

Article

Do Regional Heads Utilize Capital Expenditures, Grants, and Social Assistance in the Context of Elections?

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Abstract: This study empirically analyzes the alleged existence of political budget cycles in Indonesian local governments. Using panel data, this quantitative study concentrates on capital expenditures, grant expenditures, and social assistance expenditures in the election year and the year before the election. The purposive sampling method is used to take the sample—a local government that experienced two election cycles from 2012 to 2018. The sample consists of 1306 observational data points on capital expenditures and grants, and 636 observational data points on social assistance. The study tests its hypothesis using multiple regression analysis. The results indicate that the election year negatively affects capital expenditures, positively affects grants, and has no effect on social assistance. The year before the election negatively affects capital expenditures, but positively affects grants and social assistance. The incumbent positively affects social assistance but does not affect capital expenditures and grants. Transfers have a negative effect on capital expenditures, a positive effect on grants, and no effect on social assistance. The interactions of the election year and year before the election with the incumbent is not proven in this study.

Keywords: political budget cycles; election; incumbent; regional head



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1. Introduction

Indonesia is a democratic country in which citizens are involved in decision making. One form of involvement is the direct election system. Since 2004, direct elections are held whereby people directly elect the House of Representatives of The Republic of Indonesia (DPR), Regional Representative Council (DPD), Regional People's Representative Assembly (DPRD), as well as the president and vice president. In addition, regional heads, regents, and mayors, who are originally elected by the DPRD, are now directly elected by the people, since the issuance of Law on Regional Governments No. 32 of 2004 (now updated to Law No. 23 of 2014 concerning Regional Government) through the mechanism of regional heads and deputy regional heads (Pilkada).

Pilkada changed to the term general election for regional heads and deputy regional heads (Pemilukada) after the release of Law No. 22 of 2007 concerning the implementation of general elections was in effect and Pilkada was included in the regime. In 2011 there was a change in the use of the terms for the election of governors, regents, and mayors in accordance with Law No. 15 of 2011 on organizing general elections. Provisions for the election of governors, regents, and mayors was developed in-line following the issuance of Law No. 8 of 2015, which states that elections are held once every five years simultaneously throughout the territory of the Unitary State of the Republic of Indonesia.

The Regional Government, according to Law No. 23 of 2014, is the head of the region as an element of regional government administrators who lead the implementation of government affairs which are the authority of the autonomous region. Regional governments as autonomous regions have the right and obligation to manage their own government affairs and the interests of local communities in Indonesia; local governments in Indonesia, in carrying out their government, implement a decentralized system. Decentralization is the

transfer of government affairs by the central government to autonomous regions. Currently, there are 542 autonomous regions in Indonesia, comprising 34 provinces, 415 districts, and 93 cities.

Decentralization requires local governments at the provincial, district, or city level to prepare their budget planning and management in the Regional Revenue and Expenditure Budget (APBD). The preparation of the APBD, which goes through several stages, is adjusted according to the needs of the government and the ability of regional income. The APBD is discussed and jointly approved by the Regional Government and the Regional People's Representative Council, and is stipulated by a Regional Regulation. The APBD becomes the basis for managing regional finances for a period of one fiscal year starting from January 1 to December 31 (Minister of Home Affairs Regulation No. 13 of 2006).

Regional heads, who are responsible for regional financial policies and management, have a five-year office term. When their office term expires, regional heads can again participate in an election. This allows regional heads to strategize how to garner many votes so that they can win the election again. One approach of incumbents is to form a positive image and be remembered by the people.

Regional heads can access policies that decide on activities that build a positive image through the provision of assistance or infrastructure development using the prepared budget. However, the regional heads' authority can be abused for personal and group interests through political budget cycles, particularly when approaching election years. In 2018, 56 regional heads were convicted of corruption—mostly due to budget abuse (Gerintya 2018). Mochammad Afifudin, a member of the General Elections Supervisory Agency (Bawaslu), reports of social assistance misuse related to COVID-19 for the 2020 regional election campaign in 23 regions in Indonesia. COVID-19 social assistance can be politicized in four ways: the inclusion of regional heads' photos, political party symbols, social assistance prohibition from the APBD on behalf of regional heads, and corruption in the handling of COVID-19 funds (CNNIndonesia 2020).

The number of ways the budget is politicized makes the public more alert and smarter in responding to this. Political budget cycles describe the behavior of budget users around the election year (Nordhaus 1975). They then develop, through information asymmetry, with the level of competence of politicians or incumbent regional heads (Rogoff and Sibert 1988). Political budget cycles are large in democratic countries, especially in new democratic countries (Bohn 2019; Brender and Drazen 2005). They can also directly or indirectly occur at national and regional levels. Political budget cycles can be further explored since the management of state finances is sensitive and should not involve any personal motives or interests. The number of corrupt regional heads shows the importance of studying regional budgets, especially in years approaching the election year.

Previous studies conduct similar analyses on political budget cycles in Indonesia and abroad. However, this research focuses on regency and city governments throughout Indonesia, which have experienced two regional head elections in 2012–2018 period. The data not only focuses on the election period but also on the period before the general election for regional heads takes place. Since 2005, districts have introduced direct regional elections. The election timing was staggered because incumbents were allowed to finish their five-year terms, which for idiosyncratic reasons were not synchronized across districts (Cassidy and Velayudhan 2022). This is done to describe the cycle of budget politicization that occurs in local governments, especially incumbent regional heads.

This paper consists of several sections. Section 2 presents the literature review and hypothesis development. Section 3 discusses the research methodology. Section 4 presents the results and a discussion. Section 5 contains conclusions from the test results, including limitations and suggestions for future research.

2. Literature Review and Hypothesis Development

Political budget cycles were first developed by Nordhaus (1975) and focus on how election cycles affect microeconomic policies. They develop in the context of information asymmetry; an incumbent increases spending to maintain political power before the election, and this cycle links spending with signaling competence (Rogoff and Sibert 1988). Political budget cycles often occur in new democracies (Brender and Drazen 2005) and developing countries rather than in developed countries (Shi and Svensson 2006).

The political budget cycle has a political and budgetary element during election years. In Italy, research conducted by Repetto (2018) found that more visible expenditure functions, such as investment spending, increased in election years compared to non-election years. Furthermore, Kneebone and MzKenzie (2001) examine the electoral and partisan cycle in fiscal policy: the Canadian provincial examination. The results show that contests in highly visible areas (schools, roads, and hockey arenas) tend to increase in election years.

Akhmedov and Zhuravskaya (2004) examine opportunistic political cycles: a test in young democratic settings. One of the results of this research states that the political cycle is significant in budget spending and its composition. The average pre-election increase in total regional spending reached about 5 percent of monthly gross regional product and in welfare programs and other public assistance to 0.43 percent of monthly gross regional product. In addition, Khemani (2004) finds that politics utilize pre-election policies to provide targeted assistance to certain groups, as an imbalance of campaign support.

Political budget cycles are not only related to spending, but also to policies taken before the election takes place. These policies include tax rates (Alesina and Paradisi 2017; Binet and Pentecôte 2004; Foremny and Riedel 2014; Swianiewicz et al. 2019), traffic fines policies (Bracco 2018), and construction permit policies (Imami et al. 2018). Regardless of the policy, the main goal is to obtain support from the people by taking advantage of mandated positions.

Political budget cycles have political and budget elements during election years. Direct general elections in Indonesia are held every five years. General elections directly raise the regional financial burden on organizers (Ritonga and Alam 2010). In addition, the direct election system increases the possibility of political budget cycles (Sjahrir et al. 2013). There are differences in budget allocations during and before the election years. Grant spending, social assistance spending, and capital spending experience different allocations before and during the election period (Setiawan and Setyorini 2018).

In an election year, local governments may model the composition of regional expenditure. This means that in the election year, local governments increase or decrease certain components of expenditure that can accommodate their political interests in order to gain support from the people. Setiawan and Rizkiah (2017) support the idea that elections increase regional spending, especially on expenditure that is very easily seen by the people as voters.

Capital expenditure, such as infrastructure development, takes a lot of time so that local governments will tend to increase capital spending in the years before the election so that the benefits can be felt more by the people. This is in line with the research of Sakurai and Menezes-Filho (2011) studying evidence of political budget cycles at the Brazilian municipal level and finding that capital expenditure tends to decline in election years.

Political budget cycles can occur during the election year through certain expenditures. Local governments tend to increase spending on grants and social assistance, which are felt and seen by people during elections. Meanwhile, the government tends to make capital expenditures, which take a longer time to be felt by the people, two or more years before the election. Therefore, the first hypotheses of this study are as follows.

H_{1a}: *The election year (elect) has a negative effect on capital expenditures.*

H_{1b}: *The election year (elect) has a positive effect on grant expenditures.*

H_{1c}: *The election year (elect) has a positive effect on social assistance expenditures.*

Political budget cycles not only occur in the election year, but also in the years leading up to the election. One year before the election is likely the right time to form a positive image and gain early popular support in order to win. The years leading up to the general election for regional heads are easy targets for several parties to accommodate their personal political interests by utilizing policies, programs, and regional budgets, and politicize the budget on some expenditure components.

A number of regions are still consistent with shifting the composition of regional expenditures, policies, and programs that can be directly felt and seen by the people and maximized in the one year leading up to the election. Meanwhile, budgets, policies or programs that take a long time, such as infrastructure improvements, are allocated in the years prior to the election, so that the benefits can be felt ahead of the general election. One of the results of [Setiawan and Rizkiah \(2017\)](#) states that there is a significant decrease in capital expenditure ahead of the general election year.

[Arifin and Purnomowati \(2017\)](#) explain that in the year leading to the general election, there is a significant increase in grant spending. This mechanism may be the easiest way for local governments to obtain campaign resources for the next election. Infrastructure spending before the election can also attract voters ([Drazen and Eslava 2010](#)). Therefore, the second hypotheses of this study are as follows.

H_{2a}: *One year before the election (elect-1) has a negative effect on capital expenditures.*

H_{2b}: *One year before the election (elect-1), has a positive effect on grant expenditures.*

H_{2c}: *One year before the election (elect-1) has a positive effect on social assistance expenditures.*

Political budget cycles are larger when the current regional head is the incumbent candidate in the succeeding election. The incumbent regional head is vulnerable and executes political budget cycles before the election. An incumbent regional head can use his position to include personal interests when creating the budget ([Ariyanto and Dewi 2019](#)). Personal interests can disguise political interests, which are included in the local governments' budget and programs. Hence, the third hypotheses of this study are as follows.

H_{3a}: *The incumbent regional head (incumbent) has a positive effect on capital expenditures.*

H_{3b}: *The incumbent regional head (incumbent) has a positive effect on grant expenditures.*

H_{3c}: *The incumbent regional head (incumbent) has a positive effect on social assistance expenditures.*

Political budget cycles are not limited to budget utilization before or during elections. They can also occur through the policies of regional heads before or during the election year. In Germany, tax arrangements are made so that the growth of local business tax rates is significantly smaller in the election year and the year before the election; the rate is higher again in the year after the election ([Foremny and Riedel 2014](#)).

Apart from policies, political budget cycles are closely related to transfers from central government. Transfer income as a component of local government revenue is related to the political budget cycle. Intergovernmental transfers and revenue sharing help stabilize local finances and smooth spending over the course of the business cycle ([Rodden and Wibbels 2010](#)). [Turyna et al. \(2016\)](#) show that the strength of the political budget cycle is positively related to regional income from transfers made by the central government. Transfers increase the strength of the political budget cycle by financing regional expenditures. Therefore, the fourth hypotheses of this study are as follows.

H_{4a}: *Transfer has a positive effect on capital expenditure.*

H_{4b}: *Transfer has a positive effect on grant expenditures.*

H_{4c}: *Transfer has a positive effect on social assistance expenditures.*

3. Research Methods

This study's population includes all district/city governments in Indonesia. The purposive sampling method was used for sampling. A criterion was that the district/city government holds two cycles of regional head elections in 2012–2018 and provides data related to local government financial reports (LKPD) sourced from the Audit Board (BPK), General Election Commission (KPU), and Statistics Indonesia (BPS).

The dependent variables were capital expenditures (CAP_EXP), grant expenditures (GRANT_EXP), and social assistance expenditures (SOC_EXP). The three variables were proxied by the percentage variance of each expenditure minus the median of each expenditure for the entire province of the region in the relevant year.

The independent variables included the election year (elect), one year before the election (elect-1), two years before the election (elect-2), incumbent regional head (incumbent), and transfer income from the central government (trans). The first four variables were proxied using a dummy variable, whereas transfers were proxied by the percentage value of transfer revenues originating from the central government.

The control variables were the size of the local government (size), proxied using the natural logarithm of local revenue (PAD); the total population (population), proxied by the natural logarithm of the total population of each district/city; and poverty level (Pov_Lev), proxied by the percentage of poor people. Other control variables included audit opinion (opinion), region (region), island (island), and status, which were proxied by a dummy variable.

The model for testing the hypotheses is as follows.

$$CAP_EXP_{it} = \alpha + \beta_1 Elect_{it} + \beta_2 Elect1_{it-1} + \beta_3 Incumbent_{it} + \beta_4 Trans_{it} + \gamma X_{ikt} + \varepsilon_{it} \dots \quad (1)$$

$$GRANT_EXP_{it} = \alpha + \beta_1 Elect_{it} + \beta_2 Elect1_{it-1} + \beta_3 Incumbent_{it} + \beta_4 Trans_{it} + \gamma X_{ikt} + \varepsilon_{it} \dots \quad (2)$$

$$SOC_EXP_{it} = \alpha + \beta_1 Elect_{it} + \beta_2 Elect1_{it-1} + \beta_3 Incumbent_{it} + \beta_4 Trans_{it} + \gamma X_{ikt} + \varepsilon_{it} \dots \quad (3)$$

We also performed additional tests for the two-year period before the general election for regional heads (elect-2), as well as with the interaction of the election year and pre-election periods with the incumbent regional head.

4. Results and Discussion

This study used panel data from 248 regencies/cities in Indonesia that held two cycles of regional head elections in 2012–2018 with an observation period consisting of the election year, one year before the election, and two years before the election.

Figure 1 shows the distribution of the number of local governments holding regional head elections. In 2012 and 2017 there were 94 local governments. In 2013 and 2018 there were 154 local governments. The similarity in numbers between 2012 and 2017 as well as in 2013 and 2018 is due to the provisions taken by researchers where each local government underwent two general election cycles to see the potential for a political budget cycle.

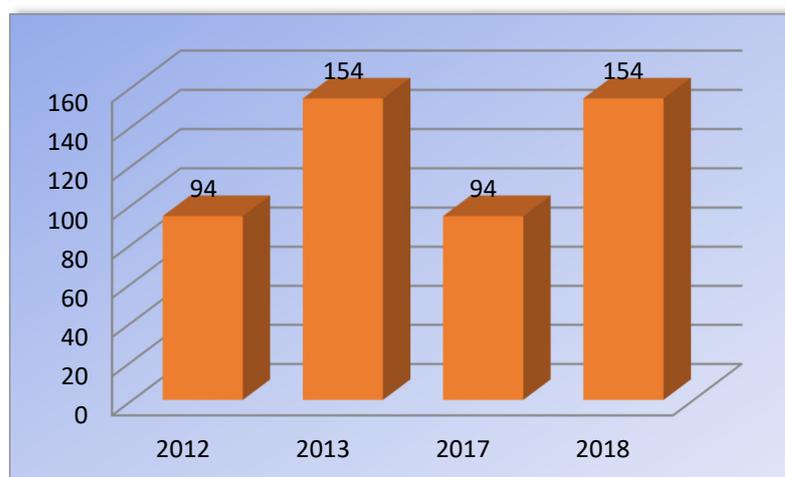


Figure 1. Distribution of the number of local governments holding regional head elections.

Table 1 shows the descriptive statistics. Based on hypothesis testing, 1306 observational data points were obtained for capital expenditures and grants, and 636 observation data points were obtained for social assistance.

Table 1. Descriptive statistics.

Variables	N	Maximum	Minimum	Mean	Median	Std. Dev
CAP_EXP	1306	3.1903	−1.00000	0.0233	−0.0334	0.4554
GRANT_EXP	1306	4.8742	−1.2137	0.3591	0.0781	1.0427
SOC_EXP	636	5.0000	0.0000	1.2093	0.7525	1.2413
TRANS	1306	0.9913	0.3004	0.8316	0.8485	0.1047
SIZE	1306	28.6862	20.4499	24.8271	24.8528	1.2608
POPULATION	1306	15.4646	9.4697	12.5432	12.4422	1.0071
POV_LEV	1306	47.5200	2.0100	14.1111	11.6900	8.8218

Note: CAP_EXP = capital expenditure; GRANT_EXP = grant expenditures; SOC_EXP = social assistance expenditures; TRANS = transfer income; SIZE = size of local government; POPULATION = total population; POV_LEV = poverty level.

Table 2 shows the descriptive statistics for the dummy variables. More than 50% of the incumbent regional heads were incumbents, and 40% of the opinions on local government financial statements were unqualified.

Table 2. Descriptive Statistics of Dummy Variables.

Variables	N	Category 1	Category 0
Elect	1306	0.330015	0.669985
Elect-1	1306	0.321178	0.678822
Elect-2	1306	0.342266	0.657734
Incumbent	1306	0.541348	0.458652
Opinion	1306	0.401991	0.598009
Region	1306	0.774885	0.225115
Island	1306	0.251149	0.748851
Status	1306	0.404288	0.595712

Note: Elect = year of election; Elect-1 = one year before the election; Elect-2 = two years before the election; Incumbent = incumbent regional head; Opinion = audit opinion; Region = type of local government; Island = island type; Status = local government status.

Table 3 shows the detailed results of the hypothesis testing. The adjusted R2 value for capital expenditure was 10.2%. Meanwhile, the dependent variable for grant expenditures shows an adjusted R2 value of 13.2%, and the adjusted R2 value for the dependent variable

for social assistance expenditures was 4.1%. The value of the F statistic for capital expenditure, grant, and social assistance was 0.0000 which is smaller than 0.05. Therefore, it can be ascertained that the independent variables of the election year, one year before the election, the incumbent regional head, and transfers have an influence on capital expenditure, grant, and social assistance with a confidence level of 95%.

Table 3. Multiple regression test results—Random effect.

Variables	CAP_EXP (1)	GRANT_EXP (2)	SOC_EXP (3)
Constant	−3.6312 0.0000	−66895 0.0000	−3.5013 0.1620
Elect	−0.0700 0.0001	0.5729 ^a 0.0000	0.0735 0.5096
Elect-1	−0.0385 ^b 0.0285	0.4914 ^a 0.0000	0.2020 ^c 0.0705
Incumbent	0.0248 0.1452	−0.0131 0.8014	0.2145 ^b 0.0330
Trans	−0.3387 ^b 0.0354	0.2935 ^c 0.0595	−1.1801 0.1659
Size	0.0594 ^a 0.0007	0.0967 ^c 0.0595	0.2022 ^b 0.0270
Population	0.1907 ^a 0.0000	0.3248 ^a 0.0000	0.0330 0.7110
Pov_Lev	0.0060 ^b 0.0146	0.0177 ^a 0.0003	0.0088 0.2319
Opinion	−0.0538 ^b 0.0123	−0.0583 0.3680	−0.0808 0.5089
Region	0.1574 ^a 0.0025	0.0047 0.9634	0.1450 0.3472
Island	−0.3193 ^a 0.0000	−0.7403 ^a 0.0000	−0.7004 ^a 0.0001
Status	0.0117 0.8006	−0.1177 0.1898	−0.0426 0.7575
N	1306	1306	636
Adjusted R ²	0.1020	0.1324	0.0414
F-statistics	14.4700	19,1006	3.4927
Prob (F-statistic)	0.0000	0.0000	0.0000

Note: ^{a,b,c} = Significance at 1%, 5% and 10% levels; CAP_EXP = capital expenditure; GRANT_EXP = grant expenditures; SOC_EXP = social assistance expenditures; ELECT = year of election; ELECT-1 = one year before the election; INCUMBENT = incumbent regional head; TRANS = transfer income; SIZE = size of local government; POPULATION = total population; POV_LEV = Poverty Level; OPINION = Audit Opinion; REGION = Type of Local Government; ISLAND = island type; STATUS = local government status.

A partial regression coefficient test (*t*-test) was conducted to determine the effect of each independent variable partially on the dependent variable. The election year (elect) on the dependent variable of capital expenditure had a regression coefficient of −0.0700 which is negative with a *p*-value below the 5% significance level of 0.0001. Meanwhile, the dependent variable on grant expenditure had a regression coefficient of 0.5729, which is positive with a *p*-value below the 5% significance level of 0.0000 and the dependent variable on social assistance expenditure had a regression coefficient of 0.0735, which is positive with a *p*-value above the 5% significance level of 0.5096.

The one year before the election (elect-1) on the dependent variable of capital expenditure had a regression coefficient of −0.0385 which is negative with a *p*-value below the 5% significance level of 0.0285. Then, the dependent variable on grant expenditure had a regression coefficient of 0.4914 which is positive with a *p*-value below the 5% significance level of 0.0000 and the dependent variable on social assistance expenditure had a regression coefficient of 0.20 with a positive sign with a *p*-value below the 10% significance level of 0.0705.

The incumbent regional head variable on the dependent variable of capital expenditure had a regression coefficient of 0.0248 which is positive with a p -value above the 5% significance level of 0.1452. Meanwhile, the dependent variable for grant expenditure had a regression coefficient of -0.0131 with a negative sign with a p -value above the 5% significance level of 0.8014 and the dependent variable on social assistance had a regression coefficient of 0.2145 with a positive sign with p , the value is below the 5% significance level of 0.0330.

The transfer from the central government to the dependent variable expenditure had a regression coefficient of -0.3387 which is negative with a p -value below the 5% significance level of 0.0354. Then, the dependent variable on grant expenditure had a regression coefficient of 0.2935 which is positive with a p -value below the 10% significance level of 0.0595 and the dependent variable on social assistance expenditure had a regression coefficient of -1.1801 which is negative with p ; the value above the 5% significance level is 0.1659.

4.1. Election Year on the Occurrence of Political Budget Cycles in Regency/City Government

Capital, grant, and social assistance expenditures can be directly felt by the community through various programs organized by local governments. These expenditures can be politicized by certain parties, especially during the election year and in the years leading up to the election.

This study shows that election year had a negative effect on capital expenditures; therefore, hypothesis (H1a), which states that the election year has a negative effect on capital expenditures, is accepted. In election years, regional governments focus more on expenditures that are directly felt by the community or organizations/institutions rather than on expenditures that take longer to be implemented; hence, capital expenditures in the election year tend to decrease. District/city governments might implement this strategy to support their personal and group political interests, and gain support from the people. This result is in line with [Sakurai and Menezes-Filho \(2011\)](#) and [Rizqiyati and Setiawan \(2021\)](#) who explain that local governments tend to reduce capital expenditures in the election year. This illustrates that level II regional governments tend to decrease capital expenditures in election years. The local government concerned is going to maximize the expenditure on activities that are directly felt by the target community.

In addition, the election year had a positive effect on grant expenditures; thus, hypothesis (H1b), which states that the election year has a positive effect on grant expenditures, is accepted. In the election year, the district/city government further increases grant expenditures. Grant expenditure is a component of indirect expenditure whose distribution is not through programs and activities and does not have a specific target. Its allocation tends to be subjective and its realization is based on the initiative of the regent/mayor in the form of regional head regulation ([Ritonga and Alam 2010](#)). Therefore, grant expenditures can be used by several parties for personal and group interests. These results are in line with [Setiawan and Rizkiah \(2017\)](#) who state that the election year has a positive effect on grant expenditures. During an election year, local governments tend to increase grant expenditures more compared with other expenditures.

Lastly, the election year had no effect on social assistance expenditures; hence, hypothesis (H1c), which states that the election year has a positive effect on social assistance expenditures, is rejected. In the election year, the district/city government does not increase or decrease social assistance expenditures. District/city governments may have already maximized these expenditures in the years leading up to the general election of regional heads. This result is not in line with [Ritonga and Alam \(2010\)](#) who show that social assistance expenditures are greater during the election year than before the election year. [Abdullah and Payamta \(2021\)](#) also state that social assistance expenditures increase in opportunistic election years.

4.2. One Year before the Election on the Occurrence of Political Budget Cycles in the Regency/City Government

Every regional government needs to observe some components of regional spending in the years leading to the election for regional heads. Several parties accommodate their personal political interests in those years by utilizing a number of policies, programs, and regional budgets, and by politicizing the budget on a number of expenditure components. Differences in budget allocations during and before the election years often occur in local government budgets. Specifically, there is a difference in allocation for grant, social assistance, and capital expenditures before and during the election (Setiawan and Setyorini 2018).

The results of the study show that the year before an election has a negative effect on capital expenditures. Therefore, hypothesis (H2a), which states that one year before the election has a negative effect on capital expenditures, is accepted. District/city governments still consistently maximize other components of expenditures in which the benefits are felt more quickly by the community/organization/institution/agencies in the area. Capital expenditures, such as those for the development of infrastructure or public facilities, still tend to decline one year before the election because it is undeniable that its effects are felt at a later time. Hence, district/city governments focus on capital spending two or more years before the general election is held. This result is in accordance with Setiawan and Rizkiah (2017) who observe a significant decrease in capital expenditures in the year before the election.

On the other hand, the year before the election had a positive effect on grant expenditures. Thus, hypothesis (H2b), which states that one year before the election has a positive effect on grant expenditures, is accepted. District/city governments increase grant expenditures not only in the election year but also in the year prior to the election. This increase aims to form an image of providing good performance, which ultimately touches the community, who, in turn, will provide support if the regional leader seeks re-election. This result is in line with Arifin and Purnomowati (2017) who state that grant expenditures significantly increase in the year leading to the election, which is probably the easiest strategy for local governments to obtain campaign resources for the next election.

Lastly, the year before the election had a positive effect on social assistance expenditures. Therefore, hypothesis (H2c), which states that one year before the election has a positive effect on social assistance expenditures, is accepted. This result is similar to grant expenditures, since both grant and social assistance expenditures can be used by incumbent regional heads to gain voters' support in the upcoming regional head elections (Ritonga and Alam 2010). In the year leading to the elections, district/city governments increase social assistance spending to accommodate their political interests. Setiawan and Rizkiah (2017) support the idea that elections increase regional expenditures, especially those that can easily be perceived by the voters. Meanwhile, infrastructure spending can only entice voters long before an election takes place (Drazen and Eslava 2010).

4.3. The Head of the Incumbent Region on the Occurrence of Political Budget Cycles in the Regency/City Government

In a general election, the winner can either be an incumbent regional head (incumbent) or not an incumbent regional head (non-incumbent). The incumbent has an influence on regional government expenditures and regional policies. Since the incumbent has access and authority, he/she can use his/her position to include personal interests in the budget (Ariyanto and Dewi 2019). Since personal interests can be disguised as political interests, opportunistic behaviors of regional heads are rampant during and before the election years.

The results of this study reveal that the incumbent has no effect on capital expenditures; therefore, hypothesis (H3a), which states that the incumbent regional head has a positive effect on capital expenditures, is rejected. This means that the increase or decrease in capital expenditures at the district/city government level is not related to the type of regional head. This is possibly because there are other factors or considerations, such as natural disasters that damage infrastructure or public facilities, which may need improvements.

The results also show that the incumbent has no effect on grant expenditures; therefore, hypothesis (H3b), which states that the incumbent regional head has a positive effect on grant expenditures, is rejected. This result is not in line with [Abdullah and Payamta \(2021\)](#) who indicate that the incumbent regional head has a significant effect on grant expenditures. The results are also not in line with [Sjahrir et al. \(2013\)](#) who indicate that the political budget cycle is stronger if the incumbent runs for re-election.

Lastly, the incumbent has a positive effect on social assistance expenditures; therefore, hypothesis (H3c), which states that the incumbent regional head has a positive effect on social assistance expenditures, is supported. These results are in line with [Ritonga and Alam \(2010\)](#) who state that social assistance expenditures in incumbent areas are greater than those in non-incumbent areas. [Mahpudin and Lestari \(2021\)](#) also show that holding elections amid a pandemic create greater opportunities for incumbents to politicize the budget, especially in social assistance expenditures, which are used as a form of covert campaign. The incumbent, who is seeking re-election, intends to win the hearts of the people by showing a positive image.

4.4. Transfer of the Occurrence of Political Budget Cycles to the Regency/City Government

Transfers are a source of revenue for local governments. One component of transferred income is transfers from the central government, which include balancing funds, regional incentive funds, special autonomy funds, privileged funds, and village funds. Transfers can finance expenditures by relevant regional governments, including expenditures that can trigger political budget cycles.

This study shows that transfers have no effect on capital expenditures; therefore, hypothesis (H4a), which states that transfers have a positive effect on capital expenditures, is rejected. This indicates that transfer income from the central government has no relationship with capital expenditures made by district/city governments in Indonesia. This result differs from [Turyna et al. \(2016\)](#) who assert that transfers from the central government to cities can increase the power of the election cycle. The difference in the results may be due to different policies between countries.

On the other hand, transfers have a positive effect on grant expenditures at the level of 10%. Therefore, hypothesis (H4b), which states that transfers have a positive effect on grant expenditures, is accepted. This suggests that transfer revenues from the central government are related to district/city government grant expenditures in Indonesia. These results are in line with [Turyna et al. \(2016\)](#) which states that transfers from the central government to cities can increase the power of the election cycle.

Lastly, transfers have no effect on social assistance expenditures; hence, hypothesis (H4c), which states that transfers have a positive effect on social assistance expenditures, is rejected. These results diverge from [Turyna et al. \(2016\)](#) who state that transfers from the central government to cities can increase the power of the election cycle. This is possible because the allocation of transfer revenues from the central government is regulated, and the relevant regional heads cannot use their positions to accommodate political interests or freely use these funds to finance certain expenditures.

The discussion for the control variables of this study is as follows. The control variables consist of government size (SIZE), total population, poverty level, opinion, region, island, and local government status. The size of the government (SIZE) as a proxy for local revenue (PAD) shows that these variables have a positive effect on capital expenditures, grant expenditures, and social assistance expenditures. This means that when a region has a high PAD, capital expenditure, grant expenditure and social assistance expenditure can also increase or be large because PAD is one source of income that can be used to finance these expenditures.

The total population shows a positive effect on capital expenditure and grant expenditure, but has no effect on social assistance expenditure. The increasing number of residents will also increase the amount of capital expenditures and grants given by local governments to their people. However, for social assistance, spending in this study showed different

results. This is possibly due to local government policies or it may be that even though the population increases, the number of people entitled to receive social assistance does not increase or decrease.

The poverty rate (Pov_Lev) from the test results shows that it has a positive effect on capital expenditure and grant expenditures, but has no effect on social assistance expenditures. If we take an analogy with this result, a high poverty rate should have an effect on social assistance spending because it is one of the important indicators in providing an aid program. However, the decision for distributing the expenditure will return to each region, which is likely to have other considerations.

Opinion on the Local Government Financial Statements which have been audited by the Audit Board of the Republic of Indonesia (BPK) shows that the opinion has a negative effect on capital expenditures and has no effect on grant expenditures and social assistance expenditures. Opinion, as the final decision of a regional financial report, whether it is unqualified opinion, modified unqualified opinion, qualified opinion, adverse opinion, or disclaimer of opinion, is less able to measure whether a local government politicizes the budget or not. The hope is that when the district/city government gets an unqualified opinion, the practice of budget politicization can be minimized or even not occur.

The type of local government between districts or cities (regions) shows a positive effect on capital expenditure, but has no effect on grant expenditures and social assistance expenditures. The difference between the district government and the city government has an impact on the capital expenditures issued by the regional government, due to many considerations such as the area, the number of residents, the independence of an area, and so on.

The existence of district/city governments in Java and non-Java Island (island) shows a significant negative effect on the three expenditures, namely capital expenditure, grant expenditure, and social assistance expenditure. This result indirectly implies that district/city governments in Java are less likely to politicize the budget or use the budget for political purposes; this is due to several factors, such as people who have started to be smart in choosing, the majority of WTP opinions are obtained, regions on the island of Java obtain this opinion, and so on.

The status of local government shows that the results have no effect on capital expenditure, grant expenditure, and social assistance expenditure. This means that district/city governments originating from the division or not from the division are not related to the practice of political budget cycles by utilizing capital expenditure budgets, grant spending or social assistance spending in the election year and ahead of the regional head election taking place.

In addition to the main tests above, we perform the following tests.

a. Special Testing for Two Years Before the Regional Head Election

Table 4 shows that the two years before the election has a positive and significant effect on capital expenditures, with a significance value and beta coefficient of 0.0004 and 0.0540, respectively. Rizqiyati and Setiawan (2021) also received similar results, where the two years before the election had a positive effect on capital expenditures. Local governments in the two years leading up to the election are more focused on capital expenditures, which are usually issued for infrastructure development, repair of public facilities, etc. Capital expenditures, as part of campaign promises or positive image formation, take time before they can benefit the public. Therefore, most local governments increase capital expenditures in the middle of the office term or two years before the next election.

Table 4. Multiple regression test results for two years before election: random effect.

Variables	CAP_EXP (1)	GRANT_EXP (2)	SOC_EXP (3)
Constant	−3.6350 0.0000	−6.2312 0.0000	−3.2409 0.1964
Elect-2	0.0540 ^a 0.0004	−0.5319 ^a 0.0000	−0.1380 0.1500
Incumbent	0.0250 0.1422	−0.0137 0.7929	0.2124 ^b 0.0347
Trans	−0.3503 ^b 0.0296	0.3193 0.4941	−0.2240 0.1504
Size	0.0582 ^a 0.0009	0.0983 ^c 0.0559	0.1991 ^b 0.0293
Population	0.1897 ^a 0.0000	0.3261 ^a 0.0000	0.0323 0.7171
Pov_Lev	0.0062 ^b 0.0123	0.0175 ^a 0.0004	0.0088 0.2330
Opinion	−0.0541 ^b 0.0120	−0.0559 0.3887	−0.0867 0.4779
Region	0.1568 ^a 0.0027	0.0042 0.9674	0.1522 0.3401
Island	−0.3173 ^a 0.0000	−0.7414 ^a 0.0000	−0.6973 ^a 0.0001
Status	0.0101 0.8273	−0.1165 0.1971	−0.0406 0.7684
N	1306	1306	636
Adjusted R ²	0.1000	0.1314	0.0410
F-statistics	15.5053	20.7474	3.7159
Prob (F-statistic)	0.0000	0.0000	0.0001

Note: ^{a,b,c} = Significance at 1%, 5% and 10% levels; CAP_EXP = Capital Expenditure; GRANT_EXP = grant expenditures; SOC_EXP = social assistance expenditures; ELECT-2 = two years before the election; INCUMBENT = incumbent regional head; TRANS = transfer income; SIZE = size of local government; POPULATION = Total Population; POV_LEV = Poverty Level; OPINION = audit opinion; REGION = Type of Local Government; ISLAND = Island Type; STATUS = local government status.

Meanwhile, the two years before the election has a negative and significant effect on grant expenditures. The significance value and beta coefficient are 0.0000 and −0.5319, respectively. The local government, although still consistent in grant expenditures, shows a downward trend in the two years prior to the election. The results are similar for social assistance expenditures. The two years before the election has no effect on social assistance expenditures. The significance and beta coefficients are 0.1500 and −0.1380, respectively. Local governments are not focused on this spending as it remains the same as the previous years.

The incumbent has a positive and significant impact on social assistance expenditures, with a significance value and beta coefficient of 0.0347 and 0.2124, respectively. However, this does not affect capital or grant expenditures. Incumbents who return in the next period can attract the people with an “early campaign” through various policies or programs that are disguised on behalf of the regional government.

For transfers, test results are not significantly different from those of the main test. Transfers, as a source of regional income, have no effect on grant or social assistance expenditures, but have a negative effect on capital expenditures. The relationship between transfers and the size or the fluctuations of grant and social assistance expenditures is less proven in this study.

b. Testing by Adding Interactions

Table 5 shows the test results that include the interaction between the election year and the incumbent and one year before the election and the incumbent. The interaction between the election year and incumbent (elect × incumbent) cannot be explained in this

research model. This can be observed in the test results, where the significance value for the three dependent variables was above 5%. The beta coefficient and significance of the capital expenditures variable were -0.0402 and 0.2479 , respectively. The beta coefficient and the significance of the grant expenditures variable were 0.1109 and 0.3249 , respectively. Finally, the beta coefficient and the significance of the social assistance expenditures variable were -0.1845 and 0.4164 , respectively. The fluctuations or the size of capital, grant, and social assistance expenditures were not affected by the election year or the incumbent.

Similar results are observed in the interaction between one year before the election and the incumbent (elect-1 x incumbent). The interaction had no effect on the dependent variables of capital, grant, and social assistance expenditures. The beta coefficient and significance of the capital expenditures variable were 0.0017 and 0.9603 , respectively. The beta coefficient and significance of the grant expenditures variable were 0.0555 and 0.6237 , respectively. Finally, the beta coefficient and significance of the social assistance expenditures variable were -0.0174 and 0.9386 , respectively. This result diverges from that of [Arifin and Purnomowati \(2017\)](#) who state that regions that are re-nominated by the incumbent have high grant expenditures. Accordingly, grant expenditures alone spend 150% more than non-incumbent districts in the election period.

Table 5. Multiple Regression Test Results with Interaction—Random Effect.

Variables	CAP_EXP	GRANT_EXP	SOC_EXP
	(1)	(2)	(3)
Constant	-3.6464 0.0000	-6.7074 0.0000	-3.5381 0.1588
Elect	-0.0450^c 0.0605	0.5124^a 0.0000	0.1826 0.2944
Elect-1	-0.0376 0.1462	0.4604^a 0.0000	0.2118 0.2129
Incumbent	0.0387 0.1380	-0.0676 0.4123	0.2784^c 0.0780
Trans	-0.3407^b 0.0343	0.2980 0.5209	-1.1906 0.1642
Elect x Incumbent	-0.0402 0.2479	0.1109 0.3249	-0.1845 0.4164
Elect-1 x Incumbent	0.0017 0.9603	0.0555 0.6237	-0.0174 0.9386
Size	0.0596^a 0.0007	0.0993^c 0.0521	0.2032^b 0.0266
Population	0.1911^a 0.0000	0.3233^a 0.0000	0.0323 0.7173
Pov_Lev	0.0060^b 0.0144	0.0177^a 0.0002	0.0087 0.2405
Opinion	-0.0548^b 0.0109	-0.0589 0.3617	-0.0860 0.4844
Region	0.1578^a 0.0023	0.0057 0.9549	0.1482 0.3543
Island	-0.3205^a 0.0000	-0.7413^a 0.0000	-0.7073^a 0.0000
Status	0.0121 0.7927	-0.1165 0.1875	-0.0431 0.7555
N	1306	1306	636
Adjusted R ²	0.1025	0.1324	0.0395
F-statistics	12.4640	16.3234	3.0088
Prob (F-statistic)	0.0000	0.0000	0.0003

Note: ^{a,b,c} = Significance at 1%, 5% and 10% levels; CAP_EXP = capital expenditure; GRANT_EXP = grant expenditures; SOC_EXP = social assistance expenditures; ELECT = year of election; ELECT-1 = one year before the election; INCUMBENT = incumbent regional head; TRANS = transfer income; SIZE = local government size; POPULATION = total population; POV_LEV = poverty level; OPINION = audit opinion; REGION = type of local government; ISLAND = island type; STATUS = local government status.

5. Conclusions

This study provides empirical evidence on the political budget cycles of local governments in Indonesia. Political budget cycles include capital expenditures, grants, and social assistance in the regional head election year, or the year leading up to the election. They are vulnerable to the politicization of budgets in young democratic countries, especially those holding direct general elections.

Test results confirm that the election year has a negative effect on capital expenditures, a positive effect on grants, and no effect on social assistance. In addition, the year before the election has a negative effect on capital expenditures, although it has a positive effect on grants and social assistance. Furthermore, the incumbent has a positive effect on social assistance, but has no effect on capital expenditures and grants. Transfers have a negative effect on capital expenditures, a positive effect on grants, and no effect on social assistance. Lastly, the interaction between the election year with the incumbent and the year before the election with the incumbent is not proven in this study.

This study has some limitations. First, the proxy for the dependent variable of capital, grants, and social assistance expenditures, which uses the percentage variance of each of these expenditures with the median of the local government in each province concerned, is not optimal in capturing the occurrence of budget politicization. Additionally, this proxy is relatively new and is not used by many researchers. Second, incumbents are limited to regional heads who initially serve as regional heads and run for re-election. Incumbents who were initially vice regional heads and were running to become regional heads/deputy regional heads in the succeeding election are not included in the research data. Third, the sample only includes local governments that held two election cycles between 2012–2018.

Based on the limitations, the following can be considered in future research: the measurement proxy for the dependent variable of capital, grant, and social assistance expenditures can be explored by examining the percentage variance of these expenditures in year t subtracted from spending in the previous year ($t - 1$) to see the value of the fluctuations of these expenditures. In determining the incumbent, further researchers can include the deputy regional heads so that the research becomes more complex. Finally, future research can add a sample election cycle, including more than two election cycles from each region, so that the validity of the data and results becomes more visible.

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