# THE INTERACTION OF CITIZEN'S TRUST BETWEEN THE EUROPEAN COMMISSION AND NATIONAL POLITICS DURING THE CRISIS

# Christos Kallandranis<sup>\*</sup>

\* Regent's University London, the U.K.

Contact details: Department of Accounting, Finance & Economics, Regent's University London, the U.K.



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#### Abstract

Trust is considered a cornerstone in binding the society, the economy and the politics altogether. The rationale of trust takes into account the importance of both individual factors and social and institutional structures. However, since the onset of the crisis, net trust in institutions has generally declined. The literature has shown that economic and other macro-variables matter for trust in institutions along with individual characteristics. However, there is no systematic evidence on the impact of credit ratings and bailouts. Hence by employing a probit model and using the Eurobarometer survey from 2000 to 2014, this study focuses on rating episodes and bailouts while controlling for individual-level influences. Along with socio-demographic factors and economic conditions, rating episodes and bail-out plans are seen to reduce the tendency of people to trust.

**Keywords:** EU Commission, National Government, Financial Crisis, Trust, Survey, Probit Model

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# 1. INTRODUCTION

A growing number of studies cite trust as the main positive component related to many outcomes like democracy, economic development and that of social capital (Putnam, 2000). But what is meant by 'trust' in institutions, and why does it matter? What is the driving force that makes individuals to place their trust in political or financial institutions? It is generally accepted that trust is an important factor for creating and stabilizing support for political institutions. In contrast, lack of trust in institutions denotes their failure to function according to the official standards, leading to a weak-state society relation (Citrin & Muste, 1999).

In this respect, Arnold et al. (2012) claim that trust in political institutions is a key element in representative democracies and the association of trust with a set of public and/or financial institutions becomes a vital substance for their stability. Putnam (2000) argues that the social capital of a community is crucial since that reflects voluntary cooperation among members, minimize parasitic behaviour, and assists collective action. A lot of research was conducted following Putnam's seminal work focusing especially on causal relationship between the individual-level social capital and the amount of trust people have in their institutions (Brehm & Rahn, 1997; Rothstein & Uslaner, 2005; Zmerli & Newton, 2008, etc.). There is also a stream of literature recognizing the effect of reasonableness in the tendency to trust arguing that trust is rationally grounded, and individuals based on their knowledge and experience form their attitude towards institutions (Evans & Whitefield, 1995; Hudson, 2006; Hardin, 2006, etc.).

However, our view is not monothematic and goes beyond peoples' attitude. It is important to consider also the larger social and institutional structures in which individuals' trust is rooted. From all the above, it is clear that the causality of generalized trust and institutional trust is still a topic of debate. In addition to that, this debate becomes even more emphatic when dealing with extreme economic conditions and the roots of trust are actually questioned. In this respect since the onset of the crisis trust in both national and political European institutions has eroded substantially (Roth, 2009, 2011). The followed



austerity policies that led many nations to frugality have widened inequalities not only between people but also between countries, with increasing differences in quality of life among EU citizens. EU trust levels are now slowly recovering after hitting a historical low of 31% in Spring 2012 highlighting the close relationship between peoples' distrust when they struggle financially. Within this framework, the recent financial crisis, which turned into a sovereign debt crisis in many European countries is one element to consider when talking about the support of EU citizens to the European project. It is apparent that with the expansion of the European Union (EU) jurisdictional authority over a wide range of policy areas, and the on-going enlargement such low levels of distrust puts under question the EU's democratic legitimization (Levi & Stoker, 2000), but it may also affect the Union's cohesion, as demonstrated by the British vote to leave the EU.

However, trust in the EU is not independent of the trust in national institutions. In fact, there is a number of studies that show that support for the EU is determined to a great extent by support for national institutions (Sanchez-Cuenca, 2000: Rohrschneider, 2002; Brinegar & Jolly, 2005; Scheuer & van der Brug, 2007; Leconte, 2010, etc.). Biernat (2007) finds that trust in national governments and satisfaction with national systemic performance reinforces trust in the EU. Armingeon and Ceka (2014) argue that "the most significant determinant of trust and support for the EU remains the level of trust in national governments. In other words, support for the EU is derived from evaluations of national politics and policy, which Europeans know far better than the remote political system of the EU" (p. 83). Anderson (1998) went even further by arguing that trust in the EU is a proxy for trust in national governments. Hence, by testing and comparing these two institutions will probably grasp the logic of trust in both the EU and at the national level and how do these two interact?

The purpose of this study is then twofold. First, is to shed light on the debate of trust for a homogeneous number of democratic countries in the EU. In this context, by using Eurobarometer we investigate not only the importance of the drivers of social trust but also the effect of overall economic conditions from 2000 to 2014 for all the 28 EU member states. This is followed by an examination of the marginal effects on trust when the sample is dichotomized into countries that are following an economic adjustment programme and those that have experienced a downgrade at least once during the period under analysis.

Secondly to provide evidence that tight economic conditions serve as a hastening mechanism of distrust in institutions. In particular, we test the interaction between trust in European institutions and more familiar (national) institutions. Our focal point is to comment on whether trust in national institutions turns out to become a driving factor of (dis)trust the EU institutions. On the individual level, citizens who trust their own government also trust the EU more than those who distrust their government.

According to our findings, the sociodemographic factors along with the traditional economic factors follow the results of the relevant theory. Based on the existence of social trust there is strong evidence that the effects of the financial crisis exert an adverse impact on people's tendency to trust in institutions. In particular, a downgrade episode significantly increases the probability of mistrust, especially for the national governments. Additionally, once a country follows a bail-out plan the average probability of distrust increases for the institution that is held more accountable in people's eyes, the European Commission.

The paper proceeds in four stages. First, we present a short review of the relevant empirical findings. Second, we provide the data and methodology in developing our empirical framework. Next, we provide the empirical results and finally, the paper concludes by highlighting the broader implications of our findings.

#### **2. LITERATURE REVIEW**

Especially for EU citizens, modelling people's attitudes towards trust has been done in terms of an interaction between European and national institutions. Indeed, previous works exploring the determinants of trust have identified associations between trust in institutions at the national and EU level, especially when the economic factor per se is taken under consideration. Hooghe and Marks (2005) confirm the importance of economic factors in determining citizens' trust in the EU. Biernat (2007) finds that trust in national governments and satisfaction with national systemic performance reinforces trust in the EU. Roth (2009) seeks to document the reaction to the crisis in terms of people's systemic trust and finds a significant fall in confidence of European citizens in the EU (European Commission, institutions European Parliament, European Central Bank (ECB)) when at the same time confidence levels in national governments, although still lower than in EU institutions, are rising. In a follow-up study, Gros and Roth (2010) find a significant decline in the levels of trust in the ECB after the crisis and argue that the fall in GDP growth seems to be the triggering factor. They note that before the crisis, growth does not seem to be a determining factor. In the context of the effect on people's confidence in the economy and in particular in the financial sector and its effect on the trust levels in the country's institutions, Mosch and Prast (2008) find a strong link for the case of the Netherlands.

In this line, Munoz et al. (2011) although they find that in general there is a positive association between the confidence in national parliaments and the European parliament when the performance of national institutions increases and in countries with well-performing and highly trusted institutions, trust in the European Parliament tends to weaken. This approach asserts that citizens are in fact more likely to have higher approval of the EU when their trust in their national institutions is low, and vice versa.

Roth et al. (2013) reveal an interesting perspective when the effects of the crisis on national and European institutional trust are examined. They find that the overall negative trends are driven by the Eurozone and in particular, although the crisis resulted in a moderate decline in trust for 8 European countries, they observe a significant decline for the periphery (Greece, Spain, Portugal, and Ireland). They conclude that unemployment is a major factor in the trust building relationship, and deterioration in labor market conditions have a significant negative effect in institutional trust at both the national and the European levels. In this line Drakos et al. (2017), controlling for several sociodemographic factors and macroeconomic conditions, find a substantial negative impact on trust in ECB for countries experiencing credit rating events and participating in economic adjustment programmes.

#### 3. DATA ISSUES AND METHODOLOGY

Trust in European Institutions is based on data from the Eurobarometer surveys1 which are run twice a year on behalf of the European Commission for all European Union (EU) member states. The surveys cover a rich set of demographic characteristics and analyse how Europeans perceive their political institutions, both national and European. We build a pooled dataset comprising of 29 cross sections, sampled semi-annually during the time span of 2000 until the first half of 2014. With 28 countries constituting the European Union, 18 of them are Eurozone members, and observed for 14 years, we obtain a total number of observations of around 460,000. Country-wise the dataset continuously covers Austria, Belgium, Denmark, Finland, France, Germany, Greece, Netherlands, Ireland, Italy, Spain and Portugal, Sweden, United Kingdom. As the enlargement process was taking place the total number of countries reached 28.

Specifically, the survey asks participants the following question:

"I would like to ask you a question about how much trust you have in certain institutions. For each of the following institution, please tell me if you tend to trust it or tend not to trust it?

There are two dependent variables to measure institutional trust, namely, trust in the European Commission and trust in one domestic political institution the National Government. Respondents are given the choice between the three possible answers: "1, Tend to trust", "2, Tend not to trust", and "3, Do not know".

In order to have an operational and uniform measurement, we recode the raw responses in the following manner. Let (i), represent type of institution and (c), and (t), country in which the survey was conducted and time period respectively. Then we generate a set of new variables (*Trust*) that attain the value of 1 if the *i* institution is trusted and zero otherwise. Since the propensity to trust is either negative or positive, we exclude the DK response. Table 1B (see Appendix B) reports the unconditional mean responses for each institution by country.

There are various reasons for the selection of these institutions and why it is important to closely monitor citizens' trust in these two different institutions. We include the European Commission as a dependent variable, which is the institution that represents the interests of the EU as a whole and is the EU's executive body. It proposes new legislation to the European Parliament and the Council of the European Union, and it ensures that EU law is correctly applied by member countries. EU Commission is neither elected directly nor elected by the EU parliament, hence its credibility is of great importance for a well-functioning group of independent states. Regarding national institutions, we introduce trust in national government as a dependent variable in our estimation process. Conceptually, trust in government reflects individuals' attitudes toward government based on perceptions of how well elected officials meet personal expectations. Citizens' trust in government is necessary for political leaders to make necessary decisions in a representative democracy. In the case that distrustful citizens withdraw support for government become less willing to comply with political decisions, putting the legitimacy of elected government into question (Easton, 1965, 1975). Following the literature, it is well recognised that the most significant determinant of trust and support for the EU still is the level of trust in national governments. Any kind of support for the EU is derived from national politics which Europeans feel more familiar than the remote political system of the EU.

The dependent variables (Trust) that we are trying to explain are discrete binary variables and must be modeled by a Probit model. The probit model assumes that the observed Bernoulli "success" or "failure" results from an underlying, but not directly observable, normally distributed random variable. Denote the underlying, unobservable or latent random variable by L and suppose that L is associated with a vector of predictor variables x according to the linear specification as follows:

$$L_{i,t}^* = \mathbf{x}_{i,t}' \boldsymbol{\beta} + c_i + e_{i,t} \tag{1}$$

where  $c_i$  is the unobserved heterogeneity and  $e_{i,t} \mid \mathbf{x} \sim N(0,1)$ . The vector of covariates  $\mathbf{x}_{i,t}$  is assumed for the time being to include country-specific factors, while  $\beta$  denotes a vector of constant parameters. Covariates include:

First, socio-demographic characteristics as marital status, age education, age, and respondent's occupation to differentiate respondents relative to what they require by institutions in different phases of their lives. The fact that people experience differences during their life cycle such as aged and educated people may find it easy to tackle and deal easily with public institutions because they may get greater access to these institutions. Alternatively, educated citizens may be more aware and exposed to information about the functioning of government in other countries and hence may be more critical than others about the way public institutions their own countries. function in There are controversial results regarding the association between, education and occupational status on political trust. High levels of formal education have been systematically found to be positively associated with social and political trust (Brehm & Rahn 1997; Deary, 2008), while others have found negative (Döring, 1992). Finally, it is expected that marital status may also impact upon life satisfaction (Diener et al., 2000). Individuals who are satisfied with their lives and are committed to a relationship develop certain public attitudes and are less hesitant to place their trust in others.

Secondly, in order to account for the countrylevel context, our study includes a number of aggregate predictors. We include in our model both the variables of national real GDP growth (GDP

<sup>&</sup>lt;sup>1</sup> The Standard Opinion & Social Eurobarometer measures the public opinion in the European Union. This survey is conducted by TNS opinion & social at the request of the European Commission and Directorate-General for Communication. The survey includes among others topics such as the European political situation and the economy.

Growth) and the national unemployment rate (Unemployment Rate) that are meant to reflect a country's macroeconomic state (Inglehart, 1997; Hudson, 2006). Both regressors might serve as potentially having an important interaction effect with trust in domestic and EU institutions. There is a reason to believe that sharp movements in crucial macroeconomic indicators and especially during the economic crisis can turn political institutions to be held fully accountable in the public eyes. In this line, there is evidence that higher national income benefits the trust in EU institutions (Fischer & Hahn, 2008), while employed people can trust more than the unemployed ones the public institutions (Hudson, 2006). Data on macroeconomic variables are obtained from Eurostat from 2000 to 2014.

Third, despite the fact that the overall economic cycle captures a part of the financial distress, the extreme macroeconomic conditions during the financial crisis require to add another set of explanatory variables. The fragility of European economies and the downturn of main economic indicators created tighter financial conditions something that is reflected in sovereign credit ratings. Hence, the increased state's cost of borrowing served as an accelerating mechanism of the damaged economies. Inevitably, national governments were forced to implement certain economic measures, something that within this set up can drastically affect people's level of trust in both national and European institutions.

Data on sovereign credit ratings are obtained by Moody's. The ratings range from Aaa (highest credit quality possible) to C (default). In order to facilitate the analysis, we track each country's rating announcements for the period 2000-2014. Then we assign to each one country the number of credit rating announcements throughout this period. The more negative credit events (downgrades) the more vulnerable for this country is the environment, so more tight measures should be taken. Table 3 in Appendix B contains the frequency of upgrades and downgrades by country from 2000 to 2014. During the sample period, only 9 out of 28 member countries never experienced any change in their credit rating status (Austria, Denmark, Finland, Germany, Luxembourg, Netherlands, Sweden, Czech Republic, and Estonia). Based on this we create two variables, capturing the upgrade and downgrade episodes taking the value of 1 whenever an event was noticed in each case.

Finally, another unprecedented event took place during the crisis in the EU, the hit of the 2008 crisis and the immediate start of a recessionary phase drove to a series of massive bail-outs for certain Eurozone countries (Cyprus, Greece, Ireland, Portugal, Spain). We choose to include the role of bail-out plans in the form of the role of economicadjustment programmes (memorandums) as a determinant of trust over and above the usual discussion of the macroeconomic environment. The hard measures and the close monitoring process by EU institutions that followed the bailout schemes changed dramatically the lives of millions of people in certain countries. We anticipate that this should have an effect on peoples' attitude towards European or national institutions.

The contribution in this analysis is exactly the fact that we are going beyond the point of social or just macroeconomic factors to measure peoples' tendency to trust. We choose to include two extraordinary economic related factors capturing the actual and real time economic phenomena and their association with the tendency to trust. This development is expected to affect more harshly countries that followed a bail-out plan due to the amplified austerity measures. Based on these we create another one dummy variable capturing countries that were in an economic adjustment programme during the period under investigation.

Putting all these together, the empirical model investigates whether (i) the socio-demographic variables (SOCIO) or (ii) the economic conditions via *GDP Growth (GDP)* and *Unemployment rate (UNEM)* or (iii) the Sovereign Credit Rating episodes dummy of downgrade or upgrade (*RATE*) or (iv) countries that were in a fiscal reform plan (*FRP*), that is, the memorandum dummy, are members of the vector of covariates.

$$Pr(L_{i,t} = 1) = \boldsymbol{\delta}_{0} + \boldsymbol{\delta}_{1}SOCIO + \boldsymbol{\delta}_{2}GDP + \boldsymbol{\delta}_{3}UNEM + \boldsymbol{\delta}_{4}RATE + \boldsymbol{\delta}_{5}FRP + \varepsilon_{i,t}$$
(2)

Our focal priors are:

- the tendency to trust will tend to be lower for countries experiencing rating episodes and particularly downgrade episodes, so we expect  $(\delta_4 < 0);$
- the tendency to trust will tend to be lower for countries involved in a fiscal reform plan (FRP), so we expect ( $\delta_5 < 0$ ).

Regarding the socio-demographic factors, we expect a positive effect for the more educated respondents, those who are married, the most elderly respondents and finally for those whose occupation is characterized as prestigious. Regarding the variables relating to macroeconomic conditions, we expect a positive sign for GDP and a negative for unemployment ( $\delta_2 > 0$ , and  $\delta_3 < 0$ ).

#### 4. EMPIRICAL RESULTS & DISCUSSION

Table 1 reports the estimation results from the Probit model for each of the two institutions. As it is well known, in discrete choice models the only useful information estimated coefficients carry relates to their sign and significance<sup>2</sup>. Thus, in Table 1 we report the estimated Marginal Effects for the probability of an elevated or deteriorated tendency to trust<sup>3</sup>.

For both institutions, the likelihood ratio test is used to calculate the significance of the model, which in all cases is highly significant. Another worth noting issue is that the explanatory power (Wald test for overall significance) is clearly higher for the European Commission, while the worst fit is encountered for the National Government. The latter reflects the sample properties of the dependent variables that exhibit very low variation.

We start our analysis by first assessing the extent to which socio-demographic attributes play any role in understanding the variation of trust in EU Commission & National Government. Sociodemographic characteristics shed light into the determinants of trust at the individual level. These characteristics have a long-standing effect in the literature on trust (Alesina & La Ferrara, 2002; Brehm & Rahn, 1997; Knack & Keefer, 1997; Paxton, 2007;

<sup>&</sup>lt;sup>2</sup> The actual estimation results are available upon request

<sup>&</sup>lt;sup>3</sup> Estimated Marginal Effects across the two possible outcomes (tend to trust, tend not to trust) add up to unity.

Zak & Knack, 2001). According to Alesina and La Ferrara (2002) trusting others may be a moral or cultural attitude emphasizing the role of individual characteristics. We make use of determinants of trust on an individual basis focusing on marital status, age education, age, respondent's occupation and the presence of other persons during the interview. All these attributes may affect the social tightness between individuals putting barriers to developing trust (Delhey & Newton, 2005; Leigh, 2006). We first include the marital status as a more psychological determinant of attitude formation which possibly captures an individual's subjective well-being. For those who are married, in comparison to those who are singles, the probability of trust is significantly increased for EU Com (7 pp) vs. National Government (2 pp). When the marital status changes to single the tendency to trust remains positive, though deteriorates significantly relative to those being married for EU commission (2.4 pp). In line with our expectations, marriage creates a significant impact upon social trust as married persons are more trusting in particular and in general with respect to the institutions (Glaeser et al., 1999). Considering these findings, this suggests that the cross-country differences account for a substantial share of the trust in national institutions.

In addition, occupational status provides mixed significant results relative to trust in the EU but insignificant institutions. for national institutions. In particular, managers having achieved to climb the social ladder or experienced a professional prestige tend to trust more the EU commission than e.g. the unemployed, manual workers or the self-employed who seem to distrust it (Deary, 2008; Gleave et al., 2011). On the other hand, people who are considered less privileged tend to distrust more the EU Commission. In line with our expectations, individuals with a higher level of education are more likely to trust the EU Commission than the National Governments. It is obvious that education and level of trust are clearly linked, as one with a higher level of education should have a clearer aspect of European and/or National affairs. We expect that trust might increase with age as a result of a maturing process however the revealing results suggest that the probability to mistrust is common for all age groups in our sample. One interpretation of this finding may be that the rise of Euroscepticism across countries has increased citizens' awareness of the shortcomings of the European institutional structure regardless of their age group. Finally, the presence of others during the interview increases the probability to mistrust for the European Commission, while this is not the case for national governments.

In order to shed light on the importance of macroeconomic conditions, we include in the model the GDP growth and the unemployment rate. According to Bursian and Furth (2013), one would expect variables that are not related to financial institutions or are outside of their control to be irrelevant for the trust-building process. However, if we assume that public do not always act rationally and cannot distinguish the real mandate of each one institution, they might be influenced by such factors as well. For people, the accountability of institutions might be taken as one. Hence, public might associate good economic performance measured by real GDP growth and the result of high employment rate with personal, and not only, improvement along with an indication of efficient institutions in line with La

Porta et al. (1997). On the contrary, a deteriorating economic activity and a high unemployment rate can be thought of for the first as a situation that will have prolonged effects in the personal welfare and for the latter as a proxy for the unconditional probability of becoming unemployed.

Our results show that real GDP growth has a positive impact on trust for only the European Commission whereas the unemployment rate influences trust negatively across all facets. More specifically, in line with previous findings (Bursian & Furth, 2013; La Porta et al., 1997, etc.) an increase in real GDP growth by 1.0 percent implies a 0.7 pp increase in the probability of trust in the EC. Contrary to our expectations, the National Government which is fully accountable for the following fiscal policy carries exactly the opposite sign, meaning that public keep a more rigorous stance against their national governments. The unemployment rate carries the expected sign and significance for both types of institutions under investigation (Hudson, 2006; Walti, 2012, etc.). However, for the National Government, the magnitude of the tendency to trust is lower than all other institutions.

We proceed with the estimation results where the impacts of downgrading or upgrading episodes are considered. We expect that a downgrading episode will lead to a decline in trust. Hence, country specific developments in the cost of borrowing weigh heavily on the level of citizens' trust towards public institutions. We need to highlight again that any development regarding the country's solvency shall be monitored by the European Commission and the National Government. However, the recent crisis and frequent credit rating announcements by rating agencies in combination with an increasing cost of borrowing especially for the most hit economies may have shaped public perceptions about the efficiency of institutions significantly. We find that people put more blame on National Government rather than the European Commission in the trustbuilding process reflected by the marginal effects of a downgrade episode. So, a downgrade by one notch would decrease the average probability of trust to 1pp for the national institution. However, in the case of an upgrade by one notch which comes with a stabilization of the bond markets could potentially outweigh such a negative effect. In particular, for the European Commission, an upgrade increases significantly the probability to trust (9 pp). Surprisingly, for National Government that is expected to get the benefit of an upgrade reveals the lowest increase in probability to trust by only 2 pp.

Having established that rating episodes affect the tendency to trust we consider the potential effect of a bail-out plan- or a fiscal reform plan. Hence, we examine for the first time in the relevant literature the dummy variable of a country to be in such a stretch position for a pre-agreed period of time. Essentially, the rapid austerity measures of the rescued plan initiated by European Institutions and the IMF have led people to reduce their trust in institutions in general. The countries that have implemented such policies the probability of trust is significantly lower across both types of institutions. From the reported results, we witness a higher probability of deterioration to trust mainly with respect to the EU Commission by 12 pp. This was expected as the European Commission co-formed with the IMF and ECB the bail-out plans and forced the harsh measures in these countries. Surprisingly,

the corresponding probability to trust National Government diminishes at a lower level by 1.7 pp. The fact that people hold the European Commission accountable for their harsh economic situation instead of putting the blame to their national governments is another example of people's blameanger game.

Table 1. Marginal effects for the probability of
tend to trust

	Dependent Variable		
Covariate	National	EU	
Covariate	Government	Commission	
Married	0.02***	0.07***	
hannea	(0.002)	(0.002)	
Single	0.02***	0.024***	
8	(0.003)	(0.003)	
up to 14-18 years old	0.005	0.06	
* '	(0.010)	(0.012)	
up to 19-21 years old	0.021	(0.12)	
	0.05***	0.14***	
up to 22 years old	(0.03)	(0.01)	
	-0.019***	-0.001	
Still studying	(0.005)	(0.005)	
	-0.032***	0.026***	
15-24 years old	(0.003)	(0.003)	
25.24	-0.039***	-0.004	
25-34 years old	(0.003)	(0.003)	
25.44 years old	-0.032***	-0.020***	
33-44 years old	(0.003)	(0.003)	
45-54 years old	-0.032***	-0.025***	
45-54 years old	(0.002)	(0.003)	
55-64 years old	-0.022***	-0.019***	
55 61 years old	(0.002)	(0.002)	
Self employed	0.001	-0.003	
<b>P /</b>	(0.003)	(0.003)	
Managers	0.002	0.017	
	(0.003)	(0.005)	
Manual worker	0.001	-0.04	
	-0.019***	-0.09***	
Unemployed	(0.003)	(0.003)	
	-0.01***	-0.04***	
Retired	(0.003)	(0.004)	
Chudanta	0.004	-0.001	
Students	(0.004)	(0.004)	
Number of persons	0.02***	-0.01***	
Number of persons	(0.003)	(0.003)	
Unemployment Rate	-0.009***	-0.003***	
enemployment nute	(0.00)	(0.00)	
GDP Growth	-0.002***	0.007***	
	(0.00)	(0.00)	
Downgrade	-0.01	0.003	
	(0.003)	(0.00)	
Upgrade	0.02	0.09	
	-0.017***	-0.12***	
Memorandum (FRP)	(0.00)	(0.004)	
	Diaanostics	(0.001)	
Observations	467827	458428	
TAZ-1-1 daya	4114.71	15548.75	
wala test	(0.00)	(0.00)	
Pseudo R <sup>2</sup>	0.007	0.026	
Log Likelihood	-309056.95	-296544.19	

Notes: (a) \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level respectively, (b) numbers in brackets denote robust standard errors. Omitted Variable: 65 years and older.

#### 4.1. Mapping trust across different scenarios

Having established that all the parameters tested affect the tendency to trust we will further explore these impacts, by testing for three different settings. The basic logic behind our approach is to study the differential effect of one selected group versus the whole sample. Essentially, we compare the average difference between outcome measures over time for the selected group. In particular, we will quantify these scenarios, by comparing the predicted probabilities of deterioration of trust in selected subgroups.

Where a single characteristic is considered:

- countries whose credit status was/wasn't downgraded;
- countries being/not being in a memorandum scheme;
- countries whose GDP growth is below a set of certain thresholds (countries in recession);
- countries whose unemployment rate is above a set of certain thresholds (countries with high unemployment rate);
- respondents that were employed/unemployed.
- Where two characteristics are considered jointly:
  if respondents were employed/unemployed before/after 2010;
- if respondents were employed/unemployed during presence/absence of memorandum;
- if countries were downgraded during presence/absence of memorandum.
- Where three characteristics are considered jointly:
- if country was not downgraded and the respondent was employed in memorandum absence;
- if country was downgraded and the respondent was unemployed in memorandum presence.

 Table 2. Predicted probability of trust across sample subgroups

	Nat. Government	European Commission
	Mean Value	Mean Value
Scenarios based on	a sinale characte	ristic
Being in Memorandum	0.29	0.39
Not being in Memorandum	0.38	0.62
No downgrade	0.38	0.62
Downgrade	0.32	0.48
GDP growth $\leq -0.1$	0.37	0.55
GDP growth $\leq -3$	0.38	0.53
GDP growth $\leq -5.8$	0.37	0.51
Unemployment>=10.1	0.33	0.57
Unemployment>=13.7	0.29	0.52
Unemployment>=16.4	0.27	0.51
Being Employed	0.38	0.62
Being Unemployed	0.34	0.53
Scenarios based o	n two characteris	tics
If Employed before 2010	0.40	0.64
If Employed after 2010		
inclusive	0.36	0.58
If Unemployed before 2010	0.36	0.57
If Unemployed after 2010		
inclusive	0.31	0.48
If Employed in		
memorandum absence	0.39	0.63
If Employed in		
memorandum presence	0.30	0.41
If Unemployed in		
memorandum absence	0.34	0.54
If Unemployed in		
memorandum presence	0.26	0.32
If downgraded in		
memorandum absence	0.33	0.52
If downgraded in	0.00	0.00
memorandum presence	0.28	0.38
Scenarios based or	n three characteri	stics
If not downgraded and		
being employed in	0.00	0.00
memorandum absence	0.39	0.63
If downgraded and being		
unemployed in	0.20	0.21
memorandum presence	0.26	0.31

The relevant results for the mean predicted probabilities are reported in Table 2, which for comparison purposes includes both institutions

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across countries for the whole time period. We start with the contrast of countries that are in a bail-out plan during the examined time period. In countries that have followed a bail-out plan relative to their counterparts that have not, the average tendency to trust deteriorates with a predicted probability that varies between 39 (62) per cent for European Commission and by 29 (38) per cent for the National Government. Especially for the case of National Government when considering the two scenarios a Predicted Probability Ratio (PPR) above unity (1.31) is produced. This suggests that the average respondent in a country experiencing a bail-out programme is 1.31 times more likely to respond that they do not trust the National Government. Someone would be expecting that on the individual level, citizens who trust their own government also trust the EU more those who distrust their government than (Anderson, 1998; Muñoz et al., 2011; Armingeon & Ceka, 2014). However, this is not exactly the case here as people from countries where the average trust in the national government the tendency to trust the EU commission is traumatized significantly due to possibly the forcefully imposed fiscal adjustment programmes.

Public opinion in the countries that witnessed a downgrade episode and those who did not are found on average to mistrust the institutions and especially the National Institutions vs. European by 32 (38) per cent against 48 (62) per cent respectively. A significant drop of trust across institutions is reported when GDP growth is included. The more the economy is falling in a recession the less trust is revealed and citizens keep surprisingly the national government as less responsible. The strongest impact is seen when the GDP growth diminishes by a rate higher than 3%. The same stands apply for the macroeconomic other variable that of unemployment rate. The higher the unemployment rate the lower on average the tendency to trust. In particular, for an unemployment rate above 13.7 %, the trust in the National Government plunges to 29 per cent while at the same time for European Institutions varies between 52 and 53 per cent. Finally, a similar picture emerges for the single scenarios, the unemployed respondents on average distrust the institutions more than those who are employed as expected holding more accountable the National Government.

Moving on to the comparison of bivariate scenarios across countries we dichotomize the time period before and after 2010 when was the year that Greece first among other hit economies signed off the bail-out plan forced by the IMF and European Institutions. The tendency to trust seems to be affected by the time period and this is mainly reflected on the National Government rather than the European Commission. Across all the cases, the tendency to trust is affected by the time period and this is mainly echoed for national governments rather than the European Commission. In particular, when being employed the predicted probability to trust falls by 36 per cent after 2010 which this is even more emphatic by 31 per cent for those who were unemployed in the same period. When the case of the presence of memorandum enters into the scenario, someone who is employed during the years of memorandum tends to trust less on average (predicted probability of 30 per cent vs. 39 per cent in memorandum absence). This result is even stronger for those who were unemployed during those years deteriorating the probability to trust to 26 per cent vs. 34 per cent for National Government. When a downgrade episode is included in the scenario during an economic reform programme the results show that if a country is downgraded and at the same time follows a bail-out plan people there tend to trust less by 28 per cent than in countries that were downgraded but were not in a bail-out plan (33 per cent).

The final triple scenario confirms altogether all the above concerns. The average tendency to trust is significantly lower for people who are unemployed that was downgraded in a country and simultaneously follows an economic adjustment programme. All in all, this result suggests that the average deterioration of institutional trust is between 26 per cent and 31 per cent for the most hit economies compared to the less hit from the financial crisis economies, between 39 per cent and 63 per cent. This result emphatically shows that under harsh economic conditions and especially within an environment of atypical events the tendency to trust is significantly affected and this is reflected mainly to national governments. However, there is strong evidence that these unprecedented events affect significantly in the same direction the EU Commission.

#### **5. CONCLUSION**

The econometric specification aimed to provide a better understanding of the interaction of trust in EU and national institutions, to examine its determinants and to confirm its validity within a financially tight economic period. In particular, we examined the levels of trust in the European Commission and National Governments for the 28 countries members of the European Union for the period 2000-2014. Using micro-level data obtained from the Eurobarometer we seek to identify the determinants of individual trust taking into account a number of factors that may influence people's attitude towards the national and European institutions eligible to form policies including sociodemographic characteristics, credit rating episodes and fiscal adjustment memorandum agreements.

The results mirror some of the findings in previous models but extend and complement others. Actually, they do shed additional light in the intrinsic trust building process as we consider, for the first time, the idea of sovereign rating episodes as well as the existence of mutual bail-out agreements between national governments and European Institutions. The results reveal that on the whole, the primary individual-level predictors of trust in institutions were the way the national economy functions. Especially, we found that people's socio-economic status is correlated with the level of trust they have for institutions. European Commission is, in general, trusted more by highly educated individuals who are married and are employed having secured a managerial position. Levels of trust are also increasing, as anticipated, for countries that enjoy better macroeconomic performance.

Regarding the sovereign rating episodes, downgrading events negatively affect people's tendency to trust National Governments whilst in the case of upgrading episodes national governments fail to capitalize in trust levels when compared with the increased levels of trust enjoyed by European Commission. Finally, in countries that have participated in bailout and fiscal adjustment programs, levels of distrust seem to rise substantially for European Commission whereas national governments follow the same trend at already lower levels of trust.

The latter reveals that the recent recession has led to a noticeable increase in the number of those who are disillusioned with politics, both at the national and the European level. Such respondents express a lack of trust in their national governments and in the European Commission when some less desirable events happen. Contrary to previous studies we find that the steepest drop in support for the EU has taken place in those countries that have been hit the hardest by the recent economic. Interestingly, citizens always blame the EU for all sorts of ills, however, this frustration is associated with a lack of basic political trust in national governments (Armingeon & Ceka, 2014). The weak fiscal policy of those countries cannot be directly connected with the European structure. Obviously, the message of who does what is not clear among Europeans and the blame and anger game drive the public opinion.

A further and deeper look in the ways European 'citizenship' for individuals is formed and the implications of that in the trust building process is therefore required. The recent vote in the UK referendum concerning the country's future as a member of the European Union provides a new insight which combined with the results of this paper create exciting opportunities for future research when trying to identify the determinants of institutional trust in the continent. Besides, using this study further research question could be put forward: what the legitimacy of the European project is and what about the issue of intra-country heterogeneity, these issues are worth exploring in the future in a more systematic way.

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#### APPENDIX A. DESCRIPTIVE DEMOGRAPHIC VARIABLES

Description	Variable	Mean	Std. Dev.	Min	Max
Marital Status:	Married	0.68	0.46	0	1
Question on respondent's					
marital status		0.240	0.43	0	1
is grouped into:	Single	0.245	0.45	0	1
Married and single.					
Age Education:	up to 14-18 years old	0.57	0.49	0	1
Question about the age of	up to 19-21 years old	0.16	0.37	0	1
education is grouped into:	up to 22 years old	0.25	0.43	0	1
up to 14-18 years, 19-21 years,					
up to 22 years,		0.07	0.26	0	1
and still studying	Still studying				
Age Groups:	15-24 years old	0.12	0.33	0	1
Question regarding respondent's	25-34 years old	0.15	0.36	0	1
age is grouped into:	35-44 years old	0.17	0.38	0	1
15 - 24 years, 25-34 years,	45-54 years old	0.17	0.37	0	1
35-44 years, 45-54 years,	55-64 years old	0.16	0.36	0	1
55-64 years and 65 years and older	65 years and older	0.20	0.40	0	1
	Self employed	0.07	0.26	0	1
Respondent's Occupation:	Managers	0.09	0.29	0	1
Question regarding respondent's occupations has been	Manual worker	0.19	0.39	0	1
grouped into: Self-employed, Managers, Manual	Unemployed	0.07	0.26	0	1
workers, Unemployed, Retired and Students.	Retired	0.26	0.43	0	1
	Students	0.09	0.29	0	1
Number of persons present during the interview	Number of persons	0.09	0.28	0	1

#### APPENDIX B. DESCRIPTIVE VARIABLES

Table 1B. Raw probabilities to trust by country

Country	National Government	European Commission
Austria	44.08%	50.64%
Belgium	41.20%	66.71%
Germany	40.57%	53.30%
Denmark	50.24%	62.71%
Spain	39.18%	58.89%
Finland	47.58%	60.64%
France	35.20%	57.56%
United Kingdom	34.58%	34.83%
Greece	38.11%	53.08%
Ireland	35.37%	71.35%
Italy	37.54%	66.32%
Luxembourg	55.84%	71.12%
Netherlands	48.39%	66.33%
Portugal	35.10%	64.76%
Sweden	41.65%	60.64%
Bulgaria	30.94%	72.15%
Cyprus	51.76%	60.55%
Czech Republic	27.89%	57.18%
Estonia	48.89%	74.55%
Croatia	24.50%	48.30%
Hungary	33.37%	66.23%
Lithuania	26.25%	74.33%
Latvia	25.20%	54.55%
Malta	43.62%	74.62%
Poland	30.87%	67.65%
Romania	28.43%	72.39%
Slovenia	35.91%	59.41%
Slovak Republic	33.72%	66.78%

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	Observations	Austria	St. Deviation	MIN	Max
GDP Growth	28460	1.18	1.81	-4.1	3.4
Unemployment Rate	29333	4.73	0.66	3.6	5.6
		Belgium	1.01		
GDP Growth	28398	0.79	1.61	-3.5	3.4
	29302	Germany	0.01	0.0	0.3
GDP Growth	28870	1.20	2.27	-4.9	4.2
Unemployment Rate	29810	8.03	1.86	5	11.2
	0=001	Denmark	0.0.4		
GDP Growth	27881	0.37 E 44	2.24	-6.2	3.2
	20001	5.44 Snain	1.41	5.4	7.0
GDP Growth	27443	0.62	2.08	-4.5	4.2
Unemployment Rate	28332	14.6	5.98	8.2	26.1
		Finland	a. (		
GDP Growth	28883	1.37	3.4	-9	5.1
	29755	8.28 France	0.87	6.4	9.8
GDP Growth	27852	0.59	1.54	-3.6	3
Unemployment Rate	28720	8.77	0.79	7.4	10.3
	1	United Kingdo	om		
GDP Growth	27692	1.14	2.47	-5.8	4
Unemployment Rate	28477	6.03 Craaca	1.27	4.7	8.1
GDP Growth	25918	0.73	4 34	-6.9	5.6
Unemployment Rate	28802	13.21	6.21	7.8	27.5
		Ireland			
GDP Growth	27557	1.22	3.77	-7.3	9.2
Unemployment Rate	28406	7.86	4.33	3.9	14.7
GDP Growth	27945	-0.28	2 31	-6.1	3.6
Unemployment Rate	28807	8.52	1.65	6.1	12.7
		Luxemburg	1		
GDP Growth	15395	1.22	3.41	-7.3	7
Unemployment Rate	15853	4.20 Notherland	1.19	1.9	5.9
GDP Growth	27006	0.62	2.01	-4.2	3.7
Unemployment Rate	27947	4.9	1.16	3.1	7.4
	1	Portugal			
GDP Growth	27488	0.13	1.75	-3	3.4
Unemployment Rate	28462	9.72 Swadan	3.41	5.1	16.4
GDP Growth	29202	1.68	2.77	-5.8	5.7
Unemployment Rate	30130	7.13	0.96	5.6	8.6
		Bulgaria			-
GDP Growth	18112	3.66	3.92	-5	7.3
Unemployment Rate	18928	9.56	2.4	5.6	13
GDP Growth	9304	-0.73	3.13	-5.8	2.9
Unemployment Rate	9753	7.38	4.13	3.7	16.1
	·	Czech Repub	lic		
GDP Growth	19412	2.19	3.67	-5.1	6.7
Unemployment Kate	20318	0.00 Estonia	1.05	4.4	ð.3
GDP Growth	18210	3.16	7.35	-14	10.4
Unemployment Rate	19007	9.45	3.73	4.6	16.7
		Croatia			
GDP Growth	19066	0.83	3.73	-6.8	5.1
Unemployment Rate	19962	12.54	2.81	8.6	17.3
GDP Growth	18791	0.94	3.14	-6.6	5
Unemployment Rate	19802	9	1.73	6.1	11.2
07.7.7		Lithuania			
GDP Growth	18187	4.77	7.17	-13.9	11.1
Unemployment Rate	18980	10.72 Lapia	4.38	4.3	17.8
GDP Growth	18345	4.18	8.46	-16.3	12
Unemployment Rate	19184	12.23	4.47	6.1	19.5
		Malta			
GDP Growth	11961	2.10	2.14	-3.5	3.8
Unemployment Rate	12378	0.50 Doland	0.31	5.9	1.2
GDP Growth	18045	3.96	1.83	1.5	6.8
Unemployment Rate	18805	11.09	3.58	7.1	19.1

# Table 2B. Descriptive statistics for macro variables (Part 1)

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Romania					
GDP Growth	18531	3.77	4.70	-5.8	9.2
Unemployment Rate	19419	6.82	0.55	5.6	8
		Slovenia			
GDP Growth	19208	1.07	4.40	-8.8	6.4
Unemployment Rate	20138	6.97	1.76	4.4	10.1
Slovak Republic					
GDP Growth	20129	3.98	4.29	-5.1	10.4
Unemployment Rate	21040	13.45	2.26	9.6	18.4

# Table 2B. Descriptive statistics for macro variables (Part 2)

# **Table 3B.** Frequency of financial events\* from 2000-2014

	Downgrade	Upgrade	In Memorandum
Austria	0	0	NO
Belgium	1	0	NO
Germany	0	0	NO
Denmark	0	0	NO
Spain	5	2	NO
Finland	0	0	NO
France	1	0	NO
United Kingdom	1	0	NO
Greece	7	2	YES (May 2010)
Ireland	5	2	YES (Nov.2010)
Italy	4	2	NO
Luxembourg	0	0	NO
Netherlands	0	0	NO
Portugal	5	1	YES (May 2011)
Sweden	0	0	NO
Bulgaria	0	4	NO
Cyprus	7	2	YES (March 2013)
Czech Republic	0	0	NO
Estonia	0	0	NO
Croatia	3	0	NO
Hungary	5	0	NO
Lithuania	2	2	NO
Latvia	3	2	NO
Malta	2	0	NO
Poland	0	0	NO
Romania	0	0	NO
Slovenia	5	1	NO
Slovak Republic	3	1	NO

Note: Frequency of events per country: Credit Rating Status and Countries that are committed to an austerity fiscal plan

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