

# Do terrorist attacks feed populist Eurosceptics? Evidence from two comparative quasi-experiments

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**Abstract.** Over recent years, Europe has experienced a series of Islamic terrorist attacks. In this article, conflicting theoretical expectations are derived on whether such attacks increase populist Euroscepticism in the form of anti-immigration, anti-refugee and anti-European Union sentiment. Empirically, plausible exogenous variation in the exposure to the 2016 Berlin attack is exploited in two nationally representative surveys covering multiple European countries. No evidence is found for a populist response to the terrorist attack in any of the surveyed countries. On the contrary, people in Germany became more positive towards the EU in the wake of the Berlin attack. Moreover, little evidence is found that ideology shaped the response to the attack. The findings suggest that terrorist attacks are not met by an immediate public populist response.

Keywords: public opinion; populism; terrorism; Europe

### Introduction

Recent years have seen a series of major terrorist attacks in European cities, including Barcelona, Berlin, Brussels, Copenhagen, Hamburg, Liège, London, Manchester, Marseilles, Nice, Paris, Stockholm and Turku. Between September 2014 and August 2017, there were an estimated 63 acts of 'jihadist terrorism' in Europe and North America that left 424 people dead and 1,800 injured (Vidino 2017). Unsurprisingly, these attacks coincided with a sharp increase in the salience of terrorism among citizens. By spring 2017, citizens of EU member states identified terrorism as the top issue facing the European Union (Eurobarometer 2017). But to what extent, if at all, do major terrorist attacks impact on public attitudes toward refugees, immigration and the EU?

This question is salient given that recent attacks coincide with two key developments. First, terrorist attacks like those in Paris in 2015, Berlin in 2016 and Manchester in 2017 took place against the backdrop of the post-2014 refugee crisis and widespread public debates in Europe about border security, immigration and terrorism (Krastev 2017). Though most perpetrators of Islamist terrorist attacks were citizens of the countries they attacked (Vidino 2017), there is evidence to suggest that the issues of terrorism and the refugee crisis have become entwined in the minds of voters. Indeed, 2016 survey data from ten European states found that most voters associated terrorism with the refugee crisis; a median of 59 per cent of respondents from ten European states agreed that refugees increase the likelihood that their country would experience terrorism – a figure that increased to over 70 per cent in states such as Poland and Hungary (Wike et al. 2016).



*Figure 1.* Public assessments of the five best and worst things about the EU, ten countries. Notes: Panel A shows the five greatest achievements of the EU. Panel B shows the five greatest failures of the EU. The countries surveyed are: United Kingdom, Austria, Poland, Hungary, Belgium, Spain, Greece, Germany, Italy and France.

Source: Data from the Chatham House Survey (CHS) in 2016–17, described in detail below.

Second, these issues have also coincided with a general debate about the capacity of the EU to respond effectively to such challenges. For example, there has emerged evidence that a large number of voters feel dissatisfied with how the EU has responded to the refugee crisis, with an average of 74 per cent of respondents across ten EU member states saying that they disapprove with how the EU has managed the refugee crisis (Wike et al. 2016). Also, and as Figure 1 shows, the populations of Europe perceive freedom to live and work across the EU, the removal of borders and peace on the continent as the greatest achievements of the EU. On the other hand, just under two-fifths of all respondents claimed that mass immigration and the refugee crisis were among its greatest failures, underscoring the need to determine the political impact and consequences of salient terrorist attacks on European public opinion towards these issues. Meanwhile, populist radical right parties that are sceptical if not hostile toward the EU (Halikiopoulou et al. 2012; Werts et al. 2013) have sought to frame the refugee crisis and terrorism as part of a broader and existential 'threat' to Europe from Islam, Muslims and refugees (Zúquete 2008; Betz 2016).

These introductory observations raise the question of whether terrorist attacks increase public hostility toward refugees and immigration, and opposition to the EU. This question is receiving growing attention in the social sciences but, so far, findings are mixed. While some studies suggest that terrorist attacks bolster threat perceptions, authoritarianism, antiimmigration sentiment and public support for more restrictive immigration policies (e.g. Echebarria-Echabe & Fernández-Guede 2006), others suggest that such attacks have no significant effects (Castanho Silva 2018) or, in contrast, increase positive attitudes toward minorities and bolster interpersonal and institutional trust (Jakobsson & Blom 2014). An additional area that has attracted interest is contagion – namely whether any changes in public attitudes spill over from the country that was attacked into other states (Finseraas et al. 2011; Finseraas & Listhaug 2013; Legewie 2013).

Studies have also produced inconsistent results relating to the more specific question of whether attacks have particularly strong effects on specific ideological groups, with some suggesting that they encourage further polarisation and others indicating that people who hold liberal or left-wing values are the most likely to change their attitudes after such events (Brouard et al. 2018; Nail et al. 2009).

Importantly, to our knowledge, no prior studies have looked at the impact of terrorist attacks on public attitudes towards the EU, which appears odd given how central the EU has been to public debates about these issues (Guild et al. 2015; Krastev 2017). While previous research has demonstrated that anti-immigration attitudes are an important influence on how people think about EU integration (Kentmen-Cin & Erisen 2017), it appears that terrorism might have an impact on public opinion toward the EU in two ways. Either in the aftermath of such attacks people might backlash against the EU, effectively blaming the organisation, or citizens might 'rally around' the European project, becoming more supportive of institutions and authorities. Hitherto, to our knowledge, there is no empirical test of these expectations.

In this article, we build on and expand the state-of-the-art literature by using a quasiexperimental research design with unique comparative survey data to investigate the effects of the 2016 terrorist attacks at a Christmas market in Berlin. The 2016 Berlin terrorist attack was committed by a follower of the Islamic State of Iraq and the Levant and left 12 people dead and 56 injured (for additional information on the European context, see Online Appendix A). The attack attracted widespread attention across Europe and is an ideal case to study not only how the German public reacted to the event, but also how the public responded in different European countries.

Contrary to the claim that terrorist attacks produce an immediate negative public backlash to minorities and increase anti-EU sentiment, we find no systematic evidence that the German public changed its attitudes toward immigrants and refugees in the wake of the Berlin attack. Nor do we find evidence that respondents became more negative towards the EU. If anything, across both datasets, we find that people in Germany held more positive attitudes toward the EU following the attack, which is similar to a 'rallying effect' that has been observed in the aftermath of terrorist attacks in the United States and elsewhere (e.g., Hetherington & Nelson 2003). These diverse findings confirm recent arguments that attitudes towards the EU should not uncritically be conflated with populist sentiments (e.g., Rooduijn 2018). In addition, with few exceptions, there is limited evidence for a strong heterogeneous response to the attack. For the other European countries, we find no strong patterns of spillover effects – that is, that the event changed public sentiments towards immigrants, refugees or the EU.

#### **Terrorism and public opinion**

Over the past two decades, though particularly following the 9/11 attacks in the United States (e.g., Bonanno & Jost 2006; Hopkins 2010), there has been a growth in research that investigates the effects of terrorist attacks on public opinion toward immigrants and minorities, right-wing parties, civil liberties, social or institutional trust, or, in the case of Israel and Palestine, peace efforts (Davis & Silver 2004; Hirsch-Hoefler et al. 2016; Mondak & Hurwitz 2012; Woods 2011). Theoretically, this work typically draws on group-threat theory (Blumer 1958; Quillian 1995) to explore the expectation that terrorist attacks bolster perceptions of threat to the individual and collective group with implications for public

attitudes and preferences, especially regarding 'threatening' out-groups. The literature on terrorism effects on mass publics can be divided into three relatively distinct clusters.

The first cluster explores the effects of terrorist attacks on aggregate shifts in public opinion. Drawing on the assumption that terrorism encourages feelings of threat, which in turn make conservatism and anti-group prejudice more likely (Caricarti et al. 2017; Inglehart & Welzel 2005), there is evidence to suggest that attacks heighten prejudice and authoritarianism (Asbrock & Fritsche 2013; Lindén et al. 2018) and, by extension, increase negative attitudes toward immigrants, refugees and other minorities (Boomgaarden & De Vreese 2007; Echebarria-Echabe & Fernández-Guede 2006), support for more restrictive immigration policies (Finseraas et al. 2011), lower support for civil liberties (Bozzoli & Müller 2009) and encourage emotional reactions like anger, which benefit right-wing parties (Berrebi & Klor 2008; Vasilopoulos et al. 2018).

Drawing on such findings, we should expect to find that in the aftermath of a major terrorist attack there is a significant increase in negative public attitudes toward immigration and refugees. There is, however, no consensus regarding these effects. Other studies produce markedly different results, suggesting that whereas attacks increase public concern about terrorism, they do not fundamentally change public attitudes toward immigrants (Castanho Silva 2018; Finseraas & Listhaug 2013), can lead to more positive attitudes toward out-groups (Jakobsson & Blom 2014), and increase interpersonal and institutional trust (Dinesen & Jæger 2013) as well as civic engagement (Wollebæk et al. 2012). These alternative findings would lead us to expect, in contrast, that terrorist attacks are followed by no significant change in public attitudes toward immigration and refugees, or even by an increase in positive sentiments toward these groups.

Related to this question is whether or not terrorist attacks also lead to a significant change in public attitudes toward the EU. Remarkably, there has been very little research in this area. This appears striking for several reasons: first, as we have seen, the EU has become integral to debates about the refugee crisis, national security, borders and terrorism; second, it seems likely that citizens of EU member states may view such terrorist events as an attack on peace and security in 'Europe' more generally; and, third, we know that anxieties over perceived threats to the wider group have become a key driver of modern Euroscepticism (Lubbers & Jaspers 2011) and support for the radical right (Werts et al. 2013).

Furthermore, scholars such as De Vries (2018) contend that public opinion toward the EU is responsive to real-world events and that citizens effectively change their views as a result of events that reflect positively or negatively on the European level. We expect that terrorist attacks, which are linked in the public mind-set to the issues of the refugee crisis and concerns about external border security, might also have an effect. Such attacks may erode support for the EU and further integration, on the basis that citizens associate such threats with the perceived failure of EU authorities to respond effectively, or even encourage such attacks by opening national borders for terrorists. Conversely, such attacks might invoke perceptions of security and community or support offered by the EU whereby citizens become more positive to it.

The latter expectation appears especially likely given research on so-called 'rallying effects' that emerge in the aftermath of terrorist attacks. In the United States, studies have found that following a major terrorist incident, there was a substantial increase in public approval of the president. This is referred to as a 'rally effect' because of how citizens 'rally

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around the flag', or institutions that are seen to be symbols of national unity and/or identity (Hetherington & Nelson 2003; Perrin & Smolek 2009). This is traced to a tendency for citizens, amid moments of existential shocks, to interpret institutions like the presidency as symbols of unity, or a general reluctance among opposing politicians to criticise the *status quo* amid such moments of national shocks (Brody & Shapiro 1991). These rallying effects can be rational responses to major international crises or shocks (Colaresi 2007), with the size of such effects being heavily dependent on the scale of the event and how the media covers it (Baker & Oneal 2001). There are good reasons to expect to find that citizens might also 'rally around' the EU in the aftermath of a terrorist attack. Outside of the United States, similar rallying effects have been documented in European states like France (e.g., Coupe 2017), Spain (Dinesen & Jæger 2013) and Sweden (Geys & Qari 2017), where after attacks scholars recorded an increase of public trust in institutions. Put simply, one might expect citizens to also perceive the EU as a broader symbol of unity in the wake of attacks, with popularity for the EU in Germany and across neighbouring member states increasing in the shadow of such a shock.

A second cluster concerns the question of whether the effects of terrorist attacks on individual-level attitudes are especially pronounced among particular ideological groups (Nail et al. 2009; see Brouard et al. 2018 for a helpful overview). Seen from the 'reactive liberals' approach, any post-terrorism shifts toward right-wing or authoritarian positions will be especially pronounced among citizens who hold a left-wing or liberal ideological orientation, not least because citizens on the right-wing already support such positions. Following terrorist attacks in London, Van de Vyver et al. (2016) recorded a sharp increase in public hostility toward Muslims among liberals, while others similarly found that after terrorism citizens who were initially less authoritarian became more susceptible to 'authoritarian thinking' and supportive of restrictive policies (Hetherington & Suhay 2011). Yet these findings too are mixed. Examining the reactions to two major terrorist attacks in France in 2015, Castanho Silva (2018) found no overall shift in public opinion and mostly no significant differences between liberals' and conservatives' responses, although after the Charlie Hebdo attack liberals turned more restrictive on refugee policy while conservatives became more xenophobic.

An alternative 'terror management' approach instead suggests that heightened concerns about mortality lead citizens to defend themselves against this anxiety by embracing their pre-existing beliefs – that is, liberals become more liberal and conservatives become more conservative. Fear of death leads citizens to strengthen their initial worldviews, with terrorist attacks producing a polarising effect whereby groups at either end of the ideological spectrum 'double down' on their pre-existing views (Castano et al. 2011; Greenberg et al. 1986, 1992; Schüller 2015; Van Prooijen et al. 2015). Whereas citizens on the right-wing become more anti-immigrant, anti-refugee or anti-EU, those on the left-wing will become more positive in their views of immigrants, refugees and the EU (e.g., Greenberg et al. 1997). There is, however, evidence to the contrary, with Castanho Silva (2018) finding no evidence of these polarising effects after the two attacks in Paris in 2015. Given these mixed findings further empirical evidence is needed.

A final cluster of research investigates the extent to which, if at all, these effects 'spill over' from one country to others – that is, whether the effects of a terrorist attack remain confined in the 'target' state or whether they are also visible in other countries.

Accordingly, public opinion in other countries might be responsive to terrorist attacks in other countries. Yet, existing work on 'contagion effects' has primarily focused on why terror attacks from groups of one country are followed by comparable attacks on the same target or country from groups of other analogous countries. Simply put, growing evidence suggests that terror attacks are highly unlikely to be independent of each other (Braithwaite & Li 2007; Midlarsky et al. 1980; Neumayer & Plumper 2009). The nature of terrorist attacks, with the aim of spreading fear in the public, might for this reason travel across national borders. Accordingly, where past terrorist attacks have occurred is endogenous to where future terrorist attacks will occur (Drakos & Gofas 2006; Koch & Cranmer 2007). Inter-civilisational rallying effects have been commonly put forward as an explanation for the spatial dependence of terrorist attacks (Huntington 1996) with robust statistical evidence that rallying effects are contagious along these inter-civilisational lines (Neumayer & Plumper 2010). Extending this to spatial proximity, others find that being near countries affected by terror attacks increases the likelihood of similar activity in their own country (Blomberg & Hess 2008; Lai 2007). The 'politics of threat' literature stresses how fear can lead citizens to become less reliant on longstanding political pre-dispositions and search for new information (Brader 2006; Marcus et al. 2000), with the media at the forefront of not only providing cues but also affecting attitudes through evoking emotion (Gadarian 2010). As such, possible spillover effects are rooted in the premise that amid an international news and political arena, attacks abroad can bolster domestic perceptions of threat, leading to shifts in public attitudes and preferences even in states that experience no such attacks.

Research on the 2015 terrorist attacks in Paris (Castanho Silva 2018) found little evidence of public opinion change on immigration and refugee issues in the target country of France but did find a significant rise of anti-immigrant and anti-refugee sentiment in other EU member states, especially those with higher unemployment and lower education. After the murder of Dutch filmmaker Theo Van Gogh, Finseraas et al. (2011) found large countryvariation among Europeans while further work by Finseraas and Listhaug (2013) found effects after the 2008 Mumbai bombings. Legewie (2013) studied the impact of the terror attack in Bali on October 2002 on anti-immigration attitudes in nine European countries. The results showed cross-national variation in the effect of the terrorist attack on public opinion. Overall, while the findings are mixed and while there are particular reasons to believe that terrorist attacks in the context of the refugee crisis might shape public opinion in European countries beyond the target country, additional evidence is needed to shed light on the possible spillover effects on populist sentiments across Europe.

#### **Context and hypotheses**

Based on the literature, we will derive specific, and in some cases contradicting, hypotheses by connecting the theoretical perspectives with the case of the 2016 Berlin attack. The Berlin attack took place on 19 December 2016 when an Islamic terrorist drove a truck into a Christmas market and left 12 people dead and 56 injured. The attack followed a number of other important events in Germany; the arrival of more than one million refugees and migrants in 2015; the rise of the populist radical right AfD, which won seats in most state parliaments and in 2017 secured more than 90 seats in the Bundestag; and several other terrorist incidents, including an arson and knife attack in Hanover in February 2016, a

bombing in Essen in April 2016, the Würzburg train axe attack in July 2016 and a suicide bombing in Ansbach in July 2016. The subsequent Berlin attack was the most significant terrorist attack in Germany in terms of casualties since the discovery of the neo-Nazi National Socialist Underground (NSU) in 2011.

As we have seen, there is evidence from both the United States and Europe that terrorist attacks can result in a significant increase in institutional trust (Dinesen & Jaeger 2013; Wollebæk et al. 2012). Such evidence, though, is confined to the impact on national institutions with few, if any, insights into how negative events such as terrorist attacks impact support for supranational bodies. Our first hypothesis is that the terrorist attack will increase support for the EU in Germany.

*H1 (institutional effect)*: The Berlin terrorist attack is likely lead to a significant rise in public support among Germans for the EU.

It is also possible to expect, however, that an increase in threat perceptions will erode public support for the EU and further integration on the basis that citizens will 'hunker down' when faced with threatening events, reverting to their local community during moments of threat while blaming the EU for the perceived lack of security at the EU level. In other words, the Berlin terror attack might have led to an increased focus on the global threat of terrorism and encouraged opposition to the EU, which is seen as delivering an inadequate or weak response to this perceived threat.

*H2 (national threat effect)*: The Berlin terrorist attack is likely to lead to a significant drop in public support among Germans for the EU.

As outlined above, increased threat and terrorist activity has been found to generate a significant increase in prejudice and negative attitudes toward immigrants and other perceived out-groups, such as refugees (Caricarti et al. 2017; Echebarria-Echabe & Fernández-Guede 2006). The increased support and legitimisation of political elites on the populist right has led to the politicisation of narratives and a hardening in rhetoric linking German policies towards immigration and refugees to terrorism. This is mirrored elsewhere in the EU where, as noted at the outset, large numbers of voters see a link between terrorism and the refugee crisis. Our third and fourth hypothesis provides competing expectations to address the existing literature:

H3 (in-group effect):	The Berlin terrorist attack is likely to reduce public
	support for immigration and refugees.

*H4 (interpersonal trust effect)*: The Berlin terrorist attack is likely to leave public support for immigration and refugees unchanged or lead to an increase in positive attitudes.

Alternatively, there is evidence that following a terrorist attack public opinion not only drifts to the right, but any re-positioning is likely to be far more prominent among those on the left of the spectrum (Van de Vyver et al. 2016). This has been contested with some scholars arguing that a terrorist act could result in a shift to the left with increased support for addressing the root causes of terrorism – poverty, political oppression, ethnic conflict, state failure – and in some cases reflecting narratives around how Western governments

have exacerbated the problem (Caruso & Schneider 2011; Krieger & Meierrieks 2011). As a consequence, we might expect to see ideology shape how people respond to the terrorist attack in Berlin. We therefore put forward the following two hypotheses:

H5 (terror management effect):	The Berlin terrorist attack is likely to give left- wing (right-wing) people more left-wing (right-wing) attitudes.
H6 (reactive liberals effect):	The Berlin terrorist attack is likely to shift left-wing people to more right-wing attitudes.

Next, we address whether the Berlin attack had a significant impact on attitudes towards the EU, immigration and refugees across different EU countries. There is evidence that the effects of terrorism on public attitudes can 'spill over' across national borders. However, such effects are small, with the average effect concealing cross-national heterogeneity. As such, treatment effects are often confined to a few countries (Finseraas et al. 2011).

Yet the preponderance of recent terrorist attacks across Europe, particularly in countries which share borders with Germany, could result in malaise restricting any 'spillover' impact. Alternatively, the increasing accessibility of media outlets and the way in which hostility to the EU, anti-immigrant, anti-refugee narratives are politicised by local elites and contextualised to their respective electorate may be key in driving shifts in public opinion to these issues outside Germany. Furthermore, outside of Germany, it is also necessary to examine whether the Berlin attack entrenched ideological identification or whether any repositioning was more prominent among individuals on the left of the ideological spectrum as public opinion moved to the right. We therefore put forward the following hypotheses:

H7 (spillover: direct effect):	Outside Germany, there will be a backlash against immigrants, refugees and increasing hostility to the EU in countries.
H8 (spillover: terror management effect):	Outside Germany, the Berlin terrorist attack is likely to give left-wing (right- wing) people more left-wing (right-wing) attitudes.
H9 (spillover: reactive liberals effect):	Outside Germany, the Berlin terrorist attack is likely to shift left-wing people to more right-wing attitudes.

#### **Empirical approach**

We address the gaps and puzzles in the extant research noted above by utilising two quasiexperiments, including a new and unique survey. This enables us to consider the effects of terrorist attacks on public attitudes toward minorities and the EU as well as the extent to which any effects 'spill over' to other countries. The two datasets allow us to assess whether a pattern identified in one dataset replicates or is unique to the specific sample (for a similar approach, see Legewie 2013). Specifically, we use a quasi-experimental research design and two survey data sources. The datasets were collected in Germany as well as other European countries surrounding the 2016 Berlin terrorist attack. These datasets make it possible to not only study how the public in Germany reacted to the event, but also to assess whether any ideological shifts in position towards the populist right following this attack was evident in neighbouring EU member states.

Our first data source is the Chatham House Survey (CHS), commissioned by the Royal Institute of International Affairs at Chatham House and fielded by Kantar between December 2016 and February 2017 (Raines et al. 2017). The online survey is a representative sample of 10,195 respondents aged over 18 using age, gender and geographical quotas. Respondents were sampled in ten countries (Austria, Belgium, France, Germany, Greece, Hungary, Italy, Poland, Spain and the United Kingdom) with the purpose of examining public opinion towards the EU, domestic politics and major recent events in European politics. Our second data source is the 2016 European Social Survey (ESS), which uses an established face-to-face approach and adheres to longstanding random probability protocols to ensure representativeness and within country capture (ESS 2016).

Importantly, in both surveys, the data collection took place when the 2016 Berlin attack unfolded. This results in a sample of respondents where some were exposed to the terrorist attack whereas others were not. Specifically, the group of respondents interviewed before the Berlin terrorist attack serves as an approximate counterfactual group for the respondents interviewed afterwards. In other words, we can compare the people interviewed before and after and attribute systematic differences across the two datasets to the terrorist attack.

We exploit that the sampling frame and the collection of the two datasets are unrelated to the Berlin attack in 2016. Increasingly, scholars have relied on the assumption that when a respondent is interviewed it is time independent from when an unexpected event occurs. As such, an unexpected event like a terrorist attack naturally assigns respondents into a treatment and control group, and assuming ignorability and excludability tests are met, scholars can obtain causal estimates of unexpected shocks (Muñoz et al. 2018). Such designs have the advantage of providing internal validity through the as-if random assignment, external validity given the reach and representativeness of the survey, and ecological validity by studying the impact of real-world events.

Our comparative design enables us to test whether the attack had an impact in Germany as well as in other European countries. Alongside Germany, we selected countries from the two datasets with more than 50 observations before and after the day of the Berlin attack in December. Table 1 shows the countries selected and a breakdown of respondents sampled before and after. The table also shows that we have Germany and France included in both datasets, whereas the other countries are unique to the specific dataset. Finally, ESS also included data for Israel, but as we focus solely on the European context here, we excluded this country (the results for this particular sample are reported in Online Appendix K).

To ensure that there are no observable differences that will bias the results we ran balance tests on the data and additional robustness tests taking any observable differences into account. As relevant covariates were available in both datasets, we included gender, age, income, employment status, education and left-right ideology. Figure 2 provides the statistical tests for imbalances on the covariates in the datasets. In both datasets, people interviewed after the event in Germany are, on average, younger. While we found imbalances on some of the covariates in the datasets, none of these differences are replicated across any of the datasets in Germany and France. Overall, we found no severe data

	CH	IS	ES	S
	Before	After	Before	After
Germany	692	126	359	115
France	566	183	638	137
Austria	769	140		
Belgium	602	158		
Greece	688	244		
Hungary	759	210		
Poland	777	55		
Spain	772	70		
Estonia			422	143
Israel			384	178
Netherlands			175	55
Poland			488	164

Table 1. Respondents interviewed before and after the Berlin attack

Note: For additional information on the data, see Online Appendices B and C.

challenges or violations during testing on how the public reacted to the terrorist attack across the two datasets. Noteworthy, as discussed below, results from additional robustness tests for Germany, including replications using repeated cross-sectional and panel data, add further credibility to the main findings.

To conduct the empirical tests, we use five dependent variables to measure attitudes towards the EU, seven dependent variables to examine public attitudes towards immigration and four dependent variables to determine attitudes toward refugees. For the EU, the outcome variables include accession of new countries, enlargement, unification and support for more powers. On immigration, we cover a broad range of established measures including a generic question about whether immigration is good for the country, cultural and economic measures, and impact on welfare and crime. Reflecting the salience of the refugee crisis we incorporate a measure to capture positive or negative feelings towards refugees entering one's country, attitudes towards applicability and risk and whether refugees should be allowed families to join them.

The use of two data sources not only provides us with a rich set of questions for each issue, but acts as a robustness check. For instance, in the case of the EU, we employ different measures worded slightly differently on the CHS and ESS to capture integration – unification or a so-called 'United States of Europe'. Here we can determine if we get similar responses in Germany and across other EU countries. All measures are coded to greater values showing more positive attitudes towards the EU, refugees and immigration. To ease the substantial interpretation across measures, all variables are further rescaled to go from 0 to 1. Full details of the questions and scales of each variable used to measure these issues and descriptive statistics are provided in Online Appendices B and C. To look into a heterogeneous response in the public (for *H5*, *H6*, *H8* and *H9*) our key variable of interest is ideology, which is measured using an 11-point scale (extreme left = 0; extreme right = 10)



*Figure 2.* Balance tests for observable differences, CHS and ESS. [Colour figure can be viewed at wileyonlinelibrary.com]

Notes: The dots indicate P-values from simple mean difference tests. Dashed line indicates p = 0.05. For full question wording on all covariates, see Online Appendix B. For descriptive statistics on all variables, see Online Appendix C.

on both the CHS and ESS. This variable captures important differences in the public on how their political outlook might shape the response to the attack.

#### **Results:** The effects of a terrorist attack on public opinion

In order to test our first four hypotheses, we look into the effects of the Berlin attack on public opinion in Germany. Figure 3 shows the effect of the attack on all outcomes of interest. The estimates are from ordinary least squares (OLS) regressions with no controls included in the left panel and gender, age, income, education, employment status and left-right ideology as controls in the right panel. For the attitudes towards the EU, we see that people hold more positive attitudes after the attack. All estimates are positive and show that people became between five and ten percentage points more positive towards the EU after the terrorist attack in both samples. Thus, the evidence is in line with a positive effect as proposed by H1 and not a national threat response proposed by H2. We find no evidence that people blamed the EU, or became more negative toward European integration, after the attack.

Turning to H3 and H4, for the outcomes related to immigration and refugees, we generally do not find systematic evidence that the public changed its attitudes in the wake of the Berlin terrorist attacks. While there are individual outcomes that reach statistical significance, the overall trend shows no significant changes in public attitudes towards immigrants and refugees in Germany. In sum, the results show that the German public became more positive towards the EU in the wake of the terrorist attack but did not change their opinion towards immigration and refugees.



*Figure 3.* The effect of the Berlin attack on public opinion in Germany, OLS estimates. [Colour figure can be viewed at wileyonlinelibrary.com]

Notes: Positive effects indicate more positive attitudes towards the EU, immigration and refugees. The thick lines indicate 90 per cent confidence intervals and the thin lines indicate 95 per cent confidence intervals. All models are ordinary least squares (OLS) regressions controlling for gender, age, income, education, employment status and ideology. For full question wordings, see Online Appendix B. For the exact estimates, see Online Appendix E. For similar models using full matching, see Online Appendix F.

To account for potential imbalances on the covariates, we reproduced the models above using full matching. We found similar findings to the ones presented here (full details are available in Online Appendix F). Next, country-level fixed effects models (Online Appendix D) and an additional test for differences between Germany and the rest of Europe (Online Appendix I) confirm the findings. To replicate the findings presented above, we used multiple cross-sectional datasets from Eurobarometer and panel data from the German Longitudinal Election Study (available in Online Appendix L). Finally, and as made available in the replication material, estimates from ordered logit regressions show similar effects.

Next, to shed light on whether people reacted differently to the attack (H5 and H6), we turn to the heterogeneous response of the attack in Germany. Figure 4 shows a series of estimates from OLS regressions with interactions where we estimate the extent to which people responded to the Berlin attack on the basis of their ideological outlook.



*Figure 4.* Interaction tests for an ideological response to the terrorist attack, Germany. [Colour figure can be viewed at wileyonlinelibrary.com]

Notes: The estimates are unstandardised regression coefficients for the interaction terms. The thick lines indicate 90 per cent confidence intervals and the thin lines indicate 95 per cent confidence intervals. For the full models, see Online Appendix G.

In general, we find no convincing evidence that respondents reacted in a strong and ideological manner across the board. Respondents who held either left-wing or rightwing ideological outlooks responded in the same way to the terrorist attack, including the outcomes where there was no change. As such, we find no evidence of a terror management effect (H5) or a reactive liberal effect (H6). One noteworthy exception is whether people believe the government should be generous in judging people's applications for refugee status. Here, we find a polarising dynamic. Figure 5 shows the marginal effects of the attack at different levels of left-right ideology.

For people with a left-wing ideology, the attack had a positive impact – that is, it made people more likely to support the government being generous in judging people's applications for refugee status. For people with a right-wing ideology, on the other hand, the attack had a negative impact and made people less likely to support the notion of generosity. Overall, this polarising effect suggests that people are entrenching their pre-existing beliefs in line with the terror management hypothesis. However, again, this is solely for one of the



*Figure 5.* Marginal effect of attack on attitudes towards applications for refugee status. [Colour figure can be viewed at wileyonlinelibrary.com]

Notes: Marginal effect of the terrorist attack at different levels of ideology. Positive values indicate positive attitudes towards applications for refugee status. Dashed lines indicate 95 per cent confidence intervals. For the full model, see Table G.3 in Online Appendix G.

outcomes, but on a methodological aside it shows the importance of looking beyond the average or direct effect of the attack as such estimates might hide differential responses.

#### **Results: Spillover effects across Europe**

Was there a backlash against immigrants, refugees and increasing hostility to the EU in countries outside Germany? Here we examine how the Berlin attack shaped public opinion across Europe (H7). Figure 6 shows estimates from Austria, Belgium, Estonia, France, Greece, Hungary, Netherlands, Poland and Spain. The empirical approach is identical to the models estimated on Germany with the covariates introduced above.

Overall, there is no trend towards changes in the different outcomes in the nine countries. In France, the country where we have data from both the CHS and ESS, there is no indication that the European public responded to the German terrorist attack. While some might suggest that this is because France had already experienced major terrorist attacks prior to the Berlin attack, for the other countries, while there are cases where we see changes in public opinion, these changes do not replicate across different measures and, in general, might be attributed to statistical noise and no systematic changes. In other words, we do not find strong support of any 'spillover effect' on public attitudes in the other EU member states surveyed here following the Berlin attack in Germany (H7).

However, it might be that these effects are hiding strong political responses in some of the countries – for example, a polarisation effect in terms of attitudes towards applications for refugee status in Germany. To see whether there was an ideological response in the different



*Figure 6.* Spillover effects across Europe, OLS estimates. [Colour figure can be viewed at wileyonlinelibrary.com]

Notes: Positive effects indicate more positive attitudes towards the EU, immigration and refugees. The thick lines indicate 90 per cent confidence intervals and the thin lines indicate 95 per cent confidence intervals. All models control for gender, age, income, education, employment status and ideology. For full question wordings, see Online Appendix B. For the bivariate OLS estimates, see Online Appendix H.



*Figure 7.* Interaction tests for an ideological response to the terrorist attack, Europe. [Colour figure can be viewed at wileyonlinelibrary.com]

Notes: The estimates are unstandardised regression coefficients for the interaction terms. The thick lines indicate 90 per cent confidence intervals and the thin lines indicate 95 per cent confidence intervals.

countries (*H8* and *H9*), Figure 7 provides interaction estimates similar to those estimated earlier in Germany.

Generally, we find little evidence that the missing spillover effects are due to a heterogeneous ideological response in the different countries (*H8* and *H9*). The only

Hypothesis		Confirmed	Note
1	Institutional effect	Yes	Greater support for the EU in Germany
2	National threat effect	No	No systematic evidence
3	In-group effect	No	No systematic evidence
4	Interpersonal trust effect	Partially	No changes in attitudes towards immigrants and refugees
5	Terror management effect	Partially	An effect on specific outcome
6	Reactive liberals effect	No	No systematic evidence
7	Spillover (Direct effect)	No	No systematic evidence in different European countries
8	Spillover (Terror management effect)	Partially	For three outcomes (one refugee item; two immigrant items) in one country (Belgium)
9	Spillover (Reactive liberals effect)	No	No systematic evidence

Table 2. Summary of hypotheses and findings

exception is Belgium, where some of the interactions for the outcomes related to refugees and immigrants are significant (see Online Appendix J for the marginal effects). These effects show that people on the left became more positive towards immigration and refugees whereas the effect became smaller or negative for right-wing people. While we are unable to shed light on why these patterns arise, one explanation might be that Belgium not only shares a border with Germany but has itself suffered numerous terrorist atrocities in recent times. Clearly, the same applies to France, where we find no such effects, and so it appears that additional research is required into understanding when and why such spillover effects occur. In sum, the evidence provides little to no support for H7-H9 – that is, that the terrorist attack in Berlin had important spillover effects across Europe. In summary, therefore, we have shed further light on how citizens respond to terrorist attacks and in Table 2 we present an overview of our findings alongside information on whether or not we confirm the hypotheses.

#### **Discussion and conclusion**

Do terrorist attacks, such as the Berlin attack in 2016, encourage negative public attitudes toward refugees, immigrants and other minorities, as well as the EU? This question has become increasingly resonant as EU member states have grappled with terrorist attacks, a major refugee crisis and strong public support for populist radical right parties, which are often sceptical if not openly hostile toward the EU. To explore this question and disentangle the causal dynamics of how citizens respond to terrorist attacks, we utilised two innovative quasi-experiments to contribute to and expand the existing literature. Our research design allowed us to formulate and test nine hypotheses on how citizens might react in the shadow of a major terrorist attack.

Our contribution to the extant literature is fourfold. First, by looking at the EU we are able to replicate the positive effect on institutional evaluations from previous studies

at the EU level. This shows that, contrary to claims in the wider debate, most citizens do not 'blame' the EU for Islamist terrorist attacks. Rather, our findings suggest that citizens tend to 'rally' around the EU after such attacks and so may be open to EU-wide solutions. This is, to our knowledge, the first evidence on how terrorism matters for EU attitudes. Second, we also contribute directly to the debate on whether the public becomes more or less hostile towards immigration and refugees in the wake of terrorism. Again, contrary to popular claims we find no systematic evidence for such change. Third, we add new insights to the heterogeneous response to terrorist attacks. Specifically, the results show that the public response to terrorism is not always shaped by people's ideological outlook but can, in some cases, explain no average effect in the public. Fourth, we address the literature on the spillover effects of terrorism on public opinion. Our findings suggest that, at least in the short term, the European public do not react strongly to terrorist attacks that are perpetrated in other countries.

Furthermore, our use of two different datasets to shed light on these dynamics provides a more robust test of how public opinion changed in the wake of a major attack. This not only provides strong internal validity, but also allows for the replication of key findings. However, there are three limitations to our approach that future research would do well to address. First, this is a single-case study conducted to speak to a broader literature interested in the impact of terrorism on public opinion. As illustrated in the map in Online Appendix A, it is possible that the estimates are affected by the context of prior terrorist attacks with German attitudes remaining relatively stable because by December 2016 they had become used to such terrorist incidents.

Second, we are unable to address the key psychological mechanisms that drive preference updating. We know that public opinion on these issues is heavily affected by emotional states (see Huddy et al. 2002; Lerner et al. 2003), that fear can lead to a shift in ideological identification and support for authoritarian policies (e.g., Huddy & Khatib 2007; Vasilopoulos et al. 2018) and that risk propensity can play a key role in shaping public attitudes toward the EU (Clarke et al. 2017; Steenbergen & Siczek 2017). Also, the role of elite cues, whether from politicians or media, has not been investigated due to data limitations. It is worth noting, for example, that in the aftermath of the Berlin attack much of the public debate focused on failures by security agencies that had put the perpetrator under surveillance but failed to arrest him (e.g., Dearden 2016). Furthermore, Chancellor Merkel was widely criticised by the populist radical right AfD, a highly stigmatised party, which might have encouraged citizens to rally around anti-AfD positions. Unfortunately, the data did not contain measures that would otherwise allow us to address the moderating or mediating role of psychological mechanisms and elite cues.

Similarly, we are unable to determine whether our results reflect the dual process model of political behaviour where individuals who store latent internalised negative stereotypes strive, when triggered by contextual signals and events, to act or adhere to anti-prejudice norms (Blinder et al. 2013). While we provide distinct theoretical expectations and demonstrate which hypotheses are confirmed, there are alternative micro-level mechanisms that we cannot account for or determine in the present context. Accordingly, future research will have to delve more into the different causal mechanisms that connect salient terrorist attacks with public opinion dynamics. These would unquestionably be fruitful avenues for further research.

Third, while our data allows us to address the impact of the Berlin attack in Germany, spillover effects beyond its borders and competing hypotheses around ideological positioning, the cross-sectional nature of the data and the sample size restricts our ability to examine change over time and determine whether such effects (or non-effects) are temporal or long-lasting. Similarly, while the breadth and depth of questions on Europe, immigration and refugees is a strength of the data, this is also only available for ten countries which does restrict our ability to take account of contextual mechanisms through hierarchical or multilevel modelling. Future research would do well, for example, to explore the role of elite cues amid an approach that can also systematically take the broader context into account.

Importantly, other potential contextual narratives and moderators could not be examined and should be the focus of further research. In truth, it remains the case that to date no studies have been able to combine the time, panel element, multilevel structure, the depth and breadth of questions on salient issues alongside capturing precise measures at both the individual and aggregate levels to precisely determine the underlying mechanisms necessary to provide a comprehensive insight into the impact of terrorist events on public opinion dynamics. Such data is imperative for moving forward so that more sophisticated techniques such as dynamic structural equation modelling or multilevel mixture models can be applied to address these outstanding questions. Through such techniques, we would be able to monitor latent variable development across time, pinpoint shifts earlier which can have a bearing on how respondents react to such events whilst simultaneously through the multilevel structure account for cluster specific class or group distributions which would provide a deeper insight into potential variations in spill over across different settings.

Putting limitations to one side, the findings of our study have implications for the broader understanding of European politics in the wake of a major refugee crisis. The finding that public opinion becomes more positive toward the EU in the wake of terrorist attacks challenges the argument that these attacks will only benefit populist radical right parties, or that the refugee crisis will inevitably erode public support for the EU (Krastev 2017). There is a temptation in the wider debate to link such attacks to broader trends in Europe, including the electoral growth of anti-immigration parties, negative public reactions to refugees and rising rates of electoral volatility, but our findings challenge these narratives. Our study also points to opportunities for the EU to garner public support for a revised approach to bolstering internal and external security measures, taking advantage of the 'rally effect' that we identify, and which is consistent with findings in the United States. While public support for Eurosceptic movements is likely to remain on the landscape for many years to come, our findings also point to the need to develop a more nuanced understanding of the relationship between this support and terrorism and warn against the assumption that terrorism will inevitably lead to a more exclusionary environment within contemporary EU politics.

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#### **Online Appendix**

Additional supporting information may be found in the Online Appendix section at the end of the article:

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Table D.2: The effect of the Berlin attack on attitudes towards the EU, country-level fixed effects models

Table D.3: The effect of the Berlin attack on attitudes towards refugees, country-level fixed effects models

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 OLS regressions, matched sample

Table F.4: The effect of the Berlin attack on attitudes towards immigration, OLS regressions, matched sample

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Table I.4: Equivalence test for all outcomes, outside Germany

#### References

- Asbrock, F. & Fritsche, I. (2013). Authoritarian reactions to terrorist threat: Who is being threatened, the me or the we? *International Journal of Psychology* 48(1): 35–49.
- Baker, W. & Oneal, J. (2001). Patriotism or opinion leadership? The nature and origins of the 'rally 'round the flag' effect. *Journal of Conflict Resolution* 45(5): 661–687.
- Berrebi, C. & Klor, E.F. (2008). Are voters sensitive to terrorism? Direct evidence from the Israeli electorate. *American Political Science Review* 102(3): 279–301.
- Betz, H. (2016). Against the 'green totalitarianism': Anti-Islamic nativism in contemporary radical right-wing populism in Western Europe. In C.S. Liang (ed.), *Europe for the Europeans*. London: Routledge.
- Blomberg, S.B. & Hess, G.D. (2008). The lexus and the olive branch: Globalization, democratization and terrorism. In P. Keefer & N. Loayza (eds), *Terrorism, economic development, and political openness*. New York: Cambridge University Press.
- Blumer, H. (1958). Race prejudice as a sense of group position. Pacific Sociological Review 1(1): 3-7.
- Blinder, S., Ford, R. & Ivarsflaten, E. (2013). The better angels of our nature: How the antiprejudice norm affects policy and party preferences in Great Britain and Germany. *American Journal of Political Science* 57(4): 841–857.
- Bonanno, G.A. & Jost, J.T. (2006). Conservative shift among high-exposure survivors of the September 11th terrorist attacks. *Basic and Applied Social Psychology* 28(4): 311–323.
- Boomgaarden, H.G. & De Vreese, C. (2007). Dramatic real-world events and public opinion dynamics: Media coverage and its impact on public reactions to an assassination. *International Journal of Public Opinion Research* 19(3): 354–366.
- Bozzoli, C. & Müller, C. (2009). *Perceptions and attitudes to a terrorist shock: Evidence from the UK*. Economics of Security Working Paper 13. Available online at: www.diw.de/documents/publikationen/ 73/diw\_01.c.354140.de/diw\_econsec0013.pdf
- Brader, T. (2006). *Campaigning for hearts and minds: How emotional appeals in political ads work*. Chicago, IL: University of Chicago Press.
- Braithwaite, A. & Li, Q. (2007). Transnational terrorism hot spots: Identification and impact evaluation. *Conflict Management and Peace Science* 24(4): 281–296.
- Brody, R.A. & Shapiro, C.R. (1991). The rally phenomenon in public opinion. In R.A. Brody (ed.), *Assessing the president: The media, elite opinion and public support*. Stanford, CA: Stanford University Press.
- Brouard, S., Vasilopoulos, P. & Foucault M. (2018). How terrorism affects political attitudes: France in the aftermath of the 2015–2016 attacks. *West European Politics* 41(5): 1073–1099.
- Caricati, L., Mancini, T. & Marletta, G. (2017). The role of ingroup threat and conservative ideologies on prejudice against immigrants in two samples of Italian adults. *Journal of Social Psychology* 157(1): 86– 97.

- Caruso, R. & Schneider, F. (2011). The socio-economic determinants of terrorism and political violence in Western Europe (1994–2007). *European Journal of Political Economy* 27(1): 37–49.
- Castanho Silva, B. (2018). The (non)impact of the 2015 Paris terrorist attacks on political attitudes. *Personality and Social Psychology Bulletin* 44(6): 838–850.
- Castano, E., Leidner, B., Bonacossa, A., Nikkah, J., Perrulli, R., Spencer, B. & Humphrey, N. (2011). Ideology, fear of death and death anxiety. *Political Psychology* 32(4): 601–621.
- Clarke, H.D., Goodwin, M.J. & Whiteley, P. (2017) *Brexit: Why Britain voted to leave the European Union*. Cambridge: Cambridge University Press.
- Colaresi, M. (2007). The benefit of the doubt: Testing an informational theory of the rally effect. *International Organization* 61(1): 99–143.
- Coupe, T. (2017). The impact of terrorism on expectations, trust and happiness: The case of the November 13 attacks in Paris, France. *Applied Economics Letters* 24(15): 1084–1087.
- Davis, D.W. & Silver, B.D. (2004). Civil liberties vs security: Public opinion in the context of the terrorist attacks on America. *American Journal of Political Science* 48(1): 28–46.
- Dearden, L. (2016). Angela Merkel's deputy brands security failures 'shocking' as suspect Anis Amri remains at large. *Independent*, 22 December.
- De Vries, C. (2018). Euroscepticism and the future of European integration. Oxford: Oxford University Press.
- 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. & Gofas, A. (2006). In search of the average transnational terrorist attack venue. *Defence and Peace Economics* 17(2): 73–93.
- Echebarria-Echabe, A. & Fernández-Guede, E. (2006). Effects of terrorism on attitudes and ideological orientation. *European Journal of Social Psychology* 36(2): 259–265.
- Eurobarometer (2017). *Standard Eurobarometer 87: Public opinion in the European Union*. Available online at: https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/ 82873
- European Social Survey (ESS) (2016). *European Social Survey, round 8 data*. Data file edition 2.1. Oslo: NSD Norwegian Centre for Research Data, Norway Data Archive and distributor of ESS data for ESS ERIC.
- Finseraas, H. & Listhaug, O. (2013). It can happen here: The impact of the Mumbai terror attacks on public opinion in Western Europe. *Public Choice* 156(1–2): 213–228.
- Finseraas, H., Jakobsson, N. & Kotsadam, A. (2011). Did the murder of Theo van Gogh change Europeans' immigration policy preferences? *Kyklos* 64(3): 396–409.
- Gadarian, S. (2010). The politics of threat: How terrorism news shapes foreign policy attitudes. *Journal of Politics* 72: 469–483.
- Geys, B. & Qari, S. (2017). Will you still trust me tomorrow? The causal effect of terrorism on social trust. *Public Choice* 173(3–4): 289–305.
- Greenberg, J., Pyszczynski, T. & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In R.F. Baumeister (ed.), *Public self and private self*. New York: Springer-Verlag.
- Greenberg, J., Simon, L., Pyszczynski, T., Solomon, S. & Chatel, D. (1992). Terror management and tolerance: Does mortality salience always intensify negative reactions to others who threaten one's worldview? *Journal of Personality and Social Psychology* 63(2): 212–220.
- Greenberg, J., Pyszczynski, T. & Solomon, S. (1997). Terror management theory of self-esteem and cultural worldviews: Empirical assessments and conceptual refinements. *Advances in Experimental Psychology* 29: 61–139.
- Guild, E., Costello, C., Garlick, M. & Lax, V.M. (2015). *The 2015 refugee crisis in the European Union*. Brussels: Centre for European Policy Studies.
- Halikiopoulou, D., Nanou, K. & Vasilopoulou, S. (2012). The paradox of nationalism: The common denominator of radical right and radical left euroscepticism. *European Journal of Political Research* 51(4): 504–539.
- Hetherington, M.J. & Nelson, M. (2003). Anatomy of a rally effect: George W. Bush and the war on terrorism. *Political Science and Politics* 36(1): 37–42.

- Hetherington, M.J. & Suhay, E. (2011). Authoritarianism, threat and Americans' support for the war on terror. *American Journal of Political Science* 55(3): 546–560.
- Hirsch-Hoefler, S., Canetti, D., Rapaport, C. & Hobfoll, S. (2016). Conflict will harden your heart: Exposure to violence, psychological distress and peace barriers in Israel and Palestine. *British Journal of Political Science* 46(4): 845–859.
- Hopkins, D.J. (2010). Politicized places: Explaining where and when immigrants provoke local opposition. *American Political Science Review* 104(1): 40–60.
- Huddy, L., Feldman, S., Capelos, T. & Provost, C. (2002). The consequences of terrorism: Disentangling the effects of personal and national threat. *Political Psychology* 23(3): 485–509.
- Huddy, L. & Khatib, N. (2007). American patriotism, national identity and political involvement. *American Journal of Political Science* 51(1): 63–77.
- Huntington, S. (1996). The clash of civilizations and the remaking of world order. New York: Simon & Schuster.
- Inglehart, R. & Welzel, C. (2005). *Modernization, cultural change and democracy: The human development*. New York: Cambridge University Press.
- Jakobsson, N. & Blom, S. (2014). Did the 2011 terror attacks in Norway change citizens' attitudes toward immigrants? *International Journal of Public Opinion Research* 26(4): 475–486.
- Kentmen-Cin, C. & Erisen, C. (2017). Anti-immigration attitudes and the opposition to European integration: A critical assessment. *European Union Politics* 18(1): 3–25.
- Koch, M.T. & Cranmer, S. (2007). Testing the 'Dick Cheney' hypothesis: Do governments of the left attract more terrorism than governments of the right? *Conflict Management and Peace Science* 24(3): 311–326.
- Krastev, I. (2017). After Europe. Philadelphia, PA: University of Pennsylvania Press.
- Krieger, T. & Meierrieks, D. (2011). What causes terrorism? Public Choice 147(1-2): 3-27.
- Lai, B. (2007). 'Draining the swamp': An empirical examination of the production of international terrorism, 1968–1998. Conflict Management and Peace Science 24(4): 297–310.
- Legewie, J. (2013). Terrorist events and attitudes toward immigrants: A natural experiment. *American Journal of Sociology* 118(5): 1199–1245.
- Lerner, J.S., Gonzalez, R.M., Small, D.A. & Fischhoff, B. (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological Science* 14(2): 144–150.
- Lindén, M., Björklund, F. & Bäckström, M. (2018). How a terror attack affects right-wing authoritarianism, social dominance orientation and their relationship to torture attitudes. *Scandinavian Journal of Psychology* 59(5): 547–552.
- Lubbers, M. & Jaspers, E. (2011). A longitudinal study of Euroscepticism in the Netherlands: 2008 versus 1990. *European Union Politics* 12(1): 21–40.
- Marcus, G., Neuman, W.R. & MacKuen, M. (2000). *Affective intelligence and political judgment*. Chicago, IL: University of Chicago Press.
- Midlarsky, M.I., Crenshaw, M. & Yoshida, F. (1980). Why violence spreads: The contagion of international terrorism. *International Studies Quarterly* 24(2): 262–298.
- Mondak, J.J. & Hurwitz, J. (2012). Examining the terror exception: Terrorism and commitments to civil liberties. *Public Opinion Quarterly* 76(2): 193–213.
- Muñoz, J., Falcó-Gimeno, A. & Hernández, E. (2018). Unexpected event during surveys design: Promise and pitfalls for causal inference. Working Paper. Available online at: https://enriquehernandez.eu/ unexpected-event-during-surveys-design-promise-and-pitfalls-for-causal-inference/
- Nail, P.R., McGregor, I., Drinkwater, A.E., Steele, G.M. & Thompson, A.W. (2009). Threat causes liberals to think like conservatives. *Journal of Experimental Social Psychology* 45(4): 901–907.
- Neumayer, E. & Plümper, T. (2009). International terrorism and the clash of civilizations. *British Journal of Political Science* 39(4): 711–734.
- Neumayer, E. & Plümper, T. (2010). Galton's problem and contagion in international terrorism along civilizational lines. *Conflict Management and Peace Science* 27(4): 308–325.
- 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.
- Quillian, L. (1995). Prejudice as a response to perceived group threat: Population composition and antiimmigrant and racial prejudice in Europe. *American Sociological Review* 60(4): 586–611.

- Raines, T., Goodwin, M. & Cutts, D. (2017). *The future of Europe comparing public and elite attitudes*. London: European Programme, Chatham House.
- Rooduijn, M. (2018). State of the field: How to study populism and adjacent topics? A plea for both more and less focus. *European Journal of Political Research* 58(1): 362–372.
- Schüller, S. (2015). The 9/11 conservative shift. Economics Letters 135: 80-84.
- Steenbergen, M.R. & Siczek, T. (2017). Better the devil you know? Risk-taking, globalization and populism in Great Britain. *European Union Politics* 18(1): 119–136.
- Van de Vyver, J., Houston, D.M., Abrams, D. & Vasiljevic, M. (2016). Boosting belligerence: How the July 7, 2005, London bombings affected liberals' moral foundations and prejudice. *Psychological Science* 27(2): 169–177.
- Van Prooijen, J., Krouwel, A.P.M., Boiten, M. & Eendebak, L. (2015). Fear among the extremes: How political ideology predicts negative emotions and out-group derogation. *Personality and Social Psychology Bulletin* 41(4): 485–497.
- Vasilopoulos, P., Marcus, G.E., Valentino, N.A. & Foucault, M. (2018). Fear, anger and voting for the far right: Evidence from the November 13, 2015 Paris terror attacks. *Political Psychology*. https://doi.org/10.1111/ pops.12513.
- Vidino, L. (2017). Who was behind the jihadist attacks on Europe and North America? *BBC News*, 30 August. Available online at: www.bbc.com/news/world-40000952
- Werts, H., Scheepers, P. & Lubbers, M. (2013). Euro-scepticism and radical right-wing voting in Europe, 2002–2008: Social cleavages, socio-political attitudes and contextual characteristics determining voting for the radical right. *European Union Politics* 14(2): 183–205.
- Wike, R., Stokes, B. & Simmons, K. (2016). Europeans fear wave of refugees will mean more terrorism, fewer jobs. Pew Research Center Global Attitudes and Trends, 11 July. Available online at: www.pewglobal.org/ 2016/07/11/europeans-fear-wave-of-refugees-will-mean-more-terrorism-fewer-jobs/
- Wollebæk, D., Enjolras, B., Steen-Johnsen, K. & Ødegård, G. (2012). After Utøya: How a high-trust society reacts to terror – Trust and civic engagement in the aftermath of July 22. *Political Science and Politics* 45(1): 32–37.
- Woods, J. (2011). The 9/11 effect: Toward a social science of the terrorist threat. *Social Science Journal* 48(1): 213–233.
- Zúquete, J.P. (2008). The European extreme-right and Islam: New directions? *Journal of Political Ideologies* 13(3): 321–344.

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#### A. The European context of the terrorist attack

To shed light on the context of the attack, we use Eurobarometer data from November 2015, May 2016, November 2016, May 2017 and November 2017. This data enables us to examine how salient terrorism as an issue was across Europe before and after the Berlin attack.

Figure A.1 shows a map with the countries included in the Eurobarometer in the period. The y-axis shows the proportion of people within the country picking terrorism as an important issue facing the country. We observe substantial variation in the baseline level, e.g. more than 20% in France and less than 5% in Estonia, as well as the developments over time.



Figure A.1: Terrorism as an important issue across Europe, 2015-2017

*Note*: Dashed line indicates December 19<sup>th</sup>, 2016. Countries with orange line are included in the ESS or CHS samples.

Interestingly, we see an increase in the concern for terrorism in Germany prior to the attack. In 2016, more than 20% said that terrorism was an important issue facing the country, and this remained stable after the attack, and even decreased slightly towards the end of 2017.

# **B.** Question wordings

Name	Variable	Question	Answers
	vallaule	Question	AllSWEIS
European Social Si	urvey		
European unification	euiti	Now thinking about the European Union, some say European unification should go further. Others say it has already gone too far. Using this card, what number on the scale best describes your position?	11 point scale from 'Unification has already gone too far' to 'Unification should go further'
Immigration, economy	imbgeco	Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries?	11 point scale from 'Bad for the Good for economy' to 'Good for the economy'
Refugees, application*	gvrfgap	The government should be generous in judging people's applications for refugee status.	From 'Agree strongly' to 'Disagree strongly'
Refugees, risk	rfgfrpc	Most applicants for refugee status aren't in real fear of persecution in their own countries.	From 'Agree strongly' to 'Disagree strongly'
Refugees, family*	rfgbfml	Refugees whose applications are granted should be entitled to bring in their close family members.	From 'Agree strongly' to 'Disagree strongly'
Male	gndr	Sex	Male or female
Age	agea	Year born	Calculated
Education	eisced	Highest level of education	ES-ISCED categories
Income	hinctnta	Household's total net income, all sources	Income deciles
Unemployed	uempla/uempli	Unemployed	Looking for a job or not
Ideology	lrscale	In politics people sometimes talk of "left" and "right". Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?	From 'Left' to 'Right'

Table B.1: Outcome measures

Chatham House Su	ırvey		
European Union, power*	Q12	Thinking about how the European Union should develop in the future, which of the following statements come closest to your view?	<ul> <li>Three options:</li> <li>The European Union should get more powers than it currently has</li> <li>The European Union should have no more or less powers than it has now</li> <li>The European Union should return some of its powers to individual Member States</li> </ul>
European Union, federation*	Q13	To what extent do you agree or disagree with the following statement? 'The European Union should become a United States of Europe with a central government'	From 'Strongly agree' to 'Strongly disagree'
European Union, enlargement	Q19_1	European Union enlargement has gone too far	From 'Strongly agree' to 'Strongly disagree'
European Union, new countries*	Q19_2	New countries should be able to join the European Union	From 'Strongly agree' to 'Strongly disagree'
Immigration, good*	Q31_1	Immigration has been good for [OUR COUNTRY]	From 'Strongly agree' to 'Strongly disagree'
Immigration, jobs	Q31_2	Immigrants have taken jobs away from those who were born in [OUR COUNTRY]	From 'Strongly agree' to 'Strongly disagree'
Immigration, cultural life*	Q31_3	Immigrants have enhanced [OUR COUNTRY]'s cultural life	From 'Strongly agree' to 'Strongly disagree'
Immigration, crime	Q31_4	Immigrants have made crime worse in [OUR COUNTRY]	From 'Strongly agree' to 'Strongly disagree'
Immigration, Muslim culture	Q31_5	The European way of life and that of Muslims are irreconcilable	From 'Strongly agree' to 'Strongly disagree'
Immigration, welfare	Q31_6	Immigrants are a strain on a [OUR	From 'Strongly agree' to 'Strongly disagree'

		COUNTRY]'s welfare system	
Refugees, positive*	Q32_3	How positive or negative do you feel about these different groups coming to live in [OUR COUNTRY]? Refugees or asylum seekers	From 'Very positive' to 'Very negative'
Male	QS1	Gender	Male or female
Age	QS2	How old are you?	
Education	D5R	What is the highest level of education you completed?	ISCED categories
Income	D10GP	What is your household's total monthly net income (i.e., the amount received each month after tax)?	"Total Less than 450 euros", "Total 450-899 euros", "Total 900-1,649 euros", "Total 1,650- 2,699 euros", "Total 2,700-4,049 euros", "Total 4,050-5,499 euros", "Total 5,500- 7,999 euros", "Total 8,000 euros or more"
Unemployed	D6	What is your current occupation?	Unemployed or not
Ideology	D7	In political matters people talk of "left" and "right". Where would you place yourself on this scale, where 0 means the left and 10 means the right?	From 'Left' to 'Right'

\* Reverse coded item to make greater values indicate more positive attitudes towards the EU, refugees and immigration.

# C. Descriptive statistics

Country	N	Terror	European unification	Immigration, economy	Refugees, application	Refugees, risk	Refugees, family
Estonia	565	0.25	0.44 (0.27)	0.45 (0.24)	0.3 (0.26)	0.36 (0.25)	0.46 (0.28)
France	775	0.18	0.5 (0.26)	0.47 (0.26)	0.6 (0.33)	0.55 (0.29)	0.54 (0.34)
Germany	474	0.24	0.58 (0.27)	0.58 (0.23)	0.4 (0.29)	0.49 (0.25)	0.56 (0.28)
Israel	562	0.32	0.58 (0.27)	0.49 (0.28)	0.42 (0.28)	0.48 (0.26)	0.51 (0.29)
Netherlands	230	0.24	0.49 (0.24)	0.51 (0.19)	0.31 (0.23)	0.54 (0.21)	0.49 (0.26)
Poland	652	0.25	0.54 (0.26)	0.51 (0.25)	0.57 (0.24)	0.39 (0.23)	0.61 (0.25)

Table C.1: Descriptive statistics, ESS

Note: Entries show mean values with standard deviations in parentheses.

				EU	J				Immigra	ation			Refugees
Country	N	Terror	Power	Federati on	Enlargem ent	New countries	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Positive
Austria	909	0.15	0.27 (0.38)	0.29 (0.3)	0.36 (0.3)	0.47 (0.28)	0.44 (0.3)	0.56 (0.3)	0.47 (0.31)	0.31 (0.31)	0.32 (0.31)	0.28 (0.29)	0.42 (0.25)
Belgium	760	0.21	0.4 (0.41)	0.49 (0.31)	0.32 (0.27)	0.4 (0.29)	0.39 (0.29)	0.47 (0.31)	0.4 (0.3)	0.34 (0.29)	0.34 (0.29)	0.32 (0.29)	0.34 (0.25)
France	749	0.24	0.33 (0.4)	0.45 (0.31)	0.29 (0.26)	0.32 (0.28)	0.42 (0.29)	0.54 (0.3)	0.46 (0.31)	0.42 (0.31)	0.36 (0.31)	0.35 (0.31)	0.37 (0.24)
Germany	818	0.15	0.36 (0.39)	0.36 (0.3)	0.37 (0.28)	0.44 (0.28)	0.47 (0.29)	0.62 (0.28)	0.53 (0.29)	0.37 (0.31)	0.36 (0.3)	0.35 (0.3)	0.45 (0.24)
Greece	932	0.26	0.25 (0.38)	0.36 (0.33)	0.42 (0.24)	0.54 (0.26)	0.27 (0.24)	0.52 (0.3)	0.36 (0.27)	0.38 (0.29)	0.32 (0.28)	0.32 (0.28)	0.47 (0.25)
Hungary	969	0.22	0.38 (0.39)	0.37 (0.3)	0.5 (0.24)	0.5 (0.23)	0.23 (0.24)	0.67 (0.29)	0.23 (0.24)	0.45 (0.33)	0.3 (0.31)	0.35 (0.32)	0.36 (0.23)
Poland	832	0.07	0.38 (0.38)	0.38 (0.29)	0.52 (0.25)	0.61 (0.22)	0.39 (0.27)	0.52 (0.29)	0.4 (0.27)	0.48 (0.28)	0.28 (0.28)	0.4 (0.29)	0.46 (0.23)
Spain	842	0.08	0.46 (0.42)	0.54 (0.32)	0.48 (0.27)	0.58 (0.27)	0.5 (0.3)	0.55 (0.33)	0.49 (0.3)	0.42 (0.31)	0.4 (0.31)	0.44 (0.31)	0.5 (0.23)

Table C.2: Descriptive statistics, CHS

Note: Entries show mean values with standard deviations in parentheses.

## D. OLS estimates, country-level fixed effects models

	Power	Federation	Enlargement	New countries	Unification
Terror	0.01	0.01	0.01	0.01*	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Male	$0.04^{***}$	0.06***	-0.001	$0.01^{**}$	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age	-0.002***	0.001***	-0.001***	-0.001***	-0.0001
	(0.0003)	(0.0002)	(0.0002)	(0.0002)	(0.0001)
Education	0.02***	$0.004^{**}$	0.002	$0.004^{**}$	0.01***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
Income	0.01***	0.01***	-0.003	-0.002	0.01***
	(0.004)	(0.003)	(0.002)	(0.002)	(0.002)
Unemployed	-0.02	-0.02*	-0.003	0.004	-0.02
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Ideology	-0.02***	-0.01***	-0.02***	-0.02***	-0.01***
	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)
Dataset	CHS	CHS	CHS	CHS	ESS
Country-level FE	Yes	Yes	Yes	Yes	Yes
Observations	8,445	8,448	8,440	8,442	3,719
Adjusted R <sup>2</sup>	0.06	0.10	0.12	0.10	0.07

Table D.1: The effect of the Berlin attack on attitudes towards the EU, country-level fixed effects models

	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Economy
Terror	-0.0004	-0.004	-0.005	-0.02*	-0.001	-0.01	-0.003
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Male	0.01	-0.005	-0.01**	-0.003	-0.02***	-0.001	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Age	0.0000	0.0002	-0.001***	-0.0004**	-0.002***	-0.001***	-0.0001
	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0001)
Education	0.02***	0.03***	$0.02^{***}$	0.02***	0.01***	0.02***	0.03***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Income	0.01***	0.01***	0.003	$0.004^{*}$	-0.002	0.001	0.01***
	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Unemployed	-0.04***	-0.04***	-0.03***	-0.02*	-0.02*	-0.02*	-0.03*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Ideology	-0.03***	-0.04***	-0.04***	-0.05***	-0.04***	-0.04***	-0.01***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Dataset	CHS	CHS	CHS	CHS	CHS	CHS	ESS
Observations	8,445	8,445	8,447	8,444	8,445	8,445	3,859
Adjusted R <sup>2</sup>	0.18	0.14	0.18	0.16	0.13	0.14	0.10

Table D.2: The effect of the Berlin attack on attitudes towards the EU, country-level fixed effects models

	Positive feelings	Application	Risk	Family
Terror	-0.003	-0.005	0.01	-0.002
	(0.01)	(0.01)	(0.01)	(0.01)
Male	-0.01	-0.02**	-0.02*	-0.02*
	(0.01)	(0.01)	(0.01)	(0.01)
Age	$0.0004^{**}$	-0.0001	-0.0004***	-0.0002*
	(0.0002)	(0.0001)	(0.0001)	(0.0001)
Education	$0.02^{***}$	0.01***	0.01***	$0.02^{***}$
	(0.001)	(0.003)	(0.002)	(0.003)
Income	0.003	-0.004**	0.001	0.002
	(0.002)	(0.002)	(0.002)	(0.002)
Unemployed	-0.02*	-0.03	-0.002	-0.02
	(0.01)	(0.02)	(0.02)	(0.02)
Ideology	-0.03***	-0.02***	-0.01***	-0.02***
	(0.001)	(0.002)	(0.002)	(0.002)
Dataset	CHS	ESS	ESS	ESS
Observations	8,445	3,895	3,737	3,867
Adjusted R <sup>2</sup>	0.15	0.17	0.10	0.07

Table D.3: The effect of the Berlin attack on attitudes towards refugees, country-level fixed effects models

## E. OLS estimates, direct effects, Germany

	Power	Federation	Enlargement	New countries	Unification
Terror	0.10***	0.07**	$0.08^{***}$	0.09***	0.08***
	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Constant	0.34***	0.35***	0.36***	0.43***	0.56***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Dataset	CHS	CHS	CHS	CHS	ESS
Observations	818	818	817	817	463
Adjusted R <sup>2</sup>	0.01	0.01	0.01	0.01	0.01

Table E.1: The effect of the Berlin attack on attitudes towards the EU, bivariate OLS regressions

	Power	Federation	Enlargement	New countries	Unification
Terror	$0.08^{*}$	$0.08^{**}$	0.05	0.07**	$0.06^{*}$
	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Male	0.04	0.03	-0.01	0.03	-0.02
	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)
Age	-0.001	0.001	-0.002**	-0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	$0.02^{**}$	0.005	-0.01*	0.0001	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income	$0.02^{**}$	0.01	-0.001	0.01	$0.02^{***}$
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Unemployed	-0.04	-0.03	-0.04	0.06	-0.08
	(0.07)	(0.05)	(0.05)	(0.05)	(0.06)
Ideology	-0.02***	-0.02***	-0.03***	-0.03***	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Dataset	CHS	CHS	CHS	CHS	ESS
Observations	793	793	792	792	400
Adjusted R <sup>2</sup>	0.03	0.03	0.05	0.05	0.05

Table E.2: The effect of the Berlin attack on attitudes towards the EU, OLS regressions

	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Economy
Terror	0.01	-0.04	0.01	-0.05	0.06**	0.004	0.03
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Constant	0.46***	0.63***	0.52***	0.38***	0.35***	0.35***	$0.57^{***}$
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Dataset	CHS	CHS	CHS	CHS	CHS	CHS	ESS
Observations	818	818	818	818	818	818	469
Adjusted R <sup>2</sup>	-0.001	0.001	-0.001	0.002	0.004	-0.001	0.001

**Table E.3**: The effect of the Berlin attack on attitudes towards immigration, bivariate OLS regressions

	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Economy
Terror	0.03	-0.02	0.005	-0.06*	0.02	-0.03	0.005
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Male	0.01	-0.03*	-0.01	0.01	-0.03	-0.02	0.002
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Age	0.001	0.0004	-0.0003	-0.0001	-0.002***	-0.002***	-0.0001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	$0.02^{***}$	$0.02^{***}$	$0.01^{**}$	0.02***	0.01**	0.01	$0.01^{*}$
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income	$0.01^{*}$	$0.02^{**}$	$0.02^{**}$	$0.01^{*}$	0.002	0.01	0.004
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.004)
Unemployed	-0.04	-0.05	-0.04	0.07	$0.09^{*}$	0.02	-0.23***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Ideology	-0.05***	-0.03***	-0.06***	-0.05***	-0.05***	-0.05***	-0.03***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Dataset	CHS	CHS	CHS	CHS	CHS	CHS	ESS
Observations	793	793	793	793	793	793	401
Adjusted R <sup>2</sup>	0.14	0.09	0.15	0.12	0.13	0.11	0.10

Table E.4: The effect of the Berlin attack on attitudes towards immigration, OLS regressions

	Positive feelings	Application	Risk	Family
Terror	-0.003	0.02	0.06**	0.02
	(0.02)	(0.03)	(0.03)	(0.03)
Constant	0.45***	$0.40^{***}$	$0.48^{***}$	0.56***
	(0.01)	(0.02)	(0.01)	(0.02)
Dataset	CHS	ESS	ESS	ESS
Observations	818	472	457	471
Adjusted R <sup>2</sup>	-0.001	-0.001	0.01	-0.001

Table E.5: The effect of the Berlin attack on attitudes towards refugees, bivariate OLS regressions

	Positive feelings	Application	Risk	Family
Terror	0.04	0.01	$0.05^{*}$	0.002
	(0.03)	(0.03)	(0.03)	(0.03)
Male	-0.04**	-0.03	-0.02	-0.03
	(0.02)	(0.03)	(0.02)	(0.03)
Age	$0.001^{**}$	0.001	-0.003***	-0.001*
	(0.001)	(0.001)	(0.001)	(0.001)
Education	0.005	0.01	0.01	$0.02^{*}$
	(0.005)	(0.01)	(0.01)	(0.01)
Income	$0.01^{*}$	-0.003	0.003	0.01**
	(0.01)	(0.01)	(0.005)	(0.01)
Unemployed	-0.03	-0.08	-0.004	-0.03
	(0.04)	(0.06)	(0.06)	(0.06)
Ideology	-0.05***	-0.05***	-0.02***	-0.04***
	(0.004)	(0.01)	(0.01)	(0.01)
Dataset	CHS	ESS	ESS	ESS
Observations	793	401	393	401
Adjusted R <sup>2</sup>	0.16	0.10	0.06	0.09

**Table E.6**: The effect of the Berlin attack on attitudes towards refugees, OLS regressions

#### F. OLS estimates, matched sample, Germany

A specific concern is whether any differences on the covariates might capture differences between the groups in the propensity to only participate in the survey at a specific time. To ensure that imbalances on observable covariates are not driving the results, we estimated the key models with and without covariates for Germany with full matching using the propensity scores based on the covariates. In none of the models do we find that the results differ from those presented in the main text.

regressions, ma	conce sumpr	•			
	Power	Federation	Enlargement	New countries	Unification
Terror	0.11***	0.07**	0.08***	0.09***	0.06*
	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Constant	0.34***	0.35***	0.36***	0.43***	$0.57^{***}$
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
Dataset	CHS	CHS	CHS	CHS	ESS
Observations	792	792	792	792	388
Adjusted R <sup>2</sup>	0.01	0.01	0.01	0.01	0.005

**Table F.1**: The effect of the Berlin attack on attitudes towards the EU, bivariate OLS regressions, matched sample

	Power	Federation	Enlargement	New countries	Unification
Terror	$0.07^{*}$	0.09**	0.05	0.07**	0.06*
	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Male	0.04	0.03	-0.01	0.03	-0.03
	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)
Age	-0.001	0.001	-0.002**	-0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	$0.02^{**}$	0.005	-0.01*	0.0001	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income	$0.02^{*}$	0.01	-0.001	0.01	$0.02^{***}$
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Unemployed	-0.04	-0.03	-0.04	0.06	-0.09
	(0.07)	(0.05)	(0.05)	(0.05)	(0.06)
Ideology	-0.02***	-0.02***	-0.03***	-0.03***	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Dataset	CHS	CHS	CHS	CHS	ESS
Observations	792	792	792	792	388
Adjusted R <sup>2</sup>	0.03	0.03	0.05	0.05	0.05

Table F.2: The effect of the Berlin attack on attitudes towards the EU, OLS regressions, matched sample

	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Economy
Terror	0.01	-0.04	0.01	-0.05	0.06**	0.004	0.01
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Constant	0.47***	0.63***	0.53***	0.38***	0.35***	0.35***	0.57***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Dataset	CHS	CHS	CHS	CHS	CHS	CHS	ESS
Observations	792	792	792	792	792	792	388
Adjusted R <sup>2</sup>	-0.001	0.002	-0.001	0.002	0.004	-0.001	-0.002

**Table F.3**: The effect of the Berlin attack on attitudes towards immigration, bivariate OLS regressions, matched sample

	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Economy
Terror	0.03	-0.02	0.003	-0.06	0.02	-0.03	0.01
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Male	0.01	-0.04*	-0.01	0.01	-0.03	-0.03	0.002
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Age	0.001	0.0005	-0.0004	-0.0000	-0.002***	-0.002***	-0.0002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	$0.02^{***}$	$0.02^{***}$	0.01**	$0.02^{***}$	$0.01^{**}$	0.01	$0.01^{*}$
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income	$0.01^{*}$	$0.02^{**}$	$0.02^{**}$	$0.02^{*}$	0.003	0.01	0.004
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.004)
Unemployed	-0.04	-0.04	-0.04	0.08	$0.09^{*}$	0.02	-0.22***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Ideology	-0.05***	-0.03***	-0.06***	-0.05***	-0.05***	-0.05***	-0.03***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Dataset	CHS	CHS	CHS	CHS	CHS	CHS	ESS
Observations	792	792	792	792	792	792	388
Adjusted R <sup>2</sup>	0.14	0.10	0.15	0.12	0.13	0.11	0.09

Table F.4: The effect of the Berlin attack on attitudes towards immigration, OLS regressions, matched sample

regressions, matched sample						
Positive feelings	Application	Risk	Family			
-0.004	0.02	0.06**	0.01			
(0.02)	(0.03)	(0.03)	(0.03)			
0.46***	$0.40^{***}$	$0.48^{***}$	0.56***			
(0.01)	(0.02)	(0.01)	(0.02)			
CHS	ESS	ESS	ESS			
792	388	388	388			
-0.001	-0.001	0.01	-0.002			
	Positive feelings -0.004 (0.02) 0.46*** (0.01) CHS 792 -0.001	Positive feelings         Application           -0.004         0.02           (0.02)         (0.03)           0.46***         0.40***           (0.01)         (0.02)           CHS         ESS           792         388           -0.001         -0.001	Positive feelings         Application         Risk           -0.004         0.02         0.06**           (0.02)         (0.03)         (0.03)           0.46***         0.40***         0.48***           (0.01)         (0.02)         (0.01)           CHS         ESS         ESS           792         388         388           -0.001         -0.001         0.01			

**Table F.5**: The effect of the Berlin attack on attitudes towards refugees, bivariate OLS regressions, matched sample

	Positive feelings	Application	Risk	Family
Terror	0.04	0.02	$0.05^{*}$	0.002
	(0.03)	(0.03)	(0.03)	(0.03)
Male	-0.04**	-0.03	-0.02	-0.03
	(0.02)	(0.03)	(0.02)	(0.03)
Age	$0.001^{**}$	0.001	-0.003***	-0.001*
	(0.001)	(0.001)	(0.001)	(0.001)
Education	0.005	0.01	0.01	$0.02^{*}$
	(0.005)	(0.01)	(0.01)	(0.01)
Income	$0.01^{*}$	-0.002	0.002	0.01**
	(0.01)	(0.01)	(0.005)	(0.01)
Unemployed	-0.03	-0.07	-0.005	-0.02
	(0.04)	(0.06)	(0.06)	(0.06)
Ideology	-0.05***	-0.05***	-0.02***	-0.04***
	(0.004)	(0.01)	(0.01)	(0.01)
Dataset	CHS	ESS	ESS	ESS
Observations	792	388	388	388
Adjusted R <sup>2</sup>	0.16	0.09	0.06	0.09

Table F.6: The effect of the Berlin attack on attitudes towards refugees, OLS regressions, matched sample

## G. OLS estimates, interaction results, Germany

	Power	Federation	Enlargement	New countries	Unification
Terror	-0.08	0.05	-0.06	0.10	0.01
	(0.11)	(0.08)	(0.08)	(0.07)	(0.09)
Ideology	-0.03***	-0.02***	-0.03***	-0.03***	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Terror × Ideology	0.03	0.01	0.02	-0.01	0.01
	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)
Male	0.04	0.03	-0.01	0.03	-0.02
	(0.03)	(0.02)	(0.02)	(0.02)	(0.03)
Age	-0.001	0.001	-0.002**	-0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	0.02**	0.004	-0.01*	0.0003	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income	$0.02^{**}$	0.01	-0.001	0.01	0.02***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Unemployed	-0.04	-0.03	-0.04	0.05	-0.08
	(0.07)	(0.05)	(0.05)	(0.05)	(0.06)
Constant	0.34***	0.31***	0.67***	0.54***	0.46***
	(0.09)	(0.07)	(0.06)	(0.06)	(0.07)
Dataset	CHS	CHS	CHS	CHS	ESS
Observations	793	793	792	792	400
Adjusted R <sup>2</sup>	0.04	0.03	0.05	0.05	0.05

Table G.1: The heterogeneous effect of the Berlin attack on attitudes towards the EU, OLS regressions

	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Economy
Terror	-0.08	-0.05	0.002	-0.15*	0.01	-0.13*	0.06
	(0.07)	(0.07)	(0.07)	(0.08)	(0.08)	(0.08)	(0.07)
Ideology	-0.05***	-0.03***	-0.06***	-0.06***	-0.05***	-0.05***	-0.02***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Terror × Ideology	0.02	0.004	0.001	0.02	0.003	0.02	-0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)
Male	0.01	-0.03*	-0.01	0.01	-0.03	-0.02	0.003
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Age	0.001	0.0004	-0.0003	-0.0001	-0.002***	-0.002***	-0.0001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Education	$0.02^{***}$	0.02***	0.01**	$0.02^{***}$	0.01**	0.01	$0.01^{*}$
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Income	$0.01^{*}$	0.02**	0.02**	$0.02^{*}$	0.002	0.01	0.003
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.004)
Unemployed	-0.03	-0.05	-0.04	0.08	$0.09^{*}$	0.02	-0.23***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Constant	0.54***	0.63***	$0.71^{***}$	0.52***	0.68***	0.68***	0.63***
	(0.06)	(0.06)	(0.06)	(0.07)	(0.06)	(0.06)	(0.06)
Dataset	CHS	CHS	CHS	CHS	CHS	CHS	ESS
Observations	793	793	793	793	793	793	401
Adjusted R <sup>2</sup>	0.14	0.09	0.15	0.12	0.13	0.11	0.09

**Table G.2**: The heterogeneous effect of the Berlin attack on attitudes towards immigration, OLS regressions

	Positive feelings	Application	Risk	Family
Terror	-0.04	0.22**	0.04	-0.01
	(0.06)	(0.09)	(0.08)	(0.09)
Ideology	-0.05***	-0.04***	-0.02***	-0.04***
	(0.005)	(0.01)	(0.01)	(0.01)
Terror × Ideology	0.01	-0.05**	0.004	0.003
	(0.01)	(0.02)	(0.02)	(0.02)
Male	-0.04**	-0.03	-0.02	-0.03
	(0.02)	(0.03)	(0.02)	(0.03)
Age	0.001**	0.001	-0.003***	-0.001*
	(0.001)	(0.001)	(0.001)	(0.001)
Education	0.004	0.01	0.01	$0.02^{*}$
	(0.005)	(0.01)	(0.01)	(0.01)
Income	0.01**	-0.005	0.003	0.01**
	(0.01)	(0.01)	(0.005)	(0.01)
Unemployed	-0.03	-0.09	-0.003	-0.03
	(0.04)	(0.06)	(0.06)	(0.06)
Constant	$0.57^{***}$	0.56***	$0.67^{***}$	0.69***
	(0.05)	(0.07)	(0.06)	(0.07)
Dataset	CHS	ESS	ESS	ESS
Observations	793	401	393	401
Adjusted R <sup>2</sup>	0.16	0.11	0.06	0.09

**Table G.3**: The heterogeneous effect of the Berlin attack on attitudes towards refugees, OLS regressions

#### H. OLS estimates, spillover effects, bivariate models

Figure H.1: Spillover effects across Europe, bivariate models, OLS estimates



## I. Test for differences, Germany and other countries

	Power	Federation	Enlargement	New countries	Unification
Terror	-0.02	-0.01	-0.01	-0.02**	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Germany	-0.01	-0.06***	-0.06***	-0.07***	0.06***
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)
$Terror \times Germany$	0.12***	$0.08^{**}$	0.09***	$0.11^{***}$	$0.09^{***}$
	(0.04)	(0.03)	(0.03)	(0.03)	(0.03)
Constant	0.36***	$0.41^{***}$	0.42***	$0.50^{***}$	0.51***
	(0.01)	(0.004)	(0.004)	(0.004)	(0.01)
Dataset	CHS	CHS	CHS	CHS	ESS
Observations	6,808	6,811	6,802	6,804	2,921
Adjusted R <sup>2</sup>	0.001	0.002	0.004	0.01	0.01

**Table I.1**: The heterogeneous effect across Europe of the Berlin attack on attitudes towards the EU, OLS regressions

	Good	Jobs	Cultural life	Crime	Muslim culture	Welfare	Economy
Terror	-0.03***	0.01	-0.01	-0.01	0.01	-0.02**	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Germany	0.09***	$0.08^{***}$	0.13***	-0.02*	0.02	-0.01	0.09***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Terror × Germany	0.04	-0.05	0.02	-0.04	0.05*	0.03	0.04
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Constant	0.38***	0.55***	$0.40^{***}$	$0.40^{***}$	0.33***	0.35***	$0.48^{***}$
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.01)
Dataset	CHS	CHS	CHS	CHS	CHS	CHS	ESS
Observations	6,809	6,809	6,810	6,809	6,810	6,808	3,123
Adjusted R <sup>2</sup>	0.01	0.01	0.02	0.001	0.001	0.0003	0.02

**Table I.2**: The heterogeneous effect across Europe of the Berlin attack on attitudes towards immigration, OLS regressions

	Positive feelings	Application	Risk	Family
Terror	-0.01	-0.02	0.005	-0.001
	(0.01)	(0.01)	(0.01)	(0.01)
Germany	0.03***	-0.08***	0.02	0.03**
	(0.01)	(0.02)	(0.02)	(0.02)
Terror × Germany	0.01	0.04	$0.06^{*}$	0.02
	(0.03)	(0.04)	(0.03)	(0.03)
Constant	$0.42^{***}$	$0.48^{***}$	0.46***	0.53***
	(0.004)	(0.01)	(0.01)	(0.01)
Dataset	CHS	ESS	ESS	ESS
Observations	6,808	3,174	2,981	3,143
Adjusted R <sup>2</sup>	0.002	0.01	0.003	0.001

**Table I.3**: The heterogeneous effect across Europe of the Berlin attack on attitudes towards refugees, OLS regressions

To formally examine whether we could infer that we have a statistically significant null effect (i.e. an affect that is in fact indistinguishable from zero), we conducted a series of equivalence tests. We examined whether we could ensure that the effect was lower than the effects we observed in Germany. We used the average effect sizes for the EU attitudes to generate the equivalence bound (-0.083 and 0.083). The reasoning is that we want to examine whether any of the effects are comparable (i.e. equivalent) to the effects we observed for EU attitudes in Germany. Th results are reported in Table I.4.

Outcome	Treatment	Control group,	Difference	Equivalence test
	group, mean	mean		statistics
EU	_			
Power	0.337	0.356	-0.019	-11.15*
Federation	0.399	0.409	-0.010	-12.77*
Enlargement	0.408	0.418	-0.010	11.548*
New countries	0.476	0.496	-0.021	9.842*
Unification	0.502	0.508	-0.005	40.481*
Immigration	_			
Good	0.351	0.377	-0.026	8.577*
Jobs	0.559	0.549	0.010	-10.418*
Cultural life	0.384	0.399	-0.015	10.151*
Crime	0.392	0.402	-0.010	10.385*
Muslim culture	0.336	0.330	0.006	-11.241*
Welfare	0.332	0.355	-0.023	8.712*
Economy	0.474	0.484	-0.009	40.330*
Refugees	_			
Positive feelings	0.408	0.419	-0.011	12.740*
Application	0.455	0.475	-0.020	29.190*
Risk	0.460	0.455	0.005	-41.069*
Family	0.526	0.527	-0.001	39.442*

 Table I.4: Equivalence test for all outcomes, outside Germany

*Note:* The equivalence test statistics are based on Student's t-test with a low bound of -0.083 and high bound of 0.083.

\* < 0.01

In none of the tests do we find that any of the effects are statistically comparable to the effects found in Germany for the EU attitudes. On the contrary, the greatest difference in the full sample outside Germany is 2.6 percentage points (for the measure on immigration is good for the country) and is nowhere near the effect size we find for EU attitudes in Germany.

## J. Marginal effects from interaction models



Figure J.1: Marginal effects in Germany, all outcomes



-0.2

Left

Ideology

Right

Figure J.2: Marginal effects in Belgium

# K. OLS estimates, direct effects, Israel

Figure K.1: OLS estimates on sample from Israel



#### L. Replication: Germany

To replicate the key findings for Germany in the main text, we used data from the Eurobarometer (five cross-sectional surveys collected in 2015-2017) and the German Longitudinal Election Study (GLES) panel data 2013-2017.



Figure L.1: Changes in populist sentiments over time, Germany

*Note*: Dashed line indicates the date of the terrorist attack. The p-values are test for mean differences in support from November 2016 to May 2017.

In Germany, from November 2016 to May 2017, we see an increase in positive EU attitudes. This change is similar to the results from the main text and is statistically significant. Similarly, we find no change in attitudes towards immigrants or refugees. This is also consistent with the results from the two quasi-experiments.

Looking at the GLES data, we were able to identify a measure on immigration attitudes. This measure is on a five-point scale and taps into whether people believe immigrants should be obliged to adapt to German culture. The average support is 4.00 in 2016 (before the attack, 2016) and 3.97 in 2017 (after the attack, 2017). This difference is not substantially (mean difference of 0.03) or statistically significant (p = 0.28). We find this reassuring in terms of demonstrating that there is no difference in immigration attitudes.



Figure L.2: Changes in immigration attitudes, Germany

Note: p-value indicates the test for mean difference between the wave in 2016 and the wave in 2017.