# EU Money and Mayors: Does Cohesion Policy affect local electoral outcomes?

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#### Abstract

The EU Cohesion Policy, with its capacity to shape the socio-economic development of European regions and cities, also holds the potential to influence the political preferences of citizens. While existing research has explored the effects of EU funding on national electoral outcomes, its impact on local elections remains underexamined, overlooking the inherently territorial nature of Cohesion Policy and the crucial role local policy-makers play in its activation and implementation. This study leverages detailed administrative data on European development projects to examine how EU funds affect political support for incumbent local politicians in Italy. It analyses the relationship between the inflow of European funds and the electoral support for Italian mayors, considering different project types that reflect the mayors' ability to attract European funds. The findings demonstrate that Cohesion Policy significantly shapes local voting behaviour. Larger, more visible projects significantly increase the likelihood of mayoral re-election. Moreover, municipalities experiencing faster economic growth, where EU projects contribute to public service improvements, witness the strongest electoral gains for incumbents. These results highlight the critical importance of project design, visibility, and effectiveness in determining the political consequences of EU redistributive policies.

Keywords: EU Cohesion Policy, incumbent re-election, political preferences, redistribution, local voting behaviour

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#### 1. Introduction

The redistribution of public resources through place-based policies is generally motivated by equity or efficiency goals (von Ehrlich & Overman, 2020). However, when redistributive programmes feature a discretionary design, they may not just have economic but also *political* consequences. As such, they may affect the electoral support for the policy-makers responsible for managing and allocating these resources (Dixit & Londregan, 1996; Roberson, 2008). The EU Cohesion Policy, the largest transnational place-based policy intervention worldwide, is no exception in this regard. By allocating large amounts of financial resources to poorer European territories, its primary objective is to reduce interregional disparities. Yet, given its scale, design, and targets, the policy is also expected to affect the daily lives of citizens and, by extension, their political preferences (Begg, 2008). Cohesion Policy has long been identified as a tool for fostering a stronger sense of European identity in recipient areas (Dellmuth & Chalmers, 2018), and a growing body of evidence suggests that European structural funds can shape electoral behaviour, mitigating anti-EU sentiment and curbing support for populist movements (Becker et al., 2017; Fidrmuc et al., 2019; Crescenzi et al., 2020; Rodríguez-Pose & Dijkstra, 2021; Borin et al., 2021; Albanese et al., 2022).

However, most studies investigating the electoral effects of Cohesion Policy focus on national-level outcomes, overlooking two key aspects. First, the territorial nature of the policy implies that its effects are most visible and tangible at the *local* level. Second, the policy's bottom-up governance structure means that local policy-makers play a critical role in determining the amount of EU investment and their effective implementation. Under the reformed Cohesion Policy framework, the volume and value of EU-funded projects in a given territory depend not only on underlying socio-economic conditions but also on political factors such as the capacity, competence, and initiative of local politicians (Barca, 2009; Barca et al., 2012; Iammarino et al., 2019). As such, the amount of resources attracted and their effective use are among the elements voters may consider when deciding whether to confirm local policy-makers in power.

This paper investigates the electoral returns associated with the implementation of EU Cohesion Policy projects at the local level. Focusing on Italy—one of the largest recipients of EU structural funds—we examine whether the electoral support for incumbent mayors seeking re-election is influenced by the amount of EU funding received and the completion of EU-financed projects during their term in office.

EU funds may shape political preferences in different ways. Voters may reward mayors who secure funding and initiate development projects, or those who effectively complete them (Zucco, 2013). Alternatively, if EU projects succeed in improving local economic conditions or public services, voters may re-elect incumbents because their quality of life has improved, regardless of whether they attribute the change directly to the performance of the mayor.

Italy represents the ideal setting where to test our research question. Since the 1990s, Italian mayors often the direct administrators of EU projects—have been elected directly by local citizens for five-year terms. Moreover, while no clear consensus exists in the literature on the effectiveness of EU regional policy (e.g. Becker et al., 2013; Pellegrini et al., 2013; Di Cataldo, 2017; Crescenzi & Giua, 2020), several studies focusing on Italy have found that EU funding has contributed to economic growth and labour market improvements (Ciani & de Blasio, 2015; Giua, 2017; Coppola et al., 2020).

Using a dataset that combines information on EU Cohesion Policy projects and municipal election outcomes in Italy from 2007 to 2020, we estimate a model testing the relationship between EU funds and electoral support for local incumbent politicians. Our findings show that mayors who attract higher levels of EU funding enjoy greater electoral support and increased chances of re-election. However, this relationship is contingent upon certain conditions. Both the visibility and the scale of projects play a crucial role in shaping local voting behaviour. These results are robust across a variety of model specifications and estimation strategies aimed at addressing endogeneity concerns.

Furthermore, we explore some of the channels potentially driving the observed electoral response by examining two potential mediators: the thematic objective of EU projects and the improvements in economic conditions experienced by citizens during a mayoral term in office. Our results show that voters are more likely to support mayors attracting EU funds intended to improve local public services and infrastructure. In addition, the relationship between EU funds and pro-incumbent voting is stronger in local contexts characterised by higher economic growth.

The remainder of the paper is organised as follows. Section 2 outlines the conceptual framework and reviews the literature, section 3 presents the data and descriptive statistics, section 4 describes the research design and empirical model, section 5 reports the findings and robustness checks, section 6 concludes.

## 2. Conceptual framework and background

### 2.1 Redistributive policies and voting outcomes

Redistributive policy can be electorally profitable for its promoters (Cox & McCubbins, 1986; Grossman & Helpman, 1996). The mechanisms through which this type of intervention can affect voting behaviour are at least two (Zucco, 2013). First, voters may recognise the capability of politicians to attract public funds towards their area of residence and reward the policy-makers responsible for the *activation/initiation* of the projects. Second, voters may see the benefits of the intervention and

electorally reward the politicians capable of *completing* the highest number of ongoing projects. Which of these two mechanisms prevails is still unclear, as existing studies on the impact of redistributive policies on electoral outcomes often fail to distinguish between them.<sup>1</sup>

Citizens expect that economic development projects improve their living conditions and provide economic benefits to their territory. Indeed, a third and related mechanism through which development policies may lead to greater support for its promoters refers to the improvements in the welfare conditions of citizens these policies can bring about (Pierson, 1996; Cox, 2009; Maskin & Tirole, 2019). This argument is supported by a great deal of empirical evidence. Fiscal performance and economic growth appear to enhance the electoral returns of incumbent politicians both at the national (Brender & Drazen, 2008) and at the local level (Brender, 2003). The evidence suggests that politicians in power tend to garner more support when economic conditions are improving, regardless of whether citizens can clearly attribute such change in living standards to the success of development policies (Pattie & Johnston, 2008; Luca, 2022). Voters seem to reward incumbent politicians even when improvements in economic conditions result from external exogenous factors (Bagués & Esteve-Volart, 2016).

While public programmes redistributing resources across regions and individuals are usually intended to improve equity or efficiency, redistributive choices may be motivated by political reasons as well (Dixit & Londregan, 1996).<sup>2</sup> Redistributive programmes can be exploited by incumbent politicians to increase their political support by targeting specific interest groups, in line with the idea of supportbuying effects of investment programmes (Roberson, 2008). Plenty of evidence has been obtained to demonstrate these dynamics, in different contexts (Dreher, 2004; Rodríguez-Pose et al., 2016, Maystadt & Salihu, 2019) and focusing on different kinds of policy interventions - e.g. infrastructure spending (Drazen & Eslava, 2010; Huet-Vaughn, 2019) or resources for disaster-hit areas (Bechtel & Hainmueller, 2011; Imami et al., 2023).<sup>3</sup>

In light of this evidence, we expect that higher proportions of EU funds increase the electoral support for incumbent local politicians. We empirically test the hypothesis that mayors are more likely to be reelected in municipalities that receive larger amounts of local development funds from the European Union during their mayoral term in office.

<sup>&</sup>lt;sup>1</sup> In most cases, empirical studies adopt eligibility variables to identify the recipient of policies, thus failing to distinguish between typologies of projects and their timing of implementation (e.g. Manacorda et al., 2011; De La O, 2013). Relevant exceptions are Dreher (2004), finding that concluding an IMF program within six months prior to a national election affects the incumbent government's chances of re-election, and Zucco (2013), finding that in Brazil voters tend to reward incumbents rather than the initiators of conditional cash transfer programmes.

<sup>&</sup>lt;sup>2</sup> Empirical studies investigating the extent to which other public funding programmes are allocated following a political rather than economic rationale include Milligan and Smart (2005), Cadot et al. (2006), and Luca and Rodríguez-Pose (2015).

<sup>&</sup>lt;sup>3</sup> While our work primarily focuses on the effect of intergovernmental resource allocation, similar findings have been obtained by studies looking specifically at individually-targeted transfers (Manacorda et al., 2011; Pop-Eleches & Pop-Eleches, 2012; De La O, 2013; Labonne, 2013).

## 2.2 EU Cohesion Policy and voting outcomes

Many studies have investigated whether EU Cohesion Policy can influence citizens' voting behaviour. Some of them have exploited the Referendum on Brexit, testing whether EU funds have contributed to mitigate Euroscepticism in the UK. Results have been mixed, as Becker et al. (2017) find no significant correlation between proportion of European funds and share of Leave votes, while Fidrmuc et al. (2017) identify a small but significant relationship. Crescenzi et al. (2020) reconcile this evidence by claiming that EU funds have mitigated Euroscepticism in the UK, but only when they have brought about tangible local labour market improvements. This result aligns with evidence from other countries, suggesting that European aid can reduce political support for Eurosceptic (Borin et al., 2021; Rodríguez-Pose & Dijkstra, 2021; Vergioglou, 2024) and populist parties (Albanese et al., 2022), while also fostering European identity (Borz et al., 2022), especially when the policy is coupled with improved economic conditions and greater visibility (Bachtrögler et al., 2018; Borz et al., 2022).

We argue that similar dynamics may be visible when it comes to local elections. The main goal of Cohesion Policy is to enhance local economic opportunities in disadvantaged territories, supporting job creation, business competitiveness, and sustainable development. In influencing the daily life of citizens, it may affect their voting behaviour.

Furthermore, the place-based nature of Cohesion Policy incentivises the activism of local politicians and the participation of local stakeholders, making EU projects more visible and citizens more aware of the policy (European Commission, 2014). Differently from other redistributive policies, EU Cohesion Policy is based on both a formula-driven and a discretionary design. The formula-driven design implies that recipient regions are divided into three groups exclusively determined by their GDP conditions – the 'less developed' regions with a GDP per capita below the 75% of the EU average receive most of the funds, while the 'transition' and 'more developed' regions obtain significantly less.<sup>4</sup>

The place-based nature of the policy makes its design discretionary as well. EU Cohesion Policy operates through multilevel dialogue among many different stakeholders and levels of government. In practical terms, all EU citizens can apply for EU funding by presenting their projects, with managing authorities (mainly regional and national governments) establishing which projects are approved and

<sup>&</sup>lt;sup>4</sup> To give a quantitative idea, for the programming period 2014-2020 'less developed' regions obtained  $\in 180$  per head per year while 'transition' regions and 'more developed' regions obtained respectively  $\in 66$  and  $\in 22$  per capita yearly. The main recipient regions in Italy are Calabria, Campania, Apulia, Sicily, and Basilicata, classified as 'less developed', that received  $\in 22.2$  billion during 2014-2020. The 'transition' regions, Sardinia, Molise, and Abruzzo obtained  $\in 1.3$  billion during the same period, while the 'more developed' regions, Piedmont, Lombardy, Liguria, Veneto, Bolzano, Trento, Friuli-Venezia-Giulia, Emilia-Romagna, Tuscany, Marche, Umbria, and Lazio obtained  $\in 7.6$  billion. Overall, Italy received  $\in 29$  billion during the 2007-2013 programming period and  $\in 32.3$  billion during the 2014-2020 programming period.

financed.<sup>5</sup> This procedure, intended to make sure that the selection of European projects is meritoriented, encourages a strong dialogue between the members of society and local policy-makers. Voters may therefore be 'grateful' to local politicians for their role in the attraction of financial resources and reward them electorally.

Despite the territorial nature of European Cohesion Policy, existing studies largely overlook its role in shaping local voting behaviours. A notable exception is the work of Banaszewska and Bischoff (2021), exploring the relationship between EU investment and mayoral re-election in Poland, finding that EU funds increase the vote shares of mayors in municipalities characterised by a lower degree of Euroscepticism. Another interesting work is that of Muraközy and Telegdy (2016), primarily exploring the influence of political alignment for EU funds allocation in Hungary and also examining the relationship between EU investment and mayoral re-election, finding that higher shares of public and construction grants have a positive impact on the mayors' vote share.

Our contribution to this literature is at least threefold. To begin with, the granularity and detail of Italian data allow for the distinction of the effects of EU funds related to all ongoing projects, those that have just started, and those that have just concluded during a legislative term. In addition, our study presents new evidence on the factors—the policy's magnitude, citizens' living conditions, and the thematic objectives of EU funds—that may shape the relationship between EU funds and mayoral re-elections. Finally, we study a novel context by focusing on the Italian case.

## 2.3 Italy as a testing ground

We claim that Italy represents an ideal laboratory for testing the local political effects of EU Cohesion Policy. To begin with, EU funds play a crucial role in Italy, because of the long-standing economic divide between the more economically advanced North and the lagging South (Polverari, 2013) and even more so after the 2008 financial crisis which led to a drastic reduction of Italian regional policy (Viesti 2011). Many studies have demonstrated that European funds have influenced socio-economic conditions in the country. They seem to have contributed to inter-regional convergence (Aiello & Pupo, 2009; Coppola et al., 2020) and employment growth (Giua, 2017), and they have partially offset the negative consequences of the economic crisis (Ciani & de Blasio, 2015).

<sup>5</sup> For additional details on the process of project selection: <u>https://ec.europa.eu/info/funding-tenders/how-apply/eligibility-who-can-get-funding\_en</u>

In addition, Italy appears as an interesting context due to its institutional structure. Since 1993, Italian mayors are directly elected for five-year terms and are subject to two-term limits.<sup>6</sup> Therefore, voters directly choose the candidate they prefer.

Mayors are responsible for several important issues such as the management of public utilities (garbage ad sewage collection, local roads, water), public housing, transportation, local police, nursery schools, and elderly care. They also have the right to assign and dismiss the city council. Furthermore, mayors play a strategic role in attracting and implementing European projects. The city council, led by the mayors, acts as an actuator, programmer, creator, or direct beneficiary for roundly half of the total amount of EU money invested in Italy.

### 3. Data

## 3.1 EU Cohesion Policy funds

The *Opencoesione* database includes detailed information on funding allocations and paid resources to each beneficiary of all projects fully or partially funded by the EU Cohesion Policy in Italy from the programming period 2007-2013 onward. For each financed project, this rich database reports its thematic objective, its geolocation, its timeline (starting date, ending date, dates of payments), the amount of resources provided directly by the EU and co-financed by national or local authorities as well as by the private sector.

We focus on the 2007-2013 and 2014-2020 programming periods, for which we have retrieved information on 1,544,571 projects in total. The project duration is heterogeneous, ranging from less than 1 to up to 13 years (0.7 years on average). The variability is mainly due to the fact that the starting date of the project does not necessarily coincide with the moment all European funds are disbursed, as these are usually provided through different tranches of payments. The number of phases of each project varies, depending on its objective. Phases are fewer in cases of projects devoted to the purchase of goods or services, while they are higher in the case of projects dedicated to public works.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> Mayors in large municipalities over 15,000 inhabitants are elected by runoff electoral system, while mayors in smaller municipalities are elected by first-past-the-post. In municipalities with less than 15,000 inhabitants, the winning candidate receives a majority bonus equal to at least two-thirds of the city council. In a municipality with over 15,000 inhabitants, if none of the candidates reaches the absolute majority a second dual ballot is called, and the winner obtains a majority bonus of 60% of the seats in the council.

<sup>&</sup>lt;sup>7</sup> In the case of public work projects, the process develops in the following phases: feasibility study, preliminary design, final design, executive design, tender award, contract signing, execution of works and testing. In the case of purchase of goods or services, the process develops in the following phases: tender award, contract stipulation, and supply execution. Finally, in the

We collapse data on EU payments at the municipal level. Most of the projects are assigned to municipalities or to components of municipalities (e.g. firms or individuals). When projects involve many municipalities, we equally split the project amount among all municipalities involved.

## 3.2 Italian municipal elections

Information on Italian local elections is extracted from two sources of the Italian Ministry of Interior: the Historical Archive of Elections (*Archivio storico delle Elezioni*) and the Registry of local and regional Aministrators (*Anagrafe degli Amministratori locali e regionali*).

The former reports the results of all the Italian electoral competitions at the local, regional, and national level.<sup>8</sup> For each municipal election, we observe the number of votes received and the seats obtained by each candidate, as well as the number of electors and the turnout in each municipal election. To complete the database, we also compute the turnout and the winner's vote margin. This database also allows us to identify which legislature has been suspended or dissolved.

The latter provides information on mayors, such as their level of education, birthplace, and previous jobs. We regroup the mayors' education and previous jobs in order to have three categories for education (low, middle, and high) and four categories of job types (armed forces, low, medium and high skilled jobs).<sup>9</sup> This detailed dataset allows us to account for all the controls generally applied in the literature on incumbent advantage (Lee, 2008; Ferreira & Gyurko, 2009; De Benedetto & De Paola, 2016).

## 3.3 Socio-economic, demographic, and geographic controls

The 2001 Census by the Italian National Institute of Statistics (ISTAT) provides data on all the socioeconomic and demographic controls of our analysis. We have selected the 2001 Census because it is the latest Census before the beginning of our sample period (2007-2020). We collect information on labour market conditions (unemployment, youth unemployment, and employment rates), demographic structure (population density, resident immigrants, dependence rates, dimension of families), level of human capital (rates of non-fulfilment of compulsory schooling, rate of fulfilment of high school, resident university students). ISTAT also reports information about the geographic features of Italian municipalities: altimetric zone, and distance from the administrative centre.

case of projects providing loans to individuals or companies, the process has the following phases: tender award, granting of the loan, and investment execution.

<sup>&</sup>lt;sup>8</sup> This database does not provide information on municipal elections for Sicily, Trentino Alto Adige, Friuli Venezia Giulia, and Valle d'Aosta.

<sup>&</sup>lt;sup>9</sup> We define the four job categories following the International Standard Classification of Occupations (ISCO) https://ilostat.ilo.org/resources/concepts-and-definitions/classification-occupation/

### 4. Research design

### 4.1 EU funds variables

To estimate whether Cohesion Policy influences the likelihood of re-election of mayors, we exploit information on the timeline of each European project and create three variables, exploiting two different project dates: the moment is which payment starts flowing (begin) and the moment in which it ends (completion).

The start of EU projects is captured by the variable *started\_projects*, grouping EU payments received for all projects beginning in a given legislature and still ongoing when the legislature ends. It is reasonable to assume that, in many cases, the incumbent local government played a relevant role in their attraction, particularly if funds are directly disbursed to the local government (and not to e.g. a private citizen, or a firm). Citizens may recognise the capability of the incumbent local governments to draft new projects and get them approved by the EU, and reward them accordingly.

The second variable, *ended\_projects*, considers only EU payments for projects completed in a given legislature. A portion of these funds is exogenous to the role played by the incumbent mayor, and dependent on previous legislatures. Citizens may reward the capability of mayors to conclude ongoing projects – by e.g. ensuring that tendered companies fulfil their commitments in time – and potentially see the benefits from the results achieved.

These two variables capture two moments of high visibility of the policy. The third variable, *all\_projects*, considers all EU money flowing to a given municipality in a given legislature. Appendix Figure A1 provides a clarifying example on the definition of the three different EU funds variables.

All three variables are constructed as:

$$EU funds_{jrt} = \ln\left[\left(\frac{\sum_{i=0}^{n} \in EU \ projects_{jrt}}{pop_{jrt}}\right) + 1\right]$$

The total amount of funding for all EU projects (from 0 to *n*) attracted by municipality *j*, located in region *r*, during a legislature that begins in year *t*, divided by the municipal population. We add one to this amount before taking its logarithm to retain observations for legislatures that received no EU funds (23.3%).<sup>10</sup> The correlation among our explanatory variables is illustrated in Table B3 in the Online Appendix.

<sup>&</sup>lt;sup>10</sup> An alternative strategy to this, i.e. taking Inverse Hyperbolic Sine (IHS) value, of EU funds produces results that are equivalent to those shown in the paper.

Given the policy's place-based structure, a path-dependence dynamic in the inflow of EU funds is likely. The quality of the local public bureaucracy, as well as the activism of local stakeholders, plays a pivotal role in determining the inflow of EU funds, and these factors do not necessarily change between different legislatures. Consistent with the territorial nature of the policy, our evidence indicates that the total amount of EU investments received in one legislative term is correlated with the amount received in the previous term (Table B3).

### 4.2 Descriptive Statistics

Combining our three main sources of data, we construct a database at the legislature level, selecting only the legislatures in which the mayor runs for the second electoral round during the 2007-2020 period. Selected in this way, our sample includes 5626 municipalities in total, 4259 of them observed once, 2690 of them twice, and 63 of them more than twice. The number of times a municipality appears in the dataset depends on electoral specificities (e.g. cases of city council suspension or dissolution) as well as the timing of local elections<sup>11</sup>. Our sample consists mainly of legislatures that started in 2009 (28%) or in 2014 (31%).

#### [Figure 1]

Figure 1 presents the electoral outcomes for incumbent mayors in our sample of municipalities. Municipalities where the incumbent mayor was re-elected at least once are shown in green, while those where the incumbent was consistently defeated are shown in pink. The data reveal a clear incumbent advantage—mayors are more likely to retain their position than their challengers are to win the election (De Benedetto & De Paola, 2016).

Figure 2 illustrates the distribution of EU Cohesion Policy investments across Italian municipalities and the differences among our three categories of funds. As expected, municipalities in Southern regions classified as 'less developed' over our sample period (Basilicata, Calabria, Campania, Apulia) are those receiving the majority of funding, even when we consider only legislatures with a running incumbent.

Descriptive statistics of the variables used and their definition are summarised in Tables B1 and B2 (Online Appendix).

#### [Figure 2]

<sup>&</sup>lt;sup>11</sup> The year in which mayoral elections are done varies by municipality, depending on when a given local legislature ends. Elections are done every five years if legislatures end 'naturally', while they are anticipated if local legislatures are terminated earlier due to e.g. mayoral resignation, or dissolution of the local government.

### 4.3 Estimating equation

In order to investigate the role of EU funds for the electoral support of incumbent mayors in Italy, we estimate the following model:

$$y_{ijrt} = \theta \ EU \ funds_{jrt} + M'_{ijrt}\beta_1 + L'_{jrt}\beta_2 + X'_{jr}\beta_3 + P'_{jrt}\beta_4 + C'_{jrt}\beta_5 + \alpha_r + \eta_t + \varepsilon_{ijrt}$$
(1)

where the outcome variable  $y_{ijrt}$  measures the margin of victory of the re-running mayors. It takes positive values if the mayor *i* is re-elected at the elections held in municipality *j*, region *r*, year *t*, and negative otherwise. A second version of this model estimates the effect of EU funds on the probability of re-election of incumbent mayors, using a probit, logit, and OLS estimator. In this case,  $y_{ijrt}$  is a dummy variable taking value 1 if the mayor *i* is re-elected at the elections held in municipality *j*, region *r*, year *t*, and zero otherwise.

*EU funds<sub>jrt</sub>* refers to the three categories of EU funds (*all\_projects, started\_projects, ended\_projects*) discussed above, computed as the log of total per capita funds in municipality *j* during the legislature that started in year *t*.

The model includes a rich set of control variables.  $M_{ijrt}$  is a vector of explanatory variables controlling for mayors' personal characteristics (e.g., gender, age, birthplace) and abilities (e.g., previous job and educational attainment) (Besley et al., 2011).  $L_{jrt}$  controls for legislature features: legislature's duration, turnout, electoral system. The  $M_{ijrt}$  and  $L_{jrt}$  control sets are chosen following the literature on incumbent advantage (Lee, 2008; De Benedetto & De Paola, 2016). To exclude the influence of partisan politics in the allocation of EU funds we control for  $P_{jrt}$ , consisting of two dummy variables indicating the alignment of the incumbent mayor with the regional and national government (Bodenstein & Kemmerling, 2011; Dotti, 2016).  $X_{jr}$  includes socio-economic, demographic, and geographic controls at municipality-level: unemployment rate, population density, share of foreigners, altimetric zone. Vector  $C_{jrt}$  adds a control for co-financing funds received by municipality *j* in legislature *t*, paid by national and local Italian authorities as well as the private sector.  $C_{jrt}$  also includes the amount of EU investments obtained in the previous legislature, controlling for path-dependency of EU funds and for the ability of the municipality to obtain EU aid.

We complete our model by including regional fixed effect,  $\alpha_r$ , to compare more homogeneous municipalities within the same region, and year of election fixed effects,  $\eta_t$ , to account for specific shocks affecting all legislatures started in the same electoral year. Error terms  $\varepsilon_{ijrt}$  are clustered at the municipal level.

#### 5. Main results

#### 5.1 Baseline estimates

The results of model 1 are reported in Table 1, displaying the coefficients of all different treatment variables on EU funds. The results without the inclusion of controls for co-financing and level of EU funds obtained in the previous legislature ( $C_{jrt}$ ) are reported in Table C1 in the Online Appendix.<sup>12</sup> The same results reporting all coefficients of control variables are shown in Appendix Table C2.

Looking at our main variables of interest, the sum of all projects completed during the legislature (*ended\_projects*) returns positive but insignificant coefficients, suggesting that they do not directly affect re-election chances of mayors in our full sample of municipalities. Differently, *started\_projects* –referring to all projects beginning during the legislature– and *all\_projects* –the sum of all EU projects– display a positive and significant coefficient in the full model. We find that a 1% increase in funds for new projects translates into approximately a 1% increase in the margin of victory of incumbent politicians. Estimating the effect of EU funds on probability of re-election with probit or logit (Online Appendix Table C3, Panel A) indicates that a higher inflow of starting projects increases the re-election chances of the mayor. These results are in line with the idea that EU Cohesion Policy can influence local electoral outcomes.

#### [Table 1]

If we look at the coefficients of controls  $C_{jrt}$  in Table C2 (Online Appendix), it is interesting to note that we find evidence of an effect of EU funds on electoral choices that lasts across legislatures and involve different mayors, as all lagged EU funds variables display significant and negative coefficients. Funds received during the previous legislature can shape voters' expectations about investment levels in the current term. In this context, past EU fund allocations serve as a benchmark against which voters assess subsequent funding inflows, ultimately influencing their support for the incumbent. Mayors are more likely to be re-elected when their predecessor secured a lower level of funding - setting a lower benchmark - and when they themselves secure greater EU funding.<sup>13</sup> This provides further evidence of the link between EU funds and the electoral success of incumbent local governments. Finally, co-

<sup>&</sup>lt;sup>12</sup> The number of observations reduces significantly when  $C_{jrt}$  controls are included in the model, because we lose all legislatures for which the previous period corresponds fully or partly to pre-sample period (EU funds can only be geolocalised from 2007).

<sup>&</sup>lt;sup>13</sup> We have replicated the analysis using the per capita difference in EU funds between the previous and current legislatures as the key explanatory variable. The results from this alternative specification (available upon request) indicate that mayors are more likely to be re-elected when their predecessor obtained a lower amount of funding, thus setting a lower benchmark for comparison. This evidence further supports the existence of a positive relationship between the inflow of EU funds and electoral support for mayors.

financed national funds appear unrelated to local voting outcomes, possibly due to their relatively modest size compared to EU funding.

### 5.2 Amount of funds

While the results displayed in Table 1 indicate a positive link between newly-started and all EU projects and the electoral support of incumbent mayors, a possibility is that the relationship between Cohesion Policy projects and local electoral preferences materialises even more clearly when the *amount* of attracted/spent funds during a legislature is particularly high, making the presence of EU projects and their potential benefits more evident to citizens. The awareness of EU Cohesion Policy is greater where EU investments are larger (Eurobarometer, 2019) and areas more strongly targeted by redistributive policies tend to display stronger support for incumbent politicians (Bechtel & Hainmueller, 2011; Huet-Vaugh, 2019). Hence, we test for the possibility that the relationship between EU funds and local voting is non-linear, hypothesising that a larger the amount of EU financial resources flowing to a municipality corresponds to a higher effect on local voting preferences.

We test for this in three different ways. To begin with, we exploit the design of the policy, which awards a much higher amount of funds to less developed Italian regions and municipalities. Therefore, we subdivide the full sample of municipalities into two subsamples: legislatures of municipalities located in less developed regions (Campania, Calabria, Apulia, and Basilicata), and legislatures of municipalities in all other Italian regions, so-called 'transition' or 'more developed'. Table 2 reports the results of the full model, while results without the inclusion of controls for EU in the previous legislature and cofinancing are in Table C1 (Online Appendix).

#### [Table 2]

Interestingly, the positive relationship between EU funds and a mayor's votes in the next election is evident for all three categories of 'treatment' variables in municipalities located in less developed regions (Table 2, Panel A), while it completely disappears in all other regions (Table 2, Panel B). On average, in less developed regions, the margin of victory for an Italian mayor increases by approximately 3-4% when our three measures of EU funds (*all\_projects, started\_projects*, and *ended\_projects*) increase by 1%. In line with the results shown in Table 1, initiating new projects appears more electorally profitable than completing existing projects.

Assessing the effect of EU funds on the probability of re-election using probit and logit models produces very similar results (Online Appendix Table C3, Panels B and C).

These results may be driven by the fact that higher amounts of EU funds increase pro-incumbent voting, but it may also be due to some specificities of less developed regions. To verify whether the amount of money truly makes a difference, we perform two further tests. The first one interacts each 'treatment' variable with itself, creating quadratic terms of EU funds. This allows to investigate for a non-linear relationship between our explanatory variables of interest and the outcome. The results, shown in Table C4 in the Online Appendix, report a positive significant quadratic term in all specifications and across EU funds categories.

The linear term appears significantly negative in columns 1-3 of Table C4, suggesting a U-shaped relationship between the amount of EU funds and pro-incumbent voting. This pattern may reflect voters comparing the funding in their own municipality to that in others, penalising incumbents linked to lower inflows. To test this interpretation, we replicate the analysis excluding legislatures that received no EU funds. In this restricted sample, we expect the non-squared EU funds term to lose significance or to have a smaller magnitude. The results, which support our intuition, are reported in columns 4-6 of Table C4.

As a final test, we run our baseline model by splitting the samples of legislatures along the amount of each typology of EU project received, exploiting different thresholds: the 50<sup>th</sup> percentile, the 75<sup>th</sup> percentile, and the 90<sup>th</sup> percentile. As shown in Table C5 (Online Appendix), EU Cohesion Policy projects are related with local electoral outcomes only when the magnitude of attracted funds is sufficiently high – above the median value at least. Conversely, below-median amounts of funds produce no effect.

#### 5.3 Robustness checks

To test for the robustness of these results we perform several additional estimates. To begin with, we restrict our sample considering exclusively EU projects where the municipal city council is reported by *Opencoesione* as an actuator, programmer, creator, or direct beneficiary of European funds. In quantitative terms, the amount for this type of funds corresponds to around  $\in$ 54 per capita per legislature, vis-à-vis  $\notin$ 91 per capita per legislature if we consider all sorts of projects. Although imposing this restriction reduces the magnitude of our three categories of EU funds, in this kind of projects the municipal government's role has surely been key, both in terms of attraction and in terms of implementation. The results, reported in the Online Appendix in Table C6, confirm that a higher amount of money for projects directly managed by the city council corresponds to higher chances for that council to be confirmed in power. In most specifications, the magnitude of coefficients is lower relative to the estimates shown in the previous section, possibly due to the fact that citizens value more the overall amount of EU funds than the fact that they see a clear role by the local government in the projects. After all, many projects whose beneficiaries are firms or individuals, and not the city council, are part of broader development programmes established and promoted by local and regional authorities.

Next, we study the relationship between EU funds and the mayoral decision to run for a second term. If EU aid significantly affects the probability of mayors running for re-election, our sample could be biased

towards legislatures that receive more EU funds, leading to an upward bias in our estimates. We estimate the probability of running for re-election through a probit model, demonstrating that EU funds do not consistently influence incumbent mayors' decisions to seek re-election (Online Appendix Table C7).

Despite the inclusion of personal mayoral features, legislature characteristics, and numerous socioeconomic and demographic controls at the municipal level, omitted factors might still influence our estimates. To address this issue, we replicate the main estimates by augmenting the set of fixed effects to capture omitted (time-varying and non-time-varying) determinants. Specifically, we include the interaction between election year and region dummies, region × election year. This set of interacted fixed effects accounts for distinctive and time-varying political and institutional patterns within regions, such as any regional policies introduced during the analysed period. We also replicate this analysis while controlling for a quadratic time trend. Then, we include a set of *province* fixed effects in the estimation. While our baseline model prefers regional fixed effects over province fixed effects, due to the higher number of observations within regions compared to provinces and the fact that many municipalities are not represented in our analysis, we report the results estimated within provinces to allow for the comparison of more similar municipalities. Lastly, we estimate a specification with local labour market areas (LMAs) fixed effects.<sup>14</sup> Once again, this is not our preferred specification due to the lower number of observations within LMAs compared to regions, but it allows us to control for the most frequent commuting patterns towards job locations. The results of all these specifications with fixed effects of different sorts are displayed in Table C8 in the Online Appendix, reporting the full sample in Panel A and the sample of less developed regions in Panel B. The results are remarkably robust to changes in specification, with all coefficients of the EU funds variables remaining positive and statistically significant across all sets of fixed effects included for less developed regions.<sup>15</sup>

Next, we test the validity of our results adopting Coarsened Exact Matching (CEM) methodology. The main intuition behind CEM is to temporarily coarsen each variable into meaningful groups, performing an exact match on these coarsened observations pre-treatment and then only retaining the uncoarsened values of the matched data (Ho et al., 2007; Iacus et al., 2011, 2012). As pre-treatment covariates. The first set relates to the ability and localisms of mayors, as both these factors may influence the mayors' chances of re-election and their capacity to attract EU funds. Ability is proxied by the mayors' education level and the previous job performed, while localisms is captured by the dummy province of birth. The second set of variables deals with the fact that EU development funds are not randomly distributed – poorer territories obtain most of the money. We account for this with a dummy variable indicating less developed regions. As CEM needs a bivariate treatment, we define as treated those legislatures receiving

<sup>&</sup>lt;sup>14</sup> Italian local labor market systems, defined by ISTAT, are sub-regional geographical areas built on one key criterion: the share of commuters crossing the LMA boundary on their way to their job place.

<sup>&</sup>lt;sup>15</sup> The results are further validated by the inclusion of *province*×*election year* and *LMA*×*election year* fixed effects, as well as by controlling for the interaction of province and LMA fixed effects with a quadratic time trend. These additional findings are available upon request.

more than the 50<sup>th</sup>,75<sup>th</sup>, and 90<sup>th</sup> percentile values for each treatment. The results, presented in Table C9 (Online Appendix), confirm that a higher amount of funds beginning new European projects leads to greater electoral support for the incumbent mayor.

Lastly, we address endogeneity adopting an instrumental variable approach. As an instrument, we follow Banaszewska and Bischoff (2021) and leverage the variation in EU funds within province and electoral year, focusing on legislatures where mayors did not seek re-election. In particular, for each legislature in which mayors are *not* running for re-election, we compute the average amount of EU funds received. Next, we build the instrumental variable in such a way that each legislature in our sample (where mayors *do* run for re-election) is associated with the corresponding time-varying provincial average of EU funds of legislatures where mayors do not run. The identifying assumption is that this *IV\_EUfunds* variable predicts the amount of funds each mayor elected in a given year and province has received, yet it is not *directly* related to their probability of re-election.

Table 3 reports the results of this model. In the first stage estimates, the instrument (*IV\_EUfunds*) displays a significant and positive correlation with the three measures of EU funds that represent our main explanatory variables (Panel A, Table 3). The Wald F-statistic is almost always exceeding the rule of thumb of 10, evidencing the instrument's relevance. The second stage estimates reported in Panel B confirm the key role of European funds for local electoral outcomes in less developed regions (columns 4-6). All three measures of EU funds display a positive and significant effect on the electoral support for re-running mayors.

[Table 3]

### 6. EU funds and local elections: mediating factors

Having established that a relationship between the amount of EU funds received and the re-election probability of a mayor exists, this section explores two of the key factors possibly determining the systematic relationship between EU funds and local electoral outcomes: the improvements in citizens' living conditions and the different thematic objectives of EU projects.

### 6.1 Local economic dynamism

First, we expect a higher role of EU Cohesion Policy as a determinant of local electoral outcomes in contexts where the inflows of EU funds are combined with greater improvements in citizens' living conditions. To capture varying local socio-economic conditions, we rely on a proxy of economic growth, computed as the percentage growth of per capita taxable income during the legislature. Information on

municipal taxable income is provided yearly by the Italian Ministry of Economy and Finance, starting from 2008.

In our preferred specifications, we test the mediating role of improved economic conditions without directly including the growth variable in the regression, as this is possibly too closely related to the explanatory variables of interest.<sup>16</sup> We split the full sample into three groups, depending on their level of income growth during the legislature. The results in Table 4 show that EU funds are positively related with re-election probability, but only in the sub-sample of legislatures characterised by substantial improvement in citizens' living conditions. For this group, a 1% increase in new or completed EU projects corresponds to a 3% increase in the margin of victory of the incumbent mayor to be confirmed in power.

#### [Table 4]

We further corroborate these results by controlling for LMA (labour market area) fixed effects. As shown in Table C11 in the Online Appendix, all three of our EU fund measures remain highly significant and positively associated with mayoral support, even when controlling for labour market commuting patterns, which could influence municipal income growth. These findings indicate that EU Cohesion Policy is capable of shaping local electoral outcomes only in contexts where the inflows of EU funds are combined with faster growth during the term in office of the mayor.<sup>17</sup>

## 6.2 Thematic objectives of EU funds

Next, we explore the possibility that different thematic objectives of EU funds may have different electoral returns (Dellmuth and Chalmers, 2018). Other works have studied the link between EU funds' areas of investment and socio-economic performance (Rodríguez-Pose & Fratesi, 2004, Sotiriou & Tsiapa, 2015; Di Cataldo & Monastiriotis, 2020), yet the evidence on whether expenditures in different thematic objectives of EU funds can influence electoral outcomes is limited.

To test this, we exploit information on the objectives of each EU project. We define three categories of EU funds, measuring the amount of financial resources obtained for the improvement of public services

<sup>&</sup>lt;sup>16</sup> Our EU funds variables are positively and significantly correlated with the proxy for growth, suggesting that European projects may be a growth driver in our context (estimates available upon request). While our main specifications do not include growth as a control, we verify the results of our model with the inclusion of the growth variable as an additional control in Table C10 in the Online Appendix. These estimates separate the effect of EU funds from that of local economic performance, and dispel any doubts that the link between European funds and electoral outcomes might be confounded by underlying economic conditions.

<sup>&</sup>lt;sup>17</sup> It is worth noting that the observed improvement in local socio-economic conditions may or may not be caused by Cohesion Policy funds. In this section we are not claiming that local growth is necessarily determined by the implementation of EU-funded projects, as this remains untested in our context, but only that it *might* be the case. The positive link between EU funds and voting preferences in places characterised by faster growth may be due to the (possible false) assumption that the positive local economic trajectory is due to the implementation of EU projects, or it may be that the policy has actually produced the expected impact.

(*Services\_funds*), the promotion of business competitiveness (*Business\_funds*), and the development of infrastructure (*Infrastructure\_funds*). We estimate our baseline model using these three measures of EU funds and report the results in Table 5. Panel A highlights that the different thematic objectives of EU funds are not significantly related to mayoral support when focusing on all Italian regions. In contrast, Panel B shows that in less developed regions the amount of money for projects aimed at improving public services and those devoted to infrastructure development are linked with higher electoral support for re-running mayors. Instead, EU funds dedicated to business promotion show a positive but insignificant coefficient.

Public goods such as services or infrastructure enter only indirectly into voters' consumption bundles (Golden and Min, 2013). However, the nature of these investments might lead to a larger voter response. In line with Drazen and Eslava (2010) and Huet-Vaughn (2019), our results confirm the importance of non-rivalrous investment in influencing support for incumbent politicians.

#### [Table 5]

To further validate these findings, we replicate the analysis looking only at EU payments for projects with different objectives *starting* in a given legislature. Table C12 in the Online Appendix reports the results. Again, EU investments in service provision and infrastructure development are linked with the electoral support of incumbent Italian mayors in less developed regions.

#### 7. Conclusions

The EU Cohesion Policy is expected to enhance public perception of the European Union. This should manifest in the voting behaviour of individuals, particularly when it comes to electorally reward politicians who are seen as responsible for the positive changes that Cohesion Policy can bring about. This work has analysed whether the EU funds play a role in rewarding local policy-makers, by verifying if municipalities that attract higher levels of EU funding are more likely to re-elect their incumbent mayors.

The results clearly show that voters electorally reward mayors who effectively initiate new European projects. On average, a 1% increase in EU funds allocated to new projects launched during a mayor's tenure corresponds to a 1% rise in the electoral support of the mayor in the subsequent election.

In addition, our analysis reveals that both the amount and the visibility of the EU money obtained are significant factors. The correlation between EU Cohesion Policy and local pro-incumbent voting is stronger in municipalities that receive greater amounts of funding. This link is particularly evident in less developed regions, where the policy is expected to yield the most visible results. In such contexts, a 1% increase in EU funding flowing to the municipality translates into a 4% increase in the margin of

victory of Italian mayors re-running for office. Consequently, these targeted local areas appear to reward the economic advantage assigned to their communities by the EU, showing increased support for the local politicians who secure these subsidies.

Voters tend to electorally reward local politicians both for *initiating* new EU development projects and for *completing* ongoing ones. However, in relative terms, attracting public funds to launch new projects appears to be more politically advantageous than completing existing initiatives.

We explore two potential elements mediating the relationship between EU funds and electoral preferences: improvements in citizens' living conditions and the thematic objectives of EU projects. Our findings suggest that citizens are more inclined to favour incumbent mayors in municipalities experiencing faster economic growth. Citizens may be assuming that the positive local economic trajectory is attributable to the effective implementation of EU projects. In addition, we show that EU investment in public goods such as service provision or local infrastructure produces the stronger electoral boost for incumbent politicians.

To ensure the robustness of our results, we have considered various potential confounding factors and performed multiple robustness checks including interacted fixed effects, considering non-linear estimation methods. A limitation of this study lies in the challenge of accounting for various factors that could influence both mayors' re-election probabilities and the inflow of EU funds. We have attempted to minimise endogeneity through different alternative approaches, including Coarsened Exact Matching (CEM) and instrumental variables.

Our results offer crucial insights for European policy-makers and the broader EU Cohesion Policy. Competent mayors who can successfully initiate European projects are indeed rewarded at the polls, but this hinges significantly on the design, visibility, and effectiveness of local EU development projects. Only larger, more visible projects that tangibly enhance the daily lives of citizens by improving public services and infrastructure have the potential to significantly boost support for local policy-makers responsible for project activation and implementation.

Hence, a key implication of our findings is that citizens are concerned about the capacity of EU projects to deliver on their promises and stimulate local economic growth. Voters are more likely to recognise the importance of European funds when economic conditions are improving, and achievements are well-publicised. This highlights the fundamental role played by competent and effective local governments for the functioning of European regional projects (Barca et al., 2012; Iammarino et al., 2019). It also underscores that a more successful Cohesion Policy, one that positively influences the socio-economic trajectory of local communities, will not only benefit the development prospects of these communities but also foster greater appreciation for the local promoters of these development projects, and potentially for the European Union as a whole.

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# Figures and Tables in the main text



Figure 1: Municipalities with running incumbent

Note: the figure illustrates the electoral result obtained by each incumbent mayor in the sample municipalities (for municipalities appearing more than once in our dataset, the electoral result of the first legislature in sample is shown).



#### Figure 2: EU funds per capita per local legislature

Note: EU funds per capita per municipality per local legislature over the 2007-2020 period. White regions/municipalities are not in sample.

	(1)	(2)	(3)
All_projects	0.0102*		
	(0.0060)		
Started_projects		0.0114**	
		(0.0057)	
Ended_projects		( )	0.0074
			(0.0057)
			(0.0001)
M <sub>ijrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$
L <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$
X <sub>jr</sub>	$\checkmark$	$\checkmark$	$\checkmark$
P <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$
C <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$
Region FE	$\checkmark$	$\checkmark$	$\checkmark$
Election year FE	$\checkmark$	$\checkmark$	$\checkmark$
Observations	2,355	2,355	2,355
R-squared	0.158	0.158	0.158

Table 1: Cohesion Policy and pro-incumbent voting

Note: clustered standard errors at the municipal level in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1. Dependent variable: margin of victory of the re-running mayor, positive if the mayor is elected at following elections and negative otherwise. *All\_projects*: log per capita total amount of funds for projects initiated or completed during legislature; *started\_projects*: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects completed during legislature.

Table 2: Mor	Table 2: More and less developed regions				
	(1)	(2)	(3)		
Panel A: less developed reg	ions				
All_projects	0.0437*** (0.0100)				
Started_projects		0.0437*** (0.0108)			
Ended_projects			0.0298** (0.0121)		
Observations R-squared	547 0 150	547 0 163	547 0 142		
	0.100	0.100	0.142		
Panel B: transition / more de	veloped regions				
All_projects	0.0064 (0.0071)				
Started_projects		0.0056 (0.0069)			
Ended_projects			0.0036 (0.0067)		
Observations	1,808	1,808	1,808		
R-squared	0.159	0.158	0.158		
M <sub>ijrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$		
L <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$		
X <sub>jr</sub>	$\checkmark$	$\checkmark$	$\checkmark$		
$P_{jrt}$	$\checkmark$	$\checkmark$	$\checkmark$		
C <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$		
Region FE	$\checkmark$	$\checkmark$	$\checkmark$		
Election year EE	./	1	1		

Note: clustered standard errors at the municipal level in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1. Panel A: sample of municipalities from less developed regions (Basilicata, Calabria, Campania, Apulia); Panel B: all other regions. Dependent variable: margin of victory of the re-running mayor. *All\_projects*: log per capita total amount of funds for projects initiated during legislature; *started\_projects*: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects initiated during legislature; *ended\_projects*: log per capita total amount of funds for projects completed during legislature.

Table 3: Instrumental vari	iable results
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		All Italy regions			Less developed regions			
	(1)	(2)	(3)	(4)	(5)	(6)		
Panel A: first stage	All_projects	Started_projects	Ended_projects	All_projects	Started_projects	Ended_projects		
IV_EUfunds	0.166*** (0.0429)	0.189*** (0.0377)	0.212*** (0.0408)	0.536*** (0.137)	0.337*** (0.107)	0.405*** (0.126)		
Wald F-statistic Observations	24.54 2,395	16.01 2,395	24.74 2,395	9.47 556	18.94 556	11.10 556		
Panel B: second stage			Margin o	of victory				
All_projects	-0.0347 (0.0512)			0.156* (0.0916)				
Started_projects		-0.0436 (0.0597)			0.0893* (0.0522)			
Ended_projects			-0.0343 (0.0478)			0.122* (0.0737)		
M <sub>ijrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	√	$\checkmark$		
L <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
X <sub>jr</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
P <sub>jr</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
C <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Region FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Election year FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Observations	2,348	2,348	2,348	547	547	547		

Note: Clustered standard errors at the municipal level in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1. TSLS, second stage results. Dependent variable: margin of victory. Columns 1-3: all Italian municipalities; columns 4-6: sample of municipalities from less developed regions.

Table 4: Results by level of economic growth

	Low economic growth		Medium economic growth			High economic growth			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
All_projects	0.0035 (0.0104)			0.0111 (0.0108)			0.0278** (0.0128)		
Started_projects		-0.0063 (0.0101)			0.0134 (0.0109)			0.0396*** (0.0118)	
Ended_projects			-0.0047 (0.0104)			0.0131 (0.0107)			0.0310*** (0.0113)
M <sub>ijrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
L <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
X <sub>jr</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
$P_{jr}$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
C <sub>jrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Region FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Election year FE	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Observations R-squared	732 0.222	732 0.223	732 0.221	731 0.191	731 0.192	731 0.194	597 0.240	597 0.251	597 0.245

Note: Clustered standard errors at the municipal level in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1. Dependent variable: margin of victory. *All\_projects*: log per capita total amount of funds for projects initiated or completed during legislature; *started\_projects*: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects: log per capita total amount of funds for projects completed during legislature. Columns 1-3: low economic growth (values ranging from -0.22-0.06); columns 4-6: medium economic growth (0.06-0.09); columns 7-9: high economic growth (0.09-0.63).

Table 5: EU funds by thematic objective						
	(1)	(2)	(3)			
Panel A: full sample						
Services	0.00119 (0.00310)					
Business	0.00134 (0.00330)					
Infrastructure			0.00129 (0.00242)			
Observations R-squared	2,355 0.154	2,355 0.153	2,355 0.154			
Panel B: less developed re	egions					
Services	0.00774* (0.00422)					
Business		-0.00235 (0.00534)				
nfrastructure			0.00621* (0.00328)			
Observations R-squared	547 0.132	547 0.128	547 0.133			
M <sub>ijrt</sub>	$\checkmark$	$\checkmark$	$\checkmark$			
'jrt	$\checkmark$	$\checkmark$	$\checkmark$			
, jr	$\checkmark$	$\checkmark$	$\checkmark$			
ir	$\checkmark$	$\checkmark$	$\checkmark$			
jrt	$\checkmark$	$\checkmark$	$\checkmark$			
Region FE	$\checkmark$	$\checkmark$	$\checkmark$			
-lection year FF	./	./	./			

Election year FE $\checkmark$  $\checkmark$  $\checkmark$ Note: clustered standard errors at the municipal level in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \*p<0.1. This table shows how the different EU funds<br/>(devoted to service, business, and infrastructure) influence the electoral support of incumbent mayors. Panel A considers the full sample while<br/>Panel B focuses only on legislatures located in less-developed regions.

## Appendix A: EU funds definitions

The figure A1 reports three consecutive legislatures and three EU projects on a timeline. Legislature 1 is ruled by mayor 1 who runs for re-election in 2012, losing the elections. Legislature 2 is ruled by mayor 2 who runs for re-election in 2017, winning the elections. Project 1 and project 2 span two legislatures – project 1 starts in legislature 1 and ends in legislature 2, while project 2 starts in legislature 2 and ends in legislature 3. Projects 3 starts and ends in legislature 2.

The variables *started\_projects* and *ended\_projects* differ from zero when there is at least one European project respectively starting or ending in each legislature. Therefore, *started\_projects* is equal to zero in legislature 3 while *ended\_projects* is equal to zero in legislature 1. In legislature 1, *started\_projects* considers only project 1 payments received by beneficiaries located in the municipality between 2010 and 2012, while in legislature 2 it sums up all payments obtained for project 3 and project 2 between 2016 and 2017. *Ended\_projects* is zero in legislature 1, it sums up all payments for project 3 and those between 2012 and 2015 for project 1 in legislature 2, and it sums up payments for project 2 between 2017 and 2021 in legislature 3. Finally, *all\_projects* sums up all payments received by EU funds beneficiaries of the municipalities in each legislature. It considers payment for project 1 between 2010 and 2012 in legislature 1, payment for all three projects between 2012 and 2017 in legislature 2, and all the remaining payments associated to project 2 in legislature 3.

#### Figure A1: Classification of EU projects



Note: the figure represents an example of electoral timeline of a municipality and disbursement of EU projects to illustrate how the three different EU funds variables are created. M1: mayor 1, M2: mayor 2.