

Does sending ballots via post reduce costs? Negligible effect of postal voting on turnout among Finnish electorate living abroad

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ABSTRACT

Postal voting is often considered a means to enhance electoral participation by minimising the costs associated with voting. This study leverages individual-level register data for the entire electorate of Finns residing abroad who were provided the option of voting by mail in the 2019 parliamentary elections in addition to traditional in-person voting. Analysis of their voting trajectories across three parliamentary elections (2011, 2015, 2019) using such diverse approaches as descriptive statistics, interrupted time series analysis and an improved causal identification strategy revealed that the availability of postal voting was unlikely to increase electoral participation among this particular electorate despite previously low participation rates. The observed changes in turnout resembled previous elections, where only in-person voting at polling stations was available. The findings indicate that postal voting may not effectively address low turnout or participation biases.

1. Introduction

A voter's motivation to participate in elections depends mainly on four factors: political interest, a sense of duty, expected gains and estimated costs (Blais and Daoust, 2020). Some costs are direct, such as time and effort invested in the act of voting itself, whereas others are indirect, such as information acquisition about parties and candidates (Blais et al., 2019). In recent years, many electoral democracies have implemented various measures to enhance accessibility and ease participation by reducing the associated costs. These voter facilitation efforts include advance voting and absentee ballots, such as postal, online and proxy voting (Gronke et al., 2008). The facilitation instruments aim to save time and the resources required for travelling to a polling station, particularly benefiting those who must travel long distances to polling stations (Brady and McNulty, 2011; McAllister and Muller, 2018; Nemčok and Peltoniemi, 2023), enduring long queues (Martínez i Coma and Smith, 2023), the elderly (Townsend et al., 2023), voters with disabilities or health challenges (Miller and Powell, 2016; Townsend et al., 2023), or those who have other commitments on election day (Qvortrup, 2005).

While the costs associated with voting are often negligible for domestic voters (Blais et al., 2019), they present a more tangible barrier for

voters residing abroad (Umpierrez de Reguero and Finn, 2023). Factors like registration requirements, timelines and a limited number of polling stations arranged by diplomatic missions in distant cities or neighbouring countries considerably discourage voting among emigrant voters (Szulecki et al., 2022; Wass et al., 2021; Weide, 2021). The barriers can be effectively addressed via absentee ballots, such as postal voting, designed to lower participation costs in this specific context (Atsushika and Stein, 2021).

Finland joined the list of countries that actively facilitate participation among the emigrant electorate by introducing postal voting as an additional voting method in the 2019 parliamentary elections. Previously, non-resident voters could cast their ballots solely in person at specified polling stations abroad. Importantly, postal voting is exclusively available to those voting from outside Finland, while domestic voters can only vote in person, either in advance or on the election day.

Taking advantage of this variation in available voting methods, we analyse participation patterns among all eligible citizens who resided abroad during at least one parliamentary, presidential or European Parliament (EP) election held between 2011 and 2019. This period encompasses three consecutive parliamentary elections in Finland (2011, 2015, 2019). By employing various research techniques, including descriptive statistics, advanced longitudinal modelling and an improved

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identification strategy, we demonstrate that postal voting had only a negligible influence on electoral participation among Finnish non-resident citizens. Derived from official voting records and covering the entire electorate living abroad, the findings offer a stringent test and reliable depiction of the limited influence of postal voting on turnout.

Our findings contribute to three distinct fields of research. First, in line with research on *costs of voting* (Blais et al., 2019), the introduction of postal voting lowered the voting barriers for citizens residing abroad. However, it has mainly served as a convenient alternative for in-person voting instead of significantly increasing the overall turnout among a previously abstaining electorate residing abroad. The patterns observed during the 2019 parliamentary elections resembled those from the two previous elections, when postal voting was unavailable. Second, we provide new insights on postal voting as one of several available *vote facilitation instruments*, characterised alternatively as having positive effects (Bonica et al., 2021; Gronke et al., 2007, 2008; Karp and Bاندucci, 2000; Luechinger et al., 2007; McDonald et al., 2023; Richey, 2008; Southwell, 2009; Southwell and Burchett, 2000), negative effects (Bergman and Yates, 2011; Burden et al., 2014; Elul et al., 2017; Kousser and Mullin, 2007) and minimal to null effects (Gronke and Miller, 2012; Neeley and Richardson, 2001; Rallings et al., 2010; Southwell, 2009). Our findings robustly fall into the last category, indicating that postal voting holds negligible sway over turnout. Third, regarding prior studies on *turnout among emigrant voters* (Kostelka, 2017; Szulecki et al., 2022; Umpierrez de Reguero and Finn, 2023), our study demonstrates how difficult it is to mobilise this specific segment of the electorate, although the low turnout rates offer considerable space for improvement.

1.1. Postal voting as a means to reduce participation costs

In Blais and Daoust's (2020) turnout decision model, motivation to engage in elections comprises four fundamental components: (1) interest in politics, (2) sense of duty to vote (referred to as the 'D' term in the rational choice model of voting by Blais, 2000), (3) the importance attributed to the election outcome (akin to the 'B' term in Riker and Ordeshook, 1968), indicating the relative benefits associated with potential victories of different candidates and parties) and (4) costs of voting (commonly referred to as the 'C' term). Among such factors, 'one's level of interest in politics and one's feeling that voting is or is not a moral obligation are the two most powerful individual level determinants of the decision to vote or abstain' (Blais and Daoust, 2020, p. 103). Caring about the outcome of the elections and the costs, whether direct or indirect, actual or perceived (Blais et al., 2019), are also relevant but less important factors in accounting for participation.

Postal voting is specifically designed to alleviate participation costs (i.e. the 'C' term). It primarily tackles practical obstacles that need to be overcome to reach a polling station, which discourage voters if the costs are too high (Atsusaka and Stein, 2021; Gronke et al., 2008; Qvortrup, 2005). As a tool to facilitate participation, postal voting consists of several stages that may vary slightly in their practical implementation across contexts and electoral frameworks. First, a voter willing to vote by post initiates the process by submitting a request to the designated state office responsible for administering the election. Second, election administrators dispatch the voting materials (instructions, ballots and a certified envelope) to the provided address. Third, upon receipt of the materials, a voter completes the voting procedure, seals the ballot securely in the provided envelope and returns it by mail. Finally, once the election administrator has successfully received the ballot, it joins the pool of other cast votes in the assigned electoral district. Due to standard delivery times, this entire process must begin well in advance of the actual election day. The farther away a voter lives from the assigned electoral district, the sooner it should be started (Qvortrup, 2005; Weide, 2021). The timing is essential given that ballots delivered after the deadline (typically sent just before election day) are deemed invalid. Voters also need to trust the delivery process, during which time the ballots are mostly unsupervised (McAllister and Muller, 2018;

Nemčok and Peltoniemi, 2023).

While electoral commissions can adjust specific technical aspects of the process, such as identity verification, delivery schedules and provided materials, all forms of postal voting aim to facilitate participation among individuals who may find it challenging or inconvenient to cast their ballots at a polling station on election day (Atsusaka and Stein, 2021). Even though voting arrangements may have limited influence on overall turnout, they can effectively encourage participation among specific groups encountering obstacles in engaging with the electoral process (Gronke et al., 2008; Qvortrup, 2005).

One such group consists of voters living abroad, who often must make long journeys to distant polling stations managed by diplomatic missions, which are in many occasions situated in distant cities or even neighbouring countries (Brady and McNulty, 2011). Such tangible costs are one of the main reasons why voters residing abroad typically exhibit considerably low turnout rates (Kostelka, 2017; Peltoniemi et al., 2023). Yet, facilitation instruments can arguably mobilise certain segments of that electorate (Martínez i Coma and Smith, 2023), such as those who maintain strong social ties (e.g. family and social circles), economic connections (e.g. property ownership and state financial support) and cultural links (e.g. language and media consumption) to their country of origin (Ciornei and Østergaard-Nielsen, 2020; Peltoniemi et al., 2023). In addition, those who remain interested in homeland politics, have intentions to return (Umpierrez de Reguero and Finn, 2023), engage in their ethnic diasporas abroad (Gherghina and Basarabă, 2023; Kostelka, 2017) and reside in countries with solid democratic institutions (Ciornei and Østergaard-Nielsen, 2020) are more prone to vote in homeland elections.

1.2. The effect of postal voting on turnout: a review of mixed empirical evidence

While solid theoretical reasons explain why postal voting could mobilise participation particularly among specific segments of the electorate, empirical evidence has suggested a range of positive, negative and no discernible effects.

Some studies indicate substantial increases in turnout, with notable instances revealing an upsurge of eight percentage points (Bonica et al., 2021) or even ten percentage points (Richey, 2008; Southwell and Burchett, 2000) after the adoption of postal voting. In contrast, analyses conducted at county and precinct levels in California showed a significant decline in the probability of voting, down by ten points, subsequent to certain localities mandating vote-by-mail elections and eliminating other balloting methods (Bergman and Yates, 2011; Elul et al., 2017). Whereas the former studies potentially overestimated the influence of postal voting (Gronke and Miller, 2012), the negative effect observed in California possibly reflects the concentration of all-mail voting in small, rural precincts and minimal state investment in the transition to mail-in ballots (Elul et al., 2017; Kousser and Mullin, 2007). Hence, the large effects reported in those studies might be (unintended) artifacts from an unbalanced comparison due to the uneven implementation of electoral reforms.

Other studies report more modest effect sizes. For instance, Barber and Holbein (2020) observed a turnout increase of about two percentage points in the US states of Washington and Utah, while Gerber, Huber and Hill (2013) identified a positive effect ranging between two to four percentage points in Washington. A broader picture put forward by McDonald et al. (2023) shows that voter turnout consistently tends to be higher in US states where a greater proportion of ballots are cast by mail. Beyond the US context, Luechinger et al. (2007) identified an approximately four percent turnout increase when comparing Swiss cantons that introduced postal voting. A two-point increase was also reported in Norway (Bjørklund and Saglie, 2000).

With respect to the influence of postal voting availability, research suggests that postal voting might address existing biases in turnout by mobilising segments of the population that might otherwise not vote,

such as the elderly (Garnett, 2019) and disabled voters (Miller and Powell, 2016; Townsley et al., 2023).¹ Moreover, the effect on turnout is more pronounced in elections with lower participation rates (Karp and Banducci, 2000; Southwell, 2009) and could be contingent upon the saliency of elections themselves (Gronke and Miller, 2012).

However, in addition to studies identifying either positive or negative effects, a third strand has not found any discernible effects of postal voting on voter turnout. It encompasses original studies (Neeley and Richardson, 2001; Southwell, 2009), comparative analyses (Blais et al., 2007), failed replications (Gronke and Miller, 2012) and analytical literature reviews (Gronke et al., 2008). The studies collectively argue that postal voting in and of itself has minimal, if any, impact on mobilising voters. Most notably, some research suggests that even if postal voting increases turnout, it primarily does so among groups that already exhibit a higher tendency to vote, thus exacerbating existing socio-economic or ethnic biases in turnout and leading to distortions in democratic representation (Berinsky et al., 2001; Karp and Banducci, 2000; Miller and Chaturvedi, 2018; Neeley and Richardson, 2001). However, contrasting results also exist (see Miller and Powell, 2016; Townsley et al., 2023).

1.3. Implementation of postal voting in Finland: a brief contextual overview

Reflecting Finland's lengthy history of emigration, facilitating political participation among voters living abroad has been a significant political issue, especially in recent decades (see Wass et al., 2021). Throughout the twentieth century, approximately one million Finns emigrated in two distinct waves: first to the US and Canada (from 1880 onwards) and later to Sweden (1960s–1970s) for work-related reasons. Presently, more than 250,000 voters, constituting roughly six per cent of the Finnish electorate (Ministry of Justice, 2019), reside abroad. Although non-resident Finnish citizens have had the right to vote from abroad since the 1970s, voter turnout has remained low, hovering around ten per cent, prompting considerable efforts for improvement by collective interest groups representing non-resident Finns. Entities like the Finland Society and Finnish Expatriate Parliament have actively engaged with homeland authorities, advocating postal voting for nearly two decades before its implementation in 2019. Government policy programmes for non-resident Finns in 2006–2011 and 2012–2016 enhanced voting opportunities for Finns living abroad. Authorities proposed postal voting as one potential strategy to bolster turnout. In comparison to other nations, though, Finns living abroad already possessed relatively extensive political rights, as they were eligible to run for office and cast ballots at embassies and other designated facilities (Peltoniemi et al., 2023; Wass et al., 2021).

In 2019, authorities for the first time made postal voting from abroad possible in the national parliamentary elections, adopting a protocol similar to the system used in Sweden. They introduced it as a supplementary voting option, while the traditional in-person, on-site voting at polling stations organised by Finnish embassies and diplomatic missions abroad remained available. Similar to practices used in, for instance, Slovenia (see Kostelka, 2017, p. 1072), Finland distributes a notice of the right to vote (polling card) to all eligible voters via mail or electronically before elections. To vote by mail, voters living abroad must request the necessary voting documents from the Ministry of Justice's subscription service and deliver their ballots, at their own expense, to the Central Electoral Commission of the correct municipality no later than two days before the election. This means that they need to mail the ballot from the local postal office well in advance to ensure timely delivery. Additionally, two adults (not necessarily Finnish citizens) must

witness the voting process, confirming its validity by providing signatures and contact information, which accompany the sealed ballot.

In essence, the individual voter rather than the electoral authority is responsible for accurately adhering to the entire postal voting procedure (Weide, 2021). Hence, it may mitigate some tangible costs, but it also incurs considerable indirect costs concerning the voting process and the requirement for two witnesses.

2. Data and methods

Our analysis examines the individual-level turnout trajectories of over 300,000 non-resident citizens eligible to vote across three consecutive parliamentary elections held in 2011, 2015 and 2019. Using the register-based database compiled by *Statistics Finland* (upon our request), the dataset includes all eligible voters whose registered address was outside Finland during at least one of the election years between the 2011 and 2019 parliamentary elections. This set of elections includes parliamentary (2011, 2015, 2019), presidential (2012, 2018) and European Parliament (2014, 2019) elections.

One major issue in determining the effect of postal voting on turnout is to reliably identify whether the increased convenience of electoral participation activates previous abstainers (as argued by Bonica et al., 2021), or if it primarily aids those already inclined to vote (as suggested by Berinsky et al., 2001; Karp and Banducci, 2000; Neeley and Richardson, 2001). Access to individual-level records enables an investigation into the prior electoral engagement of current postal voters, identifying whether they were previously non-voters or if the adoption of postal voting merely provides a new, convenient method for those who habitually voted in person. Should the latter scenario be the case, the introduction of postal voting is unlikely to significantly influence overall electoral turnout since the electorate composition would remain comparable to that of previous elections.

By examining electoral participation across three distinct time points (2011, 2015, 2019), our analysis can employ multiple research methods simultaneously, thereby enhancing the reliability of the findings. The initial analysis involves descriptive statistics to explore overall turnout changes among eligible citizens residing abroad throughout the study period. The subsequent investigation employs an interrupted time series evaluation, making it possible to investigate whether the introduction of postal voting increased voting propensity and assess possible effect heterogeneity between previous non-voters and habitual voters. The third part of analysis leverages an improved identification strategy using mobility across the Finnish border – providing or eliminating the opportunity for postal voting in 2019. The method employs two-way fixed effects model which helps control for time-invariant variables and focuses attention on within-individual variations in voting inclination attributed to the availability of postal voting. Hence, the fixed effects models serve as a more robust identification strategy.

Given the binary nature of the dependent variable (i.e. 1 = voting, 0 = abstention), the estimates are based on linear probability models providing coefficients that represent the percentage probability of voting. However, this estimation strategy may become less reliable when predicted probabilities fall below 20 or exceed 80 per cent. Given prior research findings that reducing the costs of electoral participation may not discernibly influence individual-level turnout, we check the robustness of the findings using binomial logistic regression whenever applicable. In all cases, the results (reported in the online appendix) closely align with the findings obtained from linear probability models. Additionally, to account for the non-independence of repeated observations of the same individuals, the standard errors are clustered at the individual level. This clustering approach strengthens any inferences against the potential serial correlation of error terms.

3. Results: the negligible effect of postal voting on turnout

To introduce the empirical context for analysing Finnish

¹ However, the effects of postal voting do not seemingly alter the turnout intentions of voters with clear party preferences, thus suggesting marginal implications for parties' electoral results (Barber and Holbein, 2020).

parliamentary elections, we first examine the aggregated turnout trends observed across three parliamentary elections based on the official (aggregated) voting records provided by the Finnish Ministry of Justice (2011, 2015, 2019), a national body responsible for administering elections in Finland. Fig. 1 compares the overall electoral turnout (grey line) and the turnout levels of Finnish citizens residing in Finland (red line) and abroad (blue line). It showcases minor fluctuations in turnout over time, which were roughly consistent for all groups.

Despite the uniformity in voting methods between 2011 and 2015, there was a slight decrease of 0.5 percentage points in turnout among Finns residing abroad, mirroring a comparable 0.4 percentage point decline among voters in Finland. The introduction of postal voting as an additional method for voters living abroad in the 2019 elections coincides with a small increase in electoral participation. Turnout among voters residing abroad increased by 2.5 percentage points, while the increase was 2.0 points among voters living in Finland. At first glance, it seems feasible to attribute the 0.5 percentage point increase among voters living abroad to the introduction of postal voting, an option not available to voters residing in Finland. However, our analysis, grounded in individual-level data from the population register, challenges such a straightforward interpretation.

Another approach to assess whether postal voting increased turnout is to examine the previous electoral participation rates among those who chose to submit their ballots via post in 2019. Fig. 2 breaks down the sample of 4,613 postal voters based on their previous participation. Thirty-nine per cent of postal voters participated in 2015, while most either did not vote (57%) or were ineligible to vote (4%). A significant portion of previous abstainers among postal voters might create a misleading impression that postal voting activated voters who did not participate previously. However, a comparable overall change between those who abstained in previous elections and voted in the next one (and vice versa) is also observed between 2011 and 2015, when no additional voting method was provided to the electorate residing abroad, as displayed in Fig. A1 (in the online appendix due to space constraints). Since the influx of new voters (and the shift of previous voters to abstainers) in the 2019 elections closely resembles the trend observed between 2011 and 2015, it is not possible to attribute this pattern solely to the introduction of postal voting.

3.1. Interrupted time series: examining turnout changes over time

The panel structure of the register-based dataset makes it possible to examine the effect of postal voting as an interruption in the time series. If postal voting increases turnout, the propensity to vote in the 2019 elections should be higher than in the two previous parliamentary elections, when only in-person voting at polling stations was possible. However, Table 1 indicates that such was not the case.

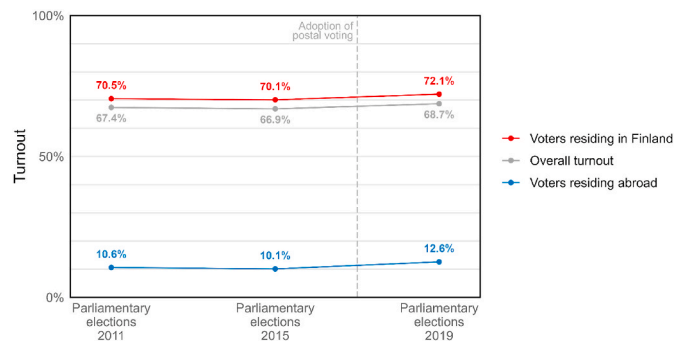


Fig. 1. Comparison of (aggregated) turnout levels in the 2011, 2015 and 2019 Finnish parliamentary elections for citizens residing in Finland and those residing abroad. Note: Turnout levels from the official voting records (Ministry of Justice, 2011, 2015, 2019).

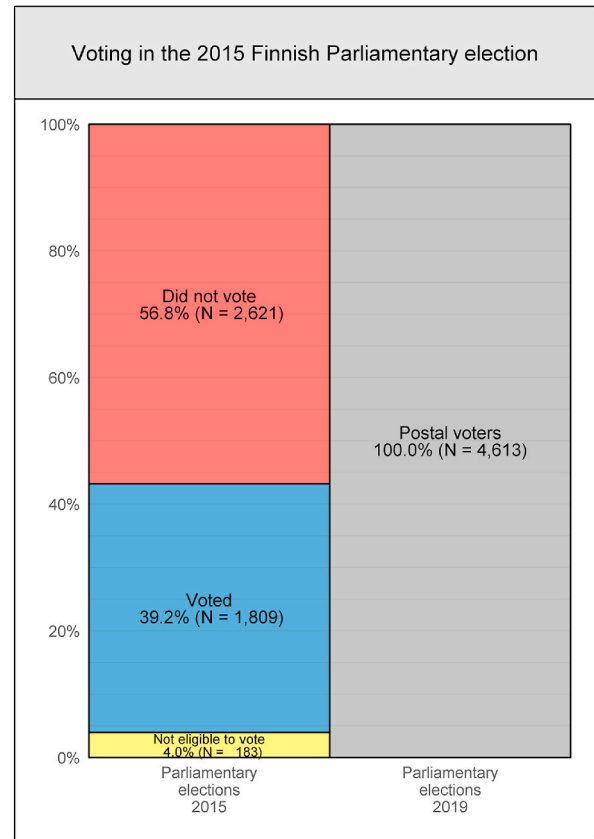


Fig. 2. Alluvial diagram: Voting methods employed in the 2015 elections by individuals who opted for postal voting in the 2019 elections.

Table 1

Interrupted time series: A comparison of voting probabilities between citizens residing abroad and those in Finland during the Finnish parliamentary elections of 2011, 2015 and 2019.

	Dependent variable: Individual turnout
	(1)
Intercept	0.0892*** (0.0006)
2015 parliamentary elections	-0.0127*** (0.0006)
2019 parliamentary elections	0.0007 (0.0007)
Voters residing in Finland	0.1914*** (0.0046)
2015 parliamentary elections × Voters residing in Finland	0.0828*** (0.0057)
2019 parliamentary elections × Voters residing in Finland	0.1579*** (0.0059)
S.E.: Clustered Observations	by individual 677,095
Unique individuals	244,515
R ²	0.04162
Adj. R ²	0.04162

Note: Thresholds for statistical significance are ***p < 0.001, **p < 0.01, *p < 0.05. A linear probability model is estimated, with coefficients representing OLS regression estimates. Individual cluster-robust standard errors are shown in parentheses. The model includes only those voters who resided abroad and those who resided in Finland during all three parliamentary elections.

The intercept suggests that the estimated turnout among citizens living abroad was 9.0 per cent in the 2011 parliamentary elections. In comparison, the voting probability slightly decreased by 1.3 percentage

points in 2015, when in-person voting continued to be the only available method for voters living abroad. After introducing postal voting as an additional method in 2019, the voting probability remained nearly the same – statistically insignificantly different compared to the 2011 elections. Fig. 3 visually represents the voting probabilities (blue line) over time, demonstrating that the participation pattern among voters residing abroad barely changed at all, especially when compared to the voters residing in Finland (red line), among whom the predicted probability of voting has been increasing over time during the whole period.

An alternative way to examine the longitudinal development in turnout involves examining effect heterogeneity, essentially assessing the probability of voting based on whether non-resident citizens voted or abstained in previous elections. Some studies suggest that while postal voting may contribute to increased overall turnout, its primary beneficiaries are groups that already exhibit a higher propensity to vote, thus potentially exacerbating existing socio-economic biases in turnout (Berinsky et al., 2001; Karp and Banducci, 2000; Neeley and Richardson, 2001).

Fig. 4 visualises the predicted probabilities of voting based on the model C1 in Table C1 in the online appendix. Due to the absence of pre-2011 electoral participation records, no probabilities can be estimated for the 2011 elections. Turning our attention to the subsequent election, the trend for previous non-voters indicates only a marginal increase (1.5 percentage points), with a further increase of 8.5 percentage points after the introduction of postal voting. Therefore, simplifying the analysis and attributing the changes to the availability of postal voting suggests that it primarily had an effect on those who had already participated in previous elections, making them even more likely to cast a ballot.

3.2. Fixed effects models: the turnout changes among voters moving across the border

The available register data contain turnout information for all three parliamentary elections, even for individuals who were registered abroad for only one election year between 2011 and 2019. This allows the analysis to leverage the fact that some voters emigrated between 2015 and 2019, thereby gaining eligibility for postal voting. Consequently, the shift in their electoral participation between the 2015 and 2019 elections can be juxtaposed with that of their counterparts who relocated abroad between 2011 and 2015, serving as a baseline since the

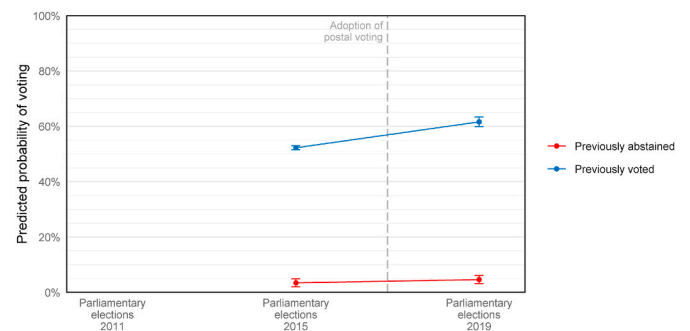


Fig. 4. Effect heterogeneity: The effect of postal voting conditional on previous voting or abstention. Note: The coefficients from Table C2 are visualised (available in the online appendix). The vertical lines represent the 95% confidence intervals.

available voting methods for them remained constant. Given that both groups moved abroad, only at different times, their profiles present an even more suitable basis for comparison.²

To conduct this comparison, we employ two-way fixed effects models, incorporating both individual and period fixed effects. These models are specified to elucidate the coefficients representing the shift in voting propensity for individuals who emigrated from Finland in contrast to those whose residency remained unchanged. The results are presented in Table 2.

The variable ‘moving abroad’ is a dummy coded as ‘1’ for individuals residing abroad during the election and ‘0’ for those residing in Finland. Thus, owing to the inclusion of two-way fixed effects, the coefficient in Model 2 reveals that the estimated probability of voting for individuals who moved abroad (regardless of the time) declines, on average, by approximately 2.8 percentage points compared to those whose residency remained constant. This outcome is consistent with the relevant

Table 2

Fixed effects (two-way) models: Examining the effect of moving abroad on the individuals’ probability to vote in the Finnish parliamentary elections.

	Dependent variable: Individual turnout	
	(2)	(3)
Moving abroad	-0.0276*** (0.0023)	0.0466*** (0.0027)
2015 parliamentary elections × moving abroad		-0.0853*** (0.0032)
2019 parliamentary elections × moving abroad		-0.1737*** (0.0036)
Fixed effects:		
Individual	Yes	Yes
Election year	Yes	Yes
S.E.: Clustered	by individual	by individual
Observations	760,488	760,488
Unique individuals	253,496	253,496
R ²	0.63946	0.64322
Within R ²	0.00072	0.01115

Note: Thresholds for statistical significance are ***p < 0.001, **p < 0.01, *p < 0.05. A linear probability model is estimated, with coefficients representing OLS regression estimates. Individual cluster-robust standard errors are shown in parentheses. The model includes only those voters who resided abroad and those who resided in Finland during all three parliamentary elections.

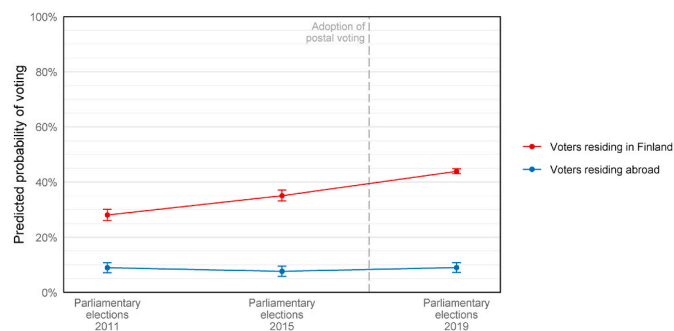


Fig. 3. Interrupted time series: A visual comparison of the voting probabilities between citizens residing abroad and those in Finland during the Finnish parliamentary elections of 2011, 2015 and 2019. Note: The coefficients from Table C1 are visualised (available in the online appendix). The vertical lines represent the 95% confidence intervals.

² Due to the absence of socio-demographic information in the register data available to us, we are unable to assess the balance between groups. The codebook providing information about the variables available in the population register can be found in Section E of the online appendix.

literature, which underscores the negative influence of emigration on individual-level turnout in homeland elections (see Ciornei and Østergaard-Nielsen, 2020; Gherghina and Basarabă, 2023; Peltoniemi et al., 2023; Umpierrez de Reguero and Finn, 2023).

In Model 3, we introduce an interaction term to facilitate the comparison between two distinct groups: those who emigrated between 2011 and 2015, constrained to in-person voting, and citizens emigrating between 2015 and 2019, offered an option to vote via mail in addition to in-person voting. The interaction term pertaining to the 2015 election and the ‘moving abroad’ dummy reveals that the voting probability among citizens who emigrated from Finland between 2011 and 2015 decreased by approximately 8.5 percentage points (when comparing the corresponding change in voting probability between 2011 and 2015 among citizens who stayed in Finland). While this decline in voting probability is noteworthy, citizens emigrating between 2015 and 2019 show an even more pronounced decrease when their voting probabilities are compared between 2015 and 2019: emigrating citizens are less likely to vote by a staggering 17.4 percentage points, despite being granted the convenience of postal voting.

These findings provide considerably strong evidence that the introduction of postal voting in Finland did not appear to have a positive effect on turnout among the citizens residing abroad. In fact, the negative effect of emigrating from Finland on the probability of voting in the homeland elections was even more pronounced in 2019, compared to the 2015 parliamentary elections.

4. Conclusions

With the objective being to reduce the costs of electoral participation, particularly high for electorates residing abroad, many countries have introduced postal voting as an additional means of casting a ballot. Focusing on the Finnish electorate living abroad, we examined the effect of postal voting using individual-level population register data spanning three parliamentary elections (2011, 2015, 2019) and covering the whole electoral subset provided with an additional postal voting method. Employing diverse methodological approaches, our findings consistently show a negligible effect, aligning with the notion that ease alone does not mobilise turnout as much as costs demobilize it (Blais and Daoust, 2020, p. 103). Importantly, the results are consistent across a variety of methodological approaches and the use of population data resolves concerns about the non-random implementation of postal voting, the typically uneven availability of voting records across electoral units and uncertainties regarding sampling strategies for public opinion surveys characteristic of previous research (see Elul et al., 2017; Gronke and Miller, 2012; Kousser and Mullin, 2007).

However, it appears that the way postal voting was implemented in practice introduced new bureaucratic and social costs, such as additional registration steps and witness requirements (Weide, 2021), which made the process cumbersome. Handling the process properly also requires a substantial amount of information acquisition as well trust in the system (on voters’ inability to examine whether their vote was compromised between its dispatchment from the local postal office and its delivery to the ballot box, see McAllister and Muller, 2018; Nemčok and Peltoniemi, 2023). In sum, while some original tangible costs are reduced, they are replaced by novel types of costs that are perhaps even more demanding. This helps clarify why it has only had a negligible effect, and like in many other similar cases, mostly facilitated those voters already more engaged in homeland politics.

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CRediT authorship contribution statement

Miroslav Nemčok: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing. **Hanna Wass:** Conceptualization, Funding acquisition, Investigation, Methodology, Writing – original draft, Writing – review & editing. **Johanna Peltoniemi:** Conceptualization, Funding acquisition, Investigation, Project administration, Writing – original draft, Writing – review & editing.

Declaration of competing interest

Authors declare no conflict of interest that could potentially influence the objectivity, integrity or impartiality of the research.

Data availability

Due to privacy constraints, the register data used in this research can be provided only directly by Statistics Finland. Authors are ready to assist interested readers in establishing access. The replication code is available at <https://doi.org/10.7910/DVN/2B6TPD>.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.electstud.2024.102776>.

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