

Razing the Church: The Enduring Effect of Nazi Repression in Poland

Volha Charnysh*

Ricardo Pique†

Abstract

We examine the enduring effects of foreign repression against religious elites on religiosity and nationalism by studying the persecution of the Catholic Church in Nazi-occupied Poland. Using original local-level data and a spatial regression discontinuity design, we establish that religious repression was most severe in the annexed Warthegau region, resulting in the arrest or death of most local priests. We argue that targeting the clergy can have divergent effects on religious participation and attachments to identities the clergy represent. The interruption in the supply of religious services caused by repression may undermine the behavioral norm of regular church attendance. At the same time, by elevating its victims to the status of martyrs for their faith and nation, this form of repression may bolster religious nationalism among their followers. Consistent with the supply channel, church attendance and religious schooling were lower in repressed localities. In line with the martyrdom channel, these areas built more monuments to victimized priests and showed more support for nationalist parties when WWII was politically salient. Our results suggest that foreign repression against religious leaders leaves lasting legacies for political and social behavior.

Keywords: Foreign repression, historical persistence, religion, nationalism, martyrdom, Poland, Nazi Germany.

JEL Codes: D72, D74, N34, N44, P00, Z12

*Corresponding Author. Associate Professor, Department of Political Science, Massachusetts Institute of Technology, Cambridge, MA 02139. Email: charnysh@mit.edu, ORCID: 0000-0002-5089-3818.

†Visiting Assistant Professor, Business Economics and Public Policy Department, Wharton School, University of Pennsylvania, Philadelphia, PA, 19104, USA. Email: rpique@wharton.upenn.edu
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*The little people we want to spare, but the nobility, clergy, and Jews must be
killed.*

Reinhard Heydrich, Director of the Gestapo, Sep. 8, 1939¹

1 Introduction

The imposition of foreign rule is often accompanied by repression against religious elites. The Meiji Japan in Korea, the Chinese Communist Party in Tibet and the Indonesian government in East Timor have all sought to establish control over the local populations by rounding up clergy and boarding up churches and temples. Religious leaders are targeted because of their role in legitimating political order, mobilizing collective action, and preserving and transmitting group identities (Rubin 2017; Ramet 1998; Gellner 1983; Hobsbawm 1992).

How does this form of repression affect political and social behavior in the long run? This question remains understudied, as contexts that allow for causal identification are scarce. Scholars have instead focused on mass repression and indiscriminate violence. Most of this work concludes that repression backfires by strengthening opposition to the perpetrator’s identity and reinforcing ingroup attachments (Balcells 2012; Lupu and Peisakhin 2017; Hadzic, Carlson and Tavits 2017; Dehdari and Gehring 2022; Nikolova, Popova and Otrachshenko 2022; Martinez, Jessen and Xu 2023; Wang 2021). This effect can persist for generations and is more likely to appear when the coercive power of the repressive regime wanes (Rozenas and Zhukov 2019) or when past events become politically salient (Fouka and Voth 2023).

Targeting religious leaders may have different effects than indiscriminate violence against the occupied population as these individuals perform crucial communal functions, represent religious and national identities, and hold high moral authority. We argue that the removal of clergy interrupts the *supply* of religious services, which other community members may not be trained or eligible to perform. This reduced supply, even if temporary, can alter religious practices in the long run by lowering the stock of “religious capital” (Iannaccone 1990) and thus the utility of religious participation. At the same time, communities whose

¹Quoted in Huener (2021, 26).

religious leaders are victimized by a foreign power may elevate these individuals to the status of national *martyrs*. Commemoration of religious leaders’ sacrifice will strengthen religious nationalism, understood as a fusion of religious and national identities and aspirations (Grzymala-Busse 2015). The supply and martyrdom channels are not mutually exclusive: individuals may stop attending church services while continuing to perceive religion as central to their national identity. In line with the “crypto-morality” model proposed by (Greif and Tadelis 2010), repression against religious elites may thus produce a divergence between observable religious behavior and privately held beliefs and identities.

We evaluate these hypotheses using a quasi-natural experiment: the division of Poland during the Nazi occupation into the unincorporated General Government (GG) and territory annexed into the German Reich. While economic exploitation and violence against civilians were ubiquitous throughout the country, repression against the Catholic Church, perceived as a locus of Polish identity, was particularly brutal in the annexed Warthegau, where 72% of the clergy were arrested and 97% of the Catholic churches were closed (Huener 2021).

The boundary between the Warthegau and the General Government, where the Catholic clergy faced less interference, was shaped by competing agendas of Nazi regional leaders vying to control as much territory as possible. It ran through the former Russian imperial partition and did not follow preexisting voivodeship or diocesan borders, splitting areas with similar demographic, ethnic, and political characteristics. We leverage the border’s placement to identify the causal effects of repression using a spatial regression discontinuity design.

Our first contribution is to identify the heterogeneity in occupation regimes. We quantify key differences in repression between the Warthegau and the General Government using original individual-level data on Nazi victims. We show that the Warthegau clergy experienced significantly higher levels of repression, both in the extensive and intensive margins. We find a 1.5-standard-deviation increase in the fraction of municipalities with at least one priest arrested and a 1.3-standard-deviation increase in the natural logarithm of the number of arrested clergy. A similar pattern holds for the subset of priests who were executed or died in captivity. At the same time, we observe no discontinuities in violence against teachers. While the Warthegau population experienced more temporary deportations – there is

a slight decrease in the shares of the adult and male populations in 1946 on the Warthegau side of the border – their demographic impact was short-lived.

Our second contribution is to examine the consequences of this repressive regime for religious behavior and political preferences. For this purpose, we exploit both the discontinuity in repression at the Warthegau-GG border and the variation in priest victimization within the Warthegau. Using newly digitized data on priests' years of service, we confirm that an average parish affected by repression remained without a priest for the duration of the war; that is, Nazi repression interrupted the supply of wartime religious services for a prolonged period. We further find a negative relationship between the intensity of repression and the provision of religion in public schools in the 1950s at the county level. The effect of repression on religious practices persisted over time: in 1991, the earliest period for which subnational data on church attendance exist, participation in Catholic Mass was lower by 11.3 percentage points, or more than 0.5 standard deviations, on the Warthegau side of the border. Within the Warthegau, Nazi repression against the clergy predicts lower rates of Mass attendance. This suggests that a temporary but drastic disruption in the supply of religious services can have long-term negative effects on participation in religious rituals.

At the same time, we expect repression to elevate the victimized priests to the status of martyrs for their faith and nation, strengthening religious nationalism in their communities. Consistent with this channel, we find a positive discontinuity at the border in the fraction of municipalities that erected post-war memorials dedicated to victimized clergy but no differences in memorials to secular victims of WWII. We then show that support for parties that emphasized Polish suffering in WWII and promoted a Pole-Catholic identity was higher in Warthegau municipalities in the 2000s, when the occupation was particularly salient in political discourse. Specifically, the Law and Justice (PiS) and the League of Polish Families (LPR) won 3.1 percent more votes in the Warthegau relative to the General Government. The positive effect is particularly surprising in light of these parties' popularity among practicing Catholics. Within the Warthegau, we find higher PiS-LPR support (1) in localities with memorials to victimized priests and (2) in localities whose religious leaders were beatified as martyrs of WWII, though only the latter result reaches statistical

significance.

Overall, our findings suggest that while the Nazi regime succeeded in reducing religious observance, it failed to achieve its ultimate objective of eradicating the Polish nation. Instead, it inadvertently strengthened the bond between Polish and Catholic identities.

We provide evidence to support the robustness of our results and to show these are not driven by differences in repressive policies during the communist period. Our baseline results hold under alternative specifications, including changes in the treatment assignment variable polynomial and bandwidth selection, as well as under an approach similar to Dell (2010). To ensure that our findings are not driven by communist repression, we digitized and geocoded data on the Polish clergy repressed between 1945 and 1989. We show that communist repression did not follow the same spatial pattern as Nazi violence and was orders of magnitude lower. The rates of persecution against individual religious leaders as well as the communist regime’s ability to recruit “patriot priests” were identical on either side of the Warthegau-GG border.²

We acknowledge that occupation regimes are bundled treatments and that our empirical strategy cannot fully separate the effect of particular policies. However, we provide additional evidence on alternative mechanisms to support our argument that religious repression is the main driver behind our results. First, we find no differences in post-1950 population density, non-agricultural population and population growth at the Warthegau-GG border. Thus, our results are unlikely to be driven by disparities in socioeconomic development between regions that experienced different occupation policies. Second, although Poland experienced massive population movements during and after WWII, the majority of Warthegau and General Government population remained in place.³ We verify that the repression of priests within Warthegau did not correlate with the wartime expulsions of the Polish population and that postwar migration rates did not vary at the Warthegau-GG border. Third, while Warthegau authorities had more extensive restrictions on Polish education, we find no differences in post-

²Nalepa and Pop-Eleches (2022) show that communist infiltration of parishes with pro-regime “patriot priests” in the 1950s was more successful in the territories Poland acquired from Germany in 1945, which affected political preferences *but not* church attendance, but our sample excludes these areas.

³Postwar population transfers affected primarily Poland’s newly acquired Western territories and the eastern borderlands annexed from Poland to the Soviet Union (Charnysh 2019).

WWII human capital at the end of the Communist regime.⁴ Finally, we show that our results cannot be explained by the effect of incorporation into the German Reich by comparing church attendance and voting behavior at the border between the unincorporated General Government and Zichenau, a region that was annexed into the Reich like the Warthegau but did not experience significant levels of religious repression.

We contribute to the literature on the legacies of repression by examining the understudied phenomenon of the persecution of domestic religious leaders by a foreign government. Our analysis highlights the divergent effects of this form of repression on religious participation and the strength of religious nationalism.⁵ In a related study, [Peisakhin and Queralt \(2022\)](#) find a positive relationship between Nazi oppression of *German* Catholic clergy in Bavaria, church attendance, and support for the Christian Social Union. We complement this and related work by leveraging a historical quasi-natural experiment to provide causal evidence of *higher* levels of violent repression by a *foreign* occupier aimed at eradicating national identity. Our divergent findings suggest that the effects of repression depend on its intensity: when the majority of persecuted religious leaders remain in their parishes and continue to interact with their followers (as happened in Bavaria), repression is less likely to undermine religious participation rates or create national martyrs than when the majority of religious leaders are arrested and killed (as happened in the Warthegau).

We also contribute to the literature on the role of religious actors in shaping political and social outcomes ([Wittenberg 2006](#); [Woodberry 2012](#); [Bottan and Perez-Truglia 2015](#); [Grzymala-Busse 2015](#); [Spenkuch and Tillmann 2018](#); [Haffert 2022](#); [Nalepa and Pop-Eleches 2022](#); [Khalil and Panza 2024](#); [Lanzara et al. 2024](#); [Tunon 2024](#); [Becker and Won 2024](#)). [Grzymala-Busse \(2015\)](#) argues that conflicts between state and religious authorities can fuse religious and national identities together, extending religious influence on politics, and we provide micro-level support for this argument using novel data. [Wittenberg \(2006\)](#) shows that in communist Hungary, the local clergy were essential for encouraging the faithful

⁴The share of the population with vocational training was slightly lower on the Warthegau side of the border in 1978, but this difference disappeared by 1988.

⁵While scholars have also studied the role of repression and co-optation of rival political elites for authoritarian stability ([Guriev and Treisman 2020](#); [Esberg 2021](#); [Krakowski and Schaub 2022](#)), this work has not measured the impact of such repression on political behavior of the general population.

to attend religious services and receive religious instruction, lowering the perceived risks of religious participation and enabling the localized persistence of right-wing preferences. Conversely, [Nalepa and Pop-Eleches \(2022\)](#) find that the communist regime in Poland successfully altered political preferences – with no impact on religious participation – by secretly recruiting some Catholic clergy to promote communist ideology from the pulpit. Our study corroborates these conclusions on the outsized social and political role of rank-and-file clergy by showing that the removal of priests by the repressive regime can alter both religious behavior and political attitudes, though not necessarily in the same direction.

Finally, our findings extend existing research on the characteristics and legacies of foreign rule ([Grosfeld and Zhuravskaya 2015](#); [Becker et al. 2016](#); [Charnysh and Finkel 2017](#); [Bukowski 2018](#); [Aaskoven 2022](#); [Dehdari and Gehring 2022](#); [Fouka and Voth 2023](#); [Fontana, Nannicini and Tabellini 2023](#); [Martinez, Jessen and Xu 2023](#); [Cannella, Makarin and Pique 2024](#)). We showcase the heterogeneity of repressive tactics - and its consequences - within one occupation power and historical period. In particular, while generalized repression may be prevalent, we show that repression targeted at elites can vary across space, with significant behavioral and political consequences in the long run.

The rest of the paper is organized as follows. Section [2](#) presents how Poland was divided into occupation zones and how repression in the Warthegau differed from that in the General Government. Section [3](#) details our analytical framework. In Section [4](#), we describe our data sources and empirical strategy. Section [5](#) presents our main results in connection to our analytical framework. Section [6](#) provides evidence on alternative explanations. Finally, Section [7](#) concludes.

2 Context

2.1 Nazi Occupation of Poland

Germany attacked Poland on September 1, 1939. Shortly afterward, the Red Army entered Poland from the east. After a month of fighting, the independent Polish state ceased to exist. Its territory was split into different occupation zones (see [Figure 1](#)).

The western and northwestern areas were incorporated into the Reich and divided into Re-

Figure 1: Occupation Zones in Poland



ichsgau Wartheland or Warthegau (initially named Posen) and Reichsgau Danzig-Westpreussen (initially named Westpreussen). Several counties north of Warsaw were incorporated into East Prussia as district (*Regierungsbezirk*) Zichenau, and the southwest region around Katowice was annexed to the province of Upper Silesia as district Oberschlesien (Kattowitz). Central and eastern areas were combined into the unincorporated General Government (*Generalgouvernement*) and administered by German officials (Furber 2004, 553).

The borders between the territory incorporated in the Reich and the General Government were established “with utmost urgency and in an irresponsibly hasty manner” in October 1939, after Hitler reached an agreement with Stalin over the German-Soviet demarcation line and lost interest in maintaining an independent Polish state for negotiation purposes (Broszat 1961, 32, 15-17). The German foreign office and the Ministry of the Interior advocated for establishing a border roughly based on the former Prussian partition and following the Warta River (Chu, Kauffman and Meng 2013, 333). They believed that incorporating “regions that

have never been under Prussian rule" would be impractical (Broszat 1961, 33). However, Hitler and Göring were interested in "rounding off of the formerly Prussian provinces" so as "to acquire economically valuable Polish territories and to establish a straight and militarily advantageous border line in the East" (33). At the conference of the State Secretaries of the Reich Ministries, hastily convened on October 5, incorporation of several additional counties was discussed.⁶ During a joint meeting with State Secretary Stuckart, General Governor Frank, and Gauleiters on October 6, however, a much more extensive expansion of the new eastern territories was achieved.⁷

The demarcation process was "particularly conflictual ...because the Gauleiter had a massive interest in claiming economically profitable regions for themselves while at the same time minimizing the proportion of non-German populations" (Jureit 2024, 50). Arthur Greiser, Warthegau leader, and other Gau officials advocated for the inclusion of Łódź, as well as Piotrków Trybunalski and Tomaszów Mazowiecki (Housden 1994; Chu, Kauffman and Meng 2013). On the other hand, Hans Frank, leader of the General Government, wanted to keep Łódź in the unincorporated territories. This position was shared by Goebbels, betraying a lack of consensus even among high ranking officials (Chu, Kauffman and Meng 2013, 336).

The final border between the annexed Warthegau and the General Government, drawn by the Ministry of the Interior in mid-October and in effect from November 20, reflected these conflicting interests (Chu, Kauffman and Meng 2013; Jureit 2024). It incorporated Kutno (coveted by Frank), Łódź and part of its surrounding hinterland into the Warthegau, but left other economic centers such as Piotrków and Tomaszów in the General Government. From north to south, the border first followed the boundaries of (former) Gostynin, Kutno and Łęczyca powiats on one side and boundaries of Łowicz and Sochaczew powiats on the other. It then partitioned the powiats of Brzeziny and Łódź, splitting the eastern Łódź powiat. Finally, the border traversed the powiats of Piotrków and Radomsko. This meant that the final path divided the prewar Łódź voivodeship in half. Neither side of the border debate was satisfied with this outcome and arguments continued for a year. In November

⁶For the Warthegau, the former Congress Polish counties of Lipno and Rypin were considered.

⁷The Decree of October 8 1939 on the Structure and Administration of Eastern Territories lists Kalisz rather than Łódź as the the third district of Reichsgau Posen.

1940, Frank and Greiser wrote a letter to Hitler putting their differences aside until the war's end (Housden 1994; Chu, Kauffman and Meng 2013).

In short, it is clear that specific local ethnic, religious, or national loyalties played no role in the demarcation of the final border. Rather, an ahistorical boundary emerged from conflicting economic interests and territorial ambitions of individual gauleiters. The new border was far away from the Russian-Prussian partition boundary and did not coincide with Polish pre- or post-war voivodeships or with territorial divisions of the Catholic Church.⁸ The counties of Piotrków, Radomsko, and Brzeziny were split by the border. We provide quantitative evidence that the border partitioned areas with similar demographic, ethnic, economic and political characteristics in Section 4.2.

Although the annexed regions were incorporated into the Reich, they remained separated by a police border from the "Old Reich" (*Altreich*) in order to prevent Poles from fleeing west and to regulate the movement of ethnic Germans from the newly incorporated territories. Nazi control of the area would last through January 1945, when the Red Army began the Vistula–Oder offensive.

2.2 Differences in Repression within Nazi-occupied Poland

The nature and intensity of repression differed between the annexed territories, intended as a Lebensraum for Germans, and the General Government, intended as a reservoir of Polish labor. In the former, all traces of Polish identity were slated for erasure. This would be accomplished, among other policies, through the arrest and execution of Catholic priests, the closure of churches, and restrictions on worship.

The Catholic Church was a key target because it was considered a bastion of Polish nationalism. As early as July 1939, the Army High Command declared the Catholic clergy as “*primarily responsible for nationalistic rabble-rousing*” (Huener 2021, 53). The image of the “agitator-priest” (*Hetzkaplan*) as an enemy of Germandom drew on a legacy of Prussian animosity toward Catholicism during the partitions of Poland (Huener 2021).

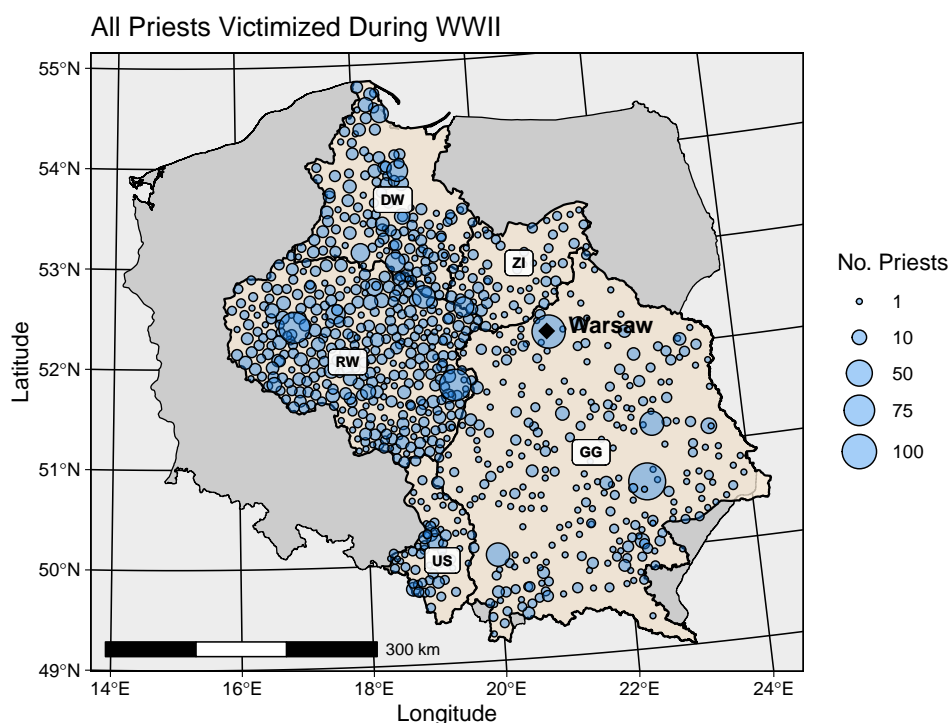
The Warthegau, which had the largest Polish population within the annexed zones, ex-

⁸The border traversed the dioceses of Łódź, Warszaw, Płock, and Częstochowa.

perienced the brunt of these policies (see Figure 2). Hitler wished the Gau “to become flourishing German land in ten years”, and he found a willing executioner in Greiser, an “anti-Polish Nazi zealot” from the formerly Prussian province of Posen (Epstein 2010, 5).

Greiser succeeded in decimating the Polish clergy in the Warthegau: of the 2,100 secular and religious clergy, 133 (6%) were killed in the Gau territory, 1,523 (73%) were arrested, and 1,092 (52%) were sent to concentration camps, where two-thirds died (Huener 2021, 208). As a result, entire districts had no priests to serve parishioners during the war (Huener 2021, 167). Charitable and educational institutions previously maintained by the Catholic Church were abolished. Some 97% of all church buildings and shrines were closed, desecrated, or destroyed (Huener 2021, 2). Nazi authorities also restricted the times of worship, prohibited public displays of faith, and prevented Poles from travelling outside of their parish to attend services elsewhere.

Figure 2: Victimized Priests by Occupation Zone



Notes: The figure plots locations of priests who were arrested, killed, or died during WWII. Abbreviations are as follows: General Government, GG; Warthegau, RW, Danzig-Westpreussen (DW), Upper Silesia (US), and Zichenau (ZI). Source: Jacewicz and Woś (1977).

Poles were strictly segregated from Germans and faced restricted hours for using public

baths and entering shops and markets. Polish children were able to attend only primary schools, staffed "exclusively with unqualified German teachers" and few in number (Jas-trzębski 2017, 69).⁹ In order to create space for German settlers, approximately 305,000 Poles were expelled to the General Government. However, the expulsions stopped when the Germans realized that they needed Polish laborers and farmers. From the mid-1940s onward, thousands of Poles were put to work in the Warthegau or the Altreich.

While the General Government also experienced large-scale violence and roundups for forced labor, de-Polonization was limited. There was "an unresolved conflict in Nazi minds" over whether this region would become a pure German colony (Lukas 2012, 32). For the time being, Nazi administration sought to control rather than eradicate Polish culture (Ga-siorowski 2010, 72). It is estimated that 95% of the clergy in the General Government remained in the same parish during the war (Lukas 2012, 15). Religious life continued uninterrupted; there were no mass closings of churches or restrictions on religious services, although the training of new priests was prohibited (Kłoczowski, Müllerowa and Skarbek 1986, 354-355).¹⁰ Vocational and primary schools remained open to satisfy German need for qualified workers, but subjects related to the Polish nationhood – such as Polish history, geography, and literature – were banned (Walczak 1987, 57).

Some aspects of German repression were similar across occupation zones. All Polish secondary and higher educational institutions were closed. Polish Jews were segregated and killed. Nazi authorities also engaged in wanton violence against civilians and pacified rebellious villages. Thousands of cultural and political elites from all around the country were arrested and killed; the earliest targets were listed in the Special Prosecution Book-Poland (*Sonderfahndungsbuch Polen*) compiled before the war.

We summarize key differences and similarities in the nature of Nazi occupation between

⁹In the neighboring Reichsgau Danzig-West Prussia, Gauleiter Albert Forster adopted a different approach, forcing much of the indigenous population onto the German People's Lists (*Volksliste*) and seeking to Germanize their children. In this district, Poles could attend secondary and vocational schools.

¹⁰As a result of milder occupation policy, some 1,200 new priestly ordinations were performed underground in the territory of the General Government (Kłoczowski, Müllerowa and Skarbek 1986, 367).

the Warthegau and the General Government in Table 1.

Table 1: Differences in Repression between Warthegau and the General Government

Warthegau	General Government (GG)
Polish administrative structures dissolved	Polish police and local administration retained under German military rule
<i>Repression against the Catholic Church</i>	
72% of clergy arrested; one-third survive	95% of the clergy remain in their parishes
97% of churches closed or liquidated	no closing of churches
reduction in worship hours	no restrictions on worship hours
all church organizations dissolved	charitable organizations allowed
<i>Repression against Polish schooling and language</i>	
Primary schools for Poles with German teachers	Primary and vocational Polish schools remain
Polish language banned in public spaces and institutions	Polish language used in local administration and public spaces
<i>Repression against civilians</i>	
Jewish Poles are herded into ghettos, exploited, and murdered	
Intellectuals, activists, and nobility arrested and killed	
305,000 (8.0%) Poles expelled to the GG	940,000 (9.9%) Poles sent to Altreich for forced labour
360,000 (9.5%) Poles sent to Altreich for forced labour	

Notes: To compute percentages for expulsions and conscription into forced labor, we use estimates of 3.8 million Catholics in the Warthegau and 9.5 million Catholics in the General Government (83.3% from 11.4 million in December 1939).

2.3 Status of the Catholic Church after WWII

After five and a half years of Nazi occupation, Poland was liberated by the Red Army. The 1945 Potsdam Conference determined Poland's new borders and recognized the Soviet-led Provisional Government of National Unity as its government. From 1948 to 1989, Poland was ruled by the Polish United Workers Party (PZPR).

The first postwar years were characterized by a tentative truce between the communist regime and the Catholic Church, enabling the church to rebuild its ranks. Priests who survived German imprisonment were able to organize and conduct pilgrimages to concentration camps. Monuments were built to commemorate victims of the Nazi occupation. Religious instruction returned to public schools.

Once the party solidified its hold on power, however, it confiscated Church properties and

sought to control the appointment of church officials. Hundreds of priests, including some prominent members of the episcopate, were imprisoned on trumped-up charges that ranged from possessing foreign currency to cooperating with the Nazis (Myszor 2002–2006). The government sought to eliminate religious education from public schools by dismissing religious teachers, refusing to approve substitute instructors proposed by the church, and pressuring parents to withdraw children from catechism classes (Konopka 1997, 100-118). After July 1961, religion could be taught only in churches and designated catechetical points.

Yet even during the Stalinist period, church attendance was tolerated, including among party members (Grzymala-Busse 2015, 155). Rather than closing churches entirely, the Communist government aimed to co-opt religion for its own ends. Between 1949 and 1956, it enlisted sympathetic priests—known as "patriot" priests (*księża patrioci*)—to propagate pro-communist messages from the pulpit. Priests who survived concentration camps were particularly attractive recruits, as the authorities believed they would be more supportive of communism. At the height of the infiltration campaign, approximately 10% of all priests in Poland belonged to state-sponsored organizations (Nalepa and Pop-Eleches 2022).

Eventually, repression subsided and the Catholic Church regained its influence. Although they did not fully embrace the Solidarity movement, religious officials grew increasingly critical of the government. The Church's opposition to the communist regime in the 1980s earned it the trust of nearly 90% of Poles (Ramet 2006, 121), along with significant institutional influence (Grzymala-Busse 2015). In 2003, 75 percent of Poles stated that it was important or very important to be Catholic in order to be Polish – a testament to the strong bond between Catholicism and Polishness (Grzymala-Busse 2015, 28).

In 1999, Nazi repression of the Catholic clergy came into the spotlight when Pope John Paul II, a Pole who lived through Nazi repression, beatified 108 Catholic Martyrs of WWII. In 2002, the Polish Bishops' Conference designated April 29 as the Day of Martyrdom of the Polish Clergy in WWII. The beatification set off a series of commemorative events across the country. Building on this momentum, religious communities around Poland proposed 122 additional candidates for beatification by 2003. In short, the Church appears to have emerged triumphant from both WWII and communism, gaining in status and loyalty.

3 Analytical Framework

Religious leaders are targeted for repression because of their legitimacy and outsize influence. Their primary function is to gather community members for worship, administer sacraments, and educate the young. The better leaders are at supplying these services, the higher communal participation in religious activities (Engelberg et al. 2016) and the greater the community members' stock of religious human capital, understood as "religious knowledge, familiarity with church ritual and doctrine, and friendships with fellow worshipers" (Iannaccone 1998, 1481). These leaders also play an important role in shaping the demand for religion by facilitating the transmission of religious values to future generations - directly, by providing religious services that complement or substitute for parental socialization, and indirectly, by influencing parents' motivation to transmit their religious norms to their offspring (Bisin, Carvalho and Verdier 2023, 33).

Religious leaders' contribution to sustaining religious practices is heightened in repressive contexts where community members face high risks for practicing their faith. For example, Wittenberg (2006, 14) shows that the local clergy were central for preserving the "church community, understood as the aggregate adherence to religious rites and rituals," in Communist Hungary because they worked to counteract the intimidation of believers by party cadres. Research has further shown that the demand for religion increases in difficult and unpredictable times (Norenzayan and Hansen 2006; Bentzen 2019; Cesur, Freidman and Sabia 2020). Religious leaders are uniquely positioned to channel this demand into sustained religious participation.

How does severe repression of religious leaders impact their communities? Addressing this question requires a clear distinction between publicly observable religious practices and privately held religious beliefs and identities. While often conflated, religious participation and religious belief represent distinct dimensions of religiosity. As noted by Huber (2005) and Grzymala-Busse (2015), there are many "believers" who do not participate in religious practices, just as there are "participants" who engage in religious rituals without deeply held beliefs. The critical distinction for our analysis lies in the fact that participation is public and more susceptible to social dynamics and state intervention whereas beliefs are private

and more resilient.

We hypothesize that targeting religious leaders may have divergent effects on religious participation and religious beliefs and identities. As argued by Greif and Tadelis (2010), in a repressive environment, religious (moral) beliefs will become decoupled from observable behavior.¹¹ Communal worship will decline, while religious attachment will be strengthened.

Arrests and executions of religious leaders will interrupt the supply of religious services. Community members will be unable to continue practicing religion in the same way as before. As a rule, providing religious services requires specialized skills and legitimacy that only religious leaders possess,¹² which limits the set of substitutes. Alternative religious services may be difficult to find, harder to reach, or less enjoyable to engage in. Targeting religious leaders will also signal the increased risk of practicing one's religion in public, reducing incentives to seek out new places of worship. Aggregate levels of religious participation should then decline due to the combination of high risks and reduced rewards from participation (Wittenberg 2006).¹³

How can the effects of repression persist after the supply of religious services is restored? The initial supply shock may deplete the stock of religious capital, reducing the marginal utility of (future) religious participation (Iannaccone 1990, 1998). A prolonged interruption in the supply of religious services may also weaken the intergenerational transmission of religion because parents will have to work harder to impart their religion to the offspring in the absence of socialization by religious leaders and peers (Bisin, Carvalho and Verdier 2023; Patacchini and Zenou 2016). The transmission of religious participation norms is likely to be most affected, as it relies heavily on the practice of regular communal worship.

We expect the consequences of repression against religious leaders for *privately-held* religious beliefs and identities to differ. Violence against these highly-respected individuals will likely be construed as an attack on their religious community as a whole. When their

¹¹Similarly, Wang (2021) argues that state-sponsored violence can reduce citizens' protest behavior at the same time as it strengthens their anti-regime attitudes.

¹²For instance, the Catholic Canon law stipulates that only ordained clergy celebrate Mass or administer sacraments.

¹³However, the most devout members may find ways to continue religious practices in secret and even develop a stronger commitment to practicing their faith (Iannaccone 1992).

persecution is part of a campaign to destroy a nation’s identity, their suffering conveys a strong signal about religious leaders’ patriotism, elevating them to the status of martyrs for their faith and nation. The concept of martyrdom goes back to early Christianity to describe “those who refused to renounce the faith and suffered death [typically at the hands of the state] for that refusal” (Murphy 2023, 466). Communities whose religious leaders were victimized may ascribe meaning to their leaders’ suffering, memorializing their sacrifice and venerating them “in ways fundamental to the community’s identity” (Murphy 2023).¹⁴ As a result, we can expect strengthened private commitments to repressed leaders’ identity and increased hostile attitudes toward the hostile regime in repressed localities. To the extent that religious leaders are perceived as defenders of their nation against a *foreign* power, religious and national identities may become fused, “forging a powerful form of religious nationalism” (Grzymala-Busse 2015, 8).

To sum up, we expect communities where religious leaders were persecuted to experience a decline in communal religious practices and an upswing in religious attachment and nationalism. These behavioral and attitudinal changes should persist over time, in line with previous findings on the long-run effects of generalized repression (Peisakhin and Queralt 2022; Lupu and Peisakhin 2017; Charnysh and Finkel 2017; Rozenas and Zhukov 2019; Fouka and Voth 2023). Even once the supply of religion is restored, religious participation rates may not fully rebound: community members’ stock of religious human capital will be depleted and younger generations will have grown up without attending religious services altogether, reducing both individual utility from church attendance and social pressures that maintain high levels of religious participation. The strengthening of religious nationalism may be insufficient to offset the initial effect of repression because individual decisions to attend church are shaped by social norms in addition to personal convictions (Huber 2005). When the rates of communal worship fall below a certain threshold, both the benefits of participating in religious rituals and the costs of abstaining diminish.¹⁵ We thus expect the decoupling of public religious practices from private ethnoreligious attachments caused by

¹⁴Evidence on the effects of martyrdom on religiosity is lacking. Most scholars have sought to explain willingness to become a martyr instead (Ferrero 2013).

¹⁵Correspondingly, studies find that changes in private religious beliefs do not necessarily go hand-in-hand with changes in public behavior (e.g., Bentzen 2019; Pargament 2001).

repression to persist long after the repressive period ends.

Scope conditions. Our framework is particularly relevant to contexts of intense repression. Only policies that prevent religious leaders from supplying religious services and interacting with their followers are sufficient to deplete religious human capital and undercut religious participation. Whether religious leaders are perceived as “martyrs” for their in-group, activating religious nationalism, likewise depends on the severity of repression: the “martyrdom” status may be available only to those who endured tremendous suffering.¹⁶

Nazi repression in the Warthegau fits these scope conditions. As scores of Catholic clergy were detained and executed, the resulting vacancies remained unfilled until the war’s end, in part because bishops, who were in charge of (re)allocating priests, were also imprisoned. The supply of religious services declined. While the “orphaned” parishes were occasionally visited by priests from elsewhere and lay Catholics performed some religious rites independently, an average community experienced a prolonged disruption of religious life (Huener 2021, 243). Religious education was often “impossible to provide” (Huener 2021, 240). For example, the deportation of Father Ignacy Bronszewski from Białotarsk parish (Włocławek diocese) in March 1941 interrupted regular worship and religious instruction until February 1945 (Huener 2021, 234).

Even in parishes where priests avoided persecution, the availability and quality of religious services declined. Overwhelmed by the demand from neighboring congregations, some priests asked their parishioners to attend services less frequently and to keep confessions brief (Huener 2021, 244). In addition, the Nazi government restricted the times when the churches could operate. Many churches were closed, vandalized, or destroyed, forcing people to worship in private homes. This limited the number of people who could safely participate in religious rituals, weakening religious bonds in the community and undercutting inter-generational transmission of religious behaviors.

However, the victimized priests were not forgotten by their communities. After Germans shot Father Paweł Kwiatkowski (Częstochowa diocese) in September 1939 and had him

¹⁶Mild repression is a less costly signal about the priests’ type. Religious leaders who are fined or briefly detained may also be suspected of collaboration with the occupation authorities.

buried in an improvised grave, his parishioners went through the trouble of reburying him in a solemn, well-attended ceremony. In 2002, a new monument was unveiled on the site of Kwiatkowski’s execution, and the circumstances of his death, along with the martyrdom of other priests during WWII, were remembered.¹⁷ Stories about religious leaders’ sacrifice reached their parishes even when the priests died far away from home. For example, Father Józef Kut (Gościeszyn parish, Poznań archdiocese) died in Dachau after allegedly refusing to renounce priesthood and sign the German People’s List in exchange for his release. Kut’s parishioners honored his sacrifice by embedding a commemorative plaque in the church façade and naming a church bell after him. In 1979, another plaque was embedded in the wall of the church in Ołobock, where the priest was born. In 1999, the Pope beatified Father Kut together with 107 other Martyrs of WWII; ceremonies in Kut’s honor were held in Warsaw, Gościeszyn, Ołobock, Poznań, Chodzież, and Wolsztyn.¹⁸

4 Empirical Analysis

4.1 Data

Our sample consists of 1,268 current Polish municipalities (*gminy*). These municipalities fit two criteria: i) their territory was part of the Second Polish Republic, i.e. they exclude the territories Poland acquired from Germany after WWII, which experienced a nearly complete population turnover, and ii) their centroid was located in the Warthegau or the General Government. We construct a time-consistent database by using the 2015 municipal boundaries as our baseline and manually matching past municipalities to current ones.¹⁹ Below, we summarize our main data sources and key variables (see Appendix A for details on data processing and Table A.1 for a summary of our sources).

¹⁷Kwiatkowski’s death is now commemorated in three different locations: on his grave in the local cemetery, in his place of death and original burial, and inside the parish church. "Karta Poległego." *Bohaterowie 1939.pl*, <https://shorturl.at/isEGU>, accessed on Sep. 12, 2023. "Poświęcenie pomnika ks. Pawła Kwiatkowskiego". 2002. *Niedziela*, <https://shorturl.at/rvOPR>, accessed on Sep. 12, 2023.

¹⁸"Bł. ks. Józef Kut". *Cyfrowa Dziecięca Encyklopedia Wielkopolan*, www.csw2020.com.pl/biogram/bl-jozef-kut. Accessed May 20, 2024.

¹⁹We account for the creation and dissolution of municipalities, as well as name changes, but do not consider the transfer of territory among existing municipalities.

Nature and intensity of repression. To measure repression against religious elites, we digitized data on Polish priests arrested or killed in German-occupied Poland from Jacewicz and Woś (1977). The source contains detailed information for most individuals including place of work, position, date of arrest, place of imprisonment, and date and cause of death. We matched parishes in which priests worked to current municipalities.

We also collected information about other forms of Nazi repression. We digitized information on all Polish teachers who did not survive the war from Walczak (1987) to measure repression against Polish educators. We georeference each observation using teachers' places of employment and categorize teachers by their cause of death. We mapped Nazi atrocities committed against the general population using a list recently compiled by Wnek and Zyblikiewicz (2022).²⁰ We also digitized local-level data on age and gender from the Polish summary census of 1946 and information on the expulsions of Polish population within Warthegau from Wardzyńska (2017) to investigate the demographic effects of Nazi policies.

In addition, we use data on over 8,400 Polish intelligentsia members (political leaders, scholars, professionals, and nobility) recorded in the Special Prosecution Book of Poland (*Sonderfahndungsbuch Polen*) shortly before the war and digitized and matched to contemporary municipalities by Krakowski and Schaub (2022). The list allows us to assess the pre-WWII variation in the distribution of Polish elites targeted by Germans.

Religion during the communist period. To check for short and medium-run effects of repression on the availability of priests, we digitized information from the 1946 yearbook of the Kielce diocese and the 1948 yearbooks of Łódź, Warsaw, and Sandomierz dioceses as well as the 1971 Survey of Polish Priests (*Spis Duchowieństwa Diecezjalnego w Polsce*), the first postwar priest census.²¹ We also collected data on the history of parishes located within 50 km of the Warthegau-GG border from the parish websites.

To measure religious behavior during communism, we gathered archival data on the pro-

²⁰The list includes sites of individual and mass executions, but excludes concentration and death camps.

²¹Using the information on the place of residence, we match every priest in the dioceses of Chełmno, Częstochowa, Gniezno, Kielce, Łódź, Płock, Sandomierz, Warszawa, and Włocławek to a current municipality.

vision of religious education in public primary schools, as reported at the county level by Provincial National Councils to the Ministry of Education at the beginning of the 1952 school year (see Figure A.1). During this period, the government discouraged parents from enrolling children in catechism classes and used various pretexts to dismiss religious instructors. In response, clergy mobilized parents to defend religious education by petitioning school authorities and withdrawing children from schools that stopped offering religion (Konopka 1997, 118). As Wittenberg (2006, Ch.4) argues in the case of communist Hungary, the clergy's ability to preserve religious education was closely tied to levels of public religious observance, which reduced the perceived risks of state retaliation while amplifying the social incentives for enrolling children in religious classes. We therefore interpret variation in the share of primary schools offering religious instruction as an imperfect proxy for the strength of religiosity.²²

To ensure that the party's policy toward the church was the same in areas with different levels of Nazi repression, we digitized and geocoded information on religious leaders targeted by the communist government in 1945-1989 from Myszor (2002-2006). We also collected data on the distribution of "patriot priests" in 1951 using archival materials on the lists of 739 members and sympathizers of the pro-government District Priests' Commissions (*Okręgowe Komisje Księży, OKK*) compiled in preparation for the pilgrimage to Kalwaria Zebrzydowska Sanctuary.²³

Church attendance after 1989. We examine the long-run consequences of repression on participation in religious rituals using local-level data on Mass attendance in 1991, 1995, 2001, and 2015, purchased from the Institute of Statistics of the Polish Catholic Church (*Instytut Statystyki Kościoła Katolickiego*). From the data, we calculate the percentage of obliged Catholics in the municipality who attended Mass. During this period, church

²²Consistent with this interpretation, the largest number of schools offering religion was situated in the former Austrian partition, where both the prevalence of priests and religious participation rates were historically high (Bartkowski 2003; Grosfeld and Zhuravskaya 2015), as shown in the Appendix Section A.

²³The pilgrimage was organized by the communist regime to connect the patriot movement to the masses and incorporate patriotic themes into the religious celebrations. Data on "patriot priests" in Kraków voivodeship is missing.

attendance declined from 47.6% in 1991 to 40% in 2015.²⁴

The creation of martyrs. We examine the commemoration of priests who died for their beliefs using data on monuments listed in the *Guide to Commemorated Places of Struggle and Martyrdom* (1988). The book was published during the communist period, when commemoration focused on Polish "liberation" by the Red Army. Hence, the list provides a conservative measure of the commemoration of Nazi repression against religious leaders. Nonetheless, the clergy whose memorials are listed are genuine Nazi victims and do not appear to have held communist sympathies; their biographies indicate that a common criterion for selection was dying in a concentration camp. The advantage of using this source over more recent lists is that most monuments were built in the first two decades after WWII.²⁵ We use data on the presence of monuments to secular WWII victims as a placebo test.

We also georeferenced locations where bishops, priests, and other Catholics beatified as martyrs in 1999 were working during WWII. Only a small number (2%) of priests who perished during WWII were beatified, but we expect locations where these prominent victims worked during the war to experience a large martyrdom boost due to the formal recognition of their suffering.²⁶ Among the 43 current municipalities with at least one martyr, 18 are located in the Warthegau.

Catholicism and Polish identity. We measure the strength of the association between Catholicism and Polishness using the electoral support for the two right-wing parties that endorsed the "Pole=Catholic" model: the Law and Justice party (*Prawo i Sprawiedliwość, PiS*) and the League of Polish Families (*Liga Polskich Rodzin, LPR*). Both parties emerged at the turn of the 20th century, when the cleavage between populist, Euro-skeptic, and religiously conservative parties, and the liberal, pro-European parties replaced earlier divisions

²⁴At the same time, the proportion of individuals identifying as religious and viewing Catholicism as important for being Polish remained relatively constant, around 90% and 45%, respectively (CBOS 2024; Wysocki 2022).

²⁵The more recent wave of commemoration in the 2000s may have been endogenous to local and national politics.

²⁶The beatification ceremonies were also held in places where the victims were born and studied, but it is difficult to obtain comprehensive information on these ceremonies.

between communists and the heirs of the Solidarity movement (Jasiewicz 2009). They appealed to religious voters and embraced a brand of nationalism that emphasized the Catholic faith and external threats to Poland.

The LPR started out as a coalition of right-wing Catholic parties and campaigned on the slogan “so that Poland can be Poland”, quoting the late Polish primate, Cardinal Wyszyński (Szczurbiak 2002, 61). PiS combined Catholic nationalists and secular conservatives. The party initially focused on corruption and law and order issues, but then shifted toward a nationalist rhetoric, positioning itself as a defender of Catholicism and patriotic values (Kowalczyk 2015). Both parties benefited from and contributed to the growing focus on the suffering of Catholic Poles in political discourse in the 2000s.

We also examine whether repression affected support for pro- and anti-communist parties in the 1990s, using vote shares of the liberal Democratic Union (UD), the anti-communist Solidarity, and the left-wing Democratic Left Alliance (SLD). We do not expect to find differences in support for these parties because they focused on issues related to the communist past and economic reforms and because WWII and national values were not politically salient in these elections (Zarycki and Nowak 2000).

Electoral data comes from the National Electoral Office (*Krajowe Biuro Wyborcze*).²⁷

Socioeconomic effects. We check for demographic and economic effects by digitizing information on population density and growth, and non-agricultural population published by the Polish Statistical Office - GUS in 1976. We examine the consequences of Nazi restrictions on education levels using data from the 1970, 1978, and 1988 population censuses.

Prewar demographic, political and religious characteristics. To validate our empirical strategy, we digitized information on population, total area, agricultural land and arable land from the 1931 census (GUS 1933) for the voivodeships of Łódź, Kielce, Lublin, and Warszawa. We draw information on prewar ethnic and religious characteristics from the 1921 census for voivodeships around the General Government and Warthegau border. We

²⁷Pre-1990 elections are not regarded as free and fair.

also measured the density of pre-war railroad system by geo-referencing 1939 railroad lines.

We provide additional evidence on pre-war religious characteristics by digitizing parish-level information on parish priests from the 1938 catalogues of the (arch)dioceses of Częstochowa, Gniezno, Kielce, Łódź, Poznań, Sandomierz, Warszawa, and Włocławek. We geolocate and match each parish to a current municipality.

We also collected data on the results for the 1922 and 1928 parliamentary elections, the last free and fair prewar elections. We focus on the main political blocks or parties that were represented in both western and central Poland in both elections, following [Kopstein and Wittenberg \(2005\)](#): (1) the National Democracy (*Endecja*), an anti-German nationalist movement with a stronghold in Western Poland;²⁸ (2) the left-wing Polish Socialist Party (*Polska Partia Socjalistyczna, PPS*); and (3) the Bloc of National Minorities (*Blok Mniejszości Narodowych*).

We check for balance in geographic characteristics by computing mean altitude, rainfall, and temperature.

Tables [B.2](#) and [B.1](#) present descriptive statistics for our main postwar and prewar variables, respectively.

4.2 Empirical Strategy

To identify our treatment effect, we rely on the quasi-random nature of the border between the Warthegau and the General Government. The boundary did not coincide with relevant historical borders, nor did it follow ethnic or economic divides. As noted earlier, conflicting German interests and objectives led to a largely arbitrary and quasi-exogenous border which partitioned homogeneous areas.

Following recent work by ([Cattaneo, Idrobo and Titiunik 2024](#)) on multi-score regression discontinuity (RD) designs, including geographic RD designs, we assume a single treatment effect and define the estimand as:

²⁸The National Democracy vote combined support the Christian Union of National Unity (*Chrześcijański Związek Jedności Narodowej*) and the Polish People’s Party “Piaśt” (*Polskie Stronnictwo Ludowe "Piaśt"*) in 1922, and the Polish Catholic Bloc (*Polski Blok Katolicki*) and the Popular National Union (*Związek Ludowo-Narodowy*) in 1928.

$$\tau_{RD} = \lim_{d_i \downarrow 0} E[Y_i | d_i] - \lim_{d_i \uparrow 0} E[Y_i | d_i], \quad (1)$$

where Y_i is the outcome in municipality i and d_i is the treatment assignment variable and is defined as the minimum distance between municipality i 's centroid and the Warthegau-General Government border. The outcome under treatment (control) conditions is observed if d_i is positive (negative).

We use local linear regressions to estimate τ_{RD} . In particular, we use [Calonico, Cattaneo and Titiunik \(2014a\)](#) robust bias-corrected estimator with a data-driven bandwidth selector. This approach offers the advantage of producing confidence intervals which account for misspecification bias in the treatment assignment variable polynomial and an alternative mean square error optimal bandwidth. Our baseline results show the conventional estimate of τ^{RD} and standard errors, and the robust bias-corrected p -value levels ([Calonico, Cattaneo and Titiunik 2014b](#)). To compute standard errors, we use a nearest-neighbor-based variance estimator, the standard option in [Calonico, Cattaneo and Titiunik \(2014a\)](#). Nonetheless, we later check the robustness of our results to the use of a nearest-neighbor-based variance estimator with errors clustered at the powiat level.

This design is similar to previous parametric approaches ([Dell 2010](#); [Dell and Querubin 2018](#)) that control for geographic location in alternative manners.²⁹ As part of our robustness check, we repeat the RD analysis introducing latitude and longitude as well as other controls. Moreover, following ([Dell 2010](#)), we depart from [Calonico, Cattaneo and Titiunik \(2014a\)](#) and carry out an OLS estimation with a restricted bandwidth and a second-order polynomial for latitude and longitude. Nonetheless, it should be note that since our border is relatively smooth, our baseline estimates should be similar to those based on a bi-variate score ([Cattaneo, Titiunik and Yu 2024](#)).

We calculate our treatment assignment variable by geo-referencing the Warthegau-General Government border from a detailed map produced by the Reich Office for State Recording (*Reichsamt für Landesaufnahme* - RfL).

²⁹[Dell \(2010\)](#) controls for latitude and longitude in one specification and for distance to the treatment boundary in another.

Our empirical strategy assumes that the expected outcomes based on treatment status, $E(Y_i(0)|d_i)$ and $E(Y_i(1)|d_i)$, are continuous in the treatment assignment variable, d_i . In geographical RD designs, the identification assumption may not hold if the treatment border is endogenous to local characteristics. We provide evidence on the validity of our strategy by checking for balance in prewar municipal demographic, ethnic and religious characteristics, as well as in prewar electoral outcomes and other covariates.

First, we find no discontinuities in prewar demographic characteristics such as the percentage of males, population density, and annual population growth, which point to similar levels of urban development. The results are reported in Panel A of Table B.3. In addition, there is balance in the presence of Polish intellectual elites registered in the *Sonderfahndungsbuch Polen*. Hence, there is no difference in Nazi targets for elite repression or perceived regime threats.

Second, the results in Panel B of Table B.3 show balance in prewar ethnic and religious characteristics. We find no significant nor sizable discontinuities in the population shares of Catholics, Jews, Germans and Poles, or in the prewar number of priests, both in absolute terms and per 1000 inhabitants and Catholics at the border.³⁰ These findings are illustrated graphically in Figure B.1.

Third, there are no significant differences in prewar electoral outcomes. We find no discontinuities in average turnout and the vote shares of Endecja and other major parties in the 1920s. The estimates are reported in Table B.4 and illustrated graphically in Figure B.2. Geographic covariates such as altitude, rainfall, temperature, and prewar agricultural land are also balanced.

We find a slight significant estimate for railroad density in 1939, though this discontinuity is not clearly visible in Figure B.2. This is mainly driven by the fact that while there are North-to-South railway lines running on both sides of the southern section of the border, the one in the General Government side is closer to the border. This is not problematic for our identification strategy for several reasons. First, as part of our robustness checks, we

³⁰If the analysis is done at the parish level, there is a small positive discontinuity in the number of priests per 1000 Catholics due to an outlier parish located next to the border. This biases against our predicted result of lower religiosity.

control for this covariate and our results are unaffected. If anything, they become stronger. Second, as aforementioned, there are North-to-South lines on both sides of the border, and several East-to-West lines which cross the border, including the major Warsaw-to-Łódź and the Warsaw-to-Torun lines. Third, it is unlikely that the border followed a pre-defined path based on strategic railway network considerations. If this were the case, German authorities would have incorporated all nearby North-to-South lines to the Reich (as happened during the partition of France in 1940). Finally, similarities in population density, population growth and agricultural land point to no differences in prewar economic conditions.

5 Results

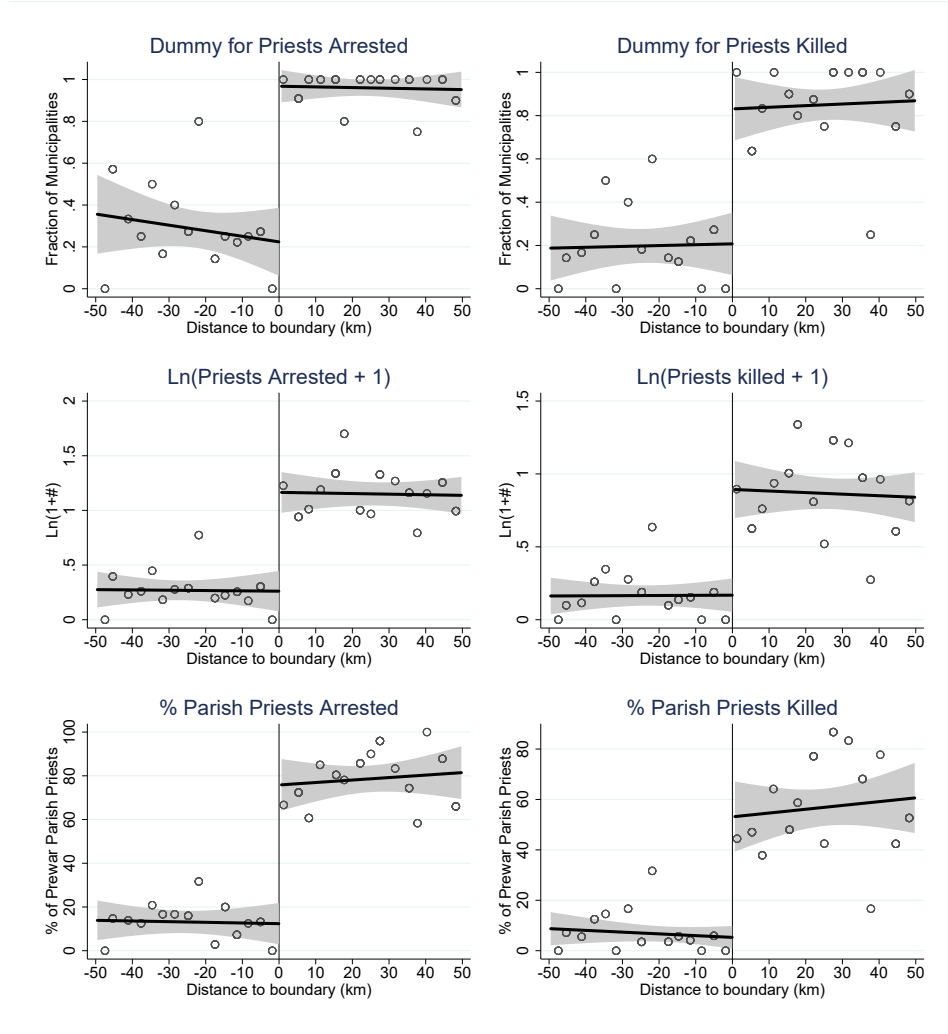
In this section, we first examine the differences in wartime repression between the Warthegau and the General Government. Second, we study the consequences of persecution of religious elites on the supply of religion, the provision of religious education, and church attendance. Third, we present evidence on the creation of martyrs and the political consequences of religious repression. Finally, we explore the robustness of our estimates.

5.1 Wartime Repression

Figure 3 clearly illustrates a sizable and statistically significant discontinuity in repression against the Polish clergy at the Warthegau border. The corresponding estimates are shown in Panel A.i of Table B.5. We find a drastic increase of 0.76 and 0.9 (or 1.5 and 1.3 standard deviations, respectively) in the fraction of municipalities with at least one priest arrested and in the natural logarithm of the number of arrested clergy, respectively. A large and significant effect is also observed for the percentage of prewar parish priests arrested. Similar results hold for priests who died due to persecution. We find strong positive effects in both the extensive and intensive margins.

Unlike the result for religious elites, we find no evidence that Nazi repression in the Warthegau disproportionately targeted Polish teachers. Our results in Panel A.ii show no statistically significant discontinuity in the fraction of municipalities with at least (i) one teacher death, (ii) one Jewish teacher death and (iii) one death due to repression. We also find no effect on the natural logarithm of the number of teachers killed. The lack of

Figure 3: Effect of Nazi Annexation on Wartime Violence Against Priests

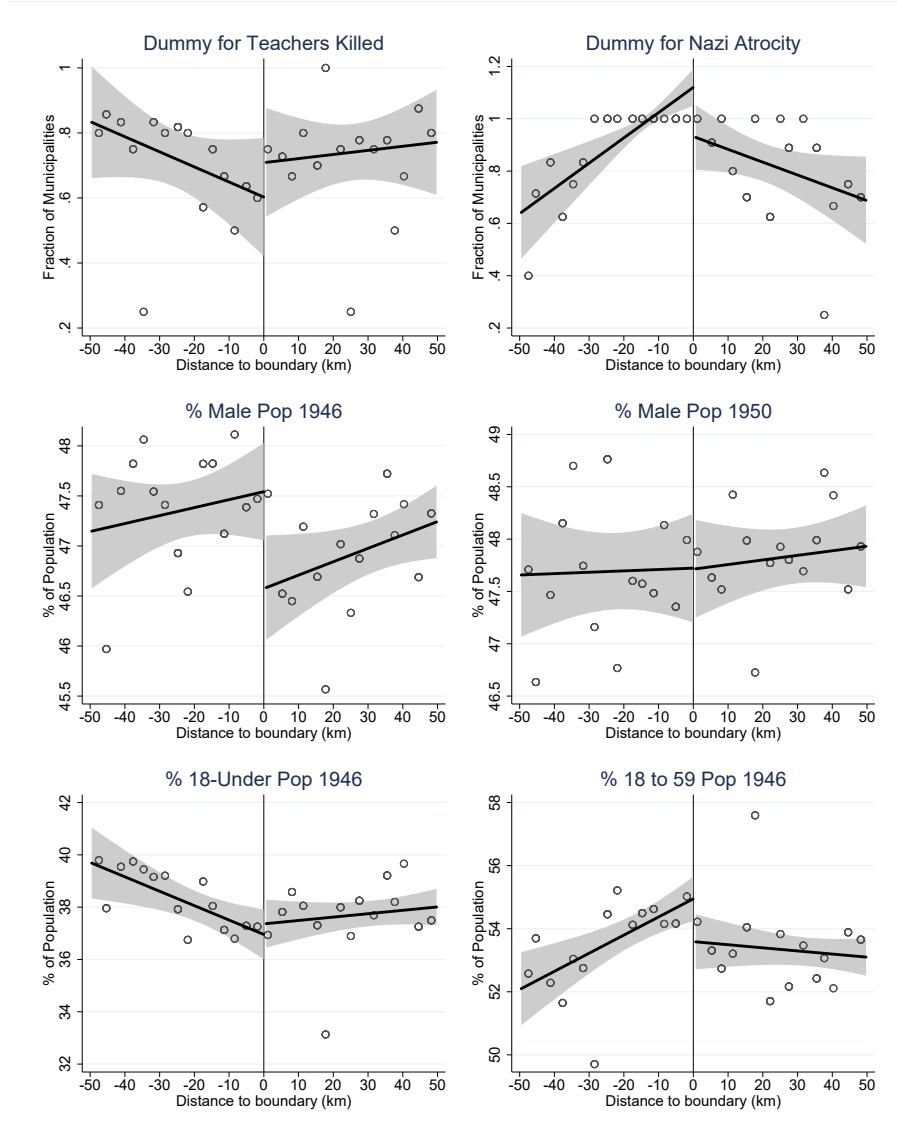


Notes: From the top, left to right, the graphs plot an indicator variable for whether a municipal priest was arrested or died as a consequence of Nazi repression between 1939 and 1945, respectively; the natural logarithm of the number of priests arrested or killed, respectively; and the percentage of prewar parish priests that were arrested or killed, respectively. Those killed includes clergy who died in concentration camps. The plots include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

discontinuities is clearly illustrated in the top row of Figure 4. This is consistent with our balance checks in Section 4.2 which show balance in the presence of Polish intellectual elites that were to be targeted by Nazi occupation.

Was religious persecution part of a broader campaign of violence in the Warthegau? We find that the area did not experience greater levels of systemic violence (top-right graph in Figure 4). On the contrary, the prevalence of municipalities with least one atrocity site

Figure 4: Effect of Nazi Annexation on Wartime Violence Against Teachers and General Population, and Postwar Population Structure



Notes: From the top, left to right, the graphs plot an indicator variable for whether a municipal teacher was killed due to Nazi repression; an indicator variable whether an atrocity (Nazi killing) site is located in the municipality; the male population as a percentage of total population in 1946 and 1950; the percentage of the 1946 population aged 18 or lower and aged between 18 and 59. The plots include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

is slightly lower on the Warthegau side of the border. However, this appears to be the mechanical result of a linear fit with a bounded variable as atrocities were very common on both sides.

Early on in the occupation period, numerous Poles were forcibly resettled from the Warthegau to the General Government or sent to Germany as forced laborers. While disaggregated data on forced laborers are unavailable, we test for discontinuities in the gender and age composition of the population immediately after the war. Panel B of Table B.5 shows the corresponding effects. We observe a small decrease of 1.1 percentage points in the share of the population between the ages of 18 and 59 and a 0.9-percentage-point decrease in the share of the male population in 1946 (middle-left and bottom-right graphs in Figure 4, respectively). However, this effect disappears completely by 1950 (middle-right graph in Figure 4).

Overall, while the Warthegau occupation regime was a compound treatment, our analysis suggests that de-Polonization focused on the persecution of Catholic clergy. This greater degree of religious repression was unmatched by violence against educators or the general population.

5.2 Reduced Supply of Religion and Long-Run Religiosity

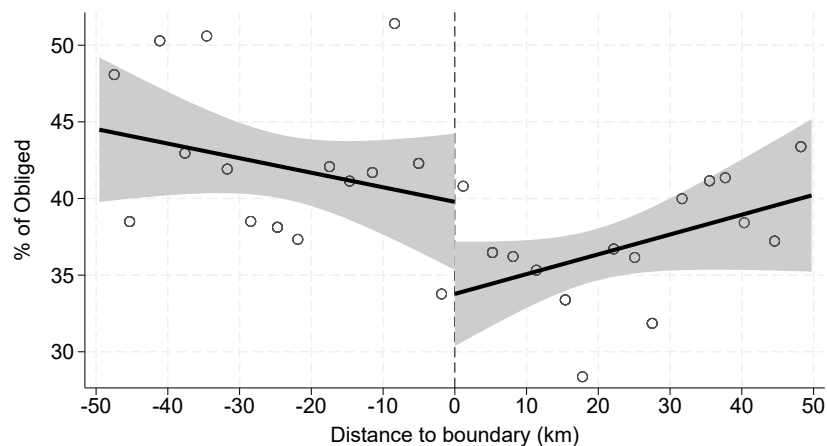
Did the persecution of priests shift the supply of religious services in affected locations? Our analysis of parish histories within 50 km of the Warthegau-GG border in Table B.6 indicates that religious supply in victimized parishes was, in fact, interrupted. We find that, in the Warthegau, the average period without a priest was significantly longer than in the General Government: 3.66 years versus 0.13 years per parish, respectively. The number of years without a priest, in turn, is correlated with the share of arrested/killed priests, at $\rho = 0.60$ ($p < 0.001$).

However, the interruption was transitory. Our analysis of the distribution of Catholic priests in 1948 shows that parish vacancies were filled shortly after the war ended. We find no discontinuities in the prevalence of priests in 1948, including in the ratio of postwar to prewar priests (Table B.7). We use more detailed data on priests from 1971 to establish that

Nazi repression did not affect the ages or career trajectories of priests assigned to the parish in subsequent decades.

Did the wartime shift in the supply of religion have long-term effects on religious practices? Figure 5 shows a clear discontinuity in average Mass attendance across four survey years (1991, 1995, 2001, and 2015) at the treatment border. The results in Table B.9 show a negative effect of 6.9 percentage points, or 0.45 standard deviations, for this average. The estimate is largely driven by the first two years of our sample (see Figure B.3). In particular, we estimate an effect of -11.3 percentage points (more than 0.5 standard deviations) for 1991. The estimates for all survey years are negative, but their magnitude and significance diminish over time. Our results suggest that, as church attendance decreased throughout Poland in the post-communist era, rates of Mass attendance in the Warthegau and control areas gradually converged. That is, past repression hastened the gradual abandonment of religious practices observed across Polish society.

Figure 5: Effect of Nazi Repression on Mass Attendance (1991 - 2015)



Notes: The graph shows average mass attendance across the years 1991, 1995, 2001, and 2015, defined as the percentage of those obligated in the municipality who attended Mass. The plot includes a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

We provide further evidence that religious persecution drives our results by analyzing the relationship between priest victimization rates and post-1991 religiosity within the Warthegau. As shown in Table B.10, municipalities with higher relative rates of priest victimization

had lower church attendance in the post-Communist period. This relationship (significant at a 10-percent level) holds for the average across our sample period and for 1991 and 1995 in particular, the years for which we observe more sizable treatment effects in the RD framework. We should note that in 44% of municipalities, all priests were removed, i.e. there is limited variation in the proportion of victimized priests, our main explanatory variable. This proxy for the reduced supply of religious services also neglects the interruption of supply following the destruction or closure of church buildings, which was almost universal in the Warthegau. The estimates are therefore conservative, yet they strengthen the plausibility of the supply channel.

Data on mass attendance at the local level is not available for the Communist period. Nonetheless, we provide suggestive evidence on short-term effects on religiosity - and how the impacts can persist through dwindling religious capital - by examining the consequences of Nazi repression on the provision of religious education in public primary schools early in the Communist era (1952). The OLS estimates in Table B.8 show a clear negative relationship between different measures of priest persecution and the availability of religious instruction.³¹ A one-standard-deviation increase in the logarithm of the number of victimized priests corresponds to a 4.2-percentage-point drop in the share of primary schools offering religion. Similar results are obtained for alternative victimization measures, such as the number of arrested or killed priests. As repression-related priest vacancies were quickly filled after the war, this finding suggests a shift in parental demand for religious instruction due to the depletion of religious capital during occupation.

5.3 Creation of Martyrs and Political Effects of Repression

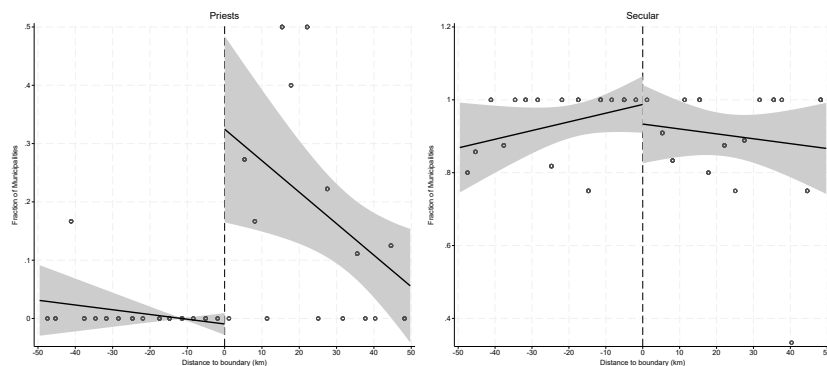
The repression of religious leaders can also elevate them to the status of martyrs for their faith and nation, strengthening the association between Catholicism and Polishness. Qualitative examples from the Warthegau indicate that victimized clergy were commemorated for their suffering.

We formally test this mechanism using data on monuments commemorating WWII vic-

³¹A RD analysis is not feasible with county-level data due to the limited number of observations close to the treatment border.

tims built within the first three decades after the war. The left plot of Figure 6 shows a clear discontinuity in the memorialization of victimized priests at the treatment border. We find that the fraction of municipalities with at least one priest memorial increases by around 0.28 in the Warthegau. As a placebo, we plot an indicator variable for the presence of memorials to secular victims. We find no significant discontinuity in this outcome, which suggests that commemorating priests was not a part of the general trend regarding war monuments in the Warthegau. Thus, already during the communist period, despite the difficult relationship between the state and the church, localities exposed to greater religious repression were able to commemorate their local priest's suffering.

Figure 6: Effect of Nazi Repression on Presence of Priest and Secular Memorials



Notes: The graphs plot an indicator variable for the presence of priest and secular memorials constructed in three decades after WWII. The plot includes a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

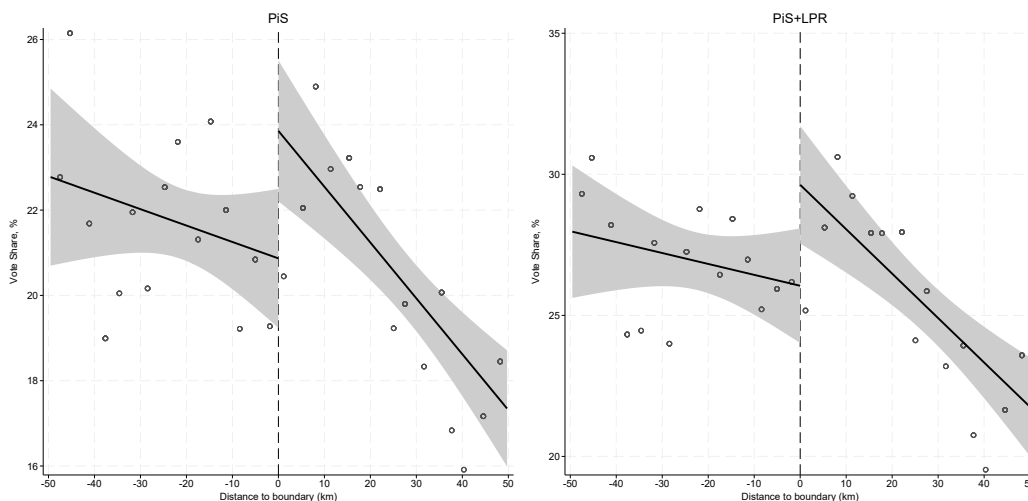
The martyrdom channel predicts higher support for nationalist parties endorsing the "Pole=Catholic" model, particularly when WWII experiences were salient in political discourse. We test this hypothesis using early 2000s electoral data, a period when openly nationalist parties (PiS and LPR) emerged and Nazi-era repression figured prominently in political debate.³² As the 2001 election neared, Poles debated their experiences during the Nazi occupation in response to the publication of Jan Gross's book about the Jedwabne

³²Electoral competition in Poland's earliest free and fair elections in the 1990s was focused on dealing with the transition to the market. Political parties were divided in their position toward the Communist past and the market reforms; Nazi occupation was not seriously discussed. Correspondingly, find no evidence that the legacy of repression influenced electoral support for the left-wing Democratic Left Alliance (SLD), the liberal Democratic Union (UD), and the anti-communist Solidarity (see Table B.11 in the Appendix).

pogrom in 1941.³³ In September 2004, a year before the next parliamentary election, the Polish parliament passed a resolution calling for war reparations from Germany and moved to re-evaluate the country's losses during the war.

Figure 7 illustrates our main results on political outcomes, which are detailed in Table B.11. We find a 2.9-percentage-point increase in support for PiS in annexed municipalities. For the LPR and PiS combined, we find a 3.4-percentage-point increase. The estimate is driven, to a large extent, by the 2005 election, held shortly after the Polish parliament requested reparations from Germany (see Figure B.4). Hence, it appears that voters in the Warthegau were more likely to endorse parties like PiS and LPR, which stoked fears of foreign threat and emphasized the centrality of Catholic faith for Polish identity. This result is particularly interesting in light of these parties' reliance on religious voters and lower popularity in western Poland.

Figure 7: Effect of Nazi Repression on PiS and LPR Support in 2000s Parliamentary Elections



Notes: The graphs plot the average vote shares of the Law and Justice party (PiS), and the Law and Justice and the League of Polish Families parties (PiS + LPR) in the 2000s elections (2001, 2005 and 2007). The plots include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

We further probe the plausibility of the martyrdom channel as a driver for the nationalist vote by checking the relationship between the PiS-LPR voteshare and indicator variables

³³The Polish left apologized for Polish involvement, while the LPR and PiS doubled down on publicizing Polish heroism and suffering.

for (1) communist-era priest memorials and (2) exposure to beatified local religious members within the Warthegau. First, note that the positive effect of religious repression on nationalist-party support also holds within the Warthegau for the 2005 election, with higher support for these parties in municipalities with higher rates of priest victimization (Column 2 in Table B.12). Second, the results in columns 3 and 4 of Table B.12 provide suggestive evidence for the martyrdom channel. The estimates for both indicators are positive. Moreover, the coefficient for the 108 martyrs, a stronger treatment, is significant at a 5% level (the estimate for priest memorials is marginally statistically insignificant: $p\text{-value} \approx 0.12$).

The overall pattern of results is consistent with the argument that by targeting religious leaders, foreign governments may reinforce religious nationalism, to the extent that the repressed clergy are viewed as martyrs by their followers.

5.4 Robustness Checks

We check for the robustness of our main results under different specifications. In particular, we exclude bordering municipalities with a sizable part (i.e., more than 20%) of their territory on the opposite side of the border, include covariates, cluster our standard errors at the powiat level, change the order of the assignment variable polynomial, and modify the estimation bandwidth. We also depart from Calonico, Cattaneo and Titiunik (2014a) and carry out an OLS estimation following Dell (2010) and Dell and Querubin (2018). The results in Tables B.13 and B.14 show that the estimates are robust. Most importantly, the estimates and significance levels hold when we exclude split border municipalities and when we include railroad density in 1939 as a covariate. In fact, the inclusion of this control strengthens our results for religiosity and voter behavior.

Finally, we calculate simulated p-values for our main results based on estimates for multiple placebo East (control) and West (treatment) regions. The results are shown in Column 2 of Table B.15. All of our main estimates remain significant.

6 Alternative Explanations

In this section, we provide evidence on alternative mechanisms which may explain the long-term effects on religiosity and political behavior. In particular, we examine whether our main results may be due to (i) other repressive policies common to annexed territories; (ii) differences in post-WWII economic development and migration; (iii) changes in human capital formation; and (iv) differences in priests’ political attitudes due to Communist infiltration. While this list of alternative explanations may not be exhaustive, we consider these to be the most plausible and salient.

Policies common to annexed territories. The Warthegau treatment is bundled; it includes not only repression of clergy, but also direct German rule and the accompanying policies of forced Germanization and resettlement. Could these other repressive policies explain the observed differences in religious participation and voting behavior at the Warthegau-GG border?

Our analysis of the variation in religious repression *within* Warthegau (see above) is intended to address this concern, but it is only correlational. Nonetheless, even *within* Warthegau, the extent of forced displacement is not positively correlated with priest victimization. OLS estimates in Table B.16 show no meaningful relationship between priest victimization and Nazi expulsions, both in absolute and relative terms.

We provide further evidence that our findings are driven by religious repression rather than other aspects of Nazi rule by comparing the General Government to Regierungsbezirk Zichenau, a region north of Warsaw incorporated into East Prussia. Like the Warthegau (but not the General Government), Zichenau experienced the dissolution of Polish administration, the closing of Polish educational and cultural institutions, and forced displacement.³⁴ However, the rates of repression against the religious elites in Zichenau were much lower than in the Warthegau and on par with those in the General Government (see Figure 2).³⁵

³⁴Educational policies in Zichenau were even more extreme than in the Warthegau: whereas Poles who lived in the Warthegau could attend primary schools, the Gauleiter of East Prussia Erich Koch opposed the establishment of any form of education for Poles (Jastrzębski 2017).

³⁵Zichenau’s general population was subject to the same forms of repression as in the General Government and the Warthegau, including arrests, execution, and recruitment for forced labor in the Reich (Grabowski

Table B.17 confirms that differences in wartime religious repression at the Zichenau-GG border are small and insignificant using geographic RDD. Correspondingly, we find no discontinuities in church attendance or support for nationalist parties in the post-Communist period. While these effects should be interpreted with caution as we cannot confirm the exogeneity of the Zichenau border, they further support our preferred explanation that repression against the church is a key channel behind our main findings.

Economic development and postwar migration. In Section 5.1, we note that there was a lower share of male and productive-age population in the Warthegau in 1946, a likely effect of forced labor deportations. Though short-lived, this could have influenced economic development and postwar migration patterns, shaping electoral and religious preferences.

Table B.18 and Figure B.5 report the effect of the Warthegau treatment on population density, non-agricultural population, and annual population growth in 1950, 1960 and 1970. We observe no meaningful and statistically significant discontinuities in these outcomes. The estimates point to similar levels of urban development and local economic production patterns across areas.

Table B.18 further shows that there were no significant differences in the number of inhabitants who were born in the municipality or arrived before 1971 as a percentage of the local population. These results are consistent with the fact that the expulsion of Germans and large-scale in-migration were concentrated in the territories Poland acquired from Germany after WWII rather than in the former Warthegau (Charnysh 2019; Becker et al. 2020).³⁶

Overall, these tests suggest that our main findings are unlikely to be driven by economic differences or postwar migration.

Human capital. In Section 5.1, we found no significant effects in violent repression against Polish teachers. However, we know that Warthegau restrictions on Polish education were more stringent than in General Government, particularly regarding vocational training.

and Grabowski 2004).

³⁶While the Germans who lived in the Warthegau were also expelled, the share of this ethnic group did not vary discontinuously at the Warthegau-GG border (see Table B.3).

While there are no discontinuities in postwar economic development, there may still be differences in human capital which can affect our main outcomes.

Figure B.6 shows a small negative discontinuity in the population with vocational education during the last decades of the Communist era. However, the census-year estimates in Table B.19 show that this effects gradually disappears. In 1970, there is a 2.1-percentage-point decrease and a marginal 0.3-percentage-point increase in the percentage of the population with vocational and higher education in 1970, respectively. By 1988, the effect decreases in magnitude and loses statistical significance. Taken together with the lack of results for Zichenau where Polish education also faced more limits, this pattern suggests that differences in human capital cannot explain our main findings.

Political sermons, communist infiltration, and communist repression. Repression may have changed surviving priests' political attitudes, exposing their parishioners to sermons of different content and indirectly shaping religiosity and religious nationalism. For instance, priests who suffered Nazi violence may have been more supportive of the communist regime, which positioned itself as a bulwark against Nazism. Conversely, Osa (1989) argues that Nazi repression strengthened local priests' religious activism and taught them to operate covertly, ensuring the viability of Catholicism during communism. Differences in repressed priests' postwar behavior are unlikely to explain our results because the vast majority of surviving priests changed parishes. Data from the heavily-repressed Łódź diocese shows that, by 1948, only 19 priests (8 percent) still served in their prewar parish. The postwar shortage of priests in the Warthegau was remedied by the reallocation of priests from other regions, and, because the remaining local priests were also reshuffled across parishes, the assignment of these outside priests was uncorrelated with repression. Of the 55 *survivors* who remained in the Łódź diocese, 72 percent changed parish by 1948.

Another concern is that the communist regime was more successful in infiltrating parishes in the former Warthegau with "patriot priests," shaping mass religious attitudes and political behavior. Researchers have argued that the party concentrated its recruitment efforts on priests who has survived Nazi violence, expecting them to be more pro-communist (Żurek

2003). We provide causal evidence on the lack of an effect of Nazi repression on communist infiltration using original archival data on priests active in the patriot movement in 1951. Figure B.7 clearly shows no discontinuity in the fraction of municipalities with at least one "patriot priest" at the treatment border. It is also important to note that the government primarily used "patriots" to promote pro-communist attitudes rather than to suppress religious participation. Supporting this, Nalepa and Pop-Eleches (2022) find that the "patriot priests'" prevalence influenced communist support but not church attendance or trust in the Church. By contrast, we find no discontinuities in support for ex-communist parties but divergent rates of religious participation in the 1990s at the Warthegau-GG border.

Finally, it is possible that communist repression against Catholic clergy was higher in the Warthegau relative to the General Government and that our findings are the product of postwar rather than wartime policies. We address this concern using individual-level data on Catholic religious members arrested, dismissed, or expelled by the communist regime in 1945-1989. As shown in Figure B.8, there are no discontinuities in the fraction of municipalities with at least one Catholic religious leader repressed by the communist regime at the Warthegau-GG border.

7 Conclusion

This paper explores the long-term effects of violence against religious leaders on political and social behavior. For this, we leverage an overlooked quasi-natural experiment. During the Nazi occupation of Poland, the country was divided into multiple occupation zones which experienced different repressive regimes. In particular, the Warthegau region was subject to intense persecution of religious elites relative to the General Government. As the border between the two areas partitioned an homogeneous territory, we use a spatial RD design to identify the effects of this regime.

Using original local-level data from Nazi-occupied Poland, we first establish that the nature and intensity of repression varied between the two occupation zones. In the Warthegau, populated by Poles but slated to become German, repression focused on the destruction of Polish identity through the persecution of the Catholic clergy. As a result, religious leaders

– but not teachers or the general population – suffered significantly greater violence than in the neighboring General Government.

We argue that repression against religious leaders has different societal consequences than indiscriminate violence against the general population. As religious leaders are responsible for the supply of religious services, arresting or killing them reduces participation in religious rituals and socialization into regular observance. The result is an enduring behavioral shift. At the same time, to the extent that the repressed clergy are perceived as martyrs for their faith and nation, this form of repression strengthens local attachments to religious and national identities, fusing them together. Repression against religious leaders thus affects religious participation and religious nationalism in opposite ways.

We provide evidence on the religious supply channel by showing that repression had a negative effect on church attendance more than forty years later, although the differences faded over time. We also find that violence against Polish priests is negatively correlated with the prevalence of religious schooling during the early communist period. Regarding the martyrdom channel, we find differences in commemorative practices, with significantly more memorials to victimized priests on the Warthegau side of the border, and increased support for nationalist parties that endorsed the centrality of Catholicism for Polish identity.

We acknowledge that the Warthegau treatment is bundled. However, additional evidence suggests that the victimization of priests drives our main findings. Within the Warthegau, municipalities with higher priest victimization rates have lower Mass attendance and exhibit greater support for nationalist PiS and LPR in the 2005 election, when WWII was particularly salient. At the same time, there are no differences in these outcomes between the General Government and Zichenau, a region that, like the Warthegau, was directly incorporated into Nazi Germany and subjected to Germanization but did not experience the same repression against the Catholic clergy. We further show that neither the rates of Communist repression against the Catholic religious nor the party’s ability to infiltrate the clergy varied at the Warthegau-GG border.

We hope that our results encourage research into the heterogeneous effects of different forms of repression. In contrast to the large literature on mass repression, we find that severe

repression targeting communal elites — individuals with disproportionate social influence — can induce behavioral changes that persist beyond the lifespan of the repressive regime. Notably, we diverge from much of the existing scholarship by uncovering distinct effects of repression on publicly observable social behaviors versus privately held beliefs and identities. A deeper, comparative analysis of the consequences of elite versus non-elite repression is a promising avenue for future research.

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Appendix for "Razing the Church: The Enduring Effect of Nazi Repression in Poland"

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A Data Appendix

Nature and intensity of Nazi repression. From the first volume of Jacewicz and Woś (1977), we extract a list of clergy killed during WWII for each former diocese in Nazi-occupied Poland. We exclude priests who died in military action (e.g. bombings, Warsaw Uprising) or were victims of Soviet or nationalist Ukrainian repression. We use more detailed information from other volumes to extract information about arrests (coded 1 when there is information on the date of arrest or place of imprisonment).

We focus on ordained clergy (*kaptani*), who perform sacraments and lead religious services, but not clerics or seminarians (*klerycy*), who are still in training. When computing the fraction of victimized priests to prewar priests, we subset the data to priests performing the same functions to ensure comparability. We thus include individuals described as *proboszcz* (parish priest), *wikar* (vicar), *administrator*, *rektor* (rector), *kapelan* (chaplain), and *rezydent* (resident priest). Percentage measures of victimized priests (relative to prewar priests) are capped at 100.

We digitized information about teacher deaths in Walczak (1987) to measure repression against educators. We match teacher to a current municipality using the prewar place of employment. From the full list of matched teachers, we then compute the number of those killed due to Nazi repression by excluding those listed as having been killed due to war violence, Soviet/Ukrainian repression, and those for which there is no information and cause of death. We also compute the number of Jewish teachers by focusing on those listed as being Jewish and those who died in concentration camps for Jews.³⁷

The List of Atrocity Sites (N=9,293) covers lethal violence against Polish civilians. Atrocities are defined as individual murders as well as mass executions of Polish citizens; there is no minimum threshold for being included into the dataset. The list does not include information about Nazi concentration, death, or POW camps. It is based on the research by Główna Komisja Badania Zbrodni Niemieckich w Polsce and presents facts established by the 1980s and the 1990s.

The supply of religion. We gathered detailed data on the turnover of parish priests (*proboszcz*) for parishes located within 50km of the border between Warthegau and the General Government from parish websites, (arch)diocese yearbooks, and other sources. We focus on priests who were appointed between 1921 and 1991 and exclude parishes that were created after WWII. Data availability varies by region: we were able to locate information for most parishes in the Łódź and Częstochowa Archdioceses, but not for Łowicz diocese, created in 1992 from parts of Łódź, Płock and Warszawa (arch) dioceses. We compute the average number of years between successive priest appointments for each parish and the average duration of priest appointments for each parish before and after the war. We also count the share of priests appointed between 1949 and 1956, the period when the Communist

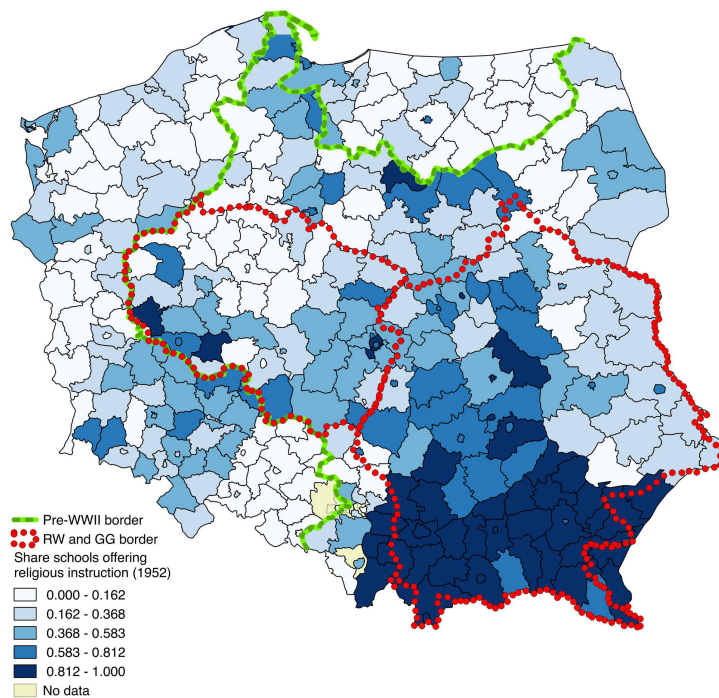
³⁷The victims killed in Lucmierz-Las, a locality in Zgierz, were assigned to Lodz as most of the victims came from the Lodz Ghetto and the Radogoszcz prison in Lodz. Some location sites cannot be matched as the list only includes information on the location voivodeship.

government sought to infiltrate the church by appointing the "patriot priests," to the total number of priests appointed between 1949 and 1989.

For the 1971 priest data, we use place of residence to match every priest in the dioceses of Chełmno, Częstochowa, Gniezno, Kielce, Łódź, Płock, Sandomierz, Warszawa, and Włocławek to a current municipality. We use year of ordination to compute years of service. In few cases, the year of ordination is greater than 1971, in which case we assign a value of 0 to years of service.

Religious instruction in public schools. The data on the number of primary schools with and without religious instruction in 1952 was digitized from the files of the Ministry of Education in the Archiwum Akt Nowych. Figure A.1 plots the variation in the availability of religious schooling at the county level. The map shows that virtually all primary schools in southeast Poland (former Austrian partition) – where religiosity was historically strong (Charnysh and Peisakhin 2022) – offered religion. By contrast, the majority of schools in the territory incorporated into German Reich in 1939 as well as in the territory Poland acquired from Germany in 1945 – where Catholic schooling was interrupted or previously absent, respectively – did not offer religion in 1952.

Figure A.1: Availability of religious schooling



Notes: The figure maps the share of primary schools where religious instruction was offered in fall 1952 relative to the total number of schools in the county as reported to the Ministry of Education from each province.

Communist repression against the clergy. We digitized and mapped data on the communist repression against religious leaders from the three-volume *Leksykon duchowieństwa represjonowanego w PRL 1945-1989. Pomordowani – więzieni – wygnani* and a supplement. These materials comprise information about 1,071 individuals who experienced some form of repression at the hands of the Soviet or Polish communist authorities, of whom 1,015 were Roman Catholic. No information about precise location could be established for 121 individuals. We focus on 929 Roman Catholics for whom we were able to establish precise location. We further distinguish between *kapłani*, or ordained clergy who perform religious services (N=539), from other religious actors, including *zakonnicy* (*zakonnice*), or monks (nuns) who have taken religious vows and live in monastic or convent communities. Most individuals were repressed during the Stalinist period; 1950 is the median year of the first incidence of repression. The majority of repression victims were incarcerated; repressive episodes also include beatings, murders, and expulsions, which were typically perpetrated by the Soviet soldiers in 1945 and disproportionately affected German nationals.

Patriot priests. To measure communist infiltration of the church, we digitized and geo-referenced information about 739 priests who were either members or sympathizers of the District Priests' Commissions (*Okręgowe Komisje Księży, OKK*) and were mentioned in the files of the Main Priests' Commission (*Główna Komisja Księży*) within the Society of Fighters for Freedom and Democracy (ZBoWiD) devoted to state-sponsored pilgrimage to Kalwaria Zebrzydowska Sanctuary on August 13, 1951.³⁸ The list is incomplete because the OKK ranks fluctuated over time. We lack information about the OKK members and sympathizers from Kraków voivodeship for the same period, but this should not affect our estimation because this voivodeship is located far the Warthegau-GG border.

We combine information on sympathizers and members because both categories of priests actively participated in the "patriot priest" movement. Kostrzewski (2021) writes that the decision on whether the priest would become a formal member or a sympathizer rested with the Commission and the Security Office (UB) rather than the priest himself. Many sympathizers transitioned in and out of formal membership.³⁹

Religious practices after 1989. We calculate attendance at Mass as the percentage of all obliged Catholics (aged seven and above) attending Mass on the survey date. For the few cases for which Mass attendance is above 100 due to the presence of parishioners from other parishes, we capped the percentage at 100. We compute both yearly and average Mass attendance based on the four years for which we have data (1991, 1995, 2001, and 2015). For 1991, information is missing for a few counties in Lubuskie, Małopolskie, Podkarpackie, and Dolnośląskie voivodeships, which are located far from treatment border and therefore do not affect our analysis.

³⁸480 priests actually attended the pilgrimage, where they pledged to fight for peace and work toward implementing the agreement between the Episcopate and the government. Kornelia Banaś. 2008 (July 13). "Patriotyczni' pątnicy." *Gość Niedzielny*: 14.

³⁹Paweł Kostrzewski. "Aktywność polityczno-społeczna 'księży patriotów' diecezji częstochowskiej (1949–1955)." *Zeszyty Historyczne tom XIX*: 175-214.

Memorialization. We collected data on monuments to religious leaders who died in WWII from the *Guide to Commemorated Places of Struggle and Martyrdom* (1988). The book was published during the communist period, so the vast majority of monuments it lists are the so-called "Red Army Gratitude Monuments" as well as monuments to unknown soldiers citizens resisting Nazi occupation. Nonetheless, the guide also includes information on the locations of 152 monuments to priests, bishops, monks, and other religious actors in the territories occupied by Germany during WWII. The dates of construction, listed for some monuments, range from 1945 to 1983, with a mean of 1961.

We also georeferenced locations where bishops, priests, and other Catholics beatified as martyrs in 1999 were working during WWII using the list from Wikipedia, available at https://pl.wikipedia.org/wiki/108_b%C5%82ogos%C5%82awionych_m%C4%99czennik%C3%B3w.

Human capital. We compute the percentage of the population aged 15 and above with at least basic education based for the following categories: higher (*wyższe*, for people with a diploma of higher education), secondary (*średnie*, for people with a secondary school-leaving certificate, which entitles them to apply for admission to a higher education institution), vocational (*zasadnicze zawodowe*, for people with a certificate of completion of a basic vocational school, which does not entitle to admission to higher education institutions), and basic (*podstawowe*, for people with a certificate of completion of a primary school).

Prewar demographic, political and religious characteristics. For the 1921 census, we digitized the volumes for the Kielce, Łódź, Pomorze, Poznań, and Warszawa voivodeships. The process of matching municipalities in Pomeranian and Poznan is particularly cumbersome. At the time, many small villages in these regions constituted their own municipalities. For these regions, we match towns and villages to current municipalities, but leave out rural estates. To compute the percentage of Catholics, we consider both Roman and Mariavite Catholics. For the 1931 census, we found an error in the area for the municipality of Głowno. (According to the census, Głowno had an area of just $0.3km^2$, which leads to a population density comparable to present-day Macao.) Hence, we compute that value as missing.

Table A.1: List of Main Data Sources

Variable	Source
Nature and Intensity of Nazi Repression	
Repression against Catholic priests	Jacewicz, Wiktor and Jan Woś. 1977. <i>Martyrologium polskiego duchowieństwa rzymskokatolickiego pod okupacją hitlerowską w latach 1939-1945</i> . Warsaw: ATK
War losses among teachers	Walczak, Marian. 1987. <i>Działalność oświatowa i martyrologia nauczycielstwa polskiego pod okupacją hitlerowską 1939-1945</i> . Zakład Narodowy im. Ossolińskich.
Nazi atrocities	Wnek, Konrad and Lidia Zyblikiewicz. 2022. Raport o Stratach Poniesionych przez Polskę w Wyniku Agresji i Okupacji Niemieckiej w Czasie II Wojny Światowej 1939-1945 - Lista Miejsc Zbrodni. [Report on the Losses Sustained by Poland as a Result of German Aggression and Occupation During the Second World War, 1939 - 1945.] Fundacja Lux Veritatis z siedzibą w Warszawie – Instytut Pamięć i Tożsamość im. św. Jana Pawła II
Postwar age and gender structure	Powszechny sumaryczny spis ludności z dn. 14.II. 1946 r. [General summary census of 14.II. 1946] Warszawa: Główny Urząd Statystyczny.
Occupation zone borders	1941 Map of the Reich Office for State Recording (Reichsamt für Landesaufnahme - RfL) from the Archive of the Polish Military Geographical Institute (Wojskowy Instytut Geograficzny).
Expulsions of Poles	Wardzyńska, Maria. 2017. <i>Wysiedlenia ludności polskiej z okupowanych ziem polskich włączonych do III Rzeszy w latach 1939-1945</i> . Warszawa: Instytut Pamięci Narodowej.
Prewar characteristics	
Population, area, agricultural/arable land	Skorowidz gmin Rzeczypospolitej Polskiej. [Index of communes of the Republic of Poland] 1933. Warszawa. Główny Urząd Statystyczny RP.
Distribution of priests and Catholics in 1938-1939	Spis Duchowieństwa i Parafii Diecezji Łódzkiej. 1938. Łódź: Seminarium Duchowny w Łodzi. Spis Duchowieństwa i Parafii Diecezji Sandomierskiej. 1938. Sandomierz: Seminarium Duchowny w Sandomierzu. Katalog Kościołów i Duchowieństwa Archidiecezji Warszawskiej na rok 1938. Warszawa. Seminarium Metropolitalny. Katalog Kościołów i Duchowieństwa Diecezji Częstochowskiej na rok 1939 Częstochowa. Kuria Diecezjalna. Druk. FD Wilkozewskiego. Elenchus Omnium Ecclesiarum Necnon Universi Cleri Dioecesis Kielcensis. 1938. Typography "Jedność." Rocznik Diecezji Włocławskiej. 1938. Włocławek: Kuria Diecezjalna. Katalog Kościołów i Duchowieństwa Diecezji Siedleckiej czyli Podlaskiej na rok 1938. Siedlce. Kuria Diecezjalna.
Ethnicity and religion in 1921	Skorowidz Miejscowości Rzeczypospolitej Polskiej. [Index of Places of the Republic of Poland] 1924. Warszawa. Główny Urząd Statystyczny RP.
Voting behavior in 1922 and 1928	(1) Statystyka Wyborów do Sejmu i Senatu Odbytych w Dniu 5 i 12 Listopada 1922 roku. [Statistics of Elections to the Sejm and Senate Held on November 5 and 12, 1922] 1926. Warszawa. Główny Urząd Statystyczny RP. (2) Statystyka Wyborów do Sejmu i Senatu Odbytych w Dniu 4 i 11 Marca 1928 roku. 1930. [Statistics of Elections to the Sejm and the Senate Held on March 4 and 11, 1928.] Warszawa. Główny Urząd Statystyczny RP.
Railroad density	Map produced by the German Army High Command in 1939, obtained from the Map Archive of Wojskowy Instytut Geograficzny
Anti-German elites	Special Prosecution Book of Poland (<i>Sonderfahndungsbuch Polen</i>), which includes the addresses of political leaders, scholars, doctors, lawyers, actors, and members of the nobility that were supposedly hostile to Germany. Digitized by Krakowski and Schaub (2022).
Postwar outcomes	
Distribution of priests, Catholics in 1946-48	(1) Spis Duchowieństwa i Parafii Diecezji Łódzkiej. [List of Clergy and Parishes of the Diocese of Łódź] 1948. Łódź: Kuria Diecezjalna w Łodzi. (2) Katalog Kościołów i Duchowieństwa Archidiecezji Warszawskiej na Rok 1948. [Catalog of Churches and Clergy of the Archdiocese of Warsaw for 1948] Warszawa: Seminarjum Metropolitalny. (3) Rocznik Diecezji Sandomierskiej. [List of Clergy and Parishes of the Diocese of Sandomierz] 1948. Sandomierz: Seminarium Duchowny w Sandomierzu. (4) Katalog Duchowieństwa i Parafii Diecezji Kieleckiej. [Directory of the Clergy and Parishes of the Diocese of Kielce.] 1946. Kielce. Kuria Diecezjalna.
Priests in 1971	Spis Duchowieństwa Diecezjalnego w Polsce. [List of Diocesan Clergy in Poland.] 1975. Poznań-Warszawa. Pallottinum.
Communist repression against the clergy	(1) Myszor, Jerzy (ed.). <i>Leksykon duchowieństwa represjonowanego w PRL 1945-1989. Pomordowani – więzieni – wygnani</i> . Volumes 1-3. Warszawa: Verbinum. (2) Myszor, Jerzy and Mirek Agata. 2008. "Leksykon duchowieństwa represjonowanego w PRL" : suplement. <i>Śląskie Studia Historyczno-Teologiczne</i> 41 (1): 137-176.
Religion in schools in 1952	Sprawozdanie Wydziałów Oświaty Prezydów Wojewódzkich Rad Narodowych, 1951-1955. Sygn. 8664. Archiwum Akt Nowych [2/283/0/1.11/8664]
Patriot priests in 1951	ZBoWiD Główna Komisja Księży. 1951. Sygn. 21 "Udział członków Komisji Księży w pielgrzymce do Kalwarii Zebrzydowskiej." Archiwum Akt Nowych 2/245/0/1/21.
Education level in 1970, 1978, 1988	Based on historical census data published by GUS at https://stat.gov.pl/spisy-powszechne/narodowe-spisy-powszechne/ludnosc-wedlug-spisow-dane-historyczne/
Population growth	Ludność i zasoby mieszkaniowe w latach 1946-1974 [Population and Housing Resources in the Years 1946-1974]. 1976. Warszawa: Główny Urząd Statystyczny.
Priest memorials	Przewodnik po Upamiętnionych Miejscach Walk i Męczeństwa [Guide to Commemorated Places of Struggle and Martyrdom]. 1988. Wyd. 4. Warszawa: Wydawn. "Sport i Turystyka".
Mass attendance in 1991, 1995, 2001, 2015	Purchased by the authors from Instytut Statystyki Kościoła Katolickiego [the Institute of Statistics of the Polish Catholic Church]

B Additional Figures and Tables

B.1 Summary Statistics

Table B.1: Summary Statistics for Main Prewar Variables and Other Covariates

Variables	Obs.	Mean	S.D.	Min	Max
Prewar Demographic Characteristics					
Male Population (1921), %	577	48.2	1.06	40.0	52.8
Population Density (1931), Ln	717	4.63	0.77	3.22	8.66
Population Growth (1921–1931), Annual %	718	1.43	1.92	-1.39	29.7
Presence of Polish Intellectual Elites (1939)	1,268	0.44	0.50	0	1
Prewar Ethnic and Religious Characteristics					
Catholic Population (1921), %	577	88.3	12.6	22.8	100
Jewish Population (1921), %	577	6.97	10.3	0	63.2
Polish Population (1921), %	577	92.1	11.2	31.5	100
German Population (1921), %	577	2.98	8.02	0	68.5
Prewar Parish Priests (1938–39):					
Presence of Priest	718	0.96	0.19	0	1
Ln(1 + Number of Priests)	718	1.33	0.54	0	5.02
Number of Priests, per 1000 Pop. 1931	535	0.28	0.18	0	1.47
Number of Priests, per 1000 Catholics	718	0.39	0.18	0	1.39
Prewar Electoral Outcomes (1922–28)					
Turnout (1922 - 1928), %	728	83.3	6.18	49.8	93.6
Vote Share of Endecja (1922 - 1928), %	728	30.2	15.3	1.65	75.4
Vote Share of PPS (1922 - 1928), %	728	15.5	10.8	0	64.8
Vote Share of BMN (1922 - 1928), %	728	8.54	9.85	0	57.8
Other Municipal Characteristics					
Mean Altitude, m a.s.l.	1,268	200	127	40.9	1,215
Mean Rainfall, mm	1,268	586	113	456	1,217
Mean Temperature, C	1,268	7.95	0.53	3.39	8.92
Agricultural Land (1931), %	717	65.9	25.7	0	99.4
Railroad Density (1939), km/km2	1,268	0.07	0.10	0	0.93

Notes: See Section A for data description and sources.

Table B.2: Summary Statistics for Main Postwar Variables

Variables	Obs.	Mean	S.D.	Min	Max
Municipality in RW	1,268	0.29	0.46	0	1
Distance to RW - GG Border, km	1,268	139.4	77.0	0.06	327
Wartime Repression (1939–1945)					
Municipality with Priest Arrested	1,268	0.49	0.50	0	1
Ln (1+Priests Arrested)	1,268	0.56	0.68	0	4.69
Percentage of Prewar Parish Priests Arrested	690	42.9	40.6	0	100
Municipality with Priest Killed	1,268	0.35	0.48	0	1
Ln (1+Priests Killed)	1,268	0.35	0.54	0	3.81
Percentage of Prewar Parish Priests Killed	690	27.8	34.6	0	100
Municipality with Teacher Killed	1,268	0.69	0.46	0	1
Ln (1+Teachers Killed)	1,268	0.87	0.79	0	6.35
Municipality with Atrocity Site	1,268	0.90	0.30	0	1
Postwar Religiosity and Priest Supply					
Mass Attendance (1991 - 2015), % of obliged	1,261	51.9	15.2	21.8	100
Presence of Priest (1948)	389	0.94	0.24	0	1
Number of Priests (1948), per 1000 1950 Pop.	389	0.33	0.20	0	1.59
Presence of Priest (1971)	607	0.97	0.17	0	1
Number of Priests (1971), per 1000 1970 Pop.	607	0.46	0.28	0	2.74
Avg. Age of Priests (1971)	589	45.4	6.69	24.3	75.0
Avg. Years of Service of Priests (1971)	589	18.7	6.26	0	52.0
Postwar Education (1970–1988)					
Education Level, % of Pop. aged 15+:					
Basic	1,268	64.4	9.03	30.1	81.1
Secondary	1,268	13.7	6.06	5.58	42.1
Vocational	1,268	20.0	3.59	10.5	32.9
Higher	1,268	1.90	1.72	0.20	16.9
Post-transition Parliamentary Elections					
Turnout (1990s), %	1,268	44.3	7.33	22.8	64.5
Turnout (2000s), %	1,268	43.7	5.28	28.9	68.3
Vote Share of UD (1990s), %	1,268	5.36	4.34	0.42	37.6
Vote Share of SLD (1990s), %	1,268	14.5	7.67	0.94	44.2
Vote Share of SLD (2000s), %	1,268	16.9	7.21	2.64	54.4
Vote Share of Solidarity (1990s), %	1,268	13.0	5.81	1.81	34.1
Vote Share of PiS (2000s), %	1,268	22.9	7.21	6.99	51.3
Vote Share of PiS+LPR (2000s), %	1,268	29.7	9.42	9.64	64.4
Vote Share of PO (2000s), %	1,268	14.9	8.26	1.35	52.3
Postwar Demographic and Economic Outcomes					
Population Density, Ln:					
1950	1,267	4.40	0.79	-0.74	7.97
1960	1,268	4.48	0.84	0.51	8.11
1970	1,268	4.52	0.89	1.43	8.18
Non-agricultural Population, % of Pop.:					
1950	1,267	27.7	25.4	0.00	99.0
1960	1,268	35.1	25.5	3.00	98.7
1970	1,268	45.8	23.7	6.38	98.7
Annual Population Growth, %:					
1946–1950	1,267	-1.42	3.62	-43.3	27.2
1950–1960	1,267	0.94	1.59	-2.98	28.9
1960–1970	1,268	0.36	1.09	-2.43	10.7

Notes: See Section A for data description and sources.

B.2 Balance Tests

Table B.3: Balance on Prewar Demographic, Ethnic, and Religious Characteristics

	RD Estimate (1)	N. (2)	Dep. Var. Mean S.D. (3) (4)	
A. Prewar Demographic Characteristics				
Male Population (1921), %	-0.290 (0.249)	577	48.2	1.06
Population Density (1931), Ln	0.075 (0.174)	717	4.63	0.77
Population Growth (1921–1931), Annual %	-0.143 (0.324)	718	1.43	1.92
Presence of Polish Intellectual Elites (1939)	0.021 (0.106)	1,268	0.44	0.50
B. Prewar Ethnic and Religious Characteristics				
Catholic Population (1921), %	-3.867 (4.139)	577	88.3	12.6
Jewish Population (1921), %	0.013 (2.879)	577	6.97	10.3
Polish Population (1921), %	-3.120 (3.667)	577	92.1	11.2
German Population (1921), %	2.660 (1.980)	577	2.98	8.02
Prewar Parish Priests (1938–39):				
Presence of Priest	0.018 (0.051)	718	0.96	0.19
Ln(1 + Number of Priests)	0.170 (0.127)	718	1.33	0.54
Number of Priests, per 1000 Pop. 1931	-0.021 (0.047)	535	0.28	0.18
Number of Priests, per 1000 Catholics	0.069 (0.053)	718	0.39	0.18

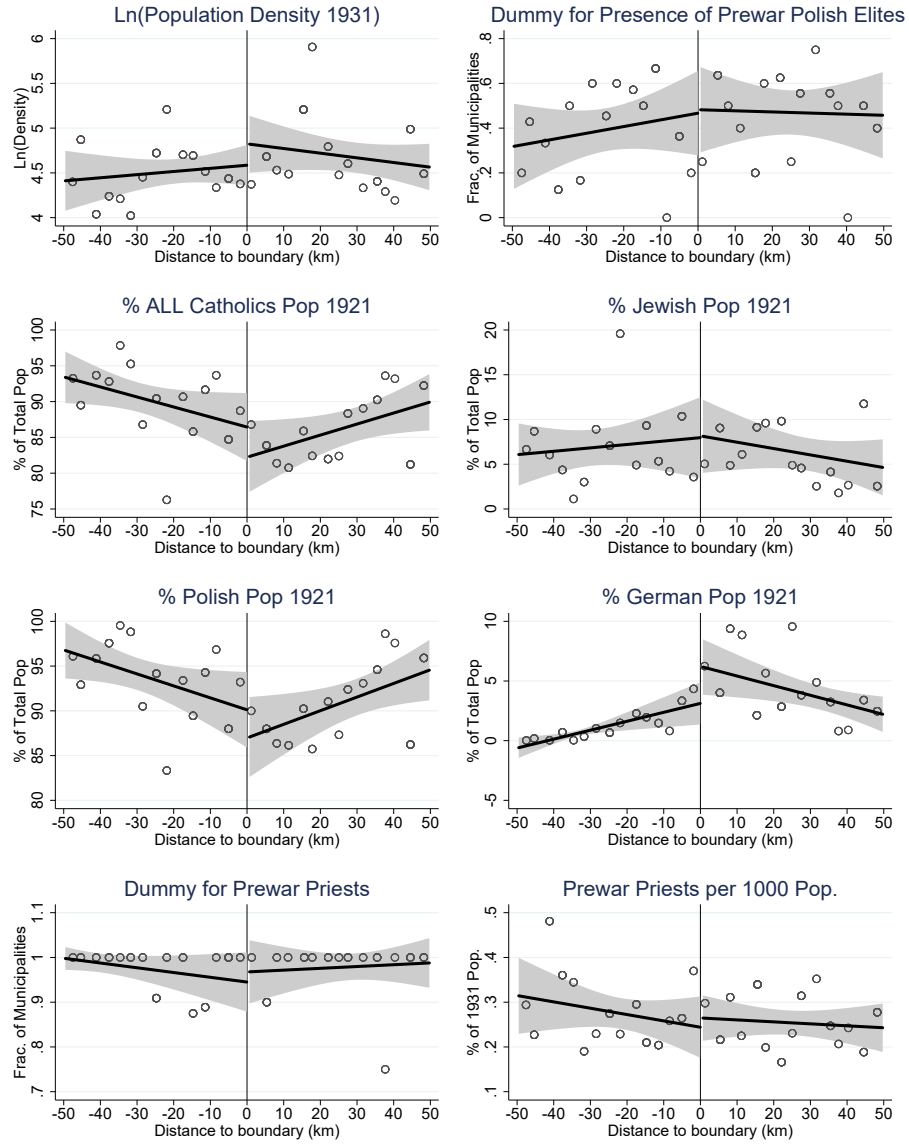
Notes: Standard errors are estimated using a heteroskedasticity–robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable as in Table B.1. Average regression bandwidths are 52km and 49.1km for Panel A and B, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table B.4: Balance on Prewar Electoral Outcomes and Other Covariates

	RD	N.	Dep. Var.	
	Estimate		Mean	S.D.
	(1)	(2)	(3)	(4)
A. Prewar Electoral Outcomes (1922–28)				
Turnout, %	-0.481 (0.926)	728	83.3	6.18
Vote Share of Endecja, %	-3.667 (4.618)	728	30.2	15.3
Vote Share of PPS, %	-3.048 (2.287)	728	15.5	10.8
Vote Share of BMN, %	3.709 (2.549)	728	8.54	9.85
B. Other Covariates				
Mean Altitude, m a.s.l.	-4.573 (12.807)	1,268	200	127
Mean Rainfall, mm	1.026 (5.929)	1,268	586	113
Mean Temperature, °C	0.015 (0.050)	1,268	7.95	0.53
Railroad Density (1939), km/km2	-0.036* (0.022)	1,268	0.07	0.10
Agricultural Land (1931), %	-4.474 (6.888)	717	65.9	25.7

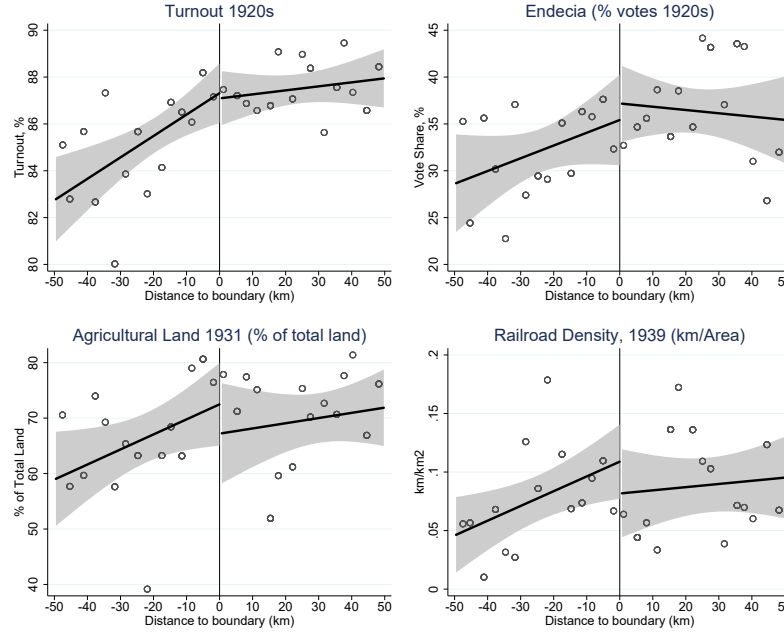
Notes: Standard errors are estimated using a heteroskedasticity–robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following Calonico, Cattaneo and Titiunik (2014a). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable as in Table B.1. Average regression bandwidths are 53.9km and 50.9km for Panel A and B, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Figure B.1: Prewar Demographic, Ethnic and Religious Characteristics Around the Warthegau-GG Border



Notes: The plots include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

Figure B.2: Prewar Electoral Characteristics and Other Covariates Around the Warthegau-GG Border



Notes: Electoral data corresponds to the 1922 and 1928 elections. The plots include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

B.3 Wartime Violence

Table B.5: Effect of Nazi Annexation on Wartime Violence and Postwar Population Structure

	RD Estimate (1)	N. (2)	Dep. Var. Mean S.D. (3) (4)	
A. Wartime Repression (1939–1945)				
i. Religious Persecution				
At Least One Local Priest:				
Arrested	0.760*** (0.084)	1,268	0.49	0.50
Killed	0.643*** (0.088)	1,268	0.35	0.48
Ln of 1+Number of Priests:				
Arrested	0.903*** (0.118)	1,268	0.56	0.68
Killed	0.707*** (0.101)	1,268	0.35	0.54
Percentage of Prewar Parish Priests:				
Arrested	60.452*** (9.056)	690	42.9	40.6
Killed	43.107*** (8.428)	690	27.8	34.6
ii. Other Repression Outcomes				
At Least One Local Teacher Killed:				
All	0.031 (0.098)	1,268	0.78	0.42
Jewish	0.021 (0.049)	1,268	0.04	0.20
Repressed	0.049 (0.105)	1,268	0.69	0.46
Ln of 1+Number of Local Teachers Killed:				
All	0.091 (0.196)	1,268	1.04	0.81
Jewish	0.097 (0.061)	1,268	0.05	0.30
Repressed	0.102 (0.200)	1,268	0.87	0.79
Presence of Atrocity Site	-0.125* (0.062)	1,268	0.90	0.30
B. Population Structure (1946–1950)				
Male Population, % of Pop.				
1946	-0.871** (0.343)	1,267	46.8	1.44
1950	0.035 (0.322)	1,267	47.3	1.38
Age Structure, % of 1946 Pop.:				
18 or under	0.437 (0.610)	621	38.3	3.06
18 to 59	-1.136* (0.583)	621	53.4	2.49

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable, as in Table B.2. Average regression bandwidths are 59.5km, 75km, and 55.9km for Panels A.i, A.ii, and B, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

B.4 Repression and Supply of Religion

Table B.6: Comparison of Priest Appointment Metrics

Metric	Warthegau	General Government	P-value
Average gap between priest appointments in 1939-45	3.66 years	0.13 years	< 0.001
Average length of priest tenure in 1945-89	10.41 years	11.36 years	0.39
Share of priests appointed in 1949-56	0.12	0.18	0.08
Number of municipalities	59	57	-

Notes: The analysis is based on parish histories within 50km of the border between the Warthegau and the General Government, collected from parish websites. We compute the average number of years between successive priest appointments for each parish and the average duration of priests appointment for each parish before and after the war. We also count the share of priests appointed between 1949 and 1956, the period when the Communist government sought to infiltrate the church by appointing the "patriot priests," to the total number of priests appointed in 1949-89.

Table B.7: Effect of Nazi Repression on Postwar Priest Supply

	RD	N.	Dep. Var.	
	Estimate		Mean	S.D.
	(1)	(2)	(3)	(4)
A. Diocesan Catalogues (1948)				
Presence of Priest	-0.017 (0.104)	389	0.94	0.24
Number of Priests, per 1000 1950 Pop.	-0.001 (0.141)	389	0.33	0.20
Ratio of Priests to Prewar Priests	0.019 (0.244)	369	0.98	0.41
B. Priest Census (1971)				
Presence of Priest	0.005 (0.063)	607	0.97	0.17
Number of Priests, per 1000 1970 Pop.	0.028 (0.061)	607	0.46	0.28
Mean Age of Priests	-1.242 (2.923)	589	45.4	6.69
Mean Years of Service of Priests	-0.776 (2.644)	589	18.7	6.26

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable as in Table B.2. Average regression bandwidths are 14.4km and 43.6km for Panel A and B, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

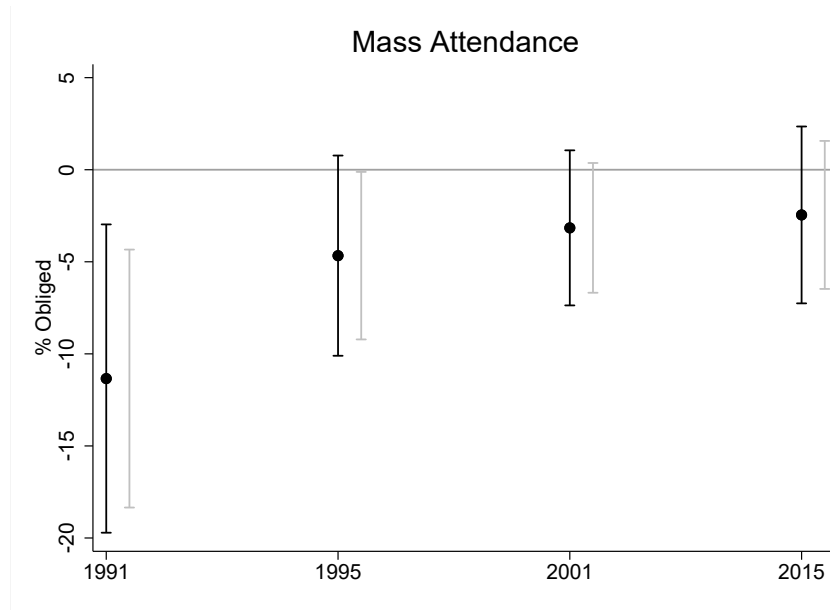
Table B.8: Relationship between Priest Repression and Religious Education in 1952

VARIABLES	Schools with Religious Education, %		
	(1)	(2)	(3)
Ln of 1+Number of Priests:			
Victimized	-4.512*		
	(2.668)		
Arrested		-4.507*	
		(2.544)	
Killed			-5.169**
			(2.571)
Observations		189	
Sample	All German Occupied Areas		
Baseline Covariates		Yes	
Mean (Dep. Var.)		53.93	
SD (Dep. Var.)		33.31	

Notes: Unit of observation are counties in 1952. Table reports estimates and robust standard errors from regressions which control for the natural logarithm of the population in 1931, the share of Catholic population in 1921, an indicator variable for urban counties, and indicator variables for former Russian and Prussian partitions. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

B.5 Repression and Religious Participation

Figure B.3: Effect of Repression on Church Attendance by Survey Year



Notes: Mass attendance is defined as the percentage of those obliged who attended Mass. The plot includes both 95% and 90% confidence intervals estimated using robust standard errors.

Table B.9: Effects of Nazi Repression on Post-Transition Religious Participation

	RD	N.	Dep. Var.	
	Estimate		Mean	S.D.
	(1)	(2)	(3)	(4)
<hr/>				
Mass Attendance, % of Obligated:				
1991 - 2015 Average	-6.875*** (2.097)	1,261	51.9	15.2
1991	-11.342** (4.271)	1,123	53.8	19.6
1995	-4.667 (2.774)	1,228	53.7	16.9
2001	-3.158 (2.148)	1,249	52.8	16.0
2015	-2.455 (2.450)	1,231	46.2	14.6

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable as in Table B.2. Average regression bandwidth is 80.2km. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

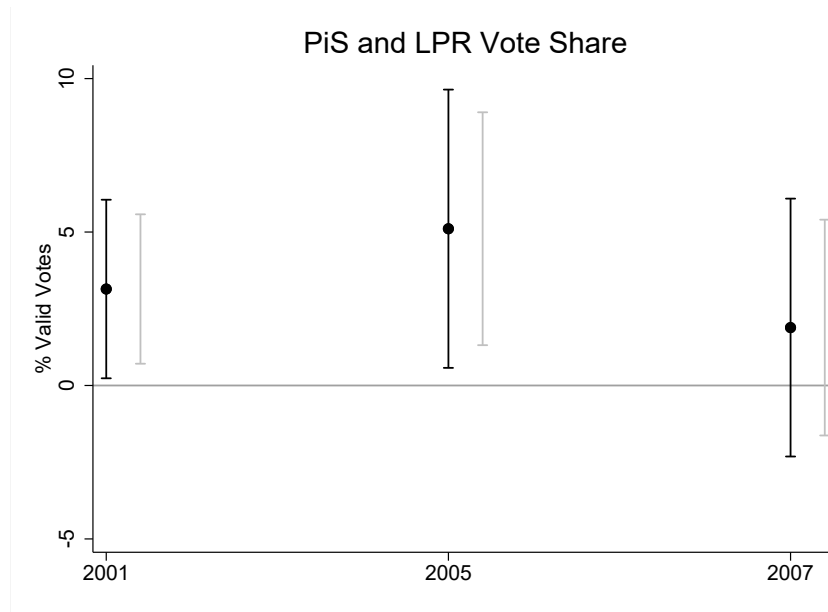
Table B.10: Relationship between Priest Repression and Mass Attendance

VARIABLES	Mass Attendance, % of Obligated		
	1991–2015	1991	1995
	(1)	(2)	(3)
% Victimized Parish Priests	-0.031* (0.018)	-0.055* (0.029)	-0.045* (0.026)
Observations	353	349	351
Sample		Warthegau	
Baseline Covariates		Yes	
Mean (Dep. Var.)	47.88	53.70	49.15
SD (Dep. Var.)	12.93	19.89	14.36

Notes: Table reports estimates and robust standard errors from regressions which control for the logarithm of 1938 Catholic population, 1939 railroad density, the logarithm of the distance to Lodz and Poznan, and an indicator variable for Prussian possessions. Column 1 corresponds to the average across multiple years: 1991, 1995, 2001, and 2015. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

B.6 Repression and Electoral Outcomes

Figure B.4: Effect of Repression on PiS and LPR Support by Election Year



Notes: Voteshare is defined as the percentage of valid votes. The plot includes both 95% and 90% confidence intervals estimated using robust standard errors.

Table B.11: Long-term Effects of Nazi Repression on Voter Behavior in Parliamentary Elections

	RD Estimate (1)	N. (2)	Dep. Var. Mean S.D. (2) (3)	
A. 1990s Parliamentary Elections (1991, 1993, 1997)				
Party Vote Shares, % of valid votes:				
Democratic Union - UD (1991-1993)	0.455 (0.837)	1,268	5.36	4.34
Democratic Left Alliance - SLD	0.288 (1.350)	1,268	14.5	7.67
Solidarity - NSZZ/AWS	0.926 (1.261)	1,268	13.0	5.81
Turnout, %	-0.783 (1.301)	1,268	44.3	7.33
B. 2000s Parliamentary Elections (2001, 2005, 2007)				
Party Vote Shares, % of valid votes:				
Democratic Left Alliance - SLD	-0.093 (1.415)	1,268	16.9	7.21
Civic Platform - PO	2.922 (1.825)	1,268	14.9	8.26
Law and Justice - PiS	2.903*** (1.075)	1,268	22.9	7.21
PiS+League of Polish Families-LPR	3.402** (1.513)	1,268	29.7	9.42
Turnout, %	-1.439 (1.122)	1,268	43.7	5.28

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable as in Table B.2. Average regression bandwidths are 73.4km and 67.6km for Panel A and B, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table B.12: Relationship between Priest Repression, Creation of Martyrs and Nationalist Support

VARIABLES	PiS+LPR Vote Share, % of Valid Votes			
	2001–2007	2005		
	(1)	(2)	(3)	(4)
% Victimized Parish Priests	0.006 (0.007)	0.023* (0.012)		
Dummy for Priest Memorial			1.734* (0.968)	
Dummy for 108 Martyrs				2.625** (1.274)
Observations	353	353	355	355
Sample		Warthegau		
Baseline Covariates		Yes		
Mean (Dep. Var.)	22.42	24.78	24.77	24.77
SD (Dep. Var.)	4.74	7.06	7.05	7.05

Notes: Table reports estimates and robust standard errors from regressions which control for the logarithm of 1938 Catholic population, 1939 railroad density, the logarithm of the distance to Lodz and Poznan, and an indicator variable for Prussian possessions. Column 1 corresponds to the average vote share across multiple years: 2001, 2005, and 2007. Columns 3 and 4 include an indicator variable for whether a priest memorial was built in the municipality and an indicator variable for whether one of the 108 Catholic Martyrs of WWII resided in the municipality, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

B.7 Robustness

Table B.13: Effects of Nazi Repression on Wartime Violence and Postwar Religiosity Under Different Specifications

RD Estimates										N.	Dep. Var.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Mean (11)	SD (12)
A. Wartime Repression (1939–1945)												
At least One Local:												
Priest Arrested	0.760*** (0.084)	0.757*** (0.098)	0.786*** (0.080)	0.678*** (0.0690)	0.782*** (0.086)	0.761*** (0.072)	0.778*** (0.101)	0.768*** (0.093)	0.735*** (0.068)	1268	0.49	0.50
Priest Killed	0.643*** (0.088)	0.618*** (0.104)	0.661*** (0.111)	0.618*** (0.0764)	0.644*** (0.082)	0.642*** (0.105)	0.640*** (0.130)	0.643*** (0.120)	0.640*** (0.084)	1268	0.35	0.48
Atrocity Site	-0.125* (0.062)	-0.145* (0.081)	-0.150** (0.060)	-0.0656 (0.0530)	-0.128* (0.062)	-0.125** (0.055)	-0.156* (0.072)	-0.124 (0.062)	-0.095** (0.052)	1268	0.90	0.30
Teacher Killed (Repression)	0.049 (0.105)	0.058 (0.114)	0.116 (0.140)	0.0316 (0.0917)	0.049 (0.103)	0.053 (0.103)	0.101 (0.142)	0.141 (0.155)	0.049 (0.105)	1268	0.69	0.46
Ln of 1+Number of Priests:												
Arrested	0.903*** (0.118)	0.912*** (0.116)	0.878*** (0.117)	0.890*** (0.106)	0.936*** (0.111)	0.905*** (0.117)	0.851*** (0.151)	0.872*** (0.125)	0.925*** (0.101)	1268	0.56	0.68
Killed	0.707*** (0.101)	0.697*** (0.115)	0.683*** (0.113)	0.689*** (0.0956)	0.729*** (0.098)	0.713*** (0.115)	0.646*** (0.138)	0.674*** (0.116)	0.715*** (0.093)	1268	0.35	0.54
Percentage of Prewar Parish Priests:												
Arrested	60.452*** (9.056)	64.089*** (9.329)	57.551*** (10.598)	67.63*** (5.897)	59.148*** (9.384)	62.015*** (8.409)	55.582*** (11.600)	60.352*** (9.098)	66.968*** (6.390)	690	42.9	40.6
Priest Killed	43.107*** (8.428)	44.280*** (9.656)	41.405*** (8.590)	49.59*** (5.972)	42.098*** (8.585)	40.594*** (6.373)	36.958*** (10.739)	41.966*** (8.647)	48.527*** (6.147)	690	27.8	34.6
B. Religiosity												
Mass Attendance, % of Obligated												
1991 - 2015 Average	-6.875*** (2.097)	-8.302*** (2.594)	-5.053 (2.422)	-5.937*** (1.850)	-7.098*** (2.118)	-6.486** (2.440)	-3.362 (3.574)	-4.906 (3.056)	-6.988 (2.015)	1261	51.9	15.2
1991	-11.342** (4.271)	-14.766** (4.800)	-10.665** (3.500)	-10.59*** (2.729)	-11.967** (4.167)	-11.399* (4.705)	-10.041 (5.285)	-10.587 (5.008)	-12.916** (3.227)	1123	53.8	19.6
1995	-4.667 (2.774)	-6.330* (2.890)	-4.548 (3.071)	-4.520* (2.584)	-4.919 (2.637)	-4.348 (2.919)	-0.536 (4.832)	-2.395 (4.109)	-4.765 (2.708)	1228	53.7	16.9
2001	-3.158 (2.148)	-4.172 (2.994)	-1.379 (2.364)	-3.709* (2.012)	-2.297 (2.485)	-3.199 (2.829)	0.267 (3.427)	-1.380 (3.042)	-3.886 (1.997)	1249	52.8	16.0
2015	-2.455 (2.450)	-4.782 (2.668)	-2.551 (2.390)	-3.126* (1.842)	-3.666 (2.219)	-2.243 (2.642)	-0.168 (3.390)	-2.231 (2.668)	-4.513 (1.884)	1231	46.2	14.6
Estimation	RDR	RDR	RDR	OLS	RDR	RDR	RDR	RDR	RDR			
Dist. Polynomial Order	1st	1st	1st	1st	1st	1st	2nd	1st	1st			
Baseline Covariates	No	No	Yes	Lat/Long	Rail Den.	No	No	No	No			
Bandwidth (km)	CCT	CCT	CCT	100km	CCT	CCT	CCT	50km	100km			
Standard Errors	NN	NN	NN	Robust	NN	NN Cluster	NN	NN	NN			
Sample	All	No Splits	All	All	All	All	All	All	All			

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor (NN) variance estimator unless specified otherwise. Column 1 reports our baseline RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Colaninico, Cattaneo and Titiunik \(2014a\)](#). Columns 2 to 8 show our estimates under different specifications: (2) excludes border municipalities which are significantly split by the border (at least 20% of their area is in the opposite zone); (3) controls for a broad set of covariates (latitude, longitude, dummy for urban municipalities, distance to Lodz, mean altitude, rainfall and temperature - results for covariates are not reported by the RD package as these do not have substantive meaning); (4) OLS estimates for a Warthegau indicator variable in a regression that controls for a second-order polynomial of latitude and longitude and a split first-order polynomial for distance to the boundary, and restricts the estimation to observations within 100km of the border; (5) controls for railroad density in 1939; (6) clusters errors using the cluster-robust nearest-neighbor estimator with errors clustered at the powiat level; (7) uses a second-order polynomial, (8) uses a 50km bandwidth; and (9) uses a 100km bandwidth. Column 9 shows the number of observations available. Columns 10 and 11 present the mean and standard deviation for the corresponding variable as in Table B.2. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table B.14: Effects of Nazi Repression on Postwar Education and Voter Behavior Under Different Specifications

	RD Estimates									N.	Dep. Var.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Mean	SD
A. Education												
Education Level, Avg. % of Pop. aged 15+ (1970–1988)												
Basic	-0.426 (1.864)	-0.591 (2.074)	1.523 (1.475)	0.559 (1.692)	-1.351 (1.572)	-0.105 (1.960)	0.829 (2.357)	0.536 (2.054)	-0.327 (1.623)	1268	64.4	9.03
Secondary	1.547 (1.282)	1.921 (1.439)	0.208 (0.959)	0.804 (1.169)	2.210* (1.022)	1.506 (1.252)	0.459 (1.540)	0.628 (1.381)	1.597 (1.131)	1268	13.7	6.06
Vocational	-1.731** (0.595)	-2.058** (0.658)	-1.505** (0.641)	-1.585*** (0.565)	-1.570** (0.597)	-1.747** (0.701)	-1.321 (0.816)	-1.527 (0.682)	-1.821** (0.517)	1268	20.0	3.59
Higher	0.550 (0.293)	0.662* (0.337)	0.189 (0.207)	0.221 (0.304)	0.661** (0.250)	0.543 (0.301)	0.580 (0.329)	0.363 (0.292)	0.551* (0.266)	1268	1.90	1.72
B. Voter Behavior												
Party Vote Shares, % of valid votes:												
UD (1990s)	0.455 (0.837)	0.640 (0.969)	-0.192 (0.544)	-0.357 (0.669)	0.784 (0.797)	0.495 (1.051)	0.219 (1.060)	0.142 (0.938)	0.183 (0.688)	1268	5.36	4.34
SLD (1990s)	0.288 (1.350)	0.448 (1.426)	-0.081 (1.041)	0.447 (1.261)	0.901 (1.342)	0.250 (2.161)	1.151 (2.061)	0.882 (1.764)	0.296 (1.344)	1268	14.5	7.67
SLD (2000s)	-0.093 (1.415)	0.002 (1.569)	-0.923 (1.273)	-0.705 (1.157)	0.421 (1.459)	-0.097 (1.955)	-0.181 (2.371)	-0.129 (1.964)	-0.127 (1.383)	1268	16.9	7.21
Solidarity (1990s)	0.926 (1.261)	1.174 (1.523)	1.475 (1.104)	0.179 (0.805)	1.226 (1.324)	0.845 (1.830)	1.395 (1.691)	1.046 (1.476)	0.303 (0.982)	1268	13.0	5.81
PiS (2000s)	2.903*** (1.075)	3.003** (1.433)	4.223*** (0.913)	2.021** (0.848)	3.006*** (1.085)	2.729* (1.629)	3.189** (1.252)	2.591 (1.371)	2.169** (0.884)	1268	22.9	7.21
PiS+LPR (2000s)	3.402** (1.513)	3.652* (1.958)	4.941*** (1.138)	2.481** (1.025)	3.524** (1.481)	3.460 (2.162)	3.676** (1.633)	2.887 (1.794)	2.480** (1.166)	1268	29.7	9.42
PO (2000s)	2.922 (1.825)	3.649* (2.052)	2.069 (1.272)	0.974 (1.442)	3.539* (1.697)	3.325 (2.810)	3.930 (2.043)	2.178 (1.982)	2.776* (1.444)	1268	14.9	8.26
Estimation	RDR	RDR	RDR	OLS	RDR	RDR	RDR	RDR	RDR			
Dist. Polynomial Order	1st	1st	1st	1st	1st	1st	1st	2nd	1st			
Baseline Covariates	No	No	Yes	Lat/Long	Rail Den.	No	No	No	No			
Bandwidth (km)	CCT	CCT	CCT	100km	CCT	CCT	CCT	50km	100km			
Standard Errors	NN	NN	NN	Robust	NN	NN Cluster	NN	NN	NN			
Sample	All	No Splits	All	All	All	All	All	All	All			

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor (NN) variance estimator unless specified otherwise. Column 1 reports our baseline RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Columns 2 to 8 show our estimates under different specifications: (2) excludes border municipalities which are significantly split by the border (at least 20% of their area is in the opposite zone); (3) controls for a broad set of covariates (latitude, longitude, dummy for urban municipalities, distance to Lodz, mean altitude, rainfall and temperature - results for covariates are not reported by the RD package as these do not have substantive meaning); (4) OLS estimates for a Warthegau indicator variable in a regression that controls for a second-order polynomial of latitude and longitude and a split first-order polynomial for distance to the boundary, and restricts the estimation to observations within 100km of the border;(5) controls for railroad density in 1939; (6) clusters errors using the cluster-robust nearest-neighbor estimator with errors clustered at the powiat level; (7) uses a second-order polynomial, (8) uses a 50km bandwidth; and (9) uses a 100km bandwidth. Columns 9 shows the number of observations available. Columns 10 and 11 present the mean and standard deviation for the corresponding variable as in Table B.2. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

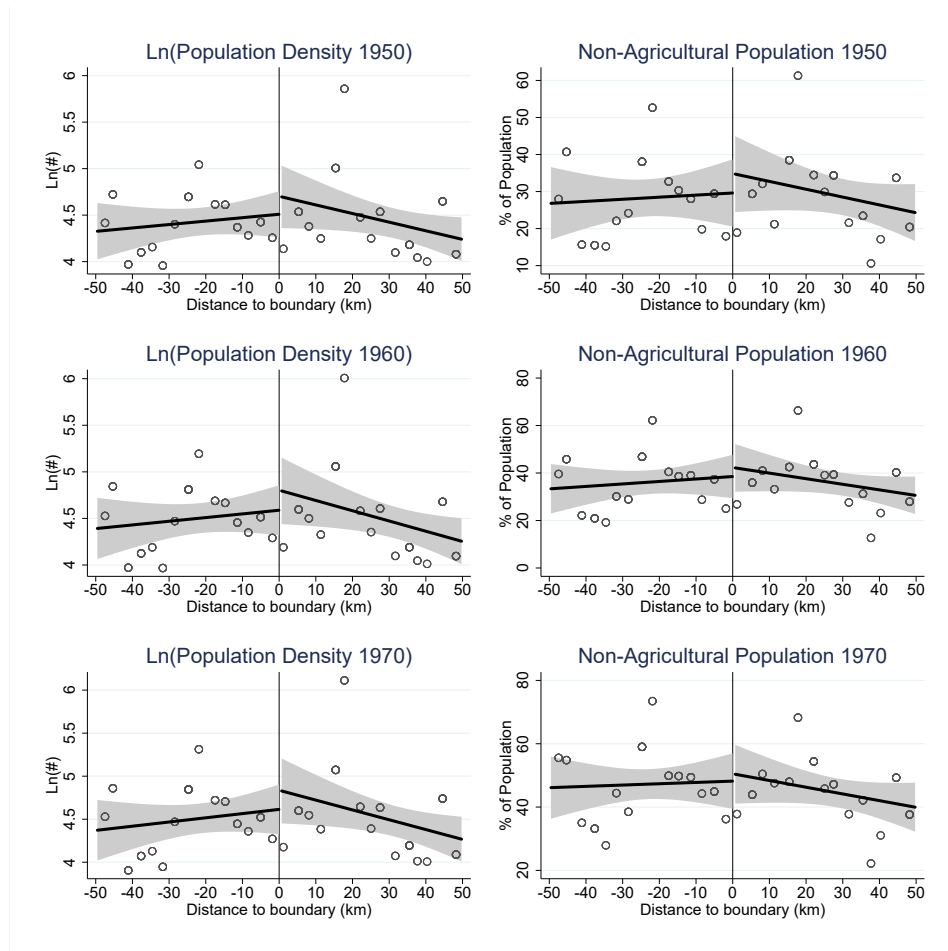
Table B.15: Effects of Nazi Repression and Simulated P-Values for Main Outcomes

	RD Estimate (1)	Simulated P-Value (2)	N. (3)	Dep. Mean (4)	Var. S.D. (5)
A. Wartime Repression (1939 - 1945)					
At Least One Local:					
Priest Arrested	0.760*** (0.084)	0.00	1268	0.49	0.50
Priest Killed	0.643*** (0.088)	0.00	1268	0.35	0.48
Teacher Killed (Repression)	0.049 (0.105)	0.40	1268	0.69	0.46
Ln of 1+Number of:					
Priest Arrested	0.903*** (0.118)	0.00	1268	0.56	0.68
Priest Killed	0.707*** (0.101)	0.00	1268	0.35	0.54
Teacher Killed (Repression)	0.102 (0.200)	0.51	1268	0.87	0.79
B. Religiosity					
Mass Attendance, % of Obligated:					
1991 - 2015 Average	-6.875*** (2.097)	0.01	1261	51.9	15.2
1991	-11.342** (4.271)	0.01	1123	53.8	19.6
C. Voter Behavior (2001, 2005, 2007)					
Party Vote Shares, % of valid votes:					
PiS	2.903*** (1.075)	0.08	1268	22.9	7.21
PiS+LPR	3.402** (1.513)	0.09	1268	29.7	9.42
PO	2.922 (1.825)	0.12	1268	14.9	8.26

Notes: Column 1 reports our baseline RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Column 2 presents simulated p-values based on 201 placebo assignment variables which split our sample municipalities into East (control) and West (treatment) regions. We compute these assignment variables by calculating the distance from a municipality to a longitudinal line that runs through the city of Łódź, and then adding/subtracting 50km in 0.5km increments. This exercise is similar, though not equivalent, to calculating distances to 201 longitudinal lines. Column 3 shows the number of observations available. Columns 4 and 5 present the mean and standard deviation for the corresponding variable as in Table B.2. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

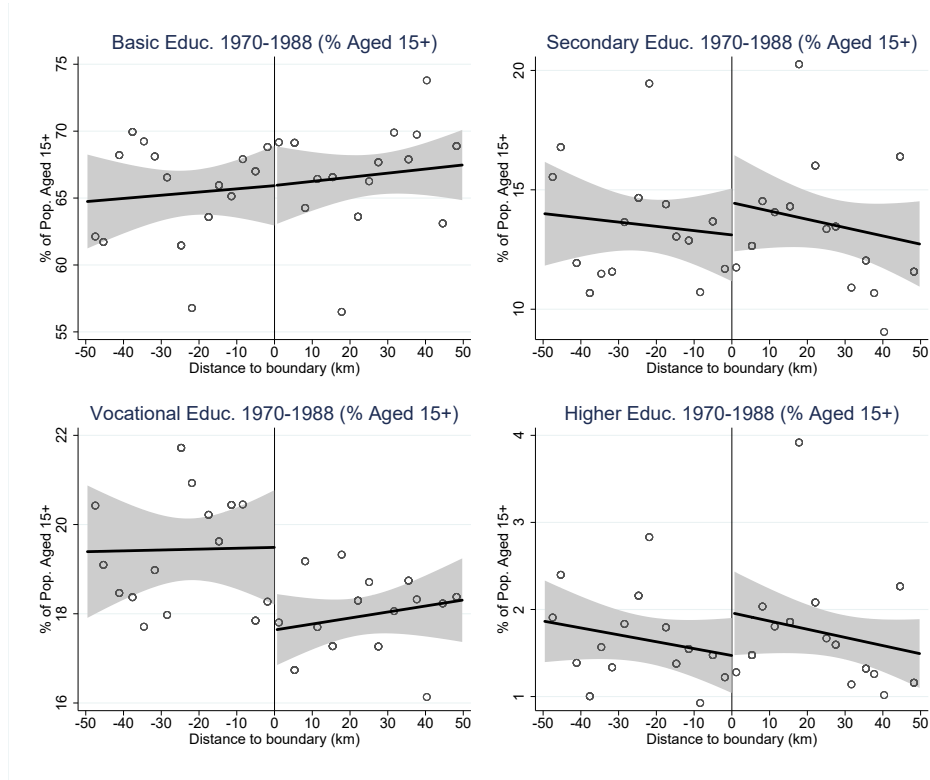
B.8 Alternative Explanations

Figure B.5: Effect of Nazi Repression on Population Density and Non-Agricultural Population (1950 - 1970)



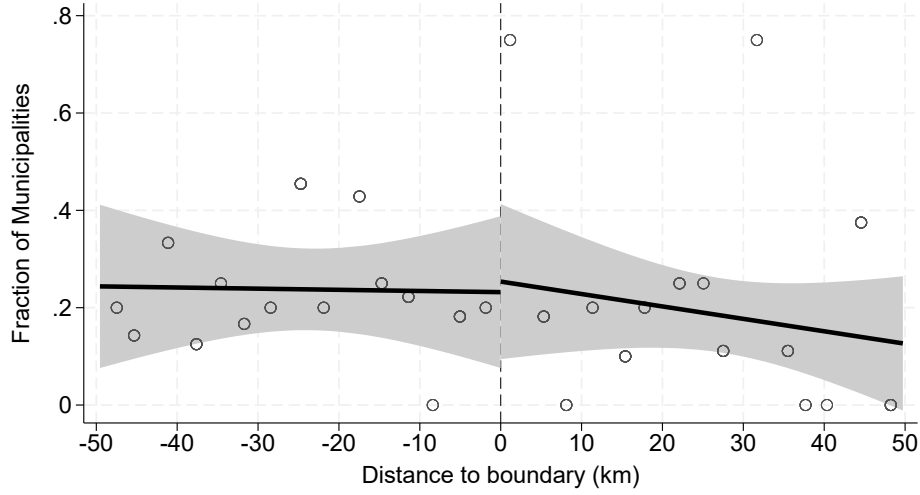
Notes: The graphs on the left plot the natural logarithm of population density and the graphs on the right plot the non-agricultural population as a percentage of total population in 1950, 1960 and 1970, respectively. These include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

Figure B.6: Effect of Nazi Repression on Postwar Education Levels



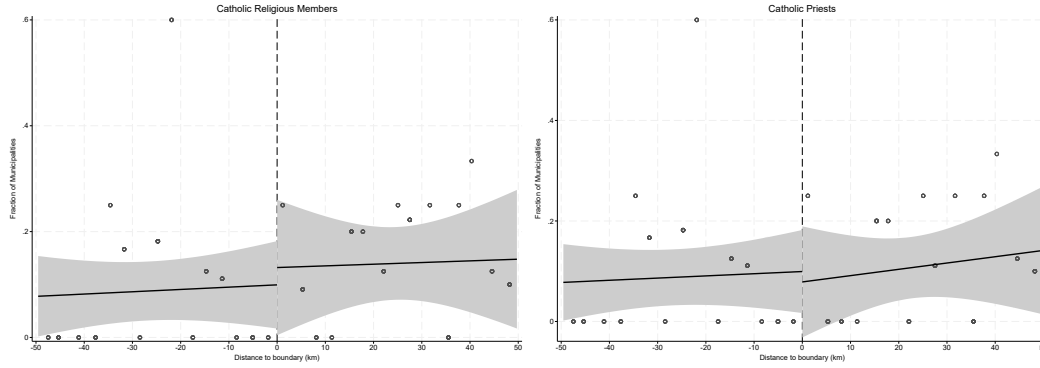
Notes: From the top, left to right, the graphs plot the share of adults aged 15 plus - with at least basic education- that have at most basic, secondary, vocational, and higher education, respectively. Shares are averages for the three pre-transition years for which information is available. These include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

Figure B.7: Effect of Nazi Repression on Communist Infiltration of the Church



Notes: The graph plots the fraction of municipalities with at least one "patriot priest" in 1951. It includes a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

Figure B.8: Effect of Nazi Repression on Communist Religious Repression



Notes: The graphs plot the fraction of municipalities with at least one Catholic religious member repressed (left) and at least one Catholic priest repressed (right) in 1945-89. These include a linear fit on each side of the treatment cutoff, and 95% confidence intervals (in grey) estimated using robust standard errors.

Table B.16: Relationship between Priest Repression and the Expulsions of Poles in 1940-44

VARIABLES	Expulsions	
	Ln (1)	% of Catholics (2)
% Victimized Parish Priests	0.001 (0.002)	0.033 (0.022)
Observations	264	264
Sample	Warthegau	
Baseline Covariates	Yes	
Mean (Dep. Var.)	5.94	9.33
SD (Dep. Var.)	1.22	10.88

Notes: Table reports estimates and robust standard errors from regressions which control for the logarithm of 1938 Catholic population, 1939 railroad density, the logarithm of the distance to Lodz and Poznan, and an indicator variable for Prussian possessions. The dependent variable in Columns 1 and 2 are the natural logarithm of the number of expelled Poles plus 1, and the share of expelled Poles as a percentage of the Catholic population in 1938, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table B.17: Effects of Nazi Repression in Zichenau

	RD Estimate (1)	N (2)	Dep. Var. Mean S.D. (3) (4)	
A. Wartime Repression (1939–1945)				
i. Religious Persecution				
At Least One Local Priest:				
Arrested	0.237 (0.177)	1,021	0.34	0.47
Killed	0.237 (0.150)	1,021	0.19	0.39
Ln of 1+Number of Priests:				
Arrested	0.259 (0.193)	1,021	0.33	0.55
Killed	0.215 (0.134)	1,021	0.17	0.39
ii. Other Repression Outcomes				
At Least One Local Teacher Killed:				
All	0.116 (0.125)	1,021	0.74	0.44
Repressed	0.145 (0.171)	1,021	0.65	0.48
Ln of 1+Number of Local Teachers Killed:				
All	0.213 (0.258)	1,021	0.96	0.79
Repressed	0.182 (0.276)	1,021	0.79	0.77
B. Religiosity				
Mass Attendance, % of Obligated:				
1991 - 2015 Average	0.289 (2.673)	1,015	52.1	15.7
1991	-0.096 (3.269)	864	52.4	19.0
C. Voter Behavior (2001, 2005, 2007)				
Party Vote Shares, % of valid votes:				
PiS	-0.338 (1.431)	1,021	24.7	6.88
PiS+LPR	-0.149 (1.987)	1,021	32.0	9.11
PO	-4.712 (3.634)	1,021	13.6	7.86

Notes: Column 1 reports our RD estimates and standard errors for the effect of Nazi Repression in Zichenau relative to the General Government using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor (NN) variance estimator. Column 2 shows the number of observations available in the Zichenau-General Government sample. Columns 3 and 4 present the mean and standard deviation for the corresponding variable in the sample that includes municipalities in the General Government and Zichenau. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table B.18: Effects of Nazi Repression on Population Density, Non-agricultural Population, and Population Growth

	RD	N.	Dep. Var.	
	Estimate (1)		Mean (3)	S.D. (4)
Population Density, Ln:				
1950	0.146 (0.173)	1,267	4.40	0.79
1960	0.166 (0.183)	1,268	4.48	0.84
1970	0.183 (0.196)	1,268	4.52	0.89
Non-agricultural Population, % of Pop.:				
1950	5.132 (6.166)	1,267	27.7	25.4
1960	4.156 (6.138)	1,268	35.1	25.5
1970	2.532 (5.927)	1,268	45.8	23.7
Annual Population Growth, %:				
1946–1950	0.219 (0.647)	1,267	-1.42	3.62
1950–1960	0.168 (0.224)	1,267	0.94	1.59
1960–1970	0.167 (0.185)	1,268	0.36	1.09
Local-Born Population (1988), % of Pop.	-4.259 (2.148)	1,242	67.3	11.0
Pre-1971 Migrant Populaion (1988), % of Pop.	-0.065 (1.262)	1,242	13.7	4.79

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable as in Table B.2. Average regression bandwidth is 74.7km. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

Table B.19: Long-term Effects of Nazi Repression on Education Levels

	RD	N.	Dep. Var.	
	Estimate (1)	(2)	Mean (3)	S.D. (4)
Education Level, % of Pop. aged 15+ with at least basic education				
A. 1970 Census				
Basic	0.161 (1.703)	1,268	74.9	8.62
Secondary	1.504 (1.050)	1,268	10.63	5.19
Vocational	-2.127*** (0.654)	1,268	13.4	3.75
Higher	0.383* (0.186)	1,268	1.11	1.25
B. 1978 Census				
Basic	-0.656 (1.999)	1,268	63.8	9.64
Secondary	1.556 (1.363)	1,268	13.5	6.44
Vocational	-1.569* (0.684)	1,268	20.9	3.96
Higher	0.631* (0.314)	1,268	1.79	1.71
C. 1988 Census				
Basic	-0.765 (2.031)	1,268	54.5	9.46
Secondary	1.551 (1.473)	1,268	17.0	6.79
Vocational	-1.486 (0.777)	1,268	25.7	4.35
Higher	0.599 (0.396)	1,268	2.79	2.25

Notes: Standard errors are estimated using a heteroskedasticity-robust nearest-neighbor variance estimator. Column 1 reports the conventional RD estimates and standard errors for the treatment effect using a first-order polynomial and no covariates. Significance levels are based on the bias-corrected confidence intervals following [Calonico, Cattaneo and Titiunik \(2014a\)](#). Column 2 shows the number of observations available. Columns 3 and 4 present the mean and standard deviation for the corresponding variable as in [Table B.2](#). Average regression bandwidths are 69.5km, 69.3km and 67.5km for Panel A, B and C, respectively. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$