Terrorist Attacks and Trust in Institutions: Micro Evidence from Europe*

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Abstract

The existing literature on terrorism focuses on the "rally-around-the-flag-effect" – a relatively short-term phenomenon. The non-immediate effects of terrorist attacks on trust in institutions, however, remain largely unexplored. Arguing that maintaining law and order and upholding peace is considered the responsibility of the political and legal institutions in democracies, we theorize the "accountability effect" suggesting that terrorist activities indicate institutional failures in preventing casualties, undermining residents' trust in these institutions. Using over 350,000 individual-level observations from the European Social Survey, we find evidence of the accountability effect showing that exposure to terrorist activities undermines self-reported trust in various national and international institutions, including the parliament, legal institutions, the police, politicians, political parties, the European Parliament, and the United Nations. Whereas this negative relationship does not weaken with additional terrorist attacks, strong governance and high trust in institutions mitigate these adverse effects. Lastly, terrorist attacks do not affect trust among people.

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1. Introduction

Terrorist attacks have become increasingly prevalent today, demanding attention from policymakers worldwide. As shown in Figure 1, the number of total and serious terrorist attacks, defined as attacks involving at least one human death or injury, steadily increased since 2000, reaching their peak in 2014 both in Europe and the World. Although there has been a decline in these attacks since 2014, they remain much higher compared to two decades ago. The current literature documents several adverse consequences of terrorism, ranging from economic turmoil to individual wellbeing (Ahern, 2018; Akay, Bargain, and Elsayed, 2018; Abadie and Gardeazabal, 2008; Blomberg, Hess, and Orphanides, 2004). However, there remains a noticeable scarcity of evidence regarding the association between terrorist attacks and trust in institutions, with most studies investigating the short-run effects, popularly knowns as "rally-around-the flag effect".

We bridge this crucial gap in the literature by studying the causal effects of terrorism on trust in political and legal institutions using over 350,000 individual-level observations from 32 European countries from 2002-2021. We hypothesize that exposure to terrorism undermines citizens' trust in a broad range of political and legal institutions which can presumably be held responsible for preventing terrorist attacks. We consider five national institutions: Parliament, Legal System, Police, Politicians, and Political Parties, and two international and global institutions: the European Parliament and the United Nations. While the selection of these institutions is primarily driven by data availability, there are compelling reasons to believe that terrorism would significantly impact individuals' trust in these institutions.

In democratic systems, citizens entrust political leaders with the responsibility of upholding law and order and maintaining peace in the country and hold them accountable for a failure to do so. Peace and prosperity are two of the most important expectations citizens have from their leaders (Nickelsburg and Norpoth, 2000). A successful terrorist attack may be perceived as the failure of government in the provision of adequate public good (*i.e.,* law and order) and maintaining peace in the country (Gassebner, Jong-A-Pin, and Mierau, 2011; Gassebner, Jong-A-Pin, and Mierau, 2008), undermining the citizens' trust in the political and legal institutions perceived to be responsible for preventing such attacks. Given the crucial roles of law enforcement and the legal system in preventing terrorist attacks, terrorism might have implications for trust in these institutions. Since our empirical setting utilizes data from European countries, we also study whether terrorist attacks influence trust in the European Parliament, and trust in the United Nations

as a global institution. Additionally, we examine the potential moderating effects of existing trust levels and the governance quality on the relationship between terrorism and trust in institutions. Our conjecture is that in countries with stronger trust in institutions and better governance, the adverse effects of terrorism on institutional trust would be lower.

To test our hypothesis of terrorism's negative effects on trust in institutions, we analyze the association between exposure to terrorist attacks and self-reported trust in various types of institutions in a sample of over 350,000 individuals from 32 European countries. We restrict our analysis to only *serious attacks,* which we define as attacks resulting in at least one human casualty, *i.e.*, terrorist attacks in which at least one person was killed or injured. An advantage of using serious terrorist attacks, as argued by Brodeur (2018), is that even if the occurrence of a terrorist attack may not be entirely random in a given country, it is unpredictable whether an attack will be successful.[1] Additionally, since the residents of a country cannot anticipate a future terrorist attack, we can safely assume that those who are surveyed before the terrorist attacks cannot revise their trust level *a priori*, providing us with a good comparison group. Our identification strategy allows us to rule out the possibility that our results could be driven by the omission of country or region-specific unobserved factors and/or time-trends in trust in institutions.

Our contributions to the literature on terrorism are multifold. First, our paper is the first study to document the causal impact of terrorism on individuals' self-reported trust in seven different national, international, and global institutions. We show that exposure to terrorism undermines citizens' trust in all seven institutions: Parliament, Legal System, Police, Politicians, Political Parties, the European Parliament, and the United Nations. Our findings show that the negative effects of terrorism on trust in institutions are highest after 3 months of the serious attack and almost entirely dissipate roughly 8 months after the attacks.

Second, while most studies in this literature utilize selected terrorist attacks in a few countries,[2] our analysis exploits variations in the timing and location of terrorist attacks occurring in 32 European countries from 2002-2021. While studies using one or a few high-profile terrorist

[1] Broduer (2018) considers *successful* attacks in his analysis. The successful attacks can include attacks where a bomb is successfully detonated in a building, even if it did not bring down the building or result in any casualties. Our definition of *serious* attacks is stricter in that it involves at least one casualty. The rationale for doing so is that human casualty is likely to invoke stronger emotions.

[2] For instance, individual terrorist attacks such as the 9/11 attacks in the United States (Åslund and Rooth, 2005), the 2004 attacks in Madrid, and the 2005 metro attacks in London (Rabby and Rodgers, 2010; Ratcliffe and Scholder, 2015), have been used to study the effects of terrorism on various economic outcomes. There are exceptions, however. See, for instance, Tripathi (2022), Peri, Rees, and Smith (2020), and Drakos and Kutan (2003.

attacks typically aim to capture the "rally effect" by focusing on the effects immediately after the attacks– a relatively short-term phenomenon; our study theorizes the "accountability effect" which suggests that terrorist attacks would lower trust in political and legal institutions whose supposed duties include maintaining peace and upholding law and order, among other objectives such as ensuring prosperity. Therefore, our results showing a decline in trust in institutions can be attributed to the accountability effect, *i.e.,* citizen's perceptions that successful terrorist attacks signify the failure of the political and legal institutions to fulfill their duty of maintaining peace in the country. It is notable in this context that the greater accountability of (democratic) leaders to their citizens pressurizes them to minimize casualties in wars (Valentino, Huth, and Croco, 2010). Accordingly, democratic countries adopt foreign and military policies, resulting in lower human costs of war.

Third, a corollary of our conjecture is that the accountability effect will be reflected in the decline in trust in these institutions despite these occurring frequently. Consistently, our findings show that terrorist attacks are not considered normal even in countries that experience frequent attacks, implying that frequent terrorist attacks continue to adversely impact the economy by undermining trust in institutions. Finally, our study highlights the roles of existing levels of trust and governance quality in shaping the association between exposure to terrorism and trust in institutions, underscoring the importance of building trust in institutions and good governance in challenging times. We show that the adverse effects of terrorist activities on trust in institutions are weaker in countries with better governance indicators and in countries which had higher levels of trust in institutions in the past.

2. Existing Literature and Theoretical Considerations

2.1 Theory and Hypothesis Development

Nickelsburg and Norpoth (2000) contend that peace and prosperity in the country are two indisputable outcomes citizens expect from their leaders. The failure of the government to provide these outcomes will lead to dissatisfaction among citizens, causing a reduction in the leader's approval. In the electoral accountability models developed by Barro (1973) and Ferejohn (1986), the incumbent governments are subject to a trade-off between the public good provision and rent extraction. The government is held accountable for the provision of public goods by the electorate.

An inadequate provision of public goods signals the incompetency of the government, which is likely to adversely impact citizens' approval of their leaders. The provision of law and order and maintaining peace are some of the most important goals that the governments and political leaders are expected to provide. The prevention of terrorist activities (through the strengthening of the law and order) can be considered as one of the public goods and one of the responsibilities of the governments. Therefore, a successful terrorist activity can be considered as a failure of the government and occurrences of terrorist attacks indicate the failure of the government and leaders in achieving the first goal (Gassebner, Jong-A-Pin, and Mierau, 2011).

While citizens do not observe successful counter-terrorist measures of the government, they observe the unsuccessful ones leading to terrorist attacks (Gassebner, Jong-A-Pin, and Mierau, 2008). Therefore, terrorist activities can negatively influence public opinion regarding the competency of the current government and electoral outcomes. Consistent with these models and predictions, researchers find that terrorist activities are positively associated with the likelihood of the incumbent government being replaced (Gassebner, Jong-A-Pin, and Mierau, 2008) and negatively associated with cabinet duration (Gassebner, Jong-A-Pin, and Mierau, 2011). Further, studies show that terrorism can influence the electoral outcome (Montalvo, 2011), polarize the electorates (Berrebi and Klor, 2008), influence voter turnout and voting decisions against the incumbent (Bali, 2007), and influence the relative support for the left/right blocs of political parties (Berrebi and Klor, 2006; Berrebi and Klor, 2008).[3]

We can extend the models by Barro (1973) and Ferejohn (1986) in which the accountability of adequate public good provision lies not just on the current government but the political leaders and legal institutions in a democratic system. This is quite applicable in the case of terrorist attacks taking place under various governments formed by different political parties. Moreover, institutions, such as the police and the legal system, are directly associated with terrorist attacks and hence can be held accountable by citizens for not preventing them. This extended model would imply that successful terrorist attacks would be considered a failure of broader political and legal institutions that are perceived to be responsible for preventing terrorist attacks and fatalities (Gassebner, Jong-A-Pin, and Mierau, 2008), undermining citizens' trust in these institutions.

[3] For instance, support for the right-wing party is relatively higher after terrorist attacks (Berrebi and Klor, 2006; Berrebi and Klor, 2008). Berrebi and Klor (2008) find that while fatalities caused by terrorist activities inside the left-leaning locality cause an increase in the support for the right-bloc, terrorism-related fatalities outside the left-leaning locality are associated with an increase in the support for left-blocs.

Recent studies report significant effects of institutions on conflict, showing that high quality institutions are associated with lower spread of conflict as they increase the cost of committing violence (Jha, Panda, and Sahu, 2022). The above discussion suggests that successful terrorist attacks would be considered a failure of the political leaders and institutions that are perceived to be responsible for preventing such attacks. Hence, we hypothesize that terrorism would lead to declines in trust in political institutions like politicians, political parties, and parliament, as well as legal institutions such as the legal system and the police.

Notably, the effects of terrorism, conflict, and civil wars on political trust and the country's institutions have been documented by many studies.[4] In a recent study, Harding and Nwokolo (2023) find that terrorist attacks lead to an increase in political trust. Hutchison (2014) finds that civil conflicts promote political intolerance, as reflected by the public's unwillingness to afford basic civil liberties to the members of nonconformist groups. In a meta-analysis, Godefroidt (2023) finds that terrorism is significantly associated with "outgroup hostility, political conservatism and rally - 'round-the-flag effects". Grosjean (2014) observes that living in a country involved in warfare or civil conflicts is negatively associated with political trust and perceived effectiveness of national institutions. Sangnier and Zylberberg (2017) show that geographical proximity to social protests can alter an individual's trust in the country's leader as well as institutions. The protest might inform the citizens about the dishonesty of their leader and the incompetency of the institutions in preventing the leaders' misbehaviors, causing citizens to lose trust in them. De Juan and Pierskalla (2016) argue that exposure to violence undermines citizens' trust in national governments and political institutions, as violence is a sign of government's inability to uphold peace and law and order. In addition, government actions during the war cause physical and human losses, negatively affecting people's trust in the government. Consistently, they find violence to be associated with lower political trust at the outbreak of the violence as well as at the end of the corresponding civil war.

Much in the same vein, we argue that the occurrences of terrorist attacks would be perceived as the incompetency of the political and legal institutions, reducing people's trust in

[4] Some studies also document that exposure to conflicts and wars can lead to a decline in social trust. For instance, Godefroidt and Langer (2020) find that the fear of terrorist attacks diminishes social trust. Studies also provide experimental evidence of a decline in trust in times of strife such as civil conflict (Cassar, Grosjean, and Whitt, 2013) and that institutions and enforcement and monitoring by a neutral third-party can play a crucial role in rebuilding ethnic trust and promoting reconciliation (Whitt, 2010; Mironava and Whitt, 2015). Interested readers can refer to these studies and references therein.

these institutions. Studies have shown that despite being rare, occurrences of terrorist activities affect emotions and behaviors. For instance, Peffley, Hutchison, and Shamir (2022) find that higher levels of terrorism are associated with political intolerance "against domestic groups alleged to be "fellow travelers" of the perpetrators of terrorism" within the country. Ahern (2018) finds that following the 2004 Madrid train bombing and the 2005 London metro attacks, there was a decline in trust (in other people), subjective well-being, and the importance of creativity and freedom. Brodeur and Wright (2019) find a decrease in the likelihood that applicants from Muslim-majority countries are granted asylum after the 9/11 attacks. Tripathi (2022) finds that terrorist attacks by foreign perpetrators instigate anti-immigrant attitudes in people. Therefore, one can arrive at the conjecture that terrorism would be negatively associated with trust in various political and legal institutions, which is another motivation behind our investigation.

To the best of our knowledge, however, there are no studies exploring the effects of terrorist activities on trust in a broad range of political, legal, and international and global institutions using individual-level data in a cross-country setting. In the closest study to ours, Peri, Rees, and Smith (2020) investigate the effects of terrorism on attitude towards immigrants and election outcomes in a multi-country analysis. Among several other outcomes, they also look at trust in the parliament and the European Parliament following terrorist attacks. Interestingly, they fail to find a significant association between terrorism and trust in these institutions. Restricting the analysis to survey responses shortly before and after terror attacks, Peri, Rees, and Smith (2023) find an increase in trust in the government and national parliaments after terrorist attacks involving at least one fatality, capturing the "rally-around-the flag-effect". Another study close to ours is a within-country investigation by Dinesen and Jaeger (2013), who find a rise in trust in various institutions following Madrid terror attacks. Finally, in a recent study, Turkoglu and Chadefaux (2023), by comparing successful and failed attacks, find that while terrorist attacks decrease people's reported life satisfaction and happiness, they do not influence their attitudes towards the government, institutions, and immigrants.

We report a significant, negative association between terrorism and trust in institutions using 10 rounds of the ESS consisting of 32 countries. In addition, we use panel data that captures the dynamism of terrorism-trust association, which is absent from studies (such as of Dinesen and Jaeger, 2013) using cross-sectional data that utilize a single incident of terrorism. Capturing these dynamics is important because exposure to several terrorist attacks under different political parties

with varying political orientations provides a view of the respondents' trust in institutions viz-a-viz terrorist attacks. Thus, the results of our study reflect more than the "rally effect" which refers to a sudden spike in the support for the government immediately after terrorist attacks when people show solidarity with the victims and support for their government. Moreover, we conduct various robustness checks to establish causality and explore the roles of existing levels of trust in these institutions and the quality of governance in mediating the association between terrorism and trust in institutions.

2.2 Accountability Effect versus Rally Effect

A related theory, known as the "rally effect," suggests that trust in the government and the president might increase after terrorist attacks. The rally effect refers to the phenomena that "specific, dramatic and sharply focused" events with international scope, such as terrorist attacks, might lead to an increase in the approval of the president (Mueller, 1973). Such traumatic events give rise to a collective sense of loss of security, and citizens act in solidarity and unity reflecting greater trust in national institutions and a strong collective identity (Perrin & Smolek, 2009; Skocpol, 2002). The rally effect has been observed following the 9/11 terrorist attack in the United States (Perrin & Smolek, 2009; Skocpol, 2002) and following the 3/11 Madrid terrorist attack in Spain (Dinesen and Jaeger, 2013). It is noteworthy then that studies on the rally effect use a single incident of large-scale terrorist attack that shook the respective country due to high casualties. Given that such studies use a single incident as the treatment, the likelihood of bias rises with the length of time between the incident and the survey conducted and hence studies using single incidents are more suitable for studying the short-term effects such as the rally effect.

Our paper, though related, is very different from studies on the "rally effect" in multiple ways, and hence, makes distinct theoretical and empirical contributions to the literature. The rally effect is usually a short-term phenomenon and must involve an international aspect. Theoretically, one can expect that citizens will be more supportive of the government when a foreign entity is behind the attacks, especially, immediately after the attack when nationalistic sentiments are high, giving rise to the rally effect. However, terror acts are not always perpetrated by foreign elements, and many times non-foreign elements are behind such attacks. In addition, after the rally effect subsides, citizens are likely to lose their trust in broader political and legal institutions because preventing terrorist attacks by foreign and non-foreign elements are considered their responsibility

to the country and citizens. By considering multiple terrorist attacks where perpetrators are not only foreigners but also non-foreign elements over a long period, our paper goes beyond the rally effect in an attempt to identify what we call the accountability effect. Such effects need not be immediate and might become stronger (as the rally effect subsides) before becoming weaker as the memory of attacks dissipates from the minds of the citizens. Our results, showing that decline in trust in various institutions is the largest roughly three months rather than one or two months after the attack, going beyond the rally effect are consistent with this theoretical discussion.

Note that the existing literature documents that right-wing supporters tend to have more trust in institutions than left-wing supporters (Devos, Spini, and Schwartz, 2010). However, an important implication of our hypothesis is that a respondent's trust in institutions would decline regardless of her political orientation, *i.e.,* right or left. Therefore, while respondents identifying themselves on the right tail of the political spectrum, might exhibit more trust in institutions, we do not expect their trust to be impacted *relatively* differently from those considering themselves to be on the left end of the political spectrum. Similarly, studies document that politics is getting more polarized. People are distrustful of the government with a different political orientation than theirs, and trust in the government rises when people perceive international problems to be most important (Hetherington and Rudolph, 2008; Hetherington and Rudolph, 2017; Hetherington and Rudolph, 2020). However, according to our conjecture, a respondent's trust in institutions declines regardless of whether she shares the same political orientation as the ruling party or the head of the government. This derives from the fact that our focus is on trust in broader political and legal institutions, and not on trust in the "government" or the "ruling party/coalition", and the onus of failing to prevent a terrorist attack is put on the entire political and legal institutions, which are considered to be responsible for maintaining the peace in the country.

It is, perhaps, also consistent with this discussion that the existing evidence is heavily in favor of casualties, resulting from wars, conflicts, and terrorism, negatively affecting the public opinion regarding the incumbent and causing a decline in their support. Such evidence has been reported for the US in the face of the Korean and Vietnam wars and conflicts in Iraq and Afghanistan (Karol and Miguel, 2007; Eichenberg and Stoll, 2006; Gartner and Segura, 1998, Mueller, 1973), other countries such as Spain in the aftermath of the Madrid bombing terrorist attacks (Montalvo, 2011), and in cross-country analyses studying the effects of terrorist attacks on

electoral outcomes and cabinet duration (Gassebner, Jong-A-Pin, and Mierau, 2011; Gassebner, Jong-A-Pin, and Mierau, 2008).

Finally, note that the rally effect should be more closely linked with the electoral support for the incumbent. Our paper, on the other hand, conjectures a decline in the trust in broader political and legal institutions after terrorist attacks, capturing the accountability effect. The two effects need not be contradictory to each other. Since our conjecture suggests that respondents experience a decline in trust in overall political institutions (the incumbent and opposition alike), the relative support for the incumbent might remain unchanged and might even rise due to the rally effect immediately following the terrorist attacks. Thus, our study extends the current literature by proposing that terrorist attacks would cause a decline in the trust in political and legal institutions regardless of the citizen's political orientation and affiliations, and the resulting decline in the trust may or may not affect electoral outcomes for the incumbent.

The rest of the paper is organized as follows. Section 3 describes the variables and data sources. Section 4 outlines our estimation method. Section 5 reports the results and the robustness exercises. We explore the roles of existing levels of trust and governance in determining the association between exposure to terrorist activities and trust in institutions in Section 6. Section 7 concludes with a summary of findings and policy implications.

3. Data

3.1 European Social Survey

The primary data source for individual-level attributes, including their self-reported trust in various institutions, is the European Social Survey (ESS). The ESS is a cross-national survey conducted in 36 European countries every alternate year since 2002. We use data from all ten rounds, from 2002 to 2021, conducted in 32 European countries.[5] The ESS records an individual's self-reported level of trust in institutions in response to the following question:

[5] The 36 countries are Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and United Kingdom. We do not consider Albania and Kosovo since they are surveyed only once. Russian Federation is dropped for the long history of violence (results remain robust to the inclusion of Russia – see Table A18 in the Online Appendix) and Israel is not part of Europe.

"Using this card [card shown by enumerator to the interviewee]*, 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."*

The institutions referred to are *the country's parliament*, *legal system*, *the police*, *politicians*, *political parties*, *the European Parliament*, and *the United Nations*. We convert the responses to these seven questions into binary ones. Each of these seven outcome variables takes the value of 1 if the response is equal to or greater than 5, and 0 if it is less than 5.[6]

Table 1 presents the summary statistics of the outcome, explanatory, and control variables. The statistics reported in Table 1 indicate that politicians and the political parties are the least trusted entities, with only about 40 percent of respondents selecting 5 or above in response to the question above measuring individuals' trust in institutions. People show the greatest trust in the police (77 percent), followed by the legal system (63.1 percent) and the parliament (54 percent). Among international institutions, about 67 percent of the respondents exhibit trust in the United Nations compared to 56 percent in the European Parliament. The level of trust in various institutions as well as exposure to serious attacks vary considerably across different countries as shown in Tables A1 and A2 in the Online Appendix, respectively.

We also utilize the information from the ESS to control for an individual's socioeconomic characteristics that could be correlated with an individual's level of trust in various institutions. These controls include age, age squared, gender, religion, level of education, employment status, marital status, household size, and the area (urban/rural) they live in. We also control for the individual's religious affiliation. Since trust in institutions could be systematically different among residents of rural areas versus urban areas, we control for the area type where a respondent resides.

3.2 Terrorism data

Terrorism information is obtained from the Global Terrorism Database (GTD), which defines terrorist attacks as "the threatened or actual use of illegal force and violence by a non-state actor

[6] The results remain qualitatively unchanged and quantitatively similar when we (i) use the variable as it is, *i.e.,* when the responses take values from 0 (no trust at all) to 10 (complete trust) (see Table A3), (ii) consider a response equal to or greater than 6 as 1; and 0 if it is less than 6 (Table A4), (iii) use median as the cut-off point with the median value being included in the category of either 1 or 0 (Tables A5 and A6). These Tables are reported in the Online Appendix.

to attain a political, economic, religious, or social goal through fear, coercion, or intimidation". Hence, any violent incident is listed as an act of terrorism if it satisfies the following criteria:

1. The incident must be intentional.
2. The incident must entail some level of violence or immediate threat of violence.
3. The perpetrators of the incidents must be sub-national actors.

Among 13,246 attacks between 2001 and 2020 in Europe, 1937 attacks resulted in at least one human casualty*, i.e.*, someone was injured or killed, in the 32 countries considered in our sample. We classify them as "serious" attacks. Our main explanatory variable is an indicator variable taking a value equal to 1 when an individual exposed to *serious* attacks in his/her country within previous *n* days of being interviewed, and 0 otherwise. The GTD reports the exact date and location of a terrorist attack, and the ESS provides the dates of all interviews. This enables us to match the ESS respondents to *serious* terrorist attacks occurring within "*n*" days prior to their interview.

3.3 Country Attributes

To account for heterogeneity across countries, we control time-variant country attributes using data from the World Development Indicators (WDI) of the World Bank. The per capita GDP numbers are PPP adjusted (in constant 2011 international $) and expressed in 10,000 units, whereas the population numbers are expressed in millions. The unemployment rate is provided by the International Labor Organization (ILO).

4. Empirical Strategy

4.1 Empirical Specification

To investigate the association between exposure to serious terrorist activities, we estimate the following model:

$$Trust_{irct} = \alpha + \beta Exposure_{irc(t-n)} + X_{irct}\delta + K_{ct}\eta + \mu_{rc} + \lambda_d + \lambda_m + \lambda_y + \varepsilon_{irct} \quad (1)$$

where $Trust_{irct}$ denotes individual *i*'s, who lives in region *r* of country *c*, and surveyed on date *t,* level of trust in various national and international institutions. Our variable of interest, $Exposure_{irc(t-n)}$, is an indicator variable that takes a value of 1 for individual *i* living in region *r* in country *c* if they were exposed to *serious* attack(s) occurring in their country *n* days before the

interview date *t*. We classify an attack as a "serious" one if there is at least one human casualty involved, *i.e.*, at least one person is killed or injured. Vector *X* consists of individual and household characteristics such as age, gender, marital status, area of living, household size, employment status, religious affiliation, and the level of education. Vector *K* consists of time variant country attributes such as the unemployment rate, GDP per capita, and the population of the country.

We include within-country region fixed effects (μ_{rc}) in all our empirical specifications to rule out the possibility that results could be biased due to the omission of region-specific characteristics that might be correlated with the resident's trust in institutions and exposure to terrorism. The region here refers to NUTS 1 level. Accordingly, standard errors are also clustered at the NUTS 1 level.[7] We also control for the survey-date fixed effects (λ_d, λ_m, and λ_y denote day, month, and year dummies, respectively) that account for time-specific characteristics to address the concerns that some unobserved factors correlated with respondents' trust in institutions might also be correlated with both the timing of the interview and terrorist attacks.[8]

4.2 Identification Strategy

The identification strategy is to exploit the variations in the timing of the interview during the same wave causing the exposure to terrorist activity to vary for individuals residing in a country. This allows for the inclusion of within-country region as well as survey-date dummies, ruling out the possibility that the association between exposure to terrorism and trust in institutions could be confounded due to the omission of either time-invariant, within-country region-specific factors or region-invariant time-specific factors.

The identification strategy is based on two key assumptions. First, there is no systematic correlation between the timing of survey the and the timing of the terrorist attack(s). This is a plausible assumption as there is no reason for these two to be correlated. First, the survey timing is predetermined as the ESS conducts in-person interviews every alternate year from September

[7] NUTS 1 level regions refer to different administrative subdivisions for different countries. For example, NUTS 1 level region for Denmark refers to the whole country, whereas they refer to the states in Germany. Prior to 2008, *i.e.*, round 4, the ESS did not report NUTS levels and only regions were mentioned. Moreover, the level of NUTS regions varies across different survey rounds. To maintain consistency for all countries and across all 10 rounds, we consolidate all the region related information to the NUTS 1 level and consider the same as "region" in our analysis. We assume that an individual *i* residing in region *r* of country *c* is exposed to the same terrorist attacks in the last *(t – n)* days occurring in country *c*, as another individual *j* $(j \neq i)$ in another region *q* $(q \neq r)$ from the same country *c*.

[8] To rectify any errors arising out of unequal probabilities of selection due to the sampling design, we weight the equation by "design weight".

of the survey year to January of the coming year.[9] It is not hard to argue that the ESS cannot predict the future terrorist activities and hence cannot plan survey dates in a region in a country accordingly. While one might argue that survey dates might be postponed in a region where serious terrorist attacks occurred, one can expect that this to happen only if a terrorist attack causes several casualties or injuries to several human beings, or extensive damage.[10] However, our identification is based on multiple serious attacks with the latter being defined as attacks leading to at least one human casualty or injury. Moreover, since the exposure to terrorism is measured at the country-level, it does not pose a threat to our identification.

The second identifying assumption is that the timing of a serious terrorist attack is not systematically correlated with within-country unobserved factors affecting a citizen's trust in institutions. Again, this is a plausible assumption: While it is possible that in countries where people have less trust in institutions might experience more terrorist attacks, there is no obvious reason to suggest that the timing of the terrorist attacks would be correlated with citizens' trust in institutions. By controlling for country or region-specific fixed effects, we can rule out the possibility that our identification can be confounded due to the omission of unobserved fixed factors that are correlated with the terrorist attacks and/or trust in institutions. Additionally, following Brodeur (2018), we argue that even if the occurrence of a terrorist attack may not be entirely random in a country, whether it will result in at least one casualty is unpredictable. Hence, our estimates using exposure to *serious* attacks as the explanatory variable can be interpreted as causal effects of terrorism on trust in institutions.

5. Results

5.1 Main Results

The results of the benchmark model are provided in Table 2. The main explanatory variable is an indicator variable that takes the value 1 when an individual is surveyed within *n* days of a serious terrorist attack in his/her country. We begin with *n = 30 days* with *30-day* increments until *300* days. Thus, besides exploring whether terrorist activities influence individuals' trust in national

[9] https://www.europeansocialsurvey.org/methodology/ess_methodology/data_collection.html

[10] In our sample, there are five or less casualties in over 69 percent of terrorist attacks, and an overwhelming 83 percent of total terrorist attacks resulted in ten or less casualties.

and international institutions, we can also observe how long the impact lasts after the attack. Columns (1) through (7) report the estimated coefficients of models, with the dependent variable being the trust in different national and international institutions. As specified in the Empirical Strategy section, we control for individual and country-level attributes along with region fixed effects, survey day, month, and year fixed effects. The standard errors are clustered at the within-country NUTS 1 level regions.

As we can see, the coefficients reported in the first row are statistically significant across all seven columns, indicating that exposure to serious attacks within 30 days prior to the survey is negatively associated with trust in all seven types of institutions. These coefficients indicate that exposure to serious attacks prior to 30 days of being surveyed is associated with a decline in trust in different institutions in the range of 0.21 to 0.29 percentage points on a scale of 0 to 1. These estimates correspond to the highest decline in trust in the country's politicians by over 7 percent followed by 5.7 percent and 5.2 percent declines in trust in political parties and parliament, respectively, from their average levels reported in the last row. The lowest decline is observed in the trust in the police by 2.55 percent followed by a decline in the trust in the legal system by 3.6 percent. Thus, terrorism erodes trust in politics and politicians more than legal institutions and law enforcement. People also lose trust in international institutions after being exposed to these attacks, as shown by a decline in trust in the European Parliament by 4.6 percent and in the United Nations by 3.3 percent.

The subsequent rows report the effects of exposure to terrorism *n days* prior to the survey on an individual's self-reported trust in various institutions. It can be observed that the adverse effects of terrorist activities on most institutions are the highest after three months of being exposed and begins to slowly decline after that. A strong decline is observed after150-days or five months of being exposed when the association between exposure to terrorism and trust in all types of institutions are statistically significant at the 5 percent level of better. Although this association remains statistically significant for all types of institutions until six months after being exposed to serious terrorist attacks, the significance level for trust in political parties worsens to the 10 percent level. Although the association between exposure to terrorism and trust in all institutions but political parties remain statistically significant until eight months after exposure to attack, the coefficients are considerably smaller for all institutions compared to their peak values. Ten months after the exposure to serious attacks, only trust in the police and the United Nations remains

statistically significant. These results indicate that while terrorist activities lower individuals' trust in institutions, the effects are relatively short-lived and disappear after about 5-6 months after the incident. Our results remain robust when instead of NUTS 1 fixed effects, we include country fixed effects and country-year trend in the model (see Tables A7 and A8 in the Online Appendix).

We estimate the effects of terrorist attacks on trust in seven different institutions, and trust in these institutions are likely to be correlated.[11] In Table 3, we address this issue in two different ways. First, we report the results of Seemingly Unrelated Regression (SUR) in Panel A, which accounts for the correlation of error terms across regression equations due to the dependent variables across these equations being correlated. We report the SUR estimation coefficients for exposure to terrorist attacks 90 days before survey. As can be seen, the coefficients of in all seven columns remain qualitatively similar and quantitatively comparable to the corresponding coefficient estimates reported in Table 2. Second, we show that our inferences are robust to adjustments for multiple inference for the set of seven outcomes using the false discovery rate (FDR) control (Newson, 2003; Newson, 2010; Benjamini and Yekutieli 2001).[12] We report the *p-values* derived from using the Simes and Hochberg Corrected Standard Errors for exposure to terrorist attacks 90 days before survey along with the *p*-values of the corresponding models reported in Table 2 (Simes, 1986; Hochberg, 1998). Our statistical inferences remain unchanged for all seven outcomes with the *p-values* being less than 0.01 in all specifications indicating that estimates are statistically highly significant.

5.2 Robustness Checks and Falsification Tests

Although our identification strategy ensures that the results presented so far are not confounded due to region-specific or time-specific fixed factors, we carry out several robustness exercises to further establish confidence in these estimates. We discuss and present some of these important robustness exercises in this section, while others have been provided in the Online Appendix.

[11] We thank an anonymous reviewer for this suggestion. The results remain robust when instead of N = 90 days, we use different N as reported in Table 2 (Table A9).

[12] The FDR refers to the expected proportion of false positives, *i.e.,* the expected number of times a true null hypothesis is rejected (Type I error) divided by total hypotheses (*i.e.,* the sum of false positives and true positives). The FDR control methods adjust the *p-values* to correct for multiple comparisons to identify the maximum possible significant comparisons while maintaining a low false positive rate. We provide *p*-values using Simes and Hochberg Corrected Standard Errors as produced by the "*qqvalue"* STATA command (see Newson, 2003 and Newson, 2010). Thus, while the SUR estimation jointly estimates parameters with a focus on efficient parameter estimation, the FDR control method adjusts the *p-values* with a focus on robust error control and inferences.

5.2.1 Political Orientation of the Respondents

First, we check whether the political orientation of the individual matters for a decline in trust in institutions using the survey question that asks the respondent to place themselves on left-right scale using a scale of 0 (left) to 10 (right). The results reported in Table 4 are consistent with our arguments that the inclusion of this variable should not impact our results. Moreover, consistent with the findings of existing studies (*e.g.,* Devos, Spini, and Schwartz, 2010), we find that the respondents with the right political orientation exhibit greater trust in every institution.[13]

5.2.2 Exposure to Future Terrorist Attacks and Attacks in Neighboring Countries

Could it be possible that the association between terrorist attacks and trust in institutions are driven by a third factor that could have coincided with a terrorist attack in the country but might have had an impact on the residents of a broader region? If that is the case, then one can expect terrorist events to be associated with trust in institutions reported by the individuals of neighboring countries (defined as countries sharing a border with one another) as well. However, as can be seen in Panel A of Table 5, terrorism in the neighboring countries is not significantly associated with trust in institutions. Here we consider only those individuals who are exposed to terrorist attacks in any of their neighboring countries but not in their own countries during the period of exposure.

To further alleviate the concerns that our results could have been driven by some unobserved factors, we run a falsification test by utilizing future terrorist attacks. The idea here is that if these results were driven due to an unobserved static factor, then one should observe a significant association between future terrorist activity and respondents' trust in institutions. In other words, we look at the association between terrorist activities *n days* after an individual is surveyed and his/her self-reported trust in institutions. We present these results in Panel B of Table 5. The main explanatory variable in Panel B of Table 5 is a dummy variable that takes the value 1 if a serious terrorist attack occurs *n* days after an individual is interviewed. The results, consistent with our expectations, show that the point estimates are close to zero and statistically insignificant at conventional levels for each of the seven institutions.

[13] While we have controlled for the respondents' self-placement on the left-right scale, future research can look at whether the governing coalition includes the preferred party of the respondents. Such an exercise will provide further insights on whether the effects of terrorist attacks on respondents' trust in institutions depends on whether their preferred party is in the government.

5.2.3 Terrorist Attacks and Trust in Others

Another falsification test investigates the association between terrorist attacks and trust in others.[14] If the results were driven due to some omitted factors that are associated with changes in the general trust level in the country, then we should find a significant association between terrorist attacks and trust in others. In addition to trust in others, we also look at two other related variables: people are fair, and people are helpful. As reported in Panel C of Table 5, we find that terrorist attacks are not significantly associated with trust in others and their perception of others being fair or helpful. These results further strengthen confidence that results are not driven due to the omission some other events coinciding with terrorist attacks.[15]

5.2.4 Robustness to Different Samples and Outliers

To save space, results of the discussion in this section are provided in the Online Appendix. One might note that the number of observations is different across different columns in Table 2 due to some participants choosing not to respond to questions concerning some of the institutions. Our results remain unchanged when we consider only those participants who provide their responses for all seven institutions (Table A13).

Exposure to serious attacks and casualties vary significantly across countries (Table A2). To alleviate the concern that our results could be sensitive to the inclusion of outlier countries, we investigate the association between exposure to serious terrorist attacks and trust in institutions using different samples to ensure the robustness of the results. In Table A14, we include only those countries that suffered at least one serious terrorist attack in our sample. In Tables A15 and A16, we drop countries that suffered most serious attacks and casualties, respectively. In Table A17, we exclude non-European Union member countries from the analysis. To ensure that our results are not driven due to any specific country, we drop each country from the analysis, one at a time, and estimate our benchmark model.[16] None of these exercises alter our main findings.

5.2.5 Potential Threat of Identification Strategy

Finally, we must acknowledge a potential threat to our identification strategy. It is quite possible that certain actions by the political and legal institutions (for instance, an act of police

[14] We thank an anonymous reviewer for this important suggestion.
[15] Results remain unchanged when we use different values of N reported in Table 5 (Tables A10 – A12).
[16] These results have been omitted from the paper to save space but can be obtained from the authors on request.

brutality) might both cause a decline in trust in institutions and propel an act of terror.[17] If that is the case, then our estimates can potentially be biased. Although such a possibility cannot entirely be eliminated, it is highly unlikely that our results would be significantly biased due to this possibility for the reasons discussed below.

First, we use several terrorist attacks occurring in 32 countries over two decades, therefore, if a few attacks were motivated by such possibilities, the average effect that we observe would not be impacted significantly. Second, we use successful attacks in our analysis, and one might argue that the governments and law and order might be extra cautious after an event or policy that could cause dissatisfaction among the citizens, prompting them to carry out an act of terror. Therefore, while non-zero, the likelihood of such attacks to be successful would be lower. Third and more importantly, as reported in Panel B of Table 5, we do not observe a significant association between future terrorist attacks and trust in institutions. If the policies and/or actions of the political and legal institution were responsible for both a decline in trust in these institutions and terror attacks, then one should observe a significant association between terrorist attacks and trust in institutions shortly after such actions or policies take place and even before terrorist attacks occur. Thus, while the bias induced by such a possibility cannot entirely be eliminated, it is highly unlikely.

5.3 Past Experience with Terrorist Attacks

Could the association between exposure to terrorism and trust in institutions be biased due to the omission of the country's experience with past terrorist attacks? To address this concern, we augment the baseline econometric specification reported in Equation (1) by including the number of serious terrorist attacks in the last three years (Table A19). We find that the main results remain unchanged. Moreover, the association between exposure to terrorism and trust in institutions remains robust when we control for the total number of terrorist attacks in the last three years rather than only serious attacks (Tables A20).

It is possible that residents of countries with frequent terrorist attacks might have developed a tolerance for terrorism, affecting their reaction to terrorism. If that were the case, then one can expect that residents of countries that experienced more terrorist activities in the past report that their trust in institutions is impacted less after they are exposed to terrorism. However, as we can

[17] We thank an anonymous reviewer for bringing this important issue to our attention.

see in Table 6, this is not the case. The coefficient of the interaction term between exposure to terrorism and the number of serious terrorist attacks is statistically insignificant in each of the seven columns in Panel A. These results suggest that even in countries where terrorist attacks are common, individuals' exposure to serious terrorist attacks leads to a decline in the trust in various national and international institutions. In Panel B of Table 6, rather than serious terrorist attacks, we include the country's experience with total terrorist attacks. The results remain unchanged: although the interaction terms are statistically significant in columns 2 and 6, they are negative and very small. The number of attacks is also not significantly associated with trust in institutions, further suggesting that it is the most recent exposure to terrorist attacks that matter for trust in institutions and not the total occurrences of such attacks.

6. The Quality of Governance and Existing Levels of Trust Matter

The results presented so far depict a robust, strong negative association between exposure to serious terrorist attacks and trust in institutions. Given the importance of trust and institutions in the economic development of countries (Algan and Cahuc, 2014), it is crucial to understand what policymakers can do to minimize the effects of terrorist activities on trust in institutions in their countries. Importantly, experimental studies have shown that institutions can play crucial roles in restoring trust and promoting reconciliation between ethnic groups in societies that have experienced ethnic violence (Whitt, 2010; Mironava and Whitt, 2015). Therefore, in this section, we present results that can help devise policy actions towards this objective. Specifically, we explore whether the existing levels of trust and the quality of governance mitigate the adverse effects of terrorist attacks on trust in institutions.

We hypothesize that in countries with higher levels of trust in institutions and better governance, terrorism would have smaller effects on citizens' trust in institutions. To investigate these hypotheses, we utilize two different sources of data. The first is the ESS data, which is our primary source of data for individual-level trust variables and other individual attributes. Utilizing this data, we create country-level indexes of trust in each institution, using responses from the previous wave of the survey for every country as the weighted average of the trust variable as defined in the Data section. We interact this country-level trust index in each institution with the exposure to serious terrorist attacks to assess whether the existing levels of trust mediate the effects of terrorism on institutions.

Besides utilizing the ESS, we also use an external data source. To examine whether a country's existing governance quality influences the magnitude of the impact of terrorism on one's confidence in institutions, we utilize the World Governance Indicators (WGI) from the World Bank. The WGI provides aggregate indicators of six broad dimensions of governance: Voice and Accountability (VA), Political Stability and Absence of Violence/Terrorism (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC). We explore the effects of each of these six indicators in determining the effects of terrorism on trust in institutions.[18]

To explore these hypotheses, we estimate the following versions of equation (1) that have been augmented with an interaction term between existing levels of trust and governance quality:

$$Trust_{irct} = \alpha + \gamma_1 Exposure_{irc(t-n)} + \gamma_2 Country\_Trust_{c(t-1)} + \gamma_3 Exposure_{irc(t-n)} * Country\_Trust_{c(t-1)} + X_{irct}\delta + K_{ct}\eta + \mu_{rc} + \lambda_d + \lambda_m + \lambda_y + \varepsilon_{irct} \quad (2)$$

$$Trust_{irct} = \alpha + \pi_1 Exposure_{irc(t-n)} + \pi_2 Governance_{ct} + \pi_3 Exposure_{irc(t-n)} * Governance_{ct} + X_{irct}\delta + K_{ct}\eta + \mu_{rc} + \lambda_d + \lambda_m + \lambda_y + \varepsilon_{irct} \quad (3)$$

where *i, r, c,* and *t* denote individual, region, country, and year, respectively. In equation 2, $Country\_Trust_{c(t-1)}$ denotes country-level trust averages in the previous wave of the survey for each of the seven institutions we study in this paper. In equation 3, $Governance_{ct}$ stands for each of the six WGI indicators. The rest of the notations carry the same interpretations as in Equation (1), indicating that we control for individual and household attributes, country characteristics, and time and region dummies.

Our focus here is on existing trust levels and various governance indicators included in the WGI. As per our hypotheses, we expect γ_3 and π_3 to be positive, showing the positive effects of trust and governance quality, respectively, on the impact of exposure to terrorist activities on trust in institutions. For these exercises, we report the results for exposure within 90 days prior to interview because the effects are found to be largest for that period in the previous section.[19]

[18] The WGIs are created using over 30 individual data sources generated by a variety of survey institutes, think tanks, non-governmental organizations, international organizations, and private sector firms. (http://info.worldbank.org/governance/wgi/#home)

[19] However, the results remain unchanged if we use *n = 30 and 60 days*.

6.1 Role of Existing Trust Levels

Table 7 reports the results of the empirical specification presented in Equation (2). Consistent with our hypotheses, while the coefficient of the exposure to serious terrorist attacks is negative, the coefficient of the interaction term is positive and statistically significant at the conventional levels in each column. These estimates therefore indicate that while exposure to terrorism is negatively associated with trust in each of the seven institutions, the effects become smaller as the level of trust in the corresponding institution rises.

The relative magnitude of these coefficients suggests that if the existing level of trust in an institution (measured in the previous survey) is high enough in a country, then serious terrorist attacks may not have an adverse effect on trust in that institution. Consider, for instance, Switzerland, which has the highest level of trust in parliament, with the weighted average being 0.823 (see Table A1 in the Online Appendix). The coefficients in the first two rows indicate that exposure to serious terrorist activities in Switzerland would have no significant negative effects on trust in parliament in the country. The same is true for trust in politicians and political parties in Denmark, for trust in the legal system in Denmark, for trust in the European Parliament in Iceland, and for trust in the United Nations in Norway. Only the coefficient of trust in the police does not turn out to be non-negative, even for the country with the most trust in the police. These results suggest that building trust in institutions is crucial during bad times.

6.2 Role of Governance Quality

The Worldwide Governance Indicators (WGI) provides a method of comparison of governance across countries and over time. Governance is defined as traditions and institutions that govern the exercise of authority in a country. The WGI provides six governance indicators that capture the robustness of institutions in different dimensions. The Voice and Accountability index reflects the citizens' roles in selecting their government, the freedom of expression and association they enjoy, and media freedom. The Political Stability and Absence of Violence/Terrorism index reflects the probability of political instability and/or violence caused due to political motivations, including terrorism. The Government Effectiveness Index focuses on the quality of public and civil services, the extent of civil services' independence from political pressures, and the quality of policy formulation and implementation. The ability of the government to develop and implement policies

and regulations to promote the development of the private sector is captured by the Regulatory Quality Index. The Rule of Law index is constructed based on agents' confidence in the rules of society, contract enforcement, property rights, the police, and the courts, as well as the prevalence of crime and violence. Finally, the Control of Corruption index reflects the abuse of public power for private gain and the "capture" of the state by elites and private interests. Higher values for each of these indicators reflect better governance quality. Clearly, therefore, in countries with better governance indicators, residents have more confidence in the institutions of their country. Hence, in these countries, residents are more likely to side with the authorities during crises, including the occurrences of terrorist activities. Therefore, we hypothesize that the adverse impact of terrorist attacks on trust in institutions gets weaker with improvements in governance quality.

In Table 8, we present the estimation results of the specification given in equation 3. Our main coefficient of interest is the interaction term between exposure to terrorism and the governance indicators, which is expected to be positive. Each of the six panels of Table 8 presents the results of six WGI indicators. Consistent with the hypothesis, we find that the coefficient of the interaction term is negative and statistically significant at conventional levels in all columns in each of the six panels. The positive coefficients on the interaction terms support our hypothesis that the adverse effect of exposure to violence is significantly lower in countries with better governance indicators. Interestingly, the governance indicators themselves are not systematically and robustly associated with trust in various institutions. A potential reason behind the insignificance of these associations could be the invariability of these governance indicators in the short term: there might not be enough variation to capture their effects on trust in institutions.

7. Conclusion

Despite their important roles in the economic growth and development of countries, the effects of terrorism on trust in different legal and political institutions, to the best of our knowledge, have not been studied before. We bridge this gap in the literature by proposing the accountability effect, suggesting citizens hold political and legal institutions accountable for preventing terrorist attacks and lose trust in these institutions for failing to prevent them. We test our hypothesis by studying the causal impact of serious terrorist attacks on self-reported trust in institutions using responses from over 350,000 individuals from 32 European Union member countries. Our findings show that exposure to terrorism leads to significant declines in trust in all seven institutions that

we study: the country's parliament, legal system, police, politicians, political parties, the European Parliament, and the United Nations. These associations remain significant to various robustness checks, and falsification tests show that these relationships are unlikely to be driven by any unobserved omitted factors. We also find that these effects are relatively short-lived and disappear after about 6 months of exposure to serious terrorist attacks. We further show that the effects are smaller in countries with higher levels of trust in these institutions, and exposure to terrorist activities has no adverse effects on trust in an institution (except for the police) if the existing level of trust (measured in the last round of survey) in the country is high enough. However, there are very few countries with such high levels of trust, and the average country experiences significant adverse effects. Finally, we show that the existence of good governance can mitigate the adverse effects of exposure to terrorism on trust in institutions.

Our results are consistent with the arguments of Kertzer and Zeitzoff (2017), who find elite cue-taking models in International Relations overly pessimistic and unnecessarily restrictive. Unlike many studies which contend that public opinion on war, terrorism, and foreign policy issues is driven from the top down (for instance, Berinsky, 2009), implying that the public has limited ability to constrain its leaders as predicted by the audience cost theory (Fearon, 1994; Levendusky and Horowitz, 2012), Kertzer and Zeitzoff (2017) show that social cues are crucial in shaping public opinion on both international affairs and security policy. The implication of this bottom-up theory of public opinion, in our context, suggests that the loss of trust in institutions of those exposed to terrorist attacks can spill over to those not exposed to such attacks and has the potential to influence their trust in and opinion of the quality of the institutions. Consequently, frequent terrorist attacks can not only influence electoral outcomes but also weaken democracy as the public loses trust in institutions such as national parliaments, political parties and leaders, judiciary, and the police.

We note that the accountability effect proposed by us does not contradict the rally effect observed by earlier studies. In fact, the two effects might be observed simultaneously. Moreover, while the rally effect refers to a sudden and immediate effect following terrorist attacks, accountability effect goes beyond the immediate effect and cab be observed up to 8 months after successful serious attacks. The accountability effect also accounts for the dynamism of the terrorism-trust association by utilizing several terrorist attacks occurring over a long period. We contend that, due to these differences, our results have different implications than studies on the

rally effect. For instance, while rally effects tend to be transitory and centered around the government and electoral outcomes, accountability effect can linger much longer and can have persistent serious consequences for trust in the efficacy of political and legal institutions.

Our findings have important implications since trust and institutions play an important role in the economic growth and development of a country (Algan and Cahuc, 2014). Furthermore, our analysis reveals that the impact of terrorist attacks on trust in institutions does not diminish with subsequent occurrences, suggesting that the cumulative effect of frequent acts of terrorism can inflict lasting damage to institutional trust. This persistence in declining trust underscores the potentially severe consequences for both a nation and its inhabitants. Our findings shed light on an additional mechanism through which terrorism exerts a detrimental impact on economic activities: diminishing trust in institutions. Future studies can formally test this mechanism. In addition, our findings also underscore the critical role of good governance in a country by highlighting its importance in mitigating the adverse effects of terrorism on trust in institutions. Altogether, our findings provide another reason for governments and international agencies to enhance their efforts in combating terrorism, particularly in light of the persistently high occurrence of terror attacks compared to previous decades. Lastly, it is worth mentioning that studies using different outcomes involving different attitude objects (e.g., immigrants, institutions, government, political parties) report conflicting results using various samples and methodologies. A meta-analysis of the effects of terrorist attacks on these different yet related outcomes summarizing and emphasizing cumulative knowledge building will be an important addition to the literature.

References

Abadie, A., & Gardeazabal, J. (2008). Terrorism and the world economy. *European Economic Review*, 52(1), 1-27.

Ahern, K. R. (2018). *The importance of psychology in economic activity: Evidence from terrorist attacks* (No. w24331). National Bureau of Economic Research.

Akay, A., Bargain, O., & Elsayed, A. (2018). Everybody's a Victim? Global Terror, Well-Being and Political Attitudes. *University of Gothenburg Working Paper No. 733.*

Algan, Y., & Cahuc, P. (2014). Trust, growth, and well-being: New evidence and policy implications. In *Handbook of Economic Growth* (Vol. 2, pp. 49-120). Elsevier.

Åslund, O., & Rooth, D. O. (2005). Shifts in attitudes and labor market discrimination: Swedish experiences after 9-11. *Journal of Population Economics*, *18*, 603-629.

Bali, V. A. (2007). Terror and elections: Lessons from Spain. *Electoral Studies*, 26(3), 669-687.

Barro, R. J. (1973). The control of politicians: an economic model. *Public Choice*, 14, 19-42.

Benjamini, Y., & Yekutieli, D. (2001). The control of the false discovery rate in multiple testing under dependency. *Annals of Statistics*, 1165-1188.

Berinsky, Adam J. 2009. In Time of War: Understanding American Public Opinion from World War II to Iraq. Chicago: University of Chicago Press.

Berrebi, C., & Klor, E. F. (2006). On terrorism and electoral outcomes: Theory and evidence from the Israeli-Palestinian conflict. *Journal of Conflict Resolution*, 50(6), 899-925.

Berrebi, C., & Klor, E. F. (2008). Are voters sensitive to terrorism? Direct evidence from the Israeli electorate. *American Political Science Review*, 102(03), 279-301.

Blomberg, S. B., Hess, G. D., & Orphanides, A. (2004). The macroeconomic consequences of terrorism. *Journal of Monetary Economics*, 51(5), 1007-1032.

Brodeur, A. (2018). "The effect of terrorism on employment and consumer sentiment: Evidence from successful and failed terror attacks." *American Economic Journal: Applied Economics* 10(4): 246-82.

Brodeur, A., & Wright, T. (2019). Terrorism, immigration and asylum approval. *Journal of Economic Behavior & Organization*, 168, 119-131.

Cassar, A., Grosjean, P., & Whitt, S. (2013). Legacies of violence: trust and market development. *Journal of Economic Growth*, 18, 285-318.

De Juan, A., & Pierskalla, J. H. (2016). Civil war violence and political trust: Microlevel evidence from Nepal. *Conflict Management and Peace Science*, 33(1), 67-88.

Devos, T., Spini, D., & Schwartz, S. H. (2002). Conflicts among human values and trust in institutions. *British Journal of Social Psychology*, 41(4), 481-494.

Dinesen, P. T., & Jæger, M. M. (2013). The effect of terror on institutional trust: new evidence from the 3/11 Madrid terrorist attack. *Political Psychology*, 34(6), 917-926.

Drakos, K., & Kutan, A. M. (2003). Regional effects of terrorism on tourism in three Mediterranean countries. *Journal of Conflict Resolution*, 47(5), 621-641.

Eichenberg, R. C., Stoll, R. J., & Lebo, M. (2006). War president: The approval ratings of George W. Bush. *Journal of Conflict Resolution*, 50(6), 783-808.

European Social Survey Cumulative File, ESS 1-9 (2020). Data file edition 1.0. Sikt - Norwegian Agency for Shared Services in Education and Research, Norway, Norway - Data Archive and distributor of ESS data for ESS ERIC. doi:10.21338/NSD-ESS-CUMULATIVE.

Fearon, J. D. (1994). Domestic political audiences and the escalation of international disputes. *American Political Science Review*, *88*(3), 577-592.

Ferejohn, J. (1986). Incumbent performance and electoral control. *Public Choice*, 50, 5-25.

Gartner, S. S., & Segura, G. M. (1998). War, casualties, and public opinion. *Journal of Conflict Resolution*, 42(3), 278-300.

Gassebner, M., Jong-A-Pin, R., & Mierau, J. O. (2008). Terrorism and electoral accountability: One strike, you're out! *Economics Letters*, *100*(1), 126-129.

Gassebner, M., Jong-A-Pin, R., & Mierau, J. O. (2011). Terrorism and cabinet duration. *International Economic Review*, 52(4), 1253-1270.

Godefroidt, A. (2023). How terrorism does (and does not) affect citizens' political attitudes: a meta-analysis. *American Journal of Political Science*, 67(1), 22-38.

Godefroidt, A., & Langer, A. (2020). How fear drives us apart: Explaining the relationship between terrorism and social trust. *Terrorism and Political Violence*, 32(7), 1482-1505.

Grosjean, P. (2014). Conflict and social and political preferences: Evidence from World War II and civil conflict in 35 European countries. *Comparative Economic Studies*, 56(3), 424-451.

Hetherington, M. J., & Rudolph, T. J. (2008). Priming, performance, and the dynamics of political trust. *Journal of Politics*, 70(2), 498-512.

Hetherington, M. J., & Rudolph, T. J. (2020). *Why Washington won't work: Polarization, political trust, and the governing crisis.* University of Chicago Press.

Hetherington, M. J., and Rudolph, T. J. (2018). Political Trust and Polarization, in Eric M. Uslaner (ed.), *The Oxford Handbook of Social and Political Trust*, Oxford Handbooks.

Hochberg, Y. (1988). A sharper Bonferroni procedure for multiple tests of significance. *Biometrika*, 75: 800–802.

Hutchison, M. L. (2014). Tolerating threat? The independent effects of civil conflict on domestic political tolerance. *Journal of Conflict Resolution*, 58(5), 796-824.

Jha, C. K., Panda, B., & Sahu, S. K. (2022). Institutions and conflict. *Economic Modelling*, 113, 105894.

Karol, D., & Miguel, E. (2007). The electoral cost of war: Iraq casualties and the 2004 US presidential election. *Journal of Politics*, 69(3), 633-648.

Kertzer, J. D., & Zeitzoff, T. (2017). A bottom-up theory of public opinion about foreign policy. *American Journal of Political Science*, *61*(3), 543-558.

Levendusky, M. S., & Horowitz, M. C. (2012). When backing down is the right decision: Partisanship, new information, and audience costs. *Journal of Politics*, *74*(2), 323-338.

Mironova, V., & Whitt, S. (2017). International peacekeeping and positive peace: Evidence from Kosovo. *Journal of Conflict Resolution*, 61(10), 2074-2104.

Montalvo, J. G. (2011). Voting after the bombings: A natural experiment on the effect of terrorist attacks on democratic elections. *Review of Economics and Statistics*, 93(4), 1146-1154.

Mueller, J. E. (1973). *War, presidents, and public opinion*. New York: John Wiley & Sons.

National Consortium for the Study of Terrorism and Responses to Terrorism (START). (2016). Global Terrorism Database [Data file]. Retrieved from https://www.start.umd.edu/gtd

Newson, R. B. (2003). Multiple-test procedures and smile plots. *The Stata Journal*, 3(2), 109-132.

Newson, R. B. (2010). Frequentist q-values for multiple-test procedures. *The Stata Journal*, 10(4), 568-584.

Nickelsburg, M., & Norpoth, H. (2000). Commander-in-chief or chief economist? The president in the eye of the public. *Electoral Studies*, 19(2-3), 313-332.

Peffley, M., Hutchison, M. L., & Shamir, M. (2022). Terrorism and Political Tolerance toward "Fellow Travelers". *Journal of Conflict Resolution*, 66(7-8), 1208-1234.

Peri, G., Rees, D. I., & Smith, B. (2020). Terrorism, Political Opinions, and Election Outcomes: Evidence from Europe. *IZA Discussion Paper* No. 13090.

Peri, G., Rees, D. I., & Smith, B. (2023). Terrorism and political attitudes: Evidence from European social surveys. *Regional Science and Urban Economics*, 99, 103864.

Perrin, A. J., & Smolek, S. J. (2009). Who trusts? Race, gender, and the September 11 rally effect among young adults. *Social Science Research*, 38(1), 134-145.

Rabby, F., & Rodgers iii, W. M. (2010). The Impact of 9/11 and the London Bombings on the Employment and Earnings of UK Muslims.

Ratcliffe, A., & von Hinke Kessler Scholder, S. (2015). The London bombings and racial prejudice: Evidence from the housing and labor market. *Economic Inquiry*, *53*(1), 276-293.

Sangnier, M., & Zylberberg, Y. (2017). Protests and trust in the state: Evidence from African countries. *Journal of Public Economics*, 152, 55-67.

Simes, R. J. (1986). An improved Bonferroni procedure for multiple tests of significance. *Biometrika*, 73: 751–754.

Skocpol, T. (2002). Will 9/11 and the war on terror revitalize American civic democracy? PS: *Political Science & Politics*, 35(3), 537-540.

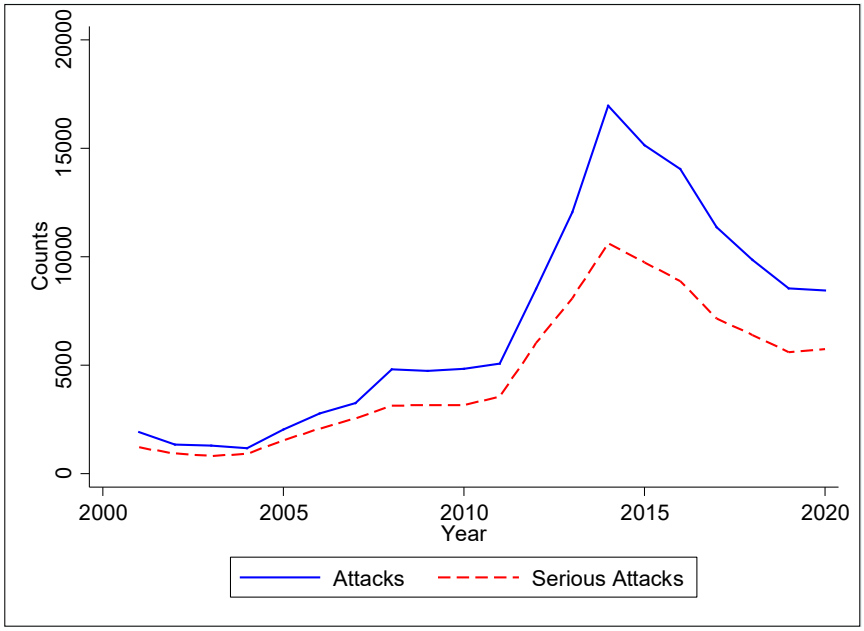
Tripathi, I. (2022). Are terrorists responsible for anti-immigrant sentiments? Evidence from Europe. *Economic Modelling*, 115, 105959.

Turkoglu, O., & Chadefaux, T. (2023). The effect of terrorist attacks on attitudes and its duration. *Political Science Research and Methods*, *11*(4), 893-902.

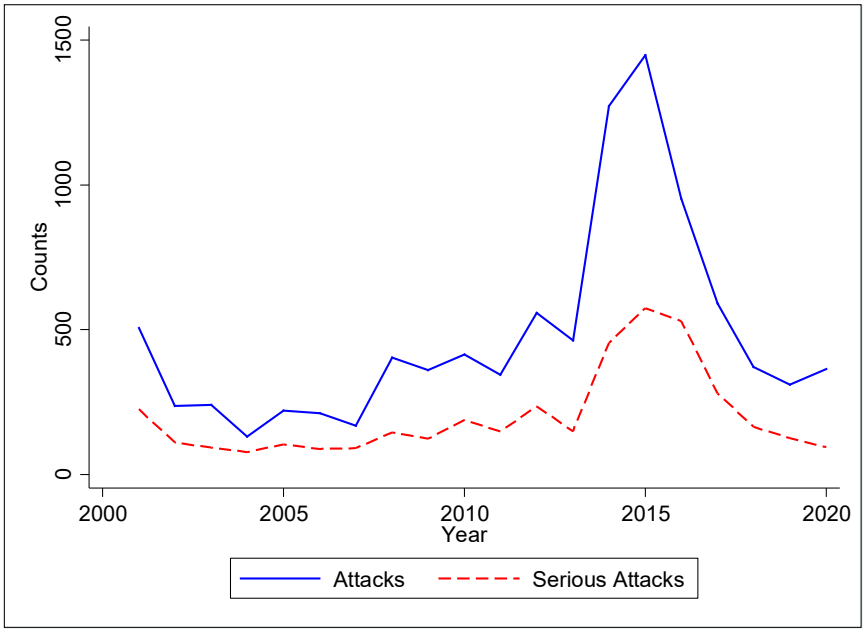
Valentino, B. A., Huth, P. K., & Croco, S. E. (2010). Bear any burden? How democracies minimize the costs of war. *Journal of Politics*, 72(2), 528-544.

Whitt, S. (2010). Institutions and ethnic trust: Evidence from Bosnia. *Europe-Asia Studies*, 62(2), 271-292.

Figure 1: Total number of attacks and serious attacks from 2000-2020



(A) World



(B) Europe

Notes: Serious attacks are defined as attacks with at least one human casualty or injury. Data taken from Global Terrorism Database (GTD).

Table 1: Descriptive Statistics

Variables	Mean	Std. Dev.	N
Trust in institutions [a]			
Parliament	0.539	0.499	376,755
Legal system	0.631	0.482	377,165
Police	0.765	0.424	381,838
Politicians	0.396	0.489	379,431
Political parties	0.386	0.487	341,759
European parliament	0.561	0.496	351,638
United Nations	0.674	0.469	352,328
Individual Attributes [a]			
Age	47.972	18.304	352,328
Female	0.521	0.5	352,328
Marital Status			
Married	0.517	0.5	352,328
Single	0.259	0.438	352,328
Other (Widowed, Divorced, Separated)	0.215	0.411	352,328
Household size			
Small (3 or less)	0.721	0.449	352,328
Large (more than 4)	0.279	0.449	352,328
Main activity in last 7 days			
Working (paid work)	0.51	0.5	352,328
Student	0.084	0.277	352,328
Unemployed	0.038	0.192	352,328
Retired	0.235	0.424	352,328
Disabled, Military, Household work, not in labor force, other	0.132	0.339	352,328
Level of education			
High education (Tertiary, Post-secondary, Upper secondary)	0.726	0.446	352,328
Low (Primary, Lower secondary)	0.272	0.445	352,328
Religion			
No denomination	0.335	0.472	352,328
Christianity	0.561	0.496	352,328
Islam, Judaism, Eastern religions, other non-Christian religions	0.033	0.18	352,328
Area of living			
Urban (city, town)	0.514	0.5	352,328
Rural (suburb, village, farm)	0.486	0.5	352,328

Table 1 *Continued*

Variables	Mean	Std. Dev.	N
Terrorism information [b]			
Exposed to serious attacks in last 30 days	0.085	0.279	352,328
Exposed to serious attacks in last 60 days	0.134	0.341	352,328
Exposed to serious attacks in last 90 days	0.163	0.369	352,328
Exposed to serious attacks in last 120 days	0.185	0.388	352,328
Exposed to serious attacks in last 150 days	0.209	0.406	352,328
Exposed to serious attacks in last 180 days	0.231	0.422	352,328
Exposed to serious attacks in last 210 days	0.255	0.436	352,328
Exposed to serious attacks in last 240 days	0.279	0.448	352,328
Exposed to serious attacks in last 270 days	0.303	0.459	352,328
Exposed to serious attacks in last 300 days	0.325	0.468	352,328
Country level attributes [c]			
GDP per capita (in 10,000 USD)	4.319	1.49	347
Population (in million)	20.881	24.555	347
Unemployment rate (ILO definition)	7.551	3.588	347
Governance indicators (Percentile Rank) [d]			
Voice and Accountability	1.229	0.369	329
Political Stability and Absence of Violence/Terrorism	0.825	0.444	329
Government Effectiveness	1.345	0.603	329
Regulatory Quality	1.318	0.47	329
Rule of Law	1.334	0.616	329
Control of Corruption	1.337	0.783	329

The statistics above reflect our research sample from 32 European countries from 2002 to 2022.

[a] European Social Survey (http://www.europeansocialsurvey.org/data/)

[b] Global Terrorism Database (https://www.start.umd.edu/gtd/)

[c] World Development Indicators (https://datacatalog.worldbank.org/dataset/world-development-indicators)

[d] Worldwide Governance Indicators (http://info.worldbank.org/governance/wgi/#home)

Table 2: Exposure to terrorism related violence and trust in institutions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.028***	-0.023***	-0.021***	-0.029***	-0.022***	-0.026***	-0.022***
	(0.008)	(0.007)	(0.006)	(0.007)	(0.006)	(0.008)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.031***	-0.029***	-0.030***	-0.027***	-0.019***	-0.026***	-0.027***
	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.009)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.030***	-0.032***	-0.033***	-0.029***	-0.021***	-0.026***	-0.024***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.025***	-0.028***	-0.031***	-0.027***	-0.016**	-0.023**	-0.021***
	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 150 days prior to survey	-0.024***	-0.028***	-0.031***	-0.026***	-0.015**	-0.023***	-0.023***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.019**	-0.021***	-0.025***	-0.021***	-0.013*	-0.022***	-0.020***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 210 days prior to survey	-0.017**	-0.019**	-0.023***	-0.019**	-0.012*	-0.022***	-0.020***
	(0.008)	(0.007)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 240 days prior to survey	-0.014*	-0.015**	-0.023***	-0.015**	-0.008	-0.018**	-0.016**
	(0.008)	(0.007)	(0.006)	(0.007)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 270 days prior to survey	-0.012*	-0.009	-0.018***	-0.016**	-0.007	-0.015*	-0.015**
	(0.007)	(0.006)	(0.005)	(0.007)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 300 days prior to survey	-0.007	-0.004	-0.014***	-0.010	-0.004	-0.008	-0.012**
	(0.006)	(0.006)	(0.005)	(0.007)	(0.006)	(0.008)	(0.006)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.539	0.631	0.765	0.396	0.386	0.561	0.674

This table shows that the exposure to serious terrorist attacks leads to a decline in trust in various institutions. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table 3: Exposure to terrorism related violence and trust in institutions: Accounting for the potential correlation between dependent variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Panel A: Estimates from Seemingly Unrelated Regression (SUR)							
Exposure to serious attacks	-0.024***	-0.027***	-0.026***	-0.024***	-0.019***	-0.020***	-0.018***
90 days prior to survey	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Observations	304,536	304,536	304,536	304,536	304,536	304,536	304,536
Dependent Variable Mean	0.146	0.151	0.137	0.136	0.142	0.061	0.078
Panel B: Accounting for Multiple Inferences: Inferences using Simes and Hochberg Corrected Standard Errors							
p-value as reported in Table 2	0.00046	0.00006	0.00002	0.0002	0.00214	0.00388	0.00021
Simes corrected standard errors	0.00064	0.00022	0.00015	0.00037	0.0025	0.00388	0.00037
Hochberg corrected standard errors	0.00138	0.00037	0.00015	0.00084	0.00388	0.00388	0.00084

This Table shows that the association between exposure to serious terrorist attacks and trust in institutions is robust to accounting for correlated errors in regression equations due to the dependent variable being correlated. In Panel A, we report the estimates form SUR. In panel B, we provide *p-values* derived from Simes and Hochberg Corrected Standard Errors for exposure to terrorist attacks 90 days before survey to check for the robustness to adjustments for multiple inference for the set of seven outcomes using the false discovery rate control (Newson, 2010; Newson, 2003). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *90* days prior to being interviewed. Other control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table 4: Exposure to terrorism related violence and trust in institutions: Controlling for the respondents' placement on the left-right scale

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks	-0.024***	-0.022***	-0.018***	-0.024***	-0.018***	-0.022***	-0.020***
30 days prior to survey	(0.008)	(0.007)	(0.006)	(0.007)	(0.007)	(0.008)	(0.006)
Placement on left-right scale	0.013***	0.008***	0.009***	0.012***	0.011***	0.007***	0.006***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)
Exposure to serious attacks	-0.027***	-0.027***	-0.027***	-0.022***	-0.014**	-0.021**	-0.024***
60 days prior to survey	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.009)	(0.006)
Placement on left-right scale	0.013***	0.008***	0.009***	0.012***	0.011***	0.007***	0.006***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)
Exposure to serious attacks	-0.026***	-0.030***	-0.029***	-0.024***	-0.017**	-0.021**	-0.021***
90 days prior to survey	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.008)	(0.006)
Placement on left-right scale	0.013***	0.008***	0.009***	0.012***	0.011***	0.007***	0.006***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)
Exposure to serious attacks	-0.021**	-0.026***	-0.028***	-0.023***	-0.012*	-0.019**	-0.019***
120 days prior to survey	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.009)	(0.006)
Placement on left-right scale	0.013***	0.008***	0.009***	0.012***	0.011***	0.007***	0.006***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)
Exposure to serious attacks	-0.020**	-0.026***	-0.028***	-0.023***	-0.011	-0.020**	-0.021***
150 days prior to survey	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Placement on left-right scale	0.013***	0.008***	0.009***	0.012***	0.011***	0.007***	0.006***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)
Exposure to serious attacks	-0.017**	-0.020***	-0.023***	-0.019**	-0.010	-0.019**	-0.019***
180 days prior to survey	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Placement on left-right scale	0.013***	0.008***	0.009***	0.012***	0.011***	0.007***	0.006***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.003)	(0.002)
Observations	330,640	330,607	333,144	332,192	299,389	312,375	314,154
Dependent Variable Mean	0.560	0.649	0.780	0.415	0.406	0.572	0.690

This table shows that the exposure to serious terrorist attacks leads to a decline in trust in various institutions even after controlling for individual's placement on the left-right scale. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Respondents place themselves on the left-right scale with 0 representing the left and 10 representing the right. Other control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table 5: Exposure to Terrorist Related Violence and Trust in Institutions: Robustness Checks

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Panel A: Exposure to terrorism related violence in neighboring countries and trust in institutions							
Exposure to serious attacks in neighboring countries 90 days prior to survey	0.002	0.004	0.005	0.001	-0.004	0.009	0.008
	(0.010)	(0.009)	(0.007)	(0.010)	(0.010)	(0.011)	(0.006)
Observations	315,466	315,676	319,731	317,788	283,385	294,105	295,051
Dependent Variable Mean	0.541	0.632	0.766	0.403	0.392	0.573	0.683
Panel B: Exposure to future terrorist attacks and trust in institutions							
Exposure to serious attacks 90 days after survey date	-0.001	0.003	-0.010**	-0.005	-0.001	0.008	0.000
	(0.006)	(0.006)	(0.004)	(0.006)	(0.006)	(0.008)	(0.005)
Observations	304,536	304,536	304,536	304,536	304,536	304,536	304,536
Dependent Variable Mean	0.539	0.635	0.766	0.398	0.395	0.559	0.668
Panel C: Exposure to terrorism related violence and trust in others							
	Most people can be trusted	**People are fair**	**People are helpful**				
Exposure to serious attacks 90 days after survey date	-0.002	-0.014	-0.006				
	(0.030)	(0.024)	(0.026)				
Observations	385,674	347,889	349,023				
Dependent Variable Mean	5.032	5.584	4.865				

Panel A: The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks occurring in a border-sharing neighboring countries *n* days prior to being interviewed. Results indicate that serious terrorist attacks in neighboring countries have no effect on trust in institutions.

Panel B: The explanatory variable is an indicator variable that takes the value 1 if *serious* terrorist attacks occur *n* days after an individual is interviewed. Results show no significant association between future serious terrorist attacks and trust in institutions.

Panel C: The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Variables are constructed from the following survey questions: *(1) Most people can be trusted or you can't be too careful: 0 (You can't be too careful) to 10 (Most people can be trusted); (2) Most people try to take advantage of you, or try to be fair: 0 (Most people try to take advantage of me) to 10 (Most people try to be fair); (3) Most of the time people are helpful or mostly looking out for themselves: 0 (People mostly look out for themselves) to 10 (People mostly try to be helpful)*. Results show no significant association between exposure to serious terrorist attacks and trust in others.

Panels A, B, & C: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the estimates from a separate regression. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table 6: Exposure to terrorism related violence and trust in institutions: Experience with terrorism

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Panel A: Interacted with total number of serious attacks in last 3 years							
Exposure to serious attacks	-0.030***	-0.029***	-0.029***	-0.026***	-0.019**	-0.025**	-0.021***
90 days prior to survey	(0.010)	(0.009)	(0.008)	(0.009)	(0.008)	(0.010)	(0.007)
Exposure to serious attacks	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
90 days prior to survey * Total serious attacks	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Total serious attacks	-0.000	0.000	-0.000*	0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)
Panel B: Interacted with total attacks in last 3 years							
Exposure to serious attacks	-0.024**	-0.023**	-0.026***	-0.023**	-0.017**	-0.013	-0.016***
90 days prior to survey	(0.010)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.006)
Exposure to serious attacks	-0.000	-0.000**	0.000	-0.000	-0.000	-0.000***	-0.000
90 days prior to survey * Total Attacks	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Total attacks	-0.000	0.000	-0.000***	-0.000	-0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.539	0.631	0.765	0.396	0.386	0.561	0.674

Results presented in this Table indicate that the experience with terrorist attacks does not attenuate the negative association between exposure to terrorist attacks and trust in institutions. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table 7: Exposure to terrorism related violence and trust in institutions: Role of existing trust level

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure90	-0.082***	-0.071***	-0.061***	-0.062***	-0.038***	-0.077***	-0.049***
	(0.014)	(0.014)	(0.015)	(0.012)	(0.011)	(0.017)	(0.012)
Exposure90* Trust in Parliament	0.129***						
	(0.024)						
Trust in Parliament	-0.044***						
	(0.015)						
Exposure90* Trust in Legal System		0.083***					
		(0.021)					
Trust in Legal System		-0.012					
		(0.009)					
Exposure90* Trust in Police			0.057***				
			(0.018)				
Trust in Police			-0.004				
			(0.009)				
Exposure90* Trust in Politicians				0.111***			
				(0.030)			
Trust in Politicians				-0.031			
				(0.020)			
Exposure90* Trust in Political Parties					0.061**		
					(0.027)		
Trust in Political Parties					-0.014		
					(0.014)		
Exposure90* Trust in European Parliament						0.133***	
						(0.033)	
Trust in European Parliament						-0.016	
						(0.019)	
Exposure90* Trust in United Nations							0.056***
							(0.018)
Trust in United Nations							-0.025***
							(0.008)
Observations	354,017	354,324	358,591	356,373	341,759	331,595	331,262
Dependent Variable Mean	0.532	0.630	0.764	0.390	0.386	0.559	0.669

This Table shows that higher existing levels of trust in institutions diminish the adverse effects of terrorist attacks on trust in institutions. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable *(Exposure90)* is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks within *90* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table 8: Exposure to terrorism related violence and trust in institutions: The role of governance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Panel A: Voice and Accountability							
Exposure90	-0.158***	-0.121***	-0.090***	-0.130***	-0.120***	-0.153***	-0.092***
	(0.024)	(0.024)	(0.021)	(0.023)	(0.019)	(0.034)	(0.022)
Exposure90*	0.107***	0.074***	0.048***	0.086***	0.084***	0.103***	0.056***
Voice & Accountability	(0.017)	(0.018)	(0.015)	(0.018)	(0.015)	(0.025)	(0.016)
Voice & Accountability	0.053	0.006	-0.064	0.020	-0.028	0.103***	-0.007
	(0.042)	(0.035)	(0.039)	(0.044)	(0.044)	(0.039)	(0.023)
Panel B: Political Stability and Absence of Violence/Terrorism							
Exposure90	-0.064***	-0.063***	-0.042***	-0.061***	-0.058***	-0.079***	-0.052***
	(0.012)	(0.011)	(0.010)	(0.011)	(0.010)	(0.015)	(0.010)
Exposure90*	0.061***	0.054***	0.021*	0.061***	0.067***	0.084***	0.046***
Political Stability	(0.014)	(0.014)	(0.013)	(0.014)	(0.012)	(0.018)	(0.011)
Political Stability	-0.015	-0.012	0.026	-0.017	-0.019	-0.054**	-0.022
	(0.022)	(0.024)	(0.021)	(0.019)	(0.020)	(0.021)	(0.016)
Panel C: Government Effectiveness							
Exposure90	-0.108***	-0.086***	-0.063***	-0.089***	-0.083***	-0.110***	-0.072***
	(0.016)	(0.014)	(0.013)	(0.016)	(0.013)	(0.022)	(0.013)
Exposure90*	0.063***	0.043***	0.023***	0.050***	0.052***	0.066***	0.037***
Govt. Effectiveness	(0.010)	(0.009)	(0.009)	(0.011)	(0.009)	(0.014)	(0.008)
Govt. Effectiveness	0.003	-0.006	0.022	0.004	0.027	-0.071***	-0.057***
	(0.024)	(0.026)	(0.023)	(0.028)	(0.032)	(0.021)	(0.014)
Panel D: Regulatory Quality							
Exposure90	-0.101***	-0.078***	-0.072***	-0.085***	-0.078***	-0.105***	-0.073***
	(0.016)	(0.016)	(0.016)	(0.017)	(0.015)	(0.023)	(0.017)
Exposure90*	0.055***	0.035***	0.031***	0.045***	0.045***	0.059***	0.037***
Regulatory Quality	(0.010)	(0.011)	(0.011)	(0.012)	(0.011)	(0.014)	(0.011)
Regulatory Quality	0.115***	0.068**	-0.039	0.084*	0.086*	0.109***	0.010
	(0.038)	(0.031)	(0.026)	(0.045)	(0.044)	(0.035)	(0.017)

Table 8 *Continued*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Panel E: Rule of Law							
Exposure90	-0.111***	-0.086***	-0.072***	-0.089***	-0.083***	-0.103***	-0.071***
	(0.016)	(0.015)	(0.014)	(0.015)	(0.013)	(0.022)	(0.014)
Exposure90*	0.067***	0.044***	0.031***	0.050***	0.051***	0.060***	0.037***
Rule of Law	(0.010)	(0.009)	(0.009)	(0.010)	(0.008)	(0.014)	(0.009)
Rule of Law	0.125***	0.135***	0.086**	0.060	0.020	0.060	0.004
	(0.032)	(0.041)	(0.038)	(0.036)	(0.042)	(0.039)	(0.028)
Panel F: Control of Corruption							
Exposure90	-0.088***	-0.069***	-0.064***	-0.073***	-0.065***	-0.093***	-0.064***
	(0.013)	(0.012)	(0.012)	(0.013)	(0.012)	(0.017)	(0.011)
Exposure90*	0.047***	0.030***	0.025***	0.037***	0.036***	0.053***	0.032***
Control of Corruption	(0.008)	(0.007)	(0.008)	(0.008)	(0.007)	(0.011)	(0.007)
Control of Corruption	0.112***	0.106***	0.041*	0.077**	0.087***	0.038	-0.007
	(0.028)	(0.024)	(0.022)	(0.032)	(0.031)	(0.033)	(0.028)
Observations	352,710	353,120	357,793	355,386	317,714	327,593	328,283
Mean of Dependent Variable	0.537	0.631	0.762	0.393	0.383	0.556	0.671

Results presented in this Table show that good governance attenuates the adverse effects of exposure to serious terrorist attacks on trust in institutions. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable *(Exposure90)* is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks within *90* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Terrorist Attacks and Trust in Institutions: Micro Evidence from Europe Online Appendix

Chandan Kumar Jha and Ishita Tripathi[20]

A1 Trust in institutions and occurrences of serious terrorist attacks across countries

Table A1 provides the average trust for the bottom three and the top three countries.[21] As can be seen, the level of trust in various institutions varies considerably across countries.

Table A1: Country averages of trust in different institutions

Country's Parliament		**Legal System**		**Police**	
Latvia	0.148	Bulgaria	0.231	Ukraine	0.240
Bulgaria	0.189	Ukraine	0.237	Bulgaria	0.412
Ukraine	0.244	Croatia	0.311	Romania	0.501
:		:		:	
Denmark	0.802	Finland	0.877	Iceland	0.934
Norway	0.806	Norway	0.883	Denmark	0.941
Switzerland	0.823	Denmark	0.904	Finland	0.959
Politicians		**Political Parties**		**European Parliament**	
Latvia	0.123	Latvia	0.117	United Kingdom	0.386
Bulgaria	0.138	Bulgaria	0.137	Croatia	0.435
Croatia	0.157	Croatia	0.160	Turkey	0.445
:		:		:	
Switzerland	0.684	Luxembourg	0.672	Luxembourg	0.670
Netherlands	0.693	Netherlands	0.711	Norway	0.695
Denmark	0.714	Denmark	0.728	Iceland	0.720
United Nations					
Turkey	0.422				
Greece	0.459				
Ukraine	0.470				
:					
Finland	0.858				
Iceland	0.881				
Norway	0.896				

Country-level averages are weighted averages of the individual responses, using both the population and design weight. For each variable, after arranging all 32 countries in ascending order, only the lowest three and the highest three are presented here.

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[21] The trust level for each country is calculated as the weighted average of individual responses. The ESS advises the use of both population and design weight while comparing the data for two or more countries and with reference to their averages. The combined weight is obtained by simply multiplying the two weights.

In Table A2, we provide the number of serious attacks and casualties citizens are exposed to by country.

Table A2: Exposure to serious attacks and casualties

Country	Number of Serious attacks	Country	Number of Casualties
Sweden	2	Sweden	4
Norway	7	Norway	7
Switzerland	9	Ireland	17
Ireland	17	Switzerland	18
Italy	20	Italy	20
Netherlands	20	Finland	47
Hungary	26	Hungary	52
Finland	47	Netherlands	76
Belgium	53	Poland	112
Poland	56	Greece	123
Czech Republic	89	Belgium	175
Turkey	102	Czech Republic	236
Greece	107	Ukraine	470
Ukraine	164	United Kingdom	493
France	165	Turkey	743
Germany	198	France	1163
Spain	225	Spain	1347
United Kingdom	387	Germany	1594

Please note that the number of serious terrorist attacks reported in this Table may not exactly match those reported in the Global Terrorism Database (GTD) because we report the number of terrorist attacks/casualties as used in our study: the attack must have happened within previous one year of a survey to be included in our sample so that surveyed citizens are exposed to these attacks. There are 8 countries (Austria, Bulgaria, Croatia, Denmark, Estonia, Latvia, Romania, and Slovakia) that suffered terrorist attacks between 2002-2021, so they are present in the GTD. However, these countries did not have any surveys done within a year of any serious attack, so the number of serious attacks in these countries is 0 in our sample.

A2 Robustness using the different cutoffs for defining the dependent variable

This section presents the robustness of results using different ways the dependent variable is defined. The results are shown to be robust when we (i) use the variable as it is, i.e., when the responses take values from 0 (no trust at all) to 10 (complete trust) (see Table A3), (ii) consider a response equal to or greater than 6 as 1; and 0 if it is less than 6 (Table A4), (iii) use median as the cut-off point with the median value being included in the category of either 1 or 0 (Tables A5 and A6).

Table A3: Exposure to terrorism related violence and trust in institutions: Using non-binarized trust variable

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.200***	-0.162***	-0.151***	-0.194***	-0.167***	-0.116***	-0.200***
	(0.051)	(0.045)	(0.039)	(0.045)	(0.050)	(0.039)	(0.051)
Exposure to serious attacks 60 days prior to survey	-0.208***	-0.195***	-0.203***	-0.191***	-0.173***	-0.159***	-0.208***
	(0.053)	(0.048)	(0.045)	(0.048)	(0.058)	(0.043)	(0.053)
Exposure to serious attacks 90 days prior to survey	-0.193***	-0.202***	-0.225***	-0.198***	-0.167***	-0.143***	-0.193***
	(0.055)	(0.052)	(0.050)	(0.049)	(0.055)	(0.039)	(0.055)
Exposure to serious attacks 120 days prior to survey	-0.172***	-0.180***	-0.227***	-0.186***	-0.150***	-0.136***	-0.172***
	(0.056)	(0.053)	(0.052)	(0.051)	(0.055)	(0.039)	(0.056)
Exposure to serious attacks 150 days prior to survey	-0.151***	-0.178***	-0.225***	-0.177***	-0.141***	-0.142***	-0.151***
	(0.052)	(0.051)	(0.051)	(0.048)	(0.050)	(0.037)	(0.052)
Exposure to serious attacks 180 days prior to survey	-0.127**	-0.139***	-0.195***	-0.146***	-0.135***	-0.124***	-0.127**
	(0.051)	(0.050)	(0.050)	(0.048)	(0.047)	(0.039)	(0.051)
Observations	376,744	377,369	382,638	379,728	349,414	349,318	376,744
Dependent Variable Mean	4.441	5.153	6.076	3.559	4.487	5.219	4.441

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The trust variable takes values from 0 (no trust at all) to 10 (complete trust). The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table A4: Exposure to terrorism related violence and trust in institutions: Changing cut-off for the binarized trust variable

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.019***	-0.025***	-0.025***	-0.016***	-0.012**	-0.019**	-0.017***
	(0.007)	(0.007)	(0.007)	(0.005)	(0.005)	(0.008)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.018**	-0.029***	-0.031***	-0.016***	-0.009*	-0.019**	-0.023***
	(0.007)	(0.007)	(0.008)	(0.005)	(0.005)	(0.009)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.016**	-0.030***	-0.034***	-0.019***	-0.011**	-0.020**	-0.023***
	(0.008)	(0.008)	(0.009)	(0.006)	(0.006)	(0.008)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.014*	-0.026***	-0.034***	-0.017***	-0.009	-0.020**	-0.023***
	(0.008)	(0.008)	(0.009)	(0.006)	(0.006)	(0.009)	(0.006)
Exposure to serious attacks 150 days prior to survey	-0.012	-0.025***	-0.034***	-0.017***	-0.008	-0.020**	-0.023***
	(0.008)	(0.008)	(0.009)	(0.006)	(0.006)	(0.008)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.008	-0.019**	-0.029***	-0.014**	-0.006	-0.020***	-0.020***
	(0.007)	(0.008)	(0.009)	(0.006)	(0.006)	(0.007)	(0.006)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.539	0.631	0.765	0.396	0.386	0.561	0.674

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The trust variable takes values equal to 1 if the response is *equal to or greater than* 6, and 0 otherwise (with 1 indicating greater trust). The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table A5: Exposure to terrorism related violence and trust in institutions: Using the median cut-off for binarized trust variable

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.028***	-0.023***	-0.021***	-0.033***	-0.028***	-0.026***	-0.022***
	(0.008)	(0.007)	(0.006)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.031***	-0.029***	-0.027***	-0.033***	-0.026***	-0.026***	-0.027***
	(0.008)	(0.007)	(0.007)	(0.009)	(0.008)	(0.009)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.030***	-0.032***	-0.031***	-0.032***	-0.026***	-0.026***	-0.024***
	(0.008)	(0.008)	(0.008)	(0.009)	(0.008)	(0.009)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.025***	-0.028***	-0.033***	-0.031***	-0.022**	-0.023**	-0.021***
	(0.009)	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)	(0.006)
Exposure to serious attacks 150 days prior to survey	-0.024***	-0.028***	-0.034***	-0.030***	-0.020**	-0.023***	-0.023***
	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)	(0.008)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.019**	-0.021***	-0.030***	-0.024***	-0.019**	-0.022***	-0.020***
	(0.008)	(0.008)	(0.008)	(0.009)	(0.008)	(0.008)	(0.006)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.539	0.631	0.511	0.513	0.505	0.561	0.674

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The trust variable takes values equal to 1 if the response is *equal to or greater than* the median value, and 0 otherwise (with 1 indicating greater trust). the median value for trust in each variable in parentheses: parliament (5), legal system (5), European Parliament (5), and the UN (5), politicians (4), political parties (4), and police (7). The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table A6: Exposure to terrorism related violence and trust in institutions: Changing the median cut-off for binarized trust variable

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.019***	-0.025***	-0.012**	-0.029***	-0.022***	-0.019**	-0.017***
	(0.007)	(0.007)	(0.005)	(0.007)	(0.006)	(0.008)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.018**	-0.029***	-0.020***	-0.027***	-0.019***	-0.019**	-0.023***
	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.009)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.016**	-0.030***	-0.024***	-0.029***	-0.021***	-0.020**	-0.023***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.014*	-0.026***	-0.027***	-0.027***	-0.016**	-0.020**	-0.023***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 150 days prior to survey	-0.012	-0.025***	-0.027***	-0.026***	-0.015**	-0.020**	-0.023***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.008	-0.019**	-0.024***	-0.021***	-0.013*	-0.020***	-0.020***
	(0.007)	(0.008)	(0.008)	(0.008)	(0.007)	(0.007)	(0.006)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.354	0.472	0.347	0.396	0.386	0.350	0.481

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The trust variable takes values equal to 1 if the response is *greater than* the median value, and 0 otherwise (with 1 indicating greater trust). the median value for trust in each variable in parentheses: parliament (5), legal system (5), European Parliament (5), and the UN (5), politicians (4), political parties (4), and police (7). The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

A3 Accounting for country fixed effects, country-year trend, and potential correlation of the dependent variables

To ensure that our results are not driven due to the omission of country-specific fixed factors and country-year trend, we check the robustness of our results by including country dummies in Table A7 and country dummies along with country-year trend and year dummies in Table A8. We find that the association between exposure to terrorist attacks and trust in institutions remains robust. Table A9 presents the estimates from the Seemingly Unrelated Regression (SUR) to account for the possibility that the dependent variables (responses to the survey questions on trust in different institutions) might be correlated.

Table A7: Exposure to terrorism related violence and trust in institutions: Accounting for country fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.023*** (0.008)	-0.020*** (0.006)	-0.017** (0.007)	-0.025*** (0.007)	-0.020*** (0.007)	-0.022*** (0.007)	-0.019*** (0.006)
Exposure to serious attacks 60 days prior to survey	-0.027*** (0.008)	-0.028*** (0.007)	-0.025*** (0.007)	-0.024*** (0.008)	-0.017** (0.007)	-0.021** (0.009)	-0.019*** (0.006)
Exposure to serious attacks 90 days prior to survey	-0.028*** (0.008)	-0.030*** (0.007)	-0.027*** (0.007)	-0.027*** (0.008)	-0.020*** (0.007)	-0.022*** (0.008)	-0.018*** (0.006)
Exposure to serious attacks 120 days prior to survey	-0.021** (0.008)	-0.025*** (0.007)	-0.025*** (0.007)	-0.022** (0.009)	-0.014* (0.008)	-0.019** (0.009)	-0.016*** (0.006)
Exposure to serious attacks 150 days prior to survey	-0.019** (0.008)	-0.024*** (0.007)	-0.025*** (0.007)	-0.019** (0.009)	-0.013 (0.008)	-0.018** (0.008)	-0.016*** (0.006)
Exposure to serious attacks 180 days prior to survey	-0.013 (0.008)	-0.016** (0.008)	-0.019** (0.008)	-0.014 (0.009)	-0.011 (0.008)	-0.017** (0.008)	-0.015** (0.006)
Observations	304,536	304,536	304,536	304,536	304,536	304,536	304,536
Dependent Variable Mean	0.539	0.635	0.766	0.398	0.395	0.559	0.668

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Country and survey date (day, month, and year dummies) fixed effects are included.

Table A8: Exposure to terrorism related violence and trust in institutions: Accounting for country-year trend with country and year fixed effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.018**	-0.016**	-0.010*	-0.020***	-0.013**	-0.023***	-0.022***
	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.031***	-0.032***	-0.022***	-0.026***	-0.016**	-0.026***	-0.026***
	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.008)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.034***	-0.037***	-0.025***	-0.030***	-0.021***	-0.030***	-0.025***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.029***	-0.035***	-0.022***	-0.026***	-0.014*	-0.029***	-0.024***
	(0.009)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)
Exposure to serious attacks 150 days prior to survey	-0.026***	-0.035***	-0.023***	-0.021***	-0.010	-0.029***	-0.028***
	(0.009)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.020**	-0.030***	-0.020***	-0.016*	-0.008	-0.028***	-0.025***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.007)	(0.007)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.539	0.631	0.765	0.396	0.386	0.561	0.674

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, individual's placement on the left-right scale. and population of a country. Country, country-year trend, and survey date (day, month, and year dummies) fixed effects are included.

Table A9: Exposure to terrorism related violence and trust in institutions: Seemingly Unrelated Regression (SUR)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.020***	-0.016***	-0.016***	-0.021***	-0.017***	-0.018***	-0.016***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.003)
Exposure to serious attacks 60 days prior to survey	-0.023***	-0.024***	-0.023***	-0.021***	-0.016***	-0.019***	-0.019***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 90 days prior to survey	-0.024***	-0.027***	-0.026***	-0.024***	-0.019***	-0.020***	-0.018***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 120 days prior to survey	-0.018***	-0.022***	-0.025***	-0.021***	-0.014***	-0.018***	-0.017***
	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 150 days prior to survey	-0.016***	-0.022***	-0.025***	-0.019***	-0.012***	-0.017***	-0.018***
	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 180 days prior to survey	-0.012***	-0.014***	-0.019***	-0.014***	-0.011***	-0.016***	-0.016***
	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 210 days prior to survey	-0.007***	-0.012***	-0.018***	-0.011***	-0.011***	-0.016***	-0.016***
	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 240 days prior to survey	-0.004*	-0.008***	-0.017***	-0.007***	-0.006**	-0.013***	-0.012***
	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 270 days prior to survey	-0.001	-0.001	-0.012***	-0.006**	-0.005**	-0.009***	-0.010***
	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Exposure to serious attacks 300 days prior to survey	0.006**	0.005**	-0.007***	0.001	-0.002	-0.000	-0.005**
	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Observations	304,536	304,536	304,536	304,536	304,536	304,536	304,536

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

A4 Additional robustness checks

This section presents Tables with various robustness checks and falsification test as referred to in the main text. The objective of these checks is to ensure that results are not confounded by region-specific or time-specific fixed factors.

Exposure to terrorist attacks in neighboring countries and trust in institutions

Table A10 shows that terrorist attacks in the border-sharing neighboring countries have no effect on trust in institutions, suggesting the results are not driven due to the omission of a third factor that could have coincided with a terrorist attack in the country but might have had an impact on the residents of a broader region.

Future terrorist attacks and trust in institutions

To alleviate the concerns that our results could have been driven by some unobserved factors, we run a falsification test by utilizing future terrorist attacks. The idea here is that if these results were driven due to an unobserved static factor, then one should observe a significant association between future terrorist activity and respondents' trust in institutions. In other words, we look at the association between terrorist activities *n days* after an individual is surveyed and his/her self-reported trust in institutions. However, as we can see in Table A11, future terrorist attacks are not significantly correlated with respondents' trust in various institutions.

Exposure to terrorist attacks and trust in others

Finally, could the results be driven due to some omitted factors that are associated with changes in the general trust level in the country? If that is the case, then we should find a significant association between terrorist attacks and trust in others. In addition to trust in others, we also look at two other related variables: people are fair, and people are helpful. We fail to find such evidence as Table A12 shows that terrorist attacks do not impact respondents' trust in other individuals. Note that the significance for exposure to terrorist attacks within 30 days of being surveyed for "people are helpful" variable might indicate the help received by others immediately after the attacks. However, the exposure to terrorist attacks is also not significant after 30 days.

Table A10: Exposure to terrorism related violence in neighboring countries and trust in institutions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks in neighboring countries 30 days prior to survey	-0.003	-0.004	0.000	-0.003	-0.006	0.004	0.006
	(0.006)	(0.005)	(0.005)	(0.006)	(0.006)	(0.008)	(0.004)
Observations	344,213	344,546	348,885	346,683	309,646	321,443	322,332
Dependent Variable Mean	0.543	0.634	0.768	0.402	0.392	0.569	0.680
Exposure to serious attacks in neighboring countries 60 days prior to survey	-0.001	-0.000	0.004	-0.003	-0.007	0.005	0.008
	(0.008)	(0.008)	(0.007)	(0.008)	(0.008)	(0.009)	(0.005)
Observations	325,930	326,170	330,318	328,304	292,438	304,117	305,057
Dependent Variable Mean	0.542	0.633	0.767	0.403	0.392	0.572	0.683
Exposure to serious attacks in neighboring countries 90 days prior to survey	0.002	0.004	0.005	0.001	-0.004	0.009	0.008
	(0.010)	(0.009)	(0.007)	(0.010)	(0.010)	(0.011)	(0.006)
Observations	315,466	315,676	319,731	317,788	283,385	294,105	295,051
Dependent Variable Mean	0.541	0.632	0.766	0.403	0.392	0.573	0.683

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The main explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks occurring in a border-sharing neighboring countries *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table A11: Exposure to future terrorist attacks and trust in institutions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days after survey date	-0.007	0.002	-0.005	-0.006	-0.001	0.008	0.004
	(0.005)	(0.006)	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)
Exposure to serious attacks 60 days after survey date	0.001	0.008	-0.006	-0.000	0.000	0.007	0.000
	(0.006)	(0.006)	(0.004)	(0.006)	(0.006)	(0.007)	(0.005)
Exposure to serious attacks 90 days after survey date	-0.001	0.003	-0.010**	-0.005	-0.001	0.008	0.000
	(0.006)	(0.006)	(0.004)	(0.006)	(0.006)	(0.008)	(0.005)
Observations	304,536	304,536	304,536	304,536	304,536	304,536	304,536
Dependent Variable Mean	0.539	0.635	0.766	0.398	0.395	0.559	0.668

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if *serious* terrorist attacks occur *n* days after an individual is interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table A12: Exposure to terrorism related violence and trust in others

	(1)	(2)	(3)
	Most people can be trusted	**People are fair**	**People are helpful**
Exposure to serious attacks 30 days prior to survey	0.038	0.039	0.075**
	(0.034)	(0.027)	(0.031)
Exposure to serious attacks 60 days prior to survey	0.006	-0.000	0.008
	(0.030)	(0.023)	(0.024)
Exposure to serious attacks 90 days prior to survey	-0.002	-0.014	-0.006
	(0.030)	(0.024)	(0.026)
Exposure to serious attacks 120 days prior to survey	-0.011	-0.029	-0.017
	(0.032)	(0.025)	(0.029)
Exposure to serious attacks 150 days prior to survey	-0.027	-0.042	-0.043
	(0.030)	(0.025)	(0.032)
Exposure to serious attacks 180 days prior to survey	-0.033	-0.044*	-0.049
	(0.030)	(0.024)	(0.032)
Observations	385,674	347,889	349,023
Dependent Variable Mean	5.032	5.584	4.865

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's attitudes estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included. Variables are constructed from the following survey questions: *(1) Most people can be trusted or you can't be too careful: 0 (You can't be too careful) to 10 (Most people can be trusted); (2) Most people try to take advantage of you, or try to be fair: 0 (Most people try to take advantage of me) to 10 (Most people try to be fair); (3) Most of the time people are helpful or mostly looking out for themselves: 0 (People mostly look out for themselves) to 10 (People mostly try to be helpful)*

A5 Robustness to the use of different samples and outliers

In this section, we check whether our results are driven due to the presence of outliers. To do so, we check the robustness of estimates using different samples. First, we consider only those respondents who answered the question for each of the 7 institutions considered (Table A13) and restrict the analysis to only those countries which suffered at least one serious attack (Table A14).

Table A13: Exposure to terrorism related violence and trust in institutions (restricted sample)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.023***	-0.019***	-0.018***	-0.024***	-0.018***	-0.020***	-0.017***
	(0.008)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.026***	-0.026***	-0.025***	-0.022***	-0.016**	-0.020**	-0.019***
	(0.008)	(0.007)	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 90 days prior to survey	-0.026***	-0.028***	-0.027***	-0.025***	-0.019***	-0.021**	-0.017***
	(0.008)	(0.007)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.020**	-0.023***	-0.025***	-0.021**	-0.013*	-0.018**	-0.016***
	(0.009)	(0.007)	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 150 days prior to survey	-0.018**	-0.022***	-0.025***	-0.018**	-0.012*	-0.018**	-0.017***
	(0.008)	(0.007)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.012	-0.015*	-0.019**	-0.013	-0.010	-0.017**	-0.015**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)	(0.008)	(0.006)
Observations	304,536	304,536	304,536	304,536	304,536	304,536	304,536
Dependent Variable Mean	0.539	0.635	0.766	0.398	0.395	0.559	0.668

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included. The sample is restricted to only those individuals that respond to all trust variables.

Table A14: Exposure to terrorism related violence and trust in institutions: Affected countries only

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.028***	-0.022***	-0.020***	-0.027***	-0.021***	-0.025***	-0.023***
	(0.008)	(0.006)	(0.006)	(0.007)	(0.006)	(0.008)	(0.007)
Exposure to serious attacks 60 days prior to survey	-0.031***	-0.029***	-0.029***	-0.026***	-0.017**	-0.026***	-0.027***
	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.010)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.030***	-0.031***	-0.031***	-0.028***	-0.020***	-0.026***	-0.024***
	(0.009)	(0.008)	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.025***	-0.027***	-0.028***	-0.026***	-0.015**	-0.023**	-0.021***
	(0.009)	(0.008)	(0.008)	(0.009)	(0.008)	(0.009)	(0.007)
Exposure to serious attacks 150 days prior to survey	-0.023***	-0.027***	-0.028***	-0.025***	-0.014*	-0.022**	-0.022***
	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.019**	-0.020**	-0.022***	-0.020**	-0.012	-0.022***	-0.020***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.008)	(0.008)	(0.006)
Observations	331,703	332,019	335,757	333,725	300,216	309,666	310,813
Dependent Variable Mean	0.553	0.649	0.771	0.410	0.402	0.561	0.680

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included. The sample is restricted to only those countries that experienced at least one serious terrorist attack. The sample consists of the following 26 countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, and Ukraine. United Kingdom. The sample excludes the following 6 countries which experience no serious attack during the study period: Cyprus, Iceland, Lithuania, Luxembourg, Portugal, and Slovenia.

Next, we drop outliers in terms of exposure to terrorist attacks in Table A15. We show that results remain robust when we drop: (i) the most affected country (Panel A), (ii) two most affected countries (Panel B), (iii) the least affected country (Panel C), (iv) two least affected countries (Panel D), (v) two least affected countries along with countries that had no exposure to serious terrorist attacks, and (vi) two most and two least affected countries (Panel F).

Table A15: Exposure to terrorism related violence and trust in institutions: Dropping outliers (countries experiencing most and least serious attacks)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Panel A: Dropping United Kingdom (most affected country)							
Exposure to serious attacks	-0.029***	-0.032***	-0.033***	-0.028***	-0.021***	-0.026***	-0.023***
90 days prior to survey	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.009)	(0.006)
Observations	361,984	362,418	366,899	364,617	328,996	337,960	33,8551
Dependent Variable Mean	0.540	0.629	0.763	0.396	0.387	0.569	0.674
Panel B: Dropping United Kingdom and Spain (two most affected countries)							
Exposure to serious attacks	-0.036***	-0.036***	-0.031***	-0.035***	-0.025***	-0.029***	-0.019***
90 days prior to survey	(0.010)	(0.009)	(0.009)	(0.009)	(0.007)	(0.010)	(0.006)
Observations	347,899	347,868	352,102	349,972	315,969	324,829	325,525
Dependent Variable Mean	0.539	0.635	0.761	0.401	0.391	0.568	0.676
Panel C: Dropping Norway (least affected country)							
Exposure to serious attacks	-0.031***	-0.033***	-0.032***	-0.030***	-0.022***	-0.029***	-0.024***
90 days prior to survey	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)
Observations	361,288	361,716	366,317	363,954	328,303	337,903	337,082
Dependent Variable Mean	0.528	0.621	0.758	0.386	0.375	0.556	0.664
Panel D: Dropping Norway and Sweden (two least affected countries)							
Exposure to serious attacks	-0.034***	-0.035***	-0.035***	-0.034***	-0.025***	-0.032***	-0.025***
90 days prior to survey	(0.008)	(0.008)	(0.008)	(0.007)	(0.007)	(0.009)	(0.006)
Observations	347,324	347,812	352,158	349,903	316,325	325,337	323,672
Dependent Variable Mean	0.518	0.614	0.754	0.378	0.366	0.557	0.656
Panel E: Dropping Norway and Sweden along with never affected countries							
Exposure to serious attacks	-0.034***	-0.035***	-0.032***	-0.033***	-0.025***	-0.032***	-0.026***
90 days prior to survey	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.009)	(0.007)
Observations	302,272	302,666	306,077	304,197	274,782	283,365	282,157
Dependent Variable Mean	0.531	0.631	0.760	0.391	0.381	0.555	0.660
Panel F: Dropping two most and two least affected countries (United Kingdom, Spain, Norway, and Sweden)							
Exposure to serious attacks	-0.039***	-0.040***	-0.034***	-0.039***	-0.028***	-0.032***	-0.020***
90 days prior to survey	(0.010)	(0.009)	(0.009)	(0.008)	(0.007)	(0.010)	(0.007)
Observations	318,468	318,515	322,422	320,444	290,535	298,528	296,869
Dependent Variable Mean	0.517	0.616	0.750	0.382	0.370	0.564	0.657

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Controlled for an individual's placement on the left-right scale. Other control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Table A16 shows that the association between exposure to terrorist attacks and trust in institutions remain robust when we drop the outlier countries in terms of the number of casualties suffered instead of exposure to the total number of serious attacks. Since the countries whose citizens are exposed to the least number of serious attacks (excluding countries whose citizens suffer zero serious attacks) are also the same countries that suffered least casualties, results in Panels C and D reported in Table A15 remain the same (hence not reported). Panels A, B, and C in Table A16 show that the association between exposure to terrorist attacks and trust in institutions remain robust when we drop the country that suffered most casualties, two countries that suffered most casualties, and two countries that suffered most casualties along with two countries that suffered least number of casualties, respectively.

Table A16: Exposure to terrorism related violence and trust in institutions: dropping outliers (countries suffering most and least casualties)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Panel A: Dropping Germany (most affected country)							
Exposure to serious attacks	-0.037***	-0.033***	-0.033***	-0.036***	-0.029***	-0.034***	-0.025***
90 days prior to survey	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.010)	(0.007)
Observations	352,176	352,441	356,926	354,621	319,914	328,234	328,758
Dependent Variable Mean	0.538	0.626	0.758	0.397	0.388	0.566	0.678
Panel B: Dropping German and Spain (two most affected countries)							
Exposure to serious attacks	-0.045***	-0.038***	-0.030***	-0.044***	-0.035***	-0.039***	-0.022***
90 days prior to survey	(0.010)	(0.009)	(0.009)	(0.009)	(0.008)	(0.010)	(0.007)
Observations	338,091	337,891	342,129	339,976	306,887	315,103	315,732
Dependent Variable Mean	0.537	0.631	0.757	0.402	0.392	0.565	0.679
Panel C: Dropping two most and two least affected countries (Germany, Spain, Norway, and Sweden)							
Exposure to serious attacks	-0.050***	-0.041***	-0.033***	-0.049***	-0.039***	-0.044***	-0.023***
90 days prior to survey	(0.010)	(0.009)	(0.009)	(0.009)	(0.008)	(0.010)	(0.007)
Observations	308,660	308,538	312,449	310,448	281,453	288,802	287,076
Dependent Variable Mean	0.514	0.612	0.744	0.383	0.370	0.560	0.660

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Controlled for an individual's placement on the left-right scale. Other control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

Finally, Tables A17 and A18 show that the relationship between exposure to terrorist attacks and trust in institutions remain robust when we consider only European Union countries and when we include Russia to our sample.

Table A17: Exposure to terrorism related violence on trust in institutions (EU countries only)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.022**	-0.019**	-0.018***	-0.024***	-0.016**	-0.028***	-0.024***
	(0.009)	(0.007)	(0.007)	(0.008)	(0.007)	(0.009)	(0.007)
Exposure to serious attacks 60 days prior to survey	-0.029***	-0.028***	-0.029***	-0.026***	-0.016**	-0.027***	-0.026***
	(0.009)	(0.008)	(0.007)	(0.008)	(0.008)	(0.010)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.029***	-0.032***	-0.032***	-0.029***	-0.020**	-0.028***	-0.023***
	(0.009)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.007)
Exposure to serious attacks 120 days prior to survey	-0.025**	-0.028***	-0.031***	-0.028***	-0.015*	-0.025***	-0.021***
	(0.010)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.007)
Exposure to serious attacks 150 days prior to survey	-0.024**	-0.028***	-0.030***	-0.027***	-0.014*	-0.024***	-0.022***
	(0.009)	(0.009)	(0.008)	(0.008)	(0.008)	(0.009)	(0.007)
Exposure to serious attacks 180 days prior to survey	-0.020**	-0.020**	-0.024***	-0.023***	-0.013	-0.023***	-0.019***
	(0.009)	(0.009)	(0.007)	(0.008)	(0.008)	(0.008)	(0.007)
Observations	329,987	330,439	334,396	332,529	299,103	310,850	309,340
Dependent Variable Mean	0.519	0.619	0.765	0.377	0.367	0.557	0.668

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included. The sample is restricted to only European Union member countries. We exclude Turkey, Ukraine, Norway, Switzerland, and Iceland. The United Kingdom officially did not leave the EU until 31st January 2020. So, it is a part of this sample.

Table A18: Exposure to terrorism related violence and trust in institutions (including Russia)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.028***	-0.023***	-0.021***	-0.029***	-0.022***	-0.026***	-0.022***
	(0.008)	(0.006)	(0.006)	(0.007)	(0.006)	(0.008)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.031***	-0.029***	-0.030***	-0.027***	-0.019***	-0.026***	-0.027***
	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.009)	(0.007)
Exposure to serious attacks 90 days prior to survey	-0.030***	-0.032***	-0.033***	-0.029***	-0.021***	-0.026***	-0.024***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 120 days prior to survey	-0.025***	-0.028***	-0.031***	-0.027***	-0.016**	-0.023**	-0.021***
	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks 150 days prior to survey	-0.024***	-0.028***	-0.030***	-0.026***	-0.015**	-0.023***	-0.023***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 180 days prior to survey	-0.019**	-0.021***	-0.025***	-0.021***	-0.013*	-0.022***	-0.020***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Observations	377,890	378,314	382,999	380,584	342,905	352,760	353,434
Dependent Variable Mean	0.538	0.631	0.764	0.395	0.386	0.562	0.674

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included.

A6 Controlling for serious and total attacks

Tables A19 and A20 show that the association between exposure to terrorist attacks and trust in institutions remains robust when we control for serious terrorist attacks and total terrorist attacks in the past. The results presented in this section indicate that despite frequent occurrences, terrorist attacks continue to cause respondents to lose trust in institutions.

Table A19: Exposure to terrorism related violence and trust in institutions (controlling for serious attacks in the last 3 years)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks	-0.028***	-0.023***	-0.020***	-0.029***	-0.021***	-0.025***	-0.022***
30 days prior to survey	(0.008)	(0.006)	(0.006)	(0.007)	(0.006)	(0.008)	(0.006)
Exposure to serious attacks	-0.031***	-0.029***	-0.028***	-0.027***	-0.018***	-0.025***	-0.026***
60 days prior to survey	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.009)	(0.007)
Exposure to serious attacks	-0.029***	-0.032***	-0.030***	-0.030***	-0.020***	-0.026***	-0.022***
90 days prior to survey	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks	-0.024***	-0.028***	-0.029***	-0.027***	-0.015**	-0.022**	-0.020***
120 days prior to survey	(0.009)	(0.008)	(0.007)	(0.008)	(0.007)	(0.009)	(0.006)
Exposure to serious attacks	-0.023***	-0.027***	-0.028***	-0.026***	-0.014**	-0.022***	-0.021***
150 days prior to survey	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks	-0.019**	-0.020***	-0.022***	-0.021***	-0.012	-0.021***	-0.019***
180 days prior to survey	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.539	0.631	0.765	0.396	0.386	0.561	0.674

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included. Additional control: the number of total serious attacks in the last three years.

Table A20: Exposure to terrorism related violence and trust in institutions (controlling for all attacks in the last 3 years)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Parliament	**Legal System**	**Police**	**Politicians**	**Political Parties**	**European Parliament**	**United Nations**
Exposure to serious attacks 30 days prior to survey	-0.024***	-0.022***	-0.014**	-0.026***	-0.020***	-0.023***	-0.019***
	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)
Exposure to serious attacks 60 days prior to survey	-0.028***	-0.029***	-0.023***	-0.024***	-0.017**	-0.023***	-0.023***
	(0.007)	(0.007)	(0.006)	(0.007)	(0.006)	(0.008)	(0.006)
Exposure to serious attacks 90 days prior to survey	-0.026***	-0.032***	-0.025***	-0.026***	-0.019***	-0.024***	-0.019***
	(0.008)	(0.007)	(0.007)	(0.007)	(0.006)	(0.007)	(0.005)
Exposure to serious attacks 120 days prior to survey	-0.021**	-0.028***	-0.023***	-0.023***	-0.014**	-0.020**	-0.017***
	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.006)
Exposure to serious attacks 150 days prior to survey	-0.020**	-0.027***	-0.024***	-0.023***	-0.012*	-0.020***	-0.019***
	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.005)
Exposure to serious attacks 180 days prior to survey	-0.016**	-0.020***	-0.018***	-0.019**	-0.011	-0.019***	-0.017***
	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.006)
Observations	376,755	377,165	381,838	379,431	341,759	351,638	352,328
Dependent Variable Mean	0.539	0.631	0.765	0.396	0.386	0.561	0.674

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at NUTS1 region level and reported in parentheses. Each column presents the impact on an individual's trust in different national and international institutions estimated from separate regressions. The explanatory variable is an indicator variable that takes the value 1 if an individual is exposed to *serious* terrorist attacks *n* days prior to being interviewed. Control variables: age, gender, marital status, area of living, household size, employment status, religious affiliation, level of education, unemployment rate, per capita GDP, and population of a country. Within-country survey location and survey date (day, month, and year dummies) fixed effects are included. Additional control: the number of total attacks in the last three years.