

Massacre Memories and Car Sales: German-Greek Conflict and Consumer Behavior during the Eurozone Crisis, 2009-14*

How is collective memory formed and to what extent does it impact behavior? During the recent Greek Debt Crisis, conflict erupted between the German and Greek governments; German car sales declined. Declines were greatest in areas where German troops committed massacres during World War II. We examine the government process that awarded towns official ‘martyr’ status, and show that quasi-random variation in victim status amplified consumer reactions against German cars. Terrain characteristics drove part of the geography of partisan attacks and reprisals. Using the share of atrocities explained by geographical features, we argue that reprisal attacks were key in creating anti-German sentiment. One interpretation of our results is that current events reactivated past memories, while government intervention influences collective memory and, in turn, major economic decisions.

Human beings live in large groups that transcend the circle of immediate family and friends. To a remarkable extent, they cooperate and undertake costly actions that benefit the community (Fehr and Gächter 2002; Sober and Wilson 1998). What binds individuals together into ‘imagined communities’ (Anderson 1983) of genetically unrelated beings remains an open question. Anthropologists and historians have long pointed out the importance of collective memories for group identity – from initiation rites to the remembrance of (mythical) ancestors (Colley 1992, Nora 1989). Collective memories differ from individual ones. While every human being recollects events, collective memories transcend what individuals remember themselves. Instead, the importance of distant events is often passed on from generation to generation through acts of public remembrance and the teaching of history in school and elsewhere, acting as ‘lieux de mémoire’.¹ These help to create group identity, and examples range from official holidays to mythical founders, monuments and sites of heroic struggle (for example, Masada) to symbolic figures such as ‘Uncle Sam’ in the US or ‘Marianne’ in France.

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¹ Literally, “sites of memory”; the concept was popularized by the French historian Pierre Nora (1989).

It is unclear how collective memories are created, when they matter, whether they can actually affect major economic decisions. One way to address these issues is to analyze memory when it fails: In this light, memory and its limitations is merely one prominent example of a range of behavioral biases, which can have substantial effects on behavior.² With regard to news in particular, models of limited attention typically predict under-reaction, and there is substantial empirical support for this prediction. Investors, for example, often react slowly to earnings news released on Fridays or on days when many other companies are reporting (DellaVigna 2009, Hirshleifer 2009); similarly, consumers change their behavior only gradually in response to the rankings of hospitals and colleges (Pope 2009).³ A closely related theoretical literature on memory limitations leads to the opposite prediction -- namely, that news can effect sharp changes in behavior if it “brings back” memories of past events (Mullainathan 2002).⁴ “Associativeness” – similarities between the current situation and the past – can encourage recall. Some results in experimental psychology bear out the predictions of limited-memory models (Sherman and Kim 2002). Also, theoretical work on collective memory has emphasized its role in nation-building and in facilitating collaboration (Dessí 2008). At the same time, there is no compelling evidence for changes in economic behavior that are due to (collective) memories.⁵

In this paper, we examine the interaction between contemporary events and collective memory in a high-stakes setting: the sales of German cars in Greece during the sovereign debt crisis of 2010—2014. In order to receive bailout loans from the European Union, Greece had to implement stringent austerity measures; the German government in particular pushed for budget cuts. German newspapers were quick to blame “lazy Southerners” for the Euro debt crisis. As public discord erupted between the German and Greek governments, and memories of Germany’s violent occupation of Greece during World War II quickly resurfaced. In the years 1941-44, German armed forces had committed numerous war crimes, including mass executions of civilians; occupation policies also triggered a major famine (Mazower 1995).

While public exchanges between German and Greek politicians turned acrimonious after 2010, Greek demonstrators waved placards of Angela Merkel in Nazi uniform to protest

² Kahnemann (1982); Akerlof (1991); Gabaix (2006); Schwartzstein (2014); Mullainathan (2002).

³ Complementary research in macroeconomics has explored the implications of inattention for business cycles (Mankiw 2002; Sims 2003).

⁴ Saliency-based models such as those offered by Gennaioli and Shleifer (2010) and Bordalo (2015) combine limited attention with limited memory; these models can accommodate both under- and over-reactions.

⁵ One important exception are Malmendier and Nagel (2011, 2016), who show that long-lingering memories of major economic upheavals such as the Great Depression or high inflation in the 1970s can influence expectations both at the individual and the aggregate level, and affect overall asset returns. Relatedly, Koudijs and Voth (2016) show that personal experience in lending to stock market speculators shifted the Amsterdam stock market’s aggregate risk-bearing capacity in the 1770s.

against the rise of an alleged “Fourth Reich”, while consumer groups called for a boycott of German products.

We focus on car sales because they represent a major purchasing decision for consumers, and because they are an iconic German product. To examine the importance of revived collective memory, we analyze variation in sales over time in Greece, exploiting differences between prefectures. We want to know whether German car sales during the recent crisis fell more in areas affected by German reprisals during World War II – and especially in those that received official recognition as ‘martyred towns’. We first create a time-series of German-Greek conflict in the years 2010-14 based on keywords in newspaper reports. During periods of elevated animosity between Germany and Greece, areas that suffered atrocities in 1941-44 saw much greater declines in German market share than unaffected areas. Figure 1 shows our main result. The dotted line tracks the growing level of animosity between Germany and Greece as the debt crisis worsened, with particularly high article shares showing conflict in early 2010 and the summer of 2012. The black line shows the difference in German market share between prefectures with and without reprisals. From the time series, it is clear that the higher the index of public acrimony between the two countries became, the greater the difference in market share between high- and low-suffering prefectures became.

In our main analysis, we show that the greater the share of destroyed towns in a prefecture, the greater the decline in market share for German producers in times of public conflict between the two countries. Cars represent a major expenditure for most households. Buying one in the middle of an economic crisis is difficult – aggregate car sales plummeted after 2010. To show that results are not driven by an aggregate downturn in economic conditions, we control for changes in nighttime luminosity in each prefecture during the crisis. We also show that the market for expensive cars (which are more likely to be German) did not suffer from larger declines than that for ordinary cars. Indeed, our results hold if we exclude all luxury cars. Further, if we interact unemployment rates pre-crisis with a vector of time dummies, to capture time-varying economic conditions, results are unaffected. Finally, measures of economic uncertainty (constructed along the lines of Baker, Bloom and Davis) do not have a *differential* effect on German car purchases, in high-vs-low atrocity prefectures.

Next, we explore more systematically how the past comes to matter for the present. Since the 1990s, Greece awards communities ‘martyred’ town status if they suffered severely during the occupation – a purely honorific designation with no material benefits. Towns and cities that received official martyr status saw market share declines for German cars above

and beyond what would be expected given the destruction they suffered. Based on a detailed analysis of documents from the archives of the Presidential commission charged with adjudicating applications, we show that there is a discontinuity in acceptance rates around 50% of wartime destruction. Awarding official designations can have a first-order influence on consumer decisions, suggesting that public recognition of victim status changes how people perceive themselves (and the actions expected of them). Similarly, based on new information from a telephone survey of the mayors' offices, we show that towns and cities that still collectively commemorate their suffering during 1941-44 also saw sharp declines in German car sales. Importantly, the declines we document only occur in periods of heightened disagreements between the German and Greek governments, as reflected in newspaper articles. In periods of low conflict, there is no divergence in German market share between prefectures that did and did not suffer reprisals.¹¹ These results suggest that a history of World War II destruction itself is not sufficient for present-day Greeks to react against German policies; instead, it requires collective and highly symbolic commemoration of the past to affect modern-day outcomes.

Despite the fact that we exploit high-frequency variation in German-Greek conflict, one might be concerned that the location of German atrocities might reflect deep underlying differences, possibly predating World War II (such as a greater ability to organize collective action, or stronger nationalist sentiment). We isolate an exogenous component of German atrocities by exploiting detailed geographical data combined with a close reading of the history of guerrilla warfare in the Balkans. Reprisals were generally carried out in towns and villages close to the location of partisan attacks, by German troops seeking revenge – without much regard for any actual support or complicity amongst locals for the partisans (Meyer 2010). In the Federal Archives of the German Armed Forces, we found information on partisan deployments and resupply in the form of detailed maps compiled by the regional German Army headquarter in Greece. We use this new data on the location of allied resupply points for the Greek partisans to explain the geography of resistance and reprisals. Exogenous variation in terrain and distances isolate a plausibly exogenous component of German reprisal actions. IV results show that consumer reactions to German-Greek conflict after 2010 were at least as strong in places where terrain characteristics determined the location of German atrocities.

¹¹ In addition to conflict index based on Greece's leading newspaper, we experiment with an alternative news index, compiled from Google search terms. It produces very similar results to our baseline index.

To rule out that other unobserved factors are driving results, we conduct a number of placebo exercises. We repeat our analysis for the sites of Italian atrocities, interact with the German-Greek conflict indicator, and find no adverse effect on German car sales. This rules out long-term persistence as an alternative interpretation – the possibility that locations that resisted more in general, and were hence attacked by the occupiers, show also more adverse reactions to outside pressure some 70 years later.

To gain further insight into mechanisms, we also conducted a survey in Greece in the summer of 2017, in martyred and non-martyred towns. We find that Greeks in martyred towns are not more nationalistic (they do not claim to be more proud than those in non-martyred towns); they also had similar education and income. This alleviates concerns that reprisal towns are structurally different from those spared German atrocities. Importantly, residents do not only buy fewer German cars– they are also less likely to state that a German brand would be their preferred choice. Strikingly, these results are stronger for Greeks born in massacred towns and cities; and they are strongest for respondents whose parents and grandparents already lived in the same location. In addition, responses suggest that in martyred towns, German policies during the crisis are indeed viewed more negatively: They are more likely to blame Germany for the Greek sovereign debt crisis.

Our paper relates to three strands of literature: The economics of identity and (collective) memory, the after-effects of conflict, and the effects of consumer boycotts. Akerlof and Kranton (2011) provide numerous examples of how identity shapes choices made by individuals and organizations. The role of identity is also prominent in Benabou and Tirole (2011). They assign a value to people’s self-image, and allow people infer “who they are” from past behavior. Experimental evidence shows an increase in pro-social behavior from random assignment to in-group status (Chen and Li 2009) and sharper punishments of violations of in-group members (Bernhard, Fischbacher and Fehr 2006). When subjects are primed with their identity, bankers become more likely to cheat, and Asian-Americans, more patient (Cohn, Fehr and Maréchal 2014; Benjamin, Choi and Strickland 2010). Jia and Persson (2017) show that parents chose the ethnic identity of their children in part based on economic incentives. Dessi (2008) presents a model of how collective memory can serve to bind nations together and enhance economic co-operation.

Conflict in general has many negative effects on development (Collier et al. 2003). At the same time, it appears to affect pattern of cooperation amongst survivors (Bauer et al. 2016) and lead to more complex societies (Turchin 2016). Countries with a longer history of military conflict typically levy more taxes, and have higher per capita GDP (Besley and

Persson 2010; Dincecco and Prado 2012). A history of past conflict has been shown to affect trade patterns and FDI (Guiso et al. 2009). Areas of Africa afflicted by slave exports continue to have lower interpersonal trust (Nunn and Wantchekon 2012).

Consumer boycotts are frequent but evidence for their effectiveness is mixed. For example, boycotts of French wine after the country's failure to support the US in Iraq have been questioned by Ashenfelter (2007).¹² Teoh et al. (1999) examine the effect of the South African Boycott on the stock prices of affected firms, and find that it had no clear impact. In general, the valuations of firms affected by boycotts do not seem to react (Koku et al. 1997}. Counter-examples include a decline in tourist visits by Americans to France after 2003 (Michaels and Zhi 2010); lower French car sales in China during the 2008 Olympics (Hong et al. 2011), and declines in the stock market values of Chinese and Japanese firms after a cooling of Sino-Japanese relations in 2005 and 2010 (Fisman et al. 2012).

Relative to the existing literature, we make three contributions: First, we highlight one channel through which attitudes change, by showing how plausibly exogenous conflict can create new, long-lasting enmity. This differs from the findings of the related literature on long-term persistence (Guiso et al. 2017; Becker et al. 2015; Voigtländer and Voth 2012).¹³ Second, we highlight the importance of collective memory – through rituals of collective remembrance, an adverse shocks translates more sharply into attitudes that matter for the long term, especially when sanctioned from above. Third, we demonstrate at the level of the consumer that location-specific differences in historical experience (and collective memory) affect important economic decisions.

We first review the historical background before presenting our data and main results. Next, we present additional results on collective memory and official recognition, before demonstrating the robustness of our findings.

Historical Background

In this section, we describe Germany's occupation of Greece during World War II as well as the sovereign debt crisis after 2010.

¹² Pandal and Venkatesan (2016) argues that this is due to American consumers having difficulty determining the national origin of products.

¹³ Our findings are more in the spirit of Malmendier and Nagel (2011, 2016).

Germany's Wartime Occupation of Greece

In May 1941, Axis forces occupied Greece. The country was divided into three occupation zones, of which the largest was administered by Italy. Germany occupied less territory but controlled key locations including Athens, Thessaloniki, and Crete. Bulgaria was in charge of a relatively small part of the country close to its own borders. From the beginning, the civilian population suffered from expropriations and plunder. The German armed forces requisitioned foodstuffs, causing to a major famine during the winter of 1941—1942, leading to an estimated 300,000 deaths (Hionidou 2006).

Throughout Eastern Europe, the German armed forces retaliated against civilians after partisan attacks. Shooting potentially uninvolved civilians in areas of armed resistance was first authorized in April 1941 in Yugoslavia (Mazower 1995), and it became standard practice of German anti-partisan operations. The High Command of the German Armed Forces (*OKW-Oberkommando der Wehrmacht*) laid down quotas for reprisal killings: 100 civilians were to be shot for each German soldier killed in a partisan attack, 50 for each soldier wounded, and so forth.

Crete saw the first German reprisals on Greek soil (Nessou 2009). General Student, the first German commander of Crete, instructed his forces to “leave aside all formalities and deliberately dispense with special courts“. Shortly thereafter, in Kondomari, Crete, German troops shot 19 civilians, following the death of a German officer (Meyer 2002) – the first of what became a string of massacres on Greek soil. Partisan attacks in particular were often followed by indiscriminate massacres of civilians and the destruction of every village near an attack. By 1944, an estimated 2,000-3,000 Greek civilians had been executed by German armed forces on Crete alone, and 1,600 (of 6,500 in total) towns and villages had been destroyed (Nessou 2009).

After the Italian surrender in 1943, German forces took over the Italian-occupied zone. Fighting between guerrilla groups (*andartes*; mostly the Communist-led ELAS) and the *Wehrmacht* intensified. For example, the northwestern Greek town of Mousiotitsa saw 153 of its inhabitants killed, including women and children, on July 25, 1943. The Germans destroyed another 15 localities in the area (Nessou 2009). Similarly gruesome massacres occurred in Kalavryta (in the Peloponnese) and in Distomo (near Delphi). After the war, the Greek Ministry of Reconstruction estimated that some 30,000 Greeks perished in reprisal attacks by German forces, with numerous villages and towns left destroyed (Doxiadis 1947).¹⁴

¹⁴ This figure does not include Jewish Greeks, shipped to death camps or murdered in Greece, nor victims of starvation.

German-Greek conflict during the Eurozone crisis

The Greek sovereign debt crisis began in late 2009, when revised budget deficit figures revealed the country's dire financial situation. This discovery led to successive downgrades of its credit rating. Eventually, with debt markets all but closed to the Greek government, an EU bailout became inevitable. From the beginning, the German government was skeptical of a financial rescue for Greece, emphasizing the scale of tax evasion and corruption as key obstacles to any permanent improvement.¹⁵ It finally agreed to the bailout in exchange for harsh austerity measures. Greek public opinion accordingly saw Germany as the instigator of foreign-imposed austerity. The reaction was immediate and intense: in February 2010, the Greek Consumers Association called for a boycott of German products – explicitly highlighting the importance of cars.¹⁶ It also explained to consumers how barcodes could be read to identify German goods on supermarket shelves.

Incendiary press coverage amplified the animosity. German newspapers portrayed Greeks as lazy cheaters, living it up at the expense of German taxpayers.¹⁷ The cover page of a German weekly featured Aphrodite making a rude gesture; a tabloid urged Greece to sell some of its islands to repay its debts.¹⁸ As the Greek economy contracted and unemployment surged amid severe cutbacks of government services and support payments, anti-German sentiment in Greece deepened. In early 2012, Greek president Karolos Papoulias publicly complained that the German finance minister Wolfgang Schäuble was insulting the entire country.¹⁹ During the 2012 visit of German chancellor Angela Merkel to Athens, thousands of demonstrators filled the streets of Athens.²⁰ Table 1 summarizes the key events of this crisis.

Memories of Nazi massacres during the Occupation frequently resurface in Greece today. When a journalist from the *Guardian* interviewed Greeks during the Euro debt crisis about their country's treatment by Germany, the massacre at Distomo immediately came up. A 45-year old bar owner contrasted this with the period immediately preceding the crisis: “Five years ago, no one had any problems with Germany.”²¹ Family members of the victims

¹⁵ “German ‘no’ to facilitating the repayment of the 110 billion euros”, *Kathimerini*, 13 October 2010. Research based on Greek bank lending data illustrates the scale of unreported income, concluding that as much as 30% of the country's deficit may have been driven by tax evasion (Artavanis et al. 2016).

¹⁶ Greek Consumers Association, 13 February 2012.

¹⁷ “Die Griechenland-Pleite”, *Focus Magazine*, Nr.~8, 2010.

¹⁸ “Verkauft doch eure Inseln, ihr Pleite-Griechen”, *Bild*, 27 October 2010.

¹⁹ “Greek president attacks German minister's ‘insults’”, Reuters, 15 February 2012.

²⁰ “Athens protests amid Angela Merkel's visit”, BBC, 9 October 2012.}

²¹ “Greece will pay its debts back, if you let us. But not with a German knife held to our throats”, Daily Telegraph, 11 February 2012. The piece profiles the life of Eleftherios Basdekis, who spent his “entire life beneath a German cloud”. A survivor of the Distomo massacre, he eventually built a successful trucking business that went bankrupt during the sovereign debt crisis. The article also cites a mother from Distomo saying

of Distomo have sued for reparation payments, taking their case to the German courts and to the International Court of Human Rights. Although Germany's Constitutional Court dismissed the case in 2003, it was recently revived when an Italian court awarded victims' descendants an Italian property owned by a German non-governmental organization. The case reached the International Court in 2012, at the height of the Greek debt crisis, and featured prominently in the Greek press.²²

After 2010, war crimes and unpaid German reparations were mentioned much more frequently in the Greek press. Former foreign minister Stavros Dimas, addressing the Greek parliament in March 2011, reminded everyone that Greece never waived its right to claim reparations and that a forced loan taken out by Germany during the Occupation had not been repaid.²³ Populist newspapers printed swastikas surrounded by the stars of the European Union to symbolize that EU policy was as harsh as Nazi occupation.

Data

In this section, we introduce the data on car registrations, wartime destruction, and martyr status, and discuss data descriptives and issues of balancedness. Next, we briefly summarize a survey we conducted in Greece in the summer of 2016.

Car registrations

Aggregate car sales in Greece slumped after the start of the financial crisis. Annual unit sales had totaled close to 180,000 before 2007. By 2011, with the Greek economy contracting rapidly, car sales fell to barely 60,000 per annum, a decline by almost two-thirds. Analyzing sales trends of cars in Greece is complicated by the fact that German car manufacturers performed strongly over the last decade. Worldwide, the share of German brands has been rising. This partly reflects the success of Volkswagen and the significant decline in Toyota's market share.²⁵

The Greek Ministry of Transport and Communications collects data on registrations of new passenger vehicles. These are disseminated by the Hellenic Statistical Authority (ELSTAT). We use monthly data on the number of new passenger vehicles registered in each prefecture for the period from January 2008 to December 2014, by manufacturing plant. The

that she “hated Germany”, that Angela Merkel was “a monster”, and that the Germans “killed Distomo; they stole our gold; they belittle Greece.”

²² “The government in the Hague for Distomo”, *Kathimerini*, 13 January 2011.

²³ “The issue of German reparations is open but...”, *Kathimerini*, 28 March 2012.

²⁵ “VW conquers the world”, *The Economist*, 7 July 2012.

raw data from ELSTAT does not contain information on the brand of registered vehicles. However, ELSTAT provides a correspondence list that allows us to match production plants to car manufacturers. This correspondence does not always distinguish between brands produced by the same manufacturer. This is true for the Daimler group, producer of both Smart and Mercedes vehicles, and for the Fiat group, which also produces Alfa Romeo and Lancia. We are nonetheless able to distinguish German from non-German brands in our sample; the former include Volkswagen, Opel, Audi, BMW, Porsche and the brands of the Daimler group.²⁶ For our purposes, a car's "nationality" is not determined by ultimate ownership of the company, but the place of manufacture of (most) cars – we count Seat as a Spanish carmaker despite the fact that it is owned by Volkswagen.²⁷

Table 2 summarizes our data. Toyota has the highest sales, followed by Opel and Volkswagen. To compare like with like, we exclude small manufacturers with less than 10 vehicles sold in the total period 2008--2014. Many German cars are luxury products. These may suffer greater declines in sales as a result of the crisis. To avoid biasing our results upwards, we repeat key parts of the empirical analysis for the "Volkswagen category" only. This is composed of a group of manufacturers focusing on compact vehicles, and mid-sized family cars. We include the following brands: Volkswagen, Opel, Citroen, Ford, Honda, Hyundai, Nissan, Peugeot, Renault, Seat, Skoda, and Toyota.

Unfortunately, there is no good data for the immediate post-war period on car registrations. This makes it harder to show that German car sales were initially weak after 1945 -- and all the more so in areas with massacres. The only data we have that is disaggregated by car manufacturer was compiled by ELSTAT for 1961, and is available for 11 transport areas. There, areas with above-median shares of population affected by massacres showed a four-percentage point gap in German market shares (23.6 vs 26.5%).

Conflict index

We compile an index of conflict by counting newspaper articles that refer to political tensions between the two countries. An example from Lexis-Nexis illustrates our approach: Figure A.1 shows the frequency of the joint occurrence of the words "anti-German" and "Greece" in articles appearing in international news media. This word pair is virtually nonexistent prior to 2009, but thereafter the frequency count increases sharply before peaking in 2012 and ~2013.

²⁶ Data on vehicle registrations are available from January 2004 on, but we are unable to distinguish German brands in the earlier sample, due to the fact that Daimler was also the owner of Chrysler.

²⁷ To the extent that Seat is actually perceived as German, we will understate the shift away from German cars, biasing our results downwards.

To obtain a measure of perceived German--Greek conflict within Greece, we compute the frequency of conflict-related articles in a leading Greek newspaper, *Kathimerini*. It is the largest daily newspaper (by circulation) during the period under study, and its entire archive of articles is digitized and available electronically. Our database comprises 101,889 articles published under the sections “Greece”, “Politics”, and “Economy”. We compute the monthly share of articles related to German--Greek conflict using an approach similar to the one described in Baker, Bloom, and Davis (2013). We use all text containing the stem “German” first, and then classify whether they refer to German-Greek conflict. With audited articles in hand, we examine the word frequencies in these articles compared to the rest. We select the combination of the five most distinctive words (haircut, summit, merkel, troika, eurozone) with the highest predictive power that minimizes false negatives and false positives. The resulting set of terms used to identify the relevant articles is the one that performs closest to the “gold standard” of human readings. In this way, we derive a monthly count of conflict-related articles, which we normalize by the total number of articles published *Kathimerini* during the same month.²⁸ Figure 2 plots the share of conflict-related articles for the period 2008—2014. While there is a gradual rise in the overall conflict article share after 2010, there are also numerous short-term spikes, when public arguments between Greek and German politicians grew particularly heated.

Wartime destruction

After World War II, the Greek Ministry for Reconstruction compiled detailed information on the extent of destruction at the town level. Some 333 municipalities witnessed major destruction; of these, 127 had 75% or more of their houses destroyed. Of the 72 towns completely destroyed in Greece during World War II, 54 witnessed mass executions of civilians; the other 18 were burnt to the ground in retaliation for insurgency attacks in the vicinity (Nessou 2009). Figure 3 provides a map of German reprisals.

The main variable we use as an indicator of German atrocities is the share of destroyed towns in a prefecture. It ranges from zero to 31.3%, with a mean of 5.3%. Out of 48 prefectures, 33 contain destroyed towns, with destruction concentrated in Crete, the Peloponnes, the Pindus Mountains, and the Agrafa Range.

Martyr Status

²⁸ See the Data Appendix for details on the algorithm used to select terms.

As a second indicator of prefecture-level exposure to German reprisals, we also examine the share of martyred towns. In Greece, an official process governs which towns receive “martyr status“. In 1993, the Greek parliament debated recognition of Kalavryta as a martyr town. During the discussion, the idea of launching a procedure to award similar status to other towns emerged. This was written into law in 1997. In accordance with Law 2503, a committee composed of professional historians and high-ranking senior officials was established in 1997. It adjudicates applications for martyr status. The Interior Ministry at the time stated that

“the ... Committee was established to examine all the proposals for the characterization of towns and villages as “martyr” towns and villages and submit relevant proposals to the Ministry. The characterization of “martyr” was important for the great contribution of towns and villages in the national struggle against the occupied forces in the period 1941-1944, during which the toll in human lives, as well as the material damage, was tragic”.

The Presidential Decree lays down the following criteria:

1. The total destruction of houses following a burning or explosion or bombardment
2. The loss of 10% of the overall population due to massive or individual executions...
3. The destruction of 80% of the total number of dwellings due to a burning, explosion or bombardment and the loss of 10% of the population... taking into consideration also the absolute losses

We analyze the official minutes of the committee discussing individual cases. While the committee followed the rules in principle, it exercised discretion on various occasions and used additional sources and supporting evidence that are not available recorded in the minutes. For example, on 28.3.2005, it handled the case of Vlacherna (Βλαχερνά). The committee minutes state “...out of the pre-existing 186 houses, 50 were completely destroyed and 131 partly destroyed.” This does not coincide perfectly with the data recorded by the Greek Ministry of Reconstruction in 1946, which assigns a percentage destroyed of 59% to the town. The committee however “unanimously decided to suggest the characterization of Vlacherna as a martyr village, since the aforementioned “partial” destruction of the houses is close to 80%, therefore we have a case of complete destruction.” The same day, it dealt with the case of Mouzakata (Μουζακάτα), and argued that “33 out of the 106 pre-existing houses

were completely destroyed... there is no adequate documentation that Mouzakati fulfils the requirements to be characterized as a martyr village. The Committee unanimously decided not to include Mouzakati...". However, the Ministry tables from 1946 show a level of destruction of 100% for Mouzakati. We do not know whether the committee in 2005 had better data than the Ministry of Reconstruction in 1946, immediately after the cessation of hostility. What is clear is that the two do not coincide perfectly. We will use this data to examine assignment to martyr status in the empirical section.

Data descriptives, control variables and balancedness

Our dataset contains information on 51 prefectures over the period January 2008 to December 2014. The main features of the data are summarized in Table 3. Massacres during the German Occupation occurred in 21 out of 51 prefectures, equivalent to 41% of the sample. The share of the (pre-war) population living in towns and villages later destroyed serves as our main explanatory variable. On average, a little more than one percent of Greeks in 1940 were affected; Fokida, on the Northern shore of the Gulf of Corinth, is the prefecture affected worst with a share of 12%.

The average prefecture in our sample saw monthly sales of 211 cars during the period; sales were as low as zero in some prefectures, and could reach as many as 16,365 cars per month in Athens. The share of German cars sold was on average 28%; especially in the smaller prefectures, the share fluctuates strongly from month to month, and in some cases, it can reach either 0 or 100%. Finally, the share of articles in Kathimerini that refer to tension in Greek-German relations during the 2008--2014 period is 6.2%.

Our main control variables come from the 2001 Greek Census and Eurostat. They include population size, employment in agriculture and industry, the share of civil servants, education, the unemployment rate and GDP per capita. Table 4 compares these variables for prefectures with and without reprisals. Overall, there are few meaningful differences between the two groups -- the share of employment in agriculture is similar, as is the proportion of the labor force in industry. The share of civil servants, a group hit hard by the crisis, is almost identical. Education levels are also comparable -- the largest difference is for the share of citizens with secondary education (19% in reprisal prefectures, 17% in the others). Unemployment rates differed by one percentage point, with a baseline of 12%.

Importantly for our setup, and given the high levels of autocorrelation in the share of German cars, the pre-crisis levels of this variable are orthogonal to reprisal status (Bruhn and McKenzie 2009). The first differences in the German car share are also identical across

prefectures with and without massacres. This indicates that there are no differential pre-crisis trends in car sales, which is crucial for the validity of our difference in differences specification.

There are no significant differences between reprisal and non-reprisal prefectures except for per capita income and the share of population with secondary education. Education is higher in reprisal prefectures, and the income difference is small. Importantly, there is no evidence that areas that suffered greater German reprisals were more nationalistic, or more pro-Communist, before 1941. Ruggedness is positively correlated with reprisals. More rugged terrain provided cover for the partisans, whose operational bases often lay in the mountains of Central and Northern Greece. Distance from a main road is also (negatively) correlated with reprisals. This reflects the German tactic of punishing villages in the vicinity of a partisan attack, many of which occurred near roads and bridges. The share of seats won by the Communist Party in the 1936 parliamentary elections is very similar in reprisal and non-reprisal prefectures. This is important because Communist-dominated ELAS was the main guerrilla group during the Occupation – pre-existing political preferences are not correlated with the location of military action.²⁹

Survey

In the summer of 2017, we conducted a telephone survey in Greece. We sampled a total of 928 individuals from 143 municipalities, distributed across 12 prefectures. We sampled individuals from 30 martyred municipalities and 113 matched towns that did not see reprisals. Table A.1 in the Appendix gives an overview of the data. We find that the sample is balanced on observables – there are no significant differences of age or gender, and the proportion of unemployed is actually higher in the non-martyred locations. The average respondent in a martyred town earned 66€ less than a respondent in a non-martyred town, but the difference is not significant. The cars owned by survey participants are about the same age in both groups, and education levels are similar. There is also no evidence of respondents in martyred towns being more proud to be Greek – their responses actually indicate lower patriotism, but the difference is not significant.

²⁹ This is in line with the finding from our survey (below) that respondents in martyred towns were not more nationalistic.

Main Empirical Results

In this section, we first show the main result – German market share declined more during months of German-Greek conflict in those prefectures that witnessed massacres during the occupation 1941-44. We also show that these results do not reflect the economic effect of the crisis. Finally, we demonstrate that the effect is plausibly causal, with exogenous factors driving German reprisals – and not some latent anti-German (or nationalist) sentiment.

Baseline Results

We estimate the following equation for the share of German car sales in each prefecture i in month j of year t :

$$S_{ijt} = C_i + M_j + Y_t + \gamma_1 \cdot ArticleShare_t + \gamma_2 \cdot ArticleShare_t \cdot ShareDestroyed_i + \varepsilon_{ijt},$$

where S is the share of German cars, C is a prefecture fixed effect, Y is the year fixed effect, M is the month fixed effect, γ_1 is the coefficient on the share of conflict articles, and γ_2 is the main coefficient of interest – the extent to which German car market share declines in addition in prefectures with more towns destroyed by the Germans during World War II.

Table 5 gives the results. We find that the higher the share of conflict articles in a given month, the lower the share of German cars – but the effect is not tightly estimated. In contrast, in areas with more German destruction, there is a large and significant decline in German car sales in exactly those months when German-Greek conflict peaked. The effect is also economically large: Going from the median share of destroyed towns (0.0167) to the 75th percentile (0.087) implies a reduction in German car sales by 0.6 percentage points in the median conflict month, a 2.5 percent relative decline.

In column 2, we add an interaction of pre-crisis control variables with the conflict article share. This is intended to capture any differential effect that conflict might have had in areas that were already struggling economically before 2010. Adding this variable only increases the size of our coefficient, which now implies a decline by 1.2 percentage points extra for prefectures at the 75th percentile of destruction, compared to the median destruction level. Similarly, adding an interaction of prefecture fixed effects and calendar month fixed effects strengthens our results. Additionally adding a date fixed effect leaves the coefficient basically unchanged.

The share of destroyed houses in a municipality is only one indicator of German atrocities. In Table 6, we use three alternative measures of destruction – the average level of destruction in each province. Instead of counting a town as either destroyed or not, we take the average town-level destruction level as the explanatory variable. Panel A shows that results are essentially identical across specifications. In panel B, we use the share of 1940 population living in destroyed towns to perform the same estimation. In our baseline specification, we find a large and significant effect. As we add additional fixed effects and controls, the precision of the estimation declines below standard levels, but the sign and size of the coefficient remain unaffected. Finally, in Panel C, we use the number of victims relative to 1940 prefecture population. Again, the coefficient on the interaction with the article share is large and negative, but the effect is not tightly estimated. Overall, we find a consistent pattern of negative effects on German car sales during periods of conflict during the Euro crisis in places with a history of atrocities; these are particularly stark when we use destroyed cities as an indicator.

Accounting for the Effect of the Crisis

Greece experienced a severe economic downturn during the Eurozone crisis. Bad news about current and possibly, future economic performance is likely to have affected car purchases. Such effects may have differed by locality. We do not have direct measures of output at the city or prefecture level. To account for the effect of the crisis, we employ three strategies. Instead, we first use the interaction between monthly unemployment in Greece as a whole and the share of destroyed towns in a prefecture, to account for time-varying economic conditions (Table 7, Panel A). There is no direct effect of unemployment on the buying of German cars in the country as a whole – nor is there a differential effect in prefectures more affected by German massacres. In Panel B, we use nightlight as an indicator of economic activity, using NASA data at the prefecture level. Because of missing data, we lose about half of our sample; the basic pattern in the half of the sample with non-missing data is the same as in the rest, but coefficients on the interaction term are not significant at standard levels of confidence (Panel B1). If we control for economic activity by adding night-time luminosity (Panel B2), we find no change in the interaction term. We interpret these results to say that a time-varying measure of economic activity such as nightlight does not detract from the basic interaction effect we document.

As a third alternative, we compile an index of economic uncertainty at the national level, using a version of the Baker, Bloom and Davis index for Greece based on the

equivalent Greek keywords (Panel C). Next, we add the uncertainty index to our estimation, using both the absolute value and the interaction with the share of destroyed towns. The results in Table 7, Panel C show that our main effect remains unchanged; higher uncertainty actually appears associated with higher sales of German cars.

Instrumental Variable Strategy

Our results could reflect reverse causality – some areas may have already been more anti-German (or generally nationalistic) before 1941, and before any reprisals took place. In that case, our results would reflect persistence of a cultural trait, and not the effects of memory.³⁰ To demonstrate that we are capturing the repercussions of events in the 1940s, we now show that the assignment of German reprisals was plausibly exogenous. In this section, we present our IV strategy, identifying exogenous factors responsible for greater German repression. No military group can fight for any length of time without substantial supplies. Food, weapons, ammunition, fuel and clothing are everyday necessities. In this regard, irregular forces are no different from regular ones, even if their demands are lower (van Creveld 2004). Greek (and other European) partisans were typically resupplied by the Allies by air, and where feasible, by sea. In Greece, the British dropped supplies by parachute from aircraft flying from Greece, or landed small aircraft on improvised airstrips; they also used submarines to land agents and military supplies.

Supply points are important for guerrilla operations, but they not easy to operate and defend. They need to be sufficiently remote for the occupiers to have difficulty in controlling the territory, but accessible enough for aircraft and submarines to reach them. Our first instrument is the proximity of supply points. German military maps of guerrilla activity and supply points compiled by Army Group E (headquartered in Salonika) during the occupation show the locations where the Royal Air Force and the Royal Navy landed supplies.

Second, we use terrain ruggedness as an instrument. Rugged areas generally provide safe havens to insurgents. Partisans and guerrillas fighting conventional forces are normally heavily outgunned, and need to use asymmetric warfare to even the odds. Che Guevara (2002) already emphasized the importance of inaccessible terrain for the initial stages of a guerrilla uprising. By retreating to the most inaccessible areas of a country, insurgents can typically deny their foes the use of their strongest assets – armor and heavy artillery (Asprey 2002).

³⁰ This would be in line with a rich literature on long-term persistence (Guiso et al. 2016; Nunn and Wantchekon 2010; Voigtländer and Voth 2012).

This pattern held in 1940s Greece, where the largest concentrations of partisans were located in inner parts of the Peloponnese and around the Pindus mountains in Northern Greece. From the German military maps, we take the location of supply points. For each town or city in our sample, we calculate the distance to the nearest supply point on the German maps. Figure 4 illustrates the pattern. The further a town or city from a supply point, the lower the incidence of massacres and the lower the probability that a town attains martyr status.

For ruggedness, we use the measure pioneered by Nunn and Puga (2012). We find that higher ruggedness predicts more massacres and a higher likelihood of martyr status. Going from a ruggedness of 200 to 400 raises the likelihood of a town being martyred from .2 to .4. Also, greater distance from supply points quickly reduces the risk of German retaliation. Next, we combine these two instruments. This is in the spirit of Munshi and Rosenzweig (2016) – while each instrument may not be excludable, we use the interaction of both, arguing that it is largely accidental whether places happened to be both close to a supply point and in very rugged terrain.³²

The first stage is indeed strong, with an F-statistic of 23.9. We instrument $ArticleShare \cdot ShareDestroyed$ with $ArticleShare \cdot farflat$, where $farflat$ is the product of supply point proximity and ruggedness. Table 8 gives the results. We estimate with a full set of fixed effects, prefecture controls, and an interaction of pre-crisis controls with the article share. We find that the coefficient on $ArticleShare \cdot ShareDestroyed$ increases slightly in size, but does not become more significant. The fact that the instrumented part of the variation in town destruction predicts declines in German car purchasing strengthens the argument that the link between car buying and revived anti-German sentiment is indeed causal.

Martyr Status and Memorials

In this section, we show that official recognition of martyr status affected consumer behavior. We also demonstrate that other forms of public remembrance at the local level have similar effects. Finally, we use evidence from a survey to show that Greeks in martyred cities are not more nationalistic today, that they blame Germans more for the economic crisis, and that they have both buy and like German cars less – and the deeper their roots in a location, the stronger the effect.

³² To this end, we define a new variable, proximity to supply points, calculated as the maximum of distance to a supply point minus actual distance for the town in question. We then multiply proximity and ruggedness. Results are broadly unaffected if we use two instruments instead of the product of the two, but the first stage is weaker – being in a very rugged place is not useful for partisans if supplies cannot come in.

The effect of martyr status

Figure 5 shows the extent to which we can explain the awarding of martyr status by the percentage of destruction, as captured in ministerial tables post-war. The likelihood of receiving martyr status is clearly increasing in the extent of destruction captured by the ministry. Importantly, the probability of receiving it jumps around a destruction level of 50%.³³ This suggests that the committee followed relatively closely the official guidelines, which lay down a cut-off of at least half of all houses destroyed before martyr status can be awarded.

We use a standard RDD design. There is a jump in the probability of receiving martyr status around the 50% destruction cutoff of 0.44, with a p-value of 0.05. The estimator uses a bandwidth of 0.15, with 24 and 26 municipalities to the left/right of the threshold. Population sizes in 1940 or 2010 do not change around the threshold. The share of Germans committing atrocities is actually lower to the right of the cutoff, an effect that is marginally significant.³⁴ We repeat the analysis for covariates in columns 2, 3, and 4, using population in 1940, and in 2010, as dependent variables. All of these show insignificant results, suggesting that our results for martyr status are driven by the committee applying an informal cut-off around 50% of destruction for classification purposes.

The evidence from the RDD and a close reading of the discussions of the committee minutes suggests that the awarding of martyr status – while correlated with destruction and population loss – also contains an important accidental element. We therefore ask whether the receipt of martyr status influences German car purchases above and beyond the effect of destruction itself. To this end, we first show that martyr status itself is strongly associated with declining German car sales. Next, we demonstrate that when we use both variables, martyr status and destruction, the effect of martyr status dominates – underlining the importance of collective memory and officially recognized victimhood.

Table 10, Panel A shows the results from Table 5 for purposes of comparison. In Panel B, we use the share of towns with martyr status as the interacted variable. The coefficient for the interaction term (*ArticleShare* · *ShareMartyred*) is consistently negative and highly significant. The estimated effect is now also bigger: a one standard deviation increase in the anti-German news share leads to a market share decline of 1% in our baseline specification,

³³ Figure A.2 in the appendix shows how the probability of martyr status being granted changes for alternative cut-offs. 50% is the only level with a significant positive value.

³⁴ These results are based on the *rdrobust* routine, as described in Calonico et al. (2017). We also used the alternative technique implemented in the STATA routine *rd*, using a range of bandwidths to show robustness as described in Austin (2011). We find treatment effects of 0.35, 0.38 and 0.28 with p-values of 0.01, 0.02, and 0.013.

but to a 1.5% decline if we use martyred towns as the treatment variable, equivalent 5.7% of German market share.

Next, we examine the effect of martyred status, controlling for the share of destroyed towns in a prefecture. In Panel C, Table 10, we conduct a horserace between the destruction variable and martyr status, by adding ($ArticleShare \cdot ShareDestroyed$) to the specification. After controlling for martyr status, the coefficient on destruction is mostly negative but never significant. Martyr status, interacted with the conflict news share, on the other hand, yields a highly significant and large impact throughout. That means that in a set of two provinces, with the same average level of destruction, the one with a higher share of officially recognized martyr towns saw a much sharper fall in German market share. This strongly suggests that it is not the level of destruction as such that affects consumer purchases, but the – officially approved and publicly recognized – status as a major victim of Nazi aggression.

Finally, we show that being above the 50% cutoff – and hence receiving martyr status due to the rules of the Presidential decree – predicts the decline in German car shares during the crisis.³⁵ In Table 10, Panel D, we use the predicted share of martyred cities in a prefecture based on the 50% criterion to explain changes in market share. We find large negative coefficients; as soon as we add interactions with pre-controls or fixed effects interactions, they are also significant. Since we control for the average level of destruction of towns in a prefecture, the effect here is mainly driven by the proportion of towns that are above the cut-off set by the presidential decrees.

Overall, we find that having been awarded martyr status officially leads to markedly greater declines in German market shares during period of German-Greek conflict. These declines are above and beyond what we would expect given the level of destruction in these towns and cities.

Public Memorials

Official recognition as a ‘martyred town’ is not the only way in which memories can be passed on from generation to generation. Many towns in Greece commemorate World War II atrocities, often by public festivities or through memorials. We conducted a telephone survey of all mayor’s offices of towns that show destruction greater zero in the official Ministry of Reconstruction list to ascertain whether a community organizes a commemorative event or

³⁵ If we had town-level car data, we could implement an exact analogue to the RDD specification, with a narrow band of destruction driving assignment to martyr status. Since we need to aggregate up to the level of the prefecture, and there are only 388 towns with destruction

whether a monument exists. There are approximately twice as many towns with a monument or public event as there are places officially recognized as ‘martyred’.

Table 11 uses memorials as a measure of how affected places were by World War II massacres. We find a large and significant negative interaction with the German news share in Panel A. In Panel B, we add martyr status also. Both memorials and martyr status predict (differentially) lower German market shares, while the share of destroyed towns on its own does not have significant predictive power.

Survey results

In our survey – conducted after the Greek-German crisis – we ask a number of questions related to both the perception of Germany, and of the purchasing and intended purchasing of German cars. In particular, we focus on two questions:

1. “Do you own a German car?”
2. “Is your ideal car a German brand?”

Figure 6 summarizes our findings. First, German cars are an aspirational good for most respondents – many more people say that their ideal car is German than there are respondents who own a German car. Second, the basic pattern is in line with the hypothesis that the Euro crisis is associated with systematically lower interest in German cars in areas affected by reprisals. While on average, 32% of Greeks say that their ideal car is German, this falls to 26% in martyr towns, and to 23% amongst people in martyr towns who were born there, and whose parents were also born in the same municipality. The differences with the non-martyred towns are significant at the 10% level.

A similar pattern emerges for actual car ownership. On average, in non-martyred towns, 18% of Greeks drive German cars in our survey; this falls to 17.3% in martyr towns, and to 12.3% for those in martyr towns whose family has lived there for generations. These results suggest that martyred towns differ in their stock of cars – and in the purchasing behavior and intentions of its residents in 2017.

To what extent do these differences reflect differences in beliefs about Germany’s role during the Euro debt crisis? In Table A.6, we also analyze answers to the question “Do you blame Germany for the recent debt crisis?” We also repeat the car analysis using the extensive margin of destruction as an explanatory variable. We find that the share of destruction is not predictive of actual car ownership, either amongst the population at large or amongst the long-

standing residents. When it comes to the ideal car, however, this changes; the coefficient on the share of destroyed towns is markedly larger and highly significant for Greeks whose families didn't move. We find that the higher the share of wartime destruction, the more Greeks are likely to blame the Euro crisis on Germany. This effect is greatest for those born in the town, and those whose parents also stem from there. Table A.7 looks at a number of placebo outcomes, showing that Greeks in destroyed cities on average are not more proud to be Greek, nor are they more likely to have lost their job. Also, there is no evidence that they are more politicized, participating at the same rate in demonstrations and strikes as the rest of the population.

Robustness and Placebo Exercises

In this section, we consider possible issues with our analysis. We first show that in plausible placebo exercises, using Italian and Bulgarian destruction during World War II, there are no results. The same is true for an index of news about Italian-Greek conflict. Next, we demonstrate that our main results are not driven by a handful of 'famous cases', the definition of our conflict article index, or the fact that German cars tend to be more expensive than other vehicles.

Placebo Exercises

In this section, we test the plausibility of our results by conducting two placebo exercises. It is essential for our argument that the changes in German car purchases are specific to German atrocities. First, we repeat the baseline analysis, but use the share of towns destroyed by Bulgarian and Italian forces as a predictor instead – interacted with the share of conflict news articles. Second, we compile an index of articles about disagreements with Italy for the same period, and examine whether it has explanatory power for German market share.

Table 12 shows that $(Article\ share) \cdot (share\ of\ town\ destroyed\ by\ Italians\ and\ Bulgarians)$ is positively correlated with German market share, but the coefficient is never significant. The fact that the coefficient is not strongly negative makes it less likely that we are picking up a correlation between characteristics that made atrocities more likely in the past and modern-day economic circumstances leading to a decline in German market share.

Next, we perform the equivalent analysis with an Italian news index. We use the same key words designed to capture German-Greek conflict during the Euro crisis, but use the word

stem “Italian” instead of “German”. We also substitute the German Chancellor Merkel with the Italian Prime Minister Renzi. Many of the articles so identified actually refer to German-Italian disagreements about the treatment of Greece – Italy advocated markedly softer policies than Germany. In Table 12, Panel B, we find negative but insignificant coefficients for $(\text{Italian Article share}) \cdot (\text{share of towns destroyed by Germans})$. In Panel C, we look at the effect on the market share of Italian cars. Prefectures where the Germans destroyed a great number of towns show increases in the market share of Italian cars when there are many articles about the Euro crisis. This suggests that Italian cars actually gained because of the moral and political support provided Italian politicians during the Euro debt crisis – especially in areas with negative memories of the German occupation. The same effect is not visible in areas where Italian and Bulgarian troops committed atrocities (Panel D). Here, the coefficient on the interaction is significantly positive only once.

Famous massacres

Amongst the litany of bloodshed that marked the German occupation of Greece, a few cases stand out – Kalavytra, Distomo, and Kommeno. In each case, almost the entire civilian population was exterminated. We examine the robustness of our findings to dropping these famous cases. In Table A.2 in the Appendix, we first drop these three towns when we compile indices of the share of destroyed towns and cities (Panel A), and then exclude the entire prefectures in which they are located (Panel B).

Results are almost entirely unaffected. The coefficient on the interaction between the share of destroyed towns and news coverage of German-Greek conflict remains large and highly significant. This is true for eliminating the towns themselves from the sample. If we drop entire provinces, the size of coefficients falls, but the decline is marginal overall.

Alternative news index

German-Greek conflict was not continuous during the period after 2010; it varied as various rescue plans were discussed and politicians intervened in public debate. Our index is based on data from e-Kathemerini, the electronic version of Greece's main business newspaper. While the most respectable paper in the country, it is not necessarily representative of sentiment in the country as a whole. Here, we compile an index based on Google searches for the same key terms, and examine the effect.

Table A.3 shows the results. We consistently find negative, highly significant interactions between the Google index and German massacres. The effect is almost identical in size to the main specification – a one standard deviation increase in German-Greek conflict interacted with the share of destroyed towns leads to a 0.8% decline in the German car share in both our baseline and in specification 1 in Table A.3.

Expensive cars

German cars tend to be more expensive than those from other countries. While non-German brands sold cars in Europe were worth an average of €23,000 in 2012, the average German car sold for €36,600 – 58% more. In the middle of the largest economic crisis to hit Greece in a generation, the taste for expensive cars may well have evaporated, providing an alternative interpretation of our main finding.

In Table A.4, we systematically exclude expensive cars first. Col. 1 shows the main result; the second column uses only sales of cars in the “Volkswagen category”, meaning non-luxury sedans (i.e. excluding Audi, BMW, and Mercedes). The coefficient on the interaction declines somewhat in size, but remains large and significant. Once we drop VW as well (leaving only Opel and the cheaper VW-associated brands), the coefficient declines and standard significance is lost – but the coefficients is also not statistically different from the ones we estimated with a full set of brands.

In Panel B, we implement our horserace specification excluding ever more exclusive German brands. As we discuss in the main text, martyr status has the strongest predictive power for market share changes. For the VW category only, the size of the coefficient actually rises (but significance declines). Once we drop VW itself, statistical significance is lost, but dropping more companies from the VW Empire restores it. Coefficient sizes overall are similar to our baseline findings.

Conclusion

In this paper, we ask a simple question: When does collective memory matter? We do so in a setting with economically large stakes - the purchase of (new) cars, one of the biggest decisions consumers take. During the Eurozone debt crisis, Greece suffered from a major loss of international confidence. As the crisis worsened, there were increasingly acrimonious spats between the Greek and German governments.

The more open the conflict between German and Greek politicians, the lower the market share of German cars in Greece became. Remarkably, a large part of the aggregate decline was driven by areas of Greece that had suffered German atrocities during the occupation in 1941-44. In other words, where current events created associations with collective memories from the Second World War, consumers reacted markedly more after 2010.

These reactions were greatest in towns and cities that received official 'martyr' status from the Greek government. To show that these patterns do not only reflect greater wartime suffering, we exploit exogenous variation in assignment of official victim status. Towns and cities above the threshold value for the 'martyr' designation show much greater declines in German market share. This suggests that public remembrance and official approval of victim status are important factors in creating collective identities. We find similarly large effects for public remembrance rituals that are organized (bottom-up) locally.

FIGURES

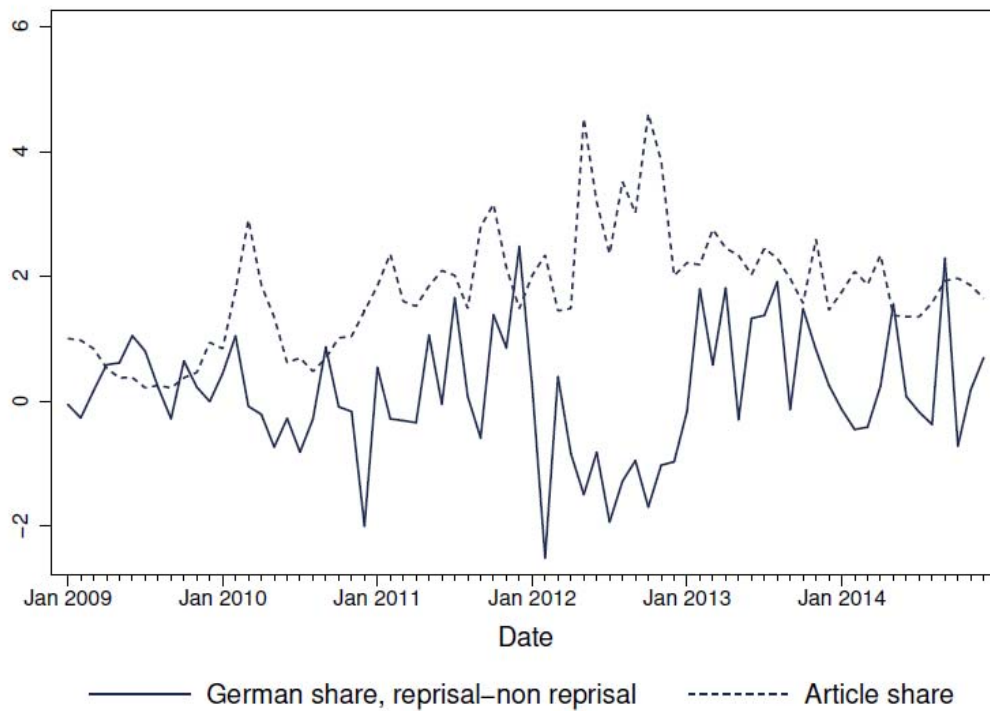


Figure 1: German-Greek conflict and German market share in prefectures with and without reprisals

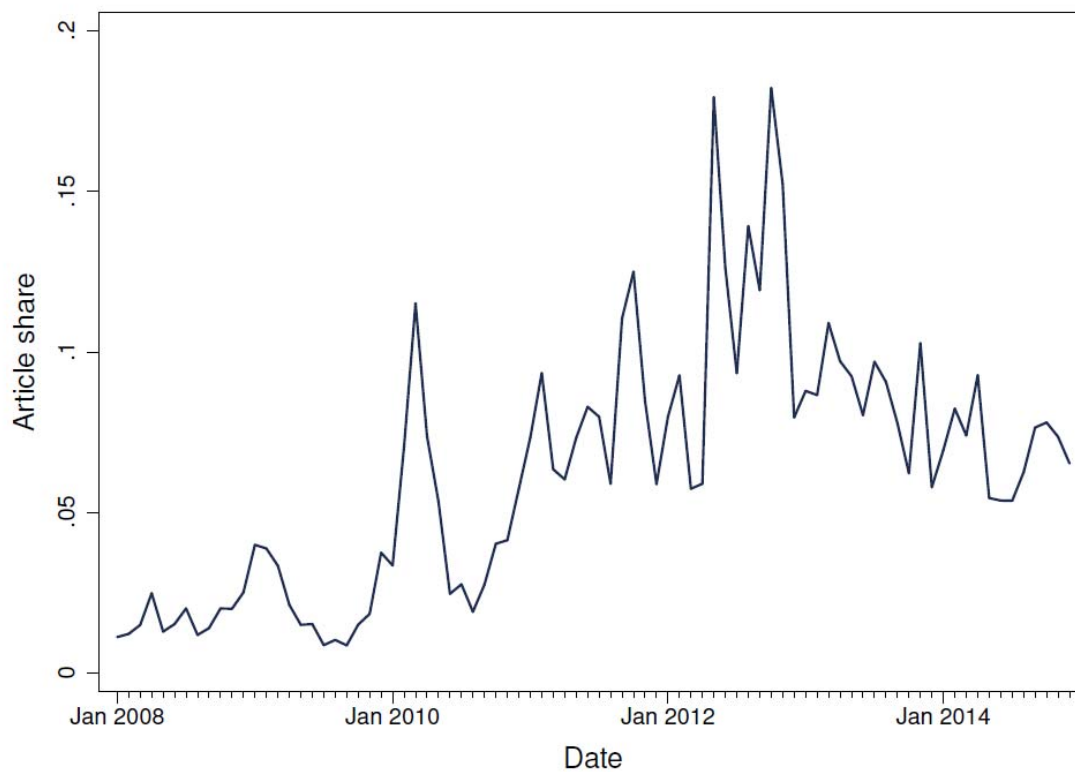


Figure 2: Conflict-related articles in *Kathemerini*, 2008-2014

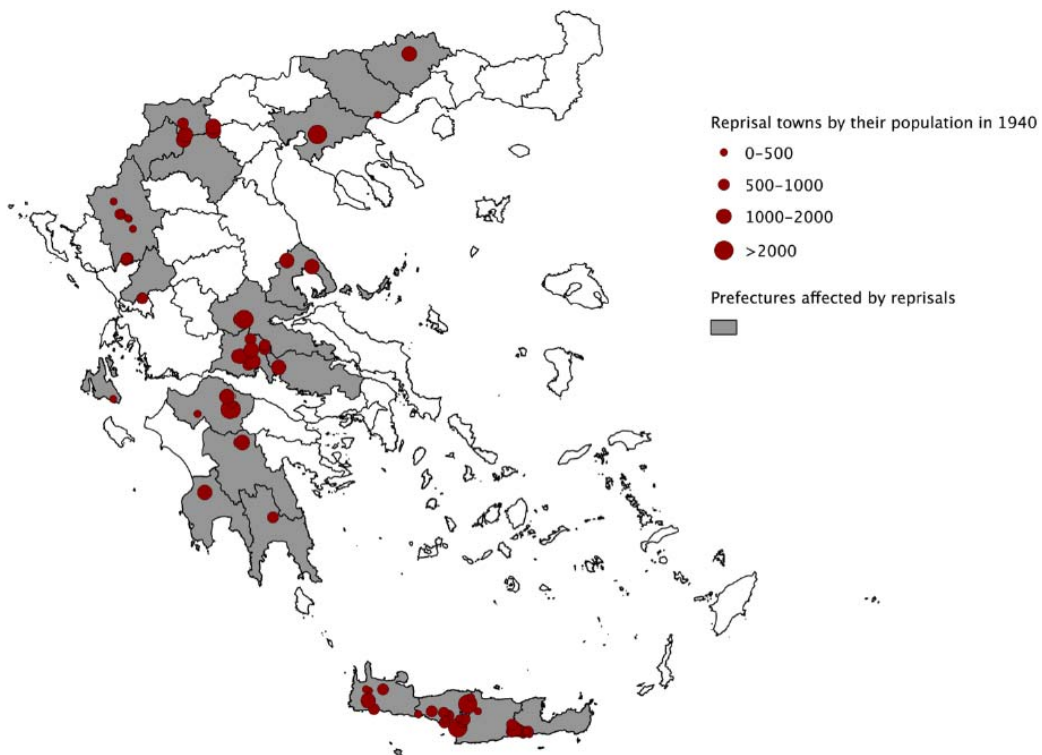


Figure 3: The geography of German reprisals in wartime Greece

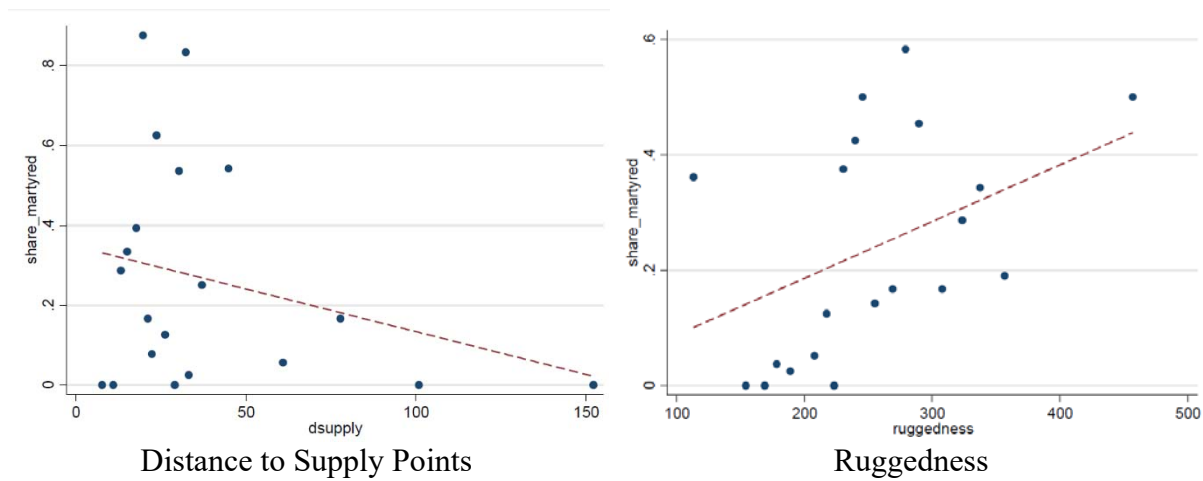


Figure 4. First Stage – Instruments and Share of Martyred Cities

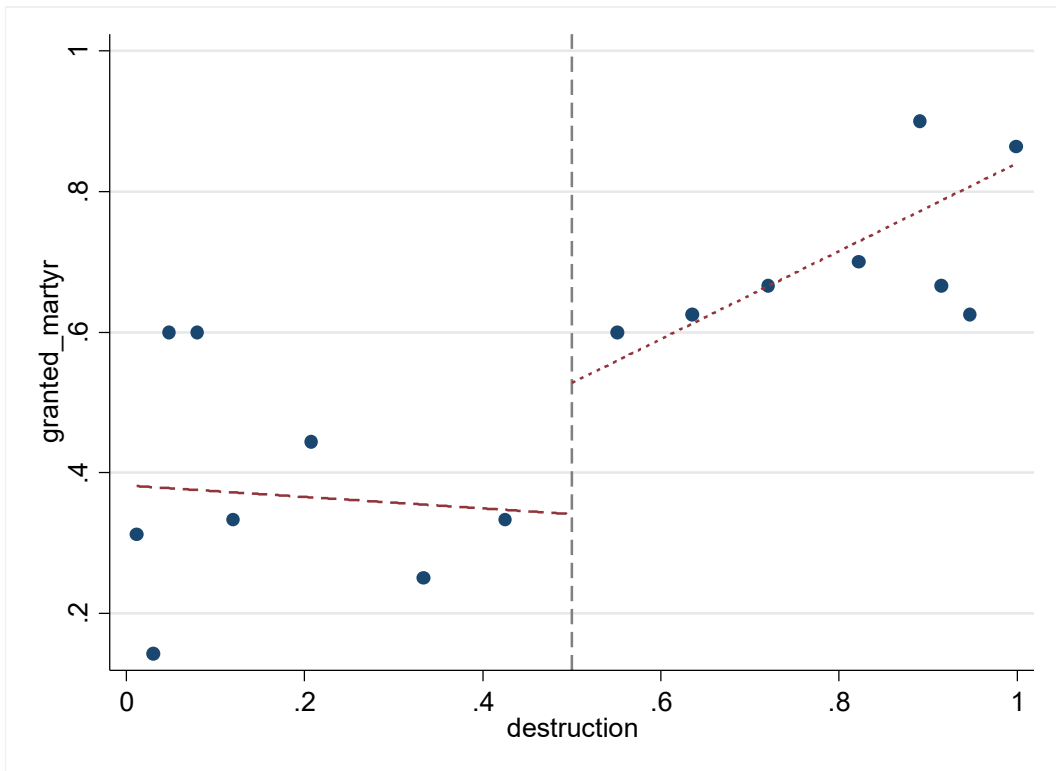


Figure 5. Martyr Status and Destruction

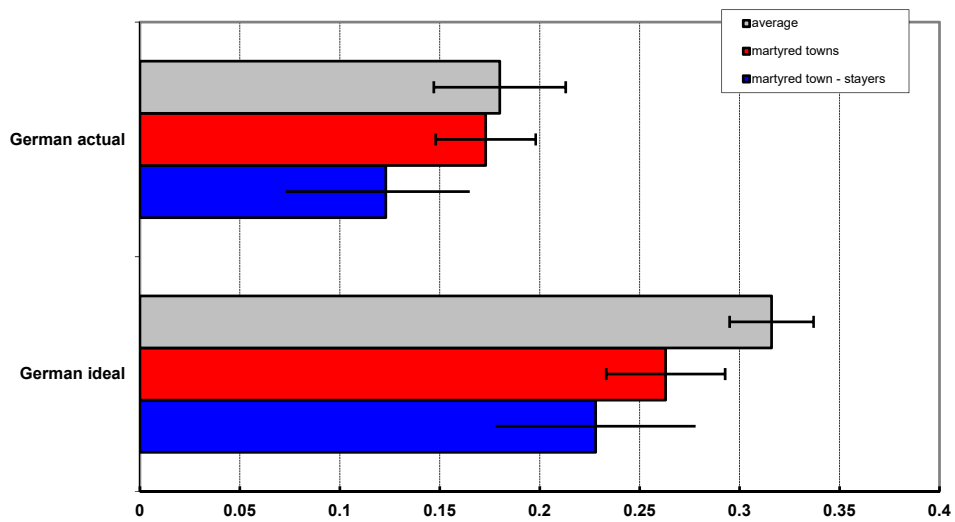


Figure 6. German Market Share and Ideal Car Shares – Martyred Towns vs. Average

TABLES

Table 1: Key Events – Greek Sovereign Debt Crisis

Date	Key events
Oct 2009	Centre-left party PASOK wins parliamentary elections
Oct-Dec 2009	Greek budget deficit reaches 12.5% of GDP Consecutive downgrades of Greece's credit rating
Feb 2010	First austerity package
Mar 2010	Second austerity package
Apr 2010	First bailout; Greece's sovereign debt downgraded to junk bond status Greek Consumer Association calls for boycott of German products
May 2010	Third austerity package passed amidst country-wide riots and strikes
Oct 2010	Brussels EU summit accepts German-inspired new bailout mechanism
Jan 2011	Greek case against Germany for WWII reparations heard in Den Haag
Sept 2011	German finance minister Wolfgang Schäuble suggests Greece may want to leave the Euro Germany refuses extension of repayment terms for Greek loan
Oct 2011	Haircut on Greek debt announced
Nov 2011	Prime minister Papandreou resigns
Feb 2012	Second bailout package
May-Jun 2012	Parliamentary elections
Nov 2012	7 th austerity package passed; massive protests and unrest outside the parliament Den Haag court rules in Germany's favor in reparations case
Jan 2013-Nov 2014	Relative political and economic stability after the EU/IMF bailout and haircut
Dec 2014	Failure to elect new Greek president results in new elections
Jan-Jul 2015	Left-wing party Syriza elected
Jul 2015	Finance minister Varoufakis resigns Finance minister Varoufakis criticizes German-led dominance of the EU continuous conflict between Greece and Germany

Table 2. Car sales by prefecture and brand

Brand	Mean	SD	Min	Max
Audi	315	251	68	1543
BMW	383	288	90	1334
Chevrolet	170	176	0	698
Chrysler	77	81	0	361
Citroen	421	266	87	1358
Dacia	37	27	0	99
Daihatsu	164	220	0	783
Fiatb	759	487	223	2513
Ford	684	513	143	2087
GeneralMotors	19	29	0	129
Honda	204	219	7	1025
Hyundai	662	575	93	2524
Jaguarc	15	25	0	99
Kia	253	259	33	1636
Mazda	194	285	0	1081
Mercedes	494	439	51	1780
Mitsubishi	157	165	8	675
Nissan	576	413	86	1998
Opel	969	604	312	2806
Peugeot	385	325	19	1319
Porsche	13	18	0	67
Renault	191	123	39	723
Saab	24	36	0	194
Seat	333	288	45	1227
Skoda	417	278	99	1439
Subaru	48	63	0	251
Suzuki	535	493	65	1896
Toyota	1162	837	235	3909
Volkswagen	967	596	220	2436
Volvo	135	63	30	319

Table 3: Summary statistics of main variables

Variable	Mean	S.D.	Min	Max	N
<hr/> Cross-section <hr/>					
Reprisals in prefecture (0/1)	0.412	0.497	0	1	51
Share of population in reprisal towns	0.011	0.024	0	0.120	51
<hr/> Monthly series <hr/>					
Share of conflict related articles	0.062	0.039	0.008	0.182	84
<hr/> Panel <hr/>					
Total car sales	211	973	0	16365	4284
Share German cars (all brands)	0.259	0.135	0	1	4243
Share German cars (VW category)	0.282	0.154	0	1	4220

Table 4: Balancedness

Variable	All	Non-reprisal	Reprisal	Difference
Population	428,711 (1,093,791)	481,133 (1,385,816)	353,823 (442,978)	127,309 (270,851)
Share employed in agriculture	0.264 (0.107)	0.277 (0.110)	0.245 (0.102)	0.0326 (0.0300)
Share employed in industry	0.219 (0.058)	0.211 (0.045)	0.230 (0.073)	-0.0189 (0.0179)
Share civil servants	0.014 (0.004)	0.014 (0.004)	0.013 (0.003)	0.001 (0.001)
Share secondary education	0.179 (0.031)	0.170 (0.030)	0.192 (0.030)	-0.0212** (0.009)
Share higher education	0.110 (0.024)	0.107 (0.024)	0.114 (0.023)	-0.0075 (0.007)
Unemployment rate	0.122 (0.029)	0.119 (0.025)	0.126 (0.035)	-0.007 (0.009)
Income per capita (2008-2009)	18378.43 (4515.67)	18106.67 (4462.24)	18766.67 (4567.36)	-693.81** (346.33)
Income per capita growth rate (2008-2009)	-0.004 (0.019)	-0.005 (0.021)	-0.004 (0.015)	-0.001 (0.001)
Share German brands pre-2010 (seasonally adjusted)	0.024 (0.088)	0.021 (0.094)	0.028 (0.08)	-0.007 (0.007)
First difference in share German brands pre-2010	0.003 (0.099)	0.002 (0.098)	0.004 (0.100)	-0.002 (0.008)
Population in 1940	146,868 (177,369)	147,034 (223,671)	146,637 (83,881)	397 (45,389)
Share seats to communists in 1936	0.028 (0.057)	0.026 (0.056)	0.031 (0.060)	-.0047 (0.0167)
Ruggedness	248.92 (77.25)	232.01 (79.66)	273.08 (68.40)	-41.07* (20.84)
Average distance from 1940 road	15.31 (35.42)	22.37 (45.09)	5.23 (2.52)	17.13** (8.25)
Average distance from 1940 railway line	78.17 (92.13)	73.54 (83.06)	84.77 (105.53)	-11.23 (27.57)
N	51	30	21	

Reprisal prefectures have at least one martyred town. Source: 2001 and 1940 Greek Census, Hellenic Subministry of Reconstruction and Hellenic Parliament, Registry of Parliament Members.

Table 5. Baseline

Dep. variable	(1) share_german	(2) share_german	(3) share_german	(4) share_german
Article share	-0.021 (0.109)	-2.298 (5.847)	-1.222 (6.375)	
Article share X Share towns	-1.491** (0.734)	-2.996** (1.288)	-3.016** (1.306)	-2.992** (1.312)
Observations	4,243	4,243	4,243	4,243
R-squared	0.258	0.267	0.353	0.391
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share	NO	YES	YES	YES
Date FE	NO	NO	NO	YES

Table 6. Alternative Measures of Destruction

Dep. variable	(1) share_german	(2) share_german	(3) share_german	(4) share_german
<u>Panel A: Mean destruction</u>				
Article share	-0.018 (0.110)	-1.331 (5.899)	-0.192 (6.486)	
Article share X Destruction	-3.042* (1.692)	-5.128* (2.652)	-4.862* (2.641)	-4.799* (2.636)
Observations	4,243	4,243	4,243	4,243
R-squared	0.258	0.267	0.352	0.391
<u>Panel B: Share of 1940 population</u>				
Article share	-0.041 (0.113)	-0.507 (6.131)	0.573 (6.739)	
Article share X Share 1940 pop.	-75.564** (36.386)	-99.783 (70.521)	-98.477 (75.483)	-97.959 (75.891)
Observations	4,243	4,243	4,243	4,243
R-squared	0.258	0.266	0.352	0.390
<u>Panel C: Victims as share of 1940 population</u>				
Article share	-0.075 (0.127)	-0.772 (6.771)	0.754 (7.340)	
Article share X Share victims	-26.286 (34.277)	-23.856 (48.937)	-13.081 (52.193)	-11.913 (52.296)
Observations	4,159	4,159	4,159	4,159
R-squared	0.258	0.266	0.352	0.391
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share	NO	YES	YES	YES
Date FE	NO	NO	NO	YES

Table 7. Accounting for the effects of the crisis

Dep. variable	(1) share_german	(2) share_german	(3) share_german	(4) share_german
<u>Panel A: Monthly unemployment</u>				
Article share	-0.033 (0.106)	-2.307 (5.857)	-1.226 (6.385)	
Article share X Share towns	-1.559 (0.932)	-3.057** (1.474)	-3.127** (1.500)	-3.136** (1.508)
Monthly unemployment rate	0.140 (0.270)	0.142 (0.270)	0.139 (0.290)	
Monthly unemployment rate X Share towns	0.048 (0.587)	0.043 (0.591)	0.076 (0.653)	0.099 (0.653)
Observations	4,243	4,243	4,243	4,243
R-squared	0.258	0.267	0.353	0.391
<u>Panel B: Nightlight density</u>				
<u>Panel B1: Baseline regressions for sample with non-missing luminosity data</u>				
Article share	-0.169 (0.140)	-6.725 (6.653)	-6.248 (7.129)	
Article share X Share towns	-0.760 (0.883)	-2.537 (1.593)	-2.384 (1.630)	-2.369 (1.641)
Observations	1,972	1,972	1,972	1,972
R-squared	0.247	0.259	0.383	0.430
<u>Panel B2: Controlling for monthly prefecture-level luminosity (log)</u>				
Article share	-0.163 (0.140)	-6.614 (6.704)	-6.150 (7.180)	
Article share X Share towns	-0.782 (0.884)	-2.559 (1.591)	-2.398 (1.628)	-2.368 (1.638)
Log(Nighttime light density)	-0.004** (0.002)	-0.004** (0.002)	-0.003 (0.002)	0.000 (0.003)
Observations	1,972	1,972	1,972	1,972
R-squared	0.248	0.260	0.383	0.430
<u>Panel B3: Controlling for monthly prefecture-level luminosity (level)</u>				
Article share	-0.140 (0.139)	-7.360 (6.699)	-7.124 (7.170)	
Article share X Share towns	-0.784 (0.868)	-2.576 (1.597)	-2.399 (1.635)	-2.376 (1.643)
Nighttime light density	-0.004** (0.002)	-0.004** (0.002)	-0.005*** (0.002)	-0.002 (0.002)

Observations	1,972	1,972	1,972	1,972
R-squared	0.250	0.261	0.386	0.430

Panel C: Placebo – Economic policy uncertainty index from Google trends

EPA Index	0.110** (0.048)	0.122** (0.049)	0.113** (0.056)	
EPA Index X Share towns	-0.162 (0.461)	-0.179 (0.471)	0.029 (0.601)	0.006 (0.601)
Observations	4,243	4,243	4,243	4,243
R-squared	0.257	0.265	0.351	0.389
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share	NO	YES	YES	YES
Date FE	NO	NO	NO	YES

Table 8. Instrumental Variable Results

	(1) OLS	(2) First stage	(3) 2SLS
Dep. variable	Share German cars	Article share X Share towns	Share German cars
Article share X Share towns	-4.226** (1.619)		-5.270** (2.357)
Article share X Farflat		-0.301*** (0.056)	
Observations	3,319	3,360	3,319
R-squared	0.340	0.803	0.244
Year FE	YES	YES	YES
Prefecture FE	YES	YES	YES
Calendar month FE	YES	YES	YES
PrefectureXCalendar month FE	YES	YES	YES
Pre-controlsXArticle share	YES	YES	YES
Date FE	YES	YES	YES
Number of prefect		40	40
F-stat		23.87	23.87

Table 9. Regression Discontinuity Design – Martyr Status

	1	2	3
Sharp RDD			
<i>outcome</i>	granted martyr	population in 1940	population in 2010
coefficient	0.44	-30.5	-40.5
p-value	0.05	0.97	0.96

Table 10. The effect of martyr status

Dep. variable	(1)	(2)	(3)	(4)
	share_german	share_german	share_german	share_german
<u>Panel A: Baseline</u>				
Article share	-0.021 (0.109)	-2.298 (5.847)	-1.222 (6.375)	
Article share X Share towns	-1.491** (0.734)	-2.996** (1.288)	-3.016** (1.306)	-2.992** (1.312)
Observations	4,243	4,243	4,243	4,243
R-squared	0.258	0.267	0.353	0.391
<u>Panel B: Martyr towns</u>				
Article share	-0.006 (0.107)	-0.765 (5.895)	0.602 (6.522)	
Article share X Share martyr towns	-6.340** (2.394)	-9.627*** (2.951)	-8.820*** (2.930)	-8.763*** (2.912)
Observations	4,159	4,159	4,159	4,159
R-squared	0.261	0.270	0.355	0.393
<u>Panel C: Horse race</u>				
Article share	-0.014 (0.112)	-1.831 (5.877)	-0.699 (6.457)	
Article share X Share towns destroyed	-0.031 (2.020)	-2.279 (1.999)	-2.805 (2.223)	-2.829 (2.237)
Article share X Share martyr towns	-7.037** (2.945)	-8.469*** (3.126)	-7.515** (3.179)	-7.499** (3.179)
Article share X Mean destruction	0.782 (3.650)	2.270 (3.775)	2.970 (4.240)	3.067 (4.252)
Observations	4,159	4,159	4,159	4,159
R-squared	0.261	0.270	0.355	0.394

Panel D: Martyr status predicted from RDD

Article share	-0.023 (0.112)	-2.539 (5.974)	-1.198 (6.479)	
Article share X Mean destruction	-1.055 (2.275)	1.040 (2.494)	1.367 (2.782)	1.488 (2.767)
Article share X Predicted share martyr	-2.579 (2.397)	-8.308*** (2.751)	-8.411*** (3.047)	-8.485*** (3.048)
Observations	4,159	4,159	4,159	4,159
R-squared	0.259	0.269	0.355	0.393
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share	NO	YES	YES	YES
Date FE	NO	NO	NO	YES

Table 11. Memory and official recognition

Dep. variable	(1) share_german	(2) share_german	(3) share_german	(4) share_german
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Panel A. Memorials

Article share	-0.017 (0.111)	-2.720 (5.844)	-1.409 (6.307)	
Article share X Share towns with memorials	-2.179** (1.009)	-5.078*** (1.734)	-5.097*** (1.744)	-5.064*** (1.749)
Observations	4,159	4,159	4,159	4,159
R-squared	0.260	0.270	0.355	0.394

Panel B. Memorials and martyr status

Article share	-0.012 (0.112)	-2.445 (5.185)	-1.344 (5.640)	
Article share X Share towns destroyed	2.982 (5.048)	10.107** (4.300)	10.446** (4.653)	10.400** (4.684)
Article share X Share towns with memorials (no martyr status)	-4.005 (6.341)	-16.897*** (5.603)	-18.070*** (5.986)	-18.039*** (6.040)
Article share X Share martyr towns	-9.671* (5.527)	-20.752*** (5.436)	-20.654*** (5.718)	-20.615*** (5.739)

Article share X Mean destruction	0.471 (3.690)	0.954 (3.046)	1.552 (3.352)	1.650 (3.354)
Observations	4,159	4,159	4,159	4,159
R-squared	0.261	0.272	0.357	0.396
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share Date FE	NO	YES	YES	YES
	NO	NO	NO	YES

Table 12. Placebo with Italian and Bulgarian reprisals

Dep. variable	(1) share german	(2) share german	(3) share german	(4) share german
<u>Panel A: Dep. Var is German car share</u>				
Article share	-0.118 (0.108)	-0.360 (6.656)	0.935 (7.239)	
German article share X Share towns destroyed by Italians and Bulgarians	0.363 (0.529)	0.046 (0.694)	0.070 (0.792)	0.078 (0.798)
Observations	4,159	4,159	4,159	4,159
R-squared	0.258	0.266	0.352	0.390
<u>Panel B: Dep. Var is German car share</u>				
Italian article share	-0.083 (0.189)	-0.002 (0.226)	0.014 (0.241)	
Italian article share X Share towns destroyed by Germans	-2.175 (1.697)	-2.759 (2.061)	-3.038 (2.346)	-2.946 (2.353)
Observations	4,243	4,243	4,243	4,243
R-squared	0.257	0.265	0.352	0.390
<u>Panel C: Dep. Var is Italian car share</u>				
Italian article share	-0.259** (0.111)	-0.273** (0.126)	-0.268* (0.137)	
Italian article share X Share towns destroyed by Germans	4.331*** (1.516)	4.762*** (1.637)	4.469** (1.919)	4.346** (1.949)
Observations	4,243	4,243	4,243	4,243

R-squared	0.195	0.199	0.325	0.349
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Panel D: Dep. Var is Italian car share

Italian article share	-0.046 (0.100)	-0.039 (0.125)	-0.056 (0.133)	
Italian article share X Share towns destroyed by Italians and Bulgarians	0.401 (0.608)	0.700 (0.656)	1.024 (0.735)	1.314* (0.774)
Observations	4,159	4,159	4,159	4,159
R-squared	0.193	0.196	0.321	0.346

Panel E: Dep. Var is Italian car share

Italian article share	-0.084 (0.102)	-0.084 (0.120)	-0.101 (0.127)	
Italian article share X Share towns destroyed by Italians	27.402** (12.091)	34.905*** (12.635)	38.347*** (13.719)	40.119*** (14.347)
Observations	4,159	4,159	4,159	4,159
R-squared	0.194	0.197	0.323	0.348
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share	NO	YES	YES	YES
Date FE	NO	NO	NO	YES

The Italian news index is constructed out of articles containing the stem “Italian-“ and the words in the German news index, substituting “Merkel” with “Renzi”.

Appendix

Table A.1: Sample characteristics, Survey

	Not martyred	Martyred	Difference/SE
Age	43.15	47.30	-4.156 (2.218)
Female	0.707	0.651	0.0562 (0.103)
Year unemployed	2013.2	2012.6	0.6 (0.41)
% unemployed	13.25	12.17	-1.08 (2.18)
Year car bought	2005.7	2005.8	-0.1 (0.55)
Ever participated in a strike	1.634	1.558	0.0760 (0.108)
Ever participated in a demonstration	1.585	1.558	0.0272 (0.109)
Proud [1-5, 1=highest]	1.146	1.256	-0.109 (0.147)
Education	4.366	4.209	0.157 (0.269)
Income (€, thousands)	1.927	1.860	0.0664 (0.202)
% destruction	0	0.719	-0.719*** (0.0571)
No of victims	0	181.7	-181.7*** (36.28)
N(max)	468	460	

Table A.2 Dropping famous reprisals

Dep. variable	(1) share german	(2) share german	(3) share german	(4) share german
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Panel A: Drop Distomo, Kalavryta, Kommemo

Article share	-0.019 (0.108)	-2.248 (5.761)	-1.178 (6.280)	
Article share X Share towns	-1.547** (0.739)	-3.125** (1.298)	-3.157** (1.317)	-3.134** (1.323)
Observations	4,243	4,243	4,243	4,243
R-squared	0.258	0.267	0.353	0.391

Panel B: Drop entire prefectures

Article share	-0.021 (0.109)	-2.298 (5.847)	-1.222 (6.375)	
Article share X Share towns	-1.491** (0.734)	-2.996** (1.288)	-3.016** (1.306)	-2.992** (1.312)
Observations	4,243	4,243	4,243	4,243
R-squared	0.258	0.267	0.353	0.391
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share	NO	YES	YES	YES
Date FE	NO	NO	NO	YES

Table A3. Google Index

VARIABLES	(1) share_german	(2) share_german	(3) share_german	(4) share_german
Google index	-0.001 (0.000)	-0.001 (0.000)	-0.001 (0.000)	
Google index X Share towns	-0.006** (0.002)	-0.007** (0.003)	-0.008** (0.003)	-0.008** (0.003)
Observations	4,243	4,243	4,243	4,243
R-squared	0.260	0.269	0.355	0.391
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	NO	NO	YES	YES
Pre-controlsXArticle share	NO	YES	YES	YES
Date FE	NO	NO	NO	YES

Table A4. Dropping expensive cars

Sample of brands	(1) All cars	(2) VW Category	(3) Drop VW	(4) Drop VW Seat Skoda
Article share	-1.222 (6.375)	-4.384 (7.189)	1.580 (6.635)	3.248 (7.833)
Article share X Share towns	-3.016** (1.306)	-2.880* (1.711)	-1.484 (1.469)	-1.637 (1.697)
Observations	4,243	4,220	4,212	4,201

R-squared	0.353	0.326	0.320	0.334
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	YES	YES	YES	YES
Pre-controlsXArticle share	YES	YES	YES	YES
Date FE	YES	YES	YES	YES

Table A4. Panel B. Dropping expensive cars in horse race specification

	(1)	(2)	(3)	(4)
				Drop VW Seat Skoda
Sample of brands	All cars	VW Category	Drop VW	
Article share	-0.699 (6.457)	-2.233 (7.405)	2.091 (7.154)	4.053 (8.562)
Article share X Share towns	-2.805 (2.223)	-3.388 (2.623)	-1.500 (2.566)	-1.193 (3.135)
Article share X Share martyr towns	-7.515** (3.179)	-8.333* (4.319)	-6.768 (4.111)	-8.651* (4.836)
Article share X Mean destruction	2.970 (4.240)	5.063 (5.336)	3.146 (5.364)	2.998 (6.454)
Observations	4,159	4,136	4,128	4,117
R-squared	0.355	0.328	0.317	0.331
Year FE	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES
PrefectureXCalendar month FE	YES	YES	YES	YES
Pre-controlsXArticle share	YES	YES	YES	YES
Date FE	YES	YES	YES	YES

Table A.5 The effect of average European price and brand fixed effects

VARIABLES	(1) log_cars	(2) log_cars	(3) log_cars	(4) log_cars	(5) log_cars	(6) log_cars	(7) log_cars	(8) log_cars
eventmonth	-0.258* (0.134)	- (0.249)	- (0.249)	-0.258* (0.134)	-0.193 (0.168)	26.253** (11.700)	26.835** (12.083)	
german_car	0.109** (0.042)	- (0.031)	0.198** (0.038)					
event_destroyed	3.461 (7.590)	7.860 (13.910)	7.860 (13.910)	3.461 (7.591)	-0.266 (10.160)	4.521 (7.163)	4.546 (7.415)	4.546 (7.416)
event_germancar	0.250 (0.174)	1.112*** (0.217)	1.112*** (0.217)	0.250 (0.174)	0.225** (0.102)	0.092 (0.107)	0.096 (0.106)	0.096 (0.106)
germancar_destroyed	0.564 (0.763)	0.420 (0.970)	0.429 (0.970)	0.612 (0.580)	0.538 (0.580)	0.521 (0.631)	0.520 (0.632)	0.520 (0.632)
event_germancar_destroyed	-6.981* (3.656)	- (5.283)	- (5.283)	-6.981* (3.657)	-5.809* (3.461)	-5.523 (3.870)	-5.516 (3.871)	-5.516 (3.872)

Observations	195,216	75,516	75,516	195,216	195,216	195,216	195,216	195,216
R-squared	0.206	0.518	0.547	0.536	0.633	0.638	0.639	0.647
Year FE	YES	YES	YES	YES	YES	YES	YES	YES
Calendar month FE	YES	YES	YES	YES	YES	YES	YES	YES
Prefecture FE	YES	YES	YES	YES	YES	YES	YES	YES
Average EU brand price	NO	NO	YES	NO	NO	NO	NO	NO
Brand FE	NO	NO	NO	YES	YES	YES	YES	YES
BrandXYear FE	NO	NO	NO	NO	YES	YES	YES	YES
PrefectXCalendar month FE	NO	NO	NO	NO	NO	NO	YES	YES
Pre-crisis controlsXArticle share	NO	NO	NO	NO	NO	YES	YES	YES
Date FE	NO	NO	NO	NO	NO	NO	NO	YES

Table A.6 Survey – Main outcomes

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. Variable	germancar	Germancar	germanidealcar	germanidealcar	blameg	blameg
%Destruction	-0.030 (0.027)	-0.033 (0.027)	-0.077** (0.030)	-0.127*** (0.027)	0.033 (0.022)	0.041** (0.016)
Observations	910	851	910	851	844	797
R-squared	0.001	0.067	0.005	0.087	0.004	0.042
Controls	NO	YES	NO	YES	NO	YES

Table A.7 Survey – Placebo outcomes

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. Variable	proud	proud	Joblost	joblost	demonstratio	demonstratio	strike	strike
			t		n	n		
%Destruction	-0.050 (0.054)	0.014 (0.053)	-0.012 (0.025)	-0.001 (0.024)	-0.014 (0.048)	-0.026 (0.029)	-0.015 (0.044)	-0.059 (0.054)
Observations	905	848	904	848	907	849	906	848
R-squared	0.001	0.033	0.000	0.137	0.000	0.117	0.000	0.142
Controls	NO	YES	NO	YES	NO	YES	NO	YES

Figures

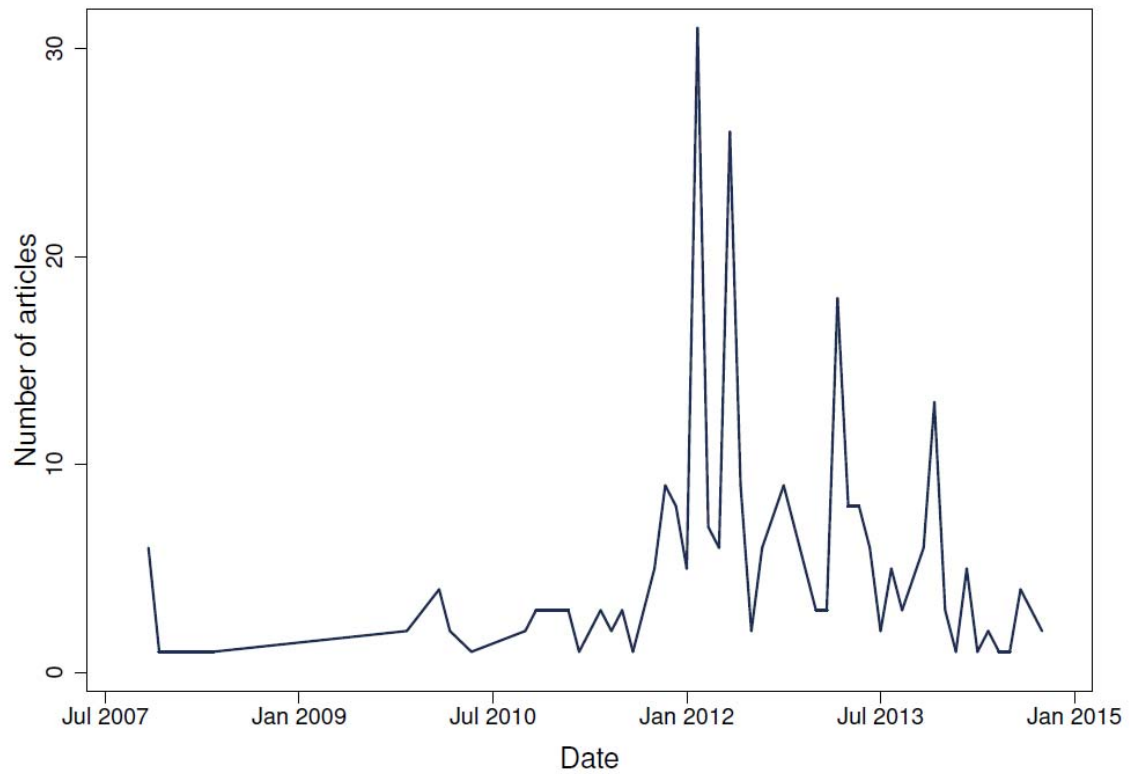


Figure A.1: Lexis-Nexis articles referring to both “anti-German” and “Greece”

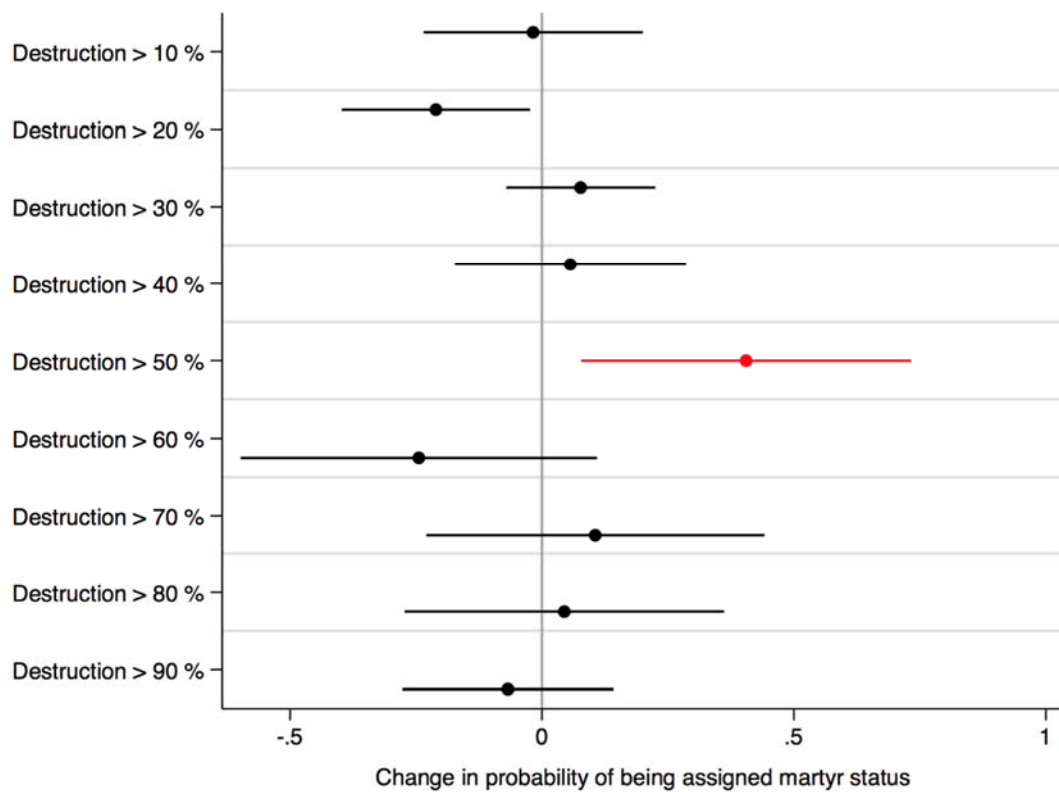


Figure A.2: Change in Probability of being assigned martyr status (different cut-offs)