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## Exploring Political Budget Cycles in the EU-27

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# Exploring Political Budget Cycles in the EU-27\*

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2026

## Abstract

Using quarterly data for the period Q1:2000–Q4:2024, the study examines whether elections in EU-27 member states shape the composition and timing of fiscal policy strategies, and how political, fiscal and institutional constraints condition these dynamics. Employing a two-way fixed-effects framework, we find evidence that elections consistently lead to increases in primary expenditure. These effects are visible across several components, namely compensation of employees, intermediate consumption, gross fixed capital formation, and other primary expenditure. Using alternative electoral windows reveals that some adjustments begin before the electoral year, particularly in the case of GFCF and other primary expenditure, suggesting medium-term planning of politically salient spending. Importantly, these patterns emerge only around regular elections, with no evidence of political budget cycles in early elections. In addition, high-debt countries tend to adopt more restrictive electoral strategies, EU membership moderates pre-electoral spending, and coalition governments appear to impose additional fiscal discipline during election periods. Overall, the findings indicate that political budget cycles persist in the European Union, but their magnitude and composition depend critically on fiscal conditions, institutional frameworks, and governance structures.

**Keywords:** Political Budget Cycles, Fiscal Policy, Elections, European Union

**JEL:** D72; E62; H60

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## 1. Introduction

A central set of questions in the literature concerns whether governments engineer fiscal expansions ahead of elections, how political budget cycles materialize—through increases in public spending, reductions in taxation, or both—and the extent to which EU-level and domestic political frameworks constrain such behaviour.

Since incumbent governments have strong incentives to remain in office, they may resort to various strategies to shape fiscal outcomes in ways that enhance their electoral prospects. While some studies highlight a preference for “visibility expenditure” – increased current spending over capital investment – others support the public expenditure targeting hypothesis, suggesting capital spending is directed toward specific groups or regions to maximize political returns (e.g. Rogoff, 1990; Vergne, 2009; Jacques, 2022). Incumbent governments also tend to behave opportunistically in their tax policies, often seeking lower revenues during election years—particularly through reductions in income and wealth taxes—with strategies that vary according to the government type and incumbent orientation (e.g., Hanusch, 2012; Douglas et al., 2024; Villavicencio and Oriola, 2025). Thus, we intend to contribute to the existing literature with new insights into how elections may influence policymaking for electoral purposes in the EU-27 and address the relevance of both timing and the political and institutional framework, as these remain topics that have not yet been widely explored.

Following the establishment of the Economic Union, the Maastricht Treaty introduced strict supranational fiscal requirements aimed at ensuring stability and robustness. Since 1992, EU member states have gradually lost fiscal autonomy due to the imposition of debt-to-GDP and deficit-to-GDP thresholds – set at 60% and 3%, respectively – which must be met prior to joining the EMU and maintained thereafter (Andrikopoulos et al., 2004). Despite these constraints, expansionary pro-cyclical fiscal policies have occasionally been observed, undermining fiscal buffers. One explanation offered in the literature is electorally motivated opportunism, commonly referred to as political budget cycles. As defined by Vergne (2009), this theory posits that fiscal policy can be strategically manipulated to enhance the re-election prospects of incumbent governments.

The accumulation of substantial public debt across Western Europe has had far-reaching consequences, particularly during the European sovereign debt crisis, which affected policymaking, risk premiums, and citizens’ welfare. Since then, fiscal discipline and debt sustainability have gained prominence, narrowing the scope for electoral fiscal manoeuvring.

Therefore, we examine the existence of political budget cycles within the EU, analyse how elections shape the composition of public budgets, assess the timing at which manipulation of

each fiscal component begins, and evaluate how fiscal and institutional constraints may limit electoral strategies.

In a nutshell, this study provides new clear evidence that electoral dynamics shape fiscal policy in the EU-27, although in a manner conditioned by institutional and macroeconomic constraints. While elections do not significantly affect government revenue, they consistently stimulate adjustments on the expenditure side, with primary spending increasing in the run-up to elections. The robustness analysis further shows that some of these adjustments begin well before the electoral year, particularly in the case of public investment and other primary expenditure, suggesting deliberate medium-term planning of politically salient spending. These dynamics, however, appear to be exclusive to regular elections, with early elections displaying no comparable fiscal behaviour.

The results also reveal important heterogeneity with high-debt countries deviating from the typical expansionary pattern and reflecting tighter fiscal constraints. EU membership is associated with lower growth in direct tax revenues and higher investment while exerting a moderating effect on total primary expenditure during elections. Coalition governments, in turn, appear to enhance fiscal scrutiny: although they expand certain spending items in non-electoral periods, they reduce other primary expenditure during elections, limiting opportunistic manipulation. Finally, although electoral periods had a positive effect on other revenue before the Global Financial Crisis (GFC), the effect is virtually eliminated in the post-crisis period.

Overall, the findings indicate that political budget cycles persist in the European Union, but their magnitude and composition depend critically on fiscal conditions, institutional arrangements, and the broader governance environment.

This paper contribution to the literature is threefold. First, it provides new evidence on the presence of political budget cycles in the EU-27. Second, it uncovers important heterogeneity related to countries' indebtedness levels, the institutional framework of the EU, and the type of government in power. Third, by relying on quarterly data, it offers a more granular perspective and reveals dynamics that annual data cannot capture, including the timing at which electoral strategies begin to unfold. These dimensions remain largely unexplored in the existing literature, and this study aims to fill that gap.

The paper is organised as follows. Section 2 provides a literature review; Section 3 presents the data and statistical considerations; Section 4 outlines the methodology and data; Section 5 presents the empirical analysis; and Section 6 concludes.

## **2. Literature Review**

### ***2.1. Democracy and the role of political motivations***

Democracy, as a cornerstone of modern political systems, has the potential to enhance public policy effectiveness. Competitive and regular elections incentivize governments to improve performance and allow voters to remove underperforming incumbents. However, despite the accountability mechanisms inherent in democratic systems, political parties may pursue alternative objectives during electoral periods, particularly those aimed at securing re-election (Vergne, 2009).

Over recent decades, economic literature has increasingly examined politically motivated fiscal behaviour. Seminal contributions include analyses of electoral budget cycles (Rogoff and Sibert, 1988), the influence of political institutions on fiscal outcomes (Persson and Tabellini, 2003), and models of opportunistic and partisan behaviour (Sapir and Sekkat, 2002). These studies highlight how electoral dynamics can distort fiscal policy, often resulting in suboptimal outcomes (Eyraud et al., 2017), such as pro-cyclical expenditure increases that erode fiscal space and hinder long-term growth.

One can distinguish between opportunistic electoral cycles—where incumbents manipulate fiscal variables to secure re-election regardless of ideology—and partisan cycles, which reflect ideological differences in fiscal priorities (Andrikopoulos et al., 2004). The ideological composition of governments can, indeed, significantly shape the design of public policies, which in turn affects state revenue collection and the distribution of income and wealth (Perotti and Kontopoulos, 2002; Huber et al., 2019). According to some strands of the literature, while right-wing incumbents tend to engage in both public spending and tax-based opportunistic policies, and are more likely to pursue lower marginal tax rates, left-wing incumbents primarily focus on tax-based manipulation and income redistribution, and appear to pursue fiscal conservatism—particularly when newly elected (e.g., Villavicencio and Oriola, 2025).

In this context, it is also important to note that coalition governments, common in proportional representation systems, tend to moderate partisan effects but may also contribute to larger deficits and increased debt accumulation (Alesina et al., 1997).

Both re-election incentives and partisan goals often lead to expansionary pre-election strategies, including increased spending, ambitious investment promises, and optimistic revenue forecasts. These measures appeal to electorates with limited understanding of intertemporal budget constraints, who may respond positively to perceived improvements in income or public services (Alesina and Perotti, 1995; Debrun et al., 2009). Post-election, however, governments frequently deviate from these promises, disrupting expectations and

consumption behaviour. Electoral considerations, especially when shaped by interest groups, can also lead to the “common pool” problem – targeted spending for specific constituencies with costs borne by the broader population (Eyraud et al., 2017).

Fiscal rules have proven effective in constraining political budget cycles, particularly in countries with fewer veto players, higher globalization, and left-leaning governments. Their impact has intensified since the global financial crisis (Gootjes et al., 2021). Empirical evidence suggests that fiscal irresponsibility may ultimately harm political prospects, as voters tend to penalize large deficits (Drazen and Eslava, 2010). Moreover, Bohn and Veiga (2021) show that budgetary forecasts may be manipulated ahead of elections, especially when incumbents face uncertainty. This effect is mitigated in electorates with higher education levels, which proxy for informed voting behaviour.

## ***2.2. Effects on the budgetary structure***

The literature consistently suggests that, in the lead-up to elections, policymakers tend to adopt short-term, myopic fiscal strategies – most notably, tax cuts that are not matched by proportional reductions in public expenditure (Buti and Van den Noord, 2004; Milesi-Ferretti et al., 2002). This behaviour results in an expansion of discretionary fiscal policy during pre-election and election years, often underpinned by overly optimistic macroeconomic projections. In contrast, non-election periods are typically used to pursue fiscal consolidation, aimed at rebuilding buffers and creating space for future electoral spending.

Rogoff’s (1990) political business cycle model, grounded in information asymmetries, posits that voters respond to both private and public consumption. The model highlights how current expenditure can be strategically increased during election periods, while long-term investments – whose benefits are less immediately visible – are often deprioritized. This strategy is shaped by voters’ limited ability to observe government competence and the quality of its advisors in real time.

Building on this framework, Vergne (2009) argues that electoral incentives significantly influence the composition of public spending. Because voters observe current expenditure and tax levels contemporaneously, governments tend to favour visible forms of spending – such as public sector wages and subsidies – over capital investment. This pattern is particularly pronounced in developing economies, where narrow tax bases limit the effectiveness of tax cuts as electoral tools. In such contexts, direct spending measures yield more immediate and tangible benefits for voters, thereby offering greater political returns.

Organized interest groups also play a pivotal role in shaping political budget cycles, especially through campaign financing and voter mobilization (Grossman and Helpman, 1996). According to models of targeted public expenditure, incumbents have strong incentives to direct investment toward specific constituencies to secure support from influential lobbies, rather than focusing solely on demonstrating policy competence (Drazen and Eslava, 2010). Also, Jacques (2022) argues that investment priorities might be a key variable for electoral competitiveness, varying according to the type of electorate that a party tries to capture, and might neglect short-term priorities.

Moreover, the distribution of voter preferences can amplify political budget cycles. As Vergne (2009) notes, a higher proportion of swing voters increases the incentive for incumbents to engage in targeted pre-election spending. This often manifests in infrastructure projects, which are politically attractive due to their geographical specificity, sectoral visibility, and immediate impact on local communities.

Despite the limited literature on this strategy, incumbent governments also tend to behave opportunistically in their tax policies, aiming for lower revenues during election years—particularly through reductions in income and wealth tax rates (Villavicencio and Oriola, 2025). Furthermore, there is some evidence that tax reforms—especially those involving tax increases—are often postponed until after elections (e.g., Douglas et al., 2024; Fuest et al., 2024).

### ***2.3. Empirical evidence***

Empirical research on political budget cycles reveals a nuanced and context-dependent relationship between electoral dynamics and fiscal behaviour. While early models emphasized the visibility of current expenditure as a strategic tool for incumbents (Rogoff, 1990), more recent studies have expanded the scope to include the targeting of capital spending and the reallocation of budgetary resources. Vergne (2009) finds that governments often favour broad-based capital expenditure during election years, not necessarily to increase deficits, but to shift spending in ways that maximize electoral returns without triggering voter backlash over fiscal imbalances.

Cross-country analyses underscore the importance of institutional quality and economic development in shaping the magnitude of political budget cycles. Shi and Svensson (2006) demonstrate that developing economies exhibit stronger electoral effects on fiscal balances than advanced industrial countries, attributing this divergence to weaker institutional constraints and lower voter information. Similarly, Drazen and Eslava (2010) challenge the assumption that

expansionary fiscal policies are electorally beneficial, showing that voters tend to penalize rather than reward fiscal profligacy, especially in systems with higher transparency and accountability. On the other hand, Afonso and Hauptmeier (2009), for European Union countries in the period 1990-2005, report that elections have the effect of rising primary spending.

Katsimi and Sarantides (2012), examining the level and composition of fiscal instruments in 19 high-income OECD countries between 1972 and 1999, found evidence of a shift from public investment to current expenditures during election periods, as well as a negative effect on revenue resulting from a decline in direct taxation.

Regarding electoral tax policies, analysing a sample of 22 countries between 1960 and 2014, Fuest et al. (2024) also found evidence that governments link tax decisions to the electoral cycle, often postponing tax increases until after elections—especially when those increases involve income taxes or VAT. Indeed, according to Alesina et al. (2024), fiscal consolidations based on tax measures carry an electoral cost in advanced economies, with the impact being amplified depending on the nature of the governing party’s political manifesto.

In the European Union, the empirical landscape is shaped by the constraints of the Economic and Monetary Union (EMU). Efthyvoulou (2012) finds that EMU member states display more pronounced political budget cycles than their non-EMU counterparts, suggesting that supranational fiscal rules may not fully deter electoral manipulation. The intensity of these cycles is further linked to electoral competitiveness and the nature of voter motivations – economic versus identity-based. Villavicencio and Oriola (2025), analysing EU member states between 1995 and 2022, found that regional public spending tends to increase and taxes are often reduced in the run-up to national elections, even though such electoral strategies are partially mitigated by strong fiscal rules. Meanwhile, according to their findings, despite the spending constraints imposed by fiscal rules, these may simultaneously incentivize tax-based fiscal manipulation during election periods, resulting in a shift from expenditure-based to taxation-based strategies.

Country-specific studies provide additional granularity. For instance, Chortareas et al. (2018) show that in Greece, electoral-year fiscal expansions persisted even after the Maastricht Treaty, particularly through increases in public sector wages. Their findings also highlight the detrimental fiscal impact of prolonged incumbency, regardless of ideological orientation. In post-communist Europe, Pulatov and Ahmad (2021) observe that electoral spending effectively reduces unemployment during election years but note that EU membership plays a moderating role in curbing such behaviour.

Taken together, the empirical literature suggests that while political budget cycles are not universally present or uniform in their effects, they remain a salient feature of fiscal policymaking – especially in environments where institutional checks are weak, electoral competition is intense, and voters are responsive to visible fiscal signals. The European experience illustrates both the persistence of these cycles and the limitations of supranational constraints in fully neutralizing electoral incentives.

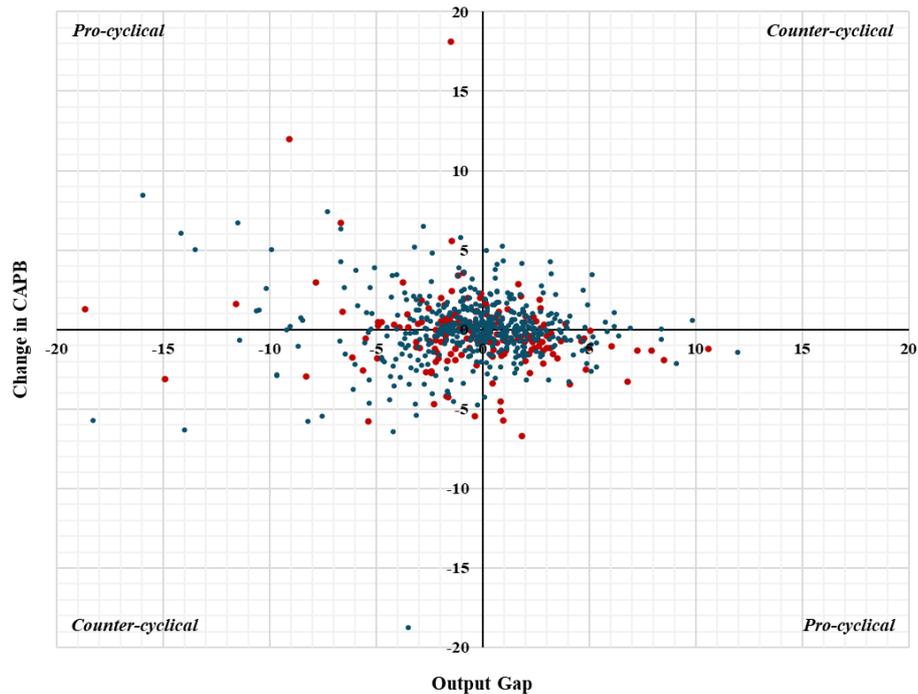
### **3. Theoretical framework and stylized facts: Policy biases and election**

Since the 1970s, government debt has increased significantly across most European countries, driven largely by a persistent deficit bias in fiscal policymaking. This accumulation of debt had particularly severe consequences for the most indebted economies during the Great Recession. The trajectory of rising public indebtedness, alongside the policy debate over its associated risks, highlighted the need for rules to enforce fiscal discipline and to lay the foundations for the single currency (Krogstrup and Wyplosz, 2009). In response, the Stability and Growth Pact (SGP) and its associated mechanisms were introduced to constrain fiscal discretion. The primary objectives of the SGP were to prevent negative cross-border spillovers from national fiscal policies, to build fiscal buffers (thus enabling the automatic stabilisers – such as taxes and transfers – to function effectively), and to facilitate the implementation of counter-cyclical policies.

As a result, since 1992, EU member states have gradually ceded part of their fiscal autonomy. The debt and deficit criteria, set at 60% and 3% of GDP respectively, were intended to serve as binding constraints on national fiscal policies, irrespective of governments' ideological orientations (Andrikopoulos et al., 2004). However, these criteria have been widely criticised for their limited effectiveness in curbing politically motivated fiscal manoeuvres (Buti and Van den Noord, 2004). Despite the rules in place, pro-cyclical fiscal behaviour – namely fiscal expansions during economic booms and contractions during downturns – has remained common practice. Consequently, in periods of economic stress, countries with eroded fiscal buffers often resort to pro-cyclical austerity, which may further exacerbate downturns.

Figure 1 illustrates the recurrent fiscal policy biases in EU member states, using annual data. Fiscal expansions and contractions are proxied by changes in the cyclically adjusted primary balance (CAPB), while economic conditions are captured through output gap estimations. Red marks represent election years, while blue marks correspond to non-election years.

**Figure 1. Pro-cyclical and counter-cyclical fiscal policies in the EU-27 (2000-2024)**



Notes: Authors' elaboration. Red markers correspond to election years, blue markers to non-election years.

The systematic deficit biases, the continued accumulation of debt, and recurrent non-compliance with fiscal targets may, among other factors, be attributed to political incentives during election periods. These dynamics are central to the literature on political budget cycles, which explores the interplay between electoral motives and fiscal policy outcomes.

Indeed, fiscal statistics for the EU-27 countries between 2000 and 2024 illustrate the potential influence of the electoral cycle on fiscal policy strategy (Table 1). On average, countries record primary deficits that are 0.32 percentage points higher in election years compared to non-election years. Excluding the cyclical component, European countries tend to pursue expansionary policies during electoral periods, as indicated by negative average changes in the CAPB. Conversely, non-election years appear to be used to correct fiscal imbalances, with more restrictive policies reflected in positive average changes in the CAPB.

On the revenue side, both average direct and indirect taxes tend to decrease in election years (by 0.05 and 0.09 percentage points, respectively), in contrast to other revenues, which increase by 0.07. On the expenditure side, compensation of employees (0.07), investment (0.05), intermediate consumption (0.01) and other primary expenditure (0.01), all tend to increase during election years. Furthermore, the data appear to support Rogoff's "visibility expenditure" theory (Rogoff, 1990), as there seems to be evidence of budget manipulation in EU countries, particularly through increases in compensation of employees and other current expenditures.

**Table 1. Fiscal statistics in election years (EU-27 average: 2000-2024)**

<i>Variable</i>	<i>Election year</i>	<i>Non-election year</i>	<i>Difference</i>
<i>Primary balance</i>	-0.72	-0.40	-0.32
<i>Δ Primary balance</i>	-0.29	0.03	-0.32
<i>CAPB</i>	-0.54	-0.15	-0.39
<i>Δ CAPB</i>	-0.29	0.07	-0.36
<i>Direct taxes</i>	10.91	11.24	-0.33
<i>Δ Direct taxes</i>	-0.01	0.04	-0.05
<i>Indirect taxes</i>	13.80	13.78	0.02
<i>Δ Indirect taxes</i>	-0.09	0.00	-0.09
<i>Other revenue</i>	17.76	17.72	0.04
<i>Δ Other revenue</i>	0.08	0.01	0.07
<i>Compensation of employees</i>	10.98	11.01	-0.03
<i>Δ Compensation of employees</i>	0.05	-0.02	0.07
<i>Intermediate consumption</i>	6.17	6.10	0.07
<i>Δ Intermediate consumption</i>	0.01	0.00	0.01
<i>GFCF</i>	3.86	3.81	0.05
<i>Δ GFCF</i>	0.05	0.00	0.05
<i>Other primary expenditure</i>	22.17	22.22	-0.05
<i>Δ Other primary expenditure</i>	0.09	0.08	0.01

Note: Authors' elaboration. All variables are expressed as a percentage of GDP.

The descriptive comparison of average fiscal aggregates in election and non-election years is informative but not causal. Such statistics do not control for underlying economic or institutional factors and therefore cannot establish whether elections drive fiscal behaviour. Their role is simply to motivate the empirical strategy developed in the next section, where causality is addressed through a formal econometric framework.

#### **4. Empirical Approach**

We aimed to analyse the role of political budget cycles in the European Union-27. Although the EU-27 member states share a high degree of economic integration, a common institutional framework, and face common fiscal rules—having been collectively exposed to severe crises, notably the sovereign debt crisis—they exhibited heterogeneous policy responses and divergent fiscal strategies. This variation within a shared framework offers a unique opportunity to identify structural patterns.

The use of quarterly data allows us to examine electoral effects at different time horizons, capturing both quarter-on-quarter and year-on-year adjustments in fiscal aggregates. This higher frequency provides a more granular view of short-term fiscal dynamics around elections, offering insights that annual data cannot reveal. To our knowledge, this dimension has so far been only marginally explored in the multi-country literature, and this study contributes by addressing that gap.

Thus, we set a typical reduced-form specification to capture the effect of elections on fiscal policy (e.g. Brander and Drazen, 2005; Vergne, 2009; Chortareas et al., 2018), adjusted for a quarterly data sample:

$$\Delta y_{it} = \alpha + \beta \Delta y_{it-1} + \phi y_{it-4} + \delta Elections_{it} + \theta X_{it} + \lambda_i + \varphi_t + u_{it} \quad (1)$$

where,  $\Delta y_{it}$  denotes the fiscal policy dependent variable, measured as the year-on-year change in the corresponding budgetary item. The lagged change  $\Delta y_{it-1}$  is included to capture short-run persistence in fiscal behaviour, while the lagged level  $y_{it-4}$  controls for the influence of the initial fiscal position prior to the observed adjustment. The fiscal variables used in the model include total revenue, total primary expenditure, direct taxes (current taxes on income and wealth), indirect taxes (taxes on imports and production), gross fixed capital formation (GFCF), and other primary expenditure notably compensation to employees and intermediate consumption.

Fiscal variables are expressed as year-on-year growth rates, which removes seasonal patterns and ensures stationarity by differencing the series over a four-quarter horizon. This transformation also provides a consistent treatment across countries and fiscal indicators in a long-T panel. Panel unit root tests were conducted using the ADF–Fisher Chi-square method under specifications with individual intercepts and with intercepts plus trend. The results, reported in Table A1, indicate that while some fiscal variables appear stationary in levels, all variables are stationary in first differences, supporting the chosen specification.

The dummy variable  $Elections_{it}$  captures the presence of an electoral period, taking the value 1 in the quarter of the election and in the three preceding quarters (12-month window), and 0 otherwise. This specification aims to identify systematic fiscal responses in the run-up to elections.

The vector  $X_{it}$  includes standard macroeconomic controls commonly used in the fiscal policy literature (e.g. Vergne, 2009; Katsimi and Sarantides, 2012). Real GDP quarterly growth captures the cyclical position of the economy and reflects the operation of automatic stabilisers, which mechanically influence fiscal aggregates as activity fluctuates. The quarterly (year-on-year) change in the unemployment rate complements this measure by providing an alternative indicator of labour-market slack that is less sensitive to output revisions and often reacts more gradually to economic conditions. Taken together, these two variables control for both the discretionary and non-discretionary components of fiscal behaviour that co-move with the

business cycle. We also include the debt-to-GDP ratio lagged four quarters, as in Ademmer and Dreher (2016), reflecting the idea that fiscal decisions are shaped by intertemporal budget constraints: higher debt levels may restrict the scope for expansionary measures or induce consolidation pressures (Gootjes et al., 2021). Overall, these controls help isolate the effect of elections from broader macroeconomic dynamics and fiscal sustainability considerations. Lastly,  $\lambda_i$  and  $\varphi_t$  denote country and time fixed effects, respectively, and  $u_{it}$  is the error term.

The empirical strategy relies on a two-way fixed-effects specification, incorporating both country and time fixed effects to control for unobserved heterogeneity across member states and for common shocks affecting all countries simultaneously. This approach isolates within-country variation over time, ensuring that the estimated coefficients capture the response of fiscal variables net of structural cross-country differences and period-specific influences. Standard errors are clustered at the country level to account for serial correlation and heteroskedasticity within units, thereby providing consistent inference in the presence of within-country dependence.

The method applied is consistent with the existing literature exploring the effects of elections on fiscal policy (e.g. Brender and Drazen, 2005; Katsimi and Sarantides, 2012), relying on a fixed-effects estimator. This approach is appropriate given the long-time dimension of the panel, which renders concerns about the Nickell bias negligible and removes the main justification for using dynamic GMM estimators designed for short-T panels. Although endogeneity can never be fully ruled out, concerns are mitigated by the fact that elections are predetermined institutional events and therefore unlikely to be driven by short-term fiscal dynamics. Even so, we performed a robustness exercise using a 2SLS estimator, instrumenting GDP growth with its first two lags in the first-stage regression. The results confirm that potential endogeneity between fiscal variables and GDP growth does not bias our estimates, thereby reinforcing the robustness of the baseline specification.

In addition to the baseline model, we conduct a set of sensitivity analyses that incorporate political, fiscal and institutional factors, and examine the timing of electoral fiscal manipulation. We also estimate a separate specification distinguishing between regular and early elections, allowing us to assess whether the results hold across different types of electoral contests.

The sample comprises 27 European Union member states (EU-27) over the period Q1:2000–Q4:2024. The macroeconomic and fiscal data were obtained from the Eurostat database and data on each country election and government type from The Representative Democracy Data Archive (REPDEM). Summary statistics are reported in Appendix Table A2, followed by a correlation matrix of the variables in Table A3.

## **5. Empirical analysis**

### ***5.1. Baseline specification***

The empirical results presented in Table 2 provide robust evidence of the influence of electoral periods on fiscal policy in the EU-27 member states. Across all specifications, fiscal policy also displays a high degree of persistence, as reflected in the significance of the lagged dependent variables in most budgetary components, and appears to be strongly conditioned by the initial level of each budgetary component.

While the election dummy does not display statistical significance in explaining year-on-year changes in total government revenue, it has a positive and significant effect on the growth of total primary expenditure. According to the baseline estimation, primary expenditure increases by approximately 0.49 pp of GDP in election years, suggesting a politically motivated expansion in fiscal outlays consistent with the presence of a political budget cycle.

Also, as expected and in line with the existing literature, growth exerts a negative effect on both revenue and primary expenditure shares of GDP due to the denominator effect (e.g. Katsimi and Sarantides, 2012). Moreover, the debt-to-GDP ratio recorded in the previous year has a positive and significant impact on revenue, which is consistent with the notion that higher debt levels tend to trigger revenue-raising efforts. Governments facing tighter fiscal constraints often resort to tax increases or enhanced revenue mobilisation to stabilise their budgetary position and signal fiscal responsibility.

Regarding the electoral effect on each budgetary component, outputs (3) to (9) indicate that election periods have no statistically significant impact on any of the revenue categories. However, they do exert a positive and significant influence on several expenditure items, notably compensation of employees, intermediate consumption, gross fixed capital formation (GFCF), and other primary expenditure. These results suggest that electoral incentives are primarily channelled through the expenditure side of the budget.

The positive association between unemployment and other primary expenditure is consistent with the behaviour of automatic stabilisers and discretionary social support measures: as labour-market conditions deteriorate, governments tend to increase transfers, subsidies, and other forms of social assistance. Although the negative relationship between unemployment and intermediate consumption is less intuitive, its statistical significance suggests that it may reflect efforts to contain operational and administrative spending during downturns, as governments reallocate resources toward more socially sensitive items or adjust day-to-day expenditures in response to tighter budgetary conditions.

Our baseline estimation also shows that the previous year's indebtedness level positively influences both indirect taxes and other revenues, while constraining the evolution of compensation to employees and public investment. However, the positive association between lagged public debt and the 'other primary expenditure' category is somewhat unexpected. A plausible explanation is that this component largely consists of transfers and support programmes that tend to expand when economic conditions deteriorate—periods that are typically characterised by higher debt levels. Moreover, many of these expenditures are rigid or legally mandated, limiting governments' ability to adjust them even when fiscal pressures intensify.

The main results of the baseline estimations are consistent with the existing literature, which argues that the presence of election periods influences fiscal policy decisions by stimulating the growth of public spending, particularly through increases in current expenditure (e.g. Rogoff, 1990; Vergne, 2009; Chortareas et al., 2018).

To further address concerns about potential endogeneity, we re-estimate the baseline specification using a 2SLS estimator following the approach of Ademmer and Dreher (2016), instrumenting GDP growth with its first two lags. The resulting coefficients remain closely aligned with the baseline fixed-effects estimates in both sign and magnitude, indicating that the relationship between elections, fiscal variables, and macroeconomic conditions is not driven by reverse causality or omitted-variable bias affecting GDP growth. This robustness exercise is presented in Table A4 of the appendix thereby reinforcing the validity of the baseline results.

For robustness purposes, we conducted an additional exercise based on quarter-on-quarter changes in the budgetary variables. Accordingly, both real GDP growth and unemployment now reflect quarterly variations, while level variables are lagged by only one quarter. Importantly, the elections variable continues to be defined as a 12-month window dummy. This alternative specification allows us to observe whether the main results are driven by year-on-year dynamics or remain consistent when focusing on short-term fiscal adjustments, thereby providing a complementary assessment of the stability of our findings. The corresponding results are reported in Table 3.

The robustness exercise, based on quarter-on-quarter changes in fiscal components, reinforces the main conclusions drawn from the baseline specification. Election periods continue to exert a statistically significant influence on expenditure items, while leaving revenue components unaffected, thereby confirming the asymmetric nature of political budget cycles. The only exception is gross fixed capital formation (GFCF), which loses statistical significance in this specification. This may be due to the inherently volatile and project-driven

nature of public investment, which often responds to medium-term planning cycles rather than short-term political incentives.

Moreover, the constraining effect of lagged public debt on compensation to employees observed in the baseline model is no longer present, suggesting that wage-related expenditure may be less sensitive to debt pressures in the short run. The results also continue to exhibit a high degree of fiscal persistence, as evidenced by the significance of lagged changes in the dependent variables. This is consistent with the view that fiscal policy adjustments tend to occur gradually, shaped by multi-year budgetary commitments and the inertia embedded in public expenditure structures.

Taken together, these findings confirm the robustness of the baseline results and offer additional insight into the short-term dynamics of fiscal behaviour in the EU-27.

**Table 2. Baseline model: Year-on-year changes in fiscal components**

	$\Delta$ Total Revenue	$\Delta$ Total Primary Expenditure	$\Delta$ Direct Taxes	$\Delta$ Indirect Taxes	$\Delta$ Other Revenue	$\Delta$ Compensation Employees	$\Delta$ Intermediate Consumption	$\Delta$ GFCF	$\Delta$ Other Primary Expenditure
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$\Delta Y_{it-1}$	0.166*** (0.036)	0.098** (0.039)	0.156** (0.073)	0.205*** (0.041)	0.157*** (0.022)	0.347*** (0.041)	0.154*** (0.034)	0.175*** (0.044)	0.081** (0.036)
$Y_{it-4}$	-0.164*** (0.027)	-0.376*** (0.061)	-0.139*** (0.026)	-0.190*** (0.037)	-0.286*** (0.027)	-0.118*** (0.015)	-0.230*** (0.037)	-0.350*** (0.052)	-0.518*** (0.075)
$Elections_{it}$	0.051 (0.092)	0.485*** (0.150)	0.018 (0.058)	-0.052 (0.037)	0.075 (0.064)	0.077*** (0.026)	0.029* (0.015)	0.094* (0.046)	0.287** (0.115)
$Growth_{it}$	-0.164*** (0.021)	-0.241*** (0.031)	-0.029** (0.012)	-0.048*** (0.011)	-0.089*** (0.011)	-0.055*** (0.007)	-0.024*** (0.005)	0.012 (0.013)	-0.170*** (0.025)
$\Delta Unemployment_{it}$	-0.031 (0.054)	0.104 (0.072)	-0.026 (0.028)	-0.038 (0.023)	0.034 (0.030)	-0.025 (0.015)	-0.036*** (0.012)	-0.021 (0.013)	0.180** (0.074)
$Debt_{it-4}$	0.008* (0.005)	0.000 (0.007)	-0.001 (0.002)	0.006** (0.003)	0.008*** (0.002)	-0.003*** (0.001)	-0.001 (0.002)	-0.007*** (0.002)	0.021* (0.011)
<i>Constant</i>	6.929*** (1.000)	16.822*** (2.538)	1.722*** (0.256)	2.359*** (0.450)	4.800*** (0.449)	0.347*** (0.041)	0.154*** (0.034)	0.175*** (0.044)	0.081** (0.036)
Country Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.245	0.470	0.192	0.243	0.257	0.556	0.267	0.316	0.451
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

**Table 3. Robustness model: Quarter-on-quarter changes in fiscal components**

	$\Delta$ Total Revenue	$\Delta$ Total Primary Expenditure	$\Delta$ Direct Taxes	$\Delta$ Indirect Taxes	$\Delta$ Other Revenue	$\Delta$ Compensation Employees	$\Delta$ Intermediate Consumption	$\Delta$ GFCF	$\Delta$ Other Primary Expenditure
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$\Delta Y_{it-1}$	-0.078 (0.095)	-0.221*** (0.070)	-0.137 (0.091)	-0.345*** (0.093)	-0.076 (0.049)	-0.335*** (0.097)	-0.298*** (0.050)	-0.121*** (0.032)	-0.23*** (0.051)
$Y_{it-1}$	-0.846*** (0.155)	-0.521*** (0.126)	-0.916*** (0.115)	-0.382*** (0.096)	-0.701*** (0.083)	-0.397*** (0.098)	-0.422*** (0.067)	-0.661*** (0.055)	-0.533*** (0.092)
$Elections_{it}$	0.043 (0.083)	0.355*** (0.109)	0.063 (0.045)	-0.035 (0.024)	0.010 (0.059)	0.051*** (0.013)	0.025* (0.013)	0.064 (0.038)	0.218** (0.080)
$Q\_Growth_{it}$	-0.070 (0.073)	-0.239*** (0.055)	0.021 (0.032)	-0.018 (0.022)	-0.051 (0.031)	-0.067*** (0.012)	0.000 (0.013)	0.002 (0.020)	-0.169*** (0.044)
$\Delta Unemployment_{it}$	0.087 (0.143)	0.668*** (0.208)	0.043 (0.075)	-0.010 (0.042)	0.076 (0.085)	0.144** (0.059)	0.002 (0.027)	0.009 (0.042)	0.504*** (0.162)
$Debt_{it-1}$	0.059*** (0.017)	0.026*** (0.009)	0.008 (0.008)	0.010* (0.006)	0.026*** (0.007)	0.002 (0.003)	0.000 (0.003)	-0.013*** (0.004)	0.033*** (0.011)
<i>Constant</i>	32.518*** (5.826)	21.063*** (5.166)	9.664*** (1.238)	4.685*** (1.143)	10.864*** (1.221)	4.269*** (1.066)	2.564*** (0.469)	3.294*** (0.359)	9.964*** (1.758)
Country Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2599	2599	2599	2599	2599	2599	2599	2599	2599
Adjusted $R^2$	0.556	0.601	0.576	0.383	0.497	0.517	0.710	0.633	0.466
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

## 5.2. Sensitivity Analysis: Institutional, political and fiscal constraints

Tables 6 and 7 present the regressions for the robustness analysis, using variables to control institutional, political and fiscal factors that might constraint the manipulation of public finances for electoral purposes.

First, we include a dummy variable identifying member states classified as highly indebted in the period preceding the annual change in the fiscal variable ( $H\_Debt_{it-4}$ ). This allows us to assess whether limited fiscal space and the social pressure associated with public debt sustainability effectively prevent, or at least mitigate, the emergence of political budget cycles (Drazen and Eslava, 2010; Gootjes et al., 2021). We define high-debt countries as those with an average debt-to-GDP ratio exceeding 90%, following the threshold used by Afonso and Jalles (2013). The adjusted specification — similarly applied to the remaining dummy variables — is then

$$\Delta y_{it} = \alpha + \beta \Delta y_{it-1} + \phi y_{it-4} + \delta_1 Elections_{it} + \delta_2 H\_Debt_{it-4} + \delta_3 (H\_Debt_{it-4} * Elections_{it}) + \theta X_{it} + \lambda_i + \varphi_t + u_{it}. \quad (2)$$

Second, we include a dummy variable identifying the influence of membership in the European Union ( $EU_{it}$ ). Upon accession, member states become subject to compliance with EU fiscal rules—covering budget balance, public debt, the structural balance and primary expenditure—which impose binding constraints on national fiscal policies (e.g. Andrikopoulos et al., 2004; Buti and Van den Noord, 2004). This variable also allows us to test whether this framework constrains, or merely has a limited effect on, spending-related manipulation, and whether it incentivises a shift in electoral strategies from expenditure to taxation, as suggested by Villavicencio and Oriola (2025).

Third, we include a dummy variable identifying coalition governments ( $Coalition_{it}$ ). As argued by Hanusch (2012), although all coalition partners seek re-election, some parties may benefit more from fiscal manipulation than others. This variable therefore allows us to assess whether governments composed of multiple parties are subject to stronger internal scrutiny or adopt different fiscal policy strategies. The political budget cycle literature has devoted very limited attention to the role of government type, and this study contributes by addressing this overlooked dimension.

Lastly, we include a dummy variable identifying the period after the onset of the global financial crisis ( $Post\_GFC_{it}$ ) — taking the value 1 from 2008Q1 to 2024Q4 and zero

otherwise — to capture the structural shift in fiscal behaviour and institutional constraints that emerged after the crisis, allowing us to assess whether electoral fiscal dynamics changed under this new environment.

Thus, the dummy variables were included both individually and in interaction with the election variable <sup>1</sup>. Because the post-GFC dummy is perfectly collinear with the time fixed effects, it cannot be included on its own and is therefore used only in interaction with the election indicator. The Tables 6 and 7 report estimations for government revenue and government expenditure, respectively.

Once again, the results prove robust across different model specifications. However, regarding the public revenue, the results show that, controlling for the highly indebted countries and the EU membership, elections might negatively influence the share of indirect taxes revenue on GDP. Moreover, it also shows that the other revenue might tend to increase during those periods, to compensate the decrease on tax revenue and the increase on public spending.

The results indicate that high-debt countries tend to follow the opposite tax policy strategy when approaching elections, increasing indirect taxes. Indeed, popular concern about public debt sustainability may alter policymakers' incentives, discouraging expansionary fiscal behaviour. As noted by Brender and Drazen (2009), higher deficits, particularly in election years, can reduce the incumbent's probability of re-election. In the same vein, election periods exert a negative influence on both GFCF and other primary expenditure in high-debt countries. Moreover, when analysed individually, high indebtedness appears to constrain compensation of employees and GFCF, while increasing other primary expenditure, likely reflecting transfers and support programmes that tend to expand when economic conditions deteriorate.

EU membership shows a negative influence on the growth rate of direct tax revenues, likely reflecting the tax-reduction strategies adopted by Eastern European countries to attract foreign direct investment and multinational enterprises (Silajdzic and Mehić, 2022). Regarding other revenues, although they follow an upward trajectory in non-electoral periods, they tend to decline in election years, which is consistent with political budget cycle theories. Concerning public spending, EU membership—as expected—positively affects investment growth, partly due to the receipt of European

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<sup>1</sup> We do not include the high-debt dummy and lagged debt simultaneously because their joint inclusion generates substantial collinearity without adding explanatory value.

Structural Funds allocated to investment. Surprisingly, however, it exerts a negative impact on total primary expenditure during electoral periods.

In addition, coalition governments appear to exert some disciplinary pressure on the conduct of fiscal policy. In fact, coalitions show a significant and positive influence on the indirect tax burden in non-electoral periods. During election years, although none of the individual revenue components is significantly affected by coalition status, total tax revenue increases in the presence of elections. Regarding public expenditure, coalition governments tend to increase primary spending, particularly compensation of employees and other primary expenditure. However, during elections, this effect reverses, leading to a reduction in other primary expenditure. The results are consistent with the view that coalition governments enhance scrutiny over public finances during election periods, limiting fiscal manipulation that could disproportionately benefit a single party.

Lastly, although the post-GFC period displays a negative sign in almost all expenditure estimations, it does not exert a statistically significant effect on electoral strategies. Nevertheless, for other revenue, the electoral effect becomes statistically significant and notably weaker in the post-GFC period, suggesting a structural shift in fiscal behaviour.

Overall, the robustness exercises confirm that institutional, political and fiscal environments meaningfully shape the scope for electoral manipulation, reinforcing the view that political budget cycles are highly context-dependent rather than uniform across countries or periods.

**Table 6. Electoral cycles under fiscal and institutional constraints: Revenue**

	$\Delta$ Total Revenue				$\Delta$ Direct Taxes				$\Delta$ Indirect Taxes				$\Delta$ Other Revenue			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
$\Delta Y_{it-1}$	0.167*** (0.035)	0.164*** (0.035)	0.163*** (0.034)	0.165*** (0.035)	0.156** (0.074)	0.155** (0.073)	0.156** (0.072)	0.156** (0.073)	0.210*** (0.041)	0.201*** (0.043)	0.204*** (0.04)	0.204*** (0.041)	0.156*** (0.022)	0.149*** (0.021)	0.156*** (0.023)	0.156*** (0.023)
$Y_{it-4}$	-0.157*** (0.024)	-0.164*** (0.026)	-0.166*** (0.027)	-0.164*** (0.027)	-0.139*** (0.026)	-0.140*** (0.026)	-0.139*** (0.025)	-0.139*** (0.026)	-0.178*** (0.036)	-0.190*** (0.037)	-0.192*** (0.036)	-0.190*** (0.037)	-0.271*** (0.026)	-0.283*** (0.026)	-0.287*** (0.028)	-0.286*** (0.027)
$Elections_{it}$	0.052 (0.105)	0.708 (0.474)	-0.239 (0.143)	0.185 (0.193)	0.024 (0.071)	0.102 (0.149)	-0.079 (0.129)	0.023 (0.062)	-0.084* (0.043)	-0.330** (0.141)	-0.094 (0.109)	-0.103* (0.059)	0.112 (0.067)	0.872*** (0.304)	-0.055 (0.123)	0.253* (0.131)
$Growth_{it}$	-0.165*** (0.020)	-0.165*** (0.021)	-0.163*** (0.021)	-0.164*** (0.021)	-0.029** (0.012)	-0.030** (0.012)	-0.029** (0.012)	-0.029** (0.012)	-0.049*** (0.01)	-0.048*** (0.011)	-0.048*** (0.011)	-0.048*** (0.011)	-0.090*** (0.011)	-0.089*** (0.011)	-0.089*** (0.011)	-0.089*** (0.011)
$\Delta Unemployment_{it}$	-0.048 (0.051)	-0.036 (0.055)	-0.031 (0.054)	-0.032 (0.054)	-0.023 (0.027)	-0.028 (0.028)	-0.026 (0.029)	-0.026 (0.028)	-0.053** (0.024)	-0.037 (0.023)	-0.038 (0.023)	-0.038 (0.023)	0.021 (0.030)	0.031 (0.033)	0.035 (0.029)	0.034 (0.030)
$Debt_{it-4}$		0.008 (0.005)	0.008 (0.005)	0.008* (0.005)		-0.002 (0.001)	-0.002 (0.002)	-0.001 (0.002)		0.006** (0.003)	0.006** (0.003)	0.006** (0.003)		0.008*** (0.002)	0.008*** (0.002)	0.008*** (0.002)
$H\_Debt_{it-4}$	0.102 (0.121)				-0.039 (0.089)				-0.006 (0.081)				0.213 (0.178)			
$H\_Debt_{it-4} * Elections_{it}$	0.003 (0.273)				-0.030 (0.137)				0.174** (0.079)				-0.172 (0.190)			
$EU_{it}$		0.256 (0.245)				-0.181* (0.106)				-0.162 (0.115)				0.620*** (0.12)		
$EU_{it} * Elections_{it}$		-0.716 (0.483)				-0.089 (0.147)				0.303* (0.155)				-0.871*** (0.304)		
$Coalition_{it}$			0.170 (0.153)				0.073 (0.092)				0.096* (0.053)				0.072 (0.114)	
$Coalition_{it} * Elections_{it}$			0.373** (0.150)				0.125 (0.132)				0.054 (0.115)				0.168 (0.11)	
$Post\_GFC_{it} * Elections_{it}$				-0.187 (0.208)				-0.007 (0.068)				0.071 (0.080)				-0.249* (0.137)
$Constant$	7.081*** (1.012)	6.674*** (0.967)	6.890*** (0.995)	6.926*** (0.999)	1.643*** (0.271)	1.910*** (0.3)	1.679*** (0.241)	1.723*** (0.256)	2.567*** (0.488)	2.501*** (0.470)	2.323*** (0.442)	2.360*** (0.450)	4.984*** (0.460)	4.185*** (0.434)	4.775*** (0.445)	4.794*** (0.450)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.243	0.207	0.208	0.206	0.149	0.150	0.150	0.149	0.235	0.245	0.243	0.243	0.253	0.266	0.258	0.258
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

**Table 7. Electoral cycles under fiscal and institutional constraints: Expenditure**

	$\Delta$ Total Primary Expenditure				$\Delta$ Compensation to Employees				$\Delta$ Intermediate Consumption			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$\Delta Y_{it-1}$	0.097** (0.038)	0.097** (0.039)	0.097** (0.039)	0.098** (0.039)	0.351*** (0.040)	0.347*** (0.041)	0.347*** (0.040)	0.347*** (0.040)	0.155*** (0.035)	0.154*** (0.033)	0.153*** (0.034)	0.154*** (0.034)
$Y_{it-4}$	-0.376*** (0.058)	-0.376*** (0.062)	-0.308*** (0.060)	-0.375*** (0.061)	-0.122*** (0.016)	-0.118*** (0.015)	-0.102*** (0.015)	-0.118*** (0.015)	-0.230*** (0.038)	-0.237*** (0.039)	-0.230*** (0.037)	-0.230*** (0.038)
$Elections_{it}$	0.578*** (0.177)	1.467*** (0.335)	0.899*** (0.239)	0.677*** (0.177)	0.060* (0.030)	0.079 (0.078)	0.102** (0.043)	0.102*** (0.033)	0.025 (0.019)	0.027 (0.093)	0.023 (0.042)	0.028 (0.033)
$Growth_{it}$	-0.240*** (0.031)	-0.244*** (0.030)	-0.240*** (0.030)	-0.241*** (0.031)	-0.054*** (0.007)	-0.055*** (0.007)	-0.055*** (0.007)	-0.055*** (0.007)	-0.023*** (0.005)	-0.024*** (0.005)	-0.024*** (0.005)	-0.024*** (0.005)
$\Delta Unemployment_{it}$	0.107 (0.072)	0.096 (0.075)	0.108 (0.069)	0.104 (0.073)	-0.021 (0.014)	-0.025* (0.014)	-0.024 (0.014)	-0.025 (0.015)	-0.034*** (0.012)	-0.036*** (0.012)	-0.036*** (0.012)	-0.036*** (0.012)
$Debt_{it-4}$		-0.001 (0.007)	-0.001 (0.006)	-0.001 (0.007)		-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)		-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)
$H\_Debt_{it-4}$	0.016 (0.475)				-0.185** (0.068)				-0.025 (0.039)			
$H\_Debt_{it-4} * Elections_{it}$	-0.483* (0.253)				0.089 (0.058)				0.016 (0.031)			
$EU_{it}$		-0.054 (0.391)				-0.013 (0.069)				-0.141 (0.104)		
$EU_{it} * Elections_{it}$		-1.064*** (0.358)				-0.002 (0.085)				0.004 (0.099)		
$Coalition_{it}$			0.752** (0.346)				0.074* (0.041)				0.042 (0.029)	
$Coalition_{it} * Elections_{it}$			-0.518* (0.254)				-0.030 (0.047)				0.008 (0.047)	
$Post\_GFC_{it} * Elections_{it}$				-0.269 (0.252)				-0.035 (0.045)				0.001 (0.040)
<i>Constant</i>	16.81*** (2.572)	16.915*** (2.756)	16.470*** (2.473)	16.808*** (2.545)	1.490*** (0.179)	1.612*** (0.200)	1.577*** (0.185)	1.599*** (0.185)	1.459*** (0.232)	1.698*** (0.314)	1.492*** (0.284)	1.520*** (0.278)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.443	0.444	0.423	0.443	0.555	0.556	0.533	0.533	0.227	0.230	0.228	0.228
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

**Table 7. Electoral cycles under fiscal and institutional constraints: Expenditure (continued)**

	$\Delta$ GFCF				$\Delta$ Other Primary Expenditure			
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
$\Delta Y_{it-1}$	0.175*** (0.043)	0.174*** (0.042)	0.175*** (0.044)	0.175*** (0.044)	0.076** (0.035)	0.081** (0.036)	0.080** (0.036)	0.080** (0.036)
$Y_{it-4}$	-0.343*** (0.05)	-0.352*** (0.051)	-0.350*** (0.052)	-0.350*** (0.052)	-0.503*** (0.072)	-0.520*** (0.075)	-0.521*** (0.075)	-0.518*** (0.076)
$Elections_{it}$	0.121** (0.055)	0.333* (0.169)	0.108 (0.088)	0.169** (0.079)	0.375*** (0.127)	0.876* (0.444)	0.594*** (0.184)	0.348** (0.154)
$Growth_{it}$	0.014 (0.015)	0.012 (0.013)	0.012 (0.013)	0.012 (0.014)	-0.173*** (0.025)	-0.172*** (0.024)	-0.169*** (0.024)	-0.170*** (0.025)
$\Delta Unemployment_{it}$	-0.011 (0.011)	-0.022 (0.013)	-0.021 (0.013)	-0.021 (0.013)	0.154** (0.062)	0.174** (0.075)	0.182** (0.071)	0.180** (0.074)
$Debt_{it-4}$		-0.007*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)		0.020* (0.011)	0.020* (0.011)	0.021* (0.011)
$H\_Debt_{it-4}$	-0.359*** (0.127)				1.012*** (0.276)			
$H\_Debt_{it-4} * Elections_{it}$	-0.147* (0.081)				-0.442*** (0.158)			
$EU_{it}$		0.217*** (0.078)				-0.297 (0.362)		
$EU_{it} * Elections_{it}$		-0.262 (0.164)				-0.634 (0.498)		
$Coalition_{it}$			-0.027 (0.06)				0.595* (0.296)	
$Coalition_{it} * Elections_{it}$			-0.018 (0.084)				-0.383* (0.203)	
$Post\_GFC_{it} * Elections_{it}$				-0.105 (0.067)				-0.086 (0.253)
<i>Constant</i>	1.32*** (0.201)	1.536*** (0.310)	1.749*** (0.300)	1.730*** (0.299)	11.430*** (1.619)	11.051*** (1.538)	10.338*** (1.393)	10.696*** (1.469)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.314	0.281	0.279	0.280	0.420	0.423	0.424	
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

### 5.3. *Sensitivity Analysis: Alternative electoral horizons and election types*

Tables 8 and 9 present additional robustness regressions, focusing on the timing of fiscal manipulation around elections. To conduct this exercise, we include four alternative electoral dummies, each corresponding to a different time window. The variable  $Elections_{3m_{it}}$  takes the value 1 in the quarter of the electoral act.  $Elections_{6m_{it}}$  covers a six-month window, assuming the value 1 in the election quarter and the two preceding quarters.  $Elections_{12m_{it}}$  corresponds to our baseline specification, capturing a full year prior to the election. Finally,  $Elections_{18m_{it}}$  extends the window to one and a half years, taking the value 1 in the electoral quarter and the five preceding quarters, allowing us to identify strategies that may begin well in advance of the election.

Once again, the results remain robust across alternative model specifications. Electoral periods do not exert a significant influence on the share of government revenue in GDP, whereas they consistently stimulate expenditure-side adjustments, particularly within the 6-, 12- and 18-month windows.

When looking at decomposed fiscal data, different patterns emerge. Notably, the acceleration in GFCF begins at least one and a half years before elections, which is consistent with the idea that investment projects may be strategically scheduled to coincide with the electoral cycle—both because they appeal to voters and because public investment typically requires longer planning and implementation horizons (e.g. Grossman and Helpman, 1996; Drazen and Eslava, 2010). Moreover, other primary expenditure also appears to accelerate more than a year before the electoral act, suggesting that some components of current spending may be adjusted well in advance of elections.

In addition, all budgetary components appear to be positively affected by elections within the 6- and 12-month windows, except for the 6-month election dummy for intermediate consumption, which—although positive—is not statistically significant. Intermediate consumption, in turn, seems to depend strongly on changes in the unemployment rate, reflecting the weight of public transfers embedded in this expenditure category.

More interestingly, only compensation of employees shows a significant acceleration in the quarter of the election itself, which may reflect wage adjustments or additional public-sector hiring during that period, aimed at appealing to public servants as a key electoral constituency.

Lastly, we re-estimate the baseline specification using a six-month electoral window, allowing us to distinguish the effects of regular ( $R\_Elections_{it}$ ) and early elections ( $E\_Elections_{it}$ ) on each fiscal policy variable. Early elections are defined as those occurring at least two quarters before the expected end of the legislative term, based on information from the Representative Democracy Data Archive (REPDEM). The exercise, following Vergne (2009) and Katsimi and Sarantides (2012), aims to assess whether fiscal adjustments reflect genuine electoral incentives or strategic timing decisions by incumbent governments, and to identify which fiscal variables are more likely to be manipulated in the context of early elections. The corresponding results are reported in Tables 10.

The results do not show any statistically significant evidence of expenditure manipulation in the context of early elections, whereas the opposite holds for regular elections. The only exception is intermediate consumption, which, despite displaying a positive coefficient, loses statistical significance.

This asymmetry between regular and early elections is consistent with the institutional structure of budgetary processes in EU member states. Regular elections follow a predetermined calendar, allowing incumbent governments to plan and implement expenditure adjustments well in advance, often through measures embedded in the annual State Budget. By contrast, early elections typically arise from political instability, government collapse or unexpected events, leaving insufficient time for incumbents to design, approve and execute targeted fiscal measures. Since most expenditure items are largely determined by budgetary appropriations, governments facing early elections have limited room to manipulate fiscal aggregates within such a compressed timeframe.

Surprisingly, early elections appear to have a negative and statistically significant effect on total revenue, even though no such effect is detected for direct taxes, indirect taxes or other revenue components. This likely reflects the limited scope for fiscal manipulation in early elections, since most expenditure is pre-committed in the State Budget.

Overall, the main results remain consistent with the baseline specification, providing additional robustness to our findings.

**Table 8. Timing of pre-electoral fiscal behaviour: Revenue**

	$\Delta$ Total Revenue				$\Delta$ Direct Taxes				$\Delta$ Indirect Taxes				$\Delta$ Other Revenue			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
$\Delta Y_{it-1}$	0.166*** (0.036)	0.166*** (0.036)	0.166*** (0.036)	0.165*** (0.036)	0.156** (0.073)	0.156** (0.073)	0.156** (0.073)	0.156** (0.073)	0.205*** (0.041)	0.205*** (0.041)	0.205*** (0.041)	0.206*** (0.041)	0.159*** (0.023)	0.158*** (0.023)	0.157*** (0.022)	0.157*** (0.022)
$Y_{it-4}$	-0.165*** (0.027)	-0.164*** (0.027)	-0.164*** (0.027)	-0.164*** (0.027)	-0.139*** (0.026)	-0.139*** (0.025)	-0.139*** (0.026)	-0.139*** (0.025)	-0.191*** (0.037)	-0.191*** (0.037)	-0.190*** (0.037)	-0.191*** (0.037)	-0.287*** (0.028)	-0.286*** (0.028)	-0.286*** (0.027)	-0.286*** (0.028)
$Growth_{it}$	-0.163*** (0.021)	-0.164*** (0.021)	-0.164*** (0.021)	-0.164*** (0.021)	-0.029** (0.012)	-0.029** (0.012)	-0.029** (0.012)	-0.029** (0.012)	-0.048*** (0.011)	-0.048*** (0.011)	-0.048*** (0.011)	-0.048*** (0.010)	-0.088*** (0.011)	-0.089*** (0.011)	-0.089*** (0.011)	-0.089*** (0.011)
$\Delta Unemployment_{it}$	-0.031 (0.054)	-0.031 (0.054)	-0.031 (0.054)	-0.031 (0.053)	-0.026 (0.029)	-0.026 (0.028)	-0.026 (0.028)	-0.026 (0.028)	-0.038 (0.023)	-0.038 (0.023)	-0.038 (0.023)	-0.038 (0.023)	0.035 (0.030)	0.035 (0.030)	0.034 (0.030)	0.035 (0.030)
$Debt_{it-4}$	0.008* (0.005)	0.008* (0.005)	0.008* (0.005)	0.008* (0.005)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	0.006** (0.003)	0.006** (0.003)	0.006** (0.003)	0.006** (0.003)	0.008*** (0.002)	0.008*** (0.002)	0.008*** (0.002)	0.008*** (0.002)
$Elections_{3m_{it}}$	-0.082 (0.168)				0.019 (0.085)				-0.063 (0.063)				-0.079 (0.100)			
$Elections_{6m_{it}}$		0.017 (0.101)				0.037 (0.059)				-0.080 (0.049)				0.049 (0.061)		
$Elections_{12m_{it}}$			0.051 (0.092)				0.018 (0.058)				-0.052 (0.037)				0.075 (0.064)	
$Elections_{18m_{it}}$				0.069 (0.080)				0.032 (0.052)				-0.038 (0.027)				0.058 (0.06)
<i>Constant</i>	6.957*** (1.020)	6.937*** (1.005)	6.929*** (1.00)	6.909*** (0.989)	1.725*** (0.257)	1.723*** (0.257)	1.722*** (0.256)	1.715*** (0.256)	2.360*** (0.453)	2.368*** (0.451)	2.359*** (0.45)	2.365*** (0.447)	4.838*** (0.459)	4.817*** (0.453)	4.800*** (0.449)	4.794*** (0.450)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.206	0.205	0.206	0.206	0.149	0.149	0.149	0.150	0.242	0.243	0.243	0.242	0.257	0.257	0.257	0.257
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

**Table 9. Timing of pre-electoral fiscal behaviour: Expenditure**

	$\Delta$ Total Primary Expenditure				$\Delta$ Compensation to Employees				$\Delta$ Intermediate Consumption			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$\Delta Y_{it-1}$	0.101** (0.038)	0.100** (0.038)	0.098** (0.039)	0.099** (0.039)	0.347*** (0.039)	0.346*** (0.040)	0.347*** (0.041)	0.349*** (0.040)	0.155*** (0.034)	0.155*** (0.034)	0.154*** (0.034)	0.154*** (0.035)
$Y_{it-4}$	-0.376*** (0.061)	-0.375*** (0.061)	-0.376*** (0.061)	-0.374*** (0.061)	-0.118*** (0.015)	-0.118*** (0.015)	-0.118*** (0.015)	-0.118*** (0.015)	-0.230*** (0.038)	-0.230*** (0.038)	-0.230*** (0.037)	-0.230*** (0.038)
$Growth_{it}$	-0.239*** (0.031)	-0.240*** (0.031)	-0.241*** (0.031)	-0.240*** (0.031)	-0.055*** (0.007)	-0.055*** (0.007)	-0.055*** (0.007)	-0.055*** (0.007)	-0.023*** (0.005)	-0.024*** (0.005)	-0.024*** (0.005)	-0.024*** (0.005)
$\Delta Unemployment_{it}$	0.106 (0.074)	0.106 (0.073)	0.104 (0.072)	0.105 (0.073)	-0.025 (0.015)	-0.025 (0.015)	-0.025 (0.015)	-0.025 (0.015)	-0.036*** (0.012)	-0.036*** (0.012)	-0.036*** (0.012)	-0.036*** (0.012)
$Debt_{it-4}$	0.000 (0.007)	0.000 (0.007)	0.000 (0.007)	0.000 (0.007)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)	-0.001 (0.002)
$Elections_{3m_{it}}$	0.260 (0.289)				0.100** (0.041)				-0.024 (0.048)			
$Elections_{6m_{it}}$		0.528** (0.199)				0.094*** (0.030)				0.025 (0.040)		
$Elections_{12m_{it}}$			0.485*** (0.150)				0.077*** (0.026)				0.029* (0.015)	
$Elections_{18m_{it}}$				0.375** (0.143)				0.029 (0.023)				0.022 (0.016)
$Constant$	16.904*** (2.549)	16.837*** (2.556)	16.822*** (2.538)	16.724*** (2.571)	1.611*** (0.186)	1.604*** (0.185)	1.599*** (0.185)	1.605*** (0.184)	1.529*** (0.277)	1.524*** (0.277)	1.520*** (0.278)	1.517*** (0.279)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.440	0.442	0.443	0.442	0.531	0.532	0.533	0.530	0.228	0.288	0.288	0.288
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

**Table 9. Timing of pre-electoral fiscal behaviour: Expenditure (continued)**

	$\Delta$ GFCF				$\Delta$ Other Primary Expenditure			
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
$\Delta Y_{it-1}$	0.176*** (0.044)	0.174*** (0.044)	0.175*** (0.044)	0.174*** (0.043)	0.083** (0.035)	0.082** (0.035)	0.081** (0.036)	0.081** (0.036)
$Y_{it-4}$	-0.351*** (0.051)	-0.351*** (0.051)	-0.305*** (0.052)	-0.350*** (0.052)	-0.518*** (0.076)	-0.517*** (0.076)	-0.518*** (0.075)	-0.517*** (0.076)
$Growth_{it}$	0.012 (0.013)	0.012 (0.013)	0.012 (0.013)	0.012 (0.013)	-0.169*** (0.025)	-0.169*** (0.025)	-0.170*** (0.025)	-0.169*** (0.025)
$\Delta Unemployment_{it}$	-0.020 (0.013)	-0.020 (0.013)	-0.021 (0.013)	-0.020 (0.013)	0.181** (0.075)	0.180** (0.074)	0.180** (0.074)	0.180** (0.074)
$Debt_{it-4}$	-0.007*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)	0.021* (0.011)	0.021* (0.011)	0.021* (0.011)	0.021* (0.011)
$Elections_{3m_{it}}$	0.087 (0.083)				0.053 (0.242)			
$Elections_{6m_{it}}$		0.157** (0.065)				0.219* (0.124)		
$Elections_{12m_{it}}$			0.094* (0.046)				0.287** (0.115)	
$Elections_{18m_{it}}$				0.094** (0.042)				0.213* (0.111)
<i>Constant</i>	1.751*** (0.299)	1.741*** (0.298)	1.732*** (0.300)	1.718*** (0.299)	10.751*** (1.484)	10.722*** (1.482)	10.698*** (1.467)	10.661*** (1.477)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.279	0.281	0.280	0.280	0.421	0.442	0.423	0.422
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

**Table 10. Year-on-year changes in fiscal components (regular and early elections)**

	$\Delta$ Total Revenue	$\Delta$ Total Primary Expenditure	$\Delta$ Direct Taxes	$\Delta$ Indirect Taxes	$\Delta$ Other Revenue	$\Delta$ Compensation Employees	$\Delta$ Intermediate Consumption	$\Delta$ GFCF	$\Delta$ Other Primary Expenditure
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$\Delta Y_{it-1}$	0.163*** (0.035)	0.100** (0.038)	0.154** (0.073)	0.219*** (0.044)	0.158*** (0.023)	0.345*** (0.04)	0.155*** (0.034)	0.174*** (0.043)	0.082** (0.035)
$Y_{it-4}$	-0.166*** (0.027)	-0.375*** (0.061)	-0.140*** (0.026)	0.001 (0.006)	-0.287*** (0.028)	-0.117*** (0.015)	-0.23*** (0.037)	-0.351*** (0.051)	-0.518*** (0.076)
$R\_Elections_{it}$	0.173 (0.137)	0.649*** (0.216)	0.100 (0.08)	-0.009 (0.051)	0.088 (0.083)	0.134*** (0.028)	0.058 (0.048)	0.168** (0.062)	0.258* (0.128)
$E\_Elections_{it}$	-0.315* (0.176)	0.270 (0.320)	-0.097 (0.102)	-0.164 (0.117)	-0.036 (0.071)	0.009 (0.054)	-0.046 (0.063)	0.133 (0.114)	0.135 (0.294)
$Growth_{it}$	-0.165*** (0.020)	-0.241*** (0.030)	-0.030** (0.012)	-0.044*** (0.011)	-0.089*** (0.011)	-0.055*** (0.007)	-0.024*** (0.005)	0.012 (0.013)	-0.169*** (0.025)
$\Delta Unemployment_{it}$	-0.032 (0.054)	0.105 (0.074)	-0.027 (0.028)	-0.029 (0.025)	0.034 (0.030)	-0.025 (0.015)	-0.036*** (0.012)	-0.02 (0.013)	0.18** (0.075)
$Debt_{it-4}$	0.008* (0.005)	0.000 (0.007)	-0.001 (0.002)	0.002** (0.001)	0.008*** (0.002)	-0.003*** (0.001)	-0.001 (0.002)	-0.007*** (0.002)	0.021* (0.011)
<i>Constant</i>	6.987*** (1.017)	16.847*** (2.559)	1.729*** (0.259)	-0.063 (0.111)	4.824*** (0.456)	1.599*** (0.186)	1.528*** (0.276)	1.742*** (0.299)	10.724*** (1.482)
Country Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2551	2551	2551	2551	2551	2551	2551	2551	2551
Adjusted $R^2$	0.245	0.470	0.150	0.156	0.257	0.556	0.267	0.316	0.451
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country.

## **6. Conclusions and policy implications**

This paper provides new evidence on political budget cycles in the European Union over 2000–2024, emphasizing the importance of fiscal composition and timing in shaping electoral strategies. Using quarterly panel data regressions with country and time fixed effects, the analysis uncovers systematic electoral patterns in fiscal behaviour.

This study shows that elections influence the structure of public expenditure, with primary spending increasing in the run-up to elections, while government revenues remain largely unaffected. These patterns indicate that incumbents rely predominantly on the expenditure side of the budget to pursue electoral gains, particularly through adjustments in current spending and targeted investment.

The results also reveal that some fiscal adjustments begin before the onset of the electoral year, suggesting that electoral manipulation is not confined to short-term opportunism but may involve medium-term planning. This dynamic is especially visible in public investment (GFCF) and other primary expenditure, which display anticipatory movements consistent with strategic political behaviour. In addition, the results suggest that electoral-driven expenditure manipulation occurs only around regular elections, whereas no such pattern emerges in early elections.

Our findings also show that the political budget cycles vary across fiscal and institutional contexts. High-debt countries exhibit more constrained behaviour, deviating from the typical expansionary pattern, while EU membership is associated with specific compositional effects, including lower growth in direct tax revenues and higher investment, but also seems to constrain the use of primary spending for electoral purposes. Moreover, coalition governments appear to enhance fiscal scrutiny: although they expand certain spending items in non-electoral periods, they reduce other primary expenditure during elections, limiting opportunistic manipulation. Also, although electoral periods increased other revenue prior to the GFC, this pattern is essentially absent in the post-crisis period.

Overall, the findings indicate that political budget cycles persist in the European Union, but their magnitude and composition depend critically on fiscal conditions, institutional arrangements, and the broader governance environment.

These findings carry four main policy implications concerning the manipulation of public finance during election periods.

First, the evidence underscores the importance of strengthening fiscal frameworks that promote transparency and limit the scope for politically motivated expenditure shifts.

Enhancing the visibility and monitoring of sub-components of primary spending—particularly current expenditure and targeted investment—may help reduce opportunistic manipulation.

Second, the heterogeneity across countries suggests that fiscal rules should account for differences in debt levels and institutional capacity. High-debt countries, which already face tighter constraints, may benefit from more flexible mechanisms that prevent pro-cyclical tightening while still discouraging electoral opportunism.

Third, the anticipatory nature of some fiscal adjustments highlights the need for medium-term budgetary oversight. Strengthening multi-year expenditure frameworks and independent fiscal councils could help detect early deviations from planned trajectories and reduce the incentives for pre-electoral fiscal engineering.

Finally, the moderating role of coalition governments suggests that institutional arrangements promoting broader political accountability may help curb opportunistic fiscal behaviour. Encouraging inclusive decision-making and reinforcing checks and balances can contribute to more disciplined fiscal governance.

In sum, electoral incentives continue to shape fiscal behaviour in the EU, but their impact is filtered through the fiscal and institutional constraints that define modern European governance.

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## Appendix

**Table A1. Unit root test: ADF–Fisher Chi-square (H0: Unit root)**

	<i>Level</i>		<i>First Difference</i>
	Constant	Constant and Trend	Constant
<i>Total Revenue</i>	72.865*	80.517**	455.464***
<i>Total Primary Expenditure</i>	103.282***	99.433***	521.333***
<i>Direct Taxes</i>	77.970**	70.780*	419.997***
<i>Indirect Taxes</i>	59.081	52.030	519.686***
<i>Other Revenue</i>	71.6202*	98.927 ***	451.508***
<i>Compensation to Employees</i>	71.383*	80.008**	390.854 ***
<i>Intermediate Consumption</i>	75.772***	72.713**	446.885***
<i>GFCF</i>	79.689**	67.115*	471.314***
<i>Other Primary Expenditure</i>	76.241**	91.233 ***	91.233***

Note: The lag lengths in panel unit root tests were selected using Akaike information criterion (AIC).

\* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors.

**Table A2. Summary statistics, full panel, 2000–2024.**

<i>Variable</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>	<i>Obs.</i>
<i>Total Revenue</i>	42.708	6.997	18.300	61.900	2664
<i>Total Primary Expenditure</i>	43.224	7.282	18.900	78.300	2664
<i>Direct Taxes</i>	11.132	5.375	3.200	36.200	2664
<i>Indirect Taxes</i>	13.806	2.930	5.100	23.500	2664
<i>Other Revenue</i>	17.771	4.482	5.000	34.100	2664
<i>Compensation to Employees</i>	11.041	2.070	5.100	17.900	2664
<i>Intermediate Consumption</i>	6.114	1.694	1.800	12.800	2664
<i>Gross Fixed Capital Formation</i>	3.794	1.511	0.500	17.000	2664
<i>Other Primary Expenditure</i>	22.275	5.761	8.600	57.400	2664
<i>Elections</i>	0.257	0.437	0.000	1.000	2700
<i>Growth</i>	2.465	0.437	-21.500	28.100	2696
<i>Unemployment</i>	8.340	4.281	1.900	28.000	2688
<i>Debt</i>	60.661	4.307	3.600	212.900	2700

**Table A3. Correlation matrix, full panel, 2000–2024.**

<i>Variable</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) $\Delta$ Total Revenue	1.000												
(2) $\Delta$ Total Prim. Expend.	0.224	1.000											
(3) $\Delta$ Direct Taxes	0.547	0.012	1.000										
(4) $\Delta$ Indirect Taxes	0.454	-0.024	-0.006	1.000									
(5) $\Delta$ Other Revenue	0.708	0.324	-0.019	0.039	1.000								
(6) $\Delta$ Compens. Employees	0.136	0.460	0.049	-0.119	0.227	1.000							
(7) $\Delta$ Intermediate Cons.	0.172	0.307	0.038	-0.012	0.222	0.261	1.000						
(8) $\Delta$ GFCF	0.206	0.352	-0.008	-0.009	0.306	0.079	0.153	1.000					
(9) $\Delta$ Other Prim. Expend.	0.147	0.929	0.000	0.002	0.208	0.267	0.091	0.083	1.000				
(10) Elections	0.001	0.019	-0.001	-0.031	0.021	0.004	0.015	0.046	0.006	1.000			
(11) Growth	-0.172	-0.416	0.023	-0.018	-0.252	-0.473	-0.234	0.023	-0.359	0.039	1.000		
(12) $\Delta$ Unemployment	0.056	0.205	-0.106	0.014	0.156	0.151	0.049	-0.060	0.219	-0.029	-0.451	1.000	
(13) Debt	0.032	-0.029	0.019	0.056	-0.004	-0.088	0.023	-0.040	-0.009	-0.002	-0.174	-0.029	1.000

**Table A4. Robustness analysis: Year-on-year changes in fiscal components (2SLS)**

	$\Delta$ Total Revenue	$\Delta$ Total Primary Expenditure	$\Delta$ Direct Taxes	$\Delta$ Indirect Taxes	$\Delta$ Other Revenue	$\Delta$ Compensation Employees	$\Delta$ Intermediate Consumption	$\Delta$ GFCF	$\Delta$ Other Primary Expenditure
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
$\Delta Y_{it-1}$	0.160*** (0.037)	0.098** (0.039)	-0.097 (0.146)	0.439*** (0.083)	0.156*** (0.023)	0.659*** (0.1)	0.16*** (0.033)	0.176*** (0.044)	0.079** (0.035)
$Y_{it-4}$	-0.165*** (0.026)	-0.376*** (0.061)	-0.14*** (0.026)	-0.184*** (0.036)	-0.285*** (0.028)	-0.102*** (0.017)	-0.236*** (0.04)	-0.349*** (0.052)	-0.519*** (0.076)
$Elections_{it}$	0.054 (0.091)	0.486*** (0.151)	0.02 (0.069)	-0.042 (0.035)	0.077 (0.063)	0.062*** (0.018)	0.026* (0.015)	0.094* (0.046)	0.292** (0.116)
$Growth_{it}$	-0.194*** (0.030)	-0.244*** (0.052)	-0.041* (0.024)	-0.046*** (0.012)	-0.107*** (0.017)	-0.002 (0.01)	-0.01 (0.007)	0.015 (0.014)	-0.208*** (0.043)
$\Delta Unemployment_{it}$	-0.058 (0.048)	0.101 (0.078)	-0.039 (0.039)	-0.038** (0.015)	0.019 (0.031)	0.01 (0.014)	-0.023** (0.011)	-0.018 (0.015)	0.146** (0.069)
$Debt_{it-4}$	0.008* (0.004)	-0.001 (0.007)	-0.002 (0.002)	0.005** (0.003)	0.008*** (0.002)	-0.001 (0.001)	-0.001 (0.002)	-0.007*** (0.002)	0.021* (0.011)
<i>Constant</i>	7.013*** (1.018)	16.827*** (2.596)	1.809*** (0.227)	2.327*** (0.456)	4.827*** (0.467)	1.196*** (0.234)	1.519*** (0.281)	1.723*** (0.301)	10.818*** (1.5)
Country Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2549	2549	2549	2549	2549	2549	2549	2549	2549
Adjusted $R^2$	0.205	0.442	0.133	0.247	0.295	0.453	0.264	0.280	0.421
Prob(J-statistic)	0.868	0.236	0.108	0.050	0.506	0.316	0.368	0.571	0.215
Prob(F-statistic)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note: \* indicates the level of significance of 10%, \*\* a level of 5% and \*\*\* a level of 1%. In brackets we report the robust standard errors. Standard errors clustered by country. The 2SLS estimates address the potential endogeneity of GDP growth by instrumenting it with its first two lags in the first-stage regression.