# Rise and Fall in the Third Reich: Social Mobility and Nazi Membership

Blum, M., & de Bromhead, A. (2017). Rise and Fall in the Third Reich: Social Mobility and Nazi Membership. (pp. 1-34). Queen's University Belfast.

QUCEH WORKING PAPER SERIES
http://www.quceh.org.uk/working-papers

# RISE AND FALL IN THE THIRD REICH: SOCIAL MOBILITY AND NAZI MEMBERSHIP

Matthias Blum (Queen's University Belfast)
Alan de Bromhead (Queen's University Belfast)

Working Paper 2017-04

QUEEN'S UNIVERSITY CENTRE FOR ECONOMIC HISTORY
Queen's University Belfast
185 Stranmillis Road
Belfast BT9 5EE
April 2017

# Rise and Fall in the Third Reich: Social Mobility and Nazi Membership

Matthias Blum*
Alan de Bromhead†

**Abstract**

This paper explores the relationship between Nazi membership and social mobility using a unique and highly detailed dataset of military conscripts and volunteers during the Third Reich. We find that membership of a Nazi organisation is positively related to social mobility when measured by the difference between fathers' and sons' occupations. This relationship is stronger for the more 'elite' NS organisations, the NSDAP and the SS. However, we find that this observed difference in upward mobility is driven by individuals with different characteristics self-selecting into these organisations, rather than from a direct reward to membership. These results are confirmed by a series of robustness tests. In addition, we employ our highly-detailed dataset to explore the determinants of Nazi membership. We find that NS membership is associated with higher socio-economic background and human capital levels.

JEL Codes: J62; N24; N44; P16

Keywords: National Socialism; Third Reich; Social Mobility; Nazi Membership; Second World War; Political Economy; Germany; Economic History

*Queen's University Belfast and QUCEH, Queen's Management School, Riddel Hall, 185 Stranmillis Road, Belfast, Northern Ireland, BT9 5EE, United Kingdom. (e-mail: matthias.blum@qub.ac.uk)

†Queen's University Belfast and QUCEH, Queen's Management School, Riddel Hall, 185 Stranmillis Road, Belfast, Northern Ireland, BT9 5EE, United Kingdom. (e-mail: a.debromhead@qub.ac.uk)

# 1 Introduction

Why do individuals choose to join political parties? The benefits of membership of political parties are often thought to include higher social capital, career advancement, or both. Parties can reward their supporters directly with jobs in public administration, or may use their influence to ensure that members are given preferential treatment in appointments or promotions (Appleton et al., 2009). In short, membership can bring economic gains. Equally, highly driven or capable individuals may be attracted to, or recruited by, political parties. As such, individuals with characteristics advantageous to social mobility may be more likely to become members, introducing the problem of selection bias (Li et al., 2007). This paper explores the relationship between political affiliation and occupational advancement with respect to one of the most notorious political regimes in history: the Nazis. Using a unique and highly-detailed dataset of individual conscripts and volunteers into the German armed forces during the Third Reich, we show that membership of the Nazi party (NSDAP), the *Schutzstaffel* (SS) the *Sturmabteilung* (SA) and the *Hitler-Jugend* (HJ) are positively associated with socioeconomic advancement, with membership in the 'elite' NSDAP and SS being associated with greater increases. However, we go further and show that this observed advancement was largely due to self-selection of individuals with different characteristics into these organisations, rather than career benefits bestowed on members. NS members achieved social advancement by being trained in occupations of a higher level than that of their father. These individuals we identify as being 'driven' or of 'high ability' types. Once this 'early mobility' is taken into account, the relationship between Nazi membership and social mobility between father's and son's occupations is no longer apparent. Finally, we explore how the timing of joining NS organizations affected improvements in occupational status. We show that even among early joiners, this self-selection effect dominates.

This study relates to a number of different literatures. Firstly, our analysis of the social composition of Nazi membership, undertaken in advance of that of socioeconomic advancement, makes a contribution to a venerable and extensive literature on this topic. Secondly, we link to the literature on the economic benefits of political membership. While membership of political organizations, and the Nazi party itself, has been linked to benefits for companies, the link has been less well established for individuals (Ferguson and Voth, 2008). To the best of our knowledge, this study is the first to do so with respect to the Nazis. In

addition, our work is linked to studies of social mobility more generally, as our analysis identifies determinants of social mobility beyond political connections.

What are the economic benefits of connections to political organizations? A number of studies have identified the benefits to companies of political connections (Fisman (2001); Faccio (2006); Claessens et al. (2008); Acemoglu et al. (2013)). In the context of Nazi Germany, Ferguson and Voth (2008) estimated that companies connected to the Nazi party outperformed their unconnected competitors by 5% to 8% in terms of returns. The benefits to individuals stemming from political connections are perhaps less well explored. Establishing a causal link running from party membership to economic benefits is also difficult due to omitted variable bias, as high-ability or 'driven' individuals may be more likely to establish links to a political party. A study by Li et al. (2007) attempts to overcome this bias by examining the relationship between Communist Party membership and earnings of twins in China. The authors find, after controlling for a twin fixed effect, that the positive relationship between earnings and membership disappears, leading them to conclude that individuals with superior abilities joined the party, not that party members benefit from their political position. Likewise, Gerber (2000) finds that former Communist Party members in post-transition Russia had higher earnings, but that this was driven by the selection of individuals with advantageous, but unobservable, traits (such as ambition) into the party. Nonetheless, other studies of connections to the Chinese Communist Party membership by Appleton et al. (2009) and Li et al. (2012) do not find selectivity to be a serious problem, suggesting a causal effect of membership on earnings.

In this paper we examine whether Nazi membership was associated with socioeconomic advancement and explore whether membership was directly linked to advancement, or if individuals with different attributes selected into the party. This analyis is possible due to the availability of detailed individual level data on German soldiers during the period 1936-1945. We go further and examine the relationship for four categories of National Socialist organizations: the NSDAP (Nazi Party), the *Schutzstaffel* (SS), the *Sturmabteilung* (SA) and the *Hitler-Jugend* (HJ). In this way we capture a broader picture of Nazi organizations and the characteristics of membership and explore differnces between memership of the 'elite' NS movements, the NSDAPand the SS, and the mass youth movement of the *Hitler-Jugend*. Before looking at the benefits of membership of these various NS organizations, we first explore the determinants of being a member of each organization and attempt to address the question of 'who

joined the Nazis?' Our dataset provides a rare opportunity to examine Nazi members relative to the rest of the population. Analysis of party member lists can give you an indication of the social background of Nazi Party members, but by definition omits those who never joined. The party member lists, such as those formerly held at the Berlin Data Centre (BDC), also lack detailed information on education and family background, important variables to consider when analysing social class (Mühlberger, 1991, p.25), information that is available from our sample. In addition, as previously highlighted, we can exploit these data to examine memberships of different types of NS organisations and not just the Nazi Party itself (NSDAP).

The analysis will proceed as follows: the next section provides a brief review of the literature on support for the Nazis andand establishes the hypotheses to be tested, while the third section describes the data used in the analysis. Section four analyses the determinants of NS membership before the relationship between social mobility and membership are explored. Section five tests the robustness of our findings before the final section concludes.

## 2 The Nazis and Social Background

Understanding what motivated millions of ordinary Germans to support the Nazi party has been the goal of historians and political scientists for decades (*inter alia* Lipset (1960); Hamilton (1982); Childers (1983); Falter (1991)). The various explanations proposed generally fall under one of a small number of broad categories. Firstly, there are the theories that focus on the appeal of the Nazi party to certain sections of society (King et al., 2008). These 'group-based' theories include those that consider the Nazi appeal to have been greatest among those on the fringes of society, typically non-voters, who felt marginalised within the Weimar system (Bendix, 1952). This theory has recently been challenged however by Satyanath et al. (2013), who argue that a vibrant networks of clubs and associations in Weimar Germany facilitated the rise of the party: high social capital, not low social capital, paved the way for the Nazis. Other group-theories emphasise the Nazis' disproportionate popularity among certain social classes. The social-class theory is perhaps the most venerable and persistent, beginning with the work of Seymour Lipset, who identified the typical Nazi voter in 1932 as

> "a middle-class self-employed Protestant who lived either on a farm

> or in a small community, and who had previously voted for a centrist or regionalist political party strongly opposed to the power and influence of big business and big labor." (Lipset, 1960, p. 149)

That the Nazis were predominantly a lower middle-class party is also argued by Michael Kater in his analysis of party membership (Kater, 1983). This hypothesis is far from being universally accepted however and is opposed by Hamilton (1982), who argues that disproportionately high support for the Nazis was an upper-middle and upper-class phenomenon, as well as by Madden (1987), who highlights the diverse social background of party members. Perhaps the only group for which there is a near consensus regarding support for the Nazis is Catholics: consistently, Catholics appear to have been less likely to vote for the NSDAP or to become members of the party (*inter alia* Childers (1983); King et al. (2008); Satyanath et al. (2013)). The other main view of Nazi party support is that the NSDAP were not just a party which appealed to particular groups, but were rather a 'catchall party of protest' which drew support from all sections of society (Childers, 1983). The view that the Nazis were a mass-party with widespread appeal is perhaps most associated with Jürgen Falter, who argues that class or confession based theories can only go so far in explaining support for the Nazis and that the Nazis received support from across the social spectrum must be acknowledged (Falter, 2000). Following this line of reasoning, King et al. (2008) combine the 'catch-all' theory and the 'group-theory' in their analysis of Nazi voting and find that, although there was a general swing towards the Nazi party across all social groups, the party achieved disproportionately high support support among the 'working-poor': those not directly under threat of unemployment but nonetheless negatively affected by the recession of the early 1930s.

More recently, in keeping with the mass-support theories, the rational, economic self-interest of individuals has been highlighted as an explanation for supporting the Nazis, either electorally or by joining the party itself. According to Brustein (1998), individuals will support a party if the benefits to supporting the party outweigh the costs. With respect to the Nazi party membership between 1925 and 1933, Brustein argues that those individuals whose material interests were aligned with the party's platform were more likely to become members. In particular, he highlights the ability of the party to recruit successfully among the 'old middle-class', blue-collar workers in import-orientated industries and male, married white-collar workers and concludes that these groups' interests

were closely aligned with Nazi party programs. Building on Brustein's analysis, Ault (2002) concludes that material reasons for joining the party became predominant only perhaps from 1930 onward and that non-material interests, or 'identity politics' better explains membership in the early years of the party.

# 3 Data

The dataset employed in the analysis of NS membership and social mobility was constructed from a sample drawn from non-commissioned officers and lower ranked soldiers serving in the German armed forces during the Second World War over the period 1936-1945. In total, a representative sample from 68 companies was constructed, comprising of units of all branches of the German armed forces, most of which served in the army (*Heer*). Additionally, information about members of the Air Force (*Luftwaffe*), *Waffen-SS*, and non-German soldiers (mostly Eastern Belgians, Austrians, Luxembourger and French from Alsace-Lorraine) were compiled.[1] The sample is drawn from the former military district VI (Wehrkreis VI) in modern-day North Rhine-Westphalia and Lower Saxony (Rass (2001); Rass (2003, p.54ff)). The information in this sample were compiled from the following sources and agencies: the WASt (*Wehrmachtauskunftstelle für Kriegsverluste und Kriegsgefangene*), the agency responsible for compiling information on soldiers who were killed or were taken prisoner, and the BA-ZNS (*Bundesarchiv-Zentralnachweisstelle*), responsible for administering personal information about soldiers. This material was complemented by information on soldiers provided by the Red Cross's Tracing Service and a central register on repatriated soldiers returning from war captivity (Rass (2001); Rass (2003, p.61ff)).[2] The dataset comprises detailed personal information on each individual soldier, such as date of medical examination, information about family history, such as year of death of parents, place and date of birth, and religion, as well as information about an individual's socioeconomic background, as recorded on the date of enlistment. The descriptive statistics for the sample used in the analysis are given in Table 1.

From the information contained in the sample, we can determine the occupation an individual is trained for, the occupation actually practiced at the time

[1] The overwhelming majority of our sample were conscripts, with less than 7% being volunteers.

[2] The authors thank Christoph Rass for valuable information on the data set as well as the Leibniz-Institut für Sozialwissenschaften (GESIS) for providing the data set.

Table 1: DESCRIPTIVE STATISTICS

| VARIABLES | (1) N | (2) mean | (3) sd | (4) min | (5) max |
|---|---|---|---|---|---|
| *NSDAP member* | 13,962 | 0.0212 | 0.144 | 0 | 1 |
| *SS member* | 13,962 | 0.0198 | 0.139 | 0 | 1 |
| *SA member* | 13,962 | 0.0654 | 0.247 | 0 | 1 |
| *Hitler Youth member* | 13,962 | 0.348 | 0.476 | 0 | 1 |
| *Other NS member* | 13,962 | 0.0514 | 0.221 | 0 | 1 |
| *Roman Catholic* | 13,962 | 0.547 | 0.498 | 0 | 1 |
| *Year of birth* | 13,962 | 1916 | 7.055 | 1900 | 1929 |
| *Occupation Father* | 12,957 | 2.721 | 0.780 | 1 | 5 |
| *Occupation Trained* | 10,750 | 2.600 | 0.831 | 1 | 5 |
| *Occupation Practiced* | 10,753 | 2.633 | 0.789 | 1 | 5 |
| *Occupation (Father) - Low* | 12,957 | 0.423 | 0.494 | 0 | 1 |
| *Occupation (Father) - Middle* | 12,957 | 0.428 | 0.495 | 0 | 1 |
| *Occupation (Father) - High* | 12,957 | 0.149 | 0.356 | 0 | 1 |
| *Schooling - None* | 13,962 | 0.0163 | 0.126 | 0 | 1 |
| *Schooling - Low* | 13,962 | 0.572 | 0.495 | 0 | 1 |
| *Schooling - Middle* | 13,962 | 0.122 | 0.328 | 0 | 1 |
| *Schooling - High* | 13,962 | 0.0586 | 0.235 | 0 | 1 |
| *Schooling - Unknown* | 13,962 | 0.231 | 0.421 | 0 | 1 |
| *Urban - Pop. up to 2000* | 13,962 | 0.466 | 0.499 | 0 | 1 |
| *Urban - Pop. up to 10000* | 13,962 | 0.128 | 0.334 | 0 | 1 |
| *Urban - Pop. up to 50000* | 13,962 | 0.170 | 0.375 | 0 | 1 |
| *Urban - Pop. over 50000* | 13,962 | 0.236 | 0.425 | 0 | 1 |
| *Age at Examination* | 13,962 | 22.86 | 6.509 | 16 | 45 |
| *Volunteer* | 13,962 | 0.0657 | 0.248 | 0 | 1 |
| *Social Mobility Score* | 10,000 | -0.0194 | 0.913 | -4 | 4 |
| *Social Climb* | 10,000 | 0.271 | 0.445 | 0 | 1 |
| *Social Fall* | 10,000 | 0.263 | 0.440 | 0 | 1 |
| *No Social Climb or Fall* | 10,000 | 0.466 | 0.499 | 0 | 1 |
| *Large Social Climb* | 10,000 | 0.0315 | 0.175 | 0 | 1 |
| *Large Social Fall* | 10,000 | 0.0557 | 0.229 | 0 | 1 |
| *Higher Training Mobility* | 9,994 | -0.0582 | 0.945 | -4 | 3 |
| *Higher Job Mobility* | 9,550 | 0.0614 | 0.578 | -3 | 4 |

of medical examination, and the occupation of an individual's father. These rich data allow us to investigate the link between socioeconomic background and the membership of an NS organization, as well as the relationship between membership and career advancement. Ideally, information on an individual's earnings would have been included but unfortunately this was not available. We use information on socioeconomic background to categorise all individuals using the Armstrong (1972) taxonomy, using occupational titles to differentiate between professionals (e.g. doctors), semi-professionals (e.g. teachers), skilled (e.g. tailors), semi-skilled (e.g. factory worker), and unskilled workers (e.g. labourers). Each category is rank-ordered; unskilled workers are given a rank of 1 while professionals are given a rank of 5.[3] The dataset also provides information regarding an individual's educational background. The German school system traditionally distinguished between three different school tracks: basic school education, a medium degree school track and an advanced school track which aims at preparing students for an academic education at college or university. We use this three-tier scheme and categorise all individuals in the dataset accordingly. This methodology allows grouping individuals into four categories: the aforementioned school tracks serve as three broad categories, while one category is generated to identify individuals without school-leaving qualifications.[4] Variables reflecting additional individual characteristics, such as religion, age, and place of habitation are also included, as can be seen in Table 1.

This dataset offers a unique set of opportunities that make this study worthwhile: first, our sample of German armed forces during the Second World War allows us to compare members and non-members of a set of Nazi organizations and assess their differences with respect to socioeconomic characteristics. Second, the data contain information about an individual's education and occupation in addition to father's occupation, providing a rare opportunity to assess the role of education, societal background and intergenerational mobility in detail. Third, the data allow us to assess membership in the following organizations separately: *Nationalsozialistische Deutsche Arbeiterpartei* (NSDAP), the official political party of the Nazis; *Sturmabteilung* (SA) and *Schutzstaffel* (SS), two major paramilitary organizations of the NSDAP; and the *Hitlerjugend* (HJ), initially the youth organization of the NSDAP and after 1933, an amal-

[3]Farmers are included in category 3 with skilled workers. Excluding farmers from the analysis does not materially affect the results.

[4]Individuals that were missing observations were included in a separate educational category "unknown".

gam of formerly independent youth organizations. In doing so we can uncover whether membership of 'elite' NS organisations, such as the NSDAP and SS, was different to membership of less selective organisations, such as the SA and HJ.

It is also important to discuss the issue of potential sample selection and the implications this may have for the external validity of the results. Firstly, military samples have been criticised as being unrepresentative of the general population, and that endogenous selection often occurs (Bodenhorn et al., 2015). The concern primarily relates to volunteer armies, the decision to enlist can be related to personal characteristics and labour market potential. As this labour market potential is likely to be related to cyclical economic conditions, a selection effect may result in those with the poorest prospects deciding to enlist while those with better prospects remain in the labour market. As a result, any sample of volunteers is non-random. As Bodenhorn et al. (2015) suggest, this selection effect is not apparent in samples of conscript armies, such as that analysed in this paper [5]. Furthermore, the fact that Germany mobilised for "total war" during the 1940s ensured that many more individuals, of various ages and backgrounds, were conscripted than would ordinarily be the case in conscript army. As such some 12.5 million men served in the German armed forces over the course of the war, relative to a male population aged 15-44 of around 16.5 million in 1939 (Parrish and Marshall, 1978; Mitchell, 1998).

Inherent in the sample is that NSDAP membership will be underestimated if higher-ranking party members were less likely to serve as regular soldiers and more likely to enter the armed forces as officers. However, this is likely to bias downwards the estimated influence of membership on social mobility if relatively "less-able" party members are the type that we capture in this sample. This limits what we are able to say about the higher ranking members of NS organisations but helps to identify the influence among the "rank and file".

Finally, it is acknowledged that for most individuals in the sample, we measure social mobility at the early stage of an individual's career trajectory and not total or lifetime mobility. For this reason we concentrate on diffences in observed, albeit partially realised, intergenrational mobility between members of NS organisations and non-members.

[5] Of course some individuals may have been able, or indeed some more able than others, to avoid or delay conscription.

# 4 Analysis

## 4.1 Membership of NS Organisations

Our analysis is divided into two parts. In a first step we run a set of logistic regressions to assess correlates of membership in an NS organisation. The data provide information on an individual's membership in the following Nazi organisations: NSDAP; SA; SS; and Hitler Youth. This level of detail allows us to assess the socioeconomic composition of supporters of the NS regime in great detail. These different groups represented different branches of the NS organisation. NSDAP membership reflects a direct political dimension while examining SA and SS memberships allow insights into the factors fostering the likelihood of joining a paramilitary organisation of the Nazi regime. A membership analysis of the Hitler Youth allows a view of a different dimension of the Nazi organisational structure: the collectivisation of youth organisations in Germany to prepare young people to be loyal supporters of the regime. The decision to join NSDAP, SS and SA was largely voluntary, while the Hitler Youth became compulsory for all males aged 10-18 in 1939 (Lepage, 2008). We run several logit regression models explaining each of the aforementioned memberships using different specifications to limit any biases arising from multicollinearity and omitted variables, with the results shown in Table 2. We estimate

$$NS_i = \alpha + \beta Occupation_i + \delta Schooling_i + \lambda Religion_i + \gamma X_i + \epsilon \qquad (1)$$

Where $NS_i$ reflects whether individual i is a member of an NS organisation. By default, we control for an individual's denomination to address the common finding in the literature that Catholics were less inclined to support NS organisations.

As we would predict, being a member of the Roman Catholic Church reduces the likelihood of being a member of any NS organisation. In order to capture social background or "class", the occupation of an individual's father is included as an explanatory variable.[6] All our models are designed as tests of differences between a low occupational background and high and medium levels, respectively. Generally, we find that individuals with higher occupational backgrounds are more likely to be members of the NSDAP, SA, SS and Hitler Youth. Exponentiating the coefficient in model 1 of Table 2 reveals that the

[6] As an alternative we included the individual's practiced occupation. This generated very similar results.

Table 2: DETERMINANTS OF NS MEMBERSHIP

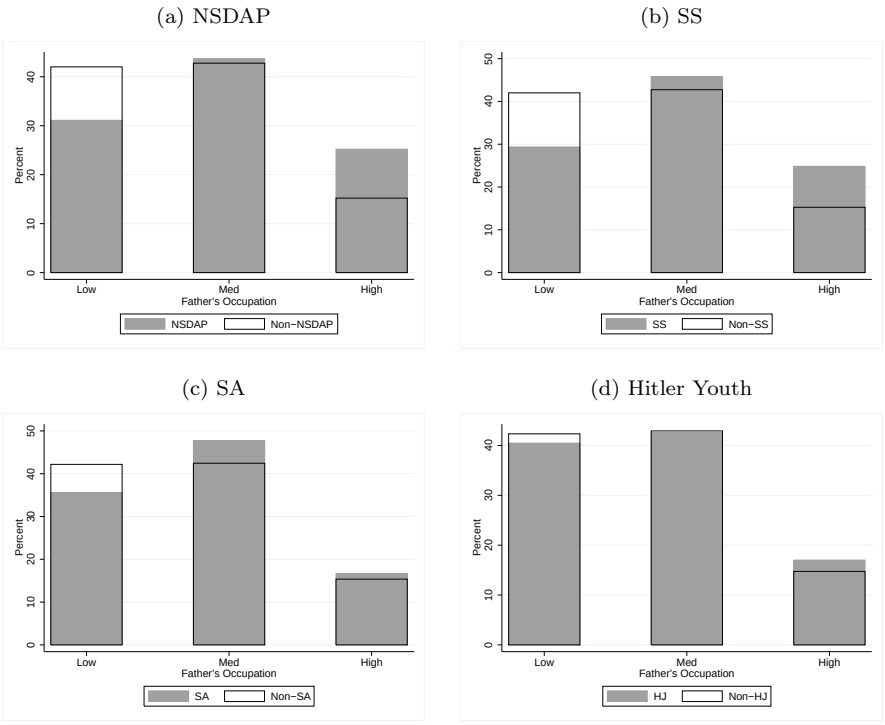
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VARIABLES | NSDAP | NSDAP | NSDAP | SA | SA | SA | SS | SS | SS | HJ | HJ | HJ |
| **Occupational background** | | | | | | | | | | | | |
| High | 0.60*** | 0.41** | 0.41** | 0.35*** | 0.26** | 0.26** | 0.75*** | 0.67*** | 0.67*** | 0.54*** | 0.33*** | 0.32*** |
| | (3.20) | (2.05) | (2.05) | (2.99) | (2.13) | (2.13) | (3.80) | (3.28) | (3.28) | (6.13) | (3.51) | (3.48) |
| Medium | 0.21 | 0.16 | 0.16 | 0.30*** | 0.28*** | 0.28*** | 0.58*** | 0.55*** | 0.55*** | 0.14** | 0.08 | 0.09 |
| | (1.32) | (1.03) | (1.03) | (3.48) | (3.19) | (3.19) | (3.53) | (3.35) | (3.35) | (2.24) | (1.35) | (1.38) |
| Low | reference | reference | reference | reference | reference | reference | reference | reference | reference | reference | reference | reference |
| **Schooling level** | | | | | | | | | | | | |
| High | | 1.47 | 1.46 | | 1.62** | 1.63** | | 0.70 | 0.70 | | 1.32*** | 1.30*** |
| | | (1.41) | (1.41) | | (2.22) | (2.22) | | (0.92) | (0.92) | | (5.39) | (5.26) |
| Medium | | 1.53 | 1.53 | | 1.57** | 1.57** | | 0.29 | 0.29 | | 0.77*** | 0.74*** |
| | | (1.48) | (1.48) | | (2.16) | (2.16) | | (0.38) | (0.38) | | (3.45) | (3.31) |
| Low | | 0.90 | 0.90 | | 1.23* | 1.23* | | 0.30 | 0.30 | | 0.32 | 0.30 |
| | | (0.88) | (0.88) | | (1.72) | (1.72) | | (0.41) | (0.41) | | (1.51) | (1.43) |
| Unknown | | 0.21 | 0.20 | | 1.45** | 1.45** | | 0.09 | 0.09 | | 0.42* | 0.39* |
| | | (0.20) | (0.19) | | (2.01) | (2.01) | | (0.11) | (0.12) | | (1.83) | (1.69) |
| None | | reference | reference | | reference | reference | | reference | reference | | reference | reference |
| **Religion** | | | | | | | | | | | | |
| Roman Catholic | -0.66*** | -0.61*** | -0.61*** | -0.26*** | -0.26*** | -0.26*** | -1.21*** | -1.21*** | -1.21*** | -0.25*** | -0.24*** | -0.24*** |
| | (-3.80) | (-3.51) | (-3.50) | (-2.78) | (-2.69) | (-2.69) | (-6.96) | (-6.95) | (-6.95) | (-3.64) | (-3.53) | (-3.42) |
| Protestant | reference | reference | reference | reference | reference | reference | reference | reference | reference | reference | reference | reference |
| **Admitted as** | | | | | | | | | | | | |
| Volunteer | | | 0.12 | | | -0.04 | | | -0.04 | | | 0.54*** |
| | | | (0.30) | | | (-0.23) | | | (-0.13) | | | (4.82) |
| Draftee | | | reference | | | reference | | | reference | | | reference |
| **Controls** | | | | | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examin | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 10,703 | 10,703 | 10,703 | 11,678 | 11,678 | 11,678 | 10,299 | 10,299 | 10,299 | 12,343 | 12,343 | 12,343 |

z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1

odds of membership of the NSDAP were almost twice as high for those from a high-status background relative to a low-status one. In addition to social background, we also include information on the level of schooling to proxy the educational status of an individual. We find a consistent pattern here. The coefficients generally indicate that individuals with higher levels of educational were more likely to be a member of any NS organisation. Whether the individual joined the German armed forces as a volunteer or was conscripted is also included in the model. We do not find that those that volunteered for military service were more likely to have been NSDAP, SA, or SS members. However, there is a statistically significant difference with respect to the Hitler Youth; individuals that volunteered for service in the German armed forces are found to be more likely to have been members of the Hitler Youth compared to those who did not volunteer. By default, all models control for an individual's year of birth and the year of medical examination. These variables constitute important control variables that capture any variation in membership that solely reflects different stages on an individual's educational or career ladder. As for NSDAP, SA and SS, those individuals born earlier had had more opportunities to join any of these parties prior to medical examination (cohort effect). Similarly, it may be reasonable to assume that for more advanced careers, returns to membership were higher. On the other hand, the same control variables capture a different effect with respect to membership in Hitler Youth. Slightly older individuals, or those who joined the armed forces early might have been simply too old by the time of medical examination to have been a member of the Nazis youth organisation. Accordingly, we find that birth year is positively related to membership of the Hitler Youth, but negatively related to NSDAP, SA and SS membership in general. Age at medical examination is positively correlated with NSDAP membership and negatively correlated with SA, SS and Hitler Youth membership. We do not find consistent results when we control for the city size: the only noteworthy finding is that individuals from areas with fewer than 2,000 inhabitants were more likely to join the SA (not reported in tables).

How do our findings compare to that of the previous Nazi membership literature? The results indicate that NSDAP members were more highly educated and held higher occupational status than non-members. Interestingly, higher levels of education and social standing are also associated with membership of other NS organisations, even the 'proletarian' SA (Stachura, 2014b, p.108). To visually compare the social background of NS members to non-members in the

Figure 1: BACKGROUND OF NS MEMBERS v. NON-MEMBERS




sample, four histograms are presented for each organisation (figure 1). Fig 1 (a) examines membership of NSDAP. This shows that higher occupations were over represented in the party while lower occupations were underrepresented, with a similar picture visible for the SS in fig 1 (b). Fig 1 (c) confirms that lower occupations were better represented among SA members but were underrepresented nonetheless. Not surprisingly the occupational background of HJ members most closely matches that of non-members, although even here higher level occupations are overrepresented (fig 1 (d)). Were the Nazis a 'catch-all party' or an organisation of the elite? Our findings suggest that these definitions are not mutually exclusive. Clearly the party managed to attract support from all levels of society. However the goal of an organisation that mirrored German society was not fully achieved: it is clear that higher-level occupations were overrepresented in all NS organisations, even the in Hitler Youth.

## 4.2 Membership and Intergenerational Mobility

The next part of the analysis examines the relationship between membership of NS organizations and social mobility. Did individuals benefit from membership of these organizations? To determine this, we firstly construct a measure of social mobility by comparing the occupation of an individual's father to that practiced by the son at the time of medical examination. Specifically, we take the Armstrong category of the son's occupation and subtract the corresponding value for the father. For example, if an individual is in a category 4 (semi-professional) occupation and their father had a category 2 occupation (semi-skilled worker), then they would be assigned a social mobility score of two.[7] As such, social mobility scores have a possible range of between -4 and +4. A histogram of the calculated social mobility scores for the sample can be seen in figure 2. This shows that 45% of individuals were in the same occupational category as their fathers and that relatively few individuals experienced extreme changes in social status from one generation to the next. To examine how intergenerational occupational mobility in our sample compares to that of other times and places we construct a simple measure of mobility based on Long and Ferrie (2013). Firstly, the occupational categories of fathers and sons are cross-tabulated in Table 3. An simple measure of intergenerational occupational mobility is given by the proportion of sons in an occupational category that is different to their father's, which for our sample is 53.5 per cent. By way of comparison, Long and Ferrie calculate that the corresponding figures for Britain and the US in the late nineteenth century were 42.6 and 45.3 per cent respectively, and in the second half of the twentieth century, 45.3 and 56.7, respectively. This suggests that intergenerational occupational mobility was relatively high in Germany during this period.[8]

Next we examine the determinants of intergenerational mobility. As a first pass we estimate a model using OLS with our measure of social mobility as the

[7] Of course, this is a crude measure of occupational mobility, as there are likely to be non-linearities involved. We address this issue in the next section.

[8] Long and Ferrie (2013) use a classification based on four groups: White collar, Farmer, skilled/semi-skilled and unskilled. The expulsion of women, Jews and 'non-Aryans' from many positions during this period, makes it difficult to compare social mobility to other places and times however. As many as 867,000 Jews and 'non-Aryans' were affected by the various decrees enacted from 1933 onward to remove 'non-Aryans' from the civil service and the professions (Kaplan, 1998, p.25). This, as well as the dislocation of a war-time economy, may also be a reason to expect a higher measured level of upward social mobility in our sample.

dependent variable. Equation (2) illustrates the testing framework:

$$SM_i = \alpha + \beta NS_i + \gamma X_i + \epsilon \tag{2}$$

On the right-hand-side we include our variable of interest: whether the individual was a member of a particular NS organisation, as well as a number of important control variables, indicated by $X$. These include controls for religion, age, year of medical examination, education and urbanisation. In addition, father's occupation is included in the model. This reflects the fact that the ability to move up or down the occupational ladder depends on where the father began. For example, a person whose father held a category 5 occupation cannot climb any higher on the scale, but can at best maintain that status or move downwards. Therefore the degree of social mobility of the son is conditional on the father's starting point. Finally, all regressions include district (*Kreis*) fixed effects. The results of the regressions can be seen in Table 4. Each column shows the results for the four NS organizations in turn. Column 1 shows the relationship between membership of the Nazi party (NSDAP) and social mobility. It indicates a positive relationship between Nazi party membership and upward social mobility. Specifically, being a party member is associated with 0.22 points higher social mobility. A similar relationship between membership of the SS and mobility can be seen in column 2, while a small positive relationship is evident for membership of the SA and HJ in columns 3 and 4, indicating a stronger relationship between upward mobility and membership of the 'elite' NS organisations. Columns 6, 7 and 9 show that these results are robust to controlling for education, although a strong, positive relationship between education level and social mobility can be observed. Likewise, results are similar when all membership types are included in the same model (columns 5 and 10). To put the relationship in context, the effect of being a NSDAP member on social mobility is similar to the difference between having no school leaving qualifications (reference) and having a medium level of schooling (0.28 v 0.21 in column 10). Clearly, this is a large effect. Finally column 11 shows the results when the different types of NS memberships are collapsed into one indicator variable. As expected, where an individual started from, namely their father's occupation, is related to social mobility; those starting from a higher occupational category are less likely to increase their occupational status further. There is also no evidence that Catholics were less likely to experience an increase in occupational status relative to non-Catholics (essentially Protestants).

Figure 2: SOCIAL MOBILITY HISTOGRAM

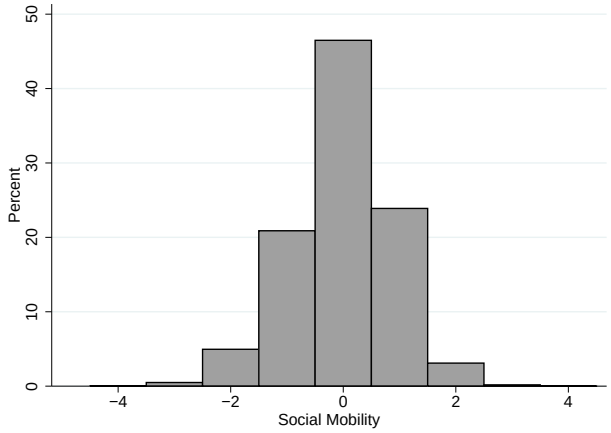



Table 3: SOCIAL MOBILITY TABLE

| | Father's Occupation (%) | | | | | |
|---|---|---|---|---|---|---|
| Son's Occupation (%) | Unskilled | Semi-skilled | Skilled | Semi-prof. | Professional | Row Sum |
| Unskilled | 23.7 | 10.8 | 6.5 | 3.1 | 1.3 | 8.3 |
| Semi-skilled | 27.9 | 39.1 | 22.5 | 15.4 | 10.0 | 28.7 |
| Skilled | 46.7 | 46.4 | 63.0 | 56.3 | 33.1 | 54.4 |
| Semi-professional | 1.4 | 3.4 | 6.7 | 19.5 | 27.5 | 6.9 |
| Professional | 0.4 | 0.3 | 1.3 | 5.7 | 28.1 | 1.7 |
| Column Sum | 100 | 100 | 100 | 100 | 100 | 100 |

Table 4: TOTAL SOCIAL MOBILITY & NS MEMBERSHIP

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | | | | |
| NSDAP | 0.22*** | | | | 0.24*** | 0.18*** | | | | 0.21*** | |
| | (4.07) | | | | (4.60) | (3.50) | | | | (3.96) | |
| SS | | 0.26*** | | | 0.29*** | | 0.24*** | | | 0.27*** | |
| | | (4.26) | | | (4.83) | | (3.84) | | | (4.28) | |
| SA | | | 0.10** | | 0.13*** | | | 0.07* | | 0.09** | |
| | | | (2.55) | | (3.38) | | | (1.80) | | (2.55) | |
| HJ | | | | 0.07*** | 0.09*** | | | | 0.06*** | 0.08*** | |
| | | | | (3.46) | (4.35) | | | | (2.90) | (3.67) | |
| Any NS membership | | | | | | | | | | | 0.11*** |
| | | | | | | | | | | | (5.88) |
| **Father's occupation** | -0.72*** | -0.72*** | -0.72*** | -0.72*** | -0.73*** | -0.76*** | -0.76*** | -0.76*** | -0.77*** | -0.77*** | -0.77*** |
| | (-50.44) | (-50.80) | (-51.22) | (-50.60) | (-50.75) | (-52.21) | (-52.38) | (-52.77) | (-52.44) | (-52.37) | (-52.48) |
| **Schooling level** | | | | | | | | | | | |
| High | | | | | | 0.80*** | 0.80*** | 0.80*** | 0.80*** | 0.78*** | 0.79*** |
| | | | | | | (12.23) | (12.03) | (12.15) | (12.01) | (11.76) | (11.78) |
| Medium | | | | | | 0.29*** | 0.29*** | 0.29*** | 0.29*** | 0.28*** | 0.28*** |
| | | | | | | (5.22) | (5.16) | (5.21) | (5.13) | (5.01) | (5.00) |
| Low | | | | | | 0.08 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 |
| | | | | | | (1.55) | (1.55) | (1.55) | (1.52) | (1.47) | (1.47) |
| Unknown | | | | | | 0.27*** | 0.27*** | 0.26*** | 0.27*** | 0.26*** | 0.26*** |
| | | | | | | (4.57) | (4.51) | (4.48) | (4.49) | (4.42) | (4.41) |
| **Religion** | | | | | | | | | | | |
| Roman Catholic | -0.02 | -0.01 | -0.02 | -0.02 | -0.00 | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.01 |
| | (-0.83) | (-0.69) | (-0.87) | (-0.82) | (-0.23) | (-0.65) | (-0.50) | (-0.69) | (-0.64) | (-0.12) | (-0.30) |
| **Controls** | | | | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Constant | -43.70*** | -45.46*** | -47.36*** | -31.94*** | -32.75*** | -72.00*** | -73.36*** | -73.81*** | -62.16*** | -62.54*** | -57.78*** |
| | (-5.39) | (-5.57) | (-5.83) | (-3.29) | (-3.44) | (-7.37) | (-7.46) | (-7.69) | (-5.94) | (-6.12) | (-5.78) |
| Observations | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 |
| R-squared | 0.38 | 0.38 | 0.38 | 0.38 | 0.39 | 0.40 | 0.40 | 0.40 | 0.40 | 0.41 | 0.41 |

Cluster robust (kreis) t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1. All reference categories are as in Table 2.

### 4.3 Membership: Self-selection or Reward?

An obvious issue with the analysis above is that the causal link running from NS organization membership to occupational advancement is not established. We know that Nazi party members advanced more that non-members, all else equal, but this could be due to some unobserved characteristic that influences both party membership and social/occupational advancement, such as 'drive' or 'ambition'. Fortunately, as we have an intermediate observation point on occupation - namely the occupation that the individual was trained for - we can start to look beneath the surface of our measure of overall intergenerational occupational mobility. As trained occupation would have been defined early in an individual's career, and would generally have preceded NS membership, we can examine to what extent intergenerational mobility was driven by early advances by those with advantageous unobserved characteristics.[9] By doing so we can get a clearer picture of whether the observed upward mobility of NS members occurred before or after membership. Columns 1-10 of Table 5 show the results of models equivalent to those estimated in the previous section, but with a new measure of occupational mobility on the left-hand side: the difference in occupation between what the individual was trained for and the father's occupation, or 'early mobility'. Taking membership of the NSDAP first in column 1, it emerges that party members were more likely to have improved their social standing at an early stage by being trained in higher status occupations relative to non-members. Since the change between father's occupation and trained occupation is not likely to have been the result of Nazi membership - the decision of what occupation to train for in most cases would have predated membership (or at the least the Nazi takeover in 1933) - this result suggests that NS members were more likely to be 'social-climbers'.[10] Columns 6 to 10 confirm that education was a strong predictor of social mobility of this type, while the previous results for other variables remain largely unchanged.

Having uncovered a relationship between NS membership and 'early mobility' we next explore whether the relationship between total mobility and NS membership, as shown in table 4, remains once we account for this 'early mobility'. To explore this we include our measure of 'early mobility' as an additional explanatory variable. These results can be seen in table 6. Unsurprisingly, 'early mobility' is closely related to total social mobility. Individuals with the high-

[9] For example, the mean age of joining the NSDAP was 27 for our sample.
[10] This claim will be tested in the robustness section.

est level of education appear to climb higher than those with lower education levels, even after controlling for early movement up the social ladder. However the most important results in the context of our analysis are those that related to NS membership. The relationship between NS membership and total social mobility, after controlling for an individual's 'early mobility' is not robust. The relatively strong and significant relationship apparent in table 4 becomes a small and insignificant effect. We interpret this as evidence that NS organisations attracted individuals who climbed the social ladder early on in their careers. We find little evidence that the apparent relationship between NS membership and social mobility is driven by party members being able to achieve occupational status beyond that of their level of training. Put differently, we find that the 'selection' effect dominates the 'reward' effect.

## 4.4 Membership: Date of Joining

Another approach to examining the relationship between social advancement and NS membership is to look at differences between different types of members. One particular way that membership can be differentiated is by date of joining. It is conceivable that those joining the party after the Nazi takeover in 1933 had different motivations to those members who joined when the party was still on the political fringe before 1930. The Nazi party itself was concerned enough about opportunistic new members flooding the party to restrict the admission of new members between June 1933 and 1937 (Unger, 1974). Indeed within the party, a distinct hierarchy emerged after 1933, with the *Alte Kämpfer*, or the old guard, displaying resentment towards the *Septemberlinge* - those that joined the party in the wake of the September 1930 electoral breakthrough. The *Märzveilchen*, (March Violets) - those who joined the party after the 1933 seizure of power - were viewed with particular contempt (Grunberger, 2013). To examine whether date of joining the party is related to social mobility, we divide our NS memberships into three categories: those who joined before 1931, those who joined between 1931 and 1932 and those that joined from 1933 onward. We then run regressions for each of our three measures of occupational mobility with the results shown in Table 7. Taking membership of the NSDAP first (column 1), it is evident that both early and late joiners were more likely to be in a higher status occupation than that of their fathers. However, if we examine the equivalent coefficients in the regression which includes 'early mobility' as an explanatory variable, we find little evidence of a relationship between

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | | | |
| NSDAP | 0.14** | | | | 0.18*** | 0.13** | | | | 0.16*** |
| | (2.34) | | | | (2.92) | (2.21) | | | | (2.75) |
| SS | | 0.25*** | | | 0.29*** | | 0.24*** | | | 0.28*** |
| | | (4.31) | | | (5.09) | | (4.51) | | | (5.16) |
| SA | | | 0.11*** | | 0.15*** | | | 0.09** | | 0.12*** |
| | | | (2.61) | | (3.68) | | | (2.09) | | (3.10) |
| HJ | | | | 0.13*** | 0.15*** | | | | 0.11*** | 0.13*** |
| | | | | (5.50) | (6.22) | | | | (4.87) | (5.51) |
| **Father's occupation** | -0.71*** | -0.72*** | -0.72*** | -0.72*** | -0.72*** | -0.76*** | -0.76*** | -0.76*** | -0.76*** | -0.76*** |
| | (-49.14) | (-49.57) | (-50.16) | (-49.04) | (-49.64) | (-52.92) | (-53.13) | (-53.53) | (-52.84) | (-53.51) |
| **Schooling level** | | | | | | | | | | |
| High | | | | | | 0.72*** | 0.72*** | 0.71*** | 0.71*** | 0.70*** |
| | | | | | | (8.71) | (8.55) | (8.74) | (8.57) | (8.33) |
| Medium | | | | | | 0.34*** | 0.34*** | 0.34*** | 0.33*** | 0.33*** |
| | | | | | | (4.45) | (4.40) | (4.42) | (4.30) | (4.21) |
| Low | | | | | | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 |
| | | | | | | (1.17) | (1.16) | (1.16) | (1.14) | (1.09) |
| Unknown | | | | | | 0.27*** | 0.27*** | 0.26*** | 0.27*** | 0.26*** |
| | | | | | | (3.38) | (3.35) | (3.33) | (3.34) | (3.27) |
| **Religion** | | | | | | | | | | |
| Roman Catholic | -0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.03 | -0.02 | -0.02 | -0.02 | -0.01 |
| | (-1.43) | (-1.26) | (-1.41) | (-1.36) | (-0.77) | (-1.14) | (-0.97) | (-1.14) | (-1.09) | (-0.55) |
| **Controls** | | | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Constant | -38.51*** | -40.29*** | -42.65*** | -17.17* | -18.62** | -65.35*** | -67.02*** | -67.82*** | -46.93*** | -47.66*** |
| | (-4.70) | (-4.98) | (-5.10) | (-1.87) | (-1.99) | (-6.22) | (-6.39) | (-6.49) | (-4.30) | (-4.37) |
| Observations | 9,994 | 9,994 | 9,994 | 9,994 | 9,994 | 9,994 | 9,994 | 9,994 | 9,994 | 9,994 |
| R-squared | 0.35 | 0.35 | 0.35 | 0.35 | 0.36 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |

Cluster robust (kreis) t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1. All reference categories are as in Table 2.

Table 6: TOTAL MOBILITY & NS MEMBERSHIP INC. EARLY MOBILITY

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | | | |
| NSDAP | 0.08 | | | | 0.08* | 0.08 | | | | 0.08 |
| | (1.64) | | | | (1.73) | (1.55) | | | | (1.62) |
| SS | | 0.07 | | | 0.07 | | 0.06 | | | 0.07 |
| | | (1.51) | | | (1.58) | | (1.41) | | | (1.46) |
| SA | | | 0.02 | | 0.02 | | | 0.01 | | 0.02 |
| | | | (0.84) | | (0.99) | | | (0.53) | | (0.65) |
| HJ | | | | -0.01 | -0.00 | | | | -0.01 | -0.01 |
| | | | | (-0.59) | (-0.26) | | | | (-0.73) | (-0.46) |
| **Father's occupation** | -0.25*** | -0.25*** | -0.25*** | -0.25*** | -0.25*** | -0.27*** | -0.27*** | -0.27*** | -0.27*** | -0.27*** |
| | (-22.51) | (-22.39) | (-22.43) | (-22.45) | (-22.13) | (-22.00) | (-21.91) | (-21.97) | (-21.99) | (-21.70) |
| **Early Mobility** | 0.66*** | 0.66*** | 0.66*** | 0.66*** | 0.66*** | 0.65*** | 0.65*** | 0.65*** | 0.66*** | 0.65*** |
| | (54.40) | (54.77) | (54.76) | (54.65) | (54.54) | (51.11) | (51.52) | (51.54) | (51.42) | (51.25) |
| **Schooling level** | | | | | | | | | | |
| High | | | | | | 0.12* | 0.12* | 0.12* | 0.12* | 0.12* |
| | | | | | | (1.75) | (1.74) | (1.75) | (1.76) | (1.73) |
| Medium | | | | | | -0.01 | -0.01 | -0.01 | -0.01 | -0.01 |
| | | | | | | (-0.29) | (-0.27) | (-0.29) | (-0.27) | (-0.28) |
| Low | | | | | | -0.09* | -0.08* | -0.09* | -0.08* | -0.08* |
| | | | | | | (-1.86) | (-1.84) | (-1.86) | (-1.85) | (-1.85) |
| Unknown | | | | | | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| | | | | | | (-0.90) | (-0.89) | (-0.92) | (-0.91) | (-0.90) |
| **Religion** | | | | | | | | | | |
| Roman Catholic | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | -0.00 | 0.00 |
| | (-0.20) | (-0.17) | (-0.26) | (-0.32) | (-0.04) | (-0.13) | (-0.10) | (-0.19) | (-0.24) | (0.01) |
| **Controls** | | | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Constant | -24.74*** | -25.28*** | -25.61*** | -26.41*** | -26.40*** | -30.21*** | -30.66*** | -30.62*** | -32.03*** | -32.00*** |
| | (-4.48) | (-4.54) | (-4.57) | (-3.99) | (-4.00) | (-4.29) | (-4.33) | (-4.34) | (-4.10) | (-4.14) |
| Observations | 8,884 | 8,884 | 8,884 | 8,884 | 8,884 | 8,884 | 8,884 | 8,884 | 8,884 | 8,884 |
| R-squared | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 |

Cluster robust (kreis) t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1. All reference categories are as in Table 2.

membership and mobility (column 6). This indicates that, even for members that joined the party early on, social mobility predated membership and that 'socially mobile' individuals self-selected into membership. For the SS and SA, it would appear that the positive relationship between membership and social mobility observed in tables 4 and 5 is driven mainly by those who joined the part from 1933 onward.

# 5 Robustness

The previous section uncovered a link between party membership and occupational advancement and that this link was mainly driven by individuals who demonstrated early mobility self-selecting into NS membership. However, there are a number of checks that must be performed to test the robustness of these findings. Firstly, there are likely to be non-linearities in the measure of social mobility employed. To test the robustness of our result, we run a series of different formulations of the dependent variable. Instead of defining the social mobility variable as an integer number between -4 and 4, we re-code it as a binary variable that equals one if there is a positive (negative) change in occupational status (i.e. change is equal to one (minus one)) and zero otherwise. We also examine whether big changes in occupational status were associated with NS memberships, as well as examining the likelihood of retaining the same occupational status.[11] Finally, we implement an ordered probit model, ranking changes in occupational status from greatest fall to greatest increase. Our conclusions, based on the original analysis, remain unaltered.[12]

In the analysis of the previous section the assumption is made that NS membership did not influence the occupation than an individual was trained for. To test this assumption we exclude individuals that, in all likelihood, would have had their trained occupation determined after the Nazi seizure of power, namely individuals that were under eighteen years of age in 1933.[13] Reassuringly, the results of the previous analysis are similar to those using this reduced sample (appendix Table A1).

[11] "Big" changes were defined as movements greater than plus or minus 1.
[12] Results reported in the appenix, tables A2-A7.
[13] We also consider cut-offs of twenty-one and sixteen in 1933 (not reported).

Table 7: SOCIAL MOBILITY & DATE OF NS MEMBERSHIP

| | Total Social Mobility | | | | | Early Mobility | | | | | Total Social Mobility (inc. Early Mobility) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
| **NS membership** | | | | | | | | | | | | | | | |
| NSDAP PRE 1931 | 0.57*** | | | | 0.59*** | 0.43*** | | | | 0.45*** | 0.17 | | | | 0.17 |
| | (3.98) | | | | (4.19) | (2.98) | | | | (3.19) | (1.15) | | | | (1.18) |
| NSDAP 1931-1932 | 0.18 | | | | 0.21 | 0.11 | | | | 0.14 | 0.10 | | | | 0.10 |
| | (1.38) | | | | (1.57) | (0.71) | | | | (0.91) | (0.98) | | | | (1.02) |
| NSDAP POST 1932 | 0.17*** | | | | 0.19*** | 0.12* | | | | 0.15** | 0.08 | | | | 0.08 |
| | (2.88) | | | | (3.23) | (1.71) | | | | (2.07) | (1.34) | | | | (1.38) |
| SS PRE 1931 | | -0.04 | | | -0.02 | | 0.23 | | | 0.25* | | -0.16 | | | -0.15 |
| | | (-0.21) | | | (-0.11) | | (1.58) | | | (1.70) | | (-1.37) | | | (-1.37) |
| SS 1931-1932 | | 0.17 | | | 0.20 | | -0.05 | | | -0.03 | | 0.18 | | | 0.18 |
| | | (1.30) | | | (1.45) | | (-0.51) | | | (-0.28) | | (1.12) | | | (1.16) |
| SS POST 1932 | | 0.27*** | | | 0.30*** | | 0.31*** | | | 0.35*** | | 0.06 | | | 0.06 |
| | | (3.78) | | | (4.16) | | (5.18) | | | (5.79) | | (1.34) | | | (1.38) |
| SA PRE 1931 | | | -0.23 | | -0.21 | | | 0.08 | | 0.11 | | | -0.27* | | -0.27* |
| | | | (-1.34) | | (-1.23) | | | (0.53) | | (0.71) | | | (-1.74) | | (-1.72) |
| SA 1931-1932 | | | 0.01 | | 0.03 | | | 0.03 | | 0.05 | | | -0.00 | | 0.00 |
| | | | (0.11) | | (0.28) | | | (0.27) | | (0.53) | | | (-0.04) | | (0.01) |
| SA POST 1932 | | | 0.09** | | 0.11*** | | | 0.08** | | 0.12*** | | | 0.03 | | 0.04 |
| | | | (2.28) | | (2.97) | | | (2.00) | | (2.95) | | | (1.34) | | (1.46) |
| HJ PRE 1931 | | | | -0.04 | -0.02 | | | | -0.01 | 0.00 | | | | -0.00 | 0.00 |
| | | | | (-0.37) | (-0.21) | | | | (-0.14) | (0.04) | | | | (-0.05) | (0.00) |
| HJ 1931-1932 | | | | -0.08 | -0.06 | | | | -0.08 | -0.06 | | | | -0.08** | -0.08* |
| | | | | (-1.50) | (-1.16) | | | | (-1.28) | (-0.95) | | | | (-2.00) | (-1.89) |
| HJ POST 1932 | | | | 0.07*** | 0.09*** | | | | 0.13*** | 0.15*** | | | | -0.01 | -0.00 |
| | | | | (3.54) | (4.26) | | | | (5.48) | (6.15) | | | | (-0.37) | (-0.05) |
| **Father's occupation** | -0.77*** | -0.76*** | -0.77*** | -0.77*** | -0.77*** | -0.76*** | -0.76*** | -0.76*** | -0.76*** | -0.76*** | -0.27*** | -0.27*** | -0.27*** | -0.27*** | -0.27*** |
| | (-52.26) | (-52.39) | (-52.91) | (-52.59) | (-52.75) | (-52.90) | (-53.25) | (-53.48) | (-53.05) | (-53.77) | (-21.85) | (-21.91) | (-21.98) | (-22.13) | (-21.72) |
| **Early Mobility** | | | | | | | | | | | 0.65*** | 0.65*** | 0.65*** | 0.65*** | 0.65*** |
| | | | | | | | | | | | (50.93) | (51.48) | (51.51) | (51.55) | (51.14) |
| **Schooling level** | | | | | | | | | | | | | | | |
| High | 0.80*** | 0.80*** | 0.80*** | 0.80*** | 0.79*** | 0.72*** | 0.71*** | 0.71*** | 0.72*** | 0.70*** | 0.12* | 0.12* | 0.12* | 0.12* | 0.12* |
| | (12.19) | (12.04) | (12.14) | (11.99) | (11.70) | (8.72) | (8.47) | (8.73) | (8.64) | (8.32) | (1.74) | (1.78) | (1.73) | (1.78) | (1.75) |
| Medium | 0.29*** | 0.29*** | 0.29*** | 0.29*** | 0.28*** | 0.34*** | 0.34*** | 0.34*** | 0.34*** | 0.33*** | -0.02 | -0.01 | -0.01 | -0.01 | -0.01 |
| | (5.18) | (5.15) | (5.22) | (5.15) | (4.99) | (4.43) | (4.35) | (4.43) | (4.33) | (4.17) | (-0.30) | (-0.26) | (-0.26) | (-0.25) | (-0.25) |
| Low | 0.08 | 0.09 | 0.09 | 0.09 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | -0.09* | -0.08* | -0.08* | -0.08* | -0.08* |
| | (1.54) | (1.54) | (1.56) | (1.56) | (1.50) | (1.17) | (1.14) | (1.17) | (1.19) | (1.12) | (-1.87) | (-1.82) | (-1.85) | (-1.82) | (-1.81) |
| Unknown | 0.27*** | 0.27*** | 0.26*** | 0.27*** | 0.26*** | 0.27*** | 0.27*** | 0.26*** | 0.27*** | 0.26*** | -0.04 | -0.04 | -0.04 | -0.04 | -0.04 |
| | (4.55) | (4.50) | (4.45) | (4.47) | (4.32) | (3.38) | (3.32) | (3.34) | (3.35) | (3.25) | (-0.90) | (-0.88) | (-0.95) | (-0.90) | (-0.91) |
| **Religion** | | | | | | | | | | | | | | | |
| Roman Catholic | -0.01 | -0.01 | -0.01 | -0.01 | -0.00 | -0.03 | -0.02 | -0.03 | -0.02 | -0.01 | -0.00 | -0.00 | -0.00 | -0.00 | 0.00 |
| | (-0.65) | (-0.50) | (-0.70) | (-0.66) | (-0.16) | (-1.15) | (-1.01) | (-1.16) | (-1.11) | (-0.64) | (-0.12) | (-0.05) | (-0.19) | (-0.24) | (0.07) |
| **Controls** | | | | | | | | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 9,994 | 9,994 | 9,994 | 9,994 | 9,994 | 8,884 | 8,884 | 8,884 | 8,884 | 8,884 |
| R-squared | 0.40 | 0.40 | 0.40 | 0.40 | 0.41 | 0.37 | 0.37 | 0.37 | 0.37 | 0.38 | 0.70 | 0.70 | 0.70 | 0.70 | 0.70 |

Cluster robust (kreis) t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1. All reference categories are as in Table 2. All models include a constant.

# 6 Conclusion

Do members of political organizations receive economic benefits? Or are more 'driven' or 'high ability' types more likely to join? Our analysis suggests that, in the case of the rank and file of NS organisations, the relationship between between social advancement and political connections is driven primarily by the latter. In the first part of the paper we examine the determinants of Nazi membership and add a unique perspective to this substantial literature. We find that higher-educated individuals and those from higher socioeconomic backgrounds were more likely to be members of not just the NSDAP, but all NS organisations. We then undertake something more novel, exploring the relationship between membership of NS organisations and socioeconomic mobility. We find a positive relationship between NS membership and intergenerational occupational advancement. Indeed we find that this relationship is stronger for the more 'elite' NS organisations, the NSDAP and the SS. However, we also uncover that NS members were more likely to have achieved social advancement at an early stage, suggesting that these individuals self-selected into membership. Although we cannot say whether members benefitted in other ways, such as through direct financial rewards or non-monetary benefits, our findings suggest that the observed positive relationship between social mobility and NS membership was driven mainly by unobserved charateristics. We find little evidence in our analysis of a direct 'reward' effect for members once we control for this 'early mobility'. Additionally we find that both early and late NSDAP joiners demonstrated higher 'early mobility'. Even among early joiners of the party our analysis uncovers little evidence of direct patronage.

# References

Acemoglu, D., S. Johnson, A. Kermani, J. Kwak, and T. Mitton (2013). The value of connections in turbulent times: Evidence from the united states. *NBER Working Paper 19701*.

Appleton, S., J. Knight, L. Song, and Q. Xia (2009). The economics of communist party membership: The curious case of rising numbers and wage premium during china's transition. *The Journal of Development Studies 45*(2), 256–275.

Armstrong, W. (1972). The use of information about occupation. In E. Wrigley

(Ed.), *Nineteenth-Century Society*, Anglica Germanica, pp. 191–311. Cambridge University Press.

Ault, B. (2002). Joining the nazi party before 1930. *Social Science History 26*(02), 273–310.

Bendix, R. (1952, Jun.). Social stratification and political power. *The American Political Science Review 46*(2), 357–375.

Bodenhorn, H., T. W. Guinnane, and T. A. Mroz (2015). Sample-selection biases and the "industrialization puzzle". Technical report, National Bureau of Economic Research.

Brustein, W. (1998). *The Logic of Evil: The Social Origins of the Nazi Party, 1925-1933*. Yale University Press. ID: 230; 95047263.

Childers, T. (1976). The social bases of the national socialist vote. *Journal of Contemporary History 11*(4, Special Issue: Theories of Fascism), pp. 17–42. ID: 88.

Childers, T. (1983). *The Nazi voter: the social foundations of fascism in Germany, 1919-1933*. Chapel Hill: University of North Carolina Press. ID: 91; 83005924.

Claessens, S., E. Feijen, and L. Laeven (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics 88*(3), 554–580.

Faccio, M. (2006). Politically connected firms. *The American Economic Review 96*(1), 369–386.

Falter, J. (1991). *Hitlers Wähler*. C.H. Besck.

Falter, J. (2000). The nsdap: A 'people's protest party'. In N. Gregor (Ed.), *Nazism*, Oxford readers, pp. 92–94. Oxford University Press.

Ferguson, T. and H.-J. Voth (2008). Betting on hitler: the value of political connections in nazi germany. *The Quarterly Journal of Economics*, 101–137.

Fisman, R. (2001). Estimating the value of political connections. *The American Economic Review 91*(4), 1095–1102.

Gerber, T. P. (2000). Membership benefits or selection effects? why former communist party members do better in post-soviet russia. *Social science research 29*(1), 25–50.

Grunberger, R. (2013). *A social history of the Third Reich*. Hachette UK.

Hamilton, R. F. (1982). *Who voted for Hitler?* Princeton University Press.

Kaplan, M. A. (1998). *Between dignity and despair: Jewish life in Nazi Germany*. Oxford University Press.

Kater, M. (1985). *The Nazi Party: A Social Profile of Members and Leaders 1919-1945*. Basil Blackwell.

Kater, M. H. (1983). *The Nazi party: A social profile of members and leaders, 1919-1945*. Cambridge, Mass.: Harvard University Press.

King, G., O. Rosen, M. Tanner, and A. F. Wagner (2008). Ordinary economic voting behavior in the extraordinary election of adolf hitler. *The Journal of Economic History 68*(04), 951–996.

Lepage, J. (2008). *Hitler Youth, 1922-1945: An Illustrated History*. McFarland, Incorporated Publishers.

Li, H., P. W. Liu, J. Zhang, and N. Ma (2007). Economic returns to communist party membership: Evidence from urban chinese twins. *The Economic Journal 117*(523), 1504–1520.

Li, H., L. Meng, X. Shi, and B. Wu (2012). Does having a cadre parent pay? evidence from the first job offers of chinese college graduates. *Journal of Development Economics 99*(2), 513 – 520.

Lipset, S. and R. Bendix (1991). *Social Mobility in Industrial Society*. A publication of the Institute of Industrial Relations, University of California. University of California Press.

Lipset, S. M. (1960). *Political man: The social bases of politics*. Seymour Martin Lipset.

Long, J. and J. Ferrie (2013). Intergenerational occupational mobility in great britain and the united states since 1850. *The American Economic Review 103*(4), 1109–1137.

Madden, P. (1987). The social class origins of nazi party members as determined by occupations, 1919-1933. *Social Science Quarterly*, 263–280.

Mitchell, B. (1998). *International Historical Statistics: Europe 1750-1993*. International Historical Statistics. Palgrave Macmillan UK.

MPIDR, C. (2011). Mpidr (max planck institute for demographic research) and cgg (chair for geodesy and geoinformatics, population history gis collection (partly based on bundesamt für kartographie und geodäsie 2011) rostock.

Mühlberger, D. (1991). *Hitler's Followers: Studies in the Sociology of the Nazi Movement*. Routledge. 90008455.

Parrish, T. and S. Marshall (1978). *The Simon and Schuster encyclopedia of World War II*. Simon and Schuster.

Paterson, L. and C. Iannelli (2006). Religion, social mobility and education in scotland. *The British journal of sociology 57*(3), 353–377.

Rass, C. (2001). Menschenmaterial: Sozialprofil, machtstrukturen und handlungsmuster einer infanteriedivision der wehrmacht im zweiten weltkrieg.

Rass, C. (2003). *Menschenmaterial: Deutsche Soldaten an der Ostfront; Innenansichten einer Infanteriedivision 1939-1945*, Volume 17. Schöningh.

Satyanath, S., N. Voigtlaender, and H.-J. Voth (2013). Bowling for fascism: social capital and the rise of the nazi party. Technical report, National Bureau of Economic Research.

Spenkuch, J. and P. Tillmann (2016). Special interests at the ballot box? religion and the electoral success of the nazis. Technical report, Working Paper.

Stachura, P. (2014a). *The Nazi Machtergreifung (RLE Nazi Germany & Holocaust)*. Routledge Library Editions: Nazi Germany and the Holocaust. Taylor & Francis.

Stachura, P. D. (2014b). *The Shaping of the Nazi State (RLE Nazi Germany and Holocaust)*. Routledge.

Unger, A. L. (1974). *The totalitarian party: party and people in Nazi Germany and Soviet Russia*. Cambridge University Press.

Weber, M. (2005). *The Protestant Ethic and the Spirit of Capitalism*. Routledge Classics. Taylor & Francis.

Table A1: SOCIAL MOBILITY AND DATE OF NS MEMBERSHIP - ONLY INDIVIDUALS AGED 18 AND OVER IN 1933

| | Total Social Mobility | | | | | Early Mobility | | | | | Total Social Mobility (inc. Early Mobility) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) |
| **NS membership** | | | | | | | | | | | | | | | |
| NSDAP PRE 1931 | 0.52*** | | | | 0.53*** | 0.29 | | | | 0.31* | 0.20 | | | | 0.20 |
| | (3.28) | | | | (3.44) | (1.62) | | | | (1.75) | (1.15) | | | | (1.17) |
| NSDAP 1931-1932 | 0.20 | | | | 0.23 | 0.12 | | | | 0.15 | 0.13 | | | | 0.14 |
| | (1.43) | | | | (1.63) | (0.75) | | | | (0.91) | (1.34) | | | | (1.41) |
| NSDAP POST 1933 | 0.12* | | | | 0.14* | 0.11 | | | | 0.13* | 0.07 | | | | 0.08 |
| | (1.66) | | | | (1.95) | (1.46) | | | | (1.73) | (1.06) | | | | (1.13) |
| SS PRE 1930 | | 0.04 | | | 0.06 | | 0.26 | | | 0.28 | | -0.11 | | | -0.11 |
| | | (0.18) | | | (0.24) | | (1.18) | | | (1.26) | | (-0.74) | | | (-0.76) |
| SS 1930-1933 | | 0.21 | | | 0.22 | | -0.06 | | | -0.04 | | 0.19 | | | 0.20 |
| | | (1.32) | | | (1.42) | | (-0.60) | | | (-0.41) | | (1.10) | | | (1.12) |
| SS POST 1933 | | 0.29*** | | | 0.32*** | | 0.31*** | | | 0.33*** | | 0.08 | | | 0.09 |
| | | (3.18) | | | (3.34) | | (3.10) | | | (3.30) | | (1.10) | | | (1.18) |
| SA PRE 1930 | | | -0.34 | | -0.32 | | | 0.03 | | 0.05 | | | -0.32* | | -0.32* |
| | | | (-1.62) | | (-1.54) | | | (0.18) | | (0.27) | | | (-1.69) | | (-1.66) |
| SA 1930-1933 | | | 0.01 | | 0.03 | | | 0.06 | | 0.08 | | | -0.05 | | -0.05 |
| | | | (0.10) | | (0.20) | | | (0.64) | | (0.82) | | | (-0.59) | | (-0.53) |
| SA POST 1933 | | | 0.12*** | | 0.14*** | | | 0.12** | | 0.14** | | | 0.04 | | 0.04 |
| | | | (2.68) | | (3.06) | | | (2.18) | | (2.48) | | | (1.06) | | (1.24) |
| HJ PRE 1930 | | | | 0.10 | 0.13 | | | | -0.00 | 0.03 | | | | 0.08 | 0.09 |
| | | | | (0.51) | (0.62) | | | | (-0.00) | (0.08) | | | | (0.81) | (0.86) |
| HJ 1930-1933 | | | | -0.40* | -0.38* | | | | 0.08 | 0.11 | | | | -0.46** | -0.45** |
| | | | | (-1.89) | (-1.75) | | | | (0.35) | (0.44) | | | | (-2.12) | (-2.08) |
| HJ POST 1933 | | | | -0.07 | -0.04 | | | | -0.01 | 0.02 | | | | -0.02 | -0.02 |
| | | | | (-0.43) | (-0.25) | | | | (-0.06) | (0.13) | | | | (-0.34) | (-0.24) |
| **Father's occupation** | -0.71*** | -0.71*** | -0.71*** | -0.71*** | -0.71*** | -0.71*** | -0.71*** | -0.71*** | -0.71*** | -0.71*** | -0.28*** | -0.28*** | -0.28*** | -0.28*** | -0.28*** |
| | (-35.03) | (-35.15) | (-35.68) | (-35.19) | (-36.07) | (-32.22) | (-32.37) | (-32.78) | (-32.25) | (-33.10) | (-14.12) | (-14.08) | (-14.08) | (-14.19) | (-14.17) |
| **Early Mobility** | | | | | | | | | | | 0.61*** | 0.61*** | 0.61*** | 0.61*** | 0.61*** |
| | | | | | | | | | | | (34.61) | (34.70) | (35.02) | (34.87) | (34.41) |
| **Schooling level** | | | | | | | | | | | | | | | |
| High | 0.87*** | 0.87*** | 0.86*** | 0.88*** | 0.84*** | 1.09*** | 1.08*** | 1.08*** | 1.10*** | 1.05*** | 0.01 | 0.02 | 0.01 | 0.02 | 0.02 |
| | (5.79) | (5.78) | (5.87) | (5.92) | (5.68) | (6.97) | (6.81) | (7.07) | (7.06) | (6.72) | (0.07) | (0.12) | (0.08) | (0.11) | (0.08) |
| Medium | 0.35** | 0.35** | 0.35** | 0.36** | 0.34** | 0.55*** | 0.55*** | 0.55*** | 0.56*** | 0.53*** | -0.09 | -0.09 | -0.09 | -0.09 | -0.09 |
| | (2.48) | (2.51) | (2.52) | (2.55) | (2.40) | (3.22) | (3.17) | (3.21) | (3.25) | (3.07) | (-0.54) | (-0.49) | (-0.50) | (-0.50) | (-0.49) |
| Low | 0.10 | 0.11 | 0.11 | 0.11 | 0.10 | 0.22 | 0.22 | 0.22 | 0.22 | 0.20 | -0.20 | -0.19 | -0.20 | -0.20 | -0.19 |
| | (0.81) | (0.84) | (0.82) | (0.86) | (0.76) | (1.31) | (1.28) | (1.30) | (1.34) | (1.21) | (-1.25) | (-1.19) | (-1.21) | (-1.21) | (-1.18) |
| Unknown | 0.29** | 0.29** | 0.28** | 0.29** | 0.27** | 0.37** | 0.37** | 0.36** | 0.38** | 0.35** | -0.12 | -0.11 | -0.12 | -0.11 | -0.12 |
| | (2.48) | (2.51) | (2.42) | (2.56) | (2.36) | (2.15) | (2.10) | (2.11) | (2.17) | (2.01) | (-0.78) | (-0.74) | (-0.78) | (-0.73) | (-0.74) |
| **Religion** | | | | | | | | | | | | | | | |
| Roman Catholic | -0.02 | -0.01 | -0.02 | -0.02 | -0.01 | -0.03 | -0.03 | -0.03 | -0.03 | -0.02 | -0.00 | -0.00 | -0.01 | -0.01 | 0.00 |
| | (-0.57) | (-0.38) | (-0.64) | (-0.70) | (-0.20) | (-0.96) | (-0.83) | (-0.95) | (-1.03) | (-0.61) | (-0.13) | (-0.06) | (-0.25) | (-0.27) | (0.03) |
| **Controls** | | | | | | | | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 4,186 | 4,186 | 4,186 | 4,186 | 4,186 | 4,344 | 4,344 | 4,344 | 4,344 | 4,344 | 3,775 | 3,775 | 3,775 | 3,775 | 3,775 |
| R-squared | 0.41 | 0.41 | 0.41 | 0.40 | 0.41 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.65 | 0.65 | 0.65 | 0.65 | 0.65 |

Cluster robust (kreis) t-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1. All reference categories are as in Table 2. All models include a constant.

TABLE A2: POSITIVE (+1) SOCIAL MOBILITY AND NS MEMBERSHIP INCLUDING EARLY MOBILITY

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | |
| NSDAP | 0.34* | 0.12 | | | | | | |
| | (1.68) | (0.46) | | | | | | |
| SS | | | -0.07 | -0.51* | | | | |
| | | | (-0.31) | (-1.77) | | | | |
| SA | | | | | 0.11 | -0.08 | | |
| | | | | | (0.93) | (-0.54) | | |
| HJ | | | | | | | 0.35*** | 0.22** |
| | | | | | | | (4.53) | (2.35) |
| **Father's occupation** | -1.88*** | -1.00*** | -1.88*** | -1.00*** | -1.88*** | -1.00*** | -1.89*** | -1.01*** |
| | (-34.61) | (-14.62) | (-34.59) | (-14.55) | (-34.59) | (-14.58) | (-34.70) | (-14.72) |
| **Early Mobility** | | 1.83*** | | 1.83*** | | 1.83*** | | 1.82*** |
| | | (31.83) | | (31.89) | | (31.85) | | (31.71) |
| **Schooling level** | | | | | | | | |
| High | 1.79*** | 0.33 | 1.80*** | 0.34 | 1.80*** | 0.33 | 1.79*** | 0.33 |
| | (6.62) | (0.94) | (6.67) | (0.97) | (6.64) | (0.96) | (6.60) | (0.95) |
| Medium | 0.60*** | 0.07 | 0.61*** | 0.07 | 0.61*** | 0.07 | 0.58** | 0.06 |
| | (2.64) | (0.25) | (2.66) | (0.25) | (2.65) | (0.26) | (2.53) | (0.21) |
| Low | 0.28 | -0.01 | 0.28 | -0.01 | 0.28 | -0.01 | 0.27 | -0.02 |
| | (1.30) | (-0.05) | (1.31) | (-0.05) | (1.30) | (-0.05) | (1.25) | (-0.06) |
| Unknown | 0.57** | 0.06 | 0.57** | 0.06 | 0.57** | 0.06 | 0.57** | 0.06 |
| | (2.52) | (0.20) | (2.51) | (0.19) | (2.48) | (0.21) | (2.49) | (0.21) |
| **Religion** | | | | | | | | |
| Roman Catholic | -0.01 | 0.01 | -0.01 | -0.00 | -0.01 | 0.00 | 0.00 | 0.01 |
| | (-0.08) | (0.08) | (-0.14) | (-0.02) | (-0.10) | (0.05) | (0.04) | (0.15) |
| **Controls** | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 9,430 | 8,360 | 9,430 | 8,360 | 9,430 | 8,360 | 9,430 | 8,360 |

z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Fixed effects logit model. All reference categories are as in Table 2.

TABLE A3: NEGATIVE (-1) SOCIAL MOBILITY AND NS MEMBERSHIP INCLUDING EARLY MOBILITY

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | |
| NSDAP | -0.26 | -0.14 | | | | | | |
| | (-1.23) | (-0.54) | | | | | | |
| SS | | | -0.30 | -0.15 | | | | |
| | | | (-1.34) | (-0.59) | | | | |
| SA | | | | | 0.01 | 0.06 | | |
| | | | | | (0.13) | (0.47) | | |
| HJ | | | | | | | -0.02 | 0.10 |
| | | | | | | | (-0.27) | (1.03) |
| **Father's occupation** | 1.13*** | 0.42*** | 1.13*** | 0.43*** | 1.13*** | 0.42*** | 1.13*** | 0.42*** |
| | (28.35) | (8.28) | (28.35) | (8.28) | (28.32) | (8.23) | (28.32) | (8.15) |
| **Early Mobility** | | -1.33*** | | -1.33*** | | -1.33*** | | -1.33*** |
| | | (-28.97) | | (-28.94) | | (-28.98) | | (-28.99) |
| **Schooling level** | | | | | | | | |
| High | -1.04*** | 0.03 | -1.04*** | 0.03 | -1.04*** | 0.03 | -1.04*** | 0.03 |
| | (-4.24) | (0.11) | (-4.26) | (0.11) | (-4.28) | (0.09) | (-4.27) | (0.08) |
| Medium | -0.54** | -0.03 | -0.54*** | -0.04 | -0.55*** | -0.04 | -0.54*** | -0.04 |
| | (-2.56) | (-0.13) | (-2.59) | (-0.14) | (-2.59) | (-0.14) | (-2.58) | (-0.16) |
| Low | -0.28 | -0.02 | -0.28 | -0.02 | -0.28 | -0.03 | -0.28 | -0.03 |
| | (-1.42) | (-0.09) | (-1.44) | (-0.10) | (-1.44) | (-0.10) | (-1.43) | (-0.10) |
| Unknown | -0.49** | 0.01 | -0.49** | 0.01 | -0.49** | 0.00 | -0.49** | 0.01 |
| | (-2.32) | (0.03) | (-2.33) | (0.03) | (-2.33) | (0.02) | (-2.33) | (0.03) |
| **Religion** | | | | | | | | |
| Roman Catholic | 0.06 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 |
| | (0.83) | (0.64) | (0.77) | (0.62) | (0.87) | (0.67) | (0.85) | (0.70) |
| **Controls** | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 9,446 | 8,364 | 9,446 | 8,364 | 9,446 | 8,364 | 9,446 | 8,364 |

z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Fixed effects logit model. All reference categories are as in Table 2.

TABLE A4: NO (0) SOCIAL MOBILITY AND NS MEMBERSHIP INCLUDING EARLY MOBILITY

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | |
| NSDAP | -0.03 | -0.04 | | | | | | |
| | (-0.19) | (-0.23) | | | | | | |
| SS | | | 0.13 | 0.14 | | | | |
| | | | (0.78) | (0.79) | | | | |
| SA | | | | | -0.02 | 0.02 | | |
| | | | | | (-0.27) | (0.22) | | |
| HJ | | | | | | | -0.21*** | -0.22*** |
| | | | | | | | (-3.45) | (-3.38) |
| **Father's occupation** | 0.08*** | 0.17*** | 0.08*** | 0.17*** | 0.08*** | 0.17*** | 0.09*** | 0.18*** |
| | (2.84) | (4.31) | (2.82) | (4.27) | (2.84) | (4.29) | (2.98) | (4.53) |
| **Early Mobility** | | 0.04 | | 0.04 | | 0.04 | | 0.05 |
| | | (1.40) | | (1.36) | | (1.39) | | (1.58) |
| **Schooling level** | | | | | | | | |
| High | -0.52*** | -0.51** | -0.52*** | -0.51** | -0.52*** | -0.51** | -0.50** | -0.51** |
| | (-2.58) | (-2.33) | (-2.60) | (-2.34) | (-2.58) | (-2.34) | (-2.52) | (-2.30) |
| Medium | -0.03 | 0.01 | -0.03 | 0.01 | -0.03 | 0.01 | -0.01 | 0.02 |
| | (-0.16) | (0.04) | (-0.16) | (0.04) | (-0.15) | (0.04) | (-0.07) | (0.11) |
| Low | 0.02 | 0.08 | 0.02 | 0.08 | 0.02 | 0.08 | 0.02 | 0.08 |
| | (0.12) | (0.46) | (0.12) | (0.46) | (0.12) | (0.46) | (0.14) | (0.48) |
| Unknown | -0.01 | 0.03 | -0.01 | 0.03 | -0.01 | 0.03 | -0.01 | 0.03 |
| | (-0.09) | (0.17) | (-0.08) | (0.18) | (-0.08) | (0.17) | (-0.08) | (0.17) |
| **Religion** | | | | | | | | |
| Roman Catholic | -0.01 | 0.01 | -0.01 | 0.01 | -0.01 | 0.01 | -0.02 | 0.00 |
| | (-0.16) | (0.18) | (-0.11) | (0.24) | (-0.17) | (0.19) | (-0.31) | (0.05) |
| **Controls** | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 9,542 | 8,471 | 9,542 | 8,471 | 9,542 | 8,471 | 9,542 | 8,471 |

z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Fixed effects logit model. All reference categories are as in Table 2.

TABLE A5: "BIG" (> +1) POSITIVE SOCIAL MOBILITY AND NS MEMBERSHIP INCLUDING EARLY MOBILITY

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | |
| NSDAP | 0.97*** | 0.60 | | | | | | |
| | (2.66) | (1.19) | | | | | | |
| SS | | | 1.07*** | 0.40 | | | | |
| | | | (2.81) | (0.73) | | | | |
| SA | | | | | 0.39 | 0.31 | | |
| | | | | | (1.45) | (0.86) | | |
| HJ | | | | | | | -0.03 | -0.44 |
| | | | | | | | (-0.12) | (-1.53) |
| **Father's occupation** | -2.88*** | -1.75*** | -2.87*** | -1.73*** | -2.88*** | -1.75*** | -2.87*** | -1.72*** |
| | (-20.36) | (-8.20) | (-20.29) | (-8.16) | (-20.34) | (-8.19) | (-20.31) | (-8.11) |
| **Early Mobility** | | 2.71*** | | 2.72*** | | 2.72*** | | 2.73*** |
| | | (16.28) | | (16.31) | | (16.33) | | (16.38) |
| **Schooling level** | | | | | | | | |
| High | 3.79*** | 1.68** | 3.71*** | 1.59** | 3.76*** | 1.60** | 3.78*** | 1.59** |
| | (6.36) | (2.09) | (6.24) | (1.97) | (6.31) | (1.99) | (6.34) | (1.99) |
| Medium | 1.01* | -0.15 | 1.01* | -0.18 | 1.01* | -0.18 | 1.03* | -0.22 |
| | (1.80) | (-0.21) | (1.81) | (-0.26) | (1.80) | (-0.26) | (1.83) | (-0.32) |
| Low | 0.02 | -0.62 | 0.01 | -0.64 | 0.02 | -0.65 | 0.03 | -0.67 |
| | (0.04) | (-0.94) | (0.03) | (-0.97) | (0.04) | (-0.98) | (0.05) | (-1.01) |
| Unknown | 0.77 | -0.23 | 0.73 | -0.28 | 0.73 | -0.29 | 0.75 | -0.31 |
| | (1.38) | (-0.33) | (1.31) | (-0.40) | (1.31) | (-0.40) | (1.33) | (-0.44) |
| **Religion** | | | | | | | | |
| Roman Catholic | -0.12 | -0.13 | -0.11 | -0.12 | -0.12 | -0.12 | -0.13 | -0.15 |
| | (-0.71) | (-0.57) | (-0.62) | (-0.55) | (-0.70) | (-0.56) | (-0.76) | (-0.69) |
| **Controls** | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 8,751 | 7,678 | 8,751 | 7,678 | 8,751 | 7,678 | 8,751 | 7,678 |

z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Fixed effects logit model. All reference categories are as in Table 2.

TABLE A6: "BIG" (<-1) NEGATIVE SOCIAL MOBILITY AND NS MEMBERSHIP INCLUDING EARLY MOBILITY

| VARIABLES | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| **NS membership** | | | | | | | | |
| NSDAP | -0.47 | -0.22 | | | | | | |
| | (-1.13) | (-0.42) | | | | | | |
| SS | | | -1.28** | -1.20* | | | | |
| | | | (-2.32) | (-1.86) | | | | |
| SA | | | | | -0.18 | -0.23 | | |
| | | | | | (-0.85) | (-0.85) | | |
| HJ | | | | | | | -0.08 | -0.01 |
| | | | | | | | (-0.60) | (-0.03) |
| **Father's occupation** | 1.93*** | 0.94*** | 1.94*** | 0.96*** | 1.93*** | 0.94*** | 1.93*** | 0.94*** |
| | (25.57) | (8.87) | (25.59) | (8.97) | (25.57) | (8.86) | (25.54) | (8.82) |
| **Early Mobility** | | -2.22*** | | -2.22*** | | -2.22*** | | -2.22*** |
| | | (-22.11) | | (-22.08) | | (-22.11) | | (-22.11) |
| **Schooling level** | | | | | | | | |
| High | -1.70*** | -0.10 | -1.69*** | -0.10 | -1.69*** | -0.07 | -1.70*** | -0.10 |
| | (-3.77) | (-0.16) | (-3.75) | (-0.15) | (-3.75) | (-0.10) | (-3.79) | (-0.15) |
| Medium | -0.78* | 0.40 | -0.78** | 0.38 | -0.78* | 0.41 | -0.78* | 0.39 |
| | (-1.95) | (0.67) | (-1.97) | (0.64) | (-1.96) | (0.68) | (-1.96) | (0.66) |
| Low | -0.05 | 0.95* | -0.05 | 0.96* | -0.05 | 0.95* | -0.05 | 0.95* |
| | (-0.14) | (1.70) | (-0.12) | (1.72) | (-0.14) | (1.71) | (-0.14) | (1.69) |
| Unknown | -0.96** | 0.40 | -0.96** | 0.42 | -0.96** | 0.41 | -0.97** | 0.40 |
| | (-2.41) | (0.66) | (-2.41) | (0.71) | (-2.39) | (0.69) | (-2.42) | (0.67) |
| **Religion** | | | | | | | | |
| Roman Catholic | 0.05 | -0.06 | 0.03 | -0.09 | 0.06 | -0.05 | 0.05 | -0.05 |
| | (0.39) | (-0.33) | (0.24) | (-0.49) | (0.43) | (-0.31) | (0.41) | (-0.30) |
| **Controls** | | | | | | | | |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | YES | YES | YES | YES | YES | YES | YES | YES |
| Observations | 8,802 | 7,776 | 8,802 | 7,776 | 8,802 | 7,776 | 8,802 | 7,776 |

z-statistics in parentheses, *** p<0.01, ** p<0.05, * p<0.1.

Fixed effects logit model. All reference categories are as in Table 2.

TABLE A7: PREDICTED PROBABILITIES FOLLOWING ORDERED PROBIT
SOCIAL MOBILITY AND NS MEMBERSHIP INCLUDING EARLY MOBILITY

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| | dy/dx | dy/dx | dy/dx | dy/dx | dy/dx | dy/dx | dy/dx | dy/dx |
| | NSDAP | NSDAP | SS | SS | SA | SA | HJ | HJ |
| **Social Mobility Score** | | | | | | | | |
| -4 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | 0.000 | -0.000 | 0.000 |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| -3 | -0.000** | -0.000 | -0.001*** | -0.000 | -0.000 | 0.000 | -0.000*** | 0.000 |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| -2 | -0.012*** | -0.001 | -0.017*** | -0.000 | -0.004 | 0.000 | -0.004*** | 0.000 |
| | (0.004) | (0.000) | (0.004) | (0.000) | (0.002) | (0.000) | (0.001) | (0.000) |
| -1 | -0.061*** | -0.032 | -0.084*** | -0.025 | -0.019 | 0.004 | -0.021*** | 0.008 |
| | (0.018) | (0.020) | (0.022) | (0.017) | (0.012) | (0.010) | (0.007) | (0.006) |
| 0 | -0.001 | -0.005 | -0.001 | -0.004 | -0.000 | 0.001 | -0.000 | 0.001 |
| | (0.002) | (0.003) | (0.003) | (0.003) | (0.001) | (0.001) | (0.001) | (0.001) |
| 1 | 0.068*** | 0.037 | 0.094*** | 0.029 | 0.021 | -0.004 | 0.023*** | -0.009 |
| | (0.020) | (0.023) | (0.024) | (0.020) | (0.014) | (0.012) | (0.007) | (0.007) |
| 2 | 0.006*** | 0.000 | 0.009*** | 0.000 | 0.002 | -0.000 | 0.002*** | -0.000 |
| | (0.002) | (0.000) | (0.002) | (0.000) | (0.001) | (0.000) | (0.001) | (0.000) |
| 3 | 0.000** | 0.000 | 0.000*** | 0.000 | 0.000 | -0.000 | 0.000** | -0.000 |
| | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| 4 | 0.000 | NA | 0.000 | NA | 0.000 | NA | 0.000 | NA |
| | (0.000) | | (0.000) | | (0.000) | | (0.000) | |
| **Controls** | | | | | | | | |
| **Early Mobility** | **NO** | **YES** | **NO** | **YES** | **NO** | **YES** | **NO** | **YES** |
| Schooling level | YES | YES | YES | YES | YES | YES | YES | YES |
| Father's occupation | YES | YES | YES | YES | YES | YES | YES | YES |
| Religion | YES | YES | YES | YES | YES | YES | YES | YES |
| Year or birth | YES | YES | YES | YES | YES | YES | YES | YES |
| Age at medical examination | YES | YES | YES | YES | YES | YES | YES | YES |
| Urbanisation | YES | YES | YES | YES | YES | YES | YES | YES |
| District fixed effects | NO | NO | NO | NO | NO | NO | NO | NO |
| Observations | 10,000 | 8,884 | 10,000 | 8,884 | 10,000 | 8,884 | 10,000 | 8,884 |

All predictors at their mean value. Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1.
District fixed effects not possible to incorporate in ordered probit model.