Trust in Institutions between Objective and Subjective determinants: a multilevel analysis in European countries
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Abstract

Trust is an essential element for effective social cohesion and a correct expression of the principles of representative democracy. In many countries of the Western world, we are witnessing the advance of anti-establishment political movements and a steady decline of trust in institutions. Crisis, perception of crisis, climate of opinion around it have an impact on political attitudes and diversified feelings (interest, trust, resentment), on political participation and on voting. Social analysts are called to deepen the reasons for the variability of these phenomena according to socio-cultural contexts and individual characteristics.

The main aim of this paper is to analyse: 1) if and how much the spread of trust in institutions is different among the EU citizens and 2) what are the determinants of trust, deepening the intensity and the direction of the relationships with subjective and objective indicators. Our purpose is to outline the differences among the EU countries regarding trust in national and international institutions, simultaneously considering macro (country) and micro (individual) level of analysis by using a multilevel approach.

The empirical analysis is based on the data collected by European Social Survey (ESS-Round 8) in 2016 (microdata) and on some variables (macrodata) taken from other statistical sources (Eurostat, Transparency International). The sample of individuals counts about 37 thousand subjects.

Data analysis includes the construction of synthetic indices, using appropriate synthesis methods, and the identification of the determinants of Trust in Institutions, considering both micro and macro level explanatory variables, resorting to Multilevel Regression.

Keywords: *Trust in Political Institutions*, *Objective/Subjective Determinants***,** *Political Sophistication*, *Multilevel Regression Models.*

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1. Focusing on Trust

Trust is a complex phenomenon that represents an essential element for effective social cohesion and a correct expression of the principles of representative democracy. We can define trust as an expectation about the object of trust (a person, an institution, etc.), considered able to produce positive outcomes (Levi and Stoker 2000). It is an attitude, it includes a more or less lasting view (about some object, event or person), but it is also a state of mind, a perspective which influences behaviors and dispositions to act or think in certain ways (Hosking 2014). Normally, trust is a response to good institutional performance, but it is also an essential condition for effective governance. It is the basis for compliance with the rules. Trust in political institutions, for example, encourages citizens to pay taxes or to support reforms that require short-term costs, in view of long-term benefits.

The most recent studies agree in highlighting a widespread state of crisis, the numerous tangible manifestations of which invest - on the social, economic and cultural fronts - both the objective and the subjective-perceptive level. The focus of this work is trust in institutions (political and international i.), which, when weak or absent, as in the historical period in which we live, produces more often the emergence of political cynicism and an attitude of renunciation than of a critical and active/participatory citizenship (Eurofound 2018). In many countries of the western world, we are witnessing a steady decline of trust in institutions and the advance of anti-establishment (especially right-wing) political movements (Kriesi et al. 2012; Kriesi and Pappas 2015; Morlino and Quaranta 2016; Muro and Vidal 2016; Martinelli 2016; Morlino and Raniolo 2017; Arpino and Obydenkova 2019, Revelli 2019). In other words, in countries where trust in institutions is low, citizens often express their consent for political candidates – not rarely populists and radicals - who promise immediate benefits and quick solutions to complex problems.

A study on trust is relevant because whether or not this resource is invested in has direct consequences on the structure and identity of a given community. Declining trust in institutions is a big problem for our society for several reasons. One need only think of the fact that the lack of trust in political institutions on the part of citizens tends to spread like wildfire and pervasively damages more types of institutions. Or again, one can think about the fact that feeling distrust towards something/someone basically translates into a discernment of incapacity in: a. representing the demands and needs of the people with loyalty and competence; b. maintaining the already contracted commitments; c. verifying the sustainability of results and objectives promised during the electoral campaign for propaganda purposes. Crisis, perception of crisis, mood of opinion around it have an impact on political attitudes and diversified feelings (interest, trust, resentment), on political participation and on

voting (Morlino and Raniolo 2017; Diamanti and Lazar 2018; Bordignon, Ceccarini and Diamanti 2018; Risso 2019).

Many national and international studies highlight how non-vote/indecision/floating votes, social anger, disengagement and disinterest in politics constantly present growing percentages in every context (Legnante and Segatti 2016; Morlino and Raniolo, 2017; Bordignon, Ceccarini, Diamanti, 2018; Itanes 2018). These expanding phenomena, the character of which is transversal and pervasive, oblige us to reflect, as well as causing several concerns. The vote connected to a strong sense of belonging and an active social commitment have always been minority phenomena, but today they are attested at their historical minimum (Dalton 2019; Mete 2019) and, above all, they characterize a small niche of individuals, that can be defined as "guaranteed", the so-called winners of globalization, satisfied with their material living conditions and with a cosmopolitan orientation (Bordignon, Ceccarini, Diamanti 2018; Itanes 2018). Faced with so much resentment and so much distrust, especially on part of some social groups, it is our task to understand the origins and the causes of the discontent we observe. It is rather complicated, perhaps for the moment impossible, to formulate hypotheses for the medium and long term about the form that the crisis and social discontent will take.

In a society where the process of disintermediation seems unstoppable, the Social Networks only apparently shorten the distance between the "representatives" and those who are "represented"; most of the time they take on the function of surrogates within this climate of disorientation and of economic, social and cultural crisis, very often contributing to amplifying malaise, anger, violence, distrust (Perloff, 2014; Frame and Brachotte 2015). Within this context, the individuals, who resemble a fluid magma with faded contours and unstable belonging and are the main target of political marketing and "politics of promises" and for whom in many cases the distinction between right and left-wing has also lost value - do not vote or show persistent indecision under elections due to: a. disinterest and extraneousness to politics, b. attitude of protest and punitive intent, c. strong disaffection and distance from institutions. Certainly we must strive to reconstruct the social foundations of consensus and trust, even in the knowledge that Social Networks cannot self-sufficiently bridge or restore the vacuum of representation and belonging that has been created (Chadwick 2013; Gillespie 2018; Mazzoleni and Bracciale 2018).

On the issue of trust in institutions there is a vast array of recent and less recent sociological and political science literature (Hackverdian and Mayne 2012). The studies of recent years, when empirical, consist mostly in secondary analyses conducted on microdata (information at the level of the individual) organized in large datasets (such as the European Social Survey or the European Values Study). These datasets, corresponding to surveys repeated cyclically over time in a conspicuous number of countries with the same data collection instrument (a structured questionnaire), lend themselves to sophisticated analysis, also in a longitudinal and multilevel perspective.

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Looking at the literature, in order to place our study in the broader context of research experiences on the issue, it seems useful to prepare a brief outline in which the salient features of the most recent studies on trust converge. The first point on which it is useful to dwell may result in the following question: "What are the roots of trust?". All the analysed studies - some more centered on the determinant elements of trust, other ones instead particularly focused on the effects of trust (or of distrust, recorded in many contexts) - start from this question and try to produce an adequate response, based on empirical evidence. These research analyses can be classified according to the weight attributed to culture, experiences and/or emotions/values in the explanation of the differentiated levels of trust observed in time and space (Rothstein and Stolle 2008; Herreros and Criado 2008; Jakobsen 2010; Park and Subramanian 2012; Edlund and Lindh 2013; Zhou 2013; Sounders 2014).

Trust in institutions - often deepened distinguishing between "politics" and "security, legality" dimensions, sometimes studied though the dichotomy "political institutions" and "non-political institutions", or "institutions of the public sphere" and "institutions of the private sphere" - is both the object of comparisons among numerous countries of Europe/of the world, and of specific investigations in more limited geographical areas, which, evidently, constitute special contexts of observation due to exceptional socio-cultural and economic traits (Secor and O'Laughlin 2005; Wallace and Latcheva 2006; Hutchison 2011; De Vroome, Hooghe and Marien 2013). Finally, most of the studies on trust show an interaction between variables at the micro level and variables at the macro level, as well as between objective data and data relating to the perception sphere (Van der Meer 2010; Christoforou 2011; Olivera 2014).

At the macro level, in the models of analysis, there is a recurrent use of factors connected to the economic sphere (GDP per capita, income distribution, unemployment rate, etc.), to welfare (for example, state aids aimed at specific social categories), to security (for example, criminal phenomena spread, perception of corruption), to the political framework (political culture, electoral rules, presence of significant changes of government, diffusion of social protest phenomena, emergence of terrorist acts and consequent political responses, etc.), and to the cultural sphere (education levels, ethno-cultural variety of the resident population, etc.) (Dogan 2005; Chang and Chu 2006; van der Meer 2010; Gundelach 2014; Thisted Dinesen 2012; 2013; Blanco and Ruiz 2013; Algan. Guriev et al. 2017).

At the micro level, in addition to the classic socio-demographic indicators, variables connected with the quality of the network of relationships (social capital, participation in community life, contact with other cultures, social representation of fellow citizens, etc.) and with the depth of individual links with the political sphere (think in particular of different levels of political sophistication) are often introduced in the statistical models. Schematically, on the micro level (the list of indicators found in literature is, as imaginable, very extensive) a wide range of variables seem to play an important role, affecting the cultural sphere of the individual, their political identity, overall satisfaction, social representations, values and feelings (for example, a

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universalist vision, rather than a sovreignist and/or traditionalist attitude; the rooting of more or less positive moods, etc.), his/her direct experiences (such as individual and as a member of a group) in the different areas of daily life.

Considering the set of results and analysis models that refer to the above-cited literature on the topic, among the aspects most significantly connected with *the highest levels of trust* in institutions, one can include: a high level of education; a considerable social capital; having a job; a medium-high level of income; an intense interest in politics; strong political activism; a positive perception of the government performances/of its representatives an active associative life; a high level of trust in the fellow citizens/"non-political" institutions; belonging to the majority ethnic group; perception that Country in which one lives is "free from corruption" and that it represents a full and ripe democracy, capable of guaranteeing procedural justice over time. On the other hand, a strong sense of security (both in a general sense and, in particular, in relation to crime) normally generates high levels of trust in institutions and widespread social cohesion. Some studies (Thisted Dinesen and Jæger 2013) outline, in this regard, that if terroristic incidents occur in specific territorial contexts, trust in institutions simultaneously increases, even reaching high peaks (confidence as an indicator of collective stress, fear and need for protection); however, this phenomenology is characterised by short-term events: in the longer term, in absence of security and in presence of a widespread feeling of poor social protection, confidence gradually decreases.

Turning to *distrust* in institutions, the elements included in the empirical literature under analysis are: a low socio-economic status; a modest level of education; perception that high corruption has affected values, culture and institutions; perception of widespread crime; a critical attitude towards parties and politics; low or no involvement in direct political action and low civic engagement. In the works that emphasize the variables at the macro level, factors that are significantly connected with lack of trust in institutions are, just to name a few: medium-long term economic crisis; high unemployment rate; a recession situation. Among political consequences, in conditions of strong and growing economic and social insecurity, there is a rise of populism.

Looking at the most recurrent interpretations of social mistrust, it seems to represent a social demand for promotion of economic growth, need for a fiscal policy that is more sensitive to the indications of the most fragile social categories, a demand for re-allocating state investments to innovative and promising sectors (services, research, infrastructures). Even at the individual level, the positions that people take on the social scale predispose them to specific welfare policy preferences; moreover, disappointment/satisfaction of expectations/needs have an impact on levels of trust in corresponding institutions.

Considering the literature on the topic, in this contribution it is assumed that individual trust is based on a rational basis (evaluation of direct and indirect experiences, scenarios, predictions, etc.), as well as on an emotional one (fear,

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anxiety, dissatisfaction, anger, etc.) and on specific values and culture (sense of community, inter-generational transmission of trust). It seems to depend not only on objective and material aspects, but also on subjective considerations and personal feelings. Trust represents a mix of knowledge and emotions: when it is elevated, it translates into confidence in the actors and institutions of one democratic government, conveying values of reciprocity and cooperation. On the other hand, the institutions of one specific country (above all the political ones) need their citizens trust to have the strength and incisiveness that are necessary to face political challenges and to convince people regarding delicate choices (sometimes unpopular). If citizens regard institutions as fair, impartial and efficient, their involvement in public life grows.

In summary, it seems that the bases of trust are economic well-being, security and social equity; however, rather than being an individual psychological attribute, trust appears to be produced through social interaction and social climate, both constitutive elements of common sense and public opinion. In this sense, perceptions, feelings, social relationships/group life, civic sense/widespread values/traditions are more relevant than the objective conditions of life; the emotional basis of trust appears more powerful than the rational one in designing social and political balances or imbalances in certain places and in certain historical periods (Granovetter 1973).

Moreover, in investigating the determinants of trust in institutions, according to an interesting piece of literature on the topic (Highton 2009; Turper and Aarts 2017; Zingher and Flynn 2018; Ervasti, Kouvo, Venetoklis 2018), we attributed particular relevance to the dimension of political sophistication, made up of skills/expertise and motivations to action based on personal interest (moreover, one of the most explored dimensions when focusing on the decision-making processes which lead to the voting/non-voting choice).

We assume that individuals with greater political sophistication can be characterized by higher degrees of trust in political institutions - recognizing their symbolic value and their importance over time (even if the specific contingent situation is particularly problematic or critical) - and by a lower punitive or anti-establishment intent (Hooghe and Marien 2013; Faggiano, Azzarita, Batani, Chimenti 2019). We also believe that high trust is simultaneously expression of a higher satisfaction with the conditions of one's country in different spheres: government, democracy, economy, education and health. Trust and satisfaction seem very important indicators of a functioning democratic system; data evidence an influence of satisfaction on trust (Vigoda-Gadot and Yuval 2003) even if both variables reinforce each other, showing an interesting, reciprocal relationship (Weber, Steinmetz and Kabst 2017).

We think social analysts are called to further investigate the reasons for the variability of these complex phenomena according to socio-cultural contexts and individual characteristics. In this perspective, the main research questions of this paper are the following: 1) To what extent does trust in Institutions differ across EU countries? 2) To what extent does trust in Institutions differ across categories of people? 3) To what extent do country-level characteristics explain trust in institutions, taking individual

characteristics into account? Our purpose, in other words, is to outline the differences among the EU countries regarding trust in political institutions (national and international), considering at the same time macro (country) and micro (individual) level of analysis by using a multilevel approach.

2. Data, Indicators, Indices

We analysed the large dataset provided by the European Social Survey (ESS)[2], a multi-country survey which, every two years since 2002, has been monitoring social change in Europe.

In this contribution we used the microdata collected in 2016 (Ess-Round 8); the considered sample has a total size of 36,530 individuals aged 18 years and above[3], in 18 European Union countries available in the survey[4]: Austria, Belgium, Czechia, Germany, Estonia, Spain, Finland, France, United Kingdom, Hungary, Ireland, Italy, Lithuania, the Netherlands, Poland, Portugal, Sweden, Slovenia.

The choice of indicators was both theory and data driven. To account for institutional trust, we considered the suitable variables in the data set, dealing with trust in two different types of Institutions that constituted two distinct dimensions in our analysis:

- Political Institutions: trust in politicians, in political parties, in the national parliament (Marien 2011, Zmerli 2013);
- International Institutions: trust in the European Parliament, in the United Nations Organization.

For each of the above variables the exact wording was "Please tell me on a scale of 0-10 how much you personally trust each of the following institutions" (where 0 means you do not trust at all, and 10 means you have complete trust). As dependent variables, each dimension was synthesized in an index calculated by the method described in the next paragraph.

Consistent with what was said in par.1, but also bearing in mind the real potential of the data matrix under analysis, to explain the individual differences of each dimension of Trust in Institutions other independent variables, both subjective and objective indicators, were introduced in the analysis. At the micro level (individual), they concern the following variables grouped by topic (table 1):

- *socio-demographic and cultural characteristics of people and some aspects of the context where they live*: gender, age, education, household's net income, domicile;

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[2] https://www.europeansocialsurvey.org

[3] In many of the EU countries (except Austria and in some cases Hungary), the age to vote is 18 years old. Therefore, only individuals aged 18 and over were considered because they were presumed more interested in politics

[4] The analysis focused only on the European Union countries, since they are presumed to have more common aspects than other countries outside the EU. Therefore, the following countries comprised in the ESS round 8 were not considered: Switzerland, Norway, Iceland, Israel, the Russian Federation.

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- *cultural and political identity*: placement on left/right wing, cultural pluralism; gender disparity, civil rights; opinion about membership in the EU, that can be considered a proxy for the sense of belonging to EU and to European values and social goals;
- *political sophistication*: political information; interest in politics, confidence in own ability to participate in politics (these variables were synthesized in an index);
- *social trust*: trust in people, confidence in the honesty of people; confidence in people's solidarity (these variables were synthesized in an index).
- *satisfaction with the condition of one's own country*: satisfaction with the economy, government, democracy, education and health in the country (synthesized in an index)

Although the use of social media and social networks sites is considered relevant for the analysis of trust in institutions, it was not possible to take into account this aspect due to the lack of the adequate variables in the dataset used.

At the macro level (country), the following indicators were considered (Table 2):

- Socio-economic dimension: GDP growth rate, economic inequality, unemployment rate, immigrants/immigration rate;
- Security dimension: criminality, perceived corruption;
- Educational dimension: financial aid to students.

The previous selected variables were the input for a strategy of analysis that consists of the following three steps: 1) Calculating synthetic indices of Trust in Political Institutions (respectively national and international), of Political sophistication, of Social trust and of Satisfaction with own country; 2) Analysing different levels of Trust both at micro (individual) and macro (country) level, applying descriptive techniques 3) Identifying the determinants of Trust in Institutions, considering both micro and macro level explanatory variables, resorting to Multilevel Regression (Raudenbush and Bryk 2002).

Table 1 Explanatory variables at micro level (Source ESS 2016)

Indicators (micro-level)	Response modes	Type	Synthetic Indices /Method
Socio-demographic and economic			
Gender	1-Male; 2 Female	Objective	
Age	1-18-34 years; 2-35-45 years; 3-46-64 years; 4- 65 and over	Objective	
Education	1-high; 2-medium; 3-Low	Objective	
Household's net income	1- 1°quartile; 2- 2° quartile; 3° quartile; 4 – 4°quartile	Objective	
Domicile, respondent's description	1-A big city; 2-Suburbs or outskirts of big city; 3-Town or small city; 4-Farm or home in countryside	Objective	
Cultural and political identity			
Self-placement on left/right wing	1- not positioned; 2- Moderate; 3- Wright; 4. Left	Subjective	

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Cultural pluralism: "Immigrants undermined or enrich the country's cultural life?"	1-enriched; 2 not undermined-not enriched; 3 -undermined	Subjective	
Gender Disparity: "Men should have more right to job than women when jobs are scarce"	1- Disagree strongly/ 5-agree strongly	Subjective	
Civil rights: "Gays and lesbians free to live life as they wish"	1- Agree strongly/ 5-Disagree strongly	Subjective	
Opinion about membership of the EU	1-Remain, 2-Leave; 3 DK	Subjective	
Political sophistication			**Political sophistication Index (PSI)**
Political information: "News about politics and current affairs, watching, reading or listening on a typical day",	1- less than 5 minutes; 2- 6 to 29 minutes, 3- 30 to 59 minutes; 4 -60 to 89 minutes; 5-more than 90 minutes	Objective	NLPCA (Component scores)
Interest in politics: "How interested in politics?"	1-not interested, 2 interested	Subjective	
Confidence in own ability to participate in politics	1-not confident/ 2 confident	Subjective	
Interpersonal trust (judgments about other people)			**Social Trust Index (STI)**
Most people can be trusted	0 /10	Subjective	PCA (Regression Factor scores)
Most people would try to be fair	0 /10	Subjective	
People mostly try to be helpful	0 /10	Subjective	
Satisfaction with own country			**Satisfaction for own country Index (SCCI)**
Satisfaction with the country's economy: "how satisfied are you with the present state of the economy in country?	0- Extremely dissatisfied / 10- Extremely satisfied	Subjective	PCA (Regression Factor scores)
Satisfaction with the country's government: "Thinking about the country government, how satisfied are you with the way it is doing its job?	0- Extremely dissatisfied / 10- Extremely satisfied	Subjective	
Satisfaction with the country's democracy: "how satisfied are you with the way democracy works in country?	0- Extremely dissatisfied / 10- Extremely satisfied	Subjective	
Satisfaction with the country's state of education: "what you think overall about the state of education in country?"	0- Extremely dissatisfied / 10- Extremely satisfied	Subjective	
Satisfaction with the country's health: "Please say what you think overall about the state of health services in country nowadays?	0-Extremely bad /10- Extremely good	Subjective	

Table 2 Explanatory variables at macro level

Indicators (macro-level)	Source	Type

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Socio- economic		
GDP growth rate	EUROSTAT (2016)	Objective
Income quintile share ratio	EUROSTAT (2016)	Objective
Immigrant per 1000 inhabitant	EUROSTAT (2016)	Objective
Unemployment rate	EUROSTAT (2016)	Objective
Security		
Homicide Rate by 100 000 inhabitants	EUROSTAT (2016)	Objective
Corruption Perceptions Index	Trasparency International (2016) Score scale 0 (highly corrupt) to 100 (very clean)	Subjective
Education		
Financial aid to students as % of total public expenditure	EUROSTAT (2015)	Objective

3. Results: synthetic indices

3.1 Measuring Trust in Institutions

To measure Trust in Institutions, considering that all variables dealing with the two considered dimensions are all eleven-point rating scales from 0 to 10, and that our aim was to obtain synthetic Indices which take into account the correlation among observed variables, two different applications of Principal Component Analysis (PCA) were run, one for each trust dimension, in order to assess if the items loaded strongly on single synthetic factor.

As is known, PCA uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables in such a way that the first principal component has the largest possible variance (Hotelling, 1933).

As concerns trust in national political Institution, PCA considered three elementary indicators (trust in politicians, in political parties, in the national parliament): the first principal component, the only one with eigenvalue greater than 1 (λ_1=2.54; VAF=84.76%), has positive correlations with the original variables (respectively 0.95, 0.94 and 0.88) and scores between 0.35 to 0.37 (table 3). This result is consistent with previous research which has found trust in national political institution to be one-dimensional explained over 84% of variance (Marien 2008), therefore it can be interpreted as a synthetic index of this conceptual dimension (TNPI).

Table 3 Trust In National Political Institution :first component

	Loading	Score
Trust in politicians	.948	.345

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Trust in political parties	.935	.373
Trust in country's parliament	.877	.368
Eigenvalue	2.543	
Variance Explained %	*84.76*	

Its regression factor scores (Thurstone 1935; Di Stefano, Zhu and Mîndrilă 2009; Devlieger, Mayer and Rosseel 2016), used to predict the location of each individual on the synthetic index[5], range from -1.61 to 2.9 (mean=0; median=0.01; standard deviation=1). It assumes significantly different mean values (F sig <0.001) by gender, age, education and country (table 8). It is highest among men and it steps up with higher levels of education. It changes with age, being lower in the middle age classes and higher among younger and older people. At country level it presents quite different aggregated values: its lowest value is recorded in Italy (-0.547) while the highest is in the Netherlands (0.72) (table 9). In order to outline the spread of trust, we carried out a classification of respondents based on the level of their Trust in Political Institutions. Thus, the TNPI index was normalized, by transforming its values in a range from 0 to 10[6], and categorized in four categories (very distrustful/ very trustful) (TNPI$_c$). Over 74.5% of all interviewed are in the distrust area (table 5).

The same procedure was used to calculate Trust in the International Political Institutions Index (TIPII). PCA considered two elementary indicators (trust in the European Parliament and trust in the United Nations Organization) which leaded to the extraction of one principal component (eigenvalue λ_1 =1.68; VAF=83,97%). It has high loadings with the original variables (respectively 0.92 and 0.92) (tab.4).

Table 4 Trust in International Political Institutions: first component

	Loading	Score
Trust in the European Parliament	.916	.546
Trust in the United Nations	.916	.546
Eigenvalue	1.679	
Variance Explained %	83.97	

It ranges from -1.99 to 2.46 (mean=0; median=0.22; standard deviation=1) and assumes significantly different mean values (F sig <0.001) by gender, age, education and country. It is highest among women, young people and those with a higher level

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[5] For all PCA applications, to evaluate the robustness of the Regression Factor scores, Bartlett scores were also calculated. These different calculation procedures led to the same results.

[6] The transformation was the following:

$$t'_{ji} = \frac{t_{ij} - min(t_i)}{max(t_i) - min(t_i)} \times 10$$

Where t'$_{ji}$ is the normalized value of i-th trust index in the j-th respondent and t$_i$ is the original value of i-th trust index. The categories are the following: very distrustful (0-3); distrustful (4-5); trustful (6-7); very trustful (8-10).

of education (table 8). At country level, it presents quite different aggregated values: its minimum pertains to Slovenia (-0.169) while the highest to Finland (0.52) (table 9).
Also in this case, the index was transformed and categorized in four categories (very distrustful/ very trustful) (TIPII$_c$): distrust in International Institutions was expressed by 64% of the respondents (table 5).

Table 5 Trust and Distrust (n=36,530)

	TNPI$_c$ %	TIPII$_c$ %
Very distrustful	46.1	26.4
Distrustful	28.4	37.6
Total distrustful	**74.5**	**64.0**
Trustful	15.5	15.2
Very trustful	10.0	20.8
Total trustful	**25.5**	**36.0**

Table 5 shows that among EU citizens, distrust in political institutions (74.5%) and in international institutions (64.0%) prevails. Still, by breaking down the data, we can highlight that the shares of confident people are very different among countries: in some of them (Poland, Slovenia, Italy, Portugal, Spain, France) the share of citizens who trust national political institutions is less than 16% and the share of people expressing distrust in all institutions are the highest in EU. Moreover, trust in International Institutions is more widespread than that in national political ones. In this scenario Austria, Germany, Sweden and above all the Netherlands are exceptions. Furthermore, in these countries the share of citizens who express trust prevails over those expressing distrust (Fig.1).
As shown in Table 10 and 11, both at country and individual level, the correlations between trust in national and international political Institutions are medium (0.62 and 0.61 respectively). These findings indicate that, while there is a relationship between trust in the two types of political institutions, there are nevertheless significant differences to be explored. These findings, which are consistent with previous studies on this topic (Arpino and Obydenkova 2019), strengthen our choice to analyse the two dimensions (TNPI and TIPII) separately.

Fig. 1 . People expressing trust in Political Institutions by country (% people aged 18 and over)
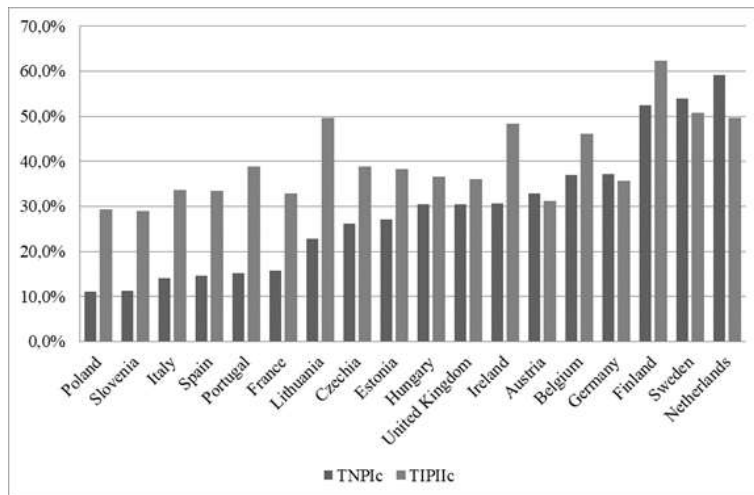
3.2 A Synthetic Index of Social Trust (STI)

The Social Trust Index (STI) was built considering three classical indicators, that have been included in the ESS in several wave to present, relating to trust in people, confidence in honesty of the people and confidence in people solidarity (table 1). PCA applied on these three trust questions shows that they yield one single component with eigenvalue greater than one (λ_1 =1.98) explaining 65.89% of total variance (table 6). It presents positive and high correlation with elementary indicators (0.83, 0.82, 0.79 respectively) and its scores range between 0.40 and 0.42 (table 6). This result is consistent with previous findings (Zmerli, Newton, and Montero 2007; Zmerli & Newton 2008, Cormina & Davidov 2013) and indicates a single underlying dimension of social trust.

The STI index ranges from -2.84 to 2.65 (mean=0 median=0.09, standard deviation=1) and it assumes significantly different mean values (F sig <0.000) by age, education and country. It presents the highest value among older people, it increases with higher levels of education (table 8) and at country level it assumes quite different aggregated values: its lowest value is recorded in Poland (-0.46) while the highest in Finland (0.77) (table 9).

Table 6 Social Trust: first component

	Loading	Score
Most people would try to be fair	.829	.415
Most people can be trusted	.819	.420

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People mostly try to be helpfull	.786	.398
Eigenvalue	1.98	
Variance Explained %	65.89	

3.3 Measuring Satisfaction with Country's Conditions (SCCI)

An index that summarizes the overall satisfaction with a country's conditions was built considering the following indicators relating to five important domains in which the activity of political institutions is carried out: economy, government, democracy, education and health (table1). Considering that the above variables are all eleven-point rating scales from 0 to 10, PCA was applied to synthetize them. The first principal component, the only one with eigenvalue greater than 1, (λ_1=2.83, VAF=56.96%) has positive loadings (between 0.61 and 0.83) with the original variables and its scores raging between 0.22 and 0.30) (table 7). Its factor scores can be interpreted as a synthetic index of overall Satisfaction for own Country's Conditions (SCCI).

Table 7 Satisfaction with Country's Conditions: first component

	Loading	Score
Satisfaction with the country's government	.834	.281
Satisfaction with the country's democracy	.826	.295
Satisfaction with the country's economy	.795	.292
Satisfaction with the country's education	.667	.236
Satisfaction with the country's health services	.613	.217
Eigenvalue	2.83	
Variance Explained %	56.59	

Its regression factor scores vary from -2.71 to 2.80 (mean=0; median=0.19; standard deviation=1) and it assumes significantly different mean values (F sig <0.000) by gender, age, education and country.
SCCI presents higher values among men, oldest and youngest people and among the most educated individuals (table 8). At country level it assumes quite different aggregated values: the lowest values are observed in Italy (-0.47), Spain (-0.43), while the highest values pertain to the Netherlands (0.65) and Finland (0.67) (table 9).

3.4 Measuring Political Sophistication (PSI)

To measure Political Sophistication three indicators were considered: political information, interest in politics, confidence on own ability to participate in politics (table 1). Considering that the above variables are categorical (both nominal and ordinal), Nonlinear Principal Component Analysis (NLPCA) was applied to test the one-dimensionality of the construct and to calculate a synthetic index to be used as explicative variable of trust. As is known, in NPCA, optimal quantification replaces the category labels with category quantifications in such a way that as much as possible of the variance in the quantified variables is accounted for (Gifi 1999; Meulman, Der Kooij and Heiser 2004). NLPCA produces variable loadings, quantification category and component scores of the objects.

The first component (λ_1 =1.98; VAF=51.2%) has positive loadings with all the original variables (respectively 0.61, 0.82 and 0.71), therefore it indicates a single underlying dimension of political sophistication. The objects scores of this component can be interpreted as a Political Sophistication Synthetic index (PSI). It ranges from -1.93 to 1.52 (mean=0; median=0.09; standard deviation=1) and assumes significantly different mean values by gender, age, education and country.

It is highest among men, it steps up with the age and with higher levels of education (table 8). At country level it presents quite different aggregated values: its minimum pertains to Czechia (-0.58), the maximum to Germany (0.36) (Table 9).

Table 8. Synthetic Indices by categories of people: mean differences

		TNPI	TIPII	PSI	STI	SCCI
Age	18-34	0.057	0.182	-0.161	0.010	0.067
	35-45	-0.011	0.030	-0.043	-0.004	-0.041
	46-64	-0.053	-0.060	0.074	-0.020	-0.072
	65 and over	0.037	-0.095	0.098	0.027	0.075
Education	Low	-0.197	-0.145	-0.323	-0.252	-0.175
	Medium	-0.004	-0.017	-0.033	-0.017	0.012
	High	0.208	0.188	0.359	0.274	0.145
Gender	Male	0.017	-0.021	0.152	0.001*	0.046
	Female	-0.010	0.035	-0.142	0.002*	-0.044
Total		0.000	0.000	0.000	0.000	0.000

There were statistically significant differences between group means as determined by one-way ANOVA (Welch test (p<0.001) except for those marked with * (Welch test p>0.05)

Table 9 Synthetic Indices by country

	TNPI	TIPII	PSI	STI	SCCI
Austria	0.300	-0.116	0.039	0.279	0.449
Belgium	0.273	0.145	-0.116	0.035	0.409
Czechia	0.096	0.011	-0.584	-0.076	0.288
Estonia	0.141	0.148	-0.080	0.281	0.102

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Finland	0.632	0.519	0.037	0.771	0.668
France	-0.177	-0.101	-0.057	-0.044	-0.359
Germany	0.355	0.016	0.358	0.216	0.432
Hungary	0.140	0.076	-0.370	-0.287	-0.156
Ireland	0.168	0.352	-0.047	0.415	0.124
Italy	-0.468	-0.129	-0.282	-0.365	-0.470
Lithuania	-0.049	0.446	-0.446	-0.010	-0.171
Netherlands	0.719	0.265	0.178	0.487	0.653
Poland	-0.374	-0.036	-0.135	-0.464	-0.180
Portugal	-0.279	0.080	-0.202	-0.335	-0.054
Slovenia	-0.392	-0.169	-0.244	-0.176	-0.391
Spain	-0.302	0.009	-0.141	-0.124	-0.428
Sweden	0.660	0.384	0.321	0.594	0.368
United Kingdom	0.213	0.026	0.189	0.253	0.207

To summarize, we can analyse the relationships between the calculated synthetic indices. As tables 10 and 11 show, the correlations between the indices are significant both at country and individual level. Therefore, the data system appears coherent and the synthesis of the numerous variables considered simplifies subsequent analyses and interpretation of results.

Table 10 Country-level Pearson Correlation coefficients between Synthetic Indices

	TNPI	TIPII	PSI	STI	SCCI
TNPI	1	.624**	.591**	.874**	.911**
TIPI		1	.177*	.658**	.499*
PSI			1	.645**	.531*
STI				1	.776**
SCCI					1

**. Correlation is significant at the 0.01 level (2-tailed);* Correlation is significant at the 0.05 level (2-tailed)

Table 11 Individual -level Pearson Correlation coefficients between Synthetic Indices

	TNPI	TIPI	PSI	STI	SCCI
TNPI	1	.610**	.243**	.406**	.655**
TIPI		1	.139**	.299**	.448**
PSI			1	.182**	.122**
STI				1	.370**
SCCI					1

**. Correlation is significant at the 0.01 level (2-tailed).

4. Results: The determinants of Trust in Political Institutions

Given the different trends by country of the two indices, as highlighted in the analyses in the previous paragraphs, to identify some determinants of Trust in Political Institutions, two distinct linear multi-level regression analysis with the Maximum Likelihood estimation were applied, where the dependent variables were respectively 1) TNPI, 2) TIPII. In each model, the structure of the data to be analysed is clearly hierarchical, since individuals are nested within countries. In fact, data consist of the values of each Trust index (dependent variable) and several explanatory variables, both socio–demographic individual features and countries variables, referred to i-th respondent in j-th country ($i=1,…,N_j$, $j=1,…,18$ and $\Sigma_j N_j=36,503$). Thus, there are two levels of analysis: level two, the highest, is that of countries, and level one, the lowest and nested inside the highest level, is that of the individuals. Therefore, it is reasonable to assume that countries can have a systematic effect on the trust of individuals, trust indices values within the same countries are dependent or correlated. This peculiarity of the dataset leads to hypothesize that the variability of trust indices can depend on both the people characteristics and the different contexts in which they live. For this reason, a multilevel approach was deemed more appropriate (Hox 2010, Raudenbush and Bryk 2002).[7]

To assess what extent the variability of trust in Institutions is situated at the individual level and at the country level, for each of the considered trust dimensions a multilevel intercept-only model (Model 1), with no explanatory variables at all, was applied first:

$$Y_{ijt} = \gamma_{00} + u_{0j} + e_{ij}, \quad i = 1, …, N_j \ ; \ j = 1, …, 18 \ ; \ t=1,..2 \qquad (1)$$

Where Y_{ij} is the dependent variable that is each of the two trust dimensions, e_{ij} represents some individual-dependent residual while u_{0j} is a random country-dependent deviation.

Model (1) provides, for each trust index (TNPI, TIPII) a partitioning of the variance between the first (e_{ij}) and second (u_{0j}) level (residual effect and random effect covariance, respectively) and allows us to evaluate the Intraclass Correlation Coefficient (ICC) for the country effect. ICC can be considered both a measure of the between countries variability and the degree of the non-independence of individuals nested into countries (Hox, 2010).

Table 12. Multilevel Model 1: Residual and Random effects by Trust index

	TNPI		TIIPI	
	Estimate	Sig.	Estimate	Sig.
Random effect Covariance	.1294	0.000	.01842	0.005
Residual Effect	.8395	0.000	.89918	0.000
ICC	.1336		.0201	

Table 12 shows different results by index:

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[7] STATA software was applied. According to EES documentation, two weighting variables were used: PSPWGHT (post-stratification weights) and PWEIGHT (population size weights).

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1- TNPI intercept varies significantly across countries (Wald Z p<0.001) and ICC=0.1336, that means that among countries the variability of the intercept is about 13.36% of the total variability of TNPI ;

2- TIPII intercept varies significantly across countries (Wald Z >0.05), even if ICC is only 2.0%.

According to literature, there are various criteria to evaluate as to whether to resort to a multi-level or single-level approach: some scholars suggest evaluating design effect, using a multi-level analysis if it is higher than 2 (Heck and Thomas 2015), other scholars consider substantial an ICC >0 (Rahn and Rudolph 2005).

However, we deem it more appropriate to follow the "best practice" of accounting for the clustering effect (Huang 2014, 2016). Therefore, despite the different rates of variability attributable to level 2, we performed a multilevel analysis in two steps for each of the two indices: first, q level-one (individual) X_q explanatory variables (listed in table 1) were introduced in the multilevel model and then p level-two (country) Z_p explanatory variables (listed in table 2)[8] were also put in, defining the following final models:

$$Y_{ijt} = \gamma_{00} + \gamma_{q0} X_{qij} + u_{0j} + e_{ij}, \qquad i = 1, \dots, N_j \; ; j=1,\dots,18 \text{ and } t=1,\dots, 2 \qquad (2)$$

$$Y_{ijt} = \gamma_{00} + \gamma_{q0} X_{qij} + \gamma_{0p} Z_{pj} + u_{0j} + e_{ij}, \qquad i = 1, \dots, N_j; \text{ and } j=1,\dots,18 \text{ and; } t=1,\dots,2 \qquad (3)$$

Table 13. Models 2 and 3: Residual and Random effects by Trust index

	TNPI		TIPII	
	Estimate	Sig.	Estimate	Sig.
Model 2				
Residual Effect	0.47499	0.000	0.6366	0.000
Random effect Covariance	0.02314	0.005	0.0229	0.013
ICC	0.04645		0.0348	
Model 3				
Residual Effect	0.4750	0.000	0.6366	0.000
Random effect Covariance	0.0054	0.003	0.0050	0.006
ICC	0.0113		0.0079	
R^2 I level	0.4342		0.2920	
R^2 II level	0.9579		0.7263	

With regard to TNPI, taking into account only the individual factors and covariates, ICC is equal to 0.0465 and it further decreases (ICC=0.0113) if two-level covariates are added into the model: considering both micro and macro variables, TNPI variability between countries is reduced to 1.13%. Compared to the null model, model 3 explains 43.42% of the Trust in Political Institution Index variability at the individual level and 95.79% at the country level.

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[8] In the models all covariates were group-mean centered.

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Considering TIPII, table 13 shows that the value of the ICC decreases if both micro and macro variables are introduced in the model: TIPII variability is reduced to 0.79%. Compared to the null model, model 3 explains 29.20% of the Trust in International Institution Index variability at the individual level and the 72.63% at the country level.

Table 14 reports the Model 3 estimated parameters (coefficients and significance) that identify those aspects, both micro and macro determinants, that influence TNPI and TIPII assuming other conditions remain unchanged. It shows that several individual and contextual level effects are significant[9].

At individual level, the analysis of the coefficients highlights that satisfaction for own country is the predictor with the highest impact on trust in Political Institution, both national and international (respectively 0.547 and 0.386). A positive impact is also that of Political sophistication (0.125; 0.071) and Social Trust (0.133; 0.113).

Moreover, compared to the reference categories, coefficients show which socio-demographic and cultural characteristics have positive and significant effects on both Trust indices; those who live in a big city compared with those who live in rural areas; those who think that immigrants enrich their country's life (proxy of cultural pluralism) and those who express attachments to EU. As regards age, the propensity for trust in political, especially in International Institutions, is higher among people aged 18-34 years compared to older people (0.071; 0.270).

Instead the characteristics that negatively affect trust in political institutions with respect to the reference categories are: being males, who seem to have a slightly lower propensity to trust political institutions, especially international ones, than females (-0.076; -0.116), people who do not have a political position on the right/left scale (-0.125; -0.135) compared with those who position themselves on the left wing.

At macro level, trust in Political Institutions, both national and international, is higher in countries where criminality (0.124; 0.165), and unemployment (0.027; 0.019) are more widespread, and the financial aid to students represents a larger share of public expenditure (0.029; 0.027). Besides these recurring findings, there are some differences among the two indices.

Some variables have a significant and positive impact on trust in national political Institutions but not on trust in international ones: those who express strong disagreement with civil rights and respondents who are strongly agree with gender disparity have a higher TNPI (respectively 0.119 and 0.118). Moreover, Gdp growth coefficients (-0.089), show how trust tends to be somewhat lower in countries where the economy grows more robustly, while economic inequality has a negative effect on Trust (-0.183).

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[9] The assumptions underlying the multilevel regression (linear relationship, homoscedasticity and normal distribution of the residuals) were tested. The scatterplot of standardized residuals showed that the data met the assumptions of linearity, but did not meet the assumption of homoscedasticity, therefore robust standard errors (Huber-White heteroscedasticity consistent standard errors) was used. Moreover, tests to see if the data met the assumption of collinearity indicated that multicollinearity was not a concern (VIF <10; Tolerance> 0.1)(Appendix).

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Instead, other variables have a significant and negative impact only on trust in international political Institutions but not on trust in National ones: The Immigration rates coefficient (-0.024) and, very slightly, the Corruption Perception Index (CPI) (-0.009). The first coefficient shows that TIPII is higher where the immigration rate is lower; while the second one, considering that CPI is a scale of 0 (highest level) to 100 (lowest level), highlights that a higher level of perceived corruption increases the trust in International Political Institutions, assuming other conditions remain unchanged.

Table 14 Multilevel Regression Model 3: coefficients

	TNPI		TIPII	
	Coef.	Sig.	Coef.	Sig.
Gender (ref. Female)				
Male	-0.076	**0.001**	-0.116	**0.000**
Age (ref. 65 and over)				
18-34	0.071	**0.038**	0.270	**0.000**
35-45	0.053	0.087	0.152	**0.000**
46-64	0.018	0.358	0.092	**0.013**
Education (ref Low)				
High	-0.007	0.086	-0.009	0.980
Medium	-0.025	0.363	-0.021	0.429
Household's total net income (ref 4 quartile)				
dk	-0.016	0.396	-0.094	**0.002**
1 quartile	-0.174	0,360	-0.024	0.351
2 quartile	-0.008	0.664	-0.041	0.051
3 quartile	0.001	0.0171	-0.016	0.328
Domicile (ref. Farm or home in countryside)				
A big city	0.064	**0.016**	0.073	**0.005**
Suburbs of big city	0.013	0.622	0.028	0.334
Town or small city	-0.006	0.793	0.023	0.286
Self-placement on left/right wing (ref. Left)				
Not positioned	-0.125	**0.000**	-0.135	**0.000**
Moderate	-0.041	**0.016**	-0.058	**0.083**
Right	0.013	0.661	-0.076	0.153
Country's cultural life undermined or enriched by immigrants (undermined)				
enriched	0.116	**0.000**	0.227	**0.000**
not undetermined - not enriched	0.055	**0.001**	0.081	**0.000**
Gender disparity (ref. Disagree strongly)				
Disagree	0.042	**0.000**	0.025	0.211
Neither agree nor disagree	0.059	**0.001**	0.007	0.565
Agree	0.125	**0.000**	0.411	0.076

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Agree strongly	0.118	**0.001**	0.252	0.669
Civil rights (ref. Agree Strongly)				
Agree	0.018	0.379	-0.017	0.157
Neither agree nor disagree	0.029	0.424	-0.052	**0.041**
Disagree	0.073	**0.122**	-0.084	**0.025**
Disagree strongly	0.119	**0.002**	-0.066	0.155
Opinion about membership of the EU (ref. DK)				
Remain	0.083	**0.032**	0.212	**0.000**
Leave	-0.054	**0.019**	-0.148	**0.000**
Political Sophistication	0.125	**0.000**	0.071	**0.000**
Interpersonal Trust	0.133	**0.000**	0.113	**0.000**
Satisfaction with own country	0.547	**0.000**	0.386	**0.000**
Income quintile share ratio	-0.183	**0.000**	**-0.083**	0.071
GDP growth rate	-0.089	**0.027**	-0.011	0.617
Unemployment rate	0.027	**0.008**	0.019	**0.019**
Immigrant per 1000 inhabitant	0.023	0.109	-0.024	**0.000**
Homicide Rate by 100 000 inhabitants	0.124	**0.001**	0.165	**0.000**
Corruption Perceptions Index	-0.003	0.443	-0.009	**0.001**
Financial aid to students as % of total public expenditure	0.029	**0.000**	0.026	**0.001**
_cons	-0.087	0.010	-0.179	0.000

5. Discussion

In the following discussion, our aims are: to highlight in a systemic way the main results that have emerged, as well as observing the individual and contextual level of analysis; to imagine future scenarios for in-depth study of the considered issues; to make some methodological reflections.

Regarding the research questions posed at the beginning of this contribution, the analysis showed that although distrust in institutions is widespread in Europe, there are significant differences between European countries. These differences can be attributed both to some characteristics of individuals and to some peculiarities of the countries in which they live. The relationships between trust and the multiple dimensions considered have highlighted the complexity of the phenomenon and the difficulty in unambiguously explaining the dynamics between trust and the subjective and objective aspects that are assumed to influence it.

Starting from the individual level, it is possible to outline that more than the objective conditions and characteristics of people (age, education, household's income) the most influent elements on trust in political institutions, both national and international, are some subjective aspects and in particular a variable connected with the perception of the surrounding reality: it is about the satisfaction with the conditions of one's own country (economy, governance, democracy, education, health). This result is in line with the same concept of Trust mentioned at the

beginning and corresponding to an expectation about the object of trust (a person, an institution, etc.), considered able to produce positive outcomes (Levi and Stoker 2000).

Other noteworthy factors that have a positive impact on trust are Political sophistication and Interpersonal Trust. With regard to the first dimension, the result is consistent with the constituent elements of the concept, which is a simultaneous expression of different individual traits: 1. recognizing the importance of institutions in representing the community demands; 2. having a consolidated emotional bond with the institutions, beyond the contingent problems and the drastic change of the political scene (Revelli 2017 and 2019); 3. having personal skills, topics mastery and active engagement.

With regard to the second dimension, the hypothesis of a contamination in the wider sphere of trust emerges: it is likely that people who can count on a solid and reliable social network, who recognize themselves in the values of the groups to which they belong, are more inclined to extend their sentiment of trust also towards those institutions with which they have no direct contact.

Moreover, a pluralistic attitude, probably favored by a consolidated presence in the context of life of different cultures, is significantly and positively connected with the investigated dimension. A strong sense of belonging to Europe produces the same empirical evidence and generates a greater propensity to trust International Institutions especially among young people, who experience more frequently the opportunity of contact with other socio-cultural contexts.

If, on the other hand, we focus on mistrust in institutions, the most significant impact is exercised by non-positioning on the right-left political axis. Within the consistent fringe of hostile and disappointed individuals with reference to the institutional system, there are: 1) those who approach the political sphere with detachment and disinterest, characterized by a modest level of political sophistication; 2) undecided people and fluctuating voters, without stable reference points in the political-institutional system; and finally 3) those who are declaredly "against" the classic political demarcations and mobilize for new forms of participation and political representation (Palano 2017).

We can add that there are two traits which have a significant and lower impact on trust in national political institutions: we are referring to attitudes in favor of widening civil rights and openly against gender inequalities. Evidently, people characterized by these convictions do not consider these institutions guarantors of civil and gender rights, nor actively engaged on this front.

At the macro level, the salient results can be interpreted according to a double/dual reading key. On the one hand, trust seems to be connected to socio-economic problems that generate a need for security and protection and a request for interventions by political institutions to resolve and contain conflicts and social vulnerability. On the other hand, trust seems to be the result of a collective assessment: a sort of "reward" (positive evaluation/support to institutions) where they have demonstrated their proactive presence (for example, through some support for the right to education), or a sort of "punishment" (negative evaluation/contrast to the institutions) where they have failed, in a notable way, in overcoming the crisis (one

need only think of the persistence of strong economic inequalities, even in contexts characterized by economic growth).

The high rate of immigration is one of the objective conditions that negatively affect trust in international political institutions. Probably, taking into consideration the difficulties on the migratory front of the single national realities, emphasized also by media communication, this result can be traced back to a vision according to which international institutions fail to assume a particularly effective role on the migration issue. On the other hand, where national political systems are perceived as spoiled (high perception of corruption), citizens look at supranational institutions with more expectations and greater confidence (Morlino and Raniolo 2017).

From a methodological point of view, this contribution has confirmed the consistency of some synthetic indices used in other studies on this subject, but it also proposed new constructs (PSI and SCCI) which proved to have a significant impact on trust in national and international political institutions.

Although some significant results are reported, this study is subject to several limitations which provide a basis for future further lines of research by enriching the system with dimensions and expanding the analysis perspective.

Some aspects, which we have not explored in this research, are relevant and current; one of them is the relationship between the individual and new technology. It is the opinion of the authors that introducing some variables on the use of the Internet and of social network sites is worthwhile, as relevant factors in the process of opinion formation, social representations building, attitude expressions, political and social participation (Risso 2019). A further aspect to be explored is the electoral behavior with particular reference to the coherence/inconsistency of voting over time and the phenomenon of abstention, also based on the specificities of each national context under analysis.

It would also be appropriate to evaluate measurement invariance for the used synthetic indices both in different countries, in groups of individuals, or in different time points in order to monitor and interpret the evolution of trust towards institutions in the face of social, economic and cultural changes (Reeskens and Hooge 2006; Breustedt 2018, Coromina and Davidov 2013).

Finally, while attributing considerable explanatory power to the cross-national approach, the high, sometimes excessive, level of synthesis and generality adopted should be emphasized, as well as the complexity in the concomitant management of a) a large number of individuals, b) multiple and heterogeneous national realities, c) blocks of variables recomposed in indices. Therefore, we think the deepening of the analysis at the national level is also fruitful, both in a perspective of control of data and of the knowledge of contextual specificities.

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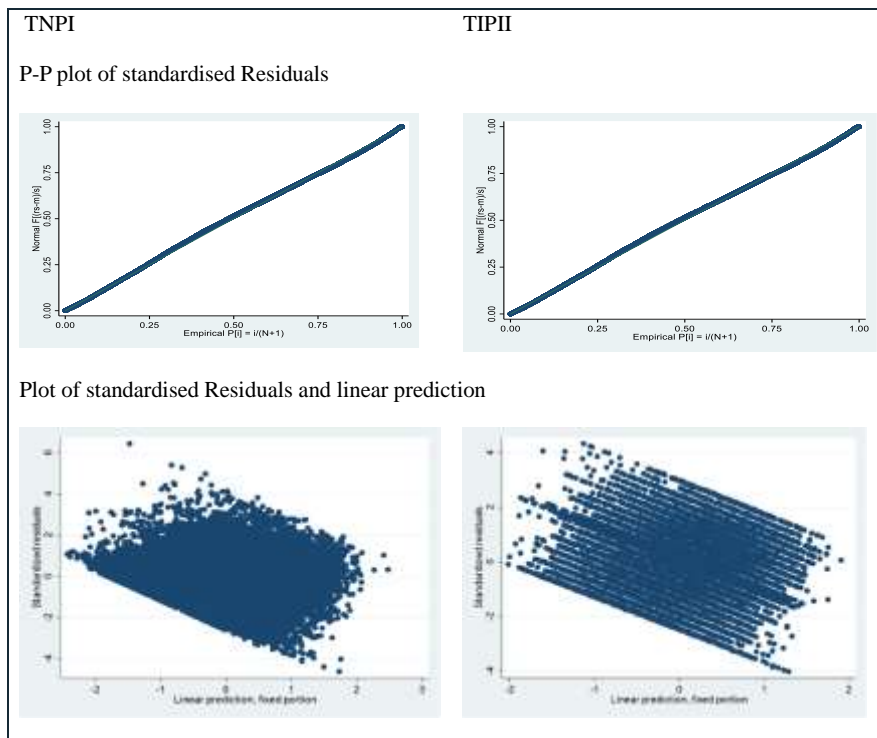
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Appendix

Fig. 2 Post-estimation

TNPI   TIPII

P-P plot of standardised Residuals

Plot of standardised Residuals and linear prediction

Tab. 15 Collinearity test Diagnostic

	VIF	SQRT VIF	Tolerance
Political Sophistication	1.08	1.04	0.925
Interpersonal Trust	1.25	1.12	0.797
Satisfaction with own country	1.24	1.11	0.807
Income quintile share ratio	5.02	2.24	0.413
GDP growth rate	2.42	1.56	
Unemployment rate	2.94	1.72	0.340
Immigrant per 1000 inhabitant	2.44	1.56	0.409
Homicide Rate by 100 000 inhabitants	3.38	1.84	0.296
Corruption Perceptions Index	3.02	1.74	0.331
Financial aid to students as % of total public expenditure	3.36	1.83	0.298
Mean VIF	2.62		