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Government Budget Allocation in Thailand:

The Impact of the Political Background of the Minister and Prime Minister

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ABSTRACT

The focus of this paper is the Thai ministry budget allocation determinations during the period of 1980-2011 in relation to the political backgrounds of the minister and prime minister. The findings reveal a strong political influence in the budget formulation process. The budget share a ministry receives was found to be dependent on whether the minister-in-charge was inside or outside the parliamentary system. Both advantages and disadvantages were found to exist in relation to ministers and ministry shares of total government budget.

Thai government administrations were found to tactically use their government budgets to reward their loyalists and recruit other political parties into the current cabinet and/or form a coalition in the next election. In addition, when elected government administrations are led by a prime minister who is a former military officer, the administrations devote more budgetary funding to military-related spending. And the non-elected government administrations backed by military juntas are found to allocate their government budget differently from those elected government administrations.

Keywords: Ministry budget; Budget allocation; Political influence.

JEL classification: D72; H30; H50.

CHAPTER ONE

INTRODUCTION

Thailand's government budget allocation is the result of a highly centralized and sophisticated budget formulation process. The budget preparation process normally takes 10 months before the beginning of the fiscal year. And its detailed budget allocation process is as follows. The Ministry of Finance, the Bureau of the Budget, the National Economic and Social Development Board, and the Bank of Thailand prepare the government budget expenditure framework and government revenue forecast based on key economic assumptions. The Bureau of the Budget and the National Economic and Social Development Board also allocate the government budget according to national strategies and priorities. These deliberations are submitted to the prime minister and the Cabinet for consideration. After the Cabinet's approval, the line-ministries prepare a detailed ministerial budget consistent with the national budget strategies to be submitted to the Bureau of the Budget. The Bureau of the Budget is responsible for proposing the detailed ministerial-level annual budget proposal to the prime minister and the Cabinet for consideration. The line-ministries adjust their budget request in accordance with guidance from the Cabinet and then submit the finalized budget proposal to the Bureau of the Budget and the Cabinet for final approval. The next step is for the Bureau of the Budget to prepare the draft Budget Act and the related budget documents that will be submitted to the Cabinet. After the final government approval, the draft Budget Act and

the related documents are submitted to the House of Representatives and the Senate for their endorsement prior to the start of the Fiscal Year[1].

As can be seen, the budget formulation process in Thailand is very complicated and involves a large number of stakeholders, including bureaucrats and politicians. Since a ministry's budget must pass the approval of its minister, the prime minister, and the Cabinet of ministers, it is interesting to address questions that relate to the influence these politicians have on the way in which the government budget is allocated to the ministries. In particular, do these politicians use their power to formulate the budget to suit the real need of the Thai people or do they just serve their own political wills?

Political factors can have a significant influence on government budget setting. Many extensive empirical and theoretical studies have investigated this subject. For instance, the political budget cycle theory cycle analyzes the effects of an election on the economy, as elections may place pressure on politicians to pursue policies that increase their chances of re-election. According to Nordhaus (1975), one of the main goals of incumbent governments is to remain in power. Hence, they are likely to stimulate the economy prior to the elections to increase their re-election probabilities.

Election years were found to affect the pattern of public expenditures (Rogoff and Sibert, 1988). In a more recent study by Vergne (2009), focusing on the dynamics of the overall budget, politicians were illustrated to change the allocation of public expenditures in an election year by shifting towards more visible current expenditures and away from capital expenditures without the need to increase the overall budget deficits.

[1] For a detailed report on the budget formulation process in Thailand, please see Blöndal and Kim (2006).

Another strand in the literature is partisan theory (Hibbs, 1977; Alesina, 1987). The type of government can influence government budget expenditures, since different governing parties may pursue different economic goals. For instance, a left-wing party prefers a lower unemployment rate over low inflation; whereas a right-wing party prefers low inflation and a higher unemployment rate. This might lead to different government budget settings. In addition, the number of governing parties in a coalition government can be related to the size of the government expenditures. Weingast *et al*. (1981) illustrated that the size of the government expenditures is larger with more parties in a coalition, as the decision costs increase with the number of decision-makers involved in the budget formulation.

Many studies have focused their attention on the allocation of public spending. Lancinese *et al*. (2006) analyzed the impact of the United States (U.S.) president on the U.S. federal budget allocation to the states during the period of 1982-2000. They found that presidents are engaged in a tactical distribution of federal funds. States with a high share of presidential votes in the past presidential election or with a governor belonging to the party of the president tend to be rewarded with more federal funds; whereas states with a governor from the opposition parties tend to be penalized in terms of federal funds received.

Grossman (1994), Levitt and Synder (1995), and Solé-Ollé and Sorribas-Navarro (2008) found that aligned states received more funds than unaligned states (controlled by opposition parties). In particular, Solé-Ollé and Sorribas-Navarro (2008) showed that aligned municipalities in Spain received over 40 percent more grants than unaligned municipalities. These findings are consistent with the ‘rewarding loyalty’ (or ‘core

supporters') hypothesis, in which government funds are allocated more to municipalities where voters are clearly attached to the incumbent party. In contrast, Wright (1974) and Wallis (1987) found that more budgets are allocated to states with more volatility of the presidential vote in the elections. This is compatible with the 'swing voter' hypothesis, in which incumbent governments manipulate government funds to target swing and marginal states in the elections.

One of the first attempts of a budget allocation investigation using data from Thailand was Tinakorn and Sussangkarn (1996). They estimated the predicted share of Thai central government budgetary spending classified by functions in comparison with the average fiscal expenditures of 28 developing countries. Based on their findings, on average, the Thai central government expenditure is below the average pattern of the developing countries with one exception, national defense spending. The high budget share of national defense spending is not surprising, as Tinakorn and Sussangkarn (1996) explained, since the Thai government administrations have often been under the military regimes. Tinakorn and Sussangkarn addressed the case of political/military influence, but did not attempt to further analyze its impact in their paper.

In a subsequent work that attempted to incorporate political factors in the model of Thailand's budget allocation, Sudsawasd (2008) investigated the Bangkok metropolitan administration budget allocation to Bangkok districts. Although Sudsawasd introduced a dummy variable of different political parties of the Bangkok metropolitan council members in the model of district budgetary funds, he did not find any significant influence of political parties on the way that the Bangkok metropolitan administration allocates its budget. Nonetheless, one cannot expect the same insignificant results for the

case of central government budget allocation, as it is allocated differently. In addition, with the much larger size of government budgets, politicians, perhaps, would like to become more involved.

It is worth noting that most studies on government budget allocation are based on the government budget transfer to the local government (e.g., Levitt and Snyder, 1995; Larciness *et al*., 2006; Solé-Ollé and Sorribas-Nvarro, 2008; Sudsawasd, 2008) or other compositions of public spending, such as the functional classification or the economic classification of budget expenditures (e.g., Tinakorn and Sussangkarn, 1996; Potrafke, 2006; Vergne, 2009). To this author's knowledge, no one has used data on the administrative classification of budget expenditures (e.g., ministries, departments, etc.), where the influence of political factors can be substantial large, especially in a country with high political instability, such as Thailand, where governments can be short-sighted and only pursue their own interests.

Consequently, this study attempts to investigate the relationship between political factors and Thai ministry budgets based on the administrative classification. More specifically, four political background types of a minister and prime minister are examined for their impacts on the budget setting at the line-ministry level. These include: the origins of a minister (appointed from "outside" or from "inside" the parliamentary system), the political party of a minister (from the leader party or from the partner parties in a coalition cabinet), the origins of a government administration (elected or non-elected government administration), and the military background of a prime minister.

All four of these political factors can have substantial implications on the allocations of the government budget in Thailand. The findings in this paper will provide

a more in-depth understanding of the ways in which the Thai governments actually formulate their budget at the line-ministry level. This information can be used to evaluate and monitor government behaviors. As stated, most existing studies are based on the aggregate total expenditures or the different compositions of budget expenditures classified by functional and economic classifications, but not by the administrative classification. Hence, this study would serve as one of the first attempts to fill this void in the literature by using the Thai Ministry budget data for the period of 1980-2011.

The remainder of this paper is organized as follows. Chapter Two begins with the presentation of an empirical model of the determinants of a ministry's budget share. The data and the empirical issues are discussed in Chapter Three. The empirical results are analyzed in Chapter Four. Finally, the concluding remarks and recommendations for future research are provided in the last chapter.

CHAPTER TWO

MODEL SPECIFICATION

A variation of the Vergne (2009)'s model of the allocation of public spending is employed in this study to examine the relationship between political factors and a ministry's budget share[2]. The model takes on the following form:

$$Budget_{i,t} = \beta_0 + \beta_1 Budget_{i,t-1} + \beta_2 X_t + \beta_3 Political_{i,t} + \varepsilon_t ,$$

where $Budget_{i,t}$ stands for ministry *i*'s budget share as a percentage of the total government expenditures in fiscal year *t*.

The lagged dependent variable $Budget_{i,t-1}$ is included in the set of explanatory variables, since the Thai government administrations normally use the previous year's budget expenditures as a guideline to form the setting of the current outlays. *X* is the set of control variables. Following Vergne (2009), this set of variables includes the level of development, measured by the logarithm of real income per capita (*GDPPC*). As a country becomes more developed, the composition of the budget allocation may change. Likewise, the degree of urbanization, measured by the logarithm of the percentage of urban population (*URBAN*), is included, since urbanization may influence the share of the budget allocated to infrastructure spending, resulting in more budgetary funds for some

[2] Vergne (2009) examined the effects of elections on the composition of government expenditures based on the functional classification of government expenditures. In contrast, the analysis of the current study is based on the allocation of government budget expenditures classified by the administrative classification (e.g., at the line-ministry level).

ministries, such as the Ministry of Transport. The degree of trade openness, measured by the ratio of exports plus imports to Gross Domestic Product (GDP) (*OPEN*), and the terms of trade (*TOT*) are included. They are used as proxies of how a country is more vulnerable to foreign competition; this may influence the way a government allocates its budgetary spending.

In order to control for demographic change, this study adds the young-age population (aged between 0 and 14 years old) as a percentage of the total population (*AGE14*) and the old-age population (aged 65 or above) as a percentage of the total population (*AGE65*). These variables should clearly relate to the budgets of the Ministry of Education and the Ministry of Public Health. Furthermore, the effects of the size of the population, measured by the logarithm of population (*POP*), and the unemployment rate (*UNEMPLOY*) are examined. An increase in the size of a population and the rate of unemployment may raise the unemployment aid and other forms of governmental assistance. As a result, more budgetary funds may be allocated to ministries, such as the Ministry of Interior and the Ministry of Education.

The time trend variable (*TREND*) is added to capture the overall pattern of change over time. In addition, the year 2003 dummy variable (*YEAR2003*), taking on the value of zero for years before 2003 and one for years 2003 through 2011, is introduced to capture the structural change of the Thai ministries in 2003[3]. The recession dummy variable

[3] In 2003, five new ministries were established (by splitting some departments from the existing ministries): the Ministry of Tourism and Sports, the Ministry of Social Development and Human Security, the Ministry of Natural Resources and Environment, the Ministry of Information and Communication Technology, and the Ministry of Energy.

(*RECESSION*) takes on the value of one for any years (1997, 1998, 2009) that Thailand is in a recession and zero otherwise. This variable is included in the model to capture the effects of recession conditions.

$Political$ is the set of variables of interest. As stated previously, the focus of this study is on the four types of political backgrounds of a minister and prime minister. These four types are:

1) Outsider ministers

Outsider ministers are defined as those ministers appointed from "outside" the parliamentary system (or non-parliamentarians). Having an outsider as the minister-in-charge may present a serious handicap in the bargaining power of the amount of a ministry's budget share that is received due to the minister's lack of political experience and support, as compared with those ministers who are from "inside" the parliamentary system. However, many outsider ministers are found to have political experience and support as party members or supporters (Yong and Hazell, 2011). In Thailand, many outsider ministers are known as (nominees of) financial supporters of governing parties in a coalition. They may even have more political power to manipulate the government budget than those "insider" ministers. Hence, it is unclear whether having a minister-in-charge who is a non-parliamentarian really presents a handicap. It is now an empirical matter.

2) Political party of a minister

The political party of a minister represents could have a large influence on the way in which the Thai government administrations allocate their budgetary funds. There are several possible models explaining the role of political parties in the allocation of

federal outlays (Levitt and Snyder, 1995). For instance, there is the strong party model, in which a governing party that controls the government administration can target government expenditures to maximize some mix of policy and re-election goals. If a government administration allocates more budgetary funds to a ministry where its minister is a member of the leader party in a multi-party coalition government, this will support the hypothesis of rewarding loyalty. In contrast, a government administration might try to use a government budget as a tactical instrument to recruit the "partner parties" in the current cabinet or form a coalition for winning the next election. Under this viewpoint, a ministry with its minister coming from the partner parties may be favored to receive more budget expenditures. This is compatible with the idea that incumbent governments distribute government funds to swing states in order to increase their chances of winning the next election (Lindbeck and Weibull, 1987). Hence, the relationship between a political party of a minister and a ministry's budget share of the government budget is also ambiguous.

3) Non-elected government administrations

The democracy process in Thailand has not been smoothly stable, as Thailand has constantly moved back and forth between democratically elected and non-elected (post-coup) government administrations. During the study period of fiscal years 1980-2011, there were 18 cabinet ministers; three of them were post-coup cabinets[4]. It is quite interesting to ask whether (and how) non-elected government administrations, appointed or backed by a military junta after the coup d'état, allocate their government budget

[4] They are the administrations of General Sujinda Kraprayoon (1992)**,** Anand Panyarachun (1991-1992, 1993), and General Surayut Chulanon (2006-2008).

differently from those elected government administrations. It is possible that post-coup government administrations may formulate the government budget by allocating more budgetary funds to spending related to military expenditures in order to gain trust and support from the ruling junta. However, one might ask a question as to whether post-coup government administrations really pursue policies following these motives. Besides, the existing empirical findings on the post-coup government impact appear to be less clear. They also vary according to a country, a period of time, and a set of variables (Zuk and Thompson, 1982).

4) Military background of a prime minister

Following the same argument of non-elected government administrations, prime ministers who are former military officers may behave differently from their civilian counterparts. Perhaps they may prioritize and divert more government budgetary funds toward military expenditures and foreign affairs spending, as compared with those prime ministers who are not former military officers. Again, it is not entirely clear whether those prime ministers with military background really behave in this way in the real world. Thus, an empirical examination of the impact of the military background of a prime minister will take place in this study[5].

The political variables used in this analysis, including the four dummy variables, are listed in Table 1. They will be tested for their impacts on the government budget allocation at the line-ministry level in Thailand.

[5] During the study period of fiscal year 1980-2011, prime ministers with military experience were General Kriangsak Chamanan, General Prem Tinnasuranon, General Chatichai Choonhavan, General Sujinda Kraprayoon, General Chavalit Yongchaiyudh, and General Surayut Chulanon.

Table 1. Political (Dummy) Variables

Variable	Definition
OUTSIDER$_i$	= 1 if minister *i* is appointed from outside the parliamentary system, = 0 otherwise.
LEADER$_i$	= 1 if minister *i* is from a quota of a prime minister or a member of a leader party in a multi-party coalition government or a member of a ruling single-party government, = 0 otherwise.
Non-Elected Government	= 1 if a government is a non-elected government administration, = 0 otherwise.
MILITARY PM	= 1 if a prime minister is a former military officer, = 0 otherwise.

CHAPTER THREE

DATA AND EMPIRICAL ISSUES

Data used in this analysis are annual and cover 12 ministries during the period of 1980-2011[6]. Those 12 ministries are the Ministry of Defence, the Ministry of Finance, the Ministry of Foreign Affairs, the Ministry of Agriculture and Cooperatives, the Ministry of Transport, the Ministry of Commerce, the Ministry of Interior, the Ministry of Justice, the Ministry of Science and Technology, the Ministry of Education, the Ministry of Public Health, and the Ministry of Industry. Data on the ministry budget are obtained from a variety of years of the *Thailand's Budget in Brief*. Thailand's macroeconomic data were extracted from the World Bank's *World Development Indicators*, the IMF's *International Financial Statistics*, and the *Penn World Table* 8. Data on political variables are from a variety of sources, including newspapers, government websites, and government documents (such as the Secretariat of the Cabinet and the Secretariat of the House of Representatives of Thailand). Summary descriptive statistics for all political variables are reported in Table 2.

Table 3 presents the Thai ministry budgets for the fiscal years of 1980 and 2011. In fiscal year 1980, the total budget expenditures of 114,556.5 million baht are allocated. In that year, around 80 percent of total government budget was allocated to those 12

[6] The choices and scopes of ministries covered in this study are selected based on data availability for the entire period of 1980-2011. Hence, those five new ministries established after 1980 are not included in this analysis.

ministries[7]. The Ministry of Interior received the largest budget share of the government budget (21.2 percent). The Ministry of Defence and the Ministry of Finance received the second and third highest ranks in budget shares at 17.7 percent and 11.9 percent, respectively. In fiscal year 2011, total budget expenditures increased by more than 1,707 percent to the amount of 2,070 billion baht. However, the ministry which received the largest budget share changes to the Ministry of Education (18.75 percent), ranked sixth in 1980. While the Ministry of Interior and the Ministry of Finance remained ranked in the top three, the Ministry of Defence, which ranked second in 1980, dropped to rank fourth in 2011. Hence, there has been a noticeable change in the allocation of the government budget at the line-ministry level between the fiscal years of 1980 and 2011.

The time patterns of ministry budgets over the period of 1980-2011 are shown in Figure 1. The sizes of the government budget allocated to all ministries have been substantially increased. However, the budget composition has changed dramatically (Figure 2). For instance, the budget shares of the Ministry of Interior and Ministry of Defence had decreased significantly over the period of 1980-2011; whereas the Ministry of Education had experienced larger shares of the government budget over the same period. In general, the time patterns of a ministry's budget share are distinct across ministries. Hence, it is inappropriate for one to assume that the determinants of a ministry's budget share are the same for all ministries, especially when social, as well as, political perceptions on the roles of each ministry are different.

[7] The rest of the government budget was assigned to expenditures such as the Central fund's budget, the state enterprise's budget, and the revolving - budgetary funds' budget, in which the sizes of budget share had been substantially increased during the study period.

For the model estimation techniques used, the disturbance terms are likely to be correlated across equations, since the budget share for each ministry is clearly correlated with each other. The seemingly unrelated regression equations (SURE) model estimation method (Zellner, 1962) is employed in this study to control for this issue. Since the dataset is a time series, the augmented Dickey–Fuller test is performed for the unit root test. If a series has a unit root, then the first differences are taken. After that, this study performs the Durbin alternative statistical test for serial correlation when the model contains a lagged dependent variable[8]. The test results cannot reject the null hypothesis of no first order serial correlation for each of the estimated equations at the 1 percent level of significance. In addition, the Breusch-Pagan test for heteroskedasticity is applied[9]. Consequently, the findings cannot reject the null hypothesis of homoskedasticity.

[8] See pages 420-421 of Woodridge (2006).

[9] See pages 436-437 of Woodridge (2006).

Table 2. Summary Descriptive Statistics for the Political (Dummy) Variables

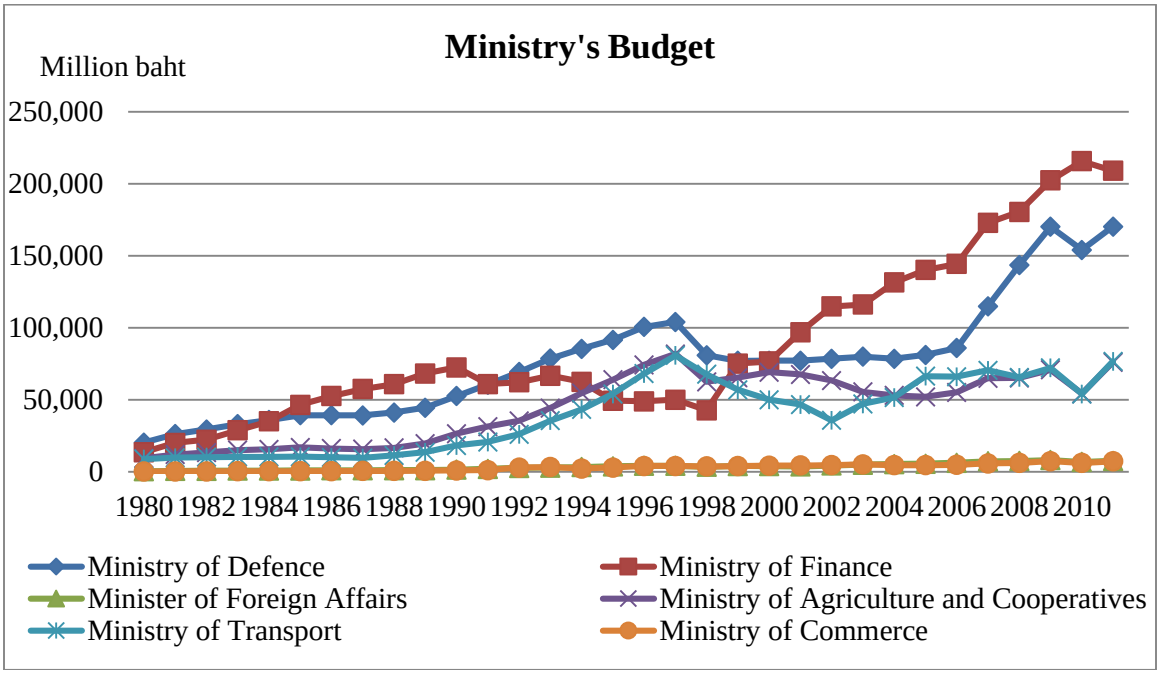
	Obs.	Mean	S.D.	Min	Max
OUTSIDER$_i$					
Ministry of Defence	32	0.53	0.51	0	1
Ministry of Finance	32	0.56	0.50	0	1
Ministry of Foreign Affairs	32	0.34	0.48	0	1
Ministry of Agriculture and Cooperatives	32	0.09	0.30	0	1
Ministry of Transport	32	0.22	0.42	0	1
Ministry of Commerce	32	0.28	0.46	0	1
Ministry of Interior	32	0.47	0.51	0	1
Ministry of Justice	32	0.13	0.34	0	1
Ministry of Science and Technology	32	0.13	0.34	0	1
Ministry of Education	32	0.41	0.50	0	1
Ministry of Public Health	32	0.13	0.34	0	1
Ministry of Industry	32	0.34	0.48	0	1
LEADER$_i$					
Ministry of Defence	32	0.81	0.40	0	1
Ministry of Finance	32	1.00	0.00	1	1
Ministry of Foreign Affairs	32	0.66	0.48	0	1
Ministry of Agriculture and Cooperatives	32	0.44	0.50	0	1
Ministry of Transport	32	0.38	0.49	0	1
Ministry of Commerce	32	0.69	0.47	0	1
Ministry of Interior	32	0.84	0.37	0	1
Ministry of Justice	32	0.56	0.50	0	1
Ministry of Science and Technology	32	0.31	0.47	0	1
Ministry of Education	32	0.66	0.48	0	1
Ministry of Public Health	32	0.63	0.49	0	1
Ministry of Industry	32	0.44	0.50	0	1
Non-Elected Government	32	0.09	0.30	0	1
MILITARY PM	32	0.47	0.51	0	1

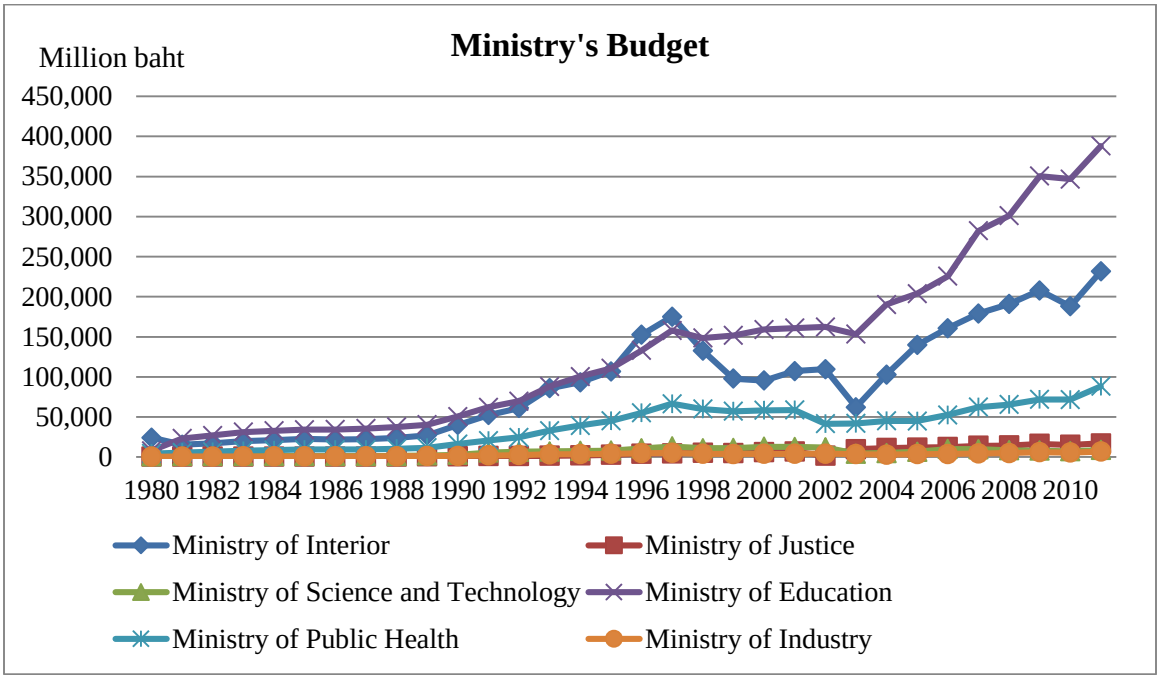
Table 3. Ministry budget for the Fiscal Years (FYs) 1980 and 2011

Rank in fiscal year 1980 (2011)	Ministry	Ministry budget in fiscal year 1980 (in million baht)	Ministry budget in fiscal year 2011 (in million baht)	Share of budget in FY 1980, in percentage of total budget	Share of budget in FY 2011, in percentage of total budget	Percentage change in Share of budget (in FYs 1980-2011)
1 (2)	Ministry of Interior	24,290	231,685	21.20	11.19	-10.01
2 (4)	Ministry of Defence	20,307	170,285	17.73	8.23	-9.50
3 (3)	Ministry of Finance	13,639	209,120	11.91	10.10	-1.81
4 (7)	Ministry of Agriculture and Cooperatives	9,439	76,138	8.24	3.68	-4.56
5 (6)	Ministry of Transport	8,828	76,713	7.71	3.71	-4.00
6 (1)	Ministry of Education	7,863	388,050	6.86	18.75	11.89
7 (5)	Ministry of Public Health	4,494.6	88,334	3.92	4.27	0.35
8 (9)	Ministry of Science and Technology	855	8,760	0.75	0.42	-0.33
9 (12)	Ministry of Industry	526	6,750	0.46	0.33	-0.13
10 (10)	Ministry of Foreign Affairs	462	7,670	0.40	0.37	-0.03
11 (8)	Ministry of Justice	389	17,030	0.34	0.82	0.48
12 (11)	Ministry of Commerce	240	7,308	0.21	0.35	0.14
	Total budget	*114,556.5*	*2,070,000*			

Source: The data are obtained from the *Thailand's Budget in Brief* (various years).

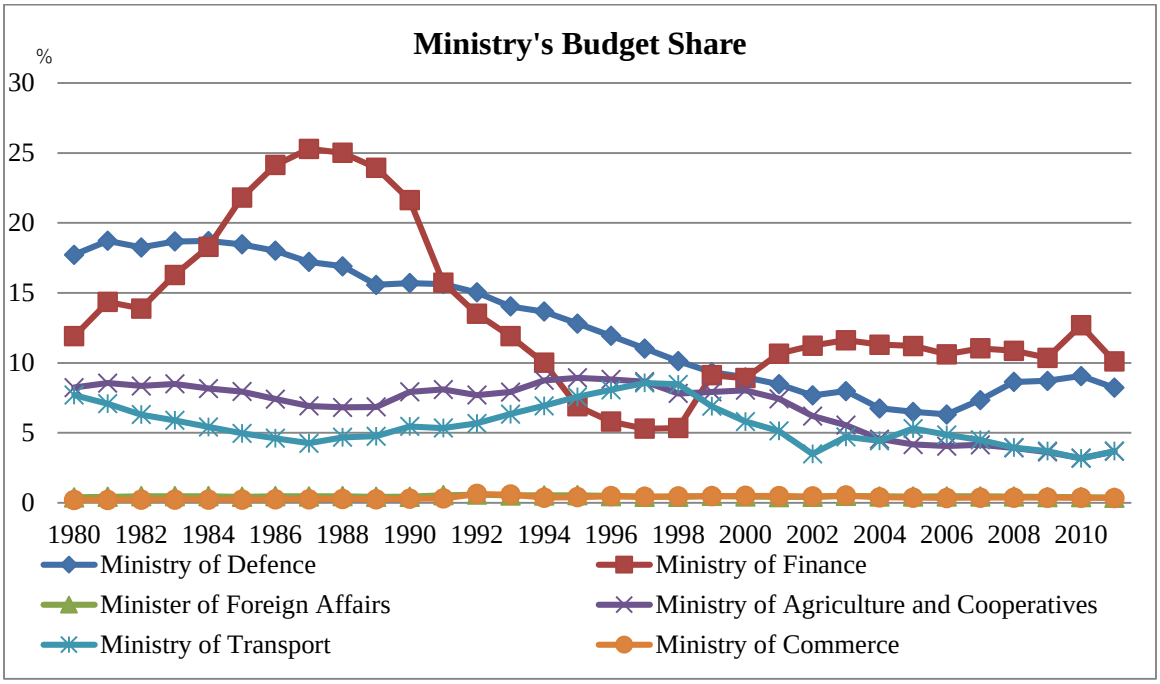
Figure 1. Government budget by ministries for the fiscal years 1980-2011

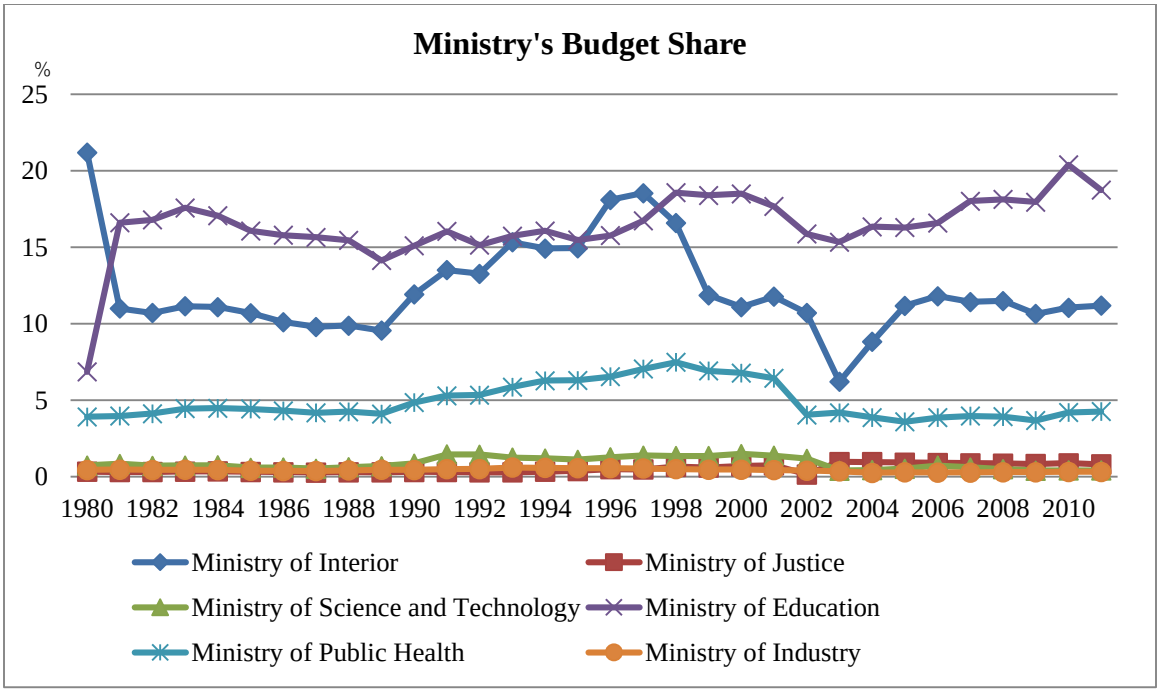




Source: The data are obtained from the *Thailand's Budget in Brief* (various years).

Figure 2. Share of total government budget by ministries for the fiscal years 1980-2011





Source: The data are obtained from the *Thailand's Budget in Brief* (various years).

CHAPTER FOUR

EMPIRICAL RESULTS

This chapter will start by presenting the baseline estimation of basic determinants of each ministry's budget share. After that, the baseline model is extended by additionally including the political (dummy) variables, in which the impact of the four political background types of a minister and a prime minister on the budget allocation at the line-ministry level will be analyzed. And at the end of this chapter, this study performs the robustness checks to see whether the results hold for different sets of explanatory variables.

4.1 Baseline specification

The estimation results of the baseline specification, reported in Table 4, confirm that the basic determinants of each ministry's budget share are dissimilar. Hence, they should be estimated separately. The findings can be summarized as follows.

An increase in the last year's budget share has a significant and negative impact on the current year's budget share allocated to the Ministry of Defence, the Ministry of Finance, the Ministry of Foreign Affairs, the Ministry of Agriculture and Cooperatives, the Ministry of Transport, the Ministry of Education, the Ministry of Public Health, and Ministry of Industry; whereas the positive impact is found for the Ministry of Interior and the Ministry of Science and Technology but the estimated coefficients are not strongly significant. As Thailand becomes more developed, measured by an increase in the real income per capita, the Ministry of Education and the Ministry of Industry receive a larger

share of the government budget. In addition, more urbanization increases the shares of the government budget to the Ministry of Transport, but it surprisingly decreases the budget share allocated to the Ministry of Education.

For a country's trade openness, an increase in total trade shares to GDP increases the shares of the government budget to the Ministry of Agriculture and Cooperatives and the Ministry of Transport. Moreover, an improvement in the terms of trade is found to have a positive impact on the Ministry of Transport's budget share. As the young-age population ratio increases, the Ministry of Defence, the Ministry of Finance, the Ministry of Justice, the Ministry of Science and Technology, and the Ministry of Education receive smaller budget shares. The result on the Ministry of Education is opposite from the expectation that the government should allocate more budgetary funds to this ministry in the case of an increase in the young-age population. For the old-age population, the rise in the ratio of the old-age population increases the budget share to the Ministry of Finance; whereas the Ministry of Transport's budget share is reduced.

The estimated coefficient of the population size indicates that the shares of the government budget to the Ministry of Defence, the Ministry of Agriculture and Cooperatives, the Ministry of Transport, the Ministry of Interior, the Ministry of Public Health, and the Ministry of Industry decrease with an increase in the Thai population. In contrast, the budget shares of Ministry of Finance and Ministry of Justice are found to increase with a larger population. An increase in the unemployment rate has a positive implication on the government budget allocated to the Ministry of Education. This finding confirms that governments raise the education budgets when unemployment surges.

For the time-trend effect, holding other factors constant, the Ministry of Defence experienced a significant negative time-trend effect on its budget share received. In contrast, a time trend has a positive effect on the Ministry of Transport's budget share. The estimation results also reveal the importance of economic conditions on the government budget allocation. It was found that a recession period has a negative impact on the Ministry of Finance's budget share of the total government expenditures.

4.2 Alternative specifications

Tables 5 to 8 present the estimation results of each political variable on a ministry's budget share. The results are summarized as follows.

- *Outsider ministers*

The results obtained for four (out of twelve) ministries suggest that outsider ministers (or ministers who are not parliamentarians) have a statistically significant negative impact on the ministry's share of the government's budget[10]. Hence, having the outsider minister can present a handicap in the bargaining power of the government budget to those four ministries. In contrast, outsider ministers from the Ministry of Commerce and the Ministry of Defence are found to be associated with a larger ministry's budget share. This is perhaps because, according to the name list of those outside ministers, they were technocrats, academicians, and former government officers. Some of them can be identified as financial and non-financial supporters of the governing

[10] The four ministries are the Ministry of Agriculture and Cooperatives, the Ministry of Interior, the Ministry of Science and Technology, and the Ministry of Industry.

party in a coalition. These people do not lack the political support or budget experience when being the outsider ministers. In addition, since Thai government administrations have enjoyed using populist policies in the past, and some of these populist policies are implemented through the Ministry of Commerce's budgetary spending (such as agriculture price stability, including price support programs and 'Blue Flag' low-priced products programs), the findings may indicate a significant increase in this type of populist spending when outside ministers were appointed to take on the post of the commerce minister.

- *Political party of a minister*

For the relevance of a political party of a minister in explaining budget allocations, the Ministry of Foreign Affairs, the Ministry of Commerce, the Ministry of Interior, the Ministry of Justice, and the Ministry of Education, whose minister-in-charge is a member of the leader party in a coalition government (or from a member of the ruling party in a single-party government), appear to receive larger shares of the government budget. This positive relationship is consistent with and supports the "rewarding loyalty" hypothesis, in which a government administration targets its budgetary funds to reward loyal members of the leader party in the past election.

This "rewarding loyalty" incidence only fits these five ministries. For most other ministries (except the Ministry of Defence, the Ministry of Finance, and the Ministry of Industry), the ministers who are members of the partner parties can induce the larger ministry's budget share of the government budget, as compared with those ministers who are from the quota of the leader party. Perhaps this finding is pointing towards the

hypothesis that a government uses its budget as a tactical instrument to recruit partner parties to form a coalition for the current cabinet and/or for winning the next election.

It is worth noting that the Ministry of Transport normally ranks in the top-five largest budget shares allocated at the ministerial level. It can be identified as one of the first choices for allocating cabinet ministries to governing parties in a coalition government. The transport minister is usually chosen as a quota of the leader party. However, when the post for the transport minister is given to other parties, it usually happens at the times when the leader party cannot gain substantial control of a government administration and is in dire need of other political parties' support to form a coalition. In this case, the bargaining power shifts away from the leader party to the partner parties. Perhaps this is the reason why the transport minister, coming from the partner parties, is found to be associated with a larger share of the government budget to the ministry.

- *Non-elected government administrations and Military background of a prime minister*

The origin of a government administration is found to have a statistically significant impact on the government budget setting. As expected, non-elected government administrations have diverted some budgetary funds to spending related military spending, mostly under the Ministry of Defence and the Ministry of Foreign Affairs[11]. This is perhaps to primarily serve the interests of the ruling juntas. In addition,

[11] The budgetary funds financed to more military spending are from the Ministry of Agriculture and Cooperatives, the Ministry of Transport, the Ministry of Science and Technology, and the Ministry of Public Health, as their budget shares are found to decrease.

more of a budget share is shifted to the Ministry of Commerce, in which part of this additional budget may be used to finance spending on populist programs (such as agricultural price stability programs). This finding is quite interesting, as it may indicate that non-elected government administrations use budgetary funds to gain trust and support from a ruling junta and Thai citizens. Nevertheless, a more in-depth investigation is required in order to confirm this hypothesis.

The military background of a prime minister is another relevant political factor in the formulation of a government budget at the ministerial level. Similarly, with non-elected government administrations, a prime minister who is a former military officer is illustrated to reveal his/her military motives by allocating more budgetary funds to spending related to the defense function, as the Ministry of Defence and the Ministry of Foreign Affairs receive greater shares of the government budget. The Ministry of Education' budget share also increases. However, the increases in these three ministries' budget shares come from the pocket of the Ministry of Justice, as its budget share is found to be the one taken away.

4.3 Robustness test

The estimation results raise the question whether they will hold for different sets of explanatory variables. In this section, the baseline regression is extended by including all four political variables, as regressors, to identify the estimated coefficients of each political variable. If the estimated coefficient of β_3 plus (minus) two standard deviations still remains significant with the same sign as in the Section 4.2. The robustness testing results are referred to as 'robust relationship.' However, if the coefficient turns

insignificant or the sign changes, in this case the robustness testing results are referred to as ‘non-robust relationship.’ The estimation results when all four political variables are included are presented in Table 9. And the robustness testing results is reported in Table 10, which is summarized as follows.

Regarding the relationship between outsider ministers and the ministry’s share of total government budget, only the Ministry of Agriculture and Cooperatives and the Ministry of Industry are found the robust and negative relationship. For the other four Ministries, which were found the significant relationship in the Section 4.2, the relationships turn to be non-robust. Hence, the empirical findings strengthen the view of having an outsider as the minister-in-charge presenting a handicap in terms of the share of government budget allocated to a ministry.

For the impact of the political party of a minister, even though the list of ministries with the significantly estimated coefficient of β_3 is shorten, the robustly significant impact on a ministry’s budget share still hold for five ministries (out of twelve). The evidence of the positive and robustly significant impact (found in the Ministry of Foreign Affairs, the Ministry of Interior, and the Ministry of Justice) confirms and supports the hypothesis of rewarding loyalty. Whereas, the negative and robust impact (found in the Ministry of Agriculture and Cooperatives and the Ministry of Transport) points toward the hypothesis of a tactical instrument where government uses its budget to recruit partner parties to from a coalition.

Next, the military background of a prime minister is also found its robust impact on the government budget allocation. The finding confirms that prime ministers who are former military officers behave differently from their civilian counterparts. More

government budgetary funds are allocated toward military expenditures and foreign affairs spending, as the budget shares of the Ministry of Defence and the Ministry of Foreign Affairs robustly increases. In addition, the Ministry of Education receives greater shares of the government budget when prime ministers have the military background.

The relationships between post-coup government administrations and military-related expenditures, in turns, are non-robust. Hence, this finding contrasts with the view that post-coup government administrations would allocate government budget funds more to the defense function in order to gain trust and serve the ruling junta. Nonetheless, the positive impact of post-coup government administrations on the budget share allocated to the Ministry of Commerce' budget remains robustly significant; whereas, the negative and robust impact is found for the Ministry of Transport and the Ministry of Science and Technology.

Table 4. Baseline results

(Dependent variable: Ministry budget share in total government budget)

VARIABLES	(1) Ministry of Defence (*D_Budget*)	(2) Ministry of Finance (*D_Budget*)	(3) Ministry of Foreign Affairs (*D_Budget*)	(4) Ministry of Agriculture and Cooperatives (*D_Budget*)	(5) Ministry of Transport (*D_Budget*)	(6) Ministry of Commerce (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	-0.405***	-0.244***	-0.324***	-0.369***	-0.212***	-0.177
	(0.119)	(0.0918)	(0.0650)	(0.135)	(0.0675)	(0.117)
*D*_log(*GDPPC*)	6.026	-8.137	0.00978	4.406	-3.610	-0.782
	(3.912)	(12.37)	(0.330)	(3.385)	(3.718)	(0.713)
D_URBAN	-5.645**	-23.04**	-0.434*	2.759	6.933***	-0.241
	(2.823)	(8.966)	(0.239)	(2.426)	(2.685)	(0.516)
D_OPEN	-0.00512	-0.0615*	-0.0012	0.0164*	0.0195*	-0.0022
	(0.0107)	(0.0341)	(0.0009)	(0.0093)	(0.0102)	(0.0019)
TOT	-0.0866***	0.0694	-0.0004	-0.0221	0.0502**	-0.0020
	(0.0234)	(0.0719)	(0.0019)	(0.0205)	(0.0217)	(0.0042)
D_AGE14	-4.477***	-8.952***	-0.0336	-0.777	3.872***	-0.159
	(1.010)	(3.175)	(0.0845)	(0.880)	(0.952)	(0.183)
AGE65	0.941	5.146***	-0.0149	-0.0889	-2.118***	-0.133
	(0.631)	(1.958)	(0.0517)	(0.526)	(0.589)	(0.112)
*D*_log(*POP*)	-135.3***	608.5***	1.255	-162.5***	-67.54*	-4.273
	(40.10)	(124.7)	(3.188)	(38.06)	(36.11)	(6.899)
D_UNEMPOY	0.0748	-0.138	0.0016	0.0576	-0.0259	-0.0137
	(0.0818)	(0.259)	(0.0069)	(0.0713)	(0.0779)	(0.0149)
TREND	-0.293**	-0.356	0.0004	-0.0762	0.280***	0.0197
	(0.120)	(0.357)	(0.0095)	(0.0984)	(0.108)	(0.0205)
RECESSION	0.0821	-3.064*	-0.0509	0.230	0.682	-0.0952
	(0.500)	(1.576)	(0.0421)	(0.429)	(0.474)	(0.0909)
YEAR2003	0.697*	-0.588	0.0690**	-0.722**	1.667***	0.0465
	(0.391)	(1.245)	(0.0332)	(0.352)	(0.375)	(0.0716)
Constant	7.930**	-38.44***	0.175	4.607	3.291	0.717
	(3.772)	(12.01)	(0.317)	(3.353)	(3.573)	(0.685)
Observations	30	30	30	30	30	30
R-squared	0.600	0.619	0.273	0.447	0.699	0.167

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

VARIABLES	(7) Ministry of Interior (*Budget*)	(8) Ministry of Justice (*Budget*)	(9) Ministry of Science& Technology (*D_Budget*)	(10) Ministry of Education (*Budget*)	(11) Ministry of Public Health (*D_Budget*)	(12) Ministry of Industry (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	0.0214	-0.0476	0.0763	-0.0736**	-0.323***	-0.512***
	(0.0466)	(0.0508)	(0.0763)	(0.0375)	(0.0450)	(0.185)
*D*_log(*GDPPC*)	12.10	-0.804	0.664	12.73*	-1.592	0.447*
	(14.64)	(0.782)	(1.755)	(6.944)	(3.262)	(0.254)
D_URBAN	7.860	-2.086***	-0.620	-16.92***	-1.059	0.281
	(10.56)	(0.566)	(1.269)	(5.024)	(2.350)	(0.220)
D_OPEN	0.0504	0.0015	0.0045	0.0237	0.0238***	0.0004
	(0.0400)	(0.0021)	(0.0048)	(0.0191)	(0.0089)	(0.0007)
TOT	-0.0609	-0.0052	-0.0025	-0.0231	0.0036	-0.0009
	(0.0851)	(0.0046)	(0.0103)	(0.0405)	(0.0189)	(0.00147)
D_AGE14	1.174	-0.524***	-0.741*	-4.452**	-1.126	-0.0419
	(3.736)	(0.202)	(0.450)	(1.780)	(0.834)	(0.0668)
AGE65	-0.687	0.00349	-0.0915	1.698	-0.418	-0.0181
	(2.317)	(0.123)	(0.275)	(1.119)	(0.509)	(0.0395)
*D*_log(*POP*)	-287.1**	13.18*	-16.47	-82.74	-141.2***	-11.00***
	(140.6)	(7.543)	(17.22)	(67.97)	(31.79)	(2.968)
D_UNEMPOY	0.293	0.0193	0.0108	0.387***	0.103	-0.0024
	(0.306)	(0.0164)	(0.0367)	(0.146)	(0.0681)	(0.0053)
TREND	-0.157	0.0170	0.0220	-0.320	-0.0188	-0.0024
	(0.427)	(0.0225)	(0.0504)	(0.209)	(0.0935)	(0.0072)
RECESSION	1.020	-0.110	-0.0026	1.346	0.241	0.0418
	(1.860)	(0.0998)	(0.223)	(0.886)	(0.415)	(0.0335)
YEAR2003	0.243	0.501***	-0.120	0.899	0.641*	-0.0428
	(1.463)	(0.0784)	(0.176)	(0.699)	(0.328)	(0.0267)
Constant	14.76	0.730	0.256	-1.026	3.242	0.259
	(14.00)	(0.751)	(1.701)	(6.674)	(3.125)	(0.249)
Observations	30	30	30	30	30	30
R-squared	0.234	0.909	0.252	0.509	0.628	0.508

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

Table 5. The impact of an outsider minister

(Dependent variable: Ministry budget share in total government budget)

VARIABLES	(1) Ministry of Defence (*D_Budget*)	(2) Ministry of Finance (*D_Budget*)	(3) Ministry of Foreign Affairs (*D_Budget*)	(4) Ministry of Agriculture and Cooperatives (*D_Budget*)	(5) Ministry of Transport (*D_Budget*)	(6) Ministry of Commerce (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	-0.478***	-0.304***	-0.385***	-0.233**	-0.244***	-0.172*
	(0.134)	(0.117)	(0.0738)	(0.111)	(0.0730)	(0.0936)
*D*_log(*GDPPC*)	7.450**	-5.314	0.0142	2.474	-3.882	-0.106
	(3.756)	(12.24)	(0.328)	(3.145)	(3.621)	(0.685)
D_URBAN	-6.312**	-20.61**	-0.446*	5.495**	6.703**	-0.135
	(2.693)	(8.925)	(0.238)	(2.317)	(2.625)	(0.481)
D_OPEN	-0.0108	-0.0535	-0.0013	0.0215**	0.0196**	-0.0021
	(0.0104)	(0.0339)	(0.0009)	(0.0087)	(0.0099)	(0.0018)
TOT	-0.106***	0.0544	-0.00049	0.00530	0.0486**	0.0004
	(0.0238)	(0.0711)	(0.0019)	(0.0193)	(0.0213)	(0.0039)
D_AGE14	-4.603***	-8.425***	-0.0325	0.379	3.794***	-0.0762
	(0.962)	(3.132)	(0.0841)	(0.838)	(0.932)	(0.172)
AGE65	0.501	5.053***	-0.0211	0.234	-2.090***	-0.131
	(0.640)	(1.928)	(0.0528)	(0.493)	(0.580)	(0.104)
*D*_log(*POP*)	-105.2**	669.6***	1.452	-167.0***	-78.42**	3.999
	(41.51)	(130.6)	(3.226)	(34.57)	(37.94)	(6.756)
D_UNEMPOY	0.0967	-0.102	0.00185	-0.0012	-0.0301	-0.0102
	(0.0781)	(0.255)	(0.0069)	(0.0666)	(0.0760)	(0.0139)
TREND	-0.210*	-0.312	0.0013	-0.113	0.266**	0.0281
	(0.123)	(0.351)	(0.0097)	(0.0916)	(0.109)	(0.0192)
RECESSION	0.439	-3.016*	-0.0522	0.0651	0.651	-0.0420
	(0.498)	(1.541)	(0.0418)	(0.398)	(0.462)	(0.0857)
YEAR2003	0.816**	-0.758	0.0740**	-0.895***	1.706***	0.0013
	(0.374)	(1.224)	(0.0333)	(0.328)	(0.366)	(0.0675)
OUTSIDER	0.473**	0.606	0.00481	-0.810***	-0.106	0.0979***
	(0.207)	(0.426)	(0.0079)	(0.173)	(0.164)	(0.0242)
Constant	10.69***	-38.30***	0.207	0.698	3.692	0.188
	(3.764)	(11.81)	(0.317)	(3.149)	(3.508)	(0.652)
Observations	30	30	30	30	30	30
R-squared	0.641	0.630	0.268	0.534	0.708	0.268

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

VARIABLES	(7) Ministry of Interior (*Budget*)	(8) Ministry of Justice (*Budget*)	(9) Ministry of Science& Technology (*D_Budget*)	(10) Ministry of Education (*Budget*)	(11) Ministry of Public Health (*D_Budget*)	(12) Ministry of Industry (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	0.0293	-0.0530	0.159**	-0.116***	-0.317***	-0.425**
	(0.0413)	(0.0566)	(0.0801)	(0.0394)	(0.0528)	(0.176)
*D*_log(*GDPPC*)	11.18	-0.836	-0.128	12.81*	-2.210	0.0786
	(14.28)	(0.786)	(1.647)	(6.936)	(3.128)	(0.274)
D_URBAN	8.725	-2.101***	-1.037	-17.20***	-1.300	0.261
	(10.31)	(0.560)	(1.185)	(5.088)	(2.232)	(0.213)
D_OPEN	0.0489	0.0016	0.0046	0.0254	0.0238***	0.0006
	(0.0390)	(0.0021)	(0.00446)	(0.0191)	(0.00845)	(0.0007)
TOT	-0.0516	-0.0055	-0.0079	-0.0270	-0.0013	-0.0007
	(0.0831)	(0.0046)	(0.0097)	(0.0405)	(0.0183)	(0.0014)
D_AGE14	0.419	-0.539**	-1.087**	-4.467**	-1.394*	-0.0826
	(3.666)	(0.210)	(0.429)	(1.781)	(0.814)	(0.0659)
AGE65	0.0374	0.0001	-0.202	1.997*	-0.518	0.0390
	(2.284)	(0.124)	(0.258)	(1.127)	(0.487)	(0.0428)
*D*_log(*POP*)	-305.2**	12.47	-33.65**	-95.69	-155.5***	-14.08***
	(137.5)	(8.206)	(16.80)	(68.00)	(32.05)	(3.144)
D_UNEMPOY	0.251	0.0187	-0.0027	0.390***	0.0926	-0.0081
	(0.299)	(0.0163)	(0.0343)	(0.146)	(0.0650)	(0.00545)
TREND	-0.289	0.0173	0.0310	-0.389*	-0.0104	-0.0149*
	(0.420)	(0.0223)	(0.0469)	(0.211)	(0.0887)	(0.0082)
RECESSION	0.853	-0.116	-0.144	1.380	0.138	-0.0093
	(1.816)	(0.101)	(0.211)	(0.885)	(0.400)	(0.0363)
YEAR2003	0.214	0.504***	-0.0146	0.828	0.710**	-0.0373
	(1.426)	(0.0787)	(0.166)	(0.709)	(0.315)	(0.0259)
OUTSIDER	-0.638*	-0.0101	-0.297***	0.0013	-0.214	-0.0500***
	(0.359)	(0.0496)	(0.0793)	(0.172)	(0.151)	(0.0171)
Constant	11.53	0.780	1.461	-0.967	4.310	0.151
	(13.77)	(0.781)	(1.623)	(6.669)	(3.054)	(0.244)
Observations	30	30	30	30	30	30
R-squared	0.264	0.910	0.353	0.505	0.655	0.507

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

Table 6. The impact of a political party of a minister

(Dependent variable: Ministry budget share in total government budget)

VARIABLES	(1) Ministry of Defence (*D_Budget*)	(2) Ministry of Finance (*D_Budget*)	(3) Ministry of Foreign Affairs (*D_Budget*)	(4) Ministry of Agriculture and Cooperatives (*D_Budget*)	(5) Ministry of Transport (*D_Budget*)	(6) Ministry of Commerce (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	-0.312**	-0.209**	-0.326***	-0.260**	-0.287***	-0.167
	(0.132)	(0.0875)	(0.0681)	(0.105)	(0.0547)	(0.108)
*D*_log(*GDPPC*)	5.867	-8.260	0.208	0.867	-4.121	0.457
	(3.891)	(12.37)	(0.321)	(3.151)	(3.418)	(0.735)
D_URBAN	-5.849**	-23.33***	-0.327	2.936	4.550*	0.855
	(2.868)	(8.963)	(0.231)	(2.204)	(2.493)	(0.554)
D_OPEN	-0.0048	-0.0631*	-0.0007	0.0146*	0.0113	0.0011
	(0.0106)	(0.0341)	(0.0009)	(0.0084)	(0.0094)	(0.0020)
TOT	-0.0816***	0.0700	0.00002	-0.0130	0.0310	0.0010
	(0.0235)	(0.0719)	(0.00185)	(0.0184)	(0.0201)	(0.00399)
D_AGE14	-4.315***	-8.875***	-0.0250	-1.051	2.792***	0.0258
	(1.043)	(3.175)	(0.0815)	(0.805)	(0.889)	(0.179)
AGE65	0.824	5.035**	-0.0650	-0.581	-1.774***	-0.192*
	(0.633)	(1.956)	(0.0508)	(0.490)	(0.542)	(0.106)
*D*_log(*POP*)	-121.5***	594.7***	0.262	-167.4***	-100.8***	-10.75
	(43.59)	(124.3)	(3.082)	(34.05)	(33.50)	(6.706)
D_UNEMPOY	0.0735	-0.142	0.0066	0.0388	-0.0481	0.00386
	(0.0813)	(0.259)	(0.0067)	(0.0646)	(0.0717)	(0.0147)
TREND	-0.260**	-0.343	0.00957	0.0155	0.202**	0.0309
	(0.121)	(0.357)	(0.0093)	(0.0904)	(0.0995)	(0.0195)
RECESSION	0.0535	-3.064*	-0.0147	-0.188	0.467	0.00876
	(0.504)	(1.576)	(0.0412)	(0.400)	(0.437)	(0.0894)
YEAR2003	0.714*	-0.544	0.0594*	-0.419	1.558***	-0.0503
	(0.403)	(1.244)	(0.0321)	(0.319)	(0.345)	(0.0715)
LEADER	0.0350		0.0419***	-0.346***	-0.541***	0.150***
	(0.216)		(0.0089)	(0.0841)	(0.0778)	(0.0356)
Constant	7.510**	-37.78***	0.226	5.066*	5.192	0.329
	(3.787)	(11.99)	(0.306)	(3.041)	(3.296)	(0.653)
Observations	30	30	30	30	30	30
R-squared	0.598	0.621	0.336	0.566	0.742	0.247

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

VARIABLES	(7) Ministry of Interior (*Budget*)	(8) Ministry of Justice (*Budget*)	(9) Ministry of Science& Technology (*D_Budget*)	(10) Ministry of Education (*Budget*)	(11) Ministry of Public Health (*D_Budget*)	(12) Ministry of Industry (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	0.0653	-0.0670	0.326***	-0.0693**	-0.338***	-0.560***
	(0.0461)	(0.0555)	(0.105)	(0.0333)	(0.0456)	(0.184)
*D*_log(*GDPPC*)	14.81	-0.945	1.243	12.56*	-1.673	0.457*
	(14.25)	(0.782)	(1.742)	(6.931)	(3.218)	(0.255)
D_URBAN	10.01	-2.189***	-0.297	-17.50***	-1.074	0.310
	(10.40)	(0.566)	(1.267)	(5.021)	(2.318)	(0.224)
D_OPEN	0.0655*	0.0016	0.0040	0.0226	0.0236***	0.0004
	(0.0393)	(0.0021)	(0.0047)	(0.0190)	(0.0088)	(0.0007)
TOT	-0.0286	-0.0034	0.00346	-0.0337	0.0058	-0.0009
	(0.0853)	(0.0046)	(0.0103)	(0.0407)	(0.0187)	(0.0016)
D_AGE14	2.928	-0.520**	-0.830*	-5.207***	-1.073	-0.0390
	(3.742)	(0.202)	(0.448)	(1.801)	(0.823)	(0.0700)
AGE65	0.546	0.0425	-0.0393	1.395	-0.353	-0.0167
	(2.269)	(0.124)	(0.273)	(1.113)	(0.503)	(0.0484)
*D*_log(*POP*)	-341.5**	13.54*	-10.82	-73.14	-139.6***	-11.29***
	(139.6)	(7.523)	(17.21)	(67.67)	(31.39)	(3.349)
D_UNEMPOY	0.327	0.0194	0.0114	0.385***	0.100	-0.0022
	(0.298)	(0.0163)	(0.0363)	(0.145)	(0.0672)	(0.0053)
TREND	-0.377	0.0112	0.0283	-0.256	-0.0281	-0.0028
	(0.417)	(0.0226)	(0.0500)	(0.207)	(0.0923)	(0.0077)
RECESSION	1.137	-0.113	0.0077	1.242	0.272	0.0447
	(1.810)	(0.0996)	(0.221)	(0.885)	(0.410)	(0.0335)
YEAR2003	-0.489	0.495***	-0.0719	0.762	0.670**	-0.0471
	(1.451)	(0.0782)	(0.175)	(0.700)	(0.324)	(0.0308)
LEADER	0.970**	0.0428**	-0.182***	0.350**	-0.0799**	0.00194
	(0.450)	(0.0203)	(0.0652)	(0.137)	(0.0391)	(0.0169)
Constant	8.116	0.409	-1.001	0.228	2.829	0.254
	(13.95)	(0.764)	(1.719)	(6.680)	(3.089)	(0.329)
Observations	30	30	30	30	30	30
R-squared	0.273	0.909	0.247	0.503	0.636	0.505

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

Table 7. The impact of non-elected government administrations

(Dependent variable: Ministry budget share in total government budget)

VARIABLES	(1) Ministry of Defence (*D_Budget*)	(2) Ministry of Finance (*D_Budget*)	(3) Ministry of Foreign Affairs (*D_Budget*)	(4) Ministry of Agriculture and Cooperatives (*D_Budget*)	(5) Ministry of Transport (*D_Budget*)	(6) Ministry of Commerce (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	-0.400***	-0.202**	-0.459***	-0.386***	-0.288***	-0.224**
	(0.110)	(0.0912)	(0.0617)	(0.137)	(0.0688)	(0.0876)
*D*_log(*GDPPC*)	8.443**	-6.419	0.194	2.715	-5.563	-0.281
	(3.600)	(12.63)	(0.322)	(3.254)	(3.626)	(0.635)
D_URBAN	-4.781*	-22.72**	-0.405*	2.121	6.243**	-0.0502
	(2.535)	(8.938)	(0.228)	(2.280)	(2.553)	(0.449)
D_OPEN	-0.0054	-0.0637*	-0.0012	0.0168*	0.0198**	-0.0023
	(0.0095)	(0.0338)	(0.0009)	(0.0087)	(0.0096)	(0.0017)
TOT	-0.0684***	0.0838	0.0009	-0.0357*	0.0392*	0.0017
	(0.0217)	(0.0749)	(0.0019)	(0.0202)	(0.0214)	(0.0038)
D_AGE14	-3.455***	-8.079**	0.0432	-1.533*	3.148***	0.0551
	(0.968)	(3.412)	(0.0867)	(0.891)	(0.972)	(0.171)
AGE65	1.304**	5.296***	0.0160	-0.351	-2.494***	-0.0576
	(0.583)	(1.988)	(0.0504)	(0.505)	(0.577)	(0.0992)
*D*_log(*POP*)	-79.19*	634.3***	5.071	-205.0***	-113.0***	6.965
	(40.51)	(140.4)	(3.511)	(40.98)	(40.21)	(6.923)
D_UNEMPOY	0.114	-0.113	0.00429	0.0309	-0.0514	-0.0056
	(0.0742)	(0.261)	(0.0067)	(0.0678)	(0.0748)	(0.0131)
TREND	-0.321***	-0.364	-0.0031	-0.0571	0.320***	0.0134
	(0.108)	(0.355)	(0.0091)	(0.0926)	(0.103)	(0.0178)
RECESSION	0.472	-2.763*	-0.0247	-0.0476	0.397	-0.0136
	(0.469)	(1.640)	(0.0418)	(0.420)	(0.469)	(0.0824)
YEAR2003	0.458	-0.718	0.0575*	-0.564*	1.895***	-0.0043
	(0.359)	(1.267)	(0.0323)	(0.339)	(0.367)	(0.0636)
Non-Elected Government	0.793***	0.609	0.0601**	-0.571**	-0.580**	0.164***
	(0.288)	(1.016)	(0.0260)	(0.258)	(0.294)	(0.0507)
Constant	3.970	-40.67***	-0.0956	7.565**	6.325*	-0.0928
	(3.637)	(12.84)	(0.326)	(3.414)	(3.681)	(0.643)
Observations	30	30	30	30	30	30
R-squared	0.681	0.626	0.351	0.517	0.732	0.373

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

VARIABLES	(7) Ministry of Interior (*Budget*)	(8) Ministry of Justice (*Budget*)	(9) Ministry of Science& Technology (*D_Budget*)	(10) Ministry of Education (*Budget*)	(11) Ministry of Public Health (*D_Budget*)	(12) Ministry of Industry (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	0.0304	-0.0592	0.239***	-0.0795**	-0.340***	-0.472**
	(0.0437)	(0.0498)	(0.0764)	(0.0376)	(0.0447)	(0.188)
*D*_log(*GDPPC*)	7.382	-0.990	-0.107	12.37*	-3.136	0.415
	(14.63)	(0.795)	(1.680)	(7.157)	(3.187)	(0.262)
D_URBAN	5.909	-2.158***	-1.157	-17.09***	-1.560	0.246
	(10.32)	(0.562)	(1.191)	(5.058)	(2.243)	(0.223)
D_OPEN	0.0514	0.0016	0.0047	0.0240	0.0241***	0.0004
	(0.0388)	(0.0021)	(0.00446)	(0.0191)	(0.0084)	(0.0007)
TOT	-0.0991	-0.0067	-0.0074	-0.0263	-0.0068	-0.0011
	(0.0865)	(0.0047)	(0.00997)	(0.0425)	(0.0188)	(0.0015)
D_AGE14	-0.934	-0.606***	-1.092**	-4.607**	-1.743**	-0.0552
	(3.916)	(0.215)	(0.451)	(1.923)	(0.854)	(0.0724)
AGE65	-1.371	-0.0213	-0.190	1.683	-0.635	-0.0199
	(2.309)	(0.125)	(0.263)	(1.152)	(0.496)	(0.0405)
*D*_log(*POP*)	-400.6**	9.022	-32.29*	-92.89	-176.1***	-11.10***
	(158.8)	(8.660)	(18.39)	(78.60)	(34.98)	(3.236)
D_UNEMPOY	0.215	0.0163	-0.00296	0.382***	0.0796	-0.0029
	(0.302)	(0.0165)	(0.0348)	(0.148)	(0.0657)	(0.0054)
TREND	-0.110	0.0190	0.0300	-0.325	-0.0016	-0.0021
	(0.416)	(0.0223)	(0.0471)	(0.210)	(0.0891)	(0.0072)
RECESSION	0.229	-0.141	-0.154	1.292	-0.0014	0.0360
	(1.893)	(0.103)	(0.218)	(0.930)	(0.413)	(0.0354)
YEAR2003	0.719	0.519***	0.0099	0.925	0.769**	-0.0386
	(1.461)	(0.0796)	(0.169)	(0.720)	(0.320)	(0.0276)
Non-Elected Government	-1.631	-0.0594	-0.326**	-0.120	-0.471*	-0.0070
	(1.164)	(0.0635)	(0.136)	(0.572)	(0.254)	(0.0206)
Constant	22.84	1.025	1.349	-0.423	5.567*	0.279
	(14.76)	(0.805)	(1.707)	(7.248)	(3.217)	(0.267)
Observations	30	30	30	30	30	30
R-squared	0.282	0.912	0.353	0.510	0.666	0.511

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

Table 8. The impact of military background of a prime minister

(Dependent variable: Ministry budget share in total government budget)

VARIABLES	(1) Ministry of Defence (*D_Budget*)	(2) Ministry of Finance (*D_Budget*)	(3) Ministry of Foreign Affairs (*D_Budget*)	(4) Ministry of Agriculture and Cooperatives (*D_Budget*)	(5) Ministry of Transport (*D_Budget*)	(6) Ministry of Commerce (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	-0.502***	-0.280***	-0.267***	-0.348***	-0.188***	-0.154
	(0.101)	(0.0734)	(0.0627)	(0.134)	(0.0646)	(0.118)
*D*_log(*GDPPC*)	8.122**	-11.01	0.150	4.123	-4.411	-0.856
	(3.530)	(12.26)	(0.305)	(3.436)	(3.690)	(0.723)
D_URBAN	-7.390***	-19.79**	-0.556**	2.982	7.792***	-0.174
	(2.586)	(9.013)	(0.224)	(2.496)	(2.704)	(0.531)
D_OPEN	-0.0126	-0.0486	-0.0018**	0.0170*	0.0227**	-0.0019
	(0.0098)	(0.0343)	(0.0008)	(0.0095)	(0.0103)	(0.0020)
TOT	-0.0545**	0.0101	0.0024	-0.0253	0.0328	-0.00349
	(0.0244)	(0.0832)	(0.0021)	(0.0236)	(0.0251)	(0.0049)
D_AGE14	-2.421**	-12.51***	0.129	-0.994	2.875**	-0.247
	(1.178)	(4.077)	(0.101)	(1.134)	(1.225)	(0.240)
AGE65	1.988***	3.790*	0.0528	-0.198	-2.504***	-0.169
	(0.644)	(2.206)	(0.0546)	(0.612)	(0.667)	(0.129)
*D*_log(*POP*)	-118.0***	577.3***	3.552	-162.6***	-78.97**	-5.282
	(36.81)	(124.6)	(3.024)	(38.56)	(36.74)	(7.174)
D_UNEMPOY	0.0155	-0.0384	-0.00265	0.0624	0.0002	-0.0114
	(0.0755)	(0.263)	(0.0065)	(0.0735)	(0.0790)	(0.0155)
TREND	-0.426***	-0.211	-0.0064	-0.0620	0.319***	0.0236
	(0.111)	(0.367)	(0.0091)	(0.104)	(0.111)	(0.0216)
RECESSION	0.286	-3.320**	-0.0374	0.206	0.608	-0.102
	(0.447)	(1.548)	(0.0385)	(0.431)	(0.466)	(0.0912)
YEAR2003	0.245	0.0938	0.0321	-0.655*	1.857***	0.0650
	(0.382)	(1.331)	(0.0332)	(0.387)	(0.402)	(0.0784)
MILITARY PM	0.875***	-1.401	0.0656**	-0.0992	-0.400	-0.0341
	(0.308)	(1.071)	(0.0267)	(0.298)	(0.322)	(0.0632)
Constant	1.650	-28.54**	-0.332	5.213	6.259	0.973
	(4.073)	(14.17)	(0.352)	(3.972)	(4.249)	(0.832)
Observations	30	30	30	30	30	30
R-squared	0.680	0.636	0.401	0.454	0.713	0.178

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

VARIABLES	(7) Ministry of Interior (*Budget*)	(8) Ministry of Justice (*Budget*)	(9) Ministry of Science& Technology (*D_Budget*)	(10) Ministry of Education (*Budget*)	(11) Ministry of Public Health (*D_Budget*)	(12) Ministry of Industry (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	0.0366	-0.0174	0.0789	-0.0793***	-0.244***	-0.547***
	(0.0405)	(0.0528)	(0.0751)	(0.0252)	(0.0418)	(0.191)
*D*_log(*GDPPC*)	10.13	-1.076	0.704	15.75**	-1.681	0.492*
	(14.69)	(0.743)	(1.787)	(6.428)	(3.278)	(0.254)
D_URBAN	10.00	-1.791***	-0.659	-19.92***	-0.581	0.270
	(10.76)	(0.546)	(1.311)	(4.719)	(2.399)	(0.229)
D_OPEN	0.0602	0.0026	0.0044	0.0126	0.0254***	0.0002
	(0.0408)	(0.0021)	(0.00496)	(0.0179)	(0.0091)	(0.0007)
TOT	-0.111	-0.0106**	-0.0017	0.0353	-0.0087	-0.0003
	(0.0996)	(0.0051)	(0.0122)	(0.0437)	(0.0222)	(0.0017)
D_AGE14	-1.696	-0.835***	-0.698	-0.969	-1.709	0.00375
	(4.865)	(0.249)	(0.594)	(2.136)	(1.087)	(0.0840)
AGE65	-1.756	-0.142	-0.0729	3.213***	-0.706	-0.00165
	(2.645)	(0.133)	(0.321)	(1.167)	(0.586)	(0.0460)
*D*_log(*POP*)	-323.2**	8.896	-15.81	-38.85	-140.7***	-10.78***
	(144.9)	(7.353)	(17.97)	(64.01)	(32.66)	(3.130)
D_UNEMPOY	0.375	0.0283*	0.0097	0.293**	0.122*	-0.0034
	(0.314)	(0.0159)	(0.0382)	(0.138)	(0.0701)	(0.0054)
TREND	-0.0551	0.0324	0.0200	-0.487**	0.0142	-0.0043
	(0.443)	(0.0222)	(0.0534)	(0.197)	(0.0978)	(0.00748)
RECESSION	0.838	-0.131	0.0006	1.607**	0.235	0.0470
	(1.850)	(0.0940)	(0.225)	(0.812)	(0.413)	(0.0333)
YEAR2003	0.810	0.571***	-0.128	0.161	0.840**	-0.0534*
	(1.588)	(0.0806)	(0.194)	(0.699)	(0.357)	(0.0283)
MILITARY PM	-1.143	-0.132**	0.0169	1.405**	-0.263	0.0169
	(1.279)	(0.0650)	(0.156)	(0.562)	(0.286)	(0.0221)
Constant	23.35	1.727**	0.120	-11.62	5.301	0.145
	(16.86)	(0.856)	(2.074)	(7.402)	(3.768)	(0.305)
Observations	30	30	30	30	30	30
R-squared	0.256	0.919	0.252	0.594	0.635	0.515

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.

***, **, * indicate significance levels at 1%, 5%, and 10%.

Table 9. The impact of all political factors

(Dependent variable: Ministry budget share in total government budget)

VARIABLES	(1) Ministry of Defence (*D_Budget*)	(2) Ministry of Finance (*D_Budget*)	(3) Ministry of Foreign Affairs (*D_Budget*)	(4) Ministry of Agriculture and Cooperatives (*D_Budget*)	(5) Ministry of Transport (*D_Budget*)	(6) Ministry of Commerce (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	-0.431***	-0.197*	-0.275***	-0.0541	-0.357***	-0.206**
	(0.109)	(0.110)	(0.0827)	(0.0742)	(0.0499)	(0.102)
*D*_log(*GDPPC*)	9.509***	-9.046	0.449	-2.749	-7.790***	-0.840
	(3.284)	(12.11)	(0.286)	(2.779)	(2.752)	(0.700)
D_URBAN	-6.725***	-18.67**	-0.447**	6.129***	6.174***	-0.208
	(2.469)	(8.996)	(0.207)	(2.069)	(2.013)	(0.521)
D_OPEN	-0.0119	-0.0509	-0.0012	0.0208***	0.0099	-0.0028
	(0.0092)	(0.0338)	(0.0008)	(0.00747)	(0.0075)	(0.0019)
TOT	-0.0497**	0.0269	0.0036*	0.0028	-0.0245	-0.0042
	(0.0245)	(0.0826)	(0.0019)	(0.0184)	(0.0195)	(0.0041)
D_AGE14	-2.083*	-11.97***	0.178*	-0.781	-1.335	-0.326
	(1.116)	(3.959)	(0.0920)	(0.885)	(1.048)	(0.209)
AGE65	1.845***	3.762*	-0.0019	-0.742	-4.263***	-0.159
	(0.652)	(2.145)	(0.0607)	(0.481)	(0.603)	(0.104)
*D*_log(*POP*)	-66.26*	610.8***	2.641	-179.6***	-122.3***	13.50*
	(39.94)	(136.5)	(3.146)	(31.35)	(30.01)	(7.802)
D_UNEMPOY	0.0588	0.0390	0.0030	-0.0091	0.0245	0.0003
	(0.0716)	(0.264)	(0.0063)	(0.0588)	(0.0600)	(0.0130)
TREND	-0.379***	-0.203	0.0047	0.0440	0.630***	0.0257
	(0.114)	(0.358)	(0.0105)	(0.0810)	(0.106)	(0.0177)
RECESSION	0.568	-2.760*	0.0135	-0.539	-0.0966	-0.0459
	(0.436)	(1.562)	(0.0375)	(0.353)	(0.359)	(0.0780)
YEAR2003	0.242	0.0637	0.0124	-0.297	2.123***	0.0948
	(0.361)	(1.290)	(0.0309)	(0.296)	(0.297)	(0.0721)
OUTSIDER	0.0826	-0.197	0.00135	-0.762***	1.651***	0.0371
	(0.199)	(0.520)	(0.0116)	(0.135)	(0.307)	(0.0314)
LEADER	0.0620		0.0571***	-0.418***	-1.106***	-0.0829
	(0.174)		(0.0187)	(0.0791)	(0.130)	(0.0544)
Non-Elected	0.551*	1.333	-0.0023	-0.0784	-1.293***	0.234***
Government	(0.302)	(1.113)	(0.0313)	(0.237)	(0.333)	(0.0683)
Military PM	0.660**	-1.858*	0.0815***	-0.299	-1.080***	-0.160***
	(0.297)	(1.104)	(0.0276)	(0.250)	(0.274)	(0.0603)
Constant	0.543	-30.58**	-0.364	3.743	16.44***	0.779
	(4.135)	(13.95)	(0.334)	(3.109)	(3.400)	(0.678)
Observations	30	30	30	30	30	30
R-squared	0.734	0.652	0.513	0.695	0.835	0.484

VARIABLES	(7) Ministry of Interior (*Budget*)	(8) Ministry of Justice (*Budget*)	(9) Ministry of Science& Technology (*D_Budget*)	(10) Ministry of Education (*Budget*)	(11) Ministry of Public Health (*D_Budget*)	(12) Ministry of Industry (*D_Budget*)
D_Budget(t-1) (or *Budget(t-1)*)	0.106**	-0.0381	0.272*	-0.0762***	-0.284***	-0.519***
	(0.0416)	(0.0563)	(0.160)	(0.0279)	(0.0501)	(0.152)
*D*_log(*GDPPC*)	8.419	-1.350*	0.0837	13.30**	-2.983	0.196
	(12.93)	(0.754)	(1.692)	(6.460)	(3.204)	(0.269)
D_URBAN	10.79	-1.959***	-1.714	-21.00***	-1.406	0.308
	(9.742)	(0.554)	(1.321)	(4.791)	(2.352)	(0.220)
D_OPEN	0.104***	0.0027	0.00325	0.0115	0.0245***	0.00048
	(0.0360)	(0.0021)	(0.0045)	(0.0176)	(0.0087)	(0.0007)
TOT	-0.0616	-0.0088*	-0.0010	0.0145	-0.0122	0.0006
	(0.0896)	(0.0051)	(0.0116)	(0.0442)	(0.0215)	(0.0017)
D_AGE14	2.447	-0.864***	-0.704	-2.356	-1.940*	-0.0011
	(4.301)	(0.248)	(0.552)	(2.260)	(1.050)	(0.0934)
AGE65	-0.283	-0.106	-0.0179	2.636**	-0.761	0.0718
	(2.375)	(0.133)	(0.297)	(1.228)	(0.566)	(0.0535)
*D*_log(*POP*)	-718.9***	7.188	-29.83	-87.97	-173.5***	-12.72***
	(151.5)	(8.136)	(18.62)	(72.29)	(35.42)	(3.317)
D_UNEMPOY	0.282	0.0267	-0.0186	0.250*	0.0877	-0.0081
	(0.283)	(0.0164)	(0.0366)	(0.141)	(0.0700)	(0.0056)
TREND	-0.412	0.0260	0.0102	-0.402*	0.0142	-0.0189**
	(0.398)	(0.0221)	(0.0493)	(0.207)	(0.0940)	(0.0092)
RECESSION	-0.389	-0.150	-0.156	1.125	-0.0006	0.0091
	(1.669)	(0.0968)	(0.215)	(0.846)	(0.415)	(0.0348)
YEAR2003	-0.701	0.571***	-0.0562	0.195	0.845**	-0.0609**
	(1.408)	(0.0799)	(0.179)	(0.687)	(0.344)	(0.0288)
OUTSIDER	0.964*			0.100		-0.0521**
	(0.492)			(0.209)		(0.0216)
LEADER	3.155***	0.0550**	0.0139	0.243*	0.0298	0.0023
	(0.589)	(0.0215)	(0.105)	(0.143)	(0.0515)	(0.0175)
Non-Elected	-3.849***	-0.0321	-0.403**	-0.851	-0.466*	0.0230
Government	(1.203)	(0.0634)	(0.162)	(0.600)	(0.273)	(0.0264)
Military PM	-0.301	-0.130*	0.185	1.520***	-0.0918	0.0186
	(1.177)	(0.0684)	(0.157)	(0.589)	(0.292)	(0.0240)
Constant	19.54	1.457*	0.262	-7.502	6.440*	-0.0997
	(15.41)	(0.865)	(2.026)	(7.586)	(3.692)	(0.327)
Observations	30	30	30	30	30	30
R-squared	0.425	0.921	0.380	0.603	0.666	0.542

Note: Figures in parentheses are standard errors. *D_* denotes the first difference.
***, **, * indicate significance levels at 1%, 5%, and 10%.

Table 10. The effects of political variables on each ministry's budget share: robustness checks

Ministry\Political variable	*OUTSIDER*$_i$	*LEADER*$_i$	*Non-Elected Government*	*MILITARY PM*
Ministry of Defence	X	x	x	+
Ministry of Finance	x		x	x
Ministry of Foreign Affairs	X	+	x	+
Ministry of Agriculture and Cooperatives	-	-	x	x
Ministry of Transport	X	-	-	x
Ministry of Commerce	X	x	+	x
Ministry of Interior	X	+	x	x
Ministry of Justice	X	+	x	x
Ministry of Science and Technology	X	x	-	x
Ministry of Education	X	x	x	+
Ministry of Public Health	X	x	x	x
Ministry of Industry	-	x	x	x

Note: x = The estimated coefficient plus (minus) two standard deviations does not remain robustly significant with the same sign.

\+ = The estimated coefficient plus (minus) two standard deviations remains robustly significant with the same positive sign.

\- = The estimated coefficient plus (minus) two standard deviations remains robustly significant with the same negative sign.

CHAPTER FIVE

CONCLUDING REMARKS

This study examined the basic determinants of the Thai government budget that was allocated to 12 ministries during the period of 1980 to 2011. Several findings within this investigation are somewhat surprising, as they are not in line with expectations. These surprising results include: (1) the Ministry of Education receiving fewer budget shares of the government budget expenditures as the ratio of the young-aged population to the total population increases; and (2) the Ministry of Public Health's budget share decreasing with an increase in the Thai population. Without any clear explanations, they are perhaps indicative of the problem of government budget insufficiency and/or the problem of budget misallocation in Thailand.

The political backgrounds of the minister and prime minister were also investigated in relation to government budget allocation. They were found to have a very important implication at the ministerial level. In terms of the budget amount a ministry receives, having a minister-in-charge who is a non-parliamentarian presents some disadvantages to the ministry. For two out of the twelve ministries investigated, an outsider minister means less government budget bargaining power, resulting in a lower budget share allocation to the ministry. The political party of a minister is another relevant factor in the government budget setting process. Thai government administrations are found to use their government budgetary funds to reward their loyalists (or those ministers who are representative of the leader party in a coalition government), as well as to tactically uses its budget to recruit his/her partner parties into

the current cabinet and/or form a coalition in the next election. It also indicates a shift of bargaining power away from the leader party in a coalition government.

Elected government administrations led by a prime minister who is a former military officer illustrate the devotion of more budgetary funds being provided to military expenditures. This finding comes as no surprise, given that a prime minister may reveal his military motive by prioritizing military spending. Non-elected government administrations, backed by the ruling juntas, are found to increase the Ministry of Commerce's budget share of the government budget. This is perhaps because a part of this additional budget may be used to finance spending on populist programs to gain support from the Thai citizens. However, more work is required to confirm this hypothesis.

In summary, this study serves as an initial attempt at analyzing the impact of the political backgrounds of governments on budget allocation at the line-ministry level. The empirical results revealed the strong political influence in the formulation of government budget. It is an indicative that Thai government administrations allocate budgetary funds following their own political interests, which could deviate from the real need of the Thai people, the goal of maximizing social welfare, and the efficiency of resource allocation. Hence, these findings may suggest the need of an improving budgetary system or a reformed fiscal framework to cope with these strong political influences leading to smaller distortions in the allocation of government funds.

For instance, budgeting system that separates government spending into the mandatory and discretionary categories and well-designed fiscal rules (especially, expenditure rules) can reduce political influence on the budget setting. More transparency

in the budgetary process can also help and provide effective restraints on executive discretion. In addition, the establishment of independent fiscal institution in Thailand (such as, the congressional budget office in the United States) can enhance parliamentary members' capability and public awareness in effective budget monitoring, as it encourages greater fiscal transparency and stimulates a public debate on the government budget formulation process

As can be seen, many findings in this study are new and differ from prior expectations. Some of the findings need further in-depth investigations to provide more insight and a more in-depth understanding. Hence, there remains much work on this subject to be done in the future.

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