DOI: 10.5281/zenodo.17646738

Journal of Contemporary Macroeconomic Issues
www.scekr.org

Does Democracy Come at a Fiscal Cost? Revisiting the Political Business Cycles in Pakistan

Niaz Ali[1]; Muhammad Tariq[2]; Muhammad Azam Khan[3]
1. PhD Scholar, Department of Economics, Abdul Wali Khan University, Mardan
Email: niazali371@gmail.com
2. Professor of Economics, Department of Economics, Abdul Wali Khan University, Mardan
Email: tariq_noror@awkum.edu.pk
3. Professor of Economics, Department of Economics, Abdul Wali Khan University, Mardan
Email: drazam75@awkum.edu.pk

PAPER INFO

Information:
Received: 21 October, 2025
Revised: 17 November, 2025
Published: December, 2025

Keywords:
Elections, Budgetary policy, Pakistan, Political Business cycles, Democracy

Corresponding Author's email:
niazali371@gmail.com

ABSTRACT

The role of electoral incentives on public spending patterns is particularly relevant in developing nations such as Pakistan as it has direct bearing on the issue of fiscal discipline and quality of governance. This study examines the role of electoral cycles on sectoral budgetary allocations at provincial level in Pakistan. Based on panel data of four provinces covering the years 1972-2018, the study uses a Fixed Effects (FE) model to determine dynamic variations in budgetary patterns. These findings are quite solid in favor of the Political Business Cycle (PBC) hypothesis with the results showing that government spending rises by a large margin (23 percentage points of GDP) in election years. It also shows that population development and openness to trade have impact of high magnitude that is positive when it comes to government expenditure, and unemployment level has no significant impact. The evidence shows a greater requirement of fiscal policies and institutional limits so as to put down opportunistic expenditure of the incumbent governments. Pakistan ought to think about institutionalizing long-term rules-based budgetary plans at provinces level to curb discretional expenditure during elections. Opportunistic fiscal expansions could be hindered by legal provisions making statutory budget ceilings obligatory before elections. Lastly, adopting practices of participatory budgeting on a local government level would increase citizen involvement and responsibility, which would minimize the room on fruitlessly spending money based on political interests.

1 Introduction

Economic policymaking is largely affected by the electoral cycles in Pakistan. With elections in sight, the current governments tend to stimulate the economy using fiscal and monetary policy initiatives to ensure that the economic growth is experienced in the short run and that the voters are highly pleased (Khemani, 2004). These could be higher government expenditures, reduction in taxes, or easier monetary policy. Nevertheless, this type of pre-election economic manipulation may cause the macroeconomic instability, as well as unsustainable economic growth in the long-term. These elections not only allow voters to hold incumbents accountable for economic outcomes but also reinforce the very legitimacy of democratic system (Johnson, 2025). The degree to which these policies are effective in influencing voters is subject to discussion. It has been put forward that economic performance does have an effect on the voting phenomenon; though this might be tempered by other loyalties like partisan and regional forces (Burki & Baxter, 1991).

Electoral dynamics and the economic policymaking are challenging in the long-term economic growth and stability in Pakistan. The Pakistani politics is marked by the civilian governments with the interventions of the military. This has been a source of political instability leading to unreliable economic policies and difficulty in undertaking long term development policies (Cohen, 2004). A new government always wants to distinguish itself among the previous ones that is why there is usually a reversal of policies and no continuity in economic planning. Political parties are known to focus on short term benefits rather than long term economic structural changes resulting into fluctuations of boom and bust (Husain, 2009). This trend has been behind a consistent high inflation rate, fiscal deficit and external account imbalances. Policymakers in the country are yet to create a balance between political incentives and prudent economic management (Nelson, 2025). This high turnover of government and shifting of policy direction has come in the way of adopting long-term stable economic policies (Zaidi, 2015). Foreign investment has also been frightened away by this political instability as well as making it difficult to achieve economic growth. Unpredictability of future economic policies as well as operating environments often causes investors to hold back and fail to commit to long term projects.

In spite of this, Pakistan has demonstrated strength and economic growth spurts. There are various economic reforms that the country has undertaken such as privatization and the enhancement of the business environment (Javed & Ayaz, 2016). The problem is however the sustainability of such reforms which in many cases rely on political will and survival. Implementation Successful implementation is a long-term endeavour that should not be based on electoral cycles. Electoral politics also impacts on the relationship of Pakistan and the international financial institutions, i.e., the International Monetary Fund (IMF). Governments can be eager to negotiate and undertake reforms suggested by IMF at the beginning of their terms but as elections draw closer, they are reluctant to do so due to the fear of a possible political reaction.

In a developing economy such as Pakistan, the significance of honest, transparent, and effective budgetary procedures cannot possibly be overestimated. Sectoral budgetary allocation in Pakistan is one of the vital issues that are manipulated during the election cycles in the country with regard to its impact on economic stability and development. The establishment of patterns in the budgetary provisions regarding the elections can facilitate the prediction of the economic condition and the possible economic issues in Pakistan (Hussain & Lee, 2022). The Political Business Cycles (PBCs) on the national level have been recorded in the existing literature, with the incumbents timing fiscal expansions before the polls (Ali, 2004; Ali, 2024). Nonetheless, there is little empirical literature regarding the manipulation of the budget at the subnational level, particularly, at the provincial level. Due to the constitutional status of the provinces such as Khyber-Pakhtunkhwa, Punjab, Sindh and Balochistan, it is important to know whether the timing of the election affects their budgetary behavior. These distortions threaten equal delivery of public services and sustainable development (Javaid et al, 2024). Thus, this study fills this gap by investigating the nature of changes in the budgetary allocation made at the provincial level in Pakistan in the election year and determining whether the changes are politically inspired as opposed to being development-oriented.

2 Literature Review

A considerable amount of literature exists in support of the political budget cycles (PBCs), especially in the developing nations where the electoral motive can be considered as a main force behind the manipulation of the short-term fiscal policies. PBC theory is a key component of public choice theory and a deep-rooted concept in this discipline.

PBC theory signify the political behavior of the politicians which they assume with the objective to win election through policy manipulation though it is not in the favor of the government especially immediate before elections. This concept is thought to have its origin in the work of Kalecki (1943) who argues that the capitalist class in power could make it possible to have full employment in the

economy by taking policy actions. However, political unwillingness restrain them from doing so due to the reason that if there is full employment in the economy, the demand for labor in the economy would increase and would lead to the reduction in the hold and bargaining power of the ruling capitalists. Hence, they oppose to perceive full employment measures in the economy to intact their supremacy, a phenomenon termed as PBC by Kalecki (1943). Another attempt of highlighting the role of politics in economic cycles was underscored by Kerman (1947). He proved empirically the involvement of politics in creating economic crisis and proposed that there exists a strong relationship between politics and economic decisions. Downs (1957) recognized that configuring economic policies is the vote maximization strategy by the politicians. He further described that politicians have their self-interest hidden in their economic policies and only insure their re-election prospects.

Nordhaus (1975) added macroeconomic dimensions to the model of PBCs by introducing Phillips curve concept. According to his theory, voters prefer the incumbent if they deliver a better economic performance in the form of improved economic indicators like unemployment and inflation before next elections. Tufte (1978) highlighted the influence of politics in macroeconomic policies in the form of creating perception of prosperity among voters who are expected to vote the incumbents. Similarly, Hibbs (1977) presented another model of PBCs and stated that politicians have their macroeconomic goals in the form of party ideology which they set in their party manifesto, announced before the election. Alesia (1988) posited that there exist voter's rationality up to some degree which means that they cannot be made fool by pre-elections manipulation. Hence, the author argued that voters anticipate the political moves of policy manipulations and react accordingly by adjusting their expectations. The economic cycles in the economies are driven by information asymmetries and government has access to private information regarding the status of the economy which voters lack, resultantly, government conceals its real competence and increase its expenditures in social services (Rogoff & Sibert, 1988).

The competence of the government has a crucial role in economic cycles but more competent governments are deemed to be responsible for the distortions in the economy rather than the less competent governments (Persson & Tabellini, 1992). Political manipulation are mainly associated to the new democracies where voters have less knowledge regarding the mechanism of the politics and their links to economic fluctuations hence budget cycle is primarily a phenomenon of the new democracies as compare to the established democracies where voters penalize fiscal manipulation rather than rewarding (Brender & Drazen, 2005). Dubois (2016) emphasized on the impact of central bank independence on the intensity of PBCs and concluded that fiscal manipulation are least in the economies where central banks are independent and vice versa. Likewise, Müller (2023) argued that election cycles at first hand targets those tools of policy manipulation which are utmost likely to care median voters.

Although a lot has been written about the political budget cycles, not much has been documented about the sector specific effects of the electoral cycles within the Pakistani context, especially at the provincial level. This research is going to close this gap. By doing it, the present research contributes to an understanding of the interaction between political motivations and decentralized governance, which is of crucial view to electoral regulators, public finance specialists, and institutional reform promoters that wish to enhance fiscal responsibility and democratic accountability.

3 Material and Methods

This section outlines the methodology to be used in exploring the possibility of the existence of Political Budget Cycles within the Pakistani setting context, theoretical framework, the data structure, model specification, and the estimation technique. This research is based on a fixed effects panel model that helps in regulating the unobserved heterogeneity between provinces.

3.1 Theoretical Framework

Developed by Nordhaus (1975), the Political Business Cycle (PBC) theory assumes that current governments deliberate alter fiscal and monetary policies to affect the election results. According to the theory, expansionary policies conducted by the ruling parties in the lead-up to an election are aimed at improving the short-term economic performance and generating a positive mood among the voters. These policies are normally reversed after the elections and a post election fiscal tightening is implemented to eliminate the imbalances created during the election period. This theoretical framework presupposes the economic myopia of the voters, who react more to the short-term changes in the economic indicators (employment, inflation, etc.) than to the long-term policy performance or fiscal responsibility. With the short-term electoral advantage, the politicians can rely on the short memory and perception of the voters to give them an electoral advantage even when their long-term fiscal performance is poor.

The applicability of the PBC theory to the study is evident: the study examines the possibility and the nature of the electoral cycle effect on the sectoral budgetary allocation at the provincial level in Pakistan. The theory can explain why and how provincial governments in Pakistan, which are constitutionally charged with a significant responsibility in core areas of the public service (e.g., education, health, roads and local development), could be manipulated to create a political advantage ahead of general elections. Through this theoretical lens, the study explores the idea that provincial spending patterns do indicate a reflection of true developmental priorities- or it is skewed by political interests based on an electoral math.

The PBC theory is more likely to be observed in a developing country context where the institutional controls are weaker, fiscal discretion is higher and budget process transparency is low. Compared to more established democracies, where independent fiscal councils or fairly strict rules-based budgeting constrain incumbent freedom of maneuver, in many developing states incumbents have greater freedom to implement politically driven fiscal shifts. The existence of PBCs in countries like India, Ghana, Brazil, and Turkey is empirically verifiable with regards to each country (Brender & Drazen, 2005; Ebeke & Ölcer, 2013). Indicatively, Brender and Drazen (2005) demonstrated that the political budget cycles phenomenon is stronger in newer or less-established democracies, in which electorates are less experienced in distinguishing between manipulative timing of policies and the sustainable economic management.

In Pakistan, the reduction of powers to provinces as a result of the 18th Constitutional Amendment handed significant fiscal power to the latter, turning into a key locus of subnational political business cycles. Major sectors of government like health, education and infrastructure which are very visible and politically sensitive particularly in the months to elections are now under the control of provincial governments. It is these very sectors that one can employ strategic budgetary increment to alter the perception of the voters and election results. According to the recent empirical research (Batool & Sieg, 2010; Rizwan & Hameed, 2021), government consumption and development expenditure in Pakistan are likely to be higher during the election year, especially in politically competitive constituencies. Nevertheless, national-level PBCs are somewhat explored, but very little is known about subnational or sector-specific ones, thus the significance of the given study.

3.2 Data Sources and Variables of the Study

The paper is based on secondary data collected by various government and institutional reports to analyze the effects of electoral cycles on sectoral budgetary allocations in Pakistan at the provincial level. Election Commission of Pakistan (ECP) provided electoral data that comprises of detailed accounts of general electoral and provincial elections, and election dates. The Pakistan Bureau of Statistics (PBS) and the Ministry of Finance provided additional data on macroeconomic indicators, and population. The data has been aggregated into a panel form with the fiscal variables matching electoral cycles across the provinces and years of study. The research expanses to a period between

1972 and 2018, encompassing mostly entire electoral cycles. This time will is important in that it reflects the era after the 18th Amendment whereby fiscal powers were devolved and provinces had the freedom in budgetary decisions.

Table 1

Variables Description and Data Sources

Variable Name	Description/Definition	Label	Source	Author (s)
Government expenditures	General government final consumption expenditures (% of GDP)	GEXP	PBS (2024)	Nguyen & Tran (2023), Koh, (2017) Quaicoe, (2022)
Unemployment rate	Unemployed (% of labor force)	Uemp	PBS (2024)	Enkelmann & Leibrecht, (2013), Tkáčová et al., (2018), Nguyen & Tran, (2023)
Trade openness	Trade (% of GDP)	TO	WDI (2024)	Wadiaa, (2019), Bergman et al., (2016), Yogo & Ngo Njib, (2018)
Population growth	Population growth (annual %)	POP	PBS (2024)	Enkelmann & Leibrecht, (2013), Bergman et al., (2016)

Source: Author's compilation, 2025.

Table 2 establishes the basic framework of the research specifying the fundamental variables and their origin. This table gives a description of major variables included in the empirical analysis. Each variable is explained by its definition, label (as it will be used in equations or datasets), data source, as well as the pertinent literature sources where similar variables have been utilized. The key variables included in the study are: government expenditures (GEXP), quantifiable as general government final consumption expenditures (as a percentage GDP) and based on Pakistan Bureau of Statistics (PBS, 2024), unemployment rate, the proportion of the labor force which is unemployed is defined as the unemployment rate. This indicator measures the situation in the labor market and is sourced (PBS 2024), trade openness (TO), the percentage of trade measured as a percentage of GDP, which shows the degree of integration of the country to the international markets. It is obtained via World Development Indicators (WDI, 2024) and commonly utilized to interpret the impacts of globalization, population growth (POP), percentage growth of the population every year. An important demographic control variable obtained by PBS (2024).

3.3 Econometric Technique

Models specification is a crucial aspect of estimating the impact of independent variables on dependent variable. In order to control for unobserved heterogeneity within and across the provinces, Fixed Effect model is better suited as compare to Random Effect model. The FE model is perfectly aimed to response this question. It effectually controls for all time-invariant features of each province, isolating the election-year effect from the province's unique, constant background. Thus, as an econometric technique, this study has employed Fixed Effect (FE) panel regression model. The general form of the model is given as under;

$$Y_{it} = \alpha + \beta_1 X_{1_{it}} + \beta_2 X_{2_{it}} + \cdots + \beta_k X_{k_{it}} + \mu_i + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where, Y_{it} is the dependent variable for unit i and time t, $X_{k\,it}$ is the explanatory variable that vary across time and units, α, β are regression parameters, μ_i denotes the unobserved, time invariant fixed effects for each unit, ε_{it} is the unobserved error tem.

The specific form of the model used in the study is;

$$GEXP_{it} = \alpha_0 + \beta_1 Ele_{it} + \beta_2\, POPG_{it} + \beta_3 TO_{it} + \beta_4 Unemp_{it} + \mu_i + \varepsilon_{it} \ldots\ldots (2)$$

Where, $GEXP_{it}$ is the dependent variable of the study and measured as final government expenditures as percentage of GDP, Ele_{it} represents the election dummy which takes the value 1 in election year and 0 otherwise, $POPG_{it}$ describes population and has measured as annual population growth rate in percentage, TO_{it} depicts trade openness which has been measured as trade as percentage of GDP, $Unemp_{it}$ represents the unemployment rate in percentage of total labor force, μ_i denotes the unobserved, time invariant fixed effects for each unit, ε_{it} is the unobserved error tem.

4 Results and Discussion

This section describes the preliminary tests before the analysis. First, stationarity if the data has been checked by means of ADF test. Second, the descriptive statistics and correlation amongst the variables has been checked and presented in tabular form. In addition, fixed effect regression model has been employed in the study.

Table 2

Panel ADF Test Results

Variable	Obs	t-statistic	p-value
GEXP	188	-18.462	0.000
POPG	188	-8.134	0.000
TO	188	-9.356	0.000
Uemp	188	-9.269	0.000

Source: Author own calculation, 2025.

The results of the panel unit root test conducted through the Augmented Dickey-Fuller (ADF) approach help to evaluate the stationarity of the crucial variables that are included in the analysis. The results indicate that the t-statistic of government expenditures (GEXP) is -18.462 with a p-value of 0.000, population growth (POPG) is -8.134 and p-value of 0.000, trade openness (TO) is -9.356 and p-value of 0.000, and unemployment rate (Uemp) is -9.269 and p-value of 0.000. The null hypothesis of a unit root is rejected at the 1 percent level for all variables as all p-values are equal to 0.000, which proves that the variables are stationary in their level form. This finding is important since it confirms the soundness of regression estimates by removing the chances of spurious association brought about by non-stationary time series. Hence, the stationarity of GEXP, POPG, TO, and Uemp boosts the robustness of the empirical exercise particularly in estimating an intricate relationship like the effect of election on government fiscal conduct.

Table 3

Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev	Min	Max
GEXP	188	104.4105	13.92851	73.53613	138.0278
POPG	188	2.294094	.3067975	1.487549	3.036767
TO	188	36.98706	5.784494	24.24039	50.92121
UEmp	188	5.410075	1.163627	3.028866	7.728387
Ele	188	0.340425	0.4751176	0	1

Source: Author own calculation, 2025.

The descriptive statistics summary in table 3 gives a brief distribution and nature of each variable incorporated in the study with 188 observations. The average value of government expenditures (GEXP) as a percentage of GDP is about 104.41 and the standard deviation is about 13.93. It shows that the variances of the public spending are quite high between the years or regions with the lowest being 73.54 and the highest being 138.03 which portrays both the tightening of the belt and the loosening of the belt in different years. Population growth (POPG) in percentage per year depicts a rather constant pattern with the average of 2.29 and a standard deviation of only 0.31, indicating that the demographic dynamics take place slowly over the years. Population growth has a low volatility with the lowest figure standing at 1.49 percent and the highest figure is 3.04 percent. The variable of trade openness (TO) that is the sum of exports and imports divided by GDP has a mean of 36.99 percent and a standard deviation of 5.78. With rather moderate variability, the lowest observed value is 24.24 percent, and the highest is 50.92 percent, which indicates fluctuations in the Pakistani interest in international trade. The unemployment rate (Uemp), which is a ratio of the number of people unemployed to the labor force, means 5.41 percent and standard deviation of 1.16. The numbers are 3.03 percent through 7.73 percent, indicating instability in the labor market. Lastly, election dummy variable (Ele), which equals 1 in the election years and 0 in other years, has a mean of 0.34 and standard deviation of 0.48. This implies that nearly 34 percent of the observations are made during election years, which should be enough to study political effects on fiscal behavior. Collectively, these descriptive statistics provide an in-depth insight in the behavior of the data and the economic environment, in which the study is framed.

Table 4

Correlation Matrix

Variable	GEXP	POPG	TO	Uemp	Ele
GEXP	1.0000				
POPG	0.2771	1.0000			
TO	0.3703	0.0064	1.0000		
UEmp	-0.0700	-0.1426	0.0290	1.0000	
Ele	0.7722	-0.0360	0.0085	-0.0782	1.0000

Source: Author own calculation, 2025.

The correlation matrix of table 4 gives details on the linear association among variables included in the analysis. There is a significant positive relationship between government expenditures (GEXP) and the election dummy (Ele) of 0.7722, meaning that government spending is expected to increase noticeably in the election year, and this result supports the political budget cycle hypothesis. There is also a moderately positive relationship between GEXP and trade openness (TO) of 0.3703, implying that the higher the involvement in international trade, the higher the government consumption perhaps as a result of additional administrative or economic functions. There is also a lesser degree of positive relationship between GEXP and the population growth (POPG) of 0.2771, which means that an increase in population results in a possibility of slight increase in government expenditure to accrue to the rising demands of public services. GEXP shows a very weak inverse relationship with the unemployment rate (Uemp) with a correlation of -0.0700 that shows that an increase in spending does not imply a decrease in unemployment in the short run. Population growth (POPG) and trade openness (TO) are almost uncorrelated having an insignificant correlation of 0.0064 and POPG and Uemp have a weak negative correlation of -0.1426 indicating a slight tendency of unemployment to decrease with an increase in population growth rate but the associations are weak. Trade openness (TO) and Uemp are near uncorrelated with a value of 0.0290, and TO is also nearly uncorrelated with the election dummy (0.0085), which implies that trade activity is not strongly related to election cycle. The unemployment rate (Uemp) indicates very weak negative relationship with Ele of -0.0782, indicating that, there is a minor decline in unemployment rate during election years, perhaps defying short-term employment.

Table 5

Fixed Effect Regression Results

Variable	Coef.	Std. Err	t	p>t	{95% Conf. Interval}
Ele	22.927	0.924	24.79	0.000	21.102-24.752
POPG	14.079	1.457	9.66	0.00	11.203-16.954
TO	0.847	0.0776	10.92	0.000	0.694-1.000
UEmp	0.254	0.384	0.66	0.509	-0.504-1.014
Const	31.590	5.037	6.27	0.000	21.649-41.532
R^2	0.82				
F	2.6.32				
Prob>F	0.000				

Source: Author own calculation, 2025.

The findings depicted in the fixed effects regression model show considerable evidence of statistically significant correlations between the independent variables and government expenditures (GEXP), where the overall R-squared equal to 0.82 denoting that the model explains 82 percent of the variation in government spending. The dummy variable representing the election (Ele) has a coefficient of 22.927, which has an insignificant standard error of 0.924 and a p-value that is highly significant of 0.000. This finding suggests that, at an average, government spending varies by almost 23 percentage points on electioneering years, which confirms the hypothesis of political budget cycles. The 95 percent confidence interval is between 21.102 and 24.752, which also proves the accuracy of this estimate. Government spending is also strongly and positively affected by population growth (POPG), with the coefficient of 14.079 and the p-value of 0.000. This implies that every percentage point rise in population growth is linked to about 14 point increase in government spending, probably because of increased needs of citizens to access public services and facilities.

The impact of trade openness (TO) is also positive and statistically significant with a coefficient of 0.847 and a p-value of 0.000 meaning that the more a country is integrated into the world trade, the higher the government consumption, perhaps to maintain regulatory, administrative, and export-promotion functions. Conversely, the unemployment rate (UEmp) insignificantly affects government spending, as the coefficient of 0.254 is associated with a p-value of 0.509. The UEmp confidence interval is very wide, and it spans between -0.504 and 1.014, which means that its effect is insignificant and we are not sure about it in this model. The constant term is 31.590 which is significant implying the level of government expenditure when all the other variables are zero. The F-statistic of the model equals 26.32 with the p-value of 0.000, which indicates that the overall model is highly significant.

4.1 Diagnostic Tests

Table 6

Modified Wald test for group wise Heteroscedasticity

Test Statistic (chi^2)	p-value
1.25	0.8690

Source: Author own calculation, 2025.

The findings given by Modified Wald Test of group wise heteroscedasticity have significant information concerning the variance pattern of the fixed effects panel regression model residuals. The results of the test in the current case produce a Chi-square of 1.25 and a p-value of 0.8690, which is slightly higher as compared to the standard significance level of 0.05, 0.01, or 0.10. The null hypothesis of Wald test is that the variance of the residuals remains constant across the cross-sectional units- in other words, the model is not heteroskedastic. As a p-value does not exceed a critical value, we cannot

reject the null hypothesis, and thus need to state that there is no evidence that the data are heteroskedastic across the groups.

Table 7

Post Residual Normality Diagnostic

Variable	Obs	Pr (Skewness)	Pr (Skewness)	Adj chi² (df=2)	Prob> chi²
resid	188	0.1946	0.4661	2.24	0.3263

Source: Author own calculation, 2025.

The table shows the findings of a combined test of the skewness and kurtosis of the residuals carried out on 188 observations. The p-value of skewness is 0.1946 and the p-value of the kurtosis is 0.4661, which implies that skewness and kurtosis of the residuals is not significantly different to what would be expected under a normal distribution. The Chi-square test statistic of the combined test (or Jarque-Bera test statistic) is 2.24 and the probability value is 0.3263. This p-value (0.855797) is much greater than the usual set of significance levels (0.01, 0.05, or 0.10), so we cannot reject the null hypothesis that the residuals are normally distributed. This outcome implies that the residuals of the fixed effects regression model can be analyzed by their normalness (in the sense of asymmetry scale and tail reaction), in their sensitivity to rare events. To put this to practice, it is a very positive model diagnostics.

4.2 Discussion

The findings of this empirical research serve as strong evidence that supports or upholds the Political Budget Cycle (PBC) hypothesis with reference to Pakistan. The findings of the fixed effects regression indicate that the growth of government expenditures in election years is high and found to be significant. To be more precise, the coefficient on the election dummy variable implies that an increase in government expenditure that is equivalent to almost 23 percentage points of GDP occurs in election years, even net of macroeconomic fundamentals. This result supports those of earlier studies by Rogoff and Sibert (1988), Shi and Svensson (2006) and more recently Nguyen and Tran (2023) who assert that current governments in power tend to use fiscal policy to intervene in elections. It is also consistent with findings of Koh (2017) and Quaicoe (2022) who identified the same pattern of election-year spending in emerging economies. Moreover, the results also correspond to the related literature on the political budget cycle in developing democracies Persson and Tabellini (2002); Aidt et al. (2011); Akhmedov and Zhuravskaya (2004) that present the same patterns in other low- and middle-income economies.

In addition to political cycles, other factors that have major influence on fiscal behavior include demographic and economic variables. The fact that the effect of the population growth on government spending is positive and significant shows the growing needs of the people in the public goods, infrastructure, and social services as the society grows at an alarming rate. This follows Bergman et al. (2016) and Enkelmann and Leibrecht (2013) who note that population pressures commonly urge governments into bigger spending plans, particularly in emerging economies. The strong connection between trade openness and government expenditure indicates the possibility of a fiscal expansion as a result of globalization, perhaps because of institutional and economic expenses of trade facilitation, export promotion schemes, and labor market adaptations. The results of this study are comparable to those studies conducted by Wacziarg and Welch (2008), Rodrik (1998), and Yogo and Ngo Njib (2018) about the fiscal implications of trading integration in open economies.

Surprisingly, unemployment rate did not indicate any statistical relevance with the government expenditures in Pakistani setting. This is contrary to the research results in the developed economies, like Alesina and Ardagna (2010) and Tkacova et al. (2018), in which fiscal policy is commonly applied counter-cyclically to solve the distress in the labor market. The low and statistically insignificant coefficient on unemployment can be evidence of institutional limitations, delays in the reaction of the

policy, or the informality of the employment relationship, which undermines the sensitivity of the labor market indicators and fiscal intervention in Pakistan. This observation also shares the apprehension of Brender and Drazen (2005) that the budgetary manipulation at the electoral process might not necessarily represent the socio-economic requirements but might be the outcomes of political arithmetic.

5 Conclusion

This paper examined whether Politics Budget Cycles (PBCs) exist in Pakistan based on a panel data of four provinces in Pakistan between the 1972 and 2019. The analysis took into consideration unobserved provincial heterogeneity and the effect of significant macroeconomic variables as well as electoral dynamics by utilizing a fixed effects regression model whereby negative controls measured the extent at which these factors interacted. The results offer considerable empirical evidence in the PBC hypothesis, as government spending accelerated a great deal, by about 23 points of GDP, in election years. Moreover, population growth and trade openness demonstrated a statistical significant and positive effect on public spending, whereas no significant effect was observed in the unemployment rate. These findings indicate that incumbent governments are likely to have expansionary fiscal conduct on the eve of election to attract electoral success and this can expose fiscal discipline and long run policy consistency. Findings of the current study provide key information to policy-makers. To start with, the evidence on the greater government spending in the election years necessitates the implementation of fiscal regulations and institutional constraints able to restrict the opportunistic spending by the incumbent governments. Second, binding fiscal rules, either in the form of medium-term expenditure limits or independent fiscal institutions, can be used to taken budget processes out of politics. Third, the government needs to invest in long term service delivery in the public sector like health, education and infrastructure which need to increase with the rise in population. Lastly, to minimize fiscal manipulation of elections and encourage accountability, it would be necessary to enhance Public Financial Management (PFM) institutions, enhance budget transparency procedures, and widen the involvement of civil society and the media in budget observation, with a particular focus on elections.

Limitations of the study

Even though this research has been insightful on the role of electoral cycles on the sectoral budgetary allocation at the provincial level in Pakistan, a number of limitations need to be noted. Publicly available budgetary data is analyzed, which does not allow reflecting informal or off-budget fiscal practices that are frequent in provincial administrations. Moreover, the research subject is a narrow time period near the 2024 national and provincial elections, which, despite its extreme relevance, is not likely to generalize well over several election cycles.

Future Research Directions

As the extension of the findings of the current research, new studies may increase the scale of the study by involving a more varied panel of provinces across several electoral cycles to investigate how political budget cycles persist or change throughout time. Researchers can also examine the role played by party ideology, incumbency advantage or coalition politics in determining patterns of budgetary allocation at subnational level. It is also possible that comparative studies of other federal democracies (India, Brazil or Nigeria etc.) can shade some light on institutional factors that either limit or contribute to the problem of electoral budget manipulation.

References

Aidt, T. S., Veiga, F. J., & Veiga, L. G. (2011). Election results and opportunistic policies: A new test of the rational political business cycle model. *Public Choice*, *148*(1), 21–44.

Alesina, A. (1988). Macroeconomics and politics. In S. Fischer (Ed.), *NBER Macroeconomics Annual* (Vol. 3, pp. 13–61). MIT Press.

Ali, I. (2004). Historical impacts on political economy in Pakistan. *Asian Journal of Management Cases*, *1*(2), 129-146.

Ali, S. (2024). Understanding the Nature of Political Economy in Developing States: A Study of the Structural Issues in the Political Economy of Pakistan. *Journal of Development and Social Sciences*, *5*(2), 648-659.

Ardagna, S. (2010). Large fiscal adjustments: Composition and macroeconomic effects. In *Tax Policy and the Economy 24*, 35–68.

Akhmedov, A., & Zhuravskaya, E. (2004). Opportunistic political cycles: Test in a young democracy setting. *The Quarterly Journal of Economics*, *119*(4), 1301–1338.

Batool, S., & Sieg, G. (2010). Electoral cycles and political budget manipulations: Evidence from Pakistan. *Applied Economics Letters*, *17*(18), 1773–1777.

Bergman, U. M., Hutchison, M. M., & Jensen, S. E. H. (2016). Promoting sustainable public finances in the European Union: The role of fiscal rules and government efficiency. *European Journal of Political Economy*, *44*, 1–19.

Brender, A., & Drazen, A. (2005). Political budget cycles in new versus established democracies. *Journal of Monetary Economics*, *52*(7), 1271–1295.

Burki, S. J., Baxter, C., & La_Porte, R. (1991). *Pakistan under the military: Eleven years of Zia Ul-haq* (p. 212). Boulder, CO: Westview Press.

Cohen, D. (2004). Political institutions and economic reform: Evidence from transition economies. *Economics of Transition*, *12*(1), 25–53.

Downs, A. (1957). An economic theory of democracy. *Harper and Row*, *28*.

Dubois, E. (2016). Political business cycles 40 years after Nordhaus. *Public Choice*, *166*(1–2), 235–259.

Ebeke, C., & Ölcer, D. (2013). Fiscal policy over the election cycle in low-income countries (IMF Working Paper No. 13/153). IMF.

Enkelmann, S., & Leibrecht, M. (2013). Political expenditure cycles and election outcomes: Evidence from disaggregated data. *Public Choice*, *157*(1–2), 305–325.

Hibbs, D. A. (1977). Political parties and macroeconomic policy. *The American Political Science Review*, *71*(4), 1467–1487.

Hussain, A. (2009). *Pakistan: The economy of an elitist state*. Oxford University Press.

Hussain, S., & Lee, H. Y. (2022). Electoral cycles and fiscal policy in South Asia: A case study of Pakistan. *Asian Journal of Comparative Politics*, *7*(1), 54–70.

Johnson, J. W. (2025). The Fiscal Politics of Turnover and Tenure: Partisan Competition and Interterm Cycles. *Journal of Political Institutions and Political Economy*, *6*(1), 105-134.

Javaid, A., Ahmed, R., & Tariq, M. (2024). *Political incentives and budgetary outcomes in Pakistan: Evidence from electoral periods*. University of Punjab Economic Working Paper Series. Javed, M., & Ayaz, M. (2016). Electoral accountability and fiscal policy manipulation in Pakistan. *Pakistan Journal of Social Sciences*, *36*(2), 99–112.

Kalecki, M. (1943). Political aspects of full employment. *The Political Quarterly*, *14*(4), 322–330.

Kerman, M. (1947). *Government policy and business cycles*. Macmillan.

Khemani, S. (2004). Political cycles in a developing economy: Effect of elections in the Indian states. *Journal of Development Economics*, *73*(1), 125–154.

Koh, W. T. H. (2017). Political budget cycles: The role of budget institutions and fiscal transparency. *Economics Letters*, *156*, 61–64.

Müller, S. (2023). Electoral timing and fiscal outcomes: A reappraisal of political budget cycles. *European Political Science Review*, *15*(1), 49–66.

Nelson, M. (Ed.). (2025). *The Elections of 2024*. University of Virginia Press.

Nguyen, T. T., & Tran, H. T. (2023). Do elections trigger government spending booms? Evidence from developing economies. *Applied Economics*, *55*(18), 2064–2080.

Nordhaus, W. D. (1975). The political business cycle. *The Review of Economic Studies*, *42*(2), 169–190.

Persson, T., & Tabellini, G. (1992). The politics of 1992: Fiscal policy and European integration. *The Review of Economic Studies*, *59*(4), 689–701.

Persson, T., & Tabellini, G. (2002). *Political economics: Explaining economic policy*. MIT Press.

Quaicoe, W. (2022). Political budget cycles and fiscal manipulation: New insights from Sub-Saharan Africa. *African Journal of Economic Policy*, *29*(2), 112–130.

Rizwan, M., & Hameed, R. (2021). Fiscal populism and political budget cycles in Pakistan: Evidence from post-devolution public finance. *Lahore Journal of Economics*, *26*(2), 123–145.

Rogoff, K., & Sibert, A. (1988). Elections and macroeconomic policy cycles. *The Review of Economic Studies*, *55*(1), 1–16.

Shi, M., & Svensson, J. (2006). Political budget cycles: Do they differ across countries and why? *Journal of Public Economics*, *90*(8–9), 1367–1389.

Tkáčová, A., Hitka, M., & Stachová, K. (2018). Impact of unemployment on government spending in EU countries: A panel data analysis. *Journal of Competitiveness*, *10*(2), 143–159.

Tufte, E. R. (1978). *Political control of the economy*. Princeton University Press.

Wacziarg, R., & Welch, K. H. (2008). Trade liberalization and growth: New evidence. *The World Bank Economic Review*, *22*(2), 187–231.

Wadiaa, E. (2019). Trade openness and the size of government: Evidence from developing countries. *International Journal of Economics and Finance*, *11*(1), 14–24.

Yogo, T. U., & Ngo Njib, J. T. (2018). Trade openness and government size in Africa: Empirical evidence using dynamic panel data. *The Journal of Economic Development*, *43*(2), 95–117.