

Aghajanian, Alia; Caeiro, Rute Martins; Egger, Eva-Maria; Justino, Patricia; Lo Bue, Maria C.

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## 'Ask not what your country can do for you': Legacies of the Great Recession and the consequences of the 'trust crisis'

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WIDER Working Paper 2023/111

## **‘Ask not what your country can do for you’**

Legacies of the Great Recession and the consequences of the  
‘trust crisis’

Alia Aghajanian,<sup>1</sup> Rute M. Caeiro,<sup>2</sup> Eva-Maria Egger,<sup>3</sup>  
Patricia Justino,<sup>2</sup> and Maria C. Lo Bue<sup>4</sup>

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**Abstract:** This paper investigates how persistent changes in trust caused by the Great Recession have affected how governments and citizens across Europe responded to the next global crisis: the COVID-19 pandemic. We show that increases in individualism and mistrust towards institutions caused by individual exposure to the 2007–08 global financial crisis across European regions shaped citizens’ responses to public health policies to curtail the spread of the COVID-19 pandemic almost 15 years later. Contrary to expectations, affected individuals exhibited significantly greater declines in mobility during the initial period of lockdown than others. We attribute this effect to individuals prioritizing their own safety amid perceived breakdowns in the social contract and lack of trust that governments would protect them. Mistrust driven by exposure to the Great Recession has also led to increased discontent of citizens with more traditional European centrist governments. These results suggest that economic events that lead to changes in social trust have lasting legacies by affecting government and citizen responses to future crises.

**Key words:** trust, social contract, Great Recession, Europe, public health policies, COVID-19

**JEL classification:** H12, I18, N14, Z18

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<sup>1</sup> World Bank, Washington, DC; <sup>2</sup> UNU-WIDER, Helsinki, Finland; <sup>3</sup> German Federal Ministry for Economic Cooperation and Development (BMZ), Bonn, Germany; <sup>4</sup> University of Trieste, Trieste, Italy; email addresses: [aaghajanian@worldbank.org](mailto:aaghajanian@worldbank.org), [caeiro@wider.unu.edu](mailto:caeiro@wider.unu.edu), [eva@egger-home.de](mailto:eva@egger-home.de), [justino@wider.unu.edu](mailto:justino@wider.unu.edu), [mariaacarmela.lobue@deams.units.it](mailto:mariaacarmela.lobue@deams.units.it)

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Katajanokanlaituri 6 B, 00160 Helsinki, Finland

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## 1 Introduction

The 2007–08 global financial crisis led to unprecedented changes across Europe. Several studies have traced significant events over the last decade to the crisis and the subsequent period of economic decline and austerity—now named the Great Recession. Some key changes attributed to the Great Recession have included the withdrawal of the UK from the European Union (Fetzer 2019) and the rise of far-right parties and populism across Europe (Algan et al. 2017; Guriev and Papaioannou 2020). At the heart of these changes was a drastic reduction in citizens’ trust towards governments and state institutions (Algan et al. 2017; Ananyev and Guriev 2019; Dustmann et al. 2017; Foster and Frieden 2017; Margalit 2019), with plausibly profound effects on citizen–state relations and the strength of the social contract across Europe today. However, not much is known about the lasting effects of such drastic shifts in trust. The existing literature typically focuses on how events temporarily affect *levels* of trust. This is because trust is generally seen in the economics literature as a historical construct with origins in the distant past (Alesina and Giuliano 2015; Becker et al. 2014; Guiso et al. 2016; Nunn and Wantchekon 2011). However, there is now evidence that severe crises can change the trajectory of trust and other social norms (Ananyev and Guriev 2019), but few studies have analysed the long-term consequences of such shifts in normative trajectories.

This paper addresses this question by analysing how the ‘trust crisis’ generated by the Great Recession has shaped the way European citizens responded to the COVID-19 pandemic, the greatest global crisis since the 2007–08 financial crisis. Trust is an important concept in the social sciences, with strong, well-documented impacts on the organization of societies (Alesina and Giuliano 2015; Algan and Cahuc 2014; Algan et al. 2016; Coleman 1990; Gambetta 1988; Uslaner 2002), economic growth (Arrow 1972; Fukuyama 1995; Guiso et al. 2004; Knack and Keefer 1997), and political outcomes (Algan et al. 2017; Greif 1994; Nannicini et al. 2013; Tabellini 2010). We postulate that the ‘trust crisis’ experienced in Europe during and after the Great Recession may have had lasting effects on citizen–state relations, thereby affecting government and people’s responses to future crises. We assess the validity of this hypothesis using the case of the COVID-19 pandemic. Specifically, we analyse how changes in trust caused by individual exposure to the 2007–08 global financial crisis across European NUTS 2 regions have shaped citizens’ compliance with public health policies to curtail the spread of the virus. We then assess whether the same changes in trust also explain other outcomes related to the strength of citizen–state relations, such as voting preferences expressed by citizens in the latest elections across Europe and the rise in protests experienced across European regions since the 2010s.

Economic shocks as pivotal as the 2007–08 financial crisis may have long-term consequences for citizen–state relations because such shocks provide citizens with new information about the ability of their governments to deliver public goods and services and to govern (Ashworth et al. 2018). This new information drives citizens to update their beliefs about social reciprocity and how governments fulfil their part of the social contract (Besley 2020; Besley et al. 2023). There are several reasons to believe that current perceptions about the social contract in Europe have been shaped to a large extent by the degree to which European regions and their citizens were exposed to the 2007–08 financial crisis and its subsequent effects. First, the financial crisis led to the implementation of austerity policies across most European countries (Fetzer 2019), which were particularly severe in southern and eastern countries, where high levels of debt led several countries to drastically reduce public spending and investment while raising taxes (European Commission 2012). These austerity policies had particular adverse effects on welfare spending, social benefits, and safety nets (Bontout and Lokajickova 2013; European Commission 2013). Cuts in public spending and in access to public services in particular may have affected how citizens perceive their government’s ability to enact the necessary measures to address subsequent crises, such as the COVID-19 pandemic, given the central importance of welfare systems to the European social contract (Dowding and John 2021; Mettler and Soss 2004). Second, the Great Recession was characterized by a large and protracted labour market crisis in Europe. Workers were deeply affected by the financial

crisis, which resulted in unprecedented levels of unemployment and economic uncertainty. Across Europe, the rate of unemployment rose from around 7 per cent on average in 2007 to over 11 per cent in 2013 (see Algan et al. 2017 for a detailed review). Increases in unemployment were, however, uneven across European regions and within countries. For instance, Spain and Greece experienced unemployment rates of over 20 per cent, with some regions reaching around 40 per cent. Some Spanish regions experienced increases in unemployment of just 3 or 4 percentage points in the period 2007–10, while in other regions unemployment rose by 15–18 percentage points (authors’ calculations based on Eurostat data). Such drastic and uneven changes in unemployment are likely to have affected perceptions about the social contract, given the well-documented role income losses and labour market uncertainty play in shaping individual political attitudes and preferences (Alesina and Giuliano 2010; Brunner et al. 2011; Margalit 2013, 2019).

The combination of austerity policies and rising unemployment has led to a breakdown of trust in governments and state institutions, and in the norms of reciprocity needed to uphold such trust. Several European countries have only recently begun to recover from the aftermath of the financial crisis, and the length of this recovery has further deepened this ‘trust crisis’ (Algan et al. 2017; Dustmann et al. 2017; Fetzer 2019; Guriev and Papaioannou 2020; Margalit 2019). The COVID-19 pandemic hit Europe as countries were experiencing some of the lowest levels of trust historically.

The SARS-CoV-2 virus (which causes COVID-19) was first detected in the Wuhan region in China in December 2019. The virus spread rapidly across the world and, by April 2020, most countries had reported several COVID-19-related deaths and hospitalizations. In response to the rapid spread of the virus, countries in Europe and elsewhere implemented various public health measures, including policies to restrict population movements and interactions, with varied degrees of success. The implementation of such policies faced a classic collective action problem: population control measures can only be implemented successfully if citizens obey them and do not free-ride and take individualistic and selfish actions at the expense of public benefit. Addressing this classic collective action problem requires commitment and reciprocity, which in turn are shaped by levels of trust (Gambetta 1988; Uslander 2002).

The paper focuses on two dimensions of trust as potential mediators linking exposure to the 2007–08 financial crisis to citizens’ responses to the public health crisis in 2020. The first includes beliefs about whether others will have our interests at heart (Gambetta 1988; Hardin 2002), often defined as generalized, interpersonal, or horizontal trust (Alesina and La Ferrara 2002), and how fellow citizens contribute to the common good and do not try to take advantage of others (Banfield 1967). The second dimension of trust refers to how citizens perceive the legitimacy, fairness, and efficiency of (democratic) institutions (Rothstein and Stolle 2008), including (national and local) governments, courts, the police, the media, and so forth (usually defined as political, institutional, or vertical trust).

Trust in others, the willingness to act in the common interest, and trust in institutions may have had consequences for the management of the pandemic because individual responses depended on how each citizen believed other citizens would reciprocate by obeying social distancing measures, and their belief that governments would protect their citizens.<sup>1</sup> These dimensions of trust are often interlinked but may not always move in the same direction. For instance, Dubra et al. (2019) show in a randomized controlled setting that distrust in government is inversely related to preferences for redistribution. Similar results are discussed by Alesina et al. (2018) and Kuziemko et al. (2015) for the USA. Likewise, in settings

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<sup>1</sup> Lack of trust in fellow citizens and key institutions and acting in self-interested ways resulted in phenomena we observed in many parts of the world in the earlier stages of the COVID-19 pandemic, such as hoarding of food and medicine, rises in thefts and buying guns, looting, and social tensions—and ultimately to the failure in some places of measures to contain the pandemic and alleviate pressures on national health systems, which resulted in unnecessary deaths (directly or indirectly related to the pandemic).

of low institutional trust, communities may nonetheless come together in times of crisis, which may strengthen links of solidarity (for the case of Hurricane Katrina, see Weil 2011). This may compensate for possible reduced trust in institutions and governments, generating complementarities and possible substitution effects between different forms of trust.

We analyse empirically how changes in mistrust led by exposure to the Great Recession may have affected individual compliance with pandemic-related restrictions in terms of levels of mobility outside one's home. Theoretically, this relationship is a-priori unclear. The COVID-19 pandemic required citizens to sacrifice their own liberties and control over their private lives for the common good. Mistrust learned from exposure to the 2007–08 crisis may have led, on the one hand, to more social distancing if citizens learned that government institutions were unreliable and unable to respond to crises and felt left to cope unaided. On the other hand, mistrust may have led to an increase in mobility if citizens learned the hard way that non-compliance with government policy is more beneficial for them and yields private benefits. For instance, the pandemic required citizens to believe that governments would implement compensatory economic policies, such as economic support for those isolating and unable to work. Prior experience with austerity policies may have led citizens to doubt these policies would be set in place, thus increasing mobility among those that needed to work and/or distrusted information about the severity of the virus. The empirical analysis in this paper is concerned with adjudicating between these two hypotheses.

We conduct this empirical analysis in two stages. We first exploit the plausibly exogenous sub-national variation in the exposure to the Great Recession based on the importance of the construction sector to predict changes in mistrust. We chose to adopt the regional share of the construction sector as the main measure of exposure to the financial crisis given the direct link between the property market and the failure of related financial instruments, which were at the heart of the global financial crisis (Algan et al. 2017). We then assess the responses of individual citizens at the sub-national (NUTS 2) level to plausibly unanticipated government restrictions during the pandemic in interaction with the predicted changes in mistrust induced by the crisis. We proxy citizens' response to the public health measures with mobility for different purposes, such as necessary shopping, recreational activities, or staying at home.

The main reduced-form results show that individuals living in NUTS 2 regions that experienced the financial crisis more severely tended to isolate more during the lockdown. The first stage results show, as expected and in line with the existing literature, that mistrust in political institutions (parliament, politicians, parties), dissatisfaction with democracy, mistrust in others, and individualistic behaviours increased in areas more affected by the financial crisis. In the second stage we find that recession-induced mistrust in political institutions significantly reduces mobility—that is, larger levels of institutional mistrust as a result of exposure to the 2007–08 financial crisis have led to citizens being *more* likely to isolate themselves. These results are especially stronger for high levels of stringency (60 and above), suggesting that reduced mobility in areas most affected by the financial crisis is highest when governments intervene the most to contain the pandemic. Recession-induced changes in interpersonal mistrust have also a large reducing effect on mobility, especially towards unrestricted or necessary places such as grocery stores, pharmacies, and parks. In line with the theoretical predictions above, we interpret this finding as indicative that reductions in mobility observed in areas with larger changes in mistrust after the 2007–08 crisis may be due to fear of contagion leading individuals to take matters into their own hands in the most pandemic-affected regions (where stringency policies were highest), rather than reflecting increased compliance with lockdown regulations.

This interpretation is consistent with an emerging literature on the relationship between citizens' mistrust in government institutions and their socio-political preferences and attitudes. Kuziemko et al. (2015) show that low levels of political trust may explain the paradox as to why many voters in the USA care about inequality but are sceptical about policies proposed by the government to tackle it.

Alesina et al. (2018) discuss how Republican voters in the USA with low trust in the government believe that the government should have no role in mitigating falling intergenerational mobility. Dubra et al. (2019) document similar results: distrust in government in the USA is inversely related to preferences for redistribution because individuals with low trust in government institutions believe that the government should have a limited role in providing redistributive policies. In a similar vein, our results show that institutional mistrust generated by the Great Recession translated into above-average reductions in mobility plausibly because people may have decided to protect themselves when faced with perceived breakdowns in the social contract and lack of trust that governments would protect them. This interpretation is also consistent with results showing that people affected by economic losses, including during the 2007–08 financial crisis, may take on more self-interested behaviours and value efficacy over equality more (De Haas et al. 2016; Fisman et al. 2013).

Although the data available does not allow us to demonstrate directly this ‘taking matters into one’s own hands’ explanation, we are able to rule out a series of alternative explanations. One important alternative explanation is that the result above suggests that those most affected by the crisis may be more compliant with government policies. One reason may be because those exhibiting lower levels of crisis-induced mistrust may have recovered from the crisis, with trust levels back to pre-crisis levels. Alternatively, these individuals may simply exhibit lower levels of risk aversion due to their experience of the financial crisis. Thus, our results may indicate that exposure to the financial crisis generated higher levels of compliance either due to recovery or risk aversion rather than mistrust. We find no evidence that these explanations hold in the data. We also find no evidence that the results may be explained by pre- or post-crisis levels of trust. In light of these empirical exercises, we conclude that ‘taking matters into one’s own hands’ is the most likely explanation for the results we find.

The way we understand the central findings of our study—namely, that mistrust triggered by the financial crisis has led citizens to take matters into their own hands and to shelter more in response to fears that governments cannot protect them—suggests that there might be other ways through which citizens express such discontent. Several studies have shown that social discontent typically results in voters punishing incumbents in elections following an economic crisis (see review in Margalit 2019). Other citizens take to the streets to express social discontent and anger at perceived broken norms of reciprocity by governments (Besley 2020; Iacoella et al. 2021; Levi 1997; Mettler and Soss 2004; Sangnier and Zylberberg 2017). If our interpretation above is correct, we should also observe citizens affected by the financial crisis who lost livelihoods and welfare support being compelled to express their discontent through voting and/or protests as their trust in the ability of governments to protect them was lost. Existing evidence supports this reasoning. Several studies have documented how, in several European countries following the financial crisis, citizens abandoned traditional voting preferences for parties in the centre of the left–right axis, in favour of parties at the extremes of this axis (Algan et al. 2017; Fetzer 2019; Hübscher et al. 2021; Lecher 2019). Feelings of social discontent and being let down by the state have also been shown to have generated resentment towards mainstream political elites and support for far-right policies across rural US counties following the financial crisis (Cramer 2016). Funke et al. (2016), using data from 827 general elections across 20 advanced economies between 1870 and 2014, show that financial crises are typically followed by substantial increases in the vote share of far-right parties, as well as by increased political fractionalization.<sup>2</sup> At the same time, protests have increased in Europe since 2010, reaching unprecedented levels.<sup>3</sup> We would thus expect to observe these effects—a

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<sup>2</sup> Other studies have documented a close link between economic shocks (related to trade liberalization), political polarization, and shifts in voting from mainstream to more extreme parties (Autor et al. 2020; Colantone and Stanig 2018; Dixit and Weibull 2007).

<sup>3</sup> Strikes, riots, protests, and anti-government demonstrations also tend to increase after financial crises, presumably indicating large dissatisfaction with incumbent governments. de Bromhead et al. (2013) and Doerr et al. (2018) show such effects for the 1929 Great Depression, while Pontichelli and Voth (2020) document a rise in social unrest following episodes of austerity across Europe between 1919 and 2008.

shift in voting preferences towards more extreme parties and more protests—in areas where recession-induced mistrust is highest (and mobility during the pandemic was reduced). Our results show a strong effect on preferences for parties outside the traditional European mainstream among individuals that exhibit the highest levels of crisis-induced mistrust, which plausibly reflect the discontent of citizens with more traditional European centrist governments since the Great Recession. We also observe a positive (but not statistically significant) effect on recession-driven mistrust on protests.

Taken together, our results offer important new contributions to a body of research in economics and political science on the social and political consequences of economic shocks (Ahlquist et al. 2020; Andrabi and Das 2017; Carlin et al. 2014; Franck 2016), including financial crises and their long-term effects (de Bromhead et al. 2013; Doerr et al. 2018). Most of the existing literature has focused on the political effects of economic crises with respect to changes in voting behaviour and preferences across the left–right political spectrum, towards democracy/authoritarianism, and for or against redistributive policy agendas (Acemoglu and Robinson 2006; Iacolla et al. 2020, 2021; Margalit 2019). Other papers, more related to ours, have shown the effects of financial crises on trust in government institutions (Algan et al. 2017; Ananyev and Guriev 2019; Foster and Frieden 2017; Stevenson and Wolfers 2011), but have not studied the longer-term consequences of such recession-driven losses in trust. We bring together these literatures by showing that losses in trust driven by the financial crisis explain subsequent citizen behaviour, both with respect to public health policies and to national elections.

To the best of our knowledge, this is the first paper to link pandemic responses to prior economic crises in Europe. In this way, the paper offers new insights to a burgeoning literature on the correlates of social distancing during lockdown. This literature has found a positive relationship between levels of trust and social capital and compliance with mobility-restriction rules. Bargain and Aminjonov (2020) show that individuals residing in European areas characterized by high levels of institutional trust exhibit reduced mobility in non-essential activities as compared to regions with lower levels of trust. Similarly, Brodeur et al. (2021) find that counties in the USA that display higher levels of interpersonal trust experience a significant decline in mobility once lockdown measures are implemented. Barrios et al. (2021) and Durante et al. (2021) show that regions characterized by a stronger civic culture tend to engage more frequently in voluntary social distancing practices. One feature of this literature is the focus on *levels* of trust, drawing on an influential body of literature that traces the formation of (persistent) levels of trust to past historical events (Alesina and Giuliano 2015; Becker et al. 2014; Guiso et al. 2016; Nunn and Wantchekon 2011). However, it is now acknowledged that trust has two components: a fixed part shaped by long-term cultural, normative, and institutional trends, and a mobile element that may be affected by shorter-term shocks (Ananyev and Guriev 2019; Putnam 2000; Stevenson and Wolfers 2011).<sup>4</sup> Our paper traces changes in the malleable component of trust across Europe to the profound effects of the 2007–08 global financial crisis. We show that not only trust levels matter for government policy but, more importantly, events that lead to shifts in the trajectory of social trust (such as the Great Recession) may have long-term consequences by affecting government and citizen responses to future crisis.

## 2 Context and identification strategy

The global financial crisis of 2007–08 was the most profound economic crisis to hit the world in the last three decades and is widely considered to have led to the largest global economic downturn since the Great Depression in the 1930s. We analyse in this paper how exposure to the 2007–08 global financial crisis influences today’s behaviour during the global pandemic through its impact on mistrust. One reason for the regional variation in the impact of the financial crisis on unemployment and other

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<sup>4</sup> An emerging body of evidence has demonstrated how social and political trust may be affected by short-term events, such as national teams winning football games (Depetris-Chauvin et al. 2020).



individual-level economic outcomes was the sector-specific vulnerability to the crisis. First, the financial crisis in 2007–08 was concentrated in the construction sector due to its direct link with the property market and the failure of related financial instruments, which were at the heart of the financial crisis (Algan et al. 2017). The construction sector is highly dependent on its borrowing capacity, which collapsed as the financial crisis unfolded. Firms in these sectors were more or less vulnerable to the crisis depending on pre-crisis financial systems they were exposed to. For example, pre-crisis trends of low real interest rates made Spain and Italy more vulnerable to low productivity, which then exacerbated the effects of the crisis (Cette et al. 2016). Spain was also hard hit because most firms borrowed from savings banks and not from private investors (Bentolila et al. 2017). The financial crisis then translated into an employment crisis. Firms which were financially vulnerable were more likely to dismiss employees during the crisis or to provide them with only fixed-term contracts after the crisis.<sup>5</sup> Evidence suggests that such firms displayed lower employment growth in the aftermath of the crisis (Siemer 2014). Additionally, labour market institutions moderated the crisis adjustment differently. For instance, Utar (2018) shows how in Denmark workers were able to acquire new skills to shift employment, while Dix-Carneiro and Kovak (2019) found long-lasting losses for workers in Brazil.<sup>6</sup> The construction sector is especially prone to casual labour contracts and is characterized by primarily low-skilled workers. Estimates document numbers of construction sector jobs lost in 2008 around 500,000 in Spain and 100,000 in the UK, among others (ILO 2009).<sup>7</sup> We make use of variation in the share of the construction sector across regions in Europe during the financial crisis (using data from Eurostat) to measure individual and regional exposure to the financial crisis. Exposure to the 2007–08 financial crisis is measured using the pre-crisis share of the construction sector in gross value added across 138 European NUTS 2 regions in 16 countries.

In order to analyse the effect of such exposure to the Great Recession on citizen responses to the COVID-19 pandemic, we use several other data sources to capture compliance with COVID-19 measures (using Google mobility data), government stringency measures (extracted from the Oxford COVID-19 Government Response tracker), and levels of interpersonal and institutional trust (from the European Social Survey, or ESS). Appendix A describes the data sources and how all variables we use in the paper were constructed.

Even though mobility and stringency data are available from the start of the pandemic until now, we restrict the analysis initially to the first phase of the pandemic and to policy responses in that period. This phase corresponds to the period between 15 February 2020 (the day from which mobility data for all the countries in our sample is available) and the country-specific date when the stringency index starts to decrease after reaching its first highest level.<sup>8</sup> In this way, we avoid capturing endogenous mobility responses caused by changes in trust over the course of the pandemic, as well as ‘COVID fatigue’ effects, and changes in mobility associated with protests and demonstrations in the summer of 2020. We consider later in the paper the effects of the second wave (from October 2020) as a robustness test.

Our empirical strategy employs a two-stage procedure. In the first stage, we estimate the changes in mistrust in response to the financial crisis at the individual level. To establish causality, we use the pre-crisis share of the construction sector in gross value added as a measure for the exposure to the

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<sup>5</sup> See Fernandes and Ferreira (2017) for Portugal, Bentolila et al. (2017) for Spain, Berton et al. (2018) for Italy, and Duygan-Bump et al. (2015) for the USA.

<sup>6</sup> Bentolila et al. (2012) argue that employment was hit harder in Spain than in France due to higher costs of dismissal and less stringent rules on temporary contracts.

<sup>7</sup> In a related study, Ananyev and Guriev (2019) show that the initial share of manufacturing in a Russian region significantly predicts the decline in income during the crisis due to how this industry was integrated in global markets. These income declines led in turn to a reduction in trust.

<sup>8</sup> On average, this is 42 days with a standard deviation of 25.5 days. The country with the fastest implementation of stringency measures is Italy, on 24 February 2020, and the last country is Sweden.

financial crisis and demonstrate how this is exogenous to mistrust. In the second stage, we estimate how crisis-induced changes in mistrust affect today's outcomes of interest at the sub-national level. Given the different data structures in the two stages, we use predicted values in the second stage based on estimates from the first stage instead of employing the common two-stage least squares estimation. This estimation strategy follows Dell et al. (2019) and Feyrer (2019), in which plausibly exogenous variation is used in a first step to predict changes in the variable of interest and whose predicted values are then included in the main regression.

## 2.1 First stage: predicted change in mistrust

In the first stage, we estimate the plausibly exogenous effect of the crisis on changes in mistrust. We then retrieve the predicted changes in mistrust and use those estimates in the second step of the analysis. To do so, we estimate changes in mistrust in response to the potential exposure to the financial crisis in European sub-national regions (NUTS). Exposure to the financial crisis is captured by the pre-crisis share of the construction sector in gross value added in a NUTS area. As discussed by Ananyev and Guriev (2019) for Russia and Algan et al. (2017) for Europe, economic shocks, such as the global financial crisis, can lead to changes in trust among the affected population. Similar in spirit to our approach, these studies employ a two-stage model using pre-crisis industrial shares as a measure for vulnerability to the crisis to predict changes in income or unemployment, which in turn affect changes in trust. Our first stage can be understood as a reduced form of their analyses as we directly estimate changes in mistrust due to crisis exposure.

Our approach follows in effect a difference-in-difference specification at the individual level with the 'shock' occurring at the sub-national NUTS area level. The equation is as follows:

$$T_{i,n,t} = \alpha + \delta(c_n \times \text{Post}_t) + \beta_1 c_n + \beta_2 X_n + \beta_3 Z_n + C_c + Y_t + \varepsilon_{i,n,t} \quad (1)$$

where  $T$  represents the mistrust variables of interest at the individual level,  $c$  represents crisis exposure, and  $\text{Post}$  is a dummy variable for time, taking the value of 0 before the financial crisis and the value of 1 after the crisis. The pre-crisis period is defined as 2002–08 and post-crisis defined as 2009–18. Our main coefficient of interest,  $\delta$ , is derived from the interaction between crisis exposure and time ( $c \times \text{Post}$ ).  $\delta$  captures the change in mistrust between the pre- and post-crisis periods due to the variation in the pre-crisis share of construction in value added.  $X$  is a vector of time-invariant individual characteristics, namely whether the person works in a work-from-home job, is 65 years or older, is male or belongs to a minority group, years of completed education, whether benefits are the main household income, and the scale of perception about the importance of following rules. We take the means of these variables at the NUTS area level over the pre-crisis period.<sup>9</sup>  $Z$  captures the NUTS area level pre-crisis average population density. Country fixed effects ( $C_c$ ) and year fixed effects ( $Y_t$ ) are included to account for country-specific and year-specific unobservables (such as cultural and institutional long-term trends). In order to account for the observed heterogeneity in the number of sub-national areas per country, each observation of our sample is weighted by the inverse of the number of NUTS areas in the corresponding country.  $i$ ,  $n$ ,  $c$ , and  $t$  are individual, NUTS area, country, and time subscripts, respectively. All estimations employ OLS, and standard errors are clustered at the NUTS region level (e.g. Bertrand et al. 2004). The intuition behind this estimation is that areas with a larger share of construction were more vulnerable to the financial crisis, as we previously discussed.

After estimating Equation 1, we obtain the predicted change in mistrust by first retrieving the predicted mistrust for the pre- and post-crisis period as in Equations 2 and 3, respectively:

$$\hat{T}_0 = \hat{\alpha} + \hat{\beta}_1 c_n + \hat{\beta}_2 X_n + \hat{\beta}_3 Z_n \quad (2)$$

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<sup>9</sup> These control variables are measured in terms of their average value over the pre-financial crisis period 2002–08. We replicate the analysis using the average value of the variables over the post-financial crisis period (2009–18) and the full period from 2002 to 2018. Our main estimates remain unchanged (see Section 4).

$$\hat{T}_1 = \hat{\alpha} + \hat{\delta}c_n + \hat{\beta}_1c_n + \hat{\beta}_2X_n + \hat{\beta}_3Z_n \quad (3)$$

The hat symbol indicates the predicted estimates from Equation 1. Thus, the change in mistrust between the two periods is

$$\hat{T}_1 - \hat{T}_0 = (\hat{\alpha} - \hat{\alpha}) + \hat{\delta}c_n + (\hat{\beta}_1c_n - \hat{\beta}_1c_n) + (\hat{\beta}_2X_n - \hat{\beta}_2X_n) + (\hat{\beta}_3Z_n - \hat{\beta}_3Z_n) \quad (4)$$

where

$$\Delta\hat{T} = \hat{\delta}c_n \quad (5)$$

This equation provides the predicted change in mistrust attributable to the Great Recession at the NUTS area level.

## 2.2 Second stage: how do crisis-induced changes in mistrust affect mobility during the pandemic?

In the second step of our analysis, we estimate how people's mobility changes in response to the stringency of government measures (such as lockdown) during the COVID-19 pandemic, allowing for heterogeneous effects by the predicted crisis-induced changes in mistrust. We use a daily panel at the NUTS area level and estimate the following equation:

$$\begin{aligned} M_{n,d} = & \alpha + \gamma_1 \text{Lockdown}_{c,d} + \gamma_2 \Delta\hat{T}_n + \delta(\Delta\hat{T} \times \text{Lockdown}_{n,d}) \\ & + \gamma_3 M_{n,d-1} + \gamma_4 \text{Deaths}_{c,d-1} + \gamma_5 X_n + C_c + D_d + \varepsilon_{n,d} \end{aligned} \quad (6)$$

where  $M$  is the mobility indicator in NUTS area  $n$  on day  $d$ . Lockdown is a dummy variable that takes the value of 0 before 15 March 2020 and the value of 1 afterwards.  $\Delta\hat{T}$  represents the predicted crisis-induced change in mistrust. Thus, the coefficient  $\delta$  in the interaction term captures whether there is a differential mobility response to the lockdown policy where the change in mistrust caused by the financial crisis had been larger. We further control for the lag of the dependent variable as mobility behaviour on one day is expected to be highly correlated to previous mobility.<sup>10</sup> Other controls are lagged COVID-related deaths ( $\text{Deaths}_{c,d-1}$ ) and day-invariant NUTS area level characteristics,  $X$ . COVID-related deaths from the previous day are expected to influence people's mobility as they exert either intimidating or optimistic influence (Mendolia et al. 2021). Control variables are the same as in the first stage estimations. We add also country fixed effects,  $C_c$ , which control for unobserved country-specific trends in unobserved cultural and institutional characteristics that could influence mobility behaviour during the pandemic. We also include day of the week,  $D_d$ , fixed effects to allow for the fact that mobility to specific destinations, such as workplaces, varies regularly during the week. Our main results are obtained by clustering standard errors at the NUTS area level (Bertrand et al. 2004; Cameron and Miller 2015).<sup>11</sup>

One concern with these estimates is the fact that Google location history settings are turned off by default, so people choose if they want to turn it on (and thus allow Google to access their data). It is plausible that people who are generally more distrusting could keep their location tracker turned off in order to avoid any potential detection from the authorities. These individuals would not be captured in the mobility data. If that is the case, then our estimates would be a lower bound of the true effect of the crisis-induced changes in mistrust on mobility. It is highly unlikely that the opposite scenario is true—that is, there is no reason to believe that those who are more trusting are likely not to turn on their location tracking settings.

<sup>10</sup> A standard test for AR(1) type serial correlation confirmed that the mobility variables are serially correlated.

<sup>11</sup> As a robustness test, we replicate the analysis by using bootstrapped standard errors (500 replications). This is to account for the use of predicted values of trust that might contain estimation errors from the first stage and thus might introduce biased standard errors in the second stage (Cameron and Trivedi 2005). Results remain unchanged and are shown in Appendix B.

### 2.3 Identifying assumptions

Identification comes from the plausibly exogenous exposure to the global financial crisis measured using the share of the construction sector in a region. The underlying assumption is that the pre-crisis construction shares affect today's mobility response only through their effect on changes in trust, even if the shares are correlated with today's local characteristics in levels (Goldsmith-Pinkham et al. 2020). Although we cannot directly test this assumption, we can show that it is plausible. To do so we conduct two exercises. First, we test for correlates of the construction shares which could affect changes in today's mobility, thus pointing at potential omitted variable bias. Second, we test for parallel pre-trends to reassure that the trends in trust prior to the global financial crisis were unrelated to the size of the construction sector in a NUTS area.

For the first test, we focus on region-level characteristics included in the above specifications which we expect to influence today's mobility. We test if their pre-crisis values are correlated with the share of construction in Table 1. We find a significant correlation between the initial construction share and the shares of workers in sectors working from home, of population aged 65 years old and above, and of individuals in households receiving pensions and social benefits as the main source of income. Moreover, NUTS regions with larger initial shares of construction exhibit higher levels of education and population density and higher levels of people's disagreement with the statement that people should follow rules at all times. Thus, we include these variables in the first stage estimations so that predicted changes in trust are not biased by changes in these variables.

Second, it is possible that mistrust might have been systematically different in areas where the construction sector was relatively high. For example, as the sector was booming, mistrust might have been particularly low as people were overly optimistic or content with their situation and related this to the current institutions. If that were the case, we would overestimate the effect of the crisis on mistrust because people in these areas would be more sensitive to the crisis shock. Our identifying assumption is that pre-crisis mistrust was unrelated to the local construction sector size, meaning that mistrust shows parallel trends in areas with a large or small construction sector. To test for parallel trends prior to the crisis, we artificially divide the available waves of pre-crisis data into two periods. The first period comprises 2002 to 2005, and the second period is defined as 2006 to 2008. We then estimate a simple difference-in-difference with trust as the outcome variable. Our main variable of interest is the interaction between time and construction share.<sup>12</sup>

Table 2 documents the interaction coefficient between construction shares and the post-2006 dummy, with 0 indicating an insignificant coefficient. Note that an insignificant coefficient implies that trends in trust are not correlated with the initial construction share at conventional significance levels, thus satisfying the parallel trend assumption. Each row of Table 2 refers to a separate regression using one of the outcomes of interest as the dependent variable. Column (1) estimates a simple difference-in-difference specification, column (2) controls for country fixed effects, and column (3) adds controls for NUTS-level characteristics. All 12 estimations confirm the assumption of parallel trends when we control for country fixed effects and NUTS area characteristics.<sup>13</sup>

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<sup>12</sup> We employ the following specification:  $T_{n,t} = \alpha + \delta(c_n \times \text{Post2006}_t) + \beta_1 c_n + \beta_2 X_n + C_c + Y_t + \varepsilon_{n,t}$ , where Post2006 is a dummy variable taking the value of 0 for 2002–05, and 1 for 2006–08.  $c$  and  $X$  are defined as before.  $C_c$  and  $Y_t$  are country and year fixed effects, respectively. Standard errors are clustered at the NUTS level.

<sup>13</sup> The full set of results are available upon request.

Table 1: Balance tests A: effect of pre-crisis share of construction on sub-regional level characteristics

Dep. variable ↓	(1) Share of construction value added
Work-from-home	−0.89*** (0.17)
Elderly	0.53** (0.27)
Youth	−0.11 (0.19)
Males	0.014 (0.14)
Population density	−26.5*** (5.58)
Education	−24.1*** (4.89)
Minority	−0.27 (0.23)
Q1 income	−0.044 (0.16)
Benefits	−0.42* (0.24)
Following rules	−5.32*** (1.33)

Note: the table reports the correlation between NUTS-level characteristics pre-crisis value added share of the construction sector for the period 2002–08. Observations are at the NUTS area level. Dependent variables in order: *Work-from-home* is the share of workers in sectors working from home; *Elderly* is the share of the population above 65 years; *Youth* is defined as the youth share of the working-age population; *Males* is the share of the male population; *Population density* is measured at the NUTS level; *Education* is the average years of full-time education completed; *Minority* is the share of individuals belonging to a minority ethnic group in the country; *Q1 income* is the share of individuals in the first welfare quantile; *Benefits* is the share of individuals in households receiving unemployment or redundancy benefits, pensions, or any other social benefits as the main source of income; *Following rules* measures the extent to which individuals agree with the statement that people should follow rules at all times (lower values correspond to stronger agreement with the statement). Dependent variables are measured as an average over the pre-crisis period. All regressions are OLS. Robust standard errors are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table 2: Test for parallel trends over the pre-crisis period

Dep. variable ↓	(1)	(2)	(3)
General mistrust	0	0	0
Selfishness	2.09*	0	0
Individualism	3.22**	0	0
Mistrust in parliament	0	0	0
Mistrust in legal system	0	0	0
Mistrust in police	0	0	0
Mistrust in politicians	0	0	0
Mistrust in political parties	1.94*	0	0
Mistrust in European Parliament	0	0	0
Institutional mistrust	0	0	0
Institutional mistrust without EU	0	0	0
First component of mistrust	0	0	0
Dissatisfaction with democracy	0	0	0
Country fixed effects	No	Yes	Yes
Controls	No	No	Yes

Note: the table presents the difference-in-difference estimation, depicting the relationship between trust outcome variables and the pre-crisis value added share of the construction sector for the period 2002–08. Observations are at the individual level. The dependent variables are standardized. All regressions are OLS. Each cell documents the interaction coefficient between construction shares and the Post2006 dummy variable. 0 indicates an insignificant coefficient. Column (1) runs a simple difference-in-difference specification. Column (2) runs the same estimation adding country fixed effects. In column (3) control variables are added. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors are clustered at the NUTS area level. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

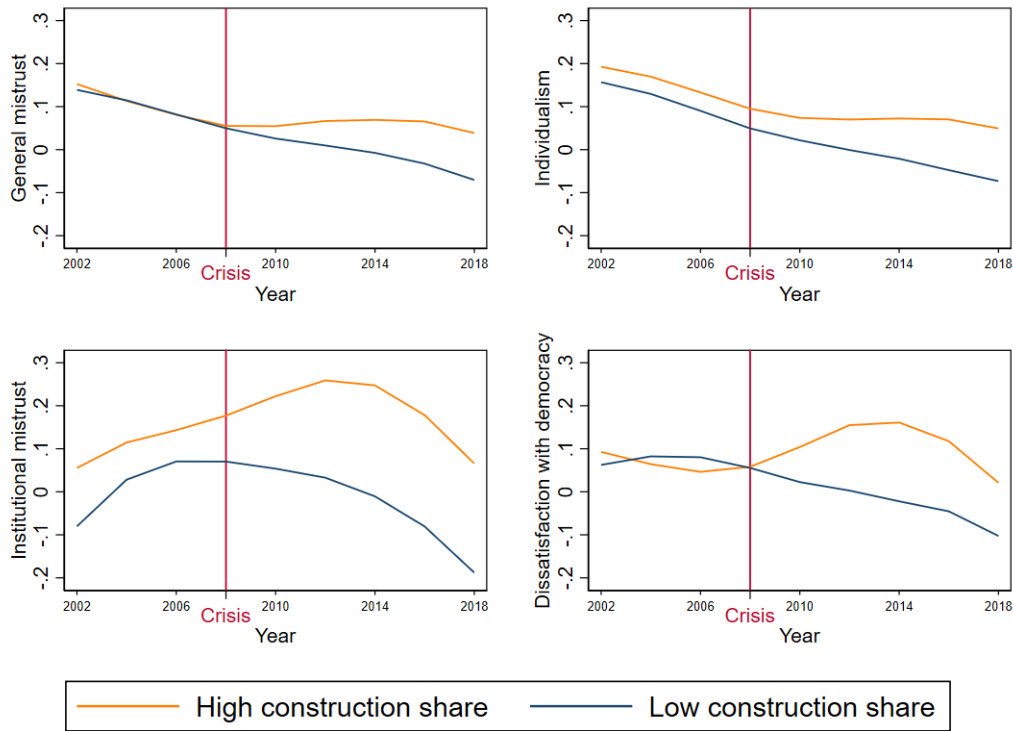
Source: authors' estimation.

### 3 Results

#### 3.1 First stage: the effect of the crisis on mistrust

To motivate our estimation strategy, in Figure 1 we plot the evolution of the various indicators of mistrust over the years before and after the Great Recession, differentiating by areas with greater or lower exposure to the crisis. The figure confirms that the financial crisis represents a shock to people's trust and attitudes. General mistrust in other people and expressions of individualism had been on a downward trend prior to the crisis. In areas with greater exposure to the recession these trends stopped until around 2016, resulting in a large difference between areas more and less affected by the crisis today. Institutional mistrust had been increasing before the crisis but only continued to do so after the crisis in areas more exposed to it, while it declined immediately in the less exposed areas.

Figure 1: Mistrust over time in high/low construction share areas, 2002–18



Note: the figure illustrates the temporal evolution of mistrust, distinguishing between areas with varying levels of exposure to the crisis. The mistrust variables, namely 'General mistrust', 'Individualism', 'Institutional mistrust', and 'Dissatisfaction with democracy', are standardized. Areas with a higher or lower construction share are determined based on whether the gross value added share of construction in 2004 was above or below the median across all NUTS areas. Similarly, high or low changes in mistrust are categorized as crisis-induced mistrust changes above or below the median crisis-induced mistrust change. The vertical red line denotes 2008 as the year of the crisis.

Source: authors' compilation based on ESS and Oxford Government Stringency data.

Tables 3–5 show the results obtained from the estimation of Equation 1. These represent the effect of the crisis on mistrust while controlling for regional characteristics that vary by year.<sup>14</sup> Standard errors are clustered at the NUTS area. The first row presents the pre-crisis relationship between the construction sector size and the dependent variable. In the second row, we report the difference-in-

<sup>14</sup> We report the two key variables of interest: the share of construction value added and the interaction between the share of construction value added and the dummy for the post-crisis period.

difference estimator, representing how much trust  $T$  in NUTS area  $n$  changes between the pre- and post-crisis period due to the variation in the pre-crisis share of construction in value added.

Overall, all measures of institutional and interpersonal mistrust increased on average after the financial crisis (with the exception of mistrust in police). In terms of effect size, areas with 1 percentage point higher shares of construction in the pre-crisis period experienced increases in interpersonal mistrust after the crisis by between 0.92 (selfishness) to 1.58 (general mistrust) standard deviations. Relatively larger are the crisis-induced changes in institutional mistrust, which range between 2.52 (mistrust in political parties) and 5.73 (dissatisfaction with democracy) standard deviations.<sup>15</sup>

Table 3: Effect of the crisis on social mistrust

Dep. variable →	(1) General mistrust	(2) Selfishness	(3) Individualism
Share of construction value added	0.40 (0.93)	0.51 (0.84)	-0.61 (0.96)
After 2008 crisis	1.58***	0.92*	1.17*
× share of construction value added	(0.58)	(0.50)	(0.70)
Observations	261,292	260,234	260,918
Adjusted $R^2$	0.127	0.108	0.121

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis on social mistrust outcome variables for the period 2002–18 (Equation 1). Observations are at the individual level. The dependent variables are standardized. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

<sup>15</sup> We adjust for testing multiple hypotheses by applying the method proposed by Romano-Wolf (see results in Appendix C). The adjusted standard errors confirm the level of statistical significance found in our main results.



Table 4: Effect of the crisis on institutional mistrust

Dep. variable →	(1) Mistrust in parliament	(2) Mistrust in legal system	(3) Mistrust in police	(4) Mistrust in politicians	(5) Mistrust in political parties	(6) Mistrust in European parliament
Share of construction value added	−2.54 (1.57)	−1.48 (1.30)	−0.35 (1.26)	−2.47* (1.30)	−2.73* (1.41)	−1.19 (1.00)
After 2008 crisis × share of construction value added	4.48** (1.86)	2.36** (1.11)	−0.46 (0.80)	4.74*** (1.76)	5.23*** (1.76)	2.80** (1.27)
Observations	255,297	255,898	259,530	257,656	228,024	237,344
Adjusted $R^2$	0.124	0.150	0.103	0.139	0.157	0.039

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis on institutional mistrust outcome variables for the period 2002–18 (Equation 1). Observations are at the individual level. The dependent variables are standardized. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table 5: Effect of the crisis on institutional mistrust and democracy perceptions

Dep. variable →	(1) Institutional mistrust	(2) Institutional mistrust without EU	(3) First component of mistrust	(4) Dissatisfaction with democracy
Share of construction value added	−1.99 (1.39)	−2.16 (1.42)	−3.68** (1.51)	−3.37* (1.82)
After 2008 crisis × share of construction value added	3.79** (1.53)	3.85** (1.51)	5.29*** (1.66)	5.73*** (1.96)
Observations	260,979	260,940	206,933	252,193
Adjusted $R^2$	0.142	0.171	0.153	0.129

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis on institutional mistrust and democracy perception outcome variables for the period 2002–18 (Equation 1). Observations are at the individual level. The dependent variables are standardized. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

### 3.2 Second stage: the effect of changes in mistrust on social mobility during the pandemic

First, we present results of the reduced-form regressions estimating the effect of exposure to the financial crisis on mobility under lockdown during the COVID-19 pandemic. All regressions control for local characteristics and for lagged confirmed COVID deaths and include country fixed effects. Standard errors are clustered at the NUTS 2 area level. Table 6 presents the results. The coefficient of interest is the interaction between crisis exposure, measured using the share of construction in value added, and lockdown. Each column presents results for a different dependent variable measuring mobility to retail, grocery stores, parks, transit stations, and staying home.

We find that mobility on average decreases after lockdown. Individuals living in areas that experienced the financial crisis more severely—that is, with a higher share of construction value added, are less

mobile after the lockdown. It is worth noting that regions with a higher share of construction were more mobile before the crisis, as evidenced by the ‘pre-crisis average share of construction value added’ coefficient. However, this effect is cancelled out after the lockdown.

We proceed to estimate mobility in response to the lockdown and crisis-induced changes in mistrust. Table A.4 in the Appendix provides summary statistics for the daily mobility data we use in the empirical analysis. We observe in Figure 2 an average reduction in mobility outside one’s home, more so for mobility to retail and recreation or transit stations, but less so to grocery shops and pharmacies or parks. This is expected, as retail and recreation places were either closed or easily avoided, whereas buying groceries or medicine was still necessary even if somewhat less frequent. Parks were not closed everywhere—in some countries they were the only opportunity to be outside without restrictions. There is a clear increase in residential mobility, meaning people stay at home more than usual.

Table 6: Effect of lockdown and crisis on mobility

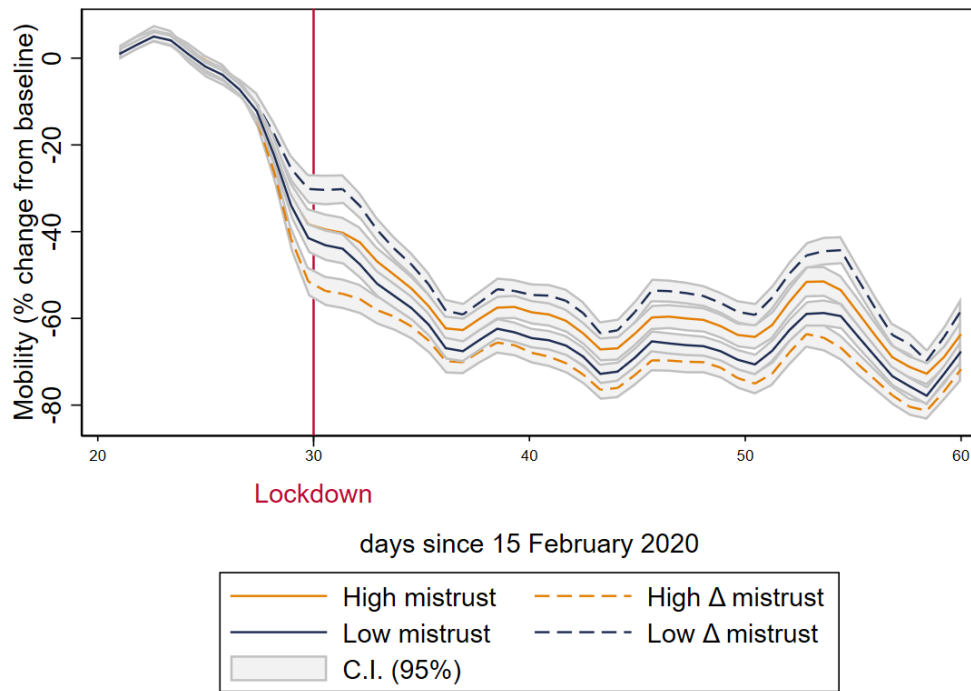
Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
After lockdown	−5.40*** (1.18)	−6.37** (3.02)	5.88 (3.65)	−6.53*** (1.20)	−9.42*** (1.46)	2.71*** (0.61)
Share of construction value added	37.8*** (12.3)	106.6** (40.9)	208.7*** (57.8)	22.4* (13.1)	44.9** (18.6)	−18.7** (7.77)
After lockdown × share of construction value added	−56.3*** (19.6)	−179.1*** (61.3)	−254.8*** (74.7)	−25.3 (16.4)	−75.1*** (27.8)	29.8*** (11.1)
Observations	11,003	10,930	10,293	10,709	11,027	10,459
Adjusted $R^2$	0.920	0.581	0.690	0.934	0.857	0.891

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis on mobility outcome variables under lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels. \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .  
Source: authors’ estimation.

In Figure 2 we observe that, from a similar starting level of mobility, sub-regions with the high levels of mistrust (or low trust) reduce their mobility less than sub-regions with low mistrust. This indicates that those that are more trusting are more likely to follow government advice and reduce mobility. However, sub-regions that experienced relatively larger increases in mistrust due to the financial crisis reduced their mobility more. In other words, those who lost trust in the government because of the financial crisis are more likely to reduce their mobility at the start of the pandemic, despite the fact that those who are generally less trusting were less likely to follow government advice. Levels of mistrust explain how citizens cooperated in the early stages of the pandemic, but their experience with the financial crisis introduces important heterogeneous responses to the pandemic. The remainder of the paper attempts to causally estimate this effect.

We now turn to the presentation of our core findings obtained from the estimation of Equation 6. As discussed in Section 2.1, our key independent variable, the change in predicted mistrust  $\Delta\hat{T}$ , is obtained by subtracting the average predicted mistrust over the pre-crisis period from the average predicted mistrust

Figure 2: Mobility to retail by levels or changes in mistrust



Note: the figure depicts the temporal evolution of retail mobility during the pandemic, focusing on areas characterized by different levels and changes in mistrust. Mobility is presented as percentages, representing the average change in mobility compared to baseline levels. High or low mistrust is defined as levels of mistrust above or below the median mistrust level in 2018. Similarly, high or low changes in mistrust are categorized as crisis-induced mistrust levels above or below the median crisis-induced mistrust level. The vertical red line indicates the common lockdown date, defined as 15 March 2020.

Source: authors' estimation.

over the post-crisis period.<sup>16</sup> We then interact this change with the lockdown variable while also controlling for the stringency index. The same NUTS area control variables as in Table 6 are included. Standard errors are clustered at the NUTS area level. For each of the six categories of mobility, we run 12 separate regressions (one for each of the 12 mistrust variables).<sup>17</sup> In Table 7 we report an overview of the coefficients on the interaction term ( $\Delta T \times \text{Lockdown}$ ). This variable measures the effect of the crisis-induced changes in mistrust on mobility responses after the introduction of lockdown policies.

Across all categories of mobility outcomes and all specifications we observe that mobility of citizens decreases more among those living in NUTS areas where the financial crisis induced the largest increases in mistrust than in other NUTS areas. These relatively larger rates of reduction in mobility attributed to the crisis-induced changes in mistrust are more sizeable for categories of essential or less restricted activities rather than for non-essential activities.<sup>18</sup> Considering, for instance, the predicted changes in institutional mistrust, a one standard deviation increase in the crisis-induced change in this index leads to a mobility reduction of  $-13.8$  (or around 39 per cent of the average mobility reduction) for non-necessary activities, such as retail, and to a 7.8 increase of the rate of staying at home (or 66 per cent of the average rate). By contrast, mobility reductions to necessary or less restricted activities, such as groceries and parks, were respectively 4 and 138 times higher than the average reductions in mobility.

<sup>16</sup> The distributions of the actual and predicted changes show very similar kernel density plots.

<sup>17</sup> Given the results produced in the first stage regressions as well as on those obtained from the Romano-Wolf validation test, we do not consider mistrust in police as this was not significantly affected by the financial crisis.

<sup>18</sup> Results are robust to the application of bootstrapped standard errors, as discussed before.

The coefficients on the interaction ( $\Delta T \times \text{Lockdown}$ ) using other mistrust variables are of a similar order of statistical significance as what we find for the crisis-induced changes of institutional mistrust. The mobility effect for a one standard deviation increase in these political mistrust variables ranges between one-third and half of the average reduction in non-essential activities (retail), and it is 4–5 times higher than the average mobility reductions to essential activities (grocery).

When we consider interpersonal mistrust, the effects are larger than those related to institutional mistrust, especially considering non-essential or less restricted activities. More precisely, the mobility effects for the observed average change in the three social mistrust variables are 9–15 times larger than the average reduction in mobility for essential activities (grocery). Across all categories of mistrust, mobility reductions were, in absolute terms, larger for the crisis-induced changes in selfishness, in individualism, and in mistrust in the legal system.

Taken together, the results above support the first hypothesis we proposed in the introduction: changes in mistrust driven by exposure to the 2007–08 financial crisis led to a reduction in mobility. We argue this may be due to citizens having learned from past experience that government institutions may be unreliable and unable to respond to the pandemic or that their fellow citizens may not act in ways that protect society from the effects of the virus. The fact that all measures of trust, as well as measures of individualism and dissatisfaction with democracy, move in the same direction support this interpretation. In the next section we take into consideration other outcomes that may reflect other aspects of the social contract and may help us to better understand these underlying explanations for our main results.

*Continuous lockdown measure.* The estimates presented so far rely on the identification of the lockdown as a simple dummy variable defined as the day when each national government recommended or imposed stay-at-home requirements, which for most countries reflected a stringency index around 60. While the stay-at-home requirements were the very first recommendations made, and marked the beginning of the lockdown, different and more stringent regulations were decided upon and implemented over the period considered. Hence, we estimate the same model as in Equation 6 but interact the changes in mistrust with the continuous measure of the stringency index. To illustrate the results, we show graphically below the marginal effects of the predicted change in institutional mistrust (the index computed with principal component analysis) on mobility to retail and recreation and to groceries and pharmacies. In order to capture heterogeneity in the different experiences of changes in mistrust induced by the crisis, the marginal effects shown are estimated at the bottom 5 per cent, median, and top 5 per cent of the distribution of the predicted changes in institutional mistrust.<sup>19</sup>

Figure 3 shows that there is a threshold of stringency at which the relationship between predicted change in mistrust and mobility changes. Up to a stringency index of 70, a predicted larger increase in mistrust leads to a smaller decline in mobility than a predicted smaller increase in mistrust. This relationship changes at higher levels of stringency where mobility reductions align. Only at high levels of stringency do we observe that citizens living in areas where the Great Recession induced a large increase in mistrust reduce their mobility relatively more than those living in areas where mistrust increased by a smaller extent.<sup>20</sup>

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<sup>19</sup> Regression results are available upon request.

<sup>20</sup> It is to be noted that a value of 70 in the stringency index corresponds to highly restrictive lockdown policies such as the requirement to close schools of all or some levels (accounting respectively for 62.6 and 34.2 per cent of the observations with a stringency index equal to or above 70). It is also related to other strict policies such as those prohibiting gatherings of more than 10 people (89.7 per cent) or requiring to not leave the home, with exceptions for ‘essential’ activities (68.04 per cent).

Table 7: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown

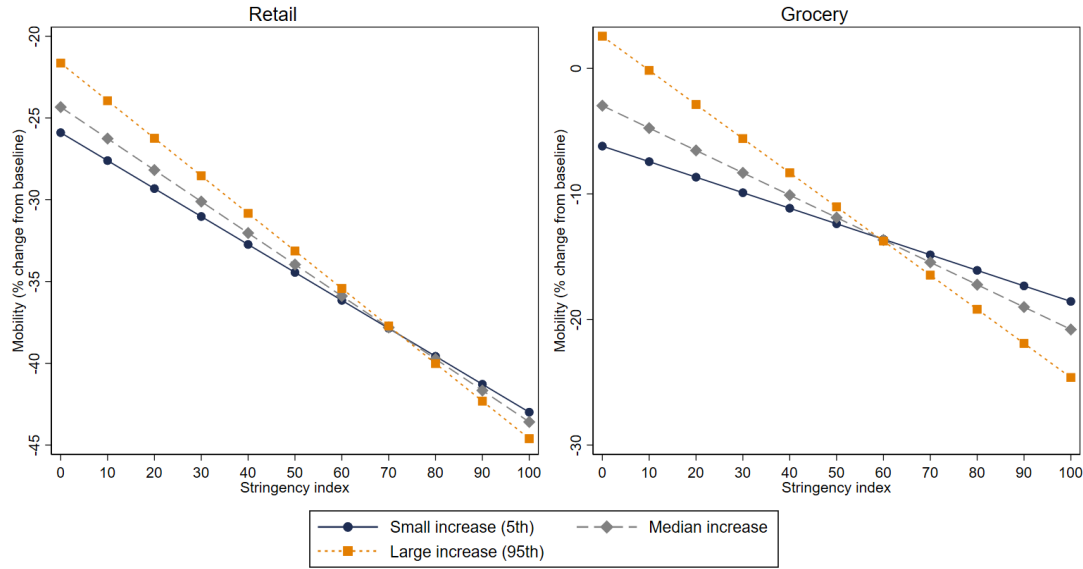
Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.2** (13.2)	-127.2*** (37.8)	-163.4*** (54.3)	-19.5* (11.0)	-48.0** (18.6)	18.6** (7.47)
Selfishness	-57.2** (22.7)	-219.5*** (65.2)	-281.9*** (93.7)	-33.7* (18.9)	-82.9** (32.1)	32.1** (12.9)
Individualism	-44.9** (17.8)	-172.3*** (51.2)	-221.3*** (73.6)	-26.5* (14.9)	-65.0** (25.2)	25.2** (10.1)
Mistrust in parliament	-11.7** (4.64)	-44.9*** (13.3)	-57.6*** (19.2)	-6.89* (3.87)	-16.9** (6.56)	6.57** (2.64)
Mistrust in legal system	-22.2** (8.80)	-85.1*** (25.3)	-109.3*** (36.3)	-13.1* (7.34)	-32.1** (12.4)	12.5** (5.00)
Mistrust in politicians	-11.0** (4.38)	-42.4*** (12.6)	-54.4*** (18.1)	-6.51* (3.65)	-16.0** (6.19)	6.20** (2.49)
Mistrust in political parties	-10.0** (3.98)	-38.4*** (11.4)	-49.4*** (16.4)	-5.91* (3.32)	-14.5** (5.62)	5.63** (2.26)
Mistrust in European Parliament	-18.7** (7.43)	-71.9*** (21.4)	-92.3*** (30.7)	-11.0* (6.20)	-27.1** (10.5)	10.5** (4.22)
Institutional mistrust	-13.8** (5.48)	-53.0*** (15.8)	-68.1*** (22.6)	-8.15* (4.57)	-20.0** (7.75)	7.76** (3.11)
Institutional mistrust without EU	-13.6** (5.39)	-52.1*** (15.5)	-66.9*** (22.3)	-8.01* (4.50)	-19.7** (7.62)	7.63** (3.06)
First component of mistrust	-9.90** (3.93)	-38.0*** (11.3)	-48.8*** (16.2)	-5.83* (3.28)	-14.3** (5.55)	5.56** (2.23)
Dissatisfaction with democracy	-9.13** (3.62)	-35.0*** (10.4)	-45.0*** (15.0)	-5.38* (3.02)	-13.2** (5.12)	5.13** (2.06)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

We observe in the case of mobility for essential activities such as ‘groceries and pharmacies’ a more pronounced switch in mobility responses when comparing regions with different degrees of crisis-induced changes in mistrust. Interestingly, this switch in mobility responses takes place at relatively lower levels of stringency compared to the case of mobility to non-essential places. As shown in panel (b) of Figure 3 for levels of stringency below 60, mobility reductions in areas where mistrust increased the most were smaller than in other areas. Instead, for high levels of stringency those living in areas where the Great Recession induced the largest increases in mistrust reduce their mobility relatively more than those living in areas where mistrust changed by a relatively smaller extent.

Figure 3: Marginal effect of predicted change in institutional mistrust on mobility at different levels of stringency



Note: the figure displays the marginal effect of crisis-induced mistrust change on mobility to retail (left-hand side) and grocery (right-hand side) at various levels of stringency. Mobility is presented as percentages, indicating the average change in mobility compared to baseline levels. The estimates are derived from the second stage regression, as specified in Equation 6. Each line represents a different value of crisis-induced institutional mistrust change. The circle, diamond, and square symbols represent the effect of an increase in crisis-induced mistrust for sub-regions located in the bottom 5 per cent, median, and top 5 per cent of the distribution of crisis-induced institutional mistrust, respectively.

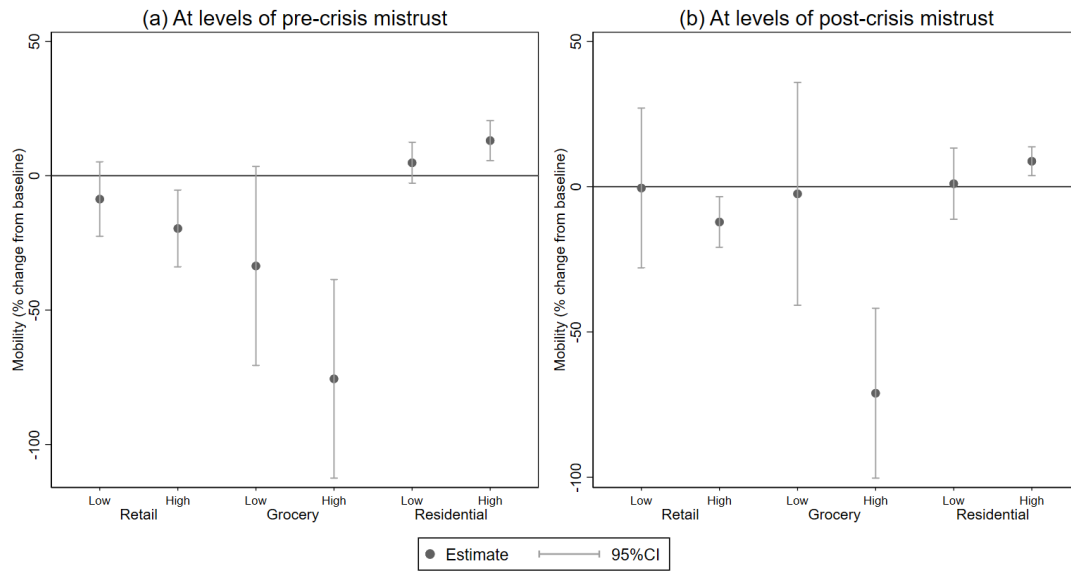
Source: authors' estimations.

*Later stages of the pandemic.* Our sample focuses on the onset of the pandemic, when we expect people's reactions to the crisis and the government to be most strongly guided by their experiences in the past, including the financial crisis. As the pandemic evolved, people learned about their governments, about the virus, and about their fellow citizens. It is thus reasonable to assume that their attitudes and behaviours may have adjusted accordingly. One outstanding question in the literature on trust is whether and how changes in trust levels persist across time and for how long. Our data allows us to partially address this question by analysing how the mediating role of trust affected people's behaviour at later stages of the pandemic. To test this we define a new sample period for the second main pandemic wave in European countries during the autumn of 2020. The period from 1 August 2020 until 31 March 2021 was marked by initially low levels of stringency, but around late October most countries drastically increased measures to contain the Delta variant. These measures lasted until the spring of 2021. We define 25 October 2020 as the common lockdown date during this period. Table 8 displays the coefficient of the interaction term between predicted changes in mistrust and the new lockdown for the six mobility outcomes. We observe that the interaction between trust and lockdown is now statistically insignificant for mobility outside the home, with some coefficients remaining negative and some turning positive. The magnitude of the coefficients is also substantially reduced when compared with the effects of the first wave.<sup>21</sup> These results suggest that citizens may have updated their beliefs and trust perceptions as the pandemic evolved. It is, however, noteworthy that the coefficient for 'staying at home' is now uniformly negative across all categories of mistrust, even if statistically significant at the 10 per cent level. This indicates that people stayed at home less in the second wave of the pandemic in areas that experienced larger increases in mistrust caused by the financial crisis. It is thus possible that crisis-induced mistrust may have generated weariness about government guidelines as the pandemic progressed and other forms of protection became available and individual responses to government policies became polarized along political lines. Note also that we cannot exclude endogeneity effects taking place in this period as information about the pandemic became more available and expectations adjusted.

<sup>21</sup> We extended our analysis sample to the protracted pandemic long after its onset until the end of 2020. We observe that the effect of trust disappears. Results are available upon request.

**Heterogeneity analysis.** It is possible that our results above may be shaped by structural levels of trust and we investigate further how estimates might differ in areas of high and low mistrust. We present the sub-sample estimates of the interaction term in Figure 4 for the pre-crisis (panel a) and the post-crisis (panel b) levels of institutional mistrust. We define high or low levels of mistrust by taking as a benchmark the median level in 2018 or, alternatively, the median of the average level over the period 2004–08. Independently of whether we consider recent or pre-crisis trust levels, most of the total mobility reduction effect stemming from the crisis-induced changes in mistrust come from regions with high levels of mistrust. As shown in Figure 4, the effect in NUTS regions featured with low levels of mistrust are statistically not different from zero. This finding is probably not surprising considering that regions in which mistrust increased more after the crisis are also the regions featuring the highest levels of mistrust (see Figure A.2 in Appendix A).

Figure 4: Effect of crisis-induced changes in institutional mistrust on mobility at different levels of pre- or post-crisis institutional mistrust



Note: the figure illustrates the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. The estimates are derived from the second stage regression specified in Equation 6, focusing on a sub-sample of areas with high or low levels of mistrust prior to 2008 (panel a) or in 2018 (panel b). The figure displays the point estimates and 95 per cent confidence intervals of the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. Mobility is presented as percentages, reflecting the average change in mobility compared to baseline levels. Mistrust is defined as high if it was equal to or above the median, and low if it was below the median in 2018.

Source: authors' estimation.

It should be noted that, in regions with high levels of mistrust, most of the reducing mobility effect for essential activities and most of the positive effect for permanence at a private residence comes from regions that experienced the largest increases in mistrust after the financial crisis (see panel (a) of Figure 5). Conversely, in regions with low levels of mistrust we observe no significant effect on mobility to necessary places and for permanence at a private residence. Yet mobility to unnecessary places increased significantly only in the sub-sample of regions that experienced the smaller increases in mistrust (see panel (b) of Figure 5).

Table 8: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown; later stages of the pandemic

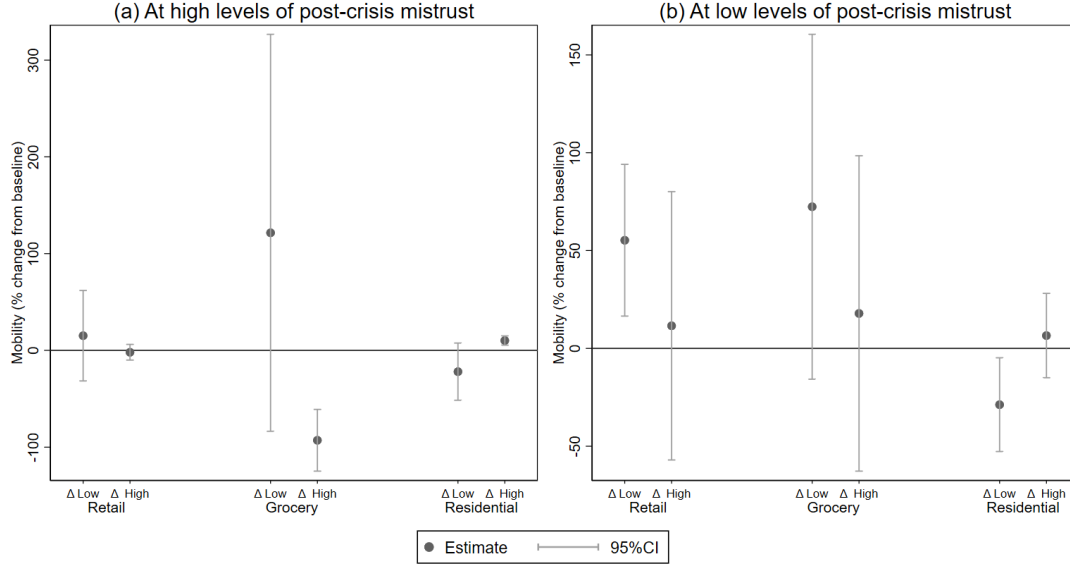
Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	13.7 (12.9)	−29.8 (26.0)	4.28 (27.3)	−2.13 (9.95)	−2.26 (6.75)	−4.15* (2.21)
Selfishness	23.7 (22.3)	−51.5 (44.9)	7.39 (47.1)	−3.68 (17.2)	−3.90 (11.6)	−7.17* (3.81)
Individualism	18.6 (17.5)	−40.4 (35.3)	5.80 (37.0)	−2.89 (13.5)	−3.06 (9.14)	−5.63* (2.99)
Mistrust in parliament	4.85 (4.55)	−10.5 (9.18)	1.51 (9.64)	−0.75 (3.51)	−0.80 (2.38)	−1.47* (0.78)
Mistrust in legal system	9.19 (8.63)	−19.9 (17.4)	2.86 (18.3)	−1.43 (6.66)	−1.51 (4.51)	−2.78* (1.48)
Mistrust in politicians	4.58 (4.29)	−9.93 (8.67)	1.43 (9.09)	−0.71 (3.31)	−0.75 (2.25)	−1.38* (0.73)
Mistrust in political parties	4.15 (3.90)	−9.01 (7.87)	1.29 (8.25)	−0.64 (3.01)	−0.68 (2.04)	−1.26* (0.67)
Mistrust in European Parliament	7.77 (7.29)	−16.8 (14.7)	2.42 (15.4)	−1.21 (5.62)	−1.28 (3.81)	−2.35* (1.25)
Institutional mistrust	5.73 (5.38)	−12.4 (10.9)	1.79 (11.4)	−0.89 (4.15)	−0.94 (2.81)	−1.73* (0.92)
Institutional mistrust without EU	5.63 (5.28)	−12.2 (10.7)	1.75 (11.2)	−0.87 (4.08)	−0.93 (2.76)	−1.70* (0.90)
First component of mistrust	4.10 (3.85)	−8.90 (7.77)	1.28 (8.15)	−0.64 (2.97)	−0.68 (2.01)	−1.24* (0.66)
Dissatisfaction with democracy	3.79 (3.55)	−8.21 (7.17)	1.18 (7.52)	−0.59 (2.74)	−0.62 (1.86)	−1.14* (0.61)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 July 2020 until 31 March 2021. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta \hat{T} \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 25 October 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.



Figure 5: Effect of crisis-induced changes in institutional mistrust on mobility in regions with high or low levels of institutional mistrust



Note: the figure illustrates the difference-in-difference estimation, showcasing the effect of crisis-induced changes in mistrust on mobility after the lockdown. The estimates are derived from the second stage regression specified in Equation 6, focusing on a sub-sample of areas with high (panel a) or low (panel b) levels of mistrust in 2018 and experiencing either high or low increases in crisis-induced institutional mistrust. The figure displays the point estimates and 95 per cent confidence intervals of the interaction term ( $\hat{\Delta T} \times \text{Lockdown}$ ) in Equation 6. Mobility is presented as percentages, reflecting the average change in mobility compared to baseline levels. Mistrust is defined as high if it was equal to or above the median, and low if it was below the median in 2018. Similarly, high or low changes in mistrust are categorized as crisis-induced mistrust levels above or below the median crisis-induced mistrust level.

Source: authors' estimation.

### 3.3 Voting patterns and protests

As discussed, our interpretation of the main results above is that recession-induced mistrust reduced mobility due to citizens taking matters into their own hands in response to fears that governments would not be able to protect them. Although the data available does not allow us to demonstrate directly this 'taking matters into one's own hands' explanation, we rule out a series of alternative explanations in Section 4. Namely, we show that higher individual levels of compliance and lower risk aversion does not explain the results above. The results cannot be explained either by pre- or post-crisis levels of trust. As outlined in the introduction, in addition to the tests we conduct later in the paper to rule out alternative explanations, if our interpretation above is correct, we should also expect to observe other citizen reactions to express such discontent. We estimate the influence of changes in mistrust due to the Great Recession on voting preferences during national elections, and on protest participation in most recent years after the financial crisis. We estimate the following equation:

$$Y_n = \alpha + \gamma_1 \hat{\Delta T}_n + \gamma_2 X_n + C_c + \varepsilon_n \quad (7)$$

Outcome  $Y$  in NUTS area  $n$  is determined by the crisis-induced change in mistrust  $\hat{\Delta T}$ , which we predicted in the first stage, controlling for local characteristics of the population and country fixed effects  $C_c$  that capture country-specific cultural and political aspects that could influence the outcome. Local characteristics are the same as in the first stage aggregated from individual to NUTS area level.<sup>22</sup> Voting outcomes in the latest available national elections across Europe are available between 2013 and 2017. Hence, we define the pre-crisis period as 2002–08, but limit the post-crisis period to 2009–12. Results

<sup>22</sup> Specifically, we take the average value of these variables over the pre-financial crisis period (2002–08). In evaluating the protests' outcomes, we also include the logarithm of the number of protests during the pre-crisis period.

from the first stage are reported in Tables D.1–D.3 in Appendix D. Albeit weaker, our previous results on the impact of the crisis on mistrust variables are largely maintained when using this time window.

In Table 9 we report an overview of the coefficients  $\gamma_1$ , which measure the effect of the crisis-induced changes in mistrust on voting and protest outcomes. For each outcome variable we run 12 separate regressions, one for each predicted change in interpersonal and institutional mistrust.

We start by focusing on votes in anti-establishment parties in the most recent election years as the key outcome variable. These are proxied by the vote shares to far-right, radical-left, populist, and Euro-sceptic parties, as well as the total share of votes to all extremist parties. For each category of institutional mistrust, we find that regions that experienced the largest crisis-induced changes in mistrust display a significant and sizeable larger share of votes for all anti-establishment parties (and, in particular, for far-left and populist parties) in the most recent elections. The estimated effects of a one standard deviation increase in the crisis-induced changes in institutional and political mistrust range between 1.90 and 4.10 standard deviations increase in votes for all anti-establishment parties.<sup>23</sup> We do not observe significant effects in voting for Euro-sceptic and far-right parties. In this latter case, the estimated coefficients are negative but it is to note that the category of ‘voting for populist parties’ is not mutually exclusive. Only in two countries (Germany and the Netherlands) the most radical-left parties were also coded as populist. For the vast majority of countries in our sample, all or most of the parties that were coded as ‘far-right’ were also populist. Hence, the votes for populist parties, which are significantly affected by changes in mistrust, absorb also preferences towards far-right parties.<sup>24</sup> Crisis-induced changes in dissatisfaction with democracy and in self-interested values seem also to have resulted in more extreme votes and in more votes for populist parties.

We display the protest results in Table 9, column (6). Our outcome measure is the logarithmic transformation of the yearly protest count from 2013 to 2017. These results are not statistically significant at conventional levels, but the majority of the coefficients have the expected sign, pointing to an increase in protests as a result of crisis-induced mistrust.<sup>25</sup> Taken together, these results show evidence for the continued effects of the trust crisis on political outcomes. Those most affected by the financial crisis displayed not only weak trust in how governments were able to deal with the pandemic, but removed at the same time their historical support for parties at the centre of the political spectrum in favour of more anti-establishment parties.

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<sup>23</sup> For instance, taking as a benchmark a predicted change in mistrust in the legal system of 0.073, which represents the mean difference of mistrust before and after the financial crisis, this change leads to a 31 per cent increase in extreme votes, which represents around 81 per cent of the average value of the dependant variable.

<sup>24</sup> Yet, considering that the effects on voting for far-right parties are not significant, it is plausible that the bulk of the effects on voting for populist parties is driven by preferences towards *tout court* populist parties and left-populist parties.

<sup>25</sup> Protest data tends to be notoriously noisy. We test the robustness of these results using the Armed Conflict Location & Event Data (ACLED). Our results remain broadly similar and are available upon request.

Table 9: Overview of the effect of the crisis-induced changes in mistrust on voting and protest outcomes

Dep. variable →	(1) Far-right	(2) Radical-left	(3) Populist	(4) Euro-sceptic	(5) Extreme votes	(6) Protests
General mistrust	−2.59 (3.37)	11.1* (6.02)	12.0** (6.02)	6.30 (7.40)	12.9* (7.48)	2.96 (3.15)
Selfishness	−1.63 (2.12)	6.99* (3.79)	7.56** (3.79)	3.96 (4.66)	8.15* (4.71)	1.86 (1.98)
Individualism	7.13 (9.28)	−30.6* (16.6)	−33.1** (16.6)	−17.3 (20.4)	−35.7* (20.6)	−8.16 (8.66)
Mistrust in parliament	−0.45 (0.58)	1.91* (1.04)	2.06** (1.04)	1.08 (1.27)	2.23* (1.29)	0.51 (0.54)
Mistrust in legal system	−0.82 (1.07)	3.52* (1.91)	3.80** (1.91)	1.99 (2.34)	4.10* (2.37)	0.94 (1.00)
Mistrust in politicians	−0.46 (0.60)	1.96* (1.06)	2.12** (1.06)	1.11 (1.31)	2.29* (1.32)	0.52 (0.56)
Mistrust in political parties	−0.41 (0.54)	1.78* (0.96)	1.92** (0.96)	1.01 (1.18)	2.07* (1.20)	0.47 (0.50)
Mistrust in European Parliament	−0.65 (0.84)	2.77* (1.50)	3.00** (1.50)	1.57 (1.85)	3.23* (1.87)	0.74 (0.79)
Institutional mistrust	−0.50 (0.65)	2.15* (1.17)	2.33** (1.17)	1.22 (1.43)	2.51* (1.45)	0.57 (0.61)
Institutional mistrust without EU	−0.50 (0.65)	2.14* (1.16)	2.32** (1.16)	1.21 (1.43)	2.50* (1.44)	0.57 (0.61)
First component of mistrust	−0.38 (0.49)	1.63* (0.88)	1.76** (0.88)	0.92 (1.09)	1.90* (1.10)	0.43 (0.46)
Dissatisfaction with democracy	−0.36 (0.47)	1.53* (0.83)	1.66** (0.83)	0.87 (1.02)	1.79* (1.03)	0.41 (0.43)

Note: the table presents the effects of the crisis-induced changes in mistrust on voting and protest outcomes. Observations are at the NUTS area level. The sample covers the period 2013–17. The dependent variables far-right, radical-left, populist, and Euro-sceptic are measured as the standardized vote shares for each party category. Extreme votes represent the combined standardized vote shares of all the aforementioned anti-establishment parties. Protests refer to the log transformation of the number of protests aggregated at the NUTS area and year level. Each cell reports the estimated coefficients  $\gamma_1$  on the crisis-induced change in mistrust  $\hat{\Delta T}$  in Equation 7. All regressions are OLS. They include country fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. In column (6) we additionally control for the average log number of protests over the pre-crisis period. Robust standard errors are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

## 4 Robustness of results

To ensure the robustness of our main results, we conducted several additional tests in this section. First, we examined the suitability of using the share of the construction sector as a measure of exposure to the financial crisis through various exercises. Second, we addressed multiple hypothesis testing and bootstrapped standard errors. Lastly, we performed sensitivity tests by estimating different model specifications and sample frames.

### 4.1 The construction sector as a measure of exposure to the financial crisis

Although the 2007–08 financial crisis eventually led to a broad economic downturn across Europe, its impact on unemployment was specific to certain sectors, particularly the construction sector. To further validate this argument, we substitute the construction share with alternative instruments and conduct placebo tests using Equation 1. The results of these tests are presented in Table 10, which reports the estimated coefficients  $\delta$  for the interaction term ( $c \times \text{Post}$ ). Each row in the table represents the results obtained using a distinct instrument. For brevity, we focus on the effects on the outcome variable of institutional mistrust.<sup>26</sup>

Within Table 10, the first three rows investigate the use of the gross value added share of non-construction sectors (GVA agriculture, GVA manufacturing, and GVA retail) as an instrument, thereby illustrating its lack of predictive power. The following three rows examine alternative instruments based on employment shares by sectors (Employment agriculture, Employment retail, Employment construction). In line with our main results, we find that only the construction sector significantly predicts changes in mistrust resulting from the crisis.

In the final row of Table 10 we introduce an alternative instrument designed to capture the most vulnerable population affected by the financial crisis. This instrument aims to test the argument that the construction sector is primarily composed of such vulnerable jobs. As previously discussed, the construction sector experienced the most severe impact due to its low-skilled and casual nature. This, in turn, could potentially contribute to higher levels of mistrust and more extreme political views among affected workers. Notably, Dal Bó et al. (2023) demonstrates that individuals with insecure income, vulnerable occupations, social assistance dependence, and specific family backgrounds are over-represented among politicians and voters of the Swedish radical-right party ‘Sweden Democrats’. Similarly, Fetzer (2019) finds that areas in the UK with a higher concentration of vulnerable jobs also exhibited stronger support for the right-wing extremist and Euro-sceptic party UKIP. In line with these arguments, we define vulnerable jobs not solely based on the (construction) sector share, as in our main estimation strategy, but by considering occupational status. Using occupation codes from the European Labour Force Survey, we identify low-skilled occupations in basic service activities as those characterized by low-employment status, following the Eurostat definition (following Fetzer 2019). We then introduce an interaction term between the share of the working-age population in low-employment status and the national-level per capita spending on social benefits, such as unemployment insurance, as a share of GDP. The resulting coefficient from this first stage regression is presented in the last row of Table 10. Notably, employing this interaction as an instrument yields consistent results to those obtained using the initial construction sector shares.

The findings of this supplementary analysis provide strong evidence suggesting that the inclusion of the pre-crisis construction sector effectively captures the vulnerability associated with the Great Recession. Specifically, regions characterized by a higher share of construction activity exhibited a greater likelihood of experiencing unemployment and income loss.

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<sup>26</sup> The results for the remaining trust variables exhibit similar patterns and are available upon request.

Table 10: Effect of the crisis on institutional mistrust: first stage estimates with alternative instruments

Dep. variable →	(1) Institutional mistrust
GVA agriculture	0.90 (1.02)
GVA manufacturing	-0.11 (0.47)
GVA retail	0.68 (0.63)
Employment agriculture	0.84* (0.49)
Employment retail	0.16 (0.35)
Employment construction	2.78*** (0.87)
Vulnerable workers $\times$ benefits	2.42** (1.10)

Note: the table presents the difference-in-difference estimation, depicting the effect of alternative crisis instruments on institutional mistrust for the period 2002–18. Observations are at the individual level. The dependent variable, institutional mistrust, is standardized. Each row presents the results from a separate regression of Equation 1 using a different instrument. Column (1) reports the estimated coefficients  $\delta$  on the interaction term  $c \times \text{Post}$  and the corresponding standard error. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors, clustered at the NUTS area level, are reported in parentheses. Employment in manufacturing did not yield an estimate due to collinearity. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

## 4.2 Multiple hypotheses testing and bootstrapped standard errors

To ensure the robustness of our findings, we conducted multiple hypothesis tests and employed bootstrapped standard errors in our analysis. We used the Romano-Wolf procedure (Clarke et al. 2020) to correct for multiple hypothesis testing in both the first and second stages of our estimation, taking into account the likely correlation between the dependent variables. The corresponding results can be found in Appendix C. Additionally, we employed bootstrapped standard errors with 500 replications to validate our results, accounting for the use of predicted values of trust in the second stage regression. Appendix B contains these results. These additional analyses confirm the robustness of our findings, as the results remain consistent with our main findings.

## 4.3 Additional sensitivity tests

We run several sensitivity checks of our main results by adding additional control variables, changing the measurement of control variables, using alternative measurements to crises-induced mistrust, and exploring different sample frames. In what follows, we will focus our discussion on the effect of changes

in institutional mistrust on remaining in one's residence. Figures 6 and 7 display the main coefficient of interest from various regressions and our main specification in blue as a comparison.<sup>27</sup>

**Alternative interpretation of results.** We start by controlling for a number of variables that may potentially be omitted in our results and affect them. First, it is possible that our interpretation of the main results is incorrect. Instead of a reaction to a fear of being unprotected, reduced mobility during the pandemic may be explained not by mistrust in state and citizen reactions but rather by the fact that the economic situation of citizens may have recovered and they are therefore more likely to trust the state and its policies and thus comply with them. Thus, our results may indicate that exposure to the financial crisis generated higher levels of compliance rather than mistrust. To assess the feasibility of this alternative explanation, in Figure 6 Specification (1) we include a control variable measuring the number of years it took each NUTS area to return to its pre-crisis levels of unemployment ('recovery'). Second, reduced mobility may simply reflect high levels of risk aversion (possibly induced by the financial crisis) rather than interpersonal or institutional trust attitudes. In Specification (2) we control for levels of risk aversion. Third, in Specification (3) we consider whether reporting of COVID-19 cases rather than deaths could induce a different behavioural change. Fourth, it is possible that pre-crisis levels of trust may simultaneously determine exposure to the financial crisis and responses to the pandemic. We thus control for pre-crisis levels of mistrust in Specification (4), shown in Figure 6. None of these additional control variables changes our main estimate.

**Alternative measures for control variables.** In Specifications (5) and (6) of Figure 6 we compute our control variables based on the average over the entire and post-crisis periods, respectively, instead of the pre-crisis period as in the main specification. Again, our estimate remains unchanged.

**Alternative clustering of standard errors.** In our empirical setting, it is reasonable to cluster the standard errors at the geographical unit (NUTS area) level in the panel regression (Bertrand et al. 2004). NUTS areas present the sampling units of the ESS and mobility data, while the treatment occurs at the country level (lockdown measures). Clustering standard errors at the country level would be a very conservative approach, and with only 18 clusters does not comply with asymptotic assumptions. For completeness, we present in any case the estimate with standard errors clustered at the country level in Specification (7) of Figure 6. As expected, the confidence intervals widen substantially.

**Fixed effects.** Most of the control variables are time-invariant during our analysis period of the second stage, such as the share of elderly population in a NUTS area. We could thus apply NUTS area fixed effects instead of country fixed effects. Those would capture also any other control variable we might have omitted. In Specification (8) of Figure 6 we observe that again our results persist.

**Weights.** In our main specification we applied weights as suggested by Algan et al. (2017). The weights are equal to 1 over the number of NUTS areas in a country to account for the different number of NUTS areas in each country, which is often due to administrative decisions and not necessarily to population size. If we do not use the weights, our main coefficient of interest becomes larger (see Figure 6, Specification (9)). Thus, we would overestimate the effect of the financial crisis-induced mistrust due to some countries with relatively more NUTS areas.

**Alternative specifications of mistrust.** The next set of specifications in Figure 6 considers the actual mistrust instead of predicted levels or changes. First, we consider the average pre-crisis levels of mistrust (Figure 6, Specification (10)). We see smaller coefficients for some specifications, indicating the significance of the base levels of mistrust. Second, in Specification (11) we interact the lockdown with the post-crisis average of mistrust. Previous research (e.g. Bargain and Aminjonov 2020) used current

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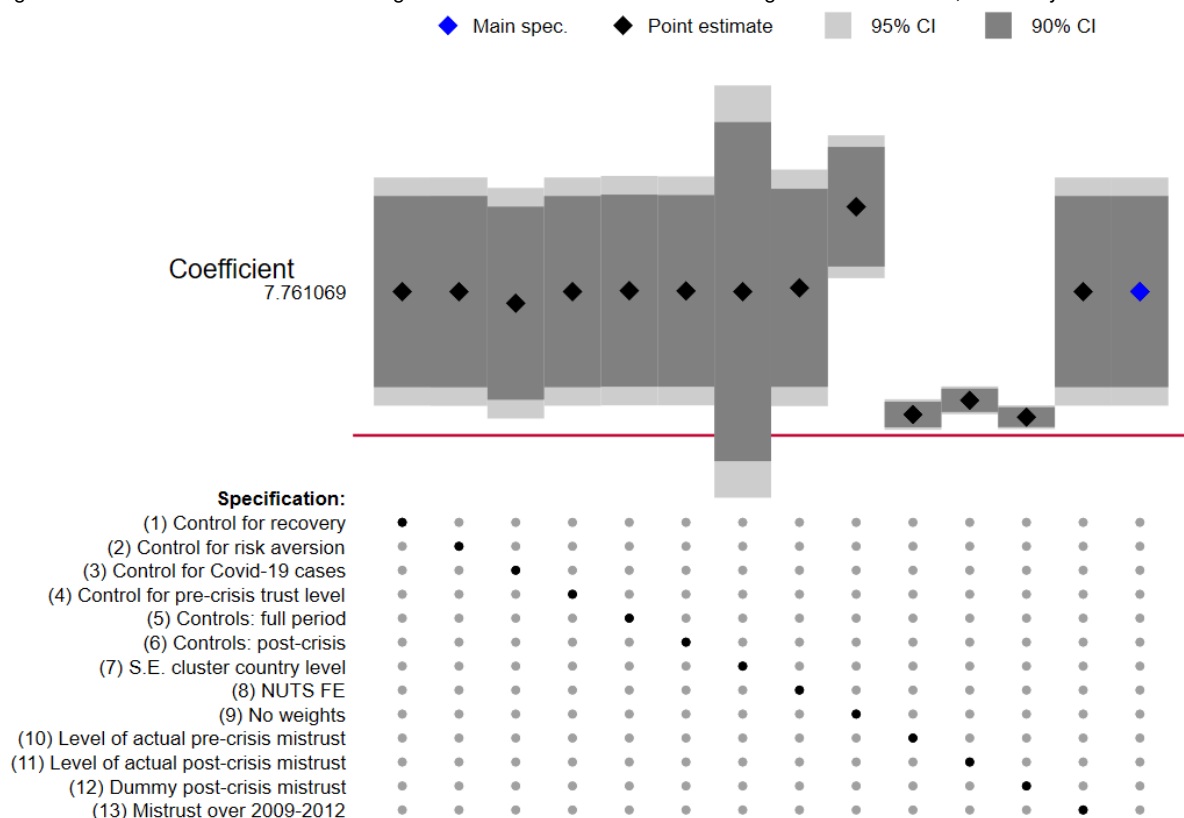
<sup>27</sup> The full set of results for Figure 6 is available in Appendix E. For brevity, the full set of results for Figure 7 is available upon request due to the large number of estimations.

trust levels to assess heterogeneous responses to a shock such as the pandemic. When applying this approach, we find that the level of mistrust has a much smaller effect on mobility than crisis-induced changes in mistrust, leading to a large underestimation of our main results. Third, we use a discrete variable of the level of current mistrust (high vs low), which result in smaller coefficients (Specification (12)).

*First stage sample, 2009–12.* The main analysis of the pandemic mobility responses used the average of trust from 2002 until 2008 as pre-crisis and from 2009 until 2018 as post-crisis values for the calculation of changes in trust. In the analysis of election and protest outcomes, however, we restricted the post-crisis period to 2009–12 as election outcomes vary from 2013 until 2017. To test whether our pandemic results also hold using this shorter period, we re-run the same regression only using the 2009–12 average in trust for the estimation of changes in trust in the first stage. Specification (13) of Figure 6 presents these results. The estimated coefficient is similar to the main results. This indicates that the major changes in trust happened immediately after the crisis and trust remained fairly stable at these new levels later.

*Outliers.* We performed a robustness analysis by systematically excluding one NUTS region at a time (Figure 7). The aim of this analysis was to assess the potential influence of outliers on our results and address concerns that our findings might be driven by specific regions, such as those with exceptionally high or low pre-crisis construction sectors. As our measure of crisis exposure is computed at the NUTS area level, this approach allowed us to examine the stability of our results across various region exclusions. Encouragingly, throughout the different region exclusions, the coefficient of interest remained consistently stable and statistically significant.

Figure 6: Effect of the crisis-induced changes in institutional mistrust on remaining in one's residence; sensitivity tests

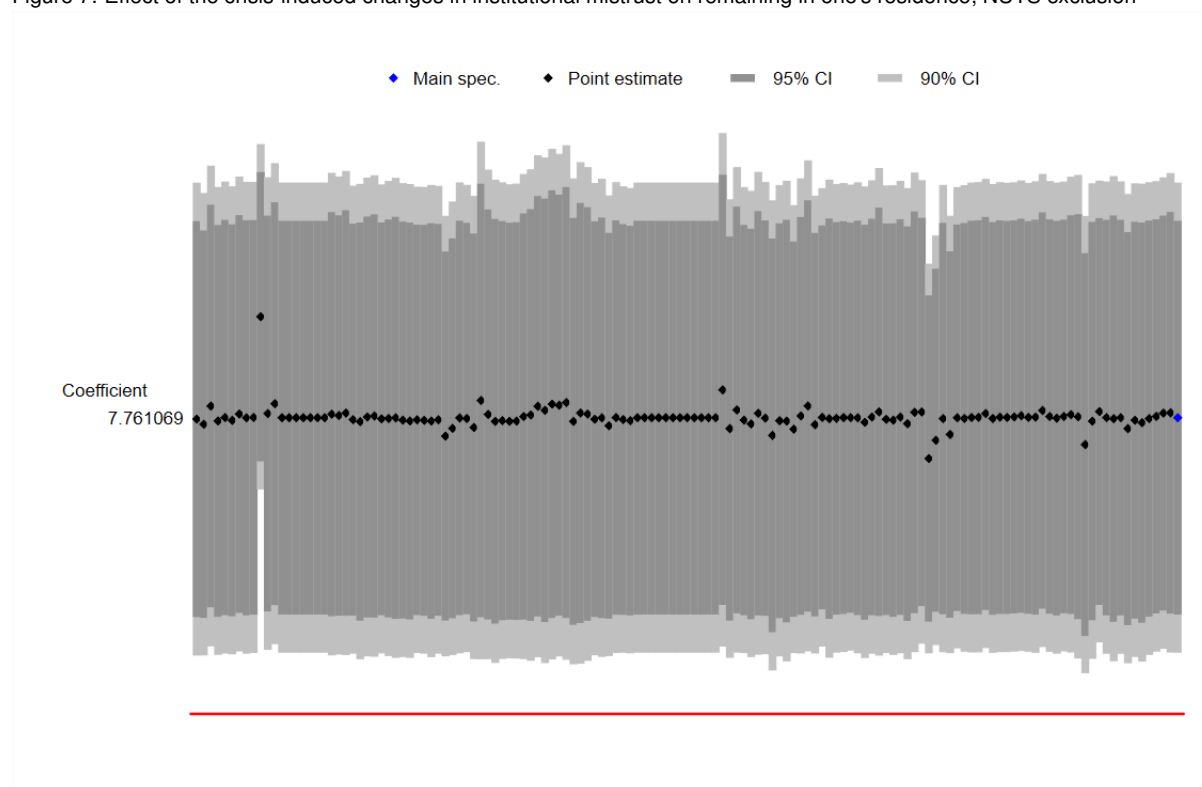


Note: the figure illustrates sensitivity tests for estimating the effect of crisis-induced changes in institutional mistrust on residential mobility after the lockdown, using a difference-in-difference estimation. The estimates are derived from the second stage regression specified in Equation 6. The figure plots the point estimates and 90 and 95 per cent confidence intervals of the interaction term ( $\Delta \hat{T} \times \text{Lockdown}$ ). The zero x-axis is represented with a red line. Mobility is presented as percentages, reflecting the average change in mobility compared to baseline levels. The estimates from our main results (Table 7) are presented in blue for comparison. Each column corresponds to a different specification, as follows: (1) includes a control variable measuring the number of years it took each NUTS area to return to its pre-crisis levels of unemployment ('recovery'); (2) includes the level of risk aversion; (3) controls for the pre-crisis level of trust; (4) controls for the post-crisis level of trust; (5) computes control variables based on the average over the full period (2004–18); (6) computes control variables based on the average over the post-crisis period (2009–18); (7) clusters standard errors at the country level; (8) includes NUTS area fixed effects; (9) does not apply weights; (10) uses the average pre-crisis levels of mistrust; (11) uses the average post-crisis levels of mistrust; (12) uses a discrete variable indicating the level of actual post-crisis mistrust (high vs low) instead of the predicted change in mistrust; and (13) considers crisis-induced mistrust change over 2009–12. Appendix E contains the full set of point estimates and standard errors.

Source: authors' estimation.



Figure 7: Effect of the crisis-induced changes in institutional mistrust on remaining in one's residence; NUTS exclusion



Note: the figure illustrates sensitivity tests for estimating the effect of crisis-induced changes in institutional mistrust on residential mobility after the lockdown, using a difference-in-difference estimation. The estimates are derived from the second stage regression specified in Equation 6. The figure plots the point estimates and 90 and 95 per cent confidence intervals of the interaction term ( $\Delta T \times \text{Lockdown}$ ). The zero  $x$ -axis is represented with a red line. Mobility is presented as percentages, reflecting the average change in mobility compared to baseline levels. The estimates from our main results (Table 7) are presented in blue for comparison. Each column corresponds to a different specification, with one NUTS region excluded at a time.

Source: authors' estimation.

## 5 Conclusion

This paper studied the effect of changes in trust caused by the exposure of European citizens to the 2007–08 financial crisis on their behaviour during the COVID-19 pandemic. The main results show that increases in mistrust caused by the 2007–08 financial crisis caused a reduction in mobility among citizens across Europe in the first wave of the pandemic. We interpret these results as suggesting that recession-induced mistrust led to citizens taking matters into their own hands as a response to fears that governments could not protect them. This ‘trust crisis’ induced by exposure to the Great Recession led also to European citizens abandoning traditional voting preferences for parties in the centre of the left–right axis, in favour of anti-establishment parties—indicating a loss of trust in the parties that governed during the financial crisis.

These findings provide new insights into the long-term consequences of economic crises, by tracing the effects of the Great Recession to how European citizens responded to a new (health) crisis more than a decade later via the mediating effects of crisis-induced mistrust. This result has important policy consequences. The response of governments in Europe and elsewhere to the global financial crisis of 2007–08 was to implement a series of austerity policies to reduce the fiscal deficit. While these policies were intended to be temporary, its consequences on social and political outcomes have been drastic, having led to a complete reconfiguration of the European political landscape. This has been largely due to sharp rises in mistrust of citizens in political elites and their fellow citizens. In hindsight, a quick response with stronger welfare protection of those most affected by the financial crisis may have prevented these longer-term consequences and the ongoing ‘trust crisis’ across Europe. This rise in mistrust explains also reactions to the COVID-19 pandemic. The initial reaction among those most affected by the financial crisis was a reduction in mobility, plausibly driven by fear that governments would not protect them. This effect may have paradoxically helped to contain the virus in those areas. Even though we view these results with caution due to endogeneity concerns, in later stages of the pandemic that first reaction was turned into distrust towards public health policies. These findings suggest that governments should use austerity policies to counteract financial crises with great caution, given the large, long-lasting consequences such policies yield for citizen–state relations—including the restriction of windows of opportunity available to governments to act effectively in future crises.

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## Appendix

### A Summary statistics

This paper draws from several data sources to capture mobility during COVID-19, government stringency measures, exposure to the financial crisis, trust and individualism, as well as voting behaviour and protests. All variables have been aggregated or matched to the sub-national administrative NUTS 2 level.<sup>1</sup> Due to data availability, our final dataset consists of 138 NUTS areas across 16 countries.<sup>2</sup>

*Exposure to the financial crisis.* Exposure to the financial crisis is captured using the NUTS level share of the construction sector in its total value added. The value added shares of construction (as well as other sectors) and unemployment rates were obtained from Eurostat. Summary statistics are reported in Table A.1 below.

*Mistrust.* Mistrust is measured using the [European Social Survey](#) (ESS) for every two years from 2002 until 2018. The ESS measures attitudes, beliefs, and behaviour patterns in European countries using a representative sample of citizens over the age of 15 living in each country. We measure both interpersonal and institutional mistrust.<sup>3</sup>

Interpersonal mistrust is identified with a standard question used in the economics literature (e.g. Alesina and La Ferrara 2002): ‘On a scale from 0 to 10, generally speaking, would you say that most people can be trusted, or that you can’t be too careful in dealing with people?’. In addition, we also consider related variables that measure expressions of self-interest and individualistic values, which capture perceptions about other people’s trustworthiness (Banfield 1967; Glaeser et al. 2000). The first variable (which we label as ‘selfishness’) is based on the question ‘Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?’ The second variable (which we label as ‘individualism’) uses the question ‘Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?’.

To measure institutional mistrust, we use a direct set of questions about whether citizens trust specific institutions, such as parliament, the legal system, police, politicians, political parties, and EU parliament. We consider these variables separately and also use them to construct three aggregated indices. The first institutional mistrust index is based on a simple average of all mistrust variables related to institutions. A second index is the same as the first but excludes mistrust in the EU parliament to allow the index to reflect only country-specific trust dynamics. The third index, which we call the first component of mistrust, uses principle component analysis to produce an index of institutional mistrust which explains 75 per cent of the total variance.<sup>4</sup> We use in addition a measure of dissatisfaction with democracy to capture the lack of confidence in the political system more broadly. Table A.2 below reproduces the questions as they appear in the questionnaire for the main variables of interest.

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<sup>1</sup> NUTS stands for the Nomenclature of Territorial Units for Statistics, a standard set of statistical sub-national units used within the EU.

<sup>2</sup> The countries in our sample include Austria, Belgium, Estonia, Finland, Germany, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom.

<sup>3</sup> Given that trust was reduced by the financial crisis, in order to ease the interpretation of these variables, we have converted standardized trust variables to mistrust by multiplying variables by  $-1$ .

<sup>4</sup> As shown in Table A.3, the first component has positive coefficients for all institutional mistrust variables which are roughly equal but slightly less for trust in police and the European parliament. The overall Kaiser-Meyer-Olkin measure of sampling adequacy is 0.84, which can be classified as ‘marvelous’.



*Mobility during the COVID-19 pandemic.* This variable is measured using [Google mobility data](#). These daily data are aggregated at the sub-national level and capture changes in visits to: (i) retail & recreation (restaurants, cafes, shopping centers, theme parks, museums, libraries, and movie theaters); (ii) grocery and pharmacies (grocery markets, food warehouses, farmers markets, specialty food shops, drug stores, and pharmacies); (iii) parks (national parks, public beaches, marinas, dog parks, plazas, and public gardens); (iv) transit stations (public transport hubs such as subway, bus, and train stations); (v) work places; and (vi) duration of time individuals spend in their places of residence. Changes in visits and duration are captured by comparing the daily value to the corresponding weekday median value in the baseline period (Jan 3–Feb 6, 2020). The data is compiled using aggregate, anonymous sets of data from users who have turned on their Google location history settings. The variables are expressed as percentages, i.e. the average percentage change in mobility to a specific destination category compared to baseline mobility. Summary statistics are reported in Table A.4 below.

*Government stringency measures and lockdown.* Government stringency measures are extracted from the Oxford COVID-19 Government Response Tracker ([OxCGRT](#)), which has systematically collected information on government policy responses to COVID-19 since February 15, 2020. The continuous stringency index is at the country level and captures the degree of stringency in measures used to restrict people’s interaction and movement. Our analysis focuses on two periods when the stringency index increased across all European countries (the so-called first and second waves of the pandemic), and before governments started to ease restrictions. We define a common lockdown date on 15 March 2020 and again on 25 October 2020 across all countries for the date when the stringency index in the majority of countries moved to ‘stay-at-home’ rules as the strictest category.<sup>5</sup>

*Voting preferences.* We compiled data on voting behaviour in general and on parliamentary election results observed in the latest available election year (i.e. between 2013 and 2017).<sup>6</sup> Voting outcomes are measured at the sub-national (NUTS) region using information on the vote shares for anti-establishment parties compiled and made publicly available by Algan et al. (2017). These data are compiled from national electoral archives and draw on the Chapel Hill Expert Survey (CHES), as well as other online resources on membership and affiliations, to identify anti-establishment parties such as (i) far-right, often nationalistic, parties; (ii) radical left parties; (iii) populist parties; and (iv) Euro-sceptic and separatist parties. We use the standardized percentages of votes to parties in each of the four orientations over the total valid votes as well as the standardized percentage of votes given to all these four anti-establishment parties (‘extreme votes’). Summary statistics are reported in Table A.5.

*Protest data.* We measure protests using the Global Database for Events, Language and Tone ([GDELT](#)). The GDELT Project collects, categorizes, and geocodes global event data from digital newspapers, news agencies, and web-based news sources using the Conflict and Mediation Event Observations (CAMEO) coding system. We focus our analysis on protest events that took place between 2013 and 2017, matching the voting preferences dataset. To arrive at the final measurement, we use the log transformation of the number of protests aggregated at the sub-national and year level. Summary statistics are reported in Table A.5.

*Control variables.* Control variables are drawn from the ESS and Eurostat and include the years of completed education, whether individuals believe following rules are important, whether individuals

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<sup>5</sup> In Figure A.1 below we plot the stringency index over time for each country in our sample, and we indicate the common lockdown date used in our analysis to illustrate that it is chosen at a date at which most countries had imposed their toughest restrictions. As discussed, our main analysis is based on the first wave. Results on the second wave are used as an additional exercise.

<sup>6</sup> The latest available election year is 2013 for Austria, Germany, Italy, and Norway; 2014 for Belgium, Hungary, Slovenia, and Sweden; 2015 for Estonia, Finland, Poland, and Portugal; 2016 for Spain and Ireland; and 2017 for France, Netherlands, and the UK.

are employed in a work-from-home occupation, are male, are above 65 years old, belong to an ethnic minority, belong to the lowest income quintile, and draw on benefits as main income source. Further control variables related to the COVID-19 pandemic include population density in 2017 (from ESS) and the previous day's confirmed infections and deaths due to COVID-19 in the region as reported by the European Centre for Disease Prevention and Control. Summary statistics for all control variables are reported in Table A.1.

Table A.1: Summary statistics: Independent and control variables

Variable	Mean	Std. dev.	Min.	Max.	N
Independent and control variables, First stage					
Share of construction value added	0.05	0.01	0.02	0.11	262,079
Employed in work-from-home occupations	0.1	0.05	0	0.24	262,079
65+ years old	0.21	0.04	0.13	0.52	262,079
Male	0.47	0.03	0.37	0.58	262,079
Population density (IHS)	5.38	1.22	2.48	9.45	262,079
Years of full-time education completed	12.07	1.47	5.98	14.62	262,079
Belongs to minority ethnic group in country	0.05	0.07	0	0.55	262,079
Household in lowest income quintile	0.06	0.05	0	0.3	262,079
Main household income source is benefits	0.24	0.06	0.04	0.41	262,079
Important to do what is told and follow rules	3.13	0.33	2.2	3.89	262,079
Independent and control variables, Second stage					
Lockdown dummy	0.63	0.48	0	1	11,815
Previous day confirmed COVID deaths (IHS)	6.05	4.81	0	15.34	11,815
Pre-crisis share of those with work-from-home occupations	0.09	0.05	0	0.24	11,815
Pre-crisis share of elderly (65+)	0.19	0.04	0.06	0.35	11,815
Pre-crisis share of males	0.48	0.03	0.4	0.6	11,815
Pre-crisis population density (IHS)	5.51	1.22	2.48	9.45	11,815
Pre-crisis average years of education	11.93	1.2	6.75	13.95	11,815
Pre-crisis share of those belonging to an ethnic minority	0.05	0.06	0	0.55	11,815
Pre-crisis share of households in 1st income quintile	0.07	0.06	0	0.3	11,815
Pre-crisis share of households with benefits as main income source	0.22	0.06	0.04	0.37	11,815
Pre-crisis importance of following rules	3.09	0.39	2.26	3.8	11,815

Note: the table displays summary statistics for independent and control variables.

Source: authors' compilation based on ESS, Oxford Government Stringency, European Disease Control, and Eurostat data.

Table A.2: Variables and European Social Survey (ESS) questions on mistrust

Variable	Question	Options/card
General mistrust	Using this card, generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?	Please tell me on a score of 0 to 10, where 0 means you can't be too careful and 10 means that most people can be trusted.
Selfishness	Using this card, do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?	Please tell me on a score of 0 to 10, where 0 means most people take advantage and 10 means that most people try to be fair.
Individualism	Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?	Please tell me on a score of 0 to 10, where 0 means people mostly look out for themselves and 10 means that people mostly try to be helpful.
Mistrust in parliament	Firstly... ...[country]'s parliament?	Using this card, please tell me on a score of 0–10 how much you personally trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust.
Mistrust in legal system	... the legal system?	
Mistrust in police	... the police?	
Mistrust in politicians	... politicians?	
Mistrust in political parties	... political parties	
Mistrust in European Parliament	... the European parliament?	
Dissatisfaction with democracy	Using this card, how satisfied are you with the way democracy works in [country]?	Options are in the range 0–10. 0 means 'extremely dissatisfied' and 10 means 'extremely satisfied'.

Table A.3: Factor loadings for first component of mistrust

Variable	Component 1	KMO
Mistrust in parliament	0.4510	0.9258
Mistrust in police	0.3629	0.8416
Mistrust in politicians	0.4490	0.7755
Mistrust in political parties	0.4459	0.7802
Mistrust in European parliament	0.2694	0.8702

Note: the table displays the factor loadings for each variable of the index referred as the first component of mistrust, representing the correlation between each variable and the underlying latent factor. The Kaiser-Meyer-Olkin test (KMO) is a measure of how suited the data are for factor analysis. Most variables have a KMO higher than or close to 0.8, which is considered to be adequate.

Source: authors' estimation.

Table A.4: Summary statistics: Mobility outcomes (% change from baseline)

Variable	Mean	Std. dev.	Min.	Max.	N
Retail	-35.54	34.77	-97	53.83	11,783
Grocery	-14.15	24.74	-100	115	11,754
Parks	-0.49	45.73	-92.75	377	11,229
Transit	-34.54	29.86	-93	51.5	11,648
Work	-29.08	26.03	-92	38.32	11,806
Home	11.67	10.64	-5.7	49.47	11,340

Note: the table displays summary statistics for the mobility outcome variables.

Source: authors' compilation based on Google mobility data.

Table A.5: Summary statistics: Political preferences and protest outcomes

Variable	Mean	Std. dev.	Min.	Max.	N
Voting for the far right	0.18	1.11	-0.75	3.62	131
Voting for the radical left	0.27	1.36	-0.73	4.93	131
Voting for populist parties	0.49	1.07	-1.16	4.26	131
Voting for eurosceptic parties	0.34	0.98	-1.23	4.07	131
Percentage of extreme votes	0.38	0.96	-1.40	3.77	131
Protests	4.31	1.37	0.69	7.49	276

Note: the table displays summary statistics for the political preferences and protest outcome variables.

Source: authors' compilation based on Algan et al. (2017) and GDELT data.

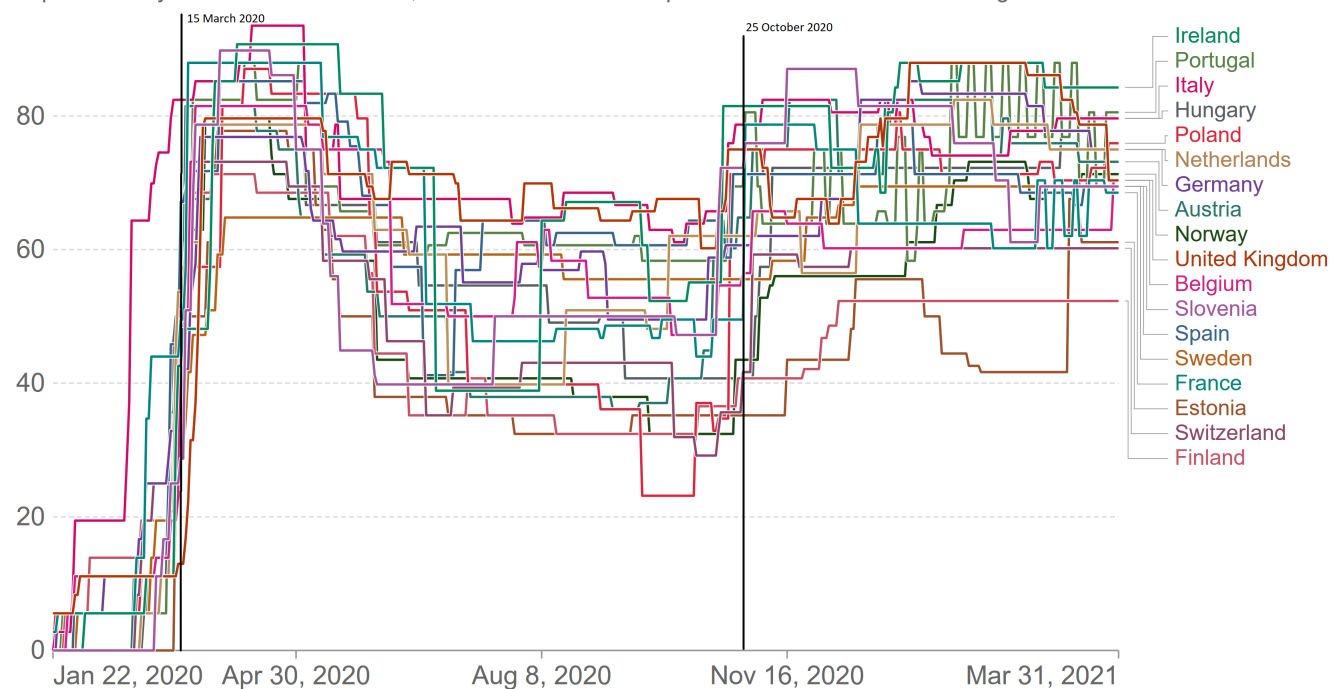
Figure A.1: Stringency index over time

## COVID-19 Stringency Index

The stringency index is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest).

If policies vary at the subnational level, the index shows the response level of the strictest subregion.

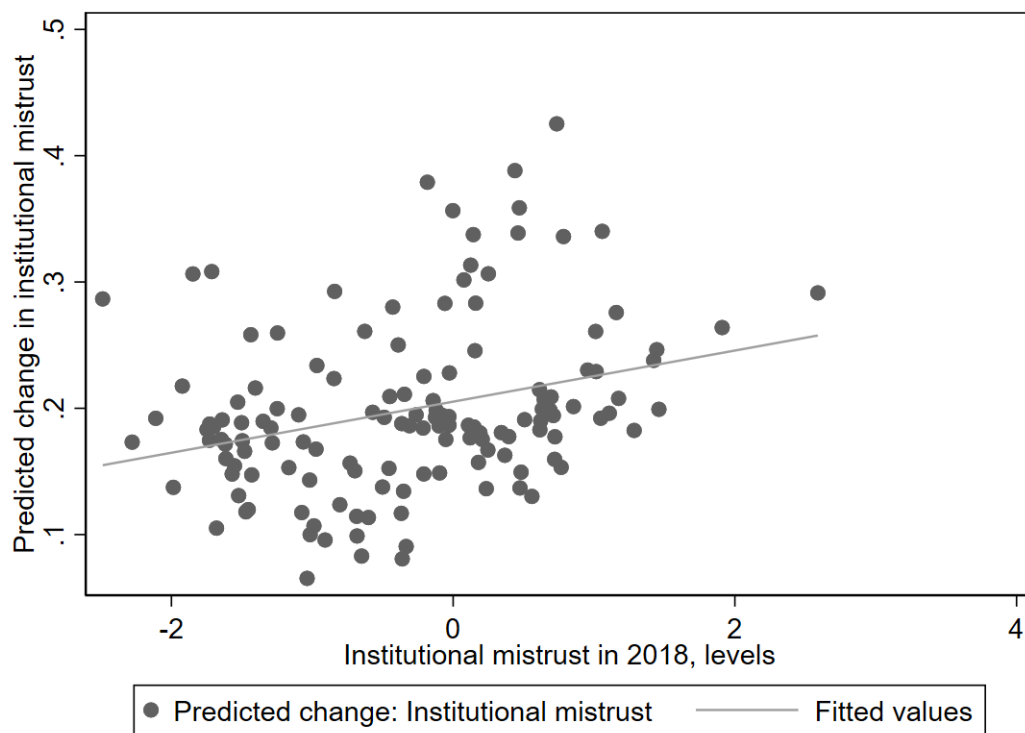
Our World  
in Data



Source: Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, University of Oxford – Last updated 2 March 2022, 06:05 (London time)

OurWorldInData.org/coronavirus • CC BY

Figure A.2: Relationship between crisis-induced changes in institutional mistrust and 2018 levels of mistrust



Note: the figure illustrates the relationship between the predicted changes in institutional mistrust and 2018 institutional mistrust levels. The variables are standardized.

Source: authors' estimation.

## B Bootstrapped standard errors

Using a predicted variable from the first stage in the second stage likely causes issues with the standard errors. We thus bootstrap the second stage estimation with 500 repetitions. Results are presented below and confirm that results are robust.

Table B.1: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown; second-stage estimation with bootstrapped standard errors

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.2*** (9.57)	-127.2*** (13.5)	-163.4*** (28.2)	-19.5*** (7.57)	-48.0*** (8.16)	18.6*** (3.33)
Selfishness	-57.2*** (16.0)	-219.5*** (21.9)	-281.9*** (46.1)	-33.7*** (12.7)	-82.9*** (15.0)	32.1*** (6.00)
Individualism	-44.9*** (13.3)	-172.3*** (17.4)	-221.3*** (39.3)	-26.5*** (9.80)	-65.0*** (11.7)	25.2*** (4.75)
Mistrust in parliament	-11.7*** (3.21)	-44.9*** (4.79)	-57.6*** (9.78)	-6.89*** (2.66)	-16.9*** (3.08)	6.57*** (1.26)
Mistrust in legal system	-22.2*** (6.36)	-85.1*** (8.75)	-109.3*** (18.1)	-13.1*** (4.66)	-32.1*** (5.78)	12.5*** (2.23)
Mistrust in politicians	-11.0*** (3.08)	-42.4*** (4.50)	-54.4*** (9.27)	-6.51*** (2.35)	-16.0*** (2.78)	6.20*** (1.20)
Mistrust in political parties	-10.0*** (2.85)	-38.4*** (4.16)	-49.4*** (8.61)	-5.91*** (2.18)	-14.5*** (2.54)	5.63*** (1.00)
Mistrust in European Parliament	-18.7*** (5.51)	-71.9*** (7.34)	-92.3*** (15.6)	-11.0*** (4.20)	-27.1*** (4.96)	10.5*** (1.81)
Institutional mistrust	-13.8*** (3.77)	-53.0*** (5.51)	-68.1*** (11.6)	-8.15*** (2.93)	-20.0*** (3.79)	7.76*** (1.44)
Institutional mistrust without EU	-13.6*** (4.02)	-52.1*** (5.43)	-66.9*** (11.1)	-8.01*** (2.95)	-19.7*** (3.60)	7.63*** (1.48)
First component of mistrust	-9.90*** (2.91)	-38.0*** (3.86)	-48.8*** (8.24)	-5.83*** (2.27)	-14.3*** (2.37)	5.56*** (0.97)
Dissatisfaction with democracy	-9.13*** (2.65)	-35.0*** (3.56)	-45.0*** (7.33)	-5.38*** (1.99)	-13.2*** (2.33)	5.13*** (0.99)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Bootstrapped standard errors are reported in parentheses. Standard errors are bootstrapped over 500 repetitions. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

## C Adjusting for multiple hypotheses testing

As we estimate the same specification for multiple dependent variables that are likely correlated with each other, we apply the Romano-Wolf multiple hypothesis correction procedure (Clarke et al. 2020). Tables C.1 and C.2 present the results for to first-stage estimation and the second-stage estimation, respectively. For each table we present the p-values of the original model and Romano-Wolf p-values for the coefficients of interest. In the first stage, not all dependent variables are equally closely related. Thus, we group them into those of mistrust and political participation. For the second stage, we group all mobility variables together for each mistrust variable regression.

The results show that, among the mistrust variables, only mistrust in the police does not remain significant at conventional levels, but the other mistrust variables all pertain their significant results. Also, the result of being dissatisfied with democracy remains significant. The mobility results also all remain significant. Only for mobility to transit stations, the effect of changes in general interpersonal mistrust and of mistrust in the European Parliament become marginally insignificant.



Table C.1: Effect of the crisis on mistrust; first-stage estimation with multiple-hypothesis p-value correction

Dep. variable ↓	(1)
General mistrust	0.003 [0.046]
Selfishness	0.030 [0.134]
Individualism	0.053 [0.134]
Mistrust in parliament	0.016 [0.114]
Mistrust in legal system	0.022 [0.134]
Mistrust in police	0.785 [0.773]
Mistrust in politicians	0.785 [0.773]
Mistrust in political parties	0.007 [0.072]
Mistrust in European Parliament	0.003 [0.046]
Institutional mistrust	0.023 [0.134]
Institutional mistrust without EU	0.014 [0.105]
First component of mistrust	0.012 [0.095]
Dissatisfaction with democracy	0.001 [0.025]

Note: the table presents the p-values for the difference-in-difference estimation, depicting the effect of the crisis on mistrust outcome variables for the period 2002 to 2018. Observations are at the individual level. The dependent variables are standardized. Each row presents the p-value for the interaction term  $c \times \text{Post}$  in Equation 1. For each coefficient of interest, we present first the model p-value, followed by the Romano-Wolf multiple hypothesis corrected p-value between brackets below. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. The model standard errors are clustered at the NUTS area level.

Source: authors' estimation.

Table C.2: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown; second-stage estimation with multiple-hypothesis p-value correction

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	0.002 [0.017]	0.001 [0.012]	0.001 [0.013]	0.020 [0.042]	0.005 [0.03]	0.004 [0.028]
Selfishness	0.002 [0.021]	0.001 [0.021]	0.001 [0.021]	0.020 [0.045]	0.005 [0.038]	0.004 [0.038]
Individualism	0.002 [0.021]	0.001 [0.016]	0.001 [0.018]	0.020 [0.043]	0.005 [0.043]	0.004 [0.042]
Mistrust in parliament	0.002 [0.018]	0.001 [0.013]	0.001 [0.015]	0.020 [0.047]	0.005 [0.034]	0.004 [0.034]
Mistrust in legal system	0.002 [0.034]	0.001 [0.021]	0.001 [0.024]	0.020 [0.054]	0.005 [0.054]	0.004 [0.054]
Mistrust in politicians	0.002 [0.018]	0.001 [0.013]	0.001 [0.015]	0.020 [0.047]	0.005 [0.034]	0.004 [0.034]
Mistrust in political parties	0.002 [0.03]	0.001 [0.012]	0.001 [0.019]	0.020 [0.05]	0.005 [0.05]	0.004 [0.05]
Mistrust in European Parliament	0.002 [0.018]	0.001 [0.01]	0.001 [0.013]	0.020 [0.042]	0.005 [0.029]	0.004 [0.029]
Institutional mistrust	0.002 [0.024]	0.001 [0.016]	0.001 [0.018]	0.020 [0.043]	0.005 [0.043]	0.004 [0.043]
Institutional mistrust without EU	0.002 [0.022]	0.001 [0.018]	0.001 [0.018]	0.020 [0.037]	0.005 [0.037]	0.004 [0.037]
First component of mistrust	0.002 [0.026]	0.001 [0.02]	0.001 [0.024]	0.020 [0.052]	0.005 [0.046]	0.004 [0.046]
Dissatisfaction with democracy	0.002 [0.013]	0.001 [0.011]	0.001 [0.011]	0.020 [0.037]	0.005 [0.025]	0.004 [0.024]

Note: the table presents the p-values for the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each row presents the p-value for the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. For each coefficient of interest, we present first the model p-value, followed by the Romano-Wolf multiple hypothesis corrected p-value between brackets below. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. The model standard errors are clustered at the NUTS area level.

Source: authors' estimation.

## D Voting and protest outcomes

Tables D.1 to D.3 show the results of Equation 1 which estimates the effect of the crisis on mistrust over the period 2002–12. Each column presents a different dependent variable. Of interest is the second row, which provides the double difference how much trust  $T$  in NUTS area  $n$  changes between pre- and post-crisis periods due to the variation in the pre-crisis share of construction in value added.

Table D.1: Effect of the crisis on social mistrust (2002–12)

Dep. variable →	(1) General mistrust	(2) Selfishness	(3) Individualism
Share of construction value added	1.44 (1.07)	1.12 (0.92)	0.61 (1.06)
After 2008 crisis × Share of construction value added	0.79 (0.92)	1.25* (0.74)	-0.29 (1.10)
Observations	173957	173232	173708
Adjusted $R^2$	0.130	0.106	0.122

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis on social mistrust outcome variables for the period 2002 to 2012 (Equation 1). Observations are at the individual level. The dependent variables are standardized. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Source: authors' estimation.

Table D.2: Effect of the crisis on institutional mistrust (2002–12)

Dep. variable →	(1) Mistrust in parliament	(2) Mistrust in legal system	(3) Mistrust in police	(4) Mistrust in politicians	(5) Mistrust in political parties	(6) Mistrust in European parliament
Share of construction value added	-1.11 (1.18)	-0.24 (1.18)	0.18 (1.19)	-1.01 (1.05)	-1.00 (1.22)	-0.55 (0.82)
After 2008 crisis × Share of construction value added	4.57*** (1.70)	2.48** (1.05)	0.73 (0.56)	4.44** (1.73)	4.90*** (1.72)	3.14** (1.30)
Observations	169588	170013	172549	171317	142008	155522
Adjusted $R^2$	0.123	0.145	0.114	0.137	0.158	0.040

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis on institutional mistrust outcome variables for the period 2002 to 2012 (Equation 1). Observations are at the individual level. The dependent variables are standardized. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Source: authors' estimation.

Table D.3: Effect of the crisis on institutional mistrust and democracy perceptions (2002–12)

Dep. variable →	(1) Institutional mistrust	(2) Institutional mistrust without EU	(3) First component of mistrust	(4) Dissatisfaction with democracy
Share of construction value added	-0.65 (1.16)	-0.72 (1.19)	-1.76 (1.22)	-1.43 (1.40)
After 2008 crisis × Share of construction value added	4.05*** (1.46)	4.07*** (1.44)	5.35*** (1.62)	5.68*** (1.93)
Observations	173701	173670	126885	167392
Adjusted $R^2$	0.141	0.174	0.154	0.137

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis on institutional mistrust and democracy perceptions outcome variables for the period 2002 to 2012 (Equation 1). Observations are at the individual level. The dependent variables are standardized. All regressions are OLS. They include country and year fixed effects and are weighted by the inverse of the number of NUTS areas within each country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

## E Sensitivity checks

This section reports the results of a series of sensitivity checks that are visually summarized in Figure 6. We group these sensitivity checks into seven main groups.

*Additional control variables.* First, in Table E.1, regressions include the number of years it took a NUTS area to return to pre-crisis levels of unemployment. The results are not affected by this. Second, in Table E.2, regressions control for a set of behavioural variables related to risk and rule aversion relevant to the mobility response. Specifically, we capture the NUTS area mean of agreement that it is important to try something new and/or different, that it is important to seek adventures and live an exciting life, and that it is important to follow rules and do what one is told to. Again, our results do not change. Third, in Table E.3 we use the number of confirmed COVID-19 cases instead of deaths to control for possibly different mobility response, but our results do not change. Finally, in Table E.4, regressions control for the pre-crisis level of trust, equally not affecting our results.

*Alternative measures for control variables.* We then replicate the analysis in Section 3.2, but rather than using the pre-crisis average of control variables from 2002 to 2008, we control in Table E.5 for the average of the variables' values over the total period (2002–18) and in Table E.6 for the average of the variables' values over the post-financial crisis period (2009–18). Results remain the same.

*Alternative clustering of standard errors.* In our empirical setting, it is reasonable to cluster the standard errors at the geographical unit (NUTS area) level in the panel regression. NUTS areas present the sampling units of the ESS and mobility data, while the treatment occurs at country level (lockdown measures). Clustering standard errors at the country level would be a very conservative approach, and with a number of clusters of only 18, would not comply with asymptotic assumptions. For completeness, we anyways present in Table E.7 the estimates with standard errors clustered at the country level. As expected, the confidence intervals widen substantially.

*Fixed effects.* In Table E.8 we run the main specification with NUTS area fixed effects instead of country fixed effects. This automatically drops the time-invariant control variables. Our results persist.

*Weights.* We usually applied weights to the main analysis. The weights are equal to 1 over the number of NUTS areas in a country to account for the different number of NUTS areas in each country, which is often due to administrative decisions and not necessarily to population size. If we do not use the weights (Table E.9), our main coefficient of interest becomes larger. Thus, we would overestimate the effect of the financial-crisis-induced mistrust due to some countries with relatively more NUTS areas.

*Alternative specifications of mistrust.* In Tables E.10 to E.12 we consider the actual mistrust instead of predicted levels or changes. Specifically, in Table E.10 we consider the average pre-crisis levels of mistrust rather than the change in mistrust. We see smaller coefficients for some specifications, indicating the significance of the base levels of mistrust. In Table E.11 we interact the lockdown with the post-crisis average of mistrust. The results are also smaller in size but follow the same direction as the main specification. Finally, in Table E.12, we use a discrete variable of the level of current mistrust (high vs low). Again, the results are smaller, leading to a large underestimation of our main results.

*First stage sample from 2009–12.* The main analysis of the pandemic mobility responses used the average of trust from 2002 until 2008 as pre-crisis and from 2009 until 2018 as post-crisis values for the calculation of changes in trust. In the analysis of election and protest outcomes, however, we restricted the post-crisis period to 2009 until 2012, as election outcomes varied from 2013 until 2017. To test whether our pandemic results also hold using this shorter period, we re-run the same regression just using the 2009–12 average in trust for the estimation of changes in trust in the first stage. Table E.13 confirms that our second-stage results are unaffected by this definition. This also indicates that the major

changes in trust happened immediately after the crisis, and trust remained fairly stable at these new levels later on.

Unless otherwise specified, Tables E.1 to E.13 report the estimated coefficients  $\delta$  on the interaction term ( $\Delta\hat{T} \times \text{Lockdown}$ ) in Equation 6.

Table E.1: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown when controlling for crisis recovery

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.2** (13.2)	-127.2*** (37.8)	-163.6*** (54.3)	-19.6* (11.0)	-48.0** (18.6)	18.6** (7.47)
Selfishness	-57.3** (22.7)	-219.4*** (65.2)	-282.3*** (93.8)	-33.8* (19.0)	-82.8** (32.1)	32.1** (12.9)
Individualism	-45.0** (17.8)	-172.3*** (51.2)	-221.6*** (73.6)	-26.5* (14.9)	-65.0** (25.2)	25.2** (10.1)
Mistrust in parliament	-11.7** (4.64)	-44.9*** (13.3)	-57.7*** (19.2)	-6.91* (3.88)	-16.9** (6.56)	6.57** (2.64)
Mistrust in legal system	-22.2** (8.81)	-85.1*** (25.3)	-109.4*** (36.4)	-13.1* (7.35)	-32.1** (12.4)	12.5** (5.00)
Mistrust in politicians	-11.0** (4.38)	-42.3*** (12.6)	-54.5*** (18.1)	-6.52* (3.66)	-16.0** (6.19)	6.20** (2.49)
Mistrust in political parties	-10.0** (3.98)	-38.4*** (11.4)	-49.4*** (16.4)	-5.92* (3.32)	-14.5** (5.62)	5.63** (2.26)
Mistrust in European Parliament	-18.7** (7.44)	-71.8*** (21.4)	-92.4*** (30.7)	-11.1* (6.21)	-27.1** (10.5)	10.5** (4.22)
Institutional mistrust	-13.8** (5.49)	-53.0*** (15.8)	-68.2*** (22.7)	-8.17* (4.58)	-20.0** (7.75)	7.76** (3.11)
Institutional mistrust without EU	-13.6** (5.39)	-52.1*** (15.5)	-67.0*** (22.3)	-8.03* (4.50)	-19.7** (7.62)	7.63** (3.06)
First component of mistrust	-9.90** (3.93)	-38.0*** (11.3)	-48.8*** (16.2)	-5.85* (3.28)	-14.3** (5.55)	5.56** (2.23)
Dissatisfaction with democracy	-9.14** (3.63)	-35.0*** (10.4)	-45.1*** (15.0)	-5.39* (3.03)	-13.2** (5.12)	5.13** (2.06)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta\hat{T} \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density and the number of years it took to return to its pre-crisis levels of unemployment at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.2: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown when controlling risk aversion

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.1** (13.2)	-127.0*** (37.9)	-163.3*** (54.7)	-19.4* (11.0)	-48.0** (18.6)	18.6** (7.48)
Selfishness	-57.1** (22.7)	-219.2*** (65.4)	-281.7*** (94.3)	-33.6* (18.9)	-82.9** (32.1)	32.1** (12.9)
Individualism	-44.8** (17.8)	-172.1*** (51.3)	-221.2*** (74.1)	-26.3* (14.9)	-65.0** (25.2)	25.2** (10.1)
Mistrust in parliament	-11.7** (4.65)	-44.8*** (13.4)	-57.6*** (19.3)	-6.86* (3.87)	-16.9** (6.57)	6.57** (2.64)
Mistrust in legal system	-22.1** (8.81)	-85.0*** (25.3)	-109.2*** (36.6)	-13.0* (7.35)	-32.1** (12.5)	12.4** (5.00)
Mistrust in politicians	-11.0** (4.39)	-42.3*** (12.6)	-54.4*** (18.2)	-6.47* (3.66)	-16.0** (6.20)	6.20** (2.49)
Mistrust in political parties	-10.0** (3.98)	-38.4*** (11.4)	-49.3*** (16.5)	-5.88* (3.32)	-14.5** (5.63)	5.63** (2.26)
Mistrust in European Parliament	-18.7** (7.44)	-71.8*** (21.4)	-92.2*** (30.9)	-11.0* (6.20)	-27.1** (10.5)	10.5** (4.22)
Institutional mistrust	-13.8** (5.49)	-53.0*** (15.8)	-68.1*** (22.8)	-8.11* (4.58)	-20.0** (7.76)	7.76** (3.12)
Institutional mistrust without EU	-13.6** (5.40)	-52.1*** (15.5)	-66.9*** (22.4)	-7.97* (4.50)	-19.7** (7.63)	7.63** (3.06)
First component of mistrust	-9.88** (3.93)	-37.9*** (11.3)	-48.7*** (16.3)	-5.80* (3.28)	-14.3** (5.56)	5.56** (2.23)
Dissatisfaction with democracy	-9.11** (3.63)	-35.0*** (10.4)	-45.0*** (15.1)	-5.35* (3.02)	-13.2** (5.13)	5.13** (2.06)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, risk aversion, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.



Table E.3: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown when controlling for confirmed COVID-19 cases

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-30.2** (13.4)	-124.7*** (38.5)	-162.8*** (52.8)	-17.7 (11.8)	-42.0** (18.4)	17.1** (7.55)
Selfishness	-52.0** (23.1)	-215.1*** (66.5)	-280.9*** (91.1)	-30.6 (20.4)	-72.5** (31.8)	29.5** (13.0)
Individualism	-40.9** (18.1)	-168.9*** (52.2)	-220.5*** (71.5)	-24.0 (16.0)	-56.9** (25.0)	23.2** (10.2)
Mistrust in parliament	-10.6** (4.72)	-44.0*** (13.6)	-57.4*** (18.6)	-6.26 (4.17)	-14.8** (6.51)	6.04** (2.66)
Mistrust in legal system	-20.2** (8.95)	-83.4*** (25.8)	-108.9*** (35.3)	-11.9 (7.91)	-28.1** (12.3)	11.4** (5.05)
Mistrust in politicians	-10.0** (4.45)	-41.5*** (12.8)	-54.2*** (17.6)	-5.90 (3.94)	-14.0** (6.14)	5.70** (2.51)
Mistrust in political parties	-9.11** (4.04)	-37.7*** (11.6)	-49.2*** (16.0)	-5.36 (3.57)	-12.7** (5.57)	5.17** (2.28)
Mistrust in European Parliament	-17.0** (7.55)	-70.4*** (21.8)	-92.0*** (29.8)	-10.0 (6.68)	-23.7** (10.4)	9.67** (4.26)
Institutional mistrust	-12.6** (5.58)	-52.0*** (16.1)	-67.9*** (22.0)	-7.39 (4.93)	-17.5** (7.69)	7.13** (3.15)
Institutional mistrust without EU	-12.4** (5.48)	-51.1*** (15.8)	-66.7*** (21.6)	-7.27 (4.84)	-17.2** (7.56)	7.01** (3.09)
First component of mistrust	-9.00** (3.99)	-37.2*** (11.5)	-48.6*** (15.8)	-5.29 (3.53)	-12.5** (5.50)	5.11** (2.25)
Dissatisfaction with democracy	-8.30** (3.68)	-34.3*** (10.6)	-44.8*** (14.5)	-4.88 (3.26)	-11.6** (5.08)	4.71** (2.08)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged confirmed COVID-19 cases. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.4: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown when controlling for the pre-crisis level of trust

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.2** (13.2)	-127.3*** (37.9)	-163.4*** (54.4)	-19.6* (11.0)	-48.0** (18.6)	18.6** (7.47)
Selfishness	-57.2** (22.7)	-219.7*** (65.3)	-282.0*** (93.7)	-33.7* (18.9)	-82.9** (32.1)	32.1** (12.9)
Individualism	-44.9** (17.8)	-172.7*** (51.3)	-221.4*** (73.6)	-26.5* (14.9)	-65.1** (25.2)	25.2** (10.1)
Mistrust in parliament	-11.7** (4.64)	-44.9*** (13.3)	-58.0*** (19.2)	-6.89* (3.87)	-16.9** (6.56)	6.57** (2.64)
Mistrust in legal system	-22.2** (8.81)	-85.1*** (25.3)	-109.5*** (36.3)	-13.0* (7.34)	-32.1** (12.4)	12.4** (5.00)
Mistrust in politicians	-11.0** (4.38)	-42.5*** (12.6)	-54.8*** (18.1)	-6.54* (3.65)	-16.0** (6.19)	6.20** (2.49)
Mistrust in political parties	-10.1** (4.00)	-37.9*** (11.5)	-46.7*** (16.0)	-6.13* (3.37)	-15.0*** (5.75)	5.70** (2.29)
Mistrust in European Parliament	-18.7** (7.43)	-71.9*** (21.4)	-92.6*** (30.7)	-11.1* (6.20)	-27.1** (10.5)	10.5** (4.22)
Institutional mistrust	-13.8** (5.48)	-53.1*** (15.8)	-68.5*** (22.7)	-8.15* (4.57)	-20.0** (7.75)	7.76** (3.11)
Institutional mistrust without EU	-13.6** (5.39)	-52.2*** (15.5)	-67.3*** (22.3)	-8.00* (4.49)	-19.7** (7.62)	7.63** (3.06)
First component of mistrust	-9.94** (3.95)	-37.4*** (11.4)	-46.0*** (15.8)	-6.04* (3.33)	-14.8*** (5.68)	5.63** (2.26)
Dissatisfaction with democracy	-9.14** (3.63)	-35.0*** (10.4)	-45.1*** (15.0)	-5.36* (3.02)	-13.2** (5.13)	5.14** (2.06)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, level of trust, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.5: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown using 2002–18 average controls

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.0** (13.2)	-126.7*** (37.9)	-162.9*** (54.5)	-19.4* (11.1)	-48.0** (18.7)	18.7** (7.51)
Selfishness	-57.0** (22.7)	-218.6*** (65.4)	-281.0*** (94.0)	-33.5* (19.1)	-82.8** (32.2)	32.3** (13.0)
Individualism	-44.7** (17.8)	-171.6*** (51.3)	-220.6*** (73.8)	-26.3* (15.0)	-65.0** (25.3)	25.4** (10.2)
Mistrust in parliament	-11.7** (4.64)	-44.7*** (13.4)	-57.5*** (19.2)	-6.85* (3.90)	-16.9** (6.58)	6.61** (2.65)
Mistrust in legal system	-22.1** (8.80)	-84.7*** (25.3)	-108.9*** (36.4)	-13.0* (7.39)	-32.1** (12.5)	12.5** (5.02)
Mistrust in politicians	-11.0** (4.38)	-42.2*** (12.6)	-54.2*** (18.1)	-6.47* (3.68)	-16.0** (6.21)	6.24** (2.50)
Mistrust in political parties	-9.98** (3.98)	-38.3*** (11.5)	-49.2*** (16.5)	-5.87* (3.34)	-14.5** (5.64)	5.66** (2.27)
Mistrust in European Parliament	-18.7** (7.43)	-71.6*** (21.4)	-92.0*** (30.8)	-11.0* (6.24)	-27.1** (10.5)	10.6** (4.24)
Institutional mistrust	-13.8** (5.49)	-52.8*** (15.8)	-67.9*** (22.7)	-8.09* (4.61)	-20.0** (7.77)	7.81** (3.13)
Institutional mistrust without EU	-13.5** (5.39)	-51.9*** (15.5)	-66.7*** (22.3)	-7.96* (4.53)	-19.7** (7.64)	7.68** (3.08)
First component of mistrust	-9.86** (3.93)	-37.8*** (11.3)	-48.6*** (16.3)	-5.79* (3.30)	-14.3** (5.57)	5.59** (2.24)
Dissatisfaction with democracy	-9.10** (3.62)	-34.9*** (10.4)	-44.9*** (15.0)	-5.35* (3.04)	-13.2** (5.14)	5.16** (2.07)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the period 2002–2018. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.6: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown using 2009–18 average controls

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-32.8** (13.1)	-126.5*** (37.9)	-162.3*** (54.3)	-19.1* (11.0)	-47.7** (18.6)	18.7** (7.49)
Selfishness	-56.6** (22.6)	-218.2*** (65.4)	-280.1*** (93.8)	-32.9* (19.0)	-82.2** (32.1)	32.3** (12.9)
Individualism	-44.5** (17.8)	-171.3*** (51.4)	-219.9*** (73.6)	-25.9* (14.9)	-64.6** (25.2)	25.3** (10.1)
Mistrust in parliament	-11.6** (4.63)	-44.6*** (13.4)	-57.3*** (19.2)	-6.73* (3.88)	-16.8** (6.56)	6.60** (2.64)
Mistrust in legal system	-22.0** (8.78)	-84.6*** (25.4)	-108.6*** (36.3)	-12.8* (7.35)	-31.9** (12.4)	12.5** (5.01)
Mistrust in politicians	-10.9** (4.37)	-42.1*** (12.6)	-54.0*** (18.1)	-6.35* (3.66)	-15.9** (6.19)	6.23** (2.49)
Mistrust in political parties	-9.92** (3.97)	-38.2*** (11.5)	-49.1*** (16.4)	-5.77* (3.32)	-14.4** (5.62)	5.65** (2.26)
Mistrust in European Parliament	-18.5** (7.42)	-71.4*** (21.4)	-91.7*** (30.7)	-10.8* (6.21)	-26.9** (10.5)	10.6** (4.23)
Institutional mistrust	-13.7** (5.47)	-52.7*** (15.8)	-67.7*** (22.7)	-7.96* (4.58)	-19.9** (7.75)	7.80** (3.12)
Institutional mistrust without EU	-13.4** (5.38)	-51.8*** (15.5)	-66.5*** (22.3)	-7.82* (4.51)	-19.5** (7.62)	7.67** (3.07)
First component of mistrust	-9.80** (3.92)	-37.7*** (11.3)	-48.4*** (16.2)	-5.70* (3.28)	-14.2** (5.55)	5.58** (2.24)
Dissatisfaction with democracy	-9.04** (3.61)	-34.8*** (10.4)	-44.7*** (15.0)	-5.26* (3.03)	-13.1** (5.12)	5.15** (2.06)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the period 2009–2018. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.7: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown with standard errors clustered at country level

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.2 (21.2)	-127.2 (79.3)	-163.4 (104.0)	-19.5 (17.7)	-48.0 (29.9)	18.6 (12.5)
Selfishness	-57.2 (36.7)	-219.5 (136.8)	-281.9 (179.4)	-33.7 (30.5)	-82.9 (51.5)	32.1 (21.6)
Individualism	-44.9 (28.8)	-172.3 (107.4)	-221.3 (140.9)	-26.5 (24.0)	-65.0 (40.5)	25.2 (17.0)
Mistrust in parliament	-11.7 (7.50)	-44.9 (28.0)	-57.6 (36.7)	-6.89 (6.24)	-16.9 (10.5)	6.57 (4.42)
Mistrust in legal system	-22.2 (14.2)	-85.1 (53.0)	-109.3 (69.5)	-13.1 (11.8)	-32.1 (20.0)	12.5 (8.37)
Mistrust in politicians	-11.0 (7.07)	-42.4 (26.4)	-54.4 (34.6)	-6.51 (5.89)	-16.0 (9.94)	6.20 (4.17)
Mistrust in political parties	-10.0 (6.42)	-38.4 (24.0)	-49.4 (31.4)	-5.91 (5.34)	-14.5 (9.03)	5.63 (3.78)
Mistrust in European Parliament	-18.7 (12.0)	-71.9 (44.8)	-92.3 (58.7)	-11.0 (9.99)	-27.1 (16.9)	10.5 (7.07)
Institutional mistrust	-13.8 (8.86)	-53.0 (33.1)	-68.1 (43.3)	-8.15 (7.37)	-20.0 (12.4)	7.76 (5.22)
Institutional mistrust without EU	-13.6 (8.70)	-52.1 (32.5)	-66.9 (42.6)	-8.01 (7.25)	-19.7 (12.2)	7.63 (5.13)
First component of mistrust	-9.90 (6.34)	-38.0 (23.7)	-48.8 (31.0)	-5.83 (5.28)	-14.3 (8.91)	5.56 (3.74)
Dissatisfaction with democracy	-9.13 (5.85)	-35.0 (21.8)	-45.0 (28.6)	-5.38 (4.87)	-13.2 (8.22)	5.13 (3.45)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the country level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.8: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown with NUTS area fixed effects

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-34.3** (13.6)	-130.5*** (38.8)	-175.4*** (59.9)	-21.5* (11.8)	-49.6** (19.2)	19.1** (7.74)
Selfishness	-59.1** (23.5)	-225.1*** (67.0)	-302.6*** (103.3)	-37.2* (20.3)	-85.6** (33.1)	33.0** (13.4)
Individualism	-46.4** (18.4)	-176.7*** (52.6)	-237.6*** (81.1)	-29.2* (16.0)	-67.2** (26.0)	25.9** (10.5)
Mistrust in parliament	-12.1** (4.80)	-46.0*** (13.7)	-61.9*** (21.1)	-7.60* (4.15)	-17.5** (6.76)	6.74** (2.73)
Mistrust in legal system	-22.9** (9.09)	-87.3*** (26.0)	-117.3*** (40.0)	-14.4* (7.88)	-33.2** (12.8)	12.8** (5.18)
Mistrust in politicians	-11.4** (4.53)	-43.4*** (12.9)	-58.4*** (19.9)	-7.17* (3.92)	-16.5** (6.38)	6.36** (2.58)
Mistrust in political parties	-10.4** (4.11)	-39.4*** (11.7)	-53.0*** (18.1)	-6.51* (3.56)	-15.0** (5.79)	5.77** (2.34)
Mistrust in European Parliament	-19.4** (7.68)	-73.7*** (21.9)	-99.1*** (33.8)	-12.2* (6.65)	-28.0** (10.8)	10.8** (4.37)
Institutional mistrust	-14.3** (5.67)	-54.4*** (16.2)	-73.1*** (25.0)	-8.98* (4.91)	-20.7** (7.99)	7.96** (3.23)
Institutional mistrust without EU	-14.0** (5.57)	-53.5*** (15.9)	-71.9*** (24.5)	-8.83* (4.82)	-20.3** (7.86)	7.83** (3.17)
First component of mistrust	-10.2** (4.06)	-38.9*** (11.6)	-52.4*** (17.9)	-6.43* (3.51)	-14.8** (5.72)	5.70** (2.31)
Dissatisfaction with democracy	-9.44** (3.74)	-35.9*** (10.7)	-48.3*** (16.5)	-5.93* (3.24)	-13.7** (5.28)	5.26** (2.13)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include NUTS level and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.9: Overview of the effect of the crisis-induced changes in mistrust on mobility reductions after lockdown without using weights

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-39.0*** (8.32)	-213.3*** (26.7)	-243.1*** (37.5)	-30.1*** (6.90)	-75.5*** (11.2)	29.6*** (4.68)
Selfishness	-67.2*** (14.4)	-368.0*** (46.0)	-419.5*** (64.8)	-51.9*** (11.9)	-130.3*** (19.3)	51.1*** (8.07)
Individualism	-52.8*** (11.3)	-288.9*** (36.1)	-329.3*** (50.9)	-40.8*** (9.35)	-102.3*** (15.1)	40.1*** (6.33)
Mistrust in parliament	-13.7*** (2.94)	-75.3*** (9.41)	-85.8*** (13.2)	-10.6*** (2.44)	-26.6*** (3.94)	10.4*** (1.65)
Mistrust in legal system	-26.1*** (5.57)	-142.7*** (17.8)	-162.6*** (25.1)	-20.1*** (4.62)	-50.5*** (7.47)	19.8*** (3.13)
Mistrust in politicians	-13.0*** (2.77)	-71.0*** (8.88)	-81.0*** (12.5)	-10.0*** (2.30)	-25.1*** (3.72)	9.86*** (1.56)
Mistrust in political parties	-11.8*** (2.52)	-64.5*** (8.06)	-73.5*** (11.3)	-9.10*** (2.09)	-22.8*** (3.38)	8.95*** (1.41)
Mistrust in European Parliament	-22.0*** (4.70)	-120.5*** (15.1)	-137.3*** (21.2)	-17.0*** (3.90)	-42.6*** (6.31)	16.7*** (2.64)
Institutional mistrust	-16.2*** (3.47)	-88.9*** (11.1)	-101.4*** (15.7)	-12.5*** (2.88)	-31.5*** (4.66)	12.3*** (1.95)
Institutional mistrust without EU	-16.0*** (3.41)	-87.4*** (10.9)	-99.6*** (15.4)	-12.3*** (2.83)	-30.9*** (4.58)	12.1*** (1.92)
First component of mistrust	-11.6*** (2.48)	-63.7*** (7.96)	-72.6*** (11.2)	-8.98*** (2.06)	-22.5*** (3.33)	8.84*** (1.40)
Dissatisfaction with democracy	-10.7*** (2.29)	-58.7*** (7.34)	-67.0*** (10.3)	-8.29*** (1.90)	-20.8*** (3.08)	8.15*** (1.29)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.10: Overview of the effect of the pre-crisis average mistrust on mobility reductions after lockdown

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-3.35*** (0.93)	-15.1*** (1.64)	-24.1*** (3.45)	-2.37*** (0.70)	-3.62*** (1.03)	1.70*** (0.45)
Selfishness	-3.34*** (0.97)	-18.1*** (1.75)	-28.4*** (3.58)	-2.14*** (0.75)	-4.15*** (1.05)	1.97*** (0.44)
Individualism	-1.46 (0.99)	-14.4*** (1.78)	-19.4*** (3.73)	-1.94*** (0.67)	-2.78** (1.13)	1.35*** (0.48)
Mistrust in parliament	-1.54 (1.03)	-7.13*** (2.06)	-16.2*** (3.67)	-1.11 (0.76)	-1.27 (1.16)	0.66 (0.47)
Mistrust in legal system	-2.04** (0.92)	-12.6*** (1.84)	-23.0*** (3.37)	-2.07*** (0.76)	-3.03*** (1.00)	1.60*** (0.44)
Mistrust in politicians	-2.40*** (0.86)	-12.9*** (1.70)	-21.1*** (3.06)	-1.75** (0.70)	-2.97*** (0.97)	1.34*** (0.42)
Mistrust in political parties	-2.29*** (0.78)	-11.5*** (1.51)	-18.8*** (2.75)	-1.71** (0.68)	-2.79*** (0.87)	1.25*** (0.37)
Mistrust in European Parliament	-0.49 (1.60)	6.26 (3.86)	5.08 (5.14)	-1.13 (1.24)	2.93 (2.13)	-2.00** (0.82)
Institutional mistrust	-1.94** (0.87)	-10.7*** (1.77)	-19.6*** (3.26)	-1.80** (0.75)	-2.33** (0.97)	1.13*** (0.42)
Institutional mistrust without EU	-1.77** (0.79)	-10.1*** (1.58)	-18.4*** (2.91)	-2.29** (0.66)	1.14*** (0.88)	(0.38)
First component of mistrust	1.35* (0.72)	3.88** (1.64)	5.65 (3.89)	0.75 (0.92)	1.60** (0.80)	-0.76** (0.33)
Dissatisfaction with democracy	1.88*** (0.66)	5.27*** (1.48)	6.45** (3.19)	1.49** (0.72)	2.57*** (0.73)	-0.90*** (0.33)

Note: the table presents the difference-in-difference estimation, depicting the effect of the pre-crisis average mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.



Table E.11: Overview of the effect of the post-crisis average mistrust on mobility reductions after lockdown

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-3.74*** (0.96)	-16.2*** (1.76)	-26.9*** (3.62)	-2.67*** (0.79)	-4.04*** (1.02)	2.00*** (0.47)
Selfishness	-3.76*** (1.02)	-19.3*** (1.83)	-30.8*** (3.87)	-2.39*** (0.82)	-4.57*** (1.11)	2.17*** (0.47)
Individualism	-1.77* (0.98)	-16.7*** (1.92)	-23.1*** (3.95)	-2.29*** (0.76)	-3.55*** (1.15)	1.76*** (0.51)
Mistrust in parliament	-3.59*** (0.97)	-15.0*** (1.72)	-26.0*** (3.30)	-2.05*** (0.65)	-3.57*** (0.99)	1.86*** (0.41)
Mistrust in legal system	-2.63*** (0.79)	-15.4*** (1.60)	-25.5*** (3.18)	-1.96*** (0.63)	-3.00*** (0.82)	1.79*** (0.39)
Mistrust in politicians	-3.43*** (0.84)	-16.9*** (1.38)	-26.4*** (2.82)	-2.16*** (0.60)	-3.95*** (0.80)	1.98*** (0.35)
Mistrust in political parties	-3.63*** (0.83)	-16.9*** (1.34)	-27.0*** (2.76)	-2.11*** (0.59)	-4.06*** (0.82)	2.05*** (0.36)
Mistrust in European Parliament	-8.41*** (1.70)	-21.9*** (4.06)	-36.0*** (6.10)	-4.47*** (1.37)	-5.64*** (2.11)	2.16*** (0.85)
Institutional mistrust	-3.37*** (0.84)	-16.0*** (1.50)	-26.8*** (3.02)	-2.15*** (0.63)	-3.62*** (0.86)	1.89*** (0.38)
Institutional mistrust without EU	-2.88*** (0.78)	-14.8*** (1.42)	-24.5*** (2.86)	-1.89*** (0.57)	-3.31*** (0.79)	1.77*** (0.35)
First component of mistrust	-3.45*** (0.82)	-15.9*** (1.44)	-26.5*** (2.92)	-2.15*** (0.62)	-3.66*** (0.84)	1.90*** (0.37)
Dissatisfaction with democracy	-3.18*** (0.90)	-15.3*** (1.69)	-26.2*** (3.27)	-1.97*** (0.62)	-3.49*** (0.89)	1.91*** (0.39)

Note: the table presents the difference-in-difference estimation, depicting the effect of the post-crisis average mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\hat{\delta}$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.

Table E.12: Overview of the effect of (discrete) post-crisis mistrust on mobility reductions after lockdown

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-1.13* (0.60)	-9.97*** (1.34)	-13.6*** (2.48)	-1.33*** (0.46)	-1.67** (0.73)	0.75** (0.32)
Selfishness	-1.40** (0.62)	-11.9*** (1.40)	-17.0*** (2.61)	-1.56*** (0.47)	-2.46*** (0.75)	1.22*** (0.33)
Individualism	-1.05* (0.62)	-11.8*** (1.43)	-16.8*** (2.58)	-1.32*** (0.45)	-2.34*** (0.75)	1.24*** (0.33)
Mistrust in parliament	-2.01*** (0.65)	-9.33*** (1.69)	-17.5*** (2.57)	-0.89* (0.48)	-2.10*** (0.79)	1.11*** (0.33)
Mistrust in legal system	-1.91*** (0.66)	-9.75*** (1.66)	-18.3*** (2.47)	-1.04** (0.47)	-2.43*** (0.80)	1.33*** (0.33)
Mistrust in politicians	-1.86*** (0.63)	-10.6*** (1.64)	-18.0*** (2.53)	-0.94** (0.47)	-2.03*** (0.77)	1.02*** (0.32)
Mistrust in political parties	-1.85*** (0.63)	-9.43*** (1.69)	-17.2*** (2.53)	-0.62 (0.46)	-1.91** (0.78)	1.23*** (0.33)
Mistrust in European Parliament	-3.15*** (0.64)	-10.9*** (1.54)	-14.5*** (2.63)	-2.13*** (0.50)	-3.05*** (0.76)	1.16*** (0.33)
Institutional mistrust	-1.72*** (0.63)	-10.9*** (1.56)	-18.1*** (2.54)	-1.21** (0.48)	-1.99** (0.77)	0.99*** (0.32)
Institutional mistrust without EU	-1.99*** (0.65)	-10.1*** (1.65)	-18.6*** (2.44)	-0.93** (0.46)	-2.27*** (0.79)	1.34*** (0.33)
First component of mistrust	-1.72*** (0.63)	-10.9*** (1.56)	-18.1*** (2.54)	-1.21** (0.48)	-1.99** (0.77)	0.99*** (0.32)
Dissatisfaction with democracy	-1.54** (0.62)	-10.3*** (1.59)	-18.0*** (2.57)	-0.74 (0.46)	-1.71** (0.76)	1.08*** (0.33)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. The mistrust variables are discrete variables that capture the post-crisis mistrust level, categorized as high or low. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ . Source: authors' estimation.

Table E.13: Overview of the effect of the crisis-induced changes in mistrust over 2009–12 on mobility reductions after lockdown

Dep. variable →	(1) Retail	(2) Grocery	(3) Parks	(4) Transit	(5) Work	(6) Home
General mistrust	-33.2** (13.2)	-127.2*** (37.8)	-163.4*** (54.3)	-19.5* (11.0)	-48.0** (18.6)	18.6** (7.47)
Selfishness	-57.2** (22.7)	-219.5*** (65.2)	-281.9*** (93.7)	-33.7* (18.9)	-82.9** (32.1)	32.1** (12.9)
Individualism	-44.9** (17.8)	-172.3*** (51.2)	-221.3*** (73.6)	-26.5* (14.9)	-65.0** (25.2)	25.2** (10.1)
Mistrust in parliament	-11.7** (4.64)	-44.9*** (13.3)	-57.6*** (19.2)	-6.89* (3.87)	-16.9** (6.56)	6.57** (2.64)
Mistrust in legal system	-22.2** (8.80)	-85.1*** (25.3)	-109.3*** (36.3)	-13.1* (7.34)	-32.1** (12.4)	12.5** (5.00)
Mistrust in politicians	-11.0** (4.38)	-42.4*** (12.6)	-54.4*** (18.1)	-6.51* (3.65)	-16.0** (6.19)	6.20** (2.49)
Mistrust in political parties	-10.0** (3.98)	-38.4*** (11.4)	-49.4*** (16.4)	-5.91* (3.32)	-14.5** (5.62)	5.63** (2.26)
Mistrust in European Parliament	-18.7** (7.43)	-71.9*** (21.4)	-92.3*** (30.7)	-11.0* (6.20)	-27.1** (10.5)	10.5** (4.22)
Institutional mistrust	-13.8** (5.48)	-53.0*** (15.8)	-68.1*** (22.6)	-8.15* (4.57)	-20.0** (7.75)	7.76** (3.11)
Institutional mistrust without EU	-13.6** (5.39)	-52.1*** (15.5)	-66.9*** (22.3)	-8.01* (4.50)	-19.7** (7.62)	7.63** (3.06)
First component of mistrust	-9.90** (3.93)	-38.0*** (11.3)	-48.8*** (16.2)	-5.83* (3.28)	-14.3** (5.55)	5.56** (2.23)
Dissatisfaction with democracy	-9.13** (3.62)	-35.0*** (10.4)	-45.0*** (15.0)	-5.38* (3.02)	-13.2** (5.12)	5.13** (2.06)

Note: the table presents the difference-in-difference estimation, depicting the effect of the crisis-induced changes in mistrust on mobility after the lockdown. Observations are at the daily level. The sample covers the period from 1 February 2020 until the country-specific date when the stringency index starts to decrease after reaching its first highest level. The dependent variables are represented as percentages, reflecting the average percentage change in mobility compared to baseline mobility. Each cell reports the estimated coefficients  $\delta$  on the interaction term ( $\Delta T \times \text{Lockdown}$ ) in Equation 6. The common lockdown date is defined as 15 March 2020 based on general trends in the stringency index. The mistrust variables are over the period 2009–2012. All regressions are OLS. They include country and weekday fixed effects and are weighted by the inverse of the number of NUTS areas in a country. We control for population density at the NUTS area level, as well as several individual-level controls. These include whether the person works in a work-from-home job, their age (65 years or older), gender, years of completed education, minority group affiliation, whether benefits constitute the main household income, and the importance placed on following rules. All control variables are measured as an average over the pre-crisis period. We further control for the lag of the dependent variable and lagged COVID-related deaths. Standard errors, clustered at the NUTS area level, are reported in parentheses. Asterisks indicate significance levels \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ .

Source: authors' estimation.