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DEFENSE BUDGET FLEXIBILITY AND CONTROL: HOW THE U.S. AND BRAZILIAN SYSTEMS STRIKE A BALANCE BETWEEN THE TWO

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THESIS

**DEFENSE BUDGET FLEXIBILITY AND CONTROL:
HOW THE U.S. AND BRAZILIAN SYSTEMS
STRIKE A BALANCE BETWEEN THE TWO**

by

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December 2022

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13. ABSTRACT (maximum 200 words)

A recurrent challenge affecting defense budgeting systems across federalist nations is balancing budget flexibility and legislative control of military appropriations execution. There has been considerable debate over the unique nature of defense expenditure and how it reflects fiscal considerations. While budget revisions are necessary to maintain flexibility due to the broad scope of the defense budget and the handling of unforeseen events, adherence to financial goals and accountability for what was allowed by the legislative impose control over military expenditures, restricting the military's versatility in carrying out its appropriations. This project offers why balancing flexibility and control is crucial for both parties to achieve their objectives during the budget execution stage. Then, it determines the attributes that indicate an effective control system and adequate budget flexibility. Finally, it contrasts flexibility tools and control activities between the United States and Brazil. This project analyzes constitutional or other legal authority disparities between the legislature, chief executive, military, treasury, and other actors involved in budgeting systems and defense budget implementation to accomplish these goals. The Congressional Budget Office (CBO), Congressional Research Service (CRS), Office of Management and Budget (OMB), the National Treasury of Brazil (STN), the Federal Budget Secretary (SOF), and other reports are reviewed.

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ABSTRACT

A recurrent challenge affecting defense budgeting systems across federalist nations is balancing budget flexibility and legislative control of military appropriations execution. There has been considerable debate over the unique nature of defense expenditure and how it reflects fiscal considerations. While budget revisions are necessary to maintain flexibility due to the broad scope of the defense budget and the handling of unforeseen events, adherence to financial goals and accountability for what was allowed by the legislative impose control over military expenditures, restricting the military's versatility in carrying out its appropriations. This project offers why balancing flexibility and control is crucial for both parties to achieve their objectives during the budget execution stage. Then, it determines the attributes that indicate an effective control system and adequate budget flexibility. Finally, it contrasts flexibility tools and control activities between the United States and Brazil. This project analyzes constitutional or other legal authority disparities between the legislature, chief executive, military, treasury, and other actors involved in budgeting systems and defense budget implementation to accomplish these goals. The Congressional Budget Office (CBO), Congressional Research Service (CRS), Office of Management and Budget (OMB), the National Treasury of Brazil (STN), the Federal Budget Secretary (SOF), and other reports are reviewed.

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LIST OF ACRONYMS AND ABBREVIATIONS

BBEDCA	balanced budget and emergency deficit control act
BCA	budget control act
CA	créditos adicionais (additional credits)
CBO	Congressional Budget Office
CBP	Customs and Border Protection
CMO	Comissão Mista de Planos, Orçamentos Públicos e Fiscalização (Commission of Plans, Public Budgets, and Inspection)
CMR	civil-military relations
COCOMs	combatant commanders
CRS	Congressional Research Service
DAS	Defense Acquisition System
DAU	defense acquisition university
DOD	Department of Defense
EP	emendas parlamentares (parliamentary amendments)
GAO	U.S. Government Accountability Office
GWOT	global war on terrorism
ICA	impoundment control act
JCIDS	Joint Capabilities Integration and Development System
JEO	Junta de Execução Orçamentária (Budget Execution Board)
LDO	lei de diretrizes orçamentárias (budget guidelines law)
LOA	lei orçamentária anual (annual budget law)
MILCON	military constructions
MILPERS	military personnel
MP	medida provisória (provisional measure)
O&M	Operation & Maintenance
OCO	overseas contingency operations
OECD	Organization for Economic Co-operation and Development

OMB	Office of Management and Budget
PPA	plano plurianual (multiyear plan)
PPBE	planning, programming, budgeting, and execution
PPBS	Program Budget System
RDT&E	Research, Development, Test, and Evaluation
RPNP	restos a pagar não-processados (non-liquidated remains payable)
RPP	restos a pagar liquidado (liquidated remains payable)
SOF	Secretaria de Orçamento Federal (Federal Budget Secretary)
STN	National Treasury of Brazil
TCU	Tribunal de Contas da União (Federal Court of Auditors)

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I. INTRODUCTION

The age-old problem of finding a middle ground between the competing demands of flexibility and control over budget execution is the driving force behind this study. The control procedure is essentially carried out through two separate but interdependent channels: legislative control of the executive branch and control down the military hierarchy, since the legislature delegate some authority to military leaders, who are utterly responsible for it. Both channels are interdependent but distinct from one another. Legislative and hierarchical control are the terms used to describe these channels. In other words, Congress uses its legislative authority to safeguard and promote financial restraint and balanced budgets. On the other hand, military budgeting systems require adaptability, especially in the face of unforeseen circumstances. However, a similar balance is necessary inside the military hierarchy to be fiscally responsible, adhere to compliance and accountability, and execute mission objectives effectively throughout budget execution.

This study identifies the characteristics of efficient control systems and budget flexibilities by analyzing the budget and control theories. In addition, it will examine the defense budget systems and mechanisms used by the respective legislative branches to exercise control, as well as analyze the tools and procedures used by the executive branches to provide flexibility. In addition, it will investigate the tools and techniques used by the executive branches to offer flexibility. The systems of the United States and Brazil are assessed to determine how they cope with control and flexibility using their various tools and approaches and the lessons that may be learned from one another. After all, this research will concentrate on the procedures employed on defense budgets to offset adaptability, flexibility, and the amount of control to fulfill their missions.

The U.S. Government Accountability Office (GAO) developed a framework for creating and sustaining robust internal control. The GAO's Standards for Internal Control in the Federal Government (2014) are the result of a collaborative effort between the private sector and the United States government to develop internal control structures that ensure an organization's goals are met with a level of confidence commensurate with its ability to do so, and that it complies with all applicable laws. Military budget systems must be adaptable to respond to natural disasters, engagements in combat, and other events of a similar nature. Frequently, these unanticipated occurrences force the government to accept that the military requires more funding above and beyond the budget established by the legislative branch for the fiscal year. Therefore, the military must be flexible in dealing with various unforeseen circumstances.

This research analyzes process descriptions, discuss the differences in constitutional or other legal authority among significant participants, and identifies the tools that are available to the legislature, the chief executive, and the program manager to delve deeper into the issue of finding a balance between flexibility and control over defense spending. In addition, there will be a section that analyzes whether the systems used in the United States or the Brazilian strike the optimal balance of control and flexibility. Simply put, this report describes the qualities of an efficient control system and its budgetary flexibility; then analyzes how they differ in Brazil and the United States and the lessons one could learn from the other.

A. BACKGROUND

It is reasonable to assert that it is not sufficient for the program manager to comply with the law and to have fulfilled any single appropriation by complying with standards if the programs and operations in question have not achieved the intended results for them to succeed. As a result, the opposite is accurate to a reasonable degree. It is not sufficient to have completed all the predefined goals or even more while at the same time failing to comply with all the legal or other regulatory criteria. It is recommended that an internal control system be implemented to minimize the risk of incurring any of these faults and maximize the potential outcomes.

A companion to the GAO's Standards for Internal Control, the Office of Management and Budget's (OMB) Circular A-123 (2004) stipulates duties for conducting reviews and submitting reports about controls inside the federal government. An agency's goals should be met with adequate confidence, and internal control systems are supposed to ensure this happens. According to the GAO's Standards of Internal Control in the

Federal Government, these goals include the performance of systems, the integrity of reporting for internal and external use, and compliance with laws and regulations.

Meanwhile, from a control point of view, it is essential to take note of two crucial oversight interactions that impact the execution of the defense budget. The first manifestation of this phenomenon occurs in the interaction between the legislative and executive branches. In this context, the military is expected to carry out whatever the legislative branch has approved, required, or banned. Ultimately, Congress determines whether the entire military appropriations can accomplish what they projected and were permitted to do by evaluating the budget's capability. The second is hierarchical control within the military's chain of command. Additional constraints are imposed from higher levels down by military officials, which, when added together, are comparable to those set by the legislative branch. This is because military leaders are responsible for ensuring that the organization follows congressional direction and exercising control over the organization in areas where Congress has delegated authority to the military and even in areas where Congress is unconcerned. In other words, military leaders responsible for complying with congressional direction will often impose stricter controls to reduce the risk of non-compliance.

The essence of defense management, which is to enhance national security and guarantee that all population members have equal access to defense, necessitates using a military budgeting system that is significantly distinct from other types and requires a high degree of flexibility. It is against the law for government agencies to spend or incur debt over the amount authorized by Congress. Furthermore, these agencies are only permitted to use funds for the purposes outlined in the relevant legislation. This means it is also against the law for these agencies to spend or incur debt before appropriation. Nevertheless, while carrying out the budget, the government typically finds that it needs more funds than Congress has allocated for the forthcoming fiscal year. For instance, further appropriation may be required in natural disasters or military conflicts. In addition, it is essential to remember that the budget was drafted many months, and in some circumstances even up to two years, before the obligation of the authorized funds and that priorities may have evolved during that time. Therefore, the budget for the military needs to have a great deal of flexibility so that it can be used to mitigate the effects of natural disasters, wage war, and fulfill other unanticipated needs, as well as the highly dynamic need for military services. Consequently, Congress uses the coercive policy authority to exercise control and examine the degree to which it is appropriate, required, or crucial that this flexibility exists. This allows it to attempt to accommodate resource needs while simultaneously promoting fiscal responsibility and balanced budgets.

B. METHODOLOGY

Process descriptions, regulatory requirements, budgeting systems, and legislation are the principal sources for the bulk of the data. Regarding U.S. procedures, the reports from the Congressional Budget Office (CBO) and the Congressional Research Service (CRS), as well as the circulars from the OMB, should be reviewed; whereas, for Brazilian procedures, most descriptions should come from the National Treasury of Brazil (STN), which oversees financial administration and federal accounting, and the Office of the Federal Budget. Military directives and the writings of academic experts are accounted for in both the United States and Brazil systems. This study contrasts Brazil with the United States of America utilizing theory and practice, as well as descriptions and think-tank materials. This comparison is intended to identify patterns, such as differences or focal events, and potential causal relationships between those to be detected. The data will be acquired from official government reports and reviewed using qualitative methods.

C. RESEARCH QUESTIONS

Legislative and executive critics appear to hold divergent opinions regarding the degree of budget execution flexibility available to agencies. While some would call for more flexibility to achieve the budgeted objectives, others would want tighter control to retain legislative intent and protect tax dollars. How are military budgets in the United States and Brazil able to find a balance between flexibility and control, and what strategies are used to make this possible? From this dilemma derives the primary research question. Listed below are secondary research questions supporting this study.

1. How is the primary budget established or made available?
2. What are the exceptions to the provided basic budget?
3. What tools and mechanisms are included in a budget to ensure it is adaptable to changing circumstances?
4. What kinds of control mechanisms are there?
5. Why is it vital to find a middle ground between budget flexibility and control?
6. What are the characteristics of a control system that works effectively?
7. What are the characteristics of flexible budgeting that work effectively?
8. How do the United States and Brazil handle control and flexibility with their tools and procedures, and are there any lessons one can learn from the other?

D. SCOPE AND LIMITATIONS

This research conducts a literature review on budget theory and control sources, with a particular emphasis on budget execution. Yet, it should be acknowledged that part of budgeting planning is requesting flexibility and drafting somewhat vague proposals to be responsive to changing circumstances. However, rather than focusing on crafting such proposals, this study examines their implementation. Thus, the research focuses on the more administrative aspects of using the funding to implement the programs that have been approved. It is accomplished through an analysis of process descriptions, regulatory requirements, budgeting systems, and legislation, such as reports from the CBO and the CRS, as well as circulars from the OMB and the STN from Brazil as well as military directives and the writings of academic experts.

The method of budget formulation, which determines the overall amount to be spent and how it is distributed, and the policies affecting deficits, are limitations of this research. When planning a budget, one might also consider questions of flexibility and control; even though they should have different appearances, there is room for research and analysis on balancing the political matters of deciding which programs to fund at what level.

E. ORGANIZATION OF STUDY

Chapter II provides a literature review on budget theory, emphasizing budget execution, particularly defense budget execution concerns, and flexibility tools. Chapter II examines the control theory and the primary U.S. and Brazilian control sources and provides a comparison. Finally, an answer is provided for the fifth secondary question, which argues why it is vital to find a middle ground between budget flexibility and control.

Chapter III discusses the processes and mechanisms that provide a high-level understanding of how the primary budget is enacted in both the United States and Brazil, as well as a more detailed description of the essential tools that allow flexibility in budget execution and the primary financial and administrative control mechanisms used by both governments. In the third chapter, secondary questions from one to four are addressed.

The information supplied in Chapter III is interpreted in Chapter IV, and secondary questions six and seven are addressed in this chapter. Chapter IV focuses on effective control system characteristics and budget flexibility. The differences in tools and procedures between the United States and Brazil are discussed in Chapter IV, along with lessons that can be learned from each other. By the end of this chapter, the reader will have laid the groundwork for understanding the study's primary question.

Chapter V examines how military budgets achieve a fair balance between flexibility and control and the means through which they have achieved this equilibrium. After then, the findings and conclusions of this research are presented, followed by suggestions for future research and recommendations.

II. LITERATURE REVIEW

A. BUDGET THEORY

Budgeting is the distribution of limited resources to a limited selection of possible expenditure options considering the available funds. The budget includes a decision-making process and suggests a sense of equilibrium (Rubin, 2019). One of the budget definitions is an instrument for planning how to spend a set sum of money over a particular timeframe. As one of the most crucial policy tools, the federal budget significantly influences a nation's progress. There is no way for elected government officials to carry out their constitutional duties, no means for programs to move forward, or even for a government to exist without a sanctioned budget (OMB, 2022b, p. 1). The government budget system gets intricate when considering the several stakeholders that take part in many levels of the process, from the planning stage through its execution. Several claimants want different outcomes from the budget decisions. The economy may affect the budget process and influence decision-makers to ease rules to allow deficits; on the other side, there may be pressure from the populace in favor of fiscal responsibility, shifting the focus to a balanced budget (Rubin, 2019).

Since public budgeting involves a variety of stakeholders with diverse interests and variable levels of influence, there are mechanisms to guarantee that elected officials ultimately make spending decisions on budget plans for the benefit of citizens, and its execution occurs accordingly (i.e., without exceeding the limits or diverting from the intended objectives). McCaffery and Mutty (2003) define budget execution as managing the budget plan since budgeting is a means of preparing for policy implementation. In addition to the fact that the budget dispute is public and involves a large variety of parties with divergent objectives and points of view, the fact that those who make spending decisions are not the ones who pay the bills raises questions about the responsiveness and public accountability of elected officials (Rubin, 2019).

As Wildavsky (2017) proposes, the primary objectives of budgeting include planning to ensure consistency and predictability in expenditures and revenues, as well as controlling public funds by restricting spending and holding participants accountable. On the other hand, budgeting should be flexible to stay in tune with the economy and policy reviews. These goals conflict since there is a demand for rigidity through limiting spending and controlling public funds. In contrast, budgeting must be somewhat flexible to adapt to economic management shifts, recessions, policy reviews, etc.

Control mechanisms are a means for defining boundaries and establishing parameters for the funds that have been authorized and appropriated (Wildavsky, 2017). These boundaries define executing the appropriations for the intended activities, and parameters assist in determining if the expenditures fall within the specified limits. Nevertheless, according to (Rubin, 2019), a distinctive feature of government budgeting is that the budget is planned well in advance of its execution. Before the beginning of a fiscal year, for months, a year, or more, public budgets are designed to last for a year or two. Numerous unanticipated events, such as shifts in the economy, public opinion, political strategy, etc., may occur between budget planning and execution, demanding a certain degree of flexibility in budget execution. Thus, budgets must be flexible to such events throughout their implementation to prevent significant policy changes.

Di Francesco and Alford (2016) expand by categorizing problems into two groups: routine and non-routine. Historically, governments have been vital in efficiently routinizing and operationalizing a large volume of standard services. Regardless of how well government institutions have tightened their focus on regular services, they have been confronted with more complex challenges in the social and environmental worlds around them, to which routine procedures are not well-suited. Undoubtedly, private and public organizations have battled to establish a careful balance between routine and nonroutine decision-making methods and techniques. Non-routine issues come in various shapes and sizes, but they all interrelate and can be described as complex problems or crises (Di Francesco & Alford, 2016). On the one hand, complex problems are difficult to solve because they involve several issues, each of which falls within the purview of a different department within the government. On the other hand, a crisis is an unforeseen event that needs immediate and significant adjustments within an organization or society.

1. Budget Execution

According to Rubin (2019), the implementation stage is about executing the budget precisely as it was authorized. Budget execution includes calculations for disbursements and regulations concerning how much money may be transferred after the budget is approved. Consequently, budget execution seems to be very technical. Nonetheless, Rubin also emphasizes the political aspects of budget execution since it dictates public accountability and involves executive and legislative policy control, among other political concerns. As Howard (1968) adds, when legislators discover that what they approved was not carried out precisely, they recognize the political and practical significance of budget execution. In other words, according to Pitsvada (1983), budget execution is the "doing" phase, the part of the budget cycle in which agencies spend-obligate appropriations to accomplish their programming objectives. A budget cycle is only complete when the "doing" phase is completed.

Because the budget is an annual document, it is tempting to assume that everything in the budget pertains to the subsequent year. According to Pitsvada (1983), this is not often the case when analyzing federal budget appropriations. Congress has provided appropriations with relative legislative flexibility. A few budgetary constraints, such as the one-year execution time limit, can be overcome by agencies. Congress can limit or control executive flexibility through the annual appropriations act. Pitsvada (1983) provides an example of how legislators might define or earmark trust fund revenues for specific purposes, such as administrative expenses. Pitsvada (1983) notes that the discussion on how Congress allocates funds has continued for some time. The legislative and executive branches have disagreed over how much flexibility agencies should have in executing congressionally funded public programs.

There are various reasons why budget implementation efforts should have regular flexibility. To name a few, Rubin (2019) emphasizes that environmental variables, such as inaccurate receipt projections, economic shifts, inflation rates, and even weather conditions, may impact budget implementation. Di Francesco and Alford (2016) define them as non-routine problems, unanticipated occurrences requiring a prompt reaction, such as crises and disasters. Burkhead (1956), meanwhile, divides budget execution into two distinct categories: administrative and financial. The latter relates to transactions involving government revenues and expenditures, whereas the former, administrative controls, refer to the everyday occurrences of budget execution that most managers experience. These events include implementing and adjusting the budget plan developed and refined by the executive branch and reviewed and approved by the legislative branch.

Referring to the fundamental law, Congress has reasons for not granting the executive the budget flexibility they desire. Elements of control should be implemented. As stated in Article I, section 9, clause 7 of the U.S. Constitution: "No Money shall be drawn from the Treasury, but in consequence of appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time." The Constitution vests Congress with the power of the purse, which gives Congress the authority to tax and decide how money is spent. Congress also has the jurisdiction to regulate the format and substance of the statements and accounts mentioned. Pitsvada (1983), as cited in McCaffery and Mutty (2003), further recognizes the contradiction in budget execution in which agencies assume they need more flexibility to address changing demands. Still, Congress believes that it is not performing its most essential constitutional function unless it imposes significant control measures on budget implementation performance.

2. Flexibility in Budget Execution

According to McCaffery and Mutty (2003), a flexible approach to budget execution comprises the ability of managers to make modifications within the limits of available funds, which implies an adjustable margin for discretionary expenditure. In addition, the more senior a manager is, the more discretion they are granted. Thus, flexibility is contingent upon the number of available funds and one's position in the management hierarchy. They offered the following illustration: At the operational level, funding for maintenance and repairs is frequently not allocated to specific structures. Thus, in this case, the local management can choose between repairing a leaking roof and painting a facility; nevertheless, there may be a trade-off between the two since the restricted funds may not allow for both expenditures.

a. Defense Budget Execution

The position at the management level proposed by McCaffery and Mutty (2003) is accentuated in the military, where there are two distinct interactions for monitoring the budget execution, as Candreva (2017) elaborates. First, legislative controls inside the military ensure the implementation of government initiatives and policies. The Executive is responsible for executing the programs stated in the legislation, translated into authorization and appropriation, rather than the programs they first offered. Thus, it clarifies the need for legislative monitoring of budget execution so that the legislative intent is carried out without unapproved deviations. Elements of control enforced by senior military officials constitute the second interaction for conducting oversight inside the military. To carry out the authorized programs, agencies are accountable for spending the funds appropriated by Congress, but they must do it within the constraints of fiscal laws. As a result, senior leaders decide to increase monitoring. One control element generally used is limiting how quickly funds may be spent. In other words, regulating appropriation rates are obligated so that the program manager or agency does not deplete its resources and must request additional funding.

Civil-military relations (CMR) theories have further investigated the participants' role in defense budget execution, particularly in democracies. According to Candreva and Jones (2005), having a military that is effective at deterring and defeating an opponent and under sufficient control that it does not undermine the government has long been seen as the central problem of civil-military relations in democratic countries. Feaver (1996), as cited in Candreva and Jones (2005), remarks that the dilemma arises when attempting to strike a balance between a military powerful enough to do everything the civilian requests and a military obediently sufficient to carry out only what civilian authority has approved. This study will not investigate how CMR models have developed or what each model promotes. Notwithstanding, a fundamental understanding of CMR gives crucial insights into the broad areas of military business in which civilian leaders, especially legislative bodies, do not participate. In addition, CMR assists in comprehending what Congress deems relevant when delegating degrees of discretion to the Department of Defense and the benefits of a higher or smaller delegation of authority over resource management.

b. *Issues in Defense Budget Execution*

The Department of Defense receives funding in distinct categories, each with unique characteristics. One aspect of regulating execution relates to the specific rules and limitations imposed on implementing a budget with its diverse types of appropriations, generally known as the colors of money. As John Dillard, Col. USA (Ret.) and Steve Stark put it, "The first thing to understand about the colors of money is that there are no colors and no actual money, and it only gets more complicated from there" (Vaughan, n.d.).

Military personnel (MILPERS) appropriations cover wages and other compensation for active and retired military personnel. In contrast, military constructions (MILCON) finance the construction of buildings, the purchase of real estate, and the maintenance of housing for servicemembers. In addition, Operation and Maintenance (O&M) appropriations support infrastructure operations such as depot maintenance and supply management as well as the cost of operating and maintaining the Armed Forces, except for the pay and allowances of military personnel, which MILPERS funds cover. Unlike O&M funding, procurement appropriations fund the acquisition of aircraft, ships, combat, support vehicles, satellites, launch vehicles, armaments, ammunition, and the like. The Research, Development, Test, and Evaluation (RDT&E) appropriation supports fundamental and applied research, development, demonstration, testing, prototyping, and evaluation activities (OMB, 2022a). See Table 1 for details on the duration of each category of appropriation.

Table 1. Categories of expenditure. Adapted from Candreva (2017).

CATEGORY	DURATION
Military Construction (MILCON)	Five years
Shipbuilding and Conversion	Five years
Procurement	Three years
Research, Development, Test, and Evaluation (RDT&E)	Two years
Operation & Maintenance (O&M)	One year
Military personnel (MILPERS)	One year
Continuing or No-Year Appropriation	Unlimited

Receiving appropriations of different types limits the execution of a budget. As McCaffery & Mutty (2003) say, given the number of restrictions put on obligating appropriations and the variety of ways different sorts of expenditures could be used, it would make more sense for dollar bills to have different colors. They effectively create legal boundaries for the budget manager, who typically cannot transfer funds across categories. It is challenging to move appropriations from one type to another; it must first be confirmed by the executive and, occasionally, depending on the transaction, by Congress.

c. Budgetary Flexibility Instruments

Federal agencies achieve execution flexibility within their budgets through many crucial tools. Intentionally vague budgets can be used as a strategy for greater adaptability. As Candreva (2017) underlines, deliberate vagueness helps foster flexibility. In the author's words: "*The art of budgeting is to provide enough detail to have the program approved and controlled but worded with enough imprecision to adapt to changing circumstances*."

Supplemental appropriations are an additional means for executives to obtain budget implementation flexibility. A request for a supplemental appropriation may be submitted when there is an urgent need for additional financial resources that cannot wait until the subsequent regular annual appropriations act. Funds can originate from existing fund balances, unexpected increases in revenue, emergency reserves, or rescissions. Deferrals grant organizations the ability to reschedule their obligations and spending, which is particularly useful when there are changes in the circumstances. As a possible holdback, the President might ask for a negligible amount of the budget that has been authorized. Rescissions, unlike deferrals, are the permanent cancellation of a specified portion of an agency's budget authority.

In contrast to supplementals and rescissions, deferrals are not founded on formal legislation approved by the executive and signed into law. For the executive branch to put off a particular expenditure, there must be a technical justification, such as the fact that the project is not ready to get underway. Another mechanism for achieving flexibility in the execution of the budget is reprogramming. According to Rubin (2019), legislation frequently places limitations on the total amount of money that can be moved around within a fund and the origin of that money. The alternative to requesting a new allocation from the budget is to perform a reprogramming.

Some organizations may purposefully underspend to save money for other expenses that have been approved. This can result in a significant amount of reprogramming, which makes it possible for significant adjustments to be made to both the approved budget and the legislative priorities. There is a potential for Congress to establish more restrictive reprogramming guidelines to monitor and prevent changes that threaten legislative policies.

B. CONTROL THEORY

Several external circumstances, and routine and non-routine occurrences, such as changes in the economy, inflation rates, inaccurate revenue forecasts, crises, etc., require flexibility in budget execution. Because the budget is established many months to a year or more in advance, the difficulty is exacerbated, causing managers to deviate to a certain extent from the initial authorized budget from precisely executing the original approved budget. In other words, budget implementation requires a degree of flexibility.

Rubin (2019) notes that the executive branch's authority to adjust the fiscal year budget is occasionally used for political and policy goals. Not all policy-related activities are inappropriate or dangerous to democratic values. However, there are instances in which the executive's budget implementation flexibility is abused or seen as such, distorting the legislative authority. As Rubin (2019) demonstrated, any indication of overspending or underspending, corruption, fraud, or deliberate undermining of the budget's goals and objectives is sufficient to increase mechanisms for controlling budget implementation.

According to Wildavsky (2017), power is exerted when the budget limits expenditure to a predetermined quantity and for predefined purposes. In other words, the legislative branch exercises authority over the executive by controlling budget execution. Di Francesco and Alford (2016) emphasize that without restrictions, at least a few individuals would continuously seek to manipulate and exploit the carelessness of the system to divert authorized resources from their intended objectives. Thus, without enforcement measures, it is highly improbable that the public sector would comply with the many budget system requirements.

Rubin (2019) asserts that the dynamics of control tend to follow a pattern over time and that the notion of deliberate misuse of the granted discretion reinforces the cyclical process of balancing the level of control elected officials choose to adopt. Rubin (2019) provides the following description of the process as an illustration: Flexibility is provided to the agencies, followed by a sense of abuse when discretion exceeds a certain threshold. Thus, enhanced monitoring, oversight, and reporting obligations are established. Finally, when the problem appears to have been fixed, or politicians become exhausted from making politically irrelevant decisions, there may be a gradual reduction in control intensity until the process is repeated. An alternative possibility is that the agency's reaction causes additional challenges, indicating that the earlier controls were inadequate or have become ineffective. This can drive decision-makers to soften or revise the mechanisms of control. Rubin (2019) argues that the impression of abuse on flexibility and decision-makers' reactions is crucial for understanding the equilibrium between flexibility and control over time.

According to Burkhead (1956), the goals of adequately executing a budget include keeping the legislative intent, complying with the constraints imposed by the budget, and maintaining flexibility at all administrative levels. The tension between complying with budgetary constraints and, from a manager's perspective, working hard to achieve legislative goals must be balanced so that the budget execution would be fiscally responsible and effective. As soon as the conditions are, to a certain extent, unfavorable to either fulfilling the legislative intent or conforming to restrictions, the outcomes would be either entirely accountable but unsuccessful in meeting the legislative objectives or unaccountable but successful. In the worst situations, they are neither responsible nor effective (Candreva, 2017).

Despite some improvement, the debate over the tension between budget execution control and flexibility persists. As McCaffery and Mutty (2003) suggest, excessive control or the wrong type of control may diminish the efficacy of a program. Nonetheless, as the federal budget has increased, even a tiny percentage error has become a substantial monetary loss, underlining the necessity for controls to safeguard fiscal propriety. While management would prefer the flexibility to achieve the budgeted intended objectives, the public is adamant that tax dollars be preserved, even if this requires greater control than is ideal. In other words, the tension between flexibility and control resembles a tug-of-war, in which two teams at opposite ends of a rope attempt to draw the other over a center line. While neither side crosses the line, both will continue to tug the rope.

As Candreva (2017) emphasizes, controls can be implemented before or after an event occurs. Rules, boundaries, standards, and norms for conduct in a particular environment are all instances of ex-ante controls, which are set before. In contrast, audits, inspections, evaluations, and documentation reviews are ex-post controls. In the sphere of government procurement and defense systems acquisition, ex-ante controls such as procedures, requirements for contracting officers, legal and comptroller evaluations, and technical evaluation of proposals are commonplace. Ex-post controls include administrative contracting officers, quality assurance surveillance plans, product receipt procedures, protest procedures, and closeout audits.

1. The United States Control Sources

This section describes some U.S. budget process contexts and potential control points. It starts with fiscal laws and the flow of funds. It then elaborates on the GAO control structure by breaking it down in greater detail. Then it concludes with a discussion of the control environment within the Department of Defense.

a. Fiscal Law

The GAO's principles of federal appropriations law also referred to as the "Red Book" (GAO, 2004) states that the following conditions must be met for an obligation or expenditure to be lawfully made with appropriated funds: purpose, time, and amount. The spending must be for a lawfully approved goal; it must be incurred within the time constraints of the appropriation and must not exceed the acquirement caps set by the legislature. All three conditions must be met for the expense to be deemed legitimate.

Under 31 U.S.C. 1301(a), "Appropriations shall be applied only to the objects for which the appropriations were made except as otherwise provided by law," appropriations may only be spent on their intended purposes. This statute institutionalizes Congress' ability to control the government's finances. U.S. Const. art. I, 9, clause 7). Since all appropriations must originate in a law passed by Congress, it is the legislative body's prerogative to specify how the funds may be ultimately expended. In other words, because expenditures are valid only if authorized in the appropriation and Congress authorizes all appropriations, spending of public funds is lawful only when authorized by Congress; therefore, Congress determines what an agency will do.

Even though Congress is ultimately responsible for determining how public funds are allocated, it should avoid listing every possible expenditure for which a government agency may need to commit funds. Unless the appropriation's language is precise, discretion over expenditures is delegated. The "necessary expense doctrine" defines this discretion. One should also note that although the "necessary expense doctrine" imposes control, there is still room for adaptation because managers are granted some discretion, which operates as a source of flexibility.

A proper expenditure assists the authorized program but is not necessarily essential to the approved program, whereas necessary spending is essential to its success. Depending on the degree to which an expense is incidentally or fundamentally tied to the accomplishment of a program, one may find varying levels of necessity (Candreva, 2017). According to GAO (2004), for an expense to be considered reasonable under the necessary expense rule, it must satisfy the following three criteria: The first requirement is an adequate connection between the expense and the charged budget line item. Secondly, there shouldn't be any explicit legal prohibitions on doing what you want with such funds. Thirdly, no other appropriation or legal funding mechanism can cover the cost incurred, which would invalidate the use of the funds.

The time limit primarily affects the time frame for new commitments or obligations and associated expenditures. As stated in 31 U.S.C. 1502, any remaining funds from a limited-duration appropriation may be used "only for payment of expenses properly incurred during the period of availability or to complete contracts properly made within that period of availability." The appropriation can be expended before its end date, and the department has five years after its end date to liquidate and pay off any remaining obligations. According to Candreva (2017), unless otherwise specified, all appropriations are assumed to be annual and are therefore available for new commitments during the federal fiscal year (October 1–September 30). As exposed in Table 1, various appropriations have different durations for obligational purposes.

According to the GAO (2004), as the federal budget was tightened in the 1990s, legislators offered agencies more discretion in spending annual appropriations and provided defense agencies more operational flexibility by permitting agencies to use fiscal-year funds for multiyear purchases of goods and services. Nonetheless, the GAO identifies the *bona fide* needs rule as the following.

> The bona fide needs rule is one of the fundamental principles of appropriations law: A fiscal year appropriation may be obligated only to meet a legitimate, or bona fide, need arising in, or in some cases arising prior to but continuing to exist in, the fiscal year for which the appropriation was made. (GAO, 2004)

In other words, managers may only use these funds to satisfy a valid or permissible need that arose during the fiscal year they were allowed or a prior budgeting year that applies to the date. "Bona fide need" is the link between a commitment and the agency's necessities during the allocating period. Simply stated, this provision restricts the use of remaining budget funds late in the fiscal year.

Limitations on the total amount to which appropriations may be used are the third central control in the rule. Candreva (2017) argues that it is not sufficient to be aware that specific funds have been appropriated and when they can be obligated, but also is required the amount available. "The apportioned amount limits the obligations that may be incurred" (Candreva, 2017). Simply put, the Antideficiency Act is the primary statute addressing amount characteristics, and it expressly prohibits the following according to the GAO (2004): (1) "Making or authorizing an obligation or expenditure from any appropriation (or apportionment) over the amount available in the appropriation (or apportionment)." 31 U.S.C. § 1341(a)(1)(A) and 31 U.S.C. § 1517(a). (2) "Involving the government in any contract or other obligation for the payment of money for any purpose in advance of appropriations made for such purpose.” 31 U.S.C. § 1341(a)(1)(B). (3) “Accepting voluntary services for the United States or employing personal services over that authorized by law, except in cases of emergency involving the safety of human life or the protection of property.” 31 U.S.C. § 1342.

As Candreva (2017) explains further, the first prohibition statement pertains to the fact that one cannot incur obligations over what is authorized in an appropriation or a legally defined portion of a budget, such as an apportionment or allotment, even if additional funds are anticipated later in the fiscal year. Agreeing to the second rule, no contracts may be signed in September because the required funds will not be available until October (the new fiscal year). Although the agreement can be drafted or negotiated, it cannot be executed until sufficient funds are available. This prohibition applies to any obligation for which funds have never been appropriated or considered (Candreva, 2019). In the final statute, an employee or contractor is prohibited from working “for free” if they plan to bill for future work and have the right to do so. It violates Title 31’s voluntary service clause to accept those “free” services without budget authority (Candreva, 2017).

b. Flow of Funds

The government’s current and future payments and expenditures are derived from the budget authority, which is the legal authority to incur legal obligations. The obligation must be recorded when a government agency incurs a legal liability resulting in immediate or future expenditures (OMB, 2022c). In other words, after the enactment of budget authority, government agencies incur obligations, essentially forcing the government to make payments. The budget records outlay in the amount paid when obligations are satisfied. The total sum government entities are authorized to obligate during the current fiscal year and any subsequent fiscal years must be equal to or less than their appropriations, never over them. Therefore, government officials can only commit the government to disbursing funds if they have budget authority.

According to (Candreva, 2017), an appropriation is not a withdrawal of funds from the Treasury but the legal authority to bind the Treasury to make a specified payment. The

Treasury's holdings would not change if this authority were never exercised. Thus, before payment, it should be clear that no Treasury funds have been transferred or withdrawn.

Considering the availability period of appropriations and the period during which payments and actual money movement may occur, this period may be longer than five years. Once the Office of Management and Budget has allocated funds to agencies, they become available for obligation. After the initial availability period, credits enter a five-year phase during which the incurred obligations can be liquidated and paid. In addition, as depicted in Figure 1, outlays derive partly from budget authority provided for the fiscal year in which the funds are expended and partly from budget authority provided for prior fiscal years.

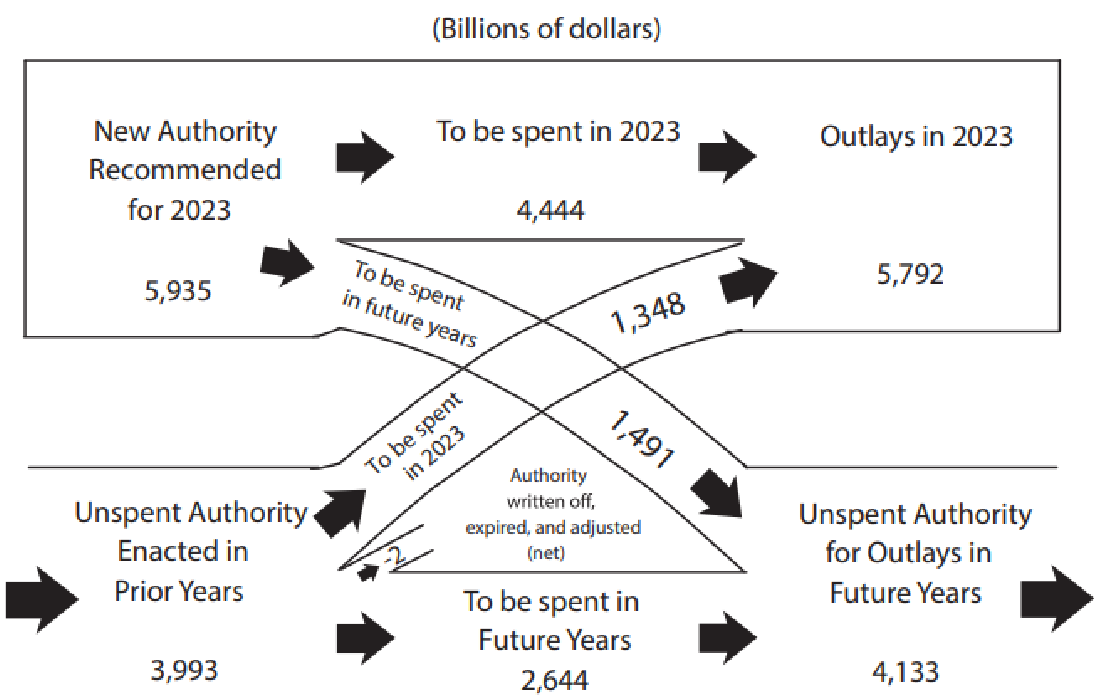

Figure 1. Budget authority and 2023 outlays. Source: OMB (2022c).

One may observe from Figure 1 that the year 2023 will not see the budget authority's total commitments or outlays. One fiscal year's payments may be used to settle debts from the previous fiscal year or earlier. In turn, obligations can be incurred either with the new budget authority granted in the current fiscal year or with the new budget authority vested in prior fiscal years. Notably, the outlay rate is the percentage of a given year's budget authority spent, not the amount authorized to be obligated and liquidated. For instance, Figure 1 explains that $4,444 billion in outlay will be made in 2023 (representing 77% of the outlay total), and those outlays will be supported by the total proposed new budget authority of $5,935 billion for that year (a first-year outlay rate of 75 percent). Consequently, the remaining $1,348 billion in outlay in 2023 (representing 23 percent of the total) will be paid with budget authority approved in prior years. In addition, $1,491 billion of the proposed new budget authority for 2023 (representing 25 percent of the proposed total) will not result in outlay until the years following 2023 (OMB, 2022c).

c. *Standards for Internal Control in the Federal Government*

An overview of the overall framework for establishing and maintaining an effective internal control system is provided in the GAO's Standards for Internal Control in the Federal Government, also known as the Green Book (2014). This publication resulted from a collaborative effort between the private sector and the United States Federal Government, which adopted this internal controls framework and promulgated it in OMB Circular A-123.

An organization utilizes internal control to facilitate the achievement of its goals. Internal solid control systems facilitate efficient and effective operations, the reporting of accurate information about those operations, and compliance with applicable laws and regulations. The Green Book, or Standards for Internal Control in the Federal Government, is a guide for internal controls to facilitate federal agencies and departments' operations. The Green Book could be helpful to, among others, a program manager at a federal agency, a certified public accountant who verifies the expenditure of federal funds by state agencies, and a training officer whose responsibility is to ensure that every employee has received the required compliance training (GAO, 2014).

The Green Book guidelines are structured as a cube (see Figure 2), with one face corresponding to the five components of internal control, another to the levels of organizational structure, and the third to the categories of objectives. The five components apply to all employees and processes, regardless of their position or specific area in which they concentrate their efforts.

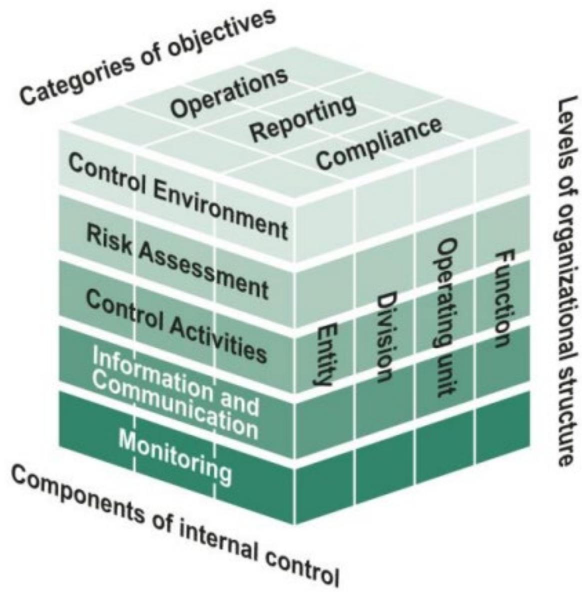

Figure 2. The cube. Source: GAO (2014)

GAO provides some definitions for internal control that helps to comprehend the bottom line of its report.

> Internal control is a dynamic, iterative, and integrated process in which components impact the design, implementation, and operating effectiveness of each other. No two entities will have an identical internal control system because of differences in factors such as mission, regulatory environment, strategic plan, entity size, risk tolerance, and information technology, and the judgment needed in responding to these differing factors (GAO, 2014).
>
> An effective internal control system provides reasonable assurance that the organization will achieve its objectives. An effective internal control system has each of the five components of internal control effectively designed, implemented, and operating and the five components operating together in an integrated manner. (GAO, 2014)

From the GAO's standpoint, it is also vital to define the features of proper oversight measures. An organization's chances of success improve with a well-established oversight of its performance. The five components are the federal government's internal control gold standard and the seventeen driving codes for useful management oversight (see Figure 3).

Simply put, management breaks down an internal control system into five components. It evaluates it based on seventeen principles to determine whether it is effective. If any of the fundamental principles or elements of an internal control system are flawed, or if those components do not work together, the system will be ineffective.

Control Environment

1. The oversight body and management should demonstrate a commitment to integrity and ethical values.

2. The oversight body should oversee the entity's internal control system.

3. Management should establish an organizational structure, assign responsibility, and delegate authority to achieve the entity's objectives.

4. Management should demonstrate a commitment to recruit, develop, and retain competent individuals.

5. Management should evaluate performance and hold individuals accountable for their internal control responsibilities.

Risk Assessment

6. Management should define objectives clearly to enable the identification of risks and define risk tolerances.

7. Management should identify, analyze, and respond to risks related to achieving the defined objectives.

8. Management should consider the potential for fraud when identifying, analyzing, and responding to risks.

9. Management should identify, analyze, and respond to significant changes that could impact the internal control system.

Control Activities

10. Management should design control activities to achieve objectives and respond to risks.

11. Management should design the entity's information system and related control activities to achieve objectives and respond to risks.

12. Management should implement control activities through policies.

Information and Communication

13. Management should use quality information to achieve the entity's objectives.

14. Management should internally communicate the necessary quality information to achieve the entity's objectives.

15. Management should externally communicate the necessary quality information to achieve the entity's objectives.

Monitoring

16. Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.

17. Management should remediate identified internal control deficiencies on a timely basis.

Figure 3. The components and principles of the cube. Source: GAO (2014).

Regarding the benefits and costs of internal control, the (GAO, 2014) points out that a robust system of internal controls can do wonders for a company, so every organization should implement one. It serves as an indicator of how well things are running, contributes to the mitigation of threats to the company's ability to achieve its objectives, and provides management with additional reasons to be optimistic about the organization's future success. When planning and implementing internal controls, management considers the associated costs and the impact of those costs on anticipated returns. Interdependence between operational processes and control mechanisms adds a layer of complexity to the cost-benefit analysis procedure. When controls are integrated into operating systems, separating the costs and benefits of those controls from those procedures can be challenging.

Although it is the responsibility of management to determine how an organization weighs the costs and benefits of various options for implementing an effective internal control system, GAO (2014) warns that cost should not be used as an excuse not to do so. The success of internal control depends on management's efforts. By weighing the costs and benefits of each action, management can prioritize the areas that are most critical or dangerous for improvement (GA0, 2014). Following a cost-benefit analysis, here are some examples of possible control approaches: locking warehouse doors to protect inventory; segregating duties to reduce the likelihood of embezzlement; signature approvals by responsible officials; random audits of transactions; routine reporting; account reconciliation; financial audits, etc.

d. Defense Budget Control Systems

The Planning, Programming, Budgeting and Execution (PPBE) system of the Department of Defense (DOD) is founded on the fundamental principles of the PPBS methodology developed in the 1960s in the United States. According to the Defense Acquisition University (DAU) glossary (n.d.), the PPBE is the Department of Defense's primary resource allocation tool. The annual cycle by which the DOD calculates its budget requirements and allocates resources to meet those requirements. With the assistance of the PPBE, adjusted military resources can be allocated more efficiently, allowing for selecting appropriate programs and determining necessary resources.

It is important to note that the PPBE is only one step in a more extensive process that aims to provide capacity allocation agencies with the resources they need to fulfill their missions. In addition to PPBE, the Joint Capabilities Integration and Development System (JCIDS) and the Defense Acquisition System (DAS) are major decision support systems for defense acquisition. While the DAS is a management process that guides all DOD acquisition programs, the JCIDS is a centralized system that assists the Secretary of Defense in identifying requirements for the capabilities of the U.S. Armed Forces to meet the military challenges faced by the nation jointly. The DAS provides the required capabilities to the Commands and the JCIDS with acquisition policies and guidelines for weapon systems and equipment.

Considering the objectives of conducting a budget, which Burkhead (1956) asserts include complying with legislative intent, adhering to budget constraints, and maintaining administrative flexibility at all levels, it is crucial to remember that the PPBE serves as a fundamental source of control over military spending to ensure that defense budgets are executed effectively. In addition, according to the DAU Acquipedia (n.d.), the PPBE's goal is to meet the financial constraints while providing the greatest possible mix of military capabilities to the Combatant Commanders (COCOMs).

Even though the PPBE system describes the DOD processes that assess the military environment when allocating resources, the planning decisions tend to constrain the programming phase by establishing priorities. According to Candreva (2017), this is because a planning component originates from external participants. The budgeting process implements planning decisions. It acts as a liaison between the executive branch (the military) and the legislative, providing the budget with the necessary legitimacy to be enacted once the programming decisions have been formatted. Execution is the subsequent phase, during which everything approved is to be carried out. As should be noted, participants in the first stage have far more flexibility than managers when executing the budget, which is constrained by the activities of each preceding level. In the end, the PPBE provides COCOMs with the best feasible combination of capabilities to accomplish their missions within budgetary constraints while keeping them accountable for their actions.

2. Brazil Control Sources

According to Novick (1968), Brazil's adoption of the program budget was influenced by the PPBS, which the U.S. Department of Defense established in the early 1960s. According to Paludo (2009), an attempt to merge operational capacity planning and budgeting led to the development of this new model. Law nº 4,320/1964 instituted the budget preparation approach known as Budget-Program, which integrates planning and budgeting to generate measurable and realistic objectives and goals (Paludo, 2009). With Law nº 4,320 on March 17, 1964, the federal government began to embrace the program-budget model, a reality validated by the 1988 Federal Constitution, which is the primary guideline governing the structural budget of Brazil. As the fundamental law, the CF references complementary laws, which are instruments the executive branch must generate to control finances and public funding: Multiyear Plan (PPA), Budget Guidelines Law (LDO), and the Annual Budget Law (LOA) (Brazil Const. art. 48, item II & art 85, item VI). The STN defines them as follows:

> PPA is the legal instrument of planning for a longer term, establishing priorities and directions for government's actions. PPA establishes – for a 4-year period and by region – government's guidelines, goals and objectives which will guide the use of public and private resources (when resulting from partnerships) for capital expenditure and others associated to it as well as those related to continuous programs .(STN, 2020b)
>
> LDO is the link between PPA and LOA, establishing which programs, among the ones included in PPA, will have priority in the next year's budget. LDO also is responsible for: setting fiscal goals for Federal Government; disciplining annual budget preparation and execution; determining changes in the legislation along with its budget adequacy; regulating on federal debt and on Federal Government's personnel and social expenses; establishing official financial agencies investment policies; regulating on inspections made by Legislative and on jobs or services with evidence of serious irregularities; and other general provisions. (STN, 2020b)
>
> LOA estimates revenues and establishes the amount federal government is authorized to expend during the year. LOA must be compatible with LDO and PPA and can be amended by additional credits' bills. LOA consists of Fiscal and Social Security budget, as well as investment budget for companies in which the Government, directly or indirectly, holds most shares with voting rights. (STN, 2020b)

In the Brazilian budget system, appropriations are only valid for issuing obligations during the fiscal year under the annuity principle. This means that regardless of the categories of the appropriations, each one must be obligated within the fiscal year; otherwise, they expire. In Brazil, a fiscal year refers to the period of one year during which a company's accounting records are compiled. In addition, the fiscal year is the annual period during which the LOA must be implemented. It coincides with the calendar year, begins on January 1, and ends on December 31.

According to Carvalho (2013), multi-year appropriation is a hot issue among field experts. Since many expenditures, especially investments, require a more extensive period to be carried out, supporters suggest that the end of the year cannot be the final milestone for budget execution. However, the value of the budgetary annuity in facilitating legislative and social control by providing more accurate projections of revenues and expenses has been widely acknowledged. The Brazilian system permits fiscal year-obligated budget appropriations to be paid or disbursed in subsequent years to circumvent the obstacles posed by annuity rigidity. Such instrument is known as Remains Payable and stipulated by Law nº. 4,320 of 1964, "Remains Payable are expenses incurred or obligations executed but not paid or disbursed by the 31st of December, distinguished as processed or unprocessed."

In the case of Processed or Liquidated Remains Payable (RPP), service or product delivery has already occurred. Since payment is now permitted, disbursement is required, as the funds must be transferred to the vendor. In contrast, Unprocessed or non-Liquidated Remains Payable (RPNP) necessitate a higher level of management and oversight from public administrators since the contractor has not yet provided the service or delivered the goods. In this scenario, payment for the object is not yet permitted.

Payables have been heavily criticized in publications. Liebman and Mahoney (2017) claim that year-end spending is rushed and inefficient because of the need to avoid the loss of funds. Due to the unpredictability of future allocations, organizations are under pressure to utilize their resources effectively. Failure to do so reduces future budgets and the loss of currently allocated funds. The authors coined the phrase "use it or lose it" to describe this phenomenon (Liebman & Mahoney, 2017).

Moreover, the Remains Payable conceal the actual savings to the Government's budget because they are not included in the fiscal result upon enrollment. This mechanism, however, ensures vendors will get paid even if payments for ongoing expenses are not made until after the end of the year. In any case, the Remains Payable increase the flexibility of the principle of budgetary annuity by permitting disbursements and outlay in subsequent fiscal years.

a. *Internal and External Budget Execution Control*

The Federal Senate defines budget execution control as the monitoring of the legality of acts that generate revenue or expenditures and establish or remove rights and obligations. It also entails verifying the administration agents responsible for public goods and values and the successful plans for delivering such goods and services. The Brazilian Constitution establishes external and internal control means (Federal Senate, n.d.). In other words, the National Congress would check the organizations and entities of the direct and indirect administration for accounting, financial, budgetary, operational, and patrimonial anomalies via external control. Each federal branch and organization would employ the internal control system independently. Thus, in Brazil's system of checks and balances, the Legislative Body is responsible for enacting laws and supervising the Federal Public Administration.

b. *Brazilian Treasury Single Account*

The Nation's financial assets, including those from its autarchies and foundations, are kept in a single account at the Central Bank of Brazil. It is a crucial tool for controlling public funds because it facilitates more efficient management of monetary resources, lessens demands on the Treasury, and speeds up the procedures involved in transferring funds and disbursing to outside buyers and sellers. To ensure even more significant operational savings and the rationalization of policies relating to the execution of financial disbursements, Decree-Law nº 200 of February 25, 1967, which promoted the organization of the Federal Administration and established the guidelines for Administrative Reform, mandated that the Ministry of Finance implement the unification of the resources handled by the National Treasury with the Union's financial agent (STN, 2020a).

The National Treasury's financial assets were gathered from its various economic agents and deposited into a single account at the Central Bank of Brazil, which acts as the Treasury's financial agent, per the Constitution of 1988. With the passage of Decree No. 93,872 on December 23, 1986, the framework for consolidating the National Treasury's funds into a Single Account was implemented.

c. *Fiscal Policy*

Government revenue and spending are the two main components of fiscal policy, which the government employs to achieve its three primary goals—macroeconomic stability, income redistribution, and resource allocation. The stabilization policy aims to maintain full employment, low unemployment, and consistent prices. The purpose of the redistribution function is to distribute wealth fairly. For good measure, the allocation function also includes compensating for market failures in the provision of public goods and services.

A wide range of indicators, such as for examining flows (primary and nominal results) and stocks, can be used for fiscal analysis (net and gross debt). Since reserves are created through flows, there is a connection between these metrics. Thus, nominal results, as an example, can affect total debt. The preliminary fiscal result is the difference between a period's preliminary receipts and preliminary expenses. The nominal budgetary impact is calculated by adding net interest paid to the primary profit. Consequently, the government has a fiscal surplus when revenues exceed expenditures during a given period and a deficit when revenues fall short of spending (STN, 2020a).

The Federal Constitution (article 167, item III) contains the golden rule, one of the essential rules for controlling government spending. This rule aims to prevent the government from using debt to finance its daily expenses, including salaries, pensions, and the cost of the public machine. The golden rule prioritizes long-term public investment over short-term spending needs to stimulate the economy for both current and future generations (STN, 2018). Infractions of the golden rule's limit may constitute a crime of responsibility. Article 85 of the Federal Constitution, item VI, defines the actions of the President of the Republic that violate the budget law.

To address the golden rule in the short term, it may be necessary to implement measures that increase revenues. Even with the country's high tax burden, it would be the government's responsibility to propose actions that increase revenues after exhausting all possibilities of adjustment through efforts to reduce or optimize expenditures. Consequently, throughout the fiscal year, limits are imposed on the rate of obligations for authorized appropriations during budget execution. Each quarter, revenues are monitored, and based on the results, new portions of the budgeted amount are released for the obligation. If revenues fall short of projections, appropriations for obligations that result in outlay are temporarily or permanently denied.

d. Mandatory Bidding Process

Article 37, section XXI of the Federal Constitution mandates competitive bidding for the Public Administration. Through competitive bidding, this law ensures that the public's best interests are served by selecting the most qualified firm for the job, considering all relevant factors such as the firm's technical and economic-financial resources, the product's quality, and the object's economic worth.

The bidding process aims to establish an equal playing field for all parties involved in procuring the Public Administration's products, services, and construction. Except in instances specified by law, the Federal Court of Auditors (TCU) requires public bidding for the procurement of goods, the execution of works, the provision of services, disposals, and leases. In other words, the rule is to bid. Not requiring or requiring no bidding process is an exception.

3. Reasons for a Balance between Flexibility and Control

Maintaining a healthy equilibrium between budget authority flexibility and control over its execution is one of the most significant challenges facing budgeting systems in federalist nations. According to Di Francesco and Alford (2016), the cry for increased flexibility is becoming progressively audible in the public realm as government agencies battle with what they consider yesterday's rigid structures and processes to deal with today's more complicated problems and volatile environments. There is a growing demand for these institutions to justify their approach to these challenges, whether explicitly or not. Thus, increased flexibility is viewed as a means for public bodies to fulfill their responsibility to deliver desired results.

However, financial procedures are essential for effectively keeping governments accountable. According to Di Francesco and Alford (2016), when infractions of these regulations are uncovered by legislative committees, auditors, or the media, they are frequently regarded as betrayals of public trust. Central finance agencies superintended these rules. In the interest of society, the TCU assists Brazil's National Congress in monitoring the country's budget and financial execution. Similarly, the OMB oversees compliance with these standards throughout U.S. systems.

According to Pitsvada (1983), both agencies and Congress must contribute to the budget execution dilemma. Congress believes it is not fully exercising its most fundamental constitutional function, the power of the purse, unless it exercises effective control over execution. At the same time, agencies argue that they need more flexibility to carry out their duties due to the dynamic nature of the requirements placed upon them. Pitsvada reinforces the reasons budget execution is crucial by saying that the dilemma will always take place since agencies create and defend budgets, and Congress passes them. This aspect alone highlights the need to establish a balanced tension between the proper amount of budget execution control and flexibility.

The discretionary authority of the executive branch to make fiscal year budget adjustments is occasionally used for partisan or political purposes. While not all policy-related actions are undesirable or detrimental to constitutional principles, the executive's discretion over budget execution might be exploitive or perceived as such, distorting the legislative authority (Rubin, 2019). One of the critical functions of legislative oversight of budget execution is to restrict agency overspending and underspending to protect the budget's stated objectives. Notably, executive budget implementation would not materially alter the legislative. In addition to minimizing or preventing corruption, fraud, and other criminal activities involving public funds, controlling budget execution is accountable for decreasing or preventing their occurrence. Therefore, the appropriate level of control supports achieving a company's objectives. Reliable and robust control systems assist in efficient and effective operations, reporting accurate information about those operations, and adherence to applicable regulations.

Numerous external conditions, common or unusual, such as economic shifts, inflation rates, inaccurate revenue projections, crises, etc., necessitate a degree of flexibility throughout the execution of a budget. Such flexibility is essential for several reasons. The fact that the budget is prepared many months to a year or more in advance, which causes managers to deviate to some extent from the initial authorized budget rather than flawlessly executing the budget that was initially approved, is a challenge that is compounded by the fact that priorities may change during the budget planning and execution process. Thus, a successful budget execution requires a degree of adaptation and flexibility.

A program's success may be hampered by excessive or inappropriate control. Due to the increasing magnitude of the government budget, even minor percentage inaccuracies can result in significant sums, highlighting the importance of rules in maintaining budgetary integrity (McCaffery & Mutty, 2003). Notably, both parties have conflicting interests. On the one hand, the executive demands unrestricted flexibility, while on the other, the legislative is concerned with protecting taxpayer funds, even if it requires additional control. Simply put, for budget execution to be successful and appropriate with public funds, a balance must be established between adhering to budgetary constraints and working diligently to achieve legislative objectives. When conditions are unbalanced for either side, the outcomes would be either accountable but unsuccessful in attaining the legislative intentions or successful but unaccountable. In either case, they lack effectiveness or accountability.

As mentioned in the previous chapter, control implementation can occur before or after an event or circumstance. Ex-ante controls are established before the event of interest, whereas ex-post controls are formed after its occurrence. One should be concerned not only with the total amount of control but also with the amount of each type of control, as each exerts a different influence on the discretion of budget execution. As Candreva (2017) explains, it is vital to strike a balance between the two types of controls and the level of overall control performed since too much control before implementation stifles creativity and innovation. In contrast, too much oversight after implementation may permit an unbearable number of errors. Being risk-averse, governments may put too much emphasis on ex-ante rules and too little on ex-post laws. In essence, burdensome laws that restrict creative freedom and initiative can discourage innovation. At the same time, an inadequate amount of control (i.e., too much flexibility), may result in waste or regulatory noncompliance, leading to poor outcomes and considerable risk exposure.

III. PROCESS DESCRIPTIONS AND MECHANISMS

This chapter discusses trends, techniques, procedures, and concepts related to federal budget flexibility tools and control mechanisms to provide insight into addressing how military budgets deal with this dilemma. A few examples are provided to demonstrate how the theory relates to the practice of budget implementation. Most of the information is provided in process descriptions, regulatory requirements, and budgeting systems. To do so, one must first grasp how the basic budget is enacted and distributed and some significant deviations from the standard procedure. Then, instruments that enable flexibility and control mechanisms are introduced and illustrated.

A. BUDGET ENACTMENT

This section provides a breakdown of the actions required to adopt a budget for the United States and Brazil. It starts with the primary high-level steps involved in enacting the United States' basic budget, from formulating the President's budget through some legislature's activities until the President and Congress reach a comprehensive budget agreement resulting in the budget's enforcement. When discussing the Brazilian budget, the connection between the LDO and the LOA and the relationship between the President and Legislative Branch officials are described. This is done to understand how the President's plan is initially formulated and how Congress changes it until its enactment.

1. The Budget of the United States

The budget is a multi-volume document that covers the President's projected spending and distribution of funds. The main Budget book contains the President's budget address and other high-level policy announcements. In the appendix, one will find specifics regarding the finances and initiatives of each agency, bureau, or program group. Other volumes, such as Analytical Perspectives and Historical Tables, offer complementary perspectives to the budget. Most of the budget consists of or is generated from the data submitted for the agency and its programs in response to an OMB Circular. In 2022, OMB Circular No. A–11 has been issued (OMB, 2022b).

According to the OMB, the budget process consists of three interconnected, high-level stages: first, the formulation of the President's budget; second, Congressional action in which Congress evaluates the budget; and third, budget enforcement in which the legislative body enacts budget laws.

a. Formulation of the President's Budget

The Budget of the United States Government is divided into various books that outline the President's fiscal policy objectives and financial priorities. The budget proposal is largely concerned with the budget year or the following fiscal year for which Congress must approve appropriations. Every fiscal year begins on October 1 and ends on September 30 (Table 2). To demonstrate how decisions made in one budget year would play out over a longer period, the Budget extends nine years beyond the budget year. The current year's spending levels are included, comparing the President's Budget proposals and the actual amounts enacted into law. The Budget also incorporates information from the most recent fiscal year, directly comparing budget projections and actual accounting outcomes.

Table 2. Fiscal year budget highlights. Adapted from OMB (2022c).

DATES	BUDGET EVENTS
1st Monday in February	President transmits the budget.
Six weeks later	Congressional committees report budget estimates to Budget Committees.
April 15	Action to be completed on the congressional budget resolution.
May 15	House consideration of annual appropriations bills may begin even if the budget resolution has not been agreed to.
June 10	House Appropriations Committee to report the last of its annual appropriations bills.
June 15	Action to be completed on "reconciliation bill" by Congress.
June 30	Action on appropriations to be completed by House.
July 15	President transmits a Mid-Session Review of the Budget.
October 1	The fiscal year begins.

The President typically begins budget formulation in the late spring of each year (excluding transitions between administrations), establishing overall budget and fiscal policy guidelines. The OMB collaborates with federal agencies to set policy priorities and planning horizons, considering these guidelines. Information, proposals, and assessments on policy decisions are continuously exchanged between the President, the Director of OMB, other officials in the Executive Office of the President, the Secretaries of the Departments, and the heads of the other Government agencies as part of the budget formulation process.

According to the OMB (2022c), analysts review agency budget submissions and indicate concerns. OMB and other entities frequently collaborate to develop solutions until a settlement is reached. As for the latter, they require input from the President and policymakers at the White House. Usually, such choices are taken by the end of December. Then comes the final process of gathering precise budget data and preparing budget documentation.

When calculating costs, decision-makers must consider economic and technological assumptions. Government spending and revenue are influenced by interest rates, economic growth, inflation, unemployment, and the number of benefit receivers. Minor modifications to these variables can increase the estimated total cost by billions. Consequently, the budget formulation process must consider the appropriate total outlays and receipts evaluating the current and expected economic conditions, as well as the resource requirements of each program.

No later than the first Monday in February, the President must submit a budget to Congress. Typically, Congress receives the budget in February, giving them eight months to review and approve it before the start of the following fiscal year on October 1.

b. Congressional Action

The budget resolution is Congress's first action upon receiving the President's proposal. Congress sets spending and revenue ceilings to determine the size of the deficit or surplus and sets the debt limit by approving a budget resolution, a planning instrument (OMB, 2022c). If a reserve fund is included in a budget resolution, the allocations may be adjusted to account for new legislation on a specific topic, such as healthcare or tax reform. Legislation that boosts certain areas but diminishes others is called "deficit neutral" and is therefore limited to the reserve funds available. In addition, reconciliation directives may be included in the budget resolution (OMB, 2022c). Each designated committee is responsible for submitting legislative amendments that alter revenues or mandatory spending. Simply put, they require that authorizing committees propose changes to laws impacting receipt or mandatory spending. Notably, these directives indicate the monetary objectives for each designated committee but do not specify the laws to be altered or the specific adjustments to be made. In addition, Congress organizes budget hearings to collect testimony from executive branch officials regarding the budget's content and proposals. For Defense, this begins with the Secretary of Defense and Chairman of the Joint Chiefs of Staff continues through the service chiefs, and concludes with subject-matter specialists (e.g., the personnel chief, the acquisition chief).

When the President and Congress reach a comprehensive budget agreement, they frequently implement it through annual appropriations acts and reconciliation acts. In certain instances, reconciliation acts have included additional elements, such as laws establishing mechanisms for enforcing such agreements. Usually, the Senate considers reconciliation measures to shorten the time of the bill's debate (OMB, 2022c).

The legislative body votes on whether to approve, reject, or modify the President's budget proposals. It can reduce the budget or include initiatives the President did not request. Additionally, Congress can increase or decrease receipts by introducing or removing taxes and other sources of receipts. Voting on budget authority, which is the legal authority to incur financial obligations, Congress creates appropriations, which authorize agencies to incur financial obligations resulting in outlays (OMB, 2022c).

c. Budget Enforcement

To keep revenue, spending, and deficits under control, the Federal Government employs a variety of budget enforcement tools. The Pay-As-You-Go Act of 2010 would be a prime example since it ensures that any increased revenue or mandatory expenditure legislation is budget neutral. The Act requires that any new law related to those mentioned above pass as "pay-as-you-go" (PAYGO), meaning neutral impact on the budget deficit (OMB, 2022c).

The Budget Control Act (BCA) imposed additional restrictions on discretionary authority due to the revision of the Balanced Budget and Emergency Deficit Control Act of 1985 (BBEDCA) on August 2, 2011. The BCA not only enacted required cuts in spending to address the deficit but also created a specific committee to propose new laws for deficit mitigation. Unfortunately, it did not produce the expected outcomes. In FY 2021, the original enforcement mechanisms of the BCA, including spending restrictions in annual appropriations and directives to reduce the deficit, expired. However, required budget cuts have been pushed until Fiscal Year 2031 (OMB, 2022c).

Due to the incapacity of created committee and Congress to suggest and implement deficit-reduction measures, automatic cuts to discretionary and mandatory spending for fiscal years 2013 through 2021 were prompted. Sequestration of mandatory spending and reductions in discretionary spending caps were used to achieve the savings (OMB, 2022c). While the discretionary caps are simple to realize, sequestration is more complicated. It reduces funding for specific government programs, automatically decreasing government spending (McGarry, 2019). Whenever Congress enacts budgets that exceed previously established federal spending caps, an automatic across-the-board spending cut is imposed on broadly defined categories, affecting all departments, most notably the Department of Defense. As a result, a lack of predictability in budgetary concerns raises, leading to a lower number of effective plans performed, especially by military leaders.

Figure 4 provides an objective explanation of how each stage contributes to creating the annual federal budget. In a nutshell, the fiscal years that regulate the United States federal budget run from October 1 to September 30. Congress establishes discretionary spending levels for the following fiscal year through the annual appropriations process, with the President playing a supporting role. The following is expected to be the approach used when allocating appropriations. The President is responsible for submitting a budget request to Congress that considers its goals. The House and Senate will next vote on and pass budget resolutions, which will decide the total annual spending levels and may or may not include the President's proposals. When reasonable, the House and Senate

Appropriations committees will assemble the 12 separate detailed appropriations bills reflecting the 12 distinct government sectors. After voting separately on the 12 appropriations bills, the House of Representatives and the Senate will reconcile any discrepancies. In closing, the President signs each of the 12 appropriations bills that complete the budget, making them official laws.

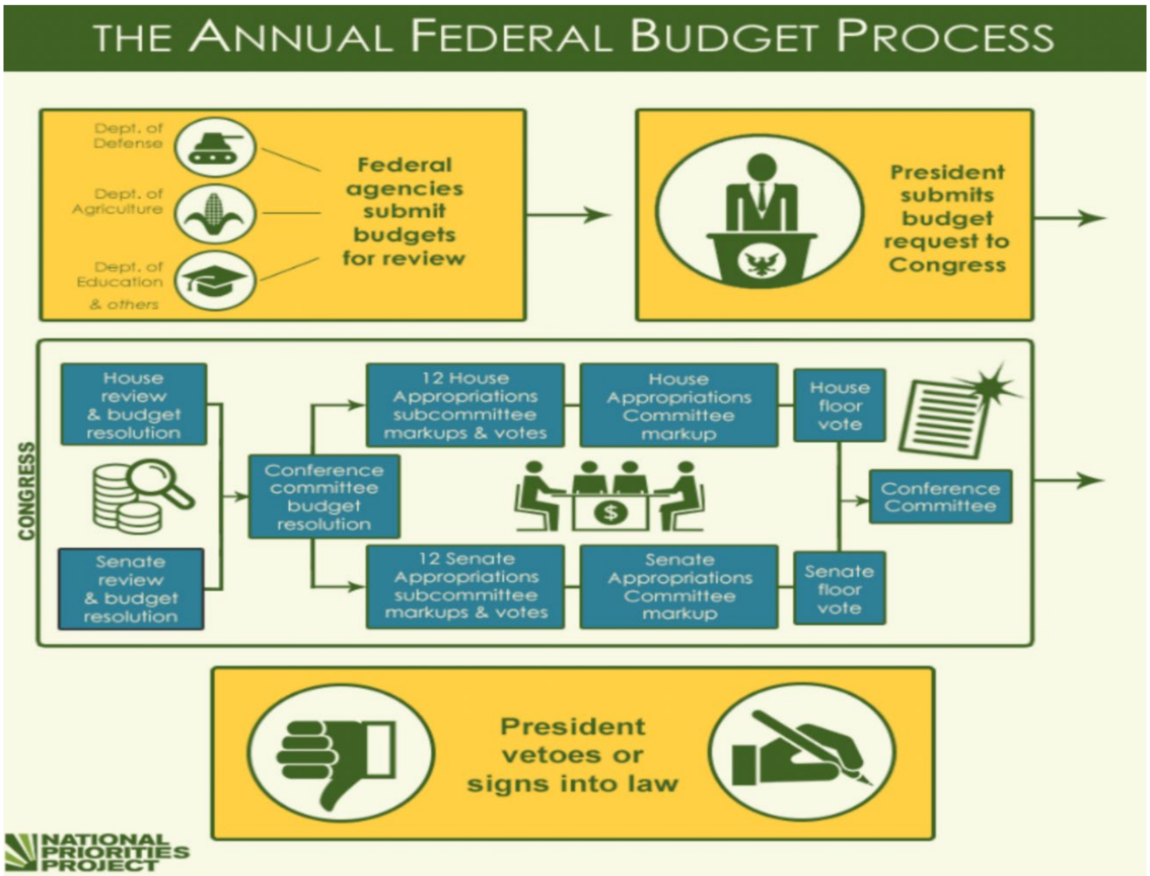

Figure 4. Annual U.S. budget process. Source: Koshgarian et al. (n.d.).

2. The Budget of Brazil

A federal budget is a tool for planning that specifies how much funding will be received from sources like taxes and other projected revenues and where precisely that funds will be spent each year. The budget is vital to the government's financial picture because it includes receipts and expenses. In other words, the budget specifies how much the Federal Government plans to spend on government administration and implementing public programs, such as health, education, and security. Generally, the budget can only be used for the specified items. The Federal Constitution establishes the LDO and the LOA, previously listed in item 2, B from Chapter II. The Executive Branch proposes them the fiscal year before they take effect, Congress approves them, and the President signs them into law. Notably, a fiscal year is an annual period during which the LOA (budget law) must be implemented. It runs from January 1 to December 31 of the same calendar year.

LDO, or the Budget Guidelines Law, is intended to serve as a foundation for developing the Annual Budget Law. It outlines the year's public administration priorities, including fiscal policy objectives and strategies. It expands on the Fiscal Responsibility Law by defining budgetary objectives, risks, and the relationship between revenues and expenditures. Until April 15 of the preceding fiscal year, the Executive Branch drafts and proposes the Budget Guidelines Bill before its referral. To allow for the consideration and a vote, the National Congress has until July 17 to resubmit the bill for approval to the Executive. The LOA, or annual budget law, specifies government spending and revenue projections. It is divided into three sections: the Fiscal Budget, the Social Security Budget, and the Investment Budget of firms. Before its adoption, the Executive Branch is responsible for writing and submitting the Annual Budget Law (LOA) project until August 31. Before bringing the proposal back to the Executive for approval, Congress has until December 22 to review and vote on it (Ministry of Economy, 2022).

Executive agencies execute budgeted expenditures based on rules and statutes accessible by year of effectiveness. Certain Decrees and Ordinances address Budgetary and Financial Programming and Legislative Amendments. Changes may also be made to the Budget Law's programming during the year. This is made possible by the laws, decrees, and ordinances that comprise the content of each year. In addition, reports and other documentation evaluate the budget execution for the given year.

The significance of the LOA in the budgeting process can be used to acquire a clearer understanding of the basic budget's enactment. The President presents a budget plan to Congress as a private executive endeavor. The budget proposal is examined by Congress, which may change it before sending it back to the President for approval. The

President approves the budget proposal, constituting it as a bill. In addition, the President has the right to reject some parts of the budget. After the LOA is passed, the Executive Branch executes the budget by issuing financial programming decrees that detail the timeline for disbursing funds and spending caps for each agency. Thus, the three primary phases of the budget process are preparation by the executive, amendment by the legislative, and budget execution.

a. Putting Together the Executive Proposal

The process commences with the Ministry of Planning, which lowers the amounts to be utilized in mandatory spending and the amount established in the LDO based on the revenue forecast. The remaining will be allocated to non-mandatory spending. In possession of this sum, the Ministry of Planning sets expenditure limits for each Ministry. These allocate resources internally and transmit their ideas back to the Planning Ministry, which consolidates all ministry recommendations before submitting a budget proposal to the President for submission to Congress. In this process, there is a great deal of political wrangling. Each ministry endeavors to increase its fund, placing the Ministry of Planning and the President under pressure.

The preparation process involves several steps and can be administratively tough. Three of them stand out: the approval of the PPA, the LDO, and the LOA, which was initially the president's proposed budget plan. Each of these laws is proposed by the Executive, based on specific objectives, and depends on the approval of the National Congress. The goal is to end each year with an authorized LOA for the following year, including all specifics regarding revenue and expenses. The annual budget is generally referred to as LOA. The law's size and complexity necessitate its division into three documents: the fiscal budget, the social security budget, and the state-owned investment budget.

b. Amendment by the Legislative

Parliamentary Amendments (EP) allow the legislature to modify the budget. As is generally observed in most democracies, legislative officials or Congressmen greatly incentivize increasing budgeted spending to satisfy their electoral interests and specific stakeholders, sometimes called pressure groups. Two distinct types of funding can allow way for legislative system amendments. Either they are boosting the revenue estimate or reducing expenses. The Congressional Budget Committee is responsible for the reappraisal of the estimated amount of revenue when this occurs. As soon as the LOA (budget) bill is presented, a Revenue Rapporteur is appointed to verify the Executive's revenue forecast as quickly as possible. Congress always seems to assume that the Executive underestimated the revenue, then re-estimated it higher, allowing legislative officials to include additional expenditures in the budget through EP.

According to Mendes (2008), setting revenue by the executive and its reevaluation by the legislature is crucial to the budget decision-making process. The executive is incentivized to provide Congress with a low revenue projection because it knows the legislature will increase the number. Reduces the likelihood of missing the fiscal target, as the recalculation by Congress will be effectively implemented. The re-estimation by Congress provides political justification for the executive to block the release of funds shortly after the budget is approved because revenues are overestimated: this places financial control in the hands of the executive and political control from the legislature in the hands of the President. Nevertheless, the legislative can accommodate the expenditure it desires to add to the budget by re-estimating revenue and reducing some of the expenses proposed by the executive. However, the executive's suggested cost-cutting measures are limited. Personnel and social expenses, debt amortization and interest, and constitutional transfers to states and cities are all constitutionally protected from budget cuts.

c. Budget Execution

After Congress approves the LOA, the President can veto certain sections. These vetoes do occur, but they do not significantly impact the budget. The executive has up to 30 days from when the LOA (budget) is made public to issue the Budgetary and Financial Programming Decree. The purpose of the rule is to make the Annual Budget Law's values reflect the current economic conditions, keeping the LDO's revenue and outlays targets in check (primary result target). For example, contingency occurs when the decree stipulates a limitation of expenses.

The contingency of funds significantly influences the budget because it restricts the organizations' ability to make commitments and financial transactions (caps on obligations and outlays). According to Mendes (2008), the Fiscal Responsibility Act was an attempt to restrict the executive's flexibility to respond to unforeseen circumstances. The law stipulated that a bimonthly audit of tax collection would be conducted. If frustration with revenue collection reached the point of jeopardizing fiscal objectives, contingency would be permitted. However, this regulation "did not catch on," and contingency is still handled in an old-fashioned manner: with a large cut at the beginning of the year and subsequent releases.

As part of monitoring budget execution, the Federal Budget Secretary (SOF) continuously reviews the economic conditions and revenue projections. Every two months, the organization, in partnership with the STN, compiles a report evaluating primary revenues and expenditures. In addition, the President heavily relies on the advice of the Budget Execution Board (JEO), whose principal responsibility is to advise the President on executing government fiscal policy. The Board, comprised of the Ministers of Economy and the Civil House, meets monthly to make decisions about managing public resources, mitigating economic risks, and the long-term sustainability of the public debt.

During the execution stage, it is not uncommon to learn that the amounts allowed in the Budget Law for a particular policy or program were insufficient. In addition, it may be necessary to incur expenditures without a budget projection. In some circumstances, the LOA might be amended by applying additional credits (CA) while it is carried out (Ministry of Economy, 2022). According to Act No. 4,320 of 1964, additional credits are classified as supplementary when they are intended to supplement the budget allocation, special when they are intended for expenses for which there is no specific budget allocation, and extraordinary when they are intended for urgent and unanticipated expenses in the event of war or public disaster.

In addition to the budget execution process that considers contingencies, the Executive has the flexibility to make modifications to the budget at any time throughout the year by submitting additional credit bills to the legislative. In contrast to the use of the contingency, which can be somewhat arbitrary, the use of additional credits is democratic and transparent since those budget changes require the legislative body's approval (Mendes, 2008).

B. EXCEPTIONS TO THE BUDGET PROVIDED

As we saw in the preceding section, the Presidents of the United States and Brazil are required to submit a budget to Congress, which typically occurs in February in the U.S. and April in Brazil, so that Congress has sufficient time to review and approve it before the beginning of the following fiscal year. However, delays occur frequently and are exceptions to the general rule. The following are instances of some of the most common and significant exceptions to the budget process across the U.S. and Brazilian systems.

1. The Budget of the United States

The budget release schedule is frequently delayed during presidential transition years to allow the next administration more time to establish spending priorities. Typically, the comprehensive budget is finished and made public in April or May. Often, new administrations give Congress a budget blueprint early in the year to aid Congress in the budgeting process (OMB, 2022c). The CRS (Riccard, 2021) notes, however, that who submits the budget for the next fiscal year is a recurring matter of discussion during a presidential transition since the rule is "on or after the first Monday in January but not later than the first Monday in February of each year." Per the Riccard (2021), a President whose tenure expires on January 20 can present the annual budget to his replacement, which occurred to George H. W. Bush, Bill Clinton, George W. Bush, Barack Obama, and Donald Trump.

Continuing resolutions (CR) and government shutdowns due to a shortage of funds are other exceptions to the rule. Due to their technical nature and complexity, budgeting systems are notoriously difficult to comprehend; even more challenging is putting one together and getting it approved on time. There is considerable debate on the complexity of budget processes and how little the public and government employees understand them.

Notably, the federal government does not enact its budget on time, as evidenced by the passage of numerous CR each year (see Figure 5); consequently, many critics assert that the current budget process requires significant reform because it is far too complex to be handled by government officials with their limited capacity. The GAO (2018) has claimed that a CR or a government shutdown creates management issues across federal departments. The GAO reported decreased government services and productivity and increased expenses due to CRs and government shutdowns such as the following.

> Delayed contracts and grants: Some agency officials reported delaying contracts and application times for grants while under a CR, which could reduce the level of services agencies provide, increase costs, and adversely affect the quality of grant submissions. For example, in 2009, officials at the Bureau of Prisons estimated that delaying a contract for a prison facility had prevented them from locking in lower prices and resulted in about $5.4 million in additional costs. The 2013 shutdown, which lasted 16 calendar days, also disrupted some activities, including clinical trials, at the agencies GAO examined due such things as furloughed staff. (GAO, 2018)
>
> Delayed hiring: Officials at the agencies GAO examined reported delaying hiring due to CRs. For example, in 2009, a Food and Drug Administration official reported that deferring hiring and training of staff during a CR had affected the agency's ability to carry out certain inspections. Agency officials also noted that because the agency may not have enough time to spend its funding on high-priority needs such as hiring new staff, it may spend funds on lower-priority items that can be procured quickly. (GAO, 2018)
>
> Additional work: Agency officials reported that managing within the constraints of a CR had created additional work, which potentially reduced productivity. In particular, shorter, and more numerous CRs can lead to more repetitive work, including entering into shorter- term contracts or grants multiple times to reflect the duration of the CR .(GAO, 2018)

In addition, the GAO has identified some approaches that legislative authorities and agencies may apply to alleviate the management difficulties faced by CRs and shutdowns. Here they are, according to the GAO:

> Legislative authorities: Congress may include in CRs specific provisions called legislative anomalies that provide some agencies or programs funding or direction different than those specified in the standard provisions that require agencies to spend more conservatively, among other things. In addition, multiyear budget authority may be helpful for managing through both CRs and shutdowns because there is less pressure to obligate the funds by the end of the year and it may allow agencies to continue some activities during a shutdown. (GA0, 2018)

> Agency actions: Agencies can also take actions to mitigate budget challenges. For example, agencies may have the ability to shift contract and grant cycles to later in the fiscal year when they are less likely to be under a CR. Shifting these cycles can help minimize disruption of services. (GAO, 2018)

In years when Congress fails to pass a budget resolution, the primary consequence is a slowdown of appropriations, increasing the likelihood of a CR since Congress must pass a CR to keep the government operating if all appropriations bills are not passed by the beginning of the fiscal year.

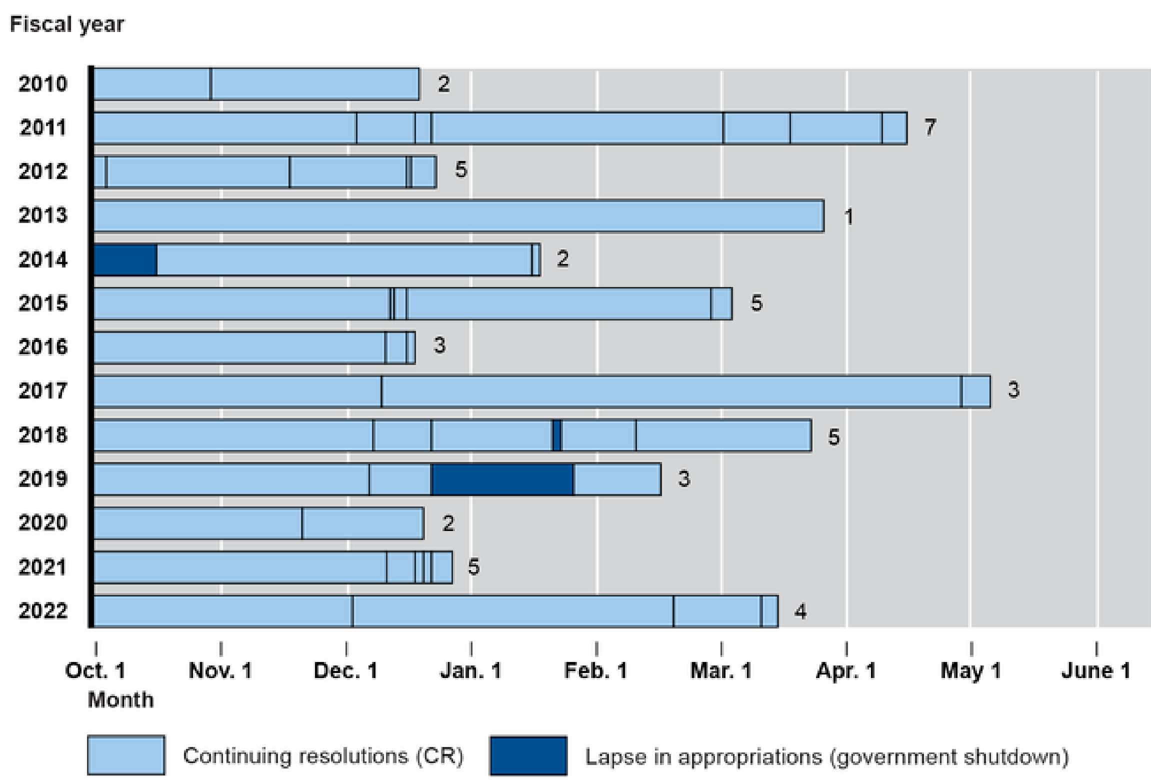

Figure 5. Duration and number of continuing resolutions and lapses in appropriations, fiscal years 2010–2022. Source: (GAO, 2022).

2. The Budget of Brazil

According to the preliminary analysis, the rule states that the Chief Executive is responsible for submitting the budget plan before the deadline, which might be up to four months before the end of the fiscal year (August 31). The deadline for the review and vote in Congress is set for December 22. As Soares Junior (2020) explains, the late completion and sanction of the LOA frequently occur in the Brazilian budget process. The author believes holding the President entirely accountable for any problems that may develop during the LOA approval process is unreasonable. The President delayed signing the LOA, even though he is directly responsible for doing so, most of the time due to the lengthy congressional debate over pieces of the budget.

According to Soares Junior (2020), this occurs even though doing so violates a few budgetary standards, such as annual and legal requirements. But before we get into how these principles are broken, it is essential to understand that even though the LOA is not approved and published, the Public Administration only uses the LDO to carry out its mandatory expenses. Provisions contained in the LDO provide for a situation in which there is a delay in the enactment of the LOA and authorize the execution of mandatory expenses, such as the payment of personnel, health expenses, and other current expenses characterized as urgent and unavoidable (Soares Junior, 2020). This is done while the LOA is not in effect and the new fiscal year has begun, and the authorization cannot exceed one-twelfth of the total amounts specified in the Annual Budget Law, frequently referred to as twelfths. These exceptions are because failing to carry urgent and unavoidable expenses out could harm the public interest irreparably.

Once one comprehends how authorized twelfths function while the LOA is being approved, one can examine the concerns highlighted by the annuity and legality principles. According to Soares Junior (2020), the late acceptance of the LOA violates the concept of annuity because it will be in effect for a time shorter than one fiscal year. Previously, it was determined that under the Brazilian budget system, under the annuity principle, appropriations are only allowed for issuing obligations within the fiscal year. Still, the opposite is true in this case of LOA approval delay. Nonetheless, in both instances, there is a deviation from the rule.

Even though the LDO permits the implementation of 1/12 of the LOA plan, Soares Junior (2020) outlines a critical legal issue involving the possibility of a hypothesis of the obligation by the executive of the twelfths' appropriations that members of Congress can later reject when passing the LOA. In other words, even though only emergency or unavoidable expenditures are permitted to be executed, the executive will assess what constitutes an emergency during the execution of the twelfths. In parallel, the legislature will consider the budget item entirely, which may exclude what the executive has already deemed an emergency.

C. TOOLS FOR PROVIDING FLEXIBILITY

Once the fiscal year has begun, there are still opportunities and methods for modifying what has already been authorized. This section provides an overview of some of the most often utilized methods for the processes carried out in the United States and Brazil.

1. The Budget of the United States

Reprogramming, supplementary appropriations, deferrals, and inter-fund transfers provide federal agencies considerable execution flexibility within their budgets. These are the key methods used in the United States, which are discussed in this subsection.

a. Reprogramming

Reprogramming is another mechanism for budget execution flexibility. Within the same department or administrative unit, funds or accounts may be reprogrammed by shifting resources from one program to another. According to Rubin (2019), legislation often restricts the amount of money that may be transferred within a fund and its source. In other words, the executive cannot reprogram whenever it deems necessary or choose the desired amount without legislative limitations.

As an alternative to requesting a new budgetary allocation, reprogramming can assist government agencies in responding to unanticipated events. The problem is when some agencies may intentionally underspend to reserve funds for unapproved expenses, leading to extensive reprogramming, causing both the approved budget and the legislative priorities reflected in the appropriations to be susceptible to significant changes. The legislature may establish reprogramming guidelines to monitor and prevent changes that threaten legislative policies, such as limiting the total amount that can be shifted, requiring advance notice and explanation of reprogramming, or requiring extensive quarterly reporting after the reprogramming has occurred (Rubin, 2019). These guidelines are typically derived from the restrictive language inserted by Congress into appropriations bills to limit the funds and time agencies have available to reprogram. For instance, Christensen (2012) states that organizations typically have leeway to change apportioned sums of no more than $400,000, or 2% of their overall funds, without seeking clearance from OMB. Generally, making reapportionments with no OMB endorsement is banned.

Throughout history, the Department of Defense and Congress have clashed over the transfer of funds in ways that affect policy or bypass congressional oversight. Rubin (2019) illustrates that in response to the military's need for flexibility, Congress increased the discretion the Department of Defense could exercise over its budget and reprogramming discretion after September 11. The result was a substantial expansion of the DOD's discretion to alter its budget without informing Congress. Later, it was confirmed that the department was "taxing" its programs to create a pool of uncommitted revenue. Unauthorized "taxes" on programs and services may indicate that officials attempt to cover up inefficiencies and failures. Congress imposes tighter restrictions on the Department of Defense in response to the growing concern over reprogramming guideline violations until another event restarts the cycle.

Some critics have pointed out the necessity to modify reprogramming procedures to give adequate and rapid responses to changing conditions, even though it is one of the top four tools for flexibility in budget execution. John Defterios, as cited in Bartels (2020), has recommended that the legislative and executive branches examine the processes for revising defense reprogramming procedures. In the new reality of great-power competition, Bartels (2020) warns that the rigidity and slowness in reprogramming are especially problematic. According to the author, the Pentagon is hampered in its capacity to deploy cutting-edge capabilities necessary to compete in the global arena by an archaic reprogramming process. Nonetheless, the world is becoming more challenging to forecast and change quickly. Bartels (2020) supports his allegation by noting that a congressional panel found that a routine reprogramming request required approval from at least 12 offices before submission to Congress.

Bartels (2020) suggests that Congress and the White House collaborate to shorten the approval process for reprogramming requests with minimal risk and to increase the degree of transfer authority proposed by the House. Excessive ex-ante controls slow down the process. Literature review suggests that excessive control might hamper the execution of a program. Tracking low risk reprogramming requests and relaxing some ex-ante constraints would expedite the approval procedure for all requests. This is because participants in the approval process would have a reduced workload and likely process riskier reprogramming requests more rapidly.

The recommended level of transfer authority by Bartels (2020) also pertains to the literature review. Rubin (2019) says that any sign of overspending or underspending, as well as corruption, fraud, or intentional undermining of the budget's aims and objectives, would be sufficient to increase budget implementation controls. For instance, improving and building border barriers throughout the southern border was a contentious issue between the executive and the legislature. According to the Painter and Singer (2020), Congress and the Trump administration's discussions on border security and broader government appropriations bills centered, among other things, on how the administration would fund their construction.

The Trump administration, which oversaw the second phase of border wall construction, adopted the following actions in FY2019 to gain funds over and beyond the levels allocated by Congress for border walls, as reported by the CRS (Painter & Singer, 2020): $601 million from the Treasury Forfeiture Fund were transferred to U.S. Customs and Border Protection (CBP), the Department of Defense reprogrammed $2.5 billion from its counterdrug programs to build border barriers, and the declaration of a national emergency authorized the reprogram of up to $3.6 billion from other military construction projects (Painter & Singer, 2020).

The President declared a national emergency on the southwest border in February 2019, calling for military use, and invoking several laws to address the security and humanitarian crisis there. For example, if the President declares war or a national emergency, the Secretary of Defense can initiate military-building projects to support the armed forces under 10 U.S.C. 2808. All military construction funds, including those still available for family housing, can be used for such endeavors (Gambler et al., 2020).

As a result of such tentative to get it done sooner, during Trump's administration, he was accused of exceeding his discretion by using the tools too freely to build the wall along the southern border. Aside from the political debate, it essentially reflects, through the state of reprogramming and transfers, the level of confidence and cooperation that has grown or weakened between the legislative and the executive over time (Bartels, 2020; Rubin, 2019).

b. Interfund transfers

In an interfund transfer, funds are moved from one appropriation account to another for an unspecified reason. The legislative body is usually notified of these transfers, a type of budget revision and redirection (Rubin, 2019). This ability to transfer resources from one appropriation account to another is subject to certain restrictions. It is meant to cover obligations not anticipated when the budget was enacted. As stated in the author's explanation, one appropriation will be increased by the same amount, and the same amount will decrease another appropriation (Pitsvada, 1983).

Since the bulk of federal transfer requirements can be met within existing accounts, the need for reprogramming can be kept to a minimum. Using discretion to transfer small amounts of funds within accounts, which does not require approval, saves agencies the trouble of requesting legislative permission for transferring funds between accounts (reprogramming).

c. Supplemental Appropriations

The federal government can only consume funds and take on debt within limits set by Congress and can only use the funding for the goals for which it was appropriated. Before an appropriation is granted, agencies are not allowed to spend or incur any costs (OMB, 2022c). Occasionally, the Government finds during budget implementation that it needs additional resources than Congress approved for the fiscal year. A supplemental allocation is viable when additional funds are required immediately and cannot wait for the following typical yearly appropriations act (OMB, 2022c). In other words, when the government discovers the necessity for additional resources than Congress budgeted due to unforeseen events, additional funds may be required, and Congress may adopt a supplemental appropriation. For example, a large natural disaster may demand more resources. Such cases may require supplemental appropriation. When a new budget law adds funds to an existing function or a new purpose during the fiscal year, a supplemental appropriation is in effect. Rubin (2019) explains that the funds may originate from fund balances, unanticipated revenue increases, contingency reserves, or rescissions, which are withdrawals of previously given spending authority. Nevertheless, supplemental appropriation may be granted without extra funds to cover its costs. In that case, those supplementals contribute to budget deficits.

Following the September 11, 2001, terrorist attacks, the President declared a Global War on Terrorism, mobilizing the full capabilities of the U.S. government to eradicate the threat. Supplementals covered the funds requested, initially called Global War on Terrorism funds (GWOT). After the fiscal year 2009 supplemental request in April 2009, the Administration renamed the funds for the wars in Iraq and Afghanistan as Overseas Contingency Operations (OCO) funds instead. Those supplemental appropriations were used for a wide range of purposes, including fighting terrorists, training the armed forces of neighboring countries, and implementing localized rehabilitation and humanitarian aid initiatives (GAO, 2009). Notably, the funds were added to the base budget and were not subject to deficit reduction regulations.

d. Rescissions and Deferrals

Rescissions and deferrals are governed under the Impoundment Control Act (I.C.A.) of 1974. (Title X of P.L. 93–344, 2 U.S.C. 681 et seq.). After a budget has been passed, the impoundment process reduces budgetary authority (permanently or temporarily). With a rescindment, a certain amount of funding from an agency's budget is taken away for good. Deferrals, meantime, put off making use of appropriations for a period, usually not exceeding 45 days (Christensen, 2012). Thus, deferrals permit agencies to reschedule their obligations and spending, particularly when circumstances change, such as a decrease or temporary suspension of expenditures.

Since deferral is known as temporary withholding or postponing the obligation or expenditure of budget authority, Rubin (2019) argues further that the chief executive of an agency may seek a small portion of the authorized budget as a holdback. While holdbacks might safeguard the government against unforeseen expenditures or fluctuating revenues, they can also be used to fund politically selected programs. Nevertheless, the Impoundment Control Act limits the President's ability to reduce or withhold agency funding through impoundment. Notably, under the ICA, funds may only be deferred in the following circumstances:

> (1) to provide for contingencies, (2) to achieve savings made possible by changes in requirements or greater efficiency of operations, or (3) as specifically provided by law. (Christensen, 2012)

Rubin (2019) notes that deferrals are not based on formal legislation passed and signed by the executive, unlike supplementals and rescissions. In addition, they do not contribute to balancing the budget because they delay the implementation of spending cuts. For the executive to delay a particular expenditure, there must be technical justifications, such as the project being unprepared to launch.

2. The Budget of Brazil

The following are the most typical methods employed in Brazil's system to offer flexibility for altering what has already been approved in the same way it is done in the previous subsection for the United States. The Remains Payable, Additional Credits, and Provisional Measures are all evaluated to provide insight into the Brazilian system.

a. Remains Payable

According to Law nº 4,320 of 1964, Remains Payable are expenses incurred or obligations undertaken but not paid or disbursed by December 31 and are categorized as either processed or unprocessed. This helps circumvent the rigidity of the budgetary annuity principle, which states that a budget authority must be fulfilled during the fiscal year to which it belongs. Consequently, Remains Payable is a way to evade the problems caused by annuity rigidity. Essentially, they allow budget appropriations committed in one fiscal year to be disbursed in the subsequent fiscal year. Note that this approach to budget execution builds the Executive's flexibility in achieving its primary goals, which are the attainment of fiscal targets and the control of legislative officials' support via so-called "payables" or "remains payable."

Governmental spending consists of the three phases of "commitment," "settlement or liquidation," and "payment." Law nº 4,320 of 1964 explains each phase: The expense commitment is the act issued by a competent authority that generates a payment obligation for the Government. Settlement or liquidation of the expense involves the validation of the right obtained by the seller based on the titles and supporting documents of the credit. Following expenditure settlement, the competent authority issues the payment order and determines the payment of the expense (i.e., the outlay or disbursement for the vendor). Expenses that have been committed and settled but not yet paid are carried over into the following year's budget as "payables." if they are not delivered in full by December 31. To avoid paying a large sum of money for bills that have already been resolved, the Executive often puts off paying them until the following year.

b. Additional Credits and Contingency Reserve

As one budget flexibility option, budget adjustments can be made in smaller chunks during the fiscal year. The Brazilian government has adopted these supplemental budgets through a system of modifications known as additional credits. The terms "supplemental," "special," and "extraordinary" all refer to categories of additional credit.

Supplemental funds can be used to make up for inadequate original budget allocations, which frequently develop throughout the execution of a program. Article 41, I of Law 4,320/64 defines "intended to reinforce the budget" as "supplementary credits" If the statute that created them expressly authorizes them to make up for deficits in budgetary appropriations, then they are used to do just that.

Nevertheless, special credits are used to account for expenses not included in the existing budget (art. 41, II, Law 4,320/64) for this purpose. They get to be open to taking on a new program, project, or activity and provide funding for the necessary staffing, supplies, and other inputs to make your product a reality. Because of this, it is possible to use this classification to enhance early state planning. Furthermore, suppose the duration of the program exceeds a single fiscal year. In that case, the PPA must include special credit as mandated by law to avoid criminal responsibility, per article 167, section1 of the Federal Constitution.

According to section 3 of Article 167 of the Constitution, extraordinary funds may cover unanticipated and urgent expenses, such as war, natural disasters, or national emergencies. While the three types of additional credit cover unplanned expenses, extraordinary credit refers to circumstances that cannot be anticipated using current resources and procedures, per the Constitution. Notably, the Constitution stresses unpredictability and urgency, critical distinguishing characteristics of an extraordinary circumstance event's unusual nature. For instance, requesting extraordinary funds for an emergency that could have been predicted is insufficient.

The contingency reserve is one approach for funding additional credits; it is a broad allocation that is not explicitly designated for a particular purpose. Its primary objective is to support the establishment of additional credits. The Senate defines a contingency reserve as a "global allocation not specifically earmarked for a particular agency, budget unit, program, or economic category, whose resources will be used to open additional credits" (Federal Senate, n.d.-b).

There needs to be a clear distinction between the supplementary, extraordinary, and special types of appropriations that support additional credits. When funds become inadequate, further credits may be granted (Kohama, 2012, as cited in Couto et al., 2018). In other words, they are in addition to the current budget's appropriation amount. Both the initial setting of the allocated amount, which became incompatible with the need for the expenses to be carried out, and the cancellation of all or part of that allocation to compensate for the supplementing of another budget item might contribute to this shortfall (Aguiar, 2008 as cited in Couto et al., 2018). This mechanism is available in the LOA, which authorizes the executive to open additional credit. This flexibility, however, is often limited to the cancellation of between twenty to thirty percent of each appropriation category, as cited in Santos (2016). Nonetheless, it means a significant transfer of discretionary authority to the Executive Branch.

It has been argued that the special type of additional credits supports new expenses not covered when planning and putting together the budget. According to Giacomoni (2010), as cited in Couto et al. (2018), the introduction of a new budget line necessitates a new piece of legislation to be authorized for enabling special credits. Nonetheless, credits of the extraordinary sort are reserved for the payment of unexpectedly high or unexpectedly urgent expenses. Extraordinary credits may be enacted by decree by the executive branch, regardless of prior legislative authorization, when unexpected costs arise, those that could not have been forecasted and still require the executive to perform actions for quickly addressing the issue (Kohama, 2012, as cited in Couto et al., 2018). However, as Giacomoni (2010) explains, the executive must immediately inform the legislature about the action taken.

c. Provisional Measure

As defined in Law 4,320/64, additional credits are expenditure authorizations that are not computed or given insufficiently by the annual budget. They might be characterized as supplementary, extraordinary, or special. In circumstances involving an extraordinary type of credit, the President of the republic authorizes them through a legal mechanism known as provisional measure (MP). Due to the urgency and unpredictability of extraordinary credits, such as during war or natural disasters, the President of the Republic transmits them to the National Congress through a MP with immediate practical effect.

Since Article 62, 1, d of the Constitution allows extraordinary credits to be established by provisional measure, the legislative body is, therefore, required to examine the urgent measure only after the budget authority has been granted, consequently reducing its control capabilities, and granting the executive greater flexibility to cover unexpected expenses. One may conclude that a law is required for supplemental and special types of credit to confer budget authority, which is correct; however, the annual budget law may authorize the executive branch to offer supplemental credits within quantitative constraints and under defined conditions. This instrument, known as the reallocation margin, gives the executive vital control over the public budget and is commonly utilized by federal organizations (Conti, 2016). As a result, the authority granted under Article 7, I of Law No. 4,320 aims to speed up budget execution by addressing the possibility that the budget law contains a provision authorizing the executive to allow supplementary credits, limiting the amount that can be approved, and ensuring that all legal requirements are met. Simply put, the need for a bill to establish supplemental or special credits is reduced as they are exempted by executive order so long as the budget law's authorization provisions are followed.

d. Expense Contingency

The contingency of expenses is an additional tool that may be used to boost budget execution flexibility. According to Dallaverde (2013), cited in Santos (2016), this mechanism gives the executive genuine legal authority to decide on budget lines with a good margin of autonomy, indicating a capacity to deviate from the LOA's objectives and legislative intents when circumstances justify the initiative. The Senate defines a contingency as "the blocking of budget appropriations. This procedure is carried out by the Executive with the objective of ensuring budgetary balance, that is, balancing the execution of expenditures and the effective availability of resources" (Federal Senate, n.d.-a). Some critics feel that such an instrument harms democracy by excluding the legislature from decision-making. In contrast, others believe it is a vital fiscal flexibility mechanism for ensuring a balanced budget. Regardless of this dispute, it is notably a method for providing the executive with budget implementation flexibility.

D. CONTROL MECHANISMS

As previously stated, Burkhead (1956) splits the processes used to execute a budget into two distinct categories: financial and administrative. The many accounts used to keep track of these figures are monitored to keep a check on the government's financial activity, including both receipts and expenditures. Administrative controls, in the context of budget execution, refer to the day-to-day events that most administrators encounter when implementing and modifying the budget plan that was developed and changed by the executive branch and reviewed and approved by the legislative branch (McCaffery &

Mutty, 2003). Burkhead (1956) claims that financial and administrative control mechanisms strive to preserve legislative intent, observe fiscal restrictions, and offer organizational flexibility at all layers of public administration.

1. The Budget of the United States

a. Purpose, Time, and Amount Restrictions

Executive officials must meet the proper purpose, time, and amount to properly expend authorized funds. "Appropriations shall be applied only to the objects for which the appropriations were made except as otherwise provided by law," states section 1301(a) of the U.S. Code. The time constraint significantly impacts new commitments and their associated expenditures. Section 1502 of the U.S. Code stipulates that funds remaining after a limited-duration appropriation may "only be for payment of expenses properly incurred during the period of availability." The Antideficiency Act is the legal foundation for the federal government's administrative and financial control. It is not enough to be aware of the purposes for which approved funds may be utilized and the periods during which they may be used.

According to GAO (2004), the Antideficiency Act is the basic statute that addresses amount characteristics, and it expressly prohibits the following: (1) "Making or authorizing an obligation or expenditure from any appropriation (or apportionment), which is over the amount available in the appropriation (or apportionment)." Sections 1341(a)(1)(A) and 1517 of Title 31 of the United States Code are applicable (a). (2) "Involving the government in any contract or other obligation for the payment of money for any purpose in advance of appropriated funds being made for such a purpose." 31 U.S.C. § 1341(a)(1)(B) (B). (3) "Accepting voluntary services for the United States or employing personal services over that authorized by law, except in cases of emergency involving the safety of human life or the protection of property." This prohibition does not apply in instances when human or property safety is threatened. 31 USC § 1342.

In a nutshell, accepting volunteer services, assuming obligations before earning an appropriation, or making obligations over the authorized amount constitute a transgression of the ADA set of laws. Table 3 comprises some instances that have been taken from Candreva (2019) to illustrate the most typical ADA infractions.

Table 3. Typical ADA infraction. Adapted from Candreva (2019).

Statute	The Antideficiency Act prohibits federal employees from:	Examples of violations
31U.S.C.§1341 (a)(1)(A)	Making or authorizing an expenditure from, or creating or authorizing an obligation under, any appropriation or fund in excess of the amount available in the appropriation or fund unless authorized by law.	a fund for foreign national tax withholdings was over-disbursed contracts contained open-ended indemnification clauses cost of an upgrade to a General officer's quarters exceeded the statutory cap on such expenditures accounting errors created a mistaken belief about the amount of funds available causing an over-obligation exceeding a minor construction threshold caused the project to become an unauthorized major construction project
31U.S.C.§1517 (a)	Making obligations or expenditures in excess of an apportionment or reapportionment, or in excess of the amount permitted by agency regulations.	obligated funds in an amount in excess of what was apportioned under a continuing resolution cited the wrong appropriation when sufficient funds were not available in the proper appropriation at the time failing to request a re-apportionment of a multiyear appropriation or carryover funds resulted in an apportionment insufficient to cover obligations obligated more on a specific project than was permitted by agency regulations

Statute	The Antideficiency Act prohibits federal employees from:	Examples of violations
31U.S.C.§1341 (a)(1)(B)	Involving the government in any obligation to pay money before funds have been appropriated for that purpose, unless otherwise allowed by law.	obligated the government to buy food or water when unauthorized entered into a multiyear lease citing one-year funds entered into contracts in one year for work that would not commence until the subsequent year acquired 14 months of services citing one-year funds
31U.S.C.§1342	Accepting voluntary services for the United States, or employing personal services not authorized by law, except in cases of emergency involving the safety of human life or the protection of property.	an employee worked while in a furlough status a volunteer student intern was not actually a student per the program definition a contractor continued working after the contract ended

The significance of the connection between continuing resolutions and the Anti-Deficiency Act should be clear from Candreva's analysis. As the author explains, once an appropriation for an object of expense has expired, for example, at the end of the 2019 fiscal year, creating obligations without a new appropriation would commit the government before the approval of the subsequent fiscal year (2020) appropriation, or it would obligate more than the 2019 fiscal year's appropriation, either way violating the law. Consequently, the government must cease promptly to prevent ADA violations. To avoid a government shutdown, Congress adopts a short-term funding package, the so-called continuing resolution.

Candreva (2019) also makes some noteworthy trends, including an increase in violations during periods of transition or complexity (such as the introduction of new authorities, legislation, etc.), and the ADA as an effective tool at preventing excess and unauthorized expenditure when it comes to the supervision and control of the legislature over the executive branch. But it still does not deal with unnecessary spending since Congress and executive agencies should redirect some of the time and energy they spend investigating and reporting ADA violations to dealing with incorrect payments if they want to deal with wasteful spending.

b. The GAO and the Public Administration Internal Control

The GAO, popularly known as the "congressional watchdog," works to improve federal efficiency and effectiveness by aiding Congress in fulfilling its essential obligations (GAO, 2002). By conducting audits of government spending, assessing performance and regulations, and offering critiques, suggestions, and the like, the GAO strives to aid Congress in making more informed oversight, policy, and financing decisions (GAO, 2002).

According to the GAO, internal robust control systems make operations more efficient and effective, simplify the reporting of correct information regarding those operations, and facilitate compliance with applicable rules and regulations. The GAO's "Green Book," or Standards for Internal Control in the Federal Government, lays out a comprehensive system for managing and upholding a reliable internal oversight of organizations' performance. The GAO strongly recommends that every business carefully weigh the advantages and disadvantages of establishing an internal control system. A company can accomplish what it sets out to do if it has a comprehensive set of internal controls. its five components need to be planned, implemented, operated, and integrated appropriately to have a successful internal control system. Control Environment, Control Activities, Risk assessment, Information and Communication, and Monitoring are the five aspects of the federal government's internal control system, which is considered the gold standard. They are outlined in 17 principles that serve as a roadmap for the effective planning, execution, and operation of the connected components.

c. Spending Rates

The rate at which funds are expended may be constrained to prevent the program office or agency from spending the entirety of its available funds too rapidly, subsequently requiring an influx of additional funds. OMB's annual budget allocations to government entities allow this to happen. As part of the budgeting process, these organizations predict how much they will spend over time. OMB will apportion funds quarterly for expense-type accounts based on DOD's estimated expenditure rate. Allocations, allotments, and objectives issued lower in the chain of command facilitate the system's smooth operation (Candreva, 2017).

If the allocated funds are determined insufficient due to an unforeseen occurrence, the agency may request that the OMB reapportion those funds. For the instances that the agency's funding objectives may have shifted, the funds previously earmarked for a specific purpose may be reprogrammed. Candreva (2017) explains that, by examining monthly summaries of year-to-date totals, a comparison of the current year to the previous year, and budget projections, the Congressional Budget Office and the Treasury Department produce monthly budget reports to monitor budget implementation. In addition, DOD departmental offices, senior commanders, and service comptrollers monitor and control spending rates and determine whether more reapportionment is required.

It is essential to be aware that there are negative aspects to using the spending rates. Occasionally, managers may spend funding inefficiently to make the spending rate look good, even if doing so is detrimental to their programs. This is in no way the objective behind the rule, which brings up the important point that despite our best efforts, there is no assurance that the outcomes would be as we had hoped for simply because we have the intention to put in place such controls.

2. The Budget of Brazil

a. The Golden Rule

The golden rule is the legal requirement prohibiting financial inflows from debt (credit operations) from surpassing current expenses (investments, financial inversions, and debt amortization). The Federal Constitution of 1988 contains the Golden Rule, which prevents avoiding owing money to cover current expenses. This provision prohibits the government from incurring debt to pay for employees, social benefits, debt interest, and public administration costs. Simply put, the golden rule stipulates that the government cannot spend more than it collects.

The golden rule is included in article 167, section III of the CF of 1988. The following is what the law says: "The following are prohibited: (…) engaging in credit operations over the amount of capital expenditures, except for those authorized by supplemental or special credits with a defined purpose and approved by the Legislative with an absolute majority." Limiting credit operations to the value of capital expenditures is one way the Constitution discourages borrowing for current spending. Government bond issuance is mainly used in these transactions.

It is permissible for the government to exceed the limit on money owed through credit operations while still adhering to the golden rule; all that is required is a request to the legislature for more funds, also known as additional credit, as stipulated by the Federal Constitution. For instance, the executive may submit a request to Congress for more funds as a supplemental or special additional credit to be made available for the payment of retirement and social benefits via the issue of debt while still complying with the rule.

b. Reports on Monitoring and Control

After budget bills are approved and signed into law, the Legislative has further responsibilities. Under Article 70 of the federal constitution, Congress must investigate federal agencies and departments during the review phase of budget implementation, focusing on the allocation of funds, the valuation of assets received, and the expenditure of public funds.

The TCU and legislative committees, such as the Mixed Commission of Plans, Public Budgets, and Inspection (CMO), assist Congress in conducting the investigation and legislative control over budget execution. Along with other public organizations, the TCU conducts audits, assessments, and recommendations by submitting to the Legislative for review and analysis of the numerous inspection and control reports to demonstrate the forecast of tax collection and application of resources under the law and within established limits; to allow the evaluation and control, by Congress, of activities and operations carried out or planned regarding budget planning and execution; and to provide transparency on the amounts allocated to the programs, amounts received, fund performance, expenditure, and cost estimates (National Congress, n.d.). Table 4 contains samples of inspection and control reports submitted to Congress.

Table 4. Reports to Congress. Adapted from the National Congress (n.d.).

SUBJECT	LEGISLATION	ACCOUNTABLE	DUE TIME / FREQUENCY
Rendering accounts	Federal Constitution/1988 - Art. 84, XXIV	President	Annual - "within 60 (sixty) days after the opening of the legislative session."
Activities Report of the Federal Court of Auditors (TCU)	Law nº 8.443/1992 - Art. 90	Federal Court of Auditors (TCU)	Quarterly and annually
Revenue and Expenditures Assessment Report	Budget Guidelines Law (LDO)	Executive	Bimonthly - "until the twenty-second day after the end of the bimester."
Financial Management Reports	Law nº 10.028/ 2000 - Art. 5	Holders of Federal Government Branches and Organizations	Established in the Budget Guidelines Law (LDO)

Considering these and other non-listed reports due to Congress, it is possible to make the following observation: the purpose of these reports is to provide transparency to the amounts allocated to each program, amounts received, estimates of expenditures and costs; demonstrate the forecast of tax collection; enforce expenditure of funds under the law and within the established limits; and permit the evaluation and control, by Congress, of the activities and operations in conduction (National Congress, n.d.).

The accountability of the heads of the federal branches stands out among the many control mechanisms because it offers countless opportunities for adjusting and improving state action and the conduct of the nation's senior figures. In addition, according to Article 49, section IX of the federal constitution, one of the most significant obligations of Congress as the bearer of external control is to evaluate the annual accounts provided by the President of the Republic.

c. Bidding Process

The federal constitution mandates competitive bidding for government contracts to protect the public interest. To do so, managers and officials in charge should consider the firm's technical and economic-financial resources, the product's quality, and the object's economic value. Instead of favoring one company over another when selecting suppliers, contractors, etc., the bidding process encourages fair competition and reasonable pricing.

Bidding is the legal and normative framework that governs the entirety of the procurement process in Brazil and acts as the fundamental guiding force for public procurement. All public expenditures must be accompanied by a formal bidding procedure (or an equivalent legal mechanism). This is in accordance with Article 3 of Law No. 8,666/ 1993 and the new Administrative Procurement and Contracts legislation, Law No. 14,133, of April 1, 2021. The former was the main normative for bidding processes until repealed by the provision of the new Administrative Procurement and Contracts norms. Law No. 8,666/1993 remains in effect for contractual agreements entered before the revocation and still within the validity period. Nevertheless, both norms regulate the bidding procedure and expressively mandate bidding process for government expenditures. Notably, managers have less flexibility and authority when it comes to implementing resources by analyzing the business rules of the bidding method, as well as the intricacy of the legislation passed by the federal government on public acquisitions.

IV. PRESENTATION OF RESULTS

Control and flexibility activities have conflicting interests, which become apparent when they are in tension. Without the smallest amount of control, there would be no reason to require a flexible arrangement. Implementing control actions represents how flexibility can be constrained; hence, these two approaches are interconnected. In addition, if the highest level of control does not provide any degree of flexibility and that flexibility is necessary to some degree to achieve desired objectives, it is conceivable that one of the desirable attributes of a control system is the provision of an adequate degree of flexibility.

A. ATTRIBUTES INDENTIFIED

The following is an evaluation of the attributes gathered from the literature in contrast with the descriptions of procedures from the systems of both the United States and Brazil. This appraisal aims to highlight effective practices that incentivize managers to adapt and adjust to unforeseen scenarios while adhering coherently to the legislative intent.

1. Effective Control System Attributes

According to Wildavsky (2017), the control mechanisms are responsible for establishing the guidelines and limits for using authorized and appropriated funds. As a result, the execution of approved programs is constrained by these limitations, and compliance with those limits is measured using criteria. The research has shed light on many restrictions on the resources. These restrictions vary on purpose, time, and amount as demonstrated by the fiscal law, in addition to pointing out the distinct appropriation accounts, for example. The obligation or expense must be for a lawful purpose, be incurred within the time constraints of the appropriation, and not exceed the appropriation's cost limits. If none of these three conditions are met, the expense is unjustifiable. Each "color of money," or expense category, is intended for a specific purpose, has a different duration, and allows for differing degrees of discretion in its execution.

An efficient control system should be able to detect instances of corruption, fraud, or any other type of abuse, allowing these occurrences to be prevented or eliminated over time. There are various reasons why managers engage in unethical activity and abuse the authority they have in conducting budget execution. In line with the findings of this study, one of them is to achieve political and public policy-related objectives. Even though it has been made clear that not all policy-related activities are unlawful or detrimental to democratic values (Rubin, 2019), it turns out that this is one of the most typical incentives for managers to engage in abusive behavior. An effective control system should have an adequate variety of tools for overseeing budget execution. These tools should allow the system to detect any sign of overspending or underspending, corruption, fraud, or the deliberate undermining of the budget's goals and objectives.

Control activities should not only discourage managers from engaging in corrupt behaviors and abusing their discretion, but they should also motivate managers to fulfill programs' objectives most efficiently and cost-effectively as possible. It is vital to balance between adhering to budgetary limits and making every effort to achieve legislative goals to ensure that the budget's execution will be effective and financially prudent. With a reliable control system, executives should be able to maximize productivity and efficiency while conforming to all applicable laws and regulations. The research has demonstrated that the joint efforts between the private sector and the United States Federal Government have aided in the implementation of control activities that establish and maintain an effective internal control to promote efficient and effective operations, the reporting of accurate information about those operations, and, finally, compliance with applicable laws and regulations.

An efficient control system should boost efficiency and transparency, allowing Congress to fulfill its constitutional responsibilities (GA0, 2014). Effective oversight includes examining how tax dollars are spent, assessing federal initiatives, and offering analysis, alternatives, guidance, and support to Congress to help them make better policy and finance decisions (GA0, 2014). Regarding the Trump administration's efforts to continue and expedite the construction of the border wall, it should be noted that by proclaiming a national emergency, they were able to reprogram funding from the counterdrug program and military construction projects to build border barriers. On the other hand, there were fears that the Trump administration was exercising too much discretion with the reprogramming mechanism to speed up the southern border wall construction. According to Rubin (2019), the legislative view of executive abuse of discretion regarding flexibility influences the equilibrium between flexibility and control over time. It's important to realize that the approach depicted in the example was not cooperative but somewhat confrontational. In a highly unusual move, House members filed suit against the Treasury Secretary to suspend the reprogramming. To make matters more intriguing, a federal judge found that the Trump administration went too far, although the GAO concluded they were within their legal rights. Briefly, the House deemed the conduct improper, although the GAO deemed them acceptable (GAO, 2019; P. Candreva, Classroom Case Study, September 2022; Somin, 2019). This circumstance lends credence to what Rubin (2019) characterizes as a cyclical process of balancing the degree of control elected officials adopt and the idea that control dynamics tend to follow a pattern over time. Rubin argues that the balance between flexibility and control changes over time due to the influence of abuse on flexibility and legislative officials' responses.

There should be sufficient financial inspections, assessments, reviews, studies, expert opinions, and the like as part of the control system to increase the overall administration's performance (GAO, 2014). Both the U.S. and Brazilian systems appear effective when evaluated through the prism of reporting. This is because the executive branches of the U.S. and Brazilian governments present different types of reports to Congress. These reports estimate tax revenue, ensuring funds are spent legally and within budgetary limitations, detail the amount allocated to each program, and enable Congress to assess and regulate the activities financed by these resources, etc. For detailed data on the reports, see Under Secretary of Defense (n.d.) and National Congress (n.d.).

Any control system should be as neutral and technical as is reasonably possible; accordingly, efforts should be made to use the available control activities and even to control the auditors and inspectors, to ensure that their findings are not skewed by political bias or other considerations other than those of eradicating abuses, achieving program goals efficiently and effectively, and allowing for an adequate degree of flexibility.

The research indicates that adhering to specific principles considerably increases the likelihood of establishing an effective control system. A dedication to fundamental principles such as accountability, integrity, and reliability generates objective, timely, and non-partisan control activities that are crucial for enhancing the decision-making process for all stakeholders.

2. Effective Budget Flexibility Attributes

For budgets to be effectively employed despite adverse circumstances, they must be adaptable. Given the difficulties of predicting the future, it is essential to create budgets considering this. Even though budgets are designed with several possibilities in mind, the actual occurrence of certain events may compel a plan revision. Adjusting the allocation of funds will make them more reasonable and practical. Allowing some wiggle room among the budget's multiple control mechanisms is claimed to improve the efficacy and efficiency of government programs. Take for instance the extreme case of the terrorist strikes that occurred on September 11, 2001. It was less than three weeks until the end of the fiscal year, and the administration required flexible budgeting methods for fighting terrorism, maintaining law and order, and cleaning up the disaster.

Given that the budget is typically drafted many months, and in some cases up to two years, in advance of the obligation of authorized funds and that priorities may have changed during that time, adequate budget flexibility should account not only for the effects of natural disasters, the need to wage war, or the fulfillment of other unanticipated needs but also for priorities and circumstances that have changed during the budget process stages preceding its execution. Rubin (2019) asserts that numerous unanticipated events may occur between budget planning and execution, such as economic, public opinion, and political strategy changes, necessitating flexibility to handle unpredictable conditions requiring substantial policy changes. According to Candreva (2017), the strategy for adaptation in budget execution starts at the outset of the draft budget piece, when the objective of each sought resource is articulated in writing. Even though the text will likely undergo revisions as the process progresses, the fundamental strategy for achieving the desired degree of adaptability, according to the author, is to strike a balance between providing sufficient detail to ensure the program is authorized and monitored and leaving room for the program to accommodate unanticipated occurrences. Managers can prepare in advance of execution, plan reprogramming authorities, and project potential supplemental appropriations requests to leverage the imprecise language of the budget, mainly because the process is lengthy and bureaucratic enough not to accommodate changing scenarios that start to become a reality during the process.

A systematic approach to budget execution exposes the importance of good attributes of flexibility (i.e., managers' ability to adjust within the budget's constraints). Regarding budgeting, operational methods frequently fail to provide the funds for necessary maintenance and operational activities, for instance. Due to the limitations imposed by the available appropriations, depending on the objective of the expenditure or the amount available, it may be necessary to choose between the execution of a service or the delivery of a product. Pitsvada (1983) says that there are six practical strategies agencies utilize to flexibly implement their budgets, which are frequently unknown to Congress but effective. So, it merits consideration as an efficient flexibility technique. Methods consist of object classification, appropriation structure, contingency funds, emergency provisions, transfer authority, and reprogramming authority. For instance, agencies are not restricted by object classification while executing their budgets so long as they do so within the confines of the appropriation structure specified in any agency appropriation act. Moving funds across distinct categories of expenditures within the same budget activity do not need reprogramming directives, frequently requiring Congressional approval.

The offsetting of appropriation annuity is a valuable feature contributing to the budget's implementation flexibility. Given that the budget is a yearly document, it is reasonable to assume its contents are unchanging and only pertinent for the upcoming year. However, this is not always the case. The budget sometimes contains dynamic information relevant to the current and the following year. There are many ways in which appropriations can be provided flexibility. One of those methods is to extend the life span of appropriations or enable restricted modifications in the amount of money to support individual programs while keeping the legislative intent. Agencies would not have additional flexibility in how they spend money gained through the flexible funding method;

however, they would be able to extend the strict one-year time restriction for established funding levels.

Other key strategies include funding for contingencies and emergency provisions. According to Pitsvada (1983), Congress enacts separate appropriations marked as contingent to provide federal budget execution with flexibility. The additional obligational authority granted by these appropriations may only be utilized to satisfy urgent or unanticipated needs, as determined by the administration following the rules controlling appropriations for contingency appropriations. Similarly, emergency provisions permit agencies to deviate from planned purposes during budget execution. The author identifies two ways in which contingency appropriations differ from emergency provisions. First, contingent appropriation is an allocation of funds outside the regular budget used to cover unanticipated expenses. Frequently, an appropriation for general purposes will include provisions for emergency funding. Second, emergency provisions do not confer additional budget authority on an agency, unlike contingency appropriations.

Funds are moved from one appropriation account to another in a transferred authority for unspecified reasons. These transfers are a kind of budget rebalancing and redistribution. They are frequently announced to the legislature, although most federal transfer requirements can be met with already established accounts, saving the time and effort required for account reprogramming. When agencies exercise their discretion to transfer small amounts of funds inside accounts, they do not require legislative approval, which saves time and resources. In other circumstances, reprogramming is utilized so that funds may be transferred from one program to another within the same department or administrative unit.

B. U.S. AND BRAZILIAN BUDGETARY CONTRAST

The U.S. Department of Defense established the Program Budget System (PPBS) in the early 1960s. It is widely acknowledged that this system considerably influenced Brazil’s adoption of the program budget (Novick, 1968). Law no. 4,320/1964 established the Budget-Program approach to budget preparation, which integrates planning and budgeting to deliver quantifiable and realistic objectives and targets. Since then, Brazil’s system has strived to connect operational capacity planning and budgeting (Paludo, 2009). The Planning, Programming, Budgeting, and Execution (PPBE) system is the Department of Defense's primary resource allocation tool. It was derived from the fundamentals of the PPBS, which served as its foundation.

In the Brazilian budget system, allocations can only be utilized to issue obligations within the fiscal year, per the annuity principle. In Brazil, accounting records are compiled during the fiscal year of every organization. It corresponds to the Gregorian calendar and runs from 1 January to 31 December. However, in the United States, the fiscal year begins on 1 October and ends on 30 September.

In Brazil, all appropriations must be utilized during the fiscal year, regardless of classification, or they are considered lost. The agencies can only implement the LOA within a single fiscal year per the annuity principle. In contrast, while the budget execution stage is in place in the United States, the budget authority granted by appropriations acts can be used to incur obligations. Once the OMB has apportioned resources from Treasury-managed appropriation accounts, the funds are legally available for obligation. The obligation does not exist until a contract is signed, a replacement part is ordered, or an employee begins working and earns pay. Once an obligation's period (depending on the appropriation type) has passed, it will be considered "expired" for five years. During these five years, obligations accumulated during appropriation availability might be settled and disbursed. After this period, the appropriations will no longer be available.

The Brazilian method permits fiscal year obligations to be paid or disbursed in subsequent years, overcoming the challenges associated with annuity rigidity. To recall the definition of a Remains Payable instrument as stated in Law No. 4,320 of 1964: "Remains Payable are expenses incurred or obligations executed but not paid or disbursed by the 31st of December, distinguished as processed or unprocessed." Compared to U.S. procedures, U.S. agencies have greater flexibility and discretion in how they use annual appropriations to spend fiscal year funds for acquisitions spanning many fiscal years. On the other hand, the bona fide need rules, which evaluate whether an obligation has a sufficient relationship to the agency's needs during the period for which the appropriation is available, are not in place in Brazil, leading some to conclude that Brazilian managers have more flexibility when it comes to obligating funds, particularly at the end of a fiscal year.

The phenomenon of "use it or lose it" is commonplace in both countries' systems at the end of a fiscal year. As previously explained, each manager has different concerns about obligating cash at the end of the fiscal year, but all do so to avoid losing funds. Inconveniences exist in general, such as hurried and inefficient year-end spending. Organizations in Brazil are under pressure to make effective use of their assets because of the unpredictability of future allocations. Any delay will harm future budgets and could lead to the diversion of already-appropriated funds. In Brazil, the Remains Payable also mask the actual financial savings because they are not shown in the fiscal result. Nonetheless, it ensures that suppliers get rewarded, even if payments for recurring expenses are postponed until after the end of the fiscal year.

In comparing the United States of America with Brazil, the overestimation of revenues and expenditures stand out as critical factors (Carvalho, 2013). These are among the lessons developed nations have learned from the multi-year budget. In contrast, the decision-making process in Brazil is focused on the short term, with the primary objectives of maintaining fiscal balance and satisfying the government's congressional supporters. Therefore, planning and spending quality take a back seat in Brazil's decision-making process, along with budget execution flexibility, due to the absence of a long-term spending plan and the requirement that all types of appropriations be committed within a fiscal year, leading to an incremental budget approach.

In the words of Blöndal et al. (2003), "the flexibility of not spending money is therefore not available to some executive leaders as it is in many Organization for Economic Co-operation and Development (OECD) member countries; however, agencies are not required to spend all the appropriated monies that have been apportioned to them by OMB, and unspent funds are returned to the Treasury." One should be aware that there is no cash flow until an obligation is settled and money has been disbursed to suppliers. Still, the essential point is that even for systems comparable to Brazil and the United States, this substantially affects spending flexibility.

Candreva (2017) elucidates that the rate at which funds are spent in the United States is controlled to prevent the program office or agency from using its available appropriations too quickly, thus requiring the input of extra resources. Budgetary funding provided by OMB on a yearly, monthly, and weekly basis enables effective control for federal agencies. The agencies plan their spending by projecting revenues and expenses over a set period. In the Brazilian system, a similar monitoring procedure exists; however, instead of monitoring the spending rate or obligating appropriations to avoid understanding or overspending, the SOF continuously reviews the economic conditions and revenue projections, with the collaboration of STN, to determine whether more appropriations can be obligated or whether a temporary contingency should take place. Such monitoring aims to verify whether the available financial resources support the expenses and commitments from the authorized appropriations. The procedure restricts the organizations' ability to make commitments and financial transactions (caps on obligations and outlays) during budget implementation. Despite the positive outcomes of both procedures, the findings from the U.S. method reveal drawbacks associated with relying on spending rates. Managers may occasionally make wasteful use of funds to improve the appearance of the spending rate, even if doing so has unfavorable effects on their programs. At the same time, when contingency of expenses takes place in the Brazilian system, budget implementation becomes more difficult for managers to overcome. In addition, the United States is not bound by revenue forecasts or the Golden Rule; consequently, it is more likely to run budget deficits than the government of Brazil, where such constraints are in place.

Concerning the presidential transition period, one should note a slight difference in the procedures followed in the United States and Brazil. This is because, according to the rule, the president of Brazil, for the first presidential term, is required to engage with the budget proposed by the president who was in charge before them. On the other hand, it is possible that it will not happen in the United States, as was the case throughout the administrations of George H. W. Bush, Bill Clinton, George W. Bush, Barack Obama, and Donald Trump, all which resulted in their successors submitting the budget.

In both the United States and Brazil, it is not uncommon for the release of the budget to be delayed; however, differing strategies are utilized in each jurisdiction.

Suppose all appropriation bills are not passed by the beginning of the fiscal year in the United States. In that case, a continuing resolution (CR) must be passed by Congress to keep the government operating. On the other hand, in Brazil, in case the LOA is not enacted on time, the so-called twelfths take place, which allows for the monthly authorization of 1/12 of the Annual Budget Law, or LOA to be enacted, of mandatory expenses and other current expenses characterized as urgent and unavoidable. A CR must be passed in the United States to avoid a government shutdown, which is not the case in Brazil.

In contrast to the North American system, where legislative approval is required for the partial or complete cancellation of appropriations as observed for the rescissions, one of the ways to support the passage of supplemental credits in Brazil is to cancel existing appropriations partially or entirely which the executive can do to a certain extent without legislative approval. The U.S. system permits agencies to reschedule their obligations and expenditures via rescission, the permanent cancellation of a specific portion of an agency's budgetary authority, deferrals, and the suspension of the obligation or expenditure of appropriate funds, particularly when circumstances change. Likewise, in Brazil, supplemental appropriations offer the government greater discretion. This contrast reveals a slightly higher flexibility of the Brazilian executive, as it contains a margin (often 20 to 30 percent) for canceling each category of appropriations to fund supplemental credits without legislative approval (Santos, 2016).

V. ANALYSIS AND CONCLUSION

A. DEFENSE BUDGETS' FLEXIBILITY AND CONTROL

Candreva (2017) sheds light on the case in the military, where there are two separate interactions for monitoring the budget implementation. First, the military is subject to legislative controls that ensure government plans and programs are carried out. As this research illustrates, programs implemented by the military differ slightly from those initially recommended during the planning phase. It turns out that legislative monitoring takes place to ensure that the legislative objective is carried out without unapproved changes. Control components imposed by senior military authorities provide the second interaction for carrying out oversight within the military. Even though fiscal law provides a minimum acceptable level of performance, some organizations may opt to establish targets higher than those imposed by the rules and regulations. The leadership has some flexibility in determining the goals to be pursued to reach the desired level of performance (GAO, 2014). The higher levels of military management intensify their supervision to ensure that their priorities are adhered to and that military groups spend funds within the confines of fiscal regulations. One approach to controlling expenditures is limiting the rate at which funds may be obligated. For instance, the program manager or agency must stick to the required appropriation rates to prevent running out of funds and requesting further funding.

The studies of CMR theories have a significant role in providing knowledge on participants' roles while implementing defense budgets in democracies. According to Candreva and Jones (2005), the primary dilemma of civil-military relations in democratic societies has traditionally been considered as having a military that is efficient at deterring and defeating an opponent and under sufficient control that it does not undermine the government. According to Feaver (1996), as cited in Candreva and Jones (2005), the problem emerges when trying to find the sweet spot between a military strong enough to accomplish whatever the civilians ask for and a military submissive sufficient to do only what the civilian authority permits. Besides the political aspect, CMR sheds light on how much authority Congress gives the Department of Defense and whether such delegation is desirable. For this analysis, one should note a wide swath of military activity in which civilian officials, especially legislative bodies, do not participate, which grants the military some wiggle room to implement their budget.

"Intentionally vague budgets," as explained by Candreva (2017), are occasionally used by managers to implement a defense budget with greater discretion. Candreva contends that not everything is described in the appropriation, nor should it be, so deliberate imprecision promotes adaptability. Under fiscal law, managers have intrinsic discretion in implementing the budget and determining how to achieve their goal, conduct the program, incur obligations, etc. Moreover, the analysis of the five components and seventeen principles of internal control established in the GAO's Standards for Internal Control in the Federal Government, as well as the roles of an internal control system, offers insights that showcase the discretion the management has when setting objectives and control activities to achieve a predetermined level of performance (GAO, 2014). Without indisputable words and statutory clarification, the GAO's Principles of Federal Appropriations Law state that agencies have sufficient discretion to fill statutory gaps and incur obligations (GAO, 2004). According to Pitsvada (1983), still within the context of the language of the appropriations statements, Congress typically allows the federal government flexibility by approving distinct expenditures specified as contingent in the appropriations phrasing. These funds are meant for use in the event of sudden or unanticipated expenditure needs and provide agencies with greater adaptability by granting them additional budget authority to commit. Under the appropriations statute, the executive branch establishes the "need."

Reprogramming is a standard method utilized by the military to provide execution flexibility. While reprogramming has been helpful as an alternative to requesting additional funds, Rubin (2019) notes that rules generally limit the overall amount of money that can be transferred within an account, demonstrating practical limitations. These rules are often drawn from the restricted wording used by Congress in appropriations bills to limit agencies' resources and time to reprogram. An example from (Christensen, 2012) illustrates that executive agencies can make allocation adjustments of up to $400,000 or 2% of their total budgeted resources without seeking clearance from OMB. One should remember that the typical rule is for agencies to get OMB's approval for reprogramming. As evidenced by Rubin, after September 11, Congress gave the Department of Defense more discretion in allocating funds and changing priorities (2019). The DOD had considerable leeway to reprogram its budget without consulting Congress until it was confirmed that the DOD was "taxing" its programs to create a pool of uncommitted appropriations. Officials trying to hide inefficiency and failure by unauthorized "taxes" on programs and services raise red flags. It is a further illustration of the cycle described by Rubin (2019), which states that when managers abuse their discretion, the legislators impose more control until a new level of confidence is reached, hence lessening the control methods, and allowing for flexibilization of procedures.

In addition to the inherent discretion of the manager executing the budget and the ability to transfer or reprogram funding from one legislatively determined use to another, supplementals serve as a suitable tool for implementing a defense budget, particularly to address urgent needs that cannot wait until the next regular annual appropriations act. The fight on terror and the training of the armed forces of friendly countries, financed by GWOT and OCO funding, are just two of the many causes that have necessitated the allocation of supplementals. As a part of the regular budget, the funding is not factored into the deficit reduction effort.

It is also customary for military departments to set aside a specific amount of funds each year, the so-called reserve, typically O&M funds, to provide more flexibility to cover unforeseen expenses. According to McCaffery & Mutty (2003), during the midyear budget review, these reserves are frequently redistributed to lower-level commands based on the varying needs of those commands. Simultaneously, commands that under-executed their budgets would have funds transferred from them to those deemed more deserving, or they would be instructed to speed up their execution. As Howard (1968) asserts, organizations have traditionally set aside a contingency fund to deal with unanticipated problems. Administrators of each major program may be granted access to a portion of the total budget for usage in unforeseen situations. The author explains that a statewide general contingency fund is often established and obtained via a centralized procedure.

The rate at which appropriations are obligated serves as a method of control to prevent the program office or agency from utilizing its available resources too rapidly. The spending rate oversight aims to determine whether the available financial resources are sufficient to cover the permitted expenditures and commitments. It would be ideal for agencies to maintain a steady pace with only minor fluctuations throughout the fiscal year; however, this is rarely the case. McCaffery and Mutty (2003) research demonstrates that it is typical for defense budget managers to spend O&M funds in a rush at the closing of a fiscal year. The OMB apportions different categories of appropriations at different rates; for instance, O&M funds are apportioned quarterly. Additionally, the study indicates that economic conditions and revenue predictions may limit the spending rate.

McCaffery and Mutty (2003) assert that the amount and clarity of each expenditure determine a manager's capacity to handle a budget and that the greater one's control over the resources, the simpler it is to implement a budget. According to the authors, in the Department of Defense, except for the lowest level, administrators, in their words, "shave a little off the top" of control funds to account for identified or awaited problems. These reserves may range from the legal minimum to whatever a commander sets aside from his annual budget to cover the remainder of the fiscal year. Even if the precise levels of these reserves are established well ahead, they will still need a reevaluation of the amount of spending that was assumed to be reasonable when preparing the budget. An issue appointed by the authors is that in the case that the "contingency" ends up being a non-event, the reserved funds will not become available until the latter part of the fiscal year, which require further adjustments to a new strategy and contributes to the increase of spending levels at the end of a fiscal year.

The fiscal legislation is the controlling instrument applicable to all government agencies, including the defense budget entities. In a nutshell, it refers to committing appropriations to the purpose for which they were formed while staying within the time constraints of each type of appropriation span, not committing more than the amount that is available in the appropriation, and not committing funds in advance. The military leaders then put into action the flexibility tools described in this chapter, coupled with other control measures, to achieve predetermined efficiency and enforce their priorities following their judgment and the discretion they have. Discretion is exercised less frequently at lower levels of the military hierarchy because the manager at the lowest level must comply with additional control activities. These activities include extra timely reports, reports on funds carried over, stricter spending rates, and other similar activities.

B. CONCLUSIONS

Striving to balance flexibility and control over budget execution is ever-ending challenge managers must face daily, especially while implementing defense budgets, which comes with additional challenges due to the military nature. Enhancing national security and ensuring that all members of the population have equal access to defense calls for a military budgeting system that is fundamentally different from other types and demands a high degree of flexibility. Reviewing the literature showed that budget execution issues are not as widely discussed as other stages, such as budget planning. This research aims to contribute to the discussion of balancing budget flexibility and control activities while implementing a budget and how the U.S. and Brazilian systems achieve this balance.

Initiated by the U.S. Department of Defense in the early 1960s, the PPBS was a significant historical factor in Brazil's transition to a program-based budget. Although the PPBS somewhat inspired Brazilian procedures, the research has revealed differences with current U.S. practices.

Appropriations in Brazil can only be obligated during the same fiscal year they were allocated, while per the U.S budgeting system, appropriations can span more than one fiscal year. Even though Remains Payable permits expenses or obligations incurred but not paid or distributed by the end of the fiscal year in Brazil to be paid in later years, U.S. agencies have greater flexibility and discretion in how they spend annual budgets for multi-year acquisitions. However, the research has shed light on the fact that Brazilian managers have more flexibility in obligating funds, particularly at the end of a fiscal year. This is due to the bona fide need rules in effect in the United States, which assess whether an obligation has a sufficient relationship to the agency's needs during the period for which the appropriation is available. The absence of these rules in Brazil and the instrument of

Remains Payable, which allows greater flexibility to disburse funds in subsequent years to support commitments made at the end of the fiscal year, offer Brazilian managers greater flexibility than their U.S. counterparts, notably at the end of the fiscal year.

In both countries' practices, "use it or lose it" is a typical occurrence by days before the end of a fiscal year. Although managers' concerns about obligating appropriations at the closing of the budgetary year vary, they all share a common goal of preserving available funds, which leads to problems such as rushed and ineffective end-of-year expenditures.

While many fundamental lessons developed countries have learned from the multi-year budget, one that stands out is the dangers of overestimating income and expenditure. The Brazilian government makes decisions in the short term with the goals of financial stability and appeasing the government's legislative sponsors. Due to the lack of a long-term budget strategy and the requirement that all categories of appropriations be committed within a fiscal year, Brazil's decision-making process lacks careful planning and high-quality spending.

Differentiating between ex-ante and ex-post kinds of control is a valuable way to strike a balance between the total amount of control and the quantity of each kind of control since each type of control affects budget execution discretion differently. Candreva (2017) emphasizes that too much control before implementation stifles creativity and innovation. Thus, it is essential to establish a balance between the two types of controls and the level of overall control conducted. However, an unacceptable number of errors may occur if there is insufficient post-event monitoring. Certain authorities may place too much emphasis on ex-ante norms to avoid harm while neglecting ex-post ones. The contrary is an excellent strategy for providing agility, for instance, when responding to urgent demands.

Through another lens, the budget flexibility mechanisms must be constrained in such a way as to comply with the budget law's essential provisions, however, fulfilling the adjustments in the budget forecasts and schedules during its execution. Although controlled, flexibility tools must be employed while implementing a budget. Without misrepresenting or mischaracterizing the budget as anything else, it is crucially essential to adhere to it in the manner approved by the legislative, with the necessary flexibility and adaptability that may be required throughout the fiscal year (Conti & Lewandowski, 2006). Similarly, Faria (2009) argues that budget flexibility tools are needed not only due to the budget law's structure but also for attaining all budget-related goals.

As for why a balance is necessary, one should note that the cry for increased flexibility is becoming progressively audible in the public realm as government agencies battle with what they consider yesterday's rigid structures and processes. According to Di Francesco and Alford (2016), when infractions of these regulations are exposed by legislative committees, auditors, or the media, they are frequently regarded as betrayals of public trust. This aspect highlights the need to establish a balanced tension between budget execution control and flexibility. To make matters worse, one should note that the executive's discretion over budget execution might be exploitive or perceived as such. In contrast, the oversight of budget execution might be so restrictive that its implementation stifles creativity and innovation in any organization.

By examining what an effective control system ought to be, research of the relevant literature and presentation of results have led to the development of specific characteristics. An effective control system should be able to detect instances of corruption, fraud, and other forms of abuse, allowing for their prevention or elimination over time. There are numerous reasons managers engage in unethical behavior and abuse their budget execution power. Control actions should deter managers from engaging in corrupt conduct and abusing discretion. In addition, control activities should motivate officials to achieve the program's objectives. An effective control system should enhance the Federal Government's performance and accountability to the public. Adequate supervision includes the appraisal of federal programs and activities and the examination of the use of public funds. By adhering to core concepts like accountability, integrity, and reliability, objective, timely, and nonpartisan control actions are generated, which are essential for increasing decision-making. Any control system should be as technically neutral and objective as possible.

On the other hand, by assessing budget flexibility attributes, the study has indicated that budgets must be adaptive to be utilized efficiently despite adverse conditions. Even while budgets are developed with several potential scenarios in mind, the actual occurrence of certain events may necessitate a change in strategy. By adjusting the allocation of funds, they become more realistic and reasonable. It is argued that allowing some wiggle room among the budget's many management systems would increase efficiency. A systematic approach to budget implementation highlights the significance of flexible characteristics. According to Pitsvada (1983), organizations use six practical techniques to implement their budgets flexibly. Methods include the classification of objects, the structure of appropriations, contingency funding, emergency provisions, transfer authority, and reprogramming. There are numerous ways in which flexibility might be afforded to appropriations. Extending the duration of appropriations or permitting limited adjustments to the funds is crucial for budget flexibility. According to Pitsvada (1983), Congress enacts separate appropriations denoted as contingent to allow flexibility for federal budget execution. Contrary to contingency appropriations, emergency provisions do not grant an agency greater financial authority.

Not only is the military subject to legislative restrictions that ensure government goals and programs are implemented, but the higher levels of military administration also strengthen their oversight to ensure their priorities adhere. Nonetheless, defense budgets commonly utilize the following strategies to adjust to changing conditions.

Fiscal law offers managers proper discretion for implementing the budget and selecting how to achieve their objectives. In addition, deliberate imprecision in the wording of appropriations promotes adaptability because not everything is described in the appropriations, nor should it be, and because managers have reasonable discretion to fill statutory gaps and incur obligations in the absence of indisputable words and statutory clarification (Candreva, 2017; GAO, 2004). The military frequently employs reprogramming to increase the range of possible actions. Ordinarily, reprogramming requires the permission of the Office of Management and Budget (OMB). It is also standard practice for military agencies to set aside a certain sum of money (the reserve), often O&M funds, to provide them more leeway to cover unexpected expenses. During the midyear budget review, these reserves are often redistributed to lower-level commands based on the different demands of those commands, as reported by McCaffery & Mutty (2003). From the bare minimum mandated by Congress to whatever the commanding officer chooses to lay aside as reserve funding, there are many ways in which reserves can be handled. Even if the precise quantities of these reserves are known months or even years in advance, they will still require a reevaluation of what is considered justifiable during budget planning. A program office or agency can be kept from rapidly depleting its funding pool by limiting the rate at which appropriations are utilized. In addition, according to the findings of McCaffery and Mutty (2003), it is common practice for defense budget managers to spend O&M monies hastily near the conclusion of the fiscal year.

Furthermore, supplementals are a crucial tool for executing a military budget, especially for meeting urgent demands that cannot wait until the next regular annual appropriations act is passed. Notably, the approval period for supplemental appropriations is often shorter than that for ordinary appropriations acts, which expedites the process considering the situation's urgency.

C. AREAS FOR FURTHER STUDY

The budget execution stage was the primary focus of the research; nevertheless, the budget planning phase plays a crucial part in setting the overall amount that will be spent, how that total amount will be apportioned, and the policies that will be put into place that will define which programs to fund at what level. Moving from the budget execution to the planning stage would provide a clearer picture of how the executive and legislative branches strive to find a happy medium between flexibility and control across the political spectrum.

An in-depth analysis of the most significant differences between budget preparation and budget execution in terms of striking a balance between flexibility and control, considering the essential components of the legal framework that surrounds budget execution, and determining how much of a say the legislature ought to have in budget execution.

Remaining in the realm of politics and budget planning, one major concern that might significantly affect and move the point of equilibrium between levels of control and flexibility is the growing national debt that has been produced by the consistent deficit in the budget of the United States government, which is typically produced by the mismatch between the expenditure and the amount of money collected. Besides 1969 and 1998–2001, 55 deficit budgets have passed since 1962. (CBO, 2021). An analysis of the impacts of such federal debt on balancing the budget and the implications on the ability to strike a balance between control levels and flexibility is research that ought to be investigated.

An in-depth analysis of the means of the flexibility provided in this study to advance in the budget execution process would be beneficial for defense budget managers to gain ongoing insight into general areas for improvement within the budgeting process, trends in the flexibility tools provided, and which category of appropriations fits better for reprogramming, supplemental, and other purposes.

This study does not even scratch the surface of examining CMR. Nevertheless, it gave some insight into the fundamental function of permitting a powerful military to deter and kill a state's enemies while also being tamed enough to ensure that it does not put the government itself at risk. It may be beneficial for high-ranking government officials to study the foundations of the CMR to gain a deeper comprehension of the interplay that occurs between the legislative and executive branches of government in the process of determining fiscal policy and the distribution of resources and the strike for a balance between budget execution flexibility and the amount of congressional control.

D. RECOMMENDATIONS

The TCU assists the National Congress in monitoring the country's budget and the administration of its finances. This is done for the greater good of the money that belongs to the Brazilian people. TCU might, however, improve its operations by adopting the Standards for Internal Control framework developed by the GAO. This framework is intended to establish and maintain efficient internal control. The United States government and the private sector worked together to create robust internal control systems to ensure that organizations meet their goals with reasonable confidence appropriate to their capabilities, which aligns with all relevant laws. The Brazilian government might learn and benefit from this.

Risk assessment is one of the five components of the GAO's Standards for Internal Control. One of its four principles is that management should clearly define their goals to identify hazards and gauge the level of risk they are willing to accept. Combined with the fact that too much control leads to inefficiency and slowing down of processes, a recommended practice for the rules used down the military hierarchy would be to arrange programs within their respective level of risk. This would allow low-risk programs' control to be loosened, especially ex-ante type of control, which would speed up execution while also relieving the burden on those involved and giving managers more time to focus on strategic issues and high-risk programs.

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