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Political budget cycles and reelection prospects in Greece's municipalities

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ABSTRACT

This paper considers the presence of political budget cycles in Greece's municipalities. We construct a new dataset from primary sources and we find strong evidence of pre-electoral manipulation through increased expenditures and excessive borrowing. We use a dynamic panel data approach producing evidence of opportunistic behavior in local government finances. Our results are robust in the face of a series of controls including mayors running for reelection, their political alignment with the central government, and prolonged terms. Moreover, the results are robust to the exclusion of small sized municipalities and to the restriction of the time range of our investigation to the post-Maastricht period. We also consider whether opportunistic policies influence incumbents' reelection prospects finding that increased expenditures and election year opportunistic excesses are electorally rewarding. Our findings provide a characterization of opportunistic public finance management in Greek municipalities where electorally motivated budgetary decisions appear impervious to the various municipal reform attempts.

1. Introduction

Greece's economic and political environment is characterized, inter alia, by weak institutions, extensive opportunistic behavior by incumbents, substantial rent-seeking (Pelagidis and Mitsopoulos, 2009), clientelism, and cronyism (Phelps, 2015). Such concerns may also afflict local government politics, which in Greece are closely associated with national politics. This paper focuses on Greek municipal budgets and pre-electoral manipulation of public finances as one manifestation of such phenomena. It considers the presence of politically induced opportunistic cycles in municipal fiscal policies. In addition, it examines how these electorally motivated budgetary policies affect mayors' reelection prospects. We construct a new dataset from primary sources, which covers 109 municipalities from 1985 to 2004 and corresponds to half of Greece's population. To our knowledge, this is the first attempt to identify political budget cycles (PBCs) in Greece's municipalities and to consider the expenditures' impact on mayors' reelection prospects.

Our focus on Greek municipalities provides some unique insights in Greece's political economy. First, our newly collected data allow us to investigate the presence of PBCs at the municipal level in the context of an advanced economy with a long history of

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political instability, weak institutions and high levels of political polarization. Second, studying Greece allows us to test if changes in the institutional framework, in this case the constraints implied by the country's effort to join the Economic and Monetary Union, had any effect on the opportunistic policies at the municipal level. Third, our data allow us to study the impact of elections on borrowing by the municipalities, a budget element absent from many other relevant studies. Although the magnitude of municipal borrowing is very limited in the case of Greece, it is nevertheless indicative of incumbents' opportunistic behavior. Fourth, given that local and national politics in Greece are closely related, we are able to systematically investigate how the interactions (alignment) between the different layers of government affect the size of the opportunistic cycle. Fifth, since no term limits apply for Greek mayors, we study the previously unexplored effects that a prolonged incumbency may have on the magnitude of municipal PBCs. Finally, as a key element of all reforms pertaining to local government in Greece over the last two decades has been the reduction in their number on the grounds of efficiency, we explicitly test whether small municipalities are more conducive to the presence of PBCs or not.

Our evidence suggests that mayors in Greece manipulate fiscal policy prior to elections as the budget balance deteriorates during election years, while total expenditures, its highly visible investment component and municipal borrowing all increase. The electoral effects on investment expenditures appear more pronounced when the mayor is aligned to the central government ruling party or when he is running for another term, while no evidence exists that the magnitude of the PBC is affected by prolonged incumbency. Our analysis also shows that PBCs are present in the post-Maastricht era and that their existence is robust to the exclusion of small-sized municipalities from our sample.

We also examine how the electorally motivated budgetary policies affect mayors' reelection prospects. Our evidence shows that both increased expenditures over the full term and election year opportunistic deviations have a positive effect on mayors' reelection prospects. This finding can explain both the emergence of political budget cycles and the persistent mismanagement of local public finances.

The rest of the paper is organized as follows. The next section briefly reviews the relevant literature for PBCs at the local government level and the effects of opportunistic policies on incumbents' reelection possibilities. Section 3 provides some highlights on Greece's local government institutions and political framework. Section 4 discusses our newly constructed dataset and estimation strategy for the detection of PBCs, while Section 5 presents and discusses the results of our analysis. Section 6 considers whether municipal expenditures affect mayors' reelection prospects. Finally, Section 7 concludes.

2. Literature survey

2.1. Political budget cycles at the local government level

Political budget cycles emerge due to opportunistically motivated incumbents who try to enhance voters' economic well-being before elections (Franzese and Jusko, 2006) as evidence suggests that economic conditions influence government support. This link, known as “economic voting”, has been studied with the help of voting and popularity functions (VP-functions) that explain government support (either in elections or polls) as a function of political and economic outcomes (Nannestad and Paldam, 1994).[3]

While recent research identifies several PBC determinants at the national level,[4] there is a growing literature considering political cycles at the local level where greater homogeneity in government structure, available policy instruments (Veiga and Veiga, 2007a) and uniformity in electoral rules and dates (Sakurai and Menezes-Filho, 2011) are present. For instance, Blais and Nadeau (1992) show that in Canada provincial governments' spending on social services and infrastructure construction increases during election years. Similarly, Galli and Rossi (2002) document the presence of election year increases in total expenditures and various spending categories like health care, education and road construction in Germany's federal states. In the setting of a young, recently established democracy, Akhmedov and Zhuravskaya (2004) report evidence of PBCs in Russia's regional elections, identifying electoral effects on public spending, financed by deficit and federal transfer increases. Along the same lines, Sjahrir et al. (2013) uncover evidence of opportunistic cycles in Indonesia's districts with electoral effects being present in direct elections and of a larger magnitude when the incumbent runs for reelection. Evidence on the presence of politically induced cycles at the subnational level finances is not solely confined to the post-WWII period. Aidt and Mooney (2014) focus on London Boroughs for the early part of the 20th century documenting the presence of political budget cycles that are conditional on the suffrage regime, either taxpayer or universal suffrage. Under the former election year tax cuts are observed while under the latter capital spending increases during election years.

A number of other papers study explicitly the emergence of PBCs at the level of municipal administrative entities. Veiga and Veiga (2007a) produce evidence of electoral effects in Portuguese municipalities. Their results show that elections have a negative

[3] Kramer (1971), Fair (1978), Madsen (1980) and Lewis-Beck (1988) are among the first who provide evidence in support of the economic voting hypothesis. Nannestad and Paldam (1994) review early evidence and conclude that VP-functions can explain government support when voters hold the government responsible for the economic conditions. Evidence from recent studies is also consistent with the economic voting hypothesis. See for example Swank and Eisinga (1999), Feld and Kirchgässner (2000), Chappell et al. (2000) and Tucker (2001). For a review of recent evidence see Lewis-Beck and Stegmaier (2013).

[4] For instance, Shi and Svensson (2006) focus on the level of economic development, Persson and Tabellini (2003) on constitutional features, Brender and Drazen (2005) on the age of democracy, Alt and Lassen (2006) on the transparency of fiscal institutions, Streb et al. (2009) on the effectiveness of checks and balances, while Rose (2006) on fiscal rules. For a review of the literature see Drazen (2000), Franzese and Jusko (2006), and De Haan and Klomp (2013).

effect on the budget balance through the decrease of local tax collection and the increase of municipal expenditures. Moreover, they show that before elections opportunistically motivated incumbents change the composition of expenditures towards highly visible by the electorate investment items, such as construction of overpasses and street works. Likewise, Sakurai and Menezes-Filho (2011) test for opportunistic and partisan cycles in Brazilian municipalities. In particular, their results show that elections have a positive impact on total and current expenditures and a negative impact on local tax revenues. They document a negative overall electoral effect on the local budget balance and, contrary to other studies, a similar effect on municipal investment. Foucault et al. (2008) report analogous electoral effects in France as all categories of public spending increase prior to elections. More recently, Drazen and Eslava (2010) consider Colombian municipalities, constructing a model of PBCs where incumbents manipulate the composition of expenditures to target specific segments of the electorate. They produce evidence showing that the most visible components of expenditures (e.g., road construction, power and water plants) expand before elections, while non-visible components (e.g., interest payments) contract. With regard to the institutional conditions under which PBCs occur at the municipal level, Benito et al. (2013) focus on Spanish municipalities and study how the introduction of a balanced budget rule affects PBCs. They argue that in the presence of such a rule, electoral cycles still emerge but only after local governments have created the necessary fiscal room.

2.2. Political budget cycles and reelection prospects

If opportunistic/electoral concerns can affect budgetary policies at the local government level, a natural question arises as to how rewarding opportunism is. A closely related to the PBC, but usually separate, strand of the literature focuses on whether higher pre-electoral expenditures are beneficial for the incumbent or not. The evidence is somewhat mixed as results both in favor and against this hypothesis have been reported. Peltzman (1992), for instance, argues that US voters are averse to higher spending as they actually penalize officials for increased spending before elections. Brender and Drazen (2008) study a large sample of countries and conclude that excess deficits do not boost incumbents' reelection probabilities either in developed or developing countries and show that increased deficits during election years reduce the prospects for reelection in developed countries with established democratic institutions. At the local level, Brender's (2003) findings from studying Israeli's local governments reaffirm the voters' fiscal conservatism hypothesis, while the findings of Drazen and Eslava (2010) from Colombian municipalities similarly show that high deficits affect negatively the share of votes received by the incumbent parties. Nevertheless, increases in the share of capital expenditures, perceived by the authors as targeted spending, positively affect the share of votes received.

Other studies, however, that focus on local governments find that pre-electoral budget manipulation can be rewarding. Akhmedov and Zhuravskaya (2004) document that increases in the size of fiscal cycles positively affect an incumbent's probability of reelection in Russia's regional elections. Likewise Veiga and Veiga (2007b), show that in Portuguese municipalities election year increases in investment expenditures are associated with higher vote percentages for the incumbents. For the case of Brazilian municipalities, Sakurai and Menezes-Filho (2008) also show that increased public expenditures significantly influence mayors' reelection prospects as increases in spending, both in election years and throughout the term, enhance mayors' probability of remaining in office. More recently, Aidt et al. (2011) pursue an innovative approach to examine the joint determination of incumbents' win margin and the opportunistic distortion in Portuguese municipalities' finances prior to elections. They document that pre-electoral fiscal manipulation is larger when an incumbent is facing a tight race and provide evidence that increased expenditures during election years positively affect an incumbents' win margin. Finally, Balaguer-Coll et al. (2015) focus on municipal elections in Spain and document, with the use of Bayesian techniques, that increases in public spending positively affect incumbents' probability of re-election.

3. Greece's municipal institutions and political framework

Municipal elections in Greece were held every four years, during October, under universal adult suffrage with the timing of elections being exogenously fixed and a uniform two round voting system applying to all municipalities. Registered voters decide over different electoral lists that candidate mayors put together and lead. The political parties strongly influence, if not directly determine, the selection of mayor candidates and their lists. They publically announce their support for a candidate and their lists and back them with financial contributions and mobilization of party members. The winning list elects both the mayor and the majority of the members in the municipal council. Mayors lead the administration, manage human resources, and oversee municipal operations, exerting strong influence both over the administration and the municipal council. Local politics in Greece to a large extent mirror national politics, which up until the 2012 elections, have been dominated by two main parties, the right-wing “New Democracy” and the left-wing “PASOK”. The candidate mayors of those parties also prevailed in Greece's local elections and were in effect provided by the electorate with “unchecked and unsupervised mandates” (Pelagidis and Mitsopoulos, 2012).

Several attempts to improve the administrative capacity and financial transparency at the local level have been made in the past. The 1997 and 2010 reform acts were among the most significant. Their key feature was to introduce extensive mergers among municipalities, reducing their number in order to improve efficiency. Reform Act 2539/1997 reduced the number of local level administrative entities from thousands to 910 municipalities and 124 smaller communes, while the latest 2010 reform act completely eliminated the smaller communes and further reduced the number of municipalities to 325.

Municipalities in Greece operate under uniform fiscal rules and are mainly financed through the central government's budget. Municipalities have the ability to impose compensatory taxation but revenues from this source are small when compared to those

received via the central government's budget. Similarly, borrowing is, typically, from government controlled financial institutions and constitutes only a small portion of total revenues. Nevertheless, municipalities in Greece draw up their budget every fiscal year on their own and decide freely on the allocation of their resources. Municipalities must meet a number of payments such as administrative expenditures and meet their debt repayment schedule. Moreover, various categories of expenditures that exceed a certain amount are subject to approval by the Court of Audit before the municipalities can disburse the related funds.[5] Besides the judiciary, the central administration supervises municipal finances and data are reported to the *Hellenic Statistical Authority*. Municipal accounts in Greece are released a considerable time after the end of each financial period and generally go unnoticed by the public.[6]

4. Data and estimation strategy

4.1. Data on municipal finances

We construct and use a new dataset on Greek municipal finances. Our panel consists of 109 municipalities, representing about half of Greece's population (2001 Census). To ensure institutional homogeneity and continuity in our dataset, we focus only on those municipalities that have not been affected by the extensive municipal mergers introduced by the 1997 administrative reform. The time dimension of our panel ranges from 1985 to 2004 and encompasses five municipal elections, held in 1986, 1990, 1994, 1998 and 2002. Our data start in 1985 when data are available for all municipalities. The time series length is constrained by changes in the financial reporting standards for Greek municipalities, which render the data after 2005 incompatible with earlier reporting. We obtain the annual data on Greece's municipal finances from various publications of the *Hellenic Statistical Authority* (HSA).[7]

Data on political variables are collected by the authors. In particular, we construct a dataset on mayors' political affiliation relying on primary sources by considering the publicly announced party nominations prior to municipal elections as well as their systematic reporting in public media afterwards. The data on candidacies and mayors' terms are retrieved from the national archive of electoral results at the *Greek Ministry of Interior*. The remaining variables used were obtained from the *Hellenic Statistical Authority*. Descriptive statistics are provided in Table A1 in Appendix A.

4.2. Empirical model specification and estimation method

We use a typical model of PBCs (e.g., Shi and Svensson, 2006; Veiga and Veiga, 2007a; Sakurai and Menezes-Filho, 2011) specified as:

$$y_{ijt} = \alpha + \beta_j y_{ijt-1} + \gamma Elections_{it} + \delta X_{ikt} + \eta_i + u_{ijt} \quad (1)$$

where the dependent variable y_{ijt} denotes one of the j fiscal variables in municipality i at time t and y_{ijt-1} is the lag of the dependent variable used to capture persistence in the fiscal variables, X_{ikt} is a vector of k control variables, and $Elections_{it}$ is a dummy variable capturing the electoral effect. It takes a value of one in election years and zero otherwise. The terms η_i and u_{ijt} represent the unobserved municipality specific effects and an *i.i.d.* error term, respectively.[8] The fiscal policy variables include the *Budget Balance*, *Borrowing Revenues*, *Total Expenditures*, and, the highly visible to the electorate, *Investment Expenditures*. All variables are expressed in logarithms of Euros per capita (2005 prices), with the exception of the *Budget Balance* which can take negative values (e.g., Sakurai and Menezes-Filho, 2011). The vector X_{ikt} includes a number of economic, demographic and political explanatory variables. The economic variables include revenues from central government in the form of direct transfers (*GovSubsidies*) and the amount of revenues collected from municipalities through special government-levied taxes (*GovLeviedTaxes*). To account for the effect of municipal population size, we construct a variable (*Population Category*), following Veiga and Veiga (2007a), which assigns a value of 1 to the two largest cities, and 2, 3, and 4 to cities with a population over 40,000, 10,000–40,000, and less than 10,000, respectively. To control for the population's age structure, following Sakurai and Menezes-Filho (2011), we include two demographic variables that represent the percentage of the population under 15 years old and over 65 years old ($\%Pop < 15$, $\%Pop > 65$). As mayors' political ideology may influence fiscal decisions, we include an *Ideology* variable to account for possible partisan effects. We classify Greek mayors as left-wing or right-wing according to the party that publicly supports them and we attribute a certain partisan affiliation only when a mayor is elected under a party's explicitly expressed support. The *Ideology* variable takes a value of -1 if the mayor of municipality i is supported by a left-wing party, a value of 0 if the mayor is not supported by any party, and a value of 1 if the mayor of municipality i is supported by a right-wing party. To capture the effect of prolonged incumbencies, we use the number of years that a mayor has been in office since 1982 (*Years as Mayor*).[9]

[5] In particular, after the 2010 administrative reform expenditures exceeding €100,000 are subject to obligatory legal inspection by the Court of Audit. If the expenditure fails to meet legal requirements it cannot be made.

[6] This is not untypical. See Veiga and Veiga (2007a) for the case of Portugal.

[7] We obtained some data in Excel format (1999–2004) after request, while the 1985–1998 series were constructed by going through the "Municipalities and Communes Income–Expenditure" publications for each single year. These reports are publicly available but, at the time of writing of this paper, only in Greek.

[8] Since elections are synchronized across all municipalities in Greece we do not include time fixed effects because election year effects cannot be separated from aggregate shocks. Our approach on this issue is similar to Aidt and Mooney (2014).

[9] Incumbents in 1985 (the first year in our dataset) were elected in the 1982 municipal elections.

Eq. (1) is a standard dynamic panel data specification. Nevertheless, the presence of a lagged dependent variable and municipality specific effects renders the OLS estimator biased and inconsistent. Although the Fixed-effects (FE) estimator eliminates the unit specific effects, it cannot eliminate the bias introduced by the inclusion of lagged dependent variables among the regressors. The order of the FE estimator bias is 1/T, where T corresponds to the time length of the panel. For small, even moderate T, the FE estimator is inconsistent but becomes consistent as T gets larger (Kiviet, 1995; Nickell, 1981). Given that the time length of our panel is 20 years, the use of the Fixed Effects estimator in the context of a dynamic model may give rise to a non-negligible bias. To address this possibility, we employ the Blundell and Bond (1998) two-step system GMM estimator for dynamic panel data (see also, Shi and Svensson, 2006; Veiga and Veiga, 2007a; Efthyvoulou, 2012). This estimator augments the Arellano and Bond (1991) difference GMM estimator using lagged differences of the dependent variables as instruments in the levels equations in addition to lagged levels of the dependent variables, which are used as instruments for the equations in first differences (see Arellano and Bover, 1995; Baltagi, 2008). Since the estimated standard errors of the two step GMM estimator tend to be severely downward biased, we correct the bias using the Windmeijer (2005) finite sample correction (see Windmeijer, 2005; Roodman, 2009a). To avoid misleading results caused by instrument proliferation, we collapse the instrument set, as suggested by Roodman (2009b), to reduce the number of moment conditions. Finally, we perform the Arellano and Bond (1991) tests for first-order and second-order serial correlation of the differenced residuals and the Hansen test for over-identifying restrictions.

5. Results and discussion

5.1. Baseline evidence

Table 1 presents our baseline results.[10] The evidence shows that *Elections* has a negative and significant effect on the *Budget Balance* at the 5% significance level, while it positively affects *Total Expenditures* and its, highly visible to the electorate, subcategory of *Investment Expenditures* (both at the 10% level of significance). The latter includes infrastructure expenditures such as construction of roads, bridges and overpasses. This finding corroborates similar results documented in other relevant studies (see e.g., Veiga and Veiga, 2007a; Drazen and Eslava, 2010).

The existing literature on municipal finances and elections, typically, does not address how elections may affect local government borrowing[11] whose pattern, as in the case of Greece, may be indicative of incumbents' opportunistic behavior. The results reported in Table 1 reveal that the effect of elections on *Borrowing* is positive and statistically significant at the 5% level. The evidence suggests that in election years the *Budget Balance* decreases by 0.012 euros (in per capita terms, 2005 euros), while *Total Expenditures* rise by 3.1%, *Investment Expenditures* increase by 8.15% and borrowing increases by 120%. Our findings corroborate similar electoral effects identified in studies on PBCs at the local level. The results also suggest that increased government transfers positively affect *Investment Expenditures*, while the population structure variables have a positive effect on *Total Expenditures* and its sub-component of *Investment Expenditures* in municipalities with a high percentage of young (under 15) people. This reflects the fact that extended parts of schooling provisions are a municipal responsibility, while expenditures pertaining to the elderly population, such as social security schemes and healthcare, are primarily provided by the central government. In addition, the results in Table 1 indicate that the small size of municipalities has a positive effect on the *Budget Balance* and *Investment Expenditures*, while it negatively affects *Borrowing*. Results also show that partisan effects are absent in the case of Greek municipalities.[12]

The following section considers whether the magnitude of the opportunistic cycle depends on various factors that either enhance incumbents' incentives for electioneering or impede their ability to pursue such policies. We focus on whether political cycles vary with mayors' political alignment with the central government, their running for another term or not, and the number of years in office (prolonged incumbency).

5.2. Running for another term, political alignment and prolonged incumbency

A mayor's decision to run for another term or not may affect the presence and/or magnitude of political cycles. Rosenberg (1992) argues that incumbents who do not seek reelection generate larger political cycles as they try to secure gains for the post-election period. On the other hand, Veiga and Veiga (2007a) show that the presence of political cycles and their magnitude in Portuguese municipalities are not affected by whether a mayor opts for reelection or not.

To test if a mayor's decision to run for another term affects the magnitude of the electoral effect we allow *Elections* to interact with a dummy variable (*ReCandidate*), which takes a value of one when the mayors run for reelection and zero otherwise. Evidence presented in Table 2, Columns (1)–(4) show that the coefficient of the interaction term *Elections* ∗ *ReCandidate*, is not statistically significant except in the case of *Total Expenditures* where evidence suggests (at the 10% significance level) that the magnitude of the political cycle is smaller when the incumbent runs for another term.

[10] For robustness purposes we have also considered a Fixed Effects estimator and the results are broadly consistent with those produced by the two-step system GMM estimator.

[11] A part of the literature considers how constitutional restrictions may affect local public debt. For example, Feld and Kirchgässner (2001) consider a cross section of 134 Swiss municipalities, while Cabasés et al. (2007) focus on Spanish municipalities. Letelier (2011) examines political determinants of municipal borrowing in Chile for the period 2004–2007. Geys (2007) considers opportunistic local debt cycles in Flemish municipalities with a focus on the implications of fractionalized government.

[12] This result is similar to that of Veiga and Veiga (2007a) who provide evidence from Portuguese municipalities showing that partisan effects are solely confined to capital expenditures, which are higher under right-wing mayors.

Table 1
Political budget cycles (PBCs) in Greek municipalities: baseline results.

Variables	*Budget Balance*	*Total Expenditures*	*Borrowing*	*Investment Expenditures*
Elections	−0.0120**	0.0309*	0.792**	0.0815*
	(0.00528)	(0.0174)	(0.397)	(0.0477)
GovSubsidies		0.359	−0.0286	0.863***
		(0.279)	(0.584)	(0.312)
GovLeviedTaxes		−0.0202	0.231	0.160*
		0.359	−0.0286	0.863***
Ideology	0.00349	0.0120	0.0822	0.00949
	(0.00305)	(0.0172)	(0.256)	(0.0382)
Population Category	0.00948***	−0.0461	−1.279***	0.222**
	(0.00338)	(0.0722)	(0.429)	(0.110)
Years as Mayor	−0.000284	−0.000432	−0.0438	0.00368
	(0.000609)	(0.00186)	(0.0558)	(0.00584)
%Pop < 15	−0.0149	1.928*	10.97	9.983**
	(0.120)	(1.069)	(17.93)	(3.953)
%Pop > 65	0.0889	−1.297	−0.468	−1.073
	(0.109)	(1.167)	(19.30)	(2.935)
Lagged dependent variable	0.781***	0.968**	0.207***	0.389**
	(0.0605)	(0.388)	(0.0501)	(0.189)
Constant	−0.0212	0.768**	−6.224	−1.038
	(0.0288)	(0.375)	(5.305)	(1.232)
AR(1)	0.017	0.002	0.000	0.000
AR(2)	0.116	0.222	0.130	0.899
Hansen test	0.389	0.871	0.374	0.317
No of instruments	10	13	13	13
Observations	1511	1495	553	1493
No of municipalities	109	109	88	109

Notes: Robust standard errors in parentheses with finite-sample correction for the two step covariance matrix as developed by Windmeijer (2005). Instruments collapsed as suggested by Roodman (2009b). ***, **, and * denote significance at the 1, 5, and 10% levels. The Hansen test for over-identifying restriction, where the null H_0 corresponds to valid over-identifying restriction. The Arellano–Bond test for the first and second order serial correlation in the first difference residuals, H_0: No serial correlation.

Given that local politics in Greece are tightly linked to national politics, we investigate how mayors' political alignment with the ruling party[13] affects the size of political cycles. As before we construct an interaction term, *Elections* ∗ *PolAlignment*.[14] The results in Table 2, Columns (5)–(8) document that being politically aligned with the central government does not affect the magnitude of the electoral effects.

While the results reported in Table 1 suggest that the years that an incumbent has been in office do not affect municipal finances, a prolonged incumbency may be expected to affect the magnitude of the political budget cycle. An incumbent who has served for a prolonged period may have greater ability to manipulate local finances, as he becomes more familiar with the relevant budgetary process or weaker incentives for pre-electoral manipulation. To test how prolonged incumbencies affect the magnitude of the electoral effects we include the *Years as Mayor* ∗ *Elections* interaction term in our model. The results in Table 2, Columns (9)–(12) show that the number of years that an incumbent has served in office does not affect the magnitude of the PBCs for any of the dependent variables used.

Our findings suggest a profoundly opportunistic element in the management of Greece's municipal finances. The question that arises naturally is whether this opportunism pays. Do increased expenditures during election years affect an incumbent's probability of reelection, and if so, how?

6. Fiscal manipulation and reelection prospects

6.1. Data and estimation method

Having identified a robust opportunistic element in the finances of Greek municipalities, we examine the potency of such policies in terms of their effect on electoral outcomes. A positive response of the public to pre-election spending hikes reinforces the incumbents' incentives for manipulating the public finances. To investigate whether and how the management of public finances at the local government level affects incumbents' reelection prospects in Greece, we consider data on election outcomes from the aforementioned 109 municipalities. The dataset ranges from 1985 to 2004, includes 5 electoral years (i.e., 1986, 1990, 1994, 1998, and 2002) and covers four full governing periods. Thus, the dataset permits us to investigate how local finances affect reelection

[13] Greece has been ruled by single party governments for the entire time period considered.
[14] *PolAlignment* takes a value of one when both mayors and central government share party affiliation and zero otherwise.

Table 2
PBC's in Greek municipalities and the effects of mayors' running for reelection/mayors' political alignment/prolonged incumbencies.

Variables	(1) *Budget Balance*	(2) *Total Expenditures*	(3) *Borrowing*	(4) *Investment Expenditures*	(5) *Budget Balance*	(6) *Total Expenditures*	(7) *Borrowing*	(8) *Investment Expenditures*	(9) *Budget Balance*	(10) *Total Expenditures*	(11) *Borrowing*	(12) *Investment Expenditures*
Elections	−0.0213***	0.0774***	1.016*	0.129*	−0.0122**	0.0418*	1.225**	0.153*	−0.0236***	0.0640*	1.443*	0.177*
	(0.00704)	(0.0265)	(0.522)	(0.0703)	(0.00496)	(0.0233)	(0.593)	(0.0893)	(0.00896)	(0.0366)	(0.839)	(0.105)
*Elections * ReCandidate*	0.0136	−0.0652*	−0.344	−0.0715								
	(0.00975)	(0.0355)	(0.579)	(0.0976)								
ReCandidate	−0.00759	0.0225	−0.409	0.0636								
	(0.00565)	(0.0182)	(0.317)	(0.0606)								
*Elections * PolAlignment*					−0.00993	−0.0175	−0.961	−0.0365				
					(0.00815)	(0.0316)	(0.868)	(0.104)				
PolAlignment					−0.00154	0.0364	0.783	0.00407				
					(0.00364)	(0.0246)	(0.482)	(0.0532)				
*Elections * Years as Mayor*									0.000829	−0.00137	−0.0918	−0.00633
									(0.00133)	(0.00435)	(0.121)	(0.0113)
GovSubsidies		0.387	−0.278	0.915***		0.639***	−0.0421	0.703***		0.797***	−0.0317	0.744***
		(0.281)	(0.257)	(0.320)		(0.243)	(0.574)	(0.185)		(0.220)	(0.565)	(0.214)
GovLeviedTaxes		−0.0195	0.168	0.161		0.0605	0.231	0.0108		0.113***	0.244	0.0243
		(0.0524)	(0.197)	(0.0980)		0.639***	−0.0421	0.703***		(0.0322)	(0.358)	(0.0569)
Ideology	0.00340	0.0128	0.0685	0.00934	0.00119	0.00123	0.0327*	0.163	0.00262	0.0267	0.0861	0.0333
	(0.00307)	(0.0171)	(0.194)	(0.0387)	(0.00375)	(0.00244)	(0.0189)	(0.277)	(0.00257)	(0.0214)	(0.259)	(0.0336)
Population Category	0.00984***	−0.0480	−1.494***	0.218*	0.00884	0.00832***	0.0382	−1.277***	0.00827***	0.0777**	−1.262***	0.135*
	(0.00344)	(0.0720)	(0.252)	(0.112)	(0.00548)	(0.00310)	(0.0668)	(0.424)	(0.00308)	(0.0365)	(0.432)	(0.0710)
Years as Mayor	−0.000002	−0.000883	−0.0858**	0.00366	0.00110	0.00066	0.000269	−0.0436	−0.000007	−0.00438	−0.0215	0.00336
	(0.000632)	(0.00199)	(0.0426)	(0.00591)	(0.000709)	(0.000533)	(0.00203)	(0.0559)	(0.000630)	(0.00527)	(0.0634)	(0.00575)
%Pop < 15	0.00217	1.992*	7.610	10.27***	0.187	−0.124	1.728	13.25	−0.119	0.762	10.89	8.199***
	(0.121)	(1.066)	(12.15)	(3.956)	(0.296)	(0.112)	(1.100)	(17.86)	(0.111)	(1.903)	(18.15)	(3.168)
%Pop > 65	0.0658	−1.329	−2.770	−1.022	0.288	0.0978	−1.558	−0.202	0.0988	−1.050	0.0469	−2.828
	(0.106)	(1.176)	(14.50)	(3.079)	(0.254)	(0.0989)	(0.990)	(18.90)	(0.101)	(1.449)	(19.37)	(2.913)
Lagged dependent variable	0.779***	0.957**	0.230***	0.375**	0.822***	0.525	0.207***	0.499***	0.821***	0.223**	0.209***	0.483***
	(0.0611)	(0.390)	(0.0277)	(0.186)	(0.0554)	(0.334)	(0.0502)	(0.0518)	(0.0551)	(0.0885)	(0.0497)	(0.0520)
Constant	−0.0173	0.815**	−4.908	−1.032	−0.00414	1.151***	−6.952	−1.360*	−0.00451	1.434***	−6.374	−0.931
	(0.0291)	(0.379)	(3.666)	(1.253)	(0.0268)	(0.289)	(5.254)	(0.790)	(0.0267)	(0.423)	(5.325)	(0.834)
AR(1)	0.017	0.002	0.000	0.000	0.017	0.001	0.000	0.000	0.017	0.007	0.000	0.000
AR(2)	0.116	0.234	0.133	0.905	0.116	0.223	0.148	0.934	0.118	0.256	0.135	0.955
Hansen test	0.395	0.853	0.316	0.350	0.422	0.807	0.379	0.371	0.423	0.868	0.371	0.373
No of instruments	12	15	15	15	12	15	15	15	11	14	14	14
Observations	1478	1462	539	1460	1478	1462	539	1460	1478	1462	539	1460
No of municipalities	109	109	88	109	109	109	88	109	109	109	88	109

Notes: See Table 1.

possibilities in four out of five elections included in our sample. We employ a fixed effects logit approach for the panel of Greek Municipalities used before, specified in Eq. (2) as:

$$Prob\left[z_{it}=1|x_{it},\eta_i\right]=F\left(\beta^{'}x_{it}+\eta_i\right), \tag{2}$$

where F is the standard logistic distribution function, z_{it} the dichotomous dependent variable (*ReElection*) taking a value of one if the mayor is re-elected and zero otherwise and η_i is the fixed municipality specific effects. The set of explanatory variables includes the fiscal variables under the control of the mayor and political–institutional variables.

We focus on the effects of two fiscal variables, namely *Total Expenditures* and *Investment Expenditures* over the full term as well as the effect of opportunistic increases that occur during election years. To investigate the latter, we follow the approach of Sakurai and Menezes-Filho (2008) and distinguish between average expenditures during the first three years of an incumbent's term and the percentage deviation of election year expenditures from this average. With respect to other political–institutional variables, we employ in our analysis those used when studying the presence of PBC, and we focus on the *Years as Mayor* variable that captures the amount of time that an individual has served as mayor. We expect that an incumbents' popularity weakens over time and repeated terms.

A panel data logit model constitutes a typical approach in investigating the determinants of reelection. A dilemma emerges, however, regarding the choice between an unconditional (standard logit MLE estimator) versus a conditional logit fixed effect estimator (Chamberlain's MLE estimator). To decide, we follow the suggestion of Baltagi (2008) and perform a Hausman test. Under the null hypothesis of homogeneity (no individual effects) both estimators are consistent but the conditional logit estimator is inefficient, as it may not use all available data. Under the alternative hypothesis, the unconditional estimator is inefficient while the conditional is both consistent and efficient (Greene, 2002). The Hausman test in our case rejects the homogeneity restriction (that is, the homogeneity hypothesis) and suggests the inclusion of fixed effects. Using this procedure reduces the sample size since only municipalities where mayors have won and lost elections can be used in the estimation.[15]

6.2. Results and discussion

We present the estimation results in Table 3. The baseline specification in Column 1 shows that greater fiscal expansions during an incumbent's term, as manifested by increases in *Total Expenditures*, affect positively the probability of reelection. Regarding the other variables considered, the evidence suggests that increases in government levied taxes negatively affect incumbents' reelection prospects, while higher levels of revenues from governmental direct transfers (*GovSubsidies*) affect them positively. The variables capturing the population structure do not affect the reelection prospects of incumbents. The amount of time that an incumbent has spent in office, however, strongly affects his reelection prospects. The corresponding coefficient is negative and statistically significant at the 1% level, indicating that incumbents are subject to diminishing popularity over repeated terms and prolonged incumbency.[16]

Column (2) reports the results from distinguishing between average expenditures in the first three years and the percentage deviation of election year expenditures from this average. The two coefficients are positive and statistically significant at the 5% level. This finding is comparable to evidence from other studies (Sakurai and Menezes-Filho, 2008; Veiga and Veiga, 2007b). The remaining control variables display results that are qualitatively similar to those in Column 1.

The subcomponent of *Investment Expenditures* does not appear to have any significant effect. The relevant coefficient in Column (3) although positive is not statistically significant indicating that only increases in aggregate expenditures (*Total Expenditures*) appear to have a positive impact on incumbents' reelection. The results in Column (4) suggest that this is also the case for average pre-electoral *Investment Expenditures* and election year deviations. This finding is interesting given that other related studies find that it is the visible expenditures that affect re-election the most (Aidt et al., 2011). We attribute this difference to Greece's institutional features where for a long period of time some investments that are associated with local government activities were undertaken by local development corporations that draw on a different budget and operated in a non-transparent environment.[17]The other coefficients are the same as before.

Our results, consistent with several other studies that provide evidence that pre-electoral expenditures are electorally rewarded (Akhmedov and Zhuravskaya, 2004; Sakurai and Menezes-Filho, 2008; Veiga and Veiga, 2007b), document that in the case of Greece's municipalities higher pre-electoral expenditures and election year opportunistic deviations are beneficial for the incumbent's reelection. This finding can partly explain the emergence of budget cycles and thus the prolonged mismanagement in Greece's local finances.

[15] This reduces our sample to 80 municipalities.

[16] For more on this erosion of public support while in office, most commonly termed the cost of ruling, see Paldam (1986), Paldam and Skott (1995) and Nannestad and Paldam (2000).

[17] After the 2010 reform municipalities are allowed to operate only up to one municipal corporation.

Table 3
The effect of budgetary policies on re-election prospects.

	Full sample			
Dependent variable: *ReElection*	(1)	(2)	(3)	(4)
Total Expenditures (full mandate)	3.796**			
	(1.878)			
Average pre-election *Total Expenditures*		4.067**		
		(1.984)		
Deviation from average *Total Expenditures* (during election year)		0.0270**		
		(0.0127)		
Investment Expenditures (full mandate)			0.271	
			(0.456)	
Average pre-election *Investment Expenditures*				0.244
				(0.454)
Deviation from average *Investment Expenditures* (during election year)				0.00505
				(0.00338)
GovSubsidies	1.496*	1.560*	1.595*	1.553*
	(0.899)	(0.910)	(0.861)	(0.855)
GovLeviedTaxes	−0.555*	−0.602**	−0.599**	−0.635**
	(0.303)	(0.292)	(0.296)	(0.290)
Population Category	−2.146*	−2.535**	−1.907*	−2.189*
	(1.136)	(1.201)	(1.140)	(1.182)
%Pop < 15	−39.82	−38.53	30.70	−2.841
	(106.3)	(107.3)	(99.41)	(107.5)
%Pop > 65	11.17	−6.036	6.850	−3.117
	(75.73)	(81.99)	(70.89)	(74.26)
Ideology	0.356	0.349	0.426	0.463
	(0.395)	(0.407)	(0.378)	(0.381)
Years as Mayor	−0.518***	−0.528***	−0.529***	−0.511***
	(0.0938)	(0.0952)	(0.0907)	(0.0894)
Pseudo R^2	0.5581	0.5729	0.5363	0.5477
Hausman test	$\chi^2 = 26.97$	$\chi^2 = 27.08$	$\chi^2 = 30.02$	$\chi^2 = 29.60$
	Prob = 0.00	Prob = 0.00	Prob = 0.00	Prob = 0.00
Observations	232	232	232	233
No of municipalities	80	80	80	80

Notes: Coefficients from logit fixed-effects regressions. Robust standard errors are in brackets. ***, **, and * denote significance at the 1, 5, and 10% levels.

6.3. Further evidence and robustness checks

We first examine whether Greece's effort to join the Economic and Monetary Union (EMU) has restricted opportunistic politics at the local level,[18] as this process may imply additional commitments and constitutional restrictions.[19] We restrict our sample to the years after 1993 that cover Greece's run up to joining the EMU and the first four years after its admission. The results are similar to those of the baseline model and we report them in Appendix A, Table A2, Columns (1)–(4).

Since the extensive municipal mergers in Greece were introduced to tackle concerns over inefficiencies stemming from the small size of municipalities, we additionally test whether the presence of electoral effects is driven by the inclusion of small municipalities in our sample. We remove municipalities with a population smaller than 10,000 inhabitants,[20] with results reported in Columns (4)–(8) of Table A2 (please see Appendix A), being similar to those presented in Table 1.

Turning now to the full dimension of our panel, we perform a series of additional robustness tests. First, as some of the policies may require substantial time to yield electoral results, we add a dummy variable to capture the effect of the year before elections. Results show that this dummy has a positive and statistically significant effect on *Total Expenditures*, *Investment Expenditures*, and *Borrowing*, while the effect of *Elections* remains qualitatively the same as in Table 1. Our results are robust to the inclusion of regional GDP per capita[21] and regional level of unemployment in our model, suggesting that expenditures are procyclical as regional GDP per capita positively affects *Total Expenditures*. When we replace the *Years as Mayor* variable with the number of consecutive terms that a mayor has served, results are qualitatively the same as in our baseline model. This is also the case when we substitute our *Ideology* variable with two separate dummies that capture when the mayor is of *Left* wing and *Right* wing political orientation. Finally, we replace our *PopCat* variable with municipal population. Results remain qualitatively the same as in our baseline specification.[22]

[18] For the effect of the Maastricht Treaty on economic voting see Veiga (2013).
[19] With regard to specific restrictions, fiscal rules, imposed by national governments to local administrative entities Grembi et al. (2012) study how policy outcomes are affected by them focusing on municipal governments in Italy. Their evidence suggests that fiscal rules can reduce debt accumulation as their relaxation has a negative effect on the budget through a fall in tax revenues.
[20] We exclude population category 4 municipalities as the average population after the last reform is approximately 30.000 citizens falling into population category 3.
[21] The regional GDP per capita is expressed in logarithms of euros per capita (2005 prices).
[22] Detailed results are available upon request.

To test the robustness of our results on the effect of opportunistic policies on election outcomes, we restrict our sample by excluding small municipalities (*PopCat* = 4) and the 1990 municipal elections. The results presented in Table A3 (Appendix A), remain qualitatively the same as in Table 3, indicating that opportunistic policies were electorally beneficial for Greek mayors in the post-Maastricht era.

7. Conclusion

We provide evidence of opportunistically motivated policies in Greek municipalities. We first consider the presence of PBCs in Greece's municipalities, constructing a dataset from raw data that covers 20 years and half of the country's population. The evidence produced shows an opportunistic PBC pattern in the *Budget Balance*, in total and *Investment Expenditures*, and in *Borrowing Revenues*. PBCs emerge in Greece's municipalities regardless of whether the mayors run for reelection or not, or whether the incumbents are politically aligned with the central government or not. Moreover, prolonged incumbencies do not appear to affect municipal finances and the magnitude of PBCs. The evidence also shows that Greece's effort to join the EMU had no effect on local opportunistic politics. The results are robust to the exclusion of small sized municipalities from our sample. This finding is interesting given that a key concern permeating all recent attempts to reform local governments in Greece was the merging of smaller into larger units.

We also consider if and how the management of local finances affects mayors' reelection prospects. Our results show that increased expenditures over the full term as well as opportunistic deviations during election years are electorally rewarded as they have a positive impact on incumbents' probabilities for reelection.

Our findings provide insights on the management of local public finances in the run-up to the Greek crisis, showing that prolonged mismanagement motivated by incumbents' electoral concerns has been prevalent. This behavior is characteristic of practices that contributed to Greece's current economic predicament. Moreover, this opportunistic behavior at the sub-government level has been impervious to the various municipal reform attempts and the post-Maastricht implicit constraints, while being intertwined with central government politics.

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Appendix A

Table A1
Descriptive statistics.
Source: *Hellenic Statistical Authority*. Dataset constructed by the authors.

Variable	Observations	Mean	Standard deviation	Min	Max
Per capita *Budget Balance*	2079	0.019	0.304	−4.854	2.442
Log of per capita *Total Expenditures*	2083	−1.176	0.584	−4.010	2.952
Log of per capita *Borrowing*	1156	−4.665	1.848	−13.940	1.733
Log of per capita *Investment Expenditures*	2086	−2.902	0.981	−10.031	1.852
Log of per capita *GovSubsidies*	2079	−2.557	0.624	−11.527	0.436
Log of per capita *GovLeviedTaxes*	2072	−4.772	1.332	−10.846	1.348
Log of per capita region level *GDP*	1090	9.705	0.132	9.382	10.005
Log of region level unemployment	1635	2.330	0.232	0.888	2.847
Percentage of the population under 15 years old (*%Pop < 15*)	1526	16.335	1.931	13.476	22.040
Percentage of the population over 65 years old (*%Pop > 65*)	1526	14.121	1.923	10.603	22.452
Population Category	2180	2.934	0.770	1	4
Years as Mayor	2180	5.649	3.9521	1	22
Elections	2180	0.25	0.433	0	1
Ideology	2180	−0.379	0.820	−1	1
PolAlignment	2074	0.495	0.50	0	1
ReCandidate	2180	0.205	0.404	0	1
ReElection	436	0.527	0.499	0	1

Notes: Fiscal variables are expressed in euros per capita (2005 prices).

Table A2
PBC's in Greek municipalities: restricted sample.

	Restricted time span: 1994–2004				Municipalities with population < 10,000 excluded from the sample			
	(1) *Budget Balance*	(2) *Total Expenditures*	(3) *Borrowing*	(4) *Investment Expenditures*	(5) *Budget Balance*	(6) *Total Expenditures*	(7) *Borrowing*	(8) *Investment Expenditures*
Elections	−0.0129**	0.0376**	0.787**	0.0786*	−0.0101**	0.624***	0.878*	0.116**
	(0.00540)	(0.0178)	(0.399)	(0.0473)	(0.00492)	(0.238)	(0.491)	(0.0513)
AR(1)	0.037	0.000	0.000	0.004	0.047	0.000	0.000	0.001
AR(2)	0.054	0.131	0.081	0.815	0.161	0.076	0.246	0.697
Hansen test	0.398	0.770	0.574	0.563	0.579	0.789	0.050	0.965
No of instruments	10	13	13	13	10	13	13	13
Elections	−0.0226***	0.0874***	1.653***	0.151**	−0.0128***	0.0726**	0.355	0.170**
	(0.00711)	(0.0275)	(0.555)	(0.0698)	(0.00453)	(0.0284)	(0.480)	(0.0745)
*Elections * ReCandidate*	0.0142	−0.0697**	−1.049	−0.110	0.00475	−0.0558	0.542	−0.0802
	(0.0101)	(0.0355)	(0.665)	(0.0934)	(0.00828)	(0.0396)	(0.531)	(0.102)
ReCandidate	−0.00835	0.0290	0.0407	0.0922	−0.00650	0.0178	−0.703**	0.0563
	(0.00649)	(0.0212)	(0.380)	(0.0635)	(0.00564)	(0.0197)	(0.328)	(0.0653)
AR(1)	0.037	0.000	0.000	0.003	0.047	0.005	0.000	0.001
AR(2)	0.054	0.141	0.103	0.759	0.161	0.076	0.297	0.690
Hansen test	0.401	0.776	0.572	0.552	0.585	0.757	0.431	0.981
No of instruments	12	15	15	15	12	15	15	15
Elections	−0.0128**	0.0448*	1.172**	0.113*	−0.0131***	0.0554**	1.447*	0.156*
	(0.00524)	(0.0234)	(0.592)	(0.0687)	(0.00491)	(0.0256)	(0.807)	(0.0832)
*Elections * PolAlignment*	−0.00982	−0.00681	−0.851	0.0199	−0.000649	−0.0164	−1.086	0.0127
	(0.00815)	(0.0339)	(0.863)	(0.0855)	(0.00751)	(0.0346)	(1.086)	(0.100)
PolAlignment	−0.00153	0.0255	0.703	0.0304	−0.000683	0.00299	0.615	−0.00615
	(0.00539)	(0.0210)	(0.561)	(0.0605)	(0.00409)	(0.0181)	(0.571)	(0.0623)
AR(1)	0.017	0.001	0.000	0.000	0.022	0.000	0.000	0.000
AR(2)	0.115	0.216	0.093	0.825	0.110	0.093	0.277	0.695
Hansen test	0.430	0.621	0.685	0.579	0.388	0.764	0.099	0.952
No of instruments	12	15	15	15	12	15	15	15
Observations	1199	1185	411	1180	1178	1176	491	1177
No of municipalities	109	109	88	109	90	90	77	90

Notes: See Table 1. Control variables used are the same as those in Table 1 and are not reported to economize on space. ***,**, and * denote significance at the 1, 5, and 10% levels. Detailed results are available from the authors upon request.

Table A3
The effect of budgetary policies on re-election prospects: restricted sample.

	Restricted sample			
Dependent variable: *ReElection*	(1)	(2)	(3)	(4)
Total Expenditures (full mandate)	6.107***			
	(2.298)			
Average preelection *Total Expenditures*		6.348***		
		(2.367)		
Deviation from average *Total Expenditures* (during election year)		0.0267*		
		(0.0137)		
Investment Expenditures (full mandate)			0.620	
			(0.568)	
Average preelection *Investment Expenditures*				0.605
				(0.579)
Deviation from average *Investment Expenditures* (during election year)				0.00440
				(0.00350)
GovSubsidies	0.995	1.229	0.974	1.062
	(1.239)	(1.248)	(1.171)	(1.141)
GovLeviedTaxes	−0.626*	−0.679*	−0.582*	−0.622*
	(0.359)	(0.361)	(0.323)	(0.324)
Population Category	−1.496	−1.454	−1.511	−1.734
	(1.817)	(1.859)	(1.697)	(1.729)
%Pop < 15	137.2	140.5	103.7	69.37
	(151.1)	(154.1)	(142.0)	(151.3)
%Pop > 65	29.92	17.76	33.42	25.60
	(93.45)	(97.85)	(83.75)	(86.41)

(continued on next page)

Table A3 *(continued)*

	Restricted sample			
Dependent variable: *ReElection*	(1)	(2)	(3)	(4)
Ideology	0.0794	0.0939	0.334	0.404
	(0.458)	(0.461)	(0.432)	(0.437)
Years as Mayor	−0.478***	−0.477***	−0.472***	−0.457***
	(0.0966)	(0.0953)	(0.0899)	(0.0895)
Pseudo R^2	0.5551	0.5628	0.5079	0.5144
Hausman test	$\chi2 = 22.43$	$\chi2 = 22.81$	$\chi2 = 23.83$	$\chi2 = 22.41$
	Prob = 0.01	Prob = 0.01	Prob = 0.00	Prob = 0.01
Observations	194	194	195	195
No of municipalities	67	67	67	67

Notes: See Table 3.
***, **, and * denote significance at the 10, 5, and 1% levels.

References

Aidt, T.S., Mooney, G., 2014. Voting suffrage and the political budget cycle: evidence from the London metropolitan boroughs 1902–1937. J. Public Econ. 112, 53–71.
Aidt, T.S., Veiga, F.J., Veiga, L.G., 2011. Election results and opportunistic policies: a new test of the rational political business cycle model. Public Choice 148, 21–44.
Akhmedov, A., Zhuravskaya, E., 2004. Opportunistic political cycles: test in a young democracy setting. Q. J. Econ. 119, 1301–1338.
Alt, J.E., Lassen, D.D., 2006. Transparency, political polarization, and political budget cycles in OECD countries. Am. J. Polit. Sci. 50, 530–550.
Arellano, M., Bond, S., 1991. Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Rev. Econ. Stud. 58, 277–297.
Arellano, M., Bover, O., 1995. Another look at the instrumental variable estimation of error-components models. J. Econ. 68, 29–51.
Balaguer-Coll, M.T., Brun-Martos, M.I., Forte, A., Tortosa-Ausina, E., 2015. Local governments' re-election and its determinants: new evidence based on a Bayesian approach. Eur. J. Polit. Econ. 39, 94–108.
Baltagi, B.H., 2008. Econometric Analysis of Panel Data. fourth ed. John Wiley & Sons, Chichester, UK; Hoboken, NJ.
Benito, B., Bastida, F., Vicente, C., 2013. Creating room for manoeuvre: a strategy to generate political budget cycles under fiscal rules. Kyklos 66, 467–496.
Blais, A., Nadeau, R., 1992. The electoral budget cycle. Public Choice 74, 389–403.
Blundell, R., Bond, S., 1998. Initial conditions and moment restrictions in dynamic panel data models. J. Econ. 87, 115–143.
Brender, A., 2003. The effect of fiscal performance on local government election results in Israel: 1989–1998. J. Public Econ. 87, 2187–2205.
Brender, A., Drazen, A., 2005. Political budget cycles in new versus established democracies. J. Monet. Econ. 52, 1271–1295.
Brender, A., Drazen, A., 2008. How do budget deficits and economic growth affect reelection prospects? Evidence from a large panel of countries. Am. Econ. Rev. 98, 2203–2220.
Cabasés, F., Pascual, P., Vallés, J., 2007. The effectiveness of institutional borrowing restrictions: empirical evidence from Spanish municipalities. Public Choice 131, 293–313.
Chappell, J., Henry, W., Gonçalves Veiga, L., 2000. Economics and elections in Western Europe: 1960–1997. Elect. Stud. 19, 183–197.
Drazen, A., 2000. Political Economy in Macroeconomics. Princeton University Press, Princeton, N.J.
Drazen, A., Eslava, M., 2010. Electoral manipulation via voter-friendly spending: theory and evidence. J. Dev. Econ. 92, 39–52.
Efthyvoulou, G., 2012. Political budget cycles in the European Union and the impact of political pressures. Public Choice 153, 295–327.
Fair, R.C., 1978. The effect of economic events on votes for president. Rev. Econ. Stat. 60, 159.
Feld, L.P., Kirchgässner, G., 2000. Official and hidden unemployment and the popularity of the government: an econometric analysis for the Kohl government. Elect. Stud. 19, 333–347.
Feld, L.P., Kirchgässner, G., 2001. Does direct democracy reduce public debt?: evidence from Swiss municipalities. Public Choice 109, 347–370.
Foucault, M., Madies, T., Paty, S., 2008. Public spending interactions and local politics: empirical evidence from French municipalities. Public Choice 137, 57–80.
Franzese, R.J., Jusko, K.L., 2006. Political–Economic Cycles. In: Weingast, B.R., Wittman, D.A. (Eds.), The Oxford Handbook of Political Economy. Oxford University Press, pp. 545–564.
Galli, E., Rossi, S.P.S., 2002. Political budget cycles: the case of the Western German Länder. Public Choice 110, 283–303.
Geys, B., 2007. Government weakness and electoral cycles in local public debt: evidence from Flemish municipalities. Local Government Studies 33, pp. 237–251.
Greene, W.H., 2002. Econometric Analysis. fifth ed. Pearson Education, Inc., Upper Saddle River, N.J.
Grembi, V., Nannicini, T., Troiano, U., 2012. Policy Responses to Fiscal Restraints: A Difference-in-discontinuities Design (IZA Discussion Paper No. 6952). Institute for the Study of Labor (IZA).
Kiviet, J.F., 1995. On bias, inconsistency, and efficiency of various estimators in dynamic panel data models. J. Econ. 68, 53–78.
Haan, J. de, Klomp, J., 2013. Conditional political budget cycles: a review of recent evidence. Public Choice 157, 387–410.
Kramer, G.H., 1971. Short-term fluctuations in U.S. voting behavior, 1896–1964. Am. Polit. Sci. Rev. 65, 131–143.
Letelier, S., L.E., 2011. Theory and evidence of municipal borrowing in Chile. Public Choice 146, 395–411.
Lewis-Beck, M.S., 1988. Economics and Elections: The Major Western Democracies. University of Michigan Press, Ann Arbor.
Lewis-Beck, M., Stegmaier, M., 2013. The VP-function revisited: a survey of the literature on vote and popularity functions after over 40 years. Public Choice 157, 367–385.
Madsen, H., 1980. Electoral Outcomes and Macroeconomic Policies: The Scandinavian Cases. In: Whiteley, P. (Ed.), Models of Political Economy. Sage, London, pp. 15–46.
Nannestad, P., Paldam, M., 1994. The VP-function: a survey of the literature on vote and popularity functions after 25 years. Public Choice 79, 213–245.
Nannestad, P., Paldam, M., 2000. The Cost of Ruling. A Foundation Stone for Two Theories (SSRN Scholarly Paper No. ID 165709). Social Science Research Network, Rochester, NY.
Nickell, S.J., 1981. Biases in dynamic models with fixed effects. Econometrica 49, 1417–1426.
Paldam, M., 1986. The distribution of election results and the two explanations of the cost of ruling. Eur. J. Polit. Econ. 2, 5–24.
Paldam, M., Skott, P., 1995. A rational-voter explanation of the cost of ruling. Public Choice 83, 159–172.
Pelagidis, T., Mitsopoulos, M., 2009. Vikings in Greece: kleptocratic interest groups in a closed, rent-seeking economy. Cato J. 29, 399–416.
Pelagidis, T., Mitsopoulos, M., 2012. Understanding the Crisis in Greece: From Boom to Bust. 2 ed. Palgrave Macmillan, Basingstoke, Hampshire; New York, NY.
Peltzman, S., 1992. Voters as fiscal conservatives. Q. J. Econ. 107, 327–361.
Persson, T., Tabellini, G.E., 2003. The Economic Effects of Constitutions. Munich Lectures in Economics. MIT Press, Cambridge, Mass.

Phelps, E.S., 2015. The Foundations of Greece's Failed Economy [WWW Document]. Project Syndicate (URL https://www.project-syndicate.org/commentary/foundation-of-greeces-failed-economy-by-edmund-s-phelps–2015-09 (accessed 1.9.16)).
Roodman, D., 2009a. How to do xtabond2: an introduction to difference and system GMM in Stata. Stata J. 9, 86–136.
Roodman, D., 2009b. A note on the theme of too many instruments. Oxf. Bull. Econ. Stat. 71, 135–158.
Rose, S., 2006. Do fiscal rules dampen the political business cycle? Public Choice 128, 407–431.
Rosenberg, J., 1992. Rationality and the political business cycle: the case of local government. Public Choice 73, 71–81.
Sakurai, S., Menezes-Filho, N., 2008. Fiscal policy and reelection in Brazilian municipalities. Public Choice 137, 301–314.
Sakurai, S., Menezes-Filho, N., 2011. Opportunistic and partisan election cycles in Brazil: new evidence at the municipal level. Public Choice 148, 233–247.
Shi, M., Svensson, J., 2006. Political budget cycles: do they differ across countries and why? J. Public Econ. 90, 1367–1389.
Sjahrir, B.S., Kis-Katos, K., Schulze, G.G., 2013. Political budget cycles in Indonesia at the district level. Econ. Lett. 120, 342–345.
Streb, J.M., Lema, D., Torrens, G., 2009. Checks and balances on political budget cycles: cross-country evidence. Kyklos 62, 426–447.
Swank, O.H., Eisinga, R., 1999. Economic outcomes and voting behaviour in a multi-party system: an application to The Netherlands. Public Choice 101, 195–213.
Tucker, J.A., 2001. Economic conditions and the vote for incumbent parties in Russia, Poland, Hungary, Slovakia, and the Czech Republic from 1990 to 1996. Post-Soviet Affairs 17, pp. 309–331.
Veiga, L.G., 2013. Voting functions in the EU-15. Public Choice 157, 411–428.
Veiga, L., Veiga, F., 2007a. Political business cycles at the municipal level. Public Choice 131, 45–64.
Veiga, L., Veiga, F., 2007b. Does opportunism pay off? Econ. Lett. 96, 177–182.
Windmeijer, F., 2005. A finite sample correction for the variance of linear efficient two-step GMM estimators. J. Econ. 126, 25–51.