July 2025

Fondazione Eni Enrico Mattei

Working Paper

15.2025

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Summary

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Keywords: Concurrent elections, Political Competition, Political Participation

JEL Classification: D72, H70

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Political Participation and Competition in Concurrent Elections: Evidence from Italy*

Federico Fabio Frattini†

July 7, 2025

Abstract

This paper investigates how concurrent national and local elections affect the local political participation and competition. Leveraging a quasi-experimental framework provided by Italy's staggered electoral timing, the paper employs a difference-in-differences design. Estimates reveal that municipalities holding concurrent elections exhibit lower levels of local participation and competition. Moreover, the concurrent election increases participation by candidates with nationally-established parties, while decreases participation with independent parties. This further translates into a higher votes share for nationally-established parties and a consequent higher probability of election. Elected mayors tend to have lower education and experience in office, while they are more likely to be from the municipality they were elected in. Further, elected mayors are able to attract more intergovernmental transfers, without substantially affecting local spending patterns.

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*I wish to thank Francesca Maria Calamunci, Agustin Casas, Italo Colantone, Nicola Mastrorocco, Gaia Narciso, Marvin Suesse, Michael Wycherley and participants at the IPECE conference and at the Trinity College Dublin Economics seminars. I acknowledge the Irish Research Council 2020 Government of Ireland Postgraduate Scholarship (GOIPG/2020/1154). Any mistake in this elaborate is my own.

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1 Introduction

It is known that low political participation rate is a problem for a well-functioning democracy. Indeed, even assuming acceptable levels of voter participation, unequal political participation may lead to poor representation (Stratmann, 2005). Also, low levels of political competition may result in elected officials holding power for long periods, increasing the chances for corruption and decreasing the ones for economic growth (Bueno de Mesquita et al., 2001). This varies to a degree when comparing "first-order", national elections, and "second-order" elections, local ones (Reif and Schmitt, 1980). Along this dimension, political alignment between local governments and national parties play an important role in the functioning of a democracy. Alignment favours coordination between the two tiers of a government while, at the same time, can lead to favouritism (Curto-Grau, Solé-Ollé, and Sorribas-Navarro, 2018). On the contrary, misalignment can trigger inefficiencies and policy gridlock, which however can result into policies which are more balanced (Alesina and Rosenthal, 1996). Given the increasing relevance that cities have in modern society and the economy (Glaeser et al., 1992), local elections are more salient and important by the day.

Concurrent elections are commonly employed to enhance convenience and increase efficiency in voter participation. A growing literature in political economics and political science has studied their effectiveness in augmenting voter turnout. The most recent literature has provided that concurrent elections positively affect it (Fauvelle-Aymar and François, 2015; Revelli, 2017; Bracco and Revelli, 2018; Cantoni, Gazzè, and Schafer, 2021). However, less is known overall about the possible changes to the political structure that concurrent elections may bring, in terms of political participation and the associated competition (Stratmann, 2005). Lastly, electoral results are less explored, and the vertical dimension of multiple government institutions is often ignored (Rudolph and Leininger, 2021).

This paper aims at providing a broader and more detailed overview of how concurrent elections affect voters, politicians and electoral outcomes. To do so, I exploit the quasi-random variation in the occurrence of national-local concurrent elections (NLCEs henceforth) in Italy to investigate the possible changes that this brings to the local political setting. Even though national and local elections are held every five years, their occurrence can change over time due to seemingly unrelated events that allow for space and time variation in the occurrence of these elections.[1] Formally, I exploit a difference-in-differences (DiD) design that compares municipalities that experience a NLCE, with municipalities that do not, before and after it. Within this framework, I investigate the impact that NLCEs have on political competition, measured as the number of candidates that participate at the local elections, and

[1] Section 2, 3 and 4 expand on this topic.

on political competition, measured with a Herfindahl-Hirschman political competition index (HHPC), which is standard in the political science literature (Afzal, 2014). Moreover, I investigate whether the NLCE impact the electoral success of candidates running at the local election either with independent party or with a party that is present in the national political stage.[2] Conceptually following from above, this is important to investigate as local independent parties may, on the one hand, diminish the coordination between tiers of government while, on the other hand, have a greater care for local policies (Otjes, 2018).

DiD estimates reveal that NLCEs negatively affect the total number of candidates running at the local elections to an extent. At the same time, NLCEs reduce the local political competition, by negatively affecting the (HHPC). Moreover, NLCEs reduce the share of votes for independent parties while, despite not achieving statistical significance, positively impacting the share of votes for nationally-established parties. In turn, this negatively (positively) affects the probability of victory of an independent (nationally-established) candidate by roughly 10 percentage points. This means a mean incidence of 16.57%. Lastly, investigating political participation by the two party types, I find partial evidence of reallocation. NLCEs reduce the number of candidates running with an independent party, while they more noisily increase the ones that run with a nationally-established party. Considering also the negative, but not statistically significant, effect on total political participation, the estimates suggest that some candidates, that would have otherwise run, decide not candidate themselves, while other candidates run with a nationally-established party. These results can be reconciled with the idea that one electoral sphere, the national one, affect the other, the local one. In turn, candidates and parties take advantage of such a framework and are rewarded by the voters (Hijino and Ishima, 2021; Rudolph and Leininger, 2021). The results survive a series of robustness checks. First, given that I exploit a staggered DiD, I follow the recent literature on the topic (Roth et al., 2023) and employ an estimator that accounts for heterogeneous treatment effects. Specifically, the one developed by Sun and Abraham (2021). Then, I visually assess the validity of the conditional parallel trend assumption by estimating an event-study specification. In none of the specifications related to the outcome above there is evidence of pre-trends, hence supporting the conditional parallel trend assumption. Moreover, I substitute time-varying controls with ones at baseline interacted with year fixed effects, I employ a Poisson pseudo-likelihood estimator, and change the clustering level. None of these changes affect the results.

I then extend the analysis in two different avenues. First, I investigate possible differences in

[2]From now on I will refer to this last instance as nationally-established parties. Note that this does not mean that the party the local candidates run with is ruling at the national level. It merely means that such party is present in the national political arena.

mayors elected in NLCEs between mayors elected not-in NLCEs. The aim is to give a formal evaluation regarding the choice of the voters that stemmed from the NLCEs. DiD estimates reveal that the mayors elected in NLCEs are more likely to be born in the municipality they were elected in and have a lower educational attainment. Moreover, event-study estimates show that they are less likely to have past experience in office. These results can be reconciled by the following interpretation. National parties select to run locally candidates who have roots in the municipality they run in. Such candidates have a documented electoral advantage (Campbell et al., 2019), possibly because voters cast their ballots for candidates from their municipality as an expression of their place-based identity (Schulte-Cloos and Bauer, 2023). This choice comes at the cost of both education and on the job experience. Second, I inspect whether mayors elected in NLCEs, who are more likely to run under a nationally-established party, manage the local government differently. I specifically focus on revenues collection and local spending. I find no evidence of differences in total spending and revenues. I find that mayors elected in a NLCEs attract more intergovernmental transfers in the years after the NLCE. This is coherent with a story of governmental multi-level party alignment (Solé-Ollé and Sorribas-Navarro, 2008; Bracco, Lockwood, et al., 2015; Kauder, Potrafke, and Reischmann, 2016). The fact that I do not know if local parties are aligned with ruling national parties forbids any further interpretation on this higher allocation of resources. It can be evidence of favouritism, as well as ability of elected mayors. Lastly, I investigate differences to local spending by sub-categories. No clear pattern emerge.

This paper contributes to the following strands of literature. First, this paper mainly contributes to the burgeoning literature of political economics and science that focuses on concurrent elections (Fauvelle-Aymar and François, 2015; Garmann, 2016; Revelli, 2017; Bracco and Revelli, 2018; Lo Prete and Revelli, 2021; Cantoni, Gazzè, and Schafer, 2021). By investigating outcomes other than voter turnout, this paper expands on the electoral implications of concurrent elections. In fact, political participation and political competition are as important as voter turnout for the well-being of a functioning democracy. Second, this paper contributes to the relationship between "first-order" and "second-order" elections (Reif and Schmitt, 1980; Heath et al., 1999; Hix and Marsh, 2011; Hobolt and Wittrock, 2011; Cabeza, 2018). The electoral interplay between different vertical electoral tiers of a government is key, for example in policy implementation (Alesina and Rosenthal, 1996). Hence, addressing the degree by which national elections influence the local political sphere is critical (Erikson, Folke, and Snyder Jr, 2015). Lastly, this paper contributes to the post-election consequences of concurrent elections. By investigating revenue collection and local spending patterns, this paper expands the literature related to intergovernmental transfers (Solé-Ollé and Sorribas-Navarro, 2008; Migueis, 2013; Bracco, Lockwood, et al., 2015; Kauder, Potrafke, and Reischmann, 2016) and to policies stemming

from partizan cities (Ferreira and Gyourko, 2009).

The structure of the elaborate is as follows. Section 2 provides a brief background on the Italian electoral and political setting. Section 3 presents the data being employed. Section 4 discusses the empirical strategy. Section 5 shows the main results, the robustness checks and two important extensions. Section 6 concludes.

2 Institutional Background

Italy is a parliamentary republic with four levels of government: nation, regions (*regioni*), provinces (*province*) and municipalities (*comuni*). As mentioned before, the first and the last levels are the focus of this paper.

National elections are held every five years with the election day being the same in all the municipalities. Since Italy has a bicameral legislature, voters vote to elect the members of two institutions: the Upper Chamber and the Lower Chamber. In practical terms, the powers of these institutions are essentially the same, resulting in Italy having a perfect bicameral legislative structure. At the end of the electoral turnout, where, in simplified terms, voters vote for their preferred party, with variations depending on the specific electoral rule in place[3], either the party or the coalition that receives the majority of the votes is tasked with choosing the Prime Minister, and then the rest of the Ministers for each area of the government. Then, the President of the Republic, who is elected by the parliament and not by the population directly, on a previous date, grants the official and formal approval to rule, and the either party or coalition is tasked to do so for the next five years. It is not uncommon that elected governments need to change their composition due to a variety of political scenarios. Also, if the elected government is not able to guarantee the majority of both the Upper and the Lower chambers, the President of the Republic can call a sudden election, that implies an early termination of the legislature and hence of the elected government.

On the other hand, municipalities are led by a directly elected mayor, who is tasked with the appointment of an executive committee, which altogether rules the municipality with a city council. Moreover, municipal elections are held every five years, with the election day differing for clusters of municipalities. Since 1993, municipalities with population above 15'000 people, if there is no candidate with more than the 50% of the votes in the first round, have the possibility of a run-off. The differential in election day at the local level is also because there exist several reasons for which a local government can experience an early termination. Examples of instances that can anticipate the local elections are violations of laws from the governing mayor and/or council, either the resignation or the death of the

[3]Chiaramonte (2015) provides a detailed overview of the national electoral laws of the period under consideration.

mayor, and the resignation of more than half of the members of the city council. At the local level candidates can run with a nationally-established party or with an independent party.

3 Data and Descriptive Evidence

Local elections characteristics. I gather data on local elections characteristics from the elections archive of the Italian Ministry of interior.[4] I have collected all local elections data that took place from 1991 to 2019 for 15 out of 20 of the Italian regions.[5] I have information on the date of the election, the local turnout, the number of candidates, the number of votes they received, their party affiliation, whether a second round took place, if there is an incumbent candidate and the name of the winning one.

First, I exploit the party affiliation of each candidates to classify whether a candidate runs with a nationally-established (aligned henceforth) party, or with a local and independent one. Further, I retrieve the main outcomes that I focus on. These capture both political competition and participation by party affiliation, either national or independent. These are: the share of votes for a party; the probability of victory of a party; the total and by party number of candidates running at the election; the Herfindahl-Hirschman political competition index (HHPC).[6][7]

I also leverage this data to identify municipalities that, throughout the sample, have experienced at least once competition between and independent and a nationally-established party. Further, I exploit the archive of the Italian Ministry of the interior to gather the dates where local and national elections where held concurrently. this occurrence took place on the 13$^{\text{th}}$ of May 2001 and on the 13$^{\text{th}}$ of April 2008. These pieces of information are key for sample restriction and treatment definition, carefully explained in the next section.

Municipalities characteristics. The data source for the socio-demographic data is the Italian Institute of Statistics[8]. Specifically, I have collected data at the municipal level from the censuses of 1991, 2001 and 2011 on an extensive set of variables.

[4] https://elezionistorico.interno.gov.it/eligendo/opendata.php

[5] I have collected data for all the 15 regions under a normal status, hence excluding special statute regions, due to varying local and national electoral laws characteristics.

[6] I compute the share of votes for a candidate c, running with a nationally-established (independent), at election date t in municipality i as $Votes\,Share_{i,t} = \sum_c \frac{Votes_{i,c,t}}{\sum_c (Votes_{i,c,t} - Null\,Votes_{i,c,t})}$.

[7] the Herfindahl-Hirschman political competition index is a standard measure of competition used in political economics and political science (Afzal, 2014). It is computed as $HHPC_{i,t} = 1 - \sum_c Votes\,Share^2_{c,i,t}$, that is, the sum of squares of the vote shares of each candidate j running for election in the municipality i at time t. It is an index that varies between 0 and 1, with 0 being no competition and 1 equal maximum competition.

[8] https://ottomilacensus.istat.it/

Other data. I gather data on elected mayor characteristics from the archive on mayors' characteristics of the Italian Ministry of the Interior.[9] I have retrieved information on mayors' age, gender, education and job outside of the public role (if present). Importantly, given that the dataset on mayors is not limited to this figure alone, but extends to other roles within the local government, I can observe if an elected mayor had any experience in any local office prior to the election.

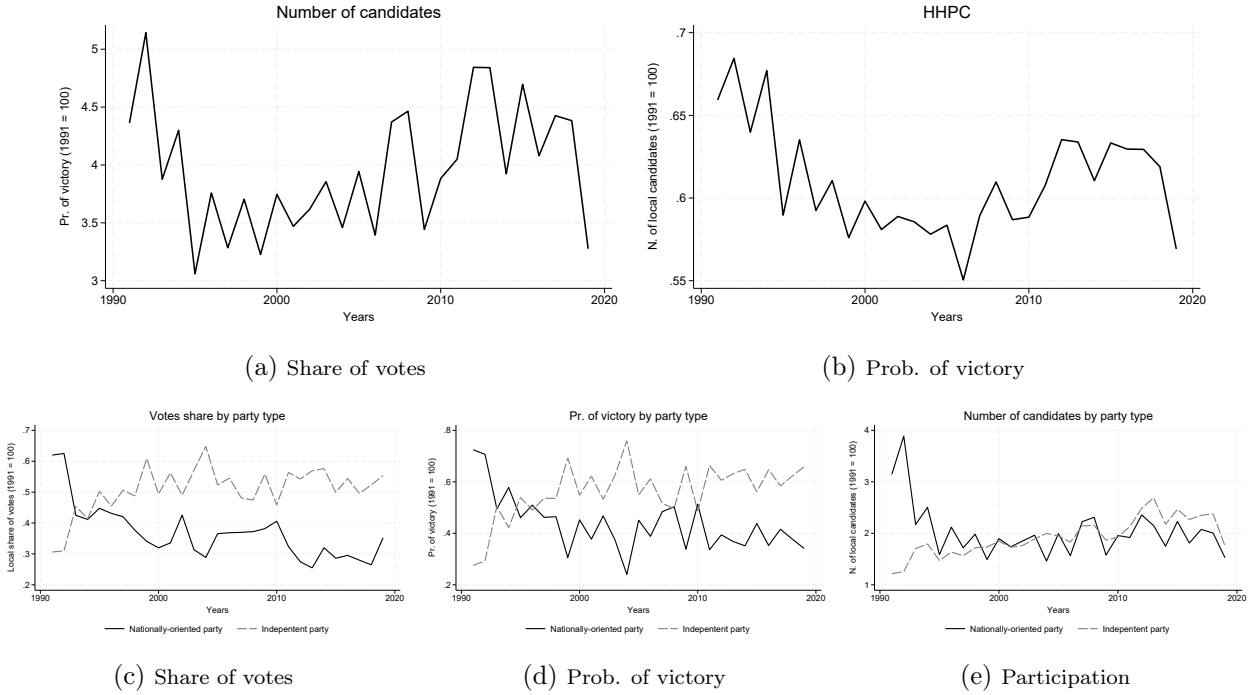
I also gather data on municipal balance sheets (*Certificati Consuntivi*), which contains yearly data on public revenues and spending from the 1998 to the 2015.[10] I focus on year-on-year revenues and spending decisions. The detail of the data allows to go beyond aggregate level of revenues and spending, resulting into several sub-categories. Specifically, I focus on: total revenues; total spending; intergovernmental transfers; spending for administrative services; spending for cultural activities; spending for justice; spending for police; spending for welfare services; spending for economic development; spending for urban development; spending for tourism; spending for mobility; spending for sport activities.

The final dataset consists of 5'355 municipalities, observed from 1991 to 2019, for an average of 3.25 local elections. Of the 5'355 municipalities, 1'350 experiences concurrent local and national elections.

Table A1 displays the summary statistics of the electoral variables. The average number of candidates at a local election is 3.624, while the average value of the HHPC index is 0.598. This last value suggests that, on average, local election tend to have moderate levels of political competition. Further, It is notable that, on average, independent parties receive a higher share of votes locally (0.535) when compared to nationally-established parties (0.370). This consequently translates in a higher probability of victory for the former (0.602) when compared to the latter (0.398). Political participation is similar, with almost two candidates per party type participating at the local elections.

[9] https://dait.interno.gov.it/elezioni/anagrafe-amministratori.
[10] https://finanzalocale.interno.gov.it/.

Figure 1: Local political participation and competition, by party type



(a) Share of votes (b) Prob. of victory

(c) Share of votes (d) Prob. of victory (e) Participation

Notes. These plots show the evolution over time of the share of votes and number of candidates at local elections by indepentent and nationally-alligned local parties.

Figure 1 shows the evolution over local election years of the inspected outcomes. Throughout the sample period, the number of candidates floats between 5 and 3, without showing a clear increasing or decreasing pattern. On the other hand, the HHPC index shows a clear decreasing trend. Further, it is evident that locally independent parties outperform nationally-established ones in votes share and victory, while not so much in participation. It is also worth noting the drop in the evolution of these variables after 1992 for nationally-established parties. This is likely due to the detected widespread corruption in political areas scandal called "clean hands".

4 Empirical strategy

The changes to the calendar of both national and primarily local elections allow for a quasi-random variation in the timing, the number and the identity of municipalities that may or may not experience NLCEs. This source of variation is what I primarily exploit in this paper. To provide useful background information, Figure A1 shows the geographic distribution of municipalities that experience NLCEs. The treated municipalities are quite homogeneously exposed across the Italian regions. Further, Figure A2 shows the timing of national elections (dashed-dotted, vertical lines), local elections (solid, connected lines) and the timing of NLCEs (solid, vertical lines).

Hence, to study the impact that the concurrence of national and local elections (NLCE henceforth)

has on the local one, I exploit the quasi-random occurrence of this concurrence. Hence, the identification strategy is based on a DiD design. Specifically, I compare the political outcomes of municipalities with and without NLCEs, before and after their occurrence. The election years in which in some municipalities local and national elections were held concurrently identify the treatment units and the period. The control group is composed of the election years for those municipalities that never experienced NLCEs and by-election years before the concurrence for those municipalities which experienced it. Formally, I estimate the following equation.

$$Y_{i,t} = \alpha + \beta NLCE_{i,t} + \gamma \mathbf{X'_{i,t}} + \tau_t + \sigma_i + \theta_{r(i)} \times \eta_y + \epsilon_{i,t} \tag{1}$$

Where $Y_{i,t}$ is the outcome of interest in municipality i and election day t. $NLCE_{i,t}$ is the treatment variable of interest, that takes value zero before either the 13$^{\text{th}}$ of May 2001 or the 13$^{\text{th}}$ of April 2008 for those municipalities with the concurrent elections, and one afterwards. $\mathbf{X'_{i,t}}$ is a vector of control variables that are unbalanced based on treatment exposure. This include: employment rate in industry; employment rate in agriculture; home-ownership rate; elderly dependency index; high-education rate; employment in services; index of families below the poverty line; unemployment rate.[11] τ_t and σ_i represent election-day and municipality fixed effects, and $\theta_{r(i)} \times \eta_y$ are region by election year fixed effects, to control non-parametrically for regional trends. An error term concludes the specification.

Given that there may be instances where, at local elections, either nationally-established or independent parties never participate, I restrict the estimating sample to those municipalities that, throughout the sample, have experienced at least once competition between and independent and a nationally-established party.[12] This ensures to have a more appropriate comparison between control and treatment groups in terms of local historical electoral landscape.

The validity of this DiD identification strategy rests on the conditional parallel trend assumption. It states that treatment and control units where on a parallel trend with respect to the outcome before the occurrence of the treatment, conditional on covariates. To provide evidence in support of this assumption, I estimate the following event study specification.

$$Y_{i,t} = \alpha + \sum_{p=-3}^{-3} \alpha_p \, NLCE_{i,t+p} + \mathbf{X'_{i,t}} + \sigma_i + \tau_t + \theta_{r(i)} \times \eta_y + \epsilon_{i,t} \tag{2}$$

where I decompose treatment exposure in treatment leads and lags, back to and up to three local elections. The excluded period is the election prior to that of the concurrent one ($p = -1$). Moreover,

[11] I retrieve these controls from estimating the following univariate cross-sectional linear regression $Pr.NLCE_i = \alpha + \beta Control_i^{1991} + \sigma_p + \epsilon_i$. I then select only statistically significant controls. See Figure A3.

[12] This action excludes roughly 1'320 municipalities, mostly of small size. The average population of the estimating sample is 14'206, while the one of the excluded sample is 3'611.

given that the treatment is staggered, I follow the recent literature on the staggered DiD set-up (see Roth et al., 2023 for an excellent review) and employ the estimator proposed by Sun and Abraham (2021), so that to account for treatment heterogeneous effects.

5 Results

Table 1 shows the main results. It jointly shows the impact of NLCEs on outcomes related to the number of local candidates participating at the election (columns 1 to 3) and the HHPC index (columns 4 to 6). Columns (1) to (3), and (4) to (6) respectively, gradually include controls and additional fixed effects.

Table 1: Concurrent national-local elections, aggregate political competition and participation.

	(1)	(2)	(3)	(4)	(5)	(6)
	N. of local candidates			*HHPC index*		
$NLCE_{i,t}$	-0.089	-0.105	-0.097	-0.016**	-0.017**	-0.013*
	(0.100)	(0.099)	(0.100)	(0.007)	(0.007)	(0.007)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls		✓	✓		✓	✓
Region by Year FE			✓			✓

Notes: Dependent variables: the number of candidates participating at the local election; the Herfindahl-Hirschman political competition index. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table 1 shows that the aggregate number of participating candidates does not change, despite having consistent negative coefficients. On the contrary, the coefficients associated to the HHPC index are negative and persistently statistically significant, signalling a reduced political competition in treated municipalities. The coefficient of column (6) imply that municipalities exposed to NLCEs have a lower HHPC index of about 1.3%.

Moving to Table 2, panel A focuses on the share of votes received at the local election. While lacking statistical significance, the coefficients follow a clear pattern. The ones associated to nationally-established parties are positive, while the ones of independent parties are negative. The coefficient in column (6) achieves statistical significance, and it translates into a reduction in the votes share for an independent party by 3.5%. This somewhat noisy reallocation in votes share affects the probability of victory. As shown in panel B, nationally-independent parties clearly benefit from the concurrent elections, increasing their probability of victory by as much as 10%. The opposite is, mechanically,

Table 2: Concurrent national-local elections, by party electoral outcomes and participation.

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:	*Sh. votes of nationally-oriented party*			*Sh. votes of independent party*		
$NLCE_{i,t}$	0.007	0.010	0.020	-0.018	-0.021	-0.035**
	(0.019)	(0.019)	(0.019)	(0.015)	(0.014)	(0.014)
Panel B:	*Pr. victory of nationally-oriented party*			*Pr. victory of independent party*		
$NLCE_{i,t}$	0.075**	0.078**	0.100***	-0.075**	-0.078**	-0.100***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Panel C:	*N. cand. of nationally-oriented party*			*N. cand. of independent party*		
$NLCE_{i,t}$	0.102	0.099	0.164**	-0.191**	-0.205***	-0.261***
	(0.073)	(0.073)	(0.073)	(0.076)	(0.076)	(0.077)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls		✓	✓		✓	✓
Region by Year FE			✓			✓

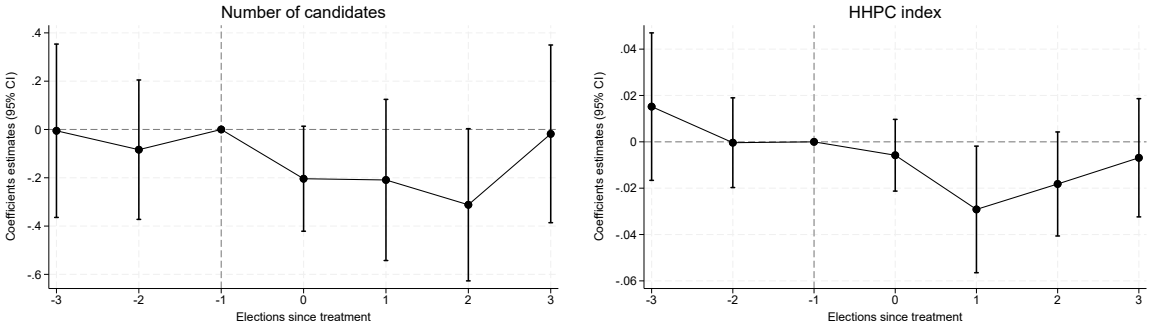
Notes: Dependent variables: the local votes share of an independent/nationally-oriented party; the probability of victory at the local election for a independent/nationally-oriented party; the number of candidates participating at the local election with a independent/nationally-oriented party. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

true for independent parties. Lastly, local participation by party is also affected. Panel C shows that, while participation under nationally-established parties mildly increases, the one under independent ones significantly decreases. The coefficient of column (6) means treated municipalities have 0.26 candidates less running for an independent party. An alternative quantification is that for every four treated municipalities, in one there is one candidate less running for an independent party. These results show that local elections, when held jointly with national ones, favour candidates that align with the national political debate. This happens from the electorate point of view, which rewards the candidates with higher votes share. This also takes place from the candidates themselves, which participate more likely under a nationally-oriented brand.

Figure 2 and Figure 3 show the relative event-study specification of the just discussed results. Notably, none of the results exhibit clear pre-trends, supporting the validity of the parallel trend assumption. The post-treatment period in Figure 2 confirms the results of the DiD specification, and better highlights the negative trend related to the aggregate number of candidates. Looking at the post-treatment period of Figure 3 it is notable that the effects do not trigger at the concurrent election, but they tend to develop in subsequent elections.

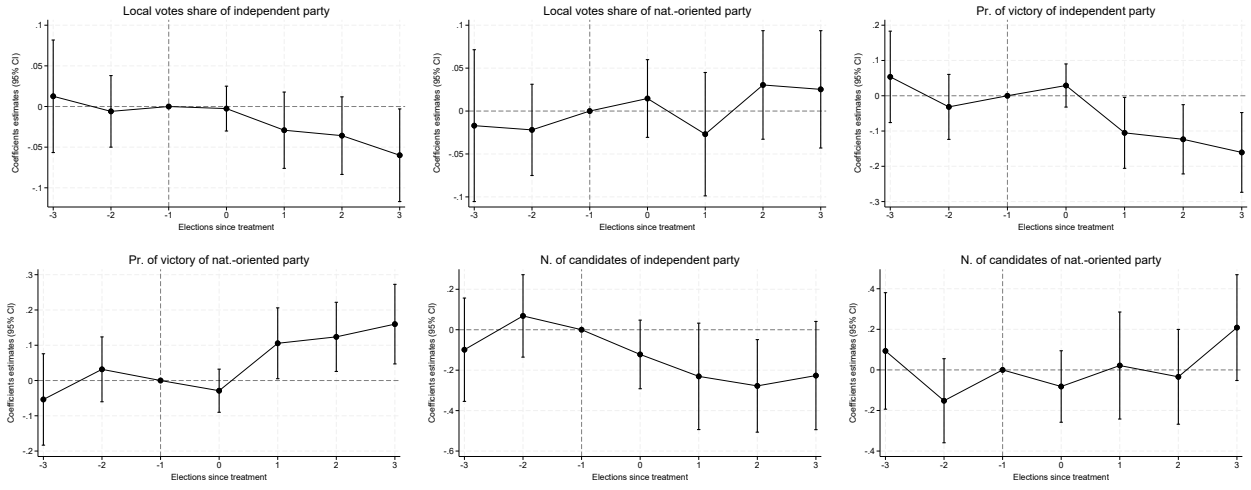
These results survive a series of additional robustness checks. Table A2 and Table A3 substitute contemporaneous controls with baseline controls interacted with election-year fixed effects. The results are, if anything, more robust. Table A4 and Table A5 substitute the linear regression with a Poisson pseudo-likelihood estimator, leaving the results substantially unaffected. Lastly, Table A6 and Table A7 change the cluster of the standard errors from the municipality to the province without affecting statistical significance of the results.

Figure 2: Concurrent national-local elections, aggregate political competition and participation. Event-study estimates.



Notes. These plots show the event study specification describe in Equation 2, and estimated with the estimator proposed by Sun and Abraham (2021).

Figure 3: Concurrent national-local elections, by party electoral outcomes and participation. Event-study estimates.



Notes. These plots show the event study specification describe in Equation 2, and estimated with the estimator proposed by Sun and Abraham (2021).

Overall, these results reveal that NLCEs disrupt average trends in local political and electoral outcomes. Nationally-established parties win from such a set-up, at the expense of independent ones. A possible explanation for this phenomenon is that the first-order election (national) casts its political stage to the the second-order election (local), where nationally-established candidates emerge advantaged. Nationally-established candidates take advantage of the shift from local to national political

discourse that the NLCE brings, and exploit it from an electoral standpoint at their own advantage (Hijino and Ishima, 2021). This non-partizan coat-tail effect (Rudolph and Leininger, 2021) also impacts the selection of candidates into party types, possibly triggering a re-allocation from independent to nationally-established parties. Alternatively, it may be that independent-party candidates, who would normally participate at the local election, decide to not participate, given the different stage of political discourse that takes place during a NLCE.

Moreover, NLCEs diminish the local election level of political participation and competition. From a political economics literature standpoint, it is unclear whether having a higher or lower number of candidates is beneficial to the electorate. On the one hand, more political participation is associated with higher incentives by incumbents and other candidates to represent the preferences of the voters. This is due to the higher number of candidates to compete with and hence the associated lower probability of victory (Stratmann, 2005). On the other hand, a lower number of candidates reduces the information costs that voters face at the election, facilitating scrutiny and selection of candidates (Martinelli, 2006). This last interpretation may be the reason behind the decreased HHPC index. Complementarily, the likely increased visibility on the local political stage that is due to the NLCE can increase the scrutiny of the local citizens on the mayoral candidates (Besley, 2005; Ferraz and Finan, 2008). Lastly, the overall reduction in political participation does not favour the reallocation hypothesis suggested in the previous paragraph.

5.1 Elected candidates

So far, the results have shown that having concurrent national-local elections impacts the local electoral political stage. Ideally, one would analyse and compare the characteristics of candidates participating at concurrent and not-concurrent elections. This would provide a clearer sense of possible political selection taking places in such set-ups. However, this is not possible given the absence of detailed data on mayoral candidates. Nevertheless, one can focus on elected mayors, and compare the characteristics of elected mayors in NLCEs with those elected in not-NLCEs. The aim is to give a more accurate statement regarding the choice stemmed from the concurrent elections. Do these elected mayors have higher education? Do they have peculiar out-of-office job characteristics? Do they have past office experience?

Table 3 applies the estimating framework of Equation 1 in investigating the following outcomes: the education level of the mayor; a dummy equal to one if the mayor is born in the city she is elected in; a dummy equal to one if the gender of the mayor is female; the age of the mayor; a dummy equal to one if the mayor had previous experience in office. Notably, mayors elected in NLCEs are less educated

Table 3: Concurrent national-local elections, elected mayors characteristics.

	(1) *Education*	(2) *Born in city*	(3) *Female*	(4) *Age*	(5) *Exp. in office*
$NLCE_{i,t}$	-0.112**	0.076*	-0.001	0.593	0.023
	(0.051)	(0.039)	(0.024)	(0.808)	(0.033)
N	12618	12618	12618	12618	12618
Municipality FE	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓
Region by Year FE	✓	✓	✓	✓	✓

Notes: Dependent variables: the education level of the mayor; a dummy equal to one if the mayor is born in the city she is elected in; a dummy equal to one if the gender of the mayor is female; the age of the mayor; a dummy equal to one if the mayor had previous experience in office. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

and are more likely born in the city they were elected in. These results can be reconciled with the idea that national parties support the candidacy of politicians that have roots in the municipalities they are running in. Such candidates have a documented by the literature electoral advantage (Górecki and Marsh, 2012; Campbell et al., 2019), possibly because voters cast their ballots for candidates from their municipality as an expression of their place-based identity (Schulte-Cloos and Bauer, 2023). The selection of such candidates may come at the cost of a higher education level, with presumably muted impacts on other mayors' characteristics, such as previous office experience. Looking at event-study specifications in Figure A4, it is notable the positive coefficient spike at the NLCE for the dummy capturing mayors born in the municipality they win in. It is also notable the negative spike at the NLCE for the previous experience in office dummy. This reinforces the hypothesis that national parties prioritize origin over other positive characteristics of their candidates and, within the NLCE electoral-setting, they are rewarded by the electorate.

5.2 Intergovernmental transfers and local spending

Do NLCEs, by affecting the local political and electoral setting, consequently affect local resource collection and policies implementation? Candidates affiliated with national-level parties may systematically differ in their local expenditure choices compared to independent or locally-oriented candidates. Nationally-established officials may prioritize spending decisions consistent with their party's broader policy objectives, secure political support from higher government tiers, or attract central resources. Conversely, independent candidates may face fewer constraints, allowing greater responsiveness to local voter preferences and specific community demands. These divergent incentives suggest that the

degree of political orientation between local and national governments may directly influence patterns of municipal spending and funding, effectively influencing policy. Exploiting yearly data on municipal balance sheets from 1998 to 2015 described in Section 3, we can formally investigate this suggested hypothesis.

Table 4: Concurrent national-local elections, local revenues, local spending and national transfers.

	(1) *Total revenues (IHS)*	(2) *Total spending (IHS)*	(3) *Nat. transfers (IHS)*
$NLCE_{i,t}$	0.000	-0.008	0.332**
	(0.014)	(0.033)	(0.153)
N	38759	38762	38758
Municipality FE	✓	✓	✓
Year FE	✓	✓	✓
Controls	✓	✓	✓
Region by Year FE	✓	✓	✓

Notes: The dependent variables are the inverse hyperbolic sine of: year-over-year total revenues; year-over-year spending; year-over-year national transfers. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce; mayor education; mayor age; if mayor is from the city; if mayor has past office experience; mayor gender. Estimates include municipality and year fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table 4 shows that NLCEs do not affect the total level of local total revenues and spending. However, NLCEs positively impact the level of intergovernmental transfers allocated to the treated municipalities. The increase in intergovernmental transfers is coherent with a robust literature that looks at party alignment and the allocation of transfers in different developed economies (Solé-Ollé and Sorribas-Navarro, 2008; Migueis, 2013; Bracco, Lockwood, et al., 2015; Kauder, Potrafke, and Reischmann, 2016; Curto-Grau, Solé-Ollé, and Sorribas-Navarro, 2018). NLCEs imply a higher probability of election of a nationally-established candidate. Consequently, it may be the case that these elected mayors, can redirect more resources to the municipality exploiting their ties with the central government. The increase in resources does not benefit any particular spending category (see Table A8). Hence, it is likely allocated proportionally to all of them. Figure A5 shows the event-study specification of these estimates. Notably, prior to the NLCE, the trend in intergovernmental transfers is negative, despite insignificant. After the NLCE, intergovernmental transfers sharply increase and remain, noisily, positive. The sub-figures related to total revenues and spending are more hectic and do not show a particular pattern. Looking at the event-studies of specific spending categories in Figure A6, most of them look rather flat. However, the mild increase in urban spending and temporary decreases in mobility and sport spending are worth underlining. Overall, candidates elected in NLCE, who are more likely to be nationally-established, do not alter local spending patterns. At the same

time, they are able to attract more resources in the form of higher intergovernmental transfers.

6 Conclusions

This paper exploited the quasi-random timing of Italy's national-local concurrent elections to analyse their effects on municipal politics. Employing a staggered difference-in-differences design, I show that national-local concurrent elections depress both the number of mayoral candidates and the Herfindahl–Hirschman Political Competition (HHPC) index, indicating a measurable reduction in political competition. At the same time, nationally-recognized parties gain ground: their vote share rises (and that of independents falls), and their probability of winning the local election increases by roughly ten percentage points. Turning to who ultimately holds office, mayors elected under concurrent elections are more likely to be native to the municipality, possess lower educational attainment and have less prior office experience. This is consistent with national parties' strategic selection of "place-rooted" nominees. Lastly, although these mayors do not alter aggregate spending or revenue trajectories, they secure more intergovernmental transfers.

These findings highlight a novel dynamic between first- and second-order elections: while local elections inform national politics, the timing of national elections reshapes local competition, candidate supply, and resource flows. From a normative standpoint, concurrent elections may yield administrative efficiencies and elevated turnout, but at the cost of diminished local pluralism, weakened independent representation, and enhanced central influence over municipal affairs. Possible avenues of future research are the following: extending this analysis to other multi-tiered democracies would clarify the generality of these effects; unpacking the mediating roles of voter information costs and media coverage could reveal through which channels national salience crowds out local contestation; and assessing long-run policy convergence between nationally influenced and local governments would speak to whether these short-run fiscal gains translate into enduring shifts in the locus of policymaking. Such inquiries are essential for designing electoral calendars that balance efficiency with the preservation of a vibrant, autonomous local democracy.

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A Appendix

A.1 Figures

Figure A1: Geographic distribution of NLCE

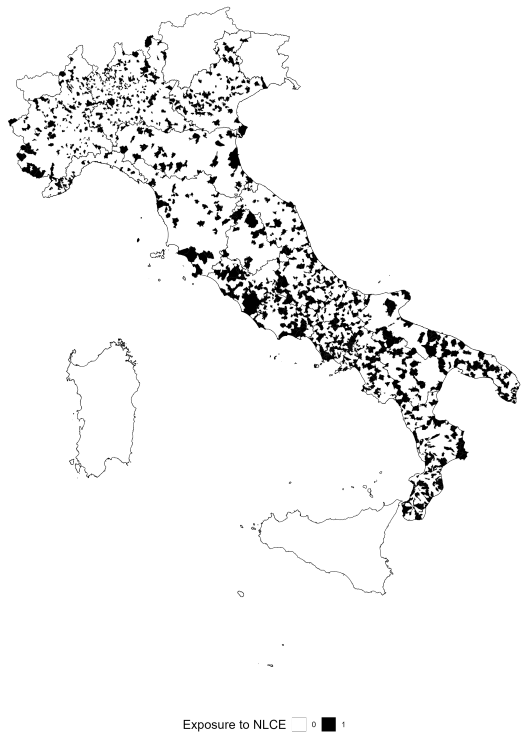
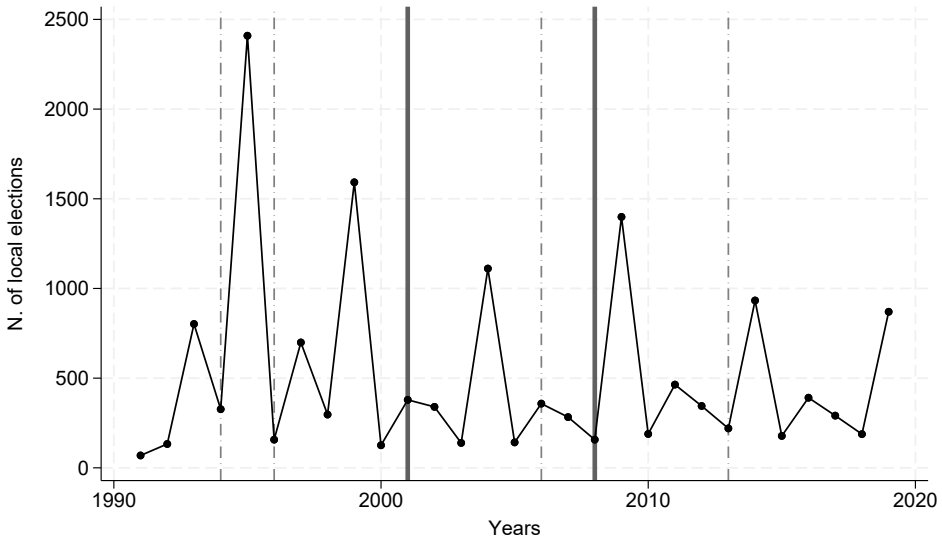
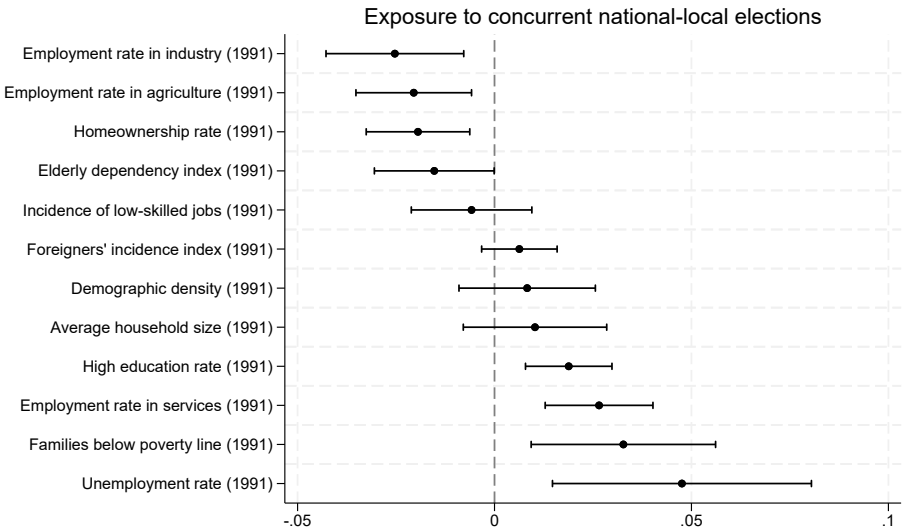


Figure A2: Number of local elections over time



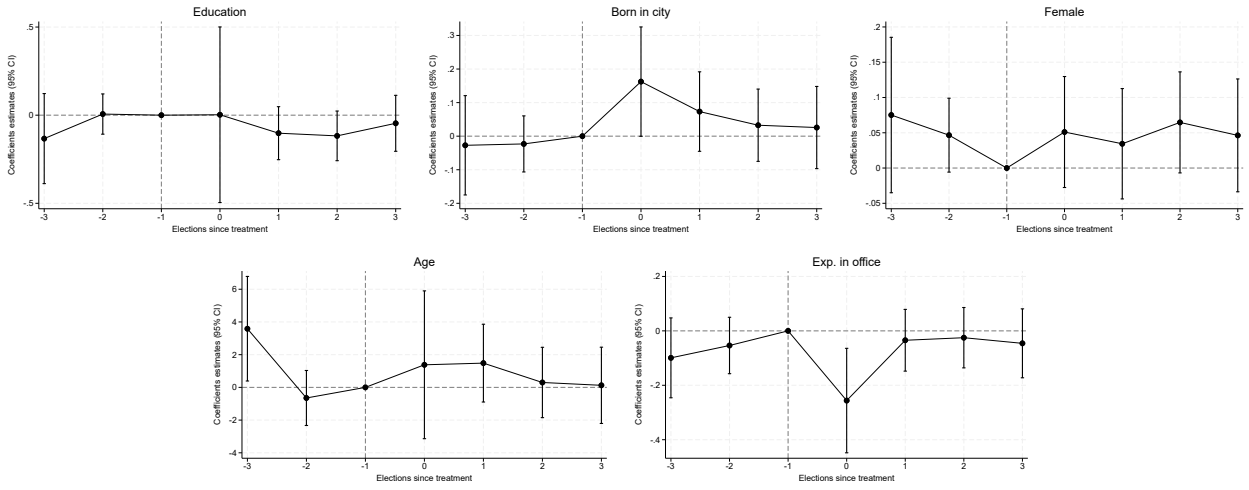
Notes. This plot shows the number of local elections over time. The dashed-dotted vertical lines highlight the years of not-concurrent national elections, while the solid vertical lines show the years of concurrent national-local elections.

Figure A3: Balanced controls



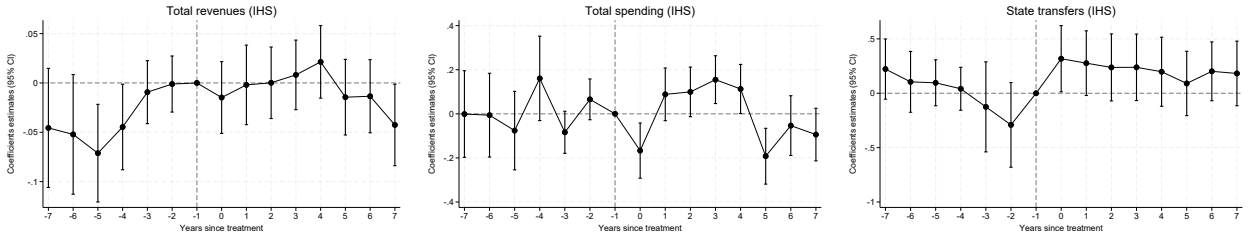
Notes. This plot shows the balancedness of municipal charateristics by exposure to concurrent national-local elections.

Figure A4: national-local concurrent elections. Event study specification. Elected mayors characteristics.



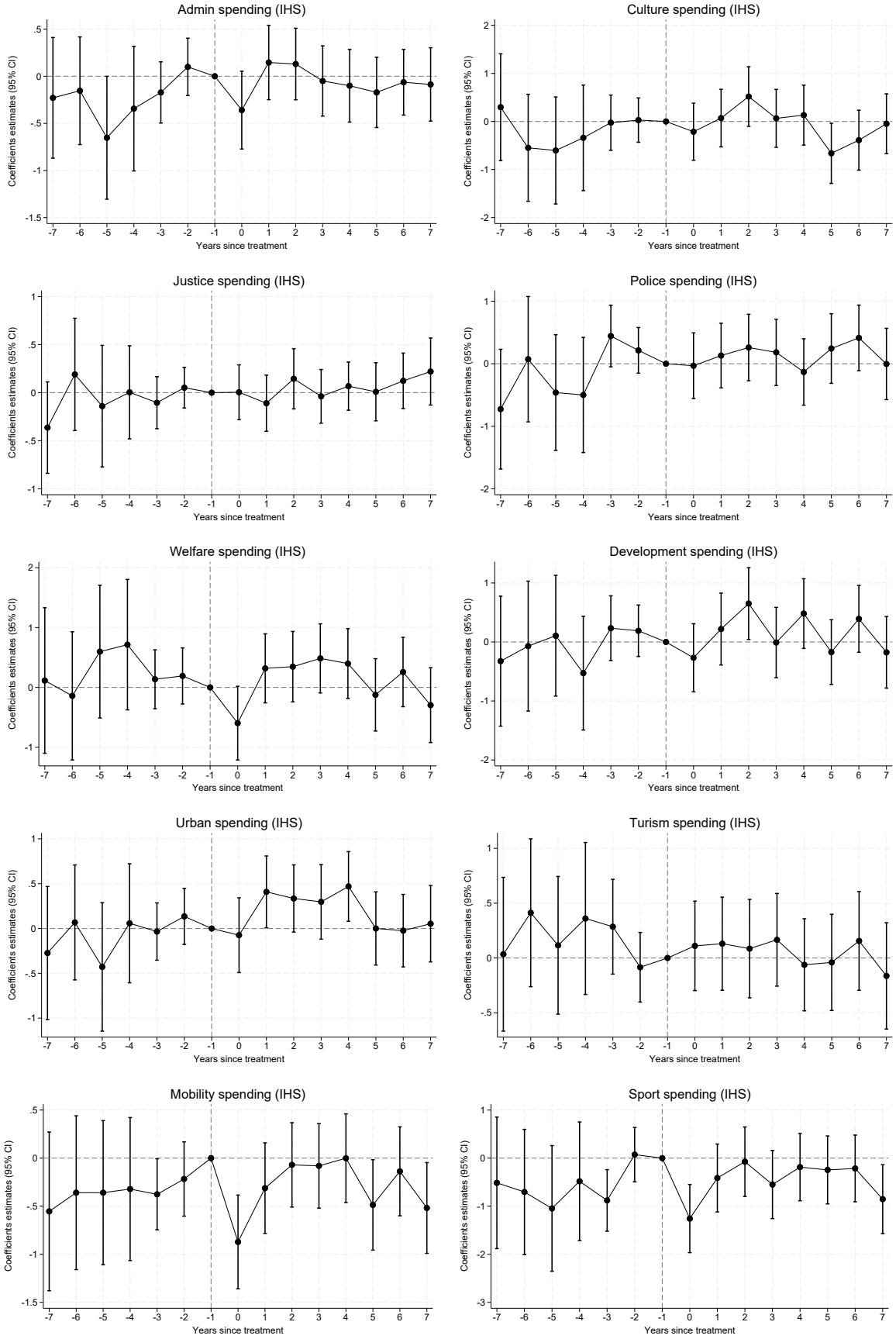
Notes. These plots show the event study specification describe in Equation 2, and estimated with the estimator proposed by Sun and Abraham (2021).

Figure A5: national-local concurrent elections. Event study specification. Local revenues, spending and transfers.



Notes. These plots show the event study specification describe in Equation 2, and estimated with the estimator proposed by Sun and Abraham (2021).

Figure A6: national-local concurrent elections. Event study specification. Local spending by type.



Notes. These plots show the event study specification describe in Equation 2, and estimated with the estimator proposed by Sun and Abraham (2021).

A.2 Tables

Table A1: Descriptive statistics of main variables

	Mean	SD	Min	p50	Max
Outcome					
N. of candidates	3.624	1.637	2.000	3.000	19.000
HHPC index	0.598	0.116	-0.003	0.608	0.935
N. of candidates of independent parties	1.844	0.939	1.000	2.000	11.000
N. of candidates of nat.-oriented parties	1.780	1.304	1.000	1.000	14.000
Local share of votes of local nat-.oriented party	0.369	0.248	0.000	0.341	0.987
Local share of votes of independent party	0.537	0.281	0.000	0.558	1.000
Pr. victory of nat.-oriented party	0.396	0.489	0.000	0.000	1.000
Pr. victory of indepen det party	0.603	0.489	0.000	1.000	1.000
Treatment					
NLCE DiD	0.138	0.345	0.000	0.000	1.000
Controls					
Elderly dependency index	28.822	11.789	5.148	27.124	182.500
Foreigners' incidence index	28.067	36.128	0.000	11.613	367.089
Average household size	2.647	0.340	1.244	2.632	4.010
Homeownership rate	75.152	7.623	17.647	75.638	100.000
High education rate	34.079	14.887	0.000	32.671	83.450
Unemployment rate	11.911	9.874	0.000	7.753	60.937
Employment rate in agriculture	9.328	9.850	0.000	5.640	70.833
Employment rate in industry	38.577	13.250	2.830	38.124	81.912
Employment rate in services	34.536	10.951	7.865	33.443	88.889
Incidence of low-skilled jobs	14.037	7.003	0.000	13.574	70.115
Families below poverty line	2.032	2.669	0.000	1.090	29.232
Demographic density	477.867	875.409	1.502	207.010	15164.905

Notes. This table shows the descriptive statistics of the main variables used in the analysis.

Table A2: Concurrent national-local elections, aggregate political competition and participation. Baseline controls.

	(1)	(2)	(3)	(4)	(5)	(6)
	N. of local candidates			*HHPC index*		
$NLCE_{i,t}$	-0.089	-0.094	-0.062	-0.016**	-0.016**	-0.012*
	(0.100)	(0.099)	(0.099)	(0.007)	(0.007)	(0.007)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls		✓	✓		✓	✓
Region by Year FE			✓			✓

Notes: Dependent variables: the number of candidates participating at the local election; the Herfindahl-Hirschman political competition index. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Controls are taken in 1991 and interacted with year fixed effects. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table A3: Concurrent national-local elections, political allignment and by party participation. Baseline controls.

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:	*Sh. votes of nationally-oriented party*			*Sh. votes of independent party*		
$NLCE_{i,t}$	0.007	0.010	0.015	-0.018	-0.024*	-0.033**
	(0.019)	(0.019)	(0.018)	(0.015)	(0.014)	(0.014)
Panel B:	*Pr. victory of nationally-oriented party*			*Pr. victory of independent party*		
$NLCE_{i,t}$	0.075**	0.084***	0.094***	-0.075**	-0.083***	-0.093***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
Panel C:	*N. cand. of nationally-oriented party*			*N. cand. of independent party*		
$NLCE_{i,t}$	0.102	0.151**	0.202***	-0.191**	-0.247***	-0.260***
	(0.073)	(0.072)	(0.073)	(0.076)	(0.076)	(0.077)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls (1991)		✓	✓		✓	✓
Region by Year FE			✓			✓

Notes: Dependent variables: the local votes share of an independent/nationally-oriented party; the probability of victory at the local election for a independent/nationally-oriented party; the number of candidates participating at the local election with a independent/nationally-oriented party. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Controls are taken in 1991 and interacted with year fixed effects. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table A4: Concurrent national-local elections, aggregate political competition and participation. Poisson estimator.

	(1)	(2)	(3)	(4)	(5)	(6)
	N. of local candidates			*HHPC index*		
$NLCE_{i,t}$	-0.015	-0.020	-0.017	-0.025**	-0.027**	-0.021*
	(0.022)	(0.022)	(0.022)	(0.011)	(0.011)	(0.011)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls		✓	✓		✓	✓
Region by Year FE			✓			✓

Notes: Dependent variables: the number of candidates participating at the local election; the Herfindahl-Hirschman political competition index. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Estimates employ a Poisson pseudo-likelihood estimator. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table A5: Concurrent national-local elections, political allignment and by party participation. Poisson estimator.

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:	*Sh. votes of nationally-oriented party*			*Sh. votes of independent party*		
$NLCE_{i,t}$	0.012	0.023	0.052	-0.045	-0.050	-0.084***
	(0.053)	(0.053)	(0.052)	(0.032)	(0.032)	(0.031)
Panel B:	*Pr. victory of nationally-oriented party*			*Pr. victory of independent party*		
$NLCE_{i,t}$	0.130**	0.140**	0.167**	-0.161**	-0.166**	-0.227***
	(0.066)	(0.065)	(0.069)	(0.066)	(0.066)	(0.069)
Panel C:	*N. cand. of nationally-oriented party*			*N. cand. of independent party*		
$NLCE_{i,t}$	0.045	0.043	0.069**	-0.088**	-0.096***	-0.120***
	(0.030)	(0.030)	(0.029)	(0.037)	(0.037)	(0.037)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls		✓	✓		✓	✓
Region by Year FE			✓			✓

Notes: Dependent variables: the local votes share of an independent/nationally-oriented party; the probability of victory at the local election for a independent/nationally-oriented party; the number of candidates participating at the local election with a independent/nationally-oriented party. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Estimates employ a Poisson pseudo-likelihood estimator. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table A6: Concurrent national-local elections, aggregate political competition and participation. Provincial cluster.

	(1)	(2)	(3)	(4)	(5)	(6)
	N. of local candidates			*HHPC index*		
$NLCE_{i,t}$	-0.089	-0.105	-0.097	-0.016**	-0.017**	-0.013*
	(0.099)	(0.099)	(0.089)	(0.007)	(0.007)	(0.007)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls		✓	✓		✓	✓
Region by Year FE			✓			✓

Notes: Dependent variables: the number of candidates participating at the local election; the Herfindahl-Hirschman political competition index. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Provincial clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table A7: Concurrent national-local elections, political allignment and by party participation. Provincial cluster.

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A:	*Sh. votes of nationally-oriented party*			*Sh. votes of independent party*		
$NLCE_{i,t}$	0.007	0.010	0.020	-0.018	-0.021	-0.035**
	(0.020)	(0.020)	(0.020)	(0.014)	(0.014)	(0.014)
Panel B:	*Pr. victory of nationally-oriented party*			*Pr. victory of independent party*		
$NLCE_{i,t}$	0.075**	0.078**	0.100***	-0.075**	-0.078**	-0.100***
	(0.032)	(0.032)	(0.033)	(0.032)	(0.032)	(0.033)
Panel C:	*N. cand. of nationally-oriented party*			*N. cand. of independent party*		
$NLCE_{i,t}$	0.102	0.099	0.164**	-0.191***	-0.205***	-0.261***
	(0.082)	(0.080)	(0.077)	(0.071)	(0.071)	(0.070)
N	13265	13265	13265	13265	13265	13265
Municipality FE	✓	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓	✓
Controls		✓	✓		✓	✓
Region by Year FE			✓			✓

Notes: Dependent variables: the local votes share of an independent/nationally-oriented party; the probability of victory at the local election for a independent/nationally-oriented party; the number of candidates participating at the local election with a independent/nationally-oriented party. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce. Estimates include municipality and election date fixed effects, as well as region by year fixed effects. Province clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table A8: Concurrent national-local elections, local spending by type.

	(1)	(2)	(3)	(4)	(5)
Panel A:	*Admin (IHS)*	*Culture (IHS)*	*Justice (IHS)*	*Police (IHS)*	*Welfare (IHS)*
$NLCE_{i,t}$	-0.038	-0.122	0.076	0.029	-0.094
	(0.104)	(0.185)	(0.100)	(0.163)	(0.162)
Panel B:	*Development (IHS)*	*Urban (IHS)*	*Turism (IHS)*	*Mobility (IHS)*	*Sport (IHS)*
$NLCE_{i,t}$	0.073	0.166	-0.063	-0.039	-0.172
	(0.177)	(0.114)	(0.138)	(0.129)	(0.203)
N	37659	38694	37482	38622	38132
Municipality FE	✓	✓	✓	✓	✓
Ele. date FE	✓	✓	✓	✓	✓
Controls	✓	✓	✓	✓	✓
Region by Year FE	✓	✓	✓	✓	✓

Notes: The dependent variables are the inverse hyperbolic sine of year-over-year spending on: administrative srvices; culture; justice; police; welfare; development; urban; turism; mobility; sport. The treatment variable, $NLCE_{i,t}$, refers to the DiD variable capturing exposure to national-local elections. Controls include: population; share of adults with a tertiary degree; employment rate in agriculture; employment rate in services; employment rate in commerce; mayor education; mayor age; if mayor is from the city; if mayor has past office experience; mayor gender. Estimates include municipality and year fixed effects, as well as region by year fixed effects. Municipality clustered standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

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