



# Budgeting Patterns for Regional Government Functions: Impact of Election of Regional Heads & Incumbents (Study of Regional Government in Indonesia)

Stevin David<sup>1</sup>, Andi Chairil Furqan<sup>2</sup>, Arif Gunarsa<sup>3</sup>, Shinta Megawati Sitorus<sup>4</sup>

<sup>1,2,3</sup> Tadulako University, Indonesia

<sup>4</sup>Central Sulawesi Province Regional Research and Innovation Agency, Indonesia  
stevindavid09@gmail.com

**Abstract.** This study aims to analyze the influence of regional head elections (PILKADA) on the budgeting patterns of regional government functions. Using secondary regional government data in Indonesia for 2014–2021 with a final sample of 2,464 observations. The results of this study show that the implementation of the PILKADA has an impact on increasing budgeting for social functions, public facilities, security and order as well as tourism and cultural functions. On the other hand, it was also found that there was a decrease in the budgeting of economic functions during the implementation of the PILKADA. This finding is consistent when there is an incumbent who is one of the PILKADA participants. Regional governments whose incumbents are regional election participants tend to increase budgeting for social functions, public facilities, security and order as well as tourism and cultural functions. In addition, it was also found that the social function budget as well as the security and order function had an impact on the incumbent's victory. Incumbents who are re-elected in the second period tend to have higher budgets for social functions as well as security and order functions. This study provides new insights regarding the budgeting patterns function of regional government in Indonesia, especially in regional governments that carry out PILKADA. The results of this study have implications for the importance of tighter planning and budgetary supervision in regions that will conduct regional elections, especially when there is an incumbent as one of the participants.

**Keywords:** Budgeting Patterns, Regional Government Functions, Regional Head Election, Incumbent.

## 1. Introduction

Indonesia has attempted to implement a purposeful decentralization policy giving authority to local governments to manage their own budgets (Simanjuntak, 2015). The budgeting patterns implemented by regional governments are influenced by various factors, one of which is the local political agenda, including the Regional Head Election (PILKADA). Pilkada requires large funds because it includes financing for pilkada preparation, candidate registration and logistics for the election process and vote

counting (Setiawan & Setyorini, 2018). Due to its strategic and political nature, Pilkada often has an impact on regional budgeting policies. In connection with this, research has been developed that analyzes the impact of Pilkada on changes in budgeting patterns. Several studies showing an increase in the budget in certain sectors during the Pilkada were conducted by Sjahrir, Kis-Katos, & Schulze, (2013) which showed an increase in the use of the budget in the year the Pilkada was held. This increase was seen when regional head elections were carried out using the direct election method (Kis-Katos, & Schulze, 2014). (Kis-Katos & Sjahrir, 2017) also revealed that there was a decrease in investment made or spent by regional governments during the Pilkada period. Meanwhile, research conducted by Haris et al., (2023) shows that there are changes in budgeting patterns, especially in public service functions during the Pilkada. Until now, this research has been limited to analyzing one function of the regional government budget, so this research aims to analyze each function of the regional government budget in Indonesia and see to what extent the existence of regional elections has an impact on budgeting patterns.

Pilkada in Indonesia is a direct mandate from the Reform Movement in 1998 (Suyatno, 2016). This creates momentum for the community to be able to participate in directly electing regional heads, which has been regulated by Undang-Undang nomor 32 tahun 2004 About Regional Government and based on Undang-undang Nomor 8 Tahun 2015 concerning amendments to Undang-Undang Nomor 1 Tahun 2015 concerning the stipulation of government regulations in lieu of the Undang-Undang Tahun 2014 concerning the election of Governors, Regents and Mayors into Undang-Undang. Pilkada is held every 5 years and simultaneously in all regions of the unitary state of Indonesia, so many parties are of the opinion that holding pilkada simultaneously creates a huge financial burden.

The budget not only functions as a technical tool but also as a political instrument that reflects the priorities and values of a society Schick, (1966). Therefore, the process of determining the budget is closely related to the political process so it is better known as budget politics. Budget preparation at the local level is often influenced by local political dynamics, which can differ from national priorities. Pilkada is often an important moment that influences budget decisions Hadiz, (2004). Budget politics are also determined when ratifying the budget in the DPR/DPRD. The budget priorities are regulated by Undang-Undang Republik Indonesia Nomor 28 Tahun 2022 concerning the State Revenue and Expenditure Budget for Fiscal Year 2023 (jdihkemenkeugoid, 2022). Therefore, budget policy making is an interaction between economic and political actors with conflicting technical, economic and political considerations (Von Hagen & Harden, 1995). Therefore, it is very important for us to be able to see the factors of changes in the pattern of budgeting functions that occur as a result of the Pilkada in each region, this is so that we can see what the priorities of a region are in the budget function during the Pilkada, and what the budget will be if there is a regional head who is Re-elected (incumbent) therein.

Based on the data used in this research, there are 308 regions consisting of 20 provinces, 56 cities and 232 districts. The results of this research show that Pilkada has a significant influence on several functional budget variables where the functions that are positively affected are the public service function, security and order function, public facilities function, health function, tourism and culture function, as well as social protection function and the functions that are negatively affected. Negative is an

economic function. Therefore, this research contributes to previous research conducted by Sjahrir, Kis-Katos, & Schulze, (2013) which was limited to analyzing budget increases. So, the novelty of this research is analyzing the pattern of budget changes, both increases and decreases. Another contribution is that no research has been found that analyzes incumbents who take part in regional head elections as having an impact on budgeting patterns.

Based on the explanation above, it can be concluded that the Pilkada and Incumbency have an impact on functional budgeting patterns in regional governments in Indonesia. The limitation of this research is only focuses on the budgeting patterns of regional government functions on the impacts provided by the PILKADA and the incumbent. The remainder of this article will be divided into 4 parts, namely the second part discusses the literature review and hypothesis development, the third part discusses the research methods used, the fourth part discusses the results of hypothesis testing, and finally, the fifth part will discuss the conclusions and implications of the research, as well as limitations. and suggestions for further research.

## **2. Literature Review and Hypothesis Development**

### **2.1. Agency Theory**

Agency theory explains the dynamics in an agreement where the 'principal' depends on the 'agent' to complete certain tasks or services. Issues such as conflicts of interest and lack of symmetric information between the two parties result in what is known as 'agency costs'. These costs relate to the effort required to ensure that the agent acts in line with the principal's wishes (Jensen & Meckling, 1976). To overcome this problem, it is important to implement effective incentive mechanisms and monitoring processes. This helps minimize agency costs and ensure that the agent's activities do not deviate from the principal's interests, especially because the principal has limitations in directly confirming what the agent is doing. (Eisenhardt, 1989). So in this case we can see how principals (citizens or voters) and agents (regional heads and incumbents) interact and how budget policy is influenced by the dynamics of this relationship.

### **2.2. Public choice theory**

Public choice theory can be explained simply as a discipline that uses an economic approach to study political behavior such as the behavior of voters, political parties, legislatures, and bureaucracy. Public choice theory discusses how information can influence the production and distribution of public goods by governments (Giroux, 1989). In this research, it is assumed that regional heads have a motivation to win reelection, so that they offer the community superior performance, which can be measured through regional government financial management.

### **2.3. Political Budget Cycle and reelection prospects**

If opportunistic or electoral interests can influence budgetary policy at the local government level, a natural question arises about the extent to which opportunism benefits. One stream of literature closely related to the Political Budget Cycle (PBC),

although usually considered a distinct entity, focuses on whether pre-election spending is more beneficial to the incumbent or not. as results both supporting and opposing this hypothesis have been reported (Peltzman, 1992).

In many countries, including established democracies and countries newly transitioning to democracy, there is evidence to suggest that governments tend to increase public spending and/or lower taxes before elections in order to increase their chances of being re-elected. The 'Political Budget Cycle' (PBC) phenomenon indicates manipulation of fiscal policy for electoral gain, but incumbents who excessively use opportunistic fiscal strategies may face consequences from voters who are more responsive to fiscal issues. Although some studies find evidence supporting the PBC hypothesis, others do not, and voters in developing countries may react differently compared to those in more developed markets. This suggests that the success of the political budget cycle in influencing reelection prospects is not always clear-cut and may vary depending on the specific economic and political context (Brender & Drazen, 2005; Rogoff & Sibert, 1988; Schuknecht, 1996).

#### **2.4. The Influence of Regional Head Elections on Regional Government Functional Budget Patterns**

Pilkada is often an important moment that influences budget decisions Hadiz, (2004). Budget politics are also determined when ratifying the budget in the DPR/DPRD. The budget priorities are regulated by Undang-Undang Republik Indonesia Nomor 28 Tahun 2022 concerning the State Revenue and Expenditure Budget for Fiscal Year 2023 (jdihkemenkeugoid, 2022)Therefore, budget policy making is an interaction between economic and political actors with conflicting technical, economic and political considerations (Von Hagen & Harden, 1995). Therefore, it is very important for us to be able to see the factors of changes in the pattern of budgeting functions that occur as a result of the Pilkada in each region, this is so that we can see what the priorities of a region are in the budget function during the Pilkada, and what the budget will be if there is a regional head who Re-elected (incumbent) therein. Based on the explanation above, the following research hypothesis is obtained.

***H1. The Election of Regional Heads Influences the Budget Pattern of Regional Government Functions***

### **3. Research methods**

#### **3.1. Data**

The data used in this research is regional government data in Indonesia for 416 regencies, 98 cities and 34 provinces, in 2014-2021. However, because 7 districts/cities in the DKI Jakarta province are administrative areas, they were excluded from the sample. Apart from that, of the 548 regional governments, there are 67 regional governments that do not have budget data for public service functions, 29 regional governments that do not have budget data for order and security functions, 1 regional government that does not have budget data for economic functions, 21 regional governments that do not have budget data for environmental functions, 10 regional governments that do not have budget data for housing and public facilities, 102 local

governments that do not have budget data for tourism and culture functions, and 3 regional governments that do not have budget data for social protection functions. Therefore, due to the unavailability of adequate data, the final sample size was set at 308 observations or the equivalent of 56.20% of the total regional governments in Indonesia in the year of observation. Sampling used the proportional sampling method, because the data used was 8 years of observation, so the final total of data used was 2,464 observations. All data used in this research comes from the Ministry of Finance, General Election Commission (KPU), The financial Audit Agency, and the Ministry of Home Affairs.

**Table 1**  
**General Description of the Research Sample**

INFORMATION	SAMPLE	
	Amount	Percent %
<b>Panel A. Sample Determination</b>		
<b>Number of Regencies/Cities/Provinces</b>	548	100%
Provincial Administrative Regency & City DKI Jakarta	7	1.28%
Does not have data on the Public Service budget function	67	12.23%
Does not have data on the Order & Security budget function	29	5.29%
Does not have Economic budget function data	1	0.18%
Does not have environmental budget function data	21	3.83%
Does not have data on the Housing and Public Facilities budget function	10	1.82%
Does not have Health budget function data	0	0.00%
Does not have data on the Tourism & Culture budget function	102	18.61%
Does not have education budget function data	0	0.00%
Does not have data on Social Protection budget functions	3	0.55%
<b>Final Sample Size</b>	<b>308</b>	<b>56.20%</b>
<b>Panel B. Sample Descriptive</b>		
<b>Based on Regional Government Status</b>		
Province	20	6.49%
City	56	18.18%
Regency	232	75.32%
<b>Amount</b>	<b>308</b>	<b>100%</b>
<b>Based on Geographical Location of Regional Government</b>		
Java Island	69	22.40%
Outside of Java Island	239	77.60%

INFORMATION	SAMPLE	
	Amount	Percent
Amount	308	100%
Final Sample Size 2014-2021	2464	100%

Source Processed by Researchers 2023

### 3.2. Empirical Model and Operational Variables

To answer the problems in this research, the empirical model in this research is as follows, namely:

$$\text{Functional budget}_{it} = \alpha_0 + \alpha_1 \text{pilk}_{it} + \alpha_2 \text{size}_{it} + \alpha_3 \text{ages}_{it} + \alpha_4 \text{mun}_{it} + \alpha_5 \text{island}_{it} + \varepsilon_{it} \dots \dots \dots e$$

The main variable in this research is **budget function<sub>it</sub>** and **pilk<sub>it</sub>**, where the **budget function<sub>it</sub>** is a variable total of the function budgets of all regional governments in 2014-2021, where these functions consist of public service functions, order and security functions, economic functions, environmental functions, housing and public facilities functions, health functions, tourism and cultural functions, educational functions, and social protection functions. All budget function values are measured using the natural logarithm (LN). **pilk<sub>it</sub>** is a variable for regional head elections in Indonesia that is measured using a dummy, namely "1" if there is a regional head election and "0" otherwise.

The control variables in this article are **size<sub>it</sub>**, **ages<sub>it</sub>**, **mun<sub>it</sub>**, and **island<sub>it</sub>**. **size<sub>it</sub>** is a variable for the size of the Regional Government in the year which is measured using the natural logarithm (LN) of total asset value. **ages<sub>it</sub>** is the Regional Government age variable which is measured using the number of years the regional government was established until 2021. **mun<sub>it</sub>** is the Regional Government status variable which is measured using a dummy, namely "2" if the Regional Government has Province status, "1" if the Regional Government has City status, and "0" otherwise. **island<sub>it</sub>** is a regional government geographical location variable which is measured using a dummy, namely "1" if the regional government has city status, and "0" otherwise.

**Table 2**  
Operationalization of Variables and Data Sources

Name	Variable Operationalization	Data source
FUNCTIONAL BUDGET <sub>it</sub>	The value of the regional government function budget, as measured by the natural logarithm (LN)	Ministry of Finance
pilk <sub>it</sub>	Shows the occurrence of Regional Head Elections from 2014-2021	General Election Commission (KPU)

SIZE <sub>it</sub>	The size of the Regional Government, measured by the natural logarithm (Ln) of the total assets of the Regional Government	Financial Agency (BPK)	Audit
AGES <sub>it</sub>	The Regional Government age variable is measured using the number of years the region was established up to 2021	Ministry of Internal Affairs.	
MUN <sub>it</sub>	Regional Government status is measured using a dummy, namely "1" if the Regional Government has City status, and "0" otherwise	Ministry of Internal Affairs.	
ISLAND <sub>it</sub>	The geographical location of the Regional Government, measured by dummy islands, namely "1" is Java Island, "0" is the other.	Ministry of Internal Affairs.	

*Data Source: Processed by Researchers (2023)*

## 4. Research Result

### 4.1. Descriptive Statistics

Descriptive statistics of research data are presented under conditions, namely when the Pilkada was held.

**Table 3** Statistical Description of Variables

Information	Obs	Mean	Std. Dev.	Min	Max
<b>Functional budget<sub>it</sub>*</b>	2,464	211.05	428.80	0.01	11,389.77
<b>pilk<sub>it</sub></b>	2,464	0.19	0.39	0	1
<b>Ages<sub>it</sub></b>	2,464	41.69	23.53	1	71
<b>Mun<sub>it</sub></b>	2,464	0.31	0.58	0	2
<b>Island<sub>it</sub></b>	2,464	0.22	0.41	0	1
<b>Size<sub>it</sub>*</b>	2,464	3,938.03	5,353.45	123.87	47,023.93

Number of Observations = 2,464

Explanation of variable operationalization in table 1

\*) In billions of rupiah

*Source: Secondary Data, STATA-14 Output (Processed, 2023)*

Table 2 depicts descriptive statistics for all variables analyzed in this study. The mean variable budget function using 211.05, which means that the average sample used has a functional budget value of around IDR 211,050,000,000.00. The mean of the election variable is 0.19, which means that on average the sample used in this study did not carry out regional head elections in the year of observation.

Several other variables, such as *agest*, show a mean of 41.69, which means that the average age of the regional governments in the sample is over 40 years or was formed before government reform was implemented in Indonesia. Meanwhile, the *mnt* and *islandt* variables show mean values of 0.39 and 0.19, which means that on average the samples used in this research are regional governments located outside the island of Java with district status. Furthermore, *sizet* shows a mean value of 5,353.45. This means that on average the regional governments in the sample have assets of IDR 5,353,450,000,000.00. Next, the results of the correlation analysis between each variable are presented in the following table.



Table 4. Variable Correlation Analysis

	lnalayu m	lnakam tib	lnaeko	lnalin g	lnafasu m	lnaseh at	lnabud	lnapen dik	lnasos	pilk	ages	mun	island	size
lnalayu m	10000													
lnakamt ib	0.417** *	10000												
lnaeko	0.000 0.744** *	0.403* **	10000											
lnaling	0.000 0.395** *	0.000 0.522* **	0.465** *	10000										
lnafasu m	0.000 0.433** *	0.000 0.625* **	0.000 0.375** *	0.373* **	10000									
lnasehat	0.000 0.748** *	0.000 0.457* **	0.000 0.682** *	0.000 0.521* **	0.000 0.378* **	10000								
lnabud	0.000 0.400** *	0.000 0.514* **	0.000 0.357** *	0.000 0.366* **	0.000 0.541* **	0.000 0.355* **	10000							
lnapend ik	0.000 0.625** *	0.000 0.488* **	0.000 0.620** *	0.000 0.544* **	0.000 0.424* **	0.000 0.750* **	0.000 0.331* **	10000						
lnasos	0.000 0.458** *	0.000 0.657* **	0.000 0.442** *	0.000 0.451* **	0.000 0.726* **	0.000 0.423* **	0.000 0.581* **	0.000 0.424* **	10000					
pilk	0.000 0.020* **	0.000 0.103* **	0.000 (0.067)* **	0.000 (0.011) **	0.000 0.061* **	0.000 0.019 **	0.000 0.096* **	0.000 0.109* **	0.000 0.196* **	10000				
ages	0.320 0.333** *	0.000 0.256* **	0.008 0.335** **	0.554 0.368* **	0.002 0.182* **	0.327 0.583* **	0.000 0.235* **	0.896 0.543* **	0.000 0.196* **	(0.005)	10000			
mun	0.000 0.359** *	0.000 0.373* **	0.000 0.432** *	0.000 0.355* **	0.000 0.290* **	0.000 0.242* **	0.000 0.323* **	0.000 0.243* **	0.000 0.373* **	0.797 (0.02)	0.026 10000			
island	0.000 0.270** *	0.000 0.189* **	0.000 0.250** **	0.000 0.349* **	0.000 0.166* **	0.000 0.447* **	0.000 0.183* **	0.000 0.486* **	0.000 0.187* **	0.205 (0.003)	0.186 0.412*	(0.020)	10000	
size	0.000 0.745** *	0.000 0.529* **	0.000 0.735** **	0.000 0.589* **	0.000 0.518* **	0.000 0.748* **	0.000 0.420* **	0.000 0.677* **	0.000 0.520* **	0.873 (0.017)	0.000 0.421*	0.321 0.449**	0.337* **	100 00
	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

Number of Observations = 2,464  
 Explanation of operationalization of variables in table 1.  
 \*\*\* \*\* \* = significant P-value 1%, 5%, 10%

Source: Secondary data, STATA-14.2 output (Processed 2023).

table 4 shows that all the main variables of this research, such as the variables budget function and pilkt have a correlation between one. table 4 shows that the main variables of this research are the variables budget function (lnalayum, lnakamtib, lnako, lnaling, lnafasum, lnasehat, lnabud, lnependik , and lnasos.) and pilkt has a correlation between only a few functions in the function budget variable such as the functions of lnakamtib, lnako, lnafasum, lnabud, and lnasos.

**4.2. Hypothesis Testing**

Hypothesis testing in this research uses regression testing with the STATA-14.2 program.

**TABLE 5**  
Hypothesis Testing Results

<i>Variable</i>	<i>LNALAYUM</i>	<i>LNAKAMTIB</i>	<i>LNAEKO</i>	<i>LNALING</i>	<i>LNAFASUM</i>	<i>LNASEHAT</i>	<i>LNABUD</i>	<i>LNAPENDIK</i>	<i>LNASOS</i>
CONS.	7,457***	9,625***	7,891***	7,963***	6,398***	9,022***	10,778***	10,733***	9,180***
	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
PILK <sub>it</sub>	0.060***	0.272***	(0.093)***	0.001	0.182***	0.056***	0.302***	0.028	0.267***
	0.007	0,000	0,000	0.958	0,000	0.003	0,000	0.203	0,000
ISLAND <sub>it</sub>	0.037	0.058	0.023	0.390***	0.034	0.218***	0.154***	0.427***	0.108***
	0.179	0.138	0.381	0,000	0.464	0,000	0.006	0,000	0.003
MUN <sub>it</sub>	0.049**	0.281***	0.166***	0.292***	0.118***	(0.040)**	0.381***	0.028	0.274***
	0.035	0,000	0,000	0,000	0.001	0.041	0,000	0.255	0,000
AGES <sub>it</sub>	0,000	0.002***	0.001***	0.005***	(0.001)**	0.008***	0.004***	0.008***	(0.000)
	0.109	0,000	0.001	0,000	0.081	0,000	0,000	0,000	0.672
SIZE <sub>it</sub>	0.745***	0.474***	0.607***	0.532***	0.677***	0.579***	0.407***	0.538***	0.496***
	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Prob > F	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Adj R-Squared	0.558	0.322	0.559	0.403	0.278	0.663	0.222	0.578	0.312
Mean VIF	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34

Number of Observations = 2,464

Explanation of variable operationalization in table 2.

\*\*\* \*\* \* = significant P-value 1%, 5%, 10%

Source: Secondary data, STATA-14.2 output (Processed 2023).

Table 5 shows that the pilkt variable has a significant influence on several functional budget variables, where the functions affected by the regional elections are the functions of public service function (Inalayum), order and peace function (Inakamtib), public facility function (Inafasum), health function (Inasehat), tourism and cultural functions (Inabud), and sosial function (Inasos) so this supports the hypothesis, which means that the pilkada has an influence on the existing budgeting pattern in Indonesia. The functional budget variables public service function (Inalayum), order and peace function (Inakamtib), public facility function (Inafasum), health function (Inasehat), tourism and cultural functions (Inabud), and sosial function (Inasos) show a positive influence when the Pilkada occurs with coefficients of 0.060, 0.272, 0.182, 0.056, 0.302, and 0.267, significant at the 5% level and for the function budget economic function (Inaeko) variable shows a negative influence when the pilkada occurs with a coefficient of -0.093, significant at the 1% level. Furthermore, other functional budget variables such as function budget Environment (Inaling), education function (Inapendik) have no influence when the pilkada occurs, so this shows that the data used in this data does not have a significant influence on the pilkada.

### 4.3. Discussion of hypothesis testing results

Based on the results of hypothesis testing in table 5, it can be concluded that in general the results of this research prove that there were changes in the functional budgeting pattern in the year of the Pilkada implementation. So the results of this research generally support previous research, especially that carried out by Haris, N., Furqan, AC, Kahar, A. and Karim, F., (2023) which shows that there are changes in functional budgeting patterns during the Pilkada. Apart from that, the results of this research also confirm the political budget cycle theory which first introduced by Nordhaus (1975) This means that when the regional elections take place, a change in budgeting patterns appears which is used to improve the required performance. Apart from that, this research also confirms the findings of previous research such as that conducted by Chortareas et al., (2016) and Efthyvoulou, (2012) which shows that similar political Budget patterns occur in various countries during general elections. This research concludes that the Pilkada can have an impact on the budgeting patterns of existing functions, especially the functions of Inakamtib, Inaeko, Inafasum, Inabud, and Inasos.

So the results of this research show that regional head elections often influence the budgeting patterns of regional government functions, with incumbents using fiscal policy to increase their chances of re-election. In the Indonesian context, this behavior reflects the political budget cycle observed by (Akhmedov & Zhuravskaya, 2004) in which local government officials increase inefficient public spending to increase voter support ahead of elections. (Alesina et al., 1997), also reveals that local governments can manipulate budgets in ways that demonstrate good fiscal performance to influence election outcomes. This research shows that political factors play an important role in budget decision making and highlights the need for transparency and strong public oversight to limit the potential negative impact of political budget cycle practices.

4.4. Additional Testing

**Functional budgeting patterns in Indonesia: the impact of regional head elections when there is an incumbent in it.**

This test aims to prove the influence of an incumbent on functional budgeting patterns when a regional election occurs. So that we can compare the budgeting patterns that occur when an election occurs, and when there are incumbents who participate in the implementation of the election.

**TABLE 6**  
Additional test results (functional budget pattern when there is an incumbent in the Pilkada)

Variable	LNALAYUM	LNAKAMTIB	LNAEKO	LNALING	LNAFASUM	LNASEHAT	LNABUD	LNAPENDIK	LNASOS
Cons	7,465***	9,633***	7,588***	7,952***	6,409***	9,025***	10,793***	10,733***	9,180***
	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Peta <sub>it</sub>	0.041**	0.263***	(0.098)***	0.046	0.165***	0.054**	0.293***	0.030	0.267***
	0.084	0,000	0,000	0.239	0,000	0.010	0,000	0.196	0,000
Island <sub>it</sub>	0.037	0.058	0.022	0.390***	0.034	0.218***	0.155***	0.427***	0.108***
	0.177	0.132	0.388	0,000	0.457	0,000	0.005	0,000	0.003
Mun <sub>it</sub>	0.049**	0.280***	0.167***	0.292***	0.117***	(0.040)**	0.379***	0.028	0.274***
	0.036	0,000	0,000	0,000	0.001	0.040	0,000	0.257	0,000
Ages <sub>it</sub>	0,000	0.002***	0.001***	0.005***	(0.001)**	0.008***	0.004***	0.008***	(0.000)
	0.114	0,000	0.001	0,000	0.074	0,000	0,000	0,000	0.672
Size <sub>it</sub>	0.674***	0.474***	0.607***	0.532***	0.677***	0.579***	0.407***	0.538***	0.496***
	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Prob > F	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
Adj R-Squared	0.557	0.320	0.559	0.403	0.277	0.663	0.220	0.578	0.312
Mean VIF	1.39	1.39	1.39	1.28	1.39	1.28	1.39	1.39	1.39

Peta<sub>it</sub> = variable that shows the presence of incumbents participating in the regional elections in Indonesia which is measured using a dummy, namely "1" if there is an incumbent in the regional head election and "0" otherwise.

Number of Observations = 2,464

Explanation of variable operationalization in table 2.

\*\*\*, \*\*, \* = significant P-value 1%, 5%, 10%

Source: Secondary data, STATA 14.2 output (Processed 2023).

The results from table 6 show that the incumbent variable has a significant influence on several function budget variables, where the functions affected by the regional

elections are the functions of  $\ln_{akamtib}$ ,  $\ln_{aeko}$ ,  $\ln_{afasum}$ ,  $\ln_{asehat}$ ,  $\ln_{abud}$ ,  $\ln_{asos}$ , which means that the incumbent has an influence on the existing budgeting pattern Indonesia.

Which is shown for the budget variables for the functions of  $\ln_{akamtib}$ ,  $\ln_{afasum}$ ,  $\ln_{asehat}$ ,  $\ln_{abud}$ , and  $\ln_{asos}$  showing a positive influence when the Pilkada occurs with coefficients of 0.263, 0.165, 0.054, 0.293, and 0.267, significant at the 1% level, and for the functional budget variable  $\ln_{aeko}$  it shows negative influence when the Pilkada occurs with a coefficient of -0.098, significant at the 1% level. And then for other functional budget variables such as  $\ln_{alayum}$ ,  $\ln_{aling}$ ,  $\ln_{asehat}$ ,  $\ln_{apendik}$ , there is no influence when the Pilkada occurs, so this shows that the data used in this data does not have a significant influence on these functions.

The results given in table 6 are consistent with the results from table 5, which means that this test shows that the budgeting pattern at the time of the Pilkada, and when there is an incumbent participating in the Pilkada, has no difference in influencing the functional budgeting pattern.

**The influence of budget functions that influence the incumbent's victory in the Pilkada.**

This test was carried out to see what budget functions can influence victory in the Pilkada.

**TABLE 7**  
**Additional test results (pattern of function budgets on incumbent wins in the PILKADA)**

	$Win_{it}$
$\ln_{alayum}$	0.086
	0.392
$\ln_{akamtib}$	0.200***
	0.001
$\ln_{aeko}$	(0.441)***
	0,000
$\ln_{aling}$	(0.042)
	0.397
$\ln_{afasum}$	(0.027)
	0.553
$\ln_{asehat}$	0.123
	0.217
$\ln_{abud}$	0.068**
	0.099
$\ln_{apendik}$	0.023
	0.736
$\ln_{asos}$	0.269***
	0,000
$Island_{it}$	0.117
	0.244
$Mun_{it}$	(0.049)
	0.535
$Ages_{it}$	0,000***

Size <sub>it</sub>	0.629 (0.169)**
Cons	0.068 (2,455)
	0.241
Prob > chi2	0,000
Pseudo R2	0.447

Win<sub>it</sub> = Variable that shows the victory of an incumbent

Participating in the Pilkada in the year of observation, which is measured using data Dummy, "1" indicates an incumbent win, "0" another.

Number of Observations = 2,464

Explanation of variable operationalization in table 2.

\*\*\*, \*\*, \* = significant P-value 1%, 5%, 10%

Source: Secondary data, STATA-14.2 output (Processed 2023).

The results of additional tests in table 7 show that there are several functions in the functional budget variable that are the key to victory during the Pilkada. This function consists of the functions of Inakamtib, Inaeko, and Inasos, which is shown by Inaeko which has a positive effect with a coefficient of 0.200 and 0.269, significant at the 1% level and Inaeko which has a negative effect with a coefficient of (0.441), significant at the 1% level.

## 5. Closing

The main aim of this research is to analyze the impact of the Pilkada and Incumbency on the budgeting pattern of Regional Government functions, so this research is expected to provide insight into the budgeting pattern of the function of a regional government when the Pilkada is being implemented. Based on the results of testing and discussion in this research, it can be concluded that when a region is holding a regional election, the budgeting pattern of regional government functions changes, where the budget function is more likely to increase. budgeting for social functions, public facilities, security and order, as well as tourism functions and apart from that it was found that social functions and security and order functions had an influence on the incumbent's victory. So incumbents who are re-elected in the second period tend to have a higher budget for social functions as well as security and order functions. So the implication of the results of this research is the importance of planning, and the importance of the central government carrying out strict supervision regarding budgeting functions in regions that will conduct regional elections, especially when there are incumbents in them. This research only uses data from 2014-2021 and only analyzes 308 Regional Governments, with a total final sample of 2,464 Observations. So it is hoped that further research can expand the observation period and analyze other variables that can influence the optimization of determining the function budget.

## References

1. Akhmedov, A., & Zhuravskaya, E. (2004). Opportunistic political cycles: test in a young democracy setting. *The Quarterly Journal of Economics*, 119(4), 1301–1338.
2. Alesina, A., Roubini, N., & Cohen, G. D. (1997). *Political cycles and the macroeconomy*. MIT press.
3. Brender, A., & Drazen, A. (2005). Political budget cycles in new versus established democracies. *Journal of Monetary Economics*, 52(7), 1271–1295.
4. Chortareas, G., Logothetis, V., & Papandreou, A. A. (2016). Political budget cycles and reelection prospects in Greece's municipalities. *European Journal of Political Economy*, 43, 1–13.
5. Efthyvoulou, G. (2012). Political budget cycles in the European Union and the impact of political pressures. *Public Choice*, 153(3–4), 295–327.
6. Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
7. Giroux, G. (1989). Political interests and governmental accounting disclosure. *Journal of Accounting and Public Policy*, 8(3), 199–217.
8. Hadiz, V. R. (2004). Decentralization and democracy in Indonesia: A critique of neo-institutionalist perspectives. *Development and Change*, 35(4), 697–718.
9. Haris, N., Furqan, A. C., Kahar, A., & Karim, F. (2023). Disaster risk index on disaster management budgeting: Indonesia's national data set. *Jamba-Journal of Disaster Risk Studies*, 15(1), 1365.
10. jdihkemenkeugoid. (2022). *Undang Undang 28 Tahun 2022 tentang Anggaran Pendapatan dan Belanja Negara Tahun Anggaran 2023*.
11. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4). [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
12. Kis-Katos, K., & Sjahrir, B. S. (2017). The impact of fiscal and political decentralization on local public investment in Indonesia. *Journal of Comparative Economics*, 45(2), 344–365.
13. Nordhaus, W. D. (1975). The political business cycle. *The Review of Economic Studies*, 42(2), 169–190.
14. Peltzman, S. (1992). Voters as fiscal conservatives. *The Quarterly Journal of Economics*, 107(2), 327–361.
15. Rogoff, K., & Sibert, A. (1988). Elections and macroeconomic policy cycles. *The Review of Economic Studies*, 55(1), 1–16.
16. Schick, A. (1966). The road to PPB: The stages of budget reform. *Public Administration Review*, 243–258.
17. Schuknecht, L. (1996). Political business cycles and fiscal policies in developing countries. *Kyklos*, 49(2), 155–170.
18. Setiawan, D., & Setyorini, E. (2018). Dampak pemilihan kepala daerah terhadap alokasi belanja daerah. *Kajian Ekonomi Dan Keuangan*, 2(2), 106–119.
19. Simanjuntak, K. M. (2015). Implementasi kebijakan desentralisasi pemerintahan di Indonesia. *Jurnal Bina Praja: Journal of Home Affairs Governance*, 7(2), 111–130.
20. Sjahrir, B. S., Kis-Katos, K., & Schulze, G. G. (2013). Political budget cycles in Indonesia at the district level. *Economics Letters*, 120(2), 342–345.
21. Sjahrir, B. S., Kis-Katos, K., & Schulze, G. G. (2014). Administrative overspending in Indonesian districts: The role of local politics. *World Development*, 59, 166–183.
22. Suyatno, S. (2016). Pemilihan kepala daerah (pilkada) dan tantangan demokrasi lokal di Indonesia. *Politik Indonesia: Indonesian Political Science Review*, 1(2), 212–230.

23. Undang-Undang, R. I. (2005). Nomor 32 Tahun 2004 Tentang Pemerintahan Daerah. *Direktorat Jenderal Otonomi Daerah, Jakarta.*
24. *UU Nomor 8 Tahun 2015.* (n.d.).
25. Von Hagen, J., & Harden, I. J. (1995). Budget processes and commitment to fiscal discipline. *European Economic Review*, 39(3–4), 771–779.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

