



## Political Budget Cycle: Mexican Town Halls Case

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### ABSTRACT

In the current economic context, one of the issues of concern is the growth of public spending of municipalities of Mexico and thus increasing public debt. This combines the traditional interest that literature has been devoted to the relationship between economics and politics from the perspective of Political Budget Cycle. The aim of this paper is to analyze the effect of elections in public expenditure management. To this end, a system based on the Generalized Method of Moments (GMM), which uses instrumental variables based on delays and differences of all variables in the model estimator was used. Our findings indicate that there is an expansion of total expenditure, spending on public works and infrastructure and current expenditure contracted work, indicating the preference of politicians for using investment spending to influence voter behavior. The work also notes that citizens value the policies of public expenditure management when making their voting decisions.

**Keywords:** Elections, political budget cycle, public spending.

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### 1.0 INTRODUCTION

The literature on political budget cycles arose due to the interest of the ruling in the handling of fiscal and budgetary variables, as a result of information asymmetry caused the benefit of the rulers in power. This phenomenon is evidenced in the work of [Rogoff and Siber \(1988\)](#) and [Rogoff \(1990\)](#), who maintain the course of asymmetries [Nordhaus \(1975\)](#), but from the perspective of imperfect information, where governments are heterogeneous in their competitiveness and deducted voters vote based, among other reasons, the economic performance that have those.

Today, the growing interest of the media to publicize financial information in the context of democracies increases the spread of these variables that motivate handling or advantage of the ruling, which contributes to knowledge and reasoning users on performance government for better decision-making.

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Such means, such as the web, print media, radio, television, etc., today are supported and regulated by different legal regulations of access and knowledge of the public information in most of the countries. However, they are still limited research analyzing transparency and use of information as a means of control to the voter regulate the actions of politicians in government (Brusca and Montesinos, 2006; Benito et al. 2013).

In this context, the literature has echoed different consequences, such as creative accounting, where governments use the possibilities at their disposal to balance budgets based on the increase or decrease in the expenditure components. Similarly, a line of research on political cycles tries to evidence if politicians use the instruments at their disposal to maximize the chances of being reelected.

According to the approaches of positivist accounting theory, formulated by Watts and Zimmerman (1978), accounting practices can be analyzed from two different perspectives: the opportunistic approach and asymmetric information, caused by attitude and aptitude, that is to say, politicians deliberately distort financial statements because they have reasons and also have the necessary technical skills to do it so, which generates a change in the composition without affecting other variables on budget (Cano, 2001).

With the evolution of new voter reasoning economic and financial strategies to gradually exclude limitations of traditional models of political budget cycles, they were incorporated. In that sense, Gamez and Yellow (2011) show that one of the changes to exclude limitations was to move from analysis of outcome variables (outcome), citing inflation, GDP growth and unemployment, variables calls instrumental tools originating fiscal policy (taxes and spending) monetary policy (money supply, interest rates) and. That is, modifying both the object of study and methodology.

Also, this paper analyzes the effect of elections on budgetary management, i.e., we try to show what kind of costs are chosen by the government in power to try to maximize their chances of continuing in the government or be reelected.

## 2.0 LITERATURE REVISION

The literature on Budgetary Political Cycles takes place in two periods, first with irrational macroeconomic models emerged in the mid-seventies, and then with rational models in the eighties, contributing and evolved in subsequent investigations with expectations formulated from behaviors previous studies. Therefore, the CPP as evolutionary part of the CPE has been studied and evidenced by numerous researchers, motivated by events and conditions arising in the economy and biases that limit. Here we refer to the various jobs performed, and the results obtained, to highlight what we can contribute to developing this first empirical work. It's that sense; literature is divided into two sections, international and Mexico.

Empirical evidence on the CPP in the international arena presents divergent results, i.e., the literature shows trends in both directions about the variable expenditure, composition and signaling periods before and after the elections. For example, Drazen and Eslava (2003) analyzed the national and regional levels in Colombia. For the first, they considered the period 1974-2000, while for the second the analyzed period is 1984-1998. The authors concluded that at the national level a political cycle in monetary aggregates or the exchange rate is not evidence. However, evidence of a political cycle in total spending or the tax receipts was ambiguous. They also found strong evidence of an expansion of government investment before the elections. Regionally they observed a significant increase in total public spending with increased investment spending before the election. The paper concludes that at both levels there is an increase in the variable investment spending before the election.

Brender and Drazen (2005) consider in their investigation the period 1960-2001, with a sample covering 107 countries, differentiated between old and new democracies. The authors use the GMM estimator in differences Arellano and Bond (1991), where, first, the regression is estimated including all democracies,

then for new democracies, then new democracies excluding transition economies and, finally, old democracies. The study concluded that the new democracies had a strong increase in spending before the election, which also explains the significant increase in public deficits in election years. Also, these findings suggested that fiscal manipulation is stronger in the new democracies than in the old ones.

About studies for municipalities, [Drazen and Eslava \(2008\)](#) analyzed a panel data that included 1,100 Colombian municipalities from 1987 to 2002 in Colombia. The authors find evidence of CPP in the pre-election year, where investment spending and current spending increases contracts. The authors used the GMM procedure suggested [Arellano and Bond \(1991\)](#), a standard approach for estimating data models dynamic type, since differentiation had endogeneity problems.

Meanwhile, [Brusca et al. \(2010\)](#) for Spain, Valencia considered 162 municipalities with more than 1,000 inhabitants, with population 1994-2005 budget data. This work GMM use of [Arellano and Bond \(1991\)](#), showing their results in an increase in investment spending and a contraction of current expenditure in the election period. The study also shows that the population maintains a positive relationship with the total expenditure and tourism rates and negative economic activity, indicating that municipalities with greater economic activity and a high rate of tourism, require less spending. About investment spending, these increase in the year before the election, showing that this expense is preferred and visible to citizens. The paper concludes that holders governments prefer spending on capital investment to try and impress the voter in the years before the election. [Aidt et al. \(2011\)](#) analyzed political, financial and economic variables in 278 Portuguese municipalities from 1979 to 2005. His study concluded that increased public spending before the elections, thereby demonstrating the CPP.

In another study of local, [Cioffi et al. \(2012\)](#) proved the existence of the CPP in Italian municipalities under the model differences GMM, [Arellano and Bond \(1991\)](#). This study considered 8,100 municipalities over a period of nine years (1998-2006) and focused its analysis on the opportunistic behavior of politicians in municipal spending, taking as dependent variable total expenditure and capital expenditure, and as explanatory variables, the election year, population, budgetary variables, politics, and education affiliation. The conclusion shows that any increase in total spending is explained by the increase in capital expenditures, which increases the chances of re-election of the incumbent in government. Also, they conclude that the CPP is notorious in municipalities with a larger population.

[Suharnoko et al. \(2013\)](#), also for the local level, they analyzed the CPP in Indonesia. This work considered the period from 2001 to 2009 and used as dependent variables total expenditure, current expenditure and other expenses. For independent variables used variables of population, urbanization and electoral periods. The results of this work indicate the strategic use of spending in election years, with differences between direct and indirect elections, so that the CPP in other expenses occur only in the direct election, and this increase is due to the organization of the elections themselves.

Meanwhile, [Benito et al. \(2013\)](#) applied the model proposed by [Arellano and Bond \(1991\)](#) to analyze the 97 largest municipalities in Spain in the period 1999-2009 and observe the effect of financial transparency in the magnitude of the CPP differences. They used as dependent variables total spending, capital spending, and taxes, about the number of inhabitants. In the independent variables variables of electoral, political and transparency they were used. The conclusions regarding the increase in total expenditure and capital expenditure indicate that both are increased in the pre-election year, which suggests an adjustment after them.

[Vicente et al. \(2013\)](#) considered their work a sample of 132 local authorities in Spain, with more than 50,000 population for the 1995-2009 period. The study analyzed the implementation of the new Law on Budgetary Stability and influence in the CPP. This work indicated that the analyzed variables such as the deficit, investment spending, and current spending, before the entry of the new law, suggested opportunistic expansions both before the elections and in the election year year; however, with the new regulations a smaller increase of these variables in the year when there were observed elections. Furthermore, in its conclusion they argued that if the law is applicable throughout the election period,

there should be a penalty clause containing the incentives of politicians, to the manipulation of budgetary variables in election years, to favor his reelection.

In Mexico, the empirical literature on the existence of CPP is relatively new and mostly oriented federal and state levels. In this context, there is little literature for Mexican municipalities, offering a review of published and their results on the existence of CPP in the Mexican economy.

Evidence of CPP was approached from the eighties by [Gámez and Botello \(1987\)](#), who conducted an analysis of the relationship between presidential cycle in Mexico and the variables of consumption, investment, exports, imports, government spending and aggregate income. This study was integrated from five presidential administrations since Ruiz Cortines to Lopez Portillo (1953-1982). Evidence found that the presidential cycle has a significant influence on the behavior of public spending, exports, and aggregate income.

In a subsequent study for municipalities in Mexico, [Moreno \(2007\)](#) applied the statistical method of fixed effects, considering as dependent variables investment spending and current spending, and as independent variables of a budgetary nature, ideological variables, electoral variables and population for the 1990-2001 period. The findings showed that spending on public works is highly political, that is, not only increases significantly in election years but is also a useful means for the actions of municipal governments more visible to the people, especially when they come from different partisan ranks of the state governor. Also, the authors believe that the political nature of spending on public works is not necessarily a disadvantage since municipalities can provide an important incentive to generate beneficial social projects. However, it is also possible that municipal governments, to obtain immediate political recognition, choose projects with short-term results, although its quality is not optimal and expected by the voter.

In the same vein, [Gámez and Amarilla \(2011\)](#) analyze the federal and state governments. For the federal level considered the period of 1986-2010 and the state level between 1989 and 2006. The study for the federal level showed that capital spending is manifested most strongly at the beginning of the election year followed by contractions after the election. For states, the results were explained only total expenditure, due to the lack of disaggregated data entities. In that sense, the results showed a significant increase in total spending before the election. Therefore, the paper concludes that CPP exists in total public spending and investment in state and federal governments in the last year of each administration, followed by contractions in the first months after the elections, which suggests that public spending is handled as an electoral weapon and not as a means of social welfare. Also, they questioned the functioning of institutional control systems, which in principle should monitor that such deviations do not occur, and spending should be allocated to meet citizens' needs.

[Ramírez and Erquizio \(2012\)](#) in their work to 31 states of the Republic from 1993 to 2009, and by GMM, said the opportunistic behavior of the tax authorities before the elections, i.e., confirm that the total expenditure increases in the year before elections. The conclusion suggests that the rulers of the 31 state institutions apply a policy of public budget management to maintain their positions and increase their chance of electoral success. These authors generally suggest that the analysis should be extended to the municipal level, in line with the work done in Colombia by [Drazen and Eslava \(2003; 2008\)](#), in Portugal by [Veiga and Veiga \(2007\)](#), in Italy by [Cioffi et al. \(2012\)](#) in Indonesia by [Suharnoko et al. \(2013\)](#) or in Spain by [Benito et al. \(2013\)](#), since literature is scarce in Mexico, something that will be addressed in this research in order to fill that gap.

### 3.0 OBJECTIVES AND HYPOTHESIS

#### 4.1 OBJECTIVES

The aim of this paper is to analyze the effect of elections on budgetary management to show whether political budget cycles designed to maximize the chances that municipal governments are reappointed occur.

In this context, the spending behavior will be studied in the proximity of the elections for evidence susceptible to manipulation in the management of municipal spending. In this regard, the international literature indicates that fiscal policy instruments of local governments are limited to the state governments, so the CPP is less intense (Brusca et al. 2010). Considering the previous results obtained in the literature of this research, this empirical work is done with the following specific objectives:

1. Analyze whether a change in spending that is associated with the electoral period takes place.
2. Examine what kind of expenses is used to reveal the electorate alleged preferences of the ruler and his party remains in power.
3. Observe whether the population increase total spending increases and how it affects composition because its growth generates demand for services, public works, and infrastructure.

## 4.2 HYPOTHESIS

Drazen and Eslava (2005) note that handling costs is to alter the composition of total expenditure for those expenses that reveal the electorate alleged tax preferences holder in office. Therefore, expenditure analysis indicates whether the decisions taken by the ruling party regarding expenditures are influenced by the proximity of the electoral process. In this context, the hypothesis we intend contrast, in line with previous literature analyzed, are as follows:

- **H1** The per capita expenditure of the municipalities increases in the pre-election period.
- **H2** Investment spending is preferred by governments to influence the voter in the period before the election the parties.
- **H3** Current expenditure decreases in the previous election in response to the increase in investment spending period.
- **H4** The population reacts positively in the composition of public spending. H1. The per capita expenditure of the municipalities increases in the pre-election period.

In that sense, if the electoral variable is positive, and also significant, imply that the type of expenditure taken as a dependent variable increases the corresponding periods, i.e., we would be facing a visible expenditure in the Rogoff model (1990) or against an I spend preferred model Drazen and Eslava (2005). Now, if this variable has negative coefficient, we would be concluding it contrary. Thus, we estimate that in our model the sign for total spending and investment should be positive and negative for current expenditure.

On the other hand, if the population has a positive and significant sign, we would be confirming that the population has a positive effect on total spending and investment spending, i.e. could say the evidence Brusca et al. (2010) and Vicente et al. (2013).

## 4.3 SAMPLES AND VARIABLES

The empirical analysis is performed with two kinds panel databases that integrate information from 127 municipalities from 1996 to 2010. Therefore, the base includes 1,525 for municipalities with more than 50,000 inhabitants. We had to remove the bodies of less than 50,000 municipal level since we detected a significant restriction of the estimator if the entire base, proven by the test of Arellano and Bond (1991) for autocorrelation and Sargan test of over-identification was used an instrument (Montero, 2010).

To estimate the statistical model variables budgetary arrangements, electoral variables and population, obtained from the National Institute of Statistics and Geography (INEGI, 2015), the website of the respective states, the electoral colleges in each state and used National Population Council (CONAPO).

Budget information is reported in nominal pesos. The original data were deflated using the National Index of Consumer Price (CPI), prepared by the Bank of Mexico, to be expressed in constant pesos of 1996. This information was published in the Official Journal of the Federation (DOF) 23 February 2011 regarding Article 20 and 20-bis of the Tax Code of the Federation.

#### 4.4 DEPENDENT VARIABLES

**Table 1:** Definition and calculation of variables

variables dependents	Description	Calculation of Variable	
GT_A	total spending	total spending / number of inhabitants	
GI_A	investment spending	investment spending / total spending	
GC_A	current expenditure	current expenditure / total spending	
variables independent	Description	Calculation of Variable	Expected sign
L1. GT	Variable $GT_{t-1}$		
L1. GI	Variable $GI_{t-1}$		
L1. GC	Variable $GC_{t-1}$		
EL_1	dummy electoral cycle	1 year before election 0 otherwise	GT (+) GI (+) GC (-)
POB	Population increase	Variable representing the increase in the population over time	(+)

We use three dependent variables that are intended to reflect the level of manipulation of total spending, investment spending and current in each entity. According to the above, the variables were taken in line with the work of Cioffi et al. (2012), Brusca et al. (2010) and Brender and Drazen (2005), ie, the total expenditure variable in relation to the number of inhabitants, investment spending and current expenditure to total expenditure. In that sense, the breakdown of expenditure will enable us to realize the effect of elections on spending in both concepts, i.e.; you can observe the probable existence of manipulation of variables in investment spending and current spending.

#### 4.5 INDEPENDENT VARIABLES

As for the explanatory or independent variables, we use variables of electoral and population to evidence and argue those variables that provide greater explanatory power over the handling of the preferred corresponding instruments. These variables are:

Delayed Variable of total spending, investment spending and current expenditure determined from the model of Arellano and Bond (1991). From these, for each model, we measured the influence of the explanatory variable on the dependent and took into account the persistence of decisions on fiscal policy last year, because under the budget inertia exerts a significant influence predetermine the behavior of successive years.

Electoral Variable, with which we measure the level of influence the elections in total spending and its composition. We construct a variable dummy considering that manipulation of spending could be a year before the election. Variable population, which will monitor the effect of increasing the population can exert on total spending and its composition. Specifically, Table 1 shows the description of the dependent and independent variables and calculation.

#### 4.0 METHODOLOGY

In this first empirical work we use panel data methodology, (MCO; EF, EA) for estimates of investment spending and current spending; also, we introduce a *dummy* variable to identify the year before the election and to control the influence of the electoral period in each regression. We also included as a variable  $\chi_{it}$  the increase in population, which will determine if affects the increase in total spending and its composition due to its increased demand generated in services, public works and infrastructure. In

addition, the model incorporates the vector  $y_{it-1}$ , which aims to improve efficiency in the results and, therefore, represents the inertia in the allocation of the composition of public spending.

In that sense, the general model for panel data used is as follows:

$$y_{it} = \alpha_i + \beta + \chi_{it} + EL_{-1} + \varepsilon_{it} \quad (1)$$

This autoregressive model we propose not presented for our analysis the robustness and reliability of the results to control the individual character of each municipality, causing errors in the estimates for the unobservable effect presented by the suggested model, that due to delays of the variable  $y_{it}$  dependent (it-1). To correct this problem, [Arellano and Bond \(1991\)](#) propose a model based on the Generalized Method of Moments (GMM), which uses instrumental variables based on delays and differences of all variables in the model estimator.

In this regard, the proposed model is expressed as follows:

$$y_{it} = \beta \Delta y_{it-1} + \Delta \chi_{it} + \Delta EL_{-1} + v_{it} \quad (2)$$

Using  $y_{i,t-s-1}$  as instruments of  $\Delta y_{i,t-s}$  and  $y_{k,i,t-s}$  as instruments of  $\Delta \chi_{k,i,t-s}$ .

Where the vector  $v_{it} = \Delta \varepsilon_{it}$ , guarantees the validity of instruments.

Also, [Arellano and Bond \(1991\)](#) observed that there are many valid instruments available and who do not exploit all the information in the database. Thus, the GMM approach can build a more efficient for dynamic data model panel, which includes strictly exogenous regressors and defaults, including delayed variable of the dependent variable, and endogenous regressors correlated with the individual effect unobservable  $v_i$

It is important to note that in this econometric analysis, municipal election periods are governed by heterogeneous calendars, i.e., that the elections occur in different years and months, depending on the local laws of each entity, considering empirical models electoral variables as constant during each year of each period, until you start the next election. The 15 years covered by the study include for some municipalities, having heterogeneous periods, in some cases covers four elections and, in others, five.

## 5.0 RESULTS ANALYSIS

Once analyzed and explained the method in this first empirical work, the results of the estimates are presented in this section as proposed by [Arellano and Bond \(1991\)](#) model; in Tables 2, 3 and 4.

All tables show each regression coefficients of the explanatory variables in addition to the standard error and testing [Arellano and Bond \(1991\)](#) to detect auto-correlation and test the validity of the instruments through the Sargan test. In that sense, from these tests, we can check whether each model is to accept or reject the null hypothesis, i.e, if the errors are not serially correlated, and then show that the instruments used in each regression are valid. This type of testing, both for this first set of regressions as for the second, will further support the results of the estimation of the dynamic model differences.

### 6.1 RESULTS

Table 2, 3 and 4 show the statistical models obtained for estimates of total spending, investment spending, and current expenditure respectively.

First, we note that the three models for municipalities have no significant values in Arellano and Bond test for autocorrelation and heteroskedasticity Sargan for. The first test of Arellano and Bond shows that there is no autocorrelation in the models proposed, while the statistical Sargan finds that the equations are appropriate and correctly about identified. These results confirm the effectiveness of both models, and while the instruments for estimating equations are adequate.

Delayed variable is positive and significant in all three regressions, confirming that there is the incidence of the variables in the previous year. As point out [Veiga and Veiga \(2007\)](#), [Drazen and Eslava \(2005\)](#) and

Brusca et al. (2010), this variable seeks to take into account the persistence of decisions on fiscal policy last year as part of the budget inertia has significant influence and predetermine the tax expense for future years.

**Table 2: Model GMM, Spending Dependent Variable total / No. Inhabitants**

Independent variables	Coefficient		Std.Err
Per capita total expenditure last year	0,6361438	*	,0018164
Year prior to the election	136,1913	*	2,172839
Population increase	0,0043401	*	,0000612
Constant	-443.5389	*	13,82538
Test Abond			0,1447
Test Sargan			0,1833
Number of observations			1525

\* Significant at1%; \*\* Significant at5%; \*\*\* Significant at 10%

**Table 3: Model GMM. Dependent variable investment spending / Total spending**

Independent variables	Coefficient		Std.Err
Investment spending last year	0,3035145	*	0,0085289
Year prior to the election	0,0106446	*	0,0010406
Population increase	0,0121939	***	0,0069247
Constant	0,0389545		0,0831953
Test Abond			0,3290
Test Sargan			0,3234
Number of observations			1525

\* Significant at1%; \*\* Significant at5%; \*\*\* Significant at 10%

**Table 4: GMM. Dependent variable current expenditure / total expenditure**

Independent variables	Coefficient		Std.Err
Current expenditure of the previous year	0,3213497	*	0,0108934
Year prior to the election	-0,0095705	*	0,00121
Population increase	-0,028637	*	0,0088423
Constant	0,8429983	*	0,107282
Test Abond			0,3012
Test Sargan			0,2180
Number of observations			1525

\* Significant at1%; \*\* Significant at5%; \*\*\* Significant at 10%

As for the explanatory variables in the models, there are significant differences in behavior, i.e., is first observed a significant increase in total per capita expenditure falls with the increase in spending related to the investment in the pre-election year and, on the other hand, a contraction in the level of current spending, although in all cases the level of significance is 1%.

Concerning the first model of the total expenditure variable, it can be seen that the electoral dummy variable has on its coefficient positive and also significant sign, which indicates an expansion of total expenditure per capita before the election. This result supports the hypothesis of CPP in the increase in total spending per capita, showing that local governments in Mexico try to impress the electorate with an expansive spending before the election. This result is similar to that obtained by Cioffi et al. (2012) and Benito et al. (2013), which showed in their work that the increase in total spending is due in part to increased investment spending, an expansionary fiscal policy that governments use before the election.



On the other hand, for the variable increase in population, its coefficient has positive and significant at the 1% mark, confirming the hypothesis we propose, i.e., the increase in population has a positive influence on the composition of public expenditure by the government. This result confirms the point made by Brusca et al. (2010) and Vicente et al. (2013) which showed that the population has a positive effect on total spending, indicating that large local authorities have more spending than smaller ones.

Also, this result confirms also designated by Escudero and Prior (2002), Cioffi et al. (2012), Benito et al. (2013) and Suharnoko et al. (2013) who observed a positive influence on the population variable in relation to total spending, suggesting that total spending increases as the population increases following their generational increase.

In the second regression model investment spending about total spending, the dummy variable is significant and has a positive coefficient. This result verifies the hypothesis where investment spending is signaled by the ruler to seek to influence the voter in the election. In that sense, it is observed that there is an increase in investment spending, reported by the rulers who believe the electorate appreciates and public infrastructure works before the election. This result confirms the work of Drazen and Eslava (2005), Brusca et al. (2010) and Vicente et al. (2013), which obtained that spending on public works is the preferred and indicated by operators in the government, i.e., the politician in power expands public spending with work and infrastructure to treat, if possible, to retain the power.

However, studies Cioffi et al. (2012) and Vicente et al. (2013) for local governments in Italy and Spain respectively, found that the effect of elections on capital spending has been reduced, decreasing the effect of the CPP in investment spending by the entry of new budgetary rules in Italian municipalities and the new Fiscal Stability Law in Spanish municipalities.

For the variable population variation coefficient, it is positive and significant at 10%, so in principle, we can say that the increase in population increases the need for investment spending. This result confirms that of Brusca et al. (2010), who noted that in the larger municipalities there is a need for greater investment spending, otherwise the study Cioffi et al. (2012), where the largest Italian municipalities increase only total spending as a result of the new budget rules discussed in this case, the demand for spending has also based on the age of the population origin, for example the population and long-lived, requires more spending on social services rather than investment demand.

In the model of current spending, as expected, the dummy variable indicates that decreases in the pre-election year, which reiterates that local governments prefer to point out investment spending and, in contrast, reduce current spending. This confirms the hypothesis we propose, i.e., current spending decreases in before the election the ruling period.

In the variable population variance, the coefficient was a significant and negative sign, indicating that the ruling by increasing population, increased investment spending and current spending decreases.

## 6.0 DISCUSSION AND CONCLUSIONS

This paper provides an overview of the effect of elections on budgetary management, which has shown the existence of political budget cycles in total spending and its composition in the municipalities of Mexico during the period 1996-2010.

The results were derived in a specific context, i.e., they were taken in 127 municipalities with more than 50,000 inhabitants.

We conclude that in Mexico, specifically in larger municipalities to 50,000 inhabitants, evidence of budgetary policy cycle presents an increase in total spending, investment spending and contraction of current expenditure in the total expenditure, which supports the manipulation of policy instruments tax by opportunistic leaders during election periods wishing to continue in power.

This observed pattern fall from the School of Public Choice (Public Choice), which examines the connection between politics and economy, from the viewpoint of alteration of economic variables over time, which in turn are caused by the performance of operators in the public sector.

On the other hand, we can also frame from the agency theory, which highlights the approaches and conflicts of interest that arise from the various agents in an entity. Under this perception, this theory is applied in the political-voter relationship where the politician in power seeks to maximize their welfare, which implies the maximization of votes to favor his reelection, or maximizing the privileges that can be your job, as [Buchanan and Tullock \(1962\)](#) maintained.

It also could be applied equally creative accounting, which maintains that managers make use of discretion and subjectivity applicable to the preparation of financial statements to induce the error in its interpretation by users ([Healy and Wahlen 1999](#)). From this perspective, politicians try to reflect that situation may be more favorable to achieve legitimacy, ultimately trying to maximize their interests and intentions to remain in power.

In that sense, this article presents the preliminary work on the development of political budget cycles analyzes, which showed evidence of the opportunistic behavior of the variables of fiscal policy noting the interest of the party in government to use variables to treat to maximize the chances of being reelected.

Recent work from Mexico, as [Gómez and Amarilla \(2011\)](#) or [Ramirez and Erquizio \(2012\)](#), and international, as [Brender and Drazen \(2005,2008\)](#); [Brusca et al. \(2010\)](#), [Cioffi et al. \(2012\)](#), [Benito et al. \(2013\)](#) complement the reflections: budgetary policy cycle suggests increases in investment spending during the pre-election year, which means it should be to increase the welfare of its citizens; however, such an increase —en some casos— is used as a weapon to attract votes and maintain or retain power.

The results suggest an expansion of total expenditure, spending on public works and infrastructure and a contraction in current spending, trying to seek benefits for the operator in power, which is so manifest their policies, exhibiting a pattern of opportunistic behavior on the myopic voters. This indicated the preference of politicians for using investment spending over current spending to influence voter behavior.

For the population variable, the results indicate that this variable has a positive and significant in both total spending and investment spending so that an increase in the population positively affects the expenses indicated. This implies a pattern of opportunistic behavior on the shortsightedness of voters, who have little retrospective memory ([Gómez and Amarilla 2011](#)), and allows the party in government run opportunist policies successfully where the authors conclude that voters in Mexico only take into account current information and also have adaptive expectations based on the information available from government operators.

In our work, the results confirm the hypotheses: public spending is used to impress the electorate, i.e., total spending increases and the ratio of investment spending to total and, consequently, the current decreases, changing their behavior about the period of the election cycle.

The scope of this work was to verify the presence of budgetary policy cycles at the municipal level, and our conclusion the evidence points to the existence of CPP in investment spending and current spending levels for the two analyzed.

Overall, the evidenced results are in line with the approach of the opportunistic model, but with some differences that could be myopia related experience in electoral processes or media disclosed voters opportunist policies of the parties in power ([Gómez and Amarilla 2011](#)).

Finally, we would like to note that this paper is a small contribution in the field of the behavior of public finances supported the theory of Budget Political Cycles and shows that still today political introduce opportunistic behavior management administrations to try to maximize their interests, such as the number of votes obtained in the elections. In fact, our results show that there may be positive effects of these behaviors, which can be an incentive for policymakers to time to act. An important recommendation to downsize political cycles and its effect is the implementation of management systems that are transparent and provide citizens all sorts of information so you can make informed decisions, recommendation set already in the literature in numerous studies as Caba et al. (2014). This information should consider both the positive and the negative of public actions, and in particular investments in public works that the government carries, while as it is found in the work are the main cause of the increase in debt, which It requires strict control of the adaptation to the principles of economy, efficiency, and effectiveness in carrying out the same

## REFERENCES

- Aidt, T. S., Veiga, F. J., y Veiga, L. G. (2011). Election results and opportunistic policies: a new test of the rational political business cycle model. *Public Choice*, 148(1-2), 21-44.
- Arellano, M., y Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies*, 58(2), 277-297.
- Benito, B., Vicente, C. y Bastida, F. (2013). Transparency and political budget cycles at municipal level. *Swiss Political Science Review*, 19(2), 139-156.
- Brender, A., y Drazen, A. (2003). Where does the political budget cycle really come from?. *Social Science Research Network*. CEPR Discussion Paper No. 4049.
- (2005). Political budget cycles in new versus established democracies. *Journal of Monetary Economics*, 52(7), 1271-1295.
- Brusca A., I., y Montesinos, V. (2005). The usefulness of local government financial reporting for citizens. *Workshop of the CIGAR, St. Gallén*.
- (2006). Are citizens significant users of government financial information? *Public Money and Management*, 26(4), 205-209.
- Brusca A., I., Labrador, M., y Montesinos, V. (2010). *Elections and local government management*. 33rd European Accounting Association Annual Congress, Istanbul (Turquois).
- Buchanan, J. M., y Tullock, G. (1962). *The calculus of Consent: Logical Foundations of Constitutional Democracy*. Michigan, University of Michigan: Ed. Press.
- Caba P., M., Rodríguez Bolívar, M., y López Hernández, A. (2014). The determinants of government financial reports online. *Transylvanian Review of Administrative Sciences*, 1(42), 5-31.
- Cano, M. (2001). *Análisis de la fiabilidad de la información contable: La contabilidad creativa*. España: Ed. Prentice Hall.
- Cioffi, M., Messina, G., y Tommasino, P. (2012). Parties, institutions and political budget cycles at the municipal level. *Bank of Italy Temi di Discussione (Working Paper)*, 885, 38.
- CONAPO. (2015). Consejo Nacional de Población. Recuperado el 20 de mayo de 2015, de <http://www.conapo.gob.mx/>
- Drazen, A. y Eslava, M. (2003). The political business cycle in Colombia on the National and Regional level, *Archivos de Economía*, No. 215. DNP.
- (2005). Electoral manipulation via expenditure composition: theory and evidence. *NBER Working Paper*, 11085.
- (2008). Electoral manipulation via voter-friendly spending: Theory and evidence. *Journal of Development Economics*, 92(1), 39-52.
- Gámez, C., y Amarillas, V. A. (2011). Política económica o economía política: el ciclo político presupuestal en México. *Cofactor*, II (3), 71-96.
- Gámez, C., y Botello, J. (1987). La influencia del ciclo presidencial en la economía mexicana: un ejercicio econométrico con variables dummy. *El dilema de la economía mexicana: Ensayos de interpretación*, Ediciones de Cultura Popular-Universidad Autónoma Metropolitana, México, 215-232.

- Gámez, C., y Ibarra-Yúnez, A. (2009). El ciclo político oportunista y el gasto de los estados mexicanos. *Gestión y política pública*, 18(1), 39-65.
- González, M. D. (2000). On elections, democracy and macroeconomic policy cycles. *Department of Economics, Princeton University, Working Paper*.
- (2002). Do changes in democracy affect the political budget cycle? Evidence from Mexico. *Review of Development Economics*, 6, 204-224.
- Healy, P. M., y Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons*, 13(4), 365-383.
- INEGI. (2015). Instituto Nacional de Estadística y Geografía. Recuperado el 15 de mayo de 2015, de <http://www.inegi.org.mx/>
- Montero, R. (2010). Panel dinámico. *Documentos de Trabajo en Economía Aplicada*. Universidad de Granada, España.
- Moreno, J. C. (2007). Gasto público y elecciones: una explicación política de la asignación de los presupuestos municipales en México. *Foro Internacional*, 408-434.
- Nordhaus, W. D. (1975). The political business cycle. *The review of economic studies*, 169-190.
- Ramírez R., R. y Erquizio, E. A. (2012). Análisis del ciclo político electoral a partir de variables de gasto público por entidad federativa en México, 1993-2009. *Revista de Economía Regional y Sectorial*. 4(2), 5-27.
- Rogoff, K. (1990). Equilibrium political budget cycles, *American Economic Review*, 80 (1), 21-36.
- Rogoff, K., y Sibert, A. (1988). Elections and Macroeconomic Policy Cycles. *The Review of Economic Studies*, 55(1), 1-16.
- (2011). Opportunistic and partisan election cycles in Brazil: new evidence at the municipal level. *Public Choice*, 148(1-2), 233-247.
- Suharnoko S., B., Kis-Katos, K., y Schulze, G. G. (2013). Political budget cycles in local Indonesia. *Economics Letters*, 120(2), 342-345.
- Veiga, L. G., y Veiga, F. J. (2007). Political business cycles at the municipal level. *Public Choice*, 131(1-2), 45-64.
- Vicente, C., Ríos, A. M., y Guillamón, M. D. (2013). Voting behavior and budget stability. *Revista de Contabilidad*, 16(1), 46-52.
- Watts, R. L., y Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *Accounting review*, 112-134.