

Age, Class, and Territory: Voting Patterns at the 2021 German Federal Election

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Introduction

Following the 26 September *Bundestag* election, Germany received a new three-party coalition government, the so-called “traffic light coalition”, comprising the Social Democrats (SPD), the Greens, and the Liberals (FDP). Observers expected long and difficult negotiations given the different positions of the three parties on a number of issues, particularly pertaining to fiscal and tax policy. However, a coalition agreement was reached on 24 November, some two months after the election.

The question remains, what can we learn about German voting patterns after this election. For a long time, Germany’s party system was regarded as very stable, with comparatively low levels of electoral volatility and both electoral and parliamentary fragmentation (cf. Casal Bértoa, 2021). Yet, this year’s election has produced a new constellation, with the two major parties (*Volksparteien*), the Social Democrats and the Christian Democrats (CDU/CSU) losing their dominant status, and three parties, the Greens, Liberals, and the Alternative for Germany (AfD), becoming middle-sized parties.

The aim of this paper is to evaluate the spatial patterns of party support at the 2021 *Bundestag* election and to test predictors of the variance of party success at the constituency level. First, the state of literature on cleavages and party competition in Germany will be discussed. Then, factors that will be tested in this study as predictors in the spatial variance of party support will be presented. Further, a discussion of the results of a multivariate regression model will ensue, together with analysis of party strongholds. Finally, some preliminary conclusions which can be derived from these results will be presented.

Cleavages and Party Competition in Germany

Studies of cleavage voting in Germany have mostly relied on longitudinal survey data, gathered in the German Longitudinal Election Study (GLES) dataset (see GESIS, 2021). Scholars of German party politics and voter behavior have uncovered stable patterns of cleavage voting along socio-economic and religious lines, with industrial workers leaning towards Social Democrats, and

Catholic voters preferring the CDU/CSU. Yet, with the advent of new, post-materialist and post-modern issues in the 1980s and the rise of the Greens, the basic “frozen cleavage structure” started to change (cf. Elff and Roßteutscher, 2016: 2). The unification of Germany and the transformation of the former East German ruling communist party into a party advocating transition to democratic socialism, further innovated not only patterns of party competition, but also introduced a regional, or territorial cleavage, as differences in party support could be clearly seen along the East-West divide. Finally, the European debt crisis of 2009-2013 and the migrant crisis of 2015 enabled the rise of an anti-immigrant, Eurosceptic, and nationalist party, the Alternative for Germany, whose patterns of support also followed a distinct East-West pattern.

Table 1. Descriptive Statistics: Party List Votes

Party	N	Min	Max	Mean	Median	St. Dev.
SPD	299	13.50	43.35	25.99	26.23	6.01
CDU/CSU	299	6.98	38.47	23.99	23.63	5.97
Greens	295	3.25	36.75	14.66	13.94	6.27
FDP	299	6.34	18.11	11.39	11.12	2.28
AfD	299	2.87	32.53	10.53	8.85	5.88
Left Party	299	1.82	18.24	4.91	3.43	3.14

Source: Author, according to Bundeswahlleiter, 2021a.

The cleavage structure in Germany during the last three decades has not only become more complex, but has been, apparently weakening. Due to increased secularization, as well as greater individualism and atypical working conditions, voters, especially younger cohorts, are less likely to be members of churches, trade unions, and chambers of commerce, and thus more likely to dealign from stable party identification and electoral support.

In light of this more dynamic and nuanced cleavage landscape in Germany, scholars have begun questioning the extent to which we can still use either socio-economic or socio-cultural cleavages as predictors of patterns of party competition and voter behavior. A recent study of economic voting has shown that property ownership can serve as a predictor of voting for the center-right (i.e., CDU/CSU and FDP), but also confirmed the ongoing salience of the religious cleavage (Okolikj and Quinlan, 2020: 11). A new analysis of the supply-side of party competition in Germany has pointed out that SPD and the Left tend to emphasize socio-economic issues in their electoral manifestos, while the Greens and AfD try to attract voters by relying on socio-cultural issues (Franzmann, Gieble, and Poguntke, 2020: 632). The 2021 election has brought about a historical low in the support for CDU/CSU and moderate gains for SPD and the Greens, which have, however, enabled them to form a government majority with FDP. This begs the question of the current nature of socio-economic and socio-cultural predictors and their explanatory power regarding electoral results and their spatial variance.

Data and Methods

In their 2008 paper, Elff, Gschwend, and Johnston (2008: 70-71) have pointed out that ecological inference is, in the minds of many social scientists, almost equated with ecological fallacy, that is the methodologically fallacy of making assumptions and drawing conclusions about individuals (in this case voters), while using data which was not collected on individuals (i.e., survey data), but rather aggregate data (official statistics and similar sources). While completely agreeing with this methodological warning, this paper does not represent an attempt to infer about individuals on the basis of aggregate data. Rather, it seeks to uncover voting patterns in space, that is, to make assumptions and draw conclusions about the way constituency characteristics affect electoral results and differences in levels of party support. Thus, this study can be understood as a territorial cleavage analysis, an approach which does study voting patterns, albeit on a geographical, and not an individual level.

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Table 2. Descriptive Statistics: Predictors

Predictor (%)	N	Min	Max	Mean	Median	St. Dev.
Age 18-24	299	4.20	15.10	7.46	7.50	1.36
Age 75 +	299	7.90	16.70	11.61	11.40	1.61
Electric Vehicles	299	1.00	4.00	1.42	1.30	0.57
No High School Diploma	299	2.50	13.40	6.81	6.30	1.97
Welfare Users	299	1.53	20.18	6.72	5.95	3.43

Source: Author, according to Bundeswahlleiter, 2021b.

The first two predictors pertain to age characteristics of constituencies, with the share of youngest voters (18-24) and the share of oldest voters (75+) as potential explanations of differences in party support. The underlying assumption here is that the Greens and the Liberals will be more successful in area with a larger percentage of young voters. Further, the percentage of electric vehicles (EVs) among all vehicles is considered as a predictor of the salience of climate change and, indirectly, postmodern, postmaterialist values, following Inglehart's and Welzel's modernization theory (2005). One should expect the Greens polling especially well in areas which have a greater percentage of electric vehicles. In addition, an education predictor variable was added. This variable uses the percentage of constituency inhabitants that do not possess a high school diploma. In the case of Germany, this implies not having finished at least *Hauptschule*, a secondary school path that is usually finished at ages 15 to 17 and does not enable university entrance. One can expect the Alternative for Germany, but also the Left Party, to fare better in those areas which have higher percentages of inhabitants without a *Hauptschule* certificate. Besides education, an additional predictor regarding the socio-economic characteristics of the constituency was included. This pertains to the percentage of welfare users, i.e., recipients of unemployment benefit II and of social allowance, the two components of the social transfers system established through the so-called Harz IV reform during the Schröder era (1998-2005). We can expect economically leftist parties to achieve better results in constituencies which have higher percentages of welfare users. Finally, we shall look at the impact of East-West differences, based on the assumption that the fact that a constituency is located either in former West Germany or East Germany will have an impact on differences in party support. The question here is, whether the Left Party and the AfD are still overwhelmingly East German parties.

Results and Discussion

The regression models were found to have a fairly high degree of predictive power, with over 80 percent of variance of the vote explained for the Left Party, and just under one third of variance explained for the Liberals. The relatively small number of cases (299 single-member constituencies) can account for

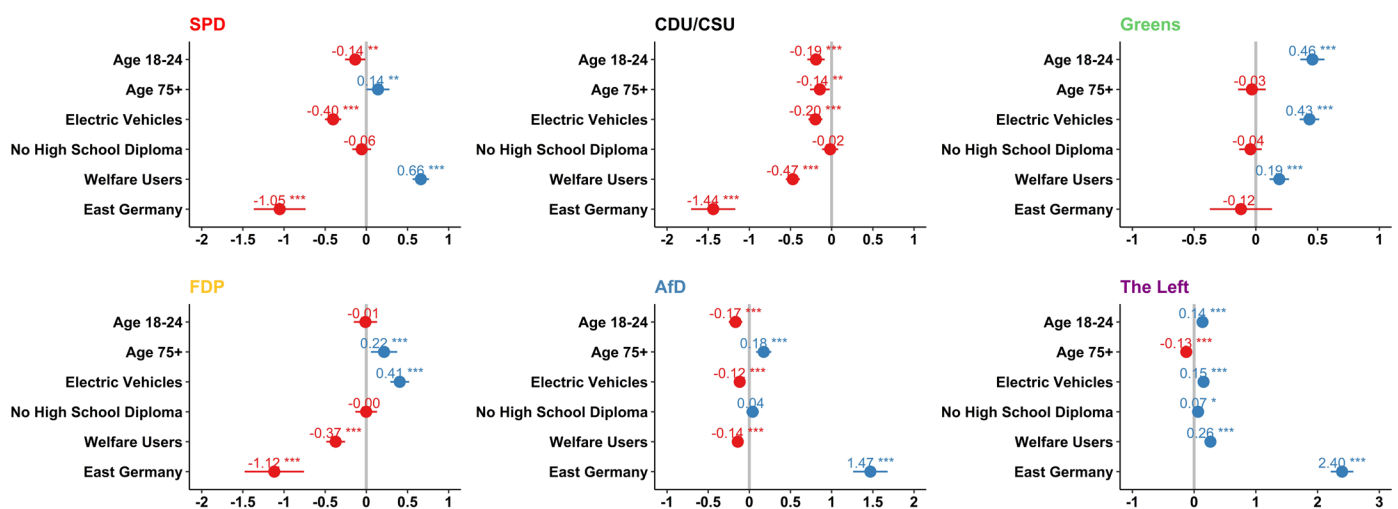
R² values which are somewhat higher than usually seen in social sciences. Before discussing the results of the full model, we should briefly consider the simple, bivariate model which just uses the East-West distinction of constituencies as a predictor of variance in party vote share. For the Social Democrats, the territorial predictor could explain almost no variance at all, yielding a predictive R² of just 0.008. For the Union parties, the model could predict almost 30 percent of the variance. On the contrary, for AfD and the Left Party, more than 60 percent of the variance could be explained by just this single predictor, the distinction between constituencies located in former East or West Germany.

Table 3. OLS Model Summary

	SPD	CDU/CSU	Greens	FDP	AfD	Left Party
N	299	299	295	299	299	299
Adjusted R ²	0.491	0.631	0.681	0.334	0.773	0.826
Predictive R ²	0.477	0.618	0.664	0.317	0.763	0.818
Residual Std. Error	4.284 (df = 292)	3.625 (df = 292)	3.537 (df = 288)	1.864 (df = 292)	2.800 (df = 292)	1.310 (df = 292)
F Statistic	48.995*** (df = 6; 292)	85.847*** (df = 6; 292)	105.813*** (df = 6; 288)	25.871*** (df = 6; 292)	170.464*** (df = 6; 292)	237.467*** (df = 6; 292)

Note: *p<0.1; **p<0.05; ***p<0.01.
Source: Author.

Figure 1. OLS Model Estimates

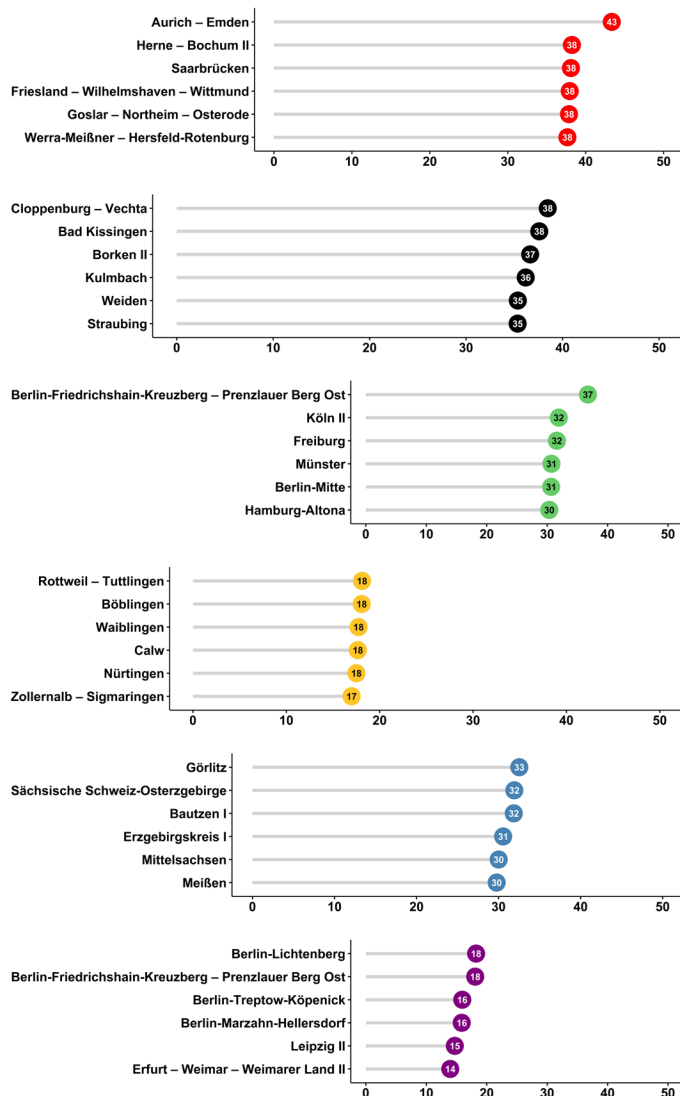


Note: *p<0.1; **p<0.05; ***p<0.01. The forest plots show standardized coefficients.
Source: Author.

According to the full model, SPD received higher vote percentages in constituencies which were more likely to be in the Western part of the country and have higher shares of citizens receiving welfare. The constituencies favoring Social Democrats also tended to have a somewhat older population, yet this characteristic was not that pronounced. In contrast, CDU and CSU fared best in areas with fewer welfare users and also received higher percentages in the Western parts of Germany. The East-West distinction was the single most important predictor of the difference in vote share for the Union parties. For the Greens, the results provided a very clear demographic constituency profile. Green-leaning constituencies had a much younger population (higher shares of inhabitants aged 18 to 24) and high shares of electric vehicles among all registered vehicles. East-West differences were not statistically significant. Constituencies favoring the Liberals also had high shares of electric vehicles but were also richer (smaller ratio of welfare

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Figure 2. Party Strongholds in 2021



Source: Author, according to Bundeswahlleiter, 2021a.

Alternative for Germany has firmly established its grip on Saxony. Thus, it scored best in constituencies located in this part of former East Germany. Finally, the Left Party has confirmed its support in East Berlin, as almost all the electoral districts in the upper 2 percent of the distribution of Left votes were in that area, apart from the southern boroughs of Leipzig (Leipzig II constituency) and Erfurt.

Thus, we can see that party strongholds neatly correspond with the territorial demographic characteristics that explain the variance in the party vote share. This congruence of factors predicting party vote share and individual electoral districts where the parties scored best is more evident for middle and smaller parties than for the two large *Volksparteien*. At the same time, the relative increase in the vote (and seat share) of the Greens and Liberals and the historically low result for the Union parties has challenged the very notion of the distinction between large and middle parties in the German party system.

users) and older (higher share of inhabitants aged 75 and more). As already noted when discussing the bivariate model, the territorial characteristic of the constituency was the strongest predictor for the Alternative for Germany and the Left Party, i.e., the location of a constituency in former East Germany strongly predicted higher vote shares for either AfD or the Left Party. The Left had better chances in poorer constituencies (higher percentages of welfare users), yet this predictor was not that prominent.

The representation of party strongholds, i.e., constituencies where the respective parties achieved their best results includes those electoral districts which account for the upper 2 percent for each party. In 2021, the Social Democrats achieved their best results in their traditional strongholds in the Saarland, northern parts of Lower Saxony, as well as in the Ruhr district. Their best result was in the Aurich – Emden electoral district, on the North Sea coast. This was also the only constituency, which was won, according to first vote (*Erststimme*), by an absolute majority (SPD incumbent Johann Saathoff, see Bundeswahlleiter, 2021a). The Christian Democrats received highest vote percentages in all the usual places – in Bavaria (CSU), as well as in areas adjacent to Social Democratic strongholds in North Rhine -Westphalia and Lower Saxony (CDU). Yet, their best results, in Cloppenburg – Vechta (Lower Saxony) and Bad Kissingen (Bavaria), were actually a far cry from 2017, when the Christian Democratic list surpassed absolute majority in the former and reached almost 45 percent in the latter case. Green strongholds are to be found in large urban areas, such as Berlin (both Eastern and central (previously divided) parts of the city), Hamburg, and Cologne. These areas correspond to the fact that Greens scored best in constituencies with large shares of young people and high ratios of electric vehicles. All Liberal strongholds are to be found in the state of Baden-Württemberg, a *Land* ruled by a Green-Black coalition. This state is the third richest in Germany according to available private income. According to official statistics, with 24.892 euros per person, it was ranked third, after Bavaria and Hamburg (Bundeswahlleiter, 2021b). The Alterna-

Conclusion

In this paper, I tried to analyze the 2021 German election from the perspective of territorial, rather than voter differences. Thus, instead of relying on survey data to build a model predicting party vote outcomes, I used structural data on the 299 single-member constituencies. The regression model has shown that the East-West divide in Germany can still serve as a very good predictor of party vote differences. The Alternative for Germany and the Left Party are still very much entrenched in electoral districts in the former German Democratic Republic. These parts of the country also tend to have a less favorable demographic (fewer young people) and socio-economic (more people relying on welfare) situation. Yet, the picture is somewhat more nuanced. Constituencies where AfD scored best do have a somewhat older population, yet fewer welfare users. On the contrary, the Left Party fared rather well in areas with a slightly younger population, but more reliant on government support. This difference can be explained by referring to the urban-rural divide, which was not directly analyzed in this paper, yet can be inferred from its results. Namely, the Left Party finds strong support in urban, impoverished areas, which, at the same time, have a younger population (e.g., university students). This is best exemplified by the fact that their most important strongholds are in East Berlin. In opposition to that, “blue” (i.e., AfD-leaning areas) are more rural, have higher percentages of the elderly, but are less reliant on welfare. Nevertheless, one should also observe that the standardized coefficients for age and welfare reliance were rather small for both parties, while the territorial, East-West divide was certainly by far the most significant. This paper has confirmed the already established notion that FDP is a party connected to wealth, as Liberal-leaning areas were in affluent parts of the country, with a somewhat older population and fewer citizens who had to rely on welfare. In addition, “yellow” districts had a higher rate of electric car ownership. Green-leaning areas had a younger population, somewhat more welfare users, but also a high share of electric vehicles. This characterization of Green-leaning areas is complemented with the information on their strongholds, which are, large, urban areas and university cities. The predictors for the vote for Social Democrats and Christian Democrats are somewhat less pronounced than for middle and smaller parties. Yet, both are definitely more likely to fare well in Western parts of the country. Also, in congruence to their social and economic policy differences, Social Democrats were more likely to achieve better results in areas with more welfare users, while Christian Democrats reached higher percentages in districts with smaller shares of citizens relying on government aid.

Finally, education, at least as coded in this model, was not a significant predictor of differences in party vote shares. Age plays an important role, pointing to a generational gap. This goes hand in hand with the urban-rural divide, with urban areas having larger shares of young people. In addition, urban areas have higher proportions of electric vehicles, emphasizing differences in the salience of climate change. In addition, the class divide, between areas with lower shares of welfare-dependent citizens and those with high percentages of welfare users, remains a significant predictor of party success. Thus, we can conclude that a territorial analysis of voting patterns in Germany confirmed the existence of a socio-economic cleavages, while at the same time highlighting an age cleavage, which seems to overlap with the climate policy cleavage, and the urban-rural divide.

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