Online Appendix to
"Elite Influence? Religion and the Electoral Success of the Nazis"

Contents

List of Figures

List of Tables

Appendix A: Historical Background

With Germany's defeat in World War I came the end of her monarchy. Although the ensuing revolution resulted in the signing of a democratic constitution, the Weimar Republic was off to a bad start (see Appendix Table A.10 for a list of key events that led to its eventual downfall). Public outrage over the Treaty of Versailles, the beginnings of a severe post-war inflation as well as several coup attempts and political assassinations all dragged the Republic into turmoil. As Appendix Figure A.3 shows, support for democratic parties dwindled from more than 80% in January of 1919 to only about 50% in the May elections of 1924. Primary beneficiaries of the various crises were radical parties on both ends of the political spectrum.

One of them was the National Socialist Workers Party (NSDAP). Founded in 1919, the Nazi Party was initially little more than one amongst many in the *völkisch*, anti-Semitic milieu of Munich. With Adolf Hitler, its 55th member and primary agitator, behind bars (due to a failed coup attempt in 1923), the NSDAP even merged with the German Völkisch Freedom Party (DVFP) to file a joint list for the party's first two national elections in 1924.

Following the end of hyperinflation and aided by the Dawes Plan (which temporarily reduced Germany's reparation payments), economic conditions steadily bettered over the course of 1924. When snap elections became necessary in December of the same year, radical parties lost support, while their democratic counterparts experienced considerable gains.

Notwithstanding parties' inability (or unwillingness) to compromise and despite multiple changes to the governing coalition (which never had a secure majority), the economic and political situation continued to improve. Parliament served the full legislative term, and the period between 1924 and 1929 became known as the Republic's "Golden Era."

After Hitler's release from prison and with the ban on the Nazi Party lifted in February 1925, the Nazi movement began to regroup. In a radical change of strategy, Hitler was now determined to ascend to power legally, i.e. by winning elections. Yet, the NSDAP remained insignificant, achieving only 2.6% of the popular vote (and 2.0% of all eligible voters) in 1928.[1]

All of this changed when Germany's ongoing economic and political stabilization came to an abrupt halt. Due to the onset of the Great Depression, American banks withdrew short-term loans on which German companies had been relying during the upturn, industrial production declined by over 40%, and unemployment skyrocketed to a peak of about 6 million (i.e., more than one in four workers) during the winter of 1932. Unable to effectively deal with the problem of rising unemployment, the Weimar Republic's last democratically governing cabinet stepped down in March of 1930.

The following September election saw landslide gains for the NSDAP. With a vote share of 18.3%—more than seven times its previous result—the Nazis became the second largest faction in parliament. Even contemporaries were surprised by NSDAP's sudden success.

[1]Due to proportionality rule with no minimum threshold, the NSDAP was still able to win 12 seats in the *Reichstag*.

Since radical parties had won the majority of seats, Heinrich Brüning, who had been Chancellor since March of the same year, circumvented the legislative prerogative of the *Reichstag* and instead governed through the use of emergency decrees (according to Article 48 of the Weimar Constitution)—as would his successors.

In light of worsening economic conditions and increasing radicalization of the political climate, the extremist KPD and NSDAP won over half of all votes in July of 1932. For the NSDAP this meant a doubling of its vote share from two years prior.

The subsequent November elections delivered hope for the embattled democracy. For the first time since 1928, the NSDAP actually lost support. Although the Nazis still constituted the largest faction in parliament, observers saw the party in decline—especially since the economy showed first signs of improvement.

Ironically, just two months later, General von Schleicher was forced to step down as *Reichskanzler*. Fearing a military coup under von Schleicher's leadership and urged by his group of advisors, President von Hindenburg named Hitler the new Chancellor on January 30, 1933.

Aided by the Reichstag Fire Decree, which suspended most civil liberties, and with the help of the police apparatus (which was under the control of Hermann Göring, then Prussian Minister of the Interior), the Nazis started to persecute political enemies within a month after Hitler took office. Nevertheless, the NDSAP was unable to achieve an absolute majority in the Republic's last election. While many KPD and SPD candidates had been imprisoned or had fled the country, voters could still choose from all major parties and cast their ballots in secret.[2] Together, Communists and Social Democrats received more than 30% of votes. With 43.9%, however, the Nazi Party was by far the largest faction in parliament. On March 23, 1933, the newly constituted Reichstag passed the Enabling Act, which sealed the end of the Weimar Republic.

Appendix B: Ecological Inference with Instrumental Variables

In this appendix, we reproduce the argument of Spenkuch (2017), who shows that instrumental variable (IV) techniques are not only useful for dealing with omitted variables bias, but that they can also solve the ecological inference problem. To see this, assume a data generating process of the following form:

$$y_i = \tau C_i + \varepsilon_i, \tag{A.1}$$

where i indexes individuals and y_i denotes the outcome of interest, e.g., whether i voted for the NSDAP. C_i is an indicator variable equal to one if and only if i belongs to group C, i.e., Catholics. For simplicity, suppose that the residuals, ε_i, are independently distributed and uncorrelated with C_i. By construction, τ measures the (*un*conditional) difference in the outcome between members of group C and nonmembers. If such individual-level data were available, then estimating τ would be straightforward.

[2]Irregularities in vote counts, etc. are believed to have been minor (see Bracher et al. 1960).

The ecological inference problem arises whenever the econometrician is constrained to analyzing aggregate data. In many applications the available data are averages at, say, the county, district, or municipality level. In this paper, for instance, we only know aggregate vote shares and the fraction of voters who are Catholic. That is, we observe

$$\begin{array}{rccccc} & \frac{1}{N_c}\sum_{i=1}^{N_c} y_i & = & \tau \frac{1}{N_c}\sum_{i=1}^{N_c} C_i & + & \frac{1}{N_c}\sum_{i=1}^{N_c} \varepsilon_i \\ \Rightarrow & \overline{y}_c & = & \tau \overline{C}_c & + & \overline{\varepsilon}_c \end{array} \tag{A.2}$$

where c indexes counties and upper bars denote county-level means.

Simply regressing $\overline{C}_c$ on $\overline{y}_c$ yields a point estimate with probability limit

$$\operatorname{plim} \widehat{\tau}_{OLS} = \tau + \frac{\operatorname{Cov}\left(\overline{C}_c, \overline{\varepsilon}_c\right)}{\operatorname{Var}\left(\overline{C}_c\right)}.$$

Hence, an ecological regression recovers τ, the true individual-level parameter, *if and only if* $\overline{C}_c$ and $\overline{\varepsilon}_c$ are uncorrelated (see also King 1997, ch. 3).

Even if the covariance between regressor and residual is equal to zero in the individual-level data, i.e., if $\operatorname{Cov}(C_i, \varepsilon_i) = 0$, it need not be the case that the same holds true in the aggregate. Since $\operatorname{Cov}\left(\overline{C}_c, \overline{\varepsilon}_c\right) = \frac{1}{N^2}\sum_i \sum_j \operatorname{Cov}(C_i, \varepsilon_j)$, bias may arise whenever $\operatorname{Cov}(C_i, \varepsilon_j) \neq 0$ for some subset of individuals $i \neq j$. Mathematically, this is the reason why ecological inferences are more challenging than those from individual-level data.

Intuitively, simple ecological regressions may produce biased results because the regressor of interest is correlated with the error term. IV techniques, however, are designed with precisely these situations in mind. Suppose the econometrician has access to an instrument that *(i)* predicts the overall share of group members, but *(ii)* affects outcomes on the individual level only through membership in C. Given such an aggregate variable, estimating the model in (A.2) by two-stage least squares solves the ecological inference problem.

PROPOSITION 1: *The two-stage least squares estimator of* τ *is asymptotically consistent and equal to the true, individual-level parameter whenever the instrument,* Z_c*, satisfies (i)* $\operatorname{Cov}\left(Z_c, \overline{C}_c,\right) \neq 0$ *and (ii)* $\operatorname{Cov}(Z_c, \varepsilon_i) = 0$.

PROOF: The probability limit of the two-stage least squares estimator equals $\operatorname{plim} \widehat{\tau}_{2SLS} = \frac{\operatorname{Cov}(Z_c, \overline{y}_c)}{\operatorname{Cov}\left(Z_c, \overline{C}_c,\right)} = \tau + \frac{\operatorname{Cov}(Z_c, \overline{\varepsilon}_c)}{\operatorname{Cov}\left(Z_c, \overline{C}_c,\right)}$. It thus suffices to show that $\operatorname{Cov}(Z_c, \overline{\varepsilon}_c) = 0$. By the usual properties of covariances, $\operatorname{Cov}(Z_c, \overline{\varepsilon}_c) = \frac{1}{N_c}\sum_{i=1}^{N_c} \operatorname{Cov}(Z_c, \varepsilon_i)$. Given that individual indices are exchangeable, we immediately see that $\operatorname{Cov}(Z_c, \varepsilon_i) = 0$ implies $\operatorname{Cov}(Z_c, \overline{\varepsilon}_c) = 0$, as desired. *Q.E.D.*

In words, the proposition states that if the econometrician observes a variable that would satisfy the exclusion restriction in individual-level data, then the same variable is also a valid instrument

in the aggregated, i.e., averaged, data.[3] The mathematics behind this result is strikingly simple. If a particular instrument is uncorrelated with all individual error terms, then it must also be uncorrelated with their mean. As a consequence, the two-stage least squares estimator recovers the true, individual-level parameter.

IV methods have, therefore, two remarkable properties. First, they help address endogeneity issues due to omitted variables, reverse causality, etc. Second, they can help draw individual-level inferences from aggregate data.

Naturally, the validity of these inferences is contingent on the available instrument. Note, whether a given instrument satisfies the key identifying assumption, i.e., whether Z_c and ε_i are plausibly uncorrelated, depends critically on the vector of controls. After all, residuals are always defined with respect to the set of included covariates. While the data generating process in equation (A.1) does not contain any controls, it is easy to see that the proposition would continue to go through *conditional* on some set of covariates, X_i.

Perhaps less obvious is the correct interpretation of the individual-level parameter that IV methods recover. Since estimation by two-stage least squares purges the point estimate of any correlation between the regressor of interest and the error term, the estimated coefficient corresponds to the difference between members of group C and nonmembers, *holding all else equal*. In many applications in the modern social sciences this is exactly the parameter of interest.

Appendix C: Alternative Instrumental Variable Estimates

Becker and Woessmann (2009) propose distance to the small town of Wittenberg—the origin of the Reformation movement—as an instrument for Protestantism. While we explicitly control for distance to Wittenberg in our main results, in this section we explore the implications of using it as an alternative instrument. Although distance to Wittenberg turns out to be a marginally "weak" instrument, our results are qualitatively and quantitatively very similar when using it instead of, or in combination with, territorial lords' religion.

Why should the distance to Wittenberg be a valid instrument? Becker and Woessmann (2009) argue that the approximately concentric diffusion of Protestantism around Wittenberg in Lutheran times introduces exogenous variation in Protestantism in late-nineteenth-century Prussia. "The main reasons for a circular dispersion around Wittenberg may have been the costs of traveling and of information diffusion through space, and these transportation and transaction costs played a crucial role at the time. Electoral Saxony, the principality around Wittenberg, was an early leader in implementing Luther's visions of reform [...]. This gives places closer to Wittenberg the advantage of being able to observe the Reformation ideals put in practice and to more easily form alliances of Protestant territories against Catholic powers. Furthermore, thousands of students came to Wittenberg to hear Luther's sermons and speeches [...]" (Becker and Woessmann 2009, pp. 557).

[3]Note, however, that Z_c is defined on the aggregate level. If the individual level data were available for estimation, the instrument would take on the same value for all individuals within, say, the same county.

Moreover, Becker and Woessmann (2009) present empirical evidence suggesting that "distance to Wittenberg is indeed unrelated to a series of proxies for economic and educational development before 1517, including the pre-Luther placement of schools, universities, monasteries, and free imperial and Hanseatic cities and urbanization" (Becker and Woessmann 2009, pp. 532). If the argument of Becker and Woessmann (2009) is, indeed, correct, and if it extends to the Weimar Republic, then distance to Wittenberg constitutes an alternative, plausibly valid instrumental variable.

Appendix Table A.4 displays results from using this alternative instrument. Columns (1)–(2) present first-stage estimates from the following empirical model:

$$Catholic_c = \kappa_d + \alpha Distance\,to\,Wittenberg_c + X_c'\phi + \eta_c, \tag{A.3}$$

while the remaining columns show two-stage least squares estimates for the second stage, i.e.

$$v_c = \mu_d + \beta \widehat{Catholic}_c + X_c'\theta + \varepsilon_c \tag{A.4}$$

with $\widehat{Catholic}_c$ denoting the *predicted* share of Catholics based on the first-stage equation above.

As in Becker and Woessmann (2009) as well as Cantoni (2014), distance to Wittenberg is heavily correlated with counties' share of Catholics, although the correlation declines markedly once we also include territorial lords' choices of religion. Importantly for our purposes, the two-stage least squares estimates of the impact on Nazi vote shares in columns (4)–(5) are qualitatively and quantitatively very similar to our main results in Table 2. Taken at face value, the estimates in these columns imply that Protestants were at least 22 percentage points more likely to vote for the NSDAP in the November election of 1932 than their Catholic counterparts. This alternative instrumental variables strategy, therefore, supports our conclusions in the main text.

In fact, columns (6) and (8) demonstrate that results from instrumenting with distance to Wittenberg *and* territorial lords' choices of religion are quantitatively indistinguishable from those in the main text, and that it is not possible to reject the overidentification test. That is, one cannot reject the null hypothesis that instrumenting with distance to Wittenberg delivers the same estimate as using territorial lords' choices instead.

Appendix D: Robustness to Violations of the Exclusion Restriction

In this appendix, we use Bayesian methods introduced by Conley et al. (2012) to assess the robustness of our results with respect to the assumption that rulers' choices of religion did not directly affect NSDAP vote shares.

Specifically, we consider the following econometric model:

$$v_c = \mu_d + \beta Catholic_c + X_c'\theta + \gamma_0 Historically\,Catholic_c + \gamma_1 Historically\,Mixed_c + \varepsilon_c. \tag{A.5}$$

Here, the vector $\gamma = [\gamma_0, \gamma_1]$ parameterizes the extent to which the exclusion restriction fails. If our identifying assumption does, in fact, hold, then $\gamma_0 = \gamma_1 = 0$ (i.e., princes' decisions exerted no

independent effect on Nazi support).

Since $Catholic_c$ is potentially endogenous, β and γ cannot be separately identified. It is, however, possible to identify β and conduct inference conditional on specifying the *support* or the *distribution* of γ (see Conley et al. 2012).

Appendix Figure A.4 displays the results. The upper panel depicts the estimated impact of Catholicism if one has no prior information on the sign or distribution of γ. Without information on the direction of the direct effect of rulers' choices after the Peace of Augsburg, one obtains identical point estimates as in the standard IV setup. The confidence intervals, however, widen. The dotted line, labeled "Union," corresponds to the theoretical 95%-confidence interval when we only impose the restriction that the support of γ is equal to $[-\delta, \delta] \times [-\delta, \delta]$. Since Conley et al. (2012) show that the resulting confidence intervals are too conservative (because they "overweight" highly unlikely cases, leading them to include the true parameter value *more* than 95% of the time), we also explore assumptions that rely on stronger priors to produce ex ante correct coverage.

The dashed line depicts confidence intervals under the assumption that γ is distributed uniformly on the interval $[-\delta, \delta] \times [-\delta, \delta]$. That is, δ still denotes the maximal allowable violation of the exclusion restriction, but the econometrician believes all scenarios to be equally likely. No matter how standard errors are ultimately calculated, as long as one is willing to rule out direct effects greater or equal to 10 percentage points, one would still reject the null hypothesis of no religious differences in Nazi support.

In the lower panel of Figure A.4, we explore the more "damning" case of prior information that leads one to believe that a ruler's choice to remain Catholic had a direct, negative impact on NSDAP vote shares. Formally, we impose the assumption that each element of γ is distributed uniformly on $[-\delta, 0]$ and plot the resulting estimate of β as well as the 90%- and 95%-confidence intervals. While the size of the point estimates declines as we allow for potentially larger violations of the exclusion restriction, they do remain meaningfully large for all values of δ that we consider. Moreover, the figure shows that, as long as one is willing to rule out direct effects larger than about 12 percentage points, it is still possible to reject the null of no differences between Catholic and Protestant voters.

Appendix E: Exploring Heterogeneity in Effect Size and Additional Robustness Checks

In this Appendix, we explore whether there exists heterogeneity in the extent to which Catholic constituencies eschewed the NSDAP. We also conduct ancillary sensitivity and robustness checks in order to demonstrate that our main results do not depend on the weighting scheme, set of controls, or the inclusion of particular regions of the Weimar Republic.

To study heterogeneity in effect size, we divide our data into subsamples and estimate the religious difference in NSDAP vote shares separately for each sample, controlling for our standard set of covariates. Appendix Table A.5 presents the results. Religious differences in Nazi support were larger in rural and agricultural areas than in urban and industrial settings—though they were large and statistically significant in all of these. If one believes that the Catholic Church and its

dignitaries were more influential in the countryside—where the local priest could effectively monitor the political activities of parishioners—then our hypothesis of elite influence at the ballot box predicts this pattern in the data. Interestingly, we find virtually no difference in relative resistance between Catholics in the "heartland" and the "diaspora", i.e., regions where Catholics are in the majority (and where there existed a distinct "Catholic culture") versus regions in which Catholics constitute a clear minority. We, therefore, find no evidence to suggest that (local-)minority status mediated the effect of religion on NSDAP support.

Appendix Table A.6 contains the results of our ancillary robustness checks. For each specification and each sample restriction, we provide OLS point estimates based on equation (1) as well as two-stage least squares estimates based on our IV approach in equation (5). The top row contains the baseline estimates from Tables 1 and 2. As the numbers in the remaining rows demonstrate, our results are qualitatively and quantitatively robust to the choice of regions included in the sample, the weighting scheme, whether we calculate vote shares as a fraction of all eligible voters or only relative to valid votes cast, whether we include even more detailed controls regarding the composition of the labor force and per capita incomes, and to controlling for Voigtländer and Voth's (2012) proxy for historically rooted anti-Semitism, as well as the (endogenous) distribution of preferences over parties in 1920. We also show that the estimated effect remains essentially unchanged when we use the religious situation directly after the Peace of Augsburg as an instrument (as opposed to that on the eve of the Thirty Years' War). Moreover, our estimates are similar if we rely on the LASSO procedure in Belloni et al. (2011) to choose covariates from our standard set of controls, their squares, and all pairwise interactions, or if we use the IV-LASSO-CV estimator of Belloni et al. (2014) to optimally select instruments from our baseline set of instrumental variables as well as their interactions with indicators for each electoral district.

Appendix F: Testing Other Explanations for Catholics' Relative Resistance

Below, we explore to which extent alternative explanations can account for Catholics' relative resistance.

F.1. *Catholic Belief and Religiosity*

A priori, one of the most natural explanations for the apparent effect of religion might be that Catholics were, on average, more pious or that the Catholic belief system itself reduced the appeal of radical movements. However, theories that attribute Catholics' relative resistance to a particular set of religious values fare poorly in casual cross-country comparisons. If Catholic values insulate believers from the appeal of radical movements, then why was it that Italy and Spain developed fascist dictatorships as well? Naturally, Spain, Italy, and Weimar Germany differed on a host of other characteristics that primitive cross-country comparisons will invariably miss. Although such comparisons may be useful in *some* settings, we caution against dimissing religiosity as an explanation for our findings out of hand.

Potentially more troublesome is that explanations based on religiosity and Catholic belief fail to adequately explain why Catholics' relative resistance crumbled after March 1933. Yet, in order to rationalize this additional "failure" of the theory, one may appeal to one of the myriad (institutional) changes after March 1933, which might have trumped any effect of religiosity.

In our view, the best way to assess the explanatory power of any explantion is to bring additional data to bear on the question. Thus, in order to subject religiosity-based explanations to a more rigorous, econometric test, we have gathered information on Catholics' reception of the Easter Communion, church attendance throughout the year, the number of religiously mixed marriages, christenings, etc. (Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands 1924, 1931). We factor analyze these data to extract a summary measure of religiosity (see the description in Appendix H) and divide our sample at the median.[4] However, as shown in Appendix Table A.7, we do not observe smaller differences in Nazi vote shares between Protestants and Catholics when the latter are less religious. If anything, the estimates point in the opposite direction. The data are, therefore, at odds with religiosity-based explanations.

F.2. *Religious Differences in Human Capital*

Becker and Woessmann (2009) argue that, in late-nineteenth-century Prussia, Protestantism had a causal, positive effect on literacy rates and thereby on economic prosperity. This suggests that the channel through which religion affected NSDAP vote shares might have been constituencies' education and income.

Although one might expect education to reduce rather than raise support for the Nazis, and despite the fact that the robustness checks in Appendix Table A.6 show that our estimates remain virtually unchanged when we also control for per capita incomes, in Appendix Table A.7 we present three additional tests of this potential explanation.

First, we divide our sample according to Catholics' relative share among high school graduates in 1931 (*Abiturienten*). Information on the religious composition of the 1931 cohort of graduates comes from Statistisches Reichsamt (1933) and is available on the state level. We have transcribed these data and relate Catholics' representation among the educated to their share in the overall population of the same state. We then split the sample at the median and estimate our workhorse empirical models, i.e. equations (1) and (5), in order to find out whether religious differences in NSDAP vote shares vary according to this proxy for relative educational attainment. They do not.

This is not to say that Protestants were not overrepresented amongst the educated. They were.[5] Our results merely indicate that religious differences in contemporaneous educational attainment do not correlate with differences in Nazi support.

[4]Reassuringly, our measure correlates positively with rates of church attendance and negatively with the fraction of religiously mixed marriages. See Appendix H and Appendix Table A.9 for details.

[5]In the median state, Protestants are overrepresented among high school graduates by a factor of 1.4, though there is large regional variation.

Second, to probe our results with respect to *historical* differences in human capital we have manually matched the county-level data of Becker and Woessmann (2009) with ours. Restricting attention to the set of Prussian counties with nonmissing information on literacy rates in 1871, the results in Table A.7 show that religious differences in NSDAP vote shares do not depend on whether literacy rates were historically above or below the sample median. This conclusion continues to hold for various other cutoff values.

Third, we repeat the previous exercise, focusing on historical income levels instead. Again, we are unable to find any evidence in favor of the human capital channel.

Lastly, before turning to other potential mechanisms through which the effect of religion might have operated, we note that without assigning an explicit role to Church dignitaries, an explanation based on religious differences in human capital *alone* cannot account for the fact that differences in Nazi vote shares depend on the political leanings of the local priest—although the lesser educated might be more inclined to be "persuaded" by the clergy. A human capital explanation would also need to be augmented to rationalize the decline in Catholics' relative resistance after 1933.

F.3. *Luther, the Kulturkampf, and Obedience to Worldly Authority*

Early observers, e.g., von Kuehnelt-Leddhin (1952), speculate that Hitler had greater appeal to Protestants because the Protestant Church had been traditionally very close to German rulers (as in the epithet *Thron und Altar*). After all, in an attempt to make the Reformation more palatable to princes, Martin Luther had taught obedience to secular rule—even if it was unjust—whereas the Catholic Church was highly dismissive of worldly powers. Others argue that Bismarck's *Kulturkampf*, with its persecutions of Church officials, sensitized Catholics to the dangers of authoritarian regimes and that it made them wary of the Hitler movement very early on (e.g., Cremer 1999). Both hypotheses are testable.

If Catholics' experiences during the *Kulturkampf* had any impact on NSDAP vote shares, then the effect should be larger in Prussia, where the *Kulturkampf* was considerably more intense than in the remainder of the German Empire (Anderson 2000; Gross 2004). Similarly, if Luther's teachings made Protestants more susceptible to the allure of the Nazis, then one would expect to see smaller religious differences in areas that are rooted in the Reformed tradition of John Calvin, whose treatment of worldly authority differed sharply from that of Luther (see, e.g., Höpfl 1991).

Again, Appendix Table A.7 shows that neither of these predictions are borne out in the data. If anything, the estimates with respect to areas' historical religion go in the "wrong" direction, whereas the results for Prussia and the remainder of Weimar Germany are statistically indistinguishable. Theories based on Catholics' wariness of secular authority receive, therefore, no support.

F.4. *Culture and the Catholic Milieu*

The most common explanation put forth by scholars arguing for a genuine effect of religion is that Catholics lived in a culturally distinct environment with a close-knit network of social clubs,

unions, and other civic organizations. Supposedly, this milieu made Catholics less susceptible to the messages of political extremists (see, e.g., Burnham 1972; Falter 1991; Kuropka 2012; Lepsius 1966). While it was undoubtedly true that life in predominantly Catholic regions was very different from that in majoritarian Protestant ones, we are uncomfortable with this explanation for at least three reasons.

First, a culture-based explanation alone has difficulty rationalizing why religious differences in Nazi support vary greatly with the political leanings of the local Catholic priest. Of course, one may argue that the political leanings of the local clergy depend on (local) cultural factors, and that our estimates in the main text pick up those. This argument, however, is inconsistent with the fact that, comparing villages that ended up having a "brown priest" in 1933 with those that did not, there are no statistically detectable differences in the support for the Nazis and no differences in the vote share of other parties on the far-right in 1924, when the Nazis first ran in national elections. If our estimates in Table 4 were driven by cultural differences, and assuming that culture is relatively stable over time, then one would expect to see statistically meaningful pre-existing differences. This is not the case.

Second, contrary to scholars who emphasize the importance of clubs and similar civic entities in immunizing Catholics against the allure of the Nazis, Satyanath et al. (2015) have recently shown that the NSDAP received *higher* vote shares in cities with more social capital, i.e. more of these organizations. Further, this effect was equally strong in predominantly Catholic and Protestant areas. At the same time, it is important to note that the analysis in Satyanath et al. (2015) is restricted to secular social organizations. Nonetheless, unless clubs that are affiliated with the Catholic Church exerted systematically different effects, explanations that attribute Catholics' resistance to social capital are at odds with the best available statistical evidence.

Third, our estimates in Appendix Table A.5 show that religious differences in NSDAP vote shares are about equally large in the antimodern, *ultramontan* milieu of the Catholic "heartland" and the more modern remainder of the Weimar Republic. Moreover, if cultural differences were responsible for Catholics' relative immunity to the Nazis, then the point estimates in Table 3 should decline markedly with the inclusion of county fixed effects. After all, cultural factors are almost certainly more similar within than across counties. Yet, the point estimates remain quite stable. In sum, although the data are imperfect, the available evidence suggests that religious differences in Nazi vote shares did not vary with proxies for Catholic culture or the social milieu.

F.5. *Loyalty to the Zentrum*

Despite their heterogeneously distributed economic interests, since the late nineteenth century, most German Catholics had supported the Zentrum rather than other parties. But why did Catholics continue to be loyal to the Zentrum, all the while Protestants abandoned their traditional parties, in particular the DNVP, DVP, and DDP? Were Zentrum politicians somehow more adept at retaining the support of their core constituents? To the best of our knowledge the historical record offers no

indication that this was the case.

Also, most formal theories in which parties choose policy positions before and after an economic shock bifurcates voters' ideal points would predict that a large party with a diverse base (such as the Zentrum) loses more of its supporters than parties that cater to more narrowly defined clienteles (such as the DDP, DVP, and DNVP). This is because a more diverse set of supporters makes it more difficult to tailor the party's new position to satisfy the heterogeneous interests of its constituents.

Nonetheless, in Appendix Table A.7 we find that religious differences in support for the Nazis varied according to Catholics' preexisting ties to the Zentrum. To roughly gauge Catholics' ties to the Zentrum we consider the *Reichstag* elections in 1920, when the NSDAP still had only a few hundred members and was little more than a niche party in the Bavarian capital of Munich. Following the practices of statisticians during the German Empire (e.g., Stolle 1893, among others), we calculate for each county the fraction of Catholics voting for the Zentrum as the total number of Zentrum votes divided by the number of voting-eligible Catholics. We then split our sample into quartiles.[6] The evidence in Table A.7 indicates smaller religious differences in NSDAP votes in areas in which Catholics had only weak ties to the Zentrum. There is, therefore, *a priori* support for the idea that preexisting ties to the Zentrum made Catholics less susceptible to the Nazis.

Note, however, that this finding is fully compatible with our theory of elite influence in electoral politics. There exists, indeed, ample qualitative evidence that the Catholic Church had tried to establish a norm to support the Zentrum long before the rise of the Nazis. Anderson (2000), for instance, notes that during the *Kaiserreich* "the most important of all of the parish clergy's task was to make sure that the Zentrum's ballots got distributed" (p. 131). It was also common for Sunday sermons to remind parishioners of their "obligation" to "vote according to their conscience"—a formula beloved by the clergy for the nod it made in the direction of voters' freedom, all the while reminding them of what "conscience" required of every good Catholic (Anderson 2000, p. 132). One interpretation of the comparative statics in Table A.7 is, therefore, that religious differences in Nazi vote shares are larger in areas where, before the advent of the NSDAP, Catholics were more likely to adhere to the Church's prescription to vote for the Zentrum.

Further, explanations that emphasize loyalty to the Zentrum have difficulty explaining why religious differences in Nazi support were larger in rural villages than in urban environments (cf. Appendix Table A.5) and why the political leanings of the local priest should have had any effect on parishioners' votes (cf. Table 4). Especially with respect to the last comparative static, any theory that relies solely on the loyalty to the Zentrum falls necessarily short. By contrast, if the Catholic Church and its dignitaries were more influential in the countryside (where the local priest could effectively monitor the political activities of parishioners), then our elite influence theory *is* capable of rationalizing the patters in the data.

[6]The population share of Catholics varies widely within these subsamples. For instance, Catholics make up between .4 and 99.8 percent of the residents of counties in the lowest quartiles, while their share ranges from .3 to 99.5 percent in the highest one.

Appendix G: For Which Parties Did Catholics Vote Instead?

The findings in Sections 3–5 of the main text suggest that Catholics were much less likely to support the NSDAP than Protestants, and in Section 6 we present results that show that Catholics also eschewed the SPD and DNVP in favor of the Zentrum, but *not* the KPD (cf. Figure 4). In this appendix we elaborate on the methodological underpinnings of the estimates in Figure 4, and we present regression results for *all* parties that played a significant role in *any* of the Weimar Republic's elections.

Specifically, in Appendix Table A.8 we report coefficients and standard errors from estimating our preferred IV specification with the vote shares of other parties as dependent variable. In line with much qualitative evidence, our estimates imply that the electorate of the Zentrum was composed almost entirely of Catholics. Compared with Catholics, Protestants were initially more likely to vote for the SPD, DDP, DVP as well as the right-wing DNVP. (But with the exception of the SPD, support for these parties dwindled dramatically after the onset of the World Economic Crisis and the ensuing radicalization of the electorate. In fact, the DDP and DVP played practically no role in any election after 1928.)

Interestingly, there are *no* religious differences in the far left of the political spectrum—despite the Catholic Church's persistent warnings about the dangers of communism. That is, Catholics and Protestants are estimated to have supported the communist KPD with nearly equal probability.

Based on the coefficients in Table A.8 we can calculate approximate vote shares by religion. To illustrate the mechanics of the exercise, note that Catholics and Protestants respectively comprise about one third and two thirds of the population in Weimar Germany, and let $s_P \approx .67$ and $s_C \approx .33$ denote the shares of each group. Since we always calculate vote shares as a fraction of the voting-eligible population, we arrive at the following approximation:

$$\overline{v} \approx s_P v_P + s_C v_C,$$

where $\overline{v}$ is the overall vote share of a particular party, while v_P and v_C denote the shares among Protestants and Catholics, respectively. Rearringing and relying on the fact that $\widehat{\beta}_{2SLS} \equiv v_P - v_C$, gives

$$v_P \approx \overline{v} - s_C \widehat{\beta}_{2SLS} \tag{A.6}$$

$$v_C \approx \overline{v} + s_P \widehat{\beta}_{2SLS}. \tag{A.7}$$

To obtain the ratio of Protestants to Catholics among the supporters of a particular party, we form the ratio of (A.6) and (A.7) and multiply it by the ratio of Protestants to Catholics among the entire population. In symbols, we calculate $\frac{v_P s_P}{v_C s_C}$, which is the quantity that we report in Figure 4 in the main text.

If there were no other religious groups in Weimar Germany other than Catholics and Protestants, then the approximations in (A.6) and (A.7), and, hence, the ratios in Figure 4, would be exactly

correct. In reality, about 4.6% of Germans were either non-religious or practiced another faith. It is possible to show that if "others" voted like the national average, then the approximations above would, again, be exact. If the voting behavior of "others" deviates from the national average, then our approximations will be subject to error. It is also possible to derive theoretical bounds on v_C and v_P, accounting for the fact that they do not add up to unity.[7] Given the small share of "others," these bounds turn out to be fairly tight. More importantly, the ratios reported in Figure 4 are qualitatively robust to this source of approximation error.

Appendix H: Data Appendix

This appendix provides a description of all data used for the results in the main text or any of the appendices.

H.1. *Election Results*

Using official publications by the *Statistische Reichsamt*, Falter and Hänisch (1990) compile information on the official results of the Weimar Republic's parliamentary elections. Since this is widely regarded as the most carefully constructed data set on the topic—taking, for instance, the frequent redistricting into account—we rely on it as our primary source of information. For most elections (i.e. for June 1920, May 1924, December 1924, May 1928, September 1930, and March 1933) results are available at the county as well as the municipality levels. Since the *Statistische Reichsamt* released official numbers only for municipalities with more than 2,000 inhabitants, Falter and Hänisch (1990) create "residual entities" called *Restkreise*, which pool all municipalities in a given county that have less than 2,000 residents (see Hänisch 1988 for additional details). We keep these observations when conducting analyses at the municipality level. Unfortunately, the *Statistische Reichsamt* never released municipality-level results for the last undoubtedly free elections in July and November of 1932, which is why most of our empirical work is on the county level.

In order to study Nazi support after Hitler came into power, we supplement the data of Falter and Hänisch (1990) with manually transcribed information on election outcomes in the general election of November 1933, the plebiscite that was held at the same time, and the referendum in November of 1934. The source of these data is Statistisches Reichsamt (1934). Throughout the analysis, the following variables are used:

Number of Eligible Voters is defined as the number of individuals residing in a given county or municipality who had the right to vote. In order to derive representative estimates, we use, unless otherwise noted, Number of Eligible Voters as the weighting variable in our regressions.

Major Parties' Vote Shares (during the Weimar Republic) are defined as the number of votes cast for a particular party (i.e. KPD, SPD, DDP, Zentrum, DVP, DNVP, or NSDAP) over the number of

[7] Briefly, we use the identity $\overline{v} \equiv s_P v_P + s_C v_C + (1 - s_P - s_C) v_O$, and let v_O, the vote share among "others," vary between 0 and 1.

eligible voters, *not* the total number of valid votes. This lets us avoid issues of endogenous turnout. Vote shares for the Zentrum always include those of the BVP, its Bavarian sister party. Note that the Nazis formed an electoral alliance with other parties in the *völkisch* bloc for both elections in 1924, running as NSFP in May 1924 and as NSFB in December 1924. For simplicity we continue to use the label "NSDAP." Also, in 1933 the DNVP campaigned together with the *Stahlhelm* and *Landbund* as *Kampffront Schwarz-Weiß-Rot*. We use the label "DNVP."

NSDAP Vote Share (November 1933) is defined as the number of valid votes cast for a NSDAP list over the number of all *eligible* voters. Implicitly, this method of defining Nazi support counts abstentions and invalid votes as opposing the regime.

Plebiscite to Withdraw from the League of Nations (November 1933) We define support for Hitler's proposal to withdraw from the League of Nations as the number of valid "yes" votes over the number of all *eligible* voters. Implicitly, this method of defining Nazi support counts abstentions, "no" votes, as well as invalid ones as opposing the regime.

Plebiscite to Merge the Offices of President and Chancellor (November 1934) We define support for the Nazi's proposal as the number of valid "yes" votes over the number of all *eligible* voters. Implicitly, this method of defining Nazi support counts abstentions, "no" votes, as well as invalid ones as opposing the regime.

Turnout is defined as the number of votes cast for all parties over the number of eligible voters.

H.2. *Socioeconomic Characteristics*

Data containing socioeconomic characteristics of counties and municipalities in the Weimar Republic come from Falter and Hänisch (1990). These data were transcribed by Falter and Hänisch (1990) from the 1925 and 1933 Censuses as well as other official publications by the *Statistische Reichsamt* and the statistical offices of the *Länder*. While the data detailed below are almost always available at the county level, coverage of municipalities (especially smaller ones) varies due to changes in the publication practices of the *Statistische Reichsamt* (see Hänisch 1988). To preserve as much of the sample as possible, we supplement the data of Falter and Hänisch (1990) with hand-coded information on the religious composition of counties from the 1933 Census. Unless otherwise noted, our analysis restricts attention to the 982 counties with nonmissing information on religious composition and election results in November 1932. This entails losing 3 counties due to missing information on residents' religion. In order to be able to control for per capita incomes in 1932 and the change in income between 1928 and 1932 (which proxies for the severity of the economic crisis), we supplement the data of Falter and Hänisch (1990) with manually transcribed information on taxable income in the respective years. The source of these data is Statistisches Reichsamt (1931, 1936).

Below follows a brief description of all covariates used throughout the paper. For additional details regarding the raw data, see Hänisch (1988) and Statistisches Reichsamt (1931, 1936).

Percent Catholic is defined as the number of Catholics living in a county (or municipality) as of the 1925 Census divided by the county's population. For 22 counties we use information from the 1933 Census, as the data of Falter and Hänisch (1990) do not contain information on religious composition.

Percent Protestant is defined as the number of Protestants living in a county (or municipality) as of the 1925 Census divided by the county's population. For 22 counties we use information from the 1933 Census, as the data of Falter and Hänisch (1990) do not contain information on religious composition.

Percent Jewish is defined as the number of Jews living in a county (or municipality) as of the 1925 Census divided by the county's population. For 22 counties we use information from the 1933 Census, as the data of Falter and Hänisch (1990) do not contain information on religious composition.

Percent Nonreligious is defined as the residual category, i.e. the share of a county's (or municipality's) population that is not classified as either Catholic, Protestant, or Jewish.

Percent Female is defined as the number of women living in a county (or municipality) as of the 1933 Census divided by the county's total population.

Urban County is an indicator variable equal to one if a county (or municipality) is officially classified as *Stadtkreis*.

Rural County is an indicator variable equal to one if a county (or municipality) is *not* officially classified as *Stadtkreis*.

Population denotes the number of individuals residing within a county (or municipality), as reported in the 1925 Census (in 1,000s). And *Log Population* is defined as its natural logarithm.

Female Labor Force Participation Rate is defined as the share of females whom the 1933 Census includes in the labor force.

Unemployment Rate is defined as the percentage of all labor force participants who are out of work, as reported in the 1933 Census.

Unemployment Rate Among White Collar Workers is defined as the percentage of self-declared white collar workers (*Angestelte*) who are out of work, as reported in the 1933 Census.

Unemployment Rate Among Blue Collar Workers is defined as the percentage of self-declared blue collar workers (*Arbeiter*) who are out of work, as reported in the 1933 Census.

Unemployment Rate Among Domestic Servants is defined as the percentage of self-declared domestic servants (*Hausangestelte*) who are out of work, as reported in the 1933 Census..

Percent in Agriculture is defined as the percentage of employed labor force participants who work in agriculture or forestry (*Land- und Forstwirtschaft*), as reported in the 1933 Census. In our

regressions, *Percent in Agriculture* serves as the omitted category for Sectoral Composition of the Workforce.

Percent in Manufacturing and Artisanry is defined as the percentage of employed labor force participants who work in manufacturing and artisanry (*Industrie und Handwerk*), as reported in the 1933 Census.

Percent in Trade and Commerce is defined as the percentage of employed labor force participants who work in trade and commerce (*Handel und Verkehr*), as reported in the 1933 Census.

Percent in Services is defined as the percentage of employed labor force participants who work in the public or private service sectors (*öffentlicher Dienst und private Dienste*), as reported in the 1933 Census.

Percent in Domestic Labor is defined as the percentage of employed labor force participants who perform domestic services (*häusliche Dienste*), as reported in the 1933 Census.

Percent Helping Family Members is defined as the percentage of employed labor force participants who work in their family's business or on the family farm (*mithelfende Familienangehörige*), as reported in the 1933 Census.

Percent White Collar Workers is defined as the percentage of employed labor force participants who are reported as *Angestellte* in the 1933 Census.

Percent Civil Servants is defined as the percentage of employed labor force participants who are reported to be civil servants (*Beamte*) in the 1933 Census.

Percent Blue Collar Workers is defined as the percentage of employed labor force participants who are reported as *Arbeiter* in the 1933 Census.

Percent Domestic Servants is defined as the percentage of employed labor force participants who are reported to be domestic servants (*Hausangestellte*) in the 1933 Census.

Percent Self-Employed is defined as the percentage of employed labor force participants who are reported to be self-employed (*Selbstständige*) in the 1933 Census.

Additional Labor Force Controls are taken from the 1925 Census. The 1925 Census lists the number of individuals in a specific sector *and* occupation. That is, it includes the number of self-employed in agriculture, in industry and artisanry, in the service sector, and in domestic labor. Similarly, it lists the number of helping family members, civil servants, and white collar workers as well as blue collar workers in each of these sectors. For each sector-occupation-cell, we calculate the corresponding percentage among all employed labor force participants and use the resulting variables as additional controls.

Per Capita Income is defined as the total personal income from all sources in 1932 (in 1,000 *Reichsmark*) per tax liable individual, as reported in the official tax assessment of 1932.

Change in Per Capita Income Relative to 1928 is defined as the difference in total personal income from all sources in 1932 (in 1,000 *Reichsmark*) per tax liable individual between 1932 and 1928. Numbers for 1928 and 1932 come from the official tax assessments of the respective years.

Fraction of Catholics Voting for the Zentrum Party in 1920 is defined as the share of votes that the Zentrum obtained in a given county during the 1920 parliamentary elections divided by the share of Catholics among that county's residents.

Catholic Heartland is defined as the regions of Rhineland, Westphalia, Baden, as well as South-East Bavaria.

Catholic Diaspora is defined as the complement to *Catholic Heartland*, i.e. the remainder of Germany.

H.3. *Territories' Official Religion after the Peace of Augsburg*

In creating a mapping between counties at the end of the Weimar Republic and the religion of the prince who reigned over the corresponding area in the aftermath of the Peace of Augsburg, this paper relies on several historical accounts (e.g., Dixon 2002; Lutz 1997; among others). The primary source of information, however, are the regional histories by Schindling and Ziegler (1992a,b, 1993a,b, 1995, 1996), which summarize the available research on each of the territories of the Holy Roman Empire for the period from 1500 to 1650. While the work of Schindling and Ziegler (1992a,b, 1993a,b, 1995, 1996) is based on a comprehensive body of historical research, the Reformation period has been studied more extensively for some regions than others. Consequently, information on some small independent territories, such as Isenburg, Hoya, or Barby, is relatively scarce.

The primary mapping used in this paper is based on the religious situation around 1624—the "normal year" for territories' official religion set in the Peace of Westphalia, which ended princes' influence over the religion of their subjects. Since territories' official religion was not constant from 1555 until 1624, there exists the possibility that the results depend on the choice of base year. To mitigate this possibility a secondary mapping based on the situation directly after the Peace of Augsburg in 1555 has been created as well. The robustness checks in Appendix Table A.6 show that our main results are robust to using this alternative mapping instead.

Despite notable differences between and within different Protestant denominations, i.e., Lutherans, Calvinists, and Zwinglians, as a whole their teachings were much closer to each other than to the doctrines of the Catholic Church. Thus, our primary mapping differentiates only between Protestant and Catholic regions. Another reason is that during the Second Reformation a number of territorial lords converted from Protestantism to Calvinism, but did not require their subjects to adopt their new religion. That is, most subjects remained Protestant. We have also created an ancillary mapping that differentiates between regions in which subjects remained Protestant and those in which they were forced to convert to Calvinism. This mapping is used in Appendix Table A.7, where we split our sample by the historical religion of people in the area.

In only a few instances does the area of a county or county equivalent at the end of the Weimar Republic correspond exactly to the area of some state at the beginning of the seventeenth century. Moreover, until the secularization in 1803 abbots and bishops were not only religious but also worldly rulers in the Holy Roman Empire. This entails that a handful of cities were divided between a religious and a worldly lord. Multiple rulers make it, of course, more difficult to determine an "official religion," and necessitate the use of guidelines by which to assign a religion to the county corresponding to a given area.

Whenever Catholic and Protestant lords reigned simultaneously over different parts of a county's area, or whenever this area contained an Imperial City, the religion assigned to this county corresponds to the likely religion of the majority of subjects. While Imperial Cities were not bound by princes' *ius reformandi*, political power in these towns often lay in the hands of local elites who would virtually impose the Reformation on residents (Dixon 2002). While the mapping is in a strict sense based on the likely religion of the majority of subjects in a given area, most variation comes from the fact that princes or local elites could dictate the religion of ordinary people.

A complicating factor is that population estimates are often not available for this time period. In cases in which relative populations cannot be determined with certainty, they are gauged by comparing the size of the areas in question assuming equal population densities. For 10% of counties this procedure yielded ambiguous results. The counties in question are classified as neither "historically Protestant" nor "historically Catholic," but as "mixed." Our main results are robust to classifying all of these counties as either historically Protestant or historically Catholic.

Absent reliable high-resolution GIS data for the late sixteenth and early seventeenth centuries, the mappings described above had to be constructed by visually comparing the borders of counties (as of the end of 1932) with the principalities in the maps of Schindling and Ziegler (1992a,b, 1993a,b, 1995, 1996). Naturally, the information in their verbal description was used as well, and proved often much more useful than any map—especially when a territory's official religion changed multiple times. Given that names of cities and places vary little over time, it was feasible to relate whole text passages to modern-day areas and counties.

For Table 3 we have created an additional mapping that takes (as much as possible given the level of detail in Schindling and Ziegler 1992a,b, 1993a,b, 1995, 1996 and other sources) differences *within* counties into account. That is, the mapping used in the municipality-level specifications in Table 3 assigns different historical religions to villages within the same county whenever princes with different religions are known to have controlled these villages.

The process of gathering and analyzing the historical information, as well as the creation of the mapping itself, was carried out by a German research assistant, who holds the equivalent of a graduate degree in history.

H.4. *Geographical Control Variables*

We geocode the centroid of each county in our data using ArcGIS. We also geocode the location of each municipality with help of an automated script to query Google Maps. In cases in which our script delivers no or ambiguous results—as, for instance, the name of a village might have changed over time, or because Google Maps is unable to distinguish two villages with the same name—we determine the location of a municipality using all available information in the raw data, such as the county in which it is located, population, etc., coupled with other public sources and hand-code latitude and longitude. With these geocodes in hand, we then calculate the following geographical control variables.

Latitude is the north-south position in degrees north.

Longitude is the east-west position in degrees east.

Distance to Berlin denotes the linear distance (in kilometers) to the city of Berlin.

Distance to Major City denotes the linear distance (in kilometers) to the nearest of the Weimar Republic's ten largest cities, i.e. Berlin, Hamburg, Cologne, Munich, Leipzig, Dresden, Breslau, Essen, Frankfurt, and Düsseldorf.

Distance to Border denotes the linear distance (in kilometers) to the nearest border of the Weimar Republic.

Distance to Major Port denotes the county's / municipality's linear distance (in kilometers) to the nearest important port, i.e. Bremen, Emden, Hamburg, Wilhemlshaven, Rostock, Kiel, Wismar, Lübeck, and Flensburg.

Distance to Major River denotes the linear distance (in kilometers) to the nearest major navigable river, i.e. Rhine, Main, Mosel, Neckar, Danube, Fulda, Werra, Weser, Elbe, Saale, Havel, Oder, Ems, Wista, and Warta.

Distance to Ore or Coal Deposits denotes the linear distance (in kilometers) to the nearest of the following deposits of ore or coal: Lower Rhine Embayment, Lausatia, Bitterfeld, Upper Palatinate, Bergheim, Borken, Aachen, Freital, Ibbenbüren, Zwickau, Ruhr Area, Saarlouis.

H.5. *Historical Control Variables*

In order to account for as many potential confounds as possible, our empirical work explicitly controls for the variables that Cantoni (2012) and Rubin (2014) have shown to have had an effect on territorial lords' choice of religion. In mapping information on the territories in Cantoni (2012) onto counties in the Weimar Republic, we use the same approach as in constructing our mapping of counties' historical religion (see Section H.3). Merging the data of Rubin (2014) with our main data set is more straightforward. We associate each city in Rubin's data with the county in which

it lies as of the November elections of 1932. Below is a brief description of all historical controls used throughout the analysis.

Distance to Wittenberg denotes the linear distance (in kilometers) to the small town of Wittenberg—the origin of the Reformation movement. This variable is calculated based on the latitude and longitude of each county (as explained in Section H.4).

Ecclesiastical Status is an indicator variable equal to one if the data of Cantoni (2012) indicate that a prince-bishop or another clergyman ruled over the area corresponding to a given county.

Contribution to Reichsmatrikel denotes the contribution to the Imperial War Tax (*Reichsmatrikel*) averaged over the princes who governed over the area corresponding to a given county. The data used to construct this variable come from Cantoni (2012).

Printing Press is an indicator variable equal to one if the data of Rubin (2014) indicate that at least one of the cities in a given county had a printing press at the beginning of the sixteenth century.

As part of our set of geographical covariates we also control for *latitude*, which Cantoni (2012) shows to be a predictor for the adoption of Protestantism.

H.6. *Information on "Brown Priests"*

Our data on "brown priests" come from Spicer (2008). In a decade-long research project, Spicer (2008) collected the names and biographical information of 138 Catholic priests (or ordained members of religious orders) who officially joined the NSDAP or made their Nazi convictions otherwise publicly known, i.e. by speaking at party meetings, blessing SA cadres, etc. A typical entry reads:

> **Schürmeister, Wilhelm**
> born Munich, December 21, 1899
> ordained May 30, 1926 (Munich)
> *Kooperator*, Fresing St. Georg, July, 1926 (supports NSDAP through his pastoral ministry)
> *Expositus*, Gröbenzell, September 16, 1936
> *Pfarrkurat*, Gröbenzell, February 1, 1938
> date of death unkown
> Source: ALMU Studenten-Karte, EAM NL Faulhaber 5402, *Schematismus München*.
> (Spicer 2008, p. 290)

We digitize this information, in particular where these priests resided at the time of the 1933 election (assuming that they remained in the last known locality until a new one is listed in the description of Spicer 2008). We then geocode the location of each priest using an automated script to query Google Maps. In cases in which the script delivers no or ambiguous results—as, for instance, Google Maps is unable to distinguish two villages with the same name—we determine the location of a priest using all available information in the description of Spicer (2008) coupled with other public sources and hand-code latitude and longitude. With the geocodes in hand, we say that a

given village had a "brown priest" if one of the priests named in Spicer (2008) resided within a 10 kilometer radius at the time of the election.

H.7. *Measures of Religiosity*

In order to test explanations based on Catholics' piety, we have gathered additional data on Catholics' reception of the Easter Communion, church attendance throughout the year, the number of mixed marriages, christenings, etc. The sources of these data are Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1924) and Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1931). We factor analyze the variables described below to extract a measure of religiosity and divide our sample at the median.

Easter Communion is defined as the share of Catholics who satisfied their Easter Duty, i.e., who received the Holy Eucharist at least once during the Easter season. To construct this variable we divide the number of Catholics who satisfied their Easter Duty in 1929 by the total number of Catholics in the same year. Both variables come from Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1931) and are available at the level of the diocese. We match counties with diocese by electronically mapping the centroids of the former into the boundaries of the latter.

Mass Attendance is defined as the share of Catholics who (regularly) attend Sunday Mass. To construct this variable we divide the number of Catholics who did so in 1929 by the total number of Catholics in the same year. Both variables come from Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1931) and are available at the level of the diocese. We match counties with diocese by electronically mapping the centroids of the former into the boundaries of the latter.

Mixed Marriages is defined as the number of times a Catholic married someone of another faith in 1923 divided by the total number of marriages in the same year. Both variables come from Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1924) and are available at the state level, with Prussia subdivided into provinces. We match counties with states/provinces by electronically mapping the centroids of the former into the boundaries of the latter.

Babies from Mixed Marriages is defined as the number of babies born in 1923 to a couple in which only one parent was Catholic divided by the total number of births to Catholics in the same year. Both variables come from Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1924) and are available at the state level, with Prussia subdivided into provinces. We match counties with states/provinces by electronically mapping the centroids of the former into the boundaries of the latter.

Christenings is defined as the number of babies christened in 1923 divided by the total number of births to Catholics in the same year. Both variables come from Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1924) and are available at the state level, with Prussia subdivided into provinces. We match counties with states/provinces by electronically mapping the centroids of the former into the boundaries of the latter.

Church Burials is defined as the number of Catholics who received a church burial in 1923 divided by the total number of Catholics who died in the same year. Both variables come from Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1924) and are available at the state level, with Prussia subdivided into provinces. We match counties with states/provinces by electronically mapping the centroids of the former into the boundaries of the latter.

We factor analyze the variables described above to extract a measure of religiosity. This measure, i.e. the first factor (which has an eigenvalue of 4.54), explains 86.3% of the variance in the underlying components.

Appendix Table A.9 displays the factor loadings for the first three factors (i.e. those with positive eigenvalues). As one would expect, our measure of religiosity correlates positively with Mass Attendance, Easter Communion, Christenings, and Church Burrials; and it is highly negatively correlated with Mixed Marriages, and Babies from Mixed Marriages. Moreover, the same table shows that the remaining, unexplained variation in each of these variables is fairly low.

H.8. *Education in the Weimar Republic*

Our data on the religious composition of the 1931 cohort of high school graduates (*Abiturienten*) come from Statistisches Reichsamt (1933). These data are available on the state level and differentiate between graduates of both genders. For our test of the human capital channel in Table A.7, we add the number of male and female high school graduates of each religion, and compare the ratio of Catholic to Protestant graduates to the ratio of Catholics to Protestants among the entire population in the same state. In the median state Protestants are overrepresented by a factor of about 1.4.

H.9. *NSDAP Membership Data*

Our data on NSDAP membership come from Falter and Kater (1993). Together with W. Burstein, Falter supervised members of the Arbeitsbereich Faschismusforschung at the Free University of Berlin and of the Department of Sociology at the University of Minnesota, who randomly sampled 42,018 membership cards for individuals who had at some point joined the Nazi Party before 1933/34. The sampling universe were the two original masterfiles of the NSDAP, containing a total of about 11.6 million membership cards, then stored at the Berlin Document Center (see Schneider-Haase 1991 for for a detailed description of the sampling procedures and for a comparison with other membership data).

Restricting attention to those who had joined the Nazi Party before 1933 (1931), we geocode the location of each member (based on the *Ortsgruppe*) using an automated script to query Google Maps. In cases in which our script delivers no or ambiguous results—as, for instance, the name of a village might have changed over time, or because Google Maps is unable to distinguish two villages with the same name—we determine the location of an *Ortsgruppe* using all available information

in the raw data (primarily the *Gau*) coupled with other public sources and hand-code latitude and longitude. This lets us geocode the location of about 98.4% of observations in the raw data. With the geocodes in hand, we sum across all cities and villages within a county in order to determine the number of NSDAP members as of December 1932 (1930). Since it is often difficult to determine whether a suburb was part of a city and, therefore, part of a *Stadtkreis*, we include all *Stadtkreise* with the county that surrounds them, which leaves us with 712 "aggregated counties." To obtain an estimate of NSDAP membership *rates*, we divide by the "aggregated county's" adult population and inflate the resulting number by 33.33.[8] The NSDAP membership rate then serves as one of the dependent variables in Table 5.

H.10. *Data of Voigtländer and Voth (2012)*

Information on historically rooted anti-Semitism, pogroms during the 1920s, attacks on synagogues during the *Reichskristallnacht*, letters to the editor of the Nazi newspaper *Der Stürmer*, and the number of deportations come from the city-level data set of Voigtländer and Voth (2012). Whenever using one of their proxies for Nazi ideology as an outcome variable, we employ their original set of covariates, i.e., cities' religious composition, an indicator variable for whether a city experienced pogroms during the Black Death (1348–50), and log population, but use their extended sample to preserve as much information as possible.

Relying on Alicke (2008), Voigtländer and Voth (2012) collect information on all municipalities within the 1938 borders of Germany that have twentieth-century data on Jewish settlements and on at least one of their anti-Semitic outcome variables. This procedure yields a sample of 1,427 towns. As there exists direct evidence of fourteenth-century Jewish settlements for only 325 of these cities, Voigtländer and Voth (2012) restrict attention to this subset. For our purposes it is irrelevant whether a given city had a Jewish settlement in the fourteenth century, which is why we rely on their extended sample.

Below follows a brief definition of all of their variables that we use throughout our analysis. For more-detailed descriptions, see Voigtländer and Voth (2012), especially their Data Appendix.

Historical Anti-Semitism is an indicator variable equal to one if at least one city in a given county experienced pogroms of Jews during the Black Death (1348-50). Voigtländer and Voth (2012) construct this variable based on the *Germania Judaica* from Avneri (1968). We take this variable from Voigtländer and Voth (2012) and use it as an additional control in one of the specifications in Appendix Table A.6.

Pogroms during the 1920s is an indicator variable equal to one if Alicke (2008) reports that a violent outrage involving physical violence occurred against a city's Jewish population during the 1920s. If

[8]At the end of 1932 the NSDAP is believed to have had about 1.2 million members, while the data of Falter and Kater (1993) contain approximately 36,000 individuals who joined the party before January 1933 and who have a valid entry for *Ortsgruppe*. This results in a sampling factor of about 33.33.

Alicke (2008) mentions no outrage or no physical violence, it takes on a value of zero. We take this variable directly from Voigtländer and Voth (2012) and use it as one of the outcomes in Table 6.

Letters to Der Stürmer denotes the number of letters to the editor of the Nazi newspaper *Der Stürmer* that were written by residents of a locality in the data set of Alicke (2008) and published between 1935 and 1938. To ensure comparability across municipalities, the variable is scaled by population in 1933. Voigtländer and Voth (2012) construct the variable by counting the number of letters that (i) were published as articles, (ii) denounced individuals as interacting/doing business with Jews, or (iii) asked questions about Jews (such as "How many Jews live in town X?"). We take this variable directly from Voigtländer and Voth (2012) and use it as one of the outcomes in Table 6.

Attacks on Synagogues During the Reichskristallnacht is an indicator variable equal to one if a city's synagogue was in use in 1933 and either destroyed or damaged during the "Night of Broken Glass" in 1938. Destruction is said to have occurred if the synagogue was ravaged to at least the point where it became unusable, whereas damage is defined to have taken place if some of the synagogues inventory was broken or if the building was impaired but remained usable. Voigtländer and Voth (2012) transcribe this information from Alicke (2008). We take the variable directly from Voigtländer and Voth (2012) and use it as one of the outcomes in Table 6.

Deportations is the number of deportations of a city's Jewish (or presumably Jewish) residents recorded in the German Federal Archives (Bundesarchiv 2007) scaled by the city's Jewish population in 1933. Voigtländer and Voth (2012) construct this variable by searching the second (and improved) version of the database for each town in their data set, recording the number of deportees for the years 1933–1945. We take the variable directly from Voigtländer and Voth (2012) and use it as one of the outcomes in Table 6.

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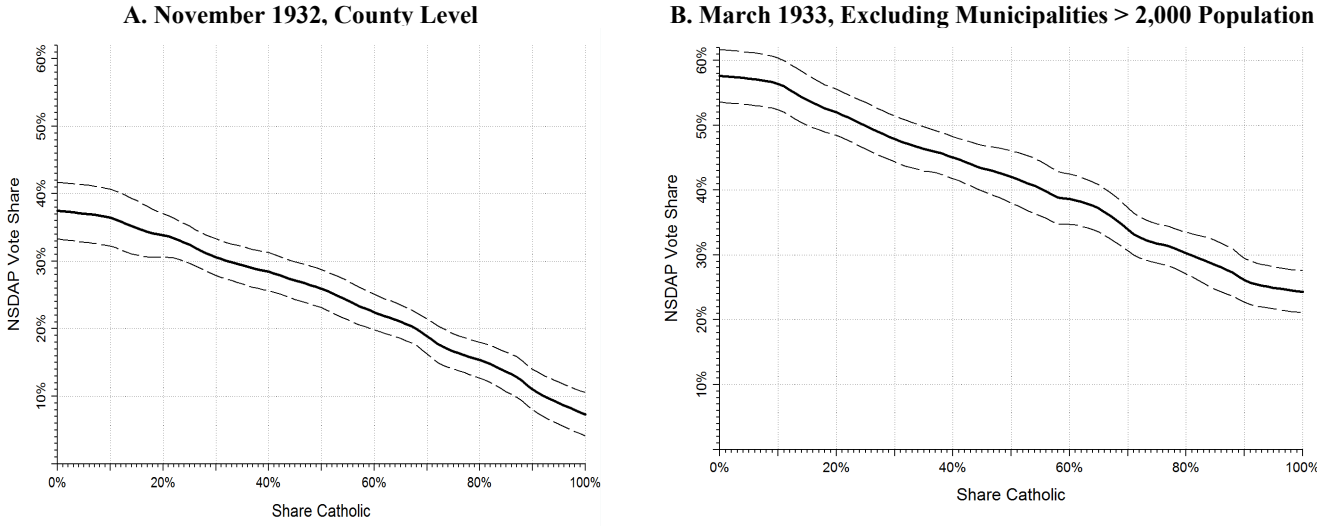
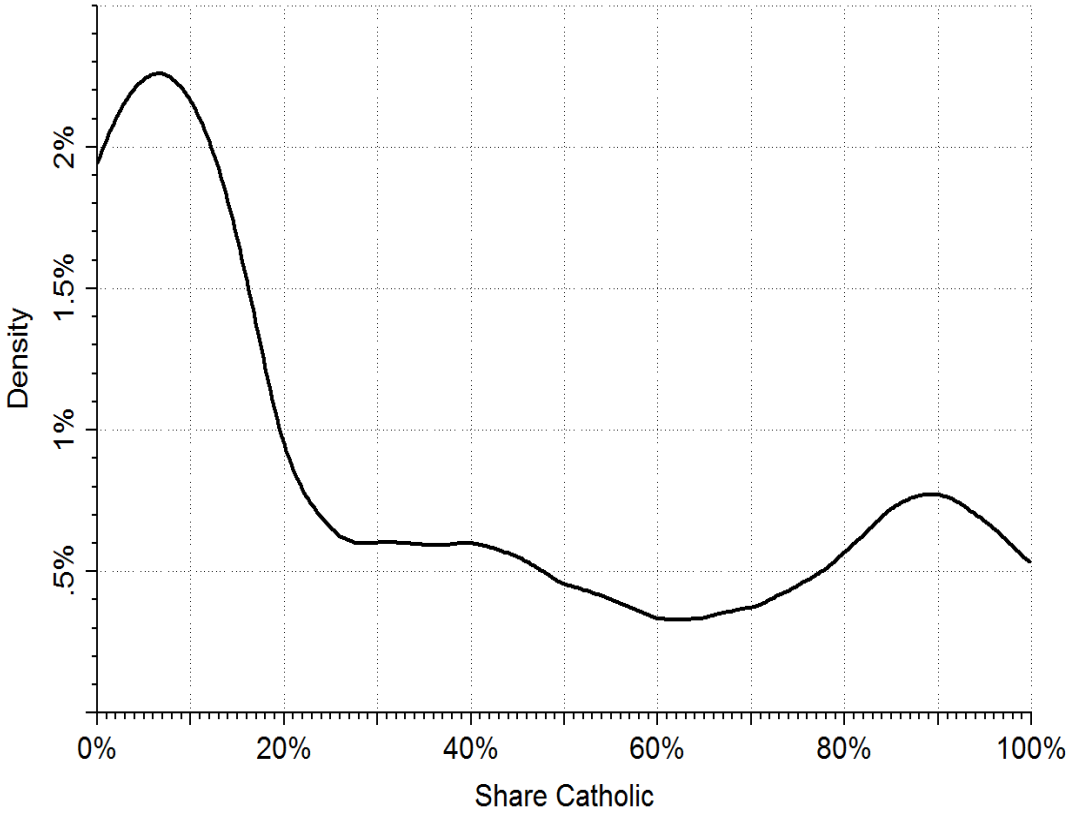
Figure A.1: Semiparametric Estimates of the Relationship between Religion and Nazi Vote Shares



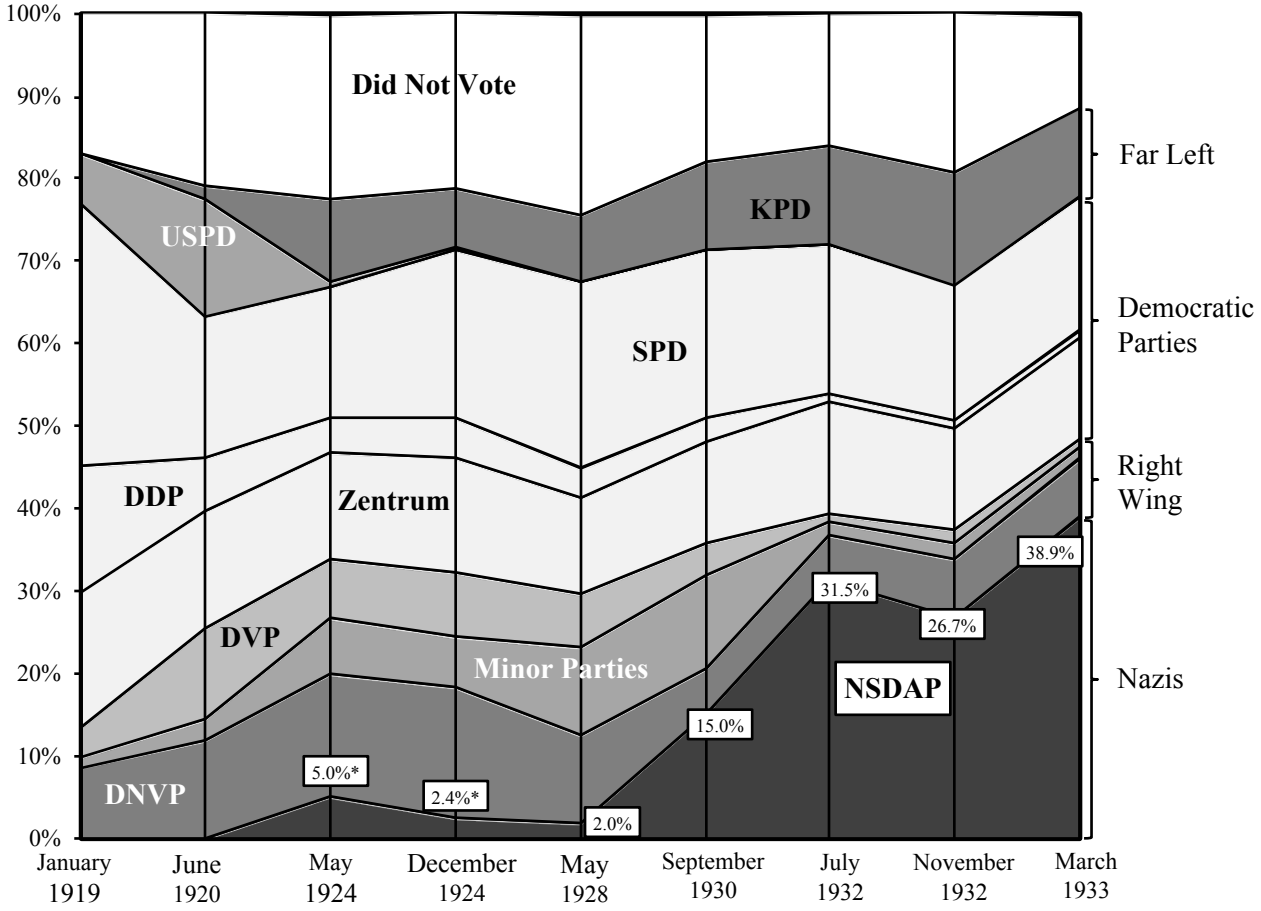
Notes: Graphs show semiparametric estimates of the relationship between NSDAP vote shares and voters' religion, i.e. $f(\cdot)$ in $v = \mu + f(Catholic) + X'\theta + \varepsilon$, as well as the associated asymptotic 95%-confidence intervals. The left panel is based on county-level data for the November election of 1932. The panel on the right restricts attention to the March elections in 1933 and to geographic units that include no municipalities with more than 2,000 inhabitants. See the Data Appendix for a detailed description of the data. $f(\cdot)$ is estimated according to the differencing method in Yatchew (1998). Standard errors account for clustering at the electoral district and have been caclulated using the nonparametric bootstrap with 1,000 iterations.

Figure A.2: Distribution of Catholics Across Counties



Notes: Figure depicts a population-weighted kernel density estimate of the distribution of counties' share of Catholics. Estimates use an Epanechnikov kernel with a bandwidth of 7.5.

Figure A.3: Election Results in Weimar Germany

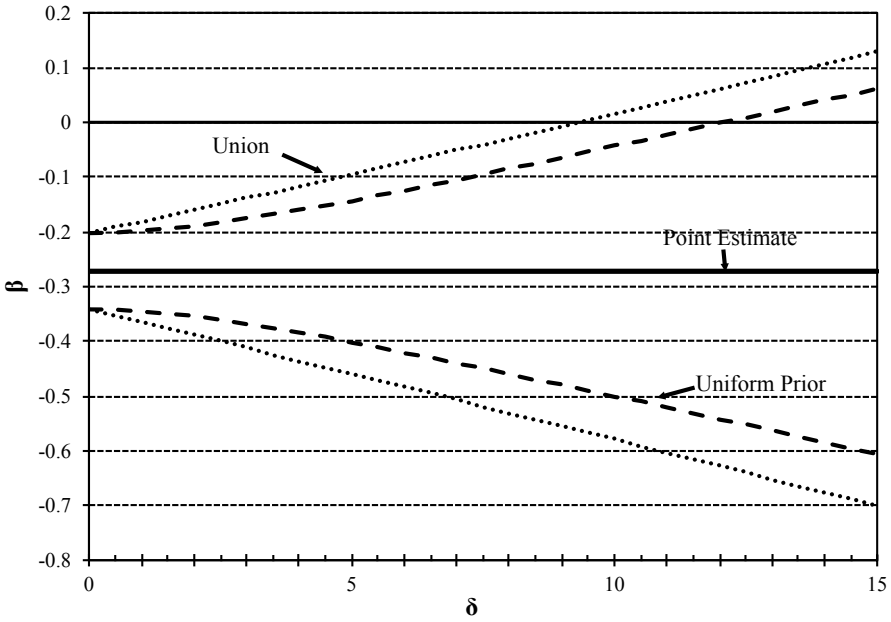


Notes: Figure depicts vote shares of major parties in each election to the Reichstag (1920–1933) and Nationalversammlung (1919), as percentage of the voting eligible population. Asterisks mark years in which the NSDAP was officially outlawed. In these years the Nazis formed an electoral alliance with other parties in the *völkisch* bloc, running as NSFP in May 1924 and as NSFB in December 1924. Results for the Zentrum include the BVP.

Sources: Based on Falter (1991).

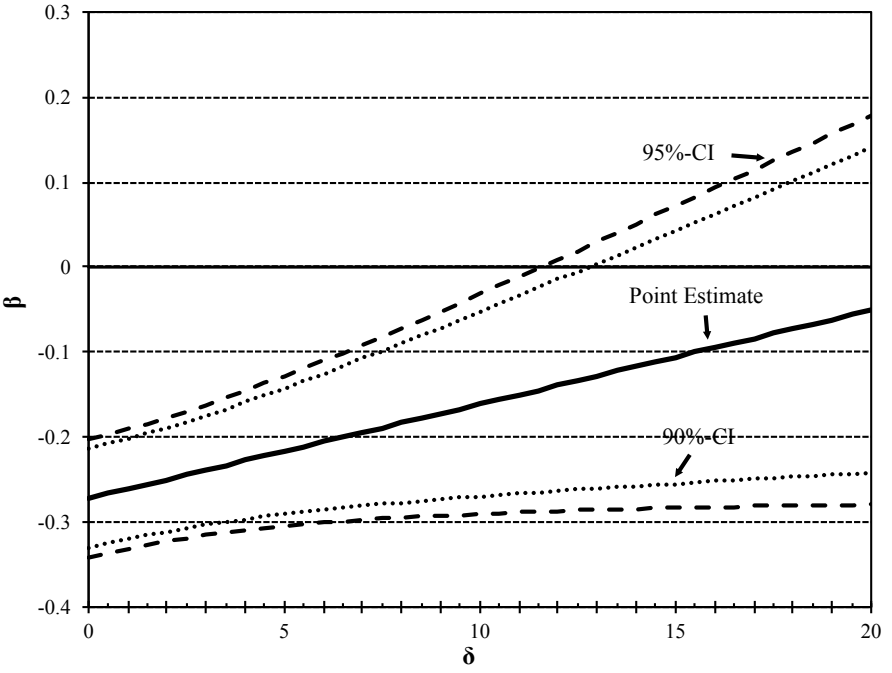
Figure A.4: Inference Allowing for Violations of the Exclusion Restriction

A. 95%-Confidence Interval Estimates with Mean-Zero Prior



Notes: Figure depicts point estimates and 95%-confidence intervals for the religious difference in the propensity to vote for the NSDAP in the November elections of 1932. The intervals labeled "Union" impose only the prior information that the support of γ in equation (A.5) is $[-\delta,\delta] \times [-\delta,\delta]$. Intervals labeled "Uniform Prior" are based on the assumption that each element of γ is distributed $U(-\delta,\delta)$. Intuitively, in both cases δ parameterizes the maximal allowable violation of the exclusion restriction. See the main text as well as Conley et al. (2012) for details on the estimation procedure.

B. 90%- and 95%-Confidence Interval Estimates with Negative Prior



Notes: Figure depicts point estimates as well as 90% (dotted line) and 95% (dashed line) confidence intervals for the religious difference in the propensity to vote for the NSDAP in the November elections of 1932. Estimates are based on the assumption that each element of γ in equation (A.5) is distributed $U(-\delta,0)$. See the main text as well as Conley et al. (2012) for details on the estimation procedure.

Table A.1: Descriptive Statistics

Variable	Full Sample	Religion of Majority: Catholic	Religion of Majority: Protestant	Source
Demographics:				
Percent Catholic	31.28	81.21	12.65	1925 Census
	(33.40)	(14.60)	(13.21)	
Percent Protestant	64.12	16.74	81.79	1925 Census
	(32.03)	(13.32)	(13.87)	
Percent Jewish	.97	.69	1.07	1925 Census
	(1.60)	(.68)	(1.82)	
Percent Nonreligious	3.64	1.36	4.49	1925 Census
	(3.47)	(1.65)	(3.59)	
Percent Female	51.29	51.26	51.30	1933 Census
	(1.19)	(1.18)	(1.20)	
Urban County	.424	.348	.452	Official County
	(.494)	(.477)	(.498)	Classification
Population (in 1,000)	179.0	167.0	183.6	1925 Census
	(220.5)	(215.9)	(222.2)	
Employment (in %):				
Female Labor Force Participation Rate	37.28	37.96	36.99	1933 Census
	(9.30)	(11.39)	(8.24)	
Unemployment Rate, Overall	18.87	16.80	19.68	1933 Census
	(9.24)	(9.16)	(9.14)	
Unemployment Rate, White Collar Workers	19.33	17.21	20.16	1933 Census
	(6.20)	(6.16)	(6.02)	
Unemployment Rate, Blue Collar Workers	31.84	30.95	32.19	1933 Census
	(11.25)	(10.76)	(11.42)	
Unemployment Rate, Domestic Servants	13.86	12.43	14.42	1933 Census
	(6.52)	(5.57)	(6.78)	
Sectoral Composition of Workforce (in %):				
Agriculture	29.14	35.44	26.68	1933 Census
	(26.71)	(27.56)	(25.98)	
Manufacturing and Artisanry	35.22	33.02	36.08	1933 Census
	(13.73)	(13.66)	(13.67)	
Trade and Commerce	21.06	17.82	22.32	1933 Census
	(12.18)	(10.87)	(12.43)	
Services	10.17	9.39	10.48	1933 Census
	(6.26)	(5.83)	(6.40)	
Domestic Labor	4.41	4.32	4.45	1933 Census
	(2.32)	(2.28)	(2.34)	
Occupational Composition (in %):				
Helping Family Members	17.46	22.72	15.41	1933 Census
	(13.86)	(15.61)	(12.53)	
White Collar Workers	13.40	11.59	14.11	1933 Census
	(8.54)	(8.05)	(8.62)	
Civil Servants	6.16	5.53	6.41	1933 Census
	(3.94)	(3.79)	(3.98)	
Blue Collar Workers	39.25	35.63	40.67	1933 Census
	(9.66)	(10.48)	(8.93)	
Domestic Servants	4.26	4.17	4.30	1933 Census
	(2.21)	(2.20)	(2.21)	
Self-Employed	19.46	20.36	19.11	1933 Census
	(4.17)	(5.11)	(3.68)	
Geography:				
Latitude (in degrees North)	51.24	50.22	51.62	Own Calculations
	(1.64)	(1.55)	(1.50)	
Longitude (in degrees East)	11.01	9.67	11.50	Own Calculations
	(3.29)	(3.48)	(3.07)	
Distance to Berlin (in km)	323.2	460.1	272.2	Own Calculations
	(161.5)	(79.4)	(154.5)	
Distance to Major City (in km)	90.94	86.14	92.74	Own Calculations
	(85.60)	(70.78)	(90.49)	
Distance to Border (in km)	73.94	50.90	82.54	Own Calculations
	(52.56)	(40.40)	(53.99)	
Distance to Major Port (in km)	308.8	394.1	277.0	Own Calculations
	(169.0)	(177.8)	(154.0)	
Distance to Major River (in km)	36.69	31.03	38.79	Own Calculations
	(57.75)	(37.69)	(63.53)	
Distance to Ore or Coal Deposits (in km)	102.1	91.8	106.0	Own Calculations
	(99.3)	(84.3)	(104.2)	
Number of Counties	982	331	651	

Notes: Entries are population-weighted means and standard deviations of covariates in our county-level data set. The sample consists of counties with nonmissing information on religious composition and election results in November 1932. See the Data Appendix for the precise definition and source of each variable.

Table A.2: Predictive Power of Constituencies' Religious Composition in the Elections of July 1932 and March 1933

	NSDAP Vote Share			
Independent Variable	July 1932		March 1933	
Percent Catholic	-.290		-.233	
	(.018)		(.021)	
Percent Jewish	-.424		-.480	
	(.286)		(.230)	
Percent Nonreligious	-1.491		-1.686	
	(.195)		(.178)	
Demographics:				
Percent Female		1.030		.859
		(.679)		(.588)
Urban County		-5.330		-2.545
		(1.764)		(1.440)
Log Population		-2.514		-1.928
		(.484)		(.461)
Economic Conditions:				
Unemployment Rate, White Collar Workers		.953		.857
		(.157)		(.125)
Unemployment Rate, Blue Collar Workers		-.328		-.424
		(.107)		(.084)
Unemployment Rate, Domestic Servants		.148		.168
		(.119)		(.099)
Female Labor Force Participation Rate		.237		.214
		(.137)		(.107)
Sectoral Composition of Workforce (in %):				
Manufacturing and Artisanry		-.097		-.130
		(.097)		(.082)
Trade and Commerce		-.367		-.366
		(.152)		(.131)
Services		-.935		-.785
		(.268)		(.214)
Domestic Labor		-3.372		-2.945
		(2.963)		(2.217)
Occupational Composition (in %):				
White Collar Workers		.671		.581
		(.309)		(.262)
Civil Servants		1.919		1.570
		(.327)		(.278)
Blue Collar Workers		.502		.339
		(.187)		(.173)
Domestic Servants		4.499		3.053
		(3.271)		(2.497)
Self-Employed		1.476		1.253
		(.414)		(.347)
Constant	45.818	-65.856	52.546	-27.113
	(1.561)	(145.36)	(1.208)	(119.20)
Geographical Controls	No	Yes	No	Yes
Electoral District Fixed Effects	No	No	No	No
R-Squared	.663	.453	.575	.498
Number of Observations	973	973	981	981

Notes: Entries are coefficients and standard errors from estimating equation (1) by weighted least squares. The dependent variable is a county's NSDAP vote share in the elections of July 1932 (left colums) and March 1933 (right columns). Weights correspond to the number of eligible voters in a given county. Heteroskedasticity robust standard errors are clustered by electoral district and reported in parentheses. The omitted category in Sectoral Composition of Workforce is Agriculture, and that in Occupational Composition is Helping Family Members. The set of Geographical Controls includes all geographical covariates listed in Appendix Table A.1. In addition to the variables shown in the table, indicator variables for missing values on each covariate are also included in the regressions.

Table A.3: "Reduced Form" Estimates

	NSDAP Vote Share					
	(1)	(2)	(3)	(4)	(5)	(6)
County's Religion in 1624:						
Catholic	-17.203	-15.513	-15.457	-14.989	-12.804	-11.520
	(1.293)	(1.193)	(1.236)	(1.471)	(1.644)	(1.533)
Mixed	-9.148	-7.342	-7.072	-6.932	-6.313	-5.709
	(1.538)	(1.757)	(1.792)	(1.807)	(1.432)	(1.144)
Demographics	No	Yes	Yes	Yes	Yes	Yes
Economic Conditions	No	Yes	Yes	Yes	Yes	Yes
Sectoral Comoposition of Workforce	No	No	Yes	Yes	Yes	Yes
Occupational Composition	No	No	No	Yes	Yes	Yes
Geographical Controls	No	No	No	No	Yes	Yes
Historical Controls	No	No	No	No	Yes	Yes
Electoral District Fixed Effects	No	No	No	No	No	Yes
R-Squared	.436	.510	.520	.531	.574	.721
Number of Observations	982	982	982	982	982	982

Notes: Entries are coefficients and standard errors from estimating the "reduced form" of our IV strategy in Section 4. Heteroskedasticity robust standard errors are clustered by electoral district and reported in parentheses. The control variables included in Demographic Controls, Economic Conditions, Sectoral Composition of Workforce, and Occupational Composition are the same as the ones listed under the respective heading in Table 1. The set of Geographical Controls includes all geographical covariates shown in Appenidx Table A.1, and Historical Controls includes the variables that Cantoni (2012) and Rubin (2014) have shown to be correlated with territorial lords' choices.

Table A.4: Alternative Instrumental Variable Estimates

	A. First Stage			*B. 2SLS*				
	Percent Catholic			NSDAP Vote Share, November 1932				
Independent Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Percent Catholic				-.221	-.250	-.272	-.213	-.271
				(.060)	(.116)	(.028)	(.076)	(.027)
Distance to Wittenberg (in km)	.083	.125	.045					
	(.028)	(.043)	(.029)					
County's Religion in 1624:								
Catholic			42.117					
			(3.681)					
Mixed			22.005					
			(3.322)					
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Economic Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sectoral Comoposition of Workforce	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Occupational Composition	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geographical Controls	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Remaining Historical Controls	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Electoral District Fixed Effects	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Instruments:								
Distance to Wittenberg	--	--	--	Yes	Yes	Yes	Yes	Yes
Distance to Wittenberg Squared	--	--	--	No	No	No	Yes	Yes
Distance to Wittenberg Cubed	--	--	--	No	No	No	Yes	Yes
Historically Catholic	--	--	--	No	No	Yes	No	Yes
Historically Mixed	--	--	--	No	No	Yes	No	Yes
First Stage F-Statistic	--	--	--	8.85	8.35	55.46	8.15	34.40
Overidentification Test [p-value]	--	--	--	--	--	.836	.900	.763
Number of Observations	982	982	982	982	982	982	982	982

Notes: Entries are coefficients and standard errors from estimating equations (A.3) and (A.4) by weighted least squares and weighted two-stage least squares, respectively. The dependent variable in columns (1)–(3) is a county's share of Catholics, and that in columns (4)–(8) is a county's NSDAP vote share in the November elections of 1932. In all specifications, heteroskedasticity robust standard errors are clustered by electoral district and reported in parentheses. The control variables included in Demographic Controls, Economic Conditions, Sectoral Composition of Workforce, and Occupational Composition are the same as the ones listed under the respective heading in Table 1. The set of Geographical Controls includes all geographical covariates shown in Appendix Table A.1, and Historical Controls includes the variables that Cantoni (2012) and Rubin (2014) have shown to be correlated with territorial lords' choices.

Table A.5: Heterogeneity in the Impact of Religion on Nazi Vote Shares

Restriction / Sample	Point Estimate OLS	Point Estimate IV	Test for Equality of OLS Coefficients [p-value]
Baseline	-.287	-.273	
	(.025)	(.028)	
By Population Density:			
Urban County	-.192	-.158	
	(.028)	(.026)	.005
Rural County	-.307	-.302	
	(.027)	(.032)	
By Sahre of Catholics:			
Catholic Heartland	-.299	-.234	
	(.022)	(.029)	.671
Catholic Diaspora	-.282	-.281	
	(.038)	(.034)	
By Share of Workforce in Agriculture:			
Above Median	-.312	-.311	
	(.029)	(.032)	.002
Below Median	-.234	-.189	
	(.017)	(.031)	

Notes: Entries are coefficients and standard errors on Percent Catholic from estimating the empirical models in equations (1) and (3) by weighted least squares and weighted two-stage least squares, respectively. The applicable sample restriction is shown in the column on the left. Heteroskedasticity robust standard errors are clustered by electoral district and reported in parentheses. "Catholic Heartland" is defined as the regions of Rhineland, Westphalia, Baden, as well as South-East Bavaria, whereas "Catholic Diaspora" encompasses the remainder of Germany. To ensure comparability with the baseline results in Tables 1 and 2, the set of covariates is the same as in the most inclusive specifications in those tables. The column on the very right displays p-values from a Chow test for equality of the coefficients estimated by lest squares, i.e. those in the column labeled "OLS."

Table A.6: Additional Robustness Checks

Specification / Sample	Point Estimate OLS	Point Estimate IV
Baseline	-.287	-.273
	(.025)	(.028)
As Percentage of Valid Votes	-.354	-.335
	(.024)	(.028)
Sample:		
Unweighted	-.287	-.279
	(.033)	(.033)
Excluding Prussia	-.282	-.274
	(.047)	(.038)
Excluding Bavaria	-.275	-.257
	(.026)	(.029)
Additional Controls:		
Additional Labor Force Controls	-.281	-.265
	(.026)	(.029)
Income per Capita & Change Relative to 1928	-.287	-.273
	(.025)	(.028)
Major Parties' Vote Shares in 1920	-.258	-.228
	(.022)	(.035)
V&V (2012) Proxy for Historical Anti-Semitism	-.290	-.275
	(.025)	(.028)
Instrument:		
Based on Religious Situation in 1555	--	-.271
		(.027)
Estimator:		
LASSO	-.213	--
	(.017)	
IV-LASSO-CV	--	-.263
		(.013)

Notes: Entries are coefficients and standard errors on Percent Catholic. The respective sample restriction, set of additional controls, alternative instrument, or estimator is shown in the column on the left. Unless otherwise indicated, results are based on the empirical models in equations (1) and (3), which are estimated by weighted least squares and weighted two-stage least squares, respectively. To ensure comparability with the baseline estimates in Tables 1 and 2, the results also control for the covariates used in the most inclusive specifications in these tables. Heteroskedasticity robust standard errors are clustered by electoral district and reported in parentheses. The LASSO estimator is based on the procedure in Belloni et al. (2014), and the IV-LASSO-CV estimator is due to Belloni et al. (2011). The former selects controls among all covariates in the most inclusive specification in Table 1, their squares, and all pairwise combinations. The latter uses 10-fold cross-validation and optimally selects instruments from the set of the instrumental variables in Table 2 as well as their interactions with indicator variables for each electoral district.

Table A.7: Testing Alternative Explanations for the Impact of Religion on Nazi Vote Shares

Restriction / Sample	Point Estimate OLS	Point Estimate IV	Test for Equality of OLS Coefficients [p-value]
Baseline	-.287	-.273	
	(.025)	(.028)	
By Fraction of Catholics Voting for the Zentrum Party in 1920:			
Lowest Quartile	-.188	-.170	
	(.046)	(.044)	
Second Quartile	-.261	-.242	
	(.026)	(.026)	.001
Third Quartile	-.331	-.361	
	(.047)	(.045)	
Highest Quartile	-.319	-.339	
	(.024)	(.033)	
By Region:			
Prussia	-.298	-.284	
	(.018)	(.021)	.693
Remainder of Germany	-.282	-.274	
	(.047)	(.038)	
By Historical Religion of Area (c. 1624):			
Catholic	-.263	--	
	(.070)		.667
Protestant	-.282	--	
	(.027)		
Catholic	-.263	--	
	(.070)		
Lutheran	-.268	--	.023
	(.034)		
Calvinist	-.382	--	
	(.056)		
By Catholics' Representation Among High School Graduates in 1931:			
Above Median	-.297	-.292	
	(.047)	(.045)	.937
Below Median	-.300	-.293	
	(.019)	(.025)	
By Historical Literacy Rates (c. 1871):			
Above Median	-.311	-.314	
	(.020)	(.039)	.245
Below Median	-.279	-.291	
	(.022)	(.022)	
By Historical Income Level (c. 1871):			
Above Median	-.287	-.238	
	(.013)	(.021)	.939
Below Median	-.286	-.278	
	(.024)	(.024)	
By Reliogiosity of Parishoners:			
Above Median	-.280	-.275	
	(.033)	(.037)	.065
Below Median	-.337	-.352	
	(.014)	(.015)	

Notes: Entries are coefficients and standard errors on Percent Catholic from estimating the empirical models in equations (1) and (3) by weighted least squares and weighted two-stage least squares, respectively. The applicable sample restriction is shown in the column on the left. Heteroskedasticity robust standard errors are clustered by electoral district and reported in parentheses. Proxies for historical incomes and literacy rates come from Becker and Woessmann (2009) and are available only for counties in Prussia. Proxy variables for Catholics' religiosity come from Amtliche Zentralstelle für kirchliche Statistik des katholischen Deutschlands (1924, 1931). As explained in Appendix H, we factor analyze these proxies to construct a religiosity index and, based on this index, then divide the counties in our data at the median. To ensure comparability with the baseline results in Tables 1 and 2, the set of covariates is the same as in the most inclusive specifications in those tables. The column on the very right displays p-values from a Chow test for equality of the coefficients estimated by lest squares, i.e. those in the column labeled "OLS."

Table A.8: Religious Differences in Parties' Vote Shares, 1920-1933

	1920	May 1924	December 1924	1928	1930	July 1932	November 1932	1933
Far Left:								
KPD	-.003	-.012	-.009	-.003	.004	.002	.002	-.001
	(.008)	(.010)	(.011)	(.013)	(.014)	(.013)	(.013)	(.012)
Democratic Parties:								
SPD	-.090	-.120	-.123	-.132	-.134	-.114	-.101	-.105
	(.017)	(.016)	(.019)	(.021)	(.020)	(.020)	(.019)	(.019)
DDP	-.075	-.040	-.040	-.026	-.026	-.004	-.004	-.003
	(.009)	(.008)	(.008)	(.006)	(.006)	(.002)	(.001)	(.002)
Zentrum / BVP	.579	.469	.480	.433	.492	.494	.453	.451
	(.030)	(.035)	(.036)	(.024)	(.032)	(.029)	(.030)	(.029)
DVP	-.090	-.036	-.042	-.038	-.015	-.007	-.011	-.008
	(.019)	(.014)	(.014)	(.010)	(.008)	(.002)	(.003)	(.002)
Right Wing:								
DNVP	-.241	-.231	-.250	-.160	-.055	-.056	-.072	-.067†
	(.030)	(.036)	(.043)	(.036)	(.009)	(.007)	(.010)	(.009)
Far Right:								
NSDAP	--	-.053*	-.030*	-.022	-.132	-.316	-.273	-.276
		(.014)	(.008)	(.007)	(.023)	(.029)	(.028)	(.023)

Notes: Entries are coefficients and standard errors from estimating the difference in the propensity to vote for a particular party between Protestants and Catholics via the instrumental variables strategy described in Section 4. Heteroskedasticity robust standard errors are clustered by electoral district and reported in parentheses. The control variables included in our regressions are the same as in Table 2. Asterisks (*) mark years in which the NSDAP was officially outlawed. In these years the Nazis formed an electoral alliance with other parties in the *völkisch* bloc, running as NSFP in May 1924 and as NSFB in December 1924. Daggers (†) mark years in which the DNVP campaigned together with the Stahlhelm and Landbund as Kampffront Schwarz-Weiß-Rot. Results for the Zentrum include the BVP.

Table A.9: Factor Analysis of Proxy Variables for Catholics' Religiosity

Variable	Factor 1	Factor 2	Factor 3	Uniqueness
Mass Attendance	.820	.443	-.105	.120
Easter Communion	.858	.399	-.111	.093
Religiously Mixed Marriages	-.919	.276	.161	.053
Babies from Religiously Mixed Marriages	-.897	.377	.135	.036
Christenings	.926	-.212	.192	.061
Church Burrials	.792	.105	.346	.243

Notes: Entries are factor loadings and uniquenesses from factor analyzing the variables listed in the column on the left. We retain the first factor as our measure of religiosity. The first three factors have eigenvalues of 4.54, .63, and .22, respectively. The first factor alone explains 86.3% of the variance in its components.

Table A.10: Key Events in the Fall of the Weimar Republic

Years of Crisis:		
1918	November	Revolution & proclamation of the German Republic
1919	January	Spartacus uprising; Elections to the National Assembly
	June	Treaty of Versailles
	August	Constition of Weimar signed into law
1920	March / April	Kapp-Lüttwitz-Putsch; Communist uprisings
	June	Elections to the first Reichstag
1921 – 1922		Political assisinations of M. Erzberger and W. Rathenau, among others
1923	January	Allied Rhineland occupation
	November	Beer Hall Putsch; Introduction of Rentenmark to end hyperinflation
Golden Era:		
1924	August	Dawes Plan
1925	April	Ultra-conservative P. v. Hindenburg elected Reichspresident
	October	Treaty of Locarno
1926	September	Germany admitted to League of Nations
Decline and Downfall:		
1929	October	Stock market crash & beginning of economic crisis
	December	Young Plan & Referendum on "Law Against the Enslavement of the German People"
1930	March	H. Brüning appointed Chancellor, first "presidential cabinet" governs by emergency decree
	Septmeber	Parliamentary elections: radical parties experience massive gains
1932	April	P. v. Hindeburg reelected as Reichspresident; A. Hitler gets 36.8% of votes
	June / July	F. v. Papen appointed new Chancellor; Nazis gain further ground in parlimanetary elections
	November	NSDAP experinces first setback in parliamentary elections
	December	General v. Schleicher appointed new Chancellor
1993	January	A. Hitler appointed new Chancellor
	February	Reichstag Fire; Weimar Constitution suspended indefinitely
	March	NSDAP achieves 43.9% of popular vote in parliamentary elections; passage of Enabling Act

Sources: Based in part on the description in Mommsen (1989).