

STRENGTHENING NATIONAL SECURITY: An Analysis of Budgetary Earmarking for Defense

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ABSTRACT

This article examines the subject of financial allocation and the cost-benefit connection in regard to Brazil's defense capabilities, specifically how resource flexibility can have a negative impact on the Armed Forces' readiness and effectiveness. Examines the potential losses to national security caused by an unbound budget on Gross Domestic Product (GDP) and offers views for policy and strategic decision-making, such as the possibility of linking to Net Current Revenue (NCR). The study takes a mixed approach, using both quantitative and qualitative analysis. The literature review is supplemented with sensitivity and content analyses. The article emphasizes the necessity for a balance between fiscal efficiency and maintaining a strong defense, giving proposals for public policies that ensure national security without compromising the effectiveness of the Armed Forces. **Keywords:** Budget; Defense; Gross Domestic Product; Net Current Revenue; Public Policies.

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INTRODUCTION

In the realm of national security, a country's defense capability plays a fundamental role in protecting its interests, territory, and citizens from both external and internal threats. This capability is not merely a reflection of military might, but also significantly depends on the financial resources available to the Armed Forces, which are necessary to maintain readiness and implement long-term transformations. In this context, budget earmarking emerges as a highly relevant issue, sparking intense debates about its potential impacts on a nation's defense capability.

An unlinked budget means there are no specific spending restrictions or obligations, allowing greater flexibility in the allocation of public resources. While this approach may be seen as a way to promote efficiency and adapt to shifting government priorities, it also raises serious concerns in the context of national defense.

The objective of this study is to examine the potential impacts of an unlinked budget on defense capability, with a focus on the possible harms that such a management approach may bring. By exploring this issue, the study seeks to provide valuable insights for policy formulation and strategic decisions related to military funding. This article aims to offer a deeper understanding of the challenges and implications of budget untying for national defense capacity, providing a foundation for future discussions and decision-making in the field of national security.

To this end, a literature review on budget earmarking and its application in defense contexts was conducted. Methodologically, a mixed approach was adopted, combining quantitative and qualitative analysis. Sensitivity analysis was used to assess potential harms, and content analysis was employed to understand perceptions on the topic. Data collection included official documents and defense reports, providing information that allowed a study aligned with the reality of Brazil's defense budget.

The possible impacts of budget untying will be addressed in key areas such as equipment modernization, military training, operations, and maintenance. Through this analysis, the study hopes to offer a comprehensive view of the consequences of this policy, considering both the benefits in terms of budgetary flexibility and the risks to the effectiveness of the Armed Forces.

The contribution of this article lies in offering a detailed and

evidence-based analysis of budget untying in the defense sector, highlighting the implications for national security and proposing recommendations for public policy formulation that ensure a balance between budgetary efficiency and defense capability. It is expected that the findings of this study will be useful for decision-makers, scholars, and defense professionals, promoting an informed and evidence-based debate on budget allocation for national defense.

2 LINKING THE BUDGET TO DEFENSE AS PART OF STATE STRATEGY

The drafting and approval of the Annual Budget Law (LOA) in Brazil follows a formally established model, but one that, in practice, exhibits structural weaknesses that can seriously compromise strategic defense planning. Although the process involves multiple actors and clearly defined stages—from the Executive Branch’s initial proposal to analysis and voting in the Legislative Branch—its execution reveals profound challenges that require critical reflection.

One of the main issues lies in the tension between short political cycles and long-term defense needs. While the LOA is drafted and executed annually, defense projects require multi-year continuity to achieve effective results. This temporal disconnect leads to inconsistencies, such as the frequent interruption of strategic programs due to budget reviews or one-off cuts. The modernization of the Armed Forces, for instance, depends on sustained investments in research, development, and equipment acquisition, but often encounters instability in year-to-year funding.

The process is marked by excessive bureaucracy and sluggishness, which hinder efficient resource execution. Congressional deliberation subjects the budget to political negotiations often detached from actual defense needs. Parliamentary amendments rarely fund strategic priorities or structural projects. Delays in resource release and frequent budget freezes exacerbate the issue, resulting in incomplete budget execution and chronic delays in implementing essential policies.

Another critical point is the lack of transparency and technical participation in budget decisions. The LOA proposal is dominated by the Executive Branch, with little effective consultation with those directly involved in defense. In the Legislative Branch, discussions rarely include expert advice, favoring political interests over strategic analyses. This

dynamic weakens decision quality and reduces the budget's capacity to reflect the sector's real needs.

It could be argued that the Multi-Year Plan (PPA) is the tool that bridges short- and long-term planning in public budgeting. It sets guidelines for a four-year cycle, starting in the second year of a presidential term and ending in the first year of the next, theoretically ensuring continuity of strategic projects across successive cycles. However, four-year cycles are too short when it comes to defense projects, which are often measured in decades. Thus, despite its planning function, the PPA does not guarantee the predictability needed, as each cycle is subject to revisions that can impact the continuity of strategic investments.

Vulnerability to fiscal crises completes the picture of challenges. Unlike countries that adopt mechanisms to protect defense investments—such as GDP or revenue-linked targets—Brazil lacks clear rules shielding these resources during fiscal adjustments. As a result, abrupt and disproportionate cuts end up compromising the Armed Forces' operational capability, affecting everything from equipment maintenance to personnel training.

The impacts of this reality are tangible. Operational capability degradation, technological obsolescence, and growing dependence on critical imports are just some of the consequences of a budget that fails to prioritize defense as a pillar of national sovereignty. While neighboring countries maintain consistent investments in the sector, Brazil is witnessing a gradual erosion of its deterrence and threat-response capacity.

Given this scenario, it is necessary to rethink the budget model, incorporating mechanisms that ensure greater stability and predictability for defense funding. Earmarking a minimum percentage of the Net Current Revenue (RCL), creating multi-year protected budgets for strategic projects, and expanding technical participation in decision-making are measures that could reverse this situation.

Ultimately, national defense cannot be treated as just another sectoral policy among many others, subject to the highs and lows of political and economic cycles. It is an essential condition for the preservation of sovereignty and state stability. A budgeting process that fails to recognize this centrality is doomed to replicate the same vulnerabilities that currently undermine the country's security and development.

It is important to emphasize that the allocation of defense resources in the LOA reflects the government's strategic priorities and national

security policies, as well as available resources and the operational needs of the Armed Forces. The LOA is drafted and approved annually by the government and the legislature, subject to debates and negotiations to ensure defense expenditures meet national interests and demands.

Smith (1983) states that the “first duty” of the sovereign is to defend society against violent threats from other nations, something only possible through the use of military force.

A preliminary analysis of the National Defense Policy (PND) (Brazil, 2020a) shows that it establishes the guiding principles and directives for the development and implementation of national defense policies.

Regarding budget expenditures for defense, the Brazilian PND does not set specific amounts or percentages of the national budget to be allocated to defense. Instead, it outlines strategic goals and guidelines aimed at strengthening the country’s defense capabilities, ensuring national sovereignty and protecting Brazilian interests.

Some relevant points in the PND concerning budget expenditures include:

Modernization of the Armed Forces: The document emphasizes the need to modernize and update Brazil’s Armed Forces to face contemporary challenges, including the maintenance and development of defense technologies. Added to these challenges are the observations made by Rodrigues (2021), related to Brazil’s strategic position, such as:

the extensive coastline and significant jurisdictional area; the scale and complexity of required actions due to international rights and commitments; the many national and international interests; the need to raise public awareness; and the coordination of actions across a plurality of interests (Rodrigues, 2021, p. 19).

Investment in Strategic Capabilities: The policy highlights the importance of investing in strategic capabilities such as border protection, cyber defense, and deterrence against external threats.

Efficiency and Transparency: Although it does not specify spending values, the PND stresses the need to use resources efficiently

and transparently, ensuring that defense investments meet the established strategic objectives.

In short, the PND provides strategic guidance for defense spending, emphasizing the importance of modernization, international cooperation, efficiency, and transparency in resource allocation to strengthen national defense capabilities. It also acknowledges how these investments contribute to national development in various areas.

Technology and Innovation: Defense spending often involves research, development, and acquisition of advanced technologies. The PND highlights the importance of encouraging innovation and technological advancement in the defense industry as a means to foster high-tech national development.

Industry and Employment: The defense industry plays a significant role in job creation and economic development, especially in regions where military bases or defense companies are located. This type of investment aims to promote the growth and diversification of the defense industry as part of a broader economic development strategy. In this regard, the naval industry stands out as a dual-purpose sector, keeping up to date technologically to produce vessels and naval equipment for both commercial and military maritime services.

Infrastructure and Logistics: Defense investments often require the development of infrastructure and logistics capacities that can benefit not only the Armed Forces but also other areas of the economy, such as transportation, communications, and information technology. The PND highlights the importance of seizing these opportunities to improve national infrastructure.

Training and Education: Defense spending includes training and professional education programs for both military and civilian personnel in the defense industry. These programs can contribute to the development of technical and managerial skills that are transferable to other sectors of the economy.

In summary, the PND acknowledges the relationship between defense spending and national development, seeking to promote investments that not only strengthen the country's defense capabilities but also foster economic growth, technological innovation, job creation, and the development of infrastructure and logistics capacities.

The PND made the defense sector's contributions to social and economic development explicit to society, even considering it a branch of

economic science, known as Defense Economics. Santos (2018) offered a diagnosis of the relationship between defense and the economy, noting:

Among the positive effects (+), we can highlight: increased employment levels, physical and technical training, as well as educational investment—developing human capital (HC). In addition, the possibility of spin-offs⁴ and improvements in social infrastructure stands out. Also noteworthy is the increase in aggregate demand (AD), national (and international) security, potentially contributing to the attraction of foreign direct investment (FDI) (Santos, 2018, p. 552).

The National Defense Strategy (END) (Brazil, 2020b) recognizes the need for sufficient financial resources to modernize, train, and maintain the Armed Forces so that they are prepared to meet present and future challenges. However, the specific allocation of budget resources is determined by the government according to its priorities and resource availability. In the formulation of Strategic Defense Actions (AED), budget regularity aims to:

align the defense budget with the country's global stature. AED-13 Seek regularity and predictability in the Defense Sector budget. AED-14 Seek the allocation of budgetary and financial resources capable of meeting the needs for the articulation and equipping of the Armed Forces, through the Annual Budget Law, at the level of 2% of GDP (Brazil, 2020b, p. 63).

It can be observed that the National Defense Strategy (END),

⁴ "Spin-off" is a term used to describe the creation of a new company, product, or project derived from a part of an existing organization. This process aims to explore new business opportunities or develop ideas that align closely with the core of the original company. In other words, it is an expansion or branching of something already established.

although it does not have the power to regulate the budget, emphasizes the need to establish a way to link the budget to defense spending. This is justified by the fact that strategic projects are long-term initiatives that take into account acquisition costs, life cycle, and disposal of defense means.

Thus, the connection between defense expenditures and the budget, in addition to guiding the allocation of resources under the limitations of budget availability (economic efficiency), makes clear the importance of maintaining regularity in the defense budget in order to ensure the continuity of strategic defense projects and, consequently, the benefits and spin-offs for society.

Adam Smith (1723–1790), often regarded as the father of modern economics, addressed several issues related to public spending in his works, although not specifically defense budgets, as that concept was less relevant in his time. However, some ideas and principles presented by Smith in his book *The Wealth of Nations* (1776) can be applied to the analysis of defense expenditures. The following considerations are highlighted:

Efficiency and Public Spending: Adam Smith emphasized the importance of efficiency in the allocation of resources, including public expenditures. He argued that the government should spend taxpayers' money wisely and avoid waste. This can be applied to defense budgets, suggesting that expenditures in this area should be carefully analyzed to ensure that resources are used effectively.

Defense as a Public Good: Smith recognized that national defense is one of the legitimate functions of government, as it provides a "public good" that benefits the whole of society. He argued that the government should provide public goods that the private sector could not efficiently supply, and defense is often cited as a classic example of such a public good.

Spending Constraints: Smith also acknowledged the importance of limiting government spending. While recognizing the need for defense, he warned against excessive government expenditures, arguing that high taxes and large public spending could hinder economic growth and prosperity.

Although Adam Smith did not specifically address defense budgets, his general economic principles can be applied to the analysis of defense spending. Matthews and Maharani (2009) state that Smith saw defense as the public good par excellence, too important to be left to the market. According to the authors:

Smith's insistence on public control over defense

has two justifications: first, defense represents one of the best examples of Pareto optimality, in which all citizens benefit from the provision of a good without the risk of free-riding; and second, policy should be guided so that initiatives in defense products remain public, as only public ownership will guarantee the continuous sovereign supply to the interested parties” (Matthews & Maharani, 2009, p. 91).

The State has the responsibility to protect property, including from external threats, making national defense a duty. Defense spending increases as society evolves for two reasons: the need to maintain a permanent armed force, and the growing complexity of war due to the division of labor, which requires greater resources in this sector.

Ambros (2017) makes an observation that reinforces this proposition:

Adam Smith advocated that defense spending should be the obligation of the sovereign State, including for the maintenance of a permanent and professional army, following his own logic of the division of labor in society. Furthermore, by acknowledging the importance of material production for national sovereignty, Smith admitted that state intervention in the economy—especially regarding import restrictions—is admissible when it serves to protect industries essential to national defense. In this regard, Smith defended the maintenance of the British Navigation Acts, even though they were unfavorable to foreign trade by increasing costs. Since the merchant navy could be easily converted into a navy of war, it became a strategic requirement to support the British naval industry in peacetime to ensure its existence in wartime. Therefore, Smith did not necessarily discuss the impact of military spending on

economic growth but saw the defense industry as strategic to national power” (Ambros, 2017, p. 139).

In support of this perspective, a brief analysis reveals that drawing positive correlations between military spending and economic development highlights several noteworthy points:

a) providing for the defense of society, contributing to security conditions and maintaining a stable environment to promote national development;

b) military expenditures can promote development through technological spin-offs, infrastructure, the development of indigenous scientific knowledge, the qualification of the productive sector, among others.

The idea that defense activity, as a responsibility of the State, can promote socio-economic development through the strategic direction of education and the productive sector efforts, directly relates to the “triple helix” theory developed by Etzkowitz and Zhou (2017).

The ideas presented in this paper address the issue of budget linkage directly and clarify that the core of this issue is the efficient management of the public budget.

With proper strategy, it is possible to uphold the requirements of economic liberalism, such as minimal state presence and flexibility in the allocation of resources according to economic and political priorities of the time. According to Etzkowitz and Zhou (2017), the State can act as a promoter of synergy among the primary institutional spheres (government–academia–industry) without major interference in the economic system.

Hamilton believed that by centralizing the defense budget under the Union, it would be possible to better coordinate efforts and avoid wasteful spending. This contributes to a more efficient use of available resources (Madison, Hamilton & Jay, 1993, p. 201).

3 UNLINKED BUDGET: AN ANALYSIS OF POTENTIAL LOSSES TO DEFENSE CAPABILITY

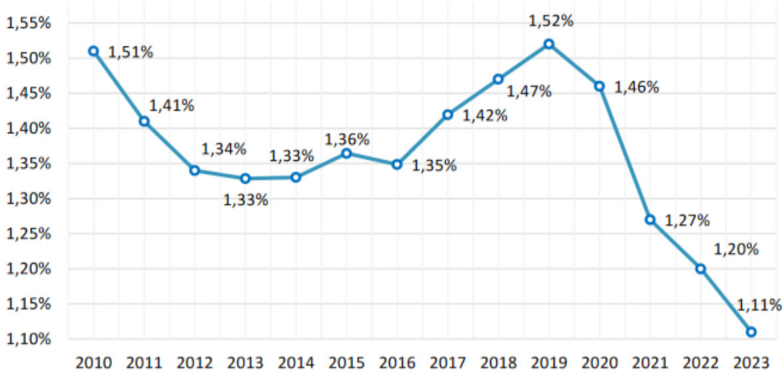
Risk analysis is a systematic and structured approach aimed at identifying, assessing, and mitigating the risks associated with a given

decision, policy, or event. In the context of the unlinking of the defense budget, this methodology allows for the examination of potential risk scenarios that may arise as a result of inadequate investment in the Armed Forces.

By employing risk analysis, it is possible to identify a wide range of potential risks, including the reduction of the Armed Forces' operational capability, the deterioration of military readiness, increased vulnerability to emerging threats, and the loss of international credibility. Additionally, this approach makes it possible to assess the likelihood of such risks occurring and the potential impacts that could arise if they are not properly managed.

To carry out a quantitative analysis of the impacts of budget unlinking on defense capability, it is necessary to collect historical data on Brazil's defense budget over the past 14 years.

Gráfico 1 – Orçamento em defesa x PIB em %



Fonte: Ministério da Defesa - Relatório de gestão (Brasil, 2023, p. 13)

With this data, provided by the Management Report (Brazil, 2023, p. 13), it is possible to proceed with a quantitative analysis, projecting the impacts of budget cuts in various areas, using the 2023 defense investment level as a baseline.

The data used as a parameter in this demonstration are purely illustrative estimates and were selected for demonstrative purposes only. They serve merely as an analytical exercise to contextualize the discussion on the topic.

The figures and impacts mentioned in this quantitative analysis are hypothetical. The objective is to exemplify the potential impact of an unlinked budget on defense capability, providing a theoretical basis for understanding the possible consequences of significant financial cuts. It

is important to emphasize that these numbers do not represent an official forecast or estimate.

The projected impacts are based on a simulated 20% reduction in the budget, for illustrative purposes, using the 2023 budget (R\$ 122.8 billion) as a reference (Brazil, 2023). This is a sensitivity analysis that explores the marginal effects of budget cuts on key components of defense, highlighting trade-offs between force maintenance and strategic investments.

Impact on Personnel – Assuming that 78% of the budget is allocated to personnel:

Personnel Budget: $0.78 \times 122.8 = \text{R\$ } 95.78$ billion

Personnel Reduction (20%): $0.20 \times 95.78 = \text{R\$ } 19.15$ billion

Impact on Investments (Force Transformation) – Assuming that 6.6% of the budget is allocated to equipment:

Investment Budget: $0.066 \times 122.8 = \text{R\$ } 8.11$ billion

Investment Reduction (20%): $0.20 \times 8.11 = \text{R\$ } 1.62$ billion

Impact on Operating Costs – Assuming that 12.8% of the budget is allocated to operations:

Operating Budget: $0.128 \times 122.8 = \text{R\$ } 15.72$ billion

Operating Cost Reduction (20%): $0.20 \times 15.72 = \text{R\$ } 3.15$ billion

Impact on Debt – Assuming that 2.5% of the budget is allocated to debt servicing:

Debt Budget: $0.025 \times 122.8 = \text{R\$ } 3.07$ billion

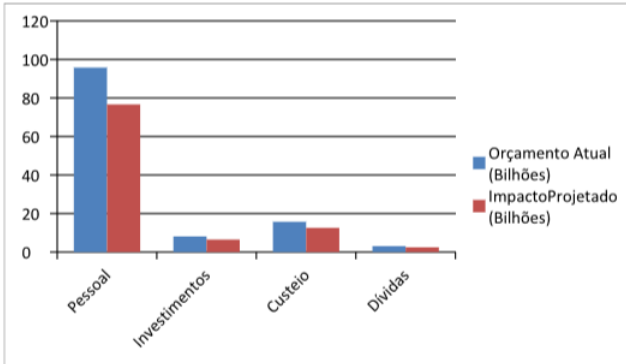
Debt Budget Reduction (20%): $0.20 \times 3.07 = \text{R\$ } 0.614$ billion

Resumo dos Impactos

Categoria	Orçamento Atual (Bilhões)	Redução (20%) (Bilhões)	Impacto Projetado (Bilhões)
Pessoal	95,78	19,15	76,63
Investimento	8,11	1,62	6,49
Custeio	15,72	3,15	12,57
Dívidas	3,07	0,614	2,46
Cálculo aproximado com estimativa de redução de 20%			98,15

Graph 2 clearly shows that a 20% budget cut would fall mainly on Personnel, potentially impacting the quality of life of military personnel and civilian employees. Investments, already limited, would suffer an additional reduction of R\$ 1.62 billion, further aggravating the challenges of modernization.

Gráfico 2 – Representação do impacto com a redução de 20%



Fonte: Elaborado pelos autores

The assessment of the potential impacts of a 20% reduction in Brazil's defense budget requires a careful analysis of the historical series of defense spending over recent decades, particularly the last 14 years. Brazil's defense budget has fluctuated considerably during this period, reflecting economic variations and shifts in government priorities. Based on these fluctuations, it is possible to make a well-founded forecast about the consequences of a significant budgetary reduction.

Over the last 14 years, Brazil's defense budget has experienced cycles of expansion and contraction, which have affected equipment maintenance capabilities and the quality of life of military personnel. The analysis of these cycles reveals that periods of budget cuts tend to exacerbate pre-existing problems, such as a lack of technological modernization and a potential decrease in crisis response capacity.

The analysis presented in this paper is part of a broader study on the evolution of government spending in strategic areas and its impact on the Brazilian economy. Specifically, the analysis focuses on the period from 2019 to 2023, a time marked by significant economic and political transformations.

During these years, Brazil faced challenges such as the COVID-19

pandemic, political instability, and changes in budgetary priorities. In this context, understanding the dynamics of defense investment becomes critical to evaluating not only national security but also the economic and strategic implications of this resource allocation.

This investigation used data from the Ministry of Defense to calculate the share of Gross Domestic Product (GDP) allocated to the defense sector, offering a detailed view of the trends observed during this critical period, highlighting detected variations.

To conduct a rigorous proportional and relative analysis of Brazil's GDP and the percentage of investment in defense between 2019 and 2023, an academic method was followed that involved the collection of accurate data, calculation of proportions, and critical interpretation of results. The analysis was structured into two main sections: data and methodology, and analysis of results.

3.1 Data and Methodology

3.1.1 Data Collection

Brazilian GDP

2019: R\$ 7.4 trillion⁵.

2023: R\$ 10.9 trillion⁶.

Defense Investment

2019: Approximately 1.52% of GDP, equivalent to R\$ 112.5 billion

2023: Approximately 1.11% of GDP, equivalent to R\$ 122.8 billion

Methodology

For proportional and relative analysis, the following steps were taken:

Step 1 – Proportion Calculation:

Proportion of defense investment relative to GDP for both years

Step 2 – Comparative Analysis:

Comparison between the proportions of the two years and

5 IBGE News Agency. Available at: <https://encurtador.com.br/cOGIC>

6 IBGE News Agency. Available at: <https://encurtador.com.br/Pv74m>

calculation of the relative variation (percentage) between them

3.2 Analysis of Results

3.2.1 Proportional Analysis

We begin by calculating the proportion of defense investment in relation to GDP for each year.

$$\text{Proporção} = \frac{\text{Investimento em Defesa}}{\text{PIB}} = \frac{\text{R\$ 112,5 bilhões}}{\text{R\$ 7,4 trilhões}} \approx 0,015 \text{ ou } 1,5\%$$

2023:

$$\text{Proporção} = \frac{\text{Investimento em Defesa}}{\text{PIB}} = \frac{\text{R\$ 122,8 bilhões}}{\text{R\$ 10,9 trilhões}} \approx 0,011 \text{ ou } 1,1\%$$

3.2.2 Análise Relativa

Para entender a variação relativa, foram comparadas as proporções e calculada a mudança percentual.

$$\text{Mudança Relativa} = \frac{\text{Proporção em 2023} - \text{Proporção em 2019}}{\text{Proporção em 2019}} \times 100\%$$

Substituindo os valores:

$$\text{Mudança Relativa} = \frac{1,1\% - 1,5\%}{1,4\%} \times 100\% = \frac{-0,4\%}{1,4\%} \times 100\% \approx -28,57\%$$

Apparently, there was a slight decrease in the proportion of defense investment relative to GDP from 2019 (1.5%) to 2023 (1.1%). However, in practice, this change represents a reduction of approximately 28.57% in the share of GDP allocated to defense investment—a concerning figure, to say the least.

The analysis also shows that, although the absolute value of defense investment increased from 2019 to 2023, the proportion of that investment relative to GDP decreased considerably. This 28.57% relative decline suggests a lower prioritization of the defense sector in relation to the overall growth of the Brazilian economy.

This interpretation is based on a content analysis of budgetary and policy trends, which reveals not only the numbers themselves but also the shift in the strategic priorities of the Brazilian state over the analyzed period. The qualitative analysis of the economic and political context associated with this proportional reduction helps to understand the motivations behind this reallocation of resources and its possible implications for national defense policy. It is important to consider this result in the broader context of economic and political changes that may have influenced defense investment decisions during this period.

4 BUDGET LINKAGE TO NET CURRENT REVENUE IN DEFENSE: A CRITICAL ANALYSIS OF BENEFITS AND CHALLENGES

National security is a fundamental pillar of the stability of any state, and its strengthening depends largely on continuous and adequate investments in defense. The delinking of the defense budget has become an increasing concern in several countries, especially during times of economic uncertainty and strict fiscal management. In this context, one possibility emerges as a potentially effective strategy to ensure the financial stability and predictability necessary to maintain the integrity of the Armed Forces: linking the defense budget to Net Current Revenue (NCR)⁷.

Unlike GDP, the linkage to NCR ensures that the defense budget reflects the country's immediate fiscal reality. While GDP can grow without a proportional increase in tax revenue (e.g., due to the expansion of the informal sector), NCR is directly tied to the resources available for allocation. In the Brazilian context, a progressive linkage is suggested, with review clauses during economic crises, thereby mitigating the risks of underinvestment.

By ensuring that a portion of the NCR is allocated to the defense sector, this approach seeks to mitigate the risks associated with arbitrary budget cuts that often impair the military and operational capacity of the Armed Forces. In this sense, budget linkage is seen not merely as a technical solution but as a governmental commitment to national security and sovereignty—reflecting the understanding that defense is a strategic priority that goes beyond revenue fluctuations and shifting social demands.

However, this strategy is not without its challenges and risks. The close link between the defense budget and the NCR can introduce new vulnerabilities, especially in economic downturns, when government revenue may inevitably shrink. Thus arises the need for a detailed analysis that addresses both the significant benefits of budgetary linkage and the challenges it may impose on defense resource management.

In this section, we briefly explore these aspects, presenting discussion prompts on the benefits of linking the defense budget to the

7 The idea of linking the defense budget to the Net Current Revenue was mentioned in an exchange of views between the Chief of the Navy Staff (CEMA) and the President of the Navy's Center for Political and Strategic Studies (PresCEPE-MB) in 2024, during which challenges and alternatives for the budgetary predictability of defense were discussed.

NCR, followed by a critical assessment of the associated risks. Based on this analysis, it becomes possible to support informed decisions about resource allocation for defense, ensuring that national security priorities are properly aligned with the country's fiscal reality.

4.1 Associated Benefits

Linking the defense budget to NCR allows the Armed Forces to plan and implement their strategies more effectively, receiving a constant flow of resources aligned with government revenue. This facilitates the development of long-term modernization and maintenance plans and ensures continuity in training programs and operations.

Strategic Priority: Budget linkage can be seen as a governmental commitment to national security. By ensuring that a percentage of NCR is allocated to defense, the country reaffirms the importance of its military strength within its institutional framework, promoting public security and sovereignty.

Avoiding Arbitrary Cuts: With a linked budget structure, the defense sector is less vulnerable to unpredictable cuts that may arise during times of economic turmoil. This is particularly important in situations requiring rapid response to internal or external security crises.

Stimulus for Modernization: Budgetary linkage allows for continuous investment in technology and operational capacity. With predictable resources, it is possible to plan and implement research and development projects, increasing the competitiveness of the national defense industry and reducing dependence on foreign technologies.

Improved Working Conditions: By securing a portion of the NCR for defense, investments in military personnel and infrastructure can be maintained, resulting in better working conditions, which in turn may boost morale and improve talent retention within the Armed Forces.

4.2 Critical Assessment of Associated Risks

A budget linked to the NCR may be vulnerable to economic fluctuations. In times of economic crisis, net current revenue may fall, resulting in a reduced defense budget, which can hinder military response capability or lead to cuts in essential programs.

Potential Priority Conflicts: Linkage may result in tensions among

various government sectors. During fiscal strain in other areas such as health or education, defense may be seen as a lower priority, leading to pressure to reverse the linkage in favor of budgets that address urgent social demands.

Budgetary Rigidity: Setting a fixed percentage of the NCR for defense may create budget rigidity that limits flexibility in reallocating resources during emergencies. The ability to respond to urgent needs in other areas may be compromised.

Lack of Innovation: Relying on a fixed budget may limit the ability to innovate. If resources are automatically allocated based on fixed rules and not regularly reviewed, there is a risk of stagnation in technological development and operational capacity.

5 FINAL CONSIDERATIONS

Regarding the importance of linking the defense budget to GDP or, alternatively, to NCR, several relevant points can be highlighted, evidencing its meaningful contribution to preserving national sovereignty and defending societal interests—an indispensable condition for development.

At the outset, it must be stressed that budget linkage alone does not guarantee the allocation of financial resources compatible with the defense needs of a country that aspires to regional leadership and greater international prominence. As an example, one need only imagine the consequences for national defense if the chosen percentage for GDP linkage were 0.5%.

Without ever losing sight of the aforementioned caveat, a defense budget linkage robust enough to generate synergy and foster development appears to be a promising path. This linkage promotes transparency and accountability to society, strengthening institutional credibility.

Liberal economic thought has highlighted useful requirements for the efficient management of state resources, such as minimal state intervention and flexibility in resource application based on current economic and political priorities. However, this work aimed to demonstrate that, with strategy, it is possible to preserve these requirements while also establishing budgetary linkage sufficient to invest in sectors capable of influencing the system and promoting development—defense being one of the most prominent of such sectors.

By establishing an appropriate (and necessarily robust) percentage of GDP or NCR, the defense budget would become less susceptible to cuts resulting from short-term political or economic

changes. This ensures that, regardless of economic fluctuations, the Armed Forces have a relatively stable source of funding.

A consistent and predictable defense budget can strengthen the country's defense industrial base, promoting research, development, and production of indigenous military equipment and technologies.

Specifically concerning NCR, allocating an adequate percentage of this financial indicator to the defense budget not only ensures the necessary resources for the protection of territory and citizens but also fosters a cycle of trust between society and military institutions. This linkage promotes transparency and accountability, which are vital to strengthening institutional credibility. Setting a fixed percentage of NCR for defense can limit the vulnerability of budget allocations to unforeseen cuts caused by short-term political or economic shifts. Thus, it ensures a realistic source of funding that is crucial for the readiness and capabilities of the Armed Forces—all without threatening fiscal responsibility, which in Brazil has become not merely a principle but a non-negotiable imperative, as established by law.

However, when considering the linkage of the defense budget to the NCR, it is essential also to recognize the challenges that such an approach may bring. Although it ensures financial predictability that benefits defense, direct dependence on NCR entails vulnerability to economic fluctuations. During financial crises, a drop in net current revenue may result in significant cuts to the defense budget, directly impacting national security capabilities.

The practical implementation of this budgetary linkage requires clear criteria that balance strategic needs and fiscal reality.

Finally, strengthening national defense through stable budget allocation not only helps preserve national sovereignty but also drives local research, development, and production of military equipment and technologies. It is a public policy that will foster a virtuous cycle of growth in the country's defense industrial base, the creation of direct and indirect jobs, and the promotion of technological innovation. These are essential elements for a Brazil that seeks a prominent position on the global stage. Thus, the linkage of the defense budget emerges not merely as a financial reference parameter but as a strategic step toward a safer and more prosperous future for the country.

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