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Abstract

We examine the impact of the rapid spread of the COVID-19 pandemic and the nationwide movement restrictions on socio-economic attitudes in four European countries (France, Germany, Spain, and the United Kingdom). We conducted large-scale surveys while the pandemic rapidly spread before and after nationwide lockdowns were implemented. We investigate the impact in three different categories of attitudes: i) economic perceptions (economic insecurity and views on globalization); ii) political attitudes (trust in domestic and international institutions, populism and immigration); and iii) social aspects (authoritarianism and loneliness). We find that overall, the pandemic/social-distancing, but not the lockdowns, has increased economic insecurity, loneliness, and acceptance of authoritarianism while decreasing support for globalization. On the bright side, there is a sensible increase in trust in domestic institutions. We also document that the pandemic had heterogeneous and disproportional effects both at the country level and at the demographic group level. In terms of societal groups, our results suggest that the aggregate results are mostly driven by a number of groups, most notably women, families with children, and the labor force.

JEL-Codes: D700, H110, H120, H410, I180.

Keywords: lockdown, Covid-19, Europe, economic insecurity, globalization, trust, populism, authoritarianism, social loneliness.

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1 Introduction

The earliest recorded pandemic afflicted Athens during the Peloponnesian War in 430–427 B.C. Since then, a long list of pandemics (such as malaria, leprosy, smallpox, measles, bubonic plague, influenza, etc.) have shaped history, decimating the human population and changing the way people live (Hays, 2005). Government interventions such as quarantines to contain the spread of contagious diseases are more modern concepts; quarantine was first used in Venice in 1127 (quarantaggiorni = forty days) to combat leprosy (Newman, 2012). Historic accounts lay out how authorities tried to fight pandemics but due to lack of detailed data very little is known about how these often drastic interventions shaped society, in particular the economic, political, and social attitudes of the population.

Today, the human population is confronted with the outbreak of a new disease. On March 11, 2020, the World Health Organization (WHO) classified the coronavirus disease 2019 (COVID-19) as a global pandemic. Many countries have implemented social distancing and mobility restrictions to contain the spread of the virus.¹ As a consequence, this pandemic has led to lockdowns of entire cities and countries around the world, and it has affected nearly every aspect of economic, social, and political life.² This new pandemic provides an opportunity to study the impact of a severe shock and drastic government interventions on a wide range of attitudes in society.

We conducted large-scale surveys in France, Germany, Spain, and the United

¹<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

²For simplicity, we will interchangeably use the terms lockdowns, social mobility restrictions, and quarantine throughout the paper, even though the measures differed in detail across countries. The measures to implement physical distancing ranged from strict quarantines, which forced people to stay inside their homes, to temporary closures of certain businesses and restrictions on the number of people coming together.

Kingdom with around 20,000 respondents, while the pandemic rapidly spread and nationwide lockdowns were implemented. The aim of this research is to investigate the impact of the COVID-19 induced restrictions, including lockdowns, on socio-economic attitudes, when the virus began to spread through these countries and WHO declared a public health emergency of international concern and established isolations.³ As the pandemic has triggered large supply and demand shocks, we first examine the impact on perceptions of economic insecurity and globalization. Then, we analyze to what extent the pandemic has affected the population's confidence in its institutions, as well as the effect it has had on populist ideas and views on immigration. Finally, we also study the influence on social aspects such as authoritarianism and loneliness.

The implementation of this survey in a crucial pandemic period allows us to understand and disentangle two different types of impact on economic, political, and social attitudes: i) the immediate impact of the lockdown; and ii) the accumulated effect of the pandemic during the whole period of the sample. To our knowledge, this is the first study, which investigates changes in a broad set of socio-economic attitudes as a result of a large exogenous shock like a global pandemic by using large-scale individual data from a cross section of countries. Our data set gives us a unique opportunity to identify the heterogeneous effects across socio-demographic strata.⁴

Our results show that, not surprisingly, the pandemic has led to increased economic insecurity. At the country level, the aforementioned increase is statistically significant in both France and Germany. Moreover, we find that, in addition to the current distortions to trade and supply chains, public opinion toward glob-

³This survey was not specifically designed to measure the impact of COVID-19. However, this fact may even turn into an advantage as the survey is not biased by the use of pandemic language.

See Fetzer et al. (2020) for the influence of the framing on coronavirus perceptions.

⁴A more in-depth discussion of the related literature will be presented in Section 2.

alization is also in decline—a result driven mostly by Germany. This particular results suggests that world leaders should prepare for increased anti-globalization pressures during (and possibly after) the pandemic, although a global push for successful vaccinations may reverse this trend. Conversely, there is a sensible increase in trust in domestic institutions (particularly in Germany and the UK), which is also consistent with some recent studies (Esaiasson et al., 2020). While authoritarian tendencies are increasing (most notably in Spain), European citizens are feeling lonelier with increased social distancing, lockdowns and, travel restrictions. Interestingly, we also show that these changes in attitudes are mostly caused by the pandemic itself, rather than the short-term contemporaneous effect of the lockdowns.

A number of recent studies in macroeconomics have argued that economic policy shocks have asymmetric effects on different demographic groups of the population. Anderson et al. (2016), for instance, contend that fiscal policy innovations have substantially different effects on consumers depending on their income: while the wealthiest individuals tend to behave according to predictions of standard Real Business Cycle (RBC) models, the poorest behave according to standard IS-LM (non-Ricardian) models, most likely due to credit constraints. In a similar vein, Cloyne and Surico (2017) argue that households with mortgage debt have large and statistically significant consumption responses to tax changes while home-owners do not. As a pandemic changes aggregate incomes and economic policy decisions at the macro level, it is reasonable to expect it to affect different groups of populations disproportionately. Our key results, indeed, show that the effects of the pandemic have been largest both in terms of magnitude and significance for women, individuals with children, and those in the labor force, which implies that the pandemic has affected certain groups disproportionately. The remainder of the paper is structured as follows: the next section reviews the relevant

literature, section 3 explains the data-collection process through the large-scale surveys, section 4 discusses the empirical methodologies used, section 5 presents empirical results, and section 6 concludes.

2 Literature

The full literature on social interactions, economic insecurities, and political attitudes is by far too comprehensive to be reviewed here. Therefore, we provide a brief definition for each concept and mostly refer to those contributions in the literature that look at the interaction of each of these concepts with large shocks in general and pandemics in particular.

2.1 Economic Insecurity

The COVID-19 pandemic and containment measures triggered multiple supply and demand shocks. We contribute to the fast-growing literature that relates the global health crisis to economic outcomes by documenting the development of perceived economic insecurities with the outbreak of a global pandemic. In closely related studies, based on internet searches and experimental surveys, Fetzer et al. (2020) find a substantial increase in economic anxiety during and after the arrival of the coronavirus. In a similar vein, Binder (2020) argues that greater concerns about the coronavirus are associated with higher inflation expectations and more pessimistic unemployment expectations. Hanspal et al. (2020) use survey data of more than 8,000 US households to provide evidence of the effect of the COVID-19 pandemic on US households' expectations about spending, debt, labor market activity, and the recovery of their wealth and income.⁵

⁵As stressed by Fetzer et al. (2020), recent empirical evidence shows the relevance of information, perceptions, and expectations in modeling households' behavior (Armona et al., 2018; Bailey et al., 2018, 2019; Binder and Rodrigue, 2018; Coibion et al., 2019, 2020b,a; D'Acunto et al., 2019;

There is also a small number of papers dealing with earlier outbreaks of virus diseases and their impact on economic insecurity. Investigating the social consequences of quarantine during the Ebola outbreak in Liberia, Pellecchia et al. (2015) observe that a mandatory prohibition of movement created serious socio-economic distress. Cava et al. (2005), exploring the experience of quarantine during the severe acute respiratory syndrome (SARS) outbreak in Toronto, document the expression of serious economic insecurity during interviews even though none of the participants in the study reported significant financial hardship due to quarantine; all respondents were compensated for the stoppage by their employers or the government. Hawryluck et al. (2004) show that lower income was directly related to increasing symptoms of both post-traumatic stress disorder and depression during the SARS quarantine in Toronto. Brooks et al. (2020) argue that the stronger symptoms of low income earners could be conditioned by their economic insecurity during the quarantine.⁶

In our empirical analysis, we not only look at economic insecurity but also attitudes toward globalization. While economic insecurity is more inward looking—capturing individual feelings about one’s own economic well-being—the perception of international economic integration reflects a more general attitude toward

Roth and Wohlfart, 2020)

⁶This paper also complements the literature that captures the impact of COVID-19 on the economy via hard facts (rather than perceptions). In this line of research, Adams-Prassl et al. (2020) present real time survey evidence from the United Kingdom, United States, and Germany and show that the labor market impacts of COVID-19 differ considerably across countries. Besides, they also find that, within countries, the impacts are highly unequal and exacerbate existing inequalities. Bartik et al. (2020) survey 5,819 small businesses in the United States and find that the pandemic has caused massive dislocation among them; and many businesses think they will not be able to survive if the pandemic persists for the coming months. Coibion et al. (2020b), with a large-scale survey of households in the Nielsen Homescan panel, point out a dramatic decline in employment in the labor market.

the specialization of market-based economies. Globalization creates redistributive effects, may trigger economic anxiety, and appears to have significant effects on politics (Rodrik, 2020). It has been widely discussed whether the rise of populism and the increase in inequality in many countries may have been triggered by globalization (e.g., Fukuyama, 2019; Rodrik, 2020). Moreover, globalization seems to have produced domestic disintegration in many countries, deepening the divide between the winners and losers of exposure to global competition (Rodrik, 1997, 2011). Our research investigates how the global pandemic affected globalization perceptions and which segments of society are driving these perceptions.

2.2 Political Attitudes

The literature on *political trust* dates back many decades (see for instance Miller, 1974) and is too comprehensive to be reviewed here extensively.⁷ Hence, we will focus on those papers that deal with the interaction of shocks (natural, economic, political) and trust in national or international institutions. A large number of contributions have investigated trust in political (mostly national) institutions after major terrorist attacks. In the wake of 9/11, the United States experienced a significant increase in trust, the so called *rally effect* (see Chanley, 2002; Gaines, 2002; Hetherington and Nelson, 2003; Skocpol, 2002). However, this increase in trust is transitional and vanishes after a few months (Perrin and Smolek, 2009). A similar pattern is detected by Dinesen and Jæger (2013) after the Madrid bombings in March 2004, though the effect was more durable in Spain than in the United States. Perrin and Smolek (2009) also analyzed the socio-demographic determi-

⁷Levi and Stoker (2000) review survey-based research of historical and comparative case studies on political trust. For the determinants of trust in international organizations, see Torgler (2008). The link between trust in national institutions and trust in international institutions is investigated in Muñoz et al. (2011). Lower trust in national institutions tends to go along with higher trust in international institutions.

nants of the rallying effect. In the wake of 9/11, African Americans, women, and the less educated exhibited a smaller rally effect. This particular result is relevant for our study as we also investigate how the effect of lockdown interacted with socio-demographic factors in changing political trust. Research also shows that citizens differentiate between institutions when attributing responsibility and adjusting their trust levels. Gates and Justesen (2020) show that after a violent terror attack in Mali, voters mainly held the president accountable while fundamental trust in democratic institutions largely remained unchanged.

A second set of papers uses the shock of the financial crisis to investigate the impact on political trust. The general consensus is that the financial crisis reduced trust in political institutions (Algan et al., 2017); the loss in trust was more severe in countries where the crisis had a strong negative impact (see also Kroknes et al., 2015; Foster and Frieden, 2017). In other words, good economic performance helps to build up trust. The loss in trust also negatively correlates with increase in unemployment (Stevenson and Wolfers, 2011). Drakos et al. (2019) show that after bail-out agreements, the trust in European institutions deteriorated while the (low) trust in national governments was largely unaffected (see also Roth et al., 2011).

The link between a health shock and political trust is investigated by Blair et al. (2017). They focus on the Ebola epidemic in Liberia in 2014–15. In contrast to our approach, however, they do not analyze how the shock affected trust but rather ask how trust in government affects responses to policy measures. Respondents with low trust in government were less willing to follow the government-mandated policy measures and to take precautions against Ebola. Flückiger et al. (2019) analyze the same epidemic and show that the increase in political trust was particularly strong in regions highly affected by the virus. This increase was mostly driven by the government's response rather than by exposure

to the disease itself. The detrimental effects of distrust on health is impressively documented by Alsan and Wanamaker (2018); the exploitation and mistreatment by the medical profession of adult black men with Syphilis from the 1930s to the early 1970s reduced the trust of this group in the health care system, which in turn reduced significantly their life expectancy. The current COVID-19 pandemic is investigated through an online survey as in our case by Daniele et al. (2020) who find a decline in institutional trust.

Populism is a multifaceted concept. For a long time, the focus in economics had been on left-wing, redistributive economic populism, which dominated in Latin America (Dornbusch and Edwards, 1990).⁸ In recent years, the focus has shifted to a broader concept of populism. A common definition is provided by Mudde (2004), who writes that populism is a “*an ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, ‘the pure people’ versus ‘the corrupt elite’, and which argues that politics should be an expression of the volonté générale (general will) of the people.*” Hence, a key element of populism is the antagonism between the (good) population and the (bad) political elite that are alienated from the masses . This antagonism is combined with the claim that the broad population is a homogeneous group whose uniform preferences are neglected by elitist politicians. Hence, populists usually also have strong anti-pluralist standpoints.⁹

Much of the debate in the last few years has centered around the question of whether populism is driven by economic factors or by cultural and social values. The economic insecurity hypothesis (Guiso et al., 2018) suggests that globalization has transformed our labor markets and our societies in general. Growing inequalities and rising job insecurity drives voters towards politicians

⁸For a recent theoretical contribution in this tradition, see Acemoglu et al. (2013).

⁹Kyle and Gultchin (2018) deliver a typology of populism and sketch how the use of the term ‘populism’ evolved over time.

promising more traditional, safe jobs for domestic workers and a roll-back of perceived excessive globalization. In contrast, the cultural backlash view suggests that populism is a reaction to the shift towards multicultural and cosmopolitan societies especially in metropolitan areas (Inglehart and Norris, 2019; Margalit, 2019). An excellent recent survey on populism research is provided by Guriev and Papaioannou (2020). Within this literature, there is also a small number of studies looking at the impact of shocks on populism. For instance, Guiso et al. (2019) find that populist parties were more successful in those Eurozone countries that suffered more from the financial crisis. Schwartz et al. (2020) show that the Brexit shock softened populist anti-immigration attitudes in the UK. As a pandemic changes macroeconomic fundamentals, including the income distribution, it is reasonable to expect that attitudes toward populism may change during the period of a global pandemic.

2.3 Social Inclusion

Regarding the impact of lockdowns on *social interaction*, we focus our analysis on the concept of emotional loneliness. de Jong-Gierveld (1987) defines loneliness as a situation that occurs from a lack of quality relationships, which includes “situations in which the number of existing relationships is smaller than is considered desirable or admissible”. One of the consequences of quarantine is a sharp reduction in the number of social interactions, which, therefore, might increase the sense of loneliness. Hossain et al. (2020) survey evidence on mental health outcomes of quarantine or isolation for preventing infectious diseases and find higher reported scores for loneliness during periods of isolation (Abad et al., 2010; Barratt et al., 2011; Gammon and Hunt, 2018). Participants in a study on Toronto’s large-scale quarantine during the outbreak of SARS in 2003 also report loneliness as one of the emotional reactions to social distancing (DiGio-

vanni et al., 2004). For the COVID-19 quarantine, Killgore et al. (2020) find that the pandemic has increased loneliness among US adults. Orgilés et al. (2020) examine the emotional well-being of Italian and Spanish children aged between 3 and 18 who are in quarantine; more than 30% of the children reported feelings of loneliness. In a study focusing on the first week of the lockdown period in Spain, Losada-Baltar et al. (2020) find that greater loneliness was expressed by women and by people who devoted more time looking for and processing COVID-19 information.

Authoritarianism can be defined as a preference for social order and security at the expense of individual autonomy (Cohrs et al., 2005; Duriez and Van Hiel, 2002; Feldman, 2003) or as a cluster of values prioritizing collective security for the tribe at the expense of individual autonomy (Inglehart and Norris, 2019). These preferences may be affected by a large shock such as a lockdown. Miller (2017) argues that economic threats may explain preferences for authoritarian government. Safety reasons may also push people towards more acceptance of authoritarian measures. Cook et al. (2018) conduct a survey experiment and find that, on average, participants support government interventions to prevent or mitigate outbreaks of emerging infectious diseases, including those that greatly restrict individual liberties. Tepe et al. (2020) also conduct two survey experiments in Germany and find that COVID-19 lockdowns led participants to favor more power for the government at the expense of parliament. Participants are also more willing to pay for state protection against COVID-19 with a long-term loss of civil liberties rather than with long-term macro-economic wealth losses. They conclude that this large-scale pandemic can induce a substantial willingness to give up freedom for casualty prevention. Amat et al. (2020) conducting survey experiments in Spain find that participants appear to be relatively willing to accept an authoritarian turn, since they show a willingness to sacrifice basic civil

liberties in order to contain the pandemic; they also show higher support for strong leadership.

3 Data

3.1 Data collection and sample

We have conducted large-scale surveys in four European countries: France, Germany, Spain, and the United Kingdom. We have chosen this set of European countries, as they are known to have different political traditions, as well as different cultures. The survey was designed and programmed by the authors via Qualtrics, and it was administered between March 3 and March 30, 2020 in all four countries by the company Respondi (<https://www.respondi.com/EN/>), which has access to panels of representative samples of respondents to whom they send out survey links by email. Respondents were paid only if they fully completed the survey. The average time for completion of the survey was 30 minutes. The final sample is close to representative in each country. We keep only those questionnaires that individuals completed in full. Our survey was not designed to capture the COVID-19 effect, but was planned to be run before the pandemic was declared. The sample sizes are 5,291 for Germany (DE), 4,940 for Spain (ES), 4,959 for France (FR), and 4,892 for the United Kingdom (UK), a total of 20,082 observations.¹⁰

As a response to the COVID-19 pandemic, the four national governments restricted basic freedom rights during the administration of this survey. Lockdowns were imposed—to different degrees—on March 15 in Spain, on March 17

¹⁰Table B.1 in Supplementary Material shows the characteristics of the whole sample relative to the population in each country. Additionally, in Figure C.1 we present the density of the number of fulfilled questionnaires throughout the survey period.

in France, and on March 23 in Germany and the United Kingdom.¹¹ The last day of the survey in Germany and the United Kingdom is March 26. Therefore, the data from these two countries should be interpreted with caution, especially for the period after the lockdowns, due to the relatively fewer number of days.

3.2 The survey structure

The survey has four components: (1) socio-demographic characteristics, (2) economic insecurity, (3) political attitudes, and (4) social inclusion. The relevant questions from the English version of the survey are presented in Appendix A.

In the first block of questions, respondents are asked about socio-demographic characteristics such as gender, age, marital status, number of children, household income level, employment status, education level, and political orientation. In the second block, we explored the participants' perceptions of economic insecurity and the risks of increasing economic globalization. To capture economic insecurity, we take a question from the European Social Survey (ESS), Round 8, 2016/2017.¹² The particular question is as follows: *Which of the descriptions comes closest to how you feel about your household's income nowadays?* The answer options are 1 (*finding it very difficult on present income*), 2 (*finding it difficult on present income*), 3 (*coping on present income*) or, 4 (*living comfortably on present income*), thus a higher score means feelings of greater economic security.¹³ Following the literature (Bossert and D'Ambrosio, 2011), we also include information about job insecurity. The specific question is: *The country will face a situation of ever increasing job insecurity.* The answer options range from 0

¹¹Table B.2 in Supplementary Material shows the official dates and the number of respondents before and after lockdown in each country.

¹²The ESS systematically measures the attitudes, beliefs, and behavior patterns of diverse populations in more than thirty European nations.

¹³We reverted the original scale so that a higher score means feelings of greater economic insecurity.

(*Completely disagree*) to 10 (*Completely agree*) with higher scores showing more perceived economic insecurity.

To capture the population's perception about the economic globalization process, we take a scale from Elchardus and Spruyt (2016) and Iakhnis et al. (2018). Elchardus and Spruyt (2016) combine several statements to measure attitudes toward globalization. The statements are as follows: i) *Even more enterprises will move to low-wage countries, threatening employment in [country of survey]*; ii) *In order to face the competition of other countries we will have to dismantle our welfare state*; iii) *Multinational enterprises will become increasingly powerful, small enterprises are bound to suffer*; and iv) *Opening the European frontiers means that our employers will prefer the low-cost workers from poorer countries to our own workers*.¹⁴ Iakhnis et al. (2018), from a eight-wave panel study of Great Britain, constructed a scale from four questions that specifically tap how globalization affects the economy. The questions, adapted to our purposes, are as follows. *Consider globalization as the increased trade between countries in goods, services, and investments. Please indicate whether you think globalization has had a negative or a positive effect on each of the following: i) [Country of survey] factory workers; ii) Multinational corporations based in [Country of survey]; iii) You and your immediate family; and iv) The [Country of survey] economy.* For the current study, we construct a globalization perception index with these eight questions. Answer options range from 0 to 10; higher scores show more negative assessments of globalization.

In the third block of questions, we attempt to elicit political attitudes. In particular, we are interested in respondents' trust in domestic and international institutions as well as in their populist views. The trust dimension is captured

¹⁴While Elchardus and Spruyt (2016) use seven questions to assess the globalizing process, we only use those statements that explicitly mention a global economic context: "other countries", "multinational" or "frontiers".

by the following question: *Please indicate on a scale of 0–10 how much you personally trust each of these institutions (0 = Do not trust at all; 10 = Complete trust). Country’s parliament / The legal system / The police / Politicians / Political parties / The European Parliament / The United Nations.* Here we follow Algan et al. (2017) and the European Social Survey. Many papers basically use this type of questions though sometimes with different scales. For instance, the Afrobarometer (Flückiger et al., 2019) and the Gallup poll (Stevenson and Wolfers, 2011) use a scale from 0 to 3, the Eurobarometer (Drakos et al., 2019) only employs a binary variable. For trust in domestic institutions, we use the average for the first five institutions. Trust in international institutions is measured by the average number for the EU and the UN. For populism we follow Elchardus and Spruyt (2016): *Please indicate on a scale of 0–10 whether you agree or disagree with the following statements (0 = Completely disagree; 10 = Completely agree): a) The opinion of ordinary people is worth more than that of experts and politicians; b) Politicians should listen more closely to the problems the people have; c) Ministers should spend less time behind their desks, and more among the ordinary people; d) People who have studied for a long time and have many diplomas do not really know what makes the world go round.* Our populism index is the average value for these four items. Hence, our measure encompasses the people-centered view (first two questions) as well as the anti-elitist view (questions 3 and 4) of populism. To our knowledge there is no clear consensus on how to measure populism and there are competing indices (Akkerman et al., 2014; Oliver and Rahn, 2016; Schulz et al., 2018; Stanley, 2011).¹⁵ Some of these measures are more comprehensive, also covering further dimensions of populism such as the demand for sovereignty of the people and the postulated homogeneity of the people. However, the set of questions is also significantly larger and the questions are much more difficult to

¹⁵For a comparison of the various indices, see Castanho Silva et al. (2020).

grasp than our simple statements.

The attitude toward immigration is captured by a set of standard questions which are used frequently, e.g., in the European Social Survey, to measure the degree of openness: *Please indicate on a scale of 0–10 to what extent you think the United Kingdom should allow people from poorer countries outside Europe / of the same race or ethnic group / of different race or ethnic group / of different religious faith than the majority of the British people / to come and live here (0 = Allow none; 10 = Allow many to come and live here)*. In addition we asked to *what extent you think the United Kingdom has become a worse or a better place to live by people coming to live here from other countries (0 = Worse place to live; 10 = Better place to live)*. Higher scores go along with greater openness towards immigration.

In the last block, participants are asked about their subjective evaluations of loneliness and authoritarian values. Regarding loneliness, we use the 6-item De Jong Gierveld Loneliness Scale. This scale has been proved as a reliable and valid measurement instrument for overall, emotional, and social loneliness suitable for large surveys (de Jong-Gierveld and Tilburg, 2006). For this survey we only focus on the three statements regarding emotional loneliness. Participants have to indicate to what extent they agree with the statements (0 = Completely disagree; 10 = Completely agree). These three statements are the following: 1) *I experience a general sense of emptiness*; 2) *I miss having people around me*, and 3) *I often feel rejected*.

To measure authoritarianism, we select four items from a battery originally created by Schwartz (1992, 2007) for cross-national comparisons of basic human values. As for the case of loneliness, participants indicate on a 0–10 scale to what extent they agree with the selected statements. These four statements are as follows: 1) *It is important to live in secure and safe surroundings*; 2) *People should*

follow rules at all times, even when no-one is watching; 3) It is important that the government is strong and ensures safety against all threats, 4) It is important to follow traditions and customs handed down by religion or family.

To aggregate the responses to all questions within the corresponding category (economic insecurity, globalization, trust in domestic institutions, etc.), we build an indicator I_{ic} on day i in country c , using Principle Component Analysis (PCA). The PCA idea is simple: one reduces the dimensionality of a concept, while preserving as much variability (i.e. statistical information) as possible but at the same time minimizing information loss. This means that "preserving as much variability as possible" translates into finding new variables that are linear functions of those in the original dataset, that successively maximize variance, and that are uncorrelated with each other. Finding such new variables, the principal components, reduces to solving an eigenvalue/eigenvector problem, and the new variables are defined by the dataset at hand, not a priori, hence making PCA an adaptive data analysis technique. In our case we find a unique component that expresses maximum information of all variables regarding each of the concepts, economic situation, social inclusion, and political attitudes. Main descriptive statistics on the principal components are shown in Table 1.

[Insert Table 1 here]

In terms of socio-economic characteristics, we include gender as a dummy, which takes value 1 for women. We model age with three dummies: younger than forty years old (*Young*), between forty and sixty-five years old (*Middle*), and more than sixty-five years old (*Old*). In terms of monthly net household income, we consider three dummies: Low, Middle, and High. The thresholds for defining the different groups vary by country: 1) For France, using OECD data (<https://stats.oecd.org/>), the thresholds are found to be: less than 1500€, 1500€ to 3000€, more than 3000€. 2) For Germany, using Statistisches Bundesamt

(https://www.destatis.de/DE/Home/_inhalt.html), thresholds are defined as: less than 1500€, 1500€ to 4500€, more than 4500€. 3) For Spain, using National Statistics Institute (<https://www.ine.es/>), thresholds are recorded as: less than 1000€, 1000€ to 3000€, more than 3,000€. 4) For the United Kingdom, using HM Revenue and Customs (<https://www.gov.uk/search/research-and-statistics>), thresholds are defined in weekly net household incomes: less than £400; £400 to £1000; more than £1000. We also consider the household structure by including a dummy to capture the fact of having children (*Children*) and being married (*Married*). Education attainment is represented through a set of dummies: *Primary*, *Secondary*, and *Tertiary* binary variables for each of the educational levels. Labor market status is also modelled by a set of dummies for *Working*, *Self-employed*, *Unemployed*, and *Studying*. Finally, there is a specific question about where a respondent places herself/himself in terms of political orientation (0 = Left; 10 = Right). We build a dummy for extreme left (*Ext_left*) if they report values from 0 to 2 and for the extreme right (*Ext_right*) if they answer values from 8 to 10. Main descriptive statistics of our sample are reported in Table 2.

[Insert Table 2 here]

4 Identification Strategy

The gold standard method for evaluation of the COVID effect is the randomized controlled trial (RCT). Observational studies are an alternative when RCTs are not feasible. A primary challenge to evaluating outcomes of non-randomized interventions is self-selection bias. Individuals who choose to participate after the lockdown may differ from individuals who choose to participate before. Observational studies attempt to approximate the design of RCTs as much as possible (Rubin et al., 2008; Rosenbaum et al., 2009). The most common matching ap-

proach is to match on a propensity score (Rosenbaum and Rubin, 1983). However, some researchers have more recently advocated coarsened exact matching (CEM; Iacus et al., 2011). Advantages of CEM relative to propensity matching include the fact that increasing balance on one variable cannot increase imbalance on another (this can happen in propensity matching), ease of implementation, less sensitivity to measurement error, and greater computational efficiency. In CEM, the unique ex-ante choice is the coarsening; however, it provides more control on the amount of imbalance in the matching solution. Variables are “coarsened” by categorizing prior to creating the strata. Then individuals are placed into the appropriate stratum. Strata including at least one individual in each group (pre-COVID and post-COVID) are retained in the analysis, while all other strata (and the individuals in them) are excluded. A weight is created for each unit in the retained strata.

Once we have matched data, our first goal would be to test for the immediate (contemporaneous) structural break caused by the lockdown. For this aim, we adopt a regression discontinuity design (RDD), which identifies potential breaks in two parametric series estimated pre- and post-lockdown. We want to identify as clearly as possible the causal effect of lockdown measures on economic insecurity, political attitudes, and social inclusion. The lockdown dates in our analysis are the dates at which the lockdowns became effective. Some psychological effects of the lockdowns may have appeared as soon as the policy was announced to the public. However, as described in the previous section, the gap between announcement and implementation was very short.

We explore the effect of a potential break through a battery of RD plots. These plots display a first-order polynomial of the indices, fitted separately above and below the lockdown (Calonico et al., 2015). They are intended to provide suggestive evidence about the potential existence of discontinuity at lockdown.

The regression discontinuity design provides a consistent estimate of the impact of lockdown under the assumption that there are no other relevant factors that cause a discrete change in their value at the corresponding threshold. This is the main threat to the validity of this strategy. If the available “technology of manipulation” is sufficiently precise, this might affect the consistency of the RD estimates. Therefore, an analysis of sensitivity is in order.

Our second goal is to identify, not only the structural break, but the general trends in economic insecurity, political attitudes, and social inclusion. Following Brodeur et al. (2020), we estimate the regression model:

$$I_{ic} = \beta_0 + \beta_1 T_{ic} + \beta_2 f(D_{ic}) T_{ic} + \beta_3 f(D_{ic})(1 - T_{ic}) + \beta_4 X_{ic} + \mu_i + \rho_c + \epsilon_{ic} \quad (1)$$

The running variable D_{ic} is defined as the distance in days from the implementation of the stay-at-home order; it is negative for the days before and positive for the days after, while the date of the actual or counterfactual implementation is set as day zero (and dropped from the empirical model, as is standard). T_{ic} is a dummy that takes value one in the days after the stay-at-home order was implemented and is zero beforehand.

The model includes country fixed effects, ρ_c , as well as week and day (Monday to Sunday) fixed effects that appear in the vector μ . The identification strategy in equation (1) thus relies on the fact that the dates at which lockdowns were implemented differed among countries. The standard errors are robust and are clustered at the day level. $f(D_{ic})$ is a polynomial function of the distance in days from the lockdown implementation interacted with the lockdown variable T_{ic} , to allow for different effects on either side of the cut-off. Our regression analysis uses polynomials of order one.

Finally, notice that I_{ic} relates to each of the indicators of economic insecu-

rity, political attitudes, and social inclusion (a total of eight indicators¹⁶). The idiosyncratic error terms ϵ_{ic} might be in principle correlated at individual level. It is the same person who answers about economic insecurity and loneliness, for example. Therefore we simultaneously estimate the system of equations regarding the whole set of indicators.

5 Results

The results section is structured as follows. We first test the immediate structural break caused by the lockdown implementation. That is, we try to identify sustained breaks in two parametric series estimated pre- and post-lockdown for the economic, political, and social indicators. Secondly, we examine the evolution of these indicators during the whole period of the sample including pre- and post-lockdown to disentangle trends and transitory effects. In both, immediate and evolution analysis, we differentiate the impact of the COVID-19 pandemic by country and groups of population.

Before proceeding with the main results, we comment on CEM indicators and the indicators' joint estimation tests. First, we find that the percentage of matched individuals in both groups is close to one hundred per cent and that the multivariate distance is $1.272e^{-14}$. Note that the lower the multivariate distance the more balance between treated and control with respect to the full joint distribution, including all interactions, of the covariates. Perfect global balance (up to coarsening) is indicated by $L1 = 0$, and larger values indicate a larger imbalance between the groups, with a maximum of $L1 = 1$, which indicates complete separation. In terms of correlation among the idiosyncratic error terms, we find that t-statistic for Breusch-Pagan test of independence is 32882.13, distributed as a

¹⁶Economic insecurity, globalization perception, trust in domestic institutions, trust in international institutions, populism openness to immigration, authoritarianism, and social loneliness.

chi-squared with 28 degrees of freedom, therefore the p-value is 0.0000. Thus, the null hypothesis of independence of equations is rejected, thus we must estimate all indicators simultaneously.

5.1 The Contemporaneous Effect of Lockdown

We begin our analysis by exploring the contemporaneous effect of lockdown through a battery of RD plots classified into economic, political, and social indicators (Figure 1).¹⁷ These plots display a first-order polynomial of the outcome variable on lockdown, fitted separately above and below the cut-off, as well as local means of the indicators for a number of population bins (Calonico et al., 2015). They are intended to provide suggestive evidence about the potential existence of a discontinuity at the threshold.

[Insert Figure 1 in here]

To properly gauge the size of the lockdown effects, Table 3 reports RDD estimates. We use local linear estimation within the mean squared error optimal bandwidth proposed by Calonico et al. (2014). and robust inference methods. As can be observed in Table 3 and Figure 1, the immediate effect of a lockdown may represent a structural and sustained break in only three indicators: populism, immigration, and authoritarianism. There is a significant decrease in the perceived populism and in authoritarian values following lockdown implementation. We also observe a greater permissiveness for the entry of immigrants after lockdown.¹⁸ However, as pointed out in Section 3, if we run some sensitivity analysis, the estimations are not robust to changes in the order of polynomial, to a placebo

¹⁷The evolution of the unconditional average level of those indexes by country through the whole period of the survey are presented in Figures C.2–C.4 in Supplemental Material.

¹⁸The same analysis has been made by socio-economic characteristics. See Table B.3–B.5 in the Supplemental Material. By country we present RD plots in Figure B.5–B.7 in the Supplemental Material.

cut-off and to changes in the main indicator (using lag of the index).¹⁹

Thus, our first finding is that the days when the lockdowns came into force do not seem to cause any structural break in socio-economic attitudes.²⁰

[Insert Table 3 in here]

5.2 The General Effect of the Pandemic and Social-Distancing

In order to capture any potentially longer and sustained effect of the COVID-19 pandemic during the whole survey period, we have estimated Equation (1) described in the previous section. We analyze the marginal effects of days before and after lockdown. These estimated net marginal effects give us an idea of the pandemic impact around the lockdowns (also anticipated or delayed) in shaping household's attitudes, and whether it displays a temporary effect around the lockdowns or not.

In Table 4 we present the net marginal effect of all periods before, all periods after, and the differences between periods before and after the lockdowns.²¹

[Insert Table 4 here]

In terms of household economic insecurity, we find that there is a first significant impact before the lockdowns. The Before-Lockdown estimated parameter is negative and significantly different from zero (see Table 4, Column 1). In addition, the net final effect is also negative. The Before-After estimated parameter

¹⁹See Table B.6 in the Supplemental Material.

²⁰We extend the analysis of Foremny et al. (2015) to the date of the "10 deaths reached" date and we verify whether there is any significant difference in the indicators above and below this threshold or any evidence of manipulation. Again the results are not conclusive of any effect of such thresholds.

²¹The estimated specific parameters for Equation (1) in 3-day groups are reported in Table B.7–B.8. For the sake of completeness, we also present the graphs of the marginal effects day by day in Figures C.2–C.5 in the Appendix. The choice of 3-day corresponds to the availability in Germany and UK of only 3 days after the lockdown.

is negative and significantly different from zero, which implies that economic insecurity increased during the pandemic. This finding is consistent with recent literature analyzing expectations and economic anxiety during a pandemic (Bartik et al., 2020; Binder, 2020; Fetzer et al., 2020; Hanspal et al., 2020). A closer inspection of the results for the individual countries reveals that the estimated parameters (Before-Lockdown, Before-After) are negative but the effects are statistically significant for Germany and France only.

Regarding attitudes toward globalization, there is an overall increase in skepticism (Table 4, Column 2). This effect seems to be driven by Germany. The outcomes for the other countries are ambiguous; the coefficients are (not statistically significant) negative for France and positive for Spain and the UK. To our knowledge, there is no previous literature analyzing potential connections between attitudes toward globalization and pandemics.

Regarding political attitudes, a quite diverse picture emerges. Overall the trust in domestic institutions has increased (Table 4, Column 3). On the level of the individual countries, the coefficient for changes in trust in domestic institutions is significantly negative for Germany and the UK. In both countries, the increase in trust had already occurred before the lockdowns (Before-Lockdown). In France and Spain, lockdown led to a short-term drop in trust with a quick recovery during the lockdown period. Note that there are no significant differences before and after the lockdowns. Hence, we find moderate signs of a rally effect, as found after terrorist attacks (Chanley, 2002; Gaines, 2002; Hetherington and Nelson, 2003; Skocpol, 2002; Perrin and Smolek, 2009). Our results, however, are in contrast to the findings of Daniele et al. (2020), who also use a survey during the COVID-19 pandemic. Trust in international institutions is not affected when looking at the entire sample (Table 4, Column 4). In Germany, trust in international institutions increased before the lockdown and roughly remained at a higher level. In contrast,

trust in international institutions decreased in Spain before the lockdown and recovered as the difference before and after is not significantly different from zero.

With respect to populism, there is a U-shaped pattern; the changes, however, are not statistically significant for the entire sample. In contrast to the shock of the financial crisis (Guiso et al., 2019), the pandemic seems not to advance populist attitudes. The individual countries show quite diverse patterns. Spain and France show a (non-significant) short-term peak on the day of lockdown, but there is no medium-term effect on populism in either country while the UK experiences a decline over the entire period (Table 4, Column 5). Openness to immigration shows no significant changes neither for the entire sample nor for single countries (Table 4, Column 6).

Authoritarian tendencies increase over the pandemic (Table 4, Column 7). This is in line with Cook et al. (2018), Amat et al. (2020), and Tepe et al. (2020). This result seems to be driven by Spain. Germany, France, and the UK do not present any significant trend. Finally, in terms of emotional loneliness, we find a significant increase over the entire period and even before the lockdowns (Table 4, Column 8). Previous surveys also found higher reported scores for loneliness during times of isolation for preventing infectious diseases (Abad et al., 2010; Barratt et al., 2011; Gammon and Hunt, 2018; Hossain et al., 2020; Arpino et al., 2020).

In a nutshell, we observe an increase in economic insecurity, in trust in domestic institutions, in authoritarianism, and in emotional loneliness across the board. For some other social and political attitudes, the picture is more nuanced. For instance, there is an elevated skepticism towards globalization. However, this effect seems to be driven mainly by Germany while France shows insignificant positive effects. For other attitudes such as populism and openness towards

immigration, no significant changes can be identified during the pandemic.

In the next step, we investigate how the pandemic affected various socio-economic groups, focusing particularly on the more vulnerable segments of society (Table 5). We consider gender, families with and without children, different age groups, low and high income earners, and labor market status (employed and unemployed).

[Insert Table 5 here]

Regarding economic distress, the COVID-19 pandemic resulted in an increase in economic insecurity across almost all segments of society. Before-After estimated parameters are negative and significantly different from zero for all groups except for families without children, the elderly, and employed respondents (Table 5, Column 1). This loss of economic security is also in line with similar results in previous pandemic literature (Liu et al., 2020; Tonzer, 2019; Windsteiger et al., 2020). These findings also complement Atchison et al. (2020), Brooks et al. (2020), and Van Bavel et al. (2020). Moreover, we observe a significant loss of confidence in the globalization process as the pandemic progresses among women, families with children, and employed respondents (Table 5, Column 2). These results are interesting as we observe that the pandemic worsened the perceptions of globalization at the aggregate level; now, at group level, however, we can identify those segments of society that drive this growing rejection.

There is no uniform pattern regarding political attitudes. The overall increase in trust in domestic institutions is driven by women and families with children, while such an effect is not detectable for men and families without children (Table 5, Column 3). One may argue that, implementing lockdowns helped institutions to regain some credibility. However, if at all, there is a hump-shaped pattern where trust in domestic institutions increased up to the lockdown and then decreased again among the employed and the young population. With respect to

the other political attitudes (trust in international institutions, populism, openness to immigration), there are no clearly identifiable heterogeneous effects across groups.

The progress of the pandemic also seems to have led to an increase in the approval of authoritarianism for women, families with and without children (Table 5, Column 7), low income earners, and employed as well as unemployed respondents. Finally, the evolution of the pandemic seems to have triggered an increase in emotional loneliness for most societal groups (women, families with children, high and low income earners, and unemployed).

In sum, as the pandemic progressed, several groups of the population experienced significant changes in their socio-economic attitudes with the exception of elderly people – somewhat paradoxically as, from a health point of view, this is the the most exposed group.

6 Conclusion

Our large-scale survey provides some first insights into how the shock of a global pandemic and the pandemic-induced lockdowns affected society in various dimensions of social and political attitudes. First, we do not find a robust structural break in any of the social attitudes at the dates of implementation of the lockdowns. Second, we do, however, detect a number changes in attitudes from the period prior to the period after the implementation of the lockdowns. The good news is that there is an increased trust in domestic institutions, sometimes accompanied by a decrease of populist tendencies. The bad news is that – not too surprisingly – loneliness and economic insecurity have also increased. As often in times of a crisis, there is also a tendency towards more appreciation of authoritarian values. Third, we identify some heterogeneity of the impact across societal groups. Significant changes of attitudes – as mentioned above – can be detected for women

and families with children but not for the elderly.

Future research will have to show whether the identified changes are also persistent in the long run. Unfortunately, our data set does not allow creating a true panel structure. However, merging our data with previous and future surveys containing the same set of questions could provide some insights into the long-run effects via matching procedures – beyond the short- and medium term effects identified in this paper. One should also keep in mind the usual shortcomings of large-scale surveys in interpreting the results, especially regarding the variables that deal with emotions. Nevertheless, our results shed light on challenges that policymakers will face reconstructing the economic and political landscape in the post-pandemic years to come.

Table 1: Indices

	Mean	St. Dev.	Min.	Max.
PANEL A: ECONOMIC INDICATORS				
Eco.Insecurity	-0.01	1.05	-3.25	3.36
Globalization	-0.02	1.67	-6.42	7.01
PANEL B: POLITICAL INDICATORS				
Trust (Domestic Inst.)	0.02	1.84	-3.99	5.73
Trust (International Inst.)	0.01	1.34	-2.35	3.42
Populism	0.03	1.50	-6.81	2.88
Immigration	0.01	2.01	-5.54	4.50
PANEL C: SOCIAL INDICATORS				
Authoritarianism	0.03	1.54	-7.72	2.59
Loneliness	-0.01	1.39	-2.72	4.05
N	20082			

Table 2: Descriptive Statistics

Variable	Mean	St. Dev.	Min.	Max.
Female	0.52	0.5	0	1
Age				
Young (18-40)	0.35	0.48	0	1
Middle (41-65)	0.48	0.50	0	1
Old (Over 65)	0.18	0.38	0	1
Income				
Low	0.23	0.42	0	1
Middle	0.61	0.49	0	1
High	0.16	0.37	0	1
Children	0.59	0.49	0	1
Married	0.55	0.5	0	1
Education				
Primary	0.10	0.30	0	1
Secondary	0.50	0.50	0	1
Tertiary	0.40	0.49	0	1
Working Status				
Unemployed	0.30	0.46	0	1
Employed	0.25	0.44	0	1
Self-Employed	0.16	0.36	0	1
Studying	0.34	0.47	0	1
Populist right	0.13	0.33	0	1
Populist left	0.19	0.39	0	1

Table 3: The effects of Lockdown (RDD estimates)

PANEL A: ECONOMIC INDICATORS				
	Economic Insecurity	Globalization		
RD Estimate	-0.027 (0.064)	-0.134 (0.127)		
N	20082	20082		
PANEL B: POLITICAL INDICATORS				
	Trust (Domestic Inst.)	Trust (International Inst.)	Populism	Immigration
RD Estimate	0.071 (0.108)	0.111 (0.083)	-0.195* (0.109)	0.257** (0.125)
N	20082	20082	20082	20082
PANEL C: SOCIAL INDICATORS				
	Authoritarianism	Loneliness		
RD Estimate	-0.208** (0.094)	0.038 (0.095)		
N	20082	20082		

Note: Robust standard error in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Test of marginal effects before and after lockdown (all sample and by country)

		Economic Insecurity	Globalization	Trust Dom. Institutions	Trust Int. Institutions	Populism	Immigration	Authoritarianism	Loneliness
ALL	Before-Lockdown	-0.886*** (0.223)	0.588 (0.383)	-1.604*** (0.417)	-0.778* (0.304)	0.346 (0.339)	0.105 (0.440)	-0.531 (0.344)	-0.940** (0.311)
	Lockdown-After	0.228 (0.226)	0.459 (0.387)	0.302 (0.421)	0.411 (0.307)	-0.570+ (0.343)	-0.554 (0.445)	-0.588+ (0.347)	-0.055 (0.314)
	Before-After	-0.658*** (0.171)	1.047*** (0.293)	-1.302*** (0.319)	-0.367 (0.233)	-0.225 (0.260)	-0.45 (0.337)	-1.119*** (0.263)	-0.994*** (0.238)
DE^a	Before-Lockdown	-1.036*** (0.292)	1.093* (0.481)	-2.127*** (0.531)	-1.252** (0.412)	0.187 (0.449)	0.423 (0.583)	-0.878+ (0.468)	-0.713+ (0.409)
	Lockdown-After	0.066 (0.054)	-0.067 (0.088)	0.029 (0.097)	0.066 (0.076)	0.106 (0.082)	-0.02 (0.107)	0.146 (0.086)	0.025 (0.075)
	Before-After	-0.970*** (0.263)	1.026* (0.433)	-2.097*** (0.478)	-1.185** (0.371)	0.293 (0.404)	0.403 (0.524)	-0.732+ (0.421)	-0.688+ (0.367)
ES	Before-Lockdown	-0.316 (0.967)	-0.311 (1.733)	2.744 (1.805)	3.834** (1.350)	-1.703 (1.406)	0.427 (1.913)	0.089 (1.544)	-0.442 (1.353)
	Lockdown-After	-0.031 (1.224)	1.036 (2.192)	-3.302 (2.283)	-4.177* (1.708)	1.966 (1.778)	-1.600 (2.419)	-1.966 (1.952)	0.316 (1.711)
	Before-After	-0.346 (0.343)	0.726 (0.615)	-0.558 (0.641)	-0.342 (0.479)	0.263 (0.499)	-1.173+ (0.679)	-1.877*** (0.548)	-0.126 (0.480)
FR	Before-Lockdown	-3.209* (1.472)	-1.489 (2.539)	0.439 (2.827)	-0.21 (2.022)	-0.542 (2.308)	1.498 (2.865)	0.934 (2.209)	1.273 (2.059)
	Lockdown-After	1.474 (0.883)	0.438 (1.524)	-0.309 (1.697)	0.262 (1.213)	0.389 (1.385)	-0.489 (1.720)	-1.132 (1.326)	-1.296 (1.236)

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Table 4: Test of marginal effects before and after lockdown (all sample and by country)

	Economic Insecurity	Globalization Institutions	Trust Dom. Institutions	Trust International	Populism	Immigration	Authoritarianism	Loneliness
Before-After	-1.735** (0.610)	-1.052 (1.051)	0.13 (1.171)	0.052 (0.837)	-0.153 (0.956)	1.009 (1.187)	-0.198 (0.915)	-0.023 (0.853)
UK^a Before-Lockdown	-0.018 (0.373)	0.278 (0.612)	-1.360* (0.690)	-0.234 (0.475)	1.322* (0.583)	-0.486 (0.734)	0.004 (0.562)	-0.474 (0.523)
Lockdown-After	-0.083 (0.062)	0.013 (0.103)	-0.038 (0.116)	-0.009 (0.080)	-0.013 (0.098)	0.102 (0.123)	-0.136 (0.094)	-0.015 (0.088)
Before-After	-0.1 (0.331)	0.291 (0.543)	-1.398* (0.612)	-0.243 (0.421)	1.309* (0.517)	-0.384 (0.652)	-0.132 (0.498)	-0.489 (0.464)

^a In Germany and the United Kingdom we only have data from three days after the lockdown. Standard errors are clustered at the day level. $+p < 0.1$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. Socio-demographic characteristics and fixed effects are included in all specifications.

Table 5: Test of marginal effects before and after lockdown (by group)

		Economic Insecurity	Globalization	Trust Dom. Institutions	Trust Int. Institutions	Populism	Immigration	Authoritarianism	Loneliness
Female	Before-Lockdown	-0.958** (0.342)	0.558 (0.576)	-1.591* (0.626)	-0.742 (0.457)	0.286 (0.517)	-0.095 (0.665)	-0.503 (0.522)	-1.444** (0.481)
	Lockdown-After	0.245 (0.306)	0.633 (0.515)	0.25 (0.560)	0.455 (0.408)	-0.673 (0.462)	-0.632 (0.595)	-0.853+ (0.467)	0.078 (0.430)
	Before-After	-0.713*** (0.209)	1.191*** (0.353)	-1.341*** (0.383)	-0.287 (0.279)	-0.387 (0.316)	-0.727+ (0.407)	-1.356*** (0.320)	-1.366*** (0.294)
Male	Before-Lockdown	-0.808** (0.299)	0.532 (0.524)	-1.677** (0.571)	-0.684+ (0.415)	0.241 (0.458)	0.387 (0.598)	-0.886+ (0.465)	-0.265 (0.411)
	Lockdown-After	-0.253 (0.535)	-0.121 (0.936)	1.385 (1.020)	0.804 (0.743)	-0.24 (0.819)	-0.843 (1.068)	0.342 (0.831)	0 (0.734)
	Before-After	-1.060* (0.495)	0.411 (0.867)	-0.291 (0.945)	0.12 (0.688)	0.001 (0.759)	-0.456 (0.990)	-0.544 (0.770)	-0.265 (0.680)
Children	Before-Lockdown	-0.738* (0.301)	0.631 (0.520)	-2.146*** (0.563)	-1.180** (0.410)	0.462 (0.456)	0.138 (0.594)	-1.327** (0.452)	-1.072* (0.418)
	Lockdown-After	0.177 (0.283)	0.212 (0.489)	0.578 (0.530)	0.829* (0.386)	-0.394 (0.429)	-0.852 (0.559)	0.217 (0.425)	-0.142 (0.393)
	Before-After	-0.561** (0.204)	0.843* (0.351)	-1.568*** (0.381)	-0.352 (0.277)	0.068 (0.308)	-0.715+ (0.401)	-1.110*** (0.305)	-1.214*** (0.282)

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Table 5: Test of marginal effects before and after lockdown (by groups)

		Economic Insecurity	Globalization	Trust Dom. Institutions	Trust Int. Institutions	Populism	Immigration	Authoritarianism	Loneliness
No Children	Before-Lockdown	-0.947** (0.332)	0.658 (0.562)	-0.994 (0.619)	-0.312 (0.453)	0.303 (0.509)	0.02 (0.654)	0.488 (0.531)	-0.683 (0.466)
	Lockdown-After	0.52 (0.438)	0.392 (0.742)	0.198 (0.817)	-0.153 (0.597)	-0.76 (0.671)	-0.203 (0.863)	-1.839** (0.700)	0.344 (0.615)
	Before-After	-0.428 (0.379)	1.05 (0.641)	-0.796 (0.706)	-0.465 (0.516)	-0.457 (0.580)	-0.182 (0.746)	-1.351* (0.605)	-0.339 (0.531)
Young	Before-Lockdown	-0.993** (0.368)	0.662 (0.606)	-2.152** (0.697)	-1.391** (0.506)	0.137 (0.581)	-0.851 (0.720)	-0.106 (0.617)	-0.717 (0.528)
	Lockdown-After	-0.234 (0.611)	0.155 (1.005)	2.470* (1.156)	1.697* (0.840)	-0.774 (0.965)	-0.191 (1.194)	-0.479 (1.023)	0.48 (0.876)
	Before-After	-1.228* (0.560)	0.817 (0.922)	0.318 (1.060)	0.306 (0.770)	-0.637 (0.884)	-1.042 (1.095)	-0.585 (0.938)	-0.237 (0.803)
Old	Before-Lockdown	0.154 (0.766)	-0.078 (1.345)	-1.327 (1.441)	-0.609 (1.037)	2.116 (1.120)	0.852 (1.486)	1.074 (1.037)	0.313 (1.025)
	Lockdown-After	-0.544 (0.668)	-0.076 (1.173)	0.105 (1.256)	0.001 (0.904)	-1.406 (0.976)	-0.651 (1.295)	-0.551 (0.904)	-1.241 (0.894)
	Before-After	-0.39 (0.471)	-0.155 (0.827)	-1.222 (0.886)	-0.608 (0.638)	0.71 (0.688)	0.202 (0.913)	0.523 (0.638)	-0.928 (0.630)

(continued on next page)

Table 5: Test of marginal effects before and after lockdown (by groups)

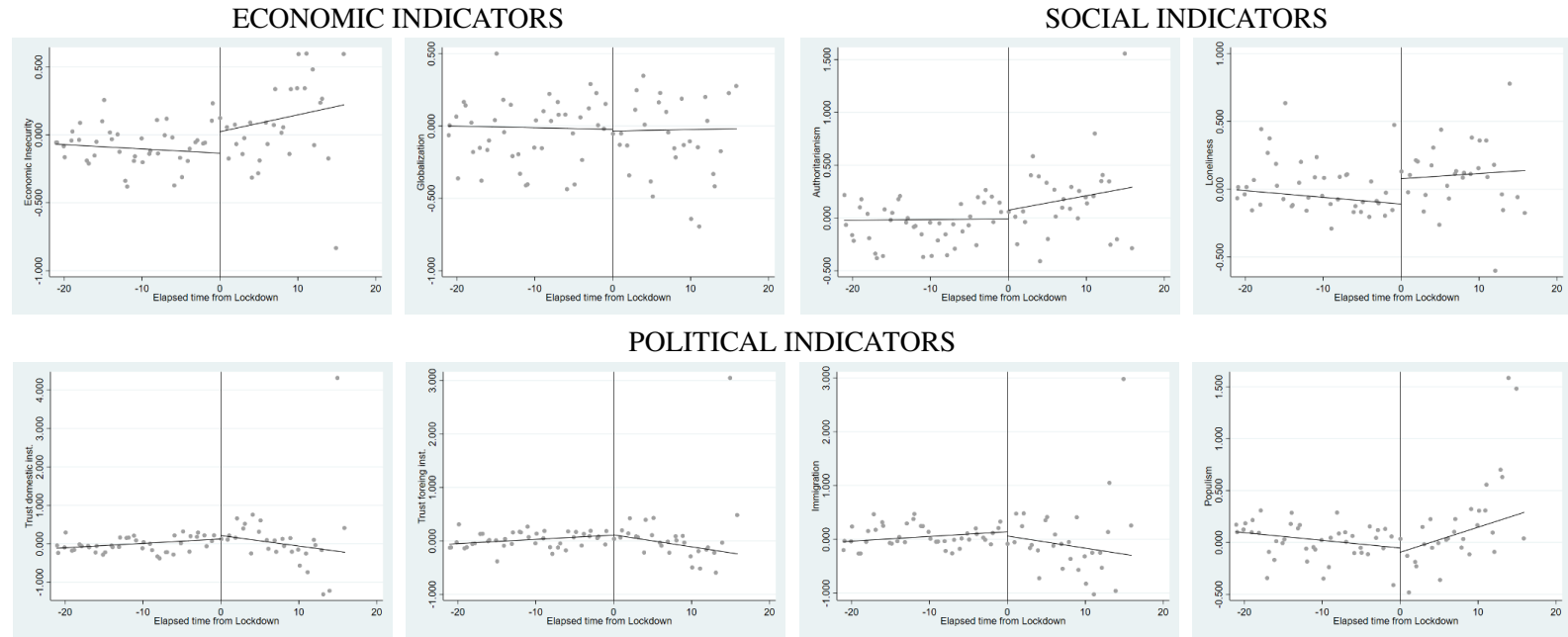
		Economic Insecurity	Globalization	Trust Dom. Institutions	Trust Int. Institutions	Populism	Immigration	Authoritarianism	Loneliness
Low income	Before-Lockdown	-0.376 (0.514)	0.195 (0.847)	-0.691 (0.918)	-0.451 (0.662)	0.091 (0.771)	0.019 (0.970)	-0.564 (0.793)	-0.4 (0.689)
	Lockdown-After	-0.379 (0.489)	0.74 (0.806)	0.419 (0.874)	-0.298 (0.630)	-0.278 (0.734)	-0.845 (0.923)	-0.619 (0.754)	-0.806 (0.656)
	Before-After	-0.755* (0.346)	0.935 (0.569)	-0.271 (0.617)	-0.749+ (0.445)	-0.186 (0.518)	-0.826 (0.652)	-1.183* (0.532)	-1.206** (0.463)
High income	Before-Lockdown	-1.441* (0.613)	-0.11 (1.113)	0.288 (1.229)	0.113 (0.892)	2.007* (0.989)	0.494 (1.288)	0.686 (0.959)	-1.385 (0.882)
	Lockdown-After	0.265 (0.561)	0.85 (1.018)	-0.689 (1.124)	0.164 (0.816)	-1.471 (0.904)	-0.93 (1.178)	-1.535+ (0.877)	-0.005 (0.807)
	Before-After	-1.176** (0.394)	0.739 (0.716)	-0.402 (0.791)	0.276 (0.574)	0.537 (0.636)	-0.436 (0.820)	-0.848 (0.617)	-1.390* (0.568)

(continued on next page)

Table 5: Test of marginal effects before and after lockdown (by groups)

		Economic Insecurity	Globalization	Trust Dom. Institutions	Trust Int. Institutions	Populism	Immigration	Authoritarianism	Loneliness
Employed	Before-Lockdown	1.023 (0.779)	2.127 (1.376)	-4.689*** (1.400)	-2.526* (1.024)	1.56 (1.227)	-3.707* (1.517)	-0.391 (1.311)	-0.371 (1.054)
	Lockdown-After	-1.166+ (0.700)	-0.369 (1.237)	2.776* (1.257)	1.298 (0.920)	-1.451 (1.103)	1.682 (1.362)	-1.861 (1.177)	-0.628 (0.947)
	Before-After	0.143 (0.462)	1.758* (0.816)	-1.913* (0.830)	-1.228* (0.607)	0.109 (0.727)	-2.025* (0.899)	-2.252** (0.777)	-0.999 (0.625)
Unemployed	Before-Lockdown	-0.537 (0.444)	0.75 (0.792)	-1.420+ (0.860)	-0.772 (0.619)	0.824 (0.669)	0.405 (0.873)	-0.136 (0.690)	-0.154 (0.651)
	Lockdown-After	-0.391 (0.416)	0.268 (0.744)	0.145 (0.807)	1.042 (0.580)	-0.965 (0.628)	-0.066 (0.819)	-1.138+ (0.648)	-1.031+ (0.611)
	Before-After	-0.928** (0.306)	1.018 (0.546)	-1.275* (0.593)	0.27 (0.426)	-0.141 (0.461)	0.339 (0.602)	-1.274** (0.476)	-1.185** (0.449)

Note: Standard errors are clustered at the day level. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Socio-demographic characteristics are included in all specifications. We also include fixed effects.



The vertical axis shows the average level of indexes (values reported in Table 3) in days before (negative values) and after (positive values) lockdown. The lines are fitted using a polynomial of order one.

Figure 1: Average level of indicators before and after lockdown (RDD estimates)

Appendix A UK version of the questionnaire

Excerpt of the relevant questions from the UK version of the questionnaire:

Q1 Were you born in the United Kingdom? Yes / No

Q2 What is your gender? Male / Female

Q3 What is your age?

Q4 What is your gross weekly household income? Less than £400 / £400–£600
/ £600–£1.000 / More than £1.000

Q5 Please indicate your marital status. Single / Couple, Married / Separated or
Divorced / Widowed

Q6 How many children do you have? I do not have children / 1 / 2 / 3 / 4 / 5 /
More than 5

Q7 Which category best describes your highest level of education? Compulsory
Education / High School / University (but not finished) / Bachelor's degree
/ Master Degree / Doctoral Degree

Q8 Which of these descriptions best describes your situation? Please select
ONLY one. In paid work / In education / Self-employed / Unemployed
and actively looking for a job / Unemployed, wanting a job but not actively
looking for a job / Permanently sick or disabled / Retired / In community or
military service / Doing housework, looking after children or other persons
/ Refusal

Q9 Have you ever had a paid job? Yes / No / Refusal-Don't know

Q10 In what year were you last in a paid job?

- Q11 In your main job are/were you. . . Please select ONLY one. An employee / Self-employed / Working for your own family's business / Refusal-Don't know
- Q12 How many employees (if any) do/did you have?
- Q13 Do/did you have a work contract of...Unlimited duration / Limited duration / Do/did you have no contract / Refusal-don't know
- Q14 Including yourself, about how many people are/were employed at the place where you usually work/worked?
- Q15 In your main job, do/did you have any responsibility for supervising the work of other employees? Yes / No / Refusal-Don't know
- Q16 Please indicate on a scale of 0-10 how much the management at your work allows/allowed you to influence policy decisions about the activities of the organization
- Q17 Have you ever been unemployed and seeking work for a period of more than three months in the last five years? Yes / No / Refusal-Don't know
- Q18 Have any of these periods lasted for 6 months or more? Yes / No / Refusal-Don't know
- Q19 Please consider the total income of all household members. What is the main source of income in your household? Wages or salaries / Income from self-employment / Pensions / Unemployment/redundancy benefit / Any other social benefits or grants / Income from investment, savings, insurance or property / Income from other sources / Refusal/Don't know
- Q20 Which of the descriptions comes closest to how you feel about your household's income nowadays? Living comfortably on present income / Coping

on present income / Finding it difficult on present income / Finding it very difficult on present income / Refusal-Don't know

Q21 Please indicate on a scale of 0-10 how interested you would say you are in politics

Q22 Please indicate on a scale of 0-10 how much you would say the political system in the United Kingdom allows people like you to have a say in what the government does

Q23 Please indicate on a scale of 0-10 how able you think you are to take an active role in a group involved with political issues

Q24 Please indicate on a scale of 0-10 how confident you are in your own ability to participate in politics

Q25 Please indicate on a scale of 0–10 how much you personally trust each of these institutions (0 = Do not trust at all; 10 = Complete trust). Country's parliament / The legal system / The police / Politicians / Political parties / The European Parliament / The United Nations

Q26 Some people don't vote nowadays for one reason or another. Did you vote in the last national election in December 12th, 2019? Yes / No / Refusal-Don't know

Q27 Which party did you vote for in that election? Conservative / Labour / Liberal Democrat / UKIP / Paid Cymru / Green Party / SNP / Brexit Party / Other (write in) / Refusal/Don't know

Q28 Which party do you plan to vote in the next national election? Conservative / Labour / Liberal Democrat / UKIP / Paid Cymru / Green Party / SNP / Brexit Party / Other (write in) / Refusal/Don't know

Q29 In politics people sometimes talk about “left” and “right”. Please indicate on a scale of 0-10 where you would place yourself (0 = Left; 10 = Right).

Q30 Please indicate on a scale of 0-10 how religious you think you are (0= Not religious at all; 10 = Very religious)

Please indicate on a scale of 0–10 whether you agree or disagree with the following statements (0= Completely disagree; 10 = Completely agree).

Q31 The opinion of ordinary people is worth more than that of experts and politicians.

Q32 Politicians should listen more closely to the problems the people have.

Q33 Ministers should spend less time behind their desks, and more among the ordinary people.

Q34 People who have studied for a long time and have many diplomas do not really know what makes the world go round.

For the next two questions, notice that we consider an ethnic group as a community or population made up of people who share a common cultural background.

Q35 Please indicate on a scale of 0–10 to what extent you think the United Kingdom should allow people of the same race or ethnic group than the majority of the British people to come and live here (0 = Allow none; 10 = Allow many to come and live here).

Q36 Please indicate on a scale of 0–10 to what extent you think the United Kingdom should allow people of the different race or ethnic group than the majority of the British people to come and live here (0 = Allow none; 10 = Allow many to come and live here).

Q37 Please indicate on a scale of 0–10 to what extent you think the United Kingdom should allow people of different religious faith than the majority of the British people to come and live here (0 = Allow none; 10 = Allow many to come and live here).

Q38 Please indicate on a scale of 0–10 to what extent you think the United Kingdom should allow people from poorer countries outside Europe to come and live here (0 = Allow none; 10 = Allow many to come and live here).

Q39 Please indicate on a scale of 0–10 to what extent you think the United Kingdom has become a worse or a better place to live by people coming to live here from other countries (0 = Worse place to live; 10 = Better place to live).

[Questions on information and fake news are omitted due to space constraints.]
Please indicate on a scale of 0–10 whether you agree or disagree with the following statements (0= Completely disagree; 10 = Completely agree).

Q61 There is too much moral decay today

Q62 The sense of belonging together that we used to have is irrevocably lost

Q63 Parents no longer adequately educate their children

Q64 People don't care for each other any more

Q65 The United Kingdom will face a situation of ever-increasing job insecurity

Q66 Even more enterprises will move to low-wage countries, threatening employment in the United Kingdom.

Q67 In order to face the competition of other countries we will have to dismantle our welfare state.

Q68 Multinational enterprises will become increasingly powerful, small enterprises are bound to suffer.

Q69 Opening the European frontiers means that our employers will prefer the low-cost workers from poorer countries to our own workers.

Q70 In the future we will become even less open and tolerant with regard to people from other cultures

Q71 The relationship between Christians and Muslims is bound to become violent in the future

Q72 The relationship between Christians and Jews is bound to become violent in the future

Q73 You can generally trust the people who run our government to do what is right.

Q74 For the next question, please consider globalization as the increased trade between countries in goods, services, and investments. Please indicate on a scale of 0–10 whether you think globalization has had a negative or a positive effect on each of the following (0= Completely negative effect; 10 = Completely positive effect) [British factory workers / Multinational corporations based in the United Kingdom / You and your immediate family / The British economy]

Please indicate on a scale of 0–10 whether you agree or disagree with the following statements (0= Completely disagree; 10 = Completely agree).

Q75 It is important to live in secure and safe surroundings.

Q76 People should follow rules at all times, even when no-one is watching.

Q77 It is important that the government is strong and ensures safety against all threats.

Q78 It is important to follow traditions and customs handed down by religion or family.

[Questions on misperceptions are omitted due to space constraints.]

Q94 There are people who tend to be towards the top of our society and people who tend to be towards the bottom. Below is a scale that runs from top to bottom. On a scale of 1–10 Where you would put yourself (1 = Bottom of our society; 10 = Top of our society).

Please indicate on a scale of 0-10 to what extent you agree with the following statements (0= Completely disagree; 10 = Completely agree).

Q95 I experience a general sense of emptiness

Q96 There are many people I can trust completely

Q97 I miss having people around me.

Q98 I often feel rejected.

Q99 I have enough opportunities to advance in life

Q100 I know exactly where I feel at home and where I belong

Appendix B Supplementary Tables

Table B.1: Main descriptive statistics (whole sample)

	Germany (DE)		Spain (ES)		France (FR)		United Kingdom (UK)	
	Sample	Pop	Sample	Pop	Sample	Pop	Sample	Pop
	Sample	Pop	Sample	Pop	Sample	Pop	Sample	Pop
Female	49.0	50.7	51.1	51	55.8	51.7	55.6	50.6
15-24y.o.	8.56	10.4	11.9	9.8	14.5	11.7	16.0	11.8
25-49y.o.	33.6	31.6	45.1	35.3	32.6	31	37.9	32.8
50-64y.o.	21.3	22.8	22.8	20.7	21.8	19.2	23.4	19.1
65-79y.o.	16.0	15.1	13.4	13.3	21.9	14	13.1	13.4
Low income	21.3	25.2	16.7	19.7	23.3	31	31.1	28.0
Middle income	65.7	57.9	65.8	61.4	60.6	45.0	54.0	45.0
High income	13.0	14.5	17.5	18.1	16.1	24.0	14.7	27.0
Employed	53.5	79.9	43.2	67.0	36.0	71.3	33.6	78.7
Unemployed	7.2	3.2	42.4	14.1	35.5	8.5	37.0	4.0
College	30.1	29.1	28.1	37.3	39.4	36.9	39.6	45.8

Notes: This table shows summary statistics from our sample along side representative statistics of population in each country. Data for gender, age, employed, and unemployed come from Eurostat census. Eurostat is the statistical office of the European Union: <https://ec.europa.eu/eurostat/>. For income data the sources are: 1) For France: OECD (<https://stats.oecd.org/>). Income levels (monthly net household income) are: less than 1500€; 1500€–3000€; more than 3000€; 2) For Germany: National Statistics Institute (https://www.destatis.de/DE/Home/_inhalt.html). Income levels (monthly net household income) are: less than 1500€; 1500€–4500€; more than 4500€; 3) For Spain: National Statistics Institute (<https://www.ine.es/>). Income levels (monthly net household income) are: less than 1000€; 1000€–3000€; more than 3,000€; 4) For the United Kingdom: National Statistics Institute (<https://www.gov.uk/search/research-and-statistics>). Income levels (gross weekly household income) are: less than £400; £400–£1000; more than £1000. Employed category also includes self-employed.

Table B.2: Dates and number of observations of COVID-19 interventions

Country	Lockdown (announced)	Lockdown (effective)	Ten deaths	N. Obs (before) ^a	N. Obs (after) ^a
Germany (DE)	March 23rd	March 24th	March 15th	7149	2414
Spain (ES)	March 14th	March 14th	March 7th	2929	2823
France (FR)	March 16th	March 17th	March 3th	4084	2606
United Kingdom (UK)	March 23th	March 24th	March 12th	4906	1464

^a Reference: the effective lockdown.

Table B.3: The effects of lockdown by groups (RDD estimates, Economic Indicators)

RD Estimate	Eco.Insecurity	Globalization	N. obs.
Germany (DE) ^a	-0.129 (0.261)	-0.066 (0.360)	5291
Spain (ES)	-0.025 (0.515)	-0.875** (0.373)	4940
France (FR)	0.114 (0.529)	-0.138 (0.614)	4959
United Kingdom (UK) ^a	0.219 (0.208)	0.464 (0.402)	4982
Male	-0.150** (0.088)	-0.454** (0.150)	9680
Female	0.034 (0.085)	0.089 (0.178)	10402
Young	0.033 (0.103)	-0.259 (0.164)	69302
Middle age	-0.014 (0.085)	-0.022 (0.151)	9552
Old	-0.041 (0.190)	0.011 (0.342)	3600
Low Income	-0.061 (0.092)	-0.380** (0.165)	4581
Middle Income	-0.127** (0.077)	-0.163 (0.132)	12257
High Income	-0.096 (0.180)	-0.4428* (0.256)	3244
No children	0.107 (0.11)	0.043 (0.170)	8285
Children	0.175* (0.097)	-0.354** (0.139)	11797
Working	0.055 (0.172)	-0.333 (0.284)	1973
Unemployed	-0.208 (0.148)	-0.379** (0.181)	5988
Student	0.090 (0.094)	0.186 (0.169)	6888
Ext. Left	0.245 (0.151)	-0.166 (0.217)	3743
Ext. Right	-0.397* (0.217)	-1.627*** (0.388)	2547

Note: Standard errors are clustered at the day level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

^a In Germany and the United Kingdom we only have data from three days after the lockdown. Therefore the analysis in this particular table is made with respect to 10 deaths day.

Table B.4: The effects of Lockdown by groups (RDD estimates, Political Indicators)

RD Estimate	Trust (Domestic Inst.)	Trust (Foreign Inst.)	Populism	Immigration	N. obs.
Germany (DE) ^a	0.139 (0.254)	0.017 (0.350)	0.037 (0.483)	-0.035 (0.665)	5291
Spain (ES)	2.536** (1.075)	0.420 (0.488)	-0.100 (0.414)	0.114 (0.698)	4940
France (FR)	-1.654 (1.154)	-0.996* (0.583)	0.161 (0.653)	-0.118 (1.208)	4959
United Kingdom (UK) ^a	-0.434 (0.394)	-0.882** (0.274)	-0.302 (0.215)	-1.596** (0.545)	4982
Male	0.259 (0.162)	0.261** (0.123)	-0.225* (0.129)	0.310* (0.186)	9680
Female	0.005 (0.151)	-0.030 (0.123)	-0.384** (0.129)	0.157 (0.186)	10402
Young	0.062 (0.186)	-0.011 (0.129)	-0.056 (0.158)	0.132 (0.162)	6930
Middle age	0.043 (0.160)	0.058 (0.118)	-0.187* (0.107)	0.023 (0.183)	9552
Old	0.827** (0.355)	0.225 (0.288)	-0.336 (0.254)	0.735* (0.434)	3600
Low Income	0.399** (0.181)	0.248* (0.142)	-0.400** (0.139)	0.178 (0.233)	4581
Middle Income	-0.085 (0.149)	-0.002 (0.127)	-0.101 (0.139)	0.077 (0.198)	12257
High Income	0.566	0.498**	-0.363	0.803**	3244

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Table B.4: The effects of Lockdown by groups (RDD estimates, Political Indicators)

RD Estimate	Trust (Domestic Inst.)	Trust (Foreign Inst.)	Populism	Immigration	N. obs.
	(0.354)	(0.245)	(0.246)	(0.358)	
No children	-0.046 (0.164)	0.041 (0.120)	-0.293* (0.153)	0.260 (0.180)	8285
Children	0.188 (0.141)	0.164* (0.099)	-0.169 (0.117)	0.214 (0.161)	11797
Working	0.419 (0.346)	0.112 (0.249)	-0.121 (0.222)	-0.084 (0.331)	1973
Unemployed	0.231 (0.213)	0.270* (0.146)	-0.155 (0.160)	0.684** (0.241)	5988
Student	-0.300 (0.183)	-0.223* (0.113)	-0.393*** (0.151)	-0.405** (0.197)	6888
Ext. Left	-0.489* (0.270)	-0.194 (0.194)	-0.475** (0.235)	0.158 (0.307)	3743
Ext. Right	1.792*** (0.358)	1.493*** (0.266)	-0.187 (0.259)	1.830*** (0.424)	2547

Note: Robust standard error in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

^a In Germany and the United Kingdom we only have data from three days after the lockdown. Therefore the analysis in this particular table is made with respect to 10 deaths day.

Table B.5: The effects of lockdown by groups (RDD estimates, Social Indicators)

RD Estimate	Authoritarianism	Loneliness	N. obs.
Germany (DE) ^a	0.463 (0.460)	-0.358 (0.495)	5291
Spain (ES)	1.535*** (0.463)	-0.937** (0.460)	4940
France (FR)	0.104 (0.636)	0.277 (0.978)	4959
United Kingdom (UK) ^a	0.095 (0.421)	-0.011** (0.501)	4982
Male	-0.162 (0.138)	0.207* (0.119)	9680
Female	-0.329** (0.118)	-0.120 (0.130)	10402
Young	0.094 (0.136)	0.068 (0.109)	6930
Middle age	0.016 (0.089)	-0.145 (0.092)	9552
Old	-0.187 (0.276)	0.043 (0.240)	3600
Low Income	-0.137 (0.147)	-0.212 (0.154)	4581
Middle Income	-0.217* (0.126)	0.124 (0.111)	12257
High Income	-0.156 (0.237)	0.284 (0.216)	3244
No children	-0.266* (0.148)	0.036 (0.106)	8285
Children	-0.063 (0.111)	0.089 (0.119)	11797
Working	-0.126 (0.262)	-0.349 (0.235)	1973
Unemployed	-0.104 (0.167)	0.303* (0.158)	5988
Student	-0.373** (0.153)	0.042 (0.127)	6888
Ext. Left	0.048 (0.239)	0.343 (0.210)	3743
Ext. Right	-0.053 (0.236)	0.592* (0.290)	2547

Note: Standard errors are clustered at the day level. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. ^a In Germany and the United Kingdom we only have data from three days after the lockdown. Therefore the analysis in this particular table is made with respect to 10 deaths day.

Table B.6: Sensitivity Analysis (RDD estimates)

	Economic Insecurity	Globaliz.	Trust Dom.Inst.	Trust Fore. Inst.	Populism	Immig.	Authorit.	Loneliness
Order of polynomial								
Order 1	-0.027 (0.064)	-0.134 (0.127)	0.071 (0.108)	0.111 (0.083)	-0.195* (0.109)	0.257** (0.125)	-0.208** (0.094)	0.038 (0.095)
Order 2	-0.024 (0.077)	-0.170 (0.134)	0.132 (0.148)	0.081 (0.109)	-0.151 (0.12)	0.150 (0.164)	-0.016 (0.136)	0.067 (0.099)
Order 3	-0.049 (0.093)	-0.137 (0.142)	0.239 (0.176)	0.083 (0.113)	-0.180 (0.123)	0.167 (0.171)	0.003 (0.138)	0.038 (0.113)
Order 4	-0.037 (0.103)	-0.138 (0.163)	0.298 (0.193)	0.099 (0.133)	-0.154 (0.135)	0.153 (0.196)	0.043 (0.148)	0.088 (0.139)
Threshold								
7 days before	-0.029 (0.120)	-0.208 (0.186)	-0.100 (0.194)	0.11 (0.143)	0.108 (0.126)	0.043 (0.229)	0.03 (0.161)	0.01 (0.161)
6 days before	-0.031 (0.066)	-0.092 (0.127)	0.09 (0.117)	0.012 (0.099)	-0.108 (0.110)	0.068 (0.152)	0.005 (0.098)	0.146* (0.080)
5 days before	-0.200* (0.114)	0.172 (0.181)	0.207 (0.182)	0.217 (0.145)	-0.431** (0.159)	-0.109 (0.189)	-0.292* (0.168)	-0.058 (0.102)
4 days before	-0.041 (0.154)	-0.036 (0.247)	-0.109 (0.191)	-0.169 (0.173)	-0.084 (0.221)	-0.177 (0.238)	-0.07 (0.180)	0.326* (0.193)
3 days before	-0.301*** (0.084)	-0.390** (0.122)	0.448** (0.152)	0.275** (0.086)	-0.165 (0.106)	0.276** (0.128)	-0.205* (0.113)	-0.079 (0.103)
2 days before	0.128** (0.061)	-0.310** (0.139)	0.302** (0.094)	0.152** (0.074)	0.221** (0.067)	-0.141 (0.127)	0.377*** (0.070)	0.130* (0.068)

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Table B.6: Sensitivity Analysis (RDD estimates)

	Economic Insecurity	Globaliz.	Trust Dom.Inst.	Trust Fore. Inst.	Populism	Immig.	Authorit.	Loneliness
1 day before	0.007 (0.093)	-0.224 (0.136)	-0.258** (0.119)	-0.078 (0.085)	0.135 (0.109)	0.302 (0.184)	-0.231* (0.134)	0.134 (0.116)
Lockdown	-0.027 (0.064)	-0.134 (0.127)	0.071 (0.108)	0.111 (0.083)	-0.195* (0.109)	0.257** (0.125)	-0.208** (0.094)	0.038 (0.095)
1 day after	-0.058 (0.090)	-0.015 (0.093)	-0.008 (0.136)	0.175* (0.093)	-0.334** (0.128)	0.588** (0.180)	-0.273* (0.165)	0.238** (0.103)
2 days after	-0.121 (0.084)	0.107 (0.151)	0.480** (0.167)	0.283* (0.158)	0.158 (0.135)	0.133 (0.210)	-0.173 (0.216)	-0.131 (0.122)
3 days after	0.133 (0.106)	0.309* (0.187)	0.009 (0.198)	-0.097 (0.146)	-0.097 (0.172)	-0.257 (0.176)	0.172 (0.158)	-0.039 (0.117)
4 days after	-0.423 (0.510)	-0.301 (0.421)	1.111 (0.995)	0.684 (0.619)	-0.237 (0.828)	-0.629 (1.149)	-0.825 (0.581)	-0.406* (0.214)

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Table B.6: Sensitivity Analysis (RDD estimates)

	Economic Insecurity	Globaliz.	Trust Dom.Inst.	Trust Fore. Inst.	Populism	Immig.	Authorit.	Loneliness
Main indicator								
Index at t	-0.027 (0.064)	-0.134 (0.127)	0.071 (0.108)	0.111 (0.083)	-0.195* (0.109)	0.257** (0.125)	-0.208** (0.094)	0.038 (0.095)
Index at t-1	-0.020 (0.064)	-0.154 (0.120)	0.062 (0.108)	0.101 (0.084)	-0.184* (0.109)	0.253** (0.125)	-0.211** (0.094)	0.097 (0.092)
Index at t-2	-0.020 (0.064)	-0.176 (0.114)	0.049 (0.110)	0.104 (0.084)	-0.166 (0.109)	0.245* (0.125)	-0.214** (0.094)	0.105 (0.091)
Index at t-3	-0.022 (0.064)	-0.115 (0.122)	0.047 (0.108)	0.098 (0.084)	-0.166 (0.109)	0.207 (0.126)	-0.224** (0.094)	0.089 (0.093)

Note: Robust standard error in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.7: Effects of the pandemic on attitudes

	Economic Insecurity	Globaliz.	Trust Dom.Inst.	Trust Fore. Inst.	Populism	Immig.	Authorit.	Loneliness
21 days before	-0.137*** (0.035)	0.195** (0.059)	-0.331*** (0.065)	-0.151** (0.047)	0.087 (0.053)	-0.137* (0.068)	-0.085 (0.053)	-0.173*** (0.048)
18 days before	-0.154*** (0.040)	0.066 (0.069)	-0.312*** (0.075)	-0.160** (0.055)	0.056 (0.061)	0.062 (0.079)	-0.108+ (0.062)	-0.107+ (0.056)
15 days before	-0.003 (0.039)	0.219** (0.067)	-0.336*** (0.073)	-0.178*** (0.053)	0.152* (0.059)	-0.002 (0.077)	-0.002 (0.060)	-0.045 (0.054)
12 days before	-0.171*** (0.037)	-0.115+ (0.064)	-0.117+ (0.070)	-0.041 (0.051)	0.044 (0.057)	0.151* (0.073)	-0.082 (0.057)	-0.148** (0.052)
9 days before	-0.122** (0.044)	0.103 (0.076)	-0.286*** (0.082)	-0.113+ (0.060)	0.004 (0.067)	-0.058 (0.087)	-0.199** (0.068)	-0.151* (0.061)
6 days before	-0.194*** (0.040)	-0.035 (0.068)	-0.177* (0.075)	-0.106+ (0.054)	0.005 (0.061)	0.085 (0.079)	-0.018 (0.061)	-0.204*** (0.056)
3 days before	-0.105* (0.041)	0.154* (0.070)	-0.045 (0.077)	-0.029 (0.056)	-0.002 (0.062)	0.004 (0.081)	-0.038 (0.063)	-0.112* (0.057)

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Table B.7: Effects of the pandemic on attitudes

	Economic Insecurity	Globaliz.	Trust Dom.Inst.	Trust Fore. Inst.	Populism	Immig.	Authorit.	Loneliness
3 days after	-0.006 (0.039)	0.032 (0.066)	-0.002 (0.072)	-0.033 (0.053)	-0.057 (0.059)	-0.008 (0.076)	0.044 (0.060)	0.013 (0.054)
6 days after	-0.057 (0.045)	0.11 (0.077)	-0.135 (0.084)	-0.123* (0.061)	0.022 (0.069)	0.084 (0.089)	0.148* (0.070)	-0.028 (0.063)
9 days after	-0.027 (0.043)	0.052 (0.074)	-0.051 (0.080)	-0.056 (0.059)	0.059 (0.065)	0.018 (0.085)	0.193** (0.066)	-0.013 (0.060)
12 days after	-0.041 (0.054)	-0.275** (0.093)	-0.049 (0.101)	-0.163* (0.074)	0.076 (0.082)	-0.035 (0.107)	0.191* (0.084)	0.084 (0.076)
15 days after	-0.096 (0.137)	-0.378 (0.235)	-0.065 (0.256)	-0.036 (0.187)	0.471* (0.209)	0.495 (0.271)	0.012 (0.211)	-0.003 (0.191)
Const.	0.273*** (0.050)	-0.022 (0.086)	0.084 (0.094)	0.076 (0.068)	-0.653*** (0.076)	-0.059 (0.099)	-0.411*** (0.077)	0.139* (0.070)

Note: Robust standard error in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table B.8: Effects of the pandemic on attitudes (by country)

	Economic Insecurity				Globalization			
	DE	ES	FR	UK	DE	ES	FR	UK
21 days before	-0.127** (0.046)			-0.044 (0.054)	0.223** (0.076)			0.142 (0.089)
18 days before	-0.146** (0.051)			-0.036 (0.065)	0.172* (0.084)			-0.006 (0.107)
15 days before	-0.130* (0.065)		-0.467 (0.294)	0.072 (0.072)	0.19 (0.108)		-0.063 (0.507)	0.05 (0.118)
12 days before	-0.239*** (0.056)	-0.036 (0.245)	-0.613* (0.295)	-0.048 (0.066)	0.068 (0.093)	-0.26 (0.439)	-0.315 (0.509)	-0.084 (0.109)
9 days before	-0.120* (0.059)	-0.063 (0.255)	-0.539+ (0.301)	-0.232** (0.088)	0.111 (0.098)	-0.007 (0.457)	-0.205 (0.519)	0.229 (0.144)
6 days before	-0.248** (0.082)	-0.059 (0.242)	-0.811** (0.295)	0.101 (0.101)	0.135 (0.134)	-0.058 (0.434)	-0.439 (0.509)	-0.01 (0.166)
3 days before	-0.027 (0.075)	-0.157 (0.242)	-0.779* (0.315)	0.169* (0.071)	0.194 (0.124)	0.014 (0.434)	-0.468 (0.544)	-0.042 (0.117)
3 days after	-0.066 (0.054)	0.321 (0.290)	-0.588* (0.300)	0.083 (0.062)	0.067 (0.088)	-0.505 (0.519)	-0.179 (0.517)	-0.013 (0.103)
6 days after		-0.127 (0.244)	-0.457 (0.295)			-0.155 (0.438)	-0.107 (0.509)	
9 days after		-0.057 (0.243)	-0.429 (0.295)			-0.083 (0.436)	-0.152 (0.509)	
12 days after		-0.031 (0.245)				-0.112 (0.438)		
15 days after		-0.076 (0.275)				-0.182 (0.492)		
Const.	0.484*** (0.056)	0.418 (0.272)	0.748* (0.307)	0.391*** (0.117)	0.112 (0.092)	0.165 (0.487)	0.196 (0.530)	-0.223 (0.192)

Note: Standard errors are clustered at the day level. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Socio-demographic characteristics and fixed effects are included in all specifications.

Table B.8: Effects of the pandemic on attitudes (by country)

	Trust Domestic Inst.				Trust Foreign Inst.				Populism				Immigration			
	DE	ES	FR	UK	DE	ES	FR	UK	DE	ES	FR	UK	DE	ES	FR	UK
21 days before	-0.300*** (0.083)			-0.332*** (0.100)	-0.128* (0.065)			-0.124+ (0.069)	0.049 (0.070)			0.214* (0.084)	0.076 (0.091)			-0.277** (0.106)
18 days before	-0.401*** (0.093)			-0.266* (0.121)	-0.245*** (0.072)			-0.076 (0.083)	-0.019 (0.078)			0.316** (0.102)	0.226* (0.102)			-0.133 (0.129)
15 days before	-0.514*** (0.119)		-0.123 (0.565)	-0.091 (0.133)	-0.296** (0.092)		-0.181 (0.404)	0.089 (0.092)	0.232* (0.100)		-0.077 (0.461)	0.326** (0.113)	0.035 (0.130)		0.134 (0.573)	0.047 (0.142)
12 days before	-0.333** (0.102)	0.777+ (0.457)	0.067 (0.566)	-0.123 (0.122)	-0.170* (0.080)	1.038** (0.342)	-0.026 (0.405)	-0.045 (0.084)	-0.053 (0.087)	-0.271 (0.356)	-0.132 (0.463)	0.166 (0.103)	0.064 (0.112)	-0.007 (0.485)	0.515 (0.574)	0.149 (0.130)
9 days before	-0.281** (0.108)	0.719 (0.476)	-0.204 (0.578)	-0.25 (0.162)	-0.138+ (0.084)	0.980** (0.356)	-0.19 (0.413)	-0.022 (0.112)	-0.067 (0.091)	-0.438 (0.371)	-0.121 (0.472)	0.062 (0.137)	-0.057 (0.118)	-0.046 (0.504)	0.172 (0.586)	0.003 (0.173)
6 days before	-0.279+ (0.148)	0.456 (0.452)	0.219 (0.567)	-0.265 (0.187)	-0.218+ (0.115)	0.812* (0.338)	0.039 (0.406)	-0.059 (0.128)	-0.082 (0.125)	-0.439 (0.352)	-0.17 (0.463)	0.13 (0.158)	0.046 (0.163)	0.227 (0.479)	0.338 (0.575)	-0.104 (0.199)
3 days before	-0.018 (0.137)	0.791+ (0.452)	0.48 (0.606)	-0.033 (0.132)	-0.055 (0.106)	1.005** (0.338)	0.149 (0.433)	0.001 (0.091)	0.128 (0.116)	-0.554 (0.352)	-0.041 (0.494)	0.109 (0.112)	0.032 (0.151)	0.254 (0.479)	0.341 (0.614)	-0.17 (0.140)
3 days after	-0.029 (0.097)	0.788 (0.541)	0.15 (0.576)	0.038 (0.116)	-0.066 (0.076)	0.896* (0.405)	-0.09 (0.412)	0.009 (0.080)	-0.106 (0.082)	-0.63 (0.421)	-0.184 (0.470)	0.013 (0.098)	0.02 (0.107)	0.122 (0.573)	0.246 (0.584)	-0.102 (0.123)
6 days after		0.799+ (0.456)	0.029 (0.567)			0.893** (0.341)	-0.131 (0.406)			-0.49 (0.355)	-0.113 (0.463)			0.388 (0.483)	0.153 (0.575)	
9 days after		0.719 (0.454)	0.131 (0.567)			0.933** (0.339)	-0.041 (0.405)			-0.425 (0.354)	-0.092 (0.463)			0.334 (0.481)	0.09 (0.575)	
12 days after		0.486 (0.457)				0.684* (0.342)				-0.4 (0.356)				0.156 (0.484)		
15 days after		0.511 (0.513)				0.770* (0.383)				-0.021 (0.399)				0.6 (0.543)		
Const.	0.172+ (0.102)	-1.203* (0.507)	0.121 (0.590)	0.277 (0.217)	0.115 (0.079)	-1.476*** (0.379)	0.223 (0.422)	0.502*** (0.149)	-0.423*** (0.086)	-0.024 (0.395)	-0.681 (0.482)	-0.691*** (0.183)	-0.176 (0.112)	-0.059 (0.537)	-0.011 (0.598)	0.777*** (0.231)]

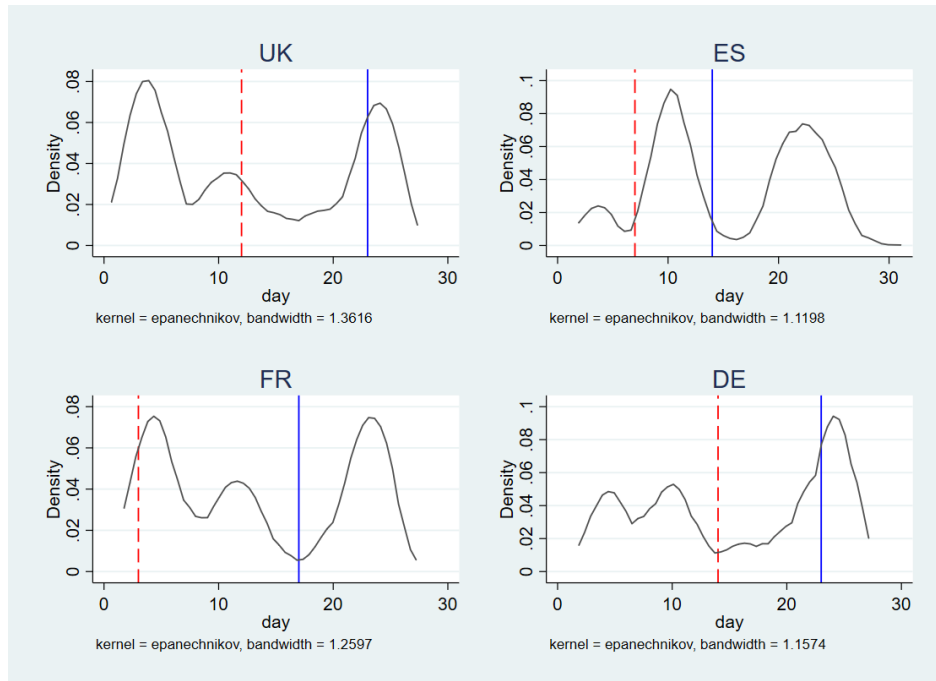
Note: Standard errors are clustered at the day level. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$ *** $p < 0.001$. Socio-demographic characteristics and fixed effects are included in all specifications.

Table B.8: Effects of the pandemic on attitudes (by country)

	Authoritarianism				Loneliness			
	DE	ES	FR	UK	DE	ES	FR	UK
21 days before	-0.182* (0.073)			0.011 (0.081)	-0.118+ (0.064)			-0.127+ (0.076)
18 days before	-0.223** (0.081)			0.096 (0.099)	-0.021 (0.071)			-0.152+ (0.092)
15 days before	-0.01 (0.105)		0.271 (0.441)	-0.009 (0.109)	-0.147 (0.091)		0.399 (0.411)	0.043 (0.101)
12 days before	-0.133 (0.090)	-0.046 (0.391)	0.238 (0.443)	-0.163 (0.100)	-0.212** (0.079)	-0.043 (0.343)	0.252 (0.412)	0.022 (0.093)
9 days before	-0.331*** (0.095)	-0.201 (0.407)	0.23 (0.452)	-0.129 (0.132)	0.004 (0.083)	-0.196 (0.357)	0.203 (0.421)	-0.366** (0.123)
6 days before	0.012 (0.131)	0.231 (0.387)	0.15 (0.443)	0.072 (0.152)	-0.336** (0.114)	-0.148 (0.339)	0.209 (0.413)	0.131 (0.142)
3 days before	-0.01 (0.121)	0.106 (0.387)	0.044 (0.473)	0.125 (0.107)	0.116 (0.105)	-0.055 (0.339)	0.211 (0.441)	-0.024 (0.100)
3 days after	-0.146+ (0.086)	0.627 (0.463)	0.355 (0.450)	0.136 (0.094)	-0.025 (0.075)	-0.083 (0.405)	0.375 (0.419)	0.015 (0.088)
6 days after		0.326 (0.390)	0.424 (0.443)			-0.136 (0.342)	0.473 (0.413)	
9 days after		0.392 (0.388)	0.353 (0.443)			0.013 (0.340)	0.448 (0.413)	
12 days after		0.376 (0.390)				0.017 (0.342)		
15 days after		0.245 (0.438)				-0.127 (0.384)		
_cons	-0.261** (0.089)	-0.675 (0.434)	-0.618 (0.461)	-0.312+ (0.176)	0.227** (0.078)	-0.014 (0.380)	-0.411 (0.430)	0.411* (0.164)

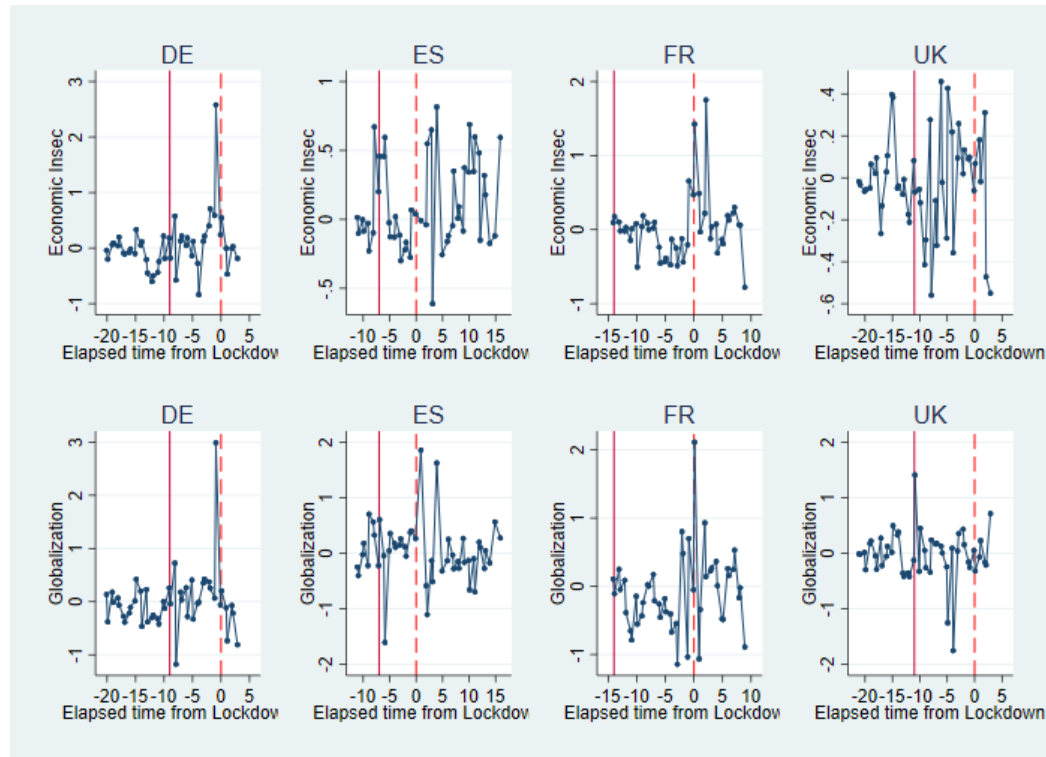
Note: Standard errors are clustered at the day level. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Socio-demographic characteristics and fixed effects are included in all specifications.

Appendix C Supplementary Figures



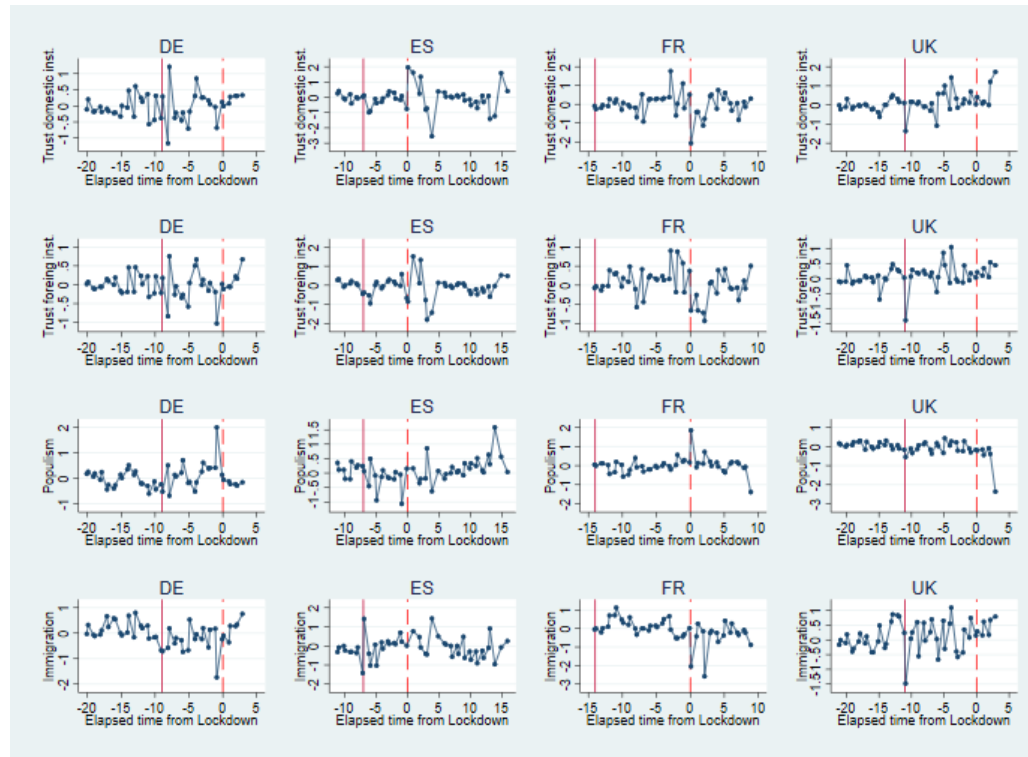
Note: Solid vertical lines show the lockdown days, while dashed lines represent the date where ten deaths were reached. DE (Germany), ES (Spain), FR (France) and UK (United Kingdom).

Figure C.1: Distribution of answers by country



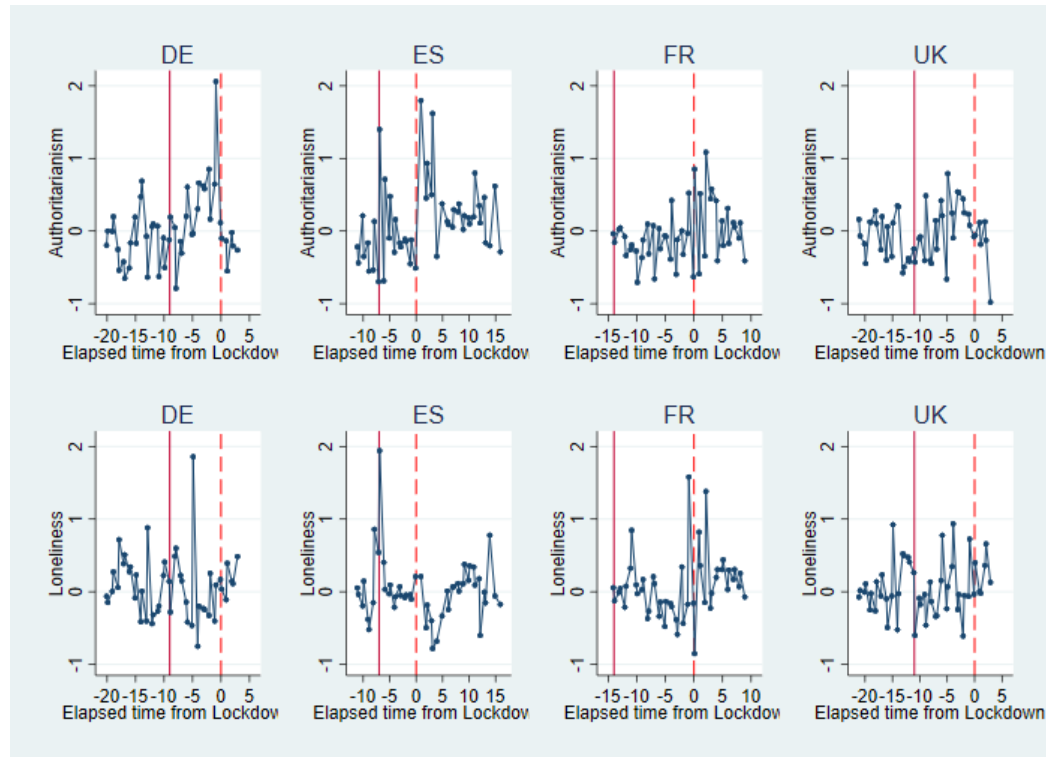
Note: The vertical axis shows the average level of indexes (values reported in Table 3) in days before (negative values) and after (positive values) the lockdown. Dots correspond to the raw averages by bins of one day. Red solid vertical lines represent the date when 10 deaths were reached; dashed red lines represent the lockdown. DE (Germany), ES (Spain), FR (France) and UK (United Kingdom).

Figure C.2: Average level of economic indicators before and after the lockdown



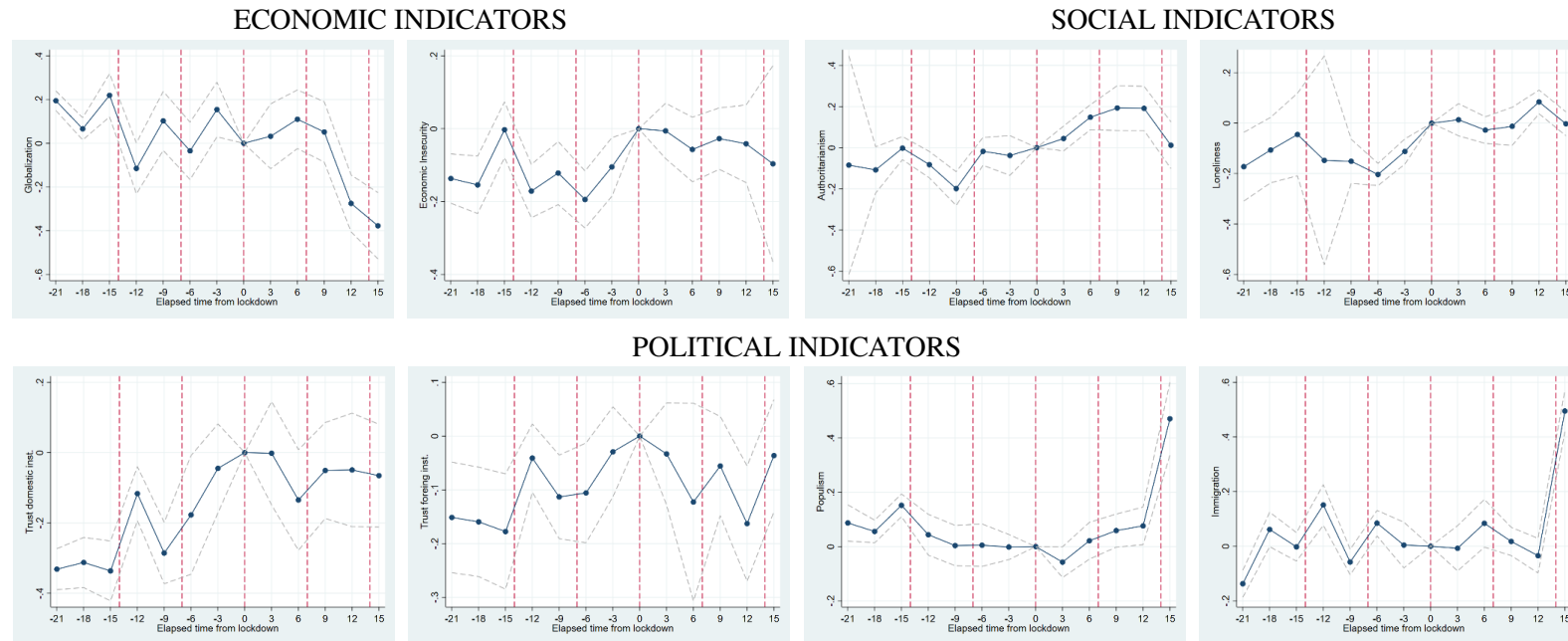
Note: The vertical axis shows the average level of indexes (values reported in Table 3) in days before (negative values) and after (positive values) the lockdown. Dots correspond to the raw averages by bins of one day. Red solid vertical lines represent the date when 10 deaths were reached; dashed red lines represent the lockdown. DE (Germany), ES (Spain), FR (France) and UK (United Kingdom).

Figure C.3: Average level of political indicators before and after the lockdown



Note: The vertical axis shows the average level of indexes (values reported in Table 3) in days before (negative values) and after (positive values) the lockdown. Dots correspond to the raw averages by bins of one day. Red solid vertical lines represent the date when 10 deaths were reached; dashed red lines represent the lockdown. DE (Germany), ES (Spain), FR (France) and UK (United Kingdom).

Figure C.4: Average level of social indicators before and after the lockdown



Note: The vertical axis shows the variation with respect to the average level of the indexes in days before (negative values) and after (positive values) the lockdown. Vertical dashed lines indicate the weeks before and after the lockdown. Finally, dashed lines are the confidence intervals.

Figure C.5: The effect of the pandemic (marginal effects)

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