DO POLITICAL BUDGET CYCLES PERSIST IN MADRID'S MUNICIPALITIES? RE-ELECTION UNCERTAINTY MATTERS.

MASTER THESIS

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Abstract

I investigate the existence of Political Budget Cycles in the 179 Municipal governments of Madrid using newly constructed panel data spanning from 2000 to 2018. With the use of a system-GMM estimator, I analyse the incumbent's fiscal policy decisions in the composition of the visible expenditure categories—during the presence and absence of the pre-electoral and electoral years. My findings provide evidence of opportunistic behaviour in public finances, where fiscal decisions are politically motivated and appear to remain plausibly immune to the local, national and international institutional reforms. As the government engages in Political Budget Cycles, I provide evidence of the gained advantage in the increased – favouring – percentage of votes. The paper provides robust results in the face of a series of controls including the political alignment of the incumbent. I also find the government's ideology does not affect the composition of expenditures but still pronounces the volatility of the opportunistic fiscal policies.

Table of Contents

List of Symbols and Abbreviations

PBC – Political Budget Cycle

GMM – Generalized Method of Moments

SGP – Stability and Growth Pact

ECB – European Central Bank

EMU – Economic and Monetary Union

OLS – Ordinary Least Squares

FE – Fixed Effects

N – Number of Municipalities

T – Time length

i – Municipality i

t – Time Period

s – Lag Level

α – Constant Term

y_j – Visible Component of Expenditure

X_k – Matrix of Controls

θ_i – Municipal Fixed Effects

u_{it} – Random Error Term

$\mathcal{E}_{it}$ – Error Term

AR(2) – Second-Order Autocorrelation Test

AR(4) – Fourth Order Autocorrelation Test

F – Statistical Distribution

PP – Popular Party

PSOE – Spanish Socialist Workers Party

IU – Unified Left Party

UPyD – Progress and Democracy Union Party

Cs – Citizens Party

List of Tables

List of Tables in Appendix

1. Introduction

My analysis sheds light on the disruptions arising from the interaction between the economic and political forces of a democratic system. The situation arises when the governments make fiscal policy decisions that are politically motivated and no longer are eluding but conducive to business cycle fluctuations – triggering the so-called "political cycle". A government prioritising their political agenda on their fiscal policy decisions – that increase their chances of re-election – might only translate into a jeopardised state of the economy. Fiscal policies have a pronounced impact on the business cycle as they influence key macroeconomic variables that indirectly affect the reallocation of resources between the public and the private sector. This occurs as fiscal policy decisions are key drivers of the economy's demand and supply sides. To illustrate this phenomenon, as a government engages in expansionary fiscal action, the policies will eventually manifest through triggered rates of inflation, responding interest rates and, in the overall expectations they form. The latter comes about as expectations about the sustainability of public finances re-adjust the price level in real terms through the responding behaviour in the private/public sector.

By undertaking a decomposition approach of fiscal expenditures, I select the most visible components of fiscal expenditures to examine the Political Budget Cycles (PBCs) in the local case of the Municipalities of Madrid. I empirically test the link between discretionary fiscal policy and an upcoming election. I thus provide evidence of the government's willingness to engage in PBC during pre-electoral and electoral years while, also, finding evidence of their ability to manipulate some of the most visible components of expenditure. Second, my empirical results suggest that ideology hardly matters in shaping the opportunistic behaviour but still pronounces the volatility of the fiscal policies – as there is a constant shift of governments between the (centre)left-wing and the (centre)right-wing parties. Third, after finding evidence of local PBCs, I also find the incumbent's gain advantage in the cast percentage of votes. Altogether, I suggest that as the re-election probabilities remain uncertain, the governments will pursue manoeuvre strategies – that overcome the fiscal constraints of the institutional framework – enabling them to manipulate the components of expenditure which, in turn, cast them a higher percentage of votes.

My study uses newly collected data from the 179 Municipalities in Madrid spanning from 2000 to 2018 with four elections in between – allowing the potential identification of PBCs in a democratic setting. Madrid was historically part of a 36-year lasting dictatorship that transitioned into an asymmetrical democratic model of the state. Along with Spain joining the European Monetary Union (EMU) in 1999, the institutional framework emanated a set of fiscal constraints. Hence, I challenge if the decentralised fiscal system of the Municipalities of Madrid is effective in terms of eradicating the emergence of PBCs.

With my first hypothesis (*H1*) I propose there is a prevailing influence of the pre-electoral and electoral years affecting the most visible components of fiscal expenditure that the Municipal governments of Madrid opt for. The second hypothesis (*H2*) will further extend the analysis to test the proposition that the opportunistic (pre)electoral manipulation of the visible components of expenditure then translates into a higher percentage of votes cast for the re-elected incumbent. Lastly, with my third hypothesis (*H3*) I suggest the incumbent's political ideology has a positive influence in the shaping of the opportunistically manipulated components of fiscal expenditure. Where a (centre)left-wing government will choose short-term oriented expansionary policies to appeal to the electorate measured by the current expenditure categories. Contrarily, a (centre)right-wing incumbent will choose longer-term oriented expansionary policies to appeal to the electorate measured by the investment type of expenditures.

To empirically test my hypotheses, I use a system-GMM estimator that employs moment conditions as an instrumentation technique to address the present endogeneity problems in my variables and the attribute of stationarity of my panel data. First, to test for *H1*, I perform different regressions for each of my dependent variables where each account for one of the visible components of expenditure. On the right-hand side of my equation, I include a lag of the dependent variable (instrumented with the second and third lags) and I include the central variables of my interest which are the pre-election and election years ¬– along with a matrix of controls. The empirical findings provide evidence for the existence of PBCs in the Municipalities of Madrid. Specifically, during the pre-electoral year, the governments opt to increase the following components of expenditure; i) protection and social promotion by an average of 460,500 euros, ii) rents, maintenance, and repairs by an average of 1,303,100 euros and, iii) real

investment by an average of 827,400 euros. Meanwhile, the following expenditures were reduced; iv) urban infrastructure by an average of 1,207,300 euros and, v) debt payments by an average of 1,740,900 euros. During the electoral years, the governments opt to increase the following components of expenditure; i) urban infrastructure by an average of 534,600 euros and, ii) education, health, culture and sports by 194,200 euros on average. At the same time, the expenditures in debt payments remained to decrease by an average of 2,262,500 euros.

Second, to test for *H2*, I perform different regressions for each visible component of expenditure where now my dependent variable is the percentage of votes attained by the party of the re-elected mayor. On the right-hand side of my equation, I include a lag of the dependent variable (instrumented with the fourth and eighth lags). I include the central variables of my interest which are the components of expenditure (and their first lag) which were previously identified as significant in *H1* – along with a matrix of controls. I provide evidence that once the incumbent manipulated the components of expenditures opportunistically, the re-elected gains advantage in the increased percentage of votes. Results show that the government will be rewarded with a higher voter turnout as the incumbent increases the following components of expenditure during the election year: i) a one-unit increase of protection and social promotion will increase the percentage of votes by an average of .00143%, ii) a one-unit increase of urban infrastructure increases the percentage of votes by an average of .00192%, iii) a one-unit increase of rents, maintenance and repairs increases the percentage of votes by an average of .000583% and, iv) a one-unit increase of pre-electoral and electoral year real investment increases the percentage of votes by an average of .000262% and .000188%, respectively. At the same time, the reduction in the debt payments reduces the incumbent's favouring votes – signalling the voters' aggregated preference for fiscal conservatism.

Third, to test for *H3,* I follow the same method I used for *H1* except that this time I include an ideology dummy variable in the explanatory side of my equation that takes a value of 1 for the (centre)right-wing and 0 for the (centre)left-wing parties. In general, I hardly find evidence that the government's ideology shapes the manipulated components of expenditure. However, finding evidence that a (centre)right-wing government will tend to increase the expenditures on urban infrastructure compared to a (centre)left-wing. Whilst, the rest of the components of expenditure do not show any ideological pattern. Nevertheless, controlling for the

government's ideology appears to pronounce the incumbent's opportunistic behaviour compared to my first results.

This paper contributes to the literature by providing evidence of the prevalence of PBCs in the Municipalities of Madrid – suggesting that re-election uncertainty matters.

I structured my analysis as follows: the second chapter provides an overview of the PBC theory. While chapter 3 provides the baseline assumptions of the PBC model. Next, chapter 4 provides the proposition of my analysis with the introduction of the local case of the Municipalities of Madrid and summarises the corresponding institutional framework. It follows with subchapters 4.1 and 4.2 where I present my data, variables and, my model specification and estimation method, respectively. Subchapters 4.3, 4.4 and 4.5 present the testing of my hypotheses and discuss the respective estimation results. Finally, I conclude in chapter 5 with a summary of my results, proposals for further research and policy suggestions.

2. Political Budget Cycles: An Overview

Political and economic research has shown collaborative effort to investigate political budget cycles that analyse the interaction between economic and political systems and the subsequent effects. The situation arises when, in democratic societies, the government makes fiscal policy decisions that are politically motivated and no longer are eluding but conducive to business cycle fluctuations – triggering the so-called "political cycle". In earlier literature, Frey (1976, 17) defined political cycles as the sporadic fluctuations in the economic cycle that result from the troubled interaction of the economic and political aspects of the state. Thus, the government decisively engages in discretionary policies to increase their chances of re-election that, in turn, jeopardise the state of the economy. For that critical reason, the uprising interest in examining the effects of political cycles gave prominence to the political budget cycle (PBC) literature.

Aforementioned, politico-economic modelling aims to portray the substantial problems arising from the interaction of the political and economic aspects of a state that are relevant for macro-economic trends (Frey, 1976, 2). Until now, researchers have made a significant amount of additions and constructive critiques to the traditional models firstly developed with a macroeconomic application by Nordhaus (1975), Frey (1976), Hibbs (1977) and, McRae (1977). At first, the political business cycle theories mainly studied the shifts in the Phillips curve caused

by the government's expansionary monetary policy providing support that the behaviour was motivated by a political cycle. Notwithstanding the latter provided with the foundation of political cycle modelling, the political business cycle model became quickly irrelevant. That occurred alongside the gained independence of the central bank and the international monetary integration thus, limiting the government's access to monetary policy instruments (Krause & Méndez, 2005; Schneider, 2010).

Correspondingly, the second strand of literature, adherent to Keynesian approaches, assumes that voters prefer governments that can increase the provision of public goods that match the levels of taxation and private consumption (Rogoff, 1990; Schneider, 2010, 127). Along these lines, PBC literature focuses on analysing the influence that political cycles have on the chosen level of public spending, taxes, and/or budget deficits. Nevertheless, later criticism dismissed the analysis of the deficit bias as a determinant to opportunism while, voters were later assumed to label those governments which increased their debt levels as non-competent (García & Hayo, 2020, 6; Schneider, 2010, 141).[1] Instead, efforts were placed to examine the exploitation of alternative fiscal policies hence, decomposing the government's expenditure, contrary to the size of the budget and, identifying those elements that followed a political cycle (García & Hayo, 2020, 6; Rogoff, 1990, 1; Vergne, 2009, 65). Subsequently, this shift gave origin to the theory of the political *budget* cycle. Thereafter, Rogoff (1990, 1) proposed a signalling model by using variables that break down the components of public spending and, placed emphasis on those that are immediately visible to the public as means of signalling governmental competence.

Numerous empirical studies have taken the same path to study the known "composition effect" that is central to today's PBC theories where aforementioned, electoral manipulation is accomplished by altering the components of public expenditures at a convenient point of time (Eslava, 2005; Schneider, 2010; Veiga & Veiga, 2007a, 2007b). Then again, work from Gonzalez (2002, 212) finds no empirical support of manipulation in the magnitude of expenditure nevertheless, finds supporting evidence of the government's budget reallocation strategies to invest in infrastructure and public transfers. Later, empirical results from Vergne (2009, 72)

[1] Furthermore, Schneider states that fiscal transparency decreases the facilitated access to debt instruments by setting institutional, domestic or international constraints and, notwithstanding, "…governments with sufficient budgetary policy autonomy may by all means exploit expenditure policies to gain voter support" (2010, 141).

confirms the rearrangement of the composition of pre-electoral spending tilted to current expenditures and away from capital expenditures without the need to raise the total expenditures or increasing the deficit.

Interestingly, PBC literature is also extended to the local level. For instance, Veiga and Veiga (2007, 60) investigate the behaviour of Portuguese Municipal mayors and show their intention to signal greater competence in pre-electoral periods by strategically shifting attention to specific expenditure categories such as i) other buildings: *social equipment* and *other*; ii) miscellaneous constructions: *streets and complementary works and, rural roads*. The authors further exploit the sample to determine the success of associating in the strategically increased expenditures thus, concluding opportunism "pays off" with a higher percentage of votes cast for the incumbent mayor (Linda G. Veiga & Veiga, 2007, 181). A similar study shows voters of Brazilian Municipalities reward shifts from current expenditures to public capital investments in the incumbent's increased probability of remaining in power. Equally important, Kneebone, R.D., McKenzie (2001) examine instead Canadian provinces and, maintain that a cycle exists in the visible components of investment expenditures. Likewise, Balaguer-Coll et al. (2015, 106) find an increase in the components of Municipal spending benefiting the election outcome in Spanish Municipalities, especially, pre-electoral current expenditures and capital expenditures. Drazen & Eslava (2010) analyse local public finances for Colombian Municipalities and find support for voters' preferences to fiscal conservatism as the share of votes for the incumbent party decreases in the level of the pre-electoral deficit nevertheless, still find existing PBCs in the increased public investment. Similarly, the chances of re-election for the Israeli local government are penalized for incurring higher levels of debt but, benefiting from the shift of resources to education and development projects (Brender, 2003).

Altogether, PBC literature has received increasing attention from scholars by placing efforts to prove the causality of election cycles in discretionary fiscal policies that are potentially characterised to be economically unsustainable. Until recently, numerous studies provide diverse theoretical and empirical approaches that support the theories of PBCs. Researchers conclude that politicians willing to increase the likeliness to be chosen for a second term will associate with opportunistic fiscal policies aiming to appeal to the electorate (Enkelmann & Leibrecht, 2013; Eslava, 2005; Shi & Svensson, 2003; Veiga & Veiga, 2007b; Vergne, 2009).

In the next section. I introduce the set of assumptions on which I establish the foundation of my analysis.

3. PBC Scenario

Conventionally, in PBC models the principal actors to consider are primarily; i) the population of voters that decides whether to keep an incumbent, ii) the incumbent government who can react to the foreseeable electorate result and, iii) the rest of the parties competing for election (Ashworth, 2012, 185).[2] As previously seen, the PBC results from a government's willingness and ability to exert discretionary fiscal policy that consequently increases their chances of re-election. The population of voters is assumed to behave rationally where their decision to choose an incumbent government or not is influenced by the public goods provided by the same, inasmuch, the government behaves competently. The voter's knowledge of the government's behaviour is restricted by their limited access to information. Given that the domestic economy remains stable, the electorate has no further incentive to become well informed as the assumption portrays they are satiated by the public provision of goods (Frey, 1976, 4). Furthermore, the electorate is assumed to influence the political process solely by exercising their vote.

The model is characterised to be present in democratic societies hence, based on the assumption that the electorate's decision is honoured by the government – at least that remains the case for a handful of studies (Frey, 1976, 5; Gonzalez, 2002, 219). Where, the government is chosen upon a sufficient number of votes on each election date hence, constraining the incumbent and the competing parties by that threshold. Under a democracy, the voter's aggregated preferences align to a preferred state of the economy which then translates into an electoral result – assuming the government remains honourable to the results. In this respect, the present government seeks to maximise the supporting votes subject to the constraints that pertain to the political system, as well as to the domestic and

[2] Moreover, political models often assume the "incumbency effect" has multiple advantages for the government seeking re-election as De Magalhaes states, i) financially, as there is a facilitated access to government financial sources; ii) strategic, as the incumbent may have the first-mover advantage; or iii) informational, as the electorate has better access to the information that concerns the current government and may, therefore create more trust (2015, 2).

international economic constraints. For instance, having to comply with an *a priori* established degree of fiscal solvency. [3]

Conventionally, the political cycle time setting is differentiated into periods that allow the identification of a government's discretionary behaviour based on a certain period, more specifically, in the presence or absence of an upcoming election. Arguably, the predetermined dates thus allow the possibility to adjust the timing of the policies so that the effect potentially increases the chances of the government's nomination (Sakurai & Menezes-Filho, 2008, 310). In this respect, the fixed election date provides a break in time where the voters choose the government on each instance and, thereafter, the election result signalises the completion of an election cycle which creates the preconditions for the next one (Frey, 1976, 10-17). In short, the emphasis on the election date aims to prove a differentiation in the fiscal behaviour amongst the pre-and post-election day.

Correspondingly, the government's re-election probability and the time they consider to remain in office are assumed to be base factors for the planning horizon that constitutes their today's budgeting plans (Frey, 1976, 9). Along these lines, studies focusing on conditional PBCs propose that the incumbent will not always act to increase their re-election chances and, will only engage in PBCs if they meet the pre-conditions to manipulate the public finances – in terms of ability and willingness (Benito et al., 2013). Hence, the literature suggests that as the election date approaches and the government foresees troubled chances of getting re-elected, their willingness to appeal to the voters will increase (Frey, 1976, 20). In this respect, the uncertainty of re-election is assumed to be linked to the government's willingness to rely upon the provision of the most tangible resources. Nevertheless, the provision of resources is constrained by the government's ability to use those instruments and by the voters' preferences for fiscal conservatism (Garrett & Lange, 1991; Gonzalez, 2002). D'Almeida & Mourao (2017, 565) supports the assumption that fiscal planning that contemplates insecurity of re-election may shorten the time horizon of economic policy planning and, consequently, compromise economic performance and growth. Conversely, Rogoff (1990, 27) and Schneider (2010, 141) assume that when a government recognizes a higher chance of re-election hence, considering a longer time

[3] This remains the case for Euro-zone countries, as public finances need to comply with the Treaties established by the European Central Bank (European Central Bank, 2003). Hence, economic constraints constitute also the ones set internationally by the Central Bank.

holding office, their selection of policy instruments will endeavour to maximise societal welfare in the long run.[4]

Having introduced the baseline assumptions of the PBC model, In the next section, I continue by introducing the case of the Municipalities of Madrid and my analysis' proposition.

4. Local PBCs: The Municipal Case of Madrid

Summing up, with the transition to a democracy thereby, establishing a decentralised fiscal system and the later participation in the EMU – presents *ex-ante* the local case of Madrid's Municipalities to be a subject of PBCs. Continuing with my analysis' proposal, I thus explore the PBC scenario in the Municipalities of Madrid. I consider the *a priori* assumptions provided by the aforementioned PBC literature as the backbone of my work. I also assume that the institutional framework endures the incumbent's ability to manipulate fiscal policies that increase their chances of re-election through the attempt of appealing to the electorate. Considering the above, my analysis questions if the mix of international, domestic and political regulatory frameworks that govern the Municipalities of Madrid are effective in obstructing opportunistic behaviour. *Ceteris paribus,* I proceed by empirically testing three main hypotheses with the first hypothesis *(H1)* as follows:

H1) There is a prevailing influence of the pre-electoral and electoral years affecting the most visible components of fiscal expenditures that the Municipal governments of Madrid opt for.

In the second part, the analysis will further be extended to test the following second hypothesis (*H2)*:

H2) Opportunistic (pre)electoral manipulation of the visible components of Municipal expenditures then translates into a higher percentage of votes cast for the re-elected incumbent.

As an addition to *H1*, the third part of the analysis contemplates a third hypothesis (*H3*) as follows:

[4] Following Rogoff assumptions that follow a welfare-theoretic framework where "…the incumbent's decision problem becomes equivalent to maximising the welfare of the representative agent" (1987, 25). Additionally, Schneider's work confirms "voters indeed seem to award a short term improvement of their welfare before elections" (2010, 141).

H3) The incumbent's political ideology has a positive influence in the shaping of the opportunistically manipulated components of fiscal expenditure. Where a (centre)left-wing government will choose short-term oriented expansionary policies to appeal to the electorate measured by the current expenditure categories. Contrarily, a (centre)right-wing incumbent will choose longer-term oriented expansionary policies to appeal to the electorate measured by the investment type of expenditures.

Central to the construction of my analysis, presented next are the underlying institutional and political frameworks that established the local governments of the Municipalities of Madrid. Along these, I also condense the respective set of domestic and international constraints to be considered.

Referring to the domestic institutional framework, the territorial organisation of the Autonomous Community of Madrid demanded the delegation of local administrative law. The local law extended the Community of Madrid into 179 Municipalities – recognising the local entities as the principal governing bodies that remain part of the Community of Madrid.[5] With this, the Municipalities regulated by the statutes of the local state legislation were designated full legal personality and autonomy while, also, are limited by the provisions of the same (Ley 2/2003). The formal organisation of the Municipalities grants both a governing and administrative body which is formed by the City Council of Madrid ("Ayuntamiento").[6] The latter is composed of the mayor and the Plenary ("El Pleno") formed by the Councillors and, chaired by the mayor– the number of appointees is proportional to each Municipal's population (Real Decreto 2568/1986, 1986).

In all Municipalities, elections are held every four years – on the fourth Sunday of May thus, following an exogenously established election date. Elections are structured in a system of party-list proportional representation, celebrated with ruling universal suffrage. Hence, the Mayor represents one of the Municipalities in the City Council– chosen among the elected Councillors and voted by the same (Almendral, 2012). Both Mayor and Councillors are granted

[5] Municipal territories, thereby, set to comply with the provision of Article 137 of the Constitution and Article 3 of the Statute of Autonomy for Madrid (Ley 2/2003, 2003).
[6] Article 35 of the Constitution of Spain.

independent and autonomous fiscal powers for the management of their joint local administration. Amongst the Mayor's main duties include; i) holding the powers of the local regime, ii) overseeing and administrating the Municipal activities, iii) the organisation of the City Council's administrative services and, iv) the coordination and functioning of the Municipal economic activities.

More specific, the Autonomous Communities and the Municipal authorities operate under a decentralised system of public finances were, the Municipalities are entitled to set their own revenue system. Hence, the Municipal government is given sufficient budgetary policy autonomy to manage their own revenue structure – where double taxation amongst all levels of government is strictly prohibited (Almendral, 2012, 102). Alongside, the local entities shall administer the expenses and payments of the Municipal fund. That is, the Municipalities are obliged to provide different basic services proportional to the size of the population. Besides that, the local governments can decide how and when to allocate their extra resources and where to spend them (Benito et al., 2013, 475) The decentralization of financial means enables the local governments to increase their sources of income. This allows, to a certain extent, subnational governments to gain the desired level of fiscal budgetary autonomy.

Complimentary to these, is the international framework that is set by the Eurosystem which imposes fiscal budget limitations to remain a binding member of the monetary union. In brief, the Stability and Growth Pact (SGP) is a treaty establishing the fiscal rules of the European Community, thus including Spain, and calls for enduring sustainable public finances by mandating member governments not to exceed a public deficit ratio of 3% of their GDP,[7] and the public debt ratio below 60% of their GDP.[8] The latter serves as a consolidation strategy for countries that remain with fiscal imbalances. Alongside, the treaty provides procedures to follow after a country has not fulfilled the fiscal requirements (European Central Bank, 2003). In addition to that, the Maastricht Treaty grants the European Central Bank (ECB) full independence over the monetary policy decision-making process established in the EMU. The main purpose of EMU is to guarantee the functioning of the system defined by a centralised

[7] "… or should have declined substantially and continuously and reached a level that comes close to the reference value" (European Central Bank, 2003).

[8] "...or should be sufficiently diminishing and approaching the reference value at a satisfactory pace" (European Central Bank, 2003).

monetary policy and a decentralised fiscal policy. The underlying set-up of "one monetary policy and many fiscal policies" calls for a challenge of international economic interdependence, as the international and domestic regulatory frameworks are compelled to support the objectives of the EMU. In the optimal scenario, the provided measures ensure the effective application of budgetary regulations and, decisions that support stability.[9]

In response to the internationally established deficit/debt limitations, the Central Government of Spain introduced the Budgetary Stability Law, extending the SGP constraints to the regional and local levels of government.[10] This law has the aim of easing the coordination between the Spanish and the European budgetary principles (Almendral, 2012, 117; Benito et al., 2013, 475). The latter gives authority to the Central Government to establish organic laws that relate to the local public budget – amongst others.[11] In that scope, the organic laws set structural debt and deficit ceilings to the Autonomous Communities' public budget – proportional to their GDP levels (Agencia Estatal del Boletín Oficial del Estado, 1978, p. 38). Meanwhile, the Municipalities must also comply with a balanced budget. [12] More specific, the Central Government has opted for *ex-ante* organic laws that restrict the total Municipal debt and vary according to their type of indebtedness – with the end goal of obliging the local governments to correct their imbalances.

Next, I describe the data, sources and variables utilised in this paper.

4.1 Collected Data and Variables

In this analysis, I put the PBC theory into empirical practise with the use of a newly prepared dataset, structured as panel data. The constructed data includes economic, political and demographic variables set at a yearly basis ranging from 2000 to 2018, encompassing four elections for each Municipality. In the data, I include four local elections for Councillors taking

[9] Likewise, compliance with the Treaties pledges the stability and long run orientation of fiscal policy. If a country persists missing the desired target, on a yearly basis, sanctions may follow thereafter.
[10] Outlined by Article 135 of the constitution: "All Public Administration shall adapt their actions to the principle of budgetary stability".
[11] "Organic laws are those relating to the development of fundamental rights and public liberties, those approved by the Statutes of Autonomy and the general electoral regime, and others provided for in the Constitution" (Agencia Estatal del Boletín Oficial del Estado, 1978).
[12] Furthermore, the Article 135 states "An organic law shall set the structural deficit ceiling allowed for the State and for the Autonomous Communities according to their Gross Domestic Product. Local Authorities shall present a balanced budget (Agencia Estatal del Boletín Oficial del Estado, 1978).

place during the years 2003, 2007, 2011 and 2015. I also use the data for the elected Municipal Mayor, collected from the Ministry of the Interior's electoral results database (Ministerio del Interior 2013). The sample considers the 179 Municipalities that are part of the Community of Madrid, all celebrated with a synchronized fixed election date determined by national law. Namely, the exogenously established election date allows avoiding endogeneity problems that may arise as an opportunistic incumbent may manipulate the electoral schedule to meet the desired economic situation (Benito et al., 2013, 469). I collected the economic, demographic and political data from the National Institute of Statistics of the Community of Madrid, whilst data availability is subject to vary across variables (Instituto de Estadística, 2019). The Ministry of Economy and Treasury (Orden EHA/3565/2008, 2008) provides a more detailed description of the local entities' approved budget structure. I adjusted the yearly volume variation of the government's aggregate year-end fiscal data with the reference values of 2015 (*Contabilidad Nacional Anual de España. Revisión Estadística 2019*, 2019).

To test the hypotheses, I use the components of fiscal expenditures as dependent variables which aim to track the fiscal behaviour through the budgetary adjustments realised on the expenditure side. As originally proposed by Rogoff, I select the most visible components of expenditure and I disaggregate them into three main types: current expenditure, investment expenditure and debt service. Thus, with the set of variables I selected, I seek to provide a rationale for the discretionary adjustments in the specific (most visible) components of public expenditure which, I argue, are politically motivated. Table A1 of the Appendix section summarises the expenditure variables and their respective descriptive statistics.

Within the Current Expenditure category, I include the variables: i) general payments (*generalexp)*, ii) current transfers *(transfexp)* and, iii) protection and social promotion *(socialexp)*. Accounting for the general expenditures, the *generalexp* variable includes the expenditures that support all the general administrative functions of the local entity.[13] The *transfexp* variable is the year-end sum of current transfers or grants and capital transfers that support the private and public sector's financing of goods and services and, capital operations.[14]

[13] Includes the general payment transfers to other levels of government that are proportional to the Municipal income and their corresponding quotas.

[14] Current transfers are donated to, not limited to, parties of intergovernmental nature, social security programmes, commercial and corporate entities, local entities, private companies, families, individuals,

The *socialexp* variable comprises the year-end sum of expenditures in social protection and welfare programmes such as the provision of pensions and retirement programmes and, worker's social services and compensations.

In the investment accounts, I include the variables: i) urban infrastructure (*urbanexp*), ii) rents, maintenance and repairs (*servexp*), iii) education and health (*eduexp*) and, iv) real investment (*realexp*). The *urbanexp* variable compromises the year-end sum of expenditures in basic public services that include the provision of Municipal security and civil protection, mobility, housing, water, cleaning services and, climate protection. Examples include the construction and maintenance of roads, parks and housing. Meanwhile, the *servexp* variable is the year-end sum of expenditures in goods and services that support the functions of the local entities.[15] The *eduexp* variable is the year-end sum of investment expenditures in education, health, culture and sports sectors and examples include investments in the construction and functioning of public hospitals, schools, libraries, museums and sports centres. Whereas, the *realexp* variable is the year-end sum of public (real) investment expenditures and, includes the planning and construction of public infrastructure projects and the acquisition of assets with a depreciative nature.

In the debt service expenditure category, I include the *debtexp* variable which refers to the year-end sum of payments that cover the outstanding local debt. Furthermore, I included the *debtexp* variable to get an overall idea of how effective the Budgetary Stability Law is in terms of curbing the local governments' level of debt and in correcting the present fiscal imbalances.

As mentioned, the explanatory variables in my analysis aim to explain the variation in the dependent variables and are selected to identify the potential presence of an electoral cycle. Here, the explanatory power of the political variables is central to testing my hypotheses. Hence, I consider the political variables: i) election *(election),* ii) pre-election *(preelection)*, iii) percentage of votes *(%votes)* and iv) party ideology *(ideology)*. Most importantly, I track the timing of elections with the *election* variable which is merely a dummy variable taking the value

institutions, international organisations. Capital transfers are donated to, not limited to, parties of intergovernmental nature, private companies, individuals, institutions, international organisations (Orden EHA/3565/2008, 2008).

[15] Public goods and services include: repairs, maintenance and conservation of infrastructure and transport, rent of movable and immovable property, supply of materials, work carried out by public or private entities or institutions (Orden EHA/3565/2008, 2008).

of 1 for the electoral years and 0 otherwise while the *preelection* variable takes a value of 1 for the pre-electoral years and 0 otherwise. Here, I assume the *preelection* variable is regarded as more reliable to explain opportunistic behaviour since elections take place in the second quarter of the year hence, the *election* variable already reflects post-electoral effects. Next, the *%votes* variable is used to test for *H2* and is, as indicated by its name, the percentage of votes attained by the mayor's political party.[16] In my analysis I consider the municipal parties; i) Popular Party (PP), ii) the Spanish Socialist Workers Party (PSOE), iii) the Unified Left (IU), iv) the Progress and Democracy Union (UPyD) and, v) Citizens (CS).[17] Hence, the *ideology* variable used for *H3,* groups those political parties into the left-right political spectrum by using a dummy variable taking the value of 1 for the centre-right to right-wing parties and 0 for the centre-left to left-wing parties. The complete list of the Municipal political parties considered for this paper, ideological classification and descriptive statistics are found in table A2 of the Appendix section.

As control variables, I utilise: i) unemployment *(unemp)*, ii) total population *(*$\ln(pop)$*)*, iii) current debt *(currentdebt)* and, iv) total income *(totalincome)*. The *unemp* variable is the year-end persons registered as unemployed per 100 inhabitants, which, I consider as an indicator of the state of the economy. With this, controlling for the economic voting hypothesis that voters hold the government responsible for economic outcomes and, in turn, is reflected in the re-election probabilities (Balaguer-Coll et al., 2015, 100; García & Hayo, 2020, 13; Linda Gonçalves Veiga & Veiga, 2010, 2).[18] The *(*$\ln(pop)$*)* variable is the year-end Municipal population in its natural logarithmic form that aims to control for the population trend and the size of the population for each Municipality. The *currentdebt* variable is the year-end sum of the total outstanding debt. The latter attempts to control the government's liabilities and for the constraints put forward by the Budgetary Stability Law. The *totalincome* variable defined as the year-end sum of total income incurred in that Municipality, this variable aims to control for the government's revenue side. Altogether, these control variables aim to overcome identification

[16] The percentage of votes variable is defined as a value between 0-100. Thus, at the time of interpreting the coefficients, a transformation of *100 is not required.

[17] The selection of the parties was based on data availability.

[18] Balaguer-Coll et al. explores the distribution of GPD growth for the different Spanish Municipalities and finds the differences to be negligible in the effect to re-election (2015). Hence, considering the unemployment rate a better indicator of the Municipality's economic situation in Spain.

problems that arise when it is not clear whether the adjustments in fiscal policy are merely acting as automatic stabilisers of the economy or if they are, by all means, favouring the upcoming elections.

The next section provides the model specification and estimation methods I used in my analysis.

4.2 Model Specification and Estimation Method

The empirical framework presented in this analysis follows the conventional PBC models targeted at the local level where the fiscal policy variables depend on the timing of elections, as well as other controls. (Balaguer-Coll et al., 2015; Chortareas et al., 2016; Drazen & Eslava, 2010; Veiga & Veiga, 2007a, 2010). Consistent with the traditional analysis of government policy and the theory of the PBC, the following equation (1) yields the baseline model which tests for *H1* as follows:

(1)

$$y_{ijt} = \alpha + \beta_j y_{ijt-1} + \gamma election_t + \sigma preelection_t + \delta_k X_{ikt-s} + \partial timetrend_t + \mathcal{E}_{it}$$

$$\mathcal{E}_{it} = \theta_i + u_{it}$$

where i indicates the different Municipalities, t represents the current year, s the lag level and α is the constant term. On the left side of the equation, the dependent variable tracks the Municipal's fiscal activity across time for each Municipality and is denoted by y_{ijt} with j accounting for one of the visible expenditure categories mentioned in table A1 of the Appendix section. Hence, for each different y_j, I run a separate regression. In the right-hand side of the equation, I add the first lag of the dependent variable which effect is captured by β_j, which purpose is to track the timing of the adjustments (or the linearity) in fiscal activity and, to examine the autoregressive component of the dynamic model (Veiga & Veiga, 2007, 51). Central to the analysis are the dummy variables *election and preelection* considering the election and pre-election year, respectively, and aiming to capture the effect of the electoral cycle through the coefficients γ and σ. The term X_{ikt-s} is a matrix of controls aiming to explain the portion of the variation for each dependent variable. The control matrix includes the variables *unemp*, $\ln(pop)$, *currentdebt*, and *totalincome* – whose effect is captured by the coefficient δ_k. While,

recommended by Roodman (2009) the *timetrend* variable, which effect is captured by ∂, aims to hold the assumption of no autocorrelation across individuals. The term θ_i controls for the Municipals' fixed effects whilst u_{it} is the random error term assumed to capture the part of voting behaviour that cannot be predicted as well as the idiosyncratic shocks (Drazen & Eslava, 2001, 29).

Initially with an Ordinary Least Squares (OLS) estimator whose Hausman test alludes to control for the fixed effects (FE) whose purpose is to address the presence of each Municipal individual attributes contained in my sample (θ_i). Since my model includes a lag of the dependent variable, the resulting fixed effects estimation suffers from the "dynamic panel bias" happening as the variables no longer behave exogenously and thus, cannot be considered fixed across repeated samples (Nickell, 1981). Additionally, given that my panel data contains a larger number of Municipalities (N = 179) compared to its time length (T = 19), the biasedness in the estimator is not mitigated by a growing T. With these, the OLS orthogonality condition is violated resulting in inconsistent estimates and, showing patterns of heteroskedasticity. To address the issue, I follow a similar approach performed by Veiga and Veiga (2007) that addresses endogeneity issues through the introduction of a system of simultaneous equations which combines a set of moment conditions that yield a first-differences transformed equation and a levels equation. The technique is based on the Generalized Method of Moments (GMM) dynamic panel estimator firstly developed by Arellano and Bond (1991) which is known to deal with panel data biases. With this, I tackle the limitations of my sample and the endogeneity attribute of my model. The method draws instruments from within the dataset, assuming there are no better instruments at hand. Initially, first-differentiating the variables of equation (1) results in a difference-GMM transformed equation (2) as follows:

(2)

$$\Delta y_{ijt} = \beta_j \Delta y_{ijt-1} + \gamma \Delta election_t + \sigma \Delta preelection_t + \delta_k \Delta X_{ikt-s} + \Delta u_{it}$$

where the set of controls X assumed to be predetermined variables (that are not strictly exogenous) where, I use the current level X_{ikt} and lags X_{ikt-1} to X_{ikt-3} to instrument for ΔX_{ikt-s} . For a variable that is predetermined, the first lag is a valid instrument of current values as the error term is assumed to be uncorrelated to present and future values (Roodman, 2009).

Despite the argumentation, the author recommends adding all available lags considered valid as instruments, I have, however, restricted the maximum lag to three periods to avoid capturing the effects of the previous election also, to avoid excluding more observations. Consistent with Arellano & Bover (1995) findings, the predetermined variables are treated as correlated to the individual effects. Additionally, I consider a set of variables assumed to be *a priori* strictly exogenous to the error term – these are instrumented standardly. There, I consider the following regressors: the pre-electoral and electoral year dummies and the time trend. With this, the individual fixed effect is expunged from the error term as it does not vary over time.[19]

Acknowledging economics as the science of trade-offs, here the singling out of the fixed effects comes at the cost of introducing a correlation in the error term as Δu_{it} and Δu_{it-1} share the term dated t-1 (Roodman, 2009, 105). In light of this assumption, I instead use the lag levels y_{ijt-2} and y_{ijt-3} to instrument for Δy_{ijt-1}, aiming to reduce the degree of correlation. However, the instruments are always slightly correlated to the endogenous components of the regressors and hence, limiting the GMM estimator as the correlation in the error term does not equal exactly zero (Roodman, 2009). The introduction of the asymptotic efficiency gains of the GMM estimator, occurring as the number of instruments increases along with the inclusion of more periods, induces an additional cost, namely, a finite sample biased estimator (Heid et al., 2012). Most importantly, I consider these limitations to the system-GMM estimator when specifying my model.

Blundell and Bond (1998) show that in cases where the sample proves to have attributes of stationarity, the system-GMM is a more efficient estimator compared to a difference-GMM. This case situates as the instruments used for a difference-GMM appear to be weakened and unprecise when variables appear close to a random walk. After testing for a unit root, I found my panel has attributes that are rather stationary and thus, past levels are not predictive of future changes so that, untransformed lags appear to be weak instruments for transformed variables (Blundell & Bond, 1998). For this reason, it seems plausible to opt for a system-GMM estimator where "past changes may indeed be more predictive of current levels than past levels are of current changes" (Roodman, 2009, p. 114). In this case, to instrument for y_{ijt-1} in equation (1) I use the difference moment condition Δy_{ijt-1} obtained from the transformed

[19] First differencing removes the individual fixed effects θ_i by $\mathcal{E}_{it} - \mathcal{E}_{it-1} = (\theta_i - \theta_i) + (u_{it} - u_{it-1}) = u_{it} - u_{it-1}$

equation (2) hence instrumenting levels with first-differences. To elaborate, the instruments in levels are used for the first differences equations and thereby, rendering instruments for the levels equations (Arellano & Bover, 1995, 48). In turn, as the stationarity assumption holds, the system-GMM estimator provides instruments that are orthogonal to the Municipal FE θ_i hence, more moment conditions become available.[20]

As mentioned, if *H1* can be supported, it follows that the dependent variables that proved to be significant in *H1* will serve as a central explanatory variable in the equation testing for *H2*. Hence my second part of the analysis follows the same estimation approach whereas, here yielding equation (3) testing for H2 as follows:

(3)

$$\%Votes_{pit} = \omega + \Omega\%Votes_{p,t-4} + \varphi_j y_{ijt} + \lambda_k X_{ikt-s} + \emptyset timetrend_i + \varepsilon_{it}$$

$$\varepsilon_{it} = \theta_i + u_{it}$$

where similar to above, i indicates the different Municipalities, t represents the current year, s the lag level and ω is the constant term. Additionally, $\%Votes_{pit}$ is the share of votes attained by the re-elected mayor's party p in the Municipality i in the election at t. In this case, I award party *p* to be the winner once an elected member of that party is voted for mayor.

Following the same approach as before, equation (3) is instrumented with system-GMM moment conditions. The dependent variable *%votes* is instrumented in the levels equation with the differences as follows: $\Delta\%Votes_{pit} = \Delta\%Votes_{pit} - \Delta\%Votes_{pi,t-4}$. Here, I track the change in the percentage of votes obtained by the re-elected incumbent in the current year t from the percentage of votes obtained in the previous victorious election $t-4$ (as elections are held every four years). In the right-hand side of the equation, I add a lag of the *%votes* variable which attempts to control for the previous electoral results.[21] The instruments are now: $\Delta\%Votes_{pit-4} = \Delta\%Votes_{pit-4} - \Delta\%Votes_{pit-8}$ where similar to before, the percentage of votes obtained in the previous election would be differentiated with the values of the election celebrated during the period $t-8$ (this time even if the incumbent was not victorious in period

[20] Here assuming that the Municipal FE are uncorrelated to the changes in our variable: $E[\Delta y_{it-1}\theta_i] = 0$,as well as uncorrelated to the idiosyncratic error u_{it-1} such that $E[\Delta u_{it-1}\theta_i] = 0$

[21] Note that, for all the periods, the %votes variable is only regressed when the incumbent was re-elected. With this, I avoid including the percentage of votes of previous winning parties which, later, were not re-elected. Here, I aim to singling out the effects of manipulating the public expenditures that helped a re-election.

$t-8$). The components of fiscal expenditures used as the dependent variable in equation (1) are now the central explanatory variables to test for *H2*. Thus, the vector of parameters φ_j will be interpreted as the reflection of the advantage the incumbent obtains when associating themselves in the manipulation of the components of expenditure. The term X remains the set of controls that are treated as predetermined variables. This time, out of the exogenous variables used for testing *H1*, the *timetrend* variable is the only exogenous variable retained in equation (3). The error term still accounts for the individual effects and the idiosyncratic shocks.

As mentioned, *H3* is an addition to *H1* that explores the influence of the incumbent's party ideology in the opportunistically manipulated components of fiscal expenditure. Thus, with the third part of my analysis adding to equation (1) the ideological motives. Hence, extending equation (1) and yielding equation (4) that tests for *H3* as follows:

(4)

$$y_{ijt} = \alpha + \beta_j y_{ijt-1} + \gamma election_t + \sigma preelection_t + \vartheta ideology_t + \delta_k X_{ikt-s} \dots + \partial timetrend_t + \mathcal{E}_{it}$$

$$\mathcal{E}_{it} = \theta_i + u_{it}$$

where all remains as specified for equation (1) except that now I include the dummy variable *ideology* which controls for the government's political position while holding office at year t, which effect is captured by the coefficient ϑ.

Next with sections 4.3, 4.4 and 4.5, I continue to the testing of my hypotheses following the methods described above. First, I start with the estimation results of testing *H1*.

4.3 Effect of Elections in the Local Public Budget

I advance with the testing of H1 through the use of the different estimation methods: OLS FE and system-GMM.[22] I report the detailed system-GMM results associated with estimating the simultaneous equations (1) and (2) in table 1 next.

Table 1

Detailed system-GMM Estimation Results: Effect of (pre)elections on the Visible Components of Expenditure

	system-GMM estimator: simultaneous equations and robust standard errors Model specification (1) for levels equation and (2) for first-differences equation							
Expenditure Category as Dependent Variable:	General Payments	Current Transfers	Protection and Social Promotion	Urban Infrastructure	Rents, Maintenance and Repairs	Education, Health, Culture and Sports	Real Investment	Debt Payments
	(generalexp)	*(transfexp)*	*(socialexp)*	*(urbanexp)*	(servexp)	(eduexp)	(realexp)	(debtexp)
Dep. Variable (t-1)	-0.102	0.527***	0.921***	0.186***	0.939***	0.723***	0.524***	0.337***
	(-0.45)	(5.46)	(5.26)	(6.43)	(16.95)	(21.83)	(86.98)	(11.38)
pre-election	-381.6	-54.58	460.5***	-1207.3*	1303.1**	-121.3	827.4*	-1740.9***
	(-0.73)	(-0.21)	(2.62)	(-1.95)	(1.99)	(-0.83)	(1.94)	(-2.80)
election	-72.78	-310.0	182.2	534.6**	-1187.7	194.2**	-1339.1	-2262.5*
	(-0.31)	(-0.86)	(0.99)	(2.22)	(-0.96)	(2.43)	(-0.84)	(-1.92)
unemp	20.47	78.81	-1.472	-5.362	-194.6	34.62*	-204.8	98.23
	(0.16)	(0.86)	(-0.05)	(-0.06)	(-1.26)	(1.73)	(-1.10)	(0.59)
unemp (t-1)	110.4	79.18	52.07**	3.188	60.30	27.58	5.669	304.6*
	(0.83)	(1.22)	(2.00)	(0.03)	(0.57)	(0.77)	(0.07)	(1.96)
unemp (t-2)	-203.3*	190.6**	46.31	297.7**	239.4***	6.601	20.96	-960.7***
	(-1.87)	(2.22)	(1.09)	(2.36)	(2.64)	(0.21)	(0.32)	(-3.08)
ln(pop)	-23291.2**	10415.2**	2724.7**	16919.5**	4701.8	121.4	1308.8	-26792.2**
	(-2.55)	(1.99)	(2.09)	(2.59)	(1.24)	(0.07)	(0.28)	(-2.22)
ln(pop) (t-1)	8219.7	-1176.4	108.7	-2521.8	-6365.5	1277.8	-5504.6	-12218.2
	(1.60)	(-0.46)	(0.10)	(-0.54)	(-1.14)	(1.25)	(-0.68)	(-1.43)
ln(pop) (t-2)	17474.0**	-10273.2**	-2994.6**	-16233.5***	1770.5	-1381.8	4556.4	42516.7**
	(2.46)	(-2.45)	(-2.28)	(-2.66)	(0.76)	(-0.99)	(1.12)	(2.51)
currentdebt	0.0535**	0.00857	-0.00191	0.0263**	0.00673	-0.0147***	-0.0134***	-0.555***
	(2.26)	(0.83)	(-0.18)	(2.05)	(0.52)	(-6.01)	(-7.02)	(-7.41)
currentdebt (t-1)	-0.0598***	0.0153***	-0.0551***	0.0997***	-0.134***	0.0241***	-0.0210***	0.706***
	(-4.27)	(2.92)	(-15.15)	(9.68)	(-26.49)	(5.77)	(-7.12)	(13.93)
currentdebt (t-2)	-0.0182	-0.115***	0.0498***	-0.229***	0.106***	-0.0453***	0.0626***	0.190
	(-0.78)	(-3.83)	(5.07)	(-5.22)	(13.95)	(-5.80)	(10.31)	(1.64)
totalincome	0.0345***	-0.0287***	0.0261**	0.122***	0.0206**	0.0162***	-0.0844***	0.760***
	(2.80)	(-7.54)	(2.48)	(12.93)	(2.47)	(11.43)	(-15.27)	(14.60)
totalincome (t-1)	-0.00133	0.0683***	0.0432***	-0.00953	0.142***	0.0147***	0.147***	-0.779***
	(-0.06)	(2.92)	(5.63)	(-0.71)	(105.66)	(5.55)	(54.14)	(-8.05)
totalincome (t-2)	0.0957***	0.112***	-0.0576***	0.324***	-0.129***	0.0343***	-0.0775***	-0.293***
	(3.44)	(6.12)	(-3.10)	(8.66)	(-6.92)	(10.40)	(-25.55)	(-4.40)
timetrend	39.05	182.0***	75.73***	396.8***	-153.5	158.9***	-115.5	-928.6***
	(0.37)	(2.76)	(2.93)	(3.08)	(-1.19)	(4.13)	(-0.71)	(-2.78)
constant	-17810.2***	1618.8	-862.6	4776.6	541.7	-3201.9**	729.7	-6321.4
	(-3.06)	(0.45)	(-0.92)	(1.23)	(0.22)	(-2.31)	(0.25)	(-0.74)
Observations	1075	1224	1224	1075	1224	1075	1224	1224
# of instruments	121	142	142	121	142	121	142	142
F	1283439.3	1430373.2	67310303.8	21466385.1	198804948.3	17109786.6	8979606.2	2336931.9
Hansen Test	0.0243	0.0153	0.0216	0.00134	0.0120	0.000722	0.0100	0.0219
Sargan Test	7.67e-215	6.46e-144	8.29e-128	8.75e-169	3.33e-106	2.23e-110	1.90e-86	4.40e-170
AR(2)	0.163	0.317	0.506	0.0931	0.299	0.422	0.318	0.471

Two-step system-GMM regression results of estimating equations (1) and (2) with robust standard errors using two lags of the dep. variable and three lags for each predetermined variable as instruments.

T statistics in parentheses. Significance: * p<.10, ** p<.05, *** p<.01

Hansen tests for the joint validity of the instruments used for the GMM estimators. AR(2) tests for autocorrelation of order 2. P-values are reported.

Sargan tests the joint validity of the over-identifying restrictions assuming a asymptotically distribution $\chi 2$. P-values are reported.

[22] All GMM estimations are performed with the use of the xtabond2 command in Stata (Roodman, 2009). Furthermore, I dismissed the use of the orthogonal option as my panel data is reported to be strongly balanced.

Results represent a two-step estimation using robust standard errors where each column represents a different regression performed for each component of expenditure. I report the T-statistics in parentheses and the results marked with one, two and three asterisks are significant at the 10%, 5% and 1% levels, respectively (this remains the case throughout the rest of the analysis for all the tables reporting estimation results). I present the number of observations and instruments at the foot of the table, as well as the F statistic. Also, included there are the Hansen/Sargan tests for the null hypothesis of the joint validity of the instruments and, the AR(2) test for the null of no second-order autocorrelation of the residuals–all where I report the P-values.

As reported in the Hansen test, I can reject the null across all instances with at least a 5% significance level. With these, the choice of instruments can be regarded as valid.[23] Whilst, I cannot reject the AR(2) test's null across the different instances, supporting the inclusion of the second lag of the dependent variable.[24] These specification tests show my models are well-specified. To instrument for the lag of the dependent variable in the transformed equation, I use the lagged levels two and three whilst, for the levels equation I employ the lagged differences between periods one to three. I treat the controls as predetermined and use the current and lagged levels one to three as instruments for both transformed and levels equations. I use the strictly exogeneous variables as their own instruments and only for the levels equation. Throughout all the estimations I perform in this paper, the treatments employed for both predetermined and exogenous variables remain done so consistently.

I then provide a robustness check of the system-GMM estimator by employing an OLS FE estimator. Similarly, I present the detailed OLS FE estimation results associated with equation (1) in table 2 presented next.

[23] In this analysis, I only consider relevant the Hansen test statistic results. When using a system-GMM estimator, the Sargan test is no longer considered asymptotically valid as it relies in an inefficient weighting matrix (Hansen, 1982). However, the Sargan test results are still reported.

[24] The AR(2) test's null can be rejected for the *urbanexp* variable at a 10% significance level. Nevertheless, I still include the second lag of the variable as the AR(2) test value lays close to the 90% confidence interval.

Table 2

Detailed OLS FE Estimation Results: Effect of (pre)elections on the Visible Components of Expenditure

	OLS estimator: FE and robust standard errors							
	Model specification (1)							
Expenditure Category as Dependent Variable:	General Payments	Current Transfers	Protection and Social Promotion	Urban Infrastructure	Rents, Maintenance and Repairs	Education, Health, Culture and Sports	Real Investment	Debt Payments
	(generalexp)	*(transfexp)*	*(socialexp)*	*(urbanexp)*	(servexp)	(eduexp)	(realexp)	(debtexp)
Dep. Variable (t-1)	-0.363*	-0.0722	0.324***	0.0474***	0.160	0.488***	0.253	-0.0375
	(-1.94)	(-0.29)	(5.80)	(3.39)	(0.72)	(8.42)	(1.08)	(-0.91)
pre-election	-50.58	3.539	389.9***	-1432.8***	1086.7**	-123.2*	1179.9*	-653.2*
	(-0.14)	(0.02)	(3.29)	(-3.14)	(2.40)	(-1.92)	(1.82)	(-1.91)
election	5.156	-504.0*	121.3	-109.3	-818.3	35.3	-1150.3	296.4
	(0.03)	(-1.72)	-0.88	(-0.74)	(-1.37)	(0.58)	(-0.93)	(1.13)
unemp	-72.14	-15.25	85.33*	-23.12	484.2	-23.71	309.3	-18.52
	(-1.41)	(-0.17)	(1.69)	(-0.51)	(1.57)	(-1.31)	(0.97)	(-0.13)
unemp (t-1)	19.55	-14.87	42.54*	58.05	90.30	4.090	65.37	329.5***
	(0.55)	(-0.50)	(1.87)	(1.39)	(0.81)	(0.27)	(0.60)	(3.46)
unemp (t-2)	113.6**	60.54	-99.92*	71.71*	-440.2	13.27	-502.1	-87.98
	(2.08)	(0.66)	(-1.77)	(1.69)	(-1.30)	(0.97)	(-1.00)	(-0.64)
ln(pop)	-1330.3	-572.4	1471.7	-3703.5*	12210.6*	-183.4	8927.0	-2514.7
	(-0.61)	(-0.27)	(1.09)	(-1.73)	(1.66)	(-0.33)	(1.10)	(-0.71)
ln(pop) (t-1)	1221.9	-579.1	-664.1	2072.2	-5573.0	1275.4**	-7044.0	-1873.3
	(0.84)	(-0.30)	(-0.68)	(1.10)	(-1.50)	(2.09)	(-0.83)	(-0.63)
ln(pop) (t-2)	3219.0**	2978.2*	-273.9	1430.2	-253.8	346.2	1035.7	-4820
	(1.98)	(1.74)	(-0.34)	(0.81)	(-0.08)	(0.67)	(0.27)	(-1.23)
currentdebt	0.0409**	-0.108*	-0.0413*	-0.0694***	-0.166	-0.0361***	-0.167	-0.0535
	(2.20)	(-1.91)	(-1.83)	(-4.12)	(-1.31)	(-4.40)	(-1.18)	(-0.81)
currentdebt (t-1)	-0.0432***	0.0884**	-0.00804	0.181***	0.102	0.0415***	0.123	0.166**
	(-2.77)	(2.13)	(-0.46)	(6.95)	(0.79)	(4.70)	(0.94)	(2.29)
currentdebt (t-2)	-0.0157	-0.0614***	0.0516***	-0.158***	0.179**	-0.0255***	0.152	0.0414
	(-0.81)	(-3.43)	(3.16)	(-7.81)	(2.13)	(-11.67)	(1.49)	(1.13)
totalincome	0.00788	-0.0355***	-0.0131***	0.0436***	-0.171***	-0.00346**	-0.198**	0.978***
	(0.43)	(-14.86)	(-4.05)	(4.92)	(-3.17)	(-2.53)	(-2.16)	(28.19)
totalincome (t-1)	-0.0202	-0.0914	-0.0255	-0.154***	-0.255	-0.0254***	-0.116	0.172
	(-0.92)	(-1.28)	(-0.80)	(-7.31)	(-1.16)	(-4.10)	(-0.49)	(1.49)
totalincome (t-2)	0.0714***	-0.044	-0.0920***	0.178***	-0.356**	-0.0029	-0.274	0.380***
	-2.73	(-0.67)	(-3.39)	-7.88	(-2.37)	(-0.45)	(-1.57)	(4.66)
constant	-19312.4	1677.9	4709.8	18444.4	-5259.8	-6282.8	4362.8	-5664.4
	(-1.33)	(0.17)	(0.64)	(1.13)	(-0.15)	(-1.31)	(0.12)	(-0.19)
Observations	1075	1224	1224	1075	1224	1075	1224	1224
R-squared	0.689	0.852	0.812	0.885	0.72	0.885	0.635	0.984
F	1318.2	77760.3	35203.5	8001.8	38683	29801.9	33064.3	410787

Panel OLS regression results of estimating equation (1) controlling for municipal individual FE.

T statistics in parentheses

Significance: * p<.10, ** p<.05, *** p<.01

Results control for municipal individual FE with robust standard errors that target the present heteroskedasticity. As before, each column represents a different regression for each component of expenditure. I show the number of observations at the foot of the table, as well

as the R-squared and F statistic.[25] In the same way, I include a lag of the dependent variable in the explanatory side of the equation. For the control variables, I use the current values and the first and second lags. Whereas, with the political variables, I only include the current values.

To enable the easing of the interpretation, I will refer to table 3 presented next. The table summarises and compares the estimation results of both system-GMM and OLS FE estimators mentioned above (table 1 and table 2, respectively).

Table 3

Estimation Results Estimator Comparison: Effect of (pre)elections on the Visible Components of Expenditure

	OLS FE		system-GMM	
	(1)	(2)	(3)	(4)
Dependent variable: expenditure category	Pre-election Year dummy *(preelection)*	Election Year dummy *(election)*	Pre-election Year dummy *(preelection)*	Election Year dummy *(election)*
General Payments	-50.58	5.156	-381.6	-72.78
(generalexp)	(-0.14)	(0.03}	(-0.73)	(-0.31)
Current Transfers	3.539	-504.0*	-54.58	-310
(transfexp)	(0.02)	(-1.72)	(-0.21)	(-0.86)
Protection and Social Promotion	389.9***	121.3	460.5***	182.2
(socialexp)	(3.29)	(0.88)	(2.62)	(.99)
Urban Infrastructure	-1432.8***	-109.3	-1207.3*	534.6**
(urbanexp)	(-3.14)	(-0.74)	(-1.95)	(2.22)
Rents, Maintenance and Repairs	1086.7**	-818.3	1303.1**	-1187.7
(servexp)	(2.4)	(-1.37)	(1.99)	(-0.96)
Education, Health, Culture and Sports	-123.2*	35.3	-121.3	194.2**
(eduexp)	(-1.92)	(0.58)	(-0.83)	(2.43)
Real Investment	1179.9*	-1150.3	827.4*	-1339.1
(realexp)	(1.82}	(-0.93)	(1.94)	(-0.84)
Debt Payments	-653.2*	296.4	-1740.9***	-2262.5*
(debtexp)	(-1.91)	(1.13)	(-2.80)	(-1.92)

The table shows the estimated effect of the (pre)electoral year dummies on the dependent variable comparing OLS FE and system-GMM estimators.
Each expenditure category represents a different regression. T statistics in parentheses.
Significance: * p<.10, ** p<.05, *** p<.01
Refer to tables 1 and 2 of this section for the detailed system-GMM and OLS FE estimation results, respectively.

[25] The R-squared values, across all of the instances, are above 60% – implying an overall good fit of the models.

Central to my analysis, the table reports the estimated effect of the *preelection* and *election* dummy variables on the different visible components of expenditure. Columns (1) and (2) employ the OLS FE estimators whilst, columns (3) and (4) the system-GMM estimators. When comparing the estimation results of the different estimators in column (1) and (3), the coefficients appear to take the same sign most of the times. The only exception is for the *transfexp* in column (1) where with the use of the OLS FE estimator, the coefficient is positive compared to the system-GMM where the opposite is true. On the contrary, columns (2) and (4) report the estimators' coefficients taking contrary signs in at least half of the instances. It is also worth mentioning that the size of the estimated coefficients is, in most cases, more pronounced when using a system-GMM estimator. This only confirms that the estimation accuracy of the OLS FE and system-GMM differ in terms of the coefficient's signs and magnitude. As mentioned, both estimators carry limitations that one should consider when relying on the results nevertheless, based on the characteristics of my sample and the results of the diagnostic tests, I regard the system-GMM estimator as superior in explaining my model.

The effect of the pre-electoral year in the composition of expenditures is reported in columns (1) and (3). Comparatively, the effect of the electoral year is presented in columns (2) and (4). As expected, the effect of the pre-electoral year shows to be significant in more instances across the expenditure categories compared to the effect of the electoral year. With these, I can confirm my *ex-ante* assumption that the *preelection* dummy is expected to explain a larger portion of opportunistic behaviour compared to the *election* dummy that already may reflect post-electoral effects. Nevertheless, the effects shown for the electoral years may provide interesting insights about the incumbent's post-electoral behaviour for instance, when in pre-elections certain expenditure categories are heavily increased and, subsequently, are reduced during the election year at significant levels.

The *generalexp* remains the only variable where neither of the (pre)election years has significance. In column (2) the *transfexp* is decreasing on average by 504,000 euros only weakly significant at a 10% level. In column (1) the *socialexp* appears to increase on average by 389,900 euros at a 1% significance level. Albeit the system-GMM estimator in column (3) shows the size of the coefficient to be larger increasing by an average of 460,500 euros with a 1% significance level. Signalling evidence of pre-electoral expenditure increases for protection and social

promotion that are later not significant in the electoral years. In column (1), the *urbanexp* shows to be more pronounced decreasing by an average of 1,432,800 euros – significant at a 1% level. Contrarily, in column (3) the same variable decreases by an average of 1,207,300 euros turning weakly significant at a 10% level. In both cases showing pre-electoral decreases in urban infrastructure expenditure. Interesting enough, this value is adjusted later in column (4) increasing by an average of 534,600 euros at a 5% significance level. Thus, *urbanexp* increases during the election year either to compensate for the pre-electoral decrease or, plausibly, to manipulate the approximating election. The latter argumentation could provide links to Rogoff's (1990) proposition where the incumbent seeks to maximise their chances of election slightly before elections with the immediately visible components of expenditures. Following Benito et al. (2013) findings, I presume the pattern shown in the *urbanexp* might, as well, be an indication of the incumbent's intention to create fiscal space during pre-electoral periods that provide room for manoeuvre. Unfortunately, due to data unavailability, the time unit in my data is restricted to a yearly basis hence, it seems nonviable to identify if the *urbanexp* increase in the electoral year took place before or after the election date. Thus, it seems not possible to provide evidence that indicates if the manoeuvre was creating fiscal space that allowed the *urbanexp* to be increased precisely before elections or was just readjusted to its natural level. Here, further disaggregation of the data could tackle the time limits of my sample and explore the timing of the quarterly expenditure adjustments.

In column (1) the *servexp* increases by an average of 1,086,700 euros with a 5% significance level. Whereas, in column (3) the size of the coefficient appears to be larger with an average increase of 1,303,100 euros with the same 5% significance level. Providing evidence for pre-electoral expenditure increases for rents, maintenance and repairs that are later not significant and even negative in the electoral years. During pre-electoral years, the incumbent's willingness to appeal to the voters is evident with their involvement in noticeable activities such as repairs and maintenance of roadways, transport and communication services and, the installation of public traffic lighting.

The *eduexp* in column (1) decreases by 123,200 euros on average and is weakly significant at a 10% level. In column (4) the same variable increases by 194,200 euros on average at a 5% significance level. The *eduexp* increase in electoral years could indicate an attempt to

immediately influence the elections or as a re-adjustment to reach the natural level after they were decreased in the year before the election – although, not at significant levels. As expenditures in education, health, culture and sports cannot be seen immediately thus, it is more likely that the increase took place after the election date. Again, quarterly data could provide evidence for this case.

The *realexp* estimation results of column (1) and (3) are both increasing by averages of 1,179,900 euros and 827,400 euros, respectively, with the same 10% significance level. Thus, my results appear in line with the studies of Balaguer-Coll et al. (2015) for the Spanish Municipalities and with Drazen & Eslava's (2010) for the Columbian Municipalities – all of which present pre-electoral increases in capital spending.

The *debtexp* shows very interesting results firstly presented in columns (1) where the variable decreases by an average of 653,200 euros with a 10% significance level. In column (3) the same variable presents a larger decrease by an average of 1,740,900 euros with a 1% significance level. Meanwhile, in column (4) the variable decreases by an average of 2,262,500 euros and becomes weakly significant at a 10% level. These results indicate that during pre-electoral and electoral years significant reductions in debt payments take place signalling the existence of PBCs. It also seems that as debt payments are decreased, the incumbent's compliance with the Budgetary Stability Law might be compromised as efforts are, instead, placed in the increased pre-electoral expenditures of variables such as *socialexp*, *servexp* and *realexp*. Challenging the Budgetary Stability Law, Benito et al. (2013, 468) investigate the case of the Spanish Municipalities and, provide evidence that PBCs still emergence after the local governments create the necessary fiscal room to manoeuvre and thereafter, undertake an expansionary fiscal policy in the election year. These results suggest that without breaking the fiscal rules, politicians willingly utilise alternative strategies that create fiscal space for the government's disposal. The latter allows the feasibility of budgeting their political agenda at a convenient point in time without the need of being non-compliant. Aligning with the results of Benito et al. (2023), I provide evidence that as an election approximates, fiscal imbalances appear not to be a priority for the incumbent as their willingness to manipulate the electoral results increases. At this point, the effectiveness that the EMU constraints – indirectly – pose to the incurred Municipal debt and deficit levels remain questionable.

Notably, there is evidence for *H1* supporting the argument that there is a prevailing influence of the electoral cycle affecting the visible components of fiscal expenditures that the Municipal governments of Madrid opt for. The results support the argumentation that the PBC affects the visible components of expenditures in pre-electoral and electoral years as they are purposedly increased or decreased with the end goal of influencing the electoral results. Altogether, the variables *socialexp*, *servexp* and *realexp* are increased at significant levels during pre-electoral years while *urbanexp* and *debtexp* are decreased. Later during the election year, as some variable's coefficients are no longer significant, *urbanexp* and *eduexp* are now increased at significant levels and, *debtexp* remains, significantly, in the negative values.

In the next section, I proceed with the estimation results of testing *H2*.

4.4 Opportunistic Behaviour and the Election Outcomes

Second, after finding significance in *H1* I proceed by advancing *H1* with the testing of *H2* as specified in equation (3). This time, considering that the incumbent manipulated the specific components of expenditure during the pre-electoral and/or electoral periods thereafter, I attempt to capture the advantage they obtain in a favouring re-election outcome. To achieve that, I measure the advantage of engaging in opportunistic behaviour in the total percentage of votes favouring the re-election of the incumbent. I encounter data limitations for the reported percentage of votes included under "Other Parties" as the collected data does not separate the percentage of votes attained by each "other" party instead, the percentage is presented as an aggregate for all. Nevertheless, to avoid the exclusion of e.g., a leading Municipal local party or a popular emerging party, if a mayor from "Other Parties" was elected I will take the percentage of votes reported for "Other Parties" as a proxy.

With this in mind, the system-GMM detailed estimation results associated with simultaneous equation (3) are reported in table 4 next.

Table 4

Detailed system-GMM Estimation Results: Effect of the Manipulated Components of Expenditure in the Incumbent's Percentage of Votes

Dependent variable: Percentage of Votes for the Re-elected Incumbent	system-GMM estimator: simultaneous equations and robust standard errors Model specification (3)							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Protection and Social Promotion	0.00226*		0.00143*					
(socialexp)	(1.67)		(1.68)					
t-1	-0.00278*	-0.000914	0.000157					
	(-1.83)	(-0.61)	(1.30)					
Urban Infrastructure	0.000489	0.000107		0.00192*				
(urbanexp)	(0.68)	(0.12)		-1.97				
t-1	-0.000656	-0.000416		-0.000631				
	(-0.74)	(-0.53)		(-1.29)				
Rents, Maintenance and Repairs	0.000553				0.000583**			
(servexp)	(1.11)				(2.19)			
t-1	-0.000495	-0.000351			0.0000635			
	(-1.39)	(-1.11)			(1.59)			
Education, Health, Culture and Sports	-0.00032	0.000815				0.000143		
(eduexp)	(-0.18)	(0.73)				(0.06)		
t-1	0.000536					0.00155		
	(0.34)					(0.80)		
Real Investment	0.000444						0.000188*	
(realexp)	(0.46)						(1.78)	
t-1	0.0000716	0.000231					0.000262*	
	(0.07)	(0.27)					(1.66)	
Debt Payments	-0.000264	-0.000317						-7.82E-05
(debtexp)	(-0.71)	(-0.81)						(-1.17)
t-1	-0.000463*	-0.000337						-4.99E-05
	(-1.66)	(-1.21)						(-1.41)
Prev. % Votes	-0.307***	-0.298***	-0.432***	-0.281**	-0.450***	-0.289**	-0.412***	-0.417***
	(-2.83)	(-2.89)	(-3.86)	(-2.54)	(-4.12)	(-2.32)	(-3.75)	(-3.90)
unemp	-0.562	-0.0998	0.994	0.969	0.517	0.977	1.187	0.976
	(-0.40)	(-0.08)	(0.59)	(0.66)	(0.35)	(0.66)	(0.69)	(0.62)
unemp (t-1)	1.568	1.82	0.937	2.079*	0.635	2.378*	1.009	0.927
	(1.32)	(1.56)	(0.84)	(1.84)	(0.63)	(1.97)	(0.91)	(0.95)
ln(pop)	52.40**	57.36**	29.09	51.57*	30.12	71.12**	24.45	24.56
	(2.04)	(2.13)	(0.90)	(1.68)	(0.98)	(2.01)	(0.75)	(0.80)
ln(pop) (t-1)	-59.48**	-64.77**	-32.34	-58.32*	-34.79	-78.48**	-28.14	-28.72
	(-2.29)	(-2.37)	(-1.01)	(-1.91)	(-1.14)	(-2.18)	(-0.86)	(-0.93)
currentdebt	-0.000128	-0.000113	-0.000196*	-0.000358*	-0.000289*	-0.000415	-0.000255*	-0.000106
	(-0.35)	(-0.40)	(-1.96)	(-1.73)	(-1.96)	(-0.86)	(-1.74)	(-1.04)
currentdebt (t-1)	0.000138	0.0000995	0.000204*	0.000142	0.000137	0.000415	0.000243	0.000067
	(0.34)	(0.29)	(1.72)	(1.28)	(1.15)	(0.71)	(1.52)	(0.46)
totalincome	-0.000132	0.000147	-0.000000648	-0.000125	0.000101	-0.00000977	0.0000366	0.0000969
	(-0.37)	(0.48)	(-0.01)	(-0.74)	(1.51)	(-0.07)	(0.52)	(0.85)
totalincome (t-1)	0.000369	0.000257	-0.000150**	-0.000103	-0.000140**	-0.00019	-0.0000872*	-2.39E-05
	(1.35)	(1.03)	(-2.04)	(-1.18)	(-2.12)	(-0.90)	(-1.85)	(-0.58)
timetrend	-1.127	-1.476**	-1.301	-1.695**	-0.909	-1.441*	-1.298	-1.417*
	(-1.53)	(-2.15)	(-1.41)	(-2.54)	(-1.22)	(-1.77)	(-1.43)	(-1.71)
constant	129.6***	130.2***	102.7***	116.8***	114.7***	115.1***	103.1***	110.6***
	(7.87)	(7.04)	(6.21)	(5.99)	(6.23)	(6.23)	(6.01)	(6.89)
Observations	225	225	225	225	225	225	225	225
# of instruments	58	58	50	33	50	33	50	50
F	6859.6	8369.4	1877.8	1902.9	4170.7	565.3	3997.3	15899.2
Hansen Test	0.0119	0.0114	0.0000707	0.0000934	0.0000293	0.000035	0.0000641	0.0000427
Sargan Test	3.78E-16	1.25E-14	4.27E-21	5.53E-15	2.2E-18	7.27E-15	1.45E-18	3.98E-21
AR(4)			0.897		0.958		0.561	0.791

Two-step system-GMM regression results of estimating equation (3) with robust standard errors using one lag of the % of votes and three lags for each predetermined variable as instruments.

T statistics in parentheses. Significance: * p<.10, ** p<.05, *** p<.01

Hansen tests for the joint validity of the instruments used for the GMM estimators. AR(4) tests for autocorrelation of order 4. P-values are reported.

Sargan tests the joint validity of the over-identifying restrictions assuming a asymptotically distribution $\chi 2$. P-values are reported.

This time I do not compare the estimation results that include an OLS FE estimator but experiment with the superior estimator that is system-GMM.

As in my previous results, the Hansen test null can be rejected across all instances with at least a 5% significance level – regarding my instruments as valid. An AR(4) test was performed to test the null of no fourth-order autocorrelation of the residuals.[26] Unfortunately, the test was only available for columns (3), (5), (7) and (8). As seen, the null cannot be rejected for any of those instances thus, supporting the inclusion of the fourth lag of the dependent variable.[27] Thereby, the model seems to be well-specified. As stated in equation (3), the dependent variable (*%votes)* is instrumented with the values of the previous election. On the explanatory side, the (lagged) *%votes* variable was instrumented with the values of the prior two elections. The predetermined and exogenous variables remained treated as before.

Next, in table 5 I summarised the results for the variables of interest.

Table 5

Estimation Results: Effect of the Manipulated Components of Expenditure in the Incumbent's Percentage of Votes

	Includes: All expenditure categories		Includes: Expenditure categories that resulted significant in H1		Includes: Each expenditure category as a different regression	
Dependent variable: Percentage of Votes for the Re-elected Incumbent	Pre-electoral Year Expenditures	Electoral Year Expenditures	Pre-electoral Year Expenditures	Electoral Year Expenditures	Pre-electoral Year Expenditures	Electoral Year Expenditures
(%votes)	(1)	(2)	(3)	(4)	(5)	(6)
Protection and Social Promotion	-0.00278*	0.00226*	-0.000914		0.000157	0.00143*
(socialexp)	(-1.83)	(1.67)	(-0.61)		(1.30)	(1.68)
Urban Infrastructure	-0.000656	0.000489	-0.000416	0.000107	-0.000631	0.00192*
(urbanexp)	(-0.74)	(0.68)	(-0.53)	(0.12)	(-1.29)	-1.97
Rents, Maintenance and Repairs	-0.000495	0.000553	-0.000351		0.0000635	0.000583**
(servexp)	(-1.39)	(1.11)	(-1.11)		(1.59)	(2.19)
Education, Health, Culture and Sports	0.000536	-0.00032		0.000815	0.00155	0.000143
(eduexp)	(0.34)	(-0.18)		(0.73)	(0.80)	(0.06)
Real Investment	0.0000716	0.000444	0.000231		0.000262*	0.000188*
(realexp)	(0.07)	(0.46)	(0.27)		(1.66)	(1.78)
Debt Payments	-0.000463*	-0.000264	-0.000337	-0.000317	-0.0000499	-0.0000782
(debtexp)	(-1.66)	(-0.71)	(-1.21)	(-0.81)	(-1.41)	(-1.17)

The table shows the estimated advantage of engaging in the (pre)electoral manipulation of the components of expenditures captured by the percentage of votes cast for the re-elected incumbent. The estimations are performed with a system-GMM estimator.

Columns (1) and (2) includes all expenditure categories as regressors. Columns (3) and (4) includes the regressors of the expenditure categories that resulted significant in the testing of H1 (see Table 4). Columns (5) and (6) include each expenditure category as a different regression.

T statistics in parentheses. Significance: * p<.10, ** p<.05, *** p<.01

Refer to table 4 of this section for the detailed system-GMM estimation results.

[26] I consider the AR(4) test as the *%votes* variable is only available each 4 periods.

[27] In this case, the fourth lag refers to the percentages of votes cast the previous election results ($t-4$).

The table reports the estimated advantage of engaging in the (pre)electoral manipulation of the visible components of expenditure captured by the percentage of votes cast by the re-elected office holder. As before, the effect of the pre-electoral year expenditures is reported in columns (1), (3) and (5), comparatively, the effect of the electoral year expenditures is presented in columns (2), (4) and (5).

Columns (1) – (4) are regressed as a robustness check of columns (5) and (6). Columns (1) and (2) represent all expenditure categories (which appeared statistically significant in the testing of *H1*) regressed together with a system-GMM estimator. I also include the first lag of the fiscal variables to control for expenditure levels during pre-electoral periods, even if the lags did not appear statistically significant. Following the same criteria for columns (3) and (4) except that here, I only included the current values and the first lags that, again, appeared statistically significant in *H1*. Representing the central results for *H2*, in columns (5) and (6) each expenditure category (and their first lag) is a different regression. I perform the regressions for each component of expenditure independently of each other to examine their isolated effect and while also benefiting from a higher number of observations in contrast to columns (1) – (4).

In general, it can be seen that, in most of the cases, when cross-comparing the available coefficients in columns (1) – (4), they take the same sign except that the size of the coefficients is mostly larger for columns (1) and (2). In columns (1) as the *socialexp* increases by one unit, the dependent variable (*%votes*) is reduced by an average of .00278% – significant at a 10% level.[28] This result suggests that the *socialexp* is the only other component of expenditure (besides the debt payments discussed later) that the voters will punish as the government increases it during pre-elections. When the same variable is isolated in columns (5) and (6) the *socialexp* one-unit increase shown in column (5), is no longer significant whereas, in column (6), the electoral year *socialexp* one unit increase increases the *%votes* by an average of .00143% – significant at a 10% level. Here, this pattern could suggest that the government is rewarded for the pre-electoral increase in social protection and promotion though, perhaps, only when the benefits to the voters are immediately available before elections. Contrarily, it also seems plausible to assume that the pre-electoral increase in the *socialexp* type of expenditure is either

[28] A one unit increase in the expenditure variable equals to 1,000 euros. This applies for all expenditure categories.

not relevant in the casted percentage of votes for the incumbent or, may even be reducing their favouring votes. In the presence of these scenarios, I assume that the voters that support expansionary fiscal policies reward this type of expenditure more than any other (as seen in the size of the coefficient) if the benefits are made available right before elections. Also, assuming that the government is punished by the electorate's preferences for fiscal conservatism when the *socialexp* is significantly increased in years before elections.

Next, in column (6) a one-unit increase in the *urbanexp* increases the *%votes* by an average of .00192%, with a 10% significance level. Hence, it seems the government is following a manoeuvring strategy to reduce the urban infrastructure expenditures in pre-electoral years. That will then, facilitate the timing of the pre-electoral increase on other components of expenditure (or in the same variable at electoral years). This could be an indication of the government's recognising the election results are favourable when the *urbanexp* is increased only immediately before the election date. Nevertheless, future research done on a quarterly basis could confirm if that was the case. For column (6) the *servexp* increases the *%votes* by an average of .000583% – significant at a 5% level. Noting that as the variable is isolated the effect becomes significant for electoral years. Again, due to the yearly unit limitations of my sample, I cannot say with certainty if the increase in the percentage of votes was a (not immediate) response to the government's pre-electoral increase in rents, maintenance and repairs or if the reaction came as the public saw a decline in this type of expenditure immediately prior the election. Albeit it is more likely the former scenario is true since the reduction in the *servexp* during the electoral year did not appear to be reduced at significant levels hence, there was no evidence of a systematic pattern attempting to be notorious for the electorate. With this argumentation, I attribute the increase in the percentage of votes to be a response to the pre-electoral increase in expenditure of rents, maintenance and repairs.

The *eduexp* appears to be the only variable without any significance across all of the instances. Again, this may appear to be yet another attempt of creating fiscal space that then allows the placement of efforts in the alternative visible types of expenditure. Whereas in columns (5) and (6) a one-unit increase in *realexp* leads to an average increase in the *%votes* by .000262% and .000188%, respectively, with a 10% significance level. Consistent with Veiga and Veiga's (2007) findings, as the real investment expenditures show to have a prolonged impact

on the electorate, the government may choose to manipulate them at the most convenient point in time. To illustrate the scenario, the incumbent seeking re-election invests in infrastructure, equipment and green areas during pre-electoral years and, after the completion of the projects, decreases those expenditures. In this case, before the elections, the electorate will be presented with a new long-lasting tangible asset hence, the electorate will choose to award the government. If the timing is played right, the electorate will focus on the provided assets instead of noticing the later reduction in the real investment expenditures.

In column (1) the *debtexp* one-unit increase leads to an average reduction in the *%votes* by .000463% – though weakly significant at a 10 % level. This could provide evidence for the public's aversion to unsustainable public finances before elections and provide support for Drazen & Eslava (2010) as well as for Brender (2003) findings of voters' increased preference for fiscal conservatism. Conforming to their finding, my results also suggest that as the public punishes the government's failure to reduce debt levels, they also reward the incumbent as they increase other components of expenditure such as for protection and social promotion, urban infrastructure, rents maintenance and repairs and, real investment.

Even if the size of the coefficients is rather small, *H2* can be confirmed as the (pre)electoral manipulation of specific components of the Municipal's expenditures translates, in most cases, to a higher percentage of votes cast for the re-elected incumbent. Notably, the incumbent's engagement in opportunistic fiscal policies creates an advantage that is compensated with a higher percentage of votes. As demonstrated by *eduexp,* some components of expenditure do not influence the electorate significantly hence, one explanation is that the variable is strategically manipulated during pre-elections to benefit from the shifting of resources – as the reduction in *eduexp* comes across as unperceived. With this, the variables *socialexp*, urbanexp, *servexp*, and *realexp* are found to cast a higher percentage of votes when made visible to the public before elections. Whilst, the debt levels measured by the *debtexp* affects the percentage of votes for the re-elected incumbent as voters incline their preferences to fiscal conservatism.

In the next section, I continue with the last part of my analysis where I present the estimation results of testing *H3*.

4.5 Influence of the Local Government's Ideology

The partisan approach to PBC theory suggests that as re-election becomes more likely then, political ideology shapes the selection of governmental budgetary policies (Frey, 1978, 20). To illustrate the scenario, if ideology were to matter a left-wing government is assumed to engage with the public through larger expansionary fiscal policies. Whereas assumed otherwise, a right-wing government remains less incentivised to appeal to the electorate with expansionary policies. The founding argumentation was originally proposed by Hibbs' (1977) partisan approach to political cycles that arise from ideological views that differ in objectives and incentives and, in the management of macroeconomic policy. Contrarily, Frey (1978) suggests political ideology hardly matters as re-election probabilities remain uncertain hence, the government will respond by utilising the financing instruments at hand that maximise their favouring votes. More recent work by Krause & Méndez (2005) sustain political ideology plays a role as right-wing parties, on average, remains mostly concerned on inflation stability whereas, the ones on left-wing are relatively more interested in keeping a stable output growth. As seen, there are still opposing views that question the role of political ideologies in influencing opportunistic cycles. Perhaps, the partisan approach to PBCs shall be investigated on a case-by-case basis. Hence, I continue with the proposed case.

Adding to H1, with H3 I am interested in exploring the impact that political ideologies have in shaping the government's – opportunistically manipulated – visible components of expenditure. Moreover, I propose a left-wing government will choose short-term oriented expansionary policies to appeal to the electorate measured by the current expenditure categories (*generalexp, transfexp, socialexp*). Contrarily, a right-wing incumbent will choose longer-term oriented expansionary policies to appeal to the electorate measured by the investment type of expenditures (*urbanexp, servexp, eduexp, realexp*).

Following *H1*'s estimation method, now testing for *H3,* I utilise both OLS FE and system-GMM estimators to estimate equation (4). The estimation of equation (4) mirrors the estimation method performed for testing *H1*. Moreover, *H3* is merely an extension of *H1* that intends to explore the effects of when controlling the incumbent's political ideology. Central to estimating equation (4), is the *ideology* dummy which provides insights into the effects of

ideological motives on the incumbent's fiscal expenditures.[29] The detailed system-GMM estimation results are reported in table 6 next.

Table 6

Detailed system-GMM Estimation Results: Influence of the Incumbent's Party Ideology in the Visible Components of Expenditure

	system-GMM estimator: simultaneous equations and robust standard errors Model specification (4)							
Expenditure Category as Dependent Variable:	General Payments	Current Transfers	Protection and Social Promotion	Urban Infrastructure	Rents, Maintenance and Repairs	Education, Health, Culture and Sports	Real Investment	Debt Payments
	(generalexp)	*(transfexp)*	*(socialexp)*	*(urbanexp)*	(servexp)	(eduexp)	(realexp)	(debtexp)
Dep. Variable (t-1)	-0.109	0.527***	0.922***	0.185***	0.939***	0.724***	0.524***	0.337***
	(-0.48)	-5.46	-5.27	-6.56	-16.93	-21.67	-86.61	-11.51
pre-election	-341.7	-84.42	488.4**	-1428.5**	1378.5**	-134.0	861.5**	-1892.8***
	(-0.61)	(-0.31)	(2.55)	(-2.07)	(1.98)	(-0.83)	(2.00)	(-2.69)
election	-114.8	-353.5	210.0	641.6**	-1338.8	196.3**	-1520.5	-2582.5*
	(-0.44)	(-0.87)	(1.02)	(2.28)	(-0.96)	(2.17)	(-0.84)	(-1.97)
ideology	-837.9	-44.30	96.23	1596.9*	211.8	15.89	-205.4	-2486.1
	(-1.06)	(-0.08)	(0.65)	(1.77)	(1.02)	(0.11)	(-0.81)	(-1.36)
unemp	32.25	71.71	-1.139	-43.08	-218.4	32.36	-222.5	74.41
	(0.24)	(0.74)	(-0.04)	(-0.43)	(-1.31)	(1.49)	(-1.05)	(0.41)
unemp (t-1)	140.9	82.65	54.97*	-5.050	75.55	29.41	21.75	353.9**
	(0.99)	(1.13)	(1.84)	(-0.04)	(0.63)	(0.74)	(0.20)	(2.13)
unemp (t-2)	-246.4**	200.1**	46.70	383.5**	260.4***	11.41	24.58	-1036.5***
	(-2.10)	(2.20)	(1.00)	(2.59)	(2.62)	(0.31)	(0.34)	(-2.89)
ln(pop)	-26251.1***	10527.7*	2995.8**	17239.0**	5143.6	101.4	1638.8	-28105.0**
	(-2.64)	(1.82)	(1.98)	(2.47)	(1.22)	(0.05)	(0.33)	(-2.20)
ln(pop) (t-1)	9330.9	-612.7	74.24	-3350.4	-7460.5	1189.6	-6140.3	-12697.2
	(1.62)	(-0.21)	(0.06)	(-0.65)	(-1.16)	(1.13)	(-0.70)	(-1.32)
ln(pop) (t-2)	19481.5**	-10963.3**	-3233.1**	-15825.3**	2445.5	-1280.5	4875.5	44441.2**
	(2.49)	(-2.33)	(-2.19)	(-2.51)	(0.86)	(-0.82)	(1.11)	(2.40)
currentdebt	0.0539**	0.00861	-0.00196	0.0269**	0.00647	-0.0148***	-0.0134***	-0.556***
	(2.27)	(0.83)	(-0.18)	(2.16)	(0.50)	(-6.05)	(-7.08)	(-7.49)
currentdebt (t-1)	-0.0601***	0.0153***	-0.0551***	0.0998***	-0.134***	0.0242***	-0.0210***	0.706***
	(-4.34)	(2.93)	(-15.31)	(9.69)	(-26.47)	(5.76)	(-7.14)	(13.97)
currentdebt (t-2)	-0.0183	-0.115***	0.0498***	-0.231***	0.106***	-0.0454***	0.0628***	0.193*
	(-0.78)	(-3.84)	(5.06)	(-5.35)	(13.93)	(-5.82)	(10.45)	(1.68)
totalincome	0.0344***	-0.0288***	0.0261**	0.122***	0.0208**	0.0162***	-0.0845***	0.760***
	(2.76)	(-7.59)	(2.49)	(13.27)	(2.49)	(11.72)	(-15.09)	(14.75)
totalincome (t-1)	-0.000981	0.0684***	0.0432***	-0.00917	0.142***	0.0147***	0.147***	-0.781***
	(-0.04)	(2.92)	(5.62)	(-0.70)	(102.85)	(5.61)	(54.55)	(-8.15)
totalincome (t-2)	0.0962***	0.112***	-0.0577***	0.325***	-0.129***	0.0343***	-0.0775***	-0.294***
	(3.46)	(6.13)	(-3.11)	(8.87)	(-6.94)	(10.63)	(-25.80)	(-4.47)
timetrend	41.60	180.5**	80.98***	430.2***	-185.1	167.1***	-138.9	-1028.7***
	(0.36)	(2.38)	(2.91)	(2.93)	(-1.25)	(3.84)	(-0.74)	(-2.77)
constant	-18598.8***	1742.6	-1043.9	3500.5	549.7	-3316.8**	1140.1	-3354.3
	(-3.05)	(0.47)	(-1.10)	(0.73)	(0.21)	(-2.23)	(0.34)	(-0.35)
Observations	971	1108	1108	971	1108	971	1108	1108
# of instruments	122	143	143	122	143	122	143	143
F	1318944.8	1427092.9	69937332.3	21376585.4	192672402.3	16412447.3	10048593.0	2386565.9
Hansen Test	0.103	0.0355	0.0380	0.0124	0.0300	0.00388	0.0175	0.0503
Sargan Test	1.03e-183	5.60e-123	3.98e-109	2.58e-146	5.12e-90	1.40e-97	1.03e-72	3.12e-145
AR(2)	0.158	0.318	0.503	0.0921	0.299	0.365	0.318	0.466

Two-step system-GMM regression results of estimating equation (4) with robust standard errors using two lags of the dep.variable and three lags for each predetermined variable as instruments.

T statistics in parentheses. Significance: * p<.10, ** p<.05, *** p<.01

Hansen tests for the joint validity of the instruments used for the GMM estimators. AR(2) tests for autocorrelation of order 2. P-values are reporte

Sargan tests the joint validity of the over-identifying restrictions assuming a asymptotically distribution $\chi 2$. P-values are reported.

[29] As specified earlier, the ideology dummy takes a value of 1 for the (centre)right-wing and 0 for the (centre)left-wing parties. The variable takes a missing value when the mayor's party belongs to "Other Parties".

As reported in the Hansen test, the null can be rejected across the instances with at least a 10% significance level.[30] Once more, the choice of instruments can be regarded as valid. Concerning the AR(2) test, the null cannot be rejected across the different instances where, again, the inclusion of the second lag of the dependent variable is recommended.[31] The specification tests signal the model to be well-specified. All the predetermined and exogenous variables remain treated consistently when estimating equations (1) and (2). Next, the detailed estimation results associated with using an OLS FE estimator are reported in table 7.

Table 7

Detailed OLS FE Estimation Results: Influence of the Incumbent's Party Ideology in the Visible Components of Expenditure

	OLS estimator: FE and robust standard errors							
	Model specification (4)							
Expenditure Category as Dependent Variable:	General Payments	Current Transfers	Protection and Social Promotion	Urban Infrastructure	Rents, Maintenance and Repairs	Education, Health, Culture and Sports	Real Investment	Debt Payments
	(generalexp)	*(transfexp)*	*(socialexp)*	*(urbanexp)*	(servexp)	(eduexp)	(realexp)	(debtexp)
Dep. Variable (t-1)	-0.364*	-0.0738	0.322***	0.0481***	0.156	0.487***	0.248	-0.0372
	(-1.95)	(-0.29)	(5.58)	(3.47)	(0.70)	(8.37)	(1.05)	(-0.92)
pre-election	-70.96	7.270	419.6***	-1526.1***	1170.3**	-124.5*	1271.1*	-791.1**
	(-0.18)	(0.03)	(3.38)	(-2.93)	(2.46)	(-1.71)	(1.84)	(-2.05)
election	18.91	-556.7*	137.7	-101.6	-893.0	39.25	-1284.4	274.8
	(0.11)	(-1.72)	(0.90)	(-0.62)	(-1.35)	(0.58)	(-0.93)	(0.98)
ideology	132.1	629.3	-32.87	775.8	-1184.9	88.80	-1258.0	-2489.6
	(0.15)	(0.97)	(-0.10)	(1.02)	(-0.70)	(0.59)	(-0.74)	(-1.08)
unemp	-85.91	-40.31	97.74*	-45.54	563.2	-28.18	377.0	40.24
	(-1.38)	(-0.37)	(1.67)	(-0.76)	(1.55)	(-1.28)	(1.00)	(0.24)
unemp (t-1)	13.99	-24.63	45.32	56.13	113.3	3.017	94.23	400.9***
	(0.37)	(-0.72)	(1.61)	(1.25)	(0.77)	(0.18)	(0.63)	(3.14)
unemp (t-2)	134.0**	64.40	-109.5*	95.56*	-494.1	16.77	-574.8	-109.8
	(2.14)	(0.62)	(-1.72)	(1.76)	(-1.30)	(1.10)	(-1.01)	(-0.73)
ln(pop)	-1714.7	-747.0	1677.1	-4428.9	12475.1	-386.5	8590.7	-3438.5
	(-0.64)	(-0.32)	(1.17)	(-1.61)	(1.60)	(-0.62)	(1.04)	(-0.85)
ln(pop) (t-1)	1685.5	-852.4	-699.0	2519.8	-5711.0	1415.6**	-7104.9	-1047.9
	(0.96)	(-0.37)	(-0.66)	(1.13)	(-1.40)	(2.02)	(-0.78)	(-0.29)
ln(pop) (t-2)	3736.9*	3726.2*	-516.1	1889.5	-946.5	324.6	530.6	-6021.2
	(1.93)	(1.80)	(-0.53)	(0.91)	(-0.23)	(0.57)	(0.12)	(-1.29)
currentdebt	0.0412**	-0.108*	-0.0415*	-0.0688***	-0.167	-0.0361***	-0.169	-0.0543
	(2.24)	(-1.89)	(-1.84)	(-3.96)	(-1.32)	(-4.35)	(-1.18)	(-0.85)
currentdebt (t-1)	-0.0434***	0.0884**	-0.00783	0.180***	0.103	0.0415***	0.124	0.167**
	(-2.81)	(2.12)	(-0.45)	(6.87)	(0.79)	(4.67)	(0.94)	(2.34)
currentdebt (t-2)	-0.0161	-0.0616***	0.0518***	-0.159***	0.180**	-0.0255***	0.154	0.0424
	(-0.83)	(-3.34)	(3.17)	(-8.00)	(2.15)	(-11.42)	(1.49)	(1.22)
totalincome	0.00790	-0.0355***	-0.0132***	0.0441***	-0.172***	-0.00349**	-0.200**	0.977***
	(0.43)	(-14.92)	(-3.95)	(4.91)	(-3.18)	(-2.50)	(-2.16)	(28.35)
totalincome (t-1)	-0.0198	-0.0914	-0.0259	-0.153***	-0.258	-0.0255***	-0.120	0.170
	(-0.92)	(-1.27)	(-0.81)	(-7.06)	(-1.17)	(-3.99)	(-0.50)	(1.52)
totalincome (t-2)	0.0718***	-0.0440	-0.0923***	0.179***	-0.357**	-0.00292	-0.277	0.379***
	(2.79)	(-0.66)	(-3.40)	(7.83)	(-2.37)	(-0.44)	(-1.57)	(4.79)
constant	-24208.7	362.8	6191.6	17858.4	4542.7	-5196.0	15671.5	-85.17
	(-1.41)	(0.03)	(0.72)	(0.84)	(0.11)	(-0.96)	(0.35)	(-0.00)
Observations	971	1108	1108	971	1108	971	1108	1108
R-squared	0.691	0.853	0.813	0.885	0.722	0.887	0.636	0.984
F	1238.5	71136.7	33786.7	8716.8	35753.7	36356.2	36133.0	354351.0

Panel OLS regression results of estimating equation (4) controlling for municipal individual FE.
T statistics in parentheses
Significance: * p<.10, ** p<.05, *** p<.01

[30] The Hansen test's null cannot be rejected for the *generalexp* variable at a 10% significance level. Nevertheless, as the test value lays close to the 90% confidence interval, I still regress it in a consistent manner.
[31] Again, the AR(2) test's null can be rejected for the *urbanexp* variable at a 10% significance level. Nevertheless, I still include the second lag of the variable as the AR(2) test value lays close to the 90% confidence interval.

Examining the *ideology* dummy, for instance, in table 6 it was only found significant for the *urbanexp* as the government's ideology aligns to the (centre)right-wing, the variable will increase by an average of 1,596,900 euros –significant at a 10% level. Besides that, as shown in both tables 6 and 7 the sign of the coefficients may provide insights into the incumbent's ideology effect on the different components of fiscal expenditure. As anticipated, each estimator presents distinct results. In table 6 the system-GMM estimator demonstrated that as the *ideology* dummy takes a value of 1, the incumbent's ideology aligns to the right-wing hence, the variables *socialexp, urbanexp, servexp,* and *eduexp* return positive coefficients. Meanwhile, the same government returns negative coefficients in the variables *generalexp, transfexp, realexp,* and *debtexp*. Conversely, in table 7 the OLS FE estimator exhibits that as the incumbent aligns to the right-wing the variables *generalexp, transfexp, urbanexp* and *eduexp* will take positive coefficients. Whilst, this time an alignment to the right-wing shows negative coefficients in the variables *socialexp*, *servexp*, *realexp* and *debtexp*. Furthermore, although the estimators show differing findings, they also share similitudes. That is, as the government reflects a right-wing ideology, the expenditures on urban infrastructure and, education, health culture and sports will remain positive. Contrarily, the same government will opt for negative values in the expenditures that relate to real investment and debt expenditures. Whereas, an incumbent with a left-wing ideology may behave otherwise. These results shed light that the Municipal governments' ideologies are not shaping the opportunistic manipulation of the components of expenditure Hence, there is no shown evidence of partisan approaches to the political cycle.

As before, to enable the easing of the interpretation, I will refer to table 8 presented next.

Table 8

Estimation Results Estimator Comparison: Influence of the Incumbent's Party Ideology in the Visible Components of Expenditure

	OLS FE		system-GMM	
	(1)	(2)	(3)	(4)
Dependent variable: expenditure category	Pre-election Year dummy	Election Year dummy	Pre-election Year dummy	Election Year dummy
	controlling for ideology			
	(preelection)	*(election)*	*(preelection)*	*(election)*
General Payments	-70.96	18.91	-341.7	-114.8
(generalexp)	(-0.18)	(0.11)	(-0.61)	(-0.44)
Current Transfers	7.270	-556.7*	-84.42	-353.5
(transfexp)	(0.03)	(-1.72)	(-0.31)	(-0.87)
Protection and Social Promotion	419.6***	137.7	488.4**	210.0
(socialexp)	(3.38)	(0.90)	(2.55)	(1.02)
Urban Infrastructure	-1526.1***	-101.6	-1428.5**	641.6**
(urbanexp)	(-2.93)	(-0.62)	(-2.07)	(2.28)
Rents, Maintenance and Repairs	1170.3**	-893.0	1378.5**	-1338.8
(servexp)	(2.46)	(-1.35)	(1.98)	(-0.96)
Education, Health, Culture and Sports	-124.5*	39.25	-134.0	196.3**
(eduexp)	(-1.71)	(0.58)	(-0.83)	(2.17)
Real Investment	1271.1*	-1284.4	861.5**	-1520.5
(realexp)	(1.84)	(-0.93)	(2.00)	(-0.84)
Debt Payments	-791.1**	274.8	-1892.8***	-2582.5*
(debtexp)	(-2.05)	(0.98)	(-2.69)	(-1.97)

The table shows the estimated effect of the Incumbent's Party ideology during (pre)electoral years in the dependent variable comparing OLS FE and system-GMM estimators.
Each expenditure category represents a different regression. T statistics in parentheses.
Significance: * p<.10, ** p<.05, *** p<.01
Refer to tables 7 and 8 of this section for the detailed system-GMM and OLS FE estimation results, respectively.

The table summarizes and compares the estimation results of both system-GMM and OLS FE estimators (table 6 and table 7, respectively). The table still reports the estimated effect in the coefficients of the *preelection* and *election* dummy variables on the visible components of expenditure, except that this time, I control for the ideology. Columns (1) and (2) employ the OLS FE estimators whilst, columns (3) and (4) the system-GMM estimators.

Now controlling for the incumbent's ideology, the effect of the pre-electoral year in the composition of expenditures is presented in columns (1) and (3) comparatively, the effect of the

electoral year is presented in columns (2) and (4). Notwithstanding the *ideology* dummy itself did not provide much explanation in the models' variations; it does provide additional significant results in the analysis of PBCs. As seen, the results almost mirror the estimation results outlined in table 1, except that when controlling for the incumbent's ideology the coefficients become more pronounced. For instance, the *generalexp* is still not significant across any of the instances. Conversely, in column (2) the *transfexp* decreases by an average of 556,700 euros – weakly significant at a 10% level.

In column (1), the *socialexp* now increases by an average of 419,600 euros with a 1% significance level. Whereas, in column (3) the *socialexp* now increased by 488,400 euros on average– although the significance level was reduced to a 5% level. The *urbanexp* in column (1) shows to be decreasing by an average of 1,526,100 euros and remains significant at a 1% level. In column (3) it decreases by an average of 1,428,500 euros and weakens to a 5% significance level. Now showing a more pronounced pre-electoral decrease in the urban infrastructure expenditures. In column (4) the same variable remains increasing by an average of 641,600 euros at a 5% significance level. In column (1) the *servexp* now increases by an average of 1,170,300 euros whereas, in column (3) the increase jumped to 1,378,500 euros on average – where both coefficients are significant at a 5 % level. In column (1) the *eduexp* is now reduced to 124,500 euros with the significance level remaining at 10%. Meanwhile, in column (4) slightly increasing to an average of 196,300 euros at a 5% significance level.

Column (1) shows the *realexp* now increasing by 1271,100 euros on average with the same 10% significance level. In column (3) the same variable increasing by an average of 861,500 euros with an increased significance level to 5%. Lastly, in column (1) the *debtexp* further decreasing to an average of 791,100 euros and gaining a 5% significance level. At the same time, in column (3) the same variable decreases now by an average of 1,892,800 euros and remaining strongly significant at a 1% level. In column (4) the *debtexp* decreases now by an average of 2,582,500 euros and remains weakly significant at a 10% level.

Politics in the Municipalities of Madrid have been dominated by two main political parties: the centre-rightist Popular Party (PP) and, the centre-leftist Spanish Socialist Workers Party (PSOE). In many of the Municipalities, these two parties have been constantly alternating the governmental seat (although, other local/emerging parties remain rather seldomly elected). In

this scenario, the results may be an indication that the government's perceived re-election uncertainty – which thereafter motivates opportunistic policies – is triggered by the constant shift of governments. Hence, I find evidence of the existence of PBC yet, not reflecting ideological motives, as Alesina (1987) proposes, perhaps the political cycle is the product of the constant shift of governments and their opposing (although limited) fiscal preferences – all of which translates into volatile policies. Here, the volatility of fiscal policies could have amplified the evidenced opportunistic behaviour. Additionally, the exhibited results of the reduced debt payments possibly align with Alesina & Tabellini's (1990) proposition that the debt levels widen as; i) the political party's degree of polarization is larger and, ii) the likeliness of the incumbent's re-appointment remains low.[32] Nevertheless, further research could focus on exploring the patterns of the debt/deficit levels (if any) – which might provide ties to their results.

In addition, Garrett & Lange (1991, 543) argue that under a monetary union the consequent interdependence of fiscal and monetary policies leaves no autonomy for governments to pursue effective policies and, additionally, pose fiscal limitations; the authors add "…in anything but the short run, the fiscal and monetary policies of governments of the left and the right should converge". The compliance with the Budgetary Stability Law could be another explanation for the null effect of the incumbent's ideology (in almost all of the instances) as they are limited in their use of fiscal instruments, Thus, with the constrained fiscal policies the incumbent might not be given enough fiscal space to exhibit ideological influences on opportunistic behaviour.

As mentioned earlier, the estimation results of testing *H3* seem to be almost parallel to the findings of *H1* although controlling for the incumbent's ideology appears to pronounce the opportunistic behaviour under the presence of an electorate cycle. Yet, I find no supporting evidence that the incumbent's ideology shapes their opportunistic behaviour. Aligning with Frey's (1978) partisan approach to PBC's, as re-election probabilities remain uncertain in the Municipalities of Madrid, it appears that ideology hardly matters in the shaping of the components of expenditure. Hence, without the bearing of any ideological motives, patterns are suggesting that uncertainty to re-election do matters.

Lastly, in the next section, I present my concluding remarks.

[32] They provide a third proposition: iii) the more downward public consumption is. Although I do not explore this variable in my analysis.

5. Conclusion

The analysis presents the local PBC case of the 179 Municipalities of Madrid. In particular, I analyse the discretionary adjustments in the visible components of fiscal expenditures that are purposedly made by the incumbent attempting to increase the electorate's favouring votes. Once I found evidence of opportunistic behaviour, I attempt to capture the advantage the re-elected incumbent receives measured in their cast percentage of votes. Furthermore, I am also interested in the effect that the incumbent's ideology has in the shaping of the evidenced opportunistic behaviour.

I use data from Madrid's local statistical office to construct a new panel dataset for the 179 Municipalities of Madrid that spans from 2000 to 2018. The time frame allows me to analyse four elections for each municipality where I am interested in exploring the effect of both pre-electoral and electoral years. Based on the characteristics of my sample and the autoregressive component of my model, the estimations were performed with the use of a system-GMM estimator which uses moment conditions as an instrumentation technique. To explore the existence of the local PBC, following Rogoff's (1990) decomposition approach of fiscal expenditures, I select the most visible components of fiscal expenditures in my data as my dependent variables.

The empirical findings provide evidence for the existence of PBCs in the Municipalities of Madrid (*H1*). I thus provide evidence of the government's willingness to engage in PBC during pre-electoral and electoral years while, also, finding evidence of their ability to manipulate some of the most visible components of expenditure. Whilst, my results may also be interpreted as evidence of a government's manoeuvre strategy to help overcome the fiscal constraints of the underlying institutional framework. Hence, assuming there is a shift of resources from one expenditure category to the other where the government expects to be rewarded at the polls. Here, as the debt payments are also reduced during the pre-electoral and electoral year, I question whether the Budgetary Stability Law that is in place is effective in curbing the level of the local debt/deficit. Further research could explore the government's adherence to the rule e.g., if the timing of elections plays a role in the government's linear/non-linear behaviour of the incurred debt and/or deficit levels – potentially identifying if the compliance with the Budgetary

Stability Law holds for both (pre)electoral and non-(pre)electoral years or if there is a manoeuvre strategy in place that provides room for non-complying in (pre)electoral years.

It is fair to mention that my results also come with limitations. Unfortunately, my panel data is limited by the yearly unit thus, as elections are held in the middle of the second quarter, I am not able to distinguish if, during the election year, some discretionary adjustments in the components of fiscal expenditures were manipulated before or after the election date. This limits my results as I am not able to determine the timing of the adjustments. Future research could tackle the limitations of my data and perform the analysis on a quarterly basis. Furthermore, scholars could investigate potential explanations about the incumbent's choice to opportunistically manipulate certain expenditure categories while not others – the motives behind their reasoning remain unclear within the scope of my analysis. Perhaps analysing the change in the percentage of votes for each component of expenditure (even when they are not opportunistically manipulated) could show interesting trends where researchers could start drawing questions.

Second, I provide evidence that, once the incumbent manipulated the components of expenditure opportunistically, the re-elected gains advantage in the increased – favouring – percentage of votes (*H2*). I thus provide evidence that the incumbent is perceived as more competent when the electorate benefits from the increased components of expenditure. Thus, the electorate rewards – up to a certain extent – a government that provides tangible goods and services but one that also contemplates sustainable public finances. Further research could provide a robustness check of my results by measuring the advantage the incumbent receives with an alternate choice of the model's dependent variable e.g., a survey of the government's approval ratings.

Third, in general, I hardly find evidence that the government's ideology shapes the manipulated components of expenditure (*H3*). I conclude the incumbent's ideology hardly matters as the re-election probabilities remain uncertain. Nevertheless, controlling for the government's ideology appears to pronounce the incumbent's opportunistic behaviour compared to my first results. The findings suggest that as the government is constantly shifting from ruling parties that may differ in their ideologies, the fiscal policies appear to be more volatile. I also argue that as the Municipal governments of Madrid are, on average, continually

changing parties, the incumbent's increased uncertainty of re-election will increase their willingness to engage in PBCs. Thus, as the incumbent perceives uncertainty of re-election, they will decisively increase the most visible components of expenditure to appeal to the electorate – without reflecting any ideological motives. It is important to note that as the incumbent's willingness to engage in PBCs increases, they are also limited in their ability to manipulate fiscal policies. Thus, as the Budgetary Stability Law binds, the government is not provided with enough fiscal space to purely display ideologically motivated policies.

Concluding, I present that in the local case of the Municipalities of Madrid as the re-election probabilities remain uncertain, the governments will pursue manoeuvre strategies – that overcome the fiscal constraints of the institutional framework – enabling them to manipulate the components of expenditure which, in turn, cast them a higher percentage of votes. It seems reasonable to suggest that future policy should place efforts to increase the local governments' accountability. As the public's preference towards fiscal conservatism increases, the voter's access to information is crucial to pursue a path where the government is made accountable for engaging in manoeuvre strategies. Most importantly, as the local governments are granted budgetary autonomy, the institutional framework shall reinforce monitoring mechanisms that address unsustainable fiscal policies. Once more, I reinstate PBCs persist in the Municipalities of Madrid – where re-election uncertainty matters.

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Appendix

Table A1

Expenditure Variables and Descriptive Statistics for Pre-electoral and Non-Pre-electoral Years.

Type of Expenditure	Category	Variable Name	Observations		Mean (St. Dev.)		25th percentile		75th percentile	
			Pre-election Year	Non Pre-electoral Year	Pre-election Year	Non Pre-electoral Year	Pre-election Year	Non Pre-electoral Year	Pre-election Year	Non Pre-electoral Year
Current Expenditure	General Payments	*generalexp*	329	1006	7138.9	6539.49	472.13	427.3	2830.8	2613.91
					(41412.21)	(36724.54)				
	Current Transfers [a]	*transfexp*	603	2008	3654.77	3666.14	38.7	40.27	541	506.18
					(30465.5)	(32126.99)				
	Protection and Social Promotion	*socialexp*	602	2005	4759.08	4632.42	43.86	30.44	1392.82	1317.67
					(32294.65)	(32588.02)				
Investment Expenditure	Urban Infrastructure	*urbanexp*	329	1006	20921.13	17979.77	256.74	215.48	5342.16	4855.55
					(176914.35)	(147779.47)				
	Rents, Maintainance and Repairs	*servexp*	603	2008	17304.34	16725.1	397.35	389.44	5142.71	5028.41
					(133054)	(128589.95)				
	Education, Health, Culture and Sports	*eduexp*	329	1006	6628.49	5875.27	211.18	167.42	2743.18	2441.87
					(37819.61)	(34251.81)				
	Real Investment	*realexp*	603	2007	9233.36	6790.63	234.98	141.52	2462.4	2074.58
					(73207.71)	(50701.56)				
Debt service	Debt Payments	*debtexp*	602	2005	6645.56	4763.56	8.41	1.09	721.08	526.47
					(99543.21)	(56430.49)				

Expenditure variables are measured as the year-end aggregate values in thousands of euros (base year: 2015). The column containing "Non Pre-electoral Year" includes all

[a] Expenditure transfers is the sum of expenditures in current transfers and capital transfers.

Table A2

Main Political Parties in the Municipalities of Madrid and their Respective Descriptive Statistics

Name of Political Party	Abbreviation	Political Spectrum	Variable name	% of Votes				
				Observations	Mean	Standard Deviation	Min	Max
Partido Popular (Popular Party)	PP	Centre-right	*votespp*	716	43.09	16.68	0	97.92
Partido Socialista Obrero Español (Spanish Socialist Workers Party)	PSOE	Centre-left	*votespsoe*	716	27.21	16.05	0	78.59
Izquierda Unida (Unified Left)	IU	Left to far-left	*votesiu*	716	7.35	8.83	0	72.46
Unión Progreso y Democracia (Progress and Democracy Union)	UPyD	Centre to Centre-left	*votesupyd*	716	0.91	2.63	0	19.58
Ciudadanos (Citizens)	Cs	Centre-right	*votescs*	716	0.87	3.66	0	31.21
Other Parties	-	-	*votesother*	716	20.57	21.84	0	100

Data availability is subject to the one provided by the National Institute of Statistics of the Community of Madrid and no disaggregated data is provided for "Other Parties".

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Declaration of Authorship

By signing this declaration, I confirm that I have completed the present thesis independently, without help from others and without using resources other than indicated and named. All phrases that are taken directly or indirectly from other sources (incl. electronic sources), quoted verbatim or paraphrased are indicated accordingly. I am aware that any violation of this declaration will result in the work being graded as 'failed' (0-grade point, ECTS-Grade F).

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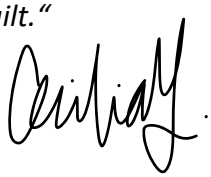

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