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# Fuelling the (party) machine: The political origins of the Greek debt during Metapolitefsi

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# Fuelling the (party) machine: The political origins of the Greek debt during Metapolitefsi

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**Abstract:** After the establishment of the Third Hellenic Republic in 1974 (*Metapolitefsi*), government debt starts to rise in an accelerating pace. The aim of this study is to assess empirically the hypothesis of political distortions behind the fiscal derailment of this period that has been hunting the Greek economy ever since. To this end, we focus our attention on the markedly expanded fiscal account of intergovernmental transfers to prefectures and municipalities. Building on a novel dataset of *expenses to prefectures* and *subsidies to municipalities* between 1974-1993, we employ a Difference-in-Differences framework and a Regression Discontinuity Design, respectively. Our analysis suggests that governing parties diverted intergovernmental transfers towards their political strongholds and politically aligned mayors. We argue that this result stems from the organizational structure of the main political parties that emerged in the new era of *Metapolitefsi*. In particular, these parties built successful clientelistic networks with hundreds of thousands of members at the local level. On this basis, prefectural authorities and politically aligned mayors became the major intermediaries to target benefits and strengthen the local organizational capacity of the governing parties' machines.

**JEL classification:** H1; H4; D7

**Keywords:** intergovernmental transfers; clientelistic networks; party machine

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## 1. Introduction

After the restoration of democracy in Greece in 1974 and the establishment of the Third Hellenic Republic, thereafter referred to as the *Metapolitefsi* (i.e., change of regime), the economy gradually entered in a prolonged vicious cycle of fiscal destabilization (see, e.g., Meghir et al., 2017; Alogoskoufis, 2019).<sup>1</sup> In particular, the rise of primary public deficits resulted in the explosion of public debt from 17.5 percent of GDP in 1974 to 97.6 percent in 1993 (see Figure 1). According to existing studies, the institutional and political framework that emerged during *Metapolitefsi* was discouraging for private investment, while it prioritized politically motivated redistributive policies (see Alogoskoufis, 1995; Katsimi and Moutos, 2010; Meghir et al., 2017; Kostis, 2019). Social groups (such as small business owners, merchants, independent professionals, and small farmers) gained significant political power and the elected governments were struggling to satisfy their demands through an abruptly rising public sector and large public deficits during elections - see Figures 2 and 3, respectively.

[Insert Figure 1, here]

According to Alogoskoufis (2019), *Metapolitefsi* was perceived by the majority of the electorate “[...] as an opportunity of a less centralized political system and redistribution of power among the country’s regions and social groups”. This public demand affected the organizational structure of the two main political parties (*New Democracy* and *Panhellenic Socialist Movement*) that dominated the political landscape since 1974. More specifically, the new parties gradually built an organizational structure around clientelistic networks at the local level that is classified by the Greek literature as *bureaucratic clientelism* (Mavrogordatos 1983; 1997; Lyrintzis, 1984), and by the international literature as *machine politics* (see Chubb, 1982; Cox and McCubbins, 1986).<sup>2</sup> This electoral strategy led to a rise by 1000 percent in the

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<sup>1</sup> The relevant literature usually defines four distinct periods in post-war Greek economic history: (i) 1944-1952 the period of International Aid and Reconstruction; (ii) 1953-1973 the economic transformation and catching up period; (iii) 1974-1993 the restoration of democracy and redistribution period; and (iv) 1994-2008 the last period before the sovereign debt crisis that is characterized by a further expansion (along with some rationalisation) of the welfare state, fast growth rates and EMU entry (see, e.g., Moutos and Pechlivanos, 2015; Kostis, 2019). Following this categorization, the paper at hand places the spotlight on the third period (1974-1993) characterized by fiscal destabilization and radical turnaround in macroeconomic performance.

<sup>2</sup> To better understand the different types of clientelistic ties that we observe in Greek politics through time, we should make clear the distinction between traditional clientelism and machine politics (for more details on this, see Mavrogordatos, 1983; 1997). The typical structure of traditional clientelism are patron-client relationships that form pyramids with members of parliament (MPs) or other politicians at the top, local party bosses (*kommatares*) in the middle and individual voters (typically peasants) at the base. In this case, the clientelistic ties are interpersonal and the networks of local bosses and middlemen belongs personally to the MPs. It was a common practice these networks (factions) to be transmitted as inheritance -or even as dowry- within the same

membership density of the two parties between 1976 and 1986. In particular, parties' members divided by their voters reached a level close to 10 percent (see Mair and van Biezen, 2001; Bosco and Morlino 2006). We argue that the use of public resources to support and develop the party machine at the local level during *Metapolitefsi* was detrimental for the evolution of public finances of the Greek state. This is consistent with the view that clientelism, in each various forms, is associated with greater public deficits and significant public sector inefficiencies (see Keefer and Vlaicu, 2007; Hicken, 2011).

Our study aims to explore the possibility of political distortions behind the allocation of intergovernmental transfers to prefectures and municipalities during the first two decades of *Metapolitefsi* (i.e., from 1974-1993). Over this period, local administration was assigned to *prefecture* (NUTS-3) and *municipal* authorities. The prefectural field of administration divided the country into 52 geographical units headed by prefects who were appointed by the central government. It should be noted that prefectures were also electoral constituencies of general elections, and they operated under close supervision of Ministries and, traditionally, were considered action areas of politicians (see Christofilopoulou, 1991; Hlepas and Getimis, 2011). Appointed prefects were allocated a significant budget from the central government and one of their main tasks was to distribute this budget within the prefecture and municipal authorities. The latter were operating under strict prefectural supervision, uniform fiscal rules and were "financially dependent" to intergovernmental transfers distributed directly by the central government or via the budget allocated to the prefecture (see Tatsos, 1988). During the new era of *bureaucratic clientelism* where the local grassroots of the party gained significant political power (see Elefantis, 1981), we also observe an unprecedented inflation of intergovernmental transfers to prefectures and municipalities (see Figures 4 and 5). This is because both appointed prefects and politically aligned mayors were important intermediaries of the governing party to support and strengthen the empowered of local organisations (see Grindle, 2012; Kemahlioğlu and Bayer, 2020; Sells, 2020).

It should be noted that social transfers (especially spending on pensions) and compensation of public employees (due to increases in both the numbers of public employees as well as their real wages) were arguably significant driving forces behind the fiscal

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family from one generation to the other. It is obvious that, in such context, the MPs are the ultimate centre of political power and, consequently, parties were built structurally around these networks of local notables. The absence of effective party organization and mass membership constituted party's parliamentary group extremely powerful (this situation is often described as *vouleftokratia*, "rule of the MPs", in the relevant literature). In contrast, bureaucratic clientelism -or machine politics- is defined as the situation that the party machine is powerful and the clientelistic linkages are impersonal and belong to the party rather than to individual politicians. In such a context, the collective bodies and the party bureaucracy become the actual centres of political power.

destabilization of the Greek state (see Moutos and Tsitsikas, 2010; Kostis, 2019). Notwithstanding, we decide to focus on intergovernmental transfers for three reasons. First, although intergovernmental transfers did not drive the fiscal derailment individually, they contributed significantly to it. In particular, expenses to prefectures increased by almost 600 percent in real per capita terms between 1974-1993, whereas subsidies to municipalities increased by around 1000 percent during the same period. This unprecedented increase coincided with the development of the party machines, whereas the correlation between government debt and intergovernmental transfers to prefectures and municipalities during 1974-1993 is 90 and 96 percent, respectively. Second, given that our argument is based on the local organization of parties, focusing on the allocation of intergovernmental transfers allows us to observe the target of the benefit at a more decentralized level (i.e., municipality) in comparison to other fiscal accounts that grew over the same period.<sup>3</sup> Third, because of that, we are in position to apply a Regression Discontinuity Design (RDD) at the municipality level to address a series of important identification concerns (see, e.g., Lee, 2008; Brollo and Nannicini 2012).

The empirical analysis takes place along two layers, namely prefectures and municipalities. More specifically, using a Difference-in-Differences (DD) framework at the prefecture level, our results suggest that inflated budgets were allocated to prefectures characterized by stronger political support for the incumbent party in the national elections (i.e., political strongholds). Moreover, this result seems to be driven by electoral and pre-electoral years of national elections.<sup>4</sup> These results are consistent with our expectations as in the new era of party machine development, prefecture authorities were in position to target more benefits and subsidies in areas/municipalities within the prefecture with higher support for the governing party. This is verified when we move to the second layer of analysis. In particular, employing a RDD framework at the municipality level, we show that mayors who

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<sup>3</sup> The nature of intergovernmental transfers allows us to identify the final receiver of the benefit (since we know the identity of the mayor), and consequently reveal potential political economy forces that may also affect the distribution of other fiscal spending accounts that are directed to unknown receivers (e.g., compensation of employees, etc.). In that sense, focusing on intergovernmental transfers allows us to investigate an underlying political economy mechanism -related to the organizational structure of the Greek parties- that may explain the fiscal derailment of Greece during the period under investigation.

<sup>4</sup> We must highlight that during that period Greece was also a newly established democracy. Starting from Linz and Stepan (1996), there is a large strand of the literature which suggests that increased budget deficits and fiscal manipulation have often been employed as instruments by newly established democratic governments in order to convince citizens that democracy is superior to any other form of governance and to consolidate the pro-democratic institutions (see Brender and Drazen 2007; Kammass and Sarantides, 2016). However, this argument does not explain the reasons why the increased intergovernmental transfers were directed in prefectures and municipalities with more supporters of the incumbent party.

were politically aligned with the government received significantly larger amounts of subsidies. On top of that, and consistent to the analysis at the prefecture level, we have indications that more subsidies were targeted to municipality strongholds.

This paper builds on the existing literature that discusses the main institutional and political determinants of the rising Greek debt during *Metapolitefsi* (see, e.g., Alogoskoufis, 1995; Katsimi and Moutos, 2010; Alogoskoufis, 2019) in two ways. . Our first contribution is our attempt to bring the Greek parties -and their organizational structure- into the relevant discussion and investigate empirically the theoretical argument of the rising *bureaucratic clientelism* (Mavrogordatos, 1983, 1997; Lyrintzis, 1984); we do so by analyzing a novel regional dataset employing modern econometric techniques. Related to this, our second contribution is to use the case of Greece and relate our empirical results to an influential body of work which argues that subnational incumbency contributes to party building with the use of state resources (see, e.g., Grindle, 2012; Kemahlioglu and Bayer, 2020; Sells, 2020).<sup>5</sup> According to this argument, and consistent with our results for the case of Greece, governing parties target resources in aligned subnational authorities aiming to strengthen their organizational capacity and entice new members to join their ranks.

The rest of the paper is organized along the following lines. Section 2 provides a brief description of the Greek political landscape, and discusses how the restoration of democracy affected the evolution of public finances. Sections 3 and 4 present the estimation strategy and the empirical findings at the prefecture and municipality level respectively. Finally, Section 5 offers our concluding remarks.

## **2. The Greek political landscape and the evolution of public finances**

### *2.1. The political landscape during Metapolitefsi*

After a brief military junta (1967-1974) and the establishment of the Third Hellenic Republic, none of the pre-junta political parties survived. The new parties diverged substantially from their predecessors in structure, functioning and programme. The most impressive event of this period was, definitely, the immediate rise of the *Panhellenic Socialist Movement (PASOK - Panellinio Socialistiko Kinima)*. *PASOK* was founded on September 3, 1974, by Andreas Papandreou and, seven years later (in the elections of 1981), it achieved to come into office by

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<sup>5</sup> There is a growing body of empirical research that places the spotlight on the potential relationship between discretionary policy benefits and party organization/clientelism in developing countries (see, e.g., Das and Moiorano, 2019; Garay et al., 2020). However, to the best of our knowledge, studies that investigate similar issues on more developed economies appear to be rather restricted. In particular, Greece is classified as a developed economy by the IMF in 1989.

fully absorbing previous political formations of the Centre (see Nicolacopoulos, 2005). During the same period (on September 26, 1974), Konstantinos Karamanlis announced the formation of the right-wing party *New Democracy* (*ND - Nea Dimokratia*) by emphasizing that *ND* was a “new political movement” and not simply a descendant of the pre-junta right-wing party *National Radical Union* (*ERE - Ethniki Rizospastiki Enosis*) (see Loulis, 1981). Before looking individually at the organizational structure of these two political forces that dominated the post-junta Greek politics, it is necessary to briefly describe the general political and electoral context during *Metapolitefsi*.

In the first parliamentary elections that took place on November 17, 1974, *ND* won a landslide victory with 54 percent of the valid votes cast. Other new parties that appeared were the second-power *Centre Union-New Forces* (*EK-ND - Enosi Kentrou-Nees Dynameis*) under Georgios Mavros that achieved 20.4 percent, and *PASOK* which came third with 13.6 percent of the valid votes cast. In the elections of 1977, *ND* retained its majority with 41.84 percent, though the big surprise was the success of *PASOK* which almost doubled its electoral strength (25.3 percent) and so became the main opposition party.<sup>6</sup> In 1981, *PASOK* won the elections with 48.1 percent - against the 35.9 percent of *ND* - and Andreas Papandreou formed the first socialist government in the history of Greece. Then, in 1985, *PASOK* won its second four-year term in government with 45.8 percent, despite the relative rise of *ND* (40.8 percent) under the new leadership of Konstantinos Mitsotakis. Finally, after two elections in 1989 that *ND* won, but failed to form a parliamentary majority, it gained a majority of only two MPs in the Greek parliament after its win with 8 percentage points in the election of April 1990.

By focusing on the issue of the organizational structure, *PASOK* was the first non-communist mass party in Greece.<sup>7</sup> Although it absorbed several personalistic patronage networks associated with the pre-junta *Center Union* party, it formed an extensive national network based on both local and regional branches with thousands of members (see Pappas, 2009; Kalyvas, 2015). For the purposes of our analysis, it is important to note that according to *PASOK*'s leader, Andreas Papandreou, the traditional organizational pyramid of the pre-junta political parties had failed to include the base of the pyramid on their decision process. The strategy of *PASOK*, according to its leader, was to enforce the “*democratic procedures by*

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<sup>6</sup> Because of *PASOK*'s success, the vote share obtained by George Mavros' centrist party slumped to 11.95 percent, leading within a few years to its gradual disintegration from the political system (see Mavrogodatos, 1984).

<sup>7</sup> The Greek Left has traditionally been identified with the *Communist Party of Greece* (*KKE - Kommounistiko Komma Ellados*). *KKE* was characterized from its very beginning by a well-organized mass base and a highly-centralized structure. Therefore, *KKE* was definitely the first mass party in Greece (see Elefantis, 1981; Lyrantzis, 1984, for more details on this).



creating grassroots organizations at the level of the village and town [...] so as to promote the genuine expression of popular opinion on general development targets and on the national political options of our country” (see, e.g., Elefantis, 1981). Thus, *PASOK* from its very beginning gave absolute priority to the development of local and regional organizations, creating a wide network of grassroots movements and a rank-and-file organization which developed through the whole country (see, e.g., Elefantis, 1981; Lyrintzis, 1984). This procedure of “political decentralization” induced substantial increase in the relative political power of the party committee at the prefectural level and of the mayors, since both became major organizational links between the party machine and the masses (see Elefantis, 1981).

After this development in the political landscape, the *ND* followed making a significant effort to develop a strong party organization with a large number of active members. This is consistent with Duverger’s (1954) argument of “contagion from the left” that would encourage the right-wing party in its own self-defense and as a means of maintaining its positions of power and influence to mirror the left.<sup>8</sup> To this end, in September of 1975, *ND* formed its first 50 regional organizations and 40 local organizations. Until the April of 1976, the number of local organizations had risen to 233 and the party memberships were approximately 20.000 (see Loulis, 1981). Although these figures highlight the considerable efforts of the party to recruit members and to develop an autonomous party machine, the overall result was not very satisfactory. This becomes obvious if one considers that, during the same period, *PASOK* had already 27.000 members (that represented a 4 percent of its vote) and a much wider network of 460 local organizations and 500 cells (i.e., a highly-decentralized level of organization that was totally absent from the organizational structure of *ND*).<sup>9</sup> This race continued for many years until both parties established a fully functioning party machine. Between 1976 and 1986 party members of *ND* and *PASOK* rose by 1000 percent reaching a level close to 10 percent of its voters (see Mair and van Biezen, 2001; Bosco and Morlino 2006).<sup>10</sup>

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<sup>8</sup> Although Duverger (1954) had in mind changes in: (i) party organization and (ii) ideology that the right-wing party must make to retain its competitive position, the impetus for organizational change inevitably leads to changes on the implemented policies (see Epstein, 1967, for more details on this).

<sup>9</sup> See Loulis (1981) and Kalyvas (2015) for further details.

<sup>10</sup> At this point, it is important to note that increasing party’s memberships and developing an autonomous party machine is not something bad per se but in contrast is a *sine qua non* for the development of mass parties and usually indicates a higher maturity of the political landscape. In the archetypical mass-party model, the basic units of political life are pre-defined and well-established social groups and networks of mass organizations (e.g., labour union, peasant leagues, churches etc.). So, politics is primarily about the competition, conflict and cooperation of these groups, whereas political parties are the agencies through which these groups and their members participate in politics and make demands on the state (see Katz and Mair, 1995, for more details on this). However, the Greek political parties founded after 1974 were not based on such collective identities. More precisely, the newly developed local networks were not representing some pre-defined sectors of the society, but in contrast, they acted as the ultimate intermediary link between the party and the society (e.g., Mavrogardatos, 1997). Under this

The political empowerment of parties' local organizations was accompanied by a significant increase of central government spending allocated to prefectures and municipalities (see Section 2.2 for more details on this). This is because in the new political environment of *Metapolitefsi*, appointed prefects and politically aligned mayors became chief components of the party machine and functioned as an arm of the governing party “at the level of the town and the village”.

## 2.2. *The evolution of public finances since Metapolitefsi*

After the restoration of democracy in 1974, a period of fiscal laxity started, which became worse in the late 1970s and continued until the early 1990s. As shown in Figure 2, the Greek state was expanding persistently during *Metapolitefsi*, running at the same time growing primary public deficits that led to the explosion of the public debt from 17.5 percent of GDP in 1974 to 97.6 percent in 1993 (see Figure 1). By employing aggregate data, previous studies highlight several political economy motives behind the observed fiscal destabilization (see, e.g., Moutos and Tsitsikas, 2010; Moutos and Pechlivanos, 2015). Among these motives, there is evidence of Political Budget Cycles (PBC) from 1974 to 1993 (see Lockwood et al., 2001). In other words, governing parties were manipulating fiscal policy instruments in order to increase their re-election chances (see, e.g., Rogoff, 1990; Potrafke, 2012). Figure 3 supports this evidence by showing that total public expenses and the budget deficit increase on average by 3.9 and 2.7 percentage points of GDP, respectively, during election years.

[Insert Figure 2 and 3, here]

We argue that the most significant cause of the fiscal derailment was the rising *bureaucratic clientelism* and the associated increased fiscal needs of the governing parties to develop and support their party machines (see, e.g., Mavrogordatos, 1997). To this end, our analysis places the spotlight on the evolution of intergovernmental transfers to prefectures and municipalities. This is because both appointed prefects and aligned mayors were important intermediaries of the governing party to support and strengthen the empowerment of local organizations in the new era of *Metapolitefsi*.

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perspective, the case of the Greek political parties during *Metapolitefsi*, are much closer to the relevant literature that investigates the use of state resources for party machine building (see, e.g., Shefter, 1994; Katz and Mair, 1995; O'Dwyer, 2004; Kemahlioglu and Bayer, 2020; Sells, 2020).

Regarding the budget allocated to prefectures, as can be seen in Figure 4, it increased by almost 600 percent in real per capita terms between 1975-1993 - predominantly driven by the administration of *PASOK* between 1982-1989. At its peak in 1989, expenses to prefectures accounted for 7.6 percent of the total budget of the general government. It should be noted that the prefectural budget was mainly financing operational expenses (e.g., wages and salaries) and health related services, whereas a significant part was transferred in municipalities in the form of (discretionary) subsidies. During a period that both dominant parties in Greece were building their local organizations, we would expect higher budgets allocated in appointed prefects where the party has more of its own supporters consistent with the “core-voter strategy” (see, e.g., Cox and McCubbins, 1986; Ansolabehere and Snyder 2006; Joannis, 2011; Kauder et al., 2016).<sup>11</sup> This is because prefects were in position to target more benefits and subsidies in areas/municipalities within the prefecture with higher support for the governing party.

[Insert Figure 4, here]

Along these lines, we move to the second layer of analysis, namely municipalities. The latter receive subsidies from the central government that can be separated into two main categories. First, non-discretionary (formula-based) subsidies from the state budget. These are constituted primarily by socioeconomic, demographic and spatial variables that are specified as normative variables. Second, discretionary subsidies, that are compatible with local public services of each municipality. This type of subsidies consists of three components: (i) discretionary subsidies allocated from the central government to municipalities via prefecture authorities; (ii) subsidies allocated from the central government to local authorities for public works in an effort to decrease local unemployment; (iii) miscellaneous subsidies authorized from the central government. Figure 5 shows the evolution of discretionary and non-discretionary subsidies to municipalities expressed in real per capita terms. Both types of subsidies increased (significantly) by around 1000 percent between 1975-1993. Figure B1, in the Appendix, shows subsidies expressed as a percentage of the total budget of municipal authorities. In 1975, total municipal subsidies accounted for around 18 percent of the municipal

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<sup>11</sup> This would be consistent with prior studies which have shown that geography matters even under Proportional Representation (PR) systems (see, e.g., Fiva and Halse, 2016; Hyytinen et al. 2018). However, it should be noted that competing theories of the relevant literature, the “core voter” hypothesis, the “swing voter” hypothesis (see Dixit and Londregan, 1998) and the “opposition stronghold” hypothesis (Casas, 2018; 2020) fit well under majoritarian (or plurality) voting systems (see Milesi-Ferretti et al., 2002).

budget, whereas by 1993 this figure increased to 45 percent. Given that municipal budgets expanded on average by almost 200 percent between 1975-1993, two regularities stand out.<sup>12</sup> First, the expansion of municipal budgets was driven by state funding - not by funds raised by local authorities. Second, over time municipal authorities became more dependent on discretionary funding allocated by the central government or via the prefecture authorities. In particular, discretionary subsidies rise proportionally more in comparison to formula-based subsidies over time, and in 1985 the former account for 61 percent of total subsidies.

[Insert Figure 5, here]

We analyze the allocation of benefits to municipalities employing a RDD framework following the relevant literature (Brollo and Nannicini 2012). An increasing number of scholars employ RDD in a similar context; see, among others, Brollo and Troiano (2016), Estache et al. (2016), Beland and Oloomi (2017), Lara and Toro (2019), and Borkan (2020). RDD delivers a clean source of variation in political alignment for mixed candidate elections decided by a narrow margin of victory. We expect a positive relationship between political alignment and allocated (discretionary) transfers to municipalities since politically aligned local authorities were assumed to be important links between the local grassroots of the party and the party machine (see, e.g., Grindle 2012; Kemahlioglu and Bayer, 2020; Sells, 2020). According to this argument, and consistently with our results for the case of Greece, governing parties distribute resources in aligned subnational authorities aiming to strengthen their organizational capacity and entice new members to join their ranks.

### **3. The Prefectural Level of Analysis**

#### *3.1. Prefectural data*

The modern Greek state consists of the central state, mainly ministries and similar national institutions, and the local government agencies. During the early years of *Metapolitefsi*, local administration was divided in two levels: the prefectural units (Level 2), and the municipalities and communities (Level 1). In particular, Greece was organized in 52 prefectures (NUTS-3), whereas the number of municipalities (LAU-1) and communities (LAU-2) in each prefecture

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<sup>12</sup> It should be noted that the two main components of the municipal budget of this period are wages and salaries (35 percent) and investment spending (25 percent).

varies across time. Overall, Greece has been described as one of the most centralist states in Europe (see Hlepas, 2003), although especially during the 1980s some reform efforts have been undertaken (see Christofilopoulou, 1991). In this section, our analysis aims to investigate the possibility of political bias in the allocation of central government budget to the appointed prefects<sup>13</sup>, by constructing the variable *prefectural expenses* expressed in real per capita terms.

Moreover, using the outcomes of legislative elections of 1974, 1977, 1981, 1985 and 1989, we construct the variable *victory margin* for the period 1975-1993.<sup>14</sup> This is the difference between the incumbent share and the opposition share<sup>15</sup>, relative to the entire voting-eligible population.<sup>16</sup> Figure B2, in the Appendix maps the *victory margin* of *ND* and *PASOK* after their first electoral wins in the elections of 1974 and 1981, respectively, at the prefectural level. As it can be seen, areas in the Peloponnese region voted strongly over time in favour of *ND*, while prefectures in the Crete Island (in the southern part of the Aegean Sea) are political strongholds of *PASOK*. Explicit definitions, descriptive statistics and sources of the variables employed throughout the prefectural analysis, are provided in Table B1 in the Appendix.

Finally, in the analysis that follows, we add a number of covariates that are expected to affect the allocated budget to prefectures. In particular, the matrix of prefecture level observable characteristics includes the population of each prefecture (*population*); the share of households with access to electricity (*electricity*); the share of individuals employed in the agricultural sector (*agriculture*); and the share of individuals who are illiterate (*illiterates*). We use these variables in order to capture the effect of urbanization, prosperity and development that are expected to affect the allocation of regional allocation of transfers from the central government (see, e.g., Solé-Ollé and Sorribas-Navarro, 2008; Joannis, 2011).

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<sup>13</sup> This changed with Law 2218/1994 which introduced the election of prefects and prefectural councils along with mayors and municipal elections. See Lavdas (1997) for a historical analysis.

<sup>14</sup> Specifically, we forward prefecture level electoral results up to (and including) the year of the next general election (see, e.g., Jablonski, 2014). For instance, we forward the election results of 1974 up to (and including) the next election year of 1977. In addition, we restrict our dataset after 1975 because this is the first year that the incumbent party of *ND* had discretion over fiscal policy after its victory in the election held in November of 1974.

<sup>15</sup> The opposition share is the share of votes received by the two leading opposition parties between 1975-1981 (i.e., *EK-ND* and *PASOK*), or the leading opposition party between 1982-1993 (i.e., *ND*). The reason for this differentiation is that during 1982-1993 we have a dominant opposition party (*ND* between 1982-1989 and *PASOK* between 1990-1993), while between 1974-1981 the centrist party *EK-ND* and *PASOK* alter in the second and third place with the summation of their strength close to 35 percent. More importantly, as explained above, *PASOK* absorbed the majority of *EK-ND* supporters in the transition of its growing influence.

<sup>16</sup> We opt for this measurement since it allows us to better account for endogenous turnout (see Spenkuch and Tillmann, 2018). However, in robustness checks reported in the Appendix, we use voting shares relative to valid votes cast and our results remain unaffected.

### 3.2. Fixed-Effects regressions

To estimate the association between political support and *prefectural expenses*, we begin by estimating a prefecture level fixed-effects model of the following form:

$$\text{prefectural expenses}_{it} = \alpha_0 + \alpha_1 \text{victory margin}_{it} + \beta X_{it} + \delta_i + \gamma_t + \varepsilon_{it} \quad (1)$$

where *prefectural expenses*<sub>it</sub> denotes the natural logarithm of real per capita prefectural expenses in prefecture *i* at time *t*; *victory margin*<sub>it</sub>, which is the main variable of interest, refers to prefecture *i* in the last election; *X*<sub>it</sub> is a vector of control variables as described above. The model also includes prefecture,  $\delta_i$ , and year fixed-effects,  $\gamma_t$ , to control for time-invariant prefecture characteristics and shocks common to all prefectures. Finally,  $\varepsilon_{it}$  is the error term clustered at the prefecture level. According to our theoretical priors, the coefficient on *victory margin* must have a positive sign.

Table 1 displays our first empirical results. We can notice in column (1) that the coefficient on *victory margin* is positive and highly significant indicating that incumbent parties tended to divert *prefectural expenses* in their strongholds consistent with the “core voter strategy” (see Cox and McCubbins, 1986). In that way, appointed prefects were in position to target more benefits and subsidies in areas/municipalities within the prefecture with higher support for the governing party. Qualitatively, our estimate suggests that prefectures with the highest value of *victory margin* receive, on average, a 12 percent higher budget in comparison to prefectures with the lowest value.

Our next task is to examine whether the relationship observed between political support and *prefectural expenses* is stronger around electoral years. To this end, we estimate the following equation:

$$\begin{aligned} \text{prefectural expenses}_{it} = & \alpha_0 + \alpha_1 \text{victory margin}_{it} + \alpha_2 \text{victory margin}_{it} \cdot \text{election}_t \\ & + \beta X_{it} + \delta_i + \gamma_t + \varepsilon_{it} \end{aligned} \quad (2)$$

As it can be seen, Equation (2) has been augmented with the interaction term *victory margin*<sub>it</sub> · *election*<sub>t</sub>. Given that national election years are constant within prefecture years, only the coefficients of *victory margin* and the interaction term between the latter and *election* are reported in columns (2) and (3) of Table 1. We use two different versions of the variable *election* in our estimates: (i) it takes the value 1 in national election years (e.g.,

1981), and 0 otherwise; (ii) it takes the value 1 both in national election and pre-election years (e.g., 1980-1981), and 0 otherwise. Consistent with prior evidence for political cycles in Greece (see Lockwood et al., 2001), the coefficient of the interaction term in column (3) is positive and statistically significant. This indicates that incumbent parties tended to divert *prefectural expenses* in their strongholds, and even more so during the electoral and pre-electoral years of national elections. In Appendix B, we re-run these estimates using political support variables as shares of valid votes cast and testing for outlier observations. As can be seen in Tables B4-B5 the relationship between political support and *prefectural expenses* remains intact.

[Insert Table 1, here]

### 3.3. Difference-in-Differences estimates

In this sub-section, we exploit the political change that occurred in 1981 as a source of variation in the distribution of political support within the Greek territory, and we employ a DD specification between 1975-1989 (i.e., the years before and after the political change). This specification allows us to explore whether there are *ND* or *PASOK* specific interactions driving the allocation of *prefectural expenses*, and takes the following form (see, e.g., Jablonski, 2014; Anaxagorou et al., 2020):

$$prefectural\ expenses_{it} = \alpha_0 + \alpha_1 party_t \cdot victory\ margin_i + \beta X_{it} + \delta_i + \gamma_t + \varepsilon_{it} \quad (3)$$

where the variable  $party_t$  is an indicator variable that takes the value 1 in years greater than or equal to 1982, and 0 otherwise when *PASOK* is in power ( $PASOK_t$ ), whereas its values are reversed when we estimate the effect of the *ND* regime ( $ND_t$ ). In addition, when  $PASOK_t(ND_t)$  is interacted with  $victory\ margin_i$ , the latter takes the values of the victory margin of *PASOK* (*ND*) in the election of 1981 (1974) -  $victory\ margin_{1981}$  ( $victory\ margin_{1974}$ ).

Given that  $victory\ margin_i$  is constant within prefectures and  $party_t$  is constant within prefecture years, only the interaction between the two remains in the model and is captured by the parameter  $\alpha_1$ . This methodology builds on the idea that *PASOK's* (*ND's*) political support should only affect the allocation of *prefectural expenses* during 1982-1989 (1975-1981) when the party is in power. Thus, by subtracting the effect of victory margin during the *PASOK* (*ND*) regime from their effect during the *ND* (*PASOK*) regime,  $\alpha_1$  provides a reasonable estimate of the extent to which each party shaped the allocation of budget to

prefectures within the Greek territory. We prefer fixed measures to estimate the effect of the two parties - 1981 (1974) victory margin of *PASOK (ND)* - since it is less likely to be endogenous to investment trends than a voting share which changes over time (see, e.g., Carruthers and Wanamaker, 2015). Of course, even fixed voting shares across prefectures are not exogenously assigned and can be correlated with potential confounders. To mitigate this issue, as in the previous section, our estimations include prefecture ( $\delta_i$ ) and year fixed-effects ( $\gamma_t$ ). Moreover, covariates in vector  $X_{it}$ , as discussed above, are employed to control for important time-variant factors that could still confound these estimates. Finally,  $\varepsilon_{it}$  is the error term clustered at the prefecture  $i$  level.

As can be seen in columns (1) and (3) of Table 2, both DD coefficients ( $PASOK_t \cdot victory\ margin_{1981}$ ;  $ND_t \cdot victory\ margin_{1974}$ ) are positive and statistically significant indicating a bias in the allocation of *prefectural expenses* by both parties. However, it should be noted that the estimated coefficient for the administration period of *PASOK* is three times higher. Moreover, as we rely on a voting share from a point in time that increases measurement error in other years, in columns (2) and (4) we opt to reduce our sample between 1978-1985, namely the last term of *ND* and the first term of *PASOK*. As it can be seen, our DD coefficients remain positive and statistically significant, suggesting for one more time political distortions in the allocation of *prefectural expenses*. In Table B6 in Appendix B, we present the robustness checks of the DD estimates: (i) we use political support variables as shares of valid votes cast; (ii) we test for outlier observations; (iii) we expand the sample between 1975-1993; (iv) we allow the effect of *PASOK* and *ND* administration to vary over two horizons during their terms in office; and (v) we test the parallel trend hypothesis for the administration of *PASOK*. Additional discussions of these tests are provided in Section A1 in Appendix A. Overall, our empirical evidence so far suggests that during the process of party -development at the local level, *prefectural expenses* was a significant political instrument for the two parties to target their supporters.

[Insert Table 2, here]

## 4. The Municipal Level of Analysis

### 4.1. Institutional background

Municipalities in Greece operate under uniform fiscal rules and are “financially dependent”, as they receive significant subsidies via the prefecture budget and/or directly from the central



government (see Figure 5 and Figure B1 in Appendix B). Along with the development of local organizations of the two parties during *Metapolitefsi*, an effort of empowerment of municipal authorities is also observed (see Christofilopoulou, 1991; Hlepas and Getmis, 2011). In particular, new forms and institutions of participation were introduced, decentralisation of competences and resources was promoted, whereas authorities were encouraged to establish municipal enterprises and provide a wider spectrum of social services. In that way, the local government was in position to offer posts, influence and power to the cadres of the dominant political parties at the local level. Despite the promotion of these changes, financial discretion (own tax revenue) of municipal authorities remained very limited over the same period (see Tatsos, 1998). As a result, (discretionary) subsidies to municipalities constituted a significant political instrument of governing parties.

Local elections use electoral lists and, therefore, mayoral candidates do not officially belong to any party which, in principle, ensures independence. However, mayoral candidates, as individuals, can be directly affiliated to a political party by being a member. Also, electoral lists, where the mayoral candidate is the head runner, could be endorsed or indirectly supported by a political party. Therefore, candidates at local elections do not run under the official name of any party, however voters can recognize the political identity of the candidate (see Chortareas et al., 2016). Mayoral candidates should obtain 50 percent plus one vote of the total valid votes in order to get elected. In case that no candidate is able to pass this threshold, then the first two candidates are transferred to the second electoral round where the winner is the candidate with the largest vote share.

The first local elections, after the military junta, took place in 1975, four months after the national elections of 1974. The next municipal elections were held in 1978, following the national elections of 1977. During both these terms, *ND* was in power. The next two local elections were held in 1982 and 1986, months after the wins of *PASOK* in the national elections of 1981 and 1985 respectively. The final election included in our sample took place in 1990, when *ND* again came to power after the national election of 1989. Due to data availability issues, our sample does not include the local election of 1975, which took place immediately after the restoration of democracy.

#### 4.2. *Municipal data*

The majority of mayors are, directly or indirectly, affiliated with the two main political parties that dominated the political landscape since the restoration of democracy. Our aim is to examine whether political alignment matters for the allocation of subsidies to municipalities

for the period 1979-1993 – i.e., after the local elections of 1978, 1982, 1986 and 1990. To this end, our main dependent variable is the real per capita discretionary intergovernmental subsidies ( $subsidies_{it}$ ) received by municipality  $i$  during term  $t$ .<sup>17</sup> Alternatively, we experiment with regular (formula-based) subsidies of the central government to municipalities, namely *non-discretionary subsidies*. Greece has a varying number of municipalities (for which fiscal data are available) during our sample period, starting from 267 in 1979 and ending with 304 municipalities in 1993. Figure B3 in Appendix B shows the administrative boundaries of these municipalities.<sup>18</sup>

During the period under consideration, we have elected mayors and mayoral candidates from all political parties of *Metapolitefsi*. It should be noted though that in some municipalities we have the so-called “independent” candidates of the two parties who were running despite the fact that other candidates had the official endorsement. On average, around 88 percent of candidate mayors who obtain one of the first two places in the electoral races of our sample are affiliated with *ND* or *PASOK*, whereas 4 percent of these cases are linked with independent candidates of the two parties. The rest of our sample is composed by candidates who are affiliated with the *Communist Party of Greece (KKE – Komounistiko Komma Elladas)* with 6.5 percent, the *Coalition of the Left, of Movements and Ecology (Synaspismos)* with 2.4 percent, the centrist *EK-ND* with 1.5 percent, whereas the remaining 1.5 percent belongs to independent candidates or cases that affiliation is uncertain.

Overall, in our sample we have data for 1,165 electoral races. To implement the RDD, we restrict the sample to municipalities with electoral races of only two candidates with the following characteristics<sup>19</sup>: (i) they are official or independent candidates of *ND* and *PASOK*; (ii) they belong to *ND* and *EK-ND*, as the latter party was absorbed by *PASOK* in the transition of its growing influence; (iii) the first two places belong to *ND* and *Synaspismos* candidates.<sup>20</sup> These restrictions are of paramount importance, as alignment (or nonalignment) will have a

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<sup>17</sup> So, after the local election of 1978, the variable  $subsidies_{it}$  is calculated as the average amount of subsidies received by municipality  $i$  between 1979-1981. We have decided to exclude the year of next municipal election from this calculation, as the party in power changed 2 times between 1978-1990 (October 1981 and October 1989) affecting the political alignment of the mayor for the average we calculate.

<sup>18</sup> Data of local electoral results were obtained from the Ministry of Interior, Directorate of Elections. However, as already mentioned, mayoral candidates do not officially belong to any party. To trace their affiliation, we used electoral data and newspapers of that era that Professor Ilias Nicolacopoulos -the most prominent electoral analyst in Greece- shared with us from his personal collection.

<sup>19</sup> In other words, we focus on electoral races that the mayor is elected in the first round. This is because when including electoral races with more than two candidates we find evidence of non-random sorting around the cut-off (see also, Broilo and Troiano, 2016).

<sup>20</sup> The logic for the latter is that in many cases *PASOK* and left-wing *Synaspismos* endorsed the same candidate in municipal elections.

different meaning if for instance the first two places belong to candidates of the same party (see, e.g., Brollo and Nannicini, 2012). Following these restrictions, we end up with 361 electoral races that took place in 196 municipalities around Greece. Figure B4, in Appendix B, shows the spatial allocation of these municipalities within the Greek territory. It should be noted that 104, 92, 42 and 123 of these 361 electoral races took place in 1978, 1982, 1986 and 1990 local elections, respectively. Also, in 155 of these races (42 percent of the sample) candidates of *ND* won, whereas in the remaining 206 races candidates of *PASOK* (191), *Synaspismos* (9) and *EK-ND* (6) won the mandate. Our forcing variable in the RDD is defined as the victory margin of the mayoral candidate aligned with the central government party in power in each municipality  $i$  and term  $t$  ( $VM_{it}$ ). Consequently, the (political) alignment variable ( $A_{it}$ ) equals to 1 when this measure is positive and 0 when it is negative.

Finally, we control for some variables that are likely to affect the allocation of subsidies. In particular, we use the census of 1981 to reproduce the set of covariates,  $X_{it}$ , employed in prefectural analysis, namely *population*, *electricity*, *agriculture*, and *illiterates*. In addition, we use a second set of covariates ( $Z_{it}$ ) to control for political characteristics. To this end, we use the variable *victory margin* defined as the difference of valid votes between the incumbent and opposition parties in the last national election. Then, we calculate the share of absent voters from the electoral process (*abstention*) defined as the share of voters to the total number of registered voters. We also include two variables that capture mayoral characteristics: (i) the number of times a candidate has been elected as mayor since the drop of the military regime (*experience*); (ii) a dummy variable that takes the value 1 in cases the winner of the last mayoral election runs as candidate and 0 otherwise (*candidate*). Explicit definitions, descriptive statistics and sources of the variables employed throughout the municipal analysis are provided in Table B2 in Appendix B.

In Table B3, in Appendix B, we summarize the main variables of the analysis comparing the sample means of the municipalities that have a mayor who is politically aligned with the government (columns 1-2) and the municipalities that have a mayor who is not aligned with the government (columns 3-4). We also report the p-value of the corresponding t-test for equality of these means. As it can be seen, even a simple comparison of means indicates a statistically significant positive difference of the average (discretionary) *subsidies* received by the municipalities with a politically aligned mayor. On the other hand, *non-discretionary subsidies* are at the same level for aligned and non-aligned municipalities.

### 4.3. Identification: Regression Discontinuity Design

To estimate the impact of political alignment on the amount of subsidies we adapt the RDD in close electoral races pioneered by Lee (2008). In particular, Lee (2008) uses the US House elections as an empirical illustration, showing that winners in close electoral races exhibit quasi-random variation that allows for the identification of causal effects of political parties. Following this methodology, we can compare the municipalities for which the aligned candidate barely won to municipalities for which the candidate barely lost. To do so, we use the variable  $VM_{it}$  defined above, where at the threshold cut-off point ( $VM_{it} = 0$ ) the political alignment ( $A_{it}$ ) *sharply* increases from 0 to 1. Then, we employ a spline polynomial specification which consists of running a  $P^{\text{th}}$ -order polynomial function in  $VM_{it}$  on either side of the threshold  $VM_{it} = 0$ , as follows:

$$subsidies_{it} = \sum_{k=0}^p \alpha_k VM_{it}^k + A_{it} \sum_{k=0}^p \beta_k VM_{it}^k + \gamma X_i + \delta Z_{it} + m_t + \varepsilon_{it} \quad (4)$$

where  $subsidies_{it}$  is the amount of *subsidies* received by municipality  $i$  during term  $t$  (i.e., 1979-1981, 1983-1985, 1987-1989, and 1991-1993);  $VM_{it}^k$  is the margin of victory of the mayor of municipality  $i$  in the last local election during the year  $t$  (i.e., 1978, 1982, 1986, and 1990);  $A_{it}$  takes the value 1 when the mayor is aligned with the central government and 0 otherwise;  $X_i$  ( $Z_{it}$ ) is the set of socio-economic (political) characteristics described above; and  $m_t$  are mayoral term-fixed-effects. Also, standard errors are clustered at the municipal level. In this setting, the estimated coefficient,  $\hat{\beta}_0$ , identifies the average treatment effect at the zero threshold. Therefore, a political bias of the central government towards the politically aligned mayoral candidate is indicated when  $\hat{\beta}_0 > 0$ .

Based on the generic specification, described in Equation (4), we employ various models. In particular, we adopt a linear regression model with  $p = 1$  as well as second, third and fourth-order polynomials. We consider these models, firstly, without additional covariates and, secondly, including the set of covariates described in the previous section. As an alternative, we apply a local linear regression which restricts the sample to municipalities in the interval  $VM_{it} \in [-h, +h]$  and estimates the model:

$$subsidies_{it} = \alpha_0 + \alpha_1 VM_{it} + \beta_0 A_{it} + \beta_1 A_{it} \cdot VM_{it} + \gamma X_i + \delta Z_{it} + m_t + \varepsilon_{it} \quad (5)$$

where the optimal bandwidth  $h$  is computed as in Calonico et al. (2014). As above, the coefficient of interest is  $\hat{\beta}_0$ .

Before we move to our main results and robustness checks, we start with two validity tests. First, we examine whether the density of our running variable,  $VM_{it}$ , is continuous at the discontinuity threshold (i.e.,  $VM_{it} = 0$ ). To check this, we follow the McCrary (2008) methodology that tests the null hypothesis of continuity employing kernel local linear regressions of the logarithm of the density separately on both sides of the cut-off. As can be seen in Figure 6, we cannot reject continuity in the running variable at the win/loss threshold, indicating that ruling party mayoral candidates do not have the ability to selectively push themselves across the win margin. Second, we have to ensure that municipalities just below and above the cut-off are similar. To this end, we examine whether there is no discontinuity in our covariates between municipalities narrowly won and narrowly lost by ruling party candidates. Table 3 presents the results, showing that all variables are balanced across the cut-off. These results are corroborated by visual inspection in Figure 7. Consistent with Table 3, there is no noticeable difference in our covariates across the cut-off.

[Insert Figure 6 here]

[Insert Figure 7 & Table 3, here]

#### 4.4. Baseline results

In this section, we describe our RDD results as reported in Table 4. Our baseline estimates include simple OLS regressions (columns 1-2), RDD regressions described in Equation (4) using a third-order spline polynomial specification (columns 3-4), and local linear regressions described in Equation (5) with optimal bandwidth calculated according to Calonico et al. (2014) (columns 5-6). For each model, we report a specification with no covariates (columns 1, 3, 5) and a specification that includes the full set of our controls (columns 2, 4, 6). Across all specifications, we have positive and statistically significant estimates, indicating that mayors politically aligned with the government receive larger amounts of (discretionary) subsidies via prefectures and the central government. According to the spline polynomial regression with the full set of covariates mayors affiliated with the central government that barely won the election received 17 percent more subsidies than their non-affiliated counterparts. These results are confirmed by visual inspection of Figure 8, which shows that

the subsidies to aligned municipalities increase significantly for positive values of victory margin around the cut-off. At the same time, we have indications that more (discretionary) subsidies flow to strongholds (where  $VM_{it}$  is large) consistent to the results at the prefecture level and the “core voter strategy” predicted by Cox and McCubbins (1986). Overall, this evidence is consistent with our expectations that politically aligned mayors were important intermediaries of the governing party to target benefits at the local level, aiming to support the local development of the party machine and in turn its overall strength at the national level (see Grindle, 2012; Kemahlioglu and Bayer, 2020; Sells, 2020).

[Insert Table 4 and Figure 8 here]

#### 4.5 Robustness checks

Our first robustness check in Table 5 is to experiment with additional specifications. In particular, the first four columns present results of polynomial estimations for all orders between 1 and 4 (each column corresponds to a specific order). Moreover, columns (5)-(7) show the results of local linear regressions for the optimal bandwidth defined by Calonico et al. (2014), half, and quarter of it. Due to space limitations, we have omitted the corresponding specifications that exclude the covariates since the results are qualitatively similar. As before, we see that our overall conclusion is robust to the polynomial order as well as the bandwidth choice.

[Insert Table 5, here]

Second, we re-run specifications of Table 4 using *non-discretionary subsidies* as our dependent variable. As already discussed both discretionary and non-discretionary subsidies to municipalities increased substantially between 1975-1993 (see Figure 5). However, given that non-discretionary (formula-based) subsidies are allocated in a fair and transparent way, we would not expect to find evidence of political bias. Indeed, we see in Table 6 that the coefficient for the political alignment variable,  $A_{it}$ , is not statistically significant in any specification. Also, visual inspection of Figure B5 does not indicate political distortions around the cut-off or towards political strongholds. This is consistent with our argument that when the governing parties had discretion over funds in the new era of *Metapolitefsi*, political bias arises in an attempt to support their party -development.

[Insert Table 6, here]

In Tables B7, B8 and Figure B6, in Appendix B, we present two additional robustness checks of the RDD estimates: (i) we investigate whether political alignment has a differentiated effect on subsidies along five dimensions (e.g., population size of municipality); (ii) we perform a placebo test using alternative cut-off points. Additional discussions of these tests are provided in Section A2 in Appendix A. Overall, our findings about the effect of political alignment on *discretionary subsidies* remain unaffected.

## 5. Conclusions

After the restoration of democracy in Greece in 1974, a period of fiscal laxity started which worsened in the late 1970s and continued until the early 1990s. This proved to be the starting point of a prolonged vicious cycle of fiscal destabilization that has been haunting the Greek economy ever since (see, e.g., Alogoskoufis, 2019). Several scholars suggest that *Metapolitefsi* produced an economic environment that discouraged private investment through increased uncertainty, while it prioritized politically motivated redistributive policies (see Meghir et al., 2017; Kostis, 2019). In particular, social groups that were at the margin of society and politics in the pre-*Metapolitefsi* era (e.g., small business owners, and small farmers) gained significant political power, whereas elected governments were striving to satisfy their “fiscal demands”.

The main parties that emerged since 1974 (i.e., *ND* and *PASOK*) put significant efforts to organize a party machine at the local level in order to attract these social groups through mass memberships. This was achieved, as between 1976 and 1986 party members of *ND* and *PASOK* rose by 1000 percent, reaching a level close to 10 percent of its voters (see Mair and van Biezen, 2001; Bosco and Morlino 2006). In this new era of *bureaucratic clientelism*, both appointed prefects and politically aligned mayors were important intermediaries of the governing party to target benefits at the local level, aiming to support and strengthen the empowerment of local organizations (see Grindle, 2012; Kemahloğlu and Bayer, 2020; Sells, 2020).

One significant fiscal instrument of political influence was intergovernmental transfers to prefectures and municipalities that increased markedly between 1974-1993, contributing to the fiscal derailment of the Greek state. Building on a novel regional dataset and employing DD and RDD estimation techniques, our analysis provides strong evidence that governing parties diverted significant amounts of intergovernmental transfers towards their political strongholds and politically aligned mayors. Overall, our findings support the notion that

political distortions during the first two decades of *Metapolitefsi* are a major contributing factor that Greece is entangled in its current malaise.



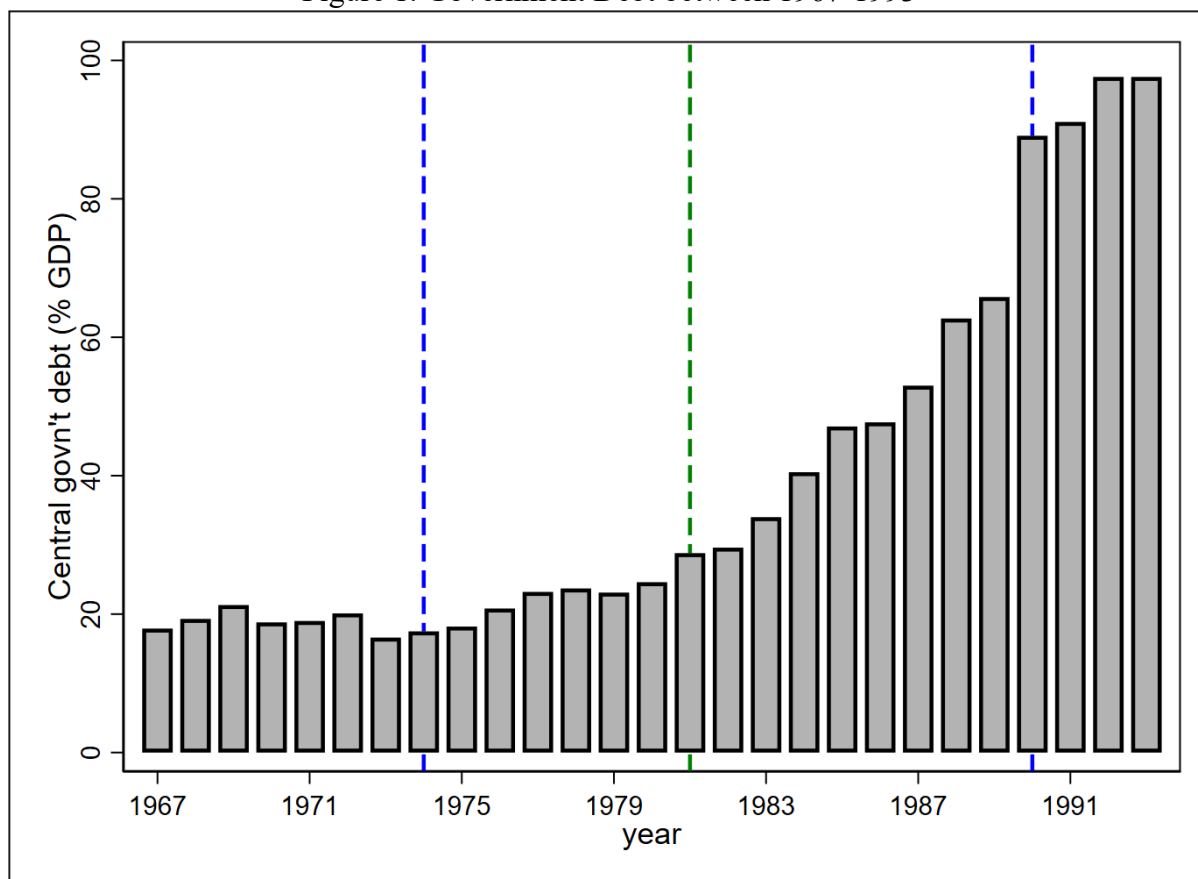
## References

- Alogoskoufis, G. (1995). The two faces of Janus: Institutions. Policy regimes and macroeconomic performance. *Economic Policy* 10, 147-192.
- Alogoskoufis, G. (2019). Greece and the Euro: A Mundellian Tragedy. *GreeSE – Hellenic Observatory Papers on Greece and Southeast Europe* 136, Hellenic Observatory, LSE.
- Anaxagorou, C. Efthyvoulou, G. and Sarantides, V. (2020). Electoral motives and the subnational allocation of foreign aid in sub-Saharan Africa, *European Economic Review*, 127, 103430.
- Ansolabehere, S., and Snyder J. (2006). Party control of state government and the distribution of public expenditures. *Scandinavian Journal of Economics*, 108, 547-569.
- Carruthers, C., and Wanamaker, M. (2015). Municipal housekeeping: The impact of women's suffrage on public education. *Journal of Human Resources*, 50(4), 837-872.
- Beland, L.-P., and Oloomi, S. (2017). Party affiliation and public spending: evidence from U.S. governors. *Economic Inquiry*, 55(2), 982-995.
- Borcan, O. (2020). The Illicit Benefits of Local Party Alignment in National Elections, *Journal of Law, Economics and Organization*, 36 (3), 461-494.
- Bosco, A. and Morlino, I. (2006). What changes in South European parties? A comparative introduction', *South European Society and Politics*, 11(3-4), 331-58.
- Brender, A., and Drazen, A. (2007). Why is economic policy different in new democracies? Affecting attitudes. *NBER Working Paper No. 13457*.
- Brollo, F., and Nannicini, T. (2012). Tying your enemy's hands in close races: The politics of federal transfers in Brazil. *The American Political Science Review*, 106(4), 742-761.
- Brollo, F., and Troiano, U. (2016). What happens when a woman wins an election? Evidence from close races in Brazil. *Journal of Development Economics*, 122, 28-45.
- Calonico, S., Cattaneo, M.D., and Titiunik, R. (2014). Robust nonparametric confidence intervals for regression-discontinuity designs. *Econometrica*, 82(6), 2295-2326.
- Casas, A. (2018). Distributive politics with vote and turnout buying. *American Political Science Review*, 112(4):1111-1119.
- Casas, A. (2020). The electoral benefits of unemployment, clientelism and distributive politics, *World Development*, 129, 104908.
- Chortareas, G., Logothetis, V. and Papandreou, A. (2016). Political budget cycles and reelection prospects in Greece's municipalities, *European Journal of Political Economy*, 43(C), 1-13.
- Christofilopoulou, P. (1991). Local government reform in Greece, in: J. J. Hesse (Ed.) *Local Government and Urban Affairs in International Perspective*, 551-572 (Baden-Baden: Nomos).
- Chubb, Judith (1982). *Patronage, Power, and Poverty in Southern Italy*. New York: Cambridge University Press Nomos).
- Cox, G. and M. D. McCubbins. (1986). Electoral Politics as a Redistributive Game. *Journal of Politics*, 48(2), 370-389.
- Dixit, A., and Londregan, J. (1998). Fiscal federalism and redistributive politics. *Journal of Public Economics*, 68(2), 153-180.
- Duverger, M. (1954). *Political Parties*. London: Methuen
- Das, U., and Maiorano, D. (2019). Post-clientelistic initiatives in a patronage democracy: The distributive politics of India's MGNREGA. *World Development*, 117, 239-252
- Elephantis, A. (1981). PASOK and the Elections of the 1977: The Rise of the Populist Movement, in Howard R. Penniman, ed., *Greece at the Polls: The National Elections of 1974 and 1977* (Washington, D.C.: American Enterprise Institute for Public Policy Research).
- Epstein, L. (1967). *Political Parties in Western Democracies*. New York: Praeger.

- Estache, A., Garsous, G. and Seroa da Motta, R. (2016). Shared Mandates, Moral Hazard, and Political (Mis) alignment in a Decentralized Economy, *World Development*, 83, 98-110.
- Fiva, J.H., and Halse, A.H. (2016). Local favoritism in at-large proportional representation systems. *Journal of Public Economics*, 143, 15-26.
- Garay, C., Palmer-Rubin, B., and Poertner, M., (2020). Organizational and partisan brokerage of social benefits: Social policy linkages in Mexico. *World Development*, 136, 105103
- Grindle, M. (2012). *Jobs for the Boys: Patronage and the State in Comparative Perspective*. Cambridge, MA: Harvard University Press.
- Hicken, A. (2011). Clientelism. *Annual Review of Political Science*, 14, 289-310.
- Hlepas, N.-K. (2003) Local government reform in Greece, in: N. Kersting and A. Vetter (Eds) *Reforming Local Government in Europe. Closing the Gap between Democracy and Efficiency*, 221–239 (Opladen: Leske and Budrich).
- Hlepas N.K., and Getimis P. (2011). Impacts of Local Government Reforms in Greece: An Interim Assessment, *Local Government Studies*, 37, (5): 517-532.
- Hyytinen, A., Meriläinen, J., Saarimaa, T., Toivanen, O., and Tukiainen, J. (2018). Public employees as politicians: Evidence from close elections. *American Political Science Review*, 112(1), 68–81.
- Jablonski, R. (2014). How aid targets votes: The impact of electoral incentives on foreign aid distribution. *World Politics*, 66(2), 1-39.
- Joanis, M. (2011). The road to power: Partisan loyalty and the centralized provision of local infrastructure, *Public Choice*, 146, (1-2), 117-143.
- Kalyvas, S. (2015). *Modern Greece: What everyone needs to know*. Oxford University Press.
- Kammas, P., and Sarantides, V. (2016). Fiscal redistribution around elections when democracy is not “the only game in town”. *Public Choice*, 168 (3), 279-311.
- Katsimi, M. and Moutos, T. (2010). EMU and the Greek crisis: The political-economy perspective, *European Journal of Political Economy*, 26(4), 568-576.
- Katz, R. S. and Mair, P. (1995). Changing models of party organization and party democracy. The emergence of cartel party. *Party Politics*, 1, 5-29.
- Kauder, B., Potrafke, N. and Reischmann M. (2016). Do politicians reward core supporters? Evidence from a discretionary grant program, *European Journal of Political Economy*, 45, 39-56.
- Keefer P, and Vlaicu, R. (2008). Democracy, credibility and clientelism. *Journal of Law Economics and Organisation*, 24(2), 371–406.
- Kemahlioğlu, Ö. and Bayer, R. (2020). Favoring co-partisan controlled areas in central government distributive programs: the role of local party organizations. *Public Choice*, in press.
- Kostis, K. (2019). *The Wealth of Greece*. Patakis Publishers (in Greek).
- Lara, B.E., and Toro, S.M. (2019). Tactical distribution in local funding: The value of an aligned mayor. *European Journal of Political Economy*, 56, 74-89.
- Lavdas, K. (1997). *The Europeanization of Greece: Interest Politics and the Crises of Integration*, London: Macmillan.
- Lee, D.S. (2008). Randomized experiments from non-random selection in U.S. House elections, *Journal of Econometrics*, 142(2), 675-697.
- Lockwood, B., Philippopoulos, A., and Tzavalis, E. (2001). Fiscal policy and politics: Theory and evidence from Greece 1960-1997. *Economic Modelling*, 18, 253-268.
- Linz, J., and Stepan, A. (1996). *Problems of democratic transition and consolidation: southern Europe, South America, and post-communist Europe*. Baltimore: Johns Hopkins University Press.

- Loulis, J. (1981). New Democracy: The New Face of Conservatism, in Howard R. Penniman, ed., *Greece at the Polls: The National Elections of 1974 and 1977* (Washington, D.C.: American Enterprise Institute for Public Policy).
- Lyrantzis, C. (1984). Political parties in post-junta Greece: A case of “bureaucratic clientelism?” *West European Politics*, 7(2), 99-118.
- Mair, P., and van Biezen, I. (2001). Party membership in twenty European democracies, 1980-2000. *Party Politics*, 7, 5-21.
- Mauro P., R. Romeu, A. Binder and A. Zaman (2015): A modern history of fiscal prudence and profligacy, *Journal of Monetary Economics* 76, 55-70.
- Mavrogordatos, G. (1983). *The rise of the green sun: The Greek election of 1981*. London: King’s College, Centre for Contemporary Greek Studies.
- Mavrogordatos, G. (1984). The Greek party system: a case of limited but polarized pluralism? *West European Politics*, 7(4), 156-169.
- Mavrogordatos, G. (1997). From traditional clientelism to machine politics: The impact of PASOK populism in Greece. *South European Society and Politics*, 2(3), 1-26.
- McCrary, J. (2008). Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test. *Journal of Econometrics*, 142: 698–714.
- Meghir, C., Pissarides, C., Vayanos, D., and Vettas, N. (2017). The Greek economy before and during the crisis-and policy options going forward, in C. Meghir, C. A. Pissarides, D. Vayanos and N. Vettas (eds), *Beyond Austerity: Reforming the Greek Economy*, MIT Press, Cambridge, MA, chapter 1, pp. 3–72.
- Milesi-Ferretti, G., Perotti, R., and Rostagno, M. (2002). Electoral systems and the composition of public spending. *Quarterly Journal of Economics*, 117 (2), 609-657.
- Moutos, T., and Pechlivanos, L. (2015). The democratization of rent seeking in modern Greece, in R. Congleton and A. Hillman (Eds.), *Companion to the Political Economy of Rent Seeking* (Edward Elgar Publishing)
- Moutos, T., and Tsitsikas, C. (2010). Whither public interest: The case of Greece’s public finances. *FinanzArchiv*, 66, 170-2016.
- Nicolacopoulos, I. (2005). Elections and voters, 1974-2004: Old cleavages and new issues. *West European Politics*, 28(2), 260-278.
- O’Dwyer, C. (2004). Runaway state building how political parties shape states in postcommunist Eastern Europe. *World Politics*, 56, 520–553.
- Pappas, T. (2009). Patrons against partisans. The politics of patronage in mass ideological parties. *Party Politics*, 15(3), 315-334.
- Potrafke, N. (2012). Political cycles and economic performance in OECD countries: empirical evidence from 1951–2006. *Public Choice*, 150, 155–179.
- Rogoff, K. (1990). Equilibrium political budget cycles. *American Economic Review*, 80(1), 21–36.
- Sells, C. (2020). Building parties from City Hall: Party membership and municipal government in Brazil. *The Journal of Politics*, 82(4), 1576-1589.
- Shefter, M. (1994). *Political parties and the state: The American historical experience*. Princeton: Princeton University Press.
- Solé-Ollé, A., and Sorribas-Navarro, P. (2008). The effects of partisan alignment on the allocation of intergovernmental transfers. Difference-in differences estimates for Spain. *Journal of Public Economics*, 92, 625–671.
- Spenkuch, J., and Tillmann, P. (2018). Elite influence? Religion and the electoral success of the Nazis, *American Journal of Political Science*, 62(1), 19-36.
- Tatsos, N. (1998). The size of local government units, local government papers, Vol. 1, National Association of Municipalities (KEDKE), Athens, 104–120.

Figure 1. Government Debt between 1967-1993



Notes: The first blue dashed line indicates the year that democracy is restored and *ND* came to power up to 1981 (i.e., 1974-81). The green dashed line indicates the year that the socialist party *PASOK* came to power after the election of 1981 up to 1989. The second blue dashed line indicates the win of *ND* in the elections of 1990. Government debt data are obtained by Reinhart and Rogoff (2011).

Figure 2. Government Primary Expenditure, Revenues and Primary Balance (%GDP) over time.

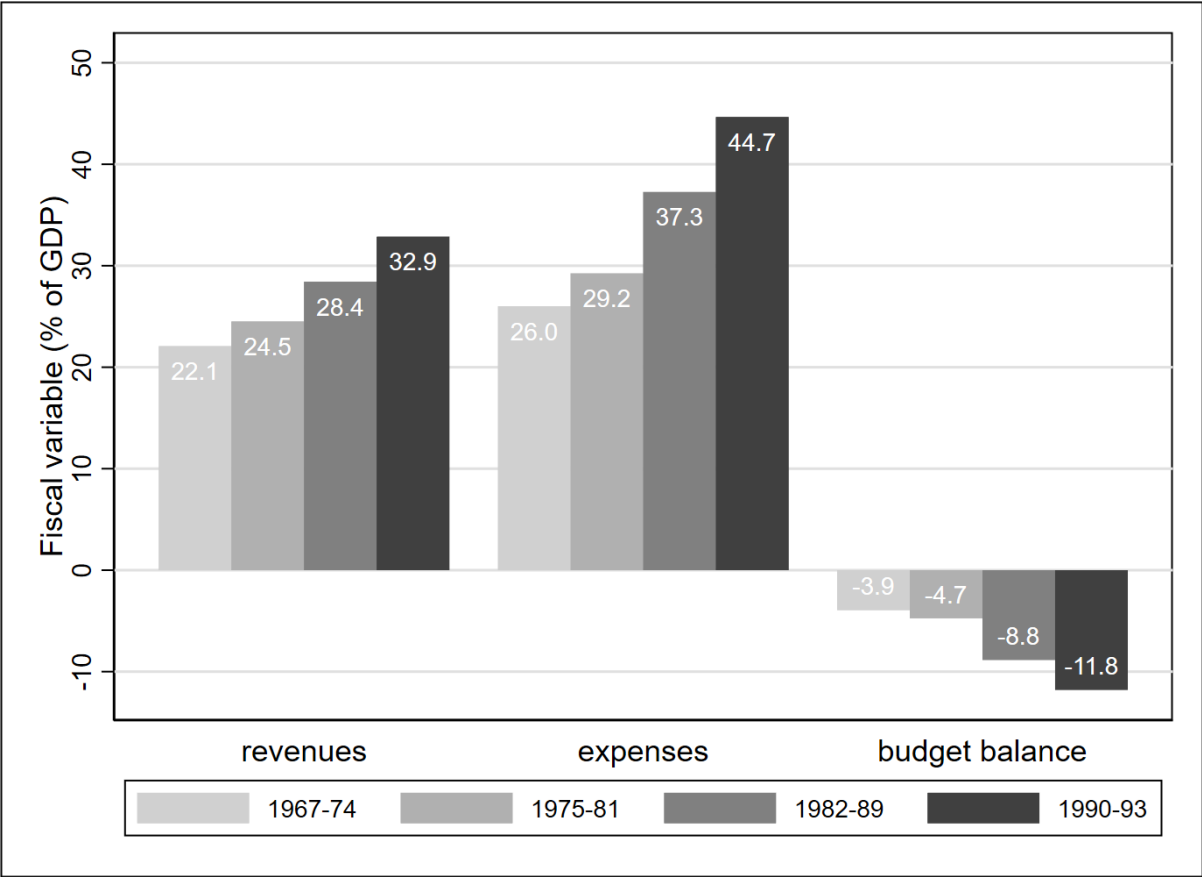


Figure 3. Government Primary Expenditure, Revenues and Primary Balance (%GDP):  
Election vs non-election years

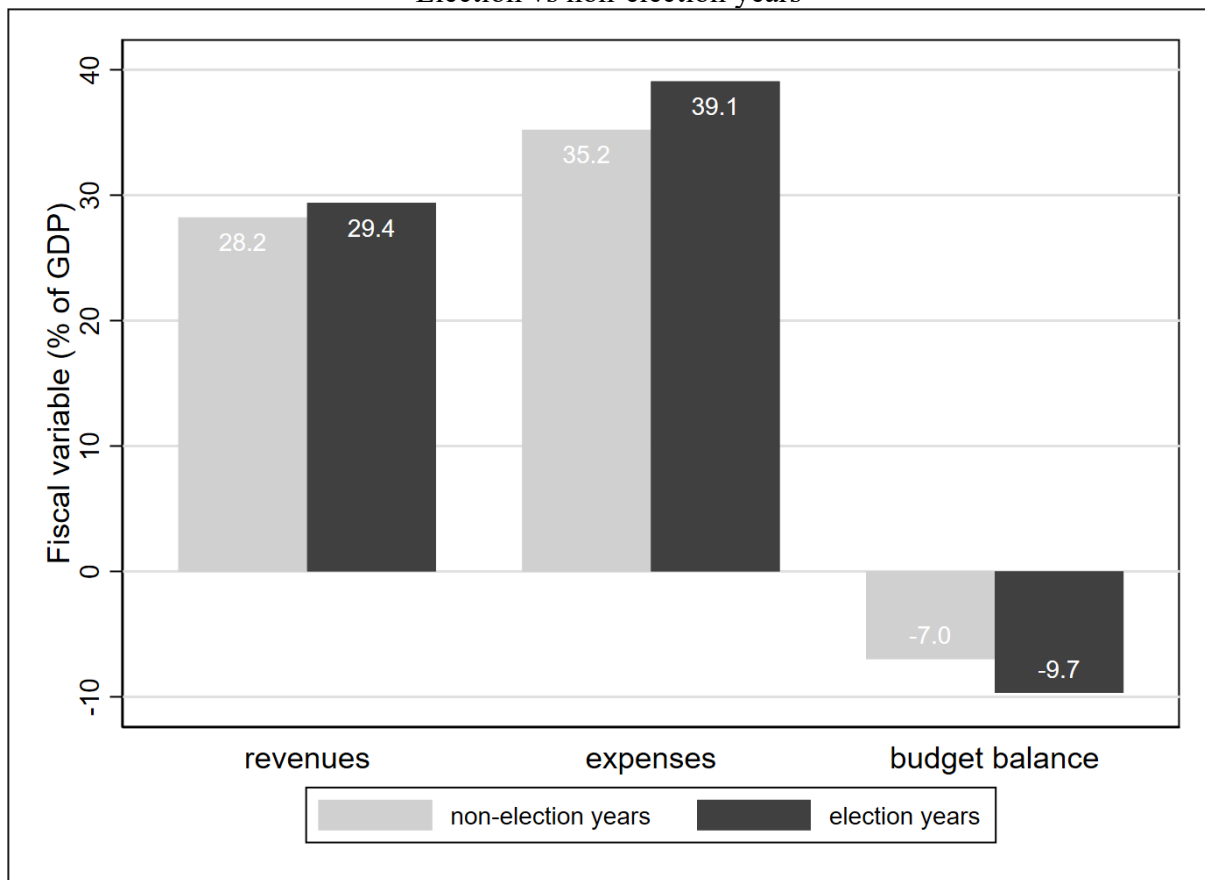
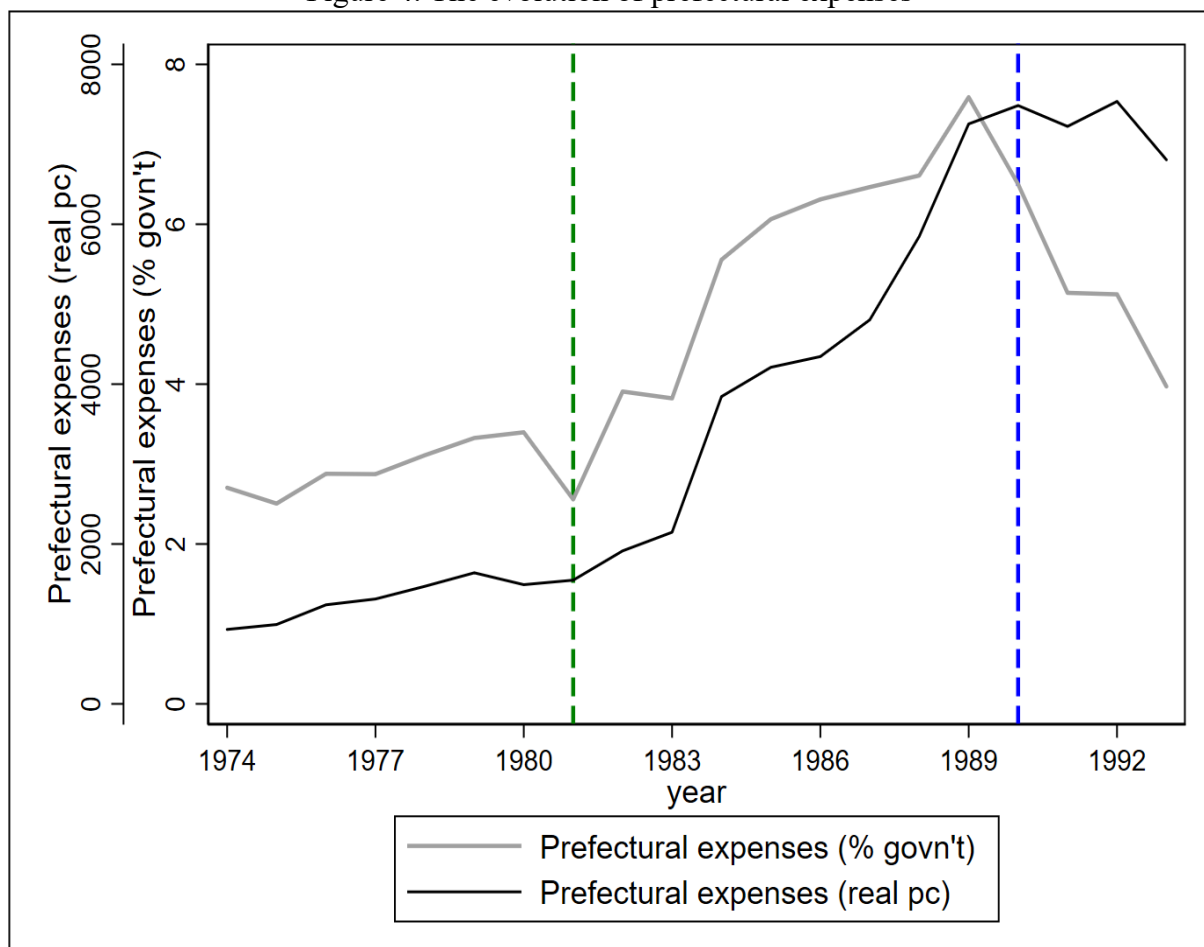
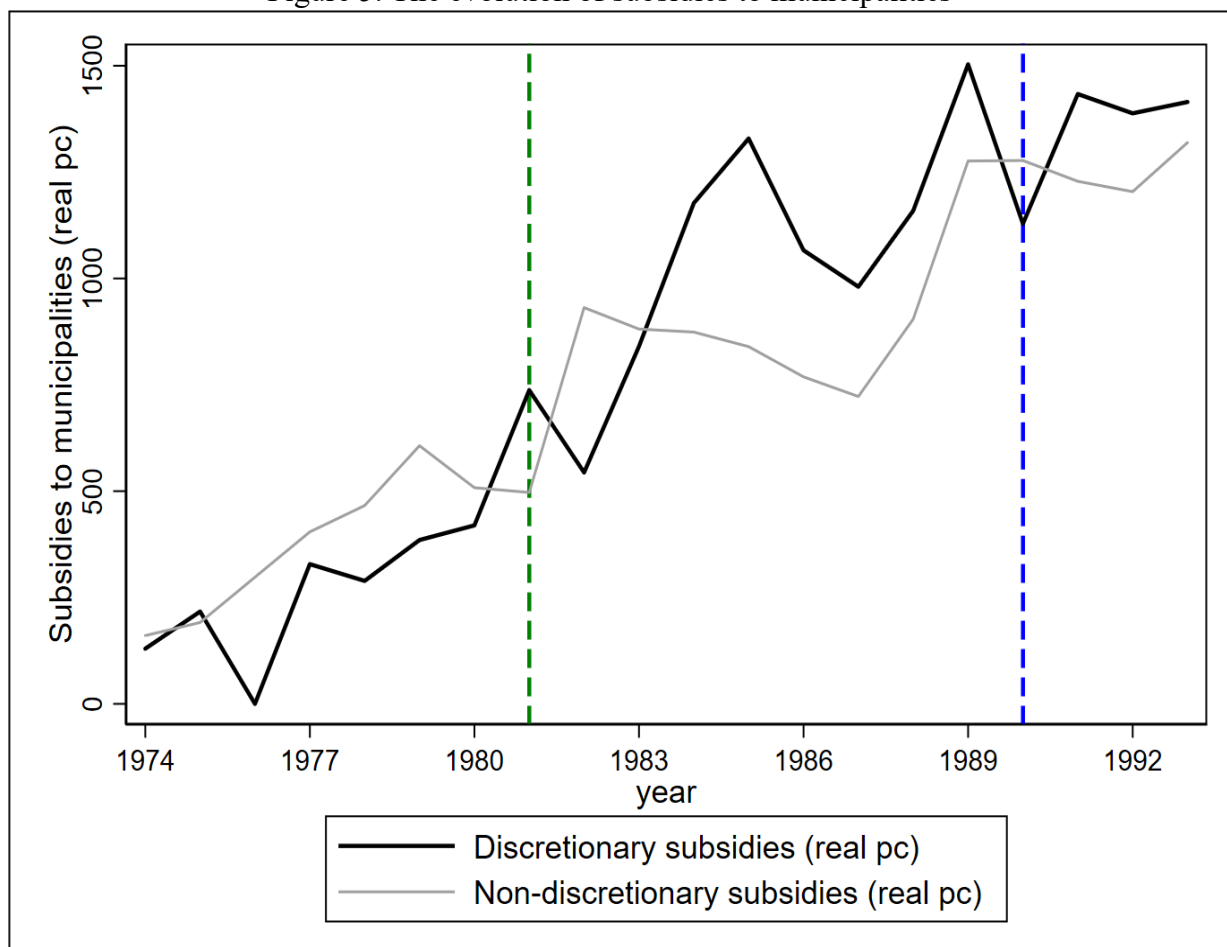


Figure 4. The evolution of prefectural expenses



came back to power in 1990. Fiscal data are obtained by the annual volumes of the final fiscal accounts of the Greek state available at the Bank of Greece (BoG).

Figure 5. The evolution of subsidies to municipalities



(ELSTAT).



Figure 6. McCrary (2008) test for no discontinuity at the cut-off

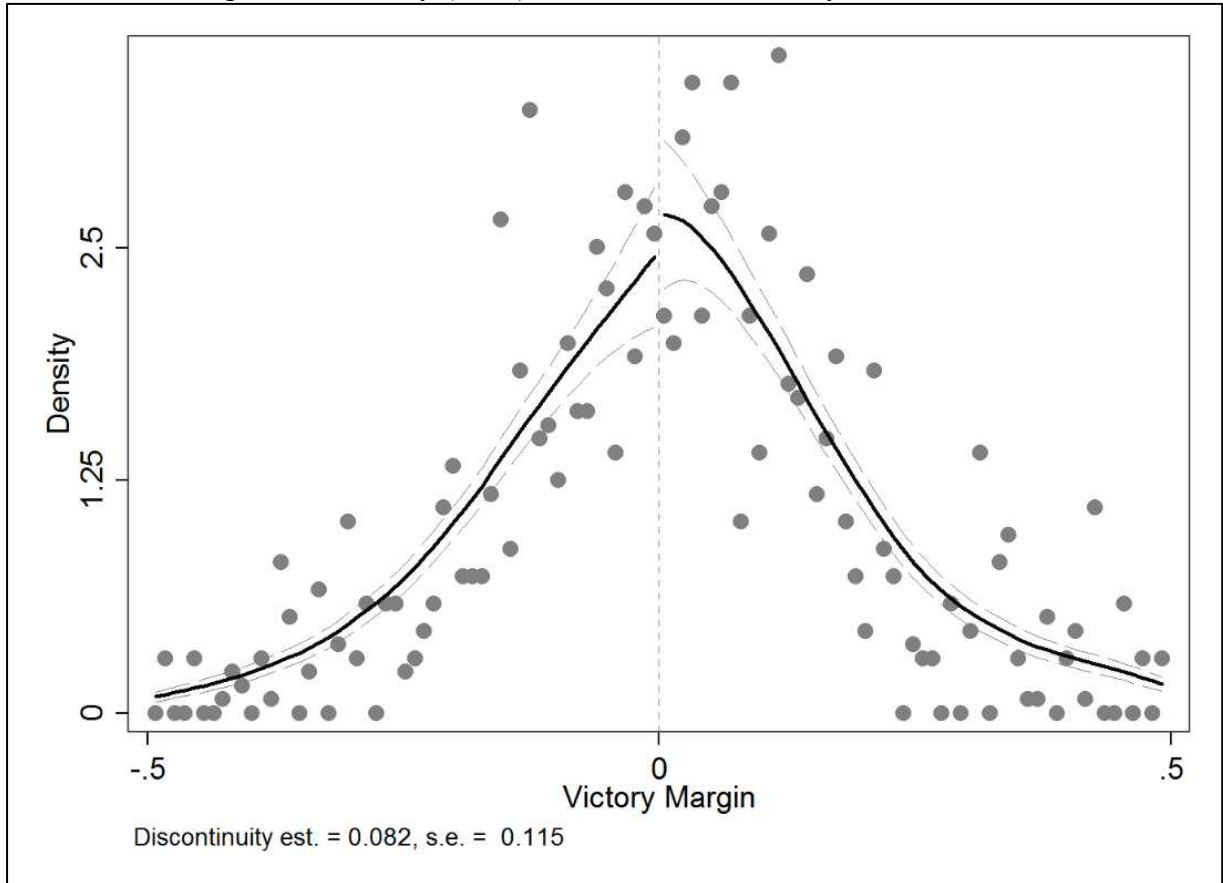


Figure 7. Balanced covariate checks

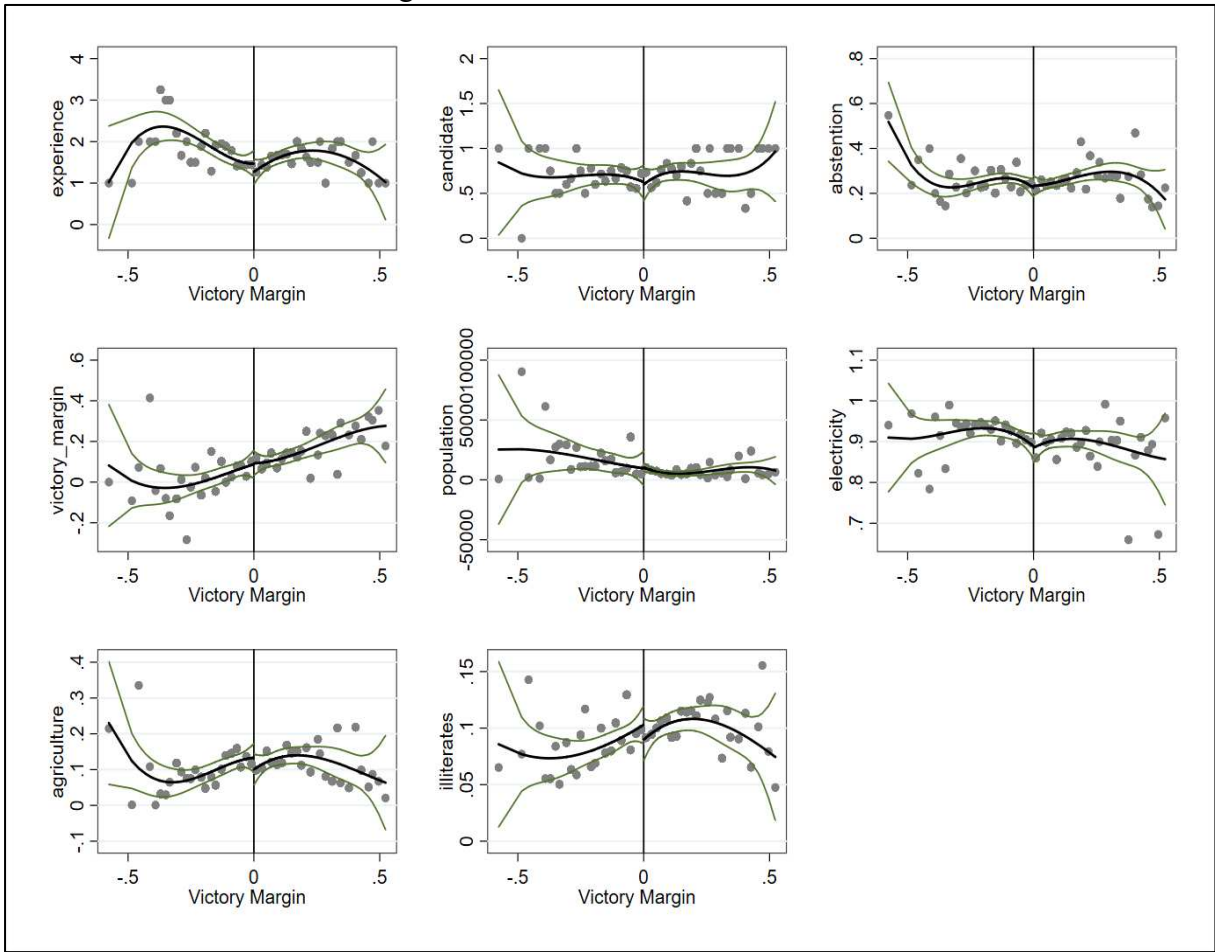


Figure 8. The effect of political alignment on discretionary subsidies

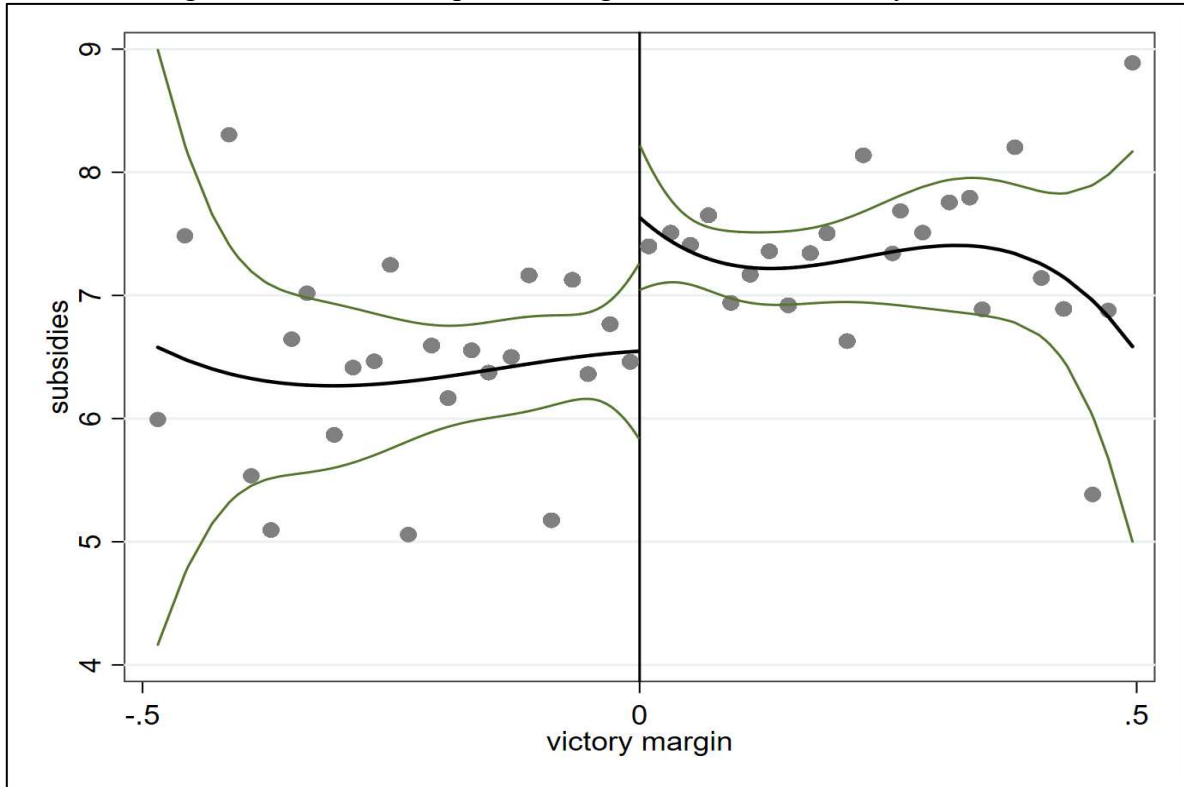


Table 1. Political support and the allocation of prefectural expenses around elections  
(Fixed-Effects)

election variable	<i>No interaction</i>	<i>National election year</i>	<i>National election and pre- election years</i>
		(1)	(2)
<i>victory margin</i>	0.148** (0.073)	0.138* (0.070)	0.089 (0.240)
<i>victory margin · election</i>		0.034 (0.572)	0.103* (0.084)
Observations	988	988	988
R <sup>2</sup>	0.944	0.944	0.944

Notes: The table reports OLS estimates of Equations (1) and (2). Prefecture and year fixed-effects are included. The dependent variable is the natural logarithm of the real per capita *prefectural expenses*. All models control for the *population*, *electricity*, *agriculture*, and *illiterates*, but these coefficients are not reported due to space limitations. Robust standard errors, clustered by prefecture, are reported in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table 2. Political support and the allocation of prefectural expenses (DD)

party in power	<i>PASOK</i>		<i>ND</i>	
	<i>victory margin</i> <sub>1981</sub>	<i>victory margin</i> <sub>1974</sub>	<i>victory margin</i> <sub>1981</sub>	<i>victory margin</i> <sub>1974</sub>
sample	1975-89	1978-85	1975-89	1978-85
	(1)	(2)	(3)	(4)
<i>party · victory margin</i>	0.629** (0.261)	0.454** (0.184)	0.232* (0.117)	0.185** (0.090)
Observations	780	416	780	416
R <sup>2</sup>	0.935	0.880	0.933	0.878

Notes: The table reports DD coefficient estimates of Equation (3). Prefecture and year fixed-effects are included. The dependent variable is the natural logarithm of the real per capita *prefectural expenses*. All models control for the *population*, *electricity*, *agriculture*, and *illiterates*, but these coefficients are not reported due to space limitations. Robust standard errors, clustered by prefecture, are reported in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table 3. Discontinuities of main covariates in close races (RDD)

	<i>experience</i>	<i>candidate</i>	<i>abstention</i>	<i>victory margin</i>	<i>population</i>	<i>electricity</i>	<i>agriculture</i>	<i>illiterates</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>alignment</i>	-0.212 (0.183)	-0.027 (0.147)	0.010 (0.033)	0.005 (0.046)	758.879 (6200.854)	-0.003 (0.020)	-0.034 (0.028)	-0.014 (0.013)
Observations	361	361	361	361	361	361	361	361
R <sup>2</sup>	0.091	0.008	0.046	0.140	0.036	0.031	0.041	0.046

Notes: Column titles refer to the dependent variable. This table shows RDD estimates of Equation (4) using a third-order spline polynomial specification. Robust standard errors clustered at the municipality level are in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table 4. Baseline results using OLS, Spline Polynomial and LLR

specification	<i>OLS</i>		<i>Spline Polynomial</i>		<i>LLR</i>	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
covariates	(1)	(2)	(3)	(4)	(5)	(6)
<i>alignment</i>	0.861*** (0.144)	0.601*** (0.132)	1.132*** (0.405)	1.104*** (0.333)	0.948** (0.373)	0.878*** (0.314)
Observations	361	361	361	361	207	210
R <sup>2</sup>	0.071	0.361	0.081	0.369	0.076	0.347
Optimal h					0.129	0.130

Notes: The dependent variable is the natural logarithm of the real per capita (discretionary) *subsidies*. This table shows results for OLS, RDD third-order spline polynomial and local linear regressions with optimal bandwidth calculated as in Calonico et al. (2014). RDD specifications with split polynomial and local linear regression following Equations (4) and (5), respectively. *h* denotes the interval of our running variable. For instance, *h*=0.129 represents races where margin of victory is between -12.9% and 12.9%. Columns (2), (4) and (6) control for the *experience*, *candidate*, *abstention*, *victory margin*, *population*, *electricity*, *agriculture*, *illiterates*, and term fixed-effects but these coefficients are not reported due to space limitations. Robust standard errors, clustered at the municipality level, are in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table 5. Alternative RDD specifications

specification	<i>Spline Polynomial</i>				<i>LLR</i>		
	<i>p(1)</i>	<i>p(2)</i>	<i>p(3)</i>	<i>p(4)</i>	<i>p(1)</i>	<i>p(1)</i>	<i>p(1)</i>
bandwidth	<i>Global</i>	<i>Global</i>	<i>Global</i>	<i>Global</i>	$\hat{h}$	$\hat{h}/2$	$\hat{h}/4$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>alignment</i>	0.763*** (0.195)	0.726*** (0.253)	1.104*** (0.333)	1.057** (0.429)	0.878*** (0.314)	1.202*** (0.430)	1.372* (0.737)
Observations	361	361	361	361	210	115	56
R <sup>2</sup>	0.363	0.364	0.369	0.370	0.347	0.436	0.598
Optimal h					0.130	0.065	0.032

Notes: The dependent variable is the natural logarithm of the real per capita (discretionary) *subsidies*. Columns (1)-(4) show results for first, second, third and fourth-order spline polynomials as described in Equation (4). Column (5) shows local linear regressions with optimal bandwidth calculated as in Calonico et al. (2014).  $h$  denotes the interval of our running variable. For instance,  $h=0.13$  represents races where margin of victory is between  $-13.0\%$  and  $13.0\%$ . Columns (6)-(7) show estimates for half and quarter of the optimal bandwidth defined by Calonico et al. (2014). All models control for the *experience*, *candidate*, *abstention*, *victory margin*, *population*, *electricity*, *agriculture*, and *illiterates*, and term fixed-effects but these coefficients are not reported due to space limitations. Robust standard errors, clustered at the municipality level, are in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table 6. The effect of alignment on non-discretionary subsidies

specification	<i>OLS</i>		<i>Spline Polynomial</i>		<i>LLR</i>	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
covariates	(1)	(2)	(3)	(4)	(5)	(6)
<i>alignment</i>	0.034 (0.047)	-0.001 (0.030)	0.027 (0.135)	-0.012 (0.079)	0.069 (0.114)	0.014 (0.099)
Observations	361	361	361	361	241	146
R <sup>2</sup>	0.001	0.657	0.017	0.663	0.020	0.673
Optimal h					0.154	0.088

Notes: The dependent variable is the natural logarithm of the real per capita *non-discretionary subsidies*. Columns (1)-(6) follow the structure of Table 4. Robust standard errors, clustered at the municipality level, are in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

## Appendix A

### A1. Robustness checks of the DD specification

In Table B6, we present modifications of the estimates of Table 2 in order to check further the consistency of our results. First, we express the political support variable *victory margin* as percentage of valid votes cast instead of the voting eligible population that was reported in the results of Table 2. As can be seen in columns (1) and (6) of Table B6, both DD coefficients for the two parties in power remain positive and statistically significant at the 5% level. Second, in columns (2) and (7) we re-run estimates of Table 3 after removing observations with standardized residuals above 1.96 or below -1.96. Our new estimates indicate that our results are not driven by outlier observations. Third, in columns (3) and (8) we expand our sample between 1975-1993 as in Table 1. The reason that we decided to limit our sample between 1975-1989 in the DD specification, is to focus on the terms of *ND* and *PASOK* just before and after the political change of 1981. However, as it can be seen, both DD coefficients in the expanded sample remain positive and statistically significant. Fourth, we allow the effect of *PASOK* and *ND* administration to vary over two horizons during their terms in office as follows:

$$\begin{aligned} \text{prefectural expenses}_{it} = & \alpha_0 + \alpha_1 \text{party}_{term 1} \cdot \text{victory margin}_i + \alpha_2 \text{party}_{term 2} \cdot \\ & \text{victory margin}_i + \beta X_{it} + \delta_i + \gamma_t + \varepsilon_{it} \end{aligned} \quad (A1)$$

where variable  $\text{party}_{term 1}$  is an indicator variable that takes the value of 1 during the first terms of *PASOK* and *ND* in office (1982-1985 and 1975-1977, respectively), and 0 otherwise. In the same way, variable  $\text{party}_{term 2}$  refers to the second term of the two parties in office (1986-1989 and 1978-1981 for *PASOK* and *ND* respectively). Moreover, as in Equation (3), the variable  $\text{victory margin}_i$  takes values of the victory margin of *PASOK* (*ND*) in the election of 1981 (1974). As can be seen in column (4), both DD coefficients are positive and statistically significant, though it should be noted that the second term of *PASOK* (1986-1989) seems to produce a stronger effect on *prefectural expenses*. In column (9), focusing on *ND* administration, both coefficients are of the same level, though the effect of the first term (1975-1977) is marginally insignificant. Finally, it remains possible that heterogeneous trends are present and induced changes in *prefectural expenses* in prefectures which voted more intensively for *PASOK* - even before 1982 when the socialist party came to power. To examine this possibility, we restrict our sample prior to 1982 and assess the importance of our key

independent variable in determining trends in *prefectural expenses*. Specifically, we modify Equation (3) and, focusing on the fiscal years 1975-1981, we estimate:

$$\text{prefectural transfers}_{it} = \alpha_0 + \alpha_1 \text{trend}_t + \alpha_2 \text{trend}_t \cdot \text{victory margin}_{1981} + \beta X_{it} + \delta_i + \gamma_t + \varepsilon_{it} \quad (\text{A2})$$

The main aim is to test whether high *victory margin*<sub>1981</sub> prefectures had different trends before 1982 (i.e.,  $\alpha_2 \neq 0$ ). The results reported in column (5) show an upward trend in *prefectural expenses*, but more importantly no evidence of a differential trend related to the size of *victory margin*<sub>1981</sub>. We do not test the hypothesis of pre-existing trends in the case of *ND* since its terms are ahead of *PASOK*'s administration.

#### *A2. Robustness checks of the RDD specification*

In Table B7, we investigate the potential heterogeneity of the impact of political alignment on discretionary subsidies. To do so, we conduct an RDD analysis allowing the discontinuity to be different along five dimensions. That is, we estimate Equation (4) augmented with an additional term and the interaction between the political alignment variable and this term for five different cases. First, we distinguish the periods that *ND* (1978-1981 and 1990-1993) and *PASOK* (1982-1985 and 1986-1989) were in power. It would be interesting to investigate whether one of the two parties drives the political alignment effect. To this end, we use the variable *ND* that takes the value 1 when *ND* is in power and 0 otherwise. Second, we examine if the municipality size is an important factor which affects the way governments allocate *subsidies*. If larger municipalities receive higher amounts of *subsidies*, it could be argued that this may not be the effect of political bias. To perform this test, we construct the variable *population above the median* that takes the value 1 if a municipality has population above 4,000 citizens, and 0 otherwise. Third, we use the variable *candidate* to distinguish cases that the mayor runs for re-election or not. It would be interesting to observe whether the central government differentiates its behaviour along this dimension. Fourth, we focus on the issue of political strongholds. We define *political strongholds* as municipalities that voted in favour of the political party in power with a margin of victory greater than 20 percent (upper quarter of the distribution) in the last national elections. In that way, we can check if the political alignment matters, but only in the political strongholds of the incumbent. Fifth, we check whether our result is driven by the level of voter turnout. In other words, we examine if higher voter turnout affects the behavior of the central government to allocate subsidies in aligned

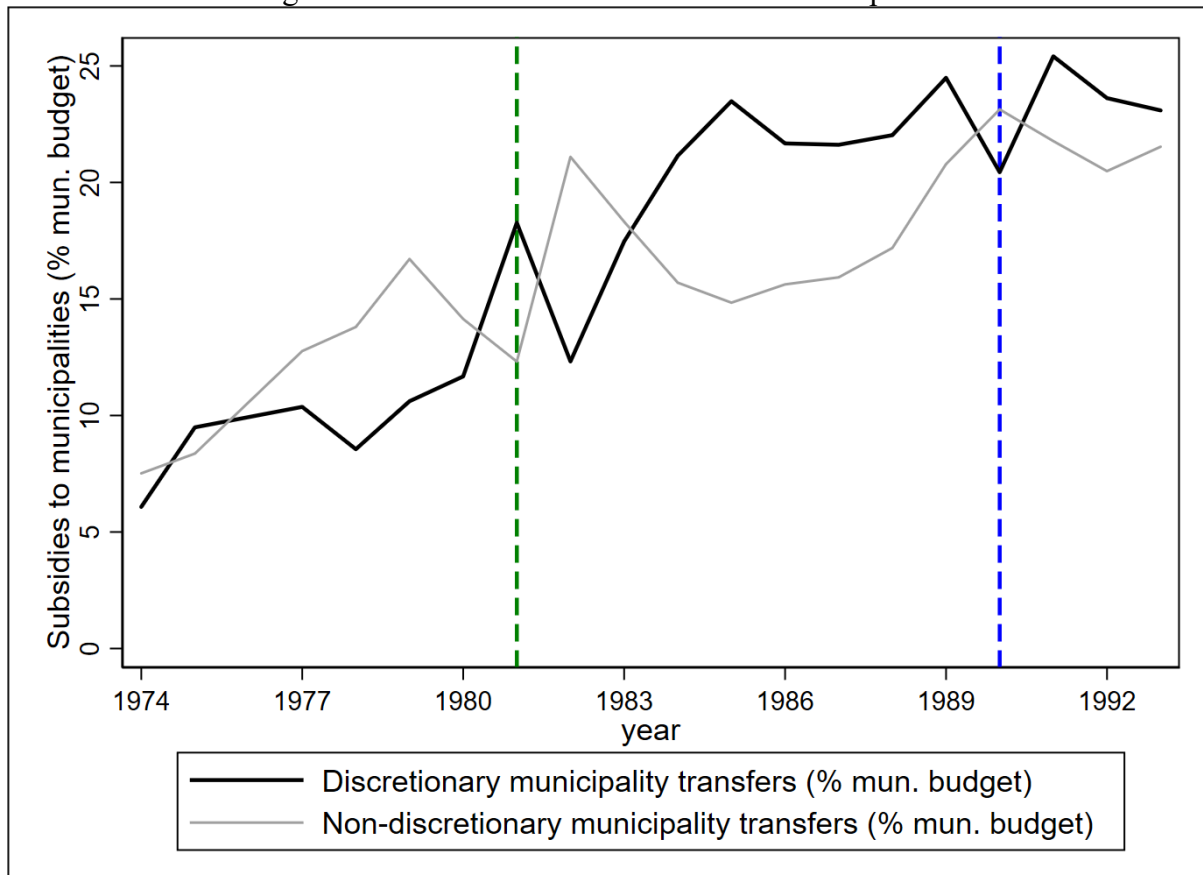


mayors at the threshold. To do so, we construct the variable *turnout above median* that takes the value 1 for municipalities with abstention rate below 23.84 percent, and 0 otherwise. As can be seen in columns (1)-(5) of Table B7, our results on political alignment do not seem to be affected significantly by a specific political party, municipality size, lame ducks, political strongholds and high turnout levels.

Our last robustness check is to perform a placebo test following Imbens and Lemieux (2008). In particular, we estimate the political alignment effect at false thresholds where no effect should exist. To this end, we use as alternative cut-off points the median on the left and right side of zero threshold. The values which correspond to these alternative thresholds are -0.116 and 0.112 respectively. Table B8 presents the results of a third-order spline polynomial for the new threshold on the left (columns 1-2), the true threshold (columns 3-4), and the new threshold on the right (columns 5-6). As it can be seen, our empirical evidence suggests that discontinuities do not exist at these alternative cut-off points. This indicates that our results are valid due to a causal relationship and not by pure randomness. Figure B8 provides a visual illustration comparing results at the true and false cut-off points.

## Appendix B. Additional Figures and Tables

Figure B1. The evolution of subsidies to municipalities



Notes: The green dashed line indicates the year that the socialist party *PASOK* came to power after the election of 1981 up to 1989. The blue dashed line indicates the year that *ND* came back to power in 1990. Fiscal data are obtained by the annual volumes of the final fiscal accounts of the Greek municipalities available in the Digital Library of the Hellenic Statistical Authority (ELSTAT).

Figure B2. Political influence of *ND* and *PASOK* at the prefecture level (NUTS-3)

Panel A: ND victory margin in 1974

Panel B: PASOK victory margin in 1981

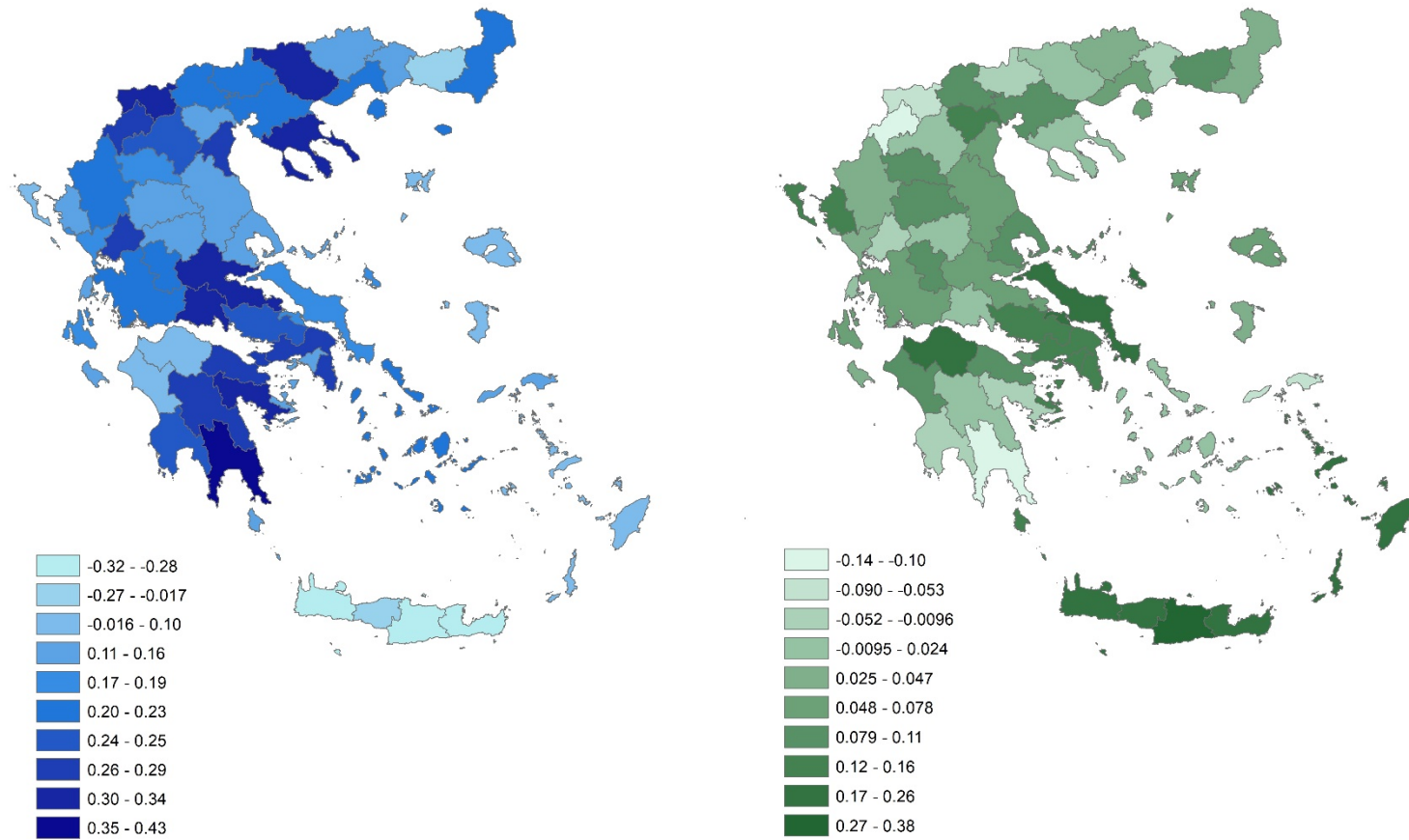
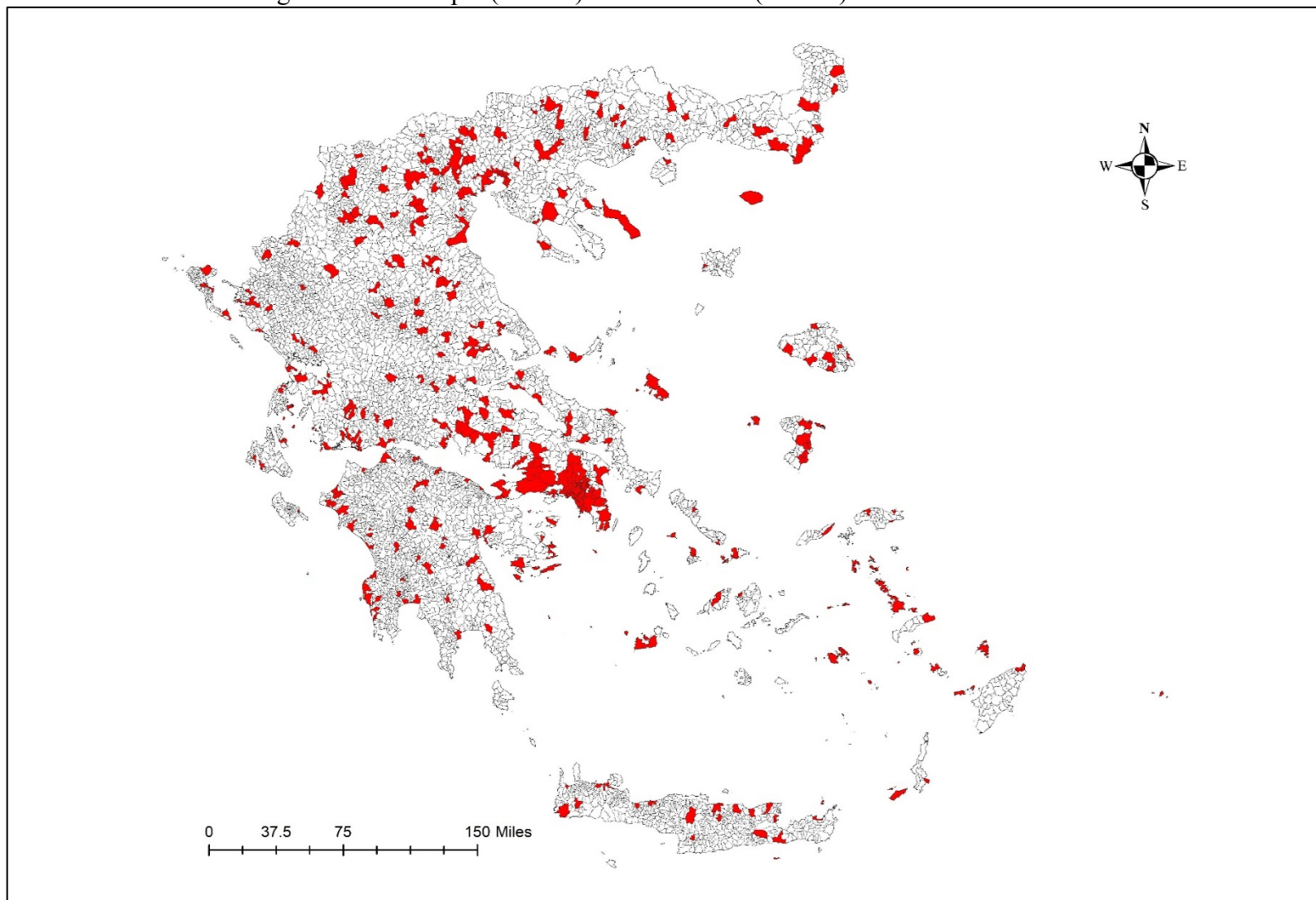
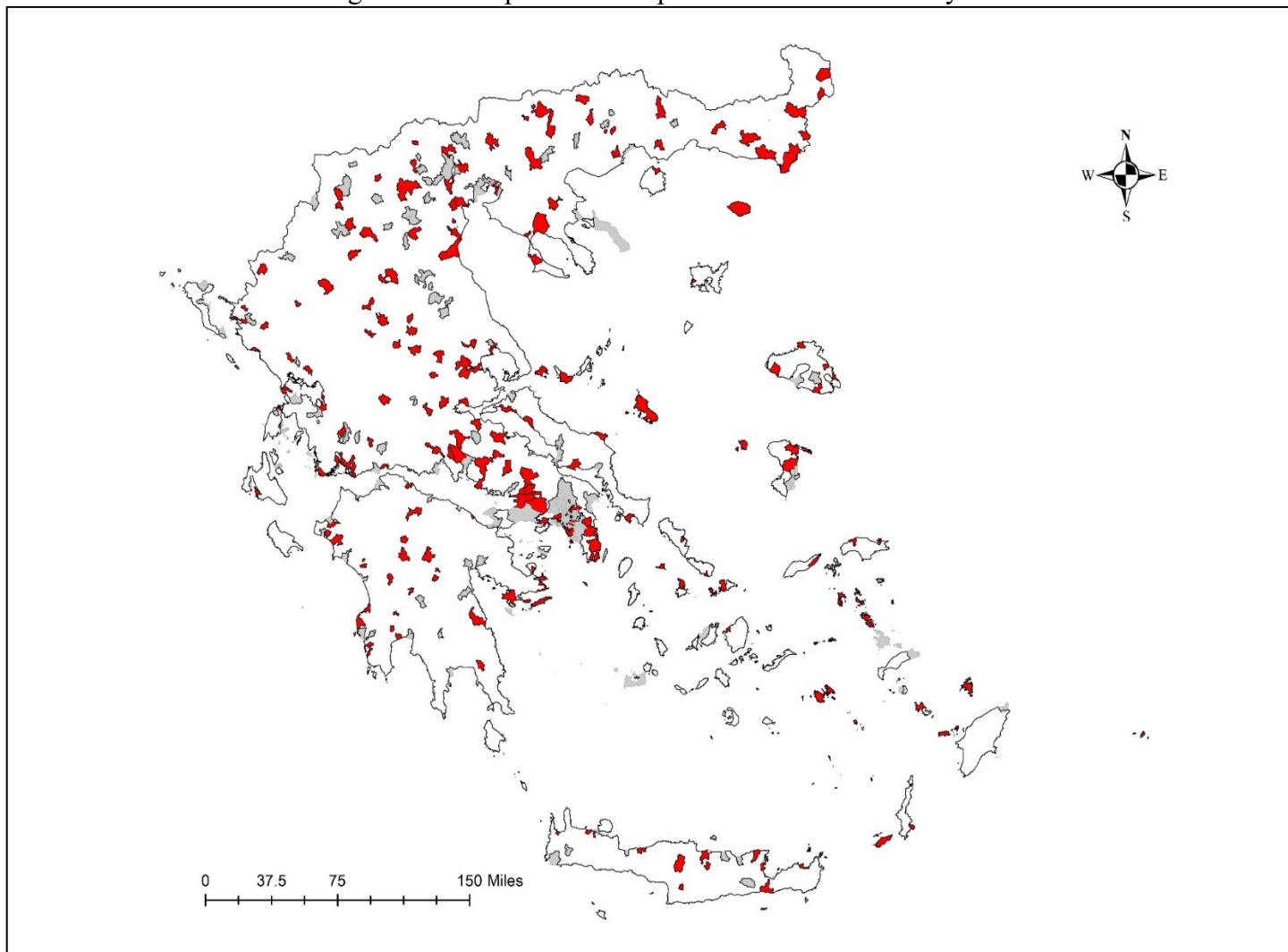


Figure B3. Municipal (LAU-1) and communal (LAU-2) boundaries of Greece



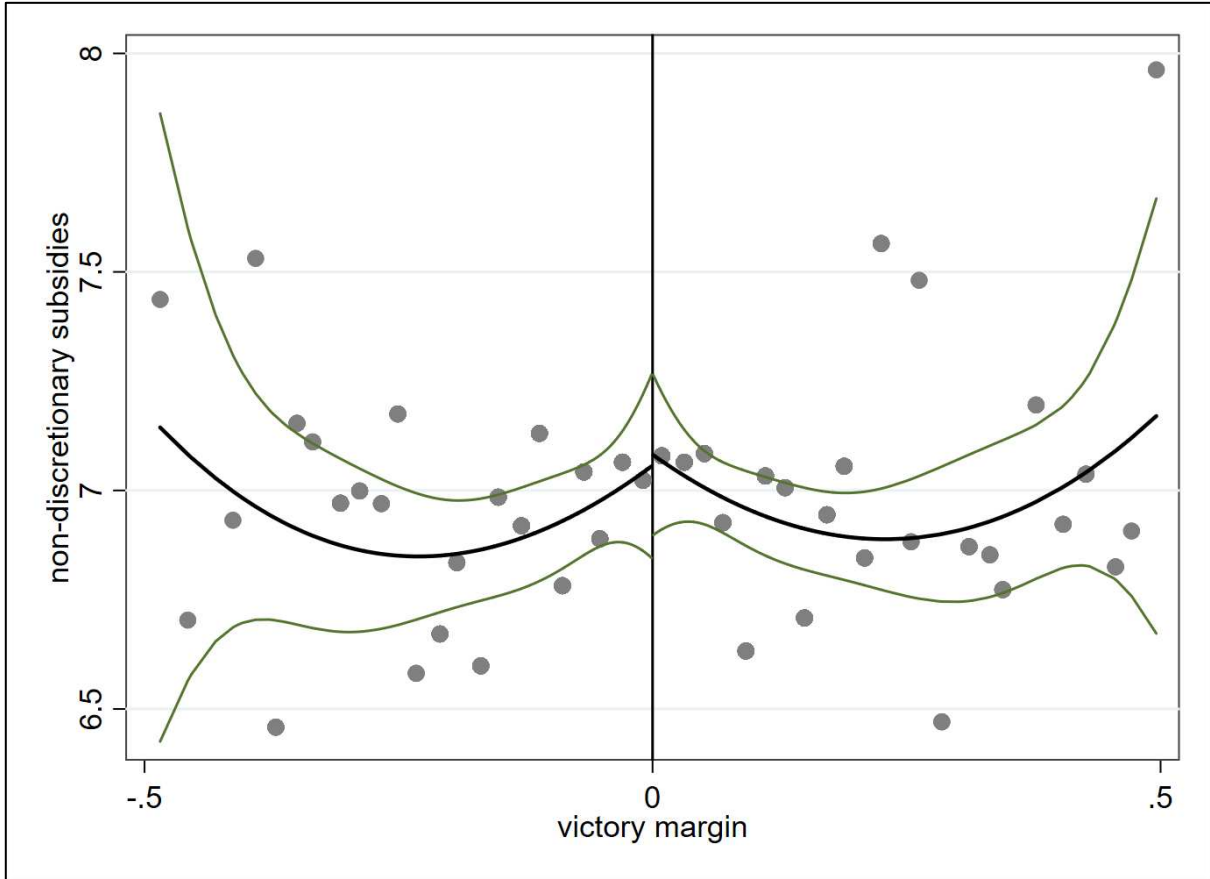
Notes: Red polygons indicate all the municipalities of our sample. The light grey lines indicate boundaries of smaller administrative divisions such as communities.

Figure B4. Sample of municipalities for the RDD analysis



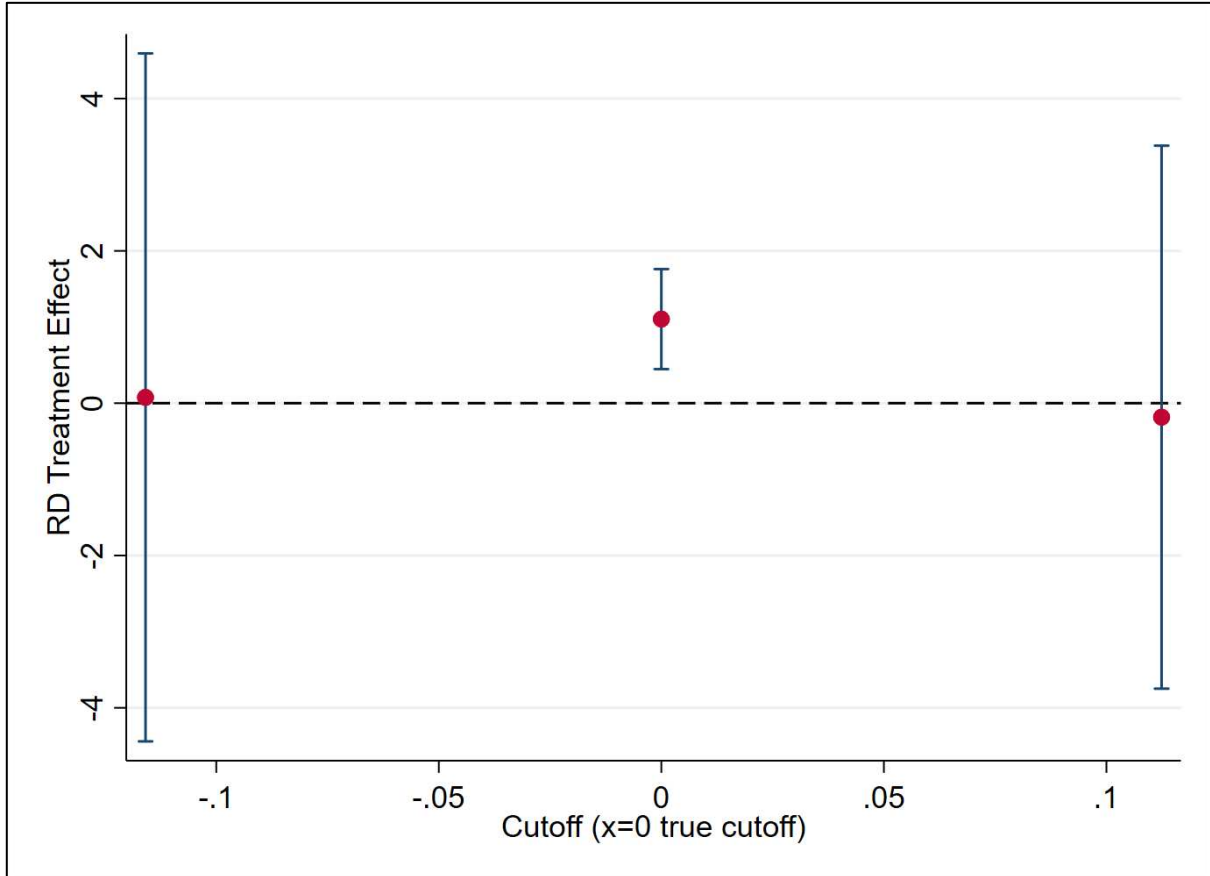
Notes: Red polygons indicate the 196 municipalities of our sample in the RDD analysis. Grey polygons indicate municipalities that do not appear in the sample.

Figure B5. The effect of political alignment on non-discretionary subsidies



Notes: See Figure 8.

Figure B6. True vs false electoral thresholds (Placebo Tests)



Notes: This graph shows the effect of alignment on subsidies based on the specifications of columns (2), (4) and (6) in Table B8. Estimates are obtained using a third-order spline polynomial specification as described on Equation (4).

Table B1. Definition of variables, data sources and descriptive statistics (Prefectural Level of Analysis)

Variable name	Description	Obs.	Mean	SD	Min	Max	Source
<i>prefectural expenses</i>	Total prefectural expenses, expressed in real per capital terms	988	3345.209	2570.246	462.250	19888.424	Final fiscal accounts of the Greek state available in the Bank of Greece (BoG)
<i>victory margin</i>	The difference between incumbent share and opposition share. The former is measured as the valid votes for the incumbent party as a share of the voting-eligible population. The latter is measured as the valid votes for the opposition party (parties) as a share of the voting-eligible population. Between 1975-1981 the opposition is composed by vote shares received by the two leading opposition parties (i.e., <i>EK-ND</i> and <i>PASOK</i> ), whereas between 1982-1993 by the leading opposition party <i>ND</i> .	988	0.063	0.111	-0.323	0.431	Ministry of Interior, Directorate of Elections
<i>victory margin (valid votes)</i>	The difference between <i>incumbent share</i> (valid votes) and <i>opposition share</i> (valid votes)	988	0.080	0.141	-0.405	0.556	
<i>election</i>	=1 in years of national elections, and 0 otherwise	988	0.316	0.465	0.000	1.000	
<i>election (pre-elections years)</i>	=1 in years and prelection years of national elections, and 0 otherwise	988	0.579	0.494	0.000	1.000	
<i>PASOK</i>	=1 in years between 1982-1989, when <i>PASOK</i> was in power, and 0 otherwise	988	0.421	0.494	0.000	1.000	
<i>PASOK (term<sub>1</sub>)</i>	=1 in years between 1982-1985, when <i>PASOK</i> was in power, and 0 otherwise	988	0.211	0.408	0.000	1.000	
<i>PASOK (term<sub>2</sub>)</i>	=1 in years between 1986-1989, when <i>PASOK</i> was in power, and 0 otherwise	988	0.211	0.408	0.000	1.000	
<i>victory margin<sub>1981</sub></i>	Valid votes that <i>PASOK</i> received in the election of 1981 as a share of the voting-eligible population	988	0.072	0.093	-0.142	0.381	
<i>victory margin<sub>1981</sub> (valid votes)</i>	Valid votes that <i>PASOK</i> received in the election of 1981 as a share of the valid votes cast	988	0.089	0.116	-0.192	0.462	
<i>ND</i>	=1 in years between 1975-1981 and 1990-1993, when <i>ND</i> was in power, and 0 otherwise	988	0.579	0.494	0.000	1.000	
<i>ND(term<sub>1</sub>)</i>	=1 in years between 1975-1977, when <i>ND</i> was in power, and 0 otherwise	988	0.158	0.365	0.000	1.000	
<i>ND(term<sub>2</sub>)</i>	=1 in years between 1978-1981, when <i>ND</i> was in power, and 0 otherwise	988	0.211	0.408	0.000	1.000	
<i>victory margin<sub>1974</sub></i>	Valid votes that <i>ND</i> received in the election of 1974 as a share of the voting-eligible population	988	0.169	0.147	-0.323	0.431	
<i>victory margin<sub>1974</sub> (valid votes)</i>	Valid votes that <i>ND</i> received in the election of 1974 as a share of the valid votes cast	988	0.217	0.187	-0.405	0.556	
<i>population</i>	Total population at the prefecture level expressed in thousands	988	189.301	420.777	20.993	3150.807	Digital library of the Hellenic Statistical Authority (ELSTAT)
<i>electricity</i>	The share of households with access to electricity	988	0.951	0.056	0.505	1.001	
<i>agriculture</i>	The share of individuals employed in the agricultural sector	988	0.384	0.155	0.006	0.734	
<i>illiterates</i>	The share of illiterate individuals	988	0.112	0.043	0.033	0.285	

Notes: Prefectural expenses are in levels, though in regressions they are expressed in logarithmic terms.



Table B2. Definition of variables, data sources and descriptive statistics (Municipal Level of Analysis)

Variable name	Description	Obs.	Mean	SD	Min	Max	
(discretionary) subsidies	Total discretionary subsidies from the central government, expressed in real per capital terms	361	2391.149	2589.566	0.000	16016.331	Digital library of the Hellenic Statistical Authority (ELSTAT)
non-discretionary subsidies	Total non-discretionary subsidies from the central government, expressed in real per capital terms	361	1167.492	577.173	209.043	3832.327	
alignment	= 1 if the mayor is aligned with the central government, and 0 otherwise	361	0.546	0.499	0.000	1.000	Ilias Nicolacopoulos data
VM	The difference of the vote share between the aligned and non-aligned mayor candidates	361	0.015	0.179	-0.576	0.523	
experience	Number of terms the mayor has served since the restoration of democracy	361	1.654	0.795	1.000	5.000	
candidate	=1 if the mayor runs for re-election, and 0 otherwise	361	0.698	0.460	0.000	1.000	
abstention	The share of absent voters from the electoral process	361	0.256	0.107	0.018	0.808	
turnout above median	=1 for municipalities that the level belongs in the first quarter of the distribution according to the variable <i>abstention</i> , and 0 otherwise	361	0.498	0.502	0.000	1.000	Ministry of Interior, Directorate of Elections
victory margin	The difference between incumbent and opposition parties share of votes in the national elections	361	0.089	0.172	-0.525	0.595	
political strongholds	=1 for municipalities that belong in the fourth quarter of the distribution according to the variable <i>victory margin</i> , and 0 otherwise	361	0.252	0.435	0.000	1.000	
ND	=1 in years between 1975-1981 and 1990-1993, when <i>ND</i> was in power, and 0 otherwise	361	0.629	0.484	0.000	1.000	
population	Total population at the prefecture level expressed in thousands	361	10369.305	25675.799	189.000	4.06e+05	
population above median	=1 for municipalities with values in population above the median, and 0 otherwise	361	0.499	0.501	0.000	1.000	Digital library of the Hellenic Statistical Authority (ELSTAT)
electricity	The share of households with access to electricity	361	0.907	0.086	0.340	1.019	
agriculture	The share of individuals employed in the agricultural sector	361	0.118	0.105	0.000	0.446	
illiterates	The share of illiterate individuals	361	0.096	0.045	0.008	0.264	

Notes: Subsidies and non-discretionary subsidies are in levels, though in regressions they are expressed in logarithmic terms.

Table B3. Testing for difference between means of aligned and non-aligned municipalities

	<b>Aligned</b>	<b>Obs.</b>	<b>Non-Aligned</b>	<b>Obs.</b>	<b>p-Value</b>
<i>(discretionary) subsidies</i>	7.307	197	6.445	164	0.000
<i>non-discretionary subsidies</i>	6.967	197	6.934	164	0.503
<i>experience</i>	1.574	197	1.75	164	0.036
<i>candidate</i>	0.711	197	0.683	164	0.569
<i>abstention</i>	0.257	197	0.255	164	0.852
<i>victory margin</i>	0.134	197	0.036	164	0.000
<i>population</i>	6908.36	197	1.50E+04	164	0.005
<i>electricity</i>	0.898	197	0.918	164	0.029
<i>agriculture</i>	0.125	197	0.109	164	0.166
<i>illiterates</i>	0.101	197	0.09	164	0.017

Table B4. Political support and the allocation of prefectural expenses: Political support variables as shares of valid votes cast

election variable	<i>No interaction</i>	<i>National election year</i>	<i>National election and pre- election years</i>
		(1)	(2)
<i>victory margin</i>	0.120** (0.058)	0.113* (0.059)	0.075 (0.060)
<i>victory margin · election</i>		0.023 (0.048)	0.079* (0.047)
Observations	988	988	988
R <sup>2</sup>	0.944	0.944	0.944

Notes: The table reports OLS estimates of Equations (1) and (2). Prefecture and year fixed-effects are included. The dependent variable is the natural logarithm of the real per capita *prefectural expenses*. All models control for the *population*, *electricity*, *agriculture*, and *illiterates*, but these coefficients are not reported due to space limitations. Robust standard errors, clustered by prefecture, are reported in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table B5. Political support and the allocation of prefectural expenses: Testing for outliers

election variable	<i>No interaction</i>	<i>National election year</i>	<i>National election and pre- election years</i>
		(1)	(2)
<i>victory margin</i>	0.161** (0.065)	0.135** (0.054)	0.076 (0.058)
<i>victory margin · election</i>		0.087 (0.078)	0.164*** (0.057)
Observations	941	941	940
R <sup>2</sup>	0.964	0.964	0.964

Notes: The table reports OLS estimates of Equation (1). Prefecture and year fixed-effects are included. In all regressions, we remove observations with standardized residuals above 1.96 or below -1.96. The dependent variable is the natural logarithm of the real per capita *prefectural expenses*. All models control for the *population*, *electricity*, *agriculture*, and *illiterates*, but these coefficients are not reported due to space limitations. Robust standard errors, clustered by prefecture, are reported in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table B6. Political support and the allocation of prefectural expenses (DD): Robustness checks

party in power victory margin	<i>PASOK</i>					<i>ND</i>			
	<i>victory margin</i> <sub>1981</sub>					<i>victory margin</i> <sub>1974</sub>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>party · victory margin</i>	0.463** (0.208)	0.432*** (0.133)	0.502** (0.247)			0.203** (0.094)	0.181** (0.085)	0.148* (0.081)	
<i>party term<sub>1</sub> · victory margin</i>				0.439** (0.214)					0.237 (0.150)
<i>party term<sub>2</sub> · victory margin</i>				0.828** (0.325)					0.228** (0.111)
<i>trend</i>					0.052** (0.021)				
<i>trend · victory margin</i>					0.001 (0.038)				
Observations	780	743	988	780	416	780	746	988	780
R <sup>2</sup>	0.934	0.959	0.945	0.935	0.719	0.933	0.958	0.944	0.933

Notes: Columns (1) and (6) list the DD coefficient estimates of Equation (3). The dependent variable is the natural logarithm of the real per capita *prefectural expenses*. In comparison to estimates in Table 2, the variables *victory margin* for the terms of *PASOK* and *ND* are expressed as percentages of valid votes cast (instead of the voting-eligible population). Columns (2) and (7) list the DD coefficient estimates of Equation (3), after removing observations with standardized residuals above 1.96 or below -1.96. Columns (3) and (8) list the DD coefficient estimates of Equation (3), after expanding the sample between 1975-1993 (instead of 1975-1989 applied in Table 2). In columns (4) and (9) we split the DD coefficient in two sub-periods for each party that was in power – i.e., 1982-1985 and 1986-1989 during *PASOK* administration, and 1975-1977 and 1978-1981 during *ND* administration. Finally, in column (5) we test the parallel trend hypothesis for the administration of *PASOK*. In particular, we test whether high *victory margin*<sub>1981</sub> prefectures had different trends before 1982. Prefecture and year fixed-effects are included in all columns but column (5) includes only prefecture fixed-effects. All models control for the *population*, *electricity*, *agriculture*, and *illiterates*, but these coefficients are not reported due to space limitations. Robust standard errors, clustered by prefecture, are reported in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table B7. RDD heterogeneity

variable	<i>ND</i>	<i>population above the median</i>	<i>candidate</i>	<i>political strongholds</i>	<i>turnout above median</i>
	(1)	(2)	(3)	(4)	(5)
<i>alignment</i>	0.748 (0.492)	1.360*** (0.510)	1.627*** (0.605)	1.167*** (0.366)	0.896* (0.545)
<i>variable</i>	-2.340*** (0.543)	-0.299 (0.559)	0.463 (0.559)	0.443 (0.850)	-0.568 (0.577)
<i>alignment · variable</i>	0.501 (0.625)	-0.566 (0.701)	-0.780 (0.703)	0.468 (0.938)	0.475 (0.723)
Observations	361	361	361	361	361
R <sup>2</sup>	0.386	0.415	0.376	0.386	0.390

Notes: Column titles refer to the variable that is interacted with the variable *alignment*. This table shows RDD estimates of Equation (4) using a third-order spline polynomial specification. All models control for the *experience*, *candidate*, *abstention*, *victory margin*, *population*, *electricity*, *agriculture*, and *illiterates*, and term fixed-effects but these coefficients are not reported due to space limitations. Robust standard errors, clustered at the municipality level, are in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.

Table B8. True vs false electoral thresholds (Placebo Tests)

covariates	No	Yes	No	Yes	No	Yes
	(1)	(2)	(3)	(4)	(5)	(6)
<i>alignment</i>	-0.331 (2.558)	0.076 (2.283)	1.048*** (0.337)	1.104*** (0.333)	-0.977 (1.830)	-0.183 (1.802)
Observations	164	164	361	361	197	197
R <sup>2</sup>	0.308	0.444	0.302	0.369	0.229	0.280
cut-off	-0.116	-0.116	0	0	0.112	0.112

Notes: The dependent variable is the natural logarithm of the real per capita (discretionary) *subsidies*. This table shows RDD estimates of Equation (4) using a third-order spline polynomial specification. Columns (2), (4) and (6) control for the *experience*, *candidate*, *abstention*, *victory margin*, *population*, *electricity*, *agriculture*, *illiterates*, and term fixed-effects but these coefficients are not reported due to space limitations. Robust standard errors, clustered at the municipality level, are in parentheses. \*, \*\*, \*\*\* denote statistical significance at the 10%, 5%, 1% level respectively.