the predicted probability

³⁰ The models presented were run on the fourth quartile of citizens displaying the higher levels of efficacy. In the first model, the dependent variable is reported turnout, while the second model adopts intention to vote to allow a greater variance in the dependent variable. Given that these models focus only on citizens with high efficacy, no interaction between anger and efficacy is introduced. Since the number of observations is severely diminished, the

of vote show how anger has depressed participation among citizens with low efficacy and promoted participation in combination with high efficacy. The impact of anger is evident across the three citizen profiles considered: an average non-partisan citizen, an habitual voter who has lost interest in politics, and an infrequent voter with low interest.

Figure 5: Impact of anger on predicted probability of voting, low and high efficacy



control vote.2005 is eliminated in order to avoid the loss of even more observations; vote.2009 still control for previous patterns of participation (alternative models with vote.2005 produced similar results anyway). Two indicators measure distrust in the system: distrust in politicians and satisfaction with democracy. The models were also run plugging in the two controls for distrust separately and returned essentially similar results.

Support for Anti-Political Establishment Parties

So far, this study has shown that anger has demobilized the half of the population who feels inefficacious about politics, and – after controlling for political distrust – favored greater engagement in the fourth of the population with the highest levels of efficacy. In order to understand the potential longer-term effects of anger on electoral behavior, we now need to explore the political preferences of angry citizens. To evaluate the impact of anger on political attitudes – and, specifically, support for APE parties – I analyze citizens’ opinions about the UKIP. Evaluations of the party, rather than just vote choice, allows me to assess the impact of anger on political preferences even for those citizens who did not cast a ballot, which would be excluded from an analysis purely based on electoral choice.³¹ Furthermore, looking at the potential support for APE parties beyond the electoral data is meaningful because favorable views towards anti-system parties, and specifically the UKIP, can concretely influence politics. As explained above, positive attitudes towards a party represent a pool of potential votes, which may translate into actual votes at a future point in time. Furthermore, a growing support for APE actors can convince mainstream parties to adopt some of the anti-system parties’ positions in order to retain voters, thereby promoting change within the system even outside the electoral channel.

The models below, which measure opinions about the UKIP,³² control for variables that previous literature has shown to be positively correlated with support for populist, extremist and far-right parties. These parties have usually scored better among men (Lubbers et al. 2002, Betz 1994). Younger and older voters tend also to be over-represented, either because of their greater reliance on

³¹ Indeed, models of electoral choice have sometimes used party evaluations as a mediator between the independent variable of interest and vote choice (for instance, see Markus and Converse 1979). In the context of the crisis, the analysis of the impact of anger on party evaluations is important because of the demobilizing effect of anger on citizens with low efficacy, who are less likely to vote. Models with vote choice as the dependent variable are anyway presented below.

³² Opinions are measured on a scale ranging from 0 to 10. The table presents OLS models, estimated with robust standard errors to deal with heteroskedasticity. All of the models were also run as ordered logit models and can be found in the appendix. The results remain unchanged.

welfare, which can lead to see immigrants as a threat, or because of their weaker social integration (see Arzheimer and Carter 2006). Less educated citizens, too, generally provide a greater support to extremist parties, either because of their more limited exposure to liberal values or on the basis of economic considerations: people with lower education generally have more limited job skills and may see immigrants as rivals (Arzheimer and Carter 2006, Weaklien 2002). I also control for the respondent's working situation, since unemployed, manual workers, self-employed and small business owners have sometimes emerged as more likely supporters (Lubbers et al. 2002, Arzheimer and Carter 2006). Two indicators of social integration, *i.e.* home ownership and union membership, address theories of social disintegration, which claim that individuals at the margins of society are more likely to support extremist parties (Kornhauser 1960; see Evans 2005). In model three, political dissatisfaction and anti-immigrant views control for the attitudinal positions that often fuel the protest and far-right vote (Ignazi 1992, Lubbers and Scheepers 2000, Lubbers et al. 2000). Finally, in order to address endogeneity concerns in the relation between anger and support for the UKIP, the last model controls for people's opinions about the UKIP in 2005. In this model, therefore, anger explains the change in opinions about the UKIP after the crisis unfolded.

The results in the table below consistently show that anger has had a positive effect on support for the UKIP.³³ The graphs below also illustrate how substantial this effect has been: the size of the impact of anger is comparable to the impact produced by moving from the lowest to the highest category of education; from the lowest level of satisfaction with democracy to the highest; and is not too distant from the impact of negative attitudes toward immigration, a very central topic in the UKIP political platform.³⁴ Interestingly enough, after controlling for support for the UKIP in 2005, anger remains a significant predictor, while political dissatisfaction loses significance. This suggests that dissatisfaction with democracy already drove support for the UKIP in 2005, so that its effect is likely

³³ The factor variable class includes 11 categories. The table reports only the statistically significant categories. The comparison baseline category is "professional or higher technical work."

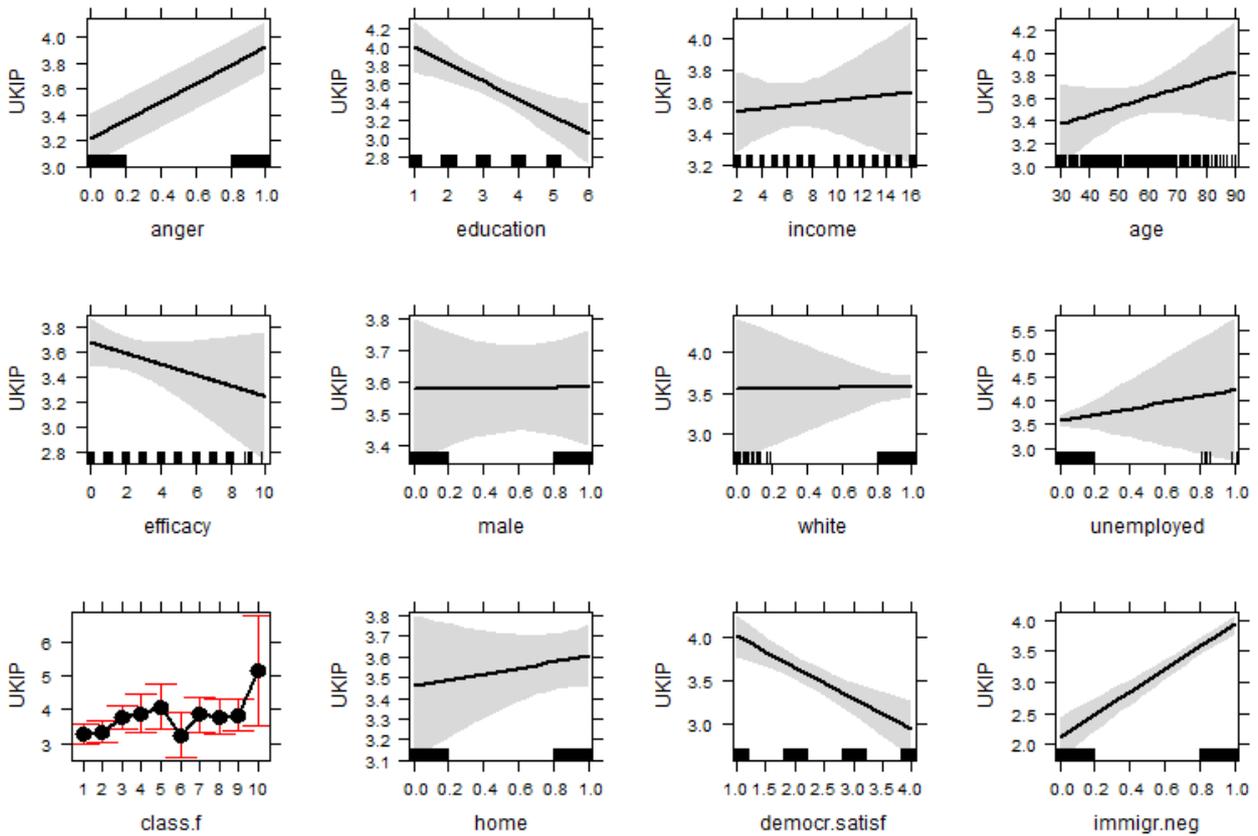
³⁴ In the graphs below, the y-axis shows support for the UKIP on a 0-10 scale, while the x-axis shows anger and the other covariates reported in model 3.

captured by the UKIP.05 control. Anger, instead, has emerged later on as a reaction to the economic crisis and helps explain the increase in support between 2005 and 2010.

Table 4: Support for UKIP

| | Model 1 | Model 2 | Model 3 | Model 4 |
|------------------------------|--------------------|--------------------|--------------------|-------------------|
| (Intercept) | 3.04*** (0.68) | 3.16*** (0.68) | 2.41*** (0.73) | 0.56 (0.65) |
| anger | 1.09*** (0.14) | 1.08*** (0.14) | 0.72*** (0.14) | 0.28* (0.11) |
| education | -0.25*** (0.06) | -0.26*** (0.06) | -0.19*** (0.06) | -0.09* (0.05) |
| income | 0.00 (0.02) | 0.00 (0.02) | 0.01 (0.02) | 0.02 (0.02) |
| age | 0.02* (0.01) | 0.01* (0.01) | 0.01 (0.01) | 0.01* (0.00) |
| efficacy | -0.11*** (0.03) | -0.10** (0.03) | -0.04 (0.03) | -0.05 (0.03) |
| male | -0.07 (0.16) | -0.07 (0.16) | 0.00 (0.15) | 0.13 (0.12) |
| white | -0.09 (0.42) | -0.11 (0.42) | 0.02 (0.43) | -0.04 (0.45) |
| unemployed | 0.86 (0.82) | 0.81 (0.81) | 0.63 (0.82) | 0.96 (0.86) |
| class (clerical) | 0.49* (0.24) | 0.44 (0.24) | 0.47 (0.24) | 0.27 (0.19) |
| class (small business owner) | 0.94* (0.37) | 0.85* (0.38) | 0.74* (0.37) | 0.29 (0.29) |
| class (skilled manual work) | 0.67* (0.33) | 0.66* (0.33) | 0.59 (0.32) | 0.27 (0.26) |
| class (never worked) | 1.55 (0.84) | 1.44 (0.84) | 1.79* (0.76) | 1.61* (0.67) |
| home | | 0.19 (0.20) | 0.17 (0.20) | 0.28 (0.16) |
| union | | -0.44* (0.17) | -0.32 (0.17) | -0.25 (0.14) |
| democr.satisf | | | -0.36*** (0.09) | -0.13 (0.07) |
| immigr.negative | | | 1.79*** (0.16) | 0.83*** (0.14) |
| UKIP.05 | | | | 0.71*** (0.02) |
| R ² | 0.10 | 0.11 | 0.16 | 0.52 |
| Adj. R ² | 0.09 | 0.09 | 0.15 | 0.51 |
| Num. obs. | 1604 | 1604 | 1588 | 1487 |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$



Despite the good reasons to consider party evaluations rather than vote choice to investigate the effect of anger on support for APE parties, analyzing the electoral choice of angry citizens who did go to the polls allows me to explore additional points. First, I can assess whether anger, beyond affecting political preferences, has already influenced concrete actions. Second, a multinomial model makes possible an evaluation of support for the UKIP vis-à-vis other parties, by assessing whether anger has had an impact significant enough to not only improve opinions about the party, but also convince citizens to choose the UKIP over political alternatives. Since vote for the UKIP is the left-out category in the model below, negative coefficients indicate an increase in the probability of voting for the UKIP over other parties. The controls include the predictors that resulted significant in model 4 measuring support for the UKIP. Instead of opinions about the UKIP in 2005, a binary variable is introduced for citizens who voted for the party at the 2005 election.

Table 5: Party Choice at the 2010 Election

| | <i>Vote Choice</i> | | |
|-------------------------------|-----------------------------|----------------------|----------------------|
| | Labour (UKIP) | Conserv (UKIP) | Lib-Dem (UKIP) |
| anger | -0.931*** (0.327) | -0.139 (0.309) | -0.837*** (0.323) |
| education | 0.048 (0.124) | 0.012 (0.115) | 0.110 (0.122) |
| income | 0.156*** (0.055) | 0.131** (0.051) | 0.057 (0.054) |
| age | -0.011 (0.015) | -0.002 (0.014) | -0.034** (0.014) |
| efficacy | 0.179** (0.081) | 0.112 (0.077) | 0.095 (0.080) |
| male | -0.159 (0.353) | -0.508 (0.332) | -0.029 (0.348) |
| white | 0.482 (1.035) | 0.507 (0.931) | 1.506 (1.079) |
| vote.UKIP.05 | -3.878*** (0.790) | -2.173*** (0.373) | -3.274*** (0.602) |
| left | 0.446*** (0.076) | -0.077 (0.067) | 0.243*** (0.073) |
| immigr.neg | -1.658** (0.666) | -0.332 (0.669) | -1.411** (0.664) |
| class (foreman or supervisor) | 2.659** (1.171) | 1.670 (1.130) | 0.831 (1.201) |
| class (unskilled manual work) | 1.522** (0.714) | 0.266 (0.677) | -0.004 (0.714) |
| class (never worked) | -2.475 (1.529) | -1.537 (1.088) | -2.726** (1.307) |
| Constant | -0.213 (1.772) | 1.841 (1.641) | 2.225 (1.767) |
| Akaike Inf. Crit. | 2,395.497 | 2,395.497 | 2,395.497 |
| <i>Note:</i> | *p<0.1; **p<0.05; ***p<0.01 | | |

As expected, anger has increased the probability to vote for the UKIP over the Labour and the Liberal-Democratic party. Instead, in the sample including all citizens, anger does not seem to have had a significant impact on the choice of the UKIP over the Conservative Party. This finding may be explained by the British electoral system and the ideology of the two parties. Single-member plurality electoral systems tend to favor bigger parties over smaller ones that stand little chance to win the district. Furthermore, despite the fact that the UKIP brands itself as the real opposition against all traditional parties, the Conservatives and the UKIP do share some common positions. They both occupy the right side of the political spectrum and have adopted a critical stance, even if with different tones, over British membership in the EU (Abedi and Lundberg 2009) and immigration.³⁵ As a consequence, some angry citizens considering the UKIP as their preferred option may have strategically voted for the closest alternative that stood more chances to win the district seat.³⁶ This likely applies especially to angry citizens with high efficacy, who – believing that they have the resources to influence politics – may have been more reluctant to choose an anti-system alternative.

In fact, things change when we consider the subset of angry citizens with low efficacy:³⁷ these voters were more likely to choose the UKIP *even* over the Conservative Party (see table).³⁸ This suggests that angry citizens with high efficacy sometimes looked for change within the system and opted for an anti-incumbent strategy. Angry citizens feeling inefficacious, instead, grew alienated from the traditional political landscape and became more sensitive to anti-system messages. Feeling they had little influence over a disliked system, these citizens convincingly supported the party that

³⁵ More recently, the Conservative Party has proposed a restrictive immigration reform. See for instance: “The Tories are becoming the ‘nasty party’ on immigration” (The Guardian, 10 June 2012) and “The Tories’ barmiest policy” (The Economist, 20 October 2012).

³⁶ Recent electoral data from the UK suggest that the electoral system can make a big difference in the electoral results of anti-mainstream parties. As mentioned above, the UKIP obtained 2.3% and 3.1% of the vote at the last two national elections held with a plurality electoral system, while it was able to gain more than 16% of the vote at the last two elections for the European Parliament, which are conducted under a PR system. Furthermore, identification with the Conservative Party is correlated with a more positive view of the UKIP; analogously, identification with the UKIP is positively correlated with more positive opinions on the Conservative Party (analysis not shown).

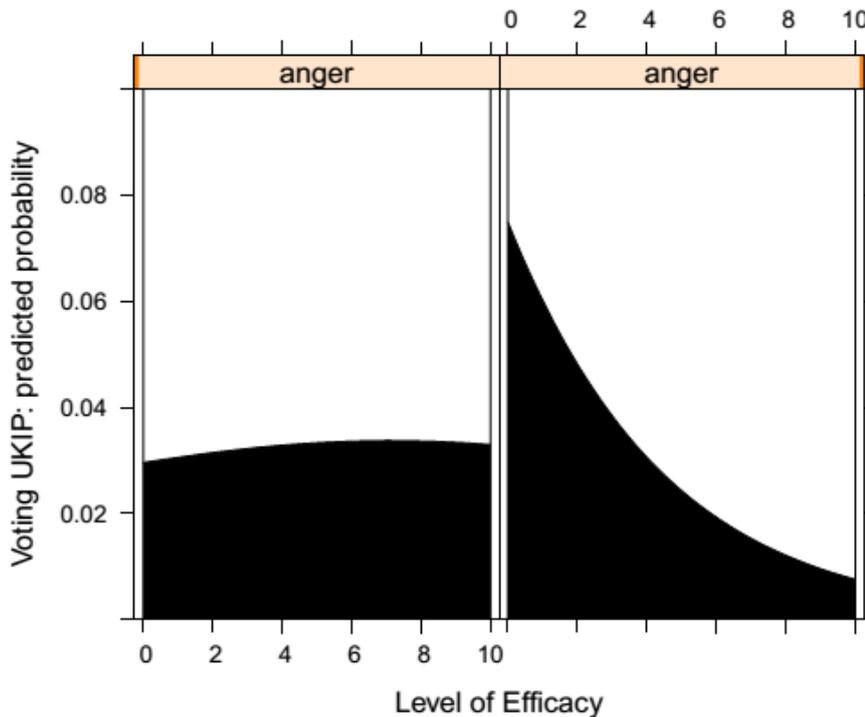
³⁷ As illustrated above, citizens with the lowest level of efficacy constitutes about one third of the sample.

³⁸ The table represents the multinomial model discussed above with the same controls, now run only on the subset of citizens with the lowest level of efficacy. The control variables are not reported in the table. A table with all the covariates can be found in the appendix.

represented the biggest challenge to the system itself. The importance of the interaction between anger and low efficacy in predicting support for the UKIP is also shown by the graph below illustrating the predicted probability of voting for the UKIP (black).³⁹ Levels of efficacy are plotted on the x-axis, while the two columns represent non-angry and angry citizens, respectively. In the absence of anger, efficacy does not seem to have a substantial effect on vote for the UKIP. Among angry citizens, instead, the predicted probability of voting for the UKIP is significantly higher among citizens with low efficacy (around 8%) than citizens with high efficacy (around 1%).

Table 6: Party Choice at the 2010 Election (low efficacy)

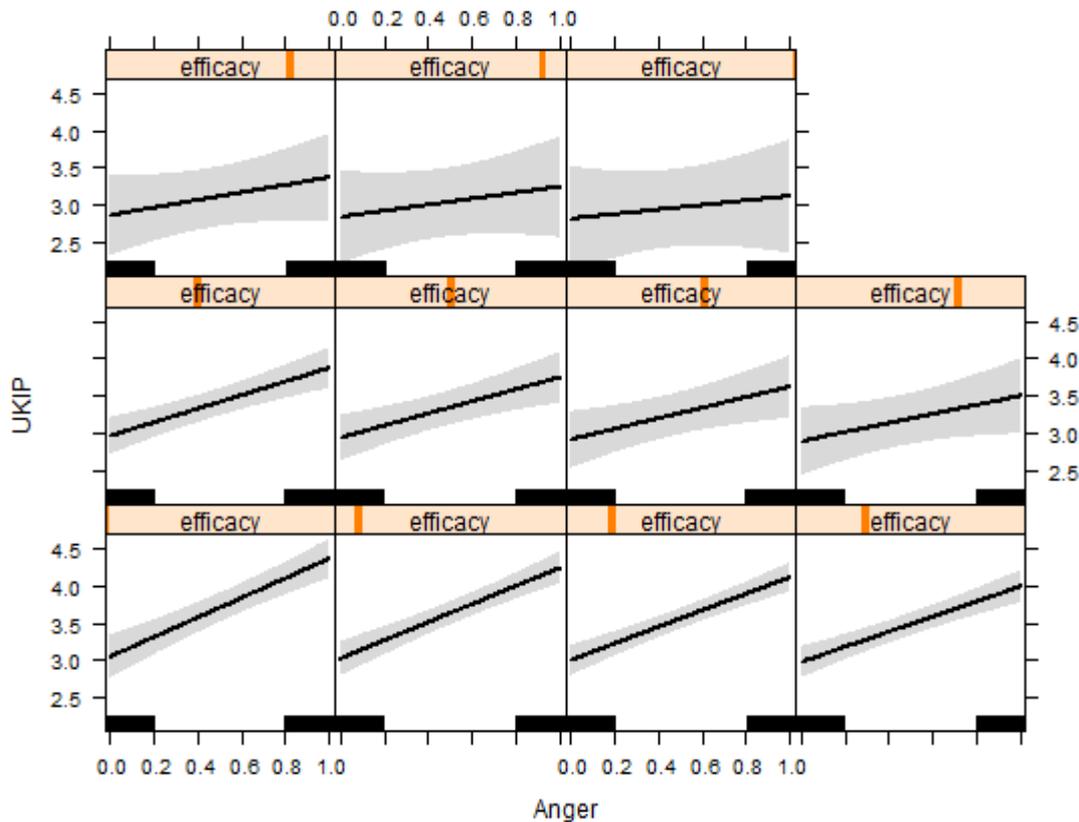
| | <i>Vote Choice</i> | | |
|-------|----------------------|---------------------|----------------------|
| | Labour (UKIP) | Conserv (UKIP) | Lib-Dem (UKIP) |
| anger | -1.767*** (0.596) | -1.181** (0.552) | -1.794*** (0.590) |



³⁹ The predicted probability derives from the multinomial model where possible party choices are UKIP, Labour, Conservative, and Lib-Dem.

Further analysis on attitudes towards the UKIP, expressed by respondents' opinions on the party, confirms the greater support for the UKIP among angry citizens with low efficacy. Indeed, the anger coefficient size is bigger for the subset of citizens with low efficacy: in the four models on support for the UKIP, the coefficients are 1.58, 1.62, 1.06 and 0.47, respectively, as compared to 1.09, 1.08, 0.72 and 0.28 in table 4 above considering all citizens.⁴⁰ Additionally, the graphs depicting the impact of anger across the 11 categories of efficacy show how anger always has a positive impact on support for the UKIP, but its effect declines as efficacy increases and becomes statistically non-significant for very high levels of efficacy.

Effect of anger on support for UKIP across different levels of efficacy



Anger about the economic crisis, therefore, has increased support for the UKIP, especially among citizens with low efficacy. Causal mediation analysis helps evaluate whether the two

⁴⁰ A table on support for UKIP among citizens with low efficacy can be found in the appendix.

mechanisms proposed above, *i.e.* increased risk propensity and refusal to compromise, explain the greater support for APE parties. Risky choices and rejection of compromise are prompted by desire for fundamental change. The causal mediation analysis, therefore, evaluates whether anger has led citizens to perceive the UKIP as a possibility of fundamental change and, consequently, to vote for the party.⁴¹ In the R mediation package, the dependent variable of the mediation model is perceptions of the UKIP as a possibility of change. In the outcome model, the binary dependent variable measures vote for the UKIP and the controls are the same as the ones adopted in the multinomial model on party choice, in addition to the mediator. The analysis clearly shows the significance of the proposed causal mechanism (and the non-significance of the direct effects): anger has increased the perception of the UKIP as a possibility of change, which, in turn, has led to vote for the UKIP.⁴²

Causal Mediation Analysis: Quasi-Bayesian Confidence Intervals

| | Estimate | 95% CI Lower | 95% CI Upper | p-value |
|--------------------------|----------|--------------|--------------|---------|
| ACME (control) | 0.01337 | 0.00318 | 0.02600 | 0.01 |
| ACME (treated) | 0.01238 | 0.00310 | 0.02351 | 0.01 |
| ADE (control) | -0.00682 | -0.02886 | 0.01432 | 0.51 |
| ADE (treated) | -0.00781 | -0.03344 | 0.01580 | 0.51 |
| Total Effect | 0.00556 | -0.01896 | 0.02902 | 0.63 |
| Prop. Mediated (control) | 0.79800 | -12.24256 | 14.92464 | 0.62 |
| Prop. Mediated (treated) | 0.82392 | -10.33103 | 14.13113 | 0.62 |
| ACME (average) | 0.01288 | 0.00321 | 0.02447 | 0.01 |
| ADE (average) | -0.00732 | -0.03078 | 0.01482 | 0.51 |
| Prop. Mediated (average) | 0.81096 | -11.46419 | 14.43416 | 0.62 |

Simulations: 1000

Sample Size Used: 1603

⁴¹ An anti-incumbent vote is often stimulated by desire for change. What the causal mediation analysis here presented is testing, however, is not just the importance of change in vote choice. Instead, it is testing whether anger about the economic crisis leads citizens to perceive an APE party as a possibility of systemic change and convinces them to vote for the party because of that reason.

⁴² Results of the causal mediation analysis remain unchanged when robust standard errors or bootstrap are adopted. The causal mediation analysis was also run with an outcome model in which the ordered dependent variable measures opinions about the UKIP and the controls are the same as the ones in model 3 on support for the UKIP. Results remain largely unchanged. In that case, the sensitivity analysis for the average causal mechanism shows that the confidence interval for ACME contains 0 when ρ (*i.e.* the correlation between the residuals of the outcome and the mediator regression) equals 0.6 and 0.7.

CONCLUSIONS

As this study has shown, anger about the economic crisis has produced diversified political effects. Anger has decreased political attention and participation among citizens with low efficacy and promoted greater participation among citizens with higher efficacy. These results therefore shed new light on the link between anger and political involvement: while the literature has consistently reported an unconditional mobilizing effect, this study shows that the nature of anger – systemic in the context of the crisis – and individual variation in terms of perceived political resources account for more nuanced outcomes. In the context of the crisis, the depressing effect on political participation among citizens with low efficacy has a substantial interest, considering that a very large sector of society currently perceives an extremely low level of personal influence over politics. These findings may apply beyond the economic crisis to cases of diffuse anger and blame attribution.

Besides affecting political engagement, anger about the crisis has also increased support for anti-establishment political parties, especially among citizens with low efficacy. The support that APE parties enjoy among angry citizens is mainly due to their unwillingness to compromise and collaborate with other political forces, and to their promise to bring substantial changes to the status quo, which resonates well with the more risk-prone angry citizens. The latent support for anti-system forces should not be underestimated: citizens expressing favorable opinions on APE parties who are currently demobilized still constitute a pool of potential future voters. The increase in consensus of previously marginalized forces may work as a self-fulfilling prophecy, presenting those forces as electorally credible contenders, thereby solving collective action problems and convincing currently demobilized citizens to return to the polls. Indeed, the increasing success of anti-system parties in more recent European elections seems to point in this direction. Future studies should therefore examine how long-lasting the anger-induced effects are likely to be. Will citizens angry about the crisis withdraw their support for anti-system forces after the exit from the crisis, or are they developing political attachments that will be carried on in the future? Answering these questions seems an endeavor worth pursuing in times of still very high economic and political uncertainty.

REFERENCES

- Abedi, Amir and Thomas Carl Lundberg. 2009. "Doomed to failure? UKIP and the Organizational Challenges Facing Right-Wing Populist Anti-Political Establishment Parties." *Parliamentary Affairs* 62, 1: 72-87.
- Arzheimer, Kai and Elisabeth Carter. 2006. "Political Opportunity Structures and Right-Wing Extremist Party Success." *European Journal of Political Research* 45: 419-43.
- Berkowitz, Leonard and Eddie Harmon-Jones. 2004. "Toward an Understanding of the Determinants of Anger." *Emotion* 4, 2: 107.
- Betz, Hans-Georg. 1994. *Radical Right-Wing Populism in Western Europe*. Houndmills: Palgrave Macmillan.
- Bosco, Anna, and Susannah Verney. 2012 "Electoral Epidemic: the Political Cost of Economic Crisis in Southern Europe, 2010–11." *South European Society and Politics* 17, 2: 129-54.
- Brady, Henry E., Sidney Verba, and Kay Lehman Schlozman. 1995. "Beyond SES: A Resource Model of Political Participation." *American Political Science Review*: 271-294.
- British Election Study. 2010. *British Election Study Panel*. Available online at: <http://bes.utdallas.edu/2009/panel-data0510.php>.
- Chan, Sophia. 1997. "Effects of Attention to Campaign Coverage on Political Trust." *International Journal of Public Opinion Research* 9, 3: 286-96.
- Cottrell, Catherine A. and Steven L. Neuberg. 2005. "Different Emotional Reactions to Different Groups: A Sociofunctional Threat-Based Approach To Prejudice." *Journal of Personality and Social Psychology* 88: 770-789.
- Curtice, John and Stephen D. Fisher. 2011. "The United Kingdom Election of 2010." *Electoral Studies* 30, 1: 223–244.
- Cuddy, Amy J.C., Susan T. Fiske and Peter Glick. 2007. "Stereotype Content Model Across Cultures: Towards Universal Similarities and Some Differences." *British Journal of Social Psychology* 48: 1-33.
- Druckman, James N. and Rose McDermott. 2008. "Emotion and the Framing of Risky Choice." *Political Behavior* 30, 3: 297-321.
- Evans, Jocelyn A.J. 2005. "The Dynamics of Social Change in Radical Right-wing Populist Party Support." *Comparative European Politics* 3: 76–101.
- Folkman, Susan, Richard S. Lazarus, Rand J. Gruen and Anita DeLongis. 1986. "Appraisal, Coping, Health Status, and Psychological Symptoms." *Journal of Personality and Social Psychology* 50, 3: 571–79.
- Ford, Robert, Matthew J. Goodwin and David Cutts. 2012. "Strategic Eurosceptics and Polite Xenophobes: Support for the United Kingdom Independence Party (UKIP) in the 2009 European Parliament Elections." *European Journal of Political Research* 51, 2: 204-234.
- Frijda, Nico H. 1986. *The emotions*. Cambridge University Press.
- Goodwin, Jeff, James M. Jasper and Francesca Poletta. 2001. *Passionate Politics: Emotions and Social Movements*. Chicago: University of Chicago Press.
- Harmon-Jones, Eddie, Jonathan D. Sigelman, Amanda Bohlig and Cindy Harmon-Jones. 2003. "Anger, Coping, and Frontal Cortical Activity: The Effect of Coping Potential on Anger-Induced Left Frontal Activity." *Cognition and Emotion* 17: 1–24.
- Hetherington Marc J. 1998. "The Political Relevance of Political Trust." *American Political Science Review* 92, 4:791-808.
- Holmes, Mary. 2004. "Introduction. The Importance of Being Angry: Anger in Political Life." *European Journal of Social Theory* 7, 2: 123–132.

Huddy, Leonie, Stanley Feldman and Erin Cassese. 2007. "On the Distinct Political Effects of Anxiety and Anger." *The Affect Effect: Dynamics of Emotion in Political Thinking and Behavior*: 202-30.

Ignazi, Piero. 1992. "The Silent Counter Revolution: Hypotheses on the Emergence of the Extreme Right-Wing Parties in Europe." *European Journal of Political Research* 22: 3–33.

Imai, Kosuke, Luke Keele and Dustin Tingley. 2010. "A General Approach to Causal Mediation Analysis." *Psychological Methods* 15, 4: 309-34.

Jasper, James M. 2011. "Emotions and Social Movements: Twenty Years of Theory and Research." *Annual Review of Sociology* 37: 285-303.

Kornhauser, William. 1960. *The Politics of Mass Society*. London: Routledge and Kegan Paul.

Lazarus, Richard S. *Emotion and adaptation*. 1991. New York: Oxford University Press.

Lerner, Jennifer S., and Dacher Keltner. 2001 "Fear, Anger, and Risk." *Journal of Personality and Social Psychology* 81, 1: 146.

Lerner, Jennifer S. and Dacher Keltner. 2000. "Beyond Valence: Toward a Model of Emotion-Specific Influences on Judgment and Choice." *Cognition & Emotion* 14, 4: 473-493.

Lubbers, Marcel, Mérove Gijsberts and Peer Scheepers. 2002. "Extreme Right-Wing Voting in Western Europe." *European Journal of Political Research* 41: 345-78.

Lubbers, Marcel and Peer Scheepers. 2000. "Individual and Contextual Characteristics of the German Republikaner Vote: A Test of Complementary Theories." *European Journal of Political Research* 38, 1: 63–94.

Lubbers, Marcel, Peer Scheepers & Billiet, Jaak. 2000. "Multilevel Modelling of the Vlaams Blok Voting: Individual and Contextual Characteristics of the Vlaams Blok Vote." *Acta Politica* 35, 4: 363-98.

Lyman, Peter. 1981. "The Politics of Anger." *Socialist Review* 11: 55–74.

Mackie, Diane M., Thierry Devos and Eliot R. Smith. 2000. "Intergroup Emotions: Explaining Offensive Action Tendencies in an Intergroup Context." *Journal of Personality and Social Psychology* 79: 602-616.

MacKuen, Michael, Jennifer Wolak, Luke Keele and George E. Marcus. 2010. "Civic Engagements: Resolute Partisanship or Reflective Deliberation." *American Journal of Political Science* 54, 2: 440-458.

Marcus, George E., W. Russell Neuman and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. University of Chicago Press.

Ryan, Timothy J. 2012. "What Makes us Click? Demonstrating Incentives for Angry Discourse with Digital-Age Field Experiments." *Journal of Politics* 74, 4: 1138-1152.

Sigelman Lee, Sigelman Carol K., and Barbara J. Walkosz. 1992. "The Public and the Paradox of Leadership: An Experimental Analysis." *American Journal of Political Science* 36: 366–85.

Smith, Heather J., Tracey Cronin and Thomas Kessler. 2008. "Anger, Fear, or Sadness: Faculty Members' Emotional Reactions to Collective Pay Disadvantage." *Political Psychology* 29, 2: 221-246.

Tiedens, Larissa Z. and Susan Linton. 2001. "Judgment under Emotional Certainty and Uncertainty: The Effects of Specific Emotions on Information Processing." *Journal of personality and social psychology* 81, 6: 973.

Tingley, Dustin, Teppei Yamamoto, Kentaro Hirose, Luke Keele and Kosuke Imai. *Mediation: R Package for Causal Mediation Analysis*. Available online at: <http://cran.r-project.org/web/packages/mediation/vignettes/mediation.pdf>.

Valentino, Nicholas A., Ted Brader, Eric W. Groenendyk, Krysha Gregorowicz and Vincent L. Hutchings. 2011. "Election Night's Alright for Fighting: The Role of Emotions in Political Participation." *Journal of Politics* 73, 1: 156-170.

Valentino, Nicholas A., Vincent L. Hutchings, Antoine J. Banks, and Anne K. Davis. 2008. "Is a Worried Citizen a Good Citizen? Emotions, Political Information Seeking, and Learning via The Internet." *Political Psychology* 29, 2: 247-273.

Van Zomeren, M., Leach, C. W., & Spears, R. (2012). Protesters as "Passionate Economists" A Dynamic Dual Pathway Model of Approach Coping With Collective Disadvantage. *Personality and Social Psychology Review*, 16(2), 180-199.

Van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: a quantitative research synthesis of three socio-psychological perspectives. *Psychological bulletin*, 134(4), 504.

Wagner, Markus. 2013. "Fear and Anger in Great Britain: Blame Assignment and Emotional Reactions to the Financial Crisis." *Political Behavior*: 1-21.

Weakliem, David L. 2002. "The Effects of Education on Political Opinions: An International Study." *International Journal of Public Opinion Research* 14: 141-57.

Weber, Christopher. 2013. "Emotions, Campaigns, and Political Participation." *Political Research Quarterly* 66, 2: 414-428.

Wolfinger, Raymond E. and Steven J. Rosenstone. 1980. *Who Votes?* Yale University Press.

APPENDIX

Distribution of the dependent variable measuring attention to the 2010 election campaign

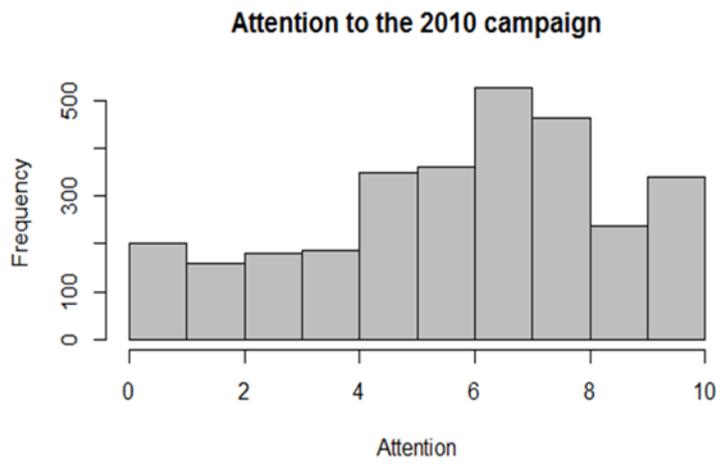


Table - 1: Attention to Campaign (without Interest)

| | Model 1 |
|---------------------|-------------------|
| (Intercept) | 0.76 (0.82) |
| anger | -0.31* (0.14) |
| att.pol | 0.51*** (0.03) |
| campaign.2005 | 0.28*** (0.02) |
| age | -0.02 (0.03) |
| age.sq | 0.02 (0.02) |
| education | 0.08* (0.04) |
| income | 0.01 (0.01) |
| male | -0.23* (0.10) |
| white | 0.58 (0.34) |
| efficacy | -0.02 (0.03) |
| pid.strength | 0.22** (0.07) |
| contact | 0.04 (0.14) |
| afraid | 0.05 (0.11) |
| blame.gov | 0.17 (0.10) |
| anger:efficacy | 0.07 (0.04) |
| R ² | 0.49 |
| Adj. R ² | 0.49 |
| Num. obs. | 1330 |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table - 2: Attention to Campaign (Ordered Logit)

| | <i>Dependent variable: Attention to Campaign</i> | | | | |
|------------------|--|---------------------|---------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) |
| anger | -0.269* (0.144) | -0.248* (0.145) | -0.275* (0.146) | -0.285* (0.147) | -0.241* (0.145) |
| interest | 1.083*** (0.089) | 1.085*** (0.089) | 1.081*** (0.089) | 1.085*** (0.089) | 0.910*** (0.091) |
| att.pol | 0.418*** (0.038) | 0.419*** (0.038) | 0.419*** (0.038) | 0.417*** (0.038) | 0.351*** (0.039) |
| education | 0.018 (0.036) | 0.015 (0.036) | 0.018 (0.036) | 0.019 (0.036) | 0.025 (0.036) |
| income | 0.006 (0.015) | 0.009 (0.015) | 0.006 (0.015) | 0.007 (0.015) | -0.0001 (0.015) |
| age | -0.001 (0.004) | -0.073** (0.028) | -0.001 (0.004) | -0.001 (0.004) | -0.001 (0.004) |
| male | -0.214** (0.103) | -0.226** (0.103) | -0.214** (0.103) | -0.211** (0.103) | -0.256** (0.103) |
| white | 0.503 (0.328) | 0.495 (0.328) | 0.503 (0.328) | 0.509 (0.328) | 0.504 (0.331) |
| efficacy.a | -0.020 (0.033) | -0.021 (0.033) | -0.020 (0.033) | -0.021 (0.033) | -0.036 (0.033) |
| pid.strength.b | 0.146** (0.074) | 0.135* (0.074) | 0.147** (0.074) | 0.145* (0.074) | 0.117 (0.074) |
| contact | 0.102 (0.144) | 0.114 (0.144) | 0.101 (0.144) | 0.102 (0.144) | 0.043 (0.144) |
| age.sq | | 0.068** (0.026) | | | |
| blame.gov | | | 0.029 (0.103) | | |
| afraid | | | | 0.061 (0.113) | |
| attention.2005 | | | | | 0.252*** (0.027) |
| anger:efficacy.a | 0.063 (0.045) | 0.060 (0.045) | 0.062 (0.045) | 0.064 (0.045) | 0.070 (0.045) |
| Observations | 1,334 | 1,334 | 1,334 | 1,334 | 1,330 |

Note: *p<0.1; **p<0.05; ***p<0.01

Table - 3: Support for UKIP (Ordered Logit)

| | <i>Dependent variable:</i> | | | |
|-------------------------------|----------------------------|----------------------|----------------------|---------------------|
| | UKIP | | | |
| | (1) | (2) | (3) | (4) |
| anger | 0.658*** (0.090) | 0.654*** (0.090) | 0.454*** (0.093) | 0.226** (0.097) |
| education | -0.161*** (0.036) | -0.165*** (0.036) | -0.113*** (0.036) | -0.097** (0.038) |
| income | -0.001 (0.014) | 0.0001 (0.015) | 0.005 (0.015) | 0.018 (0.015) |
| age | 0.007* (0.004) | 0.005 (0.004) | 0.002 (0.004) | 0.007* (0.004) |
| efficacy.a | -0.063*** (0.021) | -0.058*** (0.021) | -0.020 (0.022) | -0.034 (0.023) |
| male | -0.055 (0.098) | -0.058 (0.098) | -0.002 (0.099) | 0.133 (0.104) |
| white | -0.045 (0.281) | -0.069 (0.282) | 0.006 (0.294) | 0.089 (0.323) |
| unemployed | 0.564 (0.478) | 0.532 (0.478) | 0.416 (0.505) | 0.721 (0.600) |
| class (clerical) | 0.347** (0.153) | 0.310** (0.154) | 0.381** (0.157) | 0.276* (0.164) |
| class (sales or services) | 0.385* (0.208) | 0.353* (0.209) | 0.437** (0.212) | 0.238 (0.222) |
| class (small business owner) | 0.625*** (0.231) | 0.565** (0.233) | 0.528** (0.237) | 0.233 (0.247) |
| class (skilled manual work) | 0.424** (0.199) | 0.414** (0.199) | 0.407** (0.202) | 0.092 (0.210) |
| class (unskilled manual work) | 0.319 (0.203) | 0.334 (0.205) | 0.400* (0.209) | 0.245 (0.218) |
| class (other) | 0.308* (0.186) | 0.282 (0.186) | 0.370** (0.188) | 0.246 (0.194) |
| class (never worked) | 0.876* (0.522) | 0.802 (0.524) | 1.179** (0.525) | 1.352** (0.614) |
| home | | 0.131 (0.125) | 0.129 (0.127) | 0.246* (0.134) |
| union | | -0.296*** (0.112) | -0.220* (0.114) | -0.280** (0.119) |
| democr.satisf | | | -0.208*** (0.057) | -0.098* (0.059) |
| immigr.neg | | | 1.229*** (0.125) | 0.698*** (0.131) |
| UKIP05 | | | | 0.586*** (0.023) |
| Observations | 1,604 | 1,604 | 1,588 | 1,487 |

Note: *p<0.1; **p<0.05; ***p<0.01

Table - 4: Party choice at the election: low efficacy

| | <i>Vote Choice</i> | | |
|-------------------------------|-------------------------|----------------------|-----------------------|
| | Labour (UKIP) | Conserv (UKIP) | Lib-Dem (UKIP) |
| anger | -1.767*** (0.596) | -1.181** (0.552) | -1.794*** (0.590) |
| education | 0.100 (0.205) | 0.106 (0.176) | 0.304 (0.197) |
| income | 0.096 (0.089) | 0.148* (0.075) | 0.008 (0.084) |
| age | -0.027 (0.024) | -0.003 (0.021) | -0.043* (0.023) |
| male | -0.743 (0.614) | -1.044* (0.551) | -0.487 (0.603) |
| white | 1.785 (1.614) | 0.871 (1.258) | 14.988*** (1.179) |
| immigr.neg | -1.970* (1.189) | -0.558 (1.175) | -1.667 (1.188) |
| vote.UKIP.05 | -4.015*** (1.202) | -2.072*** (0.563) | -3.463*** (0.886) |
| left | 0.427*** (0.120) | -0.040 (0.101) | 0.258** (0.115) |
| class (clerical) | 1.856* (0.984) | 0.830 (0.805) | 0.740 (0.886) |
| class (foreman or supervisor) | 22.581*** (0.515) | 20.808*** (0.480) | 20.476*** (0.525) |
| class (skilled manual work) | 3.223*** (1.148) | 0.856 (0.991) | 1.908* (1.064) |
| class (unskilled manual work) | 3.156*** (1.089) | 1.092 (0.933) | 0.913 (1.023) |
| class (never worked) | -18.450*** (0.00000) | -2.809* (1.624) | -23.253*** (0.000) |
| Constant | -0.238 (2.725) | 1.864 (2.337) | -10.651*** (1.179) |
| Akaike Inf. Crit. | 831.363 | 831.363 | 831.363 |

Note: *p<0.1; **p<0.05; ***p<0.01

Table - 5: Support for UKIP: low efficacy

| | Model 1 | Model 2 | Model 3 | Model 4 |
|--------------------------|-------------------|-------------------|-------------------|-------------------|
| (Intercept) | 2.28 (1.31) | 2.07 (1.32) | 1.16 (1.36) | -0.53 (1.15) |
| anger | 1.58*** (0.27) | 1.62*** (0.26) | 1.06*** (0.29) | 0.47* (0.24) |
| education | -0.18 (0.11) | -0.20 (0.11) | -0.22* (0.11) | -0.13 (0.09) |
| income | 0.02 (0.04) | 0.00 (0.04) | 0.03 (0.04) | 0.02 (0.04) |
| age | 0.03* (0.01) | 0.02 (0.01) | 0.01 (0.01) | 0.02 (0.01) |
| male | -0.16 (0.31) | -0.17 (0.30) | -0.13 (0.30) | 0.16 (0.26) |
| white | -0.50 (0.83) | -0.45 (0.80) | 0.08 (0.79) | -0.11 (0.70) |
| unemployed | 0.34 (1.21) | 0.52 (1.24) | 0.28 (1.39) | 2.09 (1.08) |
| class (unskilled manual) | 0.71 (0.56) | 0.93 (0.59) | 0.89 (0.57) | 0.87 (0.46) |
| home | | 0.83* (0.35) | 0.95** (0.35) | 0.96** (0.31) |
| union | | -0.30 (0.34) | -0.15 (0.33) | 0.15 (0.28) |
| democr.satisf | | | -0.49** (0.16) | -0.34** (0.13) |
| immigr.neg | | | 2.16*** (0.33) | 1.21*** (0.35) |
| UKIP05 | | | | 0.68*** (0.04) |
| R ² | 0.10 | 0.10 | 0.16 | 0.51 |
| Adj. R ² | 0.07 | 0.07 | 0.13 | 0.48 |
| Num. obs. | 554 | 554 | 545 | 486 |

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

List of survey questions

Anger about the financial crisis

“Which, if any of the following words describe your feelings about how you have been personally affected by the current financial crisis?” (Anger was one of the 8 possible answers)

Attention to the 2010 campaign

“Using a 0 to 10 scale where 0 means no attention and 10 means a great a deal of attention, how much attention have you paid to the general election campaign thus far?”

Efficacy

“On a scale from 0 to 10, where 10 means a great deal of influence and 0 means no influence, how much influence do you have on politics and public affairs?”

Interest in politics

“Let’s talk for a few minutes about politics in general. How much interest do you generally have in what is going on in politics?” (5 categories, from “none at all” to “a great deal”)

General attention to politics

“On a scale of 0 to 10, how much attention do you generally pay to politics?”

Vote

“Talking to people about the General Election on May 6th, we have found that a lot of people didn’t manage to vote. How about you – did you manage to vote in the General Election?”

UKIP (opinion)

“On a scale that runs from 0 to 10, where 0 means strongly dislike and 10 means strongly like, how do you feel about the United Kingdom Independence Party (UKIP)?”