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The Polish Voter:
A Sociodemographic Portrait from the 2023 IPSOS Exit Poll

Abstract: This article utilizes exit poll data from IPSOS to examine the sociodemographic determinants of voting behavior in the 2023 Polish parliamentary elections. Applying multinomial logistic regression, we examine the independent effects of age, gender, education, occupation, and place of residence on party choice, with PiS as the reference category. The results reveal clear structural divides: younger voters, better-educated voters, and urban voters disproportionately support KO [Koalicja Obywatelska, Civic Coalition], NL [Nowa Lewica, The Left], and, in the case of young men, Konfederacja [Confederation], while older voters, less-educated voters, and rural voters remain PiS's electoral base. Gender effects are significant, with men more inclined toward Konfederacja and women toward NL. Occupational status further differentiates preferences, with business owners leaning toward Konfederacja and pensioners toward PiS. Predicted probability plots illustrate these dynamics and confirm the persistence of class, generational, and spatial cleavages in Polish politics. Methodologically, the study demonstrates the analytical potential of exit poll data, offering a replicable framework for future electoral research in Poland and beyond.

Keywords: elections, voting behavior, sociodemographics, exit poll

Introduction

Elections reveal more than political preferences—they reflect the social divisions, cultural values, and historical experiences that shape how citizens engage with democracy. Elections are not only mechanisms of representation but also mirrors of a country's social structure, revealing how sociodemographic divisions shape political choice. In post-industrial democracies, classical cleavages of religion, territory, and class have undergone deep transformation under the pressures of globalization, educational expansion, and cultural change (Lipset & Rokkan 1967; Kriesi 1998; Ford & Jennings 2020). Nevertheless, the extent to which these structural determinants still affect political competition remains a matter of debate.

The problem, therefore, lies in explaining how enduring social structures such as class, education, and residence continue to shape political preferences in societies that have experienced rapid social and cultural change. In Poland, these questions are especially

salient. Since the democratic transition of 1989, the Polish electorate has been divided along cultural, religious, and territorial lines, yet recent scholarship shows that new divisions, particularly generational, educational, and gender-based ones, have become increasingly important (Tworzecki 2019; Cześnik and Szczupska 2025). As younger, urban, and highly educated voters move toward progressive or centrist parties, older and rural voters remain the core of conservative support (Marcinkiewicz 2018; Sula et al. 2025). The issue of whether these divisions represent stable structural cleavages or short-term alignments remains unresolved.

However, previous studies of voting behavior in Poland have relied mainly on post-election surveys, which provide valuable attitudinal measures but have smaller sample sizes and often lack the statistical power to assess intersecting individual-level effects (Cześnik and Szczupska 2025; Wenzel et al. 2024). The restricted size and design of such surveys make it difficult to estimate the independent and combined effects of multiple sociodemographic variables with sufficient precision (Cześnik and Szczupska 2025). As a result, findings often rely on descriptive comparisons or bivariate associations that cannot isolate the net influence of age, gender, education, occupation, and place of residence on ballot choices.

The central research question guiding this study is therefore twofold. First, to what extent do sociodemographic characteristics, such as age, gender, education, occupation, and place of residence, predict ballot choices in the 2023 Polish parliamentary elections? Second, to what extent are these sociodemographic characteristics more explicative of electoral decisions than how individuals voted in the previous election (as reported by themselves)? By addressing these questions, the study moves beyond the descriptive analyses typical of smaller-scale surveys.

The results confirm that core sociodemographic factors continue to structure electoral behavior in Poland, as evidenced by both regression estimates and predicted probabilities. Gender differences are clear: men are substantially more likely to support Konfederacja, and women are substantially more likely to support Nowa Lewica, a divide that remains robust across model specifications. Predicted probabilities further highlight a pronounced generational gradient: among the youngest voters, KO [Civic Coalition], NL, and Konfederacja attract the largest shares of support, while PiS [Prawo i Sprawiedliwość, Law and Justice] dominates among those aged 60 and above. Education exerts one of the strongest effects, with university graduates showing the highest predicted probabilities of voting for KO or NL. In contrast, voters with only primary or vocational education overwhelmingly prefer PiS. Occupational patterns reinforce these divides: business owners are most likely to back Konfederacja, professionals favor KO, and pensioners and manual workers remain concentrated within the PiS electorate. Predicted probabilities also confirm a sharp urban-rural cleavage: support for KO and NL rises steadily with urbanization, while PiS maintains overwhelming dominance in villages and small towns. These associations remain statistically and substantively significant even when controlling for prior ballot choice. Thus, structural cleavages are shown to be still the foundation of electoral alignment in contemporary Poland.

In the theoretical sphere, this article advances debates on the persistence and transformation of structural cleavages in post-industrial democracies (Kriesi 1998; Ford and Jen-

nings 2020) by demonstrating the continued relevance of these divides in a rapidly modernizing post-communist society. Empirically, it offers one of the first applications of exit poll data for inferential analysis in Poland and demonstrates that such data, which has traditionally been used for media reporting, can serve as a reliable and analytically rich source for academic research. Using the 2023 IPSOS exit poll [1] enables a more precise reconstruction of voter profiles and the social foundations [2] of party competition. Methodologically, this paper shows how large, high-quality exit poll data can be leveraged through multivariate modelling and predicted probability analysis to disentangle overlapping social effects and test theoretically grounded hypotheses. Together, these contributions provide a comprehensive, data-driven account of how social structure continues to shape political alignment in contemporary Poland, offering valuable insights for scholars, analysts, and policymakers alike.

We have organized the paper as follows. In the next section, we review the literature on voting behavior and structural cleavages. Then we review research on voting behavior in Poland and discuss the history and methodology of exit polling. In the research design section, we outline our research problem, main research questions, hypotheses, data, and modelling strategy. Finally, in our empirical analysis, we present the results and discuss their implications for understanding political competition in Poland.

Theoretical Background

Understanding party preferences requires embedding sociodemographic variables within broader theories of political cleavage and electoral behavior. Lipset and Rokkan's classic work (1967) demonstrated that stable divisions such as class, religion, and territory form the foundation of party systems. However, as Kriesi (1998) argued, the last decades have witnessed a transformation of these cleavages under the pressures of globalization, cultural change, and generational replacement. In this context, factors such as gender, age, education, occupation, and place of residence remain decisive. However, their meanings have shifted, producing new patterns of political alignment across Europe, including Poland.

Gender is now widely recognized as a structural political divide. Earlier research often suggested a "traditional gender gap", with women leaning conservative due to religiosity and traditional family roles (Norris 1987; Inglehart & Norris 2003). However, Inglehart and Norris (2003) demonstrated that women's increasing educational attainment and labor force participation led to greater support for progressive and liberal parties. Goossen (2020) and Sass and Kuhnle (2023) extend this logic, conceptualizing gender as a cleavage comparable to class or religion. They highlight how reproductive rights, legislation on equality, and mobilization for feminist and LGBTQ+ issues create sustained, gender-based polarization.

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[1] In this article, we draw on analyses carried out by IPSOS using the 2023 exit poll dataset. The analytical framework and specific procedures were designed by the authors, while the analyses were conducted by IPSOS. This arrangement was necessary due to the special status of the exit poll raw data, which is subject to trade secrecy and other commercial restrictions and is not available to academics.

[2] They are the "conventional" sociodemographics used in exit poll surveys, i.e., age, gender, education level, urban or rural residence, and occupational status (the operationalizations are discussed below).

In many democracies, younger women constitute the most progressive electoral group, while men are increasingly overrepresented among radical-right voters. In Poland, sharp conflicts over abortion and gender equality exemplify how gender divisions translate directly into party competition.

Age operates as both a life-cycle and generational cleavage. According to Inglehart (1977), younger cohorts exposed to prosperity and post-materialist values are systematically more liberal than older cohorts socialized under scarcity. Kriesi (1998), and later Ford and Jennings (2020), emphasize the role of generational replacement in transforming electoral landscapes: older voters prioritize security, pensions, and traditional authority, while younger cohorts emphasize cosmopolitanism, climate change, and cultural liberalism. These dynamics are visible in Poland, where youth support for progressive and centrist parties contrasts with the conservative orientation of older voters, especially in rural areas (though another significant segment of youth leans toward the radical right). The demographic reality of an ageing electorate amplifies the political weight of older voters, reinforcing their influence on the system as a whole (Cześnik and Zagórski 2025).

Education is also a key predictor of political preferences across Europe. Higher education increases exposure to pluralism and strengthens "cognitive mobilization", correlating with greater support for liberal, pro-European parties (Lijphart 1997; Kriesi et al. 2008). Norris and Inglehart (2019) describe the lack of education as a crucial marker of the "cultural backlash", in which less-educated groups resist cosmopolitan and multicultural norms and turn to populist or nationalist actors. This educational divide reflects the broader "winners vs. losers of globalization" conflict (Kriesi et al. 2008), with higher-educated professionals benefiting from open markets and international integration, while less-educated workers perceive themselves as disadvantaged. In Poland, this cleavage is reinforced by regional inequalities in access to education and by differing orientations toward European integration.

Occupational status continues to structure political behavior, although in transformed ways. Lipset and Rokkan's (1967) classic idea of class cleavage remains relevant, but occupational divides in post-industrial societies increasingly overlap with cultural conflicts. Kriesi et al. (2006, 2008) argue that workers in routine or manual occupations, facing economic precarity, tend to gravitate toward protectionist or populist parties. In contrast, professionals and managers align with liberal and pro-market actors. Self-employed groups often have distinct preferences, supporting policies that reduce taxation and state regulation. Thus, a person's occupation correlates not only with certain material interests but also with cultural and lifestyle orientations that link directly to party preferences.

Place of residence reinforces these divisions. The urban–rural cleavage, theorized in Lipset and Rokkan's (1967) center-periphery model, has become increasingly salient. Urban voters, particularly in large metropolitan centers, are exposed to greater cultural diversity, cosmopolitan values, and dynamic labor markets, which drive support for progressive and liberal parties. By contrast, rural voters remain embedded in more traditional communities, often influenced by religious institutions, and favor conservative or agrarian forces (Bornschier 2010). Kriesi et al. (2008) show that urban-rural polarization is now one of the most persistent structuring forces in European politics. In Poland, this cleavage has sharpened over time, with metropolitan areas voting predominantly for liberal

and left parties, while smaller towns and villages provide a stable base for conservative parties.

These five sociodemographic dimensions do not operate in isolation; instead, they intersect to produce complex electoral coalitions. For example, educated young women in urban centers constitute the social base of progressive parties, while older, less-educated men in rural areas form the backbone of conservative parties. Contemporary cleavage theory (Kriesi et al. 2008; Ford & Jennings 2020) highlights precisely such multidimensional alignments, where class, cultural, and territorial divisions overlap to shape party competition. Anchoring our analysis in this literature enables us to examine how gender, age, education, occupation, and residence jointly influenced voting behavior in the 2023 Polish parliamentary elections.

Research on Voting Behavior in Poland

Research on voting behavior in Poland has long emphasized that electoral choices are shaped by a combination of lasting historical cleavages, evolving socio-economic divisions, and, more recently, elite-driven polarization. Early analyses of post-1989 elections highlighted the importance of identity, religiosity, and attitudes toward the communist past as the main lines of electoral conflict (Jasiewicz 2008; Letki 2013). Over time, these factors became embedded in a durable structure of political competition that continues to divide Polish society along moral, cultural, and territorial lines (Tworzecki 2019). As more recent scholarship shows, these traditional cleavages have been supplemented by socio-economic and generational divisions, as well as new forms of populist appeal (e.g., Sula et al. 2025). This evolving combination of influences provides the broader context for the present study, which examines how sociodemographic characteristics jointly shaped electoral behavior in the 2023 parliamentary elections.

A substantial body of research has shown that the cultural and regional cleavages in Polish politics remain deep. Analyses of the first decade after the collapse of communism found that religiosity and attachment to the Catholic Church were among the strongest predictors of support for conservative parties. At the same time, secular and liberal voters tended to support post-communist or centrist-liberal formations (Jasiewicz 2008). These divisions were reinforced by territorial differentiation: more religious and less urbanized eastern regions have consistently favored Law and Justice (PiS). At the same time, western and metropolitan areas lean toward Civic Platform (PO). This pattern supports the long-standing interpretation that post-1989 competition, initially between post-Solidarity and post-communist elites, evolved into a cultural confrontation between liberal-European and national-conservative camps (Tworzecki 2019).

The spatial distribution of party support has often been linked to the historical legacy of the eighteenth-century partitions. For instance, Wenzel et al. (2024) show that electoral and turnout patterns continue to mirror the old imperial borders. Similarly, Zagórski and Markowski (2021) find that the characteristics of the electoral turnout of the former Habsburg region remain visible today, even when sociodemographic differences are taken into account. They show that this pattern is associated with several cultural and attitudinal

factors, such as religiosity, ideological orientation, and local rootedness, which the authors link to longer-term historical influences. In the same vein, Cześnik and Grabowska (2017) argue that these regional effects remain most visible in participation rates and in the persistence of conservative voting in Galicia. In addition, Kowalski (2003) emphasizes that long-term historical and cultural legacies contribute to the enduring regional structuring of electoral behavior in Poland, even across similar levels of urbanization or socio-economic structure. Moreover, as Sadowski (2013) notes, lasting regional contrasts in Polish electoral behavior cannot be fully accounted for by contemporary sociodemographic factors alone, as local contexts and long-term patterns of socialization play a central role in structuring political preferences. Although the study does not directly examine the former partition borders, it is reasonable to acknowledge that historical legacies could continue to influence aspects of Poland's electoral geography. Certain current demographic and settlement characteristics may reflect these longer-term patterns. Thus, to some extent, the historical "partition effect" may be indirectly present in the structural variables considered here, even though the analysis is not focused on regional variation in voting behavior.

Socio-economic factors have re-emerged as crucial determinants of political choice. Using data from the Polish National Election Study (POLNES), Cześnik and Szczupska (2025) demonstrate that class differences remain a strong predictor of party preference: manual and lower-middle strata are more inclined toward redistributive, socially conservative options, while higher-educated professionals prefer market-liberal and pro-European parties. Education, which is closely tied to class and occupational status, has become an especially powerful dividing line. Moreover, Kotnarowski (2016) finds that education significantly influenced voting behavior in early post-communist Poland, with higher educational attainment associated with support for centrist and liberal rather than old-regime parties. These findings underline the cumulative effects of social position and cultural capital on political alignment—an interaction this paper allows us to examine in more detail.

Moreover, generational differentiation has also gained prominence in recent analyses. Sula et al. (2025) reveal that young voters display distinct, gendered patterns of engagement: men under 30 disproportionately support the radical right, while young women gravitate toward progressive or liberal parties. Cześnik and Szczupska (2025) argue that these contrasts reflect not merely age effects but enduring cohort experiences shaped by exposure to different political realities since 1989. Together, these studies suggest that the "youth vote" cannot be understood as homogeneous, and that generational change introduces new cross-cutting cleavages within the Polish electorate.

Economic voting, in contrast, has produced more ambiguous findings. While perceptions of economic well-being influence satisfaction with democracy, they only weakly predict party choice when cultural and identity-related variables are taken into account (Sula et al. 2025; Tworzecki 2019). Earlier analyses reached similar conclusions: voters rarely reward or punish incumbents solely on material grounds but interpret economic conditions through normative and ideological lenses (Kotnarowski 2016). This pattern suggests that in Poland, socioeconomic effects are filtered through broader cultural and political contexts rather than operating autonomously.

Methodologically, most previous studies have relied on post-election surveys such as POLPAN or POLNES, which offer valuable attitudinal measures but limited sample sizes.

Spatial analyses, while emphasizing macro-regional differences, often rely on aggregated data that cannot disentangle intersecting individual-level effects. Consequently, more integrated approaches that combine multiple sociodemographic and contextual dimensions are needed (Cześnik and Szczupska 2025; Wenzel et al. 2024). Responding to this gap, the present study relies on IPSOS exit poll data from the 2023 parliamentary election to examine how age, gender, education, occupation, and place of residence jointly shape support for Poland's main political parties. By assessing these variables simultaneously, we test the extent to which contemporary sociodemographic structures explain the current configuration of party support. In doing so, this study advances an empirical understanding of electoral cleavages in Poland.

Exit Polls: History and Practice

Exit polls, which survey voters as they leave polling stations, are key for predicting election outcomes (almost in real time) and analyzing voter behavior. First used in the 1960s, they quickly became widespread in modern democracies. Exit polls have four primary functions: (1) prediction of results before official announcements (forecasting), (2) analysis of voter behavior by linking socio-economic status, ethnicity, and gender to choices (explanatory), (3) demographic breakdowns revealing trends (descriptive), and (4) validation of other surveys (benchmarking).

Scheuren and Alvey (2008) provide a broad history and analysis of exit polls. Their origins are debated (Scheuren and Alvey 2008). The earliest attempt occurred in Denver in the 1940s, though it gained little attention. Dutch sociologist Marcel van Dam claims to have pioneered exit polls during the 1967 Dutch legislative elections, interviewing voters as they left polling stations. In the U.S., Warren Mitofsky is credited with the 1967 Kentucky gubernatorial election exit poll for CBS News, inspired by film industry techniques. By 1968, CBS had expanded its exit polls to 20 states; by the 1980s, exit polls had become routine in the U.S. and worldwide (Brown et al. 2006).

Conducting exit polls is complex and resource-intensive (Curtice and Firth 2008). High refusal rates, especially among older voters, can bias results, and limited geographic coverage can distort national predictions (Brown et al. 2006). Errors may undermine trust. Adjustments for nonresponse bias are helpful but imperfect. Scholars propose remedies, for instance, Pavia (2009) suggested a two-step strategy: (1) adjust raw exit poll estimates with past election recall ("vote-remembering adjustment"), then (2) apply a regression estimator to refine predictions. Tested in the 2003 and 2007 Corts Valencianes elections, the method improved accuracy compared to raw data and SigmaDos forecasts, especially for larger parties. Nonresponse bias is reduced, though false reporting and coverage errors remain. Experimentation can also improve accuracy. During the 1992 U.S. presidential election, Bishop and Fisher (1995) found that, compared with interviews, self-administered "secret ballots" reduced the tendency for voters to give supposedly socially acceptable (rather than truthful) answers. Brown et al. (2006) piloted this kind of exit poll in the 2003 Ontario election, demonstrating feasibility on a limited scale. However, cost and logistics have prevented its wider use.

Exit polls are superior to pre- and post-election surveys because they provide immediate, accurate data (Curtice & Firth 2008; Brown et al. 2006). As they include only actual voters, they avoid recall bias (Long & Gibson 2015). However, each method has its value: pre-election surveys reveal campaign dynamics, post-election surveys allow for detailed questioning, while exit polls face nonresponse and social-desirability biases. Some voters may misreport or decline participation, especially in polarized settings.

Beyond the West, Scheuren and Alvey (2008) examine Mexico, Japan, and other countries to show that there are various challenges. Long and Gibson (2015) demonstrate that ethnicity and candidate performance influenced voter choices in a multi-ethnic society (Kenya). Scheuren and Alvey (2008: 127–135) stress the importance of demographic data for analyzing sociopolitical voter profiles and offer frameworks for targeted strategies. Their work is essential for studies such as our analysis of Polish voters, which utilized the IPSOS 2023 exit poll data.

In Poland, exit polls emerged with the onset of democratization. The first one was administered by OBOP with German INFAS during the 1990 presidential elections. Since then, exit polls have been systematically used in parliamentary and presidential elections. Their accuracy has generally been high, with no major failures. For example, in the second round of the 2010 presidential election, TNS OBOP's estimate erred by only 0.09%.

Polish exit polls, like elsewhere, predict results and describe voter demographics. Over time, they have also come to be used to verify election integrity and track long-term trends. In strong democracies, exit polls mainly serve the media; in weaker ones, they monitor fraud. In Poland, they have been primarily informative, though occasional discrepancies have raised concerns. Data collection immediately after voting provides an accurate snapshot of the results. Consequently, Polish exit polls are usually more accurate than conventional surveys like POLNES, which (inevitably) overestimate turnout and winner support. For the 1997–2005 elections, POLNES overestimated support for the winners by 4.1% on average, compared to 1.5% for exit polls (Kubisz-Muła 2013). However, specific (and typical) exit poll limitations remain, including nonresponse bias, the underrepresentation of certain groups, sampling errors, and last-minute changes.

Methodologically, Polish exit polls follow international standards, with rigorous controls. Media consortia (TVP, TVN, Polsat) commission large-scale polls. These polls, which are among the largest in Europe, often cover 500 to 1,000 polling stations and may involve up to 100,000 voters. Selection is based on historical voting, demographics, and geography. A stratified random sample of polling stations reflects geographic and demographic diversity. Trained interviewers ask voters to complete anonymous questionnaires that include their ballot choice and demographics (age, gender, education, occupation, and residence). This reduces recall errors and post-rationalization. Fieldwork is centrally coordinated, with real-time data transmission enabling forecasts on election night. Advanced statistical techniques adjust the estimates for turnout and nonresponse. Accuracy is high, often differing from official results by < 1 percentage point. Thus, Polish practice aligns with the best global standard while being tailored to the local context.

Research Design

The primary aim of this study is to identify and assess the net effects of key sociodemographic variables on voting behavior in the 2023 Polish parliamentary elections. While analyses based on exit poll data were widely discussed in the post-election period and confirmed that sociodemographic characteristics correlate with electoral preferences, this article seeks to move beyond descriptive associations. Specifically, it examines which variables exert an independent, statistically significant effect on voting choice, and which may appear influential only because of spurious associations that disappear once other factors are controlled for. Thus, the central research problem examined in this study concerns the extent to which sociodemographic characteristics function as independent determinants of electoral behavior in contemporary Poland. Despite the widespread assumption that variables such as age, gender, education, occupation, and place of residence shape party preferences, it remains unclear whether these structural factors retain explanatory power once prior political alignment is taken into account. This study addresses the gap by investigating whether observed associations between social position and voting choice reflect genuine structural cleavages or are instead mediated by electoral continuity.

To address this objective, we pose the following research questions: (1) to what extent do sociodemographic characteristics predict voting choice in the 2023 Polish parliamentary elections? and (2) to what extent are these sociodemographic characteristics more explanatory of voting choice than how an individual voted in the previous election (as self-reported)? Consequently, we expect that sociodemographic predictors exert statistically significant effects on voting choice, such that the observed associations are not merely spurious but reflect genuine structural patterns within the electorate. By estimating two models, a baseline model including key sociodemographic predictors and an extended model that additionally incorporates past voting choice, we can capture both the long-term structural determinants of voting behavior and the extent to which sociodemographic effects operate beyond electoral continuity.

These hypothetical expectations are further elaborated in five thematic clusters corresponding to the sociodemographic variables under investigation: gender, age, education, occupational status, and place of residence. The hypotheses primarily pertain to the structural effects of these characteristics on current voting choice (RQ1). A complementary model incorporating past voting assesses the power of these characteristics to explain more than prior partisan alignment and to predict vote switching (RQ2).

Consistent with prior research on gender cleavages in electoral behavior (Evans 1993; Sass and Kuhnle 2023), we hypothesize that gender influences party preference in specific ways. In particular, we expect male voters to be significantly more likely than female voters to support Konfederacja (H1a). This radical right-wing party disproportionately appeals to younger men through its libertarian and nationalist rhetoric. Conversely, we hypothesize that male voters are less likely than female voters to support Nowa Lewica (H1b), a progressive-left formation more commonly endorsed by women. For KO and TD, we do not expect gender to exert a significant net effect after controlling for other variables; prior literature does not consistently link gender to support for these centrist parties.

Intergenerational differences in value orientations and socioeconomic interests constitute a central axis of political conflict in contemporary democracies (Kriesi 1998; Ford & Jennings 2020). Accordingly, we hypothesize that age has a systematic and negative association with support for non-PiS parties. That is, older voters are progressively less likely than the youngest cohort (18–29) to support KO, TD [Trzecia Droga, Third Way], NL, or Konfederacja, relative to PiS (H2). This expectation reflects not only the well-documented generational alignment with PiS among older voters but also the cultural and economic grievances that shape younger cohorts' affinity for opposition and anti-establishment parties, especially NL and Konfederacja.

Educational attainment is widely recognized as a key determinant of political attitudes and party preference (Deegan-Krause 2007). We hypothesize that voters with higher levels of education are significantly more likely to support KO, TD, NL, or Konfederacja than PiS, compared with those with only primary or lower secondary education (H3). This effect should be most pronounced for KO and NL, whose electorates are disproportionately composed of university-educated voters, and weakest for Konfederacja, which attracts a more ideologically driven and demographically varied base.

Occupational status serves as a proxy for both economic interests and cultural capital, making it a potent explanatory variable in models of electoral behavior. Using professionals, managers, and directors as the reference group, we hypothesize two complementary patterns. First, we expect that manual and inactive occupational groups are significantly less likely to support KO, TD, or NL than PiS (H4a). These occupational categories are more exposed to economic insecurity and tend to align with PiS's redistributive and socially conservative platform. Second, we hypothesize that business owners are more likely than professionals to support Konfederacja relative to PiS (H4b). This expectation stems from Konfederacja's economic liberalism and its emphasis on deregulation, flat taxation, and reduced state intervention—positions that resonate with entrepreneurial voters.

Finally, we examine the effect of place of residence, operationalized along a rural–urban continuum. Numerous studies have documented a persistent urban–rural cleavage in Polish politics, with PiS dominating in rural areas and the opposition performing better in urban centers (Marcinkiewicz 2018; Herodowicz et al. 2021; Adamiak et al., 2024). Accordingly, we hypothesize that urban residents are more likely than village residents to support KO, TD, NL, or Konfederacja relative to PiS (H5). We expect this effect to be powerful for KO and NL, both of which have traditionally drawn support from urban and metropolitan voters. For TD and Konfederacja, we anticipate a positive but less pronounced urban effect.

To assess the independent effects of each factor, we employ multinomial logistic regression models with party choice as the dependent variable. This modelling strategy is appropriate given the categorical nature of the outcome variable and the need to estimate the relative probability of voting for different parties based on voters' profiles. The use of multivariate regression enables us to isolate the unique contribution of each variable while controlling for the influence of others.

The data used in this study come from the 2023 IPSOS exit poll, conducted on election day (October 15, 2023), using a stratified random sample of polling stations across all electoral districts in Poland. The dataset comprises responses from approximately 75,000 voters, making it one of the most comprehensive and representative sources of

electoral behavior currently available in the Polish context. The data includes voting choices (self-reported immediately after voting) and detailed sociodemographic characteristics, enabling robust, fine-grained analysis.

Based on the previously revised literature and relying on available data, we focus on five core sociodemographic dimensions (self-reported): age, gender, education level, place of residence (classified on the urban–rural continuum), and occupational status. These variables are operationalized as categorical indicators using established classification schemes (conventional for IPSOS exit polls): age (categorical variable: 18–29, 30–39, …, 60+); gender (female/male); education level (primary, vocational, secondary, higher); place of residence (village, small town, medium-sized town, large city, metropolitan area); occupational status (farmer, manual worker, professional/specialist, business owner, etc.).

Additionally, we include in the statistical models the variable of reported voting in the previous election, that is, in the 2019 parliamentary election. While our primary focus lies in identifying structural cleavages through sociodemographic variables, incorporating past voting behavior provides a theoretically grounded robustness check. The literature on political behavior consistently shows that prior voting choice is among the strongest predictors of current electoral preferences, reflecting both political identity and long-term partisan alignment (e.g., Abramowitz 2018; Ford and Jennings, 2020). Including this variable helps control for the habitual and loyalist dimensions of voting, which may interact with sociodemographic characteristics. Although the variable is not part of our core theoretical model, its inclusion allows us to evaluate the additional explanatory power of sociodemographic characteristics net of prior political behavior. This makes our findings more robust and resistant to the criticism that observed effects may simply reflect unmeasured behavioral inertia rather than structural determinants.

Empirical Findings

The analysis presented in this section builds upon the full multinomial logistic regression models reported in Table 1. Model 1 includes only sociodemographic predictors: age, gender, education, occupation, and place of residence, to estimate their net effects on the probability of voting for Koalicja Obywatelska [KO, Civic Coalition], Trzecia Droga [TD, Third Way], Nowa Lewica [NL, The Left], or Konfederacja [Konf], using PiS [Law and Justice] as the reference category. Model 2 extends this specification by adding respondents' self-reported vote in the 2019 parliamentary elections. This two-model design corresponds directly to the research questions outlined earlier. Model 1 addresses RQ1 by identifying the structural sociodemographic determinants of voting choice in 2023, while Model 2 addresses RQ2 by examining these associations net of prior partisan alignment. Comparing the results of these two models allows us to assess whether the observed sociodemographic effects operate mostly through past vote or retain additional significance beyond habitual or partisan-aligned behavior.

The key advantage of this multivariate approach is its capacity to reveal net effects, isolating the independent influence of each variable while controlling for all others (Kotnarowski 2016). This allows us to distinguish between genuine explanatory factors and

Table 1
Multinomial logistic regression results for party vote (reference category: PiS)

	Model 1 (socdem only)				Model 2 (socdem + prev vote)			
	KO n=21705	TD n=11077	NL n=6568	Konf n=6012	KO n=20788	TD n=10594	NL n=6333	Konf n=5858
Gender (ref—Female)								
Male	0.98	1.08***	0.78***	2.79***	0.85***	0.94*	0.66***	1.96***
	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)
Age Group (ref—18–29 years)								
30–39 years	0.55***	0.58***	0.35***	0.33***	0.66***	0.77***	0.51***	0.51***
	(0.04)	(0.05)	(0.05)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)
40–49 years	0.59***	0.47***	0.27***	0.13***	0.56***	0.56***	0.32***	0.28***
	(0.04)	(0.05)	(0.05)	(0.05)	(0.06)	(0.06)	(0.07)	(0.06)
50–59 years	0.53***	0.35***	0.17***	0.07***	0.51***	0.43***	0.22***	0.17***
	(0.04)	(0.05)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)
60+ years	0.48***	0.25***	0.14***	0.03***	0.44***	0.29***	0.18***	0.08***
	(0.05)	(0.06)	(0.07)	(0.1)	(0.08)	(0.08)	(0.1)	(0.11)
Education Level (ref—Primary/Lower Secondary)								
Vocational	1.44***	1.35***	1.52***	1.26***	1.3***	1.29***	1.58***	1.27**
	(0.05)	(0.07)	(0.09)	(0.09)	(0.08)	(0.09)	(0.11)	(0.1)
Secondary/Post-secondary	2.74***	2.39***	2.41***	2.1***	1.94***	2.12***	2.03***	1.88***
	(0.05)	(0.06)	(0.08)	(0.08)	(0.08)	(0.08)	(0.1)	(0.09)
Bachelor's and higher	4.36***	4.02***	4.04***	2.73***	2.46***	3.22***	2.99***	2.28***
	(0.05)	(0.07)	(0.08)	(0.08)	(0.08)	(0.08)	(0.1)	(0.1)
Occupation Group (ref—Director/Manager/Professional)								
Business Owner/Co-owner	1.34***	1.07	0.98	1.74***	1.24***	1.01	0.98	1.72***
	(0.04)	(0.05)	(0.06)	(0.06)	(0.07)	(0.07)	(0.08)	(0.08)
Administrative/Service Worker	0.65***	0.73***	0.79***	0.78***	0.85***	0.86**	0.94	0.93
	(0.04)	(0.04)	(0.05)	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)
Farmer	0.22***	0.5***	0.33***	0.51***	0.38***	0.57***	0.47***	0.72***
	(0.06)	(0.06)	(0.09)	(0.08)	(0.09)	(0.08)	(0.11)	(0.1)
Worker	0.48***	0.57***	0.57***	0.82***	0.66***	0.71***	0.69***	0.99
	(0.05)	(0.05)	(0.07)	(0.07)	(0.07)	(0.07)	(0.09)	(0.08)
Student	1.33***	1.33***	1.86***	1.07	1.07	0.98	1.27**	0.85
	(0.07)	(0.08)	(0.08)	(0.09)	(0.1)	(0.1)	(0.1)	(0.11)
Unemployed	0.43***	0.49***	0.57***	0.79**	0.53***	0.54***	0.62***	0.82
	(0.08)	(0.09)	(0.1)	(0.1)	(0.11)	(0.11)	(0.13)	(0.13)
Pensioner	0.53***	0.49***	0.68***	0.48***	0.69***	0.63***	0.74***	0.65***
	(0.05)	(0.06)	(0.08)	(0.11)	(0.08)	(0.08)	(0.1)	(0.13)
Other	0.55***	0.65***	0.66***	0.84***	0.67***	0.68***	0.71***	0.89
	(0.04)	(0.05)	(0.06)	(0.06)	(0.07)	(0.07)	(0.08)	(0.08)
Residence (ref—Village)								
City ≤ 50k	2.08***	1.48***	2.13***	1.37***	1.65***	1.35***	1.73***	1.22***
	(0.02)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)	(0.05)
City 51–200k	2.47***	1.52***	2.71***	1.49***	1.87***	1.4***	2.23***	1.29***
	(0.03)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)	(0.06)	(0.07)
City 201–500k	3.11***	1.93***	3.27***	1.46***	2.28***	1.71***	2.42***	1.18
	(0.05)	(0.06)	(0.07)	(0.08)	(0.08)	(0.08)	(0.1)	(0.11)
City > 500k	3.44***	1.79***	4.62***	1.46***	2.15***	1.46***	3.23***	1.27***
	(0.04)	(0.05)	(0.05)	(0.07)	(0.07)	(0.07)	(0.08)	(0.09)
Voted in 2019 (ref—PiS)								
PSL					49.87***	123.15***	46.75***	5.94***
					(0.09)	(0.07)	(0.11)	(0.14)
SLD					287.14***	110.34***	1203.76***	13.32***
					(0.12)	(0.12)	(0.12)	(0.18)
Konf					43.82***	26.9***	19.06***	132.9***
					(0.1)	(0.09)	(0.13)	(0.08)
KO					2212.2***	281.8***	366.1***	28.67***
					(0.08)	(0.08)	(0.09)	(0.1)
Other parties					85.85***	82.53***	112.89***	18.32***
					(0.12)	(0.11)	(0.13)	(0.14)
Did not vote					51.84***	18.96***	32.29***	13.25***
					(0.07)	(0.06)	(0.08)	(0.09)
Do not remember					44.19***	24.23***	31.6***	10.1***
					(0.05)	(0.05)	(0.07)	(0.06)
Intercept	0.56***	0.47***	0.34***	0.36***	0.03***	0.05***	0.03***	0.06***
	(0.07)	(0.08)	(0.1)	(0.1)	(0.11)	(0.11)	(0.14)	(0.13)
AIC	22056.5				46541.0			
Pseudo R²:								
Cox and Snell	0.27				0.69			
Nagelkerke	0.28				0.72			
McFadden	0.10				0.37			
N	75675				73105			

Note: The table presents odds ratios, statistical significance of regression coefficients (*p < 0.001, **p < 0.01, ***p < 0.05), and standard errors in parentheses. The reference category for the dependent variable is PiS voters (n = 27247 for Model 1 and n = 26598 for Model 2). Both models also included voters for Bezpartyjni Samorządowcy (BS) and Polska Jest Jedna (PJJ); however, their results are omitted from the table for clarity of presentation.

spurious correlations, a significant methodological improvement over the bivariate cross-tabulations typically published by polling firms on election night.

The two models display markedly different levels of explanatory power. For the baseline specification (Model 1), which includes only sociodemographic predictors, model fit is moderate: Cox and Snell pseudo R² = 0.27, Nagelkerke R² = 0.28, and McFadden R² = 0.10, with an AIC of 22,056.5 (N = 75,675). These values are typical for models based solely on structural characteristics.

When the self-reported vote in the 2019 parliamentary elections is added (Model 2), the pseudo-R² values rise sharply (Cox and Snell = 0.69; Nagelkerke = 0.72; McFadden = 0.37), indicating a significant gain in explanatory power. However, the AIC also increases to 46,541 (N = 73,105), reflecting the substantially greater model complexity introduced by the past-vote variable. The increase in pseudo-R² observed in Model 2 indicates the strong predictive power of past voting behavior. However, while historical and cultural factors may play a part in shaping such continuity, it is also likely that other mechanisms, including social network dynamics and interpersonal influences (Jackson et al. 2018), contribute to this effect.

The results provide robust support for the majority of our hypotheses regarding the effects of key sociodemographic variables on voting choice in the 2023 Polish parliamentary elections. First, Model 1, which includes only sociodemographic predictors, confirms the hypothesized gender divide in support for Konfederacja and Nowa Lewica. Male voters are significantly more likely than female voters to support Konfederacja over PiS (OR = 2.79), consistent with H1a and the party's appeal to younger men through libertarian and nationalist messaging. Conversely, women are more likely to support Nowa Lewica over PiS (OR = 0.78), corroborating H1b and reflecting the party's progressive profile, especially in issues of gender equality and social justice.

When the past vote is included in Model 2, the effects change in a party-specific manner. For Konfederacja, the male advantage is attenuated but remains significant (OR = 1.96). For Nowa Lewica, the negative effect of being male is enhanced (OR = 0.66), indicating an even stronger gender divide once the prior vote is controlled for. For KO, the small and insignificant negative association with being male becomes slightly stronger and significant (OR = 0.85). For TD, the small yet significant positive effect of being male (OR = 1.08) is reversed (OR = 0.94). Overall, these results indicate that prior voting behavior explains part of the gender effect. However, substantial differences remain for Konfederacja and Nowa Lewica, whereas gender effects for KO and TD are modest or sensitive to model specification.

Second, the model provides strong empirical support for the hypothesis that increasing age is associated with a lower likelihood of supporting parties other than PiS. In Model 1, relative to the youngest group (18–29), voters in older age brackets are progressively less likely to support KO, TD, NL, or Konfederacja. Among voters aged 60+, the odds of supporting Konfederacja are 97% lower than among those aged 18–29 (OR = 0.03), and similarly lower for KO (OR = 0.48), TD (OR = 0.25), and NL (OR = 0.14). These results validate H2 and highlight a pronounced generational cleavage in Polish politics, where PiS enjoys dominant support among the oldest voters, while younger cohorts exhibit more diverse party preferences.

In Model 2, which includes past vote, the age effects are somewhat attenuated but remain strong and statistically significant. This indicates that age continues to exert a major independent influence on vote choice, confirming the robustness of the generational patterns.

Third, educational attainment emerges as a powerful predictor of voting choice, in line with H3. In Model 1, compared to voters with only primary education, university graduates are significantly more likely to support KO (OR = 4.36), TD (OR = 4.02), and NL (OR = 4.04) over PiS. We observe a gradient effect, with support for alternative parties increasing at each successive level of educational attainment. Although the effect for Konfederacja is weaker, it remains positive and statistically significant (OR = 2.73), reflecting the presence of a subset of ideologically motivated, more highly educated voters in its electorate.

When the past vote is included in Model 2, better-educated voters are still significantly more likely to support KO, TD, or NL over PiS, with effects slightly reduced compared to Model 1. These results demonstrate that while prior voting choice accounts for some variation, educational attainment remains a strong independent predictor of party-switching.

Fourth, our expectations regarding occupational divides are also confirmed. Model 1 shows that business owners are more likely than professionals to vote for Konfederacja rather than PiS (OR = 1.74), aligning with H4b and Konfederacja's pro-market, anti-state platform. In contrast, members of economically vulnerable groups, particularly pensioners and the unemployed, are significantly less likely to vote for any party other than PiS, which is consistent with H4a and the party's appeal through redistributive and conservative policy promises. Additionally, students are more likely to support Nowa Lewica (OR = 1.86), reinforcing the notion of a progressive, youth-driven base.

Model 2 shows that most occupational effects are attenuated but remain largely consistent in direction. For example, business owners' preference for Konfederacja decreases only slightly (OR = 1.72), while students remain somewhat more likely to support Nowa Lewica (OR = 1.27). The lower likelihood of non-PiS support among vulnerable groups persists, though with a smaller effect.

Finally, the results corroborate the hypothesized urban–rural divide (H5). Using village residents as the reference group, in Model 1, we observe a marked rise in the odds of voting for KO and NL as urbanicity increases. Residents of cities with over 500,000 inhabitants are more than three times as likely to vote for KO (OR = 3.44) and more than four times as likely to vote for NL (OR = 4.62) than to vote for PiS. While the effect is also positive for TD (OR = 1.79) and Konfederacja (OR = 1.46), it is less pronounced, as predicted. These patterns confirm the spatial polarization of Polish politics and the urban base of liberal and progressive parties.

In Model 2, the effects of urbanicity are somewhat attenuated but remain statistically significant. These results indicate that while prior voting behavior accounts for part of the urban–rural differences, spatial patterns continue to play an important role in shaping electoral preferences, particularly for KO and NL.

In sum, the empirical findings closely align with our theoretically grounded hypotheses (H1–H5). Gender, age, education, occupation, and place of residence each exert statistically

significant and substantively meaningful effects on voting choice, even after controlling for prior voting behavior and other confounding factors. These effects underscore the continued relevance of structural cleavages in shaping electoral behavior in Poland, providing a robust analytical foundation for interpreting the 2023 election results.

In addition to the odds ratio estimates presented in Table 1, Figures 1 and 2 provide visualizations of the predicted probabilities of voting for each major party, including PiS. These probabilities are derived from the full multinomial logistic regression models and show the estimated likelihood of choosing a given party for individuals in each sociodemographic category. While odds ratios provide information about the direction and strength of associations, they can be less intuitive in interpreting substantive differences, especially when all comparisons are made relative to a single reference category. Moreover, given the large sample size, many odds ratios are statistically significant, which necessitates the use of complementary tools to assess their practical importance. Predicted probabilities thus serve as a more interpretable metric by illustrating meaningful differences in electoral behavior. Presenting predicted probabilities enables clearer communication of model results and strengthens the connection between statistical findings and their real-world implications.

Figure 1, reflecting Model 1 (with sociodemographic variables only), illustrates clear and consistent structural divides in Polish voting behavior. For instance, it reveals a sharp generational divide in party preferences. Among the youngest voters (18–29), the highest predicted probability belongs to Koalicja Obywatelska (around 25%), followed by Konfederacja (around 20%). PiS is the least preferred in this group (around 15%). However, this trend reverses with age: in the 60+ category, PiS emerges as the dominant choice, with predicted support exceeding 50%, followed by KO at around 30%, and all other parties falling below 10%. These figures confirm that age is a potent structuring force in Polish politics.

Similar dynamics emerge for gender, education, occupation, and residence. Figure 1 shows that men are significantly more likely to vote for Konfederacja (with a predicted probability of above 10% compared to women below 5%), while women are more inclined toward KO and Nowa Lewica. PiS has equal predicted support among both genders. Educational level also strongly correlates with voting choice: PiS has the highest predicted probability (above 60%) among those with only primary education. KO dominates among university graduates (around 35%), with Nowa Lewica also posting a strong showing. Occupational segmentation is equally pronounced. PiS is dominant among pensioners (with a predicted probability over 50%) and farmers (over 60%), while white-collar professionals prefer KO (over 30%). Business owners lean toward Konfederacja, and students are most likely to support Nowa Lewica. Finally, Figure 1 confirms the well-documented urban–rural divide: PiS is the top choice in villages, but its support declines sharply in towns and cities, where KO overtakes it. In cities with over 500,000 residents, KO's predicted support exceeds 40%, while PiS falls below 20%, and NL approaches PiS in levels of support. Figure 2, reflecting Model 2 (demographic variables plus past vote), largely preserves these structural patterns.

Together, these predicted probability plots serve as a valuable complement to the regression model's odds ratios. While odds ratios quantify the relative effect of a given variable on choosing another party over PiS, the figures show how these effects manifest

Figure 1

**Predicted probabilities of voting by key sociodemographic variables (Model 1)**
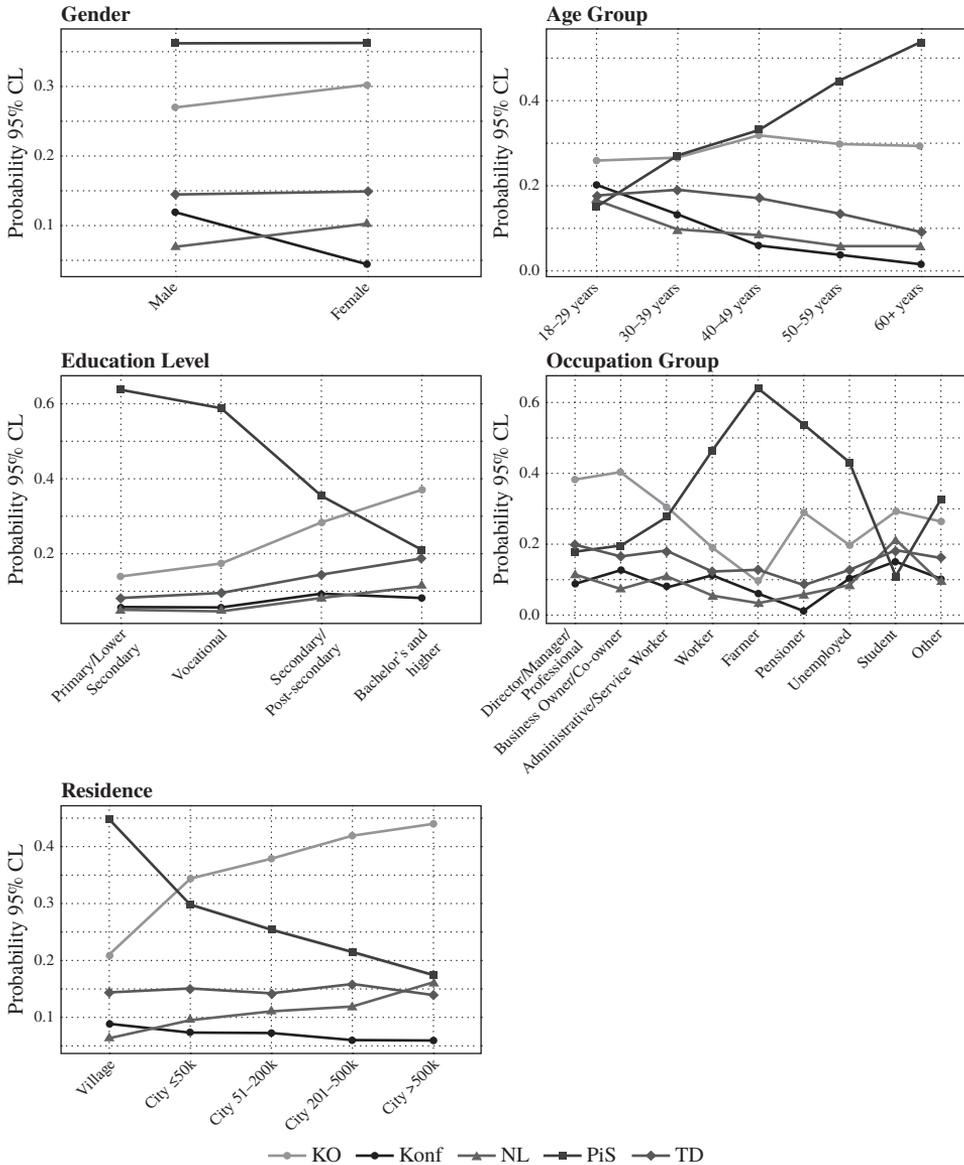
Note: see Table 1 for a table version of this figure.

in absolute terms. Notably, they reveal PiS's predicted support, which is otherwise absent from the regression coefficients because it serves as the reference category. Overall, these outputs confirm that Polish voters' choices are strongly shaped by their structural positions, and these effects remain substantial even after accounting for past voting.

Figure 2

Predicted probabilities of voting by key sociodemographic variables and previous vote (Model 2)
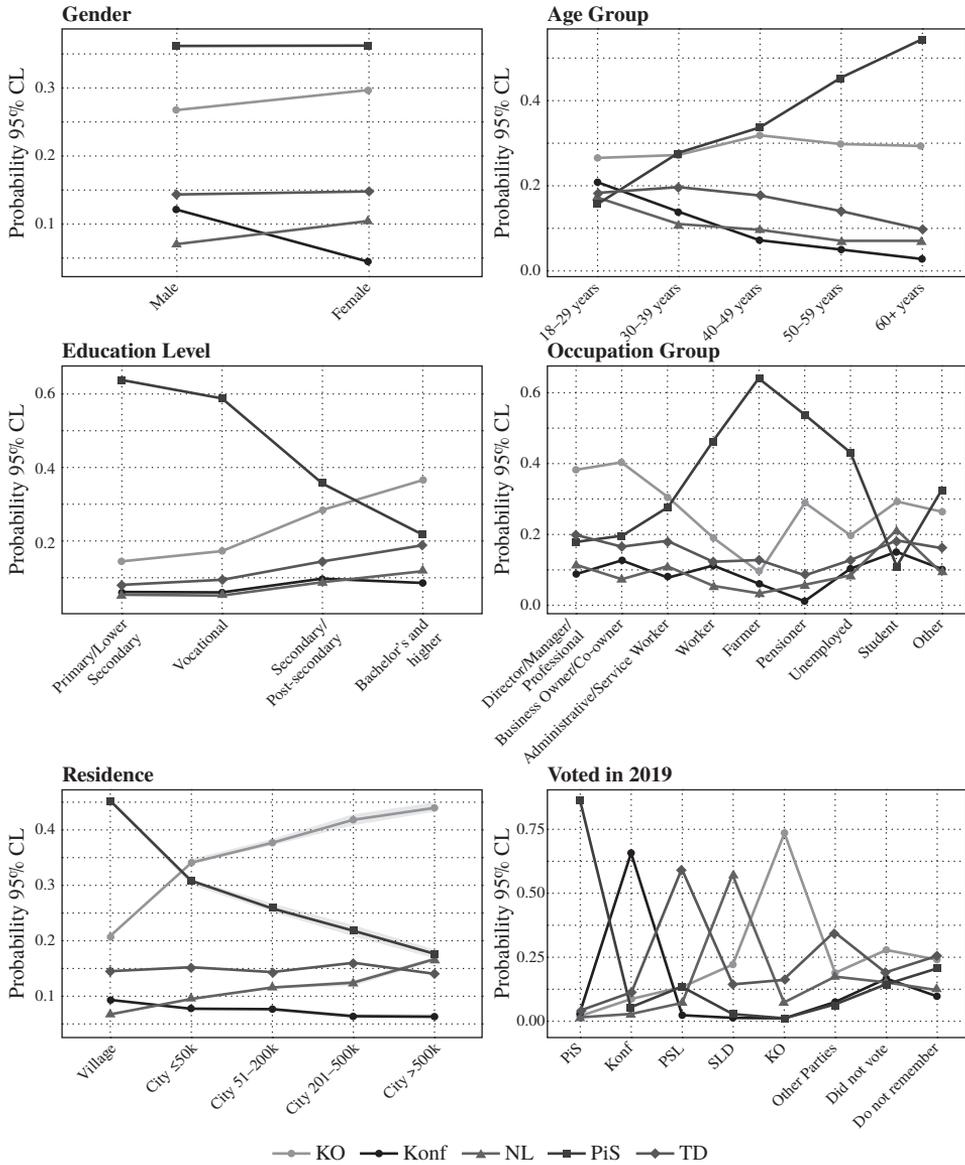
Note: see Table 1 for a table version of this figure.

Conclusions

This study offers a novel contribution to the analysis of electoral behavior in Poland by applying advanced statistical modelling to high-quality exit poll data from the 2023

parliamentary elections. Drawing on a large, representative IPSOS dataset, we employed a multinomial logistic regression model to examine how core sociodemographic variables (age, gender, education, occupational status, and place of residence) affect voting choice. Unlike traditional bivariate approaches, our model estimates the net effect of each independent variable, holding all others constant. As a result, it provides deeper, more reliable insight into the structural cleavages that continue to shape political alignments in contemporary Poland.

Our findings confirm the enduring explanatory power of sociodemographic variables. The effects of age, education, and urbanity are especially strong and consistent: voters who are younger, better-educated, or urban are significantly more likely to support KO, NL, and, among young men, Konfederacja, whereas voters who are older, less educated, or rural remain the core of PiS's electorate. While these cleavages are well-known in political science, our analysis provides stronger empirical grounding by showing that these relationships persist even when estimated simultaneously, thereby reflecting their net effects.

Furthermore, by comparing models with and without consideration of prior voting choice, the analysis demonstrates that while electoral continuity explains a considerable share of current voting patterns, it does not fully account for the influence of sociodemographic structure. In other words, past voting choices strengthen predictions but do not erase underlying social determinants. This finding highlights the coexistence of short-term partisan loyalty and long-term structural cleavages, both of which continue to affect electoral competition in Poland's evolving political landscape.

These findings take on additional meaning when considered alongside how electoral patterns are typically represented in public discourse and the media. Compared to Polish media commentary on the 2023 parliamentary elections, our multivariate results allow for a more precise reassessment (see Table 2). First, while coverage has emphasized gendered differences, our model indicates no meaningful male–female differences in support for either PiS or KO overall, tempering exit poll breakdowns.[3] Second, compared to the 2023 exit poll, which had shown PiS leading KO only among voters aged 50 and above, the predicted probabilities indicate that PiS is already outpacing KO among those aged 30 and above.[4] Third, among the youngest voters (18–29), the exit poll cross-tabs showed a near three-way tie between Third Way, The Left, and Konfederacja.

In contrast, our model shows Konfederacja clearly winning second place in this cohort after adjustment. Fourth, by place of residence, the exit poll showed a virtual dead heat between KO and PiS in towns of fewer than 50,000 residents (34.2% vs. 34.3%). At the same time, our predicted probabilities indicate that KO is already leading in the smallest urban tier.[5] Finally, in the largest cities (500k+), where exit-poll results suggested KO's overwhelming dominance, our model confirms KO's clear lead but shows The Left closing in on PiS (16.2% vs. 17.5%), in contrast to the exit poll figures (14.5% vs. 21.1%). This suggests that some headline urban narratives do not hold up to multivariate testing.

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[3] https://wydarzenia.interia.pl/wybory/parlamentarne/news-wyniki-late-poll-jak-glosowano-ze-wzgledu-na-wiek-i-wyksztal,nId,7090497 (November 4, 2025)

[4] https://www.pap.pl/aktualnosci/na-kogo-glosowali-mlodzi-wyborcy-sondaz-ipsos (November 4, 2025)

[5] https://tvn24.pl/polska/wybory-2023-jak-glosowali-mieszkancy-miast-wybory-do-sejmu-i-senatu-st7392629 (November 4, 2025)

Table 2

**Predicted probabilities (Model 1) and observed frequencies (exit poll cross-tabs) of voting
by key sociodemographic variables**

	Predicted probabilities					Observed frequencies				
	PiS	KO	TD	NL	Konf	PIS	KO	TD	NL	Konf
Gender										
Male	36.1	26.9	14.4	6.9	11.9	36.3	29.4	13.9	6.8	10.2
Female	36.1	30.1	14.8	10.2	4.4	35.9	32.5	14.1	10.1	3.7
Age Group										
18–29 years	14.8	25.7	17.5	16.4	19.9	14.4	27.6	17.9	17.4	17.8
30–39 years	26.7	26.4	18.8	9.6	13.0	25.7	28.8	18.3	10.4	11.8
40–49 years	32.8	31.6	16.9	8.2	5.8	31.6	34.5	16.5	8.1	5.2
50–59 years	44.4	29.6	13.4	5.5	3.6	43.7	32.3	12.9	5.1	3.2
60+ years	53.4	29.1	8.9	5.5	1.3	52.8	31.0	8.2	5.2	1.1
Eduction Level										
Primary/Lower Secondary	63.5	13.9	7.9	5.0	5.7	62.6	15.4	7.7	4.7	6.1
Vocational	58.7	17.3	9.5	4.9	5.6	61.5	18.1	8.3	4.2	4.6
Secondary/ Post-secondary	35.5	28.3	14.2	8.5	9.2	37.7	29.9	13.0	8.1	7.7
Bachelor's and higher	21.1	36.9	18.7	11.3	8.2	22.2	38.6	17.8	11.1	6.8
Occupation Group										
Director/Manager/Professional	17.9	38.2	19.8	11.2	8.9	18.4	40.4	19.2	11.3	7.3
Business Owner/Co-owner	19.5	40.2	16.4	7.5	12.7	20.3	42.2	15.9	7.4	10.9
Administrative/Service Worker	27.6	30.5	18.0	11.1	8.0	29.2	31.6	17.2	10.7	7.1
Farmer	63.6	9.6	12.8	3.3	6.2	66.6	9.5	11.5	3.0	5.3
Worker	46.3	19.0	12.3	5.5	11.2	49.6	19.8	11.1	5.1	9.6
Student	11.1	29.3	18.3	21.2	15.1	11.0	31.0	18.6	21.6	13.4
Unemployed	43.0	19.7	12.6	8.5	10.1	45.2	21.4	11.8	7.7	9.0
Pensioner	53.7	28.8	8.7	5.9	1.3	53.4	30.6	7.8	5.5	1.1
Other	32.6	26.2	16.2	9.3	10.1	34.7	27.4	15.8	8.9	8.5
Residence										
Village	44.7	21.0	14.5	6.5	8.8	47.6	21.2	13.4	5.9	7.8
City ≤ 50k	29.9	34.4	15.1	9.5	7.4	33.7	33.4	14.7	8.3	6.5
City 51–200k	25.6	37.9	14.3	11.2	7.2	29.7	36.7	13.8	9.9	6.4
City 201–500k	21.5	41.9	15.8	11.8	6.0	23.9	41.4	15.8	10.7	5.4
City > 500k	17.5	43.9	14.1	16.2	5.9	21.1	42.9	14.0	14.5	5.5

Moreover, while the analysis emphasizes sociodemographic effects, the findings should be interpreted in the context of Poland's history. The enduring social and cultural differences associated with the former partition borders were well documented in earlier scholarship (Marcinkiewicz 2018; Zagórski and Markowski 2021; Wenzel et al. 2024).

However, the principal value of our work lies not in simply replicating known patterns, but in offering three distinct contributions to the literature. First, to our knowledge, this is the first academic application of exit poll data in Poland that extends beyond descriptive use. Exit polls are typically cited in media coverage or post-election commentary to summarize headline results. We demonstrate that these data can serve a much richer analytical purpose. By applying multivariate techniques to IPSOS data, we treat exit polls not just as journalistic tools but as legitimate sources of empirical political research, capable

of generating theoretical insights. Exit polls offer high response rates, precise recall, and real-time accuracy—advantages rarely matched by pre- or post-election surveys.

Second, we provide a robustness check for widely circulated (just after the election day) bivariate findings. Media and polling firms often present two-variable tables (e.g., support for party X by age or education) that fail to account for confounding factors. Our model clarifies which of these relationships hold under control and which are artefacts of overlapping influences. For instance, the gender gap in support for Nowa Lewica and Konfederacja remains significant when controlling for age, education, and occupation. Meanwhile, other gaps weaken, revealing their more ambiguous (or maybe even spurious) nature.

Third, we provide a potential reference framework for future studies on the sociological foundations of electoral behavior in Poland. Our model offers a comprehensive, replicable framework for analyzing voting choice using social structure variables. The clarity of our model allows future scholars to benchmark their findings against ours or to test for continuity and change over time. In this sense, our paper contributes not only to the body of substantive knowledge but also to methodological standardization in the study of Polish political behavior.

Our findings have important implications for political practice. As Poland's party system remains relatively stable in institutional terms but fragmented in voter bases, understanding who votes for whom (and why) is essential. The persistence of deep, structural cleavages means that political parties must develop strategies tailored to distinct social groups. The rise of Konfederacja among young men and entrepreneurs suggests a realignment of the radical right. At the same time, Trzecia Droga's struggle to find a consistent electorate illustrates the difficulty of centrist positioning in a polarized environment. Progressive parties, such as NL, are gaining support among students and women, while KO consolidates its hold on the liberal and urban vote. PiS remains dominant among older, rural, and less-educated segments of the population.

However, several limitations of this study should be acknowledged. First, the analysis is based on aggregate exit poll data, which does not allow for spatial modelling. As a result, the paper focuses on individual-level sociodemographic effects and cannot directly account for historical legacies, such as the influence of the former partition borders. Second, while the exit poll provides robust measurement of demographic correlates, it offers limited insight into attitudinal and psychological factors that may mediate voting behavior, such as values or ideology. Third, the cross-sectional design captures only a single electoral moment, limiting our ability to trace long-term dynamics or causal change. These constraints, however, stem from the study's focus on the structural foundations of contemporary party support.

Ultimately, this study suggests promising avenues for future research. The inclusion of attitudinal or behavioral variables, such as political efficacy, issue salience, or trust in institutions, could enrich our understanding of how structural predispositions translate into action. Similarly, future studies could extend this approach by linking exit poll data to spatial indicators or historical administrative boundaries, thereby enabling a systematic test of how these legacies interact with current structural determinants of voting behavior.

In conclusion, this paper advances both the empirical study of Polish politics and the methodological use of exit poll data. It confirms the relevance of structural cleavages

while introducing new standards for robustness, precision, and interpretability. As electoral research continues to evolve, our model provides a solid foundation for future analyses in Poland and comparable European democracies.

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