4 For Whom the Polls Toll?

Voter Turnout in the 2022 Elections[1]

Nir Atmor, Chen Friedberg and Liran Harsgor

"What will voter turnout be like this time?" is a question that garners attention in every election campaign in the media and in the public discourse. According to prevailing views, high participation rates in elections indicate a democracy's resilience, whereas low turnout may signal a lack of trust in the system, often interpreted as a marker of a legitimacy crisis and the weakness of representative democracy (Blais, 2000; Birch, 2010). Political actors attribute great significance to voter turnout, for their own reasons. Parties encourage voter participation to win elections in the hope of forming a legitimate government post-election. High voter turnout is perceived as a guarantee of a party's success, while a low show may lead to defeat.

Against this backdrop, and prior to the 2022 elections, the call by the right-wing journalist Shimon Riklin to the "idle Likud voters in development towns" to vote (Levinson, 2022) stood out. His concern was not necessarily a low countrywide turnout; apparently neither the legitimacy of the results nor the undermining of democratic foundations worried him. His concern stemmed from low interest in what are termed "Likud strongholds" or the political right's "base." If this public on the political right does not vote in large numbers, a right-wing government cannot be formed. Such statements, prevalent in public discourse, raise questions about the differences in voter turnout across various regions in Israel, especially in light of participation disparities between the periphery and the center. When examining these issues, we must first define "periphery" – whether it is geographical, economic, cultural or something else, and how each of these variables might influence election-day turnout. In this context, it is crucial to consider the unique character of Israel's periphery.

This research, therefore, focuses on voting in the geographical periphery, and the core questions it addresses are: (1) What are the differences between voter turnout in the periphery and the center in the 2022 elections? (2) What are the factors leading to those differences? (3) Did the disparities increase during the cycle of five elections that took place between 2019 and 2022? To answer these questions, we define several variables characterizing the periphery in Israel and examine the relationship between them at the locality level and vis-à-vis turnout. Our dataset includes all 1,215 localities in Israel (Jewish and Arab) where polling stations were set up. This study is the first of its kind in that it incorporates data on "double-envelope votes"[2] once allocated to a specific locality. This information was obtained

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after a petition to the Central Elections Committee (CEC), making the findings of this study the most accurate in terms of estimating the impact of various variables on voter turnout in every Israeli locality.

The article is structured as follows: Parts 4.1 and 4.2 discuss the literature on the differences in voter turnout between the periphery and the center, focusing on characteristics of the periphery and their unique relationship to voting. Then, in part 4.3, we look closer at those characteristics and present the research hypotheses regarding how they might influence voter turnout in the periphery compared to the center. Part 4.4. outlines the data, variable definitions and research methodology, while the part 4.5 presents our findings regarding the differences in the periphery-center turnout in the 2022 elections specifically, and also considers voter turnout in the 2019–2022 series of elections. The final part, 4.6, offers explanations for the findings and our conclusions.

4.1 Periphery, Center and Electoral Participation

The term "periphery" encompasses multiple definitions, but generally, peripheral regions are defined based on their distance from the center, where the majority of a country's population resides and where its principal economic activity takes place (Kühn, 2015). Location can have significant social and economic implications: in most cases, these are remote and distant areas, rural and sparsely populated, with basic conditions, lacking in infrastructure and advancement (Rokkan and Urwin, 1982; Wellhofer, 1988). However, the nature of the periphery varies between countries and is context-dependent. This section discusses the general characteristics of the periphery and their relation to electoral participation.

What factors might lead to differences in voter turnout between the center and the periphery? One consistent finding in the literature is that a higher socio-economic status and a higher level of education increase the likelihood of an individual to participate in elections (Verba and Brady, 1995). The explanation given is that individuals from lower social classes, preoccupied with daily survival, have less time for political engagement compared to those from higher social classes (Gosnell, 1952). Similarly (and complementarily), people with higher education tend to participate in elections more than those without, as they possess a greater sense of civic duty and/or higher political awareness of the potential value of their vote (Blais, 2000; Nie et al., 1996). The conclusion derived is that at a macro level, geographical areas with a lower socio-economic population tend to have lower voter turnout compared to areas with higher socio-economic populations.

The literature addressing variations in voter turnout across different geographical units, from the locality level through to the regional and country levels, provides empirical support for this hypothesis. For instance, a study on the 1992 British elections found higher participation rates in economically established and affluent districts compared to economically weaker ones, as voters in the latter were less confident in their ability to influence election outcomes compared to those in the former (Pattie and Johnston, 1998). Another study found significant variations in voter turnout among the 50 states of the USA. The researchers showed

that electoral participation was higher when a high percentage of the population had a high school diploma at least; a higher median family income; a high percentage of individuals aged 65 and over; a high rate of women's participation in the workforce. Participation was lower in states with high unemployment and a high percentage of Hispanics (Cebula and Toma, 2006). Further research on the 2014 midterm congressional elections by the same researchers reached similar conclusions (Cebula, Payne and Saltz, 2017). In comparative research between countries, Norris (2002) found that voter turnout is significantly influenced by a country's socio-economic development, with modernization processes contributing to higher turnout. Another US study showed that higher-income areas exhibit greater participation in elections than their economically weaker counterparts (Cho and Gimple, 2010).

In addition to being characterized as a weaker segment of the population, residents of peripheral areas may also feel alienated from the political center and left behind. These feelings are amplified against the backdrop of changes in Israel's one-time welfare state structure, from which the periphery suffers more than the center (Wellhofer, 1988). However, in the periphery, there may actually be countervailing pressures towards mobilization for voting. The environment in which residents' daily lives are conducted affects who they talk to, with whom they associate in local organizations or to promote political goals as well as their community spirit and involvement in local politics (Taylor and Johnston, 1979; Burbank, 1995). The periphery tends to have more homogeneous communities, which fosters a sense of belonging. Indeed, Campbell found that small and homogeneous communities exhibit a stronger sense of civic duty and political participation than larger and heterogeneous communities (Campbell, 2006). Other studies too show that participation in local social organizations can encourage voting, as these organizations recruit for activity and maintain their members' political participation (Verba and Nie, 1972). Often, such groups have a religious affiliation, so the traditionally conservative nature of the periphery can also lead to political mobilization through participation in religious ceremonies and activities (Putnam, 2000).

Furthermore, in some countries, geographically concentrated minority groups can be found outside the center. These can be ethnic, religious or national minorities. The issue of political participation among minorities is complex (Geys, 2006). Research indicates that localities characterized by high ethnic homogeneity tend to show a greater propensity for political participation due to the presence of stronger social solidarity compared to localities marked by high ethnic heterogeneity (Cohen, 1982; Costa and Kahn, 2003). Studies examining electoral participation among minorities, such as African Americans in the US, show that their participation tends to be higher the greater their concentration within the population and lower when the community is small (Oberholzer-Gee and Waldfogel, 2001). In regions with national minorities like Quebec (Canada) and Catalonia (Spain), it was found that those identifying with the national identity rather than the minority identity are more likely to vote due to a sense of civic duty (Lago et al., 2018). In Britain, conversely, election participation rates tend to be lower in districts with a high proportion of minorities (Denver and Johns, 2021). Given these complex

findings, it is necessary to look closer at the political characteristics of minority groups found in the periphery of each country in order to speculate about their expected turnout.

In summary, many factors can lead to differences between peripheral and central localities in voter turnout. First, peripheral localities may be characterized by a high proportion of residents with a low socio-economic status and lower levels of education, and accordingly may participate less compared to localities with a wealthier, better-educated population. Second, residents of geographically remote localities may harbor feelings of alienation and detachment from the political center and the political system as a whole, which can lead to lower turnout compared to the center. Third, localities in the periphery tend to be smaller, and therefore more homogeneous and community-oriented, which may encourage political participation. This mobilization can also be strengthened by the religious nature of the community, which often recruits its members to participate through religious institutions. Fourth, residents of localities populated by an ethno-national minority group may feel alienated towards the national political system, which primarily represents the majority, and therefore may abstain from voting.

4.2 Differences between the Periphery and the Center in Electoral Participation in Israel

The geographical periphery of Israel is diverse in terms of the size of its localities and their religious, ethnic and national characteristics. As noted above, these characteristics can have varying effects on voter turnout at the locality level. To understand how these effects might manifest, we will now describe some of the types of localities that comprise the Israeli periphery and their particular characteristics.

In Israel, the periphery is synonymous with development towns. Established in the 1950s as part of a government policy for the geographical dispersion of the fledgling state population, these towns were primarily filled with new immigrants from North African countries. The low quality of construction, limited employment opportunities and educational disparities created challenging conditions for their socio-economic development, turning them into a "social periphery" as well, suffering from alienation and discrimination by the political center (Adler et al., 2005). All this has contributed over the years to low voter turnout (Atmor and Friedberg, 2015).

But that is not the whole story: in addition to development towns, the periphery is dotted with kibbutzim and moshavim under the jurisdiction of regional councils. Some were founded before and some after the state's establishment. These rural entities are small and have a predominantly Ashkenazi Jewish population. These are cohesive and closed communities, especially the kibbutzim, and socio-economically, they belong to the medium-high clusters (80% of kibbutz residents live in localities from cluster 6 or higher, according to the Central Bureau of Statistics). One can expect high voter turnout in such places.

Arab towns and villages constitute another type of locality found in the geographical – and social – periphery. Mostly situated far from the country's center,

they typically suffer from inferior governmental investment and significant delay in the development of political consciousness and entrepreneurship (Tzfadia and Gigi, 2022; Tzfadia and Yacobi, 2011). They vary in size and differ in terms of religious and ethnic identity – Bedouin, Druze, etc. This chapter will not delve into their unique characteristics but will focus on the common feature of belonging to a national minority in contrast to the Jewish majority. Voter turnout for the Knesset in Arab localities plummeted in the early 2000s, although it tends to be higher in local elections (Rosenthal, Zubida and Nachmias, 2018).

Another type of locality in the periphery is dominated by the ultra-Orthodox. Despite their generally poor economic condition, ultra-Orthodox enclaves are characterized by high voter turnout as they are mobilized to vote for their own sector's parties (Doron and Kook, 1999; Kook et al., 1998).

The last distinct type of locality distant from the center includes the Jewish settlements of Judea and Samaria. Many of them (but not all) are characterized by a nationalist religious population; they tend to be small and homogeneous communities, which generally boosts voting.

4.3 Research Hypotheses

This chapter aims to explain the variance in voter turnout in the 2022 elections between the periphery and the center at the locality (i.e., aggregate) level by estimating the marginal effect of key variables: location, socio-economic status, locality size, nationality (Jewish/Arab), proportion of ultra-Orthodox in the locality, development towns, kibbutzim and Jewish settlements in Judea and Samaria. We will now describe the research hypotheses and the theoretical rationale behind them for each of the explanatory variables.

The first variable is the simple geographical element: the distance of a locality from the center. The literature reviewed earlier points to the sense of remoteness of these localities from the political power center, which in certain cases affects their citizens' motivation to vote. Atmor and Friedberg (2015; 2016) found that such a relationship exists in Israel, with a correlation between the peripherality index of a local authority and its voter turnout where the closer a locality is to the center, the higher its political participation. In this study, *we hypothesize that the more geographically distant a locality is from the country's center, the lower its voter turnout will be.*

The second variable is the socio-economic status of the locality, which concerns the social aspect of the periphery, not just its geographical aspect. Studies conducted in Israel showed that localities with lower-income earners had significantly lower participation rates than those with a higher income, and the decrease in participation rates exacerbates as the socio-economic ranking declines (Afriat and Dahan, 2010; Atmor and Friedberg, 2015). Accordingly, *we hypothesize that the higher the socio-economic ranking of a locality, the higher voter turnout will be.*

The third variable is the size of the locality. Localities far from the center can be very small, medium or very large (such as the cities Be'er Sheva and Haifa), and size, as seen, can be significant in boosting voting in elections. Some studies show

that, at least in municipal elections, the size of the local authority affects participation rates: the larger the number of members on a local council (i.e., the larger the local authority), the lower the voter turnout for the council (Brichta, 2005). The accepted explanation for this is voter apathy, which increases as the local authority grows larger. In larger localities, the average resident is more anonymous, believes his political influence is diminished and therefore is less inclined towards political participation in general and in elections in particular (Horkin, Katz and Mevorach, 1998). Accordingly, *we hypothesize that the smaller the locality, the higher the voter turnout will be.*

Four additional variables relate to the specific nature of localities in the Israeli periphery: development towns, kibbutzim, localities with a high proportion of ultra-Orthodox and Jewish settlements in Judea and Samaria. As described above, the variable "development town" refers to localities composed of populations of oriental Jews (or immigrants from North Africa and Asia and the former Soviet Union), considered both geographically and socially peripheral, and we hypothesize that the political character of a development town will be reflected beyond its socio-economic status, more starkly highlighting the sense of distance and alienation from the political power center (Yiftachel and Tzfadia, 2008). Accordingly, *we hypothesize that in development towns, voter turnout in elections will be lower.* Conversely, we hypothesize that on kibbutzim, composed of a small, homogeneous, veteran and predominantly Ashkenazi population, residents will have a sense of ideological and political involvement. Therefore, *we hypothesize that kibbutzim will have higher voter turnout in elections than towns.*

The next social variable we examine is the proportion of ultra-Orthodox in the locality (Jewish localities only). The political behavior patterns in this sector are characterized by high involvement and commitment to *halacha* (Jewish religious law) and the rabbinical authorities of the differing orthodox streams. Thus, voting in elections is largely done in fulfillment of rabbinical instructions to do so to strengthen the world of Torah and to advance clear sectoral interests (Friedman, 1991). *We thus hypothesize that the higher the proportion of ultra-Orthodox in a locality, the higher voter turnout will be.* Another complementary variable is whether the locality is situated in the Judea and Samaria region. *We hypothesize that in Jewish settlements within the Judea and Samaria area, turnout will be higher than in other areas.* The reason for this pertains to their ideological nature, religious identity and the nature of political mobilization in these settlements.

The last variable concerns Arab localities. Rudnitzky (2022) points to three central factors that reduce the participation of Israeli Arabs in Knesset elections: a lack of trust in state institutions, the weakening of parties in the Arab street and the expansion of the phenomenon of boycotting participation in Knesset elections. Ben-Bassat and Dahan (2012) demonstrated that the clannish nature of Arab society has a decisive impact on voting in elections as a mobilizing and recruiting factor. Therefore, participation rates in local elections, in which clannish affiliation has a significant weight compared to Knesset elections, are much higher in comparison to Knesset elections. Accordingly, *we hypothesize that in Arab localities, participation rates will be lower than in Jewish localities.*

4.4 Data, Variable Definitions and Methodology

This study is ecological and based on aggregate data organized according to geographical units, namely all localities in Israel that had at least one polling station in the 2022 elections. The ecological approach has been subject to considerable criticism, mainly due to its inclusiveness and tendency to overemphasize the geographical dimension (King, 1997). Specifically, the risk of "ecological fallacy" is often cited, i.e., a situation in which the researcher slides from conclusions at the aggregate level to conclusions concerning the individual. For this reason, results should be approached with caution. In other words, it cannot be conclusively inferred that aggregate-level results are also valid at the individual level; however, similar difficulties exist regarding individual-level results obtained from surveys, especially from the analysis and segmentation of different groups (King, 1997).

Still, the ecological approach has several advantages, especially concerning the topic at hand: the approach is free from biases, such as the tendency to examine participation rates at the national level, while ignoring differences between groups from different geographical frameworks, including participation rates at the locality level. The approach focuses on official election results, namely the actual number of voters. It does not rely on surveys, which can be unreliable and misleading (in Israel as elsewhere). Finally, ecological research illuminates additional and complementary angles of election participation: the characteristics of local authorities and voting trends within them. Those are not available when analyzing participation at the individual level.

The study population comprises all 1,215 localities in Israel that had at least one polling station in the 25th Knesset elections. In other words, we include 100% of the eligible voters in Israel and 100% of actual voters. The dependent variable at the heart of the research is voter turnout at the locality level. The calculation in each locality is based on three indicators: (1) actual voter turnout at all polling stations within the locality's municipal boundaries; (2) the total number of eligible voters in that/those polling station(s); (3) the number of double-envelope votes in each locality, as received from the Central Elections Committee (for details on the use of these special votes, see section 4.4.1).

4.4.1 Independent Variables

The location of the townships and cities will be examined using the peripherality index updated and published by the Israel Central Bureau of Statistics (CBS) in 2019 (CBS, 2019a).[3] The index classifies local authorities in Israel according to their proximity to the Tel Aviv district borders, where the country's main economic and business activities take place. It has 10 values, whereby 1 indicates a very peripheral local authority and 10 indicates a very central local authority. For example, the city of Eilat receives a value of 1 on the index, Kiryat Shmona receives 2, while Ramat Gan, Givatayim and Tel Aviv receive a value of 10.

We include another CBS index in the analysis: the socio-economic cluster. This index classifies all localities based on their strength in areas such as income, employment, education, etc. (CBS, 2019b). The cluster spans a scale from 1 to 10,

such that localities like Beitar Illit or Modi'in Illit are ranked in the lowest cluster, with a value of 1, and Kfar Shmaryahu, Savyon and Omer are in the highest cluster, with a 10.[4] The peripherality index and the socio-economic cluster index differ from each other. The former deals with the geographical concept of "center" and "periphery," while the latter deals with a locality's socio-economic status. For example, there are localities in the geographical periphery with excellent economic conditions (Omer or Lehavim in the south, Kfar Vradim in the north) and, conversely, some localities in the center have poor economic conditions (Lod, Ramle, Bnei Brak). Although there is a relationship between the two indices, the correlation (according to Spearman's coefficient) between them is not particularly high ($r = 0.291$, $p < 0.001$), meaning the indices are related but not identical.

Six additional independent variables are central to the research: (1) *Locality size* is measured by the number of its eligible voters, normalized by Log; (2) *The percentage of ultra-Orthodox in the locality* is based on CBS data (2020)[5] (localities without ultra-Orthodox residents or with a negligible number received a value of 0); (3) *Development towns* (a dichotomous variable, where 1=development town), based on a list that includes 40 localities, as presented by Adler et al. (2005); (4) *The kibbutz* variable (a dichotomous variable, where 1=kibbutz) includes 260 kibbutzim in Israel; (5) *Settlements in Judea and Samaria* (a dichotomous variable, where 1 = settlement in Judea and Samaria) includes a list of 124 localities in this area; (6) N*ationality* variable, measured as a dichotomous variable where 1 = Arab locality.[6]

4.5 Findings

4.5.1 Voter Turnout in the 2022 Elections and the Issue of Double Envelopes

In the 2022 elections, the national voter turnout stood at 70.6%. As reported by the CEC, this rate is based on 4,794,593 voters out of 6,788,804 eligible registered voters. This figure includes all votes in double envelopes, which numbered 462,807 in these elections, representing about 6.8% of eligible voters or 9.7% of actual voters. These votes, erroneously referred to as "soldier votes," also include votes by delegates at Israeli diplomatic missions abroad (about 3,500), prisoners in Israeli jails (15,000), patients in hospitals, wheelchair-accessible polling stations and more. Figure 4.1 presents the growth over the years of the proportion of double envelopes, which reached a peak in the 2022 elections with nearly 10% of voter ballots.

Until the 2022 elections, the information regarding the allocation of double envelopes to localities was not available on the CEC website. In studies conducted to date on voter turnout at the locality level in Israel, the votes counted in these envelopes were not included in the calculations, potentially biasing the results. In light of this, we petitioned the CEC's legal department, and by order of the committee's chairman (Supreme Court Justice Noam Sohlberg), in a precedential move, we received the number of all double envelopes registered in each of the 1,215 localities in Israel (Case No. 3/26).

A review of voter turnout with and without the double envelopes indicates significant differences. This can be seen in Table 4.1, which presents turnout in the

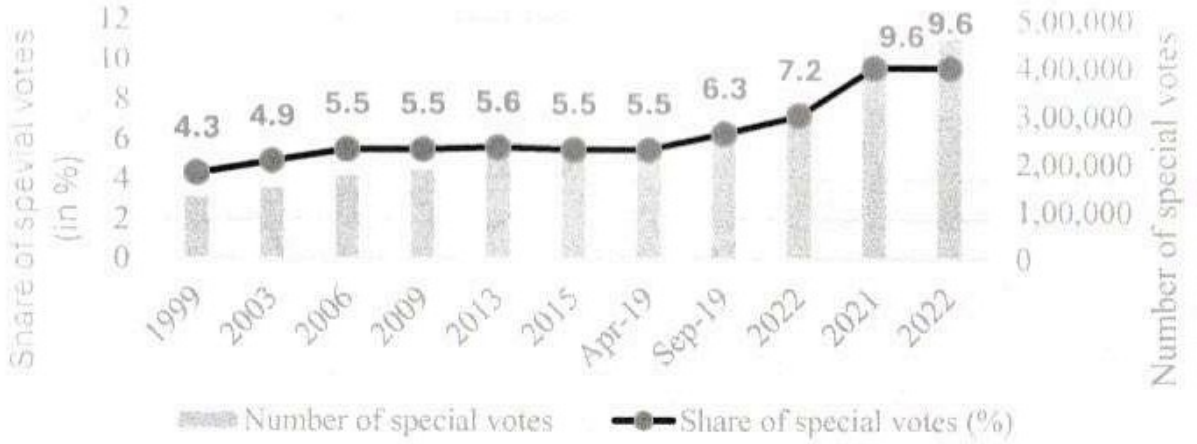

Figure 4.1 Voting with double envelopes in Israel, 1999–2022

Source: Calculations by the authors based on the CEC data, 2022; 2021; 2020; 2019a; 2019b; https://votes25.bechirot.gov.il; https://votes24.bechirot.gov.il; https://votes23.bechirot.gov.il; https://votes22.bechirot.gov.il; https://votes21.bechirot.gov.il. 1999–2015 data collected by authors.

Table 4.1 2022 election turnout by district

District	*No. of localities*	*Eligible voters*	*No. of actual voters (excluding double envelopes)*	*Voter turnout without double envelopes (%)*	*No. of double envelopes*	*Voter turnout including double envelopes (%)*
North	415	1,124,892	668,594	59.4	69,676	65.6
Haifa	91	861,522	508,090	59.0	54,100	65.3
Tel Aviv	14	1,234,619	782,810	63.4	77,631	69.7
Center	237	1,730,978	1,188,580	68.7	120,646	75.6
Jerusalem	62	577,905	365,832	63.3	45,696	71.2
South	272	991,930	616,898	62.2	70,421	69.3
Judea and Samaria	124	266,958	200,982	75.3	26,797	85.3
Total	1,215	6,788,804	4,331,786	63.8	464,967	70.6

Source: Calculations by the authors based on the CEC data, 2022. https://votes25.bechirot.gov.il/nationalresults

seven administrative districts of Israel. When counting the 69,676 double envelopes in the Northern District, for example, turnout increases from 59.4% to 65.6%. Similarly, the 120,646 double envelopes in the Central District raised the turnout from 68.7% to 75.6%.[7] The calculations in this study are based on voter turnout including the double envelopes, which gives the most accurate picture.

4.5.2 *Periphery-Center Differences in Voter Turnout: A Descriptive Overview*

Is there a difference between the turnout in Israel's periphery and center in the 2022 elections? To address this question, we present a chart of voter turnout in

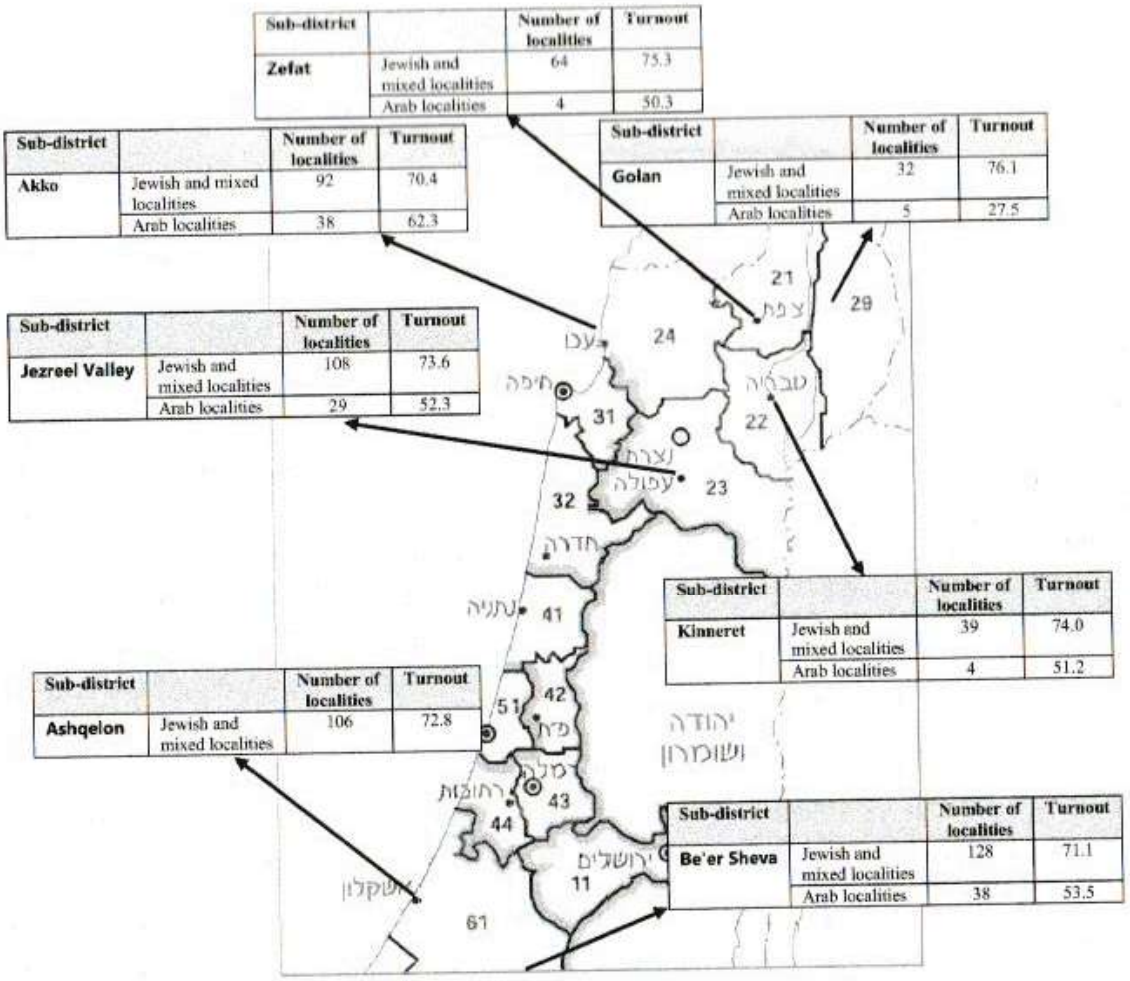

Figure 4.2 2022 Election turnout in the North and South, by sub-district

Source: Calculations by the authors based on the CEC data, 2022. Voter turnout includes the double envelopes. https://votes25.bechirot.gov.il/nationalresults.The chart was created using ArcGIS.

the periphery (see Figure 4.2). We begin with the 415 localities in the Northern District, divided into 5 sub-districts – the Golan, Jezreel Valley, Kinneret, Akko and Safed – further categorized by Jewish and mixed localities and Arab localities.[8] The data reveal that the overall turnout in the Northern District stood at 65.6%. We see that the turnout in Jewish and mixed localities in the Golan (76.1%), Jezreel Valley (73.6%), Kinneret (74.0%), Zefat (75.3%) and Akko (70.4%) sub-districts is mostly higher than the national figure (70.6%), while in Arab localities (27.5%, 52.3%, 51.2%, 50.3% and 62.3%, respectively) it is significantly lower.

In the 272 localities in the Southern District, divided into two sub-districts – Ashkelon and Be'er Sheva – and categorized by Jewish and mixed localities and Arab localities, the overall turnout was 69.3%. In the Ashkelon sub-district, it was 72.8%. In Jewish and mixed localities in the Be'er Sheva sub-district, it was 71.1%, while in Arab localities, it was 53.5%.

Table 4.2 details voter turnout according to the level of peripherality, as defined by the CBS. It is evident that the peripherality index primarily affects Arab localities, where an increase in participation rates is noticeable the closer the locality is to the center. Among Jewish and mixed localities, by contrast, there are no significant

Table 4.2 Voter turnout by peripherality index

Type of localities		*No. of localities*	*No. of eligible voters*	*No. of actual voters*	*No. of double envelopes*	*Voter turnout (%)*
1	Jewish and Mixed	16	56,731	25,209	6,172	55.3
	Arab	–	–	–	–	–
2	Jewish and Mixed	88	68,694	43,737	8,072	75.4
	Arab	7	6,918	2,476	133	37.7
3	Jewish and Mixed	292	338,651	225,457	32,979	76.3
	Arab	67	228,248	114,069	7,986	53.5
4	Jewish and Mixed	181	342,056	229,202	31,593	76.2
	Arab	39	323,689	188334	9,567	61.1
5	Jewish and Mixed	243	1,152,270	763,776	89,556	74.1
	Arab	25	281,485	134,675	6,659	50.2
6	Jewish and Mixed	127	611,352	399,229	47,320	73.0
	Arab	4	52,841	29,861	1431	59.2
7	Jewish and Mixed	71	696,837	465,675	47,631	73.7
	Arab	4	45,220	29,479	1,157	67.8
8	Jewish and Mixed	35	626,768	436,035	41,874	76.3
	Arab	–	–	–	–	–
9	Jewish and Mixed	11	118,5336	749,443	82,093	70.2
	Arab	–	–	–	–	–
10	Jewish and Mixed	5	771,708	495,129	50,744	70.7
	Arab	–	–	–	–	–
Total in Jewish and mixed localities		1,069	5,850,403	3,832,892	438,034	73.0
Total Arab localities		146	938,401	498,894	26,933	56.0

Source: Calculations by the authors based on the CEC data, 2022. https://votes25.bechirot.gov.il/nationalresults

differences in turnout between localities at different levels of peripherality. Except at peripherality level 1, the turnout in Jewish and mixed localities stands at 70% and above. At the lowest level (level 1), there are 16 localities, all Jewish and located in the Arava region. Overall turnout in the localities at this level is low (55.3%), mainly influenced by the low turnout in Eilat (53.6%).

Statistically, the correlation between the peripherality index and voter turnout in all localities (N = 1,215) is positive, weak and significant ($r = 0.160$, $p < 0.01$). Among Jewish and mixed localities alone (N = 1,069), the correlation is very weak but significant ($r = 0.076$, $p < 0.05$). Conversely, the correlation between the level of peripherality and the percentage of votes is stronger and significant ($r = 0.307$, $p < 0.01$) among Arab localities (N = 146). In summary, this table shows that the most significant differences in voter turnout are between Arab localities and Jewish and mixed localities, with the former having lower participation rates across all levels of peripherality compared to their Jewish and mixed counterparts (56% versus 73%). Distance has a much greater impact on Arab localities than on Jewish and mixed localities.

4.5.3 Periphery-Center Differences in Voter Turnout in the 2022 Elections: A Multivariate Analysis

Table 4.3 presents the correlation matrix between the independent variables and voter turnout at the locality level. The table is divided into three parts: part A presents all localities, part B focuses on Jewish and mixed localities and part C on Arab localities. It can be seen that in part A, socio-economic status and location are related to voter turnout in a positive direction, with socio-economic status having a greater impact. Regarding the following characteristics, the correlation between locality size and voter turnout is negative (the larger the locality, the lower the turnout), as is the variable for development towns, meaning development towns tend to have lower turnout compared to others. It can also be seen that the higher the concentration of ultra-Orthodox Jews in a locality, the higher the turnout. Additionally, Jewish localities in Judea and Samaria tend to have higher turnout than elsewhere. The nationality variable (as expected) has the highest coefficient, indicating that turnout in Arab localities is lower compared to Jewish and mixed localities. All these correlations are statistically significant. The "kibbutz" variable is negative but not statistically significant, meaning that in kibbutzim, voter turnout does not significantly differ from other localities.

Focusing on Jewish and mixed localities, part B shows that indeed the correlations of socio-economic status and location are positive in direction and statistically significant, but they are weaker than in part A. The "development towns" correlation is negative and stronger than among all localities in Israel, meaning that the lower turnout in development towns compared to other Jewish and mixed localities is more pronounced than when compared to all localities. As expected, Jewish localities in Judea and Samaria tend to have higher participation rates compared to other Jewish localities. Surprisingly, and contrary to our hypotheses, voter turnout in kibbutzim tends to be significantly lower compared to other Jewish localities, and ultra-Orthodox localities are no different from other Jewish localities in their turnout level (no significant correlation).

Among Arab localities (part C), socio-economic status is positively related to higher voter turnout, as well as location and locality size. In other words, the closer an Arab locality to the central region and the larger it is (in terms of population), the higher its voter turnout. The finding regarding size is the opposite of that among Jewish and mixed localities, and it is particularly interesting in light of the hypothesis that smaller, more homogeneous localities tend to have higher turnout compared to larger, more heterogeneous localities.

Table 4.4 presents a regression analysis of voter turnout in 2022 on all predictor variables under examination. This helps us estimate the marginal effect of each variable on the turnout in a locality, holding other variables constant. Models 1 and 2 provide a multivariate analysis for Jewish and mixed localities and for Arab localities separately, while Model 3 refers to all localities in Israel. Among Jewish and mixed localities (Model 1, N = 1,069), we see that the higher the socio-economic status, the higher the turnout. The coefficient of the distance variable is positive, indicating higher turnouts in the center compared to the periphery, but

Table 4.3 Correlation matrix between predictors of voter turnout and actual voter turnout

A: All localities (N = 1,215)

	1	2	3	4	5	6	7	8
1. Voter turnout								
2. Socio-Economic Status	.508**							
3. Location	.160**	.267**						
4. Locality size	−.260**	−.199**	.328**					
5. Development towns	−.074*	−.109**	.052	.437**				
6. Kibbutzim	−.005	.065*	−.189**	−.214**	−.096**			
7. Ultra-Orthodox	.068*	−.272**	.105**	.209**	.139**	−.093**		
8. Settlements in Judea and Samaria	.216**	−.105**	−.032	−.023	−.062*	−.121**	.116**	
9. Nationality	−.734**	−.599**	−.127**	.310**	−.068*	−.191**	−.066*	−.125**

B: Jewish and mixed localities (N = 1,069)

	1	2	3	4	5	6	7
1. Voter turnout	–						
2. Socio-Economic Status	.102**						
3. Location	.076*	.242**					
4. Locality Size	−.127**	−.047	.394**				
5. Development Towns	−.210**	−.196**	.045	.514**			
6. Kibbutzim	−.253**	−.068*	−.225**	−.176**	−.112**		
7. Ultra-Orthodox	.034	−.407**	.101**	.257**	.135**	−.108**	
8. Settlements in Judea & Samaria	.212**	−.236**	−.050	.018	−.071*	−.149**	.109**

(*Continued*)

Table 4.3 (Continued)

C: Arab localities (N = 146)	*1*	*2*	*3*
1. Voter turnout	–		
2. Socio-Economic Status	.296**		
3. Location	.307**	.208*	
4. Locality Size	.314**	.241**	.378**

Source: Calculations by the authors based on the CEC data, 2022. https://votes25.bechirot.gov.il/nationalresults; Central Bureau of Statistics, 2019a; 2019b; 2020; CBS File of Localities, 2021. https://www.cbs.gov.il/he/publications/doclib/2019/ishuvim/bycode2021.xlsx

*$p < 0.05$; **$p < 0.01$

Table 4.4 Multiple regressions for explaining voter turnout

	Model 1 Jewish and Mixed Localities	*Model 2 Arab Localities*	*Model 3 All Localities*
	B (S.E.)	*B (S.E.)*	*B (S.E.)*
1. Socio-Economic Status (10 = the best)	.527** (.151)	1.812* (.680)	.680** (.157)
2. Location (10 = most central)	.257 (.159)	2.22* (.965)	.250 (.169)
3. Locality Size (normalized)	−.734** (.223)	1.745* (.759)	−.205 (.223)
4. Development Town (1 = yes)	−6.292** (1.470)		−7.846** (1.577)
5. Kibbutzim (1 = yes)	−4.324** (.561)		−4.046** (.616)
6. Ultra-Orthodox (% in the locality)	.057** (.022)		.055* (.024)
7. Judea & Samaria (1 = yes)	4.910** (.752)		5.077** (.824)
8. Nationality (1=Arab)			−26.314** (1.109)
Constant	82.554** (1.602)	25.675** (5.771)	104.323** (2.150)
Adjusted R^2	.159	.164	.597
N	1069	146	1,215

Source: Calculations by the authors based on the CEC data, 2022. https://votes25.bechirot.gov.il/nationalresults, CBS 2019a, 2019b

The dependent variable: Voter turnout in the 2022 elections, by ballot boxes in the localities.

*$p < 0.05$; **$p < 0.01$

not statistically significant. This implies that when controlling for socio-economic status and the other variables in the model, distance from the center does not significantly affect turnout in the locality. The first model further reveals that when controlling for other locality characteristics in the model, voter turnout in development towns tends to be about 6% lower; in kibbutzim, it is about 4.3% lower; in Jewish localities in Judea and Samaria, voter turnout is 4.9% higher compared to other Jewish and mixed localities. The proportion of ultra-Orthodox voters in a locality positively affects turnout: for every percentage point increase in that population in a locality, the turnout increases by 0.57%. Finally, the "locality size" variable is negative and significant, indicating that larger localities have lower turnouts. Overall, the model predicts 15.7% of the variance in the 2022 election voter turnout in the Jewish and mixed localities.

In Arab localities (Model 2, N = 146), socio-economic status, location and locality size are positive and statistically significant. Unlike Jewish and mixed localities, geographic proximity to the center has a positive and significant effect on voting, even when controlling for the socio-economic status and locality size. The size

of Arab localities has the opposite effect from that in Jewish and mixed ones: the larger the township, the higher the turnout. These three variables together predict 16% of the variance in the 2022 election turnout in Arab localities.

The last model (Model 3, N = 1,215) examines all localities with polling stations in Israel in the 2022 elections. It finds that socio-economic status is positive and significant – the higher the socio-economic status of the locality, the higher the turnout. The location variable is positive but not statistically significant, and its effect is lesser compared to other variables. Also, locality size is found to be positive but not statistically significant, likely due to opposite trends in the two types of localities (Jewish and mixed versus Arab). However, several interesting findings emerge from this model: in development towns, voter turnout is significantly lower, by 7.8%, compared to all other places; in Judea and Samaria, participation rates are approximately 5.1% higher than elsewhere. Contrary to expectations, kibbutzim are identified with lower participation rates compared to other localities, by about 4%. A higher proportion of ultra-Orthodox population in a locality also has a positive and significant effect on voter turnout. Lastly, the combined model allows us to estimate the effect of the nationality variable, which has the strongest and most statistically significant effect on voting: Arab localities have a predicted lower participation rate, by 26.3%, compared to Jewish and mixed localities. These 8 variables together predict nearly 60% of the variance in the voter turnout variable in localities in Israel in the 2022 elections.

4.5.4 Periphery-Center Gaps in Voter Turnout: Trends between 2019–2022

To examine trends over time, we analyzed the voter turnout in all 1,215 Israeli localities, dividing them into 3 levels on the peripherality index: peripheral (1 to 3 on the CBS index); mid-level (4 to 6); and central localities (7 to 10 on the index). Additionally, given the considerable differences in turnout and their determinants between Jewish and Arab localities, we compared the average voter turnout according to the level of peripherality and nationality. These analyses do not include double envelopes, as they were not available for previous elections.

Figure 4.3 presents the average voter turnout according to levels of peripherality in Jewish and mixed localities and Arab localities across the five elections from 2019 to 2022. Among Jewish and mixed localities, there are almost no differences between localities situated in the country's center and those ranked in the middle of the peripherality scale, yet consistently, peripheral localities are characterized by lower voting percentages. The patterns of change over the elections are similar across all peripherality categories, but the gaps between them slightly widened. In the April 2019 elections, the center-periphery gap in average voter turnout stood at 2.5%. In September 2019, it was 3.6%. The largest gap was found in the 2022 elections, at 4.4%. Thus, among the Jewish and mixed localities, there has been a rise, albeit a modest one, in the voter turnout gap between the center and the periphery.

The graph also displays the average voter turnout in the 146 Arab localities across the 5-election cycle. As can be seen, the disparities between the three levels of peripherality are much more pronounced than in the Jewish and Mixed localities,

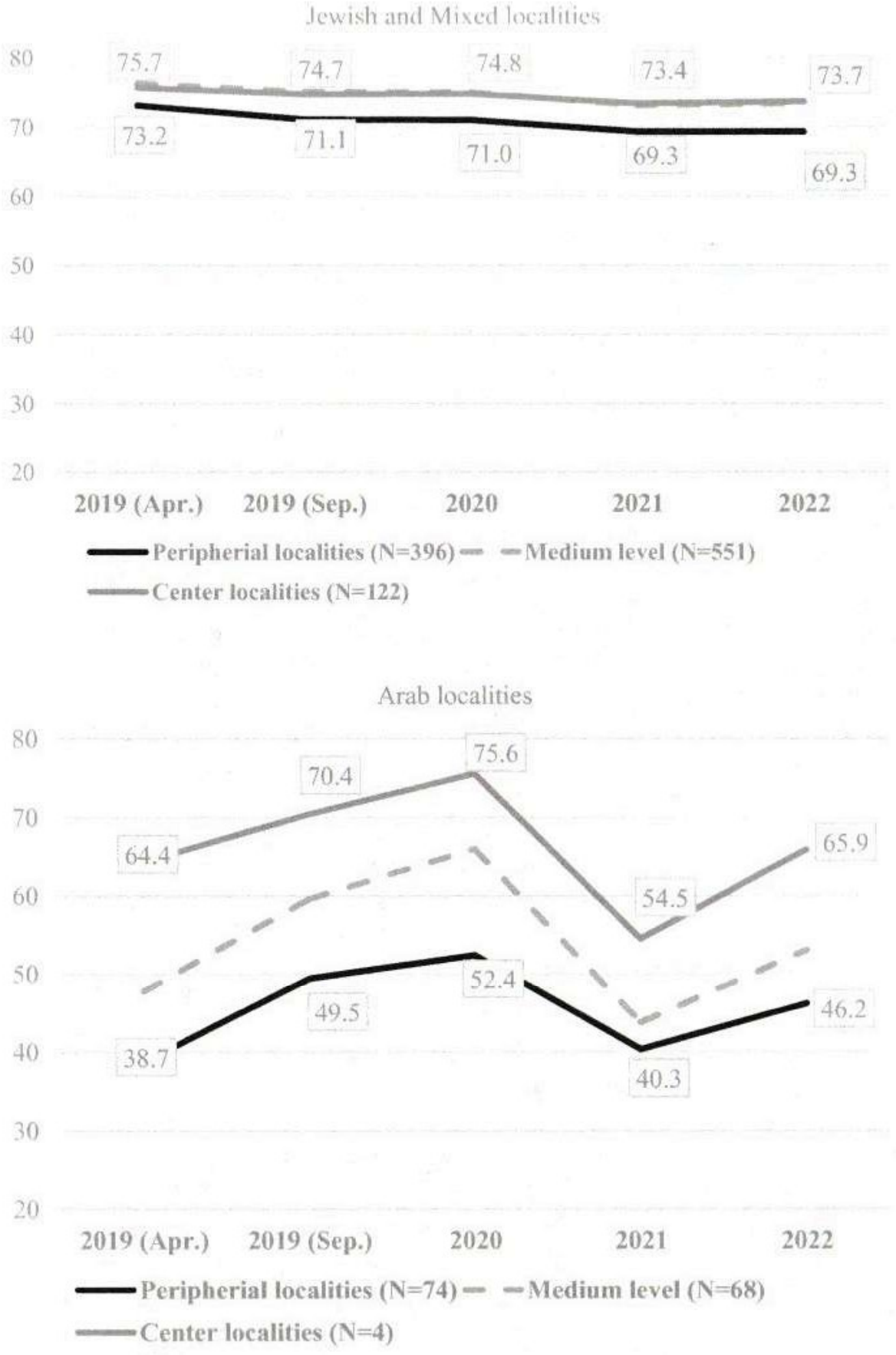

Figure 4.3 Average voter turnout, by level of peripherality

Source: Calculations by the authors based on the CEC data, 2022. https://votes25.bechirot.gov.il/nationalresults; Central Bureau of Statistics, 2019a; 2019b.

persisting across all five elections. The lowest turnout was recorded in peripheral Arab localities, ranging from 38.7% in the 2019 (April) elections to 52.4% in 2020, while the highest rates were observed in Arab localities in the central region ranging from 54.5% in 2021 to 75.6% in 2020. There is no consistent rise or fall pattern in these disparities across the five elections. Interestingly, in the April 2019 elections, the periphery-center gap in Arab localities was the largest, standing at 25.7%. The smallest gap was found in the 2021 elections (14.2%), and in the 2022 elections, it was 19.7%. In summary, among Arab localities, there are significantly larger and more substantial disparities in voter turnout between the center and the periphery compared to Jewish and mixed localities in all five elections. There is much greater variation in participation across elections than in Jewish and mixed localities, with similar fluctuations across different levels of peripherality, and no consistent rise or fall pattern in disparities over time.

4.6 Summary and Conclusions

Significant disparities exist between Israel's periphery and its center in various areas: education, health, employment, income, infrastructure and services. This study explored whether these disparities were also reflected in the participation rates in the 2022 elections. It centered around three main questions: (1) Were voter turnout rates in Israel's periphery lower in the 2022 elections compared to the center? (2) What factors contributed to those differences? (3) Did the center-periphery disparities increase during the five-election cycle between 2019 and 2022?

Regarding the first question, we found that the relationship between a locality's geographical place in the periphery versus the center and voter turnout is complex. When examining all localities in the country, the relationship is very weak. However, when analyzing this relationship separately among Jewish and mixed localities and among Arab localities, we see that location in the periphery has significant weight among Arab localities and very little among Jewish and mixed localities. Therefore, the overall voter turnout in the periphery in the 2022 elections is slightly lower than in the center, mainly due to lower participation rates among the Arab population, which predominantly resides in Israel's periphery. This finding consistently recurs in studies on voter turnout in previous elections.

Regarding the second question, our multivariate analysis shows that beyond location, socio-economic status has a positive correlation with voter turnout: the higher a locality's socio-economic status, the higher its voter turnout. This finding is consistent with previous research and applies to Jewish and mixed localities and to Arab localities alike. Another characteristic examined was locality size, and here we saw opposite effects: in Arab localities, the larger a township, the higher its voter turnout, while in Jewish and mixed localities, the relationship is negative. The latter finding aligns with the literature suggesting that smaller places tend to have higher election participation rates, indicating a specific context for these findings in Arab localities. Perhaps larger Arab localities have greater political mobilization than smaller ones.

Additional variables examining specific types of Jewish localities are also significant predictors of voter turnout: in development towns, turnout is lower even when controlling for distance and socio-economic status, indicating that deeper causes related to political alienation characterize these places. Localities with a higher proportion of ultra-Orthodox show higher turnout, as expected, as do localities in Judea and Samaria. Contrary to expectations, kibbutzim do not exhibit higher predicted voter turnout, despite being small homogeneous communities. Lastly, the analysis of all localities indicates that a locality's nationality has the highest predictive power: Arab localities have significantly lower predicted turnout compared to Jewish and mixed localities.

Regarding the third question, we observed that the periphery-center disparities in turnout, which were minor among Jewish and mixed localities in 2022 and larger among Arab localities, did not significantly change over the five-election cycle.

Our research thus indicates that, in terms of election participation, the periphery is not merely a matter of geography. In fact, for Jewish and mixed localities, it is primarily a socio-economic rather than a geographical marker, as evidenced by the development towns. This, rather than their distance from the country's center, explains their lower electoral participation. In Arab localities, however, distance has a more notable effect, though socio-economic status and size also play a role. In Arab localities, where voter turnout is significantly lower than the national average, larger, more economically established urban areas have higher participation rates in national elections compared to smaller, peripheral localities with a lower socio-economic status.

Our study was conducted at the aggregate level (locality level), but to understand these mechanisms at the individual level, future research should examine the psychological-emotional world of voters. Many residents in peripheral localities (particularly the Arabs) experience a pervasive sense of marginalization, affecting their turnout and revealing a lack of faith in their ability to change their situation through election participation. Generally, they feel the gap between themselves and their compatriots in the center, not only in distance but also in lower investment in infrastructure, education, health, job creation and more. This reality generates feelings of neglect, indifference, alienation and disaffection from politics, resulting in widespread abstention from general elections. For the Arab sector, this is compounded by a deep lack of trust in state institutions and the growing trend to boycott parliamentary elections. A more in-depth study could delve beyond the geographical angle to explore the roots of political peripherality. As our study shows, in the heterogeneous Israeli society, disparities in voter turnout depend on many factors, whose impact also differs among the diverse population groups. A deeper understanding of these factors could help the relevant actors – decision makers, practitioners and, yes, politicians – find ways to reduce the inherent disparities in participation rates in national elections.

Notes

1 We would like to thank the editors and two anonymous readers for their useful comments.
2 Special votes (known in Israel as "double-envelope votes") enable citizens (mainly Israel Defense Forces personnel, police officers, etc.), who cannot cast their ballots on election day in their default polling station, the opportunity to vote elsewhere.
3 The peripherality index was created by the CBS in 2008 at the request of the Ministry of Interior. Each locality is assigned a value in the index (which is essentially a standardized score) based on two calculations: *the Potential Accessibility Index* (which balances the proximity of the local authority to all other local authorities in the country and their population size); and *proximity to the Tel Aviv district boundary* (the distance, i.e., the shortest route by road, from the local authority to the economic and business center of Israel). The peripherality index has significant political importance as it influences the allocation of state resources, the distribution of support and funds to local authorities, eligibility for participation in educational and employment projects, and more. For criticism of the index, see Nagar-Ron, 2021.
4 This index, which pertains to 201 municipalities and local authorities, was recently calculated also for 995 localities in 54 regional councils.
5 Ultra-Orthodox in Jewish localities, 2020. https://www.cbs.gov.il/he/publications/doclib/2017/population_madaf/population_madaf_2020_12.xlsx
6 According to the CBS localities file, 2021. https://www.cbs.gov.il/he/publications/doclib/2019/ishuvim/bycode2021.xlsx
7 There is a discrepancy of some 2,300 votes between the number of external envelopes we received in the file (465,130) and the number listed on the Central Election Committee's website (462,807). After contacting the committee again, we were informed that the difference between the number of envelopes in the dataset we received and the number of votes detailed on the website is due to invalid external envelopes that were not counted as votes. That is, the CEC received the external envelopes and entered them all, but a minimal portion, less than half a percent, were not transferred for counting as they were invalidated before that stage. The voting percentage in the article, therefore, takes into account *also* those 2,300 invalid votes because we could not "isolate" them from the total. However, since we included 1,215 localities and assuming there were a few invalid votes per locality, it can be presumed that this is a negligible number with a marginal effect.
8 In the eight mixed cities – Jerusalem, Haifa, Lod, Acre, Ramla, Nof Hagalil, Ma'alot-Tarshiha and Tel Aviv-Yafo – a Jewish majority resides alongside an Arab minority. Therefore, we included the mixed localities with the Jewish localities in our analysis.

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