Granting Immigrants the Right to Vote in National Elections: Empirical Evidence from Swedish Administrative Data

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Abstract
Faced with rising levels of cross-border migration, many countries have extended local voting rights to non-citizen residents. However, empirical evidence indicates that voter turnout among non-naturalized immigrants is lower when compared to citizens. This raises the question of how to explain this difference. A common answer is that the low turnout rates of non-citizen residents are primarily due to the socio-economic composition of this group and the challenges involved in adapting to a new political system. An alternative but less discussed possibility is that the low turnout concerns the nature of the elections. Hence, we examine whether the turnout of non-citizens is hampered because they are only allowed to partake in local elections. Based on a regression discontinuity design (RDD) using Swedish administrative data, we find that turnout could increase by 10–20 percentage points if the voting rights of non-citizens were extended to the national level.

Keywords: voter turnout; Sweden; immigrants; regression discontinuity design

Introduction
In recent decades, many developed democracies have seen an increase in the share of foreign-born residents. The fact that many of these immigrants lack citizenship in their new host countries poses a challenge in terms of integration but also concerns the functioning of representative democracy, given that voting has traditionally been tied to citizenship. In many democracies, a large portion of the population currently lacks the right to vote, which may be considered a violation of the fundamental democratic principle of political inclusion; that is, the notion that all individuals subject to the laws of a polity should have a say in deciding these laws (Altman 2022; Beckman 2006; Lenard 2015).

In response to this development, an increasing number of countries have implemented public policies extending voting rights in subnational elections to non-citizen residents. According to a recent review, some forms of non-citizen voting rights are currently in place in more than one-fifth of the world’s countries (Ferris et al. 2020).

However, even in countries where non-citizens are entitled to vote, these individuals often choose not to do so. This means that public policies may not be in line with the demands of these abstaining voters. Empirical evidence from countries with a fairly long history of non-citizen voting rights in local elections – such as Sweden, the Netherlands, Belgium, and Ireland – indicates that voter turnout among non-citizens is considerably lower when compared...
to citizens (Ferris et al. 2020). Commenting on this fact, Hammar (1990), a leading migration scholar and early proponent of non-citizen voting reforms, remarks that even though the participation rates among non-citizens are not so low that the reforms could be said to constitute a ‘failure or mistake’, they are nonetheless ‘much lower than was hoped for or expected’ (Hammar 1990, 165). This raises the question of what explains the low turnout of non-citizen voters. Or, as a Swiss politician put it in an interview: ‘Why don’t they vote now that we have given them the opportunity?’ (Ruedin 2018, 243).

A common answer to this question is that the low turnout rates of non-naturalized immigrants are primarily due to the socio-economic composition of this group and the challenges involved in adapting to a new political system (Adman and Strömblad 2000; Ruedin 2018; Wass et al. 2015). An alternative, but much less discussed, possibility is that the low turnout of non-citizens more concerns the nature and character of the elections than the situation and individual characteristics of immigrant voters (Bevelander 2015; Öhrvall 2006).

For individuals to use their right to vote, they must feel that the elections concern issues of sufficient importance, meaning that the potential benefits from voting outweigh the costs (Franklin et al. 2004). This is important due to the fact that existing reforms concerning the voting rights of non-citizens typically restrict these rights to local elections, which in most countries are considered less important and less salient than national elections. This led some scholars to suggest that a likely reason for the unexpectedly low turnout of enfranchised non-citizens is that they are not allowed to participate in the elections that matter the most (Öhrvall 2006). Although theoretically plausible, we are not aware of any previous studies that explicitly test this hypothesis. In the present study, we seek to fill this research gap by using comprehensive data from Swedish registers to examine the extent to which the electoral participation of non-citizens is hampered by the fact that they are only allowed to partake in local elections.

There are at least two reasons why we believe it is important to study how the stakes of an election affect non-citizen voting. First, the results can help improve our theoretical understanding of the mechanisms underlying the political participation of non-citizen residents. In particular, the results can help us assess whether the same type of instrumental motivations, commonly invoked to explain voter turnout in the general population, apply with equal force to non-citizen residents. It is not obvious that this should be the case. The characteristics and circumstances of non-naturalized immigrants often differ significantly from those of both natives and naturalized immigrants, which may imply that standard models of political participation have less purchase in explaining the political behaviour of this group. Some scholars have even gone as far as to suggest that there might be a ‘distinctive ethnic minority calculus of political participation’ (Heath et al. 2011, 273). Whether this is actually the case is ultimately an empirical question, which we believe the present study can help shed light on.

A second reason for studying how non-citizen turnout varies with the importance of an election is that the results have a direct bearing on ongoing normative debates regarding the desirability of extending voting rights to non-citizen residents. Opponents of these reforms often point to the low turnout rates of non-citizen residents as an argument for not enfranchising non-citizens since it means that the potential benefits of granting non-citizens voting rights will be very small in comparison to the alleged negative consequences, such as undermining the value of citizenship (Ketcham 2022; Renshon 2009). These types of arguments are based on the implicit assumption that turnout among non-citizen immigrants will be very low regardless of political context as this group lacks the necessary resources or interest to participate in host country politics.

Others, however, maintain that the main problem with regard to existing non-citizen voting rights reforms is that they are not sufficiently far-reaching. One example of this is Lenard (2015, 131), who argues, ‘if the objective is to provide residents with the ability to participate in decision making that affects their lives, the vote cannot be justifiably restricted to the municipal level’. Obviously, this argument would be stronger if non-citizens could be observed to participate
to a much greater extent when being allowed to vote in national elections, which scholars in the opposite camp very much doubt. By empirically studying the relationship between election salience and non-citizen turnout, our study can thus help inform current debates on the desirability and effectiveness of extending political rights to non-citizen residents.

To obtain a credible estimate of how much the turnout of non-citizen residents would increase if they were enfranchised at the national level, we draw on data on validated turnout from Swedish population registers. In addition to the fairly unique quantity and quality of these data, there are two additional methodological advantages associated with focusing on the Swedish setting. First, the fact that only Swedish citizens are allowed to vote in the national election and that elections at all levels are held simultaneously means that we can use a regression discontinuity design (RDD) to determine how the ability to vote in the national election affects the turnout of immigrants who have been naturalized in close proximity to the election. Second, Swedish immigrants who are naturalized too close to the election are not eligible to vote in the national election despite being Swedish citizens. This is important as it enables us to disentangle the effect of being eligible at the national level from a pure citizenship acquisition effect (Hainmueller, Hangartner, and Pietrantuono 2017).

Previewing our findings, we note that immigrants who are allowed to vote in the national election are also 10–20 percentage points more likely to take part in a local election held on the same day. Since almost no voters (less than 1 per cent) in Sweden vote in local elections without also voting in the national election on the same day (Dehdari, Meriläinen, and Oskarsson 2021), this difference closely mirrors the difference between the national turnout of immigrants who naturalized in time for the election and the local level turnout of those who naturalized just after the eligibility deadline. Furthermore, we present results showing that voter turnout in local elections does not increase among those immigrants who obtained citizenship too close to the election to be eligible to vote in the national election. This indicates that the increase in turnout among naturalized citizens is driven by them being allowed to vote in national elections rather than by citizenship acquisition per se. Based on these results and several supplementary analyses, we argue that extending voting rights for non-citizens in Sweden to the national level could increase non-citizen voter turnout significantly, possibly by 10 to 20 percentage points.

Enfranchising Non-Citizens: Why, Where, and to What Effect?

In recent decades, we have witnessed an increasing trend among democratic countries to extend the franchise to non-citizen residents (Ferris et al. 2020). Yet, the desirability of such reforms remains a hotly contested topic in many countries. Not least in the US, where recent proposals to allow non-citizen residents to participate in local elections in major cities such as San Francisco, New York City, and Boston have led to heated political debates. For instance, when, in December 2021, the New York City Council voted to extend the franchise for municipal elections to all permanent residents in the city, Republican senator and former presidential candidate Marco Rubio proposed a bill to Congress that, if enacted, would ban federal funds for all cities allowing non-citizens to vote (Rubio 2021).

There is, however, one thing that most people on both sides of this debate now seem to agree on. Even if non-naturalized immigrants are enfranchised, it is unlikely that large numbers of non-citizens will actually take the opportunity to vote (for example, Bedolla 2006; Hammar 1990; Renshon 2009). In places where non-citizen immigrants have been allowed to vote, the turnout of this group has been low in both absolute and relative terms (Ferris et al. 2020; Seidel 2015).

Scholars who favour extending enfranchisement to non-citizen residents typically lament the low voter turnout of this group and argue that, in order for the reforms to be something more than a symbolic gesture of inclusion, they must be accompanied by ‘sustained, ongoing efforts

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1 Nowadays, immigrants need to obtain Swedish citizenship at least thirty days before election day to be eligible to vote in the national election. Prior to 1998, they had to obtain citizenship before July 1 in the election year.
to educate non-citizens about their right and how to exercise it’ (Ferris et al. 2020, 958). The opponents of non-citizen enfranchisement instead use the low turnout rates as an argument against such reforms. As Renshon (2009), for instance, puts it when arguing against voting rights for non-citizens in the US:

None of the long list of benefits claimed for allowing non-citizens to vote is possible if they don’t actually vote [...] The damage done to American civic culture by allowing non-citizens to vote must be carefully weighed against these very modest gains (Renshon 2009, 99).^2

Thus, one important question is whether low turnout among non-naturalized immigrants is an inevitable fact of life, as many of the opponents of enfranchising non-citizens seem to believe, or whether there are ways to increase the participation rates of this group. So, how do scholars explain the reluctance of non-citizen residents to use their voting rights?

A much-discussed explanation is that immigrants in general, and non-naturalized ones in particular, have limited access to the type of economic and social resources known to facilitate political participation in the majority population (Verba, Schlozman, and Brady 1995). From this perspective, the key obstacle to immigrants’ political participation is insufficient economic and social integration (Lindgren and Österman 2022; Ruedin 2018).

Other scholars highlight the unique circumstances facing immigrants as a group and the difficulty of adjusting to a new political system in adulthood (Wass et al. 2015; White et al. 2008). Due to the fact that immigrants were politically socialized in a different political context, the argument goes they ‘might be unlikely to adopt the pattern of political participation of their new country of residence’ (de Rooij 2012, 456). As White et al. (2008) explain, this argument comes in three varieties.

The most benign version of the argument is the exposure model, arguing that the political behaviour of immigrants will become increasingly similar to that of natives as they spend more time in the host country context and learn its language and political culture. The transferability model, on the other hand, maintains that immigrants adapting is not only a function of exposure but also depends on the extent to which immigrants are able to draw on their political experiences in their country of origin. Consequently, the greater the similarities between the old and the new political contexts, the easier it will be for immigrants to adjust. Immigrants who were politically socialized in systems that differ markedly from that of the host country will, however, face great barriers in terms of political participation. The third version of the argument, the resistance theory, is even less optimistic regarding the prospects for immigrant political integration. According to this perspective, political attitudes and beliefs are formed early in life and become highly resistant to change. Unless immigrants migrate at a very young age, we have little reason to expect the pattern of political participation among immigrants to mimic that of the majority population (Wass et al. 2015; White et al. 2008).

Finally, an additional group of scholars point to the effect of the institutional and political context, or what is sometimes referred to as the political opportunity structure; that is, the degree of openness or accessibility of a political system with regard to political newcomers (Bird, Saalfeld, and Wust 2011; Dancygier et al. 2021). For instance, political opportunity scholars often emphasize the importance of ethnic civic communities and social networks for the political mobilization of immigrants (for example, Jacobs and Tillie 2004). Previous research has also highlighted the possible impact of various aspects of the electoral and party system on immigrants’ political integration (Dancygier 2013; Schönwälder 2013; Trounstine and Valdini 2008).

Another important but less discussed aspect of the political context concerns the nature of the elections themselves and the extent to which they stimulate political mobilization and engagement. Campbell (1960), for instance, made a famous distinction between high- and low-stimulus elections to account for temporal fluctuations in voter turnout. In low-stimulus elections, where

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^2The same type of argument is also used by Ketcham (2022).
most voters attach relatively limited importance to the outcome of the election, Campbell main-
tains that the more politically interested segments of the electorate will choose to vote. However,
in high-stimulus elections where the perceived political stakes are higher, even those less inter-
ested in politics will find it worthwhile to participate in the election (Campbell1960).

Using a similar line of reasoning, Cancela and Geys (2016) predict that, while holding local
elections concurrently with a national election will increase turnout in the local elections, it
will have less of an impact on national-level turnout. The reason for this, they argue, is that
national elections are perceived as inherently more important ‘and thus may not require concur-
rent subnational elections to convince voters to turn out on Election Day’ (Cancela and Geys
2016, 269). Consequently, the main reason why turnout in local elections increases when they
are held on the same day as national elections is not that participation in multiple concurrent
elections results in economies of scale but that voters are offered the opportunity to participate
in a more important election. This argument is also supported by a recent comparative study by
Kouba, Novák, and Strnad (2021), which finds that although the turnout in local elections goes
up substantially when local elections are held jointly with national ones, holding multiple
second-order elections at the same time does not impact local-level turnout.

Viewed from this perspective, a peculiar aspect of the current practice of non-citizen voting is
that immigrants’ right to vote is typically restricted to the local level (Engdahl, Lindgren, and
Rosenqvist 2020; Ferwerda, Finseraas, and Bergh 2020). This has led scholars to hypothesize
that an important reason for the low turnout of non-citizen residents is that they may not
find it worthwhile to vote since they cannot vote in the election that matters the most (for
example, Öhrvall 2006). Or, as one Swedish public official recently put it when commenting
on the decision to introduce local voting rights for non-citizens in Sweden in the mid-1970s:

[T]his was a progressive step at the time they were introduced; however, now it is almost an
‘insult’ because of the widespread perception among immigrants that native-born Swedes
‘don’t care’ [about local elections] (Seidle 2015, 33).

This raises the interesting question of how much higher the turnout of non-naturalized immi-
grants would be if they were allowed to participate in the elections that matter the most (that is,
the national ones). Clearly, if we were to generalize from the behaviour of the majority popula-
tion, we would expect voter turnout among non-naturalized immigrants to increase substantially
if they were made eligible to vote in national elections.

However, as the above theoretical discussion indicates, many scholars have questioned the
assumption that standard models of participation apply with equal force to immigrants and eth-
nic minorities (de Rooij 2012; Heath et al. 2011). For instance, if the low turnout of non-
naturalized immigrants in local elections is mainly a function of early childhood socialization,
as suggested by the resistance theory, allowing this group to vote at the national level is unlikely
to make much of a difference. On the contrary, if Campbell (1960) was correct in suggesting that
mainly groups of voters with a lower propensity to vote are swayed into voting in high-stimulus
elections, we should expect the difference in turnout between first- and second-order elections to
be more pronounced among immigrants compared to natives. Yet another possibility is that elec-
tion saliency plays a different role for different types of immigrants. Based on the exposure and
transferability theories discussed above, we could, for instance, hypothesize that the impact on
turnout of granting non-naturalized immigrants voting rights at the national level will depend
on factors such as the time spent in the host country and the degree of similarity between the
political systems of their old and new home countries.

Hence, it is ultimately an empirical question whether – and if so, by how much – turnout
among non-naturalized immigrants would increase if their voting rights were extended to the
national level. However, we are not aware of any previous empirical studies seeking to answer
this vital question. A likely reason for this lack of research is that this issue cannot be studied
using the type of representative survey data dominating previous scholarship in this field since the samples will not contain enough non-naturalized immigrants.

To make progress on this important issue, we have to rely on alternative data sources, such as the administrative registers available in the Nordic countries. As an initial check on how election saliency relates to immigrant voting, Fig. 1 reproduces published data on municipality voter turnout for natives, naturalized immigrants, and non-naturalized immigrants in Sweden, Norway, Denmark, and Finland. Whereas the eligibility rules are very similar in all these countries, Sweden is the only country that holds local elections on the same day as the national election. In all four countries, turnout is the highest among native citizens and the lowest among non-naturalized immigrants. The voting gaps between naturalized and non-naturalized immigrants are 14, 15, and 23 percentage points in Norway, Finland, and Denmark, respectively, whereas this gap is much larger in Sweden, about 35 percentage points (illustrated in the kink in the line for Sweden). The fact that this gap is considerably higher in Sweden than in the other three countries could be seen as supporting the view that non-naturalized immigrants would vote to a greater extent if they were allowed to partake in national elections. That is, the higher turnout among naturalized immigrants in Sweden is due to the fact that they are offered the opportunity to vote in the more important national election at the same time as voting in the local election, which is not the case in other countries.

Figure 1. Turnout in local elections in the Nordic countries.
Notes: Data for Sweden refers to the local election in 2018 and comes from Statistics Sweden. Data for Norway are for 2019 and are provided by Statistics Norway. The Danish data refers to the election in 2017 and comes from Møller Hansen (2018), whereas the data for Finland are from 2012 and have been published by Wass et al. (2015).
Unfortunately, this interpretation comes with a number of caveats. First, the composition of the two immigrant groups must be similar in all time periods and countries. Second, to properly answer the question of whether the turnout of non-citizens would be higher if they could vote in national elections, it is necessary to distinguish between the effect of being eligible to vote in a more important election from the effect of citizenship acquisition per se. It has, for instance, been hypothesized that naturalization in itself can have a positive effect on voter turnout as immigrants become more committed to their host country when they gain citizenship (Bevelander 2015). In this study, we attempt to address both challenges by providing a detailed study of immigrant voting in Sweden.

Institutional Setting
Local and national elections are held in Sweden on the same day, once every four years. Local elections carry weight; both municipalities and counties have taxation rights and provide public services. Yet, the national election typically constitutes the main focus of party campaigns and media coverage. In this sense, local elections, although important in their potential local policy impact, tend to be seen as second-order elections (Oscarsson 2001).

This was particularly true for the two election years under study in this paper, namely 1994 and 2010. In both cases, the elections occurred in the aftermath of an economic crisis – the Swedish bank and mortgage crisis between 1990 and 1994 and the global financial crisis in 2008 – resulting in the election campaigns focusing on national economic issues. Thus, the salient political issues during the campaigns were related to national-level policies regarding economic growth, employment, and national debt rather than local politics.

Non-citizens have been eligible to vote in local elections since 1976, provided they resided in Sweden for at least three years directly prior to the elections. In 1998, this requirement was lowered to about a month for citizens of another EU member state (or another Nordic country). On the other hand, to be eligible to vote in the national election to parliament, immigrants must hold Swedish citizenship.

In order for an adult to become a citizen, immigrants must meet the following four criteria: (i) they must be at least eighteen-years-old; (ii) they must have a permanent residence permit; (iii) they must have resided in Sweden for at least five years; and (iv) they must fulfil a requirement of good conduct (Engdahl 2014, 9). An individual who meets all four of these requirements can apply for citizenship at the Swedish Migration Agency, which handles all applications. In cases where the Migration Agency decides to grant citizenship, it sends a letter to the Swedish Tax Agency to inform it of this decision. Then, after some unspecified processing time, the Tax Agency records the change in citizenship status in the population registers. The Election Authority, which is responsible for putting electoral rolls together, only considers an individual to be a citizen if the individual is registered as a citizen in the population registers.

All individuals who become Swedish citizens in time to be registered in the electoral rolls are eligible to vote in elections to the national parliament. Nowadays, this means an individual must be recorded as a citizen in the population registers no later than thirty days before the election. Prior to 1998, this administrative period was somewhat longer. So, in order to be registered in the electoral rolls, immigrants had to be recorded as Swedish citizens by the Tax Agency prior to July 1 (that is, about two and a half months before the upcoming election). The Election Authority then sends out voting rights certificates by mail three to four weeks before election day to all eligible voters. Those who gain citizenship too close to election day to be included in the election roll for the national election will be aware of this fact in advance of the election.3

The proportion of foreign-born individuals in Sweden is among the highest in Europe. The approximately two million foreign-born individuals make up about 19 per cent of the population,

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3We discuss the voting procedures further in the Appendix, Section B.
compared to less than 3 per cent in 1950. This increase stems from Nordic and other European labour migration in the 1950s and 1960s and refugee and family-related migration from non-European countries from the 1980s until now. These historical trends are similar to those found in many other Western European countries. It is also worth noting that many foreign-born individuals are non-citizens. At the end of 2018, about 9 per cent of the Swedish population consisted of foreign citizens. We may thus conclude that a sizable fraction of the Swedish population is affected by the factors noted in this study.

**Measurements and Method**

This study utilizes population data from two different sources. First, we obtained information on a wide range of individual-level variables from administrative registers maintained by Statistics Sweden. Most importantly, these data contain complete records of dates of immigration and naturalization, which are both key for our research design. We also have access to detailed information on various demographic and socio-economic characteristics. This information is critical for assessing the validity of our empirical design.

Second, our data on voter turnout for both national and local elections originates from a project that scanned and digitized the complete electoral rolls for Sweden’s 1994 and 2010 elections. For these two elections, highly reliable individual-level voter turnout is available for 90–95 per cent of the total electorate (see Lindgren, Oskarsson, and Persson 2019 for more details). Throughout the study, we define voting in local elections as voting in either the municipal election or the county election.

**Identification Strategy and Empirical Design**

Our main aim in this study is to examine the extent to which the high abstention rates of non-citizens in local elections can be explained by the lower salience of these elections. To do this, we utilize the fact that naturalized immigrants are entitled to vote in the more salient (national) election on the same day, whereas non-naturalized immigrants are only able to vote in local elections.

As discussed above, when comparing the turnout figures of non-citizens across the Nordic countries, a simple comparison of the turnout rates of naturalized and non-naturalized immigrants will not suffice to answer our research question since these two groups can be expected to differ in a number of respects that may affect their likelihood of voting. To overcome this problem, we employ an RDD (Hahn, Todd, and Van der Klaauw 2001; Lee and Lemieux 2010), focusing on the subset of immigrants who were granted citizenship right around the time of the two elections under study.

The basic set-up of this design is illustrated graphically in Fig. 2. The time axis in the diagram denotes the date of acquiring citizenship in relation to election day \(E\) and the cut-off date for being registered in the electoral rolls \(C\). Our treatment group consists of individuals who have acquired citizenship before \(C\), meaning they are citizens and eligible to vote for the national parliament on election day. Our control group comprises the individuals granted citizenship between \(C\) and \(E\) – meaning that, although they are citizens on election day, they are not eligible to vote in the national election (because they became citizens after \(C\)). Finally, a third group consists of those individuals who acquire citizenship after election day and are thus neither citizens nor eligible to vote for the national parliament on the day of the election. To help disentangle the salience effect from a possible pure citizenship effect, we mainly focus on the two former groups since this means that citizenship is kept constant while eligibility is allowed to vary. However, we return to the third group later in this paper when we analyze whether gaining citizenship per se, while still lacking the right to vote in the national election, has an impact on voter turnout in local elections.4

4An alternative interpretation is that the control group are the ones that receive treatment. These individuals might feel disappointed by being granted citizenship just in time for the elections without being eligible to vote in the national election, which could reduce turnout among these individuals. However, as we show in the results section, there is no difference in
The logic underlying this approach is straightforward. The exact timing of the citizenship decision is outside the control of the individual, meaning that those who acquire citizenship slightly before the eligibility cut-off date should be identical in all relevant respects to those who receive it slightly after this date. So, close to the cut-off date, it is as if random whether an individual is a citizen with the right to vote in the national election or a citizen with the right to vote only in local elections.

Consequently, we can use an RDD to examine the effect on turnout of being allowed to vote in the national election. The key feature of an RDD is that a so-called running variable determines the treatment status. Here, the treatment is national voting eligibility, and the running variable is the number of days from the eligibility cut-off date, which was seventy-nine days prior to election day in 1994 and thirty in 2010.

For reasons of space and clarity, we have decided to defer the detailed description of our RDD model to the Appendix (see Section C), where we discuss technical issues related to choices of estimation procedures, polynomials, kernels, standard errors, and bandwidths. Here, it is sufficient to say that our preferred model specification implements a non-parametric local linear RDD with a uniform kernel. Moreover, in order to address the problem that it may take up to a week for the Tax Agency to receive information on a change in citizenship status from the Migration Agency, we use a so-called ‘donut’ approach. This means we drop all individuals who gained citizenship status less than a week before the cut-off from our analysis. Finally, we present results from both a sharp and a fuzzy RDD due to the fact that treatment is not perfectly deterministic around the cut-off. In the fuzzy design, the running variable is used as an instrument for the right to vote in the national election.

Our sample consists of foreign-born individuals who were granted citizenship in 1994 and 2010, respectively. With regard to this group, we further exclude all individuals who were citizens of another Nordic country when applying for Swedish citizenship since Nordic citizens have access to a simplified application procedure, which means that they are much more able to decide when to become Swedish citizens. The final sample includes just over 34,000 individuals, 15,179 of whom gained citizenship in 1994 and 18,855 in 2010. In our empirical analysis, we analyze the 1994 and the 2010 data separately.

In Sections D and E in the Appendix, we discuss and assess the identifying assumptions behind the RDD, such as bunching and balance in observables. We also run formal bunching tests. Although some issues warrant attention and further discussion in the Appendix, we conclude that the RDD is valid and that identifying assumptions are met with regard to non-strategic bunching around the cut-off and balance in the observables.

Before turning to the empirical analysis, we should briefly comment on our dependent variable. Since nearly all eligible voters who vote in local elections also participate in the national

Figure 2. Timeline.
Notes: The time of becoming a citizen is related to the election roll cut-off date (C) and the election day (E). Individuals are considered treated if they acquire citizenship before the cut-off date, making them citizens on election day and eligible to vote for the national parliament. The control group comprises individuals who receive citizenship after the cut-off date but before election day, meaning they are citizens on election day but are not eligible to vote for the national parliament.

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Before turning to the empirical analysis, we should briefly comment on our dependent variable. Since nearly all eligible voters who vote in local elections also participate in the national
election, the local-level turnout of immigrants eligible to vote in the national election will closely resemble their turnout in local elections. In our sample, the turnout among those eligible to vote in both local and national elections is 70.7 per cent at the national level and 70.4 per cent at the local level, with only 1 per cent participating in one type of election but not the other. Therefore, comparing the local-level turnout of recently naturalized immigrants around the eligibility threshold is equivalent to comparing turnout in the national election for eligible immigrants to the local-level turnout of non-eligible but otherwise identical immigrants. Our RDD estimate can thus be used to capture how much more likely an individual is to participate when given the opportunity to vote in a national election rather than just local elections. Finally, the fact that the individuals in our sample have naturalized very recently also makes us believe that it should be possible to generalize the effect found in this sample to the larger group of non-citizen residents. We will return to this latter question in the robustness section.

Results
The main results are presented in Fig. 3 and concern the years 1994 and 2010, respectively. The y-axis in both figures shows voter turnout in the local election while the x-axis displays the date of citizenship (where the date required for eligibility to the more salient national election is normalized to 0). Given we demonstrate that no covariates are systematically discontinuous around the cut-off (see Section E in the Appendix), the only systematic difference between the naturalized immigrants on either side of the cut-off depends on whether or not they are eligible to vote in the national election. Based on the latter premise, it follows that any difference in turnout in the local election on the two sides of the cut-off is due to eligibility to vote in the more salient national election. To facilitate the reader, the treatment period is placed ‘chronologically’ to the left in the regression discontinuity (RD) plots, meaning these individuals were granted the right to vote in national elections.

The main takeaway from these figures is that citizens eligible to vote in the national election are much more likely to vote in the local election held on the same day. Figure 3 shows that being treated results in an approximately 10 percentage point increase in the probability of voting in local elections in 2010 and by a somewhat larger probability in 1994. The results presented in the figures thus support the view that immigrant turnout increases substantially once they are allowed to partake in national elections.

Note that, in addition to the main eligibility cut-off, we insert a second cut-off, presented in light grey in both figures. The light-grey cut-off shows the actual election date. We insert this in order to provide suggestive evidence against a second story, which concerns the effect of being

Figure 3. Main RD plots: Effect of eligibility in the more salient national elections on voting in local elections. Notes: RD plots according to Calonico, Cattaneo, and Titiunik (2015) using observations from the (a) 1994 and (b) 2010 elections.
granted citizenship but not being given the right to vote in the more salient election. While there are some weak indications of a ‘pure’ citizenship effect in 2010, they hinge on being inferred from a very small set of individuals. Also, in the case of 1994, we find no evidence whatsoever of any citizenship effect. Individuals who gained citizenship just before the election but not in time to be able to vote in the national election voted in as high a proportion in the local election as those who received citizenship after the election. In Section H in the Appendix, we plot and estimate the pure citizenship effect as a separate cut-off and see no signs of a treatment effect in this case either.

The conclusions of these graphical analyses are also backed up by estimating the discontinuity. The estimations in Fig. 4, which are displayed as both sharp and fuzzy, focus on the salience effect. Each plot presents the estimated RD coefficients for a range of different bandwidths. This approach offers a transparent approach to show how the estimated effect varies with the choice of bandwidth. To make the specifications for 1994 and 2010 comparable, we consider the range of eleven to seventy-nine days for the bandwidth size for both years. The institutional setting, summarized in Fig. 1, puts constraints on implementing bandwidths. For the 1994 election, the bandwidth to the right of the cut-off cannot be wider than seventy-nine days as we would otherwise simultaneously capture the salience and pure citizenship effects. In the case

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**Figure 4.** Main regression results: Effect of eligibility in the more salient national elections on voting in local elections. Notes: Local linear regression estimations with corresponding 95 per cent confidence intervals are based on conventional standard errors. The bandwidth for 1994 is symmetrical. The bandwidth for 2010 is asymmetrical and fixed at thirty days before the cut-off, whereas the bandwidth after the cut-off varies for the same range for 1994. All estimations are run with a uniform kernel. All analyses are run in a donut specification where we exclude the observations up until seven days after the cut-off. The number of observations when applying the largest bandwidths is 6,031 in 1994 and 4,389 in 2010.
of the 2010 sample, the bandwidth cannot, for the same reason, be wider than thirty days to the right of the cut-off. In order to be as transparent as possible while still acknowledging the institutional constraints, in the result section we display the estimated RD coefficients for all possible different bandwidths for each year and the treatment window separately.

There is one difference between the 1994 and 2010 analyses: for 1994, the bandwidth is symmetrical (similar on both sides of the cut-off), whereas, for 2010, the bandwidth is fixed at thirty days below the cut-off and varies between eleven and seventy-nine days above the cut-off. As explained in more detail in Section C in the Appendix, the reason is that an immigrant needs to receive her citizenship more than thirty days before the general election to be included in the election roll in 2010, whereas it was seventy-nine days in 1994.5

For the 1994 election, we observe positive and statistically significant estimates of at least 10 percentage points. This remains true for the fuzzy analysis as well, which, as expected, generally provides us with somewhat larger estimates. The positive effects are also valid in the case of 2010. While the estimates for 2010, on average, are lower than for 1994 and not always statistically significant, the fuzzy estimates for 2010 are more similar to those for 1994.6

We thus find clear evidence of a sizable effect of eligibility in the more salient national elections on voter turnout in local elections held on the same day. Whereas our most conservative estimates suggest an effect of approximately 10 percentage points, many specifications suggest that the effect could be considerably larger. Judging from the fuzzy estimates, the turnout of non-naturalized immigrants could increase by as much as 20–25 percentage points if they were allowed to vote in national elections, not just in local ones. To put this effect in context, we might mention that the difference in turnout between female and male immigrants in the 2010 election was about 4 percentage points, whereas one additional year of education was associated with a 1.5 percentage point higher turnout (approximately) among immigrant voters. In other words, the effect of being eligible to vote in the national election rather than merely the local election corresponds to that of ten to fifteen years of education.

Another perspective on our findings entails comparing the effect size to the turnout gap between natives and non-naturalized immigrants. In 2010, the turnout among native-born citizens was 87 per cent, while the corresponding share for foreign-born non-naturalized voters who were only eligible to vote in the local elections was 35 per cent. Thus, the turnout gap was 52 percentage points. Our most conservative estimate of the effect of eligibility in the more salient national election is around 10 percentage points, which accounts for roughly 20 per cent of the turnout gap. This means that a substantive share of the turnout gap between immigrants and natives can be reduced by allowing immigrants to vote in the national election.7

Overall, our main findings strongly support the view that if non-citizen immigrants were allowed to vote in national elections and not just local ones, their voter turnout would be substantially higher. However, before jumping to conclusions, we need to further examine the robustness of these findings and interpretations.

Mechanisms, Heterogeneity, and Robustness

The first important methodological caveat is that at least two different theoretical mechanisms can give rise to the finding that voter turnout is considerably higher among those immigrants who are eligible to vote in the national election.

5We display the results for symmetrical bandwidth specifications below thirty days for 2010 in Fig. E4 in the Appendix.
6One may relate to the calculated optimal bandwidths. For 1994, the symmetrical MSE optimal bandwidth was forty-two. For 2010, the data-driven symmetrical MSE optimal bandwidth (forty-five days) is beyond the salience effect treatment window. A data-driven MSE asymmetrical bandwidth above the cut-off for 2010 is forty-eight days.
7Note that this share is most likely a lower bound, as it assumes that the turnout gap between immigrants and natives is only a function of election eligibility and not also due to differences in, for instance, socioeconomic and demographic characteristics between the two groups.
One potential explanation for the observed effect is the one discussed above (that is, the national election represents a high-stimulus election (Campbell 1960)). Another possible explanation, however, focuses on the fact that voting is associated with various fixed costs (for example, transportation costs), which results in the unit costs of voting decreasing with the number of votes an individual can cast on a given occasion. This means that immigrants who are allowed to vote in all three elections will face lower average voting costs than those who are only eligible to vote in the two local elections (Aggeborn 2016; Leininger, Rudolph, and Zittlau 2018). So, is there a way to distinguish between these two rival explanations?

We believe there are two different ways of doing so, although they both exhibit weaknesses. The first way is to zoom in on the municipality of Gotland, a small island in the Baltic Sea. Since Gotland is both a municipality and a county, the residents of Gotland can only vote in two elections (municipal and national elections) instead of the standard three elections on election day. From the viewpoint of the voting cost mechanisms, we would expect voter turnout in Gotland to be lower than in other parts of Sweden. However, this is not the case. Voter turnout in municipality elections in Gotland was slightly higher than the national average for both 1994 (85.1 per cent in Gotland versus 84.9 per cent in the country as a whole) and 2010 (82.6 per cent versus 81.6 per cent) (SCB 2020). This indicates that the number of elections held on a particular day may not be that important for the level of turnout.

Another way to distinguish between the two competing mechanisms is to compare the turnout of non-citizen residents in the euro referendum held in Sweden in 2003, where both citizens and non-citizens were allowed to partake, to their turnout in the local elections in 2002. Overall turnout in the 2003 referendum was slightly higher than the turnout in the national election the year before (82.6 per cent versus 80.1 per cent), which suggests that the referendum constituted a high-stimulus election.

Consequently, if election salience is the main driver behind our previous findings, we would expect turnout among non-citizens to be higher in the referendum as most voters seem to find this election to be of similar importance as an election for the national parliament. However, if the cost-of-voting mechanism drives our results, we should expect turnout in the 2002 local elections to be higher as non-citizens are then allowed to vote in two elections at the same time, not only one.

In Fig. 5, we plot the turnout rates among non-naturalized immigrants in the elections in 2002 and 2003 by the number of years they resided in Sweden. We find clear evidence that turnout is higher in the referendum, regardless of how much time the individuals have spent in Sweden. The average difference in non-citizen turnout between the two types of elections is about 25 percentage points. This is similar to the upper bound results from our previous RDD analysis for 1994 and 2010. These results thus lend additional support to the previous interpretation of our findings (that is, the observed increase in turnout from being eligible to vote in the national election is driven by the higher perceived importance of national elections rather than by the drop in average voting costs associated with being eligible to cast one additional vote).

The results presented in Fig. 5 are also interesting in another respect. As we can see, the difference between the two types of elections is fairly similar regardless of how long a non-citizen resident has lived in Sweden. This suggests that the local average treatment effect we estimated in the previous section should be generalizable to immigrants who wait a long time to become...
naturalized or who remain non-citizen residents for their entire lives. That is, even though there is a tendency for overall turnout to increase somewhat with time from migration, in line with the expectations of the exposure model discussed in the theory section, there is no indication that the impact of election salience varies with the length of residence. This conclusion is further corroborated by an additional heterogeneity analysis presented in the Appendix. The analysis shows that the increase in turnout around the national eligibility cut-off date is very similar for immigrants who become naturalized within the first six years from arrival and for those who wait longer to become Swedish citizens (see Fig. F7). These results corroborate our assumption that it should be possible to generalize the effect in our main sample of newly naturalized immigrants to the larger group of non-citizen residents.

In the theory section, we also raised the possibility of other potential heterogeneities. In other words, according to previous literature on immigrant political socialization, the ability to adjust to a new political system could be affected by factors such as age, economic integration, size of ethnic communities, and similarity between the old and new political context. We thus examined the extent to which the strength of our treatment effect varies with factors such as these. For reasons of space, we discuss and present the results from these heterogeneity analyses in the Appendix. Admittedly, some of these analyses suffer from low statistical power as the number of observations around the cut-off may be fairly small in many subgroups. However, we find no clear evidence of any important heterogeneities in the data (see Figs. F3–F8). The only partial exception is that we obtain a smaller point estimate for immigrants born in Africa. However, we do not have sufficient statistical power to conclude that the effect differs for African immigrants.

Finally, to check the robustness of our main findings, we also performed several sensitivity analyses, presented in the Appendix (see Section F). In these robustness analyses, we (i) vary the donut window, (ii) use a triangular kernel, (iii) change the local polynomial to a quadratic polynomial, (iv) run the analysis, including covariates, and (v) compute both bias-corrected robust confidence intervals in line with Calonico, Cattaneo, and Titiunik (2014) and honest confidence intervals in line with Kolesár and Rothe (2018). All these analyses are conducted for different bandwidths, just like in the main analysis in Fig. 4. Although the estimates vary slightly over different bandwidths, assessing them all together, the robustness results are in line with

Figure 5. Turnout in 2002 local elections and 2003 euro referendum.

Notes: Turnout among non-naturalized immigrants in the 2002 local elections and the 2003 euro referendum. The confidence intervals have been capped at 1 to save space, as 1 is the maximum voter turnout rate.
our main findings. However, the quadratic polynomial specification for 2010 casts some doubt on
the robustness of the main effect for 2010.11

Conclusions
Selecting a country’s political leaders and, by extension, influencing its public policy has tra-
ditionally been considered the prerogative of those holding citizenship; accordingly, non-citizen
residents have not been allowed to vote. However, rising levels of international migration have
made this practice increasingly problematic since continuing this practice means denying a grow-
ing share of the population in many established democracies any say regarding the political devel-
opment of the country in which they live. In recent decades, a number of countries have granted
limited voting rights to non-naturalized immigrants, mostly at the municipal or regional levels.
However, the low turnout of enfranchised immigrants in these elections has been a disappoint-
ment (Hammar 1990; Seidle 2015; Togeby 1999).

One explanation for the low turnout among non-naturalized immigrants, suggested in the lit-
erature, is that they refrain from voting due to the low salience of municipal and regional elections
(Hammar 1979; Öhrvall 2006; Seidle 2015). What is implicit in this argument is the idea that
immigrants would likely become more active politically if, as some scholars propose, they were
also given the right to vote in national elections, given the higher stakes of the latter (Lenard
2015).

In this article, we have leveraged high-quality Swedish administrative data to offer what we
believe to be a credible empirical test of this ‘salience hypothesis’. We find that local-level turnout
increases by 10–20 percentage points among recently naturalized immigrants when they are also
allowed to participate in the national election held on the same day. Because virtually all eligible
voters in Sweden who vote in the local elections also vote in the same-day national election, this
figure provides us with an estimate of how much higher voter turnout among non-citizen resi-
dents in Sweden could be expected to be if they were allowed to participate in national elections
rather than only local elections. That is, to judge from our results, voter turnout among non-
citizen residents would likely be 10–20 percentage points higher if they were provided with the
opportunity to participate in national elections. By any standard, this effect must be seen as
substantial.

Although this finding is obviously significant with regard to theory, the main contribution of
the present study is, without doubt, empirical. A particular strength of this article, we believe, is
that it utilizes validated turnout data and is based on a clear identification strategy. An important
advantage of our approach is that it enables us to distinguish between the effect of being eligible at
the national level and the effect of acquiring citizenship.

Admittedly, our analysis also leaves some important questions unanswered. One concerns the
generalizability of our findings. Unfortunately, replicating our analysis in other countries is the
only way to answer this question. This may be quite difficult because researchers need access
to information on voter turnout for a sufficiently large sample of naturalized and non-naturalized
immigrants. However, we see no particular reason to expect the effect to be greater in Sweden
than in other established democracies with similar institutions (such as concurrent elections).

On the contrary, if election salience can be shown to affect turnout among immigrants in
Sweden – with its relatively liberal citizenship regime and comparatively high voter turnout –
it seems reasonable to assume that this will also be the case in other countries. We, therefore,
believe that our main finding that non-citizen residents would vote at a significantly higher
rate if given the opportunity to participate in national elections is likely applicable in other coun-
tries with similar political systems to Sweden.

11In Fig. E7, we run an analysis where we exclude those born in another EU country. After December 1994, EU citizens are
entitled to vote in local elections if residing in Sweden, albeit not in national elections. These results are in line with our main
findings.
We hope our results can offer an important impetus for the ongoing policy debate on voting rights for non-naturalized immigrants. For instance, one possible reaction to the low turnout rates among non-naturalized immigrants in countries where they are entitled to vote is that they show how little value non-citizens attach to the right to vote. The low turnout could then be used to call into question the desirability of reforms aimed at enfranchising immigrants. However, as our results show, the value attached to the right to vote is a direct function of the salience of an election. Non-naturalized immigrants can thus be expected to vote at a much higher rate if they can also make their voices heard at the national level, where the political stakes are higher. So, instead of interpreting the low turnout of non-naturalized immigrants in local elections as a sign of the insignificance of reforms to enfranchise non-citizens, one could, on the basis of our findings, argue that these reforms must be made more comprehensive in order to increase the political participation of the large and growing population of non-naturalized immigrants found in many established democracies (Lenard 2015; Seidle 2015).

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/S0007123423000509

Data availability statement. Statistics Sweden provides the data used in this paper. There are limitations to data availability, according to the terms of use, found at: https://www.scb.se/en/services/ordering-data-and-statistics/ordering-microdata/mona-statistics-swedens-platform-for-access-to-microdata/rules-and-regulations/terms-of-use/. For more information regarding data access for replication purposes, please see page A-1 in the Online Appendix. The do-files for this article are available at the BJPoS Dataverse at: https://doi.org/10.7910/DVN/30XCF8

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References


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