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Fear of the dark: How terrorist events affect trust in the long run

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Abstract

In this paper, we provide new evidence on whether individuals differ in their level of trust depending on their exposure to unexpected terrorist attacks during crucial life phases. In line with the well-grounded psychological theories on the formation of human beliefs, attitudes, and values, we find that exposure to traumatic and violent events in the two essential stages of human development – adolescence and early adulthood – reduces trust in other people. The formed values tend to be persistent over time, and the results are robust to several checks.

Keywords: Social capital, Trust, Terrorism, Value formation

JEL Codes: A13, Z1

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1 Introduction

Many societies are experiencing an increasing lack of trust. The most recent data indicate a rapid loss of trust in other people as well as in all traditional institutions, both at the government and business levels, in many countries over the last twenty years (Edelman, 2019). Trust is one of the collective values and inclinations that characterizes social networks, defining its social capital (Putnam, 2000). In a broad sense, trust is the level of confidence that people have that others will behave as might be expected. It synthetically represents a large number of beliefs and values that favor inter-personal cooperation within society, and hence it enhances economic performance. Thus, from a policy perspective, a lack or decrease of trust should be considered carefully.

Indeed, the trend of decreasing trust in recent decades is critical, as extensive empirical evidence has shown that trust affects a variety of economic outcomes, ranging from growth and macroeconomic stability to investment and trade (see, e.g., Knack and Keefer, 1997; Guiso et al., 2009). Levels of trust predict national economic growth as well as financial and physical capital and even better than skill level, all of which are factors that are regularly monitored by policymakers (Algan and Cahuc, 2010; Niazi and Hassan, 2016). In fact, trust is an essential element for all human relations, and it influences most economic activities. On the one hand, trust encourages cooperation by reducing uncertainty and minimizing the costs of incomplete information. On the other hand, it enhances the efficiency of the society by facilitating coordinated actions (Putnam et al., 1993): it increases civic participation and resilience to disasters and reduces economic inequality and illegal activities. Furthermore, trust, and more generally social capital, is also associated with many other non-economic outcomes, ranging from suicide incidence to life satisfaction (Helliwell and Putnam, 2004). Since a lack of trust undermines relationships and transactions, the cost of low trust is high from social and economic perspectives.

There are various possible explanations for the documented constant decline in the level of generalized trust at the global level: on the one hand, social and political factors (poor institutional performance, large-scale global shocks ranging from globalization to migration, and growing political polarization); on the other hand, economic factors (increasing economic inequality and low inter-generational mobility). Alternative factors may interact in a less clear and non-straightforward way.

In the first line of arguments, this paper studies whether exposure to unexpected traumatic events such as terrorism plays a role in shaping trust. The direct costs associated with terrorism in terms of loss of human lives,

injuries, and damages to buildings or infrastructures can be easily computed, as they are immediately visible in the aftermath of the event. However, the indirect costs, in terms of psychological impacts or social cohesion, are not as straightforward, although they might be significant, both in the short and in the long run. Irrespective of its origin (international or national) and nature (political, religious, ideological, or social), the effect of terrorism on trust is *ex ante* ambiguous. Terror attacks trigger anxiety and increase the fear that terrorism may occur again. Fear can make people less trusting of each other, and anxiety can make people more guarded when meeting other people. At the same time, terrorism brings people together to express their grief, compassion, and solidarity. Which mechanism would prevail is an empirical question.

The paper contributes to two main related strands of the literature: the determinants of trust and the effect of terrorism on socio-economic outcomes. The first field is well developed and consolidated, both from a theoretical and an empirical point of view. At the macro level, cross-country comparisons on the determinants of trust are widely available (see, for instance, [La Porta et al., 1997](#); [Zak and Knack, 2001](#); [Bjørnskov, 2007](#)), showing that trust depends on aggregate attributes and attitudes related to history, culture, institutions, or geography. Few studies are available at the micro level exploring individual characteristics of people who trust others ([Albanese and Blasio, 2014](#)). Individual factors related to education, wealth, religious beliefs, family background, and specific life experiences shape trust ([Uslaner, 2008](#)). Namely, pro-social preferences and trust are higher among women, religious people, ethnically homogeneous groups, and psychologically or physiologically cohesive groups ([Guiso et al., 2003](#); [Alesina and La Ferrara, 2000](#)). In this line of research, we build our analysis starting from psychological evidence indicating that values are mainly shaped in particular phases in life, specifically, adolescence and early adulthood, and are common within generations since cohorts of people born in the same period share similar social experiences.

The second field that examines the effect of terrorism on trust and trustworthiness is relatively new but is growing rapidly. Until now, this line of research has reached contradictory conclusions. Such events may bring citizens closer together and increase social trust as they put aside their differences and divisions ([Putnam, 2002](#)), although the effect can be only temporary ([Putnam and Sander, 2010](#)). However, terrorism also increases feelings of threat and insecurity, reducing social trust, cohesion, and solidarity ([Blomberg et al., 2011](#)). The effect seems to depend on the composition and characteristics of the affected population: in more culturally and racially homogeneous societies, such violent events increase people’s cohesion in facing

the common threat. [Clark and Eisenstein \(2013\)](#) argue that single acts of terrorism may be insufficient to influence trust attitudes in the long term if they do not shape collective memories. Similar contradictory results are reported by the majority of available studies focusing on conflicts or war ([Conzo and Salustri, 2019](#)). In some cases, having experienced wars or other conflicts generates distrust and other anti-social behaviors in society ([Fehr, 2009](#); [Nunn and Wantchekon, 2011](#)). In other cases, war exposure or violent experience can foster pro-social behavior (see [Bauer et al., 2016](#), for a detailed review). The results depend on whether the violence has an intra-group or inter-group origin.

In this paper, we provide new evidence on whether individuals differ in their values depending on their exposure to exogenous terrorist incidents at crucial ages for personality development as identified by psychologists. We base our analysis on well-grounded theories on the formation of human beliefs, attitudes, and values, and we show that spending the years between adolescence and youth in a terrorist-intensive historical period has a permanent impact on values as adults.

Our research is motivated by the scarce evidence of the long-term effect of terrorism exposure at the international level. Indeed, most studies examine only its short-term effect, focusing on its costs in terms of financial and stock market performance, consumer confidence, or individual well-being ([Brodeur, 2018](#)). Some studies consider few specific countries in a before–after setting ([Colombo et al., 2019](#)), while others explore the effect of specific terrorist events, such as 9-11 or the Atocha attack in 2004 (see, for example, [Arvanitidis et al., 2016](#); [Dinesen and Jæger, 2013](#)), using cross-section data with a difference-in-differences approach. Instead, in this paper, we exploit the between countries and cohort variability in terrorism intensity to disentangle its long-lasting effects. In particular, using pooled cross-sectional data from the available waves of the World Value Survey matched with information on terrorist attacks from the Global Terrorism Database, we show that exposure to traumatic violent events in crucial stages of human development negatively influences trust, and this effect does not vanish over time.

Consistent with psychological theories, we find that exposure to terrorist events during adolescence and early adulthood significantly reduces trust ([Krosnick and Alwin, 1989](#)). Because events are exogenous shocks uncorrelated with individual values and unobservable individual characteristics, we interpret the estimated effect as causal. Moreover, cross-country differences in the timing of terrorist events together with the repeated cross-sectional structure of the data available in the World Value Survey leave us confident in our identification strategy and in the causal interpretation of the results. Estimates are obtained by controlling for a large set of individual charac-

teristics as well as for country-specific birth year trends, which minimize the possibility of confounding factors. In addition, we perform several robustness checks confirming our main findings.

Our results are in line with those of [Giuliano and Spilimbergo \(2014\)](#), who find that unexpected and adverse macroeconomic shocks in adolescence or youth have a long-lasting effect on beliefs. They also complement the results of [Conzo and Salustri \(2019\)](#), showing that young people exposed to combat during the World War II display lower levels of trust and social engagement well into adulthood.

Furthermore, unlike recent papers finding only a short-lived and rapidly dissipating impact of terrorist events on trust ([Arvanitidis et al., 2016](#); [McCoy et al., 2020](#)), we find robust evidence of a long-lasting effect. The formed values tend to be persistent over time, so terrorism exposure in subsequent stages does not exert the same effects. Finally, our analysis indicates that the effect of events experienced during adolescence is amplified by very recent accidents.

The rest of the paper is organized as follows: Section 2 briefly reviews the psychological literature on values formation, Section 3 describes the data, while Section 4 presents the empirical strategy and the main results. A set of robustness checks are performed in Section 5. Finally, Section 6 concludes the paper.

2 Values and trust formation

Traits and values are important psychological characteristics defining personality. Personality traits differ across individuals, are fairly consistent in various situations, and influence our way of thinking, feeling, and behaving. The five commonly recognized traits are openness, conscientiousness, extroversion, agreeableness, and neuroticism. They tend to be stable across the human lifespan, from preschool age through adulthood, and they differ from states, which are more transitory dispositions. Values, instead, can be defined as the set of features that are valued by an individual, such as honesty, friendship, loyalty, and justice. Personal values, together with links and understandings in society, form a societal social capital that enables individuals and groups to interact. Traits and values characterize individual personality as a result of the influence and interaction of nature (biology and genetics) and nurture (environment and upbringing). According to traditional psychological theories, values and behavioral patterns are transmitted from parents to children, but they can change over time due to the effects of the social system, which encompasses the educational system, mass media, religion,

politics, and other institutions and episodes, such as traumatic personal or social events, including terrorism.

In addition, psychological theories explain the formation of individual values and identify some phases in life as particularly important for the development of cultural orientations and values. There is a consensus among psychologists that individual values are shaped in the early stages of human development, especially before adulthood, and they are very persistent over time. Core values depend on the historical environment of reference, and hence individuals within a specific generation tend to share different values and attitudes from those of individuals from other generations. Values and behavior patterns are modeled by alternative sources of influence through the interplay of parents, teachers, friends, and community members. The level of trust seems to depend on the frequency of social interactions: individuals who are engaged with others more often exhibit more trust. Meanwhile, limitations in connections reduce trust and trustworthiness. According to the ‘impressionable years model’ or the ‘formative phase model’, the development of cultural values depends on experiences in a particular period of life when susceptibility to change and development is higher ([Krosnick and Alwin, 1989](#)). Recent studies identify the critical formative phase as adolescence and early adulthood, unlike previous studies, which emphasized early childhood. Indeed, in this period values, attitudes, and beliefs are weakly developed and thus more changeable ([Vinken, 2014](#)). Furthermore, generations are characterized by people in this crucial period sharing a historical environment, which has an important socializing influence. People belonging to the same generation tend to share values and attitudes compared to individuals from other generations. Values shaped and acquired during the formative phase are persistent over time and do not change in subsequent phases ([Schwartz, 1992](#)). Social learning theory demonstrates that individuals form their attitudes and behaviors under the influence of people nearby and based on the environment ([Bondura, 1977](#)).

Among personal traits, trust has clear economic implications since it is essential for transactions, especially in the context of uncertainty and limited information. Generalized trust refers to the level of confidence one has in others despite uncertainties, risks, and the possibility for them to act opportunistically. From an economic point of view, the literature on social capital identifies two alternative theories behind the formation of trust. According to society-centric approaches, social capital is inherited from historical, cultural, and societal norms and values ([Hooghe and Stolle, 2003](#)). Meanwhile, according to the institution-centric approach ([Kumlin and Rothstein, 2005](#); [Braithwaite and Levi, 1998](#); [Tarrow, 1996](#)) social capital depends on the contemporaneous political context as well as on the formal political and legal

institutions. If this is the case, the policies and legal frameworks of political institutions play a crucial role in shaping trust.

Starting from these theories, we will rely on data to identify and quantify the effect of experiencing terrorism in crucial phases of human development more precisely.

3 Data and descriptive statistics

To identify the effect of terrorism on trust, we use two main sources of data: geopolitical data on terrorist attacks over the last 50 years together with global survey data containing information on trust and values of the general population. Let us briefly describe the content of the data and present the basic descriptive statistics.

Data on terrorism are taken from the Global Terrorism Database (GTD) ([START, 2019](#)), which documents international and domestic terrorist attacks that occurred worldwide in the period 1970–2019. Actions are classified as terrorism when characterized by ‘the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation’. The database includes events jointly satisfying three conditions: the incident must be intentional, it must entail some level of violence or immediate threat of violence, and it must be perpetrated by sub-national actors. In addition, each record must meet two of the following three criteria: (i) the act must be aimed at attaining a political, economic, religious, or social goal,¹ (ii) there must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience than the immediate victims, and (iii) the action must be outside the context of legitimate warfare activities. The GTD does not include plots or conspiracies that have not been enacted or at least attempted. However, unsuccessful attempts are recorded. Incidents occurring in both the same geographic and temporal point are regarded as a single incident, but if either the time of occurrence of the incidents or their locations are discontinuous, the events are recorded as separate incidents. Together with the exact localization of the event, information about the type of attack, the weapon, the target, the number of victims, the consequences, and the perpetrator is available, even if a clear-cut classification is often difficult.²

Starting from the full list of recorded incidents, for each country-year, we construct alternative measures of terrorism activity. The simplest one

¹According to this definition, the exclusive pursuit of profit is not enough to identify an action as terrorist.

²For a detailed description of the database, see [LaFree and Dugan \(2007\)](#).

is an absolute indicator for the total number of events. The second one distinguishes between domestic and international events. We classify an event as international if the nationality of the perpetrator group differs from the location of the attack, if the nationality of the perpetrator differs from the nationality of the target(s)/victim(s), or if the location of the attack differs from the nationality of the target(s)/victim(s). The third one accounts for the number of events in a year with at least 1, 10, or 50 kills, respectively. Moreover, we calculate the number of events resulting in property damage as well as the number of events causing major damages (greater than 1 million USD) to property. Finally, we also calculate other measures of terrorism intensity, such as the number of casualties from terrorism as well as an index combining the number of terrorist incidents and victims per year following the incidents ([Meierrieks and Gries, 2013](#)).

Figure 1 shows the trend of domestic and international terrorism by geographical area. There is significant variability both over time and across countries: while in the 70s and 80s events were mainly concentrated in Western countries, in the last two decades terrorism is very geographically focused in the eastern ones. According to the most recent figures, in the last three years 95% of deaths occurred in the Middle East, Africa, or South Asia. The long-term pattern is heterogeneous. In some areas, there is clear comovement in domestic and international incidents, with almost a constant proportion between the two. In other areas, the number of international events is by far larger than the number of domestic ones, even though there is a convergence of the two trends.

As with all data sources, the GTD has advantages and disadvantages. Compared to other datasets on terrorism, it is characterized by larger geographic and time coverage, making it possible to study the long-run effect of past events at the global level. Most importantly, the GTD records both international and domestic terrorist events, which allows exploiting any differential effect between the two. Meanwhile, the most commonly used alternative data sources collect information exclusively on international terrorist events, even though, according to estimates, they represent less than 20% of total events (see for example [Kis-Katos et al., 2011](#); [Abadie, 2006](#)). One exception is the RAND dataset, which considers both types of attacks, but it does not permit a long-run analysis since it only records domestic events since 1998 ([LaFree, 2019](#)).

However, the GTD has some limitations, mainly due to the data collection procedure. The project is managed by the GTD team at the University of Maryland, analyzing alternative sources of information, such as media articles, electronic news archives, wire services, government reports, existing datasets, books, journals, or legal documents. As underlined by [Drakos and](#)

Gofas (2006), this can result in some unintentional misreporting or omission, leading to underestimation of terrorist attacks. This issue is more relevant for earlier years and can be correlated with the degree of freedom of the press. Because of measurement errors in the terrorist variables, our estimates could be downward biased, but, given the impossibility of appropriately measuring the true size of the impact, it is also impossible to assess the size of the bias. We account for the possible correlation with press freedom in our estimates since we control for the level of democracy in the country.

The considered measure of trust is recovered from all the available waves of the World Values Survey (WVS) (Inglehart et al., 2014). The WVS is a nationally representative survey conducted in more than 100 countries that account for more than 90 percent of the world’s population. It investigates various aspects of individual attitudes, ranging from human beliefs, preferences, and values to behaviors, motivations, and norms. The questionnaires, common across countries, also collect information on standard observable sociodemographic characteristics. From 1981 to 2020, seven waves have been carried out: 1981-1984, 1990-1993, 1995-1998, 1999-2004, 2005-2009, 2010-2014, and 2017-2020. The geographical coverage varies depending on the wave, ranging from 22 countries in the first round to about 100 countries in the last one. As a result, there is significant variability among the included countries with respect to their level of development, political framework, level of democracy, historical legacy, and prevailing institutional setting.

In all the waves, generalized trust is measured by asking people the following question: ‘Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?’. Possible answers are either ‘Most people can be trusted’ or ‘Need to be very careful’. Trustful individuals are those choosing the first option. On average, only one-fourth of individuals in the sample think that most people can be trusted. However, this figure hides some variability across countries and over time. From wave 1 (1981-1984) to wave 7 (2017-2020), the share of trustful individuals almost halved, dropping from .37 to .20. This trend can be found within all geographical areas, although the levels are different: in Europe and North America, trust drops from .40 to .27, while in Asia and Oceania it drops from .45 to .25. Africa and Latin America are the regions with the lowest social trust, with an average of .17 and .14, respectively, compared to an average of .32 in Europe and North America (see Table 2).³

The survey also collects information about basic sociodemographic characteristics. Among the individual observable features potentially responsible

³Notice that countries included in each wave change, so the figures are computed over a non-consistent sample of countries.

for the differences in trust, we consider age, gender, education level (internationally harmonized), marital status, number of children, job status, interest in politics, importance of religion, and country of birth. For people born in foreign countries, no information is collected about the year of arrival into the current country of residence. Hence, we exclude from our analysis immigrants, who account for less than 6% of the sample.⁴

To test the effect of terrorism during adolescence and youth on trust, we assign to each individual the alternative measures of terrorism previously described according to the years when she experienced her impressionable phase (from 15 to 25 years). In particular, we construct cumulated measures of terrorism exposure for the relevant age window. As an example, consider the case of the 1970 cohort of individuals born in a given country and surveyed in different waves. For all of them, the simplest index of terrorism exposition is the total number of terrorist events that occurred in their country from 1986 to 1996. The same logic applies to all terrorism measures and all cohorts. Since terrorist events were recorded from 1970 and the last WVS was run in 2019, our empirical analysis covers the cohorts of individuals born from 1954 to 1993. Our final sample consists of 107 countries, with a broad variety of income levels and institutional settings. The complete list of countries included in the analysis is presented in Table 1. Basic summary statistics for the core variables used to perform the empirical analysis are reported in Table 2. Notice that, in the final consistent sample, the first wave of WVS is dropped for several reasons. First, there are only 1,359 individuals for which information from both GTD and WVS are present (these individuals are those who are at least 25 in the period 1981-1984 and are born after 1954, as GTD data are available from 1970 only). Moreover, one of the control variables (importance of religion) is missing in the first wave. However, the number of non-missing values in all of the remaining control variables is as low as 96 (over 1,359)⁵, which suggests dropping the entire wave. Finally, since all countries surveyed in the first wave are present in the next ones, there are no sample selection issues.

⁴Moreover, since the survey collects information both on age and year of birth, as a check, we compute age according to the reported year of birth, but some inconsistencies between the two emerge. Therefore, we drop all individuals with more than five years of difference between the reported and computed ages.

⁵The final sample consists of 209,925 individuals, so we lose 0.00087% of the sample.

4 Empirical Analysis

4.1 Identification strategy

The aim of the empirical analysis is to study whether and to what extent exposure to terrorist events in the crucial phases of value development affects individual trust in other people. We identify the impact of terrorism on trust by exploiting the country by cohort variation in the intensity of terrorist activity. This strategy makes it possible to account and control for country-specific and cohort-specific differences simultaneously. As discussed in previous sections, individuals' values are formed especially during adolescence and early adulthood and then tend to be persistent over time. For this reason, we first focus on this period and then compare the results with the ones obtained considering terrorist events during other life phases to prove the validity of our analysis. Therefore, in the baseline specification we estimate the following equation:

$$Trust_{icty} = \alpha + \beta Events_{15-25,icty} + \gamma X_{icty} + \eta_c + \gamma_t + \theta_y + \eta_c \gamma_t + \varepsilon_{icty} \quad (1)$$

where $Trust$ is the level of trust of individual i , living in country/region c , born at time t , and surveyed in year y , while $Events_{15-25}$ includes the terrorist events which individual i has been exposed to during her adolescence and youth (from 15 to 25). Terrorist events refer to events that occurred in the country of residence for individuals born in that country and who never moved. The vector X contains the sociodemographic individual observable characteristics described in the previous section potentially affecting trust. To control for time-invariant national differences in the social systems, the educational systems, the labor markets, or the institutional settings potentially affecting trust, we include the country-fixed effects η_c . In all specifications, we also include individual year of birth fixed effects γ_t to control for cohort-specific trends in values due to common experience within generations, while the year-fixed effects θ_y account for exogenous unobservable shocks affecting trust in the years of the survey that are common across countries. Since we match the country-year indexes for terrorism to individuals according to their country and cohort of birth, the identification of the effects of violent events on trust comes from the fact that different countries experienced different events over the years. The problem with this approach is that we could attribute to the terrorist events the effect of some other time-varying country-specific characteristics, as the terrorist shock is the only time-varying country level regressor included in our baseline specification. In particular, confounding factors might include other economic and political events that were specific to high-terrorism intensity regions, which also dis-

proportionately affected individuals during their impressionable ages, such as economic shocks and institutional/political changes affecting the young differentially. To assess this issue, we add to the model the country-specific linear trends ($\eta_c\gamma_t$) to control for cohort-specific characteristics and possibly divergent trends across countries over time due to non-observable country-specific characteristics. In addition, in the richest specification, we also add controls for individual beliefs and values that may influence trust as well as for the macroeconomic context. Finally, the usual idiosyncratic error component, clustered at the country level, is ε_{icty} .

The identification assumption is that the timing and intensity of the terrorist events is uncorrelated with the error term once observables are considered and unobservables are accounted for, through the country, year of birth, and survey fixed effects together with the country-specific trend. The repeated cross-sectional structure of the WVS allows exploiting both cross-sectional and temporal variations arising from the individual country and year of birth, but it is compatible with a demanding specification. On the one hand, observing people of the same age at different times, we are able to distinguish between age and cohort effects. On the other hand, the inclusion in all specifications of controls for individual age, year of birth, and time fixed effects accounts for age- and cohort-specific trends in values as well as for common national history.

We estimate parameters using OLS for ease of interpretation, but qualitatively similar results are obtained with logit or probit models, as discussed in Section 5.

4.2 Main results

Table 3 presents the results for the baseline model, in which terrorist events are measured by the total number of terrorist incidents that occurred in the country of residence in the relevant age bracket (15-25). For each regressor, we report the linear coefficient multiplied by 1000 and also the standardized beta coefficient, which allows assessing the magnitude of the estimated effect in comparative terms. In column (1), we observe a negative and statistically significant effect of terrorism during adolescence on trust. One standard deviation in the experienced terrorist events translates, on average, into a 0.019 standard deviation decrease in trust. Since the effect of past terrorism exposure might be mediated by other factors, we control for observable sociodemographic and economic characteristics measured at the time of the survey. The estimated effect is robust in terms of significance and magnitude (Column 2). As expected, and in line with the literature, female, employed, more educated, and married individuals tend have a higher level of trust in other

people. Meanwhile, no age differences are found, and the number of children also does not have any statistically significant effect. In addition, individual beliefs and values, measured by interest in politics and the importance of religion in one's life, turns out to be correlated with trust. Higher interest in politics translates into higher trust, while the opposite is true for religion. Although at first sight the estimated effect of terrorism could seem low, it is comparable with that of other individual features carefully monitored by policymakers. Namely, the analysis of standardized betas shows that the effect is comparable to that of being employed or having a secondary education. It is 3 times larger than the effect of being female but smaller than the effect of having a tertiary education. Finally, in Column 3, we include the GDP growth rate in the year of the survey to control for macroeconomic factors that could influence individual perception, but the effect is not statistically different from zero, and it does not change the estimated effect of terrorism.⁶

Our previous estimates do not consider attributes of the experienced incidents that could affect the findings. Different events can have different impact on public opinion as a result, for example, of media coverage, based on the number of people involved or the extent of physical damages. Hence, we first explore the role of the intensity of terrorism based on the related casualties that clearly can change the perception of the event. In particular, considering the full distribution of terrorist events in the GTD database, we focus on those with in which at least one person was killed in order to capture the psychological effect of more violent incidents. Moreover, we further restrict the analysis to consider events with at least 10 or 50 casualties, representing about the 90th and 99th percentiles of the full sample, respectively. Finally, we focus on the material and tangible effects of terrorism by considering only events resulting in damages to property and in major damage, that is, more than the equivalent of 1 million *USD*. Estimates are reported in Table 4.

Almost all measures are negatively associated with trust. The magnitude of the effects are higher than those of the baseline model, suggesting that the strength of the violence matters and not only its frequency. The results in Columns 1 and 2 show that having grown up in a period in which terrorist events had at least 10 casualties reduces trust more than having been exposed to events with at least one casualty. In addition, when we restrict our measure of terrorism to more violent incidents with at least 50 fatalities, the coefficient becomes larger but insignificant (Column 3). However, the

⁶Although not reported in the table, also controlling for the GDP growth in the reference period of terrorism exposure instead of the contemporaneous one does not affect the estimates.

number of individuals experiencing a positive number of such extreme events is very limited, making the estimation imprecise. Finally, similar results are obtained when considering the overall number of casualties instead of the number of events (Column 4) or the sum of terrorist incidents and casualties (Column 5).⁷ The results are also confirmed when considering the physical impacts of terrorism. Namely, the number of events resulting both in damage to property (Column 6) and in major damage to property (Column 7) during the critical age period reduces trust at the time of the survey, and the estimated effect is significantly higher in the second case. The detrimental effect of terrorism on trust goes hand in hand with the extent of the resulting economic damage.

Finally, we also explore the role of very recent events and their interaction with the ones experienced in the impressionable years. The time window between the violent experience and the survey could in principle influence the findings. Indeed, recent traumatic events creating a threat to life or safety are more imprinted in the mind and may therefore bias the level of social trust reported in the surveys. Also, individuals not directly involved in the event could equally have been exposed to it by news or images in the media, as shown by [Godefroidt and Langer \(2018\)](#). These events could potentially lessen the effect of experiences during the impressionable years. Hence, we augment our baseline model with a control for events that occurred the year before the survey. The results are presented in Table 5, showing that the effect of terrorism when young does not change, although the number of events in the previous year or the casualties have a negative effect on trust (Columns 1 and 2). Additionally, the intensity of the very recent events is crucial. Indeed, having experienced events with at least one, 10, or 50 victims reduces trust. As expected, the magnitude of the estimated effect increases significantly with the number of victims (Columns 3, 4, and 5) and the severity of the attack in material terms (Columns 6 and 7). However, none of the controls eliminates the effect of the violence experienced during adolescence and youth. These results are new in the literature and suggest that the memory of the terrorist attacks does not fade away as time elapses; rather, it permanently shapes individual trust.

4.3 Heterogeneous effects

Our previous estimates suggest that, on average, terrorist events when young harm social trust, but societies can react differently according to their charac-

⁷Although not reported in the text, similar results are obtained using other measures for terrorism intensity from [Jong-A-Pin et al. \(2008\)](#), who examine the relationship between terrorism and the replacement of the incumbent government.

teristics and institutional features. These elements can lead to heterogeneous effects.

A first factor potentially affecting individual trust is the prevailing level of democracy when values are formed, as an adequate level of democracy is a prerequisite for interpersonal trust. We explore this issue by controlling for the level of democracy in the relevant age bracket. In particular, using data from the Polity IV Project, we assign to each individual the average Polity Score for the lived crucial life phases. The scores range on a scale from -10 (full autocracies) to +10 (consolidated democracy). The results are presented in Table 6. Although democracy *per se* does not exert any statistically significant effect on generalized trust (Column 1), the two elements interact. Indeed, having been exposed to more terrorist incidents when young reduces trust, but the effect is smaller in more democratic contexts (Column 2). In addition, the scores enable distinguishing between two main regime categories: non-democracies (from -10 to +4) and democracies (from +5 to +10). More intense exposure to terrorism reduces trust only in non democratic countries (Column 3), but the estimated effect is not significant in democratic ones (Column 4).⁸ This could be explained by the relative size of the two counteracting forces. Experiencing a terrorist attack negatively affects trust in others. However, societies with more solid democratic institutions can compensate for this, at least partially. The current data do not allow for an investigation of why this happens, but it is likely due either to the fact that terrorist events are perceived as ‘external’ to the society (independently of the geographical origin) or to the ability of the democratic institutions to aggregate the society against a common threat—or both. Conversely, in less democratic or dictatorial systems, terrorism could be perceived as a form of political dissent, or a ‘legitimate’ action against the power, and therefore it may exacerbate the divisions in the society, decreasing social trust. Our estimates suggest that, in democratic countries, the institutional setting perfectly compensates for the effect of the experienced violence. Our results differ from those of Godefroidt and Langer (2018), who focused on the short-term effect of terrorism and found a lower level of trust in democratic countries experiencing terrorism in the previous five years.

Following the same line of argument, we explore whether the effect of terrorism on trust depends on the origin of the perpetrator (Table 7). Intuitively, the reaction to terrorist attacks may vary depending on whether they are perpetrated by domestic or foreign organizations. Indeed, domestic

⁸Although not reported in the paper, the results are qualitatively robust to a more stringent definition of democracy, that is, countries with a Polity score between 9 and 10 only.

perpetrators could lower the trust in other people, as they are perceived as close and similar, while international or foreign perpetrators are more easily identified as recognizable enemies and could foster trust in other, similar people, fighting against a common enemy. Hence, we include as explanatory variables two new indices of terrorism created using the same logic of the previous one but considering the incidents having a national or international matrix separately. The exposure to both domestic and international events during adolescence and youth reduces trust, but the effect in the latter case is significantly higher (Columns 1 and 2). Considering the standardized betas, the effect of international events is 50% higher than that of the domestic ones. These results are in line with those from the literature examining the link between conflicts and trustworthiness based on their intra-group or inter-group origin. Also in this case, the democracy level of the considered country interacts with the experiences of terrorism. Domestic or international terrorist attacks lower trust, but this effect is lower in established democracies. Both domestic and international events exert an effect almost double in democratic countries compared to the same events in democratic countries (Columns 3 and 4).

The effect of terrorism may be confounded with that of other violent events that happened in the same period, such as wars or conflicts. Conflicts and terrorism share some features, but they also differ in many aspects. Both involve acts of extreme violence, have political, ideological, or strategic aims, and are inflicted by one group of individuals against another. They both have negative consequences for the population, although war tends to be more widespread, and the destruction is likely to be more devastating. Wars are generally waged by states with armies and huge arsenals of weapons at their disposal, while terrorist groups have few professional or financial resources. An act of terrorism is politically inspired, involves violence or the threat of violence, is designed to have a strong psychological impact (targets tend to be selected carefully to provoke the desired reaction), and deliberately targets civilians. War and terrorism are clearly differentiated by international law. Apart from the differences, their effects in terms of social capital are very similar, and they can be confounded. To disentangle the two effects, in Table 8, we augment our baseline model with an individual indicator for having experienced a conflict constructed using data from the PRIO database.⁹ The estimates show that all previous results still hold both in magnitude and statistical significance, while having experienced a conflict in the reference period (Column 1) or in any year before the survey (Column 2) is not correlated with generalized trust. We also investigate

⁹The PRIO database collects information on armed conflicts from 1946 to the present.

between-country heterogeneities in the estimated effect of terrorist exposure by distinguishing between countries having and not having experienced any conflict from 1970 onward. The results presented in Columns 3 and 4 suggest that past terrorism only matters for the first group of countries.

5 Robustness checks

In this section, we discuss a number of alternative specifications of our baseline model in order to assess the consistency and robustness of our results.

First, we explore the possibility that terrorist events in other life periods can also affect generalized trust. Indeed, some psychologists underline the relevance of early childhood in shaping values, especially through intergenerational transmission within the family. According to socialization theory, early experiences with parents directly shape the values and beliefs of children. Conversely, the lifelong openness model states that development is a lifelong process, and people are equally open to changes in orientation in every moment as a result of specific experiences. According to this view, attitudes and values are susceptible to variation throughout the entire lifespan. Hence, to test these two hypotheses we repeat our analysis, considering events experienced during childhood (from 0 to 14) or adulthood (from 25 onward). To obtain comparable estimates, we restrict the analysis to the consistent sub-sample of individuals born between 1969 and 1991 and aged 26-50 at the time of the survey. Recognizing the non-comparability of point estimates with the ones discussed in the previous section, this restriction is necessary to follow cohorts over time. Indeed, GTD data are available only from 1970, while the WVS only includes individuals older than 16 and hence those born before 1990 in the last available wave. The results of this disaggregation are reported in Table 9 using the same specification of the baseline model. When considering the number of terrorist events experienced during childhood (Column 1), the impact on trust is not significantly different from zero, while events that occur during adulthood (Column 3) exert a negative impact, although slightly less significant compared to those experienced during the impressionable years (Column 2).

Taking into account all the life periods in a single regression, the negative impact of terrorist events experienced between 15 and 25 years is confirmed. In addition, traumatic events during adolescence and youth reduce trust more than those experienced in adulthood and childhood. In line with psychological theory, our results confirm the lifelong openness model but also suggest that the experiences during the impressionable period have a greater and longer-lasting impact. The estimated effect does not dissipate over time.

A further concern is the omission of variables specific for individual adolescents and youths that may be correlated with trust. In particular, our previous estimates could be upward-biased because of a positive correlation between trust and income level or parental background. Unfortunately, the WVSs do not contain any retrospective information on family socioeconomic background when young, and thus we cannot include these controls in our analysis. At best, current income in comparable brackets is available only for a sub-sample of countries, and hence we re-estimate our model including the income fixed effects that partially account for family background because of the intergenerational transmission mechanism. As reported in Appendix (Table A1), all previous results hold both in terms of significance level and magnitude, confirming the validity of our identification.

To check whether our results depend on the chosen econometric specification, we perform two main robustness checks. For ease of interpretation, we prefer discussing the OLS estimations in the main text, but we obtain very similar estimates, both in terms of significance and magnitude, when applying a probit model accounting for the dichotomous nature of the dependent variable (Table A2 in Appendix). In addition, all the previously discussed results hold considering different clustering for standard errors (i.e., country and birth-year level or country-survey year level) in order to account for error correlation among individuals born in the same period and in the same country or among individuals born in the same country and surveyed in the same year (Table A3).

Furthermore, we perform a robustness check to test how our identification strategy performs with placebo terrorist events. We randomly assign to each individual terrorist events that occurred in another country in the reference period. The estimates presented in Table 10 show that the effect of these fictitious terrorist events is statistically insignificant.

6 Conclusions

This paper provides new evidence regarding the long-term effect of terrorism on generalized trust at a global level. Recent decades have been characterized by a constant decline in trust in both developed and developing countries. The implications of this negative trend are non-trivial since the cost of low trust is high from a social and economic point of view. Distrust can create a vicious cycle by increasing regulation, lowering economic growth, and reducing trust further, reinforcing the negative mechanism of selfish behaviors. At the same time, many countries have experienced an increase in the number of violent terrorist accidents. In recent years, international terrorism has

become a more commonplace phenomenon, whereas in past decades most events were national.

We combine these two pieces of evidence to examine how trust is shaped by violent experiences in particular phases of human development and whether the effect is persistent over time. We fill a gap in the literature, which is mainly focused on the short-run effects of terrorism, especially in terms of the performance of stock and financial markets, employment, and tourism. In this paper, we provide new evidence regarding the effect of terrorism in shaping individual attitudes as measured by trust in other people. The results confirm the psychology literature, showing that individuals' values are formed in the early stages of development and tend to be persistent over time, although experiences in adulthood are also important. The analysis shows that exposure to terrorism during the critical years of adolescence and early adulthood reduces an individual's level of trust permanently. Individuals who grew up during a more turbulent historical period are less trustful. Moreover, these formed values tend to be persistent over time, and so exposure to terrorism in subsequent stages has a smaller effect. In addition, people's values seem to be shaped by the frequency and intensity of violent events. The estimated impact of terrorism is robust to the inclusion of several individual and contextual factors, both current and retrospective, some of which significantly influence trust without mediating or moderating the effect of terrorism.

Our results suggest that the effect is not driven by country-specific institutional differences or other time-varying characteristics. It is important to highlight that our indicator for terrorism captures both the direct experience of traumatic events during the impressionable years, but also peers' and parents' reactions. Unfortunately, the available data do not allow us to identify the relative weight of the three channels in affecting trust in other people in the long run. The estimated effect is heterogeneous across individuals or countries, and institutions may act as mediating factors. Terrorism has persistent effects that go beyond the evident ones. Obviously, terrorism has immediate direct costs such as property damages, destroyed physical assets or the economic value of the lives lost. However the indirect economic costs are by far larger since terrorism affects apart from trust also tourism, FDI, consumption, investment, savings, stock markets and trade. Media could amplify the effect of terrorism significantly increasing these latter costs. But also what happens in neighboring countries could have significant spillovers and externalities. Although we are not able to assess these aspects, our analysis has shed new light on the relevance of monitoring also additional elements after a terrorist event occurred. Better understanding of factors that increase uncertainty and spur cooperation may explain the different perfor-

mances across countries or sectors and would also have policy implications. Indeed, identifying the most effective way to react to and communicate after a terrorist attack is a non-trivial question for policymakers, who must also consider its long-term effect. The average extent of terrorism in most countries is low, and the share of deaths from terrorism is very small. However, the amount significantly changes from year to year and from country to country, creating unexpected rises and spikes, translating into lower trust years later. Moreover, the magnitude of the effect increases with the severity of the terrorist attack. Further, while the costs associated with a single incident may not seem large relative to the size of the considered economy, they become remarkably larger from a long-term perspective, and they are not limited to the single country. For these reasons, coordinated international efforts against terrorism are essential.

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Figures

Figure 1: Number of domestic and international terrorist events over time by area. GTD, all countries, 1970-2018.

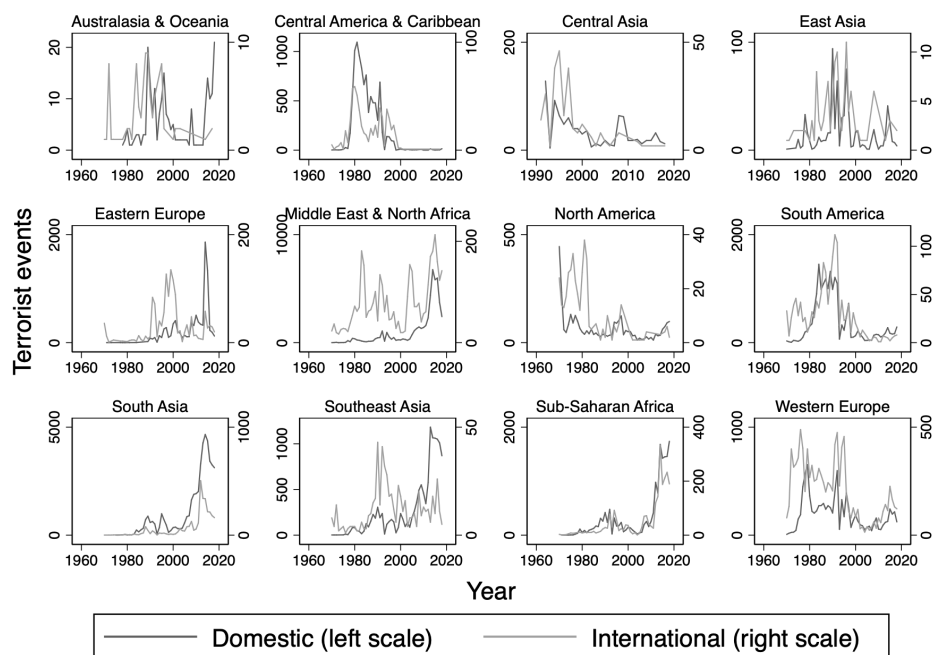
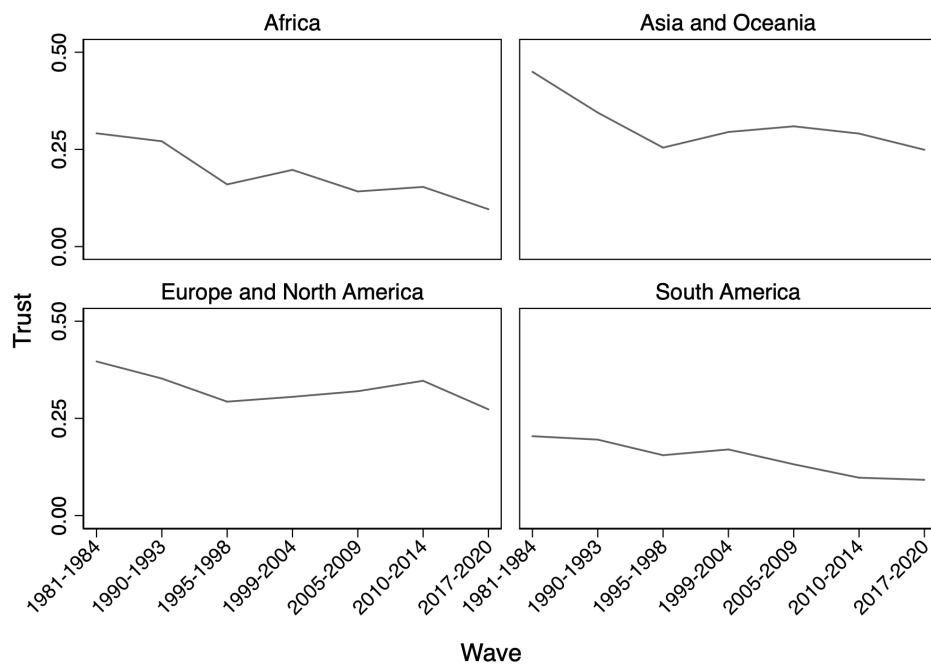


Figure 2: Trends of trust over time by area. WVS, all countries, Waves 1-7.



Tables

Table 1: List of countries in the sample, by WVS wave

	Country	Obs	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7
1	Albania	1596	0	355	1241	0	0	0
2	Algeria	1108	0	0	552	0	556	0
3	Andorra	820	0	0	0	630	0	190
4	Argentina	1750	0	320	493	467	0	470
5	Armenia	1939	0	637	723	0	579	0
6	Australia	2766	0	529	0	581	692	964
7	Austria	1461	263	491	707	0	0	0
8	Azerbaijan	1522	0	884	0	0	638	0
9	Bahrain	720	0	0	0	0	720	0
10	Bangladesh	2386	0	658	870	0	0	858
11	Belarus	2342	0	923	627	0	792	0
12	Belgium	1834	471	676	687	0	0	0
13	Bolivia	1326	0	0	0	0	0	1326
14	Bosnia-Herzegovina	1647	0	370	1277	0	0	0
15	Brazil	3527	656	0	0	774	967	1130
16	Bulgaria	1876	237	605	598	436	0	0
17	Burkina Faso	395	0	0	0	395	0	0
18	Canada	2238	456	0	801	981	0	0
19	Chile	2629	0	370	586	498	536	639
20	China	4105	0	0	523	662	1239	1681
21	Colombia	3482	0	1614	0	0	900	968
22	Croatia	578	0	0	578	0	0	0
23	Cyprus	2042	0	0	499	540	474	529
24	Czech Republic	2134	476	903	755	0	0	0
25	Denmark	1315	231	390	694	0	0	0
26	Dominican Republic	154	0	154	0	0	0	0
27	East Germany (GDR)	2304	261	682	421	414	526	0
28	Ecuador	1519	0	0	0	0	699	820
29	Egypt	4290	0	0	1168	1471	709	942
30	El Salvador	510	0	510	0	0	0	0
31	Estonia	1757	231	251	575	0	700	0
32	Ethiopia	711	0	0	0	711	0	0
33	Finland	1941	157	718	614	452	0	0
34	France	1982	227	620	669	466	0	0
35	Georgia	2332	0	0	754	837	741	0
36	Germany	561	0	0	0	0	0	561
37	Ghana	1402	0	0	0	620	782	0
38	Greece	1664	0	409	601	0	0	654
39	Guatemala	498	0	0	0	498	0	0
40	Hungary	1734	218	203	780	533	0	0
41	Iceland	980	196	366	418	0	0	0
42	India	3975	595	892	793	756	939	0
43	Indonesia	3868	0	0	411	943	0	2514
44	Iran	2211	0	0	718	1493	0	0
45	Iraq	4051	0	0	1167	1390	661	833
46	Ireland	1010	201	366	443	0	0	0
47	Italy	2258	425	680	689	464	0	0
48	Japan	2799	0	257	422	423	1015	682
49	Jordan	2019	0	0	587	0	663	769
50	Kazakhstan	1757	0	0	0	0	908	849
51	Kosovo	711	0	0	711	0	0	0
52	Kuwait	848	0	0	0	0	848	0
53	Kyrgyzstan	1002	0	0	344	0	658	0

Continued on next page

Table 1 – continued from previous page

	Country	Obs	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7
54	Latvia	1146	198	311	637	0	0	0
55	Lebanon	766	0	0	0	0	333	433
56	Libya	1302	0	0	0	0	1302	0
57	Lithuania	1522	204	712	606	0	0	0
58	Luxembourg	783	0	416	367	0	0	0
59	Macedonia	1664	0	445	1219	0	0	0
60	Malaysia	2554	0	0	0	655	860	1039
61	Mali	320	0	0	0	320	0	0
62	Mexico	4790	0	905	671	828	1224	1162
63	Moldova	2022	0	340	1156	526	0	0
64	Montenegro	1185	0	90	1095	0	0	0
65	Morocco	935	0	0	357	256	322	0
66	Netherlands	2561	219	468	609	469	796	0
67	New Zealand	1020	0	323	0	385	312	0
68	Nigeria	3835	341	815	988	0	865	826
69	Norway	1718	250	397	517	554	0	0
70	Pakistan	2792	0	0	725	0	574	1493
71	Peru	3690	0	489	766	754	689	992
72	Philippines	2802	0	524	623	0	791	864
73	Poland	2200	169	385	694	435	517	0
74	Portugal	1096	218	290	588	0	0	0
75	Qatar	677	0	0	0	0	677	0
76	Romania	3609	265	470	608	736	832	698
77	Russia	5413	0	1497	666	927	1197	1126
78	Rwanda	1402	0	0	0	530	872	0
79	Saudi Arabia	870	0	0	870	0	0	0
80	Serbia	2150	0	385	1151	0	0	614
81	Serbia-Montenegro	564	0	0	0	564	0	0
82	Singapore	1699	0	0	699	0	1000	0
83	Slovak Republic	1247	276	384	587	0	0	0
84	Slovenia	2473	224	640	601	474	534	0
85	South Africa	5285	588	1085	1366	0	2246	0
86	South Korea	3601	0	545	657	693	730	976
87	Spain	3649	566	748	1096	572	667	0
88	Sweden	1798	181	302	394	461	460	0
89	Switzerland	1700	305	385	449	561	0	0
90	Taiwan	2584	0	378	0	678	703	825
91	Tanzania	528	0	0	528	0	0	0
92	Thailand	2747	0	0	0	871	876	1000
93	Trinidad and Tobago	1012	0	0	0	493	519	0
94	Tunisia	1304	0	0	0	0	554	750
95	Turkey	7684	257	770	3070	787	985	1815
96	Uganda	545	0	0	545	0	0	0
97	Ukraine	2947	0	1160	598	460	729	0
98	United Kingdom	2300	357	694	789	460	0	0
99	United States	3683	376	427	512	0	1015	1353
100	Uruguay	1170	0	294	0	381	495	0
101	Uzbekistan	981	0	0	0	0	981	0
102	Venezuela	1020	0	476	544	0	0	0
103	Vietnam	1294	0	0	462	832	0	0
104	West Germany (FRG)	2497	317	810	476	433	461	0
105	Yemen	387	0	0	0	0	387	0
106	Zambia	668	0	0	0	668	0	0
107	Zimbabwe	1348	0	0	416	0	932	0

Table 2: Descriptive statistics

Variable	Obs	Mean	St.dev.	Min	Max
Trust	209925	.256	.437	0	1
Terrorist events (15-25)	209925	397.725	1075.197	0	22952
Events with at least 1 killed in 15-25	209925	166.565	583.757	0	14533
Events with at least 10 killed in 15-25	209925	16.269	64.631	0	1336
Events with at least 50 killed in 15-25	209925	1.132	5.241	0	103
Casualties in terrorist events (15-25)	209925	731.392	2808.91	0	67463
Events + casualties (15-25)	209925	1129.117	3816.308	0	90099
Events with property damages (15-25)	209925	265.305	617.302	0	8203
Events with major property damages (15-25)	209925	2.962	8.787	0	102
Terrorist events in the previous year	209925	63.115	215.411	0	2503
Casualties in terrorist events in the previous year	209925	124.186	546.86	0	6568
Events with at least 1 killed in the previous year	209925	30.555	113.529	0	1285
Events with at least 10 killed in the previous year	209925	2.612	13.271	0	158
Events with at least 50 killed in the previous year	209925	.163	.848	0	8
Events with property damages in the previous year	209925	27.873	79.486	0	754
Events with major property damages in the previous year	209925	.407	1.807	0	18
Democracy level (15-25)	209925	1.779	6.963	-10	10
Domestic terrorist events (15-25)	209925	343.396	1029.295	0	22691
International terrorist events (15-25)	209925	52.342	174.485	0	1917
Experienced a conflict (15-25)	209925	.418	.493	0	1
Experienced a conflict (ever)	206275	.599	.49	0	1
Terrorist events (0-14)	96145	441.177	883.365	0	5892
Terrorist events (15-25)	209925	397.725	1075.197	0	22952
Terrorist events (26+)	196784	617.413	1923.17	0	26048
Female	209925	.523	.499	0	1
Age	209925	38.361	8.776	26	65
Currently employed	209925	.718	.45	0	1
Primary educ. or less	209925	.241	.427	0	1
Secondary educ.	209925	.477	.499	0	1
Tertiary educ. or more	209925	.282	.45	0	1
Number of children	209925	1.857	1.542	0	8
Married	209925	.733	.442	0	1
Interested in politics	209925	.463	.499	0	1
Importance to religion	209925	.671	.47	0	1
GDP growth	209925	3.712	5.914	-24	54.158

Table 3: Baseline model. Linear probability model.

	(1)	(2)	(3)
	b/ β /se	b/ β /se	b/ β /se
Terrorist events (15-25)	-0.008*** -0.019*** (0.002)	-0.008*** -0.019*** (0.002)	-0.008*** -0.019*** (0.002)
Female	. . . (0.002)	4.951* 0.006* (2.891)	4.926* 0.006* (2.902)
Age	. . . (0.002)	12.003 0.241 (8.214)	12.166 0.245 (8.214)
Age squared	. . . (0.002)	0.004 0.007 (0.020)	0.004 0.006 (0.020)
Currently employed	. . . (0.002)	19.548*** 0.020*** (3.843)	19.542*** 0.020*** (3.838)
Secondary educ.	. . . (0.002)	16.003** 0.018** (7.895)	15.999** 0.018** (7.904)
Tertiary educ. or more	. . . (0.002)	80.260*** 0.083*** (13.431)	80.178*** 0.083*** (13.407)
Married	. . . (0.002)	12.371*** 0.013*** (4.260)	12.314*** 0.012*** (4.268)
Number of children	. . . (0.002)	-0.671 -0.002 (1.110)	-0.681 -0.002 (1.111)
Interest in politics	. . . (0.002)	44.800*** 0.051*** (4.147)	44.782*** 0.051*** (4.149)
Importance of religion	. . . (0.002)	-10.590** -0.011** (5.195)	-10.480** -0.011** (5.193)
GDP growth	. . . (0.002)	. . . (0.002)	-0.758 -0.010 (1.412)
Country-specific birth year trend	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
R ²	0.128	0.137	0.137
Observations	209925	209925	209925
Countries	107	107	107
Waves	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level.
For each regressor, we report in the table both the linear coefficient (first line) multiplied by 1000 and the standardized beta (second line).

Table 4: Different terrorism indicators. Linear probability model (OLS coefficients)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Events with at least 1 killed in 15-25	-0.014*** (0.002)	.	.	.	.	.	.
Events with at least 10 killed in 15-25	.	-0.107** (0.051)	.	.	.	.	.
Events with at least 50 killed in 15-25	.	.	-0.991 (0.873)	.	.	.	.
Casualties in terrorist events (15-25)	.	.	.	-0.003*** (0.001)	.	.	.
Events + casualties (15-25)	.	.	.	.	-0.002*** (0.001)	.	.
Events with property damages (15-25)	.	.	.	.	.	-0.012** (0.006)	.
Events with major property damages (15-25)	.	.	.	.	.	.	-0.834** (0.326)
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.137	0.137	0.137	0.137	0.137	0.137	0.137
Observations	209925	209925	209925	209925	209925	209925	209925
Countries	107	107	107	107	107	107	107
Waves	6	6	6	6	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000.

Table 5: Controlling for recent events. Linear probability model (OLS coefficients).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Terrorist events (15-25)	-0.005*** (0.002)	-0.004*** (0.001)	-0.005*** (0.001)	-0.005*** (0.001)	-0.007*** (0.002)	-0.008*** (0.002)	-0.007*** (0.001)
Terrorist events in the previous year	-0.075** (0.036)	.	.	.	.	.	.
Casualties in terrorist events in the previous year	.	-0.040*** (0.010)	.	.	.	.	.
Events with at least 1 killed in the previous year	.	.	-0.173** (0.075)	.	.	.	.
Events with at least 10 killed in the previous year	.	.	.	-1.370*** (0.319)	.	.	.
Events with at least 50 killed in the previous year	.	.	.	.	-10.131* (5.858)	.	.
Events with property damages in the previous year	.	.	.	.	.	-0.019 (0.058)	.
Events with major property damages in the previous year	.	.	.	.	.	.	3.413 (3.124)
Individual controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R ²	0.138	0.138	0.138	0.138	0.137	0.137	0.137
Observations	209925	209925	209925	209925	209925	209925	209925
Countries	107	107	107	107	107	107	107
Waves	6	6	6	6	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000.

Table 6: Different democracy levels. Linear probability model (OLS coefficients).

	(1) b/se	(2) b/se	(3) b/se	(4) b/se
			Polity < 5	Polity ≥ 5
Terrorist events (15-25)	-0.009*** (0.002)	-0.012*** (0.003)	-0.008*** (0.002)	0.006 (0.004)
Democracy level (15-25)	0.854 (0.623)	0.549 (0.647)	.	.
Terrorist events (15-25) X Democracy level (15-25)	.	0.001* (0.000)	.	.
Individual controls	Yes	Yes	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
R ²	0.137	0.137	0.085	0.191
Observations	209925	209925	120086	89839
Countries	107	107	81	75
Waves	6	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000. The threshold is the closest to the median in order to maximize the number of observations.

Table 7: Different perpetrators. Linear probability model (OLS coefficients).

	(1) b/se	(2) b/se	(3) b/se	(4) b/se
Domestic terrorist events (15-25)	-0.008*** (0.002)	.	.	.
Int'l terrorist events (15-25)	.	-0.070*** (0.024)	.	.
Non democracy X Domestic terrorist events (15-25)	.	.	-0.009*** (0.001)	.
Democracy X Domestic terrorist events (15-25)	.	.	-0.004* (0.002)	.
Non democracy X Int'l terrorist events (15-25)	.	.	.	-0.099*** (0.036)
Democracy X Int'l terrorist events (15-25)	.	.	.	-0.059** (0.027)
Individual controls	Yes	Yes	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
R ²	0.137	0.137	0.137	0.137
Observations	209925	209925	209925	209925
Countries	107	107	107	107
Waves	6	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000.

Table 8: Heterogeneous effect for having experienced conflicts. Linear probability model (OLS coefficients)

	(1)	(2)	(3)	(4)
	b/se	b/se	b/se	b/se
			Conflicts	No conflicts
Terrorist events (15-25)	-0.008*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)	-0.006 (0.034)
Experienced a conflict (15-25)	0.014 (4.347)	. .	. .	. .
Experienced a conflict (ever)	. .	27.173 (20.809)	. .	. .
Individual controls	Yes	Yes	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
R ²	0.137	0.138	0.117	0.150
Observations	209925	206275	123459	82816
Countries	107	107	63	62
Waves	6	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000.

Table 9: Correlation between trust and terrorist events by age groups.

	(1)	(2)	(3)	(4)
	b/se	b/se	b/se	b/se
Terrorist events (0-14)	-0.001 (0.004)	.	.	-0.005** (0.002)
Terrorist events (15-25)	.	-0.008*** (0.001)	.	-0.014*** (0.002)
Terrorist events (26+)	.	.	-0.007** (0.003)	-0.009*** (0.003)
Individual controls	Yes	Yes	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
R ²	0.146	0.147	0.147	0.147
Observations	85264	85264	85264	85264
Countries	107	107	107	107
Waves	5	5	5	5

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000. The sample is made by individuals born between 1969 and 1991 and aged 26-50 at the time of the survey.

Table 10: Random assignment of countries to individuals.

	(1)	(2)	(3)
	b/se	b/se	b/se
Terrorist events (15-25), randomized (country, individual)	-0.001 (0.001)	-0.000 (0.001)	-0.000 (0.001)
Individual controls	No	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
R ²	0.128	0.137	0.137
Observations	209925	209925	209925
Countries	107	107	107
Waves	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000.

A Appendix of tables

Table A1: Income brackets included as regressors

	(1)	(2)	(3)
	b/se	b/se	b/se
Terrorist events (15-25)	-0.007*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)
Individual controls	No	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
R ²	0.129	0.134	0.134
Observations	169931	169931	169931
Countries	105	105	105
Waves	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level.
All the coefficients are multiplied by 1000.

Table A2: Baseline model. Probit model.

	(1)	(2)	(3)
	b/se	b/se	b/se
Terrorist events (15-25)	-0.009*** (0.003)	-0.009*** (0.003)	-0.009*** (0.002)
Individual controls	No	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	209925	209925	209925
Countries	107	107	107
Waves	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level. All the coefficients are multiplied by 1000. Marginal effects are reported.

Table A3: Alternative clustered standard errors

	(1)	(2)	(3)
	b/se	b/se	b/se
Terrorist events (15-25)	-0.008*** (0.002)	-0.008*** (0.001)	-0.008*** (0.002)
Individual controls	Yes	Yes	Yes
Country-specific birth year trend	Yes	Yes	Yes
Birth year FE	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
R ²	0.137	0.137	0.137
Observations	209925	209925	209925
Countries	107	107	107
Waves	6	6	6

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Errors clustered at country level in column 1, country / birth year in column 2, country / year in column 3. All the coefficients are multiplied by 1000.