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assessing the role of public support measures and institutional trust

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# **Satisfaction with democracy in Europe: assessing the role of public support measures and institutional trust**

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## **Abstract**

This article analyses the role played by the perceived public support measures introduced during Covid-19 and institutional trust in the mechanism linking the impact of economic hardship suffered by European citizens and their satisfaction with democracy. To this aim, we use the European Living, Working and Covid-19 survey conducted by Eurofound (Eurofound 2020). Firstly, Ancova tests over different waves are conducted to delve into the citizens' perceptions of proximity to institutions from the beginning of spring 2020 to the spring of 2021. Secondly, we estimate a mediation model on the wave that has registered the lowest rate of democracy satisfaction and public trust.

The results show that, since the beginning of the pandemic, there has been an overall detachment of citizens from institutions, resulting from an overall decline in institutional trust and democracy satisfaction over time. They also suggest that European citizens' financial and economic difficulties affect their satisfaction with democracy in heterogeneous ways, depending on the degree to which they perceive the quality of public support and the level of trust in institutions: a deterioration in the levels of trust in institutions and in the evaluation of the public support, lead to a stronger negative effect of economic-distress on the citizens' satisfaction with democracy. This study contributes to advancing our understanding of what contributes to citizens' trust and satisfaction with democracy. It suggests that the deterioration of satisfaction with democracy and trust in institutions may limit the citizens' propensity to cooperate with public authorities and, as consequence, the ability of governments to deal effectively with health and socio-economic crises.

**Keywords:** Government Support, Institutional Trust, Satisfaction with Democracy, Public Health, Social Dilemma

## 1. Introduction

The Covid pandemic crisis has had serious consequences on several aspects of people's lives. On the one hand, it has significantly increased economic uncertainty and financial fragility for a large part of the population; on the other, it has challenged the ability of governments to conduct effective health policies and other interventions to support citizens, undermining confidence in the democratic system in Europe. The decrease in economic well-being was accompanied by a significant decrease in the psychophysical well-being of individuals in all European countries (Ahrendt et al. 2020; Maliszewska, Mattoo and van der Mensbrugge 2020, Roccato et al. 2020).

An important part of the literature suggests that increased economic and psychological insecurity about the future may lead to increased support for leaders or institutions associated with the nation. The 'rally effect' is a concept generally used to explain the increase in short-term popular support for the incumbent government or political leaders of a country during times of international political crises or war, but could be extended to severe pandemic crises. Generally, in these moments of high uncertainty, criticism of government policies is reduced and trust in institutions is greatly increased (Roccato et al. 2020; Asbrock and Fritsche 2013; Rickert 1998)

The rally effect is a phenomenon that generally concerns the period close to the adverse event; in fact several studies detect an increase in institutional trust during the early months of the Covid 19 emergency (Bol et al. 2021; Han et al. 2021; Amat et al, 2020), while it declines during the period of lower infection ( Ahrendt et al. 2021; Mizrahi et al. 2021). This paper also documents that the rally effect only occurred in Europe in the first months of the health emergency (from the spring 2020 to the summer 2020), while the overall decline in trust in all types of institutions, national and supranational, gradually increased from summer 2020 to spring 2021.

We think that the "rally effect" cannot be taken for granted in the context of the Covid pandemic because there are groups of citizens who have reacted differently to the crisis: groups who have reasons to call for stricter policies particularly in the early months of the pandemic, but also groups that oppose the incumbent government for political reasons related to excessive

severity, particularly after many months of restrictive economic and social impositions often not understood or considered unfounded.

This citizens' detachment from institutions due to the top-down, coercive and non-cooperative strategy by the government that excluded local actors and citizens from decision-making processes, have caused, according to some authors, a general deterioration of the democratic order (Avritzer and Rennó 2021; Repucci and Slipowitz 2020 ; Thomson and Eric, 2020). Moreover, in the face of these social and economic constraints that have led to a worsening financial situation of households and businesses, governments have intervened with support measures that have not always been *perceived* as adequate by citizens (Ahrendt et al. 2021) . The perceived quality of public support, a key factor that influences institutional trust, has also contributed to a reduction in the satisfaction with democracy in Europe.

Top-down policies, coercive measures, and inadequate social support policies undermine citizens' democratic participation by reducing their willingness to comply and cooperate with government efforts to manage the crisis (Leeson and Rouanet 2021; Mizrahi et al. 2021; Boin et al., 2020; Ostrom 2008). This could also reduce governments' ability to implement other effective policy actions in the long term, crippling them in a situation known as the “social dilemma”, in which citizens act on the basis of their objective function without considering the social cost implicit in their actions, which do not necessarily coincide with the common good (Ostrom 2009, 1998; Ostrom and Walker 2003).

A democratic and bottom up approach, based on the active role of central government, local organisations, formal and informal institutions, and where citizens are co-producers of solutions to address social dilemmas such as global warming, deep fiscal or pension reforms, and other health emergencies, is generally preferred. A bottom-up approach for this kind of situation can increase the proximity of institutions to the needs of citizens, reduce their selfish behaviour by strengthening their trust and propensity for cooperation, promoting a socially optimal outcome, which, in the case of the pandemic, is represented by a higher level of public health (Paniagua 2022; Ostrom and Meserve 2009, Ostrom 2008).

In this paper, we assume that satisfaction with democracy measures the citizen's support for regime norms and procedures and that it is a proxy for the propensity to cooperate with each other (e.g Bekiaris 2021). This work contributes to the current debate on the preservation and promotion of democracy by analysing the impact that socio-economic distress caused by the

pandemic had on individuals' democracy satisfaction. It focuses on the distance between citizens and government, measured in terms of responsiveness, reliability, fairness and integrity of public support, as key factors that influence institutional trust and satisfaction with democracy in Europe.

Specifically, we model the perceived quality of government support and trust in institutions as indirect mechanisms that can mitigate or amplify the negative impact of economic distress on citizens' satisfaction with democracy having also controlled for socio-demographic characteristics, employment status, work life balance, economic inequality, and country specific effects.

Our results show that the economic crisis is a serious threat for democracies especially for its negative impact on the perceptions of government support and institutional trust, which in turn, reduce the levels of democracy satisfaction. For preserving their democracies, states should firstly address attention toward citizens' economic conditions and propose instruments of social support which are concretely able to improve the economic well-being of individuals, increasing the overall perceptions citizens have on the competencies of public action and their trust in institutions. The promotion of institutional trust and democracy satisfaction, through appropriate and effective actions of social support, are also important for governments' performance, as they enhance citizens' cooperation and their adherence to states' policies and indications.

In Section 2 we describe the conceptual framework and the related research hypotheses. Section 3 presents data, variables and preliminary results. The main findings are presented in Section 4. Section 5 concludes.

## **2. Conceptual framework**

### **2.1 Economic distress, crisis of democracy and institutional trust**

The pandemic has caused severe consequences on the economic conditions of individuals but also on the governments' stability of countries. Firstly, the pandemic has seriously deteriorated the democracy of different countries around the world: the reduction of the quality of democracy has been the result of governments' coercive actions, as emphasised in the report of Repucci and Slipowitz (2020) on the global crisis of democracy caused by the Covid-19

spread, and as supported also by other empirical works (Avritzer and Rennó 2021; Thomson and Eric 2020). Furthermore, the presence of an economic crisis may impact citizens' satisfaction with democracy and individuals who feel themselves economically threatened may perceive to not have control over their own life and tend to support authoritarian and anti-democratic systems, as a coping mechanism for dealing with the uncertainty and threats (De Simone et al. 2022; Roccato et al. 2020; Asbrock and Fritsche 2013; Rickert 1998). Russo et al. (2020) find that, in a sample of Italian adults, the presence of natural disasters such as the case of a severe earthquake, lead people to support more authoritarian parties, as a compensatory control mechanism. Also other studies connect the perception of economic threat with a higher support for authoritarian political systems (Asbrock and Fritsche 2013; Rickert 1998). Recently, Roccato et al. (2020) find that the economic threats caused by the pandemic significantly increase support for anti-democratic systems, independently from individuals' preferences toward a strong leader. On the basis of these researches, we hypothesise that:

*H1: The economic-distress experienced by individuals during the pandemic is negatively related to the citizens' satisfaction with democracy: specifically, when the economic distress increases the satisfaction with democracy reduces (c' in Figure 1)*

Several authors analyse the impact of economic distress and general insecurity about the future on institutional trust following adverse shocks such as wars or pandemics, documenting that in most cases there is a strengthening of public trust for the political leaders in government and generally the institutions associated with the nation (rally effect). There are many reasons for the rally effect: social identity theory, according to which a crisis triggers support for symbols associated with the in-group, such as the president; explanations related to the threat itself, where the rally around the flag effect is understood as a way to increase security in an unsafe situation; or explanations related to mobilisation effects linked to the emotions of a community, such as anger or anxiety (for a survey, Esaiasson et al., 2021). The centralisation of consensus and decision-making power accompanied by a reduction in the functioning mechanisms of democracy is sometimes associated with a shift in consensus towards undemocratic and authoritarian parties (Onraet et al. 2013; Hetherington and Nelson 2003; Sales 1973).

In this work we hypothesise that the rally effect and the increase in institutional trust is occurred during the early months of the Covid 19 emergency as supported by other empirical works finding an increase in public trust the early beginning of the pandemic (Bol et al., 2021; Han et al., 2021; Amat et al., 2020). Hence we formulate the following

*H2: The increase in trust in institutions (the rally effect) occurred only in the first months of the pandemic, whereas taking a longer period of analysis into account, a significant decrease in institutional trust is assumed.*

## **2.2 Public and social policies as a mediator of the relationship between economic distress and satisfaction with democracy**

The policy feedback theory argues that public institutions and policies influence the political behaviours of citizens and their support for democratic government (Campbell 2012). Significant is the work of Pierson (1993), who considers public and social policies as resources producing variable effects in terms of mass feedback behaviours, based on citizens' interpretation of these policies. Empirical works that applied this theory lead to different results in terms of mass feedback effects. Patashnik (2009) finds that the absence of positive effects of public policies on citizens' behaviours and support depends on weak policy design and the presence of a non-homogeneous action between institutions, which lead to an incomplete support by institutions in providing social benefits. Also, Sunshine and Tyler (2003) affirm that the effect of public policies on citizens' political attitude depends on the program administration and the respect of the principles of procedural justice. The evaluations individuals make regarding the fairness and integrity of social support and public policies are important dimensions that influence citizens' satisfaction with their governments' democracy. Several studies show that the presence of clear and transparent rules, the perception of having a voice in the procedures for accessing to social services and the perception of being treated with respect and dignity, are all key elements that influence the impact of public policies effect on citizens political attitudes (Bruch et al. 2010; Plutzer 2010; Kumlin and Rothstein 2005; Soss 1999). In agreement with these previous studies, we believe that the public interventions adopted during the pandemic for supporting citizens in conditions of needs had a significant impact on democracy support and satisfaction. As mentioned by OECD (2017) states public policies should respect both the characteristics associated to their competences (e.g. responsiveness, effectiveness) and dimensions linked to ethical concerns (e.g. respect of fairness principles, integrity), which can significantly improve the citizens' political support. Some authors have found that how citizens evaluate the effectiveness and fairness of the government's response to the pandemic influences their public trust and propensity to cooperate with government directions (Boin et al. 2018; Mizrahi et al. 2021; Rosenthal et al.

1989). The feedback citizens received on the government's ability to handle crisis situations influences their incentive to cooperate, which is a proxy for satisfaction with democracy and participation in its functioning (Mizrahi et al. 2021).

Based on these studies, we propose a factor of governments' support measures adopted during the pandemic, which comprises citizens' evaluations of states' social programs in terms of fairness, integrity, responsiveness and effectiveness. We hypothesise that:

*H3a: The quality of government support is a mediator in the relationship between economic-distress and democracy satisfaction, specifically a worse perception of government support experienced by citizens amplifies the impact that increased economic difficulties have on their satisfaction with democracy (Path  $a_1*b_1$ , Figure 1)*

### **2.3 Institutional trust as a mediator on the relationship between economic-distress and satisfaction with democracy**

Trust is a multidimensional concept applied in different disciplines, in accordance with Nooteboom (2007) trust is linked with the concept of risk, as when one part is vulnerable trust serves for reducing the risks and the transaction costs of the relationship. Trust emerges when the relational risks are too high to be managed only through formal means of control. Moreover, trust can be built within relationships, on a personal basis, but it can also generate outside the relationships, in a more impersonal way, on the basis of institutions (Nooteboom 2007). Institutional trust is often referred to the fairness and transparency principles, such as the definition of Tyler (2005) who considers trust in institutions as the belief that governments are honest, caring, benevolent in their intentions and act in good faith for answering to citizens' needs. Miller and Listhaug (1990) defines political trust as the citizens' confidence that the political system, its institutions and actors will "do what is right even in the absence of constant scrutiny" and that it will be "fair, equitable, honest, efficient and responsive to society's needs" (Miller and Listhaug 1990 p.358).

The concept of institutional trust has been particularly investigated from the beginning of the pandemic, as many scholars and academic researchers have studied its role in influencing states' policies and outcomes. In particular, different works find that institutional trust, during the pandemic emergency, significantly improve policies outcomes including citizens'



compliance and adhesion to governments indications, reduction of the mortality rate and risk perceptions (Goldstein and Wiedemann 2022; Devine et al. 2021; Han et al. 2021; Dryhurst et al. 2020; Olsen and Hjorth, 2020). Further, academics also investigate the impact of the pandemic on citizens' institutional trust. With respect to this issue, some studies support that citizens, in periods of crisis, trust more in institutions and in political authorities, as "rally effects" (Bol et al. 2021; Esaiasson et al. 2021; Roccato et al. 2020; Chatagnier 2012). Nonetheless, there are also empirical works which find a decrease in trust associated to the pandemic spread, as the case of Amat et al. (2020) which show that Spanish people who contract covid-19 or close contacts with affected individuals registered lower levels of political trust. Importantly, the Eurofound's report Living, Working and Covid-19, which contains the dataset we will analyse in the empirical section, show that, across the three waves of the survey, individuals significantly decrease their levels of trust in institutions (Ahrendt et al., 2020). Given this evidence, we believe that during the pandemic, institutional trust has served for dealing with the perceived risk associated with economic-distress and social threats. Higher levels of institutional trust have served as a coping mechanism, allowing individuals to suffer less the negative consequences of economic distress. For this reason, we state that institutional trust can be considered as a significant mediator which reduces the negative impact of economic-distress on democracy satisfaction. In synthesis, we hypothesise that:

*H3b: The institutional trust is a mediator in the relationship between economic distress and democracy satisfaction, specifically, a worse institutional trust experimented by citizens amplifies the impact that increased economic difficulties have on their satisfaction with democracy (Path  $a_2*b_2$ , Figure 1)*

## **2.4 The effect of Government Support on Institutional Trust**

The trust in institutions is generated when citizens evaluate the public institutions and the governments as promise-keeping, efficient, fair and honest (Blind 2006). The reliability and reputation of public action play a central role in influencing citizens' level of trust. State capacity and quality of government increases the political legitimacy and reduces the perceived distance between institutions and individuals, increasing the levels of trust and credibility of institutions (Rothstein 2013). Many studies emphasise the role of both states' competencies and values as core elements which enhance institutions' trustworthiness and reputation (Lee & Kim 2012,

Rothstein 2013, OECD 2017). In our case, we adopt four dimensions of public policies identified by OECD as elements that characterise state competencies (responsiveness and reliability) and values (fairness and integrity). These elements of public policies result in a positive role as they increase citizens' trust in institutions.

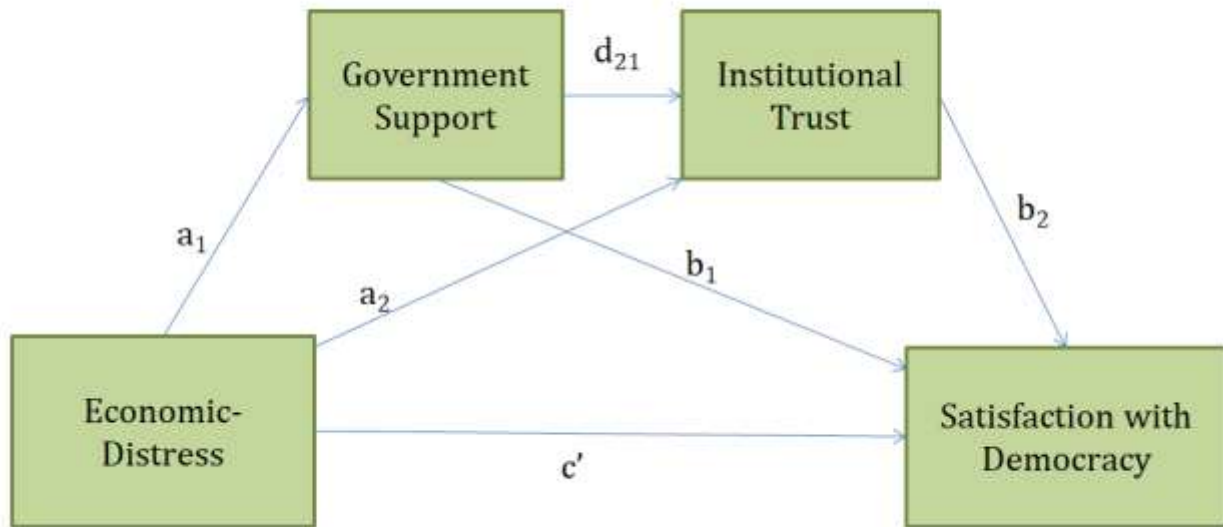
According to the model proposed by Ostrom and detailed in *Trust and Reciprocity* (Ostrom and Walker 2003), the role of reputation and feedback relationships are fundamental factors which influence individuals' trustworthiness and predisposition to trust and cooperate. If we consider trust in institutions, adopted in our theoretical model, we can suggest that citizens' trust in institutions is influenced by the previous relationships citizens have had with institutions and by the reputation they have of institutions. For this reason, positive (or negative) evaluations of government public support measures and perception of states' ability to manage citizens' needs during healthcare emergencies through the provision of adequate public support may positively (or negatively) increase citizens' trust in institutions. These arguments lead us to hypothesise that:

*H4a: The quality of the government support experienced by individuals during the pandemic is positively related to the citizens' trust in institutions, specifically a worse perception of government support reduce citizens' trust in institutions (path d21, Figure 1)*

*H4b: The negative impact of an increased economic-distress on democracy satisfaction (path c') is also worsened by the double mediating effect of the quality of governments' support through institutional trust. Higher levels of economic-distress worsens the citizens' perception of public support which, in turn, deteriorates their institutional trust, which leads to a higher negative effect on the satisfaction with democracy. ( Path  $a1*d21*b2$ , Figure 1).*

All the hypotheses above are represented in the following path diagram (Figure 1).

**Figure 1. A mediation model of the satisfaction with democracy**



### 3. Data, variables and preliminary analysis

#### 3.1 Dataset and variables

To investigate the hypotheses arising from the theoretical framework above, we employ a database drawn from the European Living, Working and Covid-19 Survey carried out by Eurofound (2021) developed during the Covid-19 pandemic (hereinafter the ELWC). The survey was conducted in three different rounds: the first one was launched in April 2020, the second one in July 2020 and the third one was implemented in February and March 2021. The three rounds reached almost 190,000 European citizens. The aim of the ELWC is to assessing the changes taking place during the pandemic in terms of trust in the public institutions, working conditions, financial and economic instability and other dimensions which capture individual well-being and satisfaction with governments' system of governance (e.g. democracy satisfaction, optimism about the future of individuals' own country). The ELWC also measured the assessment of the survey respondents with respect to income support and social and financial assistance provided during the pandemic by national governments and the European Union. We selected the third round of the ELWC involving 46,800 respondents (Eurofound, 2021). This round comprises variables of interest for our study, not sampled in the previous rounds, in particular the satisfaction with democracy.

Most of the variables we analysed are perceptions, such as the perception of how fair the measures are, how much individuals trust institutions and others, and the perception of the individual financial situation. Subjective perceptions and impressions appear to influence agents' choices and evaluations of public measures even more than direct and personal experiences. In fact, individuals make their overall assessment on the base of past experiences or evaluations shared by other individuals in their social networks, as well as on the basis of public information and media reporting (Kaufmann, Kraay, and Mastruzzi 2011).

In the following, we present the variables adopted in the mediation models. Firstly, we include in our analysis both variables originally taken from the dataset provided by the Eurofound that additional composite variables derived through the Non-Linear CATPCA<sup>1</sup>, which provides continuous factors derived from the categorical variables. In the following, we present the variables used.

*Perception of Government Support:* this factor comprises four items from the survey relating different dimensions of welfare policies adopted by the national government. As suggested by OECD (2017) we consider state competencies in terms of responsiveness and reliability, as well as the values of fairness and equity, representing important dimensions influencing institutional and interpersonal trust. Specifically, this factor suggesting the perceived quality of government interventions comprises the following variables: clarity and transparency of support measures (integrity), fairness, the ability to reach those most in need (reliability), efficiency in terms of obtaining benefits (responsiveness). The Cronbach's  $\alpha$  of this factor is equal to 0.902

*Institutional Trust:* this is a factor computed by considering local, national and multinational dimensions. In particular, we include in this factor the level of trust by individuals in national governments, healthcare systems, the police and the European Union. The Cronbach's  $\alpha$  relating to this factor is equal to 0.843

*Economic-Distress:* this factor combines economic and financial variables linked to past performance and expectations concerning the future financial condition of respondents. In addition, it comprises a variable that measures the degree of poverty individuals face in the present moment. The factor has a Cronbach's  $\alpha$  equal to 0.737.

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<sup>1</sup> This scaling method enables us to quantify categorical data and to extract latent factors summarising the variance expressed by the quantified variables.

*Work-Life balance*: this factor is related to work-life balance, including five items concerning the ability to balance work and life spheres. The Cronbach's  $\alpha$  is equal to 0.784.

The description of the items entering the definition of these factors is presented in the Appendix

We then consider additional variables already included in the original database provided by Eurofound (2020):

*Satisfaction with Democracy*: variables that measure the scores citizens attribute to the quality of democracy of their country's government. It is measured in likert scale ranging from 1 (= very dissatisfied) to 10(= very satisfied satisfied). We consider this variable as a proxy of the quality of democracy and democratic stability.

*Control variables*: under this heading socio-demographics characteristics are considered. They are identified by the following dummies: FEM (female=1), EDUC (high level of education, i.e bachelor's degree, master's, doctorate=1), SPOUSE (having a spouse or a partner =1), CHILD (having children up to the age of 11 =1), NO-METRO (cities of small dimensions =1). Dummies relating to the employment status are also analysed, with the excluded characteristic for students (student= 0): EMPL (employee =1), SELF-EMPL (self-employed =1), UNEMP (unemployed =1), RETIRED (retired =1), HOME (homemaker =1). We also include dummies identifying the European countries, which has been organised into 8 groups in order of the average levels of quality of democracy (See Table 3). Finally, the perception of inequality INEQ "financial situation compared to others" (Likert scale 1 = much worse -5=much better) and the factor WLB is included as control.

### **3.2 Preliminary analysis**

In the following, we evaluate the presence of a rally effect, that is the popular support for the national and supra institutions measured by the level of institutional trust, between different time periods relating to the development of the pandemic. An important detachment of citizens and institutions which reach its peak in the spring 2021 is documented. We focus further on this time period, as we are interested in understanding what factors led to the decline in trust and satisfaction with democracy. We define the sample and the distribution of the variables

Satisfaction with democracy, Economic distress, Perception of government support and Institutional trust across countries.

### **3.2.1 The rally effect during the pandemic period: Ancova analysis**

Table 1 analyses the presence of a rally effect on the levels of trust in institutions from the beginning of the pandemic to spring 2021. To do this, we conduct the Ancova test on trust in different types of institutions (the police, the government, the healthcare system and the European Union) over three time periods, also taking into account the countries variables. The results suggest that there has been a general decline in public trust over time, partially supporting the hypothesis (H2) relating the presence of a rally effect in institutional trust only in the short period of the spread of the pandemic. In particular, the pandemic did not produce any rally effect in the case of trust in the government and the police, while trust in the European Union and trust in the healthcare system only registered a slight rally effect in the short term, between spring 2020 and summer 2020, while the levels of trust drop significantly from summer 2020 to spring 2021 across all the institutions considered. According to these results<sup>2</sup>, the pandemic seems to have deteriorated not only the levels of quality of democracy but also the levels of trust in institutions, worsening citizens' perceptions of distance from institutions and reducing their propensity to cooperate. Table 1 also documents a reduction in satisfaction with democracy, recording a significant decline from summer 2020, in which the average of it was equal to 5,05 (2,818) out of 10, to spring 2021, in which the average value was equal to 4,33 (2,853). These findings lead us to focus our work on the third wave, which is the period characterised by the highest detachment between citizens and institutions, in terms of lower public trust and satisfaction with democracy.

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<sup>2</sup> Post-hoc Scheffe and Bonferroni tests confirm that there is a significant difference in the average levels of trust in institutions across all the three waves, meaning that the levels of institutional trust significantly changes between every wave.

**Table 1. Ancova test on the trust in institutions over time, controlling for Europeans countries and t-test on satisfaction with democracy**

	Wave 1 – Spring 2020	Wave 2 – Summer 2020	Wave 3 – Spring 2021	F-test and significance
Trust in your country government	4,77 (3,006)	4,63 (2,942)	3,87 (2,823)	F (2; 10709,703) =1400,304***
Trust in the police	6,24 (2,588)	6,16 (2,528)	5,71 (2,728)	F (2;3786,084) =613,212***
Trust in the European Union	4,48 (2,699)	5,10 (2,787)	4,59 (2,857)	F (2;3130,245) = 420,509 ***
Trust in the Healthcare system	6,45 (2,564)	6,53 (2,462)	5,89 (2,687)	F (2; 4931,316) = 860,617 ***
Satisfaction with democracy	NA	5,05 (2,818)	4,33 (2,853)	T= 25,832 ***

Note. \*\*\* p-value < 0,01; \*\* p-value < 0,05; \* p-value < 0,1. Standard deviations are in parenthesis. T-test and Anova test are confirmed also with tests for equal variance not assumed (Welch's test).

### 3.2.2 Socio-demographic dimensions of the sample

Our sample, that relates the individuals interviewed in the third waves (spring 2021) , consists of individuals from the European Union<sup>3</sup>, mainly women (63%), in the age range from 18 to 98 years. The majority of the sample is characterised by individuals over 50 years of age (61%), followed by individuals from 36 to 49 years (25%), while individuals from 18 to 34 represent a minority of the sample (14%). Most of the interviewees were employees (49%), a significant

<sup>3</sup> The European countries included are: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

share consisted of retired people (24%), followed by the unemployed (9%), self-employed (8%), homemakers (4%), individuals unable to work due to disabilities or long-term illness (3%) and students (3%). Moreover, the majority of our sample had a high level of educational qualifications: 51% had a bachelor's degree, a master's or a doctorate. With regard to household composition, 61% of the sample reported having a spouse or partner and 45% had, at least, one child up to 11 years old. A total of 79% live in a household consisting of one to three individuals. In terms of work-life balance, 60% of the respondents stated that they worried about work when not working at least sometimes, 73% felt too tired after work to do some of the household jobs that needed to be done, 55% reported that their job prevented them from dedicating the time needed for their family.

With respect to the economic well-being of the interviewees, the Eurofound report registered a reduction across the three waves of this survey (Ahrendt et al., 2020.) In particular, our statistics show that, in spring 2021, 23% of the interviewees, at least one fourth, face difficulties in making ends meet. Furthermore, 27% declare to suffer from a worsening in their own financial situation, with respect to three months before, and 23% believe that their financial situation in the next three months from the survey will get more severe. Economic conditions may vary across European countries and can significantly influence the satisfaction of people with democracy, the overall evaluation of states' quality of government, and the citizens' perception of closeness with public authorities. In the following table we analyse the presence of significant differences in the satisfaction with democracy, public trust, economic-distress and governments' social support across European countries in the third round, where we will estimate our mediation model. (A detailed analysis on descriptive statistics is available in Giovinazzo et al., 2022).

### **3.2.3 Satisfaction with democracy, economic distress, government support and institutional trust in European countries: one - way Anova analysis**

We conduct one-way-Anova for analysing the presence of differences and the average scores that the interviewees attributed to their Satisfaction with Democracy, perceived quality of Government Support, the Institutional Trust and the Economic-Distress of individuals. The variable Satisfaction with Democracy represents our dependent variable of analysis. Results from one-way-Anova show that there is a statistical difference on the average scores attributed



to the satisfaction with the democracy between countries ( $F(26, 46601) = 403,723$ ). This result is confirmed by the Welch test, used in the case of unequal variance in the sample, as suggested by the Levene's test we run. Moreover, we perform the Scheffe post-hoc tests for homogenous subsamples and the Games-Howell post-hoc test which compares pairs of countries for evidencing statistical difference. Both the post-hoc tests support the presence of 8 groups of countries homogeneous inside for their average levels of Satisfaction with Democracy, and significantly different from the other countries. These groups are presented and ranked in Table 2. We also perform one-way-Anova and the Welch test on the other variables adopted in our mediation models, confirming in all cases a significant difference in the average distribution of institutional trust, economic-distress, perceptions of governments' support across European countries. We include in our mediation model the eight groups of European countries, for taking into consideration the presence of differences between countries. Anova tests on the other variables are available on request.

**Table 2. Homogeneous groups of countries for democracy - Scheffe Test**

	Homogenous groups								
	N	1	2	3	4	5	6	7	8
Poland	1332	2,61							
Bulgaria	3162		2,97						
Croatia	1425		3,02						
Hungary	3261		3,16						
Slovenia	1026		3,17						
Slovakia	1632		3,49						
Greece	5748			3,81					
Cyprus	678			3,87					
Czechia	1490			3,90					
Romania	2088				4,28				
France	1288				4,38				
Belgium	1775				4,57				
Latvia	1182				4,58				

*Table 2 – continued*

Malta	634									4,79
Austria	969									4,81
Spain	1506									4,94
Italy	1993									5,07
Estonia	1013									5,21
Lithuania	1883									5,39
Netherlands	887									5,43
Germany	2821									5,64
Portugal	2135									5,82
Ireland	2627									6,36
Luxembourg	403									6,37
Sweden	875									6,46
Finland	1012									7,21
Denmark	1271									7,88
Sig.		,389	,605	,967	,053	,346	,092	1,000	1,000	

#### 4. Results from the mediation analysis

The mediation model has been estimated through the SPSS software with Hayes' PROCESS Macro (Version 4.0, released in August 2022) (Model 6), with which we analyse the direct impact of the Economic-Distress on citizens' Satisfaction with Democracy, as well as the indirect impact of the Economic-Distress through the mediators of Perceptions of Government Support and Institutional Trust. The models estimated allow us to consider the impact of these mediators separately as well as their effects in a causal relationship, according to which the Economic-Distress effect on the Democracy is influenced by the Perceptions of Government Support which, in turn, influences Institutional Trust that impacts on the Satisfaction with Democracy. These mediation paths are estimated in three steps: firstly Model 1 adopts as a dependent variable the first mediator Perceptions of Government Support and shows that the Economic-Distress significantly reduces citizens' perceptions of Government Support. Secondly, Model 2 considers the second mediator Institutional Trust as a dependent variable,

and finds that also in this case higher levels of Economic-Distress significantly worsen the levels of Institutional Trust. We also notice that the mediator of Perception of Government Support is positively and significantly correlated with citizens' trust in institutions: good (or bad) evaluations of government support during the public health emergency increase (or reduce) citizens' trust in institutions. This result supports H4a and can be linked to the role of reputation that institutions have, based on the quality of the public services provided. The third model adopts as a dependent variable the Satisfaction with Democracy and includes the Economic-Distress variable, negatively and significantly correlated with the Satisfaction with Democracy. This result supports H1, according to which situations characterised by high economic distress reduce citizens' support for the government democracy, which is in our cases proxied by their democracy satisfaction. This result suggests that states should pay attention towards the negative impacts of crisis and public health emergencies on the quality of democracy perceived by citizens.

Our results also show that perceptions of state support and institutional trust are positively and significantly correlated with satisfaction with democracy: higher (or lower) evaluations of the quality of government support and experienced institutional trust increase (or decrease) citizens' satisfaction with democracy. (Table 4, Model 3). Model 4 shows the total effect of Economic-Distress on Democracy satisfaction without the mediators' perceptions of government support and institutional trust. In this case the negative coefficient of the Economic-Distress is higher than that of Model 3, where we consider also the mediators. In particular, the total effect of Economic-Distress is equal to a coefficient of -1,00 ( $p < 0,00$ ) when only this variable is analysed, while when we include also the Perceptions of Government Support and the Institutional Trust, the coefficient of Economic-Distress reduces to -0,12 ( $p < 0,00$ ), indicating that a significant share of its effect is mediated and determined by the mediators of Perceptions of Government Support and Institutional Trust. These results are also represented in the path diagram in Figure 3.

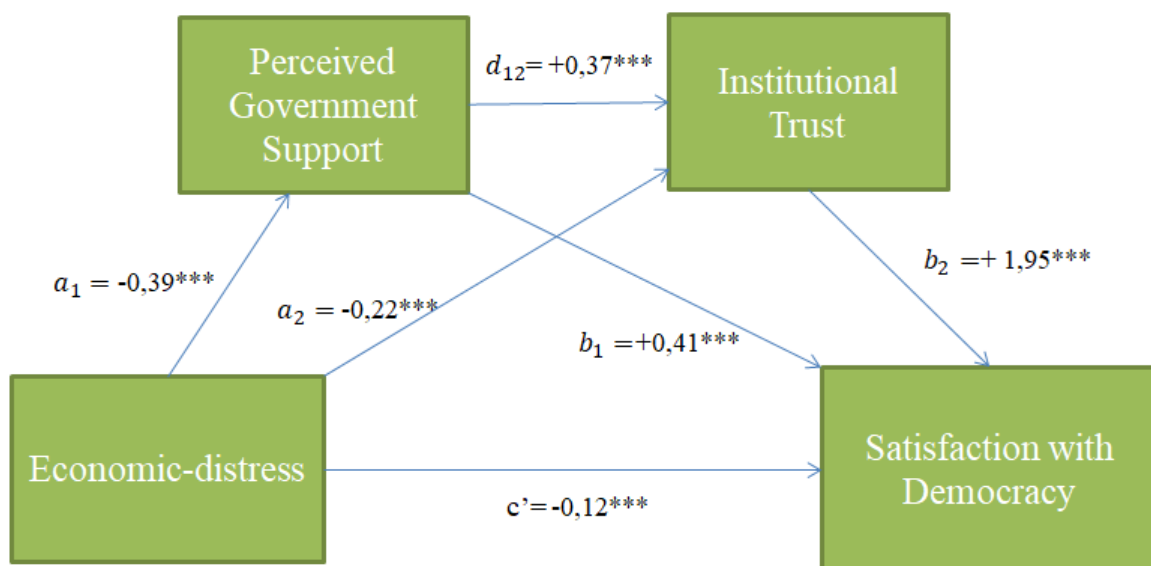
**Table 4. The impact of the Economic-Distress on the Satisfaction with Democracy and the mediating effects of Institutional Trust and Government Support**

	Model 1	Model 2	Model 3	Model 4
	Mediator 1 (y= Perceptions of Government support)	Mediator 2 (y=Institutional trust)	Total model direct and indirect effects (y= Democracy)	Total effect model (y=Democracy)
Economic distress	-0,39*** (0,012)	-0,22*** (0,010)	-0,12*** (0,024)	-1,00*** (0,034)
Mediator 1: Government support		0,37*** (0,007)	0,41*** (0,017)	
Mediator 2: Institutional trust			1,95*** (0,018)	
Female	0,06*** (0,016)	0,14*** (0,013)	-0,005 (0,031)	0,34*** (0,045)
Age	0,003*** (0,009)	0,001* (0,000)	0,0004 (0,001)	0,006*** (0,002)
Educ	-0,009 (0,017)	0,06*** (0,014)	0,06** (0,03)	0,18*** (0,047)
Children	0,01** (0,007)	-0,002 (0,006)	-0,01 (0,013)	-0,004 (0,019)
Partner	0,04** (0,019)	0,02 (0,016)	0,07** (0,036)	0,16*** (0,053)
No-metro	-0,04*** (0,016)	-0,05*** (0,013)	-0,10*** (0,030)	-0,26*** (0,043)
Inequalities	0,12*** (0,011)	-0,004 (0,010)	0,01 (0,022)	0,148*** (0,032)
Work-life balance	0,01* (0,009)	0,006 (0,007)	0,07*** (0,017)	0,11*** (0,025)
Occupational dummies	Included	Included	Included	Included
Countries				
Group 1	-0,34*** (0,074)	-1,10*** (0,062)	-2,04*** (0,140)	-4,61*** (0,203)
Group 2	-0,34*** (0,059)	-0,93*** (0,049)	-1,86*** (0,112)	-4,08*** (0,162)

*Table 4 – continued*

Group 3	-0,04*** (0,059)	-0,99*** (0,049)	-1,24*** (0,112)	-3,24*** (0,162)
Group 4	-0,16** (0,059)	-0,63*** (0,049)	-1,32*** (0,110)	-2,75*** (0,161)
Group 5	-0,13*** (0,059)	-0,42*** (0,049)	-0,99*** (0,110)	-1,97*** (0,161)
Group 6	0,15*** (0,059)	-0,31*** (0,049)	-0,90*** (0,111)	-1,34*** (0,163)
Group 7	-0,07 (0,08)	0,15** (0,067)	-0,44*** (0,150)	-0,24*** (0,220)
R-squared	0,139	0,428	0,670	0,294
N	14247	14247	14247	14247

**Figure 3. Representation of the main results in the mediation model**



**Table 5. Comparison between total, direct and indirect effects**

	Effect and standard error	(BootLLCI; BootULCI)	% on total
Total effect	-1,00 (0,034)	(-1,070; -0,037)	
Direct effect	-0,12 (0,024)	(-0,16; -0,07)	12%
Indirect effects			
Perceptions of government support	-0,16 (0,009)	(-0,17; -0,14)	16%
Institutional trust	-0,43 (0,02)	(-0,48; -0,39)	43%
Government support through institutional trust	-0,37 (0,01)	(-0,30; -0,26)	28%

Results of Table 5 shows that a higher economic-distress may seriously deteriorate the satisfaction with democracy in particular through its indirect effects of citizens' perceptions of social support and institutional trust. These two are significant mediators that amplify the negative impact of an increased economic distress on the democracy, supporting (H3a), (H3b) and (H4b). In particular, the greatest effect is attributed to institutional trust, which seems to be the most important determinant in the negative impact of economic hardship, accounting for 43% of the total effect of the economic distress (H3b, the mediation of institutional trust). Following institutional trust, the indirect effect of perceptions of government support *through* institutional trust represents 28% of the total effects (H4b, the double mediation effect). Though, the perception of government support results to be the mediator that accounts for the lower share of the indirect effect, represented only by 16% (H3a, the mediation of governments' supports). State support is important and significant in the negative effect of economic distress on the support for democracy.

Although perceptions of government support and institutional trust represent two important determinants of democracy satisfaction, the economic-distress causes a significant worsening in these two dimensions which, in turn, reduce the evaluation of democracy satisfaction.

Nonetheless, the negative impact on the perceptions of governments' supports also influence citizens' institutional trust, which is the dimension accounting for the higher share of the indirect negative impact of economic-distress on democracy. Citizens' negative perceptions of state support reduce institutions' reputation and trustworthiness, worsening citizens' trust, which in turn reduce satisfaction with democracy.

The estimated signs of the control variables are those expected as outlined in Table 4. Model 4 shows that satisfaction with democracy increases with increasing age, education, respondents having a partner and being female. Living in a small city is associated with lower levels of satisfaction with democracy. The perception of a better economic and financial situation than others and a good work-life balance are characteristics that improve satisfaction with democracy. Finally, the country effects considered in our models confirm the results of the ANOVA tests previously presented and are significant, suggesting heterogeneity across Europe in satisfaction with democracy (see also Figure 2).

Models 1, 2 related to the mediators Perceived Government Support and Institutional trust respectively, reveal that women and increasing age are positively and significantly associated with higher levels of trust in institutions and to a good perception of the quality of government support. Lower levels of trust and evaluation of the quality of public support characterise the younger generations, who perceive a greater distance with institutions due to social policies and public support that are not in line with their needs. Living in a no metropolitan area (or small city) is a negative determinant of trust in institutions and positive perceptions of government support, while having a partner and, at least, one child, are positively correlated with higher positive evaluations of public support (Model 1, Table 4). Similarly to satisfaction with democracy, individuals' perceptions of having a better financial situation with respect to others and a good work-life balance are positive determinants of good evaluation of the government support (Model 1, Table 4). To conclude, higher levels of education are also associated with higher levels of trust in institutions, while, in this case, the perception of having a better financial status and a better work-life balance are not significant determinants of trust in institutions (Model 2, Table 4).

## 5. Conclusion

This article analyses the role played by the perceived public support measures introduced during Covid-19 and institutional trust in the mechanism linking the impact of economic hardship suffered by European citizens and their satisfaction with democracy.

Firstly we document a severe decrease in trust towards all the institutions over the course of the three waves of the survey analysed. In partial support of the H2 hypothesis that there was a rally effect in the early stages of the pandemic: we find an increase in trust that is associated with the rally effect in the waves of spring 2020 and summer 2020 and only with regard to trust in the health system and the European Union, while the overall trust has declined significantly considering all the types of institutional trust and the third wave of spring 2021. Secondly, this generalized reduction of institutional trust is accompanied by lower levels of satisfaction with democracy, both these dimensions lead to a higher detachment of citizens and institutions, which may lead to a lack in cooperation and adhesion to governments' indications (Mizrahi et al., 2021).

We also find that the worsening economic and financial conditions experienced by European citizens during the Covid pandemic also correlates with their reduced satisfaction with democracy (H1), although this negative impact is largely determined by the indirect mechanisms of worsening in the perceptions of good public support and institutional trust. Living in conditions of economic-distress causes a significant deterioration in the perception of government support and in the reduction of citizens' trust in institutions, which in turn, decrease the satisfaction with democracy.

According to these indirect mechanisms, institutional trust and perceived government support during the pandemic are both significant mediators in the negative impact of economic distress on democracy satisfaction, confirming both H3a and H3b. The evaluation of public support is significant not only for its indirect effect in satisfaction with democracy, as hypothesised in H3a, but also for its influence on institutional trust, which appears to be the main determinant of citizens' dissatisfaction with democracy.

In fact, we also document that the negative impact of an increased economic-distress on democracy satisfaction is represented by the relationship of perceived government support on



satisfaction with democracy through institutional (dis)trust, which significantly amplifies the effect of governments' support, as hypothesised in H4b.

European governments should therefore not underestimate the reputational damage of interventions perceived as distant or not shared by citizens during the pandemic because they generate lasting consequences on institutional trust and attachment to the system of democratic rules. The economic-distress seems to increase dissatisfaction with democracies through its effects on the perceived distance of government support from the needs of citizens and in reducing their trust in institutions.

To understand this mechanism is particularly important as trust in institutions is also a key determinant of the effectiveness of public policies, lower levels of trust can negatively affect the willingness of citizens to cooperate with public action as in a democratic system, worsening the overall performance of institutions and governments.

The results of this work show that there has been a decrease in the levels of citizens' trust in national and supranational institutions from the beginning of the pandemic to the spring of 2021. This distance between society and institutions has amplified the negative impact that individuals' economic and financial difficulties have on their satisfaction with democracy.

However, governments can take action to preserve and strengthen citizens' satisfaction with democracy by providing support for economic and financial distress using public actions which respect the characteristics of fairness, integrity, responsiveness and reliability that they are relevant dimensions to determine citizens' closeness from their governments (e.g OECD 2017; Bruch, Ferree, and Soss 2010; Plutzer, 2010; Kumlin and Rothstein 2005; Soss 1999).

Institutional trust and satisfaction with democracy are important for ensuring social cooperation, full recovery and responding to future social dilemmas, such as future health emergencies, economic crises, but also to tackle deep structural reforms in Europe. Democratic governments provide a set of fundamental tools and allow citizens to contribute fully and actively to building the future of their countries and managing challenges

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## APPENDIX

**Table A. The factors from the CATPCA and their dimensions**

Items	Perception of Government Support	Institutional Trust	WLB	ECO-STRESS
The support measures are fair	0.821			
The support measures reach those who need most	0.779			
Obtaining support from public services is easy and efficient	0.747			
The rules for obtaining support are clear and transparent	0.746			
Trust in your country's government		0.872		
Trust in the healthcare system		0.843		
Trust in the police		0.835		
Trust in the European Union		0.742		
Found it difficult to concentrate on your job because of your family responsibility			0.822	
Found that your job prevents you from giving the time you wanted to your family			0.776	
Found that your family responsibilities prevented you from giving the time you should for your work			0.766	
Felt too tired after work to do some of the household jobs which need to be done			0.685	
Kept worrying about work when you were not working			0.592	
Household financial situation since three months ago				0.843
Household ability to make ends meet				0.805
Household financial situation in three months' time				0.780
Cronbach's	0.902	0.843	0.784	0.737