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Mevlude Akbulut-Yuksel

Dalhousie University and IZA

Dozie Okoye Dalhousie University

Mutlu Yuksel Dalhousie University and IZA

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IZA – Institute of Labor Economics					
Schaumburg-Lippe-Straße 5–9 53113 Bonn, Germany	Phone: +49-228-3894-0 Email: publications@iza.org	www.iza.org			

ABSTRACT

Learning to Participate in Politics: Evidence from Jewish Expulsions in Nazi Germany

This paper provides causal evidence on the importance of socioeconomic circumstances, socialization, and childhood events, in the formation of adult political behaviour and attitudes, using region-by-cohort variation in exposure to the Jewish expulsions in Nazi Germany as a quasi-experiment. We find that the expulsion of Jewish professionals had long-lasting detrimental effects on the political attitudes and beliefs of Germans who were at impressionable years during the Nazi Regime. We further demonstrate that these adverse effects on political behaviour and attitudes may be explained by the social changes brought about by the expulsions, which led to relatively lower adult socioeconomic status and civic skills for individuals in their impressionable ages during the expulsions. These results are robust to several alternative specifications, composition bias induced by differential migration and mortality rates across regions and cohorts, and also regional differences in economic performance, wartime destruction, urbanization, and party support, during the Nazi Regime.

JEL Classification: Keywords: D72, D74, O12, P16, N40 political behaviour, impressionable years, Jewish expulsions, socioeconomic status

Corresponding author:

Dozie Okoye Department of Economics Dalhousie University 6214 University Avenue PO Box 15000 Halifax, NS B3H 4R2 Canada E-mail: cokoye@dal.ca

1 Introduction

Political interest and participation are widely believed to be essential for proper democratic governance.¹ For example, voting, as one form of political participation, is associated with the degree to which policy outcomes represent citizens' preferences, and helps to build social capital (Dahl, 1971; Gimpel and Schuknecht, 2003; Highton, 1997; Pateman, 1970). Beside being essential for the proper functioning of a democracy, participation in politics is thought to be important for a range of socioeconomic outcomes: it potentially helps to build social capital, improve public health, empower citizens, and might even have an impact on aggregate incomes (Acemoglu et al., 2014; Barro, 1996; Carpini and Keeter, 1996; Guiso et al., 2004; Knack and Keefer, 1997; Putnam, 2000; Sanders, 2001; Tavares and Wacziarg, 2001). Hence, a large body of literature attempting to understand the determinants of political behaviour has developed. This understanding is even more important in the face of the declining participation rates in many established democracies, and the simultaneously increasing democratization in many parts of Africa and Latin America (O'Toole et al., 2003; Putnam, 2000; Resnick and Casale, 2011; Schraufnagel and Sgouraki, 2005).

An important open question in this literature concerns the role of socioeconomic circumstances, socialization, and childhood events, on adult political behaviour, and especially effects on an individual's interest and participation in political activity. For example, are there long-term stable determinants of political behaviour, or is political behaviour determined largely by context-specific cost-benefit analyses? We answer these questions using a retrospective study of the expulsion of Jewish professionals in Nazi Germany, and investigate the long-term impacts of these events in childhood and early adulthood on the political behaviour of German adults.

Soon after coming into power in 1933, the government enacted the "Law for the Restoration of the Professional Civil Service," which gave it power to expel all civil servants of Jewish background from national civil service jobs. The immediate impact of the law was a significant loss of highly educated professionals in Germany, ranging from lawyers, doctors and university professors to secondary and primary school teachers, because the Jewish population at this time was significantly more likely to be part of the professional class and tended to be concentrated in urban areas, compared to the rest of the population. The expulsions also led to a breakdown in family structure, as some of the individuals expelled were Jews of mixed ancestry (Evans, 2005; Kaplan, 2005).²

 $^{^{1}}$ A generally accepted definition of political participation is any "activity that has the intent or effect of influencing government action — either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies" (Verba et al., 1995, 38).

 $^{^{2}}$ See the next section for a more detailed description of the Jewish population and effects of the expulsion.

In this paper, we treat the expulsions as an exogenous shock to affected German children and young adults, and use potential differences in exposure across German regions to test whether, and in what ways, growing up during the expulsions had a permanent impact on individuals' political interest and participation as adults. Our focus on childhood and young adults is consistent with the literature on the importance of early life for later cognitive outcomes (Heckman, 2007), and is embedded in the well-established *impressionable years* and *increasing persistence* hypotheses, both of which imply that beliefs are mostly formed before full adulthood and fade more slowly with age (Brim and Kagan, 1980; Krosnick and Alwin, 1989).³

A major challenge in estimating the effects of the Jewish expulsions on political behaviour is that any cohort of individuals has shared experiences that might be correlated with both the expulsions and political behaviour. Thus, we cannot simply compare exposed cohorts to those that were not directly affected by the expulsions. Similarly, we generally cannot identify the impact of the expulsions by comparing areas with different levels of exposure within a particular cohort, because the areas might also be different for other reasons. Therefore, we use the within-region variation across cohorts in the exposure to Jewish expulsions (cohortby-region variation) to identify the impact of Jewish expulsions on political behaviour, which allows us to account flexibly for time-period, life cycle, and cohort-specific effects, as well as fixed regional characteristics.⁴

We combine unique data on the fraction of the population who were Jewish in the former West Germany at the lowest representative geographical unit in 1933, from Kessner (1935), with individual-level data from the German Socio-Economic Panel (SOEP).⁵ Using pre-1933 percentages of the population who were Jewish as a proxy for the intensity of the expulsion in each region, we find that individuals who were children and young adults during the time of the expulsions are significantly less likely to be interested, and participate, in politics, compared than older individuals or those born long after the war. To put the estimates in perspective, one may compare a young individual in Frankfurt in 1933, where 3.25% of the population was of Jewish origin, to a young individual in Bremen, which was 0.4% Jewish in 1933; the estimates imply that the young individual who was in Frankfurt at the time

 $^{^{3}}$ The influence of early life events on adult political participation and interest has long history in political science, and Jennings and Niemi (1974); Miller and Sears (1986); Putnam (2000); Sears (1975) provide important contributions. The importance of childhood and early adulthood years for the formation of political beliefs is linked to the nature of the brain in those critical years (Spear, 2000). Alesina and Giuliano (2011) and Glass et al. (1986) provide empirical evidence suggesting that the family environment matters for political participation.

 $^{^{4}}$ This is a generalized difference-in-differences technique. The empirical strategy involves simultaneously comparing the political behaviours *within a region* of individuals whose childhoods would have been affected by the expulsions with those who were born much later (controls for regional characteristics), and *across regions* with different levels of pre-1933 Jewish population for individuals who would have been affected by the expulsion (controls for cohort characteristics).

 $^{{}^{5}}$ We call the lowest representative geographical unit regions. They are referred to formally as *Raumordnungsregionen* (RORs) and are determined by the Federal Planning office based on economic inter-linkages; they are most similar to metropolitan statistical areas (MSA) in the U.S. See Knies and Spiess (2007) for more detailed information on regions in the SOEP.

of the expulsions is five percentage points less likely to participate in local politics, as a result of the expulsions. These estimates are important quantitatively, as studies have found that door-to-door canvassing, for example, increases voter turnout by an average of seven percentage points (de Rooij et al., 2009).

The estimated impacts may be interpreted as being causal under the assumption that the trends in political behaviour would have been the same in all regions if it had not been for the expulsions (parallel trends). We test this assumption directly using cohorts who were not in their impressionable years during the expulsions, and those who were born after the expulsions. Specifically, we run a placebo test showing that the impact of Jewish expulsions is not found for either individuals who were past their impressionable years during this time period nor for individuals who were born in the 1960s, after the expulsions. Therefore, we are able to rule out explanations for our results that rely on region-wide or cohort-specific factors, and also general region-cohort trends in political behaviour and attitudes. These results also imply that expulsions have no spillover impacts on later generations born in regions with ex-ante higher proportions of Jews.⁶

However, our results could also be confounded by the possibility of other economics and political events that were specific to high-exposure regions and also disproportionately affected individuals in their impressionable ages. These include economic and institutional/political shocks that could affect the young *differentially*, as has been documented by several studies (see Giuliano and Spilimbergo 2014; Lewis-Beck 1990; Remmer 1991; Kenneth M. Roberts 1999; Tufte 1980; Wilkin et al. 1997, and other references therein). Drawing on several sources of historical data, we demonstrate that our results are not driven by a variety of region-specific shocks that could possibly have had differential impacts on impressionableaged individuals. On the socioeconomic front, the results are not explained by the differential impacts of region-level unemployment rates, income per capita, population size, and urbanization rates. Furthermore, we find that affected children and young adults in high exposure areas are not more likely to migrate, nor do they have higher mortality rates. On the political side, they are not explained by the differential impacts of the shares of votes for the Nazi and Communist parties within the region, all of which might have shaped the political outlooks of affected children and young adults. Lastly, the impact of Jewish expulsions is also not explained by the differential impact of wartime destruction on the young in high exposure areas, as measured by the volume of residential rubble per capita. In fact, with the exception of the urban share of population in 1933, none of these region-specific characteristics have large differential impacts on the subsequent political behaviours of contemporary children

 $^{^{6}}$ We are able to use cohorts born after the war as a placebo-treated cohort because of the rapid post-war recovery across Germany (Akbulut-Yuksel, 2014; Ichino and Winter-Ebmer, 2004).

and young adults, and the point estimates are generally zero and insignificant.

So, what is driving the impact of the expulsions on children and young adults in areas with relatively larger Jewish populations? We argue that these impacts are consistent with the impacts of the changes in the education system and the social environment in which the affected individuals grew up. The expulsions resulted in large human capital losses. For example, eight percent of teachers were expelled in 1933 alone, and it is estimated that more than 15 percent of university professors, teachers, doctors, lawyers, and other professionals were dismissed as a result of this law, including twenty future and past Nobel prize winners. The expulsions also led to important changes within the family, because a significant proportion of émigrés were of mixed Jewish-German descent (Akbulut-Yuksel and Yuksel, 2015; Evans, 2005; Moser et al., 2014; Strauss, 1983; Yahil, 1991). Consequently, a number of studies have found that the expulsions had a negative impact on general schooling attainments in affected areas, and also had a negative effect on affected German doctorate students (Akbulut-Yuksel and Yuksel, 2015; Waldinger, 2010).⁷

Given the above changes in German society as a result of the expulsions, we explain the causal link between exposure to the expulsion of Jewish professionals and political behaviour by building on insights from the established literature on the importance of socioeconomic status and the social environment in the formation of political behaviour (Alesina and Giuliano, 2011; Brady et al., 1995; Glass et al., 1986; Jenning and Markus, 1977; Jennings and Niemi, 1974; Putnam, 2000; Verba and Nie, 1972; Verba et al., 1995). The key idea, illustrated in Figure 1, is that the expulsions changed the environment in which children and young adults were socialized, which affected their socioeconomic status, interest in politics, and ability to acquire the resources required for political participation as adults (such an income and civic skills). Consistent with this theory, we find that, relative to members of the same cohort who lived in areas with lower proportions of Jews, exposed children and young adults have less schooling, earn lower wages, are less likely to believe politics is important, less likely to belong to a church, less likely to volunteer, and have lower levels of trust. Therefore, our results on the negative impacts of exposure to the expulsions on political behaviour is consistent with relatively lower adult socioeconomic status and civic skills, as a result of growing up during the turbulent expulsions, that have negatively affected adult political behaviour.

Contributions and Related Literature:

The results in this paper are related directly to studies of the determinants of political participation, particularly regarding the importance of an individual's socioeconomic status for

⁷See Acemoglu et al. (2011) for similar social changes that were brought about by the expulsions in Russia.

their political behaviour (Campbell et al., 1960; Putnam, 2000; Verba et al., 1995; Wolfinger and Rosenstone, 1980). Unlike most empirical studies analyzing the link between socioeconomic status and political behaviour, which use detailed survey and census data (see Bekkers 2005; Brady et al. 1995; Finkel and Muller 1998, and others cited by Putnam 1995), our empirical contribution to this literature is the demonstration of the link between events in childhood that alter individuals' socioeconomic status and adult political behaviour. Hence, we are able to explore how fundamental differences in socioeconomic status, arising from exogenous differences in childhood experiences, influence political interest and participation in adulthood. In so doing, we provide further evidence on the links between socioeconomic status, political interest, and behaviour, by showing that these impacts are significant and long lasting.

One important contribution of our paper is to the literature examining the causal impacts of events in childhood and young adulthood on political attitudes and behaviour (Adhvaryu and Fenske, 2013; Giuliano and Spilimbergo, 2014; Jenning and Markus, 1977; Jennings and Markus, 1984; Kim and Lee, 2014; Madestam and Yanagizawa-Drott, 2012; Malmendier and Nagel, 2011). Consistent with most of the literature, we find that events in childhood and early adulthood have strong and persistent impacts on adult political behaviour. However, we do not find evidence that the differences in political attitudes for exposed cohorts are driven by macroeconomic shocks, as per Giuliano and Spilimbergo (2014) and Malmendier and Nagel (2011), which may reflect the fact that the economic impacts of the war and associated military policies were felt across most regions of Germany. Consistent with the results of Madestam and Yanagizawa-Drott (2012) regarding the impact of Fourth of July celebrations on civic engagement, we also find that the impacts of events in full adulthood are not persistent given that experience of the expulsions do not have long-term impacts on the political behaviour of adults. Our paper provides further evidence on the importance of early life events, especially conflict and war, for adult attitudes and behaviour, as predicted by the *impressionable years* and *increasing persistence* hypotheses (Brim and Kagan, 1980; Krosnick and Alwin, 1989; Jenning and Markus, 1977; Sears and Funk, 1999). We add to this literature by further showing that the impact of the expulsions does not spill over into the political behaviours of future generations.

Our results also contribute to the debate on the size of human capital externalities. While most studies find little evidence of wage externalities to human capital (Acemoglu and Angrist, 1999; Moretti, 2004; Rauch, 1993), we provide evidence of political externalities to human capital. Our estimates imply that large changes in human capital, on the scale of the Jewish expulsion, can have long lasting impacts on political behaviour by altering schooling attainments and adult civic skills. This is consistent with the results of recent empirical studies on the impact of schooling on political behaviour (Campante and Chor, 2012; Dee, 2004; Milligan et al., 2004; Siedler, 2010).

We make a significant contribution to studies of the political legacies of conflict, summarized in Section 4 of Blattman and Miguel (2010). In a recent study, Adhvaryu and Fenske (2013) found no impact on political attitudes and behaviour following conflicts in Africa, which is explained as being a result of resilience and post-traumatic growth (Tedeschi and Calhoun, 2004). Furthermore, Bellows and Miguel (2009) and Blattman (2009) find conflict exposure to have a positive impact on political participation in Sierra Leone and Uganda, respectively. One important difference between our study and Bellows and Miguel's study on Sierra Leone is that the latter examined the impact of the conflict on adults (with an average age of 42) in the early 2000s, while we emphasize the long-term impact on children and young adults. Studying the impact on adults rules out one channel through which conflict may impact political behaviour, by changes in schooling and the associated acquisition of civic skills, which are largely completed by adults. In fact, Bellows and Miguel (2009) do not find any systematic changes in the estimated impact of victimization on political behaviour once they control for education. Blattman (2009) examines the impact of conflict on individuals in Uganda who were participants in and victims of the conflict, many of whom also experienced personal growth and acquired civic skills during and after the conflict, in spite of worse schooling outcomes (Blattman and Annan, 2010). Our findings add to this growing body of literature by providing a mechanism through which the negative impacts of conflict on political behaviour might persist. This occurs when schooling and the acquisition of civic skills is truncated, as was the case for children and young adults during the Jewish expulsions. However, it is important to note that children and young adults are resilient and can acquire civic skills through non-formal channels.

Last but not least, this paper improves our understanding of the long-term causes, consequences, and impacts, of the Nazi regime and the holocaust on economic performance, schooling, social and human capital, political and social attitudes, and financial institutions (Acemoglu et al., 2011; Akbulut-Yuksel and Yuksel, 2015; Braun, 2016; D'Acunto et al., 2015; Grosfeld et al., 2013; Pascali, 2009; Satyanath et al., 2017; Voigtländer and Voth, 2015; Waldinger, 2012, 2010). Consistent with our findings, Acemoglu et al. (2011) find that the degree of Jewish persecution during the holocaust in Russia is also related negatively to current political behaviour, and attribute this to changes in the social structure within Russian society. While the two studies are related, our study examines a different country, and we emphasize the channel through which an exposure to persecutions is related to political behaviour at an individual level, as opposed to aggregate changes in the social structure. Our results may be interpreted as evidence that social structure is important for political behaviour by changing individuals' abilities to acquire civic skills, especially in a situation like Germany's where social capital was important for the rise of the Nazi regime in the first instance (Satyanath et al., 2017).

2 Historical Background on Jewish Expulsions

The historical circumstances surrounding the Nazi regime and its policies, including Jewish expulsions, have been discussed extensively in the literature (Evans, 2005; Friedlander, 2009; Kaplan, 2005; Voigtländer and Voth, 2015; Yahil, 1991). This section summarizes the history of Jewish expulsions in Germany, with a focus on factors that are important for our empirical analyses. Specifically, we focus on two facts: (1) the expulsion policy, encapsulated in the "Law for the Restoration of the Professional Civil Service," was driven and implemented by the national government, and (2) the policy led to the expulsion of Jewish professionals, who eventually left the country or were killed in the holocaust. The first point helps to address concerns about whether the expulsions were *targeted* or implemented differently in some regions, and the second demonstrates that the policy led to important population movements and changes in the socioeconomic structure of German society over this period.

The German Nazi party gained power in 1933, at which time it was estimated that there were about 520,000 Jews in the *Deutshes Reich*, making up 0.8% of the population. The Jewish population had been remarkably successful in professional occupations, such as medicine, teaching, law, journalism, finance, business, and academia, and made up a larger proportion of the middle and upper-middle classes. The expulsion policy, initiated on April 7, 1933, was an attempt to purge Jews from the civil service and several professional occupations that were government-controlled. By May of the same year, the expulsion was extended to postal service workers, railroad operators, professional associations, trade guilds and many other occupations (Friedlander, 2009; Kaplan, 2005). The purges were extensive and defined anyone with at least one Jewish parent or grandparent as Jewish. In the event that an individual could not prove sufficiently that he was not Jewish, he had to provide further evidence from experts on racial research from the Ministry of Interior (Yahil, 1991). It is important to note here that the policy was initiated and implemented nationally by the Nazi party, with little of the implementation being left to regions (Friedlander, 2009).

The impact of the policy on Jews in Germany was severe, and led to a considerable loss of human capital in key sectors. For example, the German Municipal Statistical Yearbooks report that 8.3 percent of teachers were dismissed in 1933, a figure that rose to 32 percent of female secondary school heads in cities like Berlin with significantly higher Jewish populations (Evans, 2005). Famously, the expulsions were also extended to academia, seeing the expulsion of about 15 percent of university professors for being Jewish, in addition to over 2,000 research scientists and other scholars (Evans, 2005; Waldinger, 2010). In the legal profession, the policy saw the expulsion of 16 percent of lawyers, with all Jewish lawyers having lost their admission to the bar by 1938. In the medical profession, all Jewish doctors had lost most of their non-Jewish patients by July 1933, as insurance companies would only reimburse fees for Jewish patients, which effectively put the doctors out of work (Yahil, 1991).

The above examples, in addition to the well-documented extent of the purge to many other sectors of the economy, meant that much of the Jewish population lost their access to primary means of livelihood, and by the end of the 1933 alone, over 37,000 had simply left the country as refugees to other European countries and the United States. It is estimated that the policies resulted in about half of the Jewish population of Germany, a total of 282,000 people, emigrating by the end of the 1930s. Most of those who stayed behind became victims of the holocaust and the associated pogroms (Evans, 2005; Friedlander, 2009; Strauss, 1983). Germany found it difficult to fill the vacancies which opened up in affected occupations, and the purge reflected genuine changes in the social structure and education institutions between 1933 and 1945 (Acemoglu et al., 2011; Akbulut-Yuksel and Yuksel, 2015; Waldinger, 2010).

Our aim is to study the impact of these social changes on the subsequent political behaviour of German children and young adults who were in their impressionable years between 1933 and 1945. As a result of the national nature of the policy, we can reasonably infer that the degree of exposure in each region should be proportional to the initial concentration of the Jewish population, all else being equal. For example, we would expect to see proportionally more Jews leave their jobs in Frankfurt than in the average German region, because Jews made up a larger proportion of the population of Frankfurt. We take advantage of this plausibly exogenous source of variation in losses across regions, generated by regional differences in the proportion of the population who were Jewish, in order to estimate the impact of the expulsions on political behaviour after controlling for fixed regional and cohort characteristics. Details on the theoretical framework, identification strategy, and data are provided in the next section.

3 Theoretical Context, Empirical Strategy and Data

Theoretical Context

As was explained in Section 2, the expulsions made abrupt and detrimental changes to the human and social capital of German society. The surrounding events led to the loss of most of the 520,000 Jews in the country, who were concentrated in urban areas. These émigrés were largely from the middle and upper classes and had had successful careers in various professional occupations, such as medicine, teaching, law, journalism, finance, business, and academia (Friedlander, 2009; Kaplan, 2005). Furthermore, the expulsions also led to important changes in families, as a significant proportion of the émigrés were Jews of mixed descent (Evans, 2005; Moser et al., 2014; Strauss, 1983; Yahil, 1991).

[Figure 1 about here.]

The theoretical links between the expulsions and the adult political behaviour of the children and young adults growing up at the time may be described using the model outlined in Figure 1, adapted from Brady et al. (1995).⁸ The essence of the model is that socioeconomic status (SES) predicts political participation because of its impact on political interest and access to the resources required for political participation (Campbell et al., 1960; Putnam, 2000; Verba et al., 1995; Wolfinger and Rosenstone, 1980).⁹ For example, schooling enhances political interest, which leads to a greater political participation by the educated. Schooling may also lead to higher incomes, which increases individuals' abilities to donate to political causes. Beside schooling and income, civic skills acquired through the process of socialization during a person's impressionable years, in formal schooling and family environments, are also important for adult political behaviour (Alesina and Giuliano, 2011; Glass et al., 1986; Jennings and Niemi, 1974; Putnam, 2000). Lastly, adult involvements in opportunities for building civic skills, at churches, through volunteer organizations and on their jobs, also have important implications for political participation, and these opportunities may vary with SES; for example, high income earners may have more leadership opportunities at their jobs.¹⁰

Thus, there are a number of theoretical channels linking the expulsions to the adult SES of young people, who grew up in areas where the expulsions were more intense, and their consequent adult political behaviour. For instance, Akbulut-Yuksel and Yuksel (2015) show that areas with relatively larger Jewish populations had more teachers expelled, and individuals who were of school age at the time of the expulsion have 0.5 years less schooling,

⁸Related theories based on rational choice models would predict that exposed individuals are more likely to choose not to participate because of the reduced net benefits of participation (Downs, 1957; Olson, 1965). We believe that these models perform well for predicting participation in specific political actions, but not the long-term trends in political participation that we examine. For instance, it is not clear why individuals who grew up during the expulsions would only have consistently lower net material benefits from participation in areas with a high pre-1933 proportion Jews. Furthermore, Finkel and Muller (1998) and Schlozman et al. (1995) show that self-interest is not a good predictor of political participation. Hence, we focus on theories where socioeconomic status influences political participation.

 $^{^{9}}$ Furthermore, as Brady et al. (1995) explain, these resources are also able to explain different forms of participation such as voting, donating, and acts that take time. We focus solely on general forms of participation because our dataset does not have information on the different forms of participation.

 $^{^{10}}$ The chart in Figure 1 demonstrates the finding that free time also affects political behaviour but is generally not correlated with SES, because of offsetting income and substitution effects (Brady et al., 1995).

on average. In addition, Waldinger (2010) demonstrates that the expulsions also had a negative effect on affected German doctoral students, given the number of professors expelled. Changes in the family environment as a result of the expulsions, which included a significant number of mixed Jews (Evans, 2005), would also have had a negative impact on schooling (Case et al., 2001; John F. Ermisch, 2001; Gruber, 2004), socialization and the acquisition of civic skills within the family (Jennings and Niemi, 1974; Glass et al., 1986). It is also possible that social capital declined more intensively in areas with greater exposure to the expulsions, and this would have had a negative impact on the socialization of children and young adults (Jenning and Markus, 1977; Satyanath et al., 2017).

To summarize the discussion thus far, the expulsions had an impact on the social composition of German society and families, and were especially important in institutions in which early socialization takes place (the school and family). These changes would have influenced the schooling, socialization, and socioeconomic status of affected German children and young adults, which in turn would have affected adult political interest and participation through their available resources: income and civic skills.

3.1 Empirical Strategy

We identify the impact of Jewish expulsions on political behaviour by exploiting the regionby-cohort variation in the intensity and experience of the expulsions. This strategy helps us to account and control for region-specific and cohort-specific differences simultaneously. Plausibly exogenous regional variation comes from the fact that the policy was formulated and implemented nationally, which means that any differences in the proportion of the population expelled across regions should depend only on differences in the initial proportion of Jews.¹¹ The main cohort variation comes from comparing individuals who were "young" and of school age at the start of the expulsions with those who were born after World War 2 and the reconstruction, and for whom no direct effect is expected.¹² As was mentioned earlier, this focus on childhood and young adults is motivated by the well-established *impressionable years* and *increasing persistence* hypotheses in social psychology (Brim and Kagan, 1980; Krosnick and Alwin, 1989). These theories imply that beliefs are largely formed before full adulthood and fade more slowly with age, suggesting that the early years are crucial for

 $^{^{11}}$ This conclusion has been demonstrated to hold in general for the percentages of professors and teachers expelled from their jobs, as can be seen in Figures 3 and 4 of Akbulut-Yuksel and Yuksel (2015), for example.

 $^{^{12}}$ We also test for robustness of the estimates across different age bands for the definition of young, as well as comparing individuals who were older during the expulsions to the unborn. Note that if there are spillovers due to the transmission of political values or behaviour across cohorts, then one might expect an indirect effect on the unborn, in which case the withinregion cohort variation would deliver lower-bound estimates of the effect. However, we do not find evidence of any significant impact on the political behaviour of the unborn.

belief formation.¹³

With all this in mind, we implement a generalized difference-in-differences strategy in which our treatment variable is an interaction between the proportion of Jews in the region and an indicator for being between the ages of 6 and 23 at the start of the expulsions (the impressionable/treated cohort). Specifically, we estimate the equation below:

$$Y_{irt} = \alpha + \beta (FractionJewish_r \times ImpressionableCohort_{it}) + \rho_r + \tau_t + \delta' \mathbf{X_{irt}} + \epsilon_{irt}, \quad (1)$$

where Y_{irt} is a measure of political behaviour (interest and participation) for individual *i* in region *r* born in year *t*. *ImpressionableCohort*_{it} is an indicator variable that is equal to 1 if an individual *i*s year of birth *t* was between 1910 and 1927 (making them between the ages of 6 and 23 at the start of the expulsions), and 0 otherwise. The parameter of interest, β , estimates an intent to treat (ITT) effect, as we are looking at the pool of individuals who were potentially treated as children and young adults. The baseline control group consists of individuals born between 1951-1960

We also include region fixed effects, ρ_r , to account for the fact that regions with different proportions of Jews might have fundamentally different political behaviours. Birth-year events and all shocks that are common to individuals born in each birth year are accounted for using birth-year fixed effects, τ_t . Birth-year fixed effects are even more general than, and already account for, "impressionable cohort" fixed effects. Lastly, we control for a number of individual and household characteristics in the vector $\mathbf{X_{irt}}$, including gender and rural dummies, and parental education. The error term is denoted by ϵ_{irt} , is assumed to be possibly correlated within regions and is clustered by region. In our baseline estimates, the treatment group is defined as individuals born between 1910 and 1927, as they were likely to be of school and impressionable ages in 1933 when the expulsions began. Our control group consists of individuals who were born between 1951 and 1960, and is chosen because they were not affected directly by the expulsions, WWII or the subsequent reconstruction (Akbulut-Yuksel, 2014; Ichino and Winter-Ebmer, 2004).

We carry out robustness checks of the baseline results using different treatment and control groups. First, we *extend* the definition of impressionable years to include all individuals who were born before the war and were children or young adults during the expulsions (cohorts born between 1910 and upto 1945), in order to test the robustness of the results to the selection of our baseline treatment group. We include the cohort born between 1928 and 1933, who were likely too young to have been in school before the expulsions began

 $^{^{13}}$ For recent applications of this hypotheses to political and economic behaviour, see Giuliano and Spilimbergo (2014), who find that growing up during a recession has strong impacts on political preferences. Madestam and Yanagizawa-Drott (2012) also find that attending fourth of July celebrations in youth has strong impacts on political behaviour, but that the effect on older individuals is smaller and non-persistent.

but were possibly in school at some point during the war (schooling is often regarded as an important avenue for political socialization; see Dee, 2004; Jennings and Niemi, 1974; Jennings and Markus, 1984; Milligan et al., 2004; Siedler, 2010). However, note that in addition to the expulsions, the socialization of the cohort born between 1933 and 1945 was also very likely to have been positively influenced by the rapid post-war reconstruction which might confound our results (see Ichino and Winter-Ebmer 2004 for a formal structural test). We also *restrict* the treated group to the cohort born between 1915 and 1927 as they were within compulsory schooling ages during the expulsions. Secondly, we use individuals who were born between 1900 and 1909, and therefore experienced the expulsions but probably not in their impressionable years, as an alternative control group. Thirdly, we depart from a cohort-based definition of treatment and use a continuous measure of treatment by calculating the number of years in which the individual would have experienced the expulsions, which clearly illustrates that our estimates capture lived experiences beyond age and cohort effects.¹⁴ Lastly, we also include individuals born between 1946-1950 in the control group, in order to ensure that the analysis is robust to using the full sample of people born between 1946-1960 as the control group. Our results are robust to these alternate definitions of the treatment and control groups.

We also perform additional falsification tests of the identification assumption. Our strategy identifies the coefficient β as a causal impact of the expulsions on children and young adults if the impressionable cohort and those born after 1950 would have had the same *trends* in political behaviour across regions with different proportions of Jews in the population in 1933, had the expulsions not occurred. We evaluate this assumption by performing a falsification test in which we compare individuals born between 1951 and 1960 to both individuals born in 1961–1970 and individuals born between 1900 and 1909. The aim of this exercise is to show that there are no systematic trends in political behaviour across cohorts and regions with different proportions of the population being Jewish, except for the cohorts who were children and young adults during the expulsions. This exercise also helps us to test for spillover effects of the expulsions on future political behaviour. We also investigate the robustness of our results to measurement and sampling errors generated by internal migration and mortality rates across regions in adulthood for the exposed cohort.

 $^{^{14}}$ This continuous measure of exposure is calculated as the length of exposure to the Nazi Regime, which was between 1933 and 1945; thus, we have a total of 12 years of possible exposure. We also assume that the child was affected by the expulsions if they are between 6 and 23 years of age during the period 1933 to 1945. Thus, an individual born in 1910 would have only one year of experience, while an individual born in 1930 would have had nine years of exposure (1936–1945).

3.2 Data Description

Our analyses are built around individual and household data from the 1985 German Socio-Economic Panel (SOEP) in former West Germany, which is a representative survey of West Germans residing in private households. From the SOEP, we collect a battery of information on individual and household characteristics, including parental and childhood environments. Given our focus on region-level Jewish populations, we also collect information on whether individuals have moved away from the city in which they grew up, and define these movers as migrants. The sample is restricted to individuals born between 1910 and 1960, who would all have been adults (older than 25) at the time of the survey in 1985.¹⁵

We focus on the impact of the expulsions at level of the smallest geographical unit provided in SOEP, called the *Raumordnungsregionen* (RORs or regions for short). The measure of the proportion of Jews in the population in each region is obtained from Kessner (1935), who provides city-level information on the percentages of individuals who were affiliated with various religious groups in 1933. We use the percentage in 1933, obtained from the 1933 population census, because the expulsions began in 1933, as was explained in the historical background. It is important to note that while we define individuals as "Jewish" based on their religious identification, the expulsions defined individuals as Jewish based on much wider racial/ethnic criteria (Evans, 2005). However, this discrepancy should not pose major problems because 91.5 percent of "racial" Jews in the 1939 German Reich also had Jewish religious affiliations (Blau, 1950). Given the high correlation between "racial" and practising Jews in 1939, we believe that the percentage of religious Jews serves as a good proxy for the percentage of the population who were Jewish in 1939.¹⁶

The key outcome variables are measures of individuals' interest in politics and participation in local politics. We examine interest in politics because it is generally related to civic engagement and political participation (Bekkers, 2005; Brady et al., 1995). From the SOEP, we use the question asking, "First of all in general: How interested are you in politics?" Individuals are assumed to be interested in politics if they indicate "strong" or "very strong"

¹⁵The analysis looking at the impact of the expulsion on German children assumes that there are very few Jewish respondents in the survey. This is supported by data from the 2007 SOEP which show that only 0.24 percent of respondents in former West Germany belonged to "other religious organizations," which excludes Protestants, Catholics, Evangelicals, Other Christians, Islamic religious organizations and non-denominations. Other data show that the fraction of the population of Germany in 1946 who were Jewish was only 0.15 percent.

¹⁶In fact, there is reason to believe that this percentage would have been higher in 1933, because about half of the Jewish population had already emigrated before 1939, and Jews of mixed ancestry who were largely considered Jewish primarily as a result of the Nuremberg laws of 1935 constituted a significant fraction of non-religious Jews in 1939. The Nuremberg laws defined racial Jews as all persons with at least three grandparents who were racially full Jews, or "Mischlinge" (mixed) of the first degree, with two grandparents who were full Jews, and then those with only one grandparent who was racially a full Jew. Most of the Mischlinge were able to retain German citizenship initially while other Jews were forcibly expelled, but the expulsions and definitions eventually expanded to include Jews of mixed ancestries as well (Evans, 2005). Hence, the 1939 Jewish population included a higher proportion of Jews of mixed ancestry, who were less likely to be religiously Jewish, than the 1933 population, which explains why the percentage of practising Jews was probably higher in 1933, making it a good proxy for the Jewish population in 1933.

interest, and not interested if they indicate "weak" or "none". For our measure of political participation, we use the question asking how often individuals participate in "citizen initiatives, parties, community politics." Individuals are coded as not being participants if they indicate that they "Never" participate. The data reveal that 36% of all individuals indicate a strong or very strong interest in politics, but only 8.2% of individuals in the sample actively participate (see Table 1). We also collect further data on individuals' employment, income, schooling, and other measures of civic engagement, which we use to test the possible channels through which the expulsions might have affected political behaviour. The description of the construction of these individual-level variables is left to the Appendix, but they are summarized in Table 1.

The dataset also includes additional information at the regional level that is collected from a range of different sources. These include the average income per capita in 1932, the unemployment rate in 1932, the shares of votes received by the Nazi and Communist Parties in the two federal elections of 1932, and information on the population and area. Lastly, we obtain a measure of the region-level wartime destruction by compiling information on the region-level volume of residential rubble at the end of WWII. These data are obtained from various years of the German Municipal Statistical Yearbook, and will be used to test interpretations and alternative explanations for our baseline results.

We match regions in the SOEP to digitized data on the city-level fraction of the population who were Jewish, and other historical socioeconomic variables. Individuals in the SOEP have unique regions (RORs) which are matched to the percentage of the city-level population who were Jewish from Kessner (1935). This is possible because every city reported by Kessner (1935) belongs to only one region in the SOEP, and we are able to match cities to 47 regions that form the aggregate unit of analysis. These 47 regions account for 85% of the West German population at the time of the survey.

3.3 Descriptive Characteristics

Descriptive statistics for regional characteristics are presented in the top panel of Table 1, and the regions are split according to the percentage of Jews in the population of the region in 1933. We see from the table that the percentage of Jews in the population of former West Germany is given as 1.2%, which is slightly larger than the average of 0.8% reported in the 1933 census. This is largely because the Yearbook reports the percentage of Jews in the population in cities with 50,000 or more inhabitants, which are more likely to have relatively larger Jewish populations. Furthermore, the data show a significant degree of variation in the initial percentage of Jews in the population, ranging from an average

of 1.96% in "above-average" regions to 0.72% in regions with below-average proportions of Jews in the population. The data also reveal the decline in the share of Jews in the population as a result of the expulsions and the holocaust, with these proportions dropping to 0.3 and 0.07 in high and low areas, respectively, by 1946. Importantly, we note that while the absolute loss is larger in areas with relatively larger Jewish populations (1.66 vs. 0.642), the percentage declines are quite similar (0.85 vs. 0.89). We take this as evidence of the uniform implementation of the expulsions across regions, with the impact being larger in areas with larger initial Jewish populations, as was emphasized in the historical background. This difference in the absolute number of Jews lost during the expulsions, as a result of initial differences in the proportion of Jews rather than differences in expulsion rates, is precisely the region-level variation that we exploit in the analyses.

The top panel of Table 1 also highlights why we need to account for fixed regional characteristics, because income per capita, population and land area are all significantly larger in areas with above-average Jewish populations. Thus, if incomes and population are correlated with political behaviour, then a simple cross-regional analysis would yield biased results. This also explains why we use the region-by-cohort variation to identify the impact of the expulsions, which allows us to control for fixed regional and cohort characteristics simultaneously. The differences in incomes, population, and land area may also suggest differences in future trends across regions that are unrelated to the expulsions. We assess these trends formally using placebo-treated cohorts, and do not find any evidence of differential cohort-specific trends across regions.

[Table 1 about here.]

Next, we provide a brief summary of individual and household characteristics from the SOEP in the lower panel of Table 1. Individuals complete about 11.3 years of schooling on average, and over 80% of individuals have mothers and/or fathers with a basic education. Furthermore, 59% of the respondents live in rural areas and 54% are female. The average age of the respondents is 47 years, indicating that these are adults with relatively established political behaviours. Next, we use the region-cohort variation in expulsions to estimate the impact of the loss of the relatively well-educated Jewish population on individuals' subsequent political behaviour.

4 Estimated Impact of Expulsions on Political Behaviour

4.1 Baseline Difference-in-Differences Estimates

[Table 2 about here.]

Table 2 reports the difference-in-differences estimates of the effect of Jewish expulsions on the subsequent political behaviour of Germans who were children and young adults (ages 6-23) at the time of the expulsions. The top panel illustrates the impact of the expulsions on individuals' interest in politics, while the bottom panel reports the estimated impact on political participation. The estimates in column (1) of the table imply that, in a region with an average Jewish population in 1933, individuals who were in their impressionable years during the expulsions are about 4.6 percentage points less likely to express an interest in politics than individuals in the same region who were born after the expulsions and the war (between 1951–1960).¹⁷ This coefficient is important quantitatively, and its importance can be illustrated in two different ways. First, given that about 36% of the sample indicate an interest in politics, the estimates imply that the general interest in politics among the cohort who were in their impressionable years during the expulsions is about 13% (4.6/36) lower than the overall mean in a region with the average percentage of Jews in 1933. A second way of illustrating the significance of this estimate is to compare a young individual in 1933 Frankfurt, where 3.25% of the population were of Jewish origin, to a young individual in Bremen, where only 0.4% of the population were Jewish in 1933. In this case, the estimates imply that a young individual who was in Frankfurt at the time of the expulsions is 11 percentage points less likely to indicate an interest in politics than an individual in the same cohort from Bremen, with all else being equal. The estimates also imply that individuals who grew up in Frankfurt during the expulsions will show an average political interest that is onethird of the German mean, if all else is equal. Overall, the estimates in column (1) show that the Jewish expulsions had a quantitatively and statistically significant impact on political interest for individuals who were in their impressionable years during the expulsions.¹⁸

Columns (2)–(4) of the top panel control for household characteristics (parental education) and allow the difference-in-differences estimates to vary based on these characteristics. We find that having parents with basic education increases an individual's interest in politics, a result that is generally consistent with the typical role of education and the family in political socialization (Glass et al., 1986; Jennings and Niemi, 1974; Verba et al., 1995). However, in increase in parental education does not appear to mitigate the impact of the expulsions on individuals' political interest, and the estimated interaction terms are insignificant. Thus, it appears that factors outside the home were also responsible for the decline in political interest

 $^{^{17}}$ This is obtained by multiplying the estimated difference-in-differences coefficient, 0.039, by the average percentage of Jews in the sample, 1.19.

 $^{^{18}}$ Note that if there is an intergenerational transmission of political attitudes, some of the decline in political interest within regions might be transmitted to the generations born after the expulsions, in which case our difference-in-differences estimates would be the lower bound of the total effect of the expulsions. However, we demonstrate later that there is no evidence of such spillover effects across generations. Similar results are also found when we use the *estimated proportional declines* in regional Jewish populations between 1933 and 1949 as a measure of the magnitude of the expulsions. These results are available upon request.

among the cohort who lived in more exposed areas during their impressionable years.

The second panel of Table 2 shows similar results regarding the impact of the expulsions on local political participation. The estimates in the bottom panel of column (1) imply that, in a region with an average Jewish population in 1933, individuals who were in their impressionable years during the expulsions are about 2.2 percentage points less likely to participate in local politics than individuals from the same region who were born after the expulsions and the war. As with the results on political interest, this estimate is statistically and quantitatively meaningful, representing a 26% percent lower political participation for the impressionable cohort than for the unaffected cohort in a region with the average proportion of Jews in the population in 1933, and also a 5.2 percentage point drop in political participation—more than 50% lower than the national average—between individuals from the affected cohort in Frankfurt (high proportion of Jews) and Bremen (below average proportion of Jews). Furthermore, the 2.2 percentage point decline in political participation (26% below the mean) is important, given that canvassing, which is an important method of increasing political participation, increases the voter turnout by an average of 7 percentage points, from a base of about 50%—representing a 14% change (de Rooij et al., 2009).

Columns (2) and (3) in the second panel of Table 2 continue to indicate that parental education is an important determinant of political participation, although they are not jointly significant in column (4). However, unlike the results for political interest, we find that having parents with more than a basic education actually increases the negative impact of the expulsions on local political participation, although this is not jointly significant when we include interactions for the educations of both parents in column (4). These results lead us to conclude that our point estimates for the impact of the expulsions on political participation are robust to family characteristics, and that the expulsions led to a significant decline in political participation for individuals who were in their impressionable years.

4.2 Estimated Impact of Expulsions by Length of Exposure

Next, we evaluate the impact of the expulsions by length of exposure. That is, we ask whether individuals for whom most of their childhood and early adulthood was during the period of the expulsions are affected more than those who experienced the expulsions for only a few years. This question is relevant because the impact of the expulsions is not expected to be the same for all individuals within the cohort, and one might wonder whether the impact is restricted to individuals who were exposed most intensively at particular ages.

To address this question, we break down the exposed cohort by the estimated length of exposure (ranging from 0 to 12 years). While we leave the details of this calculation for appendix Table A2, we are computing the number of years that an individual would have been between the ages of 6 and 23 between 1933 and 1944 (from the beginning of the expulsions to the last full year of Nazi Regime). Note that this measure of exposure is not the same as age; for example, an individual born in 1917 would have had the same eight years of childhood and young adulthood exposure as an individual born in 1931, because one turned 24 in 1941 (exposure between 1933 and 1940) and the other turned 6 in 1937 (exposure between 1937 and 1944). The estimated length of exposure is then used as the measure of treatment, allowing us to differentiate between individuals within the exposed cohort but with different intensities of exposure to the expulsions, while still controlling for birth-year and region fixed effects. The results from this alternative definition of exposure are contained in Table 3.

[Table 3 about here.]

The top panel of Table 3 continues to show that an exposure to the expulsions has a significant negative impact on political interest. The coefficient is interpreted to mean that an individual with only one year of exposure to the expulsions would be 0.26 percentage points less likely to be interested in politics than an individual living in the same region but with no exposure to the expulsion, all else being the same. This impact increases with the length of exposure, because an individual with about six years of exposure is 1.56 percentage points less likely to indicate interest in politics than an individual with no exposure. Furthermore, the bottom panel shows that, all else being the same, an additional year of exposure is also associated with a 0.11 percentage point decline in local political participation for individuals who lived in a region with the average proportion of Jews in 1933. These estimates are robust to the inclusion of the mother's and father's education, as is shown in columns (2)-(4), and indicate that the impact of the exposure increases with the estimated length of exposure.

In summary, the results in Table 3 show that even a year of exposure to the expulsions had a negative impact on political behaviour, controlling for birth-year (cohort) effects. Furthermore, the estimates imply that the negative impacts of the expulsions on political behaviour are larger among individuals for whom more of their childhood and young adulthood was passed during the expulsions and the subsequent turbulent period. Hence, we conclude that the length of exposure—not merely belonging to the cohort born between 1910 and 1927—is important for understanding the impact of the expulsions, independent of any birth-year fixed effects.

4.3 Falsification Tests, Assignment Rules, and Sampling Bias

Next, we test the identification assumption behind the difference-in-differences estimates, evaluate the robustness of the estimated impacts of the expulsions to the rule assigning individuals to treatment and control groups, and examine the robustness of our estimates to systematically different migration and mortality rates across regions—sampling bias.

Falsification Test

We present evidence on the validity of the assumption behind our identification strategy in Table 4. Recall that our identification assumption is that there would have been similar trends in political behaviour for cohorts across regions with different proportions of Jews in the population, if it had not been for the expulsions. Stated differently, our identification assumption is valid if there are no differential cohort-region trends in political behaviour independent of exposure to the expulsions. We test this by comparing political behaviours across regions with different proportions of the population being Jewish in 1933, but using the younger cohort born between 1951 and 1960 as a placebo treatment group, and other (older and younger) cohorts as the control group.¹⁹

As the results in Table 4 show, there are no significant differences in political interest and participation across these cohorts in regions with differing proportions of the population being Jewish in 1933, if all else is the same. This is the case when we compare individuals born between 1951 and 1960 to both individuals born between 1961 and 1970 and an older cohort born between 1900 and 1909.

[Table 4 about here.]

In addition, these results indicate an absence of spillover effects of the impact of the expulsions on the political behaviour of the cohort born after the war. If there were spillovers across generations, we might expect to see persistent differences in political behaviour among members of the cohort that was not exposed to the expulsions directly but was born right after the events, but this is not found in the data. Furthermore, the absence of significant differences between individuals who were born before 1910 and those who were born after the Nazi Regime indicates that the impacts that we observe are not found for individuals who were already adults during the expulsions. Thus, the impacts that we identify are specific to individuals who were at an impressionable age in areas with a higher proportion of Jews in the population, not merely those who lived through the expulsions, nor is it reflective

 $^{^{19}}$ We perform the falsification tests using both cohorts because the younger cohort, born between 1961 and 1970, may still be too young (15–25) to have fully-formed political attitudes in 1985, and there are too few left of the older cohort, born between 1900 and 1909, by 1985.

of general cohort-region trends. This is as expected, given the rapid recovery in German infrastructure following the end of WWII (Akbulut-Yuksel, 2014; Ichino and Winter-Ebmer, 2004).

Robustness to the Assignment Rule

While it is generally agreed that events in childhood and young adulthood tend to have more persistent impacts on behaviour and preferences, the lack of a clear definition of "impressionable age" might cast doubt on the validity of our baseline treatment group (Brim and Kagan, 1980; Giuliano and Spilimbergo, 2014; Jennings and Markus, 1984; Krosnick and Alwin, 1989; Miller and Sears, 1986). For example, although most of the above studies focus on late childhood and early adulthood, it may not be entirely clear why individuals who were younger than six in 1933 or those born during the expulsions should be excluded, given the importance of early childhood for cognitive outcomes (Heckman, 2007).

We address these concerns by utilizing a range of definitions for the treatment and control groups, and also by estimating the impacts of the expulsions treating individuals born in 1910–1923, 1910–1933 and 1910–1938, 1910-1945, and 1915-1927, as alternative treatment groups. The first four categories expand the definition of treatment to include those who started school after the expulsions, but impacted by the war. The last category, 1915-1927, examines robustness to excluding individuals, born between 1910-1914, who may have been too old to be affected the expulsions. We also extend the control group to include all individuals born immediately after the war, between 1946 and 1960.²⁰ The results are given in Tables 5 and 6.

[Table 5 about here.]

The first column of Table 5 provides the estimates for individuals born between 1910 and 1923, who were therefore between the ages of 10 and 23 at the start of the expulsions in 1933, and the second column includes estimates of the impact of the expulsions on individuals who were born from 1910–1933. For these groups, we find that the expulsions continue to have a strong and significant negative impact on the general interest in politics and political participation in politics, and the point estimates remain very similar to the baseline group. The same is true when we include individuals who were born during the expulsions and the subsequent war, between 1933 and 1945, but the point estimates for participation in local politics becomes somewhat weaker but of a similar magnitude with the baseline cohort (within one standard deviation). The slightly smaller estimated impacts when the treatment

 $^{^{20}}$ The year 1938 is chosen because the expulsions largely ended in 1939, which also marked the beginning of WWII, and the year 1945 marked the end of WWII.

group is extended to individuals born after the expulsions had already begun (1933-1945) is most likely due to the fact that disruptions in schooling and socialization is smaller for this younger cohort. For instance, individuals born after 1938 would not have been in school until after the war ended in 1944 or sometime after that, thus schooling and socialization would not have been disrupted significantly by the expulsion of Jewish teachers and other professionals, especially given rapid reconstruction efforts after the war (Akbulut-Yuksel and Yuksel, 2015; Ichino and Winter-Ebmer, 2004). The estimates in the last column also show that the results are robust to excluding the older treated cohort, born between 1910-1914. Overall, these results provide evidence that our estimates capture the differential impacts of the expulsions, and not WWII, else we would have observed similar impacts for young people growing up during WWII (1933-1945), or the older cohort (1910-1914).

In Table 6 we further extend the control group to include individuals born just after the war, between 1946 and 1960. While this is a relatively noisy control group, especially when we include individuals born around 1945 in the treated category as in column (5), we continue to find that growing up in an area that was more greatly impacted by the expulsions continue to be strongly negatively associated with interest in politics and political behaviour. Overall, we conclude that the estimated impact of the expulsions on interest in politics and political participation is robust to the definition of impressionable years. Further, while the estimated impacts on political participation is slightly weaker when we include individuals born during the war and expulsions, this result does shed some light on the mechanisms behind our estimates and illustrates that the estimated negative impacts of the expulsions do not strictly capture differential exposure to WWII when young but differential exposure to the expulsions when of an impressionable school age (between the ages of 6 and 23).

[Table 6 about here.]

Robustness to Differential Migration, Mortality, and Sampling Rates

Individuals in our analyses are counted as being exposed to the expulsions based on their current region of residence, under the assumption that, on average, their current region of residence will be the same as that in their impressionable years. In fact, with the exception of 2012 wave of SOEP, the SOEP and other individual level German datasets only include information on the current region of residence. Nevertheless, it is possible that individuals may have moved since the expulsions, and might be living in regions other than that in which they lived in their early years. This would introduce measurement error to our treatment variable that might bias our estimates towards zero. We note that we do not expect differential migration rates, given the well-documented low rates of mobility in Germany, which

are known to be even lower in early childhood (Hochstadt, 1999; Rainer and Siedler, 2009; Pischke and von Wachter, 2008).

As a more formal check of the effect of measurement errors induced by internal migration, we restrict the sample to non-movers, who are defined as individuals who currently live in the same region as in their childhood. The results from running the estimation on this restricted sample are shown in columns (1) and (2) of Table 7. We find that, for a region that was 1% Jewish in 1933, the difference-in-differences estimates of the expulsions on interest and participation in politics for non-movers, at -0.05 and -0.03, are even larger in magnitude than the baseline estimates using the whole sample. However, the differences from the baseline estimated impacts are not statistically significant. This evidence indicates that measurement error induced by internal migration is unlikely to be biasing our results. This is consistent with the literature on German internal migration cited in the previous paragraph.

Furthermore, we evaluate the possibility of differences in internal migration rates conditional on the percentage of Jews in the population in 1933. For example, it is possible that areas with larger than average Jewish populations attracted young migrants during the expulsions and WWII who are unlikely to be interested in local politics. Column (3) of Table 7 classifies individuals as movers if they no longer live in their childhood region of residence, and estimates the difference-in-differences impact of the expulsions, under equation (1), using the probability of moving as the dependent variable. The estimate of the probability of moving is close to zero and statistically insignificant, as is evident from column (3) of Table 7. We present this as evidence that our results are not driven by differential migration rates across regions, for the cohort in their impressionable years. Hence, we can conclude that individuals did not choose their migration destinations based on the fraction of Jews in the population in 1933.

One might also be concerned about the possibility of differential mortality rates across regions with different Jewish populations in 1933 that might have an impact on political participation and interest through the age structure, independently of the expulsions. Note that birth-year fixed effects already account for national differences in mortality rates across cohorts. We address concerns regarding differential region-cohort mortality rates by utilizing the panel structure of SOEP and tracking the mortality of individuals in the dataset between 1985 and 2011. The mortality variable is an indicator that is equal to 1 if an individual died between 1985 and 2011 and 0 otherwise. The results are given in column (4) of Table 7 and show that the mortality rates across regions are similar for the treated and control cohorts, with the coefficient being close to zero (0.008) and statistically insignificant. Therefore, we conclude that a composition bias across cohorts and regions, induced by differential mortality rates, is unlikely to be driving our results.

Lastly, we evaluate the importance of composition bias further by estimating the differences in sampling rates across regions and cohorts, using equation (1). This is important in order to ensure that our results are not being driven by sampling errors across regions and cohorts. To do this, we follow Meng et al. (2015) and use the sample size of the cohort in each region as the dependent variable, then test whether the cohort sizes differ systematically across regions and cohorts based on the 1933 proportion of Jews in the population. The results, given in column (5) of Table 7, show no statistically significant differences across regions for the cohort in their impressionable ages, based on the 1933 proportion of Jews in the population. The results also imply that there are no statistically significant differences in sample size across the treatment and control cohorts within a region, once general cohort fixed effects are accounted for. In summary, these results imply that our results are not an artefact of composition biases induced by differential mortality and sampling rates.

[Table 7 about here.]

In summary, we have shown that the estimated impacts of the Jewish expulsions on the political behaviour of Germans who were at an impressionable age during the expulsions are robust to a number of possible biases, and have also provided evidence of our identification assumption. We have demonstrated that there are no region-cohort trends for those born after the war or those who were already adults before the expulsions, relative to younger cohorts who were not exposed to the expulsions. We also find that our results are not affected by measurement errors generated by internal migration across regions in adulthood for the exposed cohort. The estimates are similar to the baseline when the sample is restricted to non-movers, and we do not find any significant cohort-by-region variation in migration rates. Lastly, we document the robustness of our results to various forms of age-related composition biases that may be induced by differential mortality and sampling rates. Hence, we conclude that the estimated impacts are generally robust. We next examine the robustness of the estimated impacts to other contemporary events that might vary by region and cohorts.

4.4 Robustness to Other Contemporary Events

Germany underwent a number of tumultuous events between 1933 and 1950, some of which were contemporaneous and might be related to differences in the intensity of the expulsions across regions. We evaluate the potential of various historical events that might confound the relationships that we find between the expulsions and the subsequent political behaviour of contemporary individuals at impressionable ages. In this exercise, we are interested primarily in events between 1933 and 1950 that could have had different intensities across regions and the potential to have differential impacts across cohorts. It is important to note that nationwide events and general events that are specific to a particular region or cohort, but not both, are already accounted for in our analyses by our region and birth-year fixed effects. We study a host of these events, and the results are shown in Table 8, with the baseline results included in the first column.

State-Time Trends

We begin in column (2) of Table 8 and use the fact that we consider lower levels of aggregation than the state to include state-time trends in the regression explicitly in order to account flexibly for statewide events that might have different impacts on different cohorts. We find that the difference-in-differences estimate of the impact of the expulsions on individuals born between 1910 and 1927 remains negative and statistically significant after controlling for state-time trends. While the estimated impact on an interest in politics is slightly smaller, the estimated impact on participation in local politics is slightly larger, although neither estimate is statistically different from the baseline. This shows that the estimated impact of the expulsions on individuals at impressionable ages is neither confounded nor explained by contemporaneous state-specific policies.

Wartime Destruction

Next, we examine the possibility that our expulsion variable might be capturing wartime experiences that may be correlated with the intensity of the expulsions, and which might have a disproportionate impact on the young (Adhvaryu and Fenske, 2013; Bellows and Miguel, 2009; Blattman, 2009). Using the volume of rubble per capita as a proxy for wartime destruction within the region, we re-estimate the baseline equation and include an interaction between wartime destruction and the affected cohort dummy as an additional variable. The results, given in the third column of Table 8, show that wartime destruction does not have a differential impact across cohorts or across regions within a cohort, with all else being the same. Importantly, our baseline estimates of the impact of the expulsions on a general interest in politics and participation in local politics remain largely unchanged. We interpret this result as evidence that the differential impact of wartime destruction does not explain the results that we find.

[Table 8 about here.]

Adverse Macroeconomic Conditions

One important confounder could be the fact that the intensity of Jewish expulsions may have coincided with the intensity of adverse macroeconomic conditions, which could have had a lasting impact on individuals' preferences and political behaviour (Giuliano and Spilimbergo, 2014). Columns (4) and (5) of Table 8 address this concern by including interactions between the regional unemployment rate, income and population size in 1932 as proxies for regional macroeconomic conditions, and an indicator for the individual being at an impressionable age in 1933. We find that including measures of the regional unemployment rate in column (4) does not change the difference-in-differences estimate of the impact of the expulsions significantly for either interest in politics and participation. The impact of the regional unemployment rate on the cohort at an impressionable age is close to zero and statistically insignificant. Furthermore, column (5) also includes controls for income per capita and population size, with an indicator for being in the cohort at an impressionable age. We continue to find that the estimated impacts of the expulsions on the political behaviour of the affected cohort remain largely the same.

Further, Giuliano and Spilimbergo (2014) demonstrate that children and young adults who grow up in times of adverse macroeconomic conditions tend to express greater support for left-leaning parties. In light of this, we assess the impact of the expulsions on the party support of contemporary children and young adults in order to evaluate the importance of macroeconomic conditions for our result further. The results are contained in Table A1 of the Appendix. Columns (2) and (3) indicate that individuals in the treated cohort are significantly more likely to support the Social Democrats (SPD) but no more or less likely to support the Christian Democratic Union (CDU). Looking at broad party support, the results show that, when the major parties are aggregated in columns (4) and (5), individuals in the affected cohort are no more or less likely to support left-leaning (SPD, Greens) or right-leaning (CDU, CSU, FDH) parties in different regions. We take these results on the absence of differential left- or right-party support, along with the results on the unemployment rate, income, and population size, as evidence that region-by-cohort variation in German macroeconomic conditions does not explain the differences in political behaviour that are associated with the intensity of Jewish expulsions.

Regional Differences in Political Support and Social Capital

Differences in political support and modes of participation across regions in 1933 Germany could also be related to the expulsions and may have had a large impact on the young (Putnam, 2000; Madestam and Yanagizawa-Drott, 2012; Satyanath et al., 2017). For example,

regions with higher fractions of Jewish residents in 1933 might have shown stronger support for the Nazi party, and the contemporary young in these places may have felt ostracized, alienated, and unable to participate in politics. A second confounding factor arises from the fact that members of the Communist party were also expelled from the civil service at the same time as the Jews, meaning that our results might also capture the expulsion of communists or the reluctance of individuals in communist-dominated areas to participate in current German politics. Although Waldinger (2010) argues that only a small fraction of professionals were dismissed for being communist, we provide an empirical evaluation of the impact of differences in political party support across regions and the potential impact this might have had on the young.

In column (6) of Table 8, we use information on the percentages of votes for the Nazi and Communist parties in the November 1932 Federal elections to control for the differential impacts of the support and votes received by these parties on the affected cohort, as well as initial social capital (support for the Nazi party was positively correlated with initial social capital as shown by Satyanath et al., 2017). The results reveal that the differences in party support at the beginning of the expulsions do not have differential impacts on the political behaviour of the young, and the estimates are generally small and not statistically significant. Once again, the difference-in-differences estimate of the expulsions remains largely unchanged. We therefore conclude that differences in political support across regions do not explain the impact of the Jewish expulsions on contemporary German children and young adults.

Urbanization in 1933

Lastly, it is possible that national or statewide policies might have had differential impacts on the young in more densely populated and prosperous regions with generally higher proportions of Jews in the population. It could be the different impacts of these policies on individuals who are at an impressionable age that is responsible for the results that we find, rather than the expulsions. Hence, column (7) includes an interaction between the urban share of the region and an indicator for being in the affected cohort. We also note that the urban share could be used as a proxy for macroeconomic conditions, given that urbanization tends to be correlated positively with incomes in the developed world. While we do not find any significant differences in the impact of the urban share on political interest, we do find that individuals who grew up in regions with higher urbanization rates during the expulsions tend to participate more in politics, with this impact being significant at the 90% level. Nevertheless, the impact of the intensity of the 1933 Jewish expulsions on contemporary individuals who are at an impressionable age remains negative and significant; but while the point estimates are somewhat smaller, the difference is not statistically significant. This result implies that while the urban share might be important for political participation, it does not explain the estimated impact of Jewish expulsions on the affected cohort significantly.

In summary, we have demonstrated that the difference-in-differences estimates of the impacts of Jewish expulsions on the impressionable cohort are robust, and are neither confounded nor explained by a variety of contemporary historical events. They are robust to state-specific policies, and even to controlling for the state-specific trends in political participation and interest. Furthermore, we show that the estimated impact of the expulsions is robust to any cohort-specific impacts of WWII, a variety of macroeconomic conditions (unemployment, income, population, urban share), support for the Nazi party and initial social capital. Next, we provide an explanation for the impact of the expulsions on contemporary children and young adults that is embedded the socialization and socioeconomic status (SES) model of political behaviour.

5 Interpretation and Channels

Why would growing up during the expulsions have an impact on political behaviour in adulthood? Our hypothesis is that the expulsions led to significant changes, in human and social capital, that altered the political "resources" acquired by children and young adults, which is in turn reflected in adult political behaviour and engagement. Building on the discussion in Section 3.1, our explanation is based on the impact of the social changes brought about by the expulsions on the socioeconomic status (education, employment, income) of the exposed children and young adults, and their consequent ability to acquire the "resources" — money and civic skills—that stimulate political interest and participation. We now present evidence on the impact of the expulsions on the socioeconomic status and civic skills of the affected cohort.

The Empirical Evidence for Causal Channels

Table 9 provides evidence on the impact of the expulsions on the treated cohort's SES, civic skills, and opportunities for the acquisition of civic skills. The table is estimated based on equation 1, but with different dependent variables from the SOEP.²¹ Column (1) of the table shows that the treated cohorts have significantly less schooling, all else being equal. In a region that had the average percentage of Jews in the population in 1933, the estimate implies that the treated cohort have about 0.5 years less schooling, on average (1.19 × 0.4074), than

 $^{^{21}\}mathrm{Details}$ on the construction of these variables are provided in the Appendix.

members of the same cohort who grew up in a region that had no Jews in 1933. Column 2 restricts the sample to individuals who are still working in 1985. Within this sample, we continue to find that an exposure to the expulsions is associated with significantly lower subsequent incomes. Because incomes are measured as log hourly wages, the interpretation is that growing up in a region with the average proportion of Jews is associated with incomes that are about 15% (0.1334 × 1.19) lower than those of other members of the same cohort who grew up in a region with no Jewish population.

The results in columns (1) and (2) demonstrate the important impacts of the expulsion on the SES of the exposed cohort in regions with higher proportions of Jews. As was explained earlier, this is a result of a combination of factors, including the expulsion of a significant proportion of teachers and professors, and changes in the family environment. These results would therefore imply that lower schooling attainments and incomes led to a decrease in individuals' interest in politics and political participation, because money and civic skills, acquired both at school and at home are resources required for political participation (Brady et al., 1995; Jennings and Niemi, 1974; Putnam, 2000).

[Table 9 about here.]

Another implication of the model outlined earlier is that growing up during the expulsions would have decreased individuals' civic skills, and might also have affected their opportunities of developing civic skills in adulthood. For instance, SES could influence individuals' job types and organizational responsibilities on the job. There might also be an impact on party support or volunteerism, and therefore on the opportunity to develop civic skills as part of a political party or volunteer organization. Therefore, we provide further evidence on the impact of the expulsions on civic skills, and the opportunity to acquire civic skills in adulthood, in columns (3)–(8) of Table 9. While some of these opportunities vary with SES, other activities, such as participation in a church, are not correlated strongly with SES (Brady et al., 1995).

The estimates in column (3) show that the treated cohorts are neither more nor less likely to be unemployed, even though the estimates in column (2) indicate that they earn lower average wages. The relevance of this result can be seen from the similar results of Brady et al. (1995), which imply that activities that help to develop civic skills on the job are more important than actually being employed, and the opportunity to participate in such job-related activities increases with SES. Hence, we may conclude from the evidence in columns (1)–(3) that the cohort that was exposed to the expulsions while young may be less likely to participate in and develop an interest in politics, not because they are less likely to be employed, but because they are less likely to be involved in job-related activities that build civic skills.

Moving on to columns (4) and (5), we find that while the treated cohorts are no less likely to indicate support for a political party, they are much more less likely to say that a political party is important. Furthermore, the estimates also show that the exposed cohorts are less likely to participate in volunteer organizations or churches, and have lower levels of trust. Taken together, these results provide further channels through which the expulsions may have affected individuals' interest in politics and political participation. An exposure to the expulsions is related to lower rates of both participation in organizations in which civic skills could be developed (churches and volunteer groups) and social capital (trust).²² Consequently, they are also less likely to view political activity as important, which is often related to lower rates of political interest and participation, and lower levels of SES (Brady et al., 1995; Finkel and Muller, 1998; Schlozman et al., 1995).

Overall, the empirical results support explanations that are based on a framework in which the expulsions led to significant changes in the socialization environment of the exposed cohort—both at school and at home—such as those documented by several studies (Acemoglu et al., 2011; Akbulut-Yuksel and Yuksel, 2015; Evans, 2005; Waldinger, 2010; Yahil, 1991). We show that, consequently, individuals who were children or young adults at the time of the event have lower levels of schooling and wages, and hence lower levels of SES. Based on the large body of literature on SES and political participation, we further demonstrate that the lower levels of SES are related to less interest and importance being attached to political activities, less of the resources that are required to participate in politics (money, civic skills, trust) being available, and fewer opportunities to build civic skills even as adults (volunteering, church attendance) presenting themselves.²³ Thus, our results on the lower political interest and participation rates of the cohort who were exposed to the expulsions could be understood to be driven by changes in socioeconomic status and the related civic skills, as a result of growing up during the turbulent period between 1933 and 1945.

 $^{^{22}}$ Note that the lower rates of trust could be either a result or a cause of the lower rates of participation in organizations in which civic skills may be acquired. We do not take a stand on this important issue as it is outside the scope of this paper, but see Alesina and Giuliano (2011) or Putnam (2000) for further discussions.

 $^{^{23}}$ Unfortunately, we do not have detailed information on the amount of "free time" available, which was found to contribute to political behaviour by Brady et al. (1995). However, they find that free time is not related strongly to SES due to roughly equal substitution and income effects. Therefore, we conjecture that free time would not be an important mechanism here either.

6 Conclusion

We use region-by-cohort variation in the exposure to the Jewish expulsions of 1933–1939 to show that young Germans who grew up during the expulsions in Germany are significantly less likely to be interested or participate in politics. These results are much stronger for children and young adults for whom more of their impressionable years occurred during the expulsions and the Nazi regime. We also demonstrate that the negative impacts of the expulsions on political behaviour are due to the social changes that were brought about by the expulsions, that led to significant disturbances to the family and schooling environments in which young people were socialized, and are not the result of other contemporary events. Drawing on theories of the links between the social environment, socioeconomic status, and political behaviour, we demonstrate that, all else being equal, young people with a greater exposure to the expulsions have relatively lower socioeconomic status (schooling, income), have fewer civic skills (trust), and are less likely to participate in organizations that help to develop civic skills (volunteering, church attendance).

These results are important for our understanding of politics and economics. First, they help us to understand the long-term impacts of the Jewish expulsions and the Nazi regime in Germany on Germans. Furthermore, we are able to demonstrate the links between childhood events, socioeconomic status, and adult political behaviour, which have been discussed but rarely tested using empirical data. We show that events in childhood and young adulthood do indeed matter for political attitudes and behaviours in adulthood, although we do not find these attitudes to spill over to future generations of Germans. We believe that the absence of intergenerational spillovers indicates the importance of the broader social environment, beyond the nuclear family, for learning to participate in politics. Our findings also reveal that conflicts have important consequences for political behaviour if they alter the environment in which individuals are socialized—especially in the family and at school. Therefore, an understanding of the interaction between conflict and political behaviour. Lastly, given that the Jewish expulsions also meant a significant loss of the skilled middle class population, the results imply that political socialization is an important human capital externality.

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Figure 1: Resource-based Model of Political Interest and Participation

	All (1)	RORs with above avg. Jewish pop. (2)	RORs with below avg. Jewish pop. (3)	Difference s.e (difference) (4)
		Summary of Reg	ional Characteristics	3
Percentage of Jews in 1933	1.190	1.955	0.715	1.240***
	(0.875)	(0.960)	(0.280)	(0.027)
Percentage of Jews in 1946	0.156	0.291	0.073	0.219^{***}
	(0.283)	(0.381)	(0.148)	(0.011)
Area in km^2 in 1933	264.329	317.347	231.523	85.824***
	(211.083)	(251.813)	(173.516)	(8.696)
Population in 1933	409,803	519,369	342,008	$177,361^{***}$
	(409, 803.000)	(342, 292.900)	(349, 870.300)	(14, 579.030)
Income per Capita in 1932 (in RM)	474.900	504.368	456.303	48.064^{***}
	(103.711)	(70.599)	(116.233)	(4.262)
Rubble per Capita	15.627	17.122	14.683	2.439
	(7.480)	(9.019)	(6.137)	(0.306)
	Sumn	nary of Individual a	nd Household Chara	cteristics
Interest in Politics	0.361	0.363	0.3600	0.003
	(0.480)	(0.481)	(0.480)	(0.020)
Political Participation	0.082	0.084	0.081	0.003
	(0.275)	(0.277)	(0.273)	(0.012)
Years of Schooling	11.320	11.435	11.248	0.187
	(2.311)	(2.391)	(2.258)	(0.105)
Employment	0.616	0.642	0.599	0.043
	(0.487)	(0.480)	(0.490)	(0.023)
$\operatorname{Ln}(\operatorname{wage})$	8.944	8.974	8.924	0.050
	(0.969)	(0.912)	(1.005)	(0.062)
Importance of Political	0.233	0.201	0.252	-0.051
Activity	(0.423)	(0.401)	(0.434)	(0.021)
Volunteer	0.206	0.205	0.206	-0.001
	(0.404)	(0.404)	(0.405)	(0.017)
Trust	0.622	0.653	0.605	0.048
	(0.485)	(0.477)	(0.489)	(0.035)
Church Attendance	0.270	0.290	0.258	0.031
	(0.444)	(0.454)	(0.438)	(0.022)
Mother with Basic Education	0.887	0.876	0.894	-0.018
	(0.316)	(0.330)	(0.308)	(0.014)
Father with Basic Education	0.828	0.816	0.836	-0.019
	(0.377)	(0.387)	(0.371)	(0.017)
Age	47.275	47.280	47.272	0.008
	(18.458)	(18.347)	(18.533)	(0.776)
	,	,	,	*
Female	0.537	0.534	0.539	-0.005
	(0.499)	(0.499)	(0.499)	(0.021)
		. ,		. *
Rural	0.587	0.577	0.592	-0.015
	(0.493)	(0.494)	(0.492)	(0.021)
Observations Max.	2399	917	1482	2399

	(1)	(2)	(3)	(4)
	General	Interest in	Politics (Me	ean = 0.361)
Percentage of Jews in 1933 \times Born btw. 1910–1927	-0.0392^{**} (0.0174)	-0.0462^{**} (0.0173)	-0.0451^{**} (0.0197)	-0.0443^{**} (0.0193)
Mother has more than Basic Education		$\begin{array}{c} 0.2329^{***} \\ (0.0398) \end{array}$		$\begin{array}{c} 0.1464^{***} \\ (0.0534) \end{array}$
Father has more than Basic Education			$\begin{array}{c} 0.2132^{***} \\ (0.0319) \end{array}$	$\begin{array}{c} 0.1433^{***} \\ (0.0444) \end{array}$
$\%$ of Jews in 1933 \times Born btw. 1910–1927 \times Mother has more than Basic Education		-0.004 (0.0467)		-0.047 (0.0883)
$\%$ of Jews in 1933 \times Born btw.1910–1927 \times Father has more than Basic Education			-0.00820 (0.0500)	.0109 (0.0679)
R ² Observations	0.113 2389	$0.144 \\ 2064$	$0.1470 \\ 2040$.152 2009

Table 2: Estimated Effect of Jewish Expulsions on General Interest in Politics (Mean = 0.361)

Participation in Local Politics (Mean = 0.082)

Percentage of Jews in 1933 \times Born btw. 1910–1927	-0.0184^{**} (0.0074)	-0.0187^{**} (0.0087)	-0.0180^{*} (0.0100)	-0.0179^{*} (0.0096)
Mother has more than Basic Education		$\begin{array}{c} 0.0746^{***} \\ (0.0248) \end{array}$		$\begin{array}{c} 0.051 \\ (0.0364) \end{array}$
Father has more than Basic Education			$\begin{array}{c} 0.0738^{***} \\ (0.0251) \end{array}$	$0.050 \\ (0.0347)$
$\%$ of Jews in 1933 \times Born btw. 1910–1927 \times Mother has more than Basic Education		-0.0494^{**} (0.0222)		-0.035 (0.0379)
$\%$ of Jews in 1933 \times Born btw. 1910–1927 \times Father has more than Basic Education			-0.0419^{*} (0.0210)	-0.0358 (0.0324)
R^2 Observations	$0.055 \\ 2357$	$0.074 \\ 2041$	$0.0720 \\ 2017$.077 1987

Notes: Standard errors, clustered by regions, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). The control group is individuals born between 1951 and 1960. All regressions control for region and birth-year fixed effects, along with gender and rural dummies. Each column in columns (2)-(4) is from a separate regression in which the main treatment effect is allowed to vary by parental (household) characteristics.

	(1)	(2)	(3)	(4)
	General	Interest in F	Politics (Me	an = 0.361)
$\%$ of Jews in 1933 \times Exposure Length	-0.0026^{**} (0.0013)	-0.0036^{**} (0.0014)	-0.0033^{**} (0.0015)	-0.0033^{**} (0.0015)
Mother has more than Basic Education		$\begin{array}{c} 0.2362^{***} \\ (0.0326) \end{array}$		$\begin{array}{c} 0.1663^{***} \\ (0.0445) \end{array}$
Father has more than Basic Education			$\begin{array}{c} 0.1995^{***} \\ (0.0272) \end{array}$	$\begin{array}{c} 0.1236^{***} \\ (0.0376) \end{array}$
R^2 Observations	$0.110 \\ 3,515$	$0.141 \\ 3,048$	$0.144 \\ 3,022$	$0.150 \\ 2,974$
	Participat	ion in Local	Politics (M	ean = 0.082)
$\%$ of Jews in 1933 \times Exposure Length	-0.0011^{*} (0.0006)	-0.0020^{***} (0.0007)	-0.0018^{**} (0.0008)	-0.0019^{**} (0.0008)
Mother has more than Basic Education		$\begin{array}{c} 0.0756^{***} \\ (0.0260) \end{array}$		$\begin{array}{c} 0.053 \\ (0.0350) \end{array}$
Father has more than Basic Education			$\begin{array}{c} 0.0752^{***} \\ (0.0210) \end{array}$	0.0490^{*} (0.0279)
R^2 Observations	$0.044 \\ 3466$	$0.059 \\ 3014$	$0.060 \\ 2988$	0.063 2941

Table 3: Estimated Impact of Jewish Expulsions by Length of Exposure

Notes: The table shows the estimated impact of Jewish expulsions using a continuous measure of exposure to expulsions in childhood and young adulthood. We define exposure as having lived during the Nazi Regime, which was between 1933 and 1945; thus, we have a total of 12 years of possible exposure. We also assume that the child was affected by the Nazi Regime if they were between 6 and 23 years of age at any time during the period 1933 to 1944. Standard errors, clustered by regions, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). The control group is individuals born between 1951 and 1960. All regressions control for region and birth-year fixed effects, along with gender and rural dummies. The point estimates are also allowed to vary by parental (household) characteristics.

Table 4: Falsification Tests

	Interest (1)	Participation (2)	(3)	Participation (4)
$\%$ of Jews in 1933 \times Born btw. 1951–1960	0.0165 (0.0226)	0.0052 (0.0120)	0.0264 (0.0283)	-0.0019 (0.0134)
Placebo Control Group	Born i	n 1961–1970	Born i	in 1900–1909
R^2 Observations	$0.103 \\ 2250$	0.039 2229	0.118 1481	$0.059 \\ 1466$

Notes: Standard errors, clustered by regions, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). The placebo treated group are individuals born between 1951 and 1960, and the placebo control groups are older and younger untreated individuals. Each column is from a separate regression and controls for region and birth-year fixed effects. The other controls in each regression are gender and rural dummies.

Table 5:	Robustness	of the	Estimated	Impact	of t	he .	Jewish	Expulsions	to	Treatment	Group	Selection
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	Born btw.	Born btw.	Born btw.	Born btw.	Born btw.
	1910–1923	1910–1933	1910–1938	1910–1945	1915–1927
	(1)	(2)	(3)	(4)	(5)
	Gei	neral Interes	t in Politics	(Mean = 0.3)	36 1)
$\%$ of Jews in 1933 \times Cohort Dummy	-0.0489^{***}	-0.0366^{**}	-0.0290^{*}	-0.0275^{*}	-0.0407^{**}
	(0.0176)	(0.0155)	(0.0166)	(0.0159)	(0.0190)
Female	-0.2641^{***}	-0.2634^{***}	-0.2762^{***}	-0.2798^{***}	-0.2731^{***}
	(0.0137)	(0.0125)	(0.0107)	(0.0106)	(0.0155)
Rural	-0.0683^{***}	-0.0710^{***}	-0.0695^{***}	-0.0593^{***}	-0.0713^{***}
	(0.0221)	(0.0208)	(0.0191)	(0.0162)	(0.0196)
R^2 Observations	$0.111 \\ 2019$	$0.106 \\ 2952$	$0.111 \\ 3515$	$\begin{array}{c} 0.111 \\ 4340 \end{array}$	0.117 2123
	Part	icipation in 1	Local Politic	s (Mean $= 0$.082)
$\%$ of Jews in 1933 \times Cohort Dummy	-0.0122^{*}	-0.0151^{**}	-0.0099	-0.0026	-0.0202**
	(0.0071)	(0.0067)	(0.0073)	(0.0061)	(0.0081)
Female	-0.0469^{***}	-0.0597^{***}	-0.0606***	-0.0612^{***}	-0.0583^{***}
	(0.0109)	(0.0104)	(0.0093)	(0.0088)	(0.0114)
Rural	0.019 (0.0172)	$\begin{array}{c} 0.0111\\ (0.0128) \end{array}$	$\begin{array}{c} 0.0104 \\ (0.0124) \end{array}$	$0.0082 \\ (0.0106)$	0.0187 (0.0166)
R^2 Observations	$0.053 \\ 1992$	$0.047 \\ 2906$	$0.045 \\ 3466$	$0.04 \\ 4280$	$0.053 \\ 2098$

Notes: The table shows the estimated impact of the Jewish expulsions using a range of definitions of "impressionable years." Standard errors, clustered by region, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). The control group is individuals born between 1951 and 1960. All regressions control for region and birth-year fixed effects, along with gender and rural dummies, and linear state-time trends.

Table 6.	Robustness of the	Fetimated	Impact of	the Iowish	Expulsions to	Trootmont	and (Control	Croups
Table 0:	Robustness of the	e Estimated	impact of	the Jewish	Expuisions to	reatment a	ana	Control	Groups

	Born btw.	Born btw.	Born btw.	Born btw.	Born btw.	Born btw.
	1910–1923	1910–1927	1910–1933	1910–1938	1910–1945	1915–1927
	(1)	(2)	(3)	(4)	(5)	(6)
		General I	nterest in Po	olitics (Mean	n = 0.361)	
$\%$ of Jews in 1933 \times Cohort Dummy	-0.0448^{***}	-0.0335^{**}	-0.0310**	-0.0243*	-0.0235^{*}	-0.0328^{**}
	(0.0154)	(0.0152)	(0.0128)	(0.0146)	(0.0137)	(0.0163)
Female	-0.2639^{***}	-0.2685^{***}	-0.2630^{***}	-0.2741^{***}	-0.2780^{***}	-0.2705^{***}
	(0.0119)	(0.0114)	(0.0110)	(0.0102)	(0.0097)	(0.0144)
Rural	-0.0683^{***}	-0.0697^{***}	-0.0709^{***}	-0.0698^{***}	-0.0606^{***}	-0.0721^{***}
	(0.0221)	(0.0188)	(0.0197)	(0.0185)	(0.0159)	(0.0190)
R^2 Observations	$0.11 \\ 2574$	0.111 2944	$0.106 \\ 3507$	$\begin{array}{c} 0.109 \\ 4070 \end{array}$	$0.109 \\ 4895$	$0.114 \\ 2678$
		Participati	on in Local I	Politics (Mea	n = 0.082)	
$\%$ of Jews in 1933 \times Cohort Dummy	-0.0107	-0.0176^{**}	-0.0146^{*}	-0.0111^{**}	-0.0039	-0.0188^{**}
	(0.0091)	(0.0084)	(0.0075)	(0.0055)	(0.0062)	(0.0089)
Female	-0.0478^{***}	-0.0549^{***}	-0.0581^{***}	-0.0590^{***}	-0.0596^{***}	-0.0568^{***}
	(0.0109)	(0.0103)	(0.0097)	(0.0086)	(0.0084)	(0.0110)
Rural	0.0134 (0.0160)	$\begin{array}{c} 0.0103 \\ (0.0140) \end{array}$	0.0078 (0.0127)	0.0065 (0.0119)	$0.006 \\ (0.0102)$	0.013 (0.0156)
R^2 Observations	$0.049 \\ 2536$	$0.051 \\ 2901$	$0.045 \\ 3450$	$\begin{array}{c} 0.043 \\ 4010 \end{array}$	$0.04 \\ 4824$	$0.048 \\ 2642$

Notes: The table shows the estimated impact of the Jewish expulsions using a range of definitions of "impressionable years." Standard errors, clustered by region, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). The control group is now individuals born between 1946 and 1960. All regressions control for region and birth-year fixed effects, along with gender and rural dummies, and linear state-time trends.

Table 7	:	Robustness	$_{\mathrm{to}}$	Sample	Selection
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	Non-Me	overs Only			
	Interest in Politics (1)	Participation in Politics (2)	Internal Migration (3)	Mortality (4)	Cohort Size (5)
% of Jews in 1933 \times Born btw. 1910–1927	-0.0404^{*} (0.0269)	-0.0209^{*} (0.0110)	-0.0262 (0.0177)	-0.0078 (0.0088)	-0.1435 (0.2058)
R^2 Observations	$0.138 \\ 1308$	$0.077 \\ 1290$	$0.108 \\ 2348$	$0.527 \\ 2354$	$0.518 \\ 2354$

Notes: Standard errors, clustered by regions, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). Each column is from a separate regression, controlling for region and birth-year fixed effects. Other controls in each regression are gender and rural dummies. Individuals are coded as movers if they report that they no longer live in their childhood region. Mortality is computed by exploring the panel nature of the data.

	Base Results (1)	State Trends (2)	WWII Destruction (3)	Unemp. Rate (4)	Pop. Size & Income (5)	Party Support (6)	Urban Share (7)	All (8)
% of Jews in 1933 \times Born btw. 1910–1927	-0.0392^{**} (0.0174)	-0.0337^{**} (0.0172)	General Int -0.0409** (0.0175)	erest in Pol -0.0384^{**} (0.0159)	litics (Mean -0.0345* (0.0180)	$= 0.361) \\ -0.0392^{**} \\ (0.0154)$	-0.0335^{**} (0.0156)	-0.0353^{**} (0.0156)
Rubble per Cap. × Born btw. 1910–1927			0.0018 (0.0023)					0.0007 (0.0027)
Unemployment Rate in 1932 \times Born btw. 1910–1927				$\begin{array}{c} 0.0101 \\ (0.0088) \end{array}$				0.0073 (0.0141)
Population Size in 1933 \times Born btw. 1910–1927					-0.0001 (0.0002)			-0.0001 (0.0002)
Income per Capita in 1932 \times Born btw. 1910–1927					-0.0001 (0.0002)			-0.0002 (0.0002)
$\%$ of Votes to Nazi Party \times Born btw. 1910–1927						0.0003 (0.0026)		-0.001 (0.0039)
$\%$ of Votes to Communist Party \times Born btw. 1910–1927						0.0048 (0.0041)		$\begin{array}{c} 0.005 \\ (0.0062) \end{array}$
Urban Share \times Born btw. 1910–1927							$\begin{array}{c} 0.1319 \\ (0.1242) \end{array}$	-0.0796 (0.1581)
R^2 Observations	0.113 2389	0.118 2389	0.113 2360	0.114 2389	0.113 2360	0.114 2389	0.114 2389	0.114 2360
~			Participation in Local Politics (Mean $= 0.082$)					
% of Jews in 1933 × Born btw. 1910–1927	-0.0184^{**} (0.0074)	-0.0191^{**} (0.0074)	-0.0200^{**} (0.0082)	-0.0180^{**} (0.0073)	-0.0197^{***} (0.0066)	-0.0211^{**} (0.0080)	-0.0124^{*} (0.0071)	-0.0151^{*} (0.0077)
Rubble per Cap. \times Born btw. 1910–1927			0.0005 (0.0013)					-0.0001 (0.0016)
Unemployment Rate in 1932 \times Born btw. 1910–1927				$\begin{array}{c} 0.0067 \\ (0.0042) \end{array}$				$\begin{array}{c} 0.0012\\ (0.0054) \end{array}$
Population Size in 1933 \times Born btw. 1910–1927					-0.0001 (0.0002)			-0.0001 (0.0002)
Income per Capita in 1932 \times Born btw. 1910–1927					-0.0001 (0.0002)			$\begin{array}{c} 0.0001 \\ (0.0002) \end{array}$
$\%$ of Votes to Nazi Party \times Born btw. 1910–1927						$\begin{array}{c} 0.0012\\ (0.0015) \end{array}$		$\begin{array}{c} 0.001 \\ (0.0016) \end{array}$
$\%$ of Votes to Communist Party \times Born btw. 1910–1927						0.0027 (0.0018)		-0.0011 (0.0032)
Urban Share × Born btw. 1910–1927							0.1441^{*} (0.0590)	0.1667 (0.1067)
R^2 Observations	$0.055 \\ 2357$	0.057 2357	0.055 2328	$0.056 \\ 2357$	$0.055 \\ 2357$	0.056 2328	0.057 2357	.057 2328

Notes: Standard errors, clustered by regions, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). The control group is individuals born between 1951 and 1960. All regressions control for region and birth-year fixed effects, along with gender and rural dummies and state-cohort trends.

Table 9:	Expulsions	and Political	Behaviour:	Potential	Channels	

	Schooling (1)	Income (2)	Employment (3)	Party Support (4)	Importance of Pol. Activity (5)	Volunteer (6)	Trust (7)	Church (8)
% of Jews in 1933	-0.4074^{***}	-0.1334^{***}	$0.022 \\ (0.0211)$	0.0192	-0.0556^{***}	-0.0306^{**}	-0.0491^{*}	-0.0312^{*}
× Born btw.1910-1927	(0.0706)	(0.0400)		(.0257)	(0.0144)	(0.0143)	(0.0270)	(0.0185)
R^2	0.181	0.280	0.327	0.071	0.081	0.074	0.103	0.174
Observations	2385	1026	1896	2377	1713	2350	852	1721

Notes: Standard errors, clustered by regions, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). The control group is individuals born between 1951 and 1960. All regressions control for region and birth-year fixed effects, along with gender dummies and rural dummies. We test the ability of various channels to explain the estimated patterns of political activity and interest according to the resource-based socioeconomic status model described by Brady et al. (1995).

Appendix: Additional Tables and Variable Definitions Additional Tables

	Support a Party (1)	Social Democrats (2)	Christian Democratic U. (3)	Left-Leaning (SPD,Greens) (4)	$\begin{array}{c} \textbf{Right-Leaning} \\ \textbf{(CDU, CSU, FDH)} \\ (5) \end{array}$
$\%$ of Jews in 1933 \times Born btw. 1910–1927	$0.0192 \\ (0.0257)$	0.0516^{**} (0.0249)	-0.0152 (0.0274)	0.0091 (0.0241)	-0.0039 (0.0217)
R^2 Observations	$0.071 \\ 2377$	$0.107 \\ 1478$	$0.192 \\ 1478$	$0.1480 \\ 1478$	$.150 \\ 1478$

Table A1: Impact of Expulsions on Party Support

Notes: Standard errors, clustered by regions, are shown in parentheses. Asterisks denote significance levels (* = 0.10, ** = 0.05, *** = 0.01). Each column is from a separate regression. Each column controls for region and birth-year fixed effects. Other controls in each regression are gender and rural dummies. The table estimates the impact of an exposure to the expulsions on both general party support and support for particular major parties.

Definitions of Some Variables from SOEP

Interest in Politics: This comes from Question Bp75 of SOEP: "First of all in general: How interested are you in politics?" We classify an individual as interested if he responds as having strong or very strong interest, and non-interested if weak or no interest. Missing values are left as missing in all cases.

Participation in Local Politics: This comes from the time use data in SOEP: "Which of the following activities do you do in your free time? Please enter how often you practice each activity. Bp0707: Participation in citizen initiatives, parties, community politics." Individuals are classified as participants if they participate "less frequently" than monthly, or more frequently, i.e., monthly and weekly. Individuals are classified as not participating if they never participate.

Length of Exposure: Length of exposure is calculated as the length of time that an individual would have lived under the Nazi regime (1933–1945) between the ages of 6 and 23 (impressionable years). If we call the length of exposure "Treat", it is generated as below:

Importance of Political Activity: This comes from the question in SOEP: "Different individuals find different things in life important. How important are the following things to you today? Gp0209: To be politically/socially involved." Individuals are classified as viewing

Treat	Birth year
1	1910 or 1938
2	1911 or 1937
3	1912 or 1936
4	1913 or 1935
5	1914 or 1934
6	1915 or 1933
7	1916 or 1932
8	1917 or 1931
9	1918 or 1930
10	1919 or 1929
11	1920 or 1928
12	Between 1921 and 1927 (inclusive)
0	Before 1910 or after 1938

 Table A2:
 Calculation of the length of Exposure

politics as important if they say politics is "important" or "very important". Individuals are classified as not viewing politics as important if they indicate it is "not very important" or "unimportant."

Trust: Our measure of trust comes from Question Tp0301: "On the Whole Trust People." Individuals are classified as trusting if they respond that they "Agree" or "Agree Slightly," and not trusting if they respond that they "Disagree Slightly" or "Totally Disagree."

Church Attendance: This comes from the SOEP: "Now some questions about your free time. How frequently do you do the following activities? Gp0408: Go to church or religious institutions." Individuals are classified as going to church if they go at least monthly.

Volunteerism: This comes from Gp0407 of the SOEP: "Now some questions about your free time. How frequently do you do the following activities? Gp0408: Volunteer work in clubs, associations, or social services." Individuals are classified as volunteering if they participate at least monthly.

Party Support: This comes from Question Bp7901 of the SOEP: "Many people in the Federal Republic of West Germany are inclined to a certain political party, although from

time to time they vote for another political party. What about you: Are you inclined—generally speaking—to a particular party?" Individuals are classified as supporting a party if they answer "yes."

If the response above is "yes," they are asked "Which Party?" We classify CDU, CSU and FDH as right-wing, and SDP and Greens as left-wing, as is standard in the literature.