



#### RESEARCH ARTICLE

# Challenging the Challengers? The Transformative Implications of the Bündnis Sahra Wagenknecht for German Party Competition

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Abstract This article examines the transformative impact of a challenger's entry into party competition, using a quasi-experimental design to provide an evidence-based evaluation of its effects on voter mobilization, competition with mainstream parties, and interactions with other challengers. Leveraging variation in the participation of the newly formed Sahra Wagenknecht Alliance (Bündnis Sahra Wagenknecht [BSW]), we analyzed local elections in five German states. To account for strategic factors influencing BSW participation, we applied covariate balancing propensity scores to ensure comparability between treated and nontreated municipalities, enabling an unbiased estimation of the average treatment effect of BSW participation on changes in voter turnout and party vote shares. Except for the right-wing Alternative for Germany (Alternative für Deutschland) party, our findings reveal a significant reduction in vote shares for all parties, with no evidence of increased voter mobilization. These results have important implications for party competition dynamics and the functioning of representative democracy in the presence of multiple challengers.

**Keywords** Party competition · Quasi-experiment · Sahra Wagenknecht Alliance · Challenger parties · Local elections

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## Eine Herausforderung für die Herausforderer? Die transformativen Implikationen des Bündnisses Sahra Wagenknecht für den deutschen Parteienwettbewerb

Zusammenfassung Dieser Artikel analysiert die Auswirkungen des Eintritts einer Herausfordererpartei auf den Parteienwettbewerb, um mit Hilfe eines quasiexperimentellen Forschungsdesigns evidenzbasierte Erkenntnisse über den Mobilisierungseffekt auf bisherige Nichtwähler, die Konkurrenz mit etablierten Parteien und den etwaigen Wettbewerb mit anderen Herausfordererparteien zu gewinnen. Anhand von Kommunalwahlen in fünf Bundesländern untersuchen wir den Partizipationseffekt des Bündnisses Sahra Wagenknecht (BSW), das nicht flächendeckend in allen Kommunen zur Wahl antrat. Zur Berücksichtigung von strategischen Partizipationseffekten einer BSW-Beteiligung verwenden wir kovariatenbalancierende Propensity Scores, die über eine Gewichtung eine Vergleichbarkeit von Kommunen herstellen. Dadurch können wir den durchschnittlichen BSW-Beteiligungseffekt auf die Veränderungen der Wahlbeteiligung und der Stimmenanteile anderer Parteien schätzen. Mit Ausnahme der rechtspopulistischen Alternative für Deutschland finden wir einen signifikanten Stimmenrückgang aller Parteien, während es keinen Hinweis auf eine erhöhte Wählermobilisierung durch die BSW-Teilnahme gibt. Diese Ergebnisse liefern wichtige Implikationen zur Erklärung der Dynamik des Parteienwettbewerbs und das Funktionieren der repräsentativen Demokratie im Kontext mehrerer Herausfordererparteien.

**Schlüsselwörter** Parteienwettbewerb · Quasi-Experiment · Bündnis Sahra Wagenknecht · Herausfordererparteien · Kommunalwahlen

#### 1 Introduction—Challenging the Challengers?

In June 2024, the newly formed Sahra Wagenknecht Alliance (*Bündnis Sahra Wagenknecht* [BSW]) achieved notable success in the European election, securing 6.2% of the vote share in Germany. This result marks the entry of a new challenger party into German party competition, in which multiple challenger parties compete on the peripheries of the spectrum. Led by Sahra Wagenknecht, a charismatic politician with widespread public recognition, the BSW campaigns on a left-authoritarian platform advocating a higher minimum wage, the introduction of a pension minimum, opposition to "unregulated" immigration, and calls for immediate peace negotiations with Russia (Heckmann et al. 2025). The party's rhetoric employs an "us versus them" narrative against existing parties, adopting a populist sentiment

<sup>&</sup>lt;sup>1</sup> Challenger parties are defined as those without prior government experience at the national level (De Vries and Hobolt 2020).



commonly associated with the right-authoritarian challenger party Alternative for Germany (*Alternative für Deutschland* [AfD]; Thomeczek 2024).<sup>2</sup>

Inherent to proportional electoral rules, the distribution of vote shares in German party competition is a zero-sum game. While new parties can gain votes either directly from existing parties or mobilize previously abstaining voters, their entry inevitably leads to a proportional redistribution of vote shares at the expense of existing parties. In many representative democracies, this dynamic has reshaped party competition. The rise of mainly populist challenger parties (PCPs), which occupy previously unrepresented spaces in party competition, has altered traditional voting patterns (Dassonneville et al. 2024; Hooghe and Marks 2018; Kriesi et al. 2008), often resulting in electoral losses for center-left and center-right mainstream parties (De Vries and Hobolt 2020; Hobolt and Tilley 2016).³ However, the emergence of a new PCP—independent of already existing PCPs—raises further questions: Does the entry of a new PCP enhance political representation by mobilizing abstainers, reduce mainstream parties' vote shares, or primarily divert votes from existing PCPs, thereby diluting the overall populist impact?

Analyzing the effect of a challenger party's entry into party competition is empirically and analytically challenging; Laver and Sergenti (2011) highlight the "analytical intractability" of studying the impact of new challengers in multidimensional policy spaces, where no static equilibrium exists. Beyond these analytical challenges, micro-level analyses relying on survey data suffer from measurement error, as a sizable number of respondents misreport their voting behavior due to memory shortcomings and social desirability bias. This leads to both overreporting of electoral participation and underreporting of support for PCPs (Dahlgaard et al. 2019; Valentim 2024). For example, the European Election Study (EES) overestimated the turnout rate for Germany in the 2024 European election by 15.7% (80.4% compared to 64.7% in official electoral statistics [Die Bundeswahlleiterin 2024; Popa et al. 2024]). Similarly, the EES indicated a 10.3% vote share for the AfD, whereas the official result stands at 15.9%. While official statistics on vote shares do not suffer from measurement error, macro-level analyses of vote shares are vulnerable to ecological fallacies. These fallacies include false positives, in which electoral gains are misattributed within multidyadic party competition, and false negatives, in which shifts in vote shares remain undetected due to offsetting gains and losses (Cohen et al. 2024). Consequently, evidence-based insights into the transformative implications of a new challenger party's entry into party competition remain scarce.

This study aims to contribute evidence-based insights into the transformative implications of a new challenger party's entry into party competition by leveraging changes in vote shares and turnout within a quasi-experimental framework, thereby avoiding measurement error and ecological fallacies. Specifically, we provide evidence of the transformative effect of BSW's entry into party competition in the

<sup>&</sup>lt;sup>3</sup> Mainstream parties are defined as current and former governing parties, as well as those with the capacity to co-govern, such as second-chamber pivotal parties.



<sup>&</sup>lt;sup>2</sup> Following the ideational approach, populism is understood as a thin-centered ideology that divides society into two homogeneous and antagonistic groups: the "pure people" and the "corrupt elite" (Mudde 2004).

2024 county council elections (*Kreistagswahlen*) of five German states, held either concurrently with the European election (Saxony, Rhineland-Palatinate, Saarland, Mecklenburg-Western Pomerania) or two weeks prior (Thuringia). The BSW fielded candidates in some of these elections but not others, creating quasirandom variation that allows for credible causal inference. To account for strategic considerations of nonrandom BSW participation, we employ covariate balancing propensity scores (CBPS; Imai and Ratkovic 2014). This approach ensures credible comparability of treatment and control units by weighting them on key sociodemographic, economic, and political covariates that could have influenced BSW's strategic preference for participation in certain areas.

Our study evaluates several propositions regarding BSW's impact on the dynamics of German party competition, which can be broadly summarized by two nonexclusive factors: voter demand for an economically left and culturally authoritarian platform, and dissatisfaction linked to populist sentiments (Heckmann et al. 2025; Jankowski 2024; Thomeczek 2024; Wagner et al. 2023). The quasi-experimental evidence we present diverges from most previous observational findings by demonstrating that BSW participation neither significantly increased voter turnout nor consistently reduced the AfD's vote share, thus questioning the party's initial goal of "undermining" the AfD's rise. Instead, and consistent with (Jankowski 2024), our results indicate that the Left party (*Die Linke*), from which BSW emerged as a splinter party, experienced the most substantial vote share losses whenever the BSW fielded candidates. This suggests that the BSW primarily competes on the left periphery of the party spectrum, while its broader effects on voter mobilization and competition dynamics with other parties remain more nuanced.

#### 2 Propositions—Impact of BSW on Dynamics of Party Competition

Contemporary models of party competition mostly adopt a two-dimensional spatial framework, distinguishing between the economic and cultural dimensions of political contestation (Hillen and Steiner 2020; Huber et al. 2023; Lefkofridi et al. 2014). This conceptualization is supported by empirical studies on programmatic party competition, which indicate a shift since the 1990s from the traditional one-dimensional left-versus-right competition toward a two-dimensional policy space in many European representative democracies (König et al. 2017). Although parties may adjust their platforms on some secondary issues within this two-dimensional space, their ability to fundamentally reposition across the quadrants of this two-dimensional policy space is constrained by preference stability of party members and entrenched reputations in the eyes of the voters (Hooghe and Marks 2018). However, when existing party platforms fail to cover voter preferences, this increases the likelihood of a successful entry of a new challenger party into party competition (De Vries and Hobolt 2020).

In many European representative democracies, scholars observe a notable representational gap of voter preferences in the two-dimensional policy space of party competition, as parties rarely occupy the left-authoritarian quadrant (Hillen and Steiner 2020; Lefkofridi et al. 2014). In this quadrant, a substantial share of voters



combines left-economic preferences with cultural-authoritarian positions (Van der Brug and Van Spanje 2009). These so-called left-authoritarian voters experience cross-cutting pressures (Lefkofridi et al. 2014) when no party platform aligns with their two-dimensional preferences. This lack of representation increases their likelihood of either abstaining or being forced to choose between a left-progressive or a right-authoritarian surrogate platform, depending on the relative salience of issues on the economic and cultural dimensions (Lefkofridi et al. 2014; Van der Brug and Van Spanje 2009). For instance, when fears about migration heighten the salience of the cultural dimension, left-authoritarian voters are more inclined to support right-authoritarian parties, which frame migration as a cultural threat (Vachudova 2021).

In choice-rich electoral contexts, providing a left-authoritarian platform can mobilize voters and increase voter turnout (Brockington 2009). Due to a missing platform in German party competition, left-authoritarian voters were historically more prone to abstain (Hillen and Steiner 2020). Importantly, this representational argument generally applies to challenger parties and not just to PCPs, since a populist agenda does not inherently boost turnout (Leininger and Meijers 2021). In the right-authoritarian quadrant, right-wing parties pursue a populist agenda to compete with mainstream conservative parties (Jolly et al. 2022). In contrast, the BSW is the only German party offering a left-authoritarian platform (Thomeczek et al. 2024). Consequently, the first mobilization proposition states that the BSW's entry into German party competition increases turnout by mobilizing formerly abstaining left-authoritarian voters.

According to spatial voting theory, voters decide for the platform closest to their preferences, depending on the relative salience of issues on the economic and cultural dimensions. While the right-authoritarian platform of the AfD may align with left-authoritarian voters on the cultural dimension due to an emphasis on migration issues (Jankowski 2024; Wagner et al. 2023), these voters may still experience cross-cutting pressure from the AfD's neoliberal economic positions. In contrast, the BSW's platform is likely to alleviate this tension by combining left-wing economic positions, such as a higher minimum wage, with authoritarian cultural stances opposing "unregulated" immigration. Moreover, the BSW shares key positions with the AfD, particularly regarding the halt of military support for Ukraine (Heckmann et al. 2025). Given these overlaps, the second competition proposition suggests that the BSW's entry into German party competition will reduce the AfD's vote share.

Regardless of their exact location in the two-dimensional policy space, a new challenger party may also attract support from mainstream parties by employing a populist "us versus them" rhetoric (De Vries and Hobolt 2020). This rhetoric frames mainstream parties as indistinguishable and unresponsive to voters' distinct demands, fostering dissatisfaction and eroding trust in representative democracy (Berman 2021; Vachudova 2021). In times of crisis, a key populist claim is that mainstream parties fail to change the status quo in order to implement the will of the people. In representative democracies, the likelihood of status quo persistence increases with the number of partisan and institutional veto players (Tsebelis 2002), such as in multiparty coalition governments and bicameral systems. However, if the maintenance of the status quo is perceived as an increasing economic or cultural threat, public dissatisfaction with mainstream parties increases. This, in turn, may



heighten populist antisystem attitudes (Akkerman et al. 2014; Rooduijn et al. 2016), prompting voters to sanction mainstream parties at the ballot box. Accordingly, the third antimainstream proposition is that the BSW will draw votes away from mainstream parties.

The BSW shares economic positions, personnel, and organizational structures with its legacy party, the Left (Thomeczek 2024). Rather than fostering collaboration, former membership and similar policy positions often result in electoral competition or even partisan hostility (Vampa and Albertazzi 2021; Vittori and Morlino 2021). In contrast to the BSW, the Left adopts a progressive stance on the cultural dimension and has moderated its populist rhetoric to position itself as an office-seeking coalition partner. While parties with divergent positions on one dimension but similar positions on another dimension are generally able to compromise, this is less likely to occur with PCPs that claim to exclusively represent the will of the people (Mudde 2004). In addition to this populist rhetoric, leadership rivalry also seems to play an important role for the relationship between splinter and legacy party, as many supporters of the Left appear to favor Sahra Wagenknecht over the party leadership of her legacy party (Wagner et al. 2023). Therefore, the fourth compensation proposition is that the BSW's entry will reduce the Left's vote share.

#### 3 Research Design—County Council Elections as a Quasi-Experiment

#### 3.1 Data and Sampling

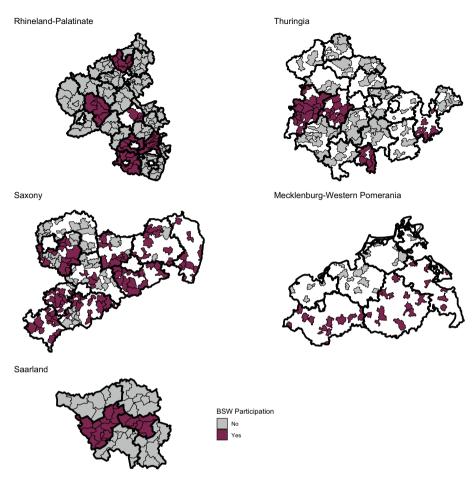
To evaluate the four propositions—mobilization, competition, antimainstream, and compensation—regarding the implications of the BSW's entry into party competition, we used data from the 2024 German county council elections. Although the BSW contested elections in five states, it did not field candidates in all counties, creating variation that enables a quasi-experimental design. The five states include only 22 county-free cities (*kreisfreie Städte*) and 63 counties, thus limiting the statistical power of a direct county-level analysis. The concurrently held municipal council elections (*Gemeinderatswahlen*) would offer a larger sample size, but they present several other constraints. For example, the BSW participated in few municipal council elections, and only a subset of other parties—primarily the Social Democratic Party (SPD) and the Christian Democratic Union (CDU)—consistently competed at this level. Moreover, independent local lists dominated many municipal council elections, sometimes securing more than 50% of the vote shares. Given these constraints, our unit of analysis is the municipality, with multiple municipalities electing a single county council.<sup>4</sup>

Figure 1 illustrates the geographic distribution of our sample of municipalities nested within counties, with treatment status defined by BSW participation.<sup>5</sup> Purple areas represent municipalities where the BSW participated, gray areas indicate BSW nonparticipation, and white areas denote regions excluded from the sample. To max-

<sup>&</sup>lt;sup>5</sup> Figure A1 in the supplementary material shows the location of counties within states across Germany.



<sup>&</sup>lt;sup>4</sup> We adjust for this dependency structure within the data throughout the analysis.



**Fig. 1** Map of counties, county-free cities, and municipalities in German states: inclusion in main sample and treatment status. Thick lines represent borders of counties and county-free cities, while thin lines indicate municipal borders. White spots denote areas not included in the sample. The size of the states is not proportional (Shape files obtained from Bundesamt für Kartographie und Geodäsie [2024]). *BSW* Sahra Wagenknecht Alliance

imize comparability of municipalities, our first analysis excluded county-free cities, which elect their own city councils (*Stadträte*) and are administratively independent from counties. Additionally, we omitted municipalities with populations under 5000 due to missing background variables, which we need for the weighting approach.<sup>6</sup>

Despite lacking exogenous control over case selection in the quasi-experimental setting, the five states in our sample exhibit distinct characteristics, enabling a more general analysis of the BSW's impact on the dynamics in German party competition. The sample includes two western German states (Saarland, Rhineland-Palatinate)

<sup>&</sup>lt;sup>6</sup> In subsequent analyses, we will incorporate these units to assess whether their inclusion affects our findings.



and three eastern German states. Politically, Thuringia has seen the strongest AfD support and was the first state to elect a prime minister from the Left. In western Germany, PCPs have been generally less successful. Rhineland-Palatinate is notable for the strong presence of the conservative Free Voters (*Freie Wähler*). The BSW's success in county council elections also varied substantively across states, with a vote share averaging between 5.7% (Rhineland-Palatinate) and 10.7% (Mecklenburg-Western Pomerania) in counties where it fielded candidates.

We utilized the *Wegweiser Kommune* dataset to obtain background information on municipalities from 2022, the most recent year available (Bertelsmann Stiftung 2024). Given specific data features and missing information, we implemented several adjustments. In Rhineland-Palatinate, where the administrative structure includes numerous small municipalities, we used data at the level of collective municipalities (*Verbandsgemeinden*), as their size and administrative competencies are more comparable to municipalities in other states. We excluded five newly founded municipalities because we could not reliably compare changes over time. To ensure comparability, we further removed 78 municipalities where not all nationally relevant parties competed. Another five municipalities were dropped due to substantial missing data on key covariates. After these adjustments, our final sample consisted of 423 municipalities. We supplemented this dataset with vote shares and turnout data from the statistical offices of the respective states. Descriptive statistics for all variables used are provided in Table A2 in the supplementary material.

#### 3.2 Identification Strategy and Operationalization

To estimate the transformative impact of the BSW's entry into party competition, our quantity of interest is the average treatment effect (ATE), which estimates the expected difference in outcomes between a treatment and control group. However, due to the fundamental problem of causal inference, one can observe only a single outcome per unit. Following the causal inference framework, four key assumptions must hold to estimate the expected difference in outcomes between a treatment and control group: the stable unit treatment value assumption (SUTVA), conditional independence, covariate balance, and common support (Imbens 2004). While we formally define and describe these assumptions in more detail in the supplementary material (pp. 3–4), we focus here on the empirically testable assumptions of covariate balance and common support, which could threaten the internal validity of our findings.

Smaller parties with limited resources must often prioritize where they compete (Golder et al. 2017). As a newly established cadre party with selective membership,

<sup>&</sup>lt;sup>10</sup> Sources: (Landeswahlleiter Mecklenburg-Vorpommern 2024; Landeswahlleiter Rheinland-Pfalz 2024; Landeswahlleiterin Saarland 2024; Statistisches Landesamt des Freistaates Sachsen 2024; Thüringer Landesamt für Statistik 2024).



<sup>&</sup>lt;sup>7</sup> Table A1 in the supplementary material provides an English translation and detailed information on the indicators used in this paper.

<sup>&</sup>lt;sup>8</sup> Grammetal, Kirner Land, Langenlonsheim-Stromberg, Nahe-Glan, and Nottertal-Helinger Höhen.

<sup>&</sup>lt;sup>9</sup> Arnsdorf, Unstruttal, Mühlhausen (Thuringia), Dingelstädt, and Bad Sulza.

the BSW faced limited financial and human resources. Given these constraints, it was more efficient for the party to collect signatures for a single European election district rather than for each individual county council election. Supporting this reasoning, the BSW did not contest the county council elections in all nine states voting alongside the European election and participated only partially even within the states where it did compete. For our comparison of treated and nontreated units, the key question is whether this partial participation was driven more by quasirandom idiosyncratic factors—such as candidate availability—or by strategic considerations based on favorable electoral prospects, which could introduce omitted variable bias.

To address such potential bias, we accounted for historically distinct regional voting patterns by using a binary indicator distinguishing eastern and western Germany (Arzheimer 2021). As shown in Fig. 1, approximately two-thirds of treated municipalities are located in eastern Germany, suggesting a strategic focus on regions where challenger parties are generally stronger. We further accounted for the economic dimension of party competition by balancing municipalities on welfare recipient shares (SGB II), the proportion of highly qualified workers (academic degrees), and per capita core budget debt. On the cultural dimension, the BSW could have targeted units where the AfD has been most successful, selecting municipalities with aging residents, low population density, limited immigrant exposure (measured by the share of residents without German citizenship), and "dying" municipalities (per capita net inflow vs. outflow) (Weisskircher 2020). Since many BSW members were formerly part of the Left party (Thomeczek 2024), we also weighted the Left's previous vote share in county council elections, as the BSW may have targeted former strongholds of its legacy party. Additionally, we included turnout in past county council elections, as low-turnout areas may have motivated the BSW to field candidates, aligning with the mobilization hypothesis. To capture the strong influence of local parties and independent lists in subnational elections (Jankowski et al. 2022), we balanced on the prior vote share of "Other" parties.<sup>11</sup>

Using CBPS, we ensured that treated and nontreated municipalities were comparable. <sup>12</sup> Unlike traditional propensity score models that focus solely on estimating treatment probabilities, CBPS directly incorporates covariate balance constraints into the estimation process, thus minimizing model dependence (Imai and Ratkovic 2014). This method solves for propensity scores that satisfy specified moment conditions—in our case, the means across treatment and control groups. <sup>13</sup> Once the propensity scores, i.e., the conditional probability of treatment given the covariates, were estimated, we derived final weights using the Horvitz–Thompson estimator (Horvitz and Thompson 1952).

<sup>&</sup>lt;sup>13</sup> A key advantage of CBPS is that it eliminates the need for iterative model fitting, reducing the risk of bias introduced by researcher discretion (King and Nielsen 2019).



<sup>&</sup>lt;sup>11</sup> Additionally, we balance the two groups on a binary variable indicating whether foreign population shares were imputed from county-level data for 50 municipalities.

<sup>&</sup>lt;sup>12</sup> Concerns that propensity scores can even increase covariate imbalance and model dependence apply only for matching, not for weighting (King and Nielsen 2019).

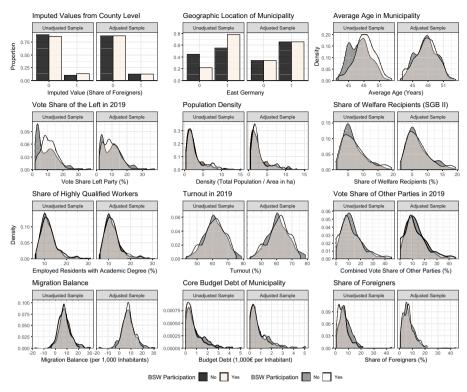


Fig. 2 Empirical distributions of covariates before and after covariate balancing propensity scores weighting by treatment status. Weights are calculated using the WeightIt package for R (Greifer 2024). BSW Sahra Wagenknecht Alliance

Figure 2 illustrates the empirical distributions of each covariate before and after CBPS weighting, stratified by treatment status.<sup>14</sup> The figure demonstrates that most covariates exhibit reasonable balance even before adjustment, which is encouraging, as a well-balanced preweighting distribution reduces the need for extensive statistical adjustment. Notably, for some covariates, such as regional location (eastern vs. western Germany) and municipal average age, CBPS weighting significantly improved balance. Importantly, there was no instance in which weighting worsened balance, reinforcing the fulfillment of the covariate balance assumption.

Figure A3 in the supplementary material illustrates the propensity scores distributions before and after balancing, stratified by treatment status. Balancing substantially improves alignment in treatment assignment probabilities. We address the very few cases violating common support—control units with scores below 0.16

 $<sup>^{14}</sup>$  For a complementary assessment, Fig. A2 in the supplementary material presents a Love plot comparing standardized mean differences before and after CBPS weighting. After weighting, all covariates fall within the conventional balance threshold of  $\pm$  0.1 (Stuart 2010). It is important to note that significance tests for covariate means—commonly used in applied research—are inappropriate for assessing balance, as they conflate changes in balance with changes in statistical power (Imai et al. 2008). Furthermore, two distributions with identical means may exhibit entirely different shapes.



and treatment units above 0.84—with a sensitivity analysis in the evaluation of the robustness of our findings.

#### 4 Results—The Impact of BSW Participation

To estimate the ATE, we relied on the "G-computation" method (Snowden et al. 2011). This method is doubly robust and provides accurate estimates if either the propensity score model or the outcome model is correctly specified (Stuart 2010). We applied the exact same approach to each of the seven outcome variables.

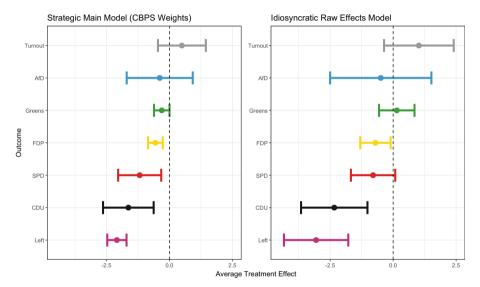


Fig. 3 Average treatment effect of Sahra Wagenknecht Alliance (BSW) participation on changes in turnout and vote shares. *CBPS* covariate balancing propensity scores, *AfD* Alternative for Germany, *FDP* Free Democratic Party, *SPD* Social Democratic Party, *CDU* Christian Democratic Union, *Left* Die Linke

<sup>&</sup>lt;sup>15</sup> G-computation involves several steps. First, we ran weighted ordinary least squares regression models, using weights for each municipality obtained from CBPS. To account for potential dependencies among municipalities within the same county, we clustered standard errors at the county level. We followed the conventional approach of including all covariates used for obtaining the weights, along with their interaction terms with the binary treatment condition (whether the BSW competed or not; Greifer 2024). Since our outcome measures reflect changes and likely depend on previous electoral strength, we also added the vote shares from the 2019 county council elections for all parties not included in the balancing step (CDU, SPD, FDP, Greens, and AfD). Second, we generated two modified versions of the original dataset: one in which the BSW participation variable is set to 1 for all observations and another in which it is set to 0 for all observations. All other variables were held at their observed values. Third, we used the model from the first step to calculate adjusted predictions for the two counterfactual datasets. Finally, we calculated the average treatment effect by taking the difference in means of the adjusted predictions. Asymptotically correct standard errors were obtained using the delta method, which accounts for the estimation of weights. For the implementation of G-computation, we relied on the WeightIt and marginaleffects packages for R (Arel-Bundock et al. 2024; Greifer 2024). See Eschenwecker and König (2024) for replication material.



The left panel of Fig. 3 presents the ATE and corresponding 95% confidence intervals for the seven outcome variables, representing changes in vote shares of existing parties and turnout due to BSW participation. Contrary to the mobilization proposition, BSW participation did not significantly increase electoral turnout. <sup>16</sup> The analysis further indicates that the BSW's entry into party competition led to statistically significant vote share reductions for all parties except the AfD. This finding contradicts the competition proposition, which assumes electoral rivalry between the BSW and the AfD. However, the wide confidence intervals indicate that effects in both directions are possible. Consistent with the antimainstream proposition, BSW participation resulted in substantial losses for all mainstream parties, particularly the CDU and the SPD. Most notably, the Left suffered the largest vote share losses, averaging –2.1 percentage points (± 0.4 pp). This supports the compensation proposition, suggesting that the BSW is most appealing to former Left voters (Jankowski 2024).

To check whether the results were primarily driven by our weighting approach, which accounted for strategic selection into treatment (e.g., the Left's prior electoral strength), or by more idiosyncratic factors such as candidate availability, we estimated a "raw" effects model using plain ordinary least squares regressions for each outcome, omitting CBPS weights and control variables in the G-computation step. The right panel of Fig. 3 presents these results. Overall, they closely align with the main model's findings, with two minor deviations: The ATE for the Greens and the confidence interval for the SPD marginally cross zero. As expected, uncertainty estimates are generally larger due to the absence of controls. However, all confidence intervals encompass the main model's estimated ATE, and the two most notable findings—no mobilization effect and no consistent direct competition with the AfD—remain robust. This suggests that BSW participation was driven more by candidate availability than by strategic electoral considerations, as the results remain consistent even without adjusting for key confounders of strategic selection.

To interpret the substantive magnitude of these effects, we compared ATE estimates to pooled vote share changes across all municipalities rather than to prior election results, as the latter do not account for temporal shifts in party competition. Pooled changes across the full sample provide a more neutral benchmark, preventing exaggerated percentage shifts for smaller parties. Relative to these baselines, the ATEs indicate substantial effects of BSW participation. For example, the Left's ATE accounts for 39% of its total losses, while the SPD's ATE explains 55% of its overall decline. These large effect sizes highlight the transformative impact of the BSW on the dynamics in party competition.

We conducted a series of alternative model and sample specifications to evaluate the robustness of our findings. First, we modeled data dependency structures by incorporating random intercepts instead of the clustered standard errors. Second,

<sup>&</sup>lt;sup>17</sup> The mean changes in the pooled sample are as follows: +3.7 pp turnout; +8.0 pp AfD; -1.3 pp CDU; -2.0 pp SPD; -2.1 pp FDP; -3.9 pp Greens; -5.4 pp Left.



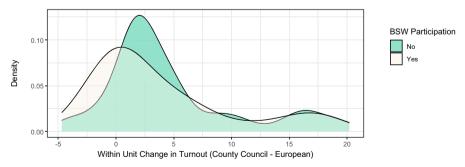
<sup>&</sup>lt;sup>16</sup> This assumes that the BSW's concurrent participation in the European election does not affect turnout in the control group, potentially offsetting mobilization effects in the treatment group. We assess the validity of this assumption in the following subsection.

following Jankowski et al. (2022), we included municipalities with incomplete party competition by setting missing party vote shares to zero. Third, we implemented entropy balancing as an alternative weighting method (Hainmueller 2012). Fourth, we excluded municipalities with imputed county-level values. Fifth, we dropped observations from Saarland due to its closed-list ballot system, which differs from the open-list ballots used in other states (Linhart and Eichhorn 2024). Finally, we tested the sensitivity of our weights to observations outside common support (Caliendo and Kopeinig 2008). Detailed descriptions and results of these robustness tests are provided in the supplementary material (Figs. A4–A9). Across all specifications, our findings remain substantively unchanged.

#### 4.1 Turnout Effect in Nonconcurrent Elections

Our interpretation of the BSW effect on turnout assumes that the concurrency of European and county council elections does not bias our estimates. Two potential confounding mechanisms warrant further consideration. First, while concurrent elections are known to increase overall turnout (Leininger et al. 2018; Rudolph and Leininger 2021), the states in our sample already held both elections concurrently in 2019. Thus, general concurrency effects are not a confounding factor. Second, voters who supported the BSW in the European election, where it competed nationwide, may have chosen a surrogate party in the county council election, potentially offsetting differences between the treatment and control groups.

To investigate this, we took a closer look at Thuringia, where county council elections were held two weeks before the European election, allowing for an empirical assessment of within-unit changes in turnout across the two elections. Two-sided pairwise t-tests within both the control and treatment groups showed that turnout in the Thuringia county council election was significantly higher than in the subsequent European election (control group:  $+4.6\,\mathrm{pp}$ , p < 0.00; treatment group:  $+4.0\,\mathrm{pp}$ , p < 0.00). This finding supports the general turnout boost associated with concurrent elections (Leininger et al. 2018) and underscores the importance of analyzing within-unit changes rather than absolute turnout levels across elections.



**Fig. 4** Sahra Wagenknecht Alliance (BSW) mobilization in nonconcurrent elections. Overlay of the distributions of within-unit changes of turnout from the County Council and European elections in Thuringia by treatment status.

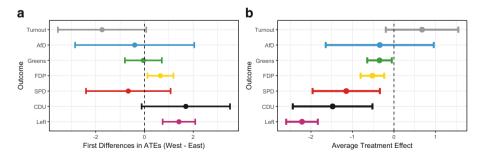


Figure 4 presents the full distributions of these changes, differentiated by treatment status of BSW participation. The results show that BSW participation in the European election did not artificially increase turnout in the control group, as the average difference is even smaller than in the treatment group. This is further supported by a one-sided t-test on within-unit differences (p=0.70) and a nonparametric Mann–Whitney U-test (p=0.88). A confounding mobilization effect would point in the opposite direction. While we can examine potential concurrency bias only for Thuringia, there is no clear reason why this should not apply to the other states. The BSW had 10.4% of the vote share in Thuringian counties where it participated, closely matching its strongest result of 10.7% in Mecklenburg-Western Pomerania. If a mobilization effect would be present, it should be most pronounced in areas where the BSW achieved high vote shares.

### 4.2 Heterogeneity Between Eastern and Western and Between Rural and Urban Units

Given distinct voting patterns in eastern and western Germany (Arzheimer 2021), regional variation could limit the broader implications of our findings regarding the transformative impact of BSW participation on the dynamics in party competition. The left panel of Fig. 5 shows no statistically significant differences in five of the seven outcome variables between eastern and western Germany. The exceptions are the Free Democratic Party (FDP) and the Left, both of which experienced significantly larger losses in the east. Notably, despite large uncertainty estimates, the estimated difference for the AfD is close to zero—a surprising result given the party's greater strength in the east. The FDP's losses suggest a different role of the liberal party in the eyes of eastern and western voters, as the party experienced significant declines when the BSW participated in the east but not in the west.

For the Left, significant differences across regions suggest that the BSW compensated the "east effect" of its legacy party. The east effect describes an electoral advantage of the Left as a regional catchall party that persists even after accounting for political preferences, political dissatisfaction, and other explanatory variables



**Fig. 5** Regional and unit heterogeneity. a displays first differences in the ATEs of BSW participation between West and East Germany. b reruns the main model but adds 22 county-free cities and 32 rural counties to the sample. *BSW* Sahra Wagenknecht Alliance, *AfD* Alternative for Germany, *FDP* Free Democratic Party, *SPD* Social Democratic Party, *CDU* Christian Democratic Union, *Left* Die Linke, *ATE* average treatment effect



(Arzheimer 2021). This phenomenon, stable across electoral districts, may explain why the Left's losses were more pronounced in eastern Germany, as the BSW captured its legacy party's diminishing regional electoral advantage. However, the differences between eastern and western Germany should not be overstated. While the Left experienced steeper declines in the east, unlike the FDP, the party also suffered significant losses in western Germany in counties where the BSW participated. Using micro-level panel data, Jankowski (2024) reports similar results, showing more pronounced effects of vote switching to the BSW in eastern Germany but ultimately pointing to the same substantive trend across all parties in both regions.

To further broaden the scope of our findings, we expanded our sample beyond the 423 municipalities initially analyzed. Although these municipalities were well matched for comparability, the initial sample excluded highly rural areas (due to a minimum population threshold of 5000) and urbanized areas (county-free cities) to ensure consistency in administrative and electoral characteristics. To address this, we incorporated all 22 county-free cities in the five states of our sample, including major cities such as Dresden and Leipzig. Additionally, we extended our analysis to rural areas by aggregating data at the county level, adding 32 eastern German counties that include municipalities with populations below 5000.<sup>18</sup>

The results, presented in the right panel of Fig. 5, reaffirm our core findings. Even with the expanded sample, BSW participation led to statistically significant vote share reductions for all parties except the AfD, confirming the robustness of our earlier results. Likewise, there is no evidence that BSW participation increased turnout, reinforcing the absence of a mobilization effect across diverse settings. While adding 54 cases represents only a modest 13% increase in sample size—insufficient to reverse the direction of the ATEs—it could nevertheless meaningfully affect confidence interval bounds. However, these bounds remain largely unchanged, indicating that our conclusions are not restricted to a relatively homogeneous sample of municipalities. Instead, they extend to a more diverse set of electoral contexts, encompassing both rural and urban areas, thereby strengthening the scope of our findings.

#### 4.3 Comparison of Results Across Elections

To further expand the scale of our analysis, we leveraged the concurrent European election to compare vote share and turnout changes within the treatment group, where the BSW participated in both elections. Unlike our previous quasi-experimental approach, this comparison is exploratory. However, several factors suggest similar patterns across both elections. First, Germany's 5% electoral threshold applies to neither European nor council county elections. Second, both county council and European elections are classified as second-order elections (SOEs; Reif and Schmitt 1980), which typically exhibit lower turnout and weaker performance for mainstream parties while benefiting smaller challenger parties (Hix and Marsh 2007; Schmitt et al. 2020). Third, while voters may be more familiar with candidates in council county elections, research suggests that even in municipal council elections,



<sup>&</sup>lt;sup>18</sup> The county of Hildburghausen is excluded due to incomplete party competition.

where personal knowledge of candidates is more common, such effects remain limited (Graeb and Vetter 2024). Finally, Germany's highly nationalized party system tends to produce a similar distribution of vote shares across different electoral levels (Golder et al. 2017). The primary difference between European and council county elections is that the former employs nationwide closed-list ballots rather than openlist ballots. Taken together, these aspects justify exploring whether the local findings extend to SOEs at other levels within Germany's multilevel electoral system.

Figure 6 overlays the full distributions of changes in the outcome variables for both elections. The overall similarity of these distributions reinforces the broader scale of our findings. However, variance is notably larger in the county council elections, particularly for the CDU, suggesting that uncertainty estimates from the county council election analysis are wider—and thus more conservative—than necessary. For the Greens, SPD, Left, and FDP, losses in county council elections were slightly smaller than in the European election, indicating that county council results may even underestimate their vote share declines. Conversely, the AfD's gains were slightly smaller in county council elections than in the European election, implying that our county council election results underestimate the party's national-level gains, shifting the estimated ATE for the AfD even closer to zero. This underestimation aligns with survey experiment findings that open-list ballots tend to restrict support for PCPs by favoring mainstream parties with greater intraparty disagreement (Blumenau et al. 2017; Bräuninger et al. 2022).

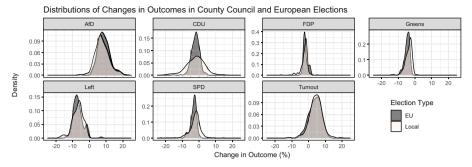
#### 5 Discussion

Although our findings are robust across various alternative model and sample specifications, their scope must be interpreted with caution. One limitation is that we could only examine the assumption of no offsetting turnout effects in the control group within Thuringia. While there is no reason to expect systematic differences in other states, we cannot definitively rule out such effects. If they exist, our findings should be understood as capturing the BSW's impact on the dynamics in German party competition independent of potential mobilization effects. Another limitation is that, while our study avoids survey-based measurement errors, we can only indirectly test micro-level mechanisms of the BSW's entry into party competition using official electoral statistics (Jankowski et al. 2022).

#### 5.1 External Validity of Findings for General Elections

We also acknowledge that the scale of our quasi-experimental results is constrained to a single SOE case of county council elections, which limits their generalizability to first-order general elections. Although we identify the most pronounced effect of BSW participation for the party of the Left, a party with a limited voter base, first-order general elections may exhibit different electoral dynamics that shift the relative salience of issues on the economic and cultural dimensions within the two-dimensional policy space of party competition. Similarly, voter dissatisfaction with the BSW's performance in eastern German state government coalitions or strategic





**Fig. 6** Comparison of results across elections. Overlay of the distributions of changes in the outcome variables for the 2024 County Council and European elections for municipalities, county-free cities, and rural counties in the treatment group. *AfD* Alternative for Germany, *FDP* Free Democratic Party, *SPD* Social Democratic Party, *CDU* Christian Democratic Union, *Left* Die Linke, *EU* European Union

adaptations in particular by the party of the Left could alter the observed patterns in general elections. Given the analytical complexity of party competition (Laver and Sergenti 2011), these dynamics are not necessarily stable over time.

Furthermore, party classifications may change, as illustrated by the transformation of the party of the Left. According to the prevailing literature, challenger parties are those without government experience at the national level (De Vries and Hobolt 2020). However, while the party of the Left has historically functioned as a regional catchall party (Arzheimer 2021), its participation in subnational coalition governments may have altered its status. Moreover, the decline of the FDP and Greens in eastern Germany raises questions about the conventional distinction between mainstream and challenger parties. Similarly, while the BSW could be classified as a left-wing populist party based on its economic positions (Thomeczek 2024; Thomeczek et al. 2024), its strong issue emphasis and stances on immigration and foreign policy combined with the populist "us versus them" rhetoric could challenge such a categorization (Huber et al. 2023).

Despite these limitations, we believe that our findings may contribute to the literature on competition dynamics, comparative trends of party competition, and the broader implications of challenger party success.

#### **5.2 Party Competition Dynamics**

Our findings aim to contribute to the literature on party competition dynamics by providing quasi-experimental evidence. The patterns we observe are not driven by voter mobilization. While the entry of a left-authoritarian party like the BSW may fill a macro-level supply gap in party platforms, we find no evidence that this translates into greater political representation through increased turnout among previously abstaining voters. This contrasts with findings from observational studies (Hillen and Steiner 2020; Lefkofridi et al. 2014). However, as Hillen and Steiner (2020) suggest, lower turnout among left-authoritarian voters may itself be the root cause of the observed supply gap.



The party competition dynamics between the new and existing challenger parties reveal contrasting effects. On the one hand, our findings suggest that the BSW serves mainly as a conduit for former supporters of the Left party, who appear to prefer Sahra Wagenknecht over the leaders of her former party (Jankowski 2024; Wagner et al. 2023). On the other hand, the proposition that the BSW's entry would reduce the AfD's vote share by dissolving cross-cutting pressures among voters with left-authoritarian preferences is not supported by empirical evidence.

One possible explanation for the lack of consistent direct competition between the BSW and the AfD may stem from their differing treatment by mainstream parties. While the AfD is widely regarded as a pariah due to its extremist positions, the BSW is considered a legitimate coalition partner despite similar populist rhetoric and pro-Russian sentiments. This difference may affect strategic voting, as dissatisfied voters seeking policy influence may favor the BSW over the AfD, which lacks governing credibility. Conversely, right-authoritarian AfD supporters have little incentive to switch to the BSW, as it does not fully align with their policy preferences. As a result, dissatisfied voters seeking to avoid wasting their vote by supporting a pariah party may gravitate toward the BSW, while ideologically committed AfD supporters remain unlikely to defect. Future survey analyses could examine whether these mechanisms hold at the individual level.

#### 5.3 Comparative Trends of Party Competition

Our study of party competition in council county elections exhibits several unique characteristics. The BSW entered a political landscape already populated by other challenger parties—the Left and the AfD. Moreover, it is a splinter party and diverges from the traditional inclusionary definition of the people in European left-wing populism (Mudde and Kaltwasser 2013). Instead, it espouses eclectic ideological positions and operates as a hierarchical cadre party centered around its charismatic leader, Sahra Wagenknecht.

However, many of these characteristics reflect broader trends in party competition observed in other countries. First, the coexistence of multiple challenger parties with differing ideological orientations is not uncommon, as seen in the Netherlands, France, Greece, Italy, and Spain. Second, new PCPs frequently emerge as splinters, either from mainstream parties (e.g., La France Insoumise [LFI] in France and Independent Greeks-National Patriotic Alliance [ANEL] in Greece) or from other PCPs (e.g., Alliance for the Future of Austria [BZÖ] in Austria and Blue Reform [SIN] in Finland; Heinisch et al. 2021; Jungar 2021; Shields 2021; Tsatsanis 2021). Third, while the BSW diverges from inclusionary, horizontal populist movements such as Podemos in Spain or Syriza in Greece (Katsambekis 2019; Kioupkiolis 2019), it aligns more closely with traditions of socialist populism that fuse class identity with nationalism under charismatic leadership (Halikiopoulou et al. 2012; March 2012). Additionally, the BSW's ideological eclecticism bears similarities to Italy's Five Star Movement, a valence populist party that blends diverse ideological strands (Ivaldi et al. 2017; Mosca and Tronconi 2019). Perhaps the closest comparison is Jean-Luc Mélenchon's LFI, which rejects traditional left-right labels and employs a cadre-like leadership structure (Shields 2021). Finally, although we ob-



serve slightly more pronounced effects between eastern and western Germany, such regional disparities are not unique to Germany. Even starker political divides exist in other European contexts, such as those between Catalonia and Spain, Flanders and Wallonia in Belgium, or northern and southern Italy.

#### 5.4 Implications of Populist Challenger Success

Beyond the specific context of party competition in council county elections, our findings may have broader implications for representative democracies with multiple PCPs. De Vries and Hobolt (2020) outline three potential trajectories for the continued rise of challenger parties: (1) fragmentation of the party system, (2) replacement of existing parties, and (3) reinvention of mainstream parties.

In Germany, party system fragmentation has been a defining trend since the 1980s, culminating in six parties represented in the twentieth Bundestag. However, our results suggest that the BSW's entry signals a shift toward replacement rather than further fragmentation. The BSW compensates for the Left's losses while attracting voters dissatisfied with mainstream parties, potentially pushing the FDP below the 5% electoral threshold. Paradoxically, this could lead to fewer parties in the Bundestag, as the BSW competes with its legacy party and marginalizes the FDP. It is even conceivable that none of the three parties secure enough votes to enter parliament, leaving the AfD as the sole PCP represented in the legislature.

These dynamics have significant implications for representative democracy. The rise of PCPs can complicate coalition formation, weaken majorities of mainstream parties, and increase the likelihood of breaking coalition governments (De Vries and Hobolt 2020; Wolinetz and Zaslove 2018). With their populist "us versus them" rhetoric, PCPs face additional challenges in forming and sustaining coalitions, as they claim to represent the singular will of the people (Mudde 2004). Consequently, coalitions between PCPs are rare and typically short-lived (Vampa and Albertazzi 2021; Vittori and Morlino 2021). However, as the recent coalition-building between the CDU, SPD, and BSW in Thuringia illustrates, the broader impact of these dynamics on representative democracy ultimately depends on how existing parties respond to new challengers.

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**Data Availability Statement** All data and R scripts necessary to replicate the results of this study are publicly available in a Dataverse repository (Eschenwecker and König 2024).

 $\textbf{Conflict of interest} \ \ S. \ Eschenwecker \ and \ T. \ K\"{o}nig \ declare \ that \ they \ have \ no \ competing \ interests.$ 

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