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**Allocating Responsibility in Multilevel Government Systems:
Voter and Expert Attributions in the European Union¹**

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Abstract

Democratic accountability requires that citizens can assign responsibility for policy outcomes, yet multilevel structures of government complicate this task as they blur lines of accountability and leave voters uncertain about which level of government is responsible. This study examines the extent to which Europeans are able to navigate the complex and ever-changing divisions of responsibility between their national governments and the European Union (EU). Specifically, we compare citizen and expert responsibility attributions to evaluate if and how voters can competently assign policy responsibility to the European Union. Using multilevel modeling to analyze survey and media data from 27 EU member states, we demonstrate that extreme attitudes decrease citizen competence by motivating biased information processing. Yet at the contextual level, highly politicized environments result in more correct allocations of responsibility by creating an information-rich context.

Keywords: multilevel governance, attribution, responsibility, polarization, knowledge, European Union

Lack of political knowledge among citizens is well-documented (see e.g. Converse 1964; Delli Carpini and Keeter 1996). Indeed, the level of citizen ignorance about politics have led some scholars to suggest that “the low level of political knowledge and the absence of ideological reasoning have lent credence to the charge that popular control of the government is illusory” (Iyengar 1987, 816). Citizens living in systems of multi-level governance, such as the European Union (EU), face a greater challenge when it comes to holding their representatives to account, since they have the additional task of differentiating between multiple levels of government when deciding whom to credit and blame for policy outcomes (Arceneaux 2006; Cutler 2004, 2008; de Vries et al. 2011; Johns 2011). Yet, if popular control is to be more than an illusion, then it is crucial that citizens have at least a basic understanding of the different levels of government responsibility and are able to assess their government’s performance. The very notion of elections as a means of holding governments to account assumes that citizens are able assign responsibility for policy outcomes (Key 1966; Fiorina 1981; Rudolph 2003). Since attribution of responsibility is not a matter of preferences or policy positions, citizens cannot easily rely on proxies or shortcuts to help them distinguish governmental responsibility (Lupia 1994; Sniderman 2000). This raises the question of whether citizens are able to correctly differentiate responsibility between levels of national and supranational government. More fundamentally, it begs the question of what factors enable citizens to acquire the information necessary to do so.

This article examines individuals’ ability to attribute policy responsibility to the European Union. To be able to assess the degree of competence in citizens’ responsibility judgments, we compare citizen evaluations to expert judgments. The theoretical framework highlights the key factors at both the individual and the contextual level that enable individuals to distinguish between the responsibilities of different levels of government. Specifically, we theorize that learning about governmental responsibility will depend on three key elements: individual-level

knowledge and political attitudes, as well as an information-rich political environment. Previous studies of how citizens cope with multilevel governance systems have only examined single countries, such as the US, Canada, or Spain. Given the multi-national and multi-level nature of the EU, it provides an ideal test case not only for expanding the research utilizing a more complex system, but also for explicitly testing contextual level variables that single-country studies can only speculate about. Specifically, it provides an ideal situation for examining both how individual-level factors and very different political contexts shape citizens' ability to assign responsibility, and for comparing these effects across twenty-seven different countries.

This study thus contributes to the literature in three important ways. First, we examine attribution of responsibility in the context of the EU utilizing three unique cross-national datasets: a survey of citizens in all 27 EU member states, a study of the media contexts, and a survey of experts in EU policy making. Second, our findings, based on multilevel analysis of these data, show that even within the EU there are significant differences in the information provided by the political environment, and these, in turn, shape citizens' ability to assign responsibility. Finally, we demonstrate that while political attitudes may serve as a motivating factor, they do not increase voter competence, since citizens with strong attitudes are more likely to be biased information processors as a result of motivated reasoning (Kunda 1990). These findings have important implications for our understanding of citizen competence and democracy in complex systems.

Attributing Responsibility in Multilevel Government Systems

In the classic tradition of democratic theory, elections are a sanctioning device in which voters reward or punish incumbents on the basis of past performance (Fiorina 1981; Key 1966). This model of the electoral process relies on the critical assumption that voters are able to assign responsibility for policy outcomes. Responsibility judgments are thus the principal mechanism by

which citizens hold representatives to account for their actions, since it is those judgments that intervene between evaluations of policy outcomes and voting behavior. For a number of reasons, multiple levels of government make it more difficult for individuals to correctly assign responsibility (Arceneaux 2006; Cutler 2004, 2008; Johns 2011; León 2011). When policy responsibilities are divided between multiple levels of government, and often overlapping, citizens may not know which level of government is more responsible for a particular policy. In addition, politicians do not have incentives to make the system more clear. Complexity allows them to claim credit for successful policies and engage in blame shifting for undesirable outcomes.

Developments in the economic voting literature have illustrated the importance of attribution of responsibility as a moderator of voting behavior. According to the simple reward-punishment model, individuals vote for the incumbent when the economy is good and for the opponent when times are bad (Fiorina 1981; Lewis-Beck 1988). However, this model has been shown to work best in countries where responsibility lies with a single government party, and less well when governments are weak and divided and legislatures are strong (Powell and Whitten 1993; Anderson 2000; Nadeau et al. 2002; Whitten and Palmer 1999). Most of these aggregate-level studies have focused on “horizontal” institutional structures, such as coalition and divided government, and they have not directly examined voters’ views of who is responsible.

Recently more attention has turned to the “vertical” institutional structures of federal government, mainly in the context of the federal systems of Canada and the US (Arceneaux 2006; Gomez and Wilson 2003; Cutler 2004, 2008; Johns 2011). Collectively, this work has sought to understand to what extent 1) citizens attribute different amounts of responsibility to different levels of government; 2) these attributions are correct; and 3) voters cast their ballot based on these perceptions of responsibility and assignment of credit or blame. Yet, the studies provide mixed evidence about the ability of citizens to allocate responsibilities among different levels of

government. Some studies suggest that citizens are able to hold elected representatives to account for their performance at the more appropriate level of government (Atkeson and Partin 1995), whereas others suggest that citizens have difficulty distinguishing between different levels and do not differentiate responsibility (Cutler 2008) and that even when they are able to correctly distinguish it is unclear if this translates into greater accountability (Arceneaux 2006; Cutler 2004; Johns 2011; Hobolt and Tilley 2014). This work thus leaves open the question of the degree to which citizens are able to correctly assign responsibility to different levels of government in a multilevel system, and more importantly what enables them to do so.

First we must define “responsibility” and “correct” responsibility assignments. In the context of multilevel government, “responsibility” has been considered primarily in two ways: functional responsibility and causal responsibility (see Hart 1968). Functional responsibility refers to the role and tasks for which the government is responsible, in other words, the areas where it has policy-making duties. For example, the EU can be said to have functional responsible for monetary policy in the Eurozone. Causal responsibility refers to the influence an actor has on bringing about a specific outcome, which can lead to attributions of credit for positive outcomes and blame for negative results. In this article, we focus on functional responsibility and analyze if and how individuals understand the EU responsibility for various policy areas. We do not assess perceptions of whether the EU has had a positive or a negative influence on policy outcomes.

Specifically, we are interested in assessing the degree of competence in citizens’ responsibility evaluations. But how do we know when citizens are making “correct” attributions of responsibility? The literature on voting behavior defines competent voting as voters choosing the same way as they would have done if perfect information were available (see Lupia 1994; Lau and Redlawsk 1997). Similarly, we define competent attribution of responsibility as individual assessments that are similar to those that would have been made with perfect information. The best

way of measuring “perfect information” is to obtain expert opinions on actual divisions of responsibility in the EU. Similar to the approach used by Cutler (2008), who conducted an expert survey on federal versus provincial responsibility in the Canadian context, we have conducted a survey of scholars specializing in European Union policy-making and averaged across expert evaluations to establish a baseline assessment of EU responsibility. By comparing citizen evaluations of responsibility to expert judgments, we can determine how close citizen evaluations are to fully-informed assessments. The next section presents our theoretical propositions about when and why individuals are capable of reaching attribution judgments of expert quality.

Ability and Motivated Reasoning

There is no doubt that it is difficult for individuals to attribute responsibility in federal or multilevel government systems, as extant work has shown. However, this prior work lacks a theory to explain when and why individuals are able to attribute responsibility in systems of multilevel governance. To address this question, we build on previous research which argues that knowledge about political issues is a function of ability, motivation, and opportunity (Luskin 1990; Delli Carpini and Keeter 1996; Gordon and Segura 1997). Individuals vary considerably in their cognitive ability to understand political information, their motivation to seek it out, and the opportunities they have to obtain this knowledge. This past research highlights the role that motivating factors play in encouraging citizens to seek out information, finding that the intrinsic factor of political interest is positively correlated with political knowledge. We go beyond motivating factors to explore the role of motivated reasoning: how do political attitudes influence information processing? Thus we do not ask *if* citizens are motivated by their political attitudes, but *how* are they motivated to process EU-related information. We theorize that cognitive ability

facilitates, while political attitudes motivate information processing about the EU's responsibilities. This will be expanded in the ensuing sections.

Responsibility Judgments Facilitated by Cognitive Ability

Some individuals have a higher cognitive ability, which manifests itself in higher levels of political sophistication and facilitates the consumption and systematic processing of complex political information (Luskin 1990). Indeed, high knowledge citizens are better able to understand institutional complexity and divided lines of responsibility. Highly sophisticated voters are more capable of recognizing that responsibility is divided among multiple levels and of making diffuse responsibility attributions, whereas low sophisticates generally focus on one political actor (Cutler 2004; Gomez and Wilson 2003, 2008). High sophisticates are also more competent in processing political information and news stories, and in converting this information into stored knowledge (Zaller 1991). Moreover, an individual's level of general political knowledge is a reliable predictor of news story recall (Price and Zaller 1993). Some individuals are generally interested in and more knowledgeable about a variety of political topics. In addition, highly informed citizens are more likely to perceive objective facts (Blais 2010). As political sophisticates are better able to understand complex government structures, divided responsibility, and have the cognitive ability to process and retain political news, we expect high political sophisticates to also be more knowledgeable about the European Union's responsibility. This brings us to our first hypothesis:

H1: Political sophisticates will make more correct responsibility assignments.

Responsibility Judgments Motivated by Political Attitudes

Even if we do expect individuals with higher levels of political sophistication to more correctly allocate responsibility, it is generally costly and thus irrational for most citizens to be

politically informed (Downs 1957). Indeed, we would not expect individuals of similar cognitive ability to be equally competent at assigning responsibility because of differing motivations. While individual cognitive ability facilitates information processing, political attitudes motivate information processing. Previous studies have identified motivating factors that generate more competent behavior and higher levels of knowledge (Luskin 1990; Eveland 2004). However, following the literature on motivated reasoning (Kunda 1990; Taber et al. 2009), we argue that political attitudes motivate individuals to process information in a very different way, resulting instead in *less* competent behavior. People hold a variety of politically-related attitudes, some of them strong and stable, others are weak and variable. We focus on the impact of strong political attitudes because they are more likely to bias information processing and judgments, as well as influence behavior, than weak attitudes (Krosnick and Petty 2005). There are multiple dimensions of attitude strength including attitude extremity and ambivalence. Attitude extremity is defined as the deviation from the midpoint on a scale (Abelson 1995), with individuals consistently holding mostly positive or negative views towards the same attitude object. Ambivalence occurs when an individual holds a mixture of favorable and unfavorable views, and is measured by the sum of positive and negative evaluations (Thompson et al. 1995).

Both attitude extremity and ambivalence influence information processing: individuals with extreme attitudes are more often motivated by directional goals, whereas ambivalent citizens are motivated by accuracy goals. Citizens with strong prior attitudes are often biased information processors, motivated by (dis)confirmation biases (Taber and Lodge 2006; Taber et al. 2009). These individuals are more likely to discount information that is contrary to their prior beliefs, and indiscriminately accept information that is in line with their attitudes. They may also actively seek out information that confirms their prior attitudes. This is well-established in the literature on voting behavior. Over fifty years ago, Campbell et al. (1960) asserted that individuals are prone to

interpret political items through a partisan bias, in other words, that political attitudes distort information processing. This has been confirmed in many studies since then (Redlawsk 2002; Bartels 2002). An individual's political beliefs affect the way they engage in political decision-making and information processing (Rahn 1993; Bartels 2000). Partisan predispositions affect perceptions of the economy (Evans and Anderson 2006; Gerber and Huber 2010) and attributions of responsibility (Tilley and Hobolt 2011; Rudolph 2003, 2006). While different terminology for attitudes has been used in these various studies (partisanship, affect, predispositions, attachment, stereotypes, etc.) the findings are very consistent: strong attitudes bias perceptions and beliefs.

Conversely, individuals with high levels of ambivalence are more likely to process information in a systematic way (Rudolph and Popp 2007; Lavine et al. 2012). There is evidence of the "greater aptitude of ambivalent citizens as compared to non-ambivalent citizens to make more balanced or accurate political judgments" (Meffert et al. 2004, 64). When individuals undertake reasoning driven by accuracy goals, they spend more time and effort in evaluating the information and are much less reliant on several types of bias and heuristic shortcuts (cf. Kunda 1990). Individuals who engage in a search for information with the goal of forming accurate impressions are much more likely to report correct information or impressions than individuals who do not have an accuracy goal (Huang and Price 2001; Biesanz and Human 2010).

Recent research suggests that EU attitudes are often ambivalent (de Vries and Steenbergen 2013; Stoeckel 2013). Both extreme and ambivalent attitudes towards the European Union can motivate knowledge acquisition, but while individuals with extreme pro- or anti-EU attitudes may be motivated to learn about EU-related information, we also expect that they are more likely to select information that is in line with their prior beliefs and to process new information in a biased manner. This will result in a less accurate understanding of the EU's policy-making role. Ambivalent individuals, and those without strong predispositions for or against the European

Union, whom we refer to as “centrists”, are more likely to process information in a non-biased way and thus better able to allocate responsibility. *Centrists* is a diverse group that can include people who are ambivalent about the EU or who have moderate views on European integration. For this research, the heterogeneity of this group is not a concern as the theoretical focus is individuals with extreme attitudes compared to those with moderate attitudes.

H2: Individuals with extreme positive or negative attitudes about European integration are less able to correctly assign responsibility compared to centrists.

Contextual Information and the Politicization of European Integration

Moving beyond determinants at the individual level, we now turn to the role of the information context. Citizens do not acquire information in a vacuum; they are affected by the type of information available in the environment and the saliency of a given issue. The political context can motivate, provide information, and help even low informed citizens to gain knowledge (Kuklinski et al. 2001). Previous studies have shown that the knowledge gap between low and high sophisticates can shrink when more information is provided in the political context (Nicholson 2003; Jerit and Barabas 2006). But what type of political environment provides the opportunity to acquire information about complex structures of governance and motivates citizens to pay attention to this information?

We argue that the politicization of the European issue plays an important role in determining the availability of information about and saliency of the EU to individual citizens. Recent work on political behavior in Europe has argued that the issue of European integration is becoming increasingly politicized as we are witnessing public contention over European matters in referendums, party competition and media reporting (de Vreese 2003; Tillman 2004; de Vries 2007; Kriesi et al. 2008; Hobolt 2009; Hooghe and Marks 2009). EU politicization refers to the

increasing contentiousness of decision making in the process of European integration (Schmitter 1969). Hooghe and Marks posit that this politicization has changed both the content and the process of decision making in the EU (2009, 8). Importantly, however, the level of politicization of European issues varies considerably across countries. We know from studies of vote choice in referendums and elections that arena-specific voting - so-called “EU issue voting” - is more pronounced when the European issue is politicized in the domestic sphere (Tillman 2004; de Vries 2007; Hobolt 2009; de Vries et al. 2011). Equally, we would expect that the level of politicization of the EU issue in a country affects citizens’ knowledge about EU policy responsibility by increasing the amount of information available about the EU and making it a salient issue. In turn, this creates an opportunity for all in that country to acquire this information.

It is important to note that a *lack* of politicization in the field of EU studies has been associated with elite (and media) consensus in favor of European integration, and generally little public debate (Hooghe et al. 2002; Hobolt et al. 2009). Consequently, politicization mostly implies that actors more critical of the EU are given a voice, creating debate and increasing the amount of negativity surrounding European integration. We therefore focus on two key indicators of politicization: the negativity of media coverage of the European Union and perceived party polarization on the EU issue. Firstly, learning can occur in negative media contexts through two mechanisms: by the increased availability and attention to information, and by increasing the salience of the issue. Studies have uncovered a negativity bias whereby negative information stands out above positive information (Rozin and Royzman 2001). One reason for this is that negative stories are more likely to capture an individual’s attention through physiological arousal. Negative arousal in particular is associated with retaining more information (Reeves et al. 1991; Lang et al. 1996). As individuals pay the most attention to negative stories, we expect that the EU becomes salient in countries with more negative coverage of EU news.

Second, we would expect the EU to be salient in contexts where parties are polarized on the European integration dimension. Issue salience increases when political parties are polarized on an issue and salience decreases when parties' stances converge (Milazzo et al. 2012). In contexts where parties' positions on European integration are polarized, the EU becomes a more salient topic and there are higher levels of EU-related information available than in contexts with little party polarization. We theorize that politicized contexts provide an opportunity to learn from the information-rich environment and individuals are motivated to do so because of the perceived salience of the topic.

H3: The more negative the media tone is on stories about the European Union, the more correctly individuals will attribute responsibility.

H4: Individuals in contexts where parties are polarized along the European dimension will more correctly allocate responsibility.

Data

To test our hypotheses, we rely on three separate datasets: the 2009 European Election Study Voter Survey (EES 2009; van Egmond et al. 2009) which included a module of responsibility questions, the EES Media Study (Schuck et al. 2010) and a survey of experts on EU policy making conducted by the authors. The voter survey was fielded during the four weeks immediately following the June 2009 European Parliament elections, with randomly-drawn samples of at least 1,000 respondents in each of the EU's 27 Member States. The Media Study includes content analysis of news stories from two broadsheets and one tabloid as well as the main evening news broadcasts from each EU country. In total, 52,009 television and newspaper stories were coded. Finally, to ascertain "correct" evaluations of EU responsibility, we surveyed experts on European Union policy making.² One hundred seventy-five potential expert respondents were

invited to complete the survey, which included the same responsibility questions as in the EES voter survey. A total of 117 individuals responded (67% response rate), with at least two experts per EU Member State. The goal was not to obtain a perfect distribution across countries, in particular since EU experts are not represented equally throughout the Member States, but rather to have enough variation to average expert evaluations of European Union policy responsibility.³

The question modules on attributions of responsibility probed respondents for their responsibility judgments in five policy areas, using the following wording:⁴

How responsible is the (country) government for economic conditions in (country)? Please indicate your views using any number on a scale from 0 to 10, where 0 means “no responsibility” and 10 means “full responsibility.”

And what about the European Union, how responsible is the EU for economic conditions in (country)?

These questions were repeated for the following policy areas: standard of health care, levels of immigration, setting interest rates and dealing with climate change.

Table 1 provides a summary of expert and citizen attributions of functional responsibility to national governments and the EU across five policy areas. Table 1 gives the mean and standard deviation for each group. Note that citizens and experts are further divided into Eurozone/non-Eurozone groups for the interest rate questions: citizens in Eurozone countries are compared to experts in Eurozone countries, while individuals in non-Eurozone countries are evaluated against experts in non-Eurozone countries. To assess the extent to which citizens assign responsibility correctly, we compare the scores given by individuals in our voter survey with the scores of experts. It is noteworthy that citizens and experts rank order the responsibility of the EU across policy areas similarly, with EU assigned the highest level of responsibility for interest rates (within the Eurozone) and the lowest responsibility for health care. On average, however, citizens

attribute higher levels of responsibility to the EU than do experts in all areas except one: Eurozone citizens attribute less responsibility than the experts do to the EU for interest rates.

[TABLE 1 ABOUT HERE]

The standard deviations are generally much smaller for the experts, showing that while there is some variation in expert opinion, there is less disagreement among experts than there is among citizens. We turn now to the multivariate analysis of the individual-level and contextual-level factors to test our hypotheses about the role of ability, motivation, and politicization in correctly allocating responsibility to the European Union.

Methodology

To assess correct attribution of responsibility we construct a measure of *closeness to the expert evaluation*. We first calculated the mean expert attribution of responsibility for each issue area.⁵ Next, we subtracted an individual's attribution of responsibility from the expert mean and took the absolute value to find the distance from expert evaluation. Finally, we averaged across the five policy areas to create the outcome variable of closeness to expert evaluation. Note that attributions to national governments and to the EU are included in the outcome variable. As these questions were asked sequentially and are inherently linked, both should be considered.⁶ Similar to how a multi-item scale can correct for measurement error, by averaging across all policy areas, we obtain a more accurate picture of individual's general understanding of EU responsibility.

The individual-level model estimates the importance of ability and attitudes in making competent responsibility judgments. To test the hypotheses that cognitive ability facilitates correct responsibility attributions, *political knowledge* is included as an explanatory variable. Political knowledge is a summated scale created from factual political knowledge questions (Zaller 1992).⁷ To assess politically motivated evaluations, we include *EU attitudes*; a standardized summated

rating scale, with positive values being most supportive of the European Union.⁸ Importantly, since we do not anticipate that there is a linear relationship between EU attitudes and responsibility judgments, we also include *EU attitudes squared* to capture the curvilinear effect. In addition, we include age, gender, occupation, and education as control variables as these have been associated with political knowledge (Delli Carpini and Keeter 1996; Luskin 1990).

To test our hypotheses on the direct effects of politicization of the EU issue, two contextual-level variables are included. The first, *negative media tone*, is a measure of the tone of news stories about EU- topics in television broadcasts and newspapers.⁹ Higher values of this variable correspond to more negative tone in the media on EU issues. Second, *party polarization* is a measure of the political party system on the issue of European integration. Since we argue that polarization increases saliency and the amount of information available, it is crucial that voters perceive party differences. Therefore, this measure uses citizens' subjective placement of the parties in the EES voter survey and is calculated as the standard deviation of the mean party positions in each political system.¹⁰ Finally, we control for length of EU membership.

Multilevel analysis is used to model both the individual-level and contextual-level variation in closeness to expert evaluations. A multilevel, or hierarchical, model allows for estimating the variance between individuals as well as the variance between countries to specifically correct for the clustered nature of the data and to obtain correct standard errors (Snijders and Bosker 1999).

Results

The model estimation results are shown in Table 2. The first column shows the random effects ANOVA, or null model, which allows us to partition the variance between the individual-level and country-level. Based on the variance estimates, the intra-class correlation is measured at

.10, meaning that 10% of the variation in correct attributions of responsibility is due to between-country differences, while 90% is due to individual-level differences. This is in line with the cross-level variation found in other comparative studies of attitudes in Europe (such as Crepaz and Damron 2008; McLaren 2007). The second column provides the results for a baseline model including only the substantive variables, and the final column includes the control measures.

[TABLE 2 ABOUT HERE]

At the individual level, we proposed that cognitive ability would facilitate while EU attitudes would motivate information processing. First, we theorized that citizens with high levels of political knowledge are generally more aware of and able to process political topics and would therefore make attributions closer to expert evaluations. We find this hypothesis is supported: political knowledge is strongly associated with correct responsibility attributions.¹¹ For a one-unit increase in political knowledge, a respondent will be .06 points closer to expert evaluations, holding all other variables constant. The most politically sophisticated individuals will be, on average, .42 points closer to expert judgments. This finding is not surprising, but it could not be assumed. Citizens usually have limited knowledge about EU governance, so it is important to confirm that cognitive ability, measured by political sophistication, facilitates correct attributions of responsibility.

For the second individual-level covariate, we examine how political attitudes motivate information processing. We theorized that individuals with extreme attitudes – strong EU supporters and Euroskeptics – may select and process EU-related information in a biased way. Therefore, they will make responsibility judgments that are less accurate. On the other hand, individuals with centrist or ambivalent attitudes towards the EU are much less likely to suffer from a perceptual bias and therefore are better able to acquire factual content about the European Union. This hypothesis was strongly supported: both Euroskeptics and EU supporters make less accurate

responsibility judgments than do the people with centrist attitudes. This is demonstrated in Figure 1, which shows the predicted responsibility judgments across levels of EU attitudes and the associated 95% confidence intervals, holding all other variables at their mean. The figure clearly shows a curvilinear relationship between EU attitudes and correct assignment of responsibility. The most Euroskeptic individuals are a full point less accurate than centrists, while EU supporters are .4 points less accurate than those individuals with moderate or ambivalent EU attitudes. While individuals with extreme attitudes on both ends of the spectrum suffer from biased information processing, the effect is stronger for those with negative attitudes.¹²

[FIGURE 1 ABOUT HERE]

At the country-level, we proposed that politicization creates an opportunity for citizens to learn from the information-rich environment, resulting in more correct assignments of responsibility across levels of government. In contexts where the EU is highly politicized, the European issue becomes more salient and more accessible for people to learn about it. We tested this theory with two different contextual-level variables: negative media tone and party polarization. We find support for the direct effects of media negativity. The EU issue is more salient to individuals in countries where the news stories about the EU are primarily negative, enabling citizens to make more accurate responsibility judgments. Austria, Flemish Belgium, and the United Kingdom had the media outlets with the most negative tone, while Malta and Bulgaria had the most positive media tone. Austrians were .5 points closer to expert evaluations than Maltese respondents, holding all other effects constant.

Similarly, there are strong direct effects of party polarization on attributions of responsibility. In countries where political parties are perceived to be highly polarized on the EU-issue, such as Sweden and Luxembourg, individuals make more accurate responsibility evaluations than those in countries where polarization is perceived lowest, including Estonia and

Latvia.¹³ Holding all other variables constant, citizens in the most polarized context are .59 points closer to experts than citizens in the least polarized country. The politicization indicators of media tone and party polarization both support the theory that increased politicization creates an environment where individuals have access to information and improves correct attributions of responsibility. This suggests that while both predictors are measures of politicization and have similar effects on correct attributions of responsibility, they are tapping into slightly different processes. This is supported by their low correlation (.16), and lends further credence to the claim that politicization, in various forms, increases the amount of information available to citizens.¹⁴

Conclusion

Citizens generally are uninformed about political affairs and are lacking in political knowledge. It is especially difficult for them to understand allocations of responsibility in complex institutional structures. Indeed, some scholars have argued that it is irrational for voters to spend the necessary time and energy to become well-informed about politics. Yet it is crucial for democratic accountability that citizens have at least a basic understanding of governmental responsibility. To that end, this article sought to answer if European citizens can competently allocate responsibility to the European Union. In addition, if becoming informed is costly, under what conditions can citizens make responsibility judgments that approach expert quality?

The empirical analysis provided support for our theoretical model which highlighted cognitive ability, political attitudes, and politicization of the European issue as key factors in allocations of responsibility to the EU. At the individual level, we posited that cognitive ability facilitates the acquisition and consumption of information, with high political sophisticates more likely to correctly allocate responsibility than their less sophisticated counterparts. Moreover, while attitudes towards European integration may motivate individuals to acquire information,

attitude extremity promotes biased information processing which leads to less accurate responsibility judgments compared to those with ambivalent or moderate attitudes. This was demonstrated with a curvilinear relationship between EU attitudes and correct attributions of responsibility. At the contextual level, we theorized that politicization on the European issue would provide an opportunity to easily acquire information about the EU through increased salience and amount of information available. We demonstrated that two different types of politicization resulted in more correct responsibility attributions: negative media tone on EU stories and party polarization on European integration.

These findings have important implications for our understanding of what enables individuals to learn about complex political matters. While cognitive ability is important, it is only one factor that facilitates political learning; attitudes and the political context are also crucial. Extreme political attitudes as well as greater politicization can make the issue salient and motivate individuals to seek out information. However, because they are liable to suffer from (dis)confirmation biases which influence their information processing, individuals with extreme attitudes are the least likely to make correct responsibility judgments.

Yet the story is reversed when we move from the individual to the contextual level. In the political context, higher levels of politicization result in increased information supply and more accurate political judgments. This greater amount of available information is accessible for anyone, so no matter how moderate or extreme an individual's attitudes are, he is more likely to form accurate impressions than a citizen with similar attitudes in a context with low levels of politicization. This is reassuring news for those who worry about increasing political contentiousness and the potential negative impacts on democratic outcomes. In the context of the European Union, we find that increased politicization improves citizens' knowledge of complex governance structures, which can positively influence democratic accountability and governance.

Endnotes

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² The expert survey was carried out online in February 2010 (after the EES voter survey in June 2009, but before the onset of the Eurozone crisis with the first bailout of Greece in May 2010 and the Irish bailout in November 2010). Most names obtained from UACES Expert on Europe.

³ While there is an objective reality of EU responsibility for policy areas and outcomes, there is no straightforward single measure that can be applied. Therefore, we use experts' attribution of responsibility as a measure of this latent variable. We believe this is the best method to establish a baseline of divisions of responsibility in a governance structure as complex as the EU. Other studies have demonstrated the validity and reliability of expert judgments when measuring similar political constructs such as party and policy positions in comparative politics (see e.g. Steenbergen and Marks 2007; Hooghe, Bakker et al. 2010). Furthermore, experts, while highly sophisticated, are not merely "high sophisticate" citizens. They possess specialized knowledge that, when averaged across experts, enables estimation of a "true" allocation of responsibility.

⁴ A possible critique is that these questions do not specify which institution within the EU – European Parliament, Commission, Central Bank, etc. - is responsible. However, most citizens tend not distinguish between the myriad of European institutions (Karp et al. 2003) and rather

consider the EU as an entity so the lack of institutional-specification should not pose a problem when measuring citizen perceptions of EU responsibility.

⁵ While there was less variation in the experts' attributions of responsibility than the citizens' attributions, the experts were not in complete agreement. To ensure the robustness of the findings, we also calculated the dependent variable using 1) separately, the lower and upper bounds of the expert confidence interval as the mean expert scores and 2) distance between citizens and their country experts (i.e. a citizen from the UK is compared to the UK experts). The substantive conclusions remain the same.

⁶ Results are the same when the dependent variable includes only attributions to the EU, and when the dependent variable is the relative responsibility of the EU compared to national governments. These model estimations can be found in the online appendix.

⁷ Question wording given in the online appendix. The scale has an alpha score of .67.

⁸ EU attitudes measure is a standardized item scale created from four equally weighted questions with an alpha score of .71. See the online appendix for question wording. These items were chosen for the scale of EU attitudes as they were highly correlated with each other and meet the monotone homogeneity assumption in item-rest tests. In addition, we model it as a one-dimensional construct, as we found strong unidimensionality in the responses.

⁹ This measure is based on coding of how news stories evaluated the EU, the European Parliament, and enlargement: negative, rather negative, balanced/mixed, rather positive, positive.

¹⁰ Our findings are robust when we instead use the range of the parties' positions in each system with the EES data.

¹¹ The EES survey included questions about the EU and national governments. In models testing the EU and national knowledge items separately, both had a strong and significant positive association with correct responsibility attributions.

¹² It is worth noting that these effects are not driven by a propensity of EU supporters (skeptics) to simply assign more (less) responsibility to the EU. The correlation between EU support and assignment of responsibility to the EU, averaged across five policy areas, is only 0.03. We find, however, that the effect of attitude bias on assignment of responsibility is conditioned by perceived performance in a policy area, e.g. when the economy is improving, EU supporters attribute more responsibility to the EU, whereas Euroskeptics attribute more responsibility to the EU when the economy is perceived to be deteriorating (see also Hobolt and Tilley 2014).

¹³ An alternative measure of EU politicization could be the incidence of holding referendums on European integration. When included as a second-level variable instead of EU party polarization, this has a strong and significant relationship with attributions: citizens in countries who have had an EU referendum are closer to the expert judgments. However, this measure is highly correlated with party polarization at .51. Since the direction of causality is unclear – referendums could lead to party polarization or vice versa – we have chosen to focus on party polarization.

¹⁴ These substantive interpretations are from the baseline model. When controlling for membership length, comparing the most and least politicized contexts, the effect of media tone is .37 and party polarization is .47. A citizen in a founding member country is, on average, .27 points closer to the experts than citizens who joined the EU in 2007.

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Biographies

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Tables & Figures

Table 1: Comparing Expert and Citizen Attributions of Responsibility*

Policy Area	Experts		Citizens	
	Mean	(SD)	Mean	(SD)
National Government Responsibility				
Responsibility				
Economy	5.88	(1.84)	7.19	(2.72)
Health Care	8.13	(1.77)	7.80	(2.70)
Immigration	6.69	(2.09)	7.23	(2.81)
Interest Rates - Non Eurozone	4.53	(3.35)	6.80	(3.22)
Interest Rates - Eurozone	2.38	(2.55)	5.96	(3.08)
Climate Change	5.83	(2.16)	6.25	(3.10)
European Union Responsibility				
Economy	4.48	(1.86)	5.70	(2.70)
Health Care	2.28	(1.96)	4.72	(3.00)
Immigration	4.18	(2.28)	6.00	(3.03)
Interest Rates - Non Eurozone	3.04	(3.32)	5.26	(3.26)
Interest Rates - Eurozone	7.95	(2.10)	6.29	(2.88)
Climate Change	5.50	(2.12)	6.22	(3.03)
<i>n</i>	117		27069	

* Two-group mean comparison tests confirm there is a significant difference between citizens and experts for each policy area at p< .01.

Table 2: Multilevel Model of Correct Attributions of Responsibility

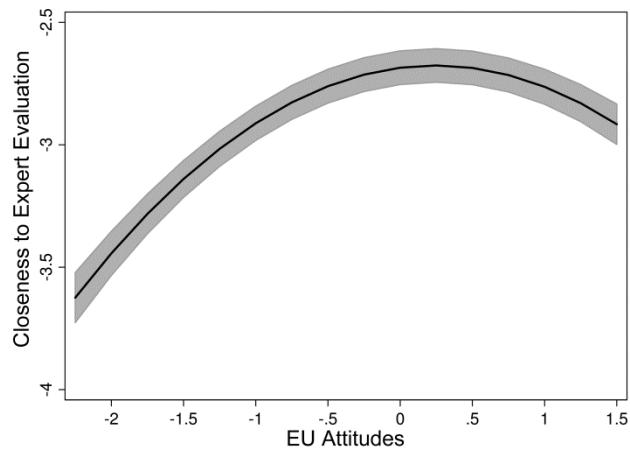
	Null		Baseline		Full	
	Coef	SE	Coef	SE	Coef	SE
Political Knowledge			0.07	(.00) *	0.06	(.00) *
EU Attitudes			0.09	(.01) *	0.07	(.01) *
EU Attitudes^2			-0.16	(.01) *	-0.15	(.01) *
<i>Control Variables</i>						
Education					0.05	(.00) *
Age					-0.002	(.00) *
Female					-0.05	(.01) *
<i>Occupation (Base=Upper Service)</i>						
Lower Service					-0.00	(.03)
Petty Bourgeois					-0.05	(.02) *
Routine Non-Manual					-0.08	(.03) *
Skilled					-0.13	(.02) *
Non-Skilled					-0.12	(.02) *
Still in Education					0.03	(.03)
Other					-0.03	(.02)
<i>Level 2 Variables</i>						
Negative Media Tone			0.19	(.07) *	0.14	(.06) *
Party Polarization			0.38	(.10) *	0.30	(.09) *
Membership Length					0.005	(.00) *
Intercept	-2.76	(.06) *	-3.42	(.12) *	-3.38	(.11) *
Variance	0.1	(.03)	0.05	(.01)	0.03	(.01)
Number of individuals	26662		26653		25596	
Number of contexts	28		28		28	

*p<.05, two-tailed test

The dependent variable is closeness to expert evaluation.

Source: European Election Study 2009 and Expert Survey 2010

Figure 1: Marginal Effect of EU Attitudes on Responsibility Judgments



Supplementary Material

Allocating Responsibility in Multilevel Government Systems: Voter and Expert Attributions in the European Union

Traci L Wilson & Sara B Hobolt

I Question Wording from EES 2009 Voter Survey

Political Knowledge

- Q92. Switzerland is a member of the EU
- Q93. The European Union has 25 member states
- Q94. Every country in the EU elects the same number of representatives to the European Parliament.
- Q95. Every six months, a different Member State becomes president of the Council of the European Union
- Q96. The [Country] Minister of Education {or appropriate national title} is [Insert Name].
- Q97. Individuals must be 25 or older to stand as candidates in [Country] general elections.
- Q98. There are [actual number + 50%] members of the [Country] parliament.

EU Attitudes

- Q79. Generally speaking, do you think that [Country's] membership of the European Union is a good thing, bad thing, or neither good nor bad?
- Q80. Some say European Unification should be pushed further. Others say it already has gone too far. What is your opinion? Please indicate your views using a scale from 0 to 10, where 0 means unification 'has already gone too far' and 10 means it 'should be pushed further'. What number on this scale best describes your position?
- Q83. In general, do you think that enlargement of the European Union would be a good thing, bad thing, or neither good nor bad?
- Q91. How much confidence do you have that decisions made by the European Union will be in the interest of (country)? A great deal of confidence, a fair amount, not very much, or no confidence at all.

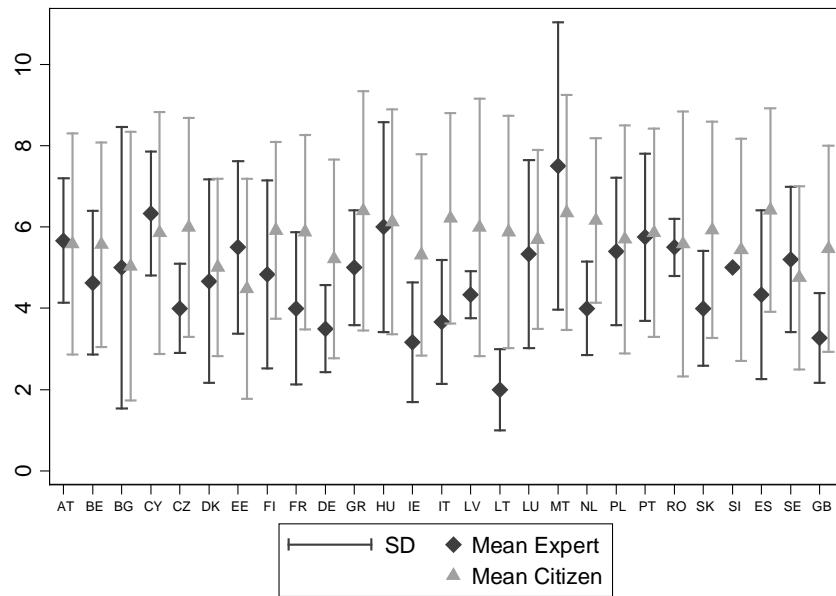
II Descriptive Summary of the Data

Variable	Mean	SD	Min	Max
Individual-Level Variables				
Closeness to Expert Evaluation	-2.76	.98	-8.13	-0.12
Political Knowledge	3.90	1.87	0	7
EU Attitudes	-0.01	0.73	-2.30	1.44
Education	3.46	1.38	0	6
Age	50.3	16.9	18	99
Female	.56	.50	0	1
Upper Service	.16	.36	0	1
Lower Service	.06	.24	0	1
Routine Non-Manual	.28	.45	0	1
Petty Bourgeois	.08	.27	0	1
Skilled	.11	.31	0	1
Non-Skilled	.16	.36	0	1
Still in Education	.04	.21	0	1
Other	.11	.31	0	1
Contextual-Level Variables				
Negative Tone in Media	0.16	0.59	-1.36	1.26
EU Party Polarization - SD	1.12	0.40	0.42	1.97
Length of Membership	22.94	20.93	2	57

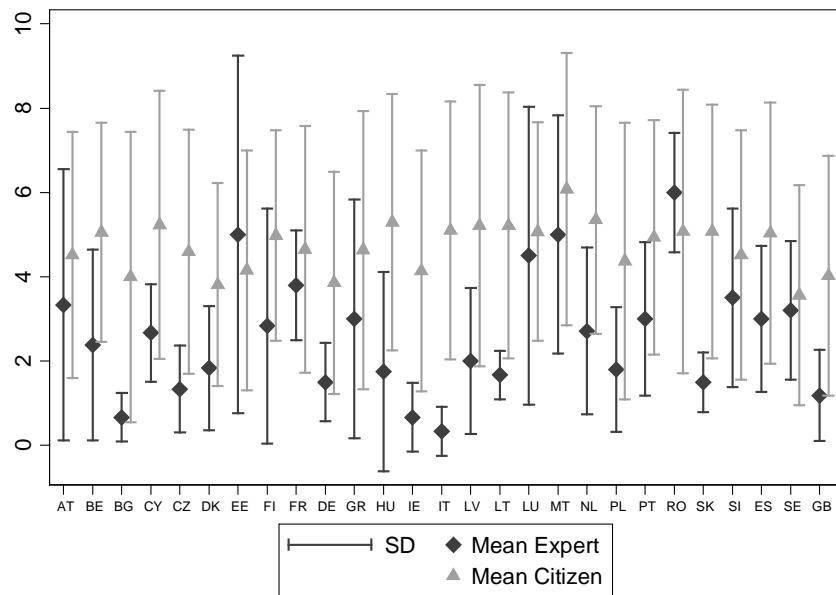
III Country-Level Descriptive Data

These figures show, for each policy area, the mean and standard deviation of expert and citizen attributions of responsibility to the EU by country.

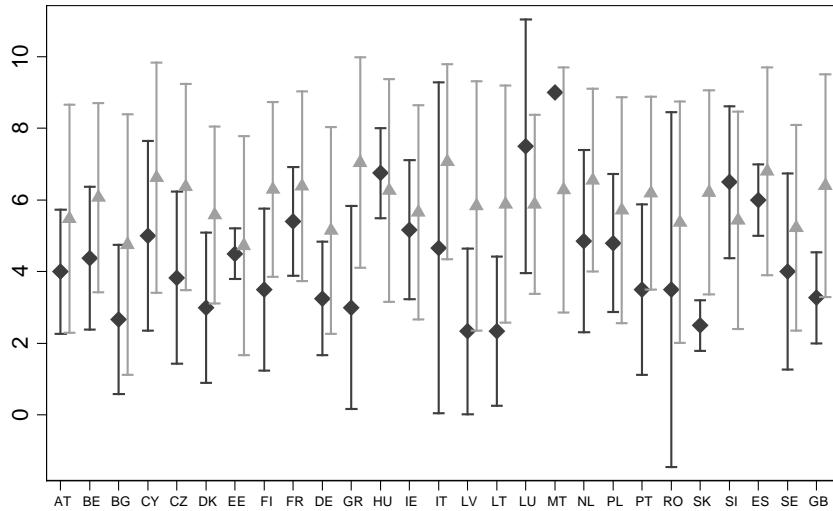
Economy



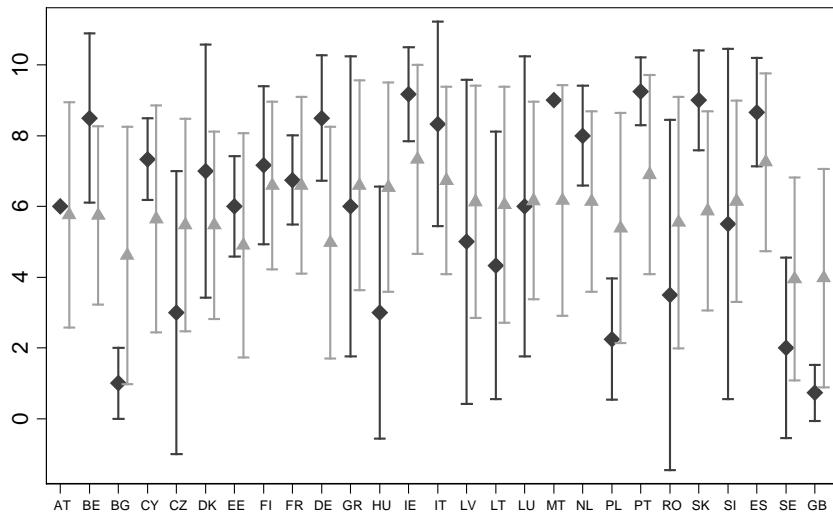
Health Care



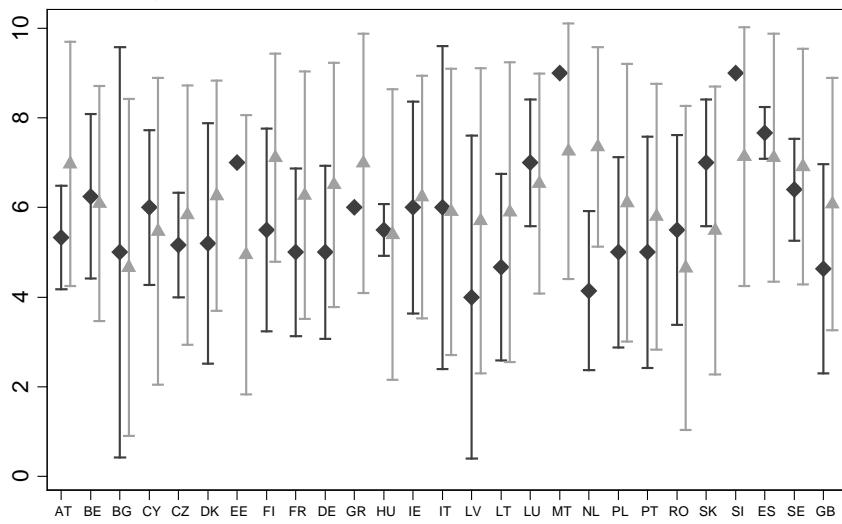
Immigration



Interest Rates



Climate Change



— SD ◆ Mean Expert
▲ Mean Citizen

IV Distance to Country Experts

Recall that the dependent variable looks at the closeness to average expert evaluation. As a robustness check, we created an alternative dependent variable by calculating the distance between an individual's attribution score and expert evaluations from his same country, rather than an overall average of all countries. For instance, a citizen from France is compared to the mean evaluation of experts from France. As the Table below shows, the results are substantively the same as in the original model (using grand mean expert evaluations). While there is between-country variation in expert and citizen judgments of responsibility, the results suggest that they are not systematic.

Multilevel Model of Correct Attributions of Responsibility

	Empty		Baseline		Full				
	Coef	SE	Coef	SE	Coef	SE			
Political Knowledge			0.09	(.00)	*	0.07	(.00)	*	
EU Attitudes			0.08	(.01)	*	0.06	(.01)	*	
EU Attitudes ²			-0.18	(.01)	*	-0.17	(.01)	*	
<i>Control Variables</i>									
Education					0.05	(.00)	*		
Age					0	(.00)	*		
Female					-0.06	(.02)	*		
<i>Occupation (Base=Upper Service)</i>									
Lower Service					-0.04	(.04)			
Petty Bourgeois					-0.09	(.03)	*		
Routine Non-Manual					-0.07	(.03)	*		
Skilled					-0.18	(.03)	*		
Non-Skilled					-0.19	(.03)	*		
Still in Education					-0.05	(.04)			
Other					-0.09	(.03)	*		
<i>Level 2 Variables</i>									
Negative Media Tone			0.11	(.09)		0.05	(.07)		
Party Polarization			0.54	(.14)	*	0.57	(.13)	*	
Intercept	-2.87	(.08)	*	-3.7	(.16)	*	-3.7	(.16)	*
Variance	0.16	(.04)		0.08	(.01)		0.08	(.01)	
Number of individuals	26236			26228			25187		
Number of contexts	28			28			28		

*p<.05 , two-tailed test

The dependent variable is closeness to **country** expert evaluation.

Source: European Election Study 2009 and Expert Survey 2010

V Attributions of Responsibility – EU Only

Recall that the dependent variable looks at the closeness to average expert evaluation combining attributions to national governments and to the EU. In the models below, the dependent variable look at closeness to expert average for the EU responsibility questions only. The model output is the same in substance and significance to those in the paper, highlighting the robustness of the results.

Multilevel Model of Correct Attributions of Responsibility: EU Only

	Null		Baseline		Full	
	Coef	SE	Coef	SE	Coef	SE
Political Knowledge			0.09	(.00) *	0.07	(.00) *
EU Attitudes			0.06	(.01) *	0.04	(.01) *
EU Attitudes^2			-0.20	(.01) *	-0.19	(.01) *
<i>Control Variables</i>						
Education					0.06	(.00) *
Age					-0.002	(.00) *
Female					-0.08	(.02) *
<i>Occupation (Base=Upper Service)</i>						
Lower Service					-0.02	(.04)
Petty Bourgeois					-0.07	(.02) *
Routine Non-Manual					-0.08	(.03) *
Skilled					-0.17	(.03) *
Non-Skilled					-0.18	(.03) *
Still in Education					-0.04	(.04)
Other					-0.06	(.03)
<i>Level 2 Variables</i>						
Negative Media Tone			0.18	(.08) *	0.13	(.07)
Party Polarization			0.28	(.12) *	0.21	(.10) *
Membership Length					0.004	(.00) *
Intercept	-2.82	(.06)	-3.42	(.14) *	-3.37	(.13) *
Variance	0.1	(.03)	0.05	(.02)	0.04	(.01)
Number of individuals	26236		26228		25187	
Number of contexts	28		28		28	

*p<.05, two-tailed test

The dependent variable is closeness to expert evaluation.

Source: European Election Study 2009 and Expert Survey 2010

VI Attributions of Responsibility: Relative Responsibility of the EU compared to National Government

In the 2009 EES Voter Survey, the questions asking respondents to assign responsibility to their national governments and the EU were asked sequentially; hence it is possible that citizens thought of their responses in terms of relative responsibility. To check of this would make a difference to our findings, we did additional analyses using relative responsibility as a dependent variable. First, we calculated the relative responsibility of the EU compared to national governments by comparing the scores given to each level of government: is it more, less, or equally responsible for each policy area. Next, this was compared to expert judgments and citizens were given one point for each “correct” answer. The distribution of this variable is below.

Score	n	%
0	2,758	10
1	4,218	16
2	7,565	28
3	7,562	28
4	4,293	16
5	673	2

We estimated this multilevel model using both linear regression and ordinal logit. As shown in the table below, the results are substantively and significantly the same as the original models, highlighting the robustness of the results.

Multilevel Model of Correct Attributions of Responsibility: Relative Responsibility of EU

	Linear Regression		Ordinal Logit Regression					
	Coef	SE	Coef	SE				
Political Knowledge	0.09	(.00)	*	0.13	(.01)	*		
EU Attitudes	0.06	(.01)	*	0.09	(.02)	*		
EU Attitudes^2	-0.03	(.01)	*	-0.05	(.02)	*		
<i>Control Variables</i>								
Education	0.07	(.01)	*	0.11	(.01)	*		
Age	-0.01	(.00)	*	-0.01	(.00)	*		
Female	-0.06	(.00)	*	-0.08	(.02)	*		
<i>Occupation (Base=Upper Service)</i>								
Lower Service	0.02	(.04)		0.02	(.05)			
Petty Bourgeois	0.00	(.02)		0.02	(.04)			
Routine Non-Manual			-0.01	(.03)		0.00	(.05)	
Skilled			-0.05	(.03)		-0.08	(.05)	
Non-Skilled			-0.04	(.03)		-0.04	(.04)	
Still in Education			-0.13	(.04)		-0.20	(.06)	*
Other			-0.11	(.03)		-0.16	(.05)	*
<i>Level 2 Variables</i>								
Negative Media Tone	0.22	(.11)	*	0.35	(.02)	*		
Party Polarization	0.38	(.17)	*	0.44	(.03)	*		
Membership Length	-0.01	(.00)		-0.01	(.00)	*		
Constant	1.78	(.20)	*					
Cut 1				-1.70	(.08)	*		
Cut 2				-0.50	(.08)	*		
Cut 3				0.85	(.08)	*		
Cut 4				2.34	(.08)	*		
Cut 5				4.61	(.09)	*		
Variance	0.12	(.03)		0.25	-(.01)			
Number of individuals	25970			25970				
Number of contexts	28			28				

*p<.05, two-tailed test

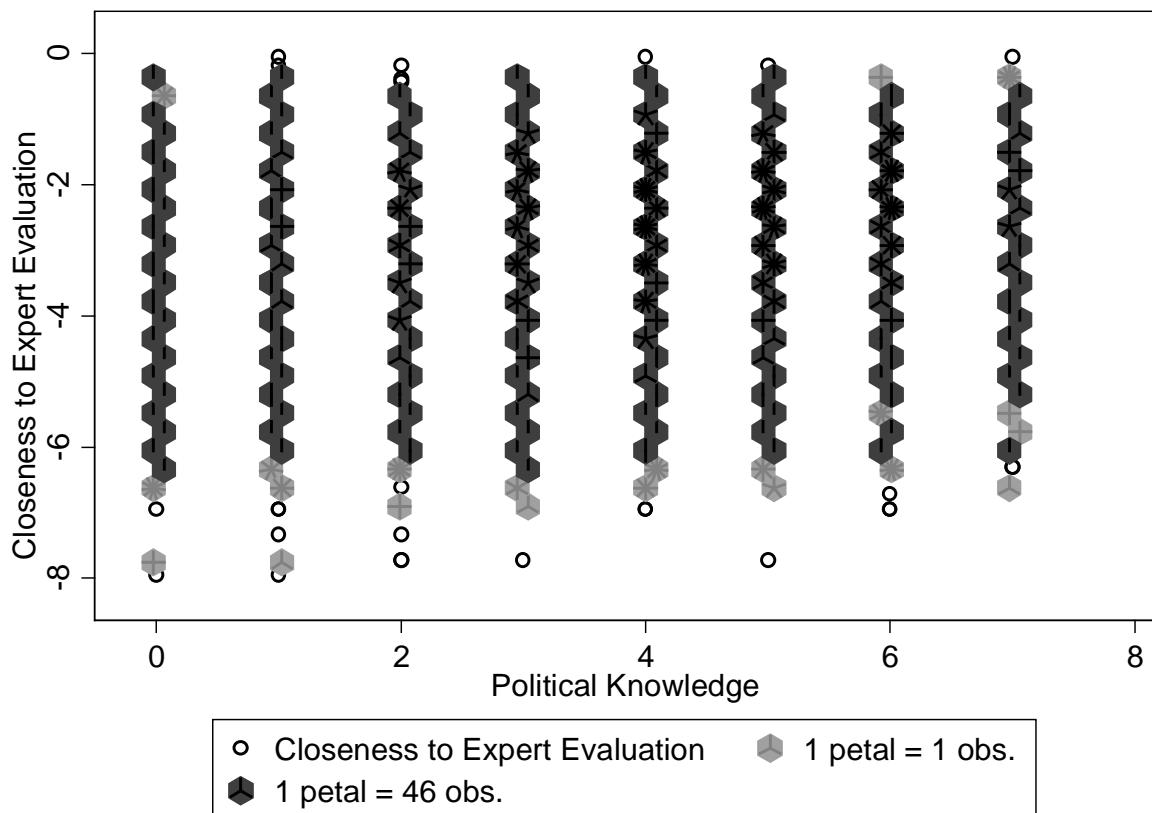
The dependent variable is the number of policy areas for which citizens correctly attributed relative responsibility.

Source: European Election Study 2009 and Expert Survey 2010

VII Bivariate relationship between dependent variable and political knowledge

Due to the large number of observations (nearly 27000), we present here a sunflower plot and box plot to help visualize the relationship between political knowledge and correct attributions of responsibility

Sunflower plot of political knowledge and dependent variable



Box plot of political knowledge groups and dependent variable

