

# Selective Abstention in Simultaneous Elections: Understanding the Turnout Gap

Sirus H. Dehdari\*    Jaakko Meriläinen†    Sven Oskarsson‡

June 18, 2020

## Abstract

If two elections are held at the same day, why do some people choose to vote in one but to abstain in another? We argue that selective abstention is driven by same factors that determine voter turnout. Our empirical analysis focuses on Sweden where the turnout gap between local and national elections has been about 2 – 3%. Rich administrative registry data reveal that people from higher socio-economic backgrounds, immigrants, women, older individuals, and people who have been less geographically mobile are less likely to selectively abstain.

Keywords: elections, roll-off, selective abstention, voting behavior, voter turnout

Word count: 2432

---

\*Department of Government, Uppsala University, and Swedish Institute for Social Research, Stockholm University. Email: [sirus.dehdari@statsvet.uu.se](mailto:sirus.dehdari@statsvet.uu.se).

†Center for Economic Research and Department of Economics, Instituto Tecnológico Autónomo de México. Email: [jaakko.merilainen@itam.mx](mailto:jaakko.merilainen@itam.mx).

‡Department of Government, Uppsala University. Email: [sven.oskarsson@statsvet.uu.se](mailto:sven.oskarsson@statsvet.uu.se).

Voter turnout varies greatly across time and space (Blais 2000). This holds true even when focusing on simultaneously held elections within countries. The notion of selective abstention is commonplace. For example, Burnham (1965) makes a remark on “[...] the tendency of the electorate to vote for ‘prestige’ offices but not for the lower offices on the same ballot” in the United States. This raises a puzzle. Why do some people choose to vote in one but to abstain in another if they have already born the cost of showing up at the polling station? Who are the selectively-abstaining voters?

Answering these questions is not straightforward. Voter turnout scholars have explored the connection between various individual-level characteristics and selective abstention building on both aggregate and/or survey data (Bullock and Dunn 1996; McGregor 2018; Wattenberg, McAllister, and Salvanto 2000). However, inferences from aggregate data are subject to the well-understood ecological inference problem. Survey data on voter turnout, on the other hand, tend to suffer from misreporting that may be correlated with potentially unobserved voter characteristics (Holbrook and Krosnick 2009; Silver, Anderson, and Abramson 1986).

We tackle these issues with exceptional administrative registry data from Sweden where voters vote in elections at three different levels—national, regional, and municipal—at the same time. Our data combine voter turnout registries with a plethora of individual-level characteristics. With this data set at hand, we demonstrate that individual characteristics that typically predict voter turnout (or abstention) are also associated with selective abstention. Holding the electoral context constant, our empirical analysis reveals that people from higher socio-economic backgrounds, immigrants, women, older individuals, and people who have been less geographically mobile are less likely to selectively abstain. These correlations are in line with various arguments that link individuals’ demographic and socio-economic characteristics with the costs and benefits of voting (Almond and Verba 1963; Verba and Nie 1972; Wolfinger and Rosenstone 1980).

## Sweden as a Test Bed

We study selective electoral participation in the context of Sweden. Elections to the Swedish Parliament, municipal councils, and county councils have been held simultaneously since the year 1970.<sup>1</sup> At the present, the elections are held every four years on the second Sunday of September. For the past ten years, voter turnout has exceeded 80% in all types of elections (see Figure 1), but there has been a relatively stable turnout gap between municipal and regional, and national elections. For example, in 2018, about 87% of the voters voted in the national election but the turnout rate was roughly three percentage points lower in the local elections.

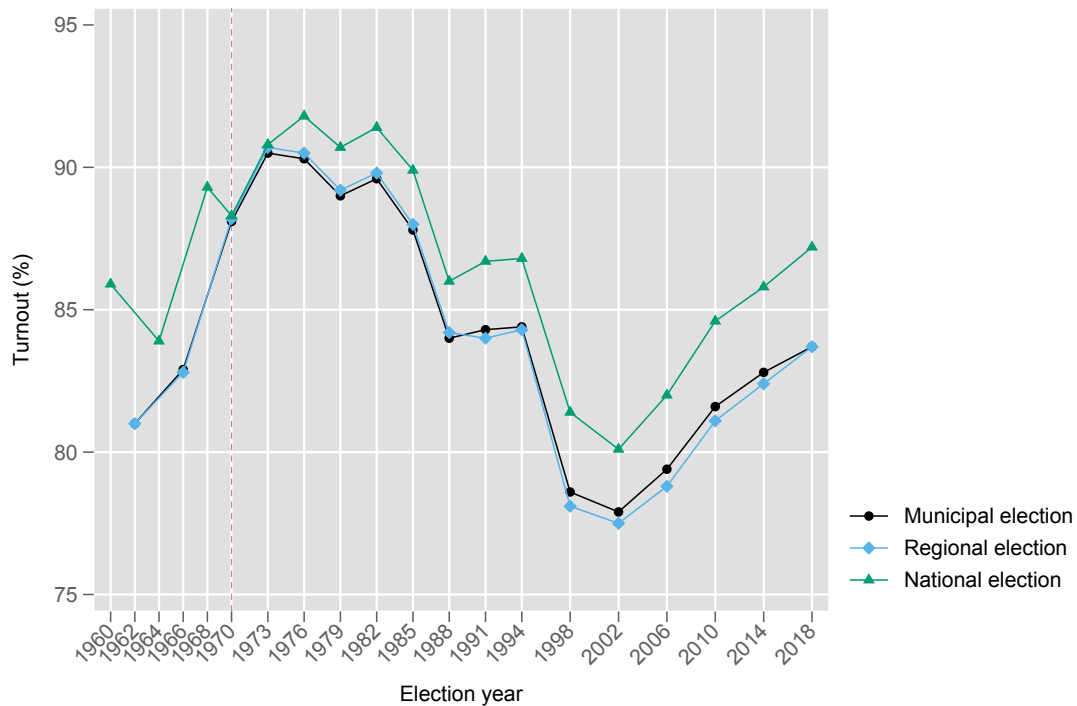
The political environment is fairly homogeneous across different types of elections. They all use the same electoral system: proportional representation with semi-open lists. Each voter may cast one vote per election that they are allowed to participate in. The candidate lists for each party are printed for separate ballot papers, and there is one party list per election. The ballots for different-level elections have a similar layout but a different color.<sup>2</sup> A key difference between the elections at different levels are eligibility rules. To vote in a Swedish parliamentary election, one must be a Swedish citizen and at least 18 years old. Voting in Swedish elections for the county and municipal councils is less restricted. An individual is allowed to vote in these elections if he or she is at least 18 years old and a citizen of Sweden, Iceland, Norway, or any EU country. Furthermore, permanent residents who are citizens of other countries are eligible to vote if they have lived in Sweden for three consecutive years (see also [Aggeborn et al. 2020](#)). Differential eligibility rules call for individual-level data if we want to understand what is behind selective abstention.

---

<sup>1</sup>The Swedish system is fairly decentralized. Municipal councils are responsible for policies such as urban planning and primary and secondary education. The county councils are responsible for organizing health care.

<sup>2</sup>In the United States, many elections are typically included in the same ballot. Selective voter abstention is often referred to as “roll-off”, as voters are more likely to abstain in races for less salient offices that are usually listed lower on the ballot ([Bowler and Donovan 2000](#)).

Using Swedish administrative registries, we build an individual-level data set on voter turnout and various characteristics. Our turnout data come from the elections of 2010 in which about 84.4% of voters voted in both national and municipal elections. A small fraction of voters eligible to vote in both elections abstained selectively: 1.61% voted in the national but not the municipal elections, and 0.11% voted in the municipal but not the parliamentary elections. We observe the turnout outcomes and various characteristics of more than six and a half million voters in total.



**Figure 1.** Turnout in Swedish elections, 1960-2018. Elections have been organized on the same day since 1970 (dashed vertical line). *Source:* SCB.

## Theoretical Considerations

What could explain the selective abstention that we see in our data? Students of voter turnout have attributed it to a multitude of determinants. For instance, selective abstention may be a result of some voters being peripherally engaged in politics. It may require more to motivate them to vote

at lower-level elections (Bhatti et al. 2019; Burnham 1965). On the other hand, some voters may abstain in some of the elections because of lack of information (Dubin and Kalsow 1996). Such determinants of voting behavior may interact with macro-level factors common to all voters in a constituency such as differential mobilization efforts across elections (Cox and Munger 1989), or complex ballot structures (Reilly and Richey 2011).

These explanations are closely connected with the calculus of voting framework (Downs 1957; Riker and Ordeshook 1968). A voter chooses to vote if the utility he or she derives from voting exceeds the cost of doing so—formally, if  $pB + D > C$ . Here,  $p$  is the probability of a voter’s vote influencing the electoral outcome, bringing the voter a benefit  $B$  if realized.  $D$  is an additional payoff that a voter obtains from the act of voting, such as utility from filling a citizen duty, and  $C$  is the cost of voting. We argue that factors that explain voter turnout are also likely to influence selective abstention. Our focus is on  $C$  and  $D$  which vary across voters.<sup>3</sup>

Theoretical work suggests that the costs explaining selective abstention are not *fixed costs* such as the time spent traveling to a polling station. Rather than that there are psychological *informational costs* that a voter faces if he or she has limited information on candidates and parties, and might “mistakenly” vote for the wrong candidate or party (Ghirardato and Katz 2006). These arguments are in tally with the seminal work by Feddersen and Pesendorfer (1996) who show that less informed indifferent voters strictly prefer abstaining over voting, even when it is costless. On the other hand, there may be other types of costs that matter for selective abstention. Voters who are part of a tight social network may be monitored by their peers, which could increase the cost of not voting (Feddersen 2004). Related to this argument, one might expect that voters who are more engaged with the local community may also have a greater sense of a civic duty, increasing the propensity to vote in elections at all levels of government (Leighly 1996).

---

<sup>3</sup>Arguably,  $p$  and  $B$  could vary by election. For example, a single vote might be decisive in a small local government election, making  $p$  greater in local elections. Our analysis abstracts from this possibility and holds the electoral context fixed across all voters.

Our data set contains information on a number of socio-economic and demographic characteristics which have been argued to have a strong link with *C* and *D* ([Almond and Verba 1963](#); [Verba and Nie 1972](#); [Wolfinger and Rosenstone 1980](#)). One of the most prominent arguments in this literature is that citizens with a higher socio-economic status are better informed than less-educated and lower-income citizens. This should make them less likely to selectively abstain in simultaneous elections. We also have a reason to believe that older people are less likely to selectively abstain, because they tend to have become more involved with public affairs and more connected with their communities. For similar reasons, geographical mobility may matter: people who have lived longer in a particular municipality might be less likely to selectively abstain in local elections. This could also be associated with the costs of voting. People who have recently moved to a new municipality may not be that familiar with the local political environment and might have to exert more effort into finding a suitable candidate or party.<sup>4</sup>

The relationship between gender and immigrant background, and selective participation is more ambiguous from a theoretical perspective. [Kostelka, Blais, and Gidengil \(2019\)](#), for example, argue that women are less psychologically engaged in politics and thus less likely to vote in second-order elections. In contrast, authors such as [Carreras \(2018\)](#) have suggested that women exhibit a higher sense of civic duty than men. This may make them even less likely to selectively abstain. Similarly, it is unclear how people with an immigrant background turn out to vote in elections at different levels. On the one hand, immigrants may come from lower socio-economic backgrounds, and they might experience language barriers to acquiring political information especially at lower-level elections. Then again, naturalization might play some role and increase voter participation, for instance, by boosting the feeling of social inclusion ([Bevelander and Pendakur 2011](#)).

---

<sup>4</sup>Those eligible to vote are automatically registered as voters in all elections. Thus, geographical mobility cannot affect (selective) turnout through registration mattering for the costs of voting in our case (c.f. [Highton 2000](#)).

## Empirical Analysis

We estimate a simple OLS model to quantify the connection between voter characteristics and selective abstention in Swedish election. We regress an indicator variable for selective abstention—multiplied by 100 so that the coefficients can be interpreted as percentage points—on a set of covariates. To keep the electoral environment fixed, we include municipality fixed effects in our analyses. We measure selective abstention in two ways: *i*) turning out to vote in at least one of the three elections but abstaining in at least one vote, or *ii*) voting only in either local or national election.<sup>5</sup> These regression results are reported in Table 1.

The estimation results on selective abstention from a specification that does not control for the lagged dependent variable suggest the following (columns 1 and 3). First, socio-economic status matters. Earning 10,000 SEK (about 1,000 USD) more is associated with a 0.02 percentage point decrease in selective abstention, and having one more year of education is associated with a decrease of 0.22 – 0.29 percentage points. These regression coefficients are statistically significant at the 1% level. Unemployed individuals are 0.29 – 0.49 percentage points more likely to selectively abstain. Overall, these results are in line with the argument that people from higher socio-economic backgrounds have more political information which decreases the costs of voting. This further makes participation in all elections more likely.

Second, demographic characteristics are important. A one-year increase in age decreases the propensity of selective abstention by 0.06 – 0.09 percentage points. Having lived one more year in a municipality is associated with a decrease of 0.03 in selective abstention. These results are in line with a lower *C* or a higher *D* for older voters or voters who have not moved recently. Selective abstention in any election is, on average, 0.5 – 0.8 percentage points less likely among women than men which in tally with the idea of female voters having a higher sense of civic duty to vote. Interestingly, a final remark is that immigrants (naturalized citizens) are 0.2 – 0.4 percentage points more likely to vote in all elections than native Swedes.

---

<sup>5</sup>Thus, we exclude voters in the region of Gotland that does not have a regional government.

To understand whether the selective participation is a persistent phenomenon or if voters do so perhaps by accident, we also estimate a specification in which we include the lagged dependent variable. For the purpose of this test, we use data from the 2014 elections in which we observe a random sample of the voters.<sup>6</sup> We link these voters to their turnout behavior in the 2010 election. If selective electoral participation is persistent, we ought to see a positive correlation between past selective abstention and selective abstention today. This is, indeed, the case (columns 2 and 4 of Table 1). In fact, past selective turnout turns out to be by far the strongest predictor of selective turnout in the current election: voters who selectively abstained in the 2010 elections are 12.6 – 16.1 percentage points more likely to abstain again four years later.

Note also that not all of our descriptive results persist when we control for the lagged dependent variable. In particular, the regression coefficients of *Years in municipality* and *Immigrant* are no longer statistically significant. The latter even changes its sign when the additional covariate is included. The regression coefficient of *Unemployed* is marginally significant in column (2) but insignificant in column (4). Many of the estimates also tend towards zero when we control for lagged (selective) abstention.

In most cases, the same characteristics that predict selective abstention also predict overall abstention. Columns (5) and (6) report the correlation between voter abstention (in all elections) and voter characteristics. There are, however, two notable exceptions. First, voters with an immigrant background are less likely to selectively abstain, conditional on having turned out to vote, but more likely to abstain overall. Second, unemployed voters are more likely to selectively abstain while they instead are less likely to abstain overall.

---

<sup>6</sup>The 2014 data are based on a random selection of eligible voters based on the Swedish registry, however, higher sampling weights has been placed on individuals from marginalized groups, for instance immigrants or individuals of lower socioeconomic status.



**Table 1.** Determinants of selective and complete voter abstention.

	Selective abstention (any election)		Selective abstention (local or national)		Complete abstention	
	(1)	(2)	(3)	(4)	(5)	(6)
Income	-0.022*** (0.002)	-0.010*** (0.003)	-0.021*** (0.002)	-0.009*** (0.002)	-0.129*** (0.009)	-0.080*** (0.011)
Years of education	-0.290*** (0.019)	-0.168*** (0.031)	-0.220*** (0.013)	-0.099*** (0.023)	-2.113*** (0.024)	-1.127*** (0.057)
Unemployed	0.485*** (0.056)	0.817* (0.457)	0.285*** (0.046)	0.318 (0.348)	-0.653*** (0.124)	-1.212* (0.718)
Age	-0.082*** (0.005)	-0.038*** (0.005)	-0.063*** (0.004)	-0.031*** (0.005)	-0.088*** (0.010)	-0.024** (0.009)
Years in municipality	-0.025*** (0.005)	-0.008 (0.005)	-0.028*** (0.002)	-0.006 (0.004)	-0.112*** (0.011)	-0.047*** (0.010)
Female	-0.790*** (0.046)	-0.561*** (0.117)	-0.483*** (0.034)	-0.244*** (0.090)	-1.672*** (0.054)	-1.263*** (0.270)
Immigrant	-0.596*** (0.144)	0.286 (0.259)	-0.341*** (0.075)	0.004 (0.187)	13.505*** (0.418)	10.522*** (0.497)
Lagged dependent variable		16.125*** (1.220)		12.687*** (1.243)		41.398*** (0.828)
Year	2010	2014	2010	2014	2010	2014
Observations	5742335	43670	5738934	42773	6643367	53709

*Notes:* The dependent variable is an indicator variable (multiplied by 100) for selective abstention in any election in columns (1) and (2), selective abstention in either the local or national election in columns (3) and (4), and not voting in any election in columns (5) and (6). The estimations in columns (1) and (2) are conditional on voting in any election, and the estimations in columns (3) and (4) are conditional on voting in either the local or the national election. All regressions control for municipality fixed effects. Robust standard errors are reported in parentheses. \*\*\*, \*\* and \* denote statistical significance at 1%, 5% and 10% levels, respectively.

## Closing Remarks

We document new empirical facts on what kind of people selectively abstain in simultaneous elections. Knowing what type of citizens are more likely to abstain selectively can help designing policies intended to boost turnout. For example, voters who have already born the cost of voting might be the easiest to persuade in get-out-the-vote experiments. They should also be more likely to react to information on political platforms of candidates and other important topics which should help reduce the information costs associated with voting. Finally, while we observe merely a relatively small turnout gap between national and local elections, it is worth noting that the

difference in turnout rates could be pivotal for the outcomes of local elections. This may be crucial for both political representation and policy outcomes.

## References

- Aggeborn, Linuz, Henrik Andersson, Sirius Håfström Dehdari, and Karl-Oskar Lindgren. 2020. "Does Election Salience Affect Immigrant Voter Turnout?" *APSA Preprints*.
- Almond, Gabriel, and Sidney Verba. 1963. *The Civic Culture: Political Attitudes and Democracy in Five Nations*. New Jersey: Princeton University Press.
- Bevelander, Peter, and Ravi Pendakur. 2011. "Voting and Social Inclusion in Sweden." *International Migration* 49 (4): 67-92.
- Bhatti, Yosef, Jens Olav Dahlgaard, Jonas Hedegaard Hansen, and Kasper Møller Hansen. 2019. "Core and Peripheral Voters: Predictors of Turnout Across Three Types of Elections." *Political Studies* 67 (2): 348-366.
- Blais, André. 2000. *To Vote or Not to Vote: The Merits and Limits of Rational Choice Theory*. University of Pittsburgh Press.
- Bowler, Shaun, and Todd Donovan. 2000. *Demanding Choices: Opinion, Voting, and Direct Democracy*. University of Michigan Press.
- Bullock, Charles S., and Richard E. Dunn. 1996. "Election Roll-Off: A Test of Three Explanations." *Urban Affairs Review* 32 (1): 71-86.
- Burnham, Walter Dean. 1965. "The Changing Shape of the American Political Universe." *American Political Science Review* 59 (1): 7-28.
- Carreras, Miguel. 2018. "Why no gender gap in electoral participation? A civic duty explanation." *Electoral Studies* 52: 36-45.
- Cox, Gary W., and Michael C. Munger. 1989. "Closeness, Expenditures, and Turnout in the 1982 U.S. House Elections." *American Political Science Review* 83 (1): 217-231.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.
- Dubin, Jeffrey A., and Gretchen A. Kalsow. 1996. "Comparing Absentee and Precinct Voters: Voting on Direct Legislation." *Political Behavior* 18 (4): 393-411.

- Feddersen, Timothy J. 2004. "Rational Choice Theory and the Paradox of Not Voting." *Journal of Economic Perspectives* 18 (1): 99-112.
- Feddersen, Timothy J., and Wolfgang Pesendorfer. 1996. "The Swing Voter's Curse." *American Economic Review* 86 (3): 408-424.
- Ghirardato, Paolo, and Jonathan N. Katz. 2006. "Indecision Theory: Explaining Selective Abstention in Multiple Elections." *Journal of Public Economic Theory* 8: 379-400.
- Highton, Benjamin. 2000. "Residential Mobility, Community Mobility, and Electoral Participation." *Political Behavior* 2 (1): 109-120.
- Holbrook, Allyson L., and Jon A. Krosnick. 2009. "Social desirability bias in voter turnout reports: Tests using the item count technique." *Public Opinion Quarterly* 74 (1): 37-67.
- Kostelka, Filip, André Blais, and Elisabeth Gidengil. 2019. "Has the gender gap in voter turnout really disappeared?" *West European Politics* 3 (42): 437-463.
- Leighly, Jan. 1996. "Group Membership and the Mobilization of Political Participation." *Journal of Politics* 2 (58): 447-463.
- McGregor, R. Michael. 2018. "Voters Who Abstain: Explaining Abstention and Ballot Roll-Off in the 2014 Toronto Municipal Election." *Urban Affairs Review* 54 (6): 1081-1106.
- Reilly, Shauna, and Sean Richey. 2011. "Ballot Question Readability and Roll-Off: The Impact of Language Complexity." *Political Research Quarterly* 64 (1): 59-67.
- Riker, William, and Peter Ordeshook. 1968. "A Theory of the Calculus of Voting." *American Political Science Review* 62 (1): 25-42.
- Silver, Brian D., Barbara A. Anderson, and Paul R. Abramson. 1986. "Who Overreports Voting?" *American Political Science Review* 80 (2): 613-624.
- Verba, Sidney, and Norman H. Nie. 1972. *Participation in America: Political Democracy and Social Equality*. New York, NY: Harper & Row.
- Wattenberg, Martin P., Ian McAllister, and Anthony Salvanto. 2000. "How Voting is Like Taking an SAT Test: An Analysis of American Voter Rolloff." *American Politics Quarterly* 28 (2): 234-250.
- Wolfinger, Raymond, and Steven J. Rosenstone. 1980. *Who Votes?* New Haven, CT: Yale University Press.