

# The Road to Trust. A Vignette Study on the Determinants of Citizens' Trust in the European Commission\*

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## Abstract

This article analyses the determinants of citizens' trust in the European Commission. We examined four predictors of citizens' trust in political institutions: political participation, value congruence, performance outcomes and attributability of performance outcomes. We argue that these factors impact trust in the European Commission, which is a necessary precondition for making a risky investment and willingness to pay taxes, which can be understood as behavioural consequences of trust. To examine our hypotheses we have implemented a vignette study. Our analyses show that value congruence, the European Commission's perceived performance and attributability impact risky investments via trust, as expected. Political participation exerts a direct significant influence on risky investments.

**Keywords:** political trust; European Commission; value congruence; political participation; factorial survey

## Introduction

Citizens' trust in governmental institutions is faltering throughout Europe (Edelman, 2017), including the European Union (EU). Since 2009, which marked the beginning of the European sovereign debt crisis, all European institutions have been suffering a continuous decline of citizens' trust. Even Brexit, according to some commentators, was perceived as an 'incarnate trust defeat' (Oliver, 2016; Edelman, 2017). This is a worrisome development for European integration as scholars generally agree that citizens' trust in political institutions is necessary for the functioning of a political system (cf. Hetherington, 1998). Others have argued that low levels of political trust undermine citizens' willingness to make material and ideological sacrifices (Chanley, 2002; Hetherington and Husser, 2012). In line with this general literature on the level of trust in institutions and the subsequent consequences of low trust, it has been argued that, for the EU in particular, unstable trust in European institutions threatens effective governance as well as the efficient functioning of the community per se (Hix, 2013; Levi, 1998; Tyler, 2001), strengthens anti-European movements (Rudolph and Popp, 2009) and may even reduce compliance with EU regulations (Fard and Rostamy, 2007; Scholz and Lubell, 1998; Tyler, 1990; Tyler and Degoey, 1996;). But while we possess solid information about the effects of trust, or lack of thereof, our understanding of the factors

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determining trust remains somewhat limited. We address this gap in this article and hope to contribute thereby to the more general debates on current EU crises.

Many studies have examined trust in European institutions (Arnold *et al.*, 2012; Bolleyer and Smirnova, 2017; Dotti Sani and Magistro, 2016; Fischer and Hahn, 2008; Hix, 2013; Hudson, 2006; Kumlin, 2009; Muñoz *et al.*, 2011; Roth *et al.*, 2013). On closer inspection, three observations stand out: first, most empirical research focuses on the European Parliament (EP) (Dotti Sani and Magistro, 2016; Kumlin, 2009; Muñoz *et al.*, 2011) although the European Commission (EC) is generally considered the most visible body that represents Europe (Hartlapp *et al.*, 2014; Hix *et al.*, 2007; Kassim *et al.*, 2013) and due to its monopoly of legislative initiative is a powerful actor in the EU's legislative decision making (Hörl *et al.*, 2005; Tsebelis and Garrett, 2001; Wonka, 2007). Second, most studies have relied on survey data provided by the Eurobarometer (Armingeon and Ceka, 2014; Roth *et al.*, 2013) and the European Social Survey (Dotti Sani and Magistro, 2016). In these surveys, trust is usually measured as an overall attitude towards an institution using a single-item indicator. This method is inadequate for two reasons: single-item measurements do not check for validity and reliability; as trust is situation-specific and situations cannot be adequately represented in a single item (Bauer and Freitag, 2017). Third, most studies from a sociological and political science perspective have viewed trust as an attitudinal concept (Arnold *et al.*, 2012; Freitag and Ackermann, 2015; Roth *et al.*, 2013). Another branch of research, the behavioural economic literature (Gangl *et al.*, 2015b), focuses on the behavioural consequences of trust, that is, on the question of whether trust can be turned into action. As a political system can be stable only if citizens are willing to participate, it seems promising to combine these perspectives. Thus, in this article trust will be understood as a necessary precondition for potential supportive behaviour towards the EC or the EU, more generally.

In reaction to the first and second observations above, here we present newly collected data on trust related to the EC. Addressing observation number two, we used measurement instruments with valid psychometric properties to capture citizens' trust in the EC. As we collected our own data, we could – unlike most current practices – use a multi-item measurement, in line with a prominent legacy initiated by Stokes (1962). Building on Buskens and Weesie (2000) ideas, we conducted a factorial survey to analyse the cues for trust in different situational settings. Thereby, we not only offer a understanding of the factors impacting trust in the EC but also introduce an alternative measurement for trust in political institutions.

In consideration of foreseeable criticisms on synchronizing two branches of research, one mainly focusing on the attitudinal component and the other on the behavioural consequence of trust, we decided to measure both aspects in our survey. Trust is measured, as outlined above, using instruments with valid psychometric properties and the behavioural consequence is measured by a question on willingness to pay taxes.

The article is organized as follows. In the next section, definitions, theoretical assumptions and hypotheses are presented. In the research design section we explain our choice of a vignette study and provide information on the data gathered from a sample of German citizens. We then test our hypotheses by means of clustered ordinary least squares (OLS) regression models. The results are displayed and discussed in the final sections of the article.

## Theory and Hypotheses

While no one doubts the central role of trust in social theory, there is less agreement on its definition (see Bauer and Freitag, 2017; Becerra and Gupta, 1999; Newton and Zmerli, 2011). We therefore first review the concept of political trust before differentiating political trust from related concepts. Then we introduce the concept of risky investment as a behavioural consequence of trust. Finally, we develop our model and present the variables that should determine trust and risky investment.

### *Political Trust*

For us, trust characterizes a relationship between a trustor – in our case, the citizens – and a trustee, that is, the EC (Bauer and Fatke, 2014; Bauer and Freitag, 2017). In line with Levi and Stoker (2000), we see trust as a psychological state involving the willingness to be vulnerable based on positive expectations of the intentions or behaviour of another party (Mayer *et al.*, 1995; Rousseau *et al.*, 1998). This willingness to be vulnerable is closely linked to positive beliefs about the other party: ‘the initial grant of trust depends on one persons’ evaluation that another will be trustworthy’ (Levi, 1998). In the case of political trust the references of individual trust expectations are institutional actors and, in this study, the EC (see also Kotzian, 2011; McLaren, 2007). We thus distinguish trust from generalized trust (Uslaner, 2002), which describes an individual’s tendency to trust independent of a specific situation (Bauer and Freitag, 2017).

As trust describes an expectation the trustor has about the trustee, a rich conceptualization and measurement of trust needs to capture both psychological and behavioural trust. A reasonable way to do so is to examine the trustor’s evaluation of the trustee’s trustworthiness. The literature distinguishes various dimensions of the trustor’s beliefs about the trustee. For instance, Uslaner (2002) found that trust comprises belief in the goodwill of the other, which is closely linked to integrity; a term some authors (Catterberg and Moreno, 2005; Citrin and Green, 1986) have used to describe the trustee’s adherence to a set of moral principles in line with the trustor’s expectation (Mayer *et al.*, 1995). Furthermore, trust is also related to expectations of competence, performance and ability (see also Citrin and Green, 1986; Das and Teng, 2001; Dekker, 2004; Sako, 1992). Together these dimensions all form an overall judgement of trust.

### *Risky Investment as a Behavioural Consequence of Political Trust*

We agree with researchers like Bauer and Freitag (2017) and Hardin (2002) who have argued that trust describes a relationship that is located on an attitudinal rather than on a behavioural level. However, attitudinal trust alone is not enough for a political system to work. Citizens need to put their trust into action, such as by paying taxes (Gangl *et al.*, 2015b). Such interactive trust has been linked to trust particularly in the way economists measure trust (Dasgupta, 1988) and this relationship is also modelled as an important element of the wider trust literature (Mayer *et al.*, 1995). Therefore, it is also important to consider ‘risky investments’ as a behavioural consequence of trust (cf. Deutsch, 1960; Kramer, 1990).

### *What Determines Trust?*

As we have already outlined, numerous studies have identified the determinants of trust in political institutions. Yet the literature is highly fragmented due to the heterogeneous theoretical conceptualizations of trust. Here, we focus on a few factors broadly acknowledged to determine trust in the EC; namely (1) political participation, (2) value congruence, (3) performance outcome and (4) attributability of performance.

**Political Participation.** We argue that political participation promotes political trust through two main avenues. First, political participation provides citizens with some degree of control. Hence, given citizens' ability to vote on practical issues or to elect representatives, they will select more trustworthy individuals to relevant institutions and untrustworthy behaviour can be sanctioned. This strengthens trust in institutions as it gives citizens the power to control the decision-making process, at least indirectly (see Bauer and Fatke, 2014; Freitag and Ackermann, 2015; Schneider *et al.*, 1997; Slovic, 1993). Second, political participation leads to identification, as through this citizens experience how the institution values their opinions by means of public involvement and the possibilities of voice (Tyler, 1990). Doteuchi (2002), addressing the link between participation, identification and political trust, finds that direct political participation in municipal governments enables people to feel a stronger connection to their town's civil society. Finally, Cheema (2005) argued that 'the possibility of being heard' is key to trust in public institutions (see also Persson *et al.*, 2013). Moreover, Fennema and Tillie (1999) claimed that working together for the same goal leads to trust. Based on these arguments, we therefore hypothesize:

*H1* The more opportunities for an individual to exert political participation, the higher is her/his individual level of trust in the EC.

**Value Congruence.** Ideological concerns also drive trust. More precisely, the perceived congruence of the citizens' and the government's values should reflect positively on trust. This positive effect of value congruence has been extensively discussed in organization science research (Edwards and Cable, 2009; Elangovan and Shapiro, 1998; Jones and George, 1998; Siegrist *et al.*, 2000; Williams, 2001). Recently, the meaning of value congruence has also gained some momentum in political science (Anderson, 2010; Esaiasson, 2010; Kleiner and Bucker, 2014; Nelson and Garst, 2005). In this respect, people tend to appreciate those policies and candidates with which they perceive the greatest match with their values (Katz and Hass, 1988; Kinder, 1998; Nelson and Garst, 2005). Shared core values act as a clear token for a more community-based rather than exchange-oriented relationship (see also Lewicki and Bunker, 1996). Shared values thus create a community feeling (Kehoe and Ponting, 2003; Sitkin and Roth, 1993) in which those who are viewed as belonging to the same community are expected to behave in a more trustworthy manner and to deserve more trust than those who are not. On the contrary, a lack of perceived value congruence between two parties is likely to make them distrust each other (Bouckaert *et al.*, 2002; Jones and George, 1998;) Thus, our second hypothesis is as follows:

*H2* The higher an individual's perceived value congruence with the EC, the higher is her/his individual level of trust in the EC.

Performance Outcome. It is uncontested in research on political trust that people trust governments that perform well more than those that do not. This trust arises because governments signal their competence by their performance. Thus, citizens' trust (and distrust) can also be seen as a rational response to governmental and policy outcomes (Chanley, 2002; Kleiner and Bücker, 2014; March, 1989; North, 1990). In addition, better performance might also be linked to goodwill in the sense that a well-performing government is able to further citizens' well-being. Hence, a government that produces wanted outcomes will be perceived as more trustworthy than those that do not. This relationship between performance and trust has been demonstrated often, particularly when it comes to economic indicators: people evaluate performance according to their own financial status and to their perception of the state of the economy as a whole (Espinal *et al.*, 2006; Fiorina, 1978). The more successful the government in meeting people's needs – for example, economic growth rate or the sufficient provision of public goods (Alesina and Perotti, 1995; Van de Walle and Bouckaert, 2003) – the higher the people's trust in the government (Citrin and Green, 1986; Hetherington, 1998). Other studies have shown that political performance – broadly and in the sense of being effective in accomplishing tasks, such as combatting corruption (Lu, 2014; Mishler and Rose, 2001) or legislation, for example, safeguarding domestic security (Chanley, 2002) – also has a positive effect on political trust. Thus, we propose this third hypothesis:

*H3* The more positively an individual evaluates the EC's performance outcomes, the higher is her/his individual level of trust in the EC.

Attributability of Performance Outcomes. The attributability of outcomes means that citizens perceive their government as unambiguously accountable for a certain result. A clear communication of 'who is responsible for what' enables citizens to evaluate outcomes and to distinguish those aspects the government controls from those it does not. This transparency enables citizens to update their expectations quickly and thereby promotes trust (Hupe and Edwards, 2012; Lu, 2014; Tomkins, 2001; Velez *et al.*, 2008).

In addition, and if citizens can directly attribute performance outcomes, they will feel a lower risk in making themselves vulnerable towards a regulatory body as it gives them a sense of being in control over decision-making processes. Hence, the way decisions are influenced becomes more transparent as well. We consider this mechanism to be particularly important in the context of multilevel EU governance, in which it often remains unclear as to which level holds responsibility for which outcome – especially considering the common practice of so-called blame games, wherein national governments claim policy success for themselves while shifting the responsibility for disagreeable policies to the European level (Bouckaert *et al.*, 2002). Thus, we postulate this fourth hypothesis:



*H4* The clearer the attributability of the EC's performance outcomes, the higher is the individual level of trust in the EC.

### *Trust as a Necessary Condition for Risky Investments*

The trust literature assumes that trust in action, also referred to as the behavioural component of trust, is associated with a feeling of reciprocal trustworthiness between parties, mostly expressed as trust begets trust (Lewis and Weigert, 1985). This relationship between a trusting attitude and trust in action has also been explored in the literature on tax compliance or attitude to taxation (Frey and Torgler, 2007; Gangl *et al.*, 2015b; Torgler, 2003). Positive attitudes of trust towards public authorities are thought to reflect citizens' beliefs that their money is well spent, the authority is competent and the actions and rules of the authorities are adjusted to the interests of the public, that is, they are well intentioned. These beliefs are viewed as strengthening tax morale and tax compliance, as one possible way to demonstrate trust in action. As such, we understand trust as a necessary precondition for a risky investment and accordingly assume that all the mechanisms outlined above also hold true for risky investments. Thus, we hypothesize the following:

*H5* Political participation, value congruence, performance outcome and the attributability of performance outcomes are related to citizens' risky investments in the same way as trust.

Alternatively, it might be true that trust is a necessary condition for risky investments. In that case, trust will act as a mediator in a regression model. Therefore, we postulate this sixth hypothesis:

*H6* The effects of political participation, value congruence, performance outcome and the attributability of performance outcomes on citizens' risky investments are mediated by trust.

## **Research Design**

We tested our hypotheses with a factorial survey design, also known as a vignette study, which is a special form of an experimental design. Vignettes are short stories in which the independent variables (in our case political participation, value congruence, performance outcome, and the attributability of performance outcomes) are randomly varied. Vignette studies combine the advantages of experimental and survey designs. The experimental logic allow a focus on causal process by reducing problems of endogeneity, spurious correlation or omitted variables (Tomz and Weeks, 2013). The survey context offers a more naturalistic setting than laboratory experiments (Gerber and Green, 2008; Sauer *et al.*, 2009). In the following subsections we introduce the details of the vignette study design, the measurements of the variables and the sampling procedure.

### *Design of the Vignette Study and Measurement of the Independent Variables*

In vignette studies the independent variables are operationalized through hypothetical but realistic short stories that respondents are asked to evaluate. Therefore, the vignette design

allows us to capture our concept of trust, as we argue that trust is dependent on the situational setting. Vignettes can be based on a third person who acts within or witnesses the situation described in the short story. This is an example of one vignette used in our study:

Starting from the next legislative period, Mr Maier will have the legal right to vote directly for the president of the European Commission 5-year incumbency. When on vacation in Hungary, Mr Maier witnesses the violent repression by security forces of a peaceful demonstration for freedom of expression. Mr Maier considers that freedom of expression is the highest value to be protected. Thus, he favours the European Commission initiative, whereupon Hungary should be severely sanctioned and, as a last resort, banned from the European Union. Mr Maier wants to change his electricity provider. Due to a directive initiated by the European Commission he can now choose the most attractive provider among companies from all over Europe. Shopping in his local supermarket, Mr Maier wants to choose between various meat products from all over Europe. A European Commission quality seal warrants the product itself as well as of its production meet European standards.

In our study we have four independent variables hypothesized as drivers of political trust and represented in the vignettes. Each independent variable describes a condition which can be present (can be understood in experimental logic as the treatment) or not (the control). Table 1 shows the variations of the conditions for the independent variables. Thus, each independent variable can take on two values to be varied in the vignette, resulting in a  $2 \times 2 \times 2 \times 2$  experimental setting. Hence, the total number of all possible vignettes is 16. Three of the 16 vignettes were randomly assigned and presented to each participant of the study. Results from our cognitive and technical pretests suggested that these three vignettes were the most effective way to avoid satisficing and comprehension problems for the respondents.

### *Measurement of the Dependent Variables*

The dependent variables of goodwill and competence trust as well as the behavioural consequence of trust were measured using the following scales.

#### *Political Trust*

Political trust in the EC was measured as a decomposed index of (1) goodwill trust and (2) competence trust (Mayer and Davis, 1999, see also Bøggild [2016] for a distinction between moral and pragmatic trust). In line with the work of Searle *et al.* (2011), all items were adapted to the institutional level and translated into German.<sup>1</sup> Using the scale of Searle *et al.* (2011) is justified for three reasons: content validity, criterion validity and reliability. In terms of content validity, a close inspection of the items presented in the supporting information online mirrors the core of our trust definition. Accordingly, trust is conceptualized as a citizen's willingness to be vulnerable based on their evaluation of the EC's trustworthiness. Trustworthiness expectations, in turn, become manifest in citizens' positive expectations in the EC's ability (that is, competence and performance) and goodwill (that is, benevolence and integrity perceptions). A sample item for ability reads: 'The European Commission is known to be successful at the things it tries to

<sup>1</sup>The complete scale is available in the supporting information online.

Table 1: Overview of variations in the vignettes

<i>Independent variable</i>	<i>Verbal representation in the vignette</i>	<i>Reasoning</i>	<i>Experimental condition</i>	<i>Numerical expression</i>
Political participation (H1)	Starting from the next legislative period, Mr Maier will have <i>the legal right to vote directly for</i> the president of the EC 5-year incumbency. Mr Maier does not have the legal <i>right to vote</i> for the president of the EC. Instead the president is nominated by non-public procedures, as hitherto.	Institutionalized form of political participation: general right to vote (Hix, 2013)	Treatment = right to vote	1
Value congruence (H2)	On vacation in Hungary Mr Maier witnesses the violent repression by security forces of a peaceful demonstration for freedom of expression. Mr Maier considers freedom of expression to be highest value to be protected. Thus <i>he favours the EC initiative</i> whereupon Hungary should be severely sanctioned and, as a last resort, banned from the EU. On vacation in Hungary Mr Maier witnesses the violent repression by security forces of a peaceful demonstration for freedom of expression. Mr Maier considers freedom of expression as highest value to be protected. The <i>EC decided not to take the initiative</i> to change the current status quo in Hungary.	Securing citizens' freedom of expression as a basic EU value: trade-off scenario between the EC's sanctioning measures for a country violating citizens' freedom of expression versus EC's decision to follow the principle of non-interference in a country's internal affairs (see Sitkin and Roth, 1993)	Treatment = experience of value congruence  Control = no experience of value congruence	1  0
Performance outcome (H3)	Mr Maier wants to change his electricity provider. Due to a directive initiated by the EC, <i>he can now choose the most attractive provider from companies all over Europe</i> . Mr Maier wants to change his electricity provider. He can <i>choose only among the four big German energy providers</i> , thus his	EU internal market regulation: citizens' experience of economic benefits due to EC's performance (see Hix and Høyland, 2011)	Treatment = economic benefits  Control = no economic benefits	1  0



Table 1: (Continued)

<i>Independent variable</i>	<i>Verbal representation in the vignette</i>	<i>Reasoning</i>	<i>Experimental condition</i>	<i>Numerical expression</i>
Attributability of the performance outcome (H4)	<p>freedom of choice is limited. Furthermore he has only a limited ability to counter price rises or shifts in supply.</p> <p>Shopping in his local supermarket, Mr Meier wants to choose between various meat products from all over Europe. <i>A EC quality seal warrants European standards</i> of the product itself as well as of its production.</p> <p>Shopping in his local supermarket, Mr Meier wants to choose between various meat products from all over Europe. Although he knows that food safety is ensured by European regulation, <i>this is not visible on the product itself.</i></p>	<p>Clear attributability of EC's internal market regulation: EC takes responsibility for food safety via a visible European Commission food quality tag on meat products ( see Bouckaert <i>et al.</i>, 2002)</p>	<p>Treatment = clear attributability of EC's performance</p> <p>Control = no clear attributability of EC's performance</p>	<p>1</p> <p>0</p>

**Note:** Italics used to emphasize treatment and control condition for the respondent

do'. A sample item for goodwill-based trustworthiness expectations is: 'My needs and desires are very important to the European Commission'. In terms of criterion validity, we refer to the work of Dietz and den Hartog (2006), who reviewed 14 established measures of trust. The results of their review show that trustworthiness beliefs (as in our case) are paramount for the explanation of trust-related behaviour. Moreover, they incorporate ability and goodwill intentions in the same measure in order to avoid serious measurement error because current psychometric trust measurement research lacks comprehensive insights on which contingency factors matter most for which trustworthiness beliefs. Finally, to examine whether the two dimensions of goodwill and competence trust were identifiable, we performed a principal axis analysis (promax rotation) as well as structural equation modelling. Our confirmatory factor analysis suggested that a one-factor model of political trust ( $\chi^2 = 150.48$  ( $P > \chi^2 = 0.000$ ); root mean square error of approximation: 0.144; CFI: 0.97, TLI: 0.95) is to be preferred over a two-factor model of goodwill and competence-based trust (Pearson's correlation:  $r = 0.93$ ). Cronbach's alpha of the whole political trust scale ( $\alpha = 0.95$ ) was satisfactory. The measurement model is presented in the online.

#### *Risky Investment*

We operationalized the trust-based behaviour of risky investment with a survey item asking for the percentage of overall taxes that citizens were willing to direct to the EC (instead of devoting the same amount to national taxes). We chose this indicator because tax morale has often been linked to trust-based positive expectations of governments (Scholz and Lubell, 1998). More precisely, we followed the idea of the 'slippery slope framework' rationale (Kirchler *et al.*, 2008), which is explicit in the positive relationship between trust as the psychological willingness to be vulnerable and trust-based risky behaviour (that is, tax compliance, see Gangl *et al.*, 2015a; Gangl *et al.*, 2015b). In addition, taxes arguably do not depict a low-cost situation.

A comprehensive overview as well as the full list of survey items of our political trust measures are provided in the supporting information online as are an overview on the control variables and the reasoning behind their selection.

#### *Sampling*

Data were collected from 25 February to 10 March 2013.<sup>2</sup> Thus, data collection took place shortly after the enforcement of the European citizens' initiative, which allowed citizens to participate directly in the development of EU policies. However, the most prominent aspect of EU politics shortly before and during the time of the survey was the Eurozone crisis. For example, the European stability mechanism and the European fiscal pact had been established shortly before the survey. Thus, the data collection took place when the EU was facing challenges but took action to address them.

The data were collected from SoSci Survey Panel Munich, which is an online access panel. Only German citizens were surveyed. Our gross sample was  $n = 617$ ; the net sample consisted of 540 interviewees. Excluding all item and unit non-responses, the answers of 256 respondents remained. As mentioned above, we randomly presented three

<sup>2</sup>The data are published on Harvard dataverse.

vignettes to each study participant. Thus, we were able to analyse  $n = 256 \times 3 = 768$  factorial cases, which were treated as the units of analysis.

Descriptive statistics of our sample (see Table 2) include the respondents' age (in decades), political orientation, gender, educational level and their German Federal State of residence. Compared with the national distributions of the latter characteristics from the Federal Statistical Office of Germany, our sample consisted predominantly of young cohorts (25–39 years), left-oriented voters (the German Green Party, Die Linke) as well as a disproportionate level of people with higher education levels (BA and MA degrees). In terms of their gender and place of residence the distribution of the sample corresponds to the data in the Federal Statistical Office of Germany.

### *Analysis*

We employed an OLS regression with clustered standard errors (SE). Clustered SEs are a parsimonious way to control for the fact that each respondent answered three vignettes, which violates the OLS assumption of the independence of the observations (see Dunning, 2012). Alternatively, multilevel mixed effects, that is, linear regression models consisting of varying intercepts and slopes, could be applied (Auspurg and Hinz, 2015). However, our data did not allow for estimating varying intercepts and slopes; thus, we followed the approach of Mäs *et al.* (2005), who supported models with clustered SEs on the context level (in our case, the respondent level) as a suitable and efficient alternative. As it could be argued that the scaling of the risky investment variable is not suitable for OLS regressions, we also estimated ordered logit models with clustered SEs.<sup>3</sup>

### **Results**

The results of the regression analyses are displayed in Table 3. Model 1 shows the regression with the dependent variable (trust), the independent variables (political participation, value congruence, performance outcome and attributability) and all control variables.<sup>4</sup> In this model, value congruence, performance outcome and attributability exert a strong, significant and positive impact on trust. This means that if citizens perceive a fit of values between the EC and themselves their trust into the EC will increase by 0.53 on a scale ranging from 1 to 5. If performance outcome can be observed trust increases by 0.21, and if it is attributable to the EC it is 0.29. Thus H2, H3 and H4 can be confirmed, whereby the effect of value congruence exerts the strongest effect. The effect of political participation is also positive but not significant. Thus, H1 cannot be confirmed. Hence, the right to vote does not seem to impact on the citizens' trust beliefs towards the EC. Model 2 presents the same regression but the dependent variable is risky investment instead of trust.<sup>5</sup> In this model, political participation is found to have a significant positive effect on risky investment, that is, the behavioural consequence of trust: if citizens have the right to vote their willingness to pay taxes to the EC increases by 0.19 on a four-point-scale value congruence and the attributability of the performance outcome once again have a

<sup>3</sup>The results of these additional analyses are presented in the supporting information online.

<sup>4</sup>Model 5 is the same model but without control variables. It shows the same effects with one exception: political participation exerts a significant effect without control.

<sup>5</sup>Model 6 is the same model however without control variables. It shows the same effects as the models with controls.

Table 2: Descriptive statistics and correlation matrix

	<i>n</i>	<i>Mean</i>	<i>sD</i>	<i>Min</i>	<i>Max</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	
1. Trust	762	2.44	0.98	0	5	1															
2. Risky investment	742	2.18	0.88	1	4	0.52	1														
3. Political participation	768	0.48	0.49	0	1	0.07	0.14	1													
4. Value congruence	768	0.48	0.49	0	1	0.31	0.20	0.01	1												
5. Performance outcome	768	0.49	0.5	0	1	0.12	0.08	0.05	0.02	1											
6. Attributability	768	0.49	0.49	0	1	0.19	0.12	0.03	0.01	0.01	1										
7. Gender (1 = male)	759	0.48	0.5	0	1	-0.01	-0.03	0.02	0.05	0.04	-0.01	1									
8. Age (in decades)	768	1.98	1.50	0.1	5.7	-0.17	-0.15	-0.06	-0.01	0.01	-0.11	0.25	1								
9. Education	756	0.86	0.34	0	1	0.06	0.03	0.01	0.03	0.03	0.01	-0.05	-0.30	1							
10. Political orientation	597	0.38	0.48	0	1	0.02	-0.01	-0.02	-0.03	-0.06	-0.03	-0.04	-0.09	-0.08	1						
11. Residence	735	0.56	0.49	0	1	-0.05	-0.09	0.01	-0.01	-0.02	-0.02	0.02	0.06	-0.07	-0.12	1					
12. Disposition to trust	768	4.43	1.04	1.33	7	0.18	0.11	0.05	0.03	0.04	0.03	0.01	0.04	0.13	-0.10	0.12	1				
13. Interest in EU	762	0.66	0.47	0	1	0.01	-0.08	-0.08	-0.07	-0.13	0.02	-0.08	-0.04	0.14	0.08	0.06	-0.11	1			
14. Support	744	0.97	0.29	0	1	0.23	0.16	0.04	-0.01	0.04	0.07	-0.12	-0.09	-0.04	0.10	0.05	0.09	-0.07	1		
15. Knowledge	768	3.71	1.05	1	5	-0.07	0.03	-0.02	0.01	0.06	0.02	0.12	0.09	0.05	-0.18	0.11	0.10	-0.14	0.01	1	

Table 3: Results of regression analyses

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Trust</i>	<i>Risky investment</i>	<i>Risky investment</i>	<i>Risky investment</i>	<i>Trust</i>	<i>Risky investment</i>
Political participation	0.07 (0.06)	0.19*** (0.07)		0.16** (0.06)	0.12** (0.06)	0.19*** (0.06)
Value congruence	0.53*** (0.08)	0.32*** (0.07)		0.08 (0.07)	0.60*** (0.07)	0.40*** (0.07)
Performance outcome	0.21*** (0.08)	0.10 (0.07)		0.01 (0.06)	0.17** (0.07)	0.07 (0.06)
Attributability	0.29*** (0.07)	0.15** (0.06)		0.02 (0.06)	0.34*** (0.06)	0.20*** (0.05)
Trust			0.48*** (0.05)	0.45*** (0.05)		
Gender (1 = male)	0.12 (0.10)	-0.00 (0.11)	-0.03 (0.10)	-0.04 (0.10)		
Age (in decades)	-0.11*** (0.04)	-0.08** (0.04)	-0.04 (0.03)	-0.04 (0.03)		
Education	-0.06 (0.14)	-0.08 (0.15)	-0.06 (0.12)	-0.07 (0.13)		
Political orientation	0.03 (0.10)	-0.03 (0.11)	-0.04 (0.09)	-0.03 (0.09)		
Residence	-0.03 (0.10)	-0.15 (0.11)	-0.13 (0.10)	-0.13 (0.10)		
Disposition to trust	0.11** (0.05)	0.06 (0.05)	-0.00 (0.04)	-0.00 (0.04)		
Interest in EU	0.13 (0.11)	-0.04 (0.12)	-0.12 (0.10)	-0.09 (0.10)		
support	0.76*** (0.22)	0.47* (0.27)	0.11 (0.27)	0.11 (0.27)		
Knowledge	-0.05 (0.05)	0.03 (0.05)	0.06 (0.04)	0.06 (0.05)		
Constant	1.08*** (0.38)	1.39*** (0.44)	1.03** (0.43)	0.94** (0.42)	1.86*** (0.07)	1.76*** (0.07)
Observations	582	565	565	565	762	742
R <sup>2</sup>	0.22	0.13	0.29	0.30	0.14	0.08



significant positive effect whereas performance outcome is no longer significant. Thus, H5 can only be partially confirmed.

To obtain a better understanding of whether trust mediates the effect of value congruence, performance and attributability on risky investment, models 3 and 4 present regression models with risky investment as the dependent variable and trust as the independent variable. In both models trust as a belief has a significant and positive effect on risky investment. In Model 4, both value congruence and attributability are no longer significant, in contrast to Model 2, in which political participation remains significant and positive under the control of trust. Hence, H6 can be partially confirmed. The effects of value congruence, performance outcome and attributability are all mediated by trust (as a belief) while political participation has a direct influence only on risky investment in a trust context.

## Conclusion

The aim of our study was to investigate which factors drive citizens to trust the EC and then to determine whether trust leads to the behavioural consequence of risky investment, that is the willingness to pay taxes. Therefore, we identified four determinants of political trust from the literature and derived hypotheses accordingly. To test our hypotheses we conducted a vignette study. We found that trust in the EC is strongly related to perceptions of value congruence, performance outcomes and the attributability of such outcomes to the institutional actor. These trust beliefs are also related to what we have termed risky investments, in the form of tax payments directed towards the EC. Furthermore, we demonstrate that political participation also matters, but unlike some findings in the literature, participation was not linked to trust beliefs. Instead, it had a direct impact on risky investments. Finally, our findings also point to the relevance of individual level factors, such as citizens' personal disposition to trust.

Future research should aim at replicating our findings by using larger, ideally cross-national samples, in order to reduce the potential impact of national characteristics or bias produced by sampling and to enhance the generalizability of our results. The strength of this article is the modulation of causality and our results point to the importance of one strong determinant of political trust: value congruence. We show that citizens' trust is strongest when they find value congruence between their own beliefs and the actions of the EC. This finding is in line with the broader trust literature, which has emphasized that value congruence is of relevance in situations in which specific one-to-one relationship information is absent – that is, no information is available on whether the trustor 'likes me personally' (Mayer *et al.*, 1995). In addition, the emerging distrust literature has argued that low trust as well as the emergence of distrust are linked to perceptions of the incongruence of core values (Bijlsma-Frankema *et al.*, 2015). Trust levels towards the EC are modest or even near the distrust threshold.

Furthermore, we found that participation was significant for risk-related investments in relationships, that is, for a stronger exposure towards the EC. This finding is partially reflected in the literature. For example, Mayer *et al.* (1995) argued that trust beliefs may translate into risky investments if the level of risk at stake matches the level of trust expectations. Hence, participation – electing the president of the EC, in our

case – can also be understood as a risk mitigation instrument that directly contributes to trust in action rather than in a mediated fashion.

Against the backdrop of recent academic but real-world changes, our results bear implications for both theory and practice. The strong impact of value congruence shows that this variable must be accounted for in a much more prominent way in future research on political trust. For us, this underlines the fact that the EC is widely perceived as the guardian and promoter of the EU as a value-based community and that it needs to act more clearly to guard and promote shared core values. Clearly, citizens seem to appreciate the value-based actions of the EC.

It is debatable, however, whether this finding can be transferred to other EU organs such as EP or national governments. For the EP, control functions might matter more than value congruence; a translation to national governments, however, does not seem to be implausible *ex ante*. Possibly, even stronger results may be reached when applying the same design to national executives.

Concerning political participation, our results strongly advocate a more robust democratization of the EU polity. It is interesting to note that political participation seems to affect political trust, as hypothesized by a number of scholars (Hetherington, 2005; Hix *et al.*, 2007). However, this only holds with respect to the behavioural consequences of trust. Thus, our results also support recent policy initiatives on the installation of a European tax union as a token for an advancing European integration. Our results show that citizens are willing to pay taxes to a superior, supranational authority as long as the pivotal actor grants them the possibility of political involvement. Hence, our results support the idea that civic controls foster trust so that citizens turn out to be convinced accomplices rather than passive consumers. We conclude, therefore, that citizens are more willing to become vulnerable if they may exert stronger control over and influence on their representatives (Tyler, 2001). Thus, trust depends on both citizens and the EC. However, further changes demand that citizens and EU officials remain able and willing to tango.

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**Appendix I:** Measurements of trust expectations, risky investment and an example vignette

**Appendix II:** Control variables

**Appendix III:** Additional regression models

**Appendix IV:** Vignette narratives and random drawing