COST ARCHITECTURE – FINANCIAL CHALLENGES IN IMPLEMENTING NATIONAL, NATO AND EU SECURITY POLICIES AND STRATEGIES –

Lieutenant Adrian IURA, PhD Candidate
"Lucian Blaga" University, Sibiu, Romania
DOI: 10.55535/RMT.2024.4.45

The paper examines the financial challenges, the possibilities for strengthening the reaction forces and the critical infrastructure that are associated with the implementation of national security policies and concepts, considering Romania's obligations within NATO and the European Union. The main aim of the research is to analyse the impact of budgetary constraints on the state's ability to meet its international security and defence commitments and to respond adequately to emerging risks. The study argues the need for a detailed assessment of procurement decisions in terms of costs and their association with national security, integrating concepts such as "financial security" and "strategic efficiency" to highlight the relationship between economic resources and strategic performance. The methodology adopted includes a qualitative analysis of official documents and financial reports of NATO and EU member states. The results of the research aim to identify sustainable financing solutions capable of supporting national security policies through an optimized allocation of resources.

Keywords: critical infrastructure; European Union; funding; resilience; security;

INTRODUCTION

National security policies and concepts, especially in complex multinational organizations such as the North Atlantic Treaty Organization (NATO) and the European Union (EU), are strongly influenced by their financial architecture. Effective implementation of defence concepts depends not only on political will and military capabilities, but also on the availability and efficient use of financial resources. However, the literature on the financial challenges underpinning these policies remains fragmented and insufficiently explored, especially in terms of the way NATO and the EU manage the tension between national and collective financial commitments. This article aims to address the main gaps in the existing literature by providing an analysis of the cost architecture involved in implementing national security policies in these two major security frameworks.

While numerous studies analyse NATO's burden-sharing model and the EU's Common Security and Defence Policy (CSDP), little research directly compares their financial mechanisms in addressing collective defence needs. The existing literature tends to focus on the political and operational aspects of NATO and EU defence concepts, leaving the financial dimensions under-examined. In addition, there is little comprehensive analysis of the long-term sustainability of defence funding, particularly considering economic downturns, the emergence of new security threats and technological advances. This article fills an existing gap by investigating how financial challenges influence the development, coordination and execution of national security concepts in NATO and the EU.

One contribution this article makes is to comparatively examine the financial approaches in NATO and the EU, providing new insights into how these organizations manage the cost of defence in the context of economic and political constraints. In addition, this study highlights the fiscal inefficiencies resulting from the fragmentation of procurement and defence spending among member states. The article also contributes to the broader discussion on the sustainability of defence funding by addressing emerging threats such as cyber security and space defence, areas that require increased financial attention but remain under-researched.

This article aims to provide a deeper understanding of the theoretical and financial approaches involved in the implementation of national security policies and concepts within NATO and the EU.

METHODOLOGY AND LITERATURE REVIEW

An integrated review of the existing literature and methodological approach used to explore the financial challenges of implementing national security policies in NATO and the EU is provided. It begins by outlining the theoretical framework on the financial architecture of national security, with a focus on the principles of defence economics and cost management. It is followed by a comparative analysis of NATO and EU approaches to security financing, highlighting key differences in their budgetary and financial strategies. The chapter then discusses the main challenges in cost management and defence budgeting, before detailing the methodology used to analyse the financial data. Finally, the chapter identifies gaps in the current literature and suggests directions for future research, laying the groundwork for a more in-depth examination of NATO and EU financial and decision-making structures.

Theoretical framework: The security architecture of financial management

The financial architecture underlying national security policies plays a crucial role in shaping the effectiveness and sustainability of defence concepts. At the heart of this architecture is the interaction between economic resources and military capabilities. The defence economics literature emphasizes the need for nations and international organizations to align their security objectives with their fiscal capabilities. Concepts such as *cost-benefit analysis* and *national security budgeting* are central to understanding how nations allocate resources to defence.

In the context of NATO and the European Union, the challenge is magnified by the collective nature of their defence concepts, which require the coordination of resources across multiple member states. Existing literature, including the work of Hartley (2011) and Sandler and Hartley (1995), illustrates how both organizations grapple with the need to balance the security needs of the group with the individual fiscal realities of their members (Hartley, 2012). This framework is vital to understanding cost-sharing mechanisms and potential inefficiencies that arise in managing collective defence efforts (Sandler, Hartley).

By analysing the financial architecture through the lens of established economic theories, we can better understand how financial constraints influence defence decisions and how different approaches to funding – whether through direct contributions or pooling of resources – influence NATO and EU strategic outcomes.

According to the opinion of specialists, approaches to military equipment procurement are explored through marketing elements, especially customer-consumer relations and sales in the sphere of marketing relations. Therefore,

based on public-private partnerships, financial development could be realized through meeting the needs *"regarding the quality of goods, relationship, service, information and trademark"* (Minculete, Chisega-Negrilă, 2014).

Comparative analysis: NATO and EU approaches to security financing

Both NATO and the EU approach security funding with distinct models, although both share the challenge of coordinating defence contributions from different member states. NATO operates under the principle of burden-sharing, whereby member states are encouraged to contribute 2% of their GDP to defence spending, a goal reaffirmed at several summits, including the 2014 Wales summit and the 2016 Warsaw summit.

The European Union, on the other hand, finances its Common Security and Defence Policy (CSDP) through a combination of national contributions and EU-level funding mechanisms such as the European Defence Fund (EDF). Unlike NATO, which relies heavily on national defence budgets, the EU has taken steps to pool resources at the supranational level, aiming for greater cost efficiency through collective procurement and defence innovation projects.

Despite these differences, both organizations face common challenges related to the sustainability of funding models. Researchers, such as Biscop and J.C. Perry, have highlighted growing concerns about how to sustain long-term defence commitments, particularly in the context of changing political priorities and economic constraints (Perry, Bond, 2012).

Methodological approach: Cost analysis of national security programs

To analyse the financial challenges faced by NATO and the EU in implementing their national security strategies, this study uses a comparative cost analysis methodology. This approach involves the examination of both quantitative and qualitative data on defence spending, cost-sharing arrangements and procurement strategies in the two organizations. The data used in this analysis come from a variety of sources, including official NATO and EU financial reports, national defence budgets, and academic studies on defence economics.

Quantitative data on defence spending, such as the proportion of GDP allocated to defence by member states, are compared between NATO and EU member countries. This comparison makes it possible to identify patterns and discrepancies in the way resources are allocated both within and between the two organizations. In addition, qualitative data from policy documents, speeches and expert interviews are analysed to understand the political and strategic considerations that influence defence spending decisions.

The analysis also considers wider economic factors such as the impact of economic crises on defence budgets and the potential for defence innovation to reduce costs in the long term. By combining these different data sources, the study aims to provide a comprehensive picture of the financial architecture of national security policies in NATO and the EU.

Literature gaps and future research directions

While there is a significant body of literature on defence economics and the financial challenges of collective security, there are still important gaps that need to be addressed. One of these gaps is limited empirical research on the long-term sustainability of defence spending in the face of emerging security challenges such as cybersecurity and space defence. These new areas of warfare require significant investments in technology and infrastructure, but there is no consensus on how these costs should be shared between NATO and EU members.

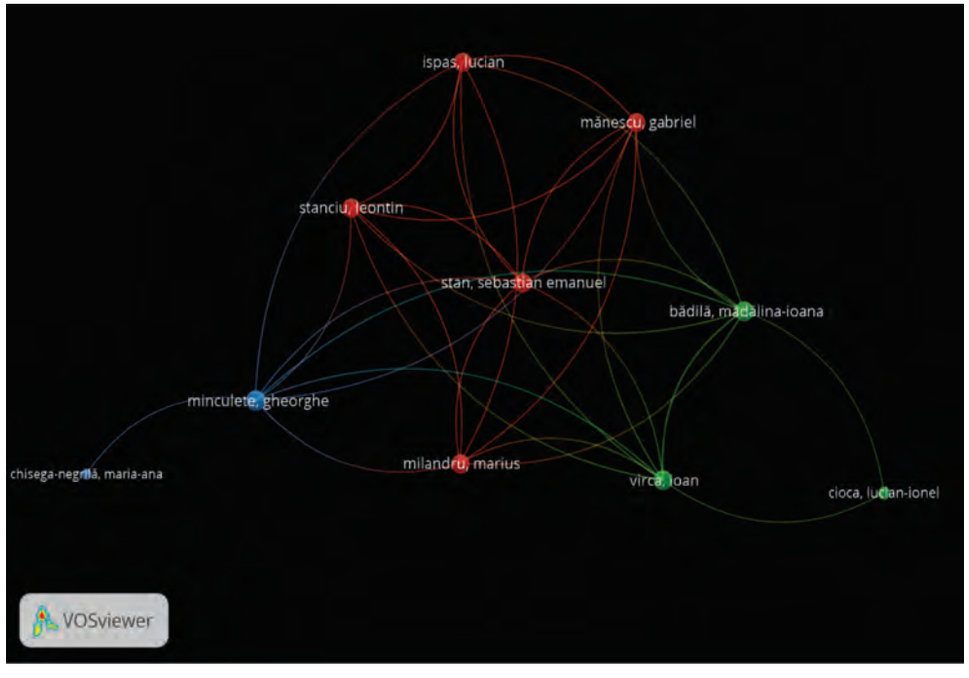

Figure 1: Literature review (author's design)

Another area that requires further exploration is the potential for greater interoperability between NATO and EU defence programs. Although there is considerable overlap between the members of the two organizations, their defence strategies remain largely separate, leading to inefficiencies in resource allocation.

Scholars, such as Fiott, have called for more integrated defence planning (Fiott, 2023), but there is little empirical research on how such integration might be achieved in practice.

Future research should also focus on the impact of defence innovation on cost structures, on how new technologies such as artificial intelligence and autonomous weapon systems will affect the financial architecture of national security. Understanding the costs associated with the development and deployment of these technologies is essential for future defence planning.

NATO AND EU SECURITY CONFIGURATION FOR CRITICAL INFRASTRUCTURE RESILIENCE

Based on the ideology that every country that is part of the North Atlantic Alliance is obliged to withstand a major shock, it must cope in the event of a natural disaster or critical infrastructure failure or military or hybrid conflict.

According to Article 3 of the North Atlantic Treaty, it is stipulated that to *"achieve more effectively the objectives of this Treaty, the Parties, separately and jointly, through continuous and effective self-help and mutual assistance, shall maintain and develop their individual and collective capacity to resist armed attack"* (1949, updated in 2023), which brings the principle of resilience to the forefront.

The principle of resilience can be defined as both a national responsibility and a collective commitment, and each ally must be robust and adaptable to be able to cope with the full spectrum of crises that are envisioned by the alliance. Therefore, resilience relies on strong cooperation between stakeholders (both civilian and military) that can mutually benefit each other in both peacetime and wartime.

Reconfiguration in the operational area – emergence of Battlegroup structures

In view of the operational concept, the agility of alliance forces is *"highlighted by their logistical potential to rapidly combine and move capabilities over long distances to conduct planned operations in austere, fragile environments with vulnerable critical infrastructure"* (Minculete, 2023, p. 82). In this context, it may be noted that in the sphere of the North Atlantic Alliance, the defence planning process is established in detail and should also be taken into account by the member countries in order to identify risks and build specific resilience through which both national and multinational resources can be committed (NATO, 2017, pp. 3-5).

Given the role played by operational logistics and the financial sphere, its range of importance and action is intended to encompass both the national area

of a member state and the multinational area, given the partnerships between powerful countries, which have formed Battlegroups (BGs) following troop deployments.

Therefore, within Romania, a highly responsive French battalion was deployed as a framework nation.

Table 1: French-led Battle Group in Romania (BGFP) (author's design)

Contributor	Number of militaries involved	Types of Forces involved
France	550	1 x Infantry Battalion
Belgium	248	Combined Arms Battle Group
Poland	230	1 x Mechanized Company
United States of America	120	Cavalry unit
A total of approximately 1,150 military		

Since the outbreak of the armed conflict in Ukraine, NATO has been able to deploy many troops in the Eastern flank to secure and strengthen its defence, considering the development of the war in Eastern Europe. As shown in *figure 2*,

Figure 2: Deployment of NATO forces on the Eastern Flank (NATO, 2017, ib.)

the multinational structures of the North Atlantic Alliance have started to deploy more and more forces around the Eastern flank to be able to support and at the same time maintain security and defence in case of a possible attack by Russia or a possible defeat of Ukraine.

Improving the financing of security, defence and military logistics based on the Ukrainian model

Based on the concept of transforming alliance functionality, operational logistics is a system of systems, capable of anticipating and solving the requirements of the forces on which the tactical situation will depend. The requirements in support of operational or joint logistics have led to a much higher level of understanding of this field, following the experiences of the campaigns in Afghanistan and Iraq (McDermott, 2013, pp. 16, 32).

The armed conflict in Eastern Europe has forced the member states of NATO and the European Union to carry out the necessary structural and functional reorganizations to increase the resilience of their armed forces.

Therefore, from the point of view of economic, social and military stability, the North Atlantic Alliance has imposed and applied the necessary measures to increase combat power, forcing the modernization of strategic, joint (operational) and tactical logistics, and the rate of the effect of increasing the performance of modernization of security and defence from the financial point of view can be represented by the following econometric relationship (adapted from Minculete, 2023, p. 110):

$$\% Rcr = [(Mo * Lm/Ln) - Cv] *100,$$

of which the following data are expressed according to the following legend:

- % Rcr = representing the rate of performance growth;
- M = the mission the logistics must fulfil;
- Lm = modernized logistics, able to cope with any type of disaster (with increased resilience);
- Ln = non-modernized logistics, which could cope for the full capabilities;
- Cv = the value of the consequences of the manifestation of risk factors.

Given the adaptation of the econometric relationship of the performance growth rate econometric relation, represented above, and based on *figure 2*, it is exploited the main role through which a nation has to go through a modernization process. The notions in the figure are based on the determinations and structural changes that Ukraine has made to reach the performance developed in the type of the Russian-Ukrainian conflict.

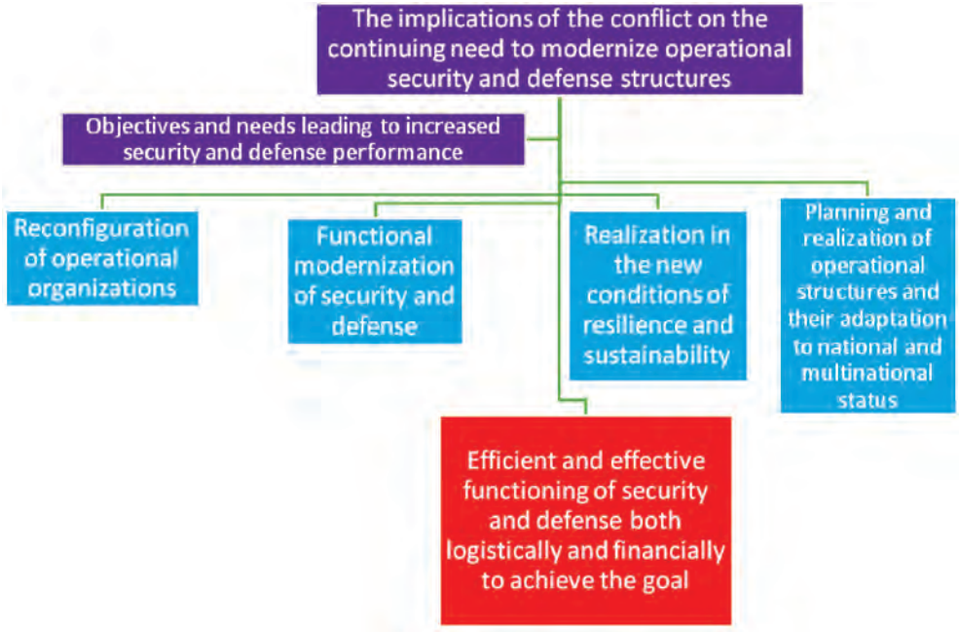

Figure 3: Functional determinations to achieve optimal performance and the goal
(author's compilation)

Therefore, it can be concluded that the need to set and achieve an objective on the operationalization of combat forces in the conditions of the 21st century (uncertainty and high-risk) can determine the overall performance that is found in operational structures that have led to adequate growth in the structural spheres.

THE INFLUENCES OF FINANCIAL MANAGEMENT AND MATHEMATICAL RELATIONSHIPS IN DECISION-MAKING FOR SECURITY AND DEFENCE AT NATIONAL, NATO AND EU LEVEL

In the complex web of national, NATO and EU security and defence decision-making, the interplay between financial management and mathematical relationships has a profound influence, and this chapter will delve into the complex dynamics where fiscal strategies and quantitative analysis intersect, shaping policies and strategies crucial to protecting interests and ensuring security and defence.

The mathematical relationships that make it possible to strengthen logistical and financial management

Based on the idea that today's economic requirements have evolved, it is appreciated that supply chain management of operational structures needs smart digital technologies. The article emphasizes the ideologies of variety, volatility,

social, economic and geopolitical conflict issues, which, through the relevance of supply chain management (SCM), become essential in the functional stages of the concepts *"Society 5.0"* and *"Industry 5.0"* (Minculete, 2021).

Therefore, by adapting the econometric relations of probabilities, decision and occurrence factors, and the optimal determinant of expectations, their applicability in the military environment will be observed, which is aimed at increasing the level of financial and logistic performance effects, from a structural and functional point of view (Minculete et al., 2022).

In a short exercise, the probability of occurrence of the event *"c"* (costs), lead to the increase in the functional performance in the SCM through the following variables: Cr and Cm, the probability of occurrence of the event *"i"* will express the adaptation of each decision node, related to each decision variant at the level of the operational structure (EmDi), realizing an evaluation of the specific costs of each purchase, installation and functional checks of equipment and systems. Therefore, the relationship formula of the decision determinant and the optimal expectation determinant is given by the following econometric formulae:

$$V_{op} = \max E_m i, \text{ where } E_m i = \sum_{i=1}^{m} Pc * Ric$$

- Pc = represents the probability of event *"c"* occurring;
- Ric = represented by the variable *"i"* influenced by event *"c"*;
- Emi = represents the expectation determinant of the decision node;
- Vop = is the Optimal Decision Variant, where there is the highest mathematical expectation and from a value and decision point of view, it represents the optimal decision.

Therefore, the adaptation to the strategic miliary model complements the risk management with the following statement: *"according to the specific implementation method, the construction of the decision tree is based on the three decision variants (V1 - V3); the risk nodes (R1 - R3); the decision nodes (D1 - D9); the terminal nodes (E1 - E18)"* (Ib.).

Following the fictitious construction of the decision tree, the following will be presented:

- V1 - V3 are the decision alternatives;
- R1 - R3 are the risk nodes (risk management);
- D1 - D9 represent the decision nodes, where the optimal decision will be made by means of decision management out of the total of the 3 variants;
- E1 - E18 are the final nodes, from which the acquisition costs are derived, in other words Ei is represented by the possibilities.

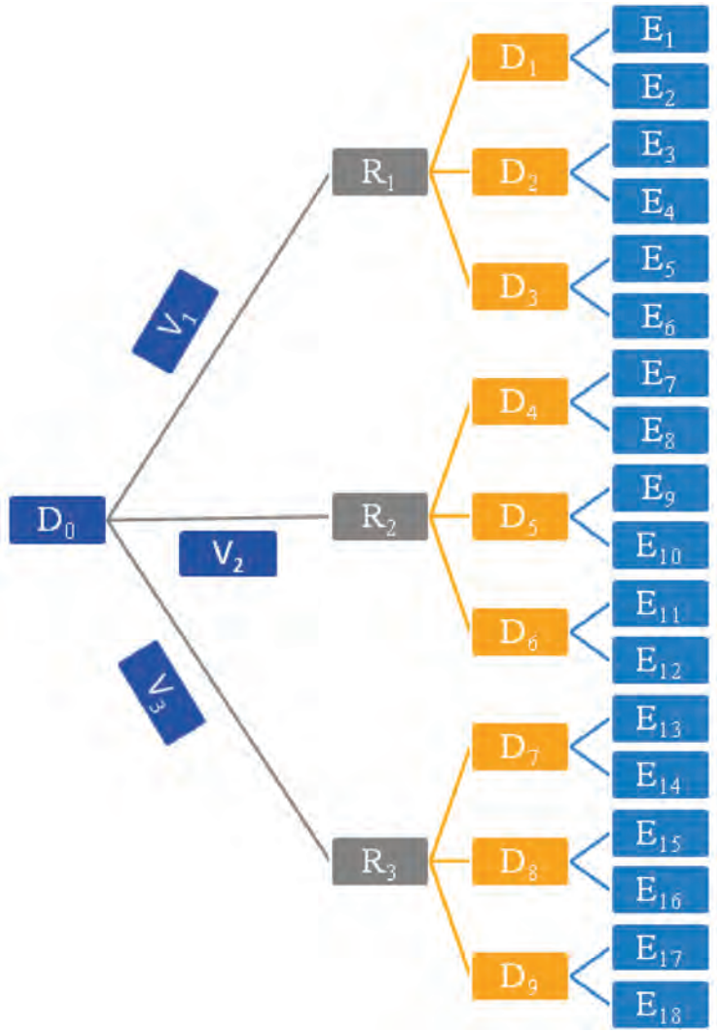

Figure 4: Results of the decision tree according to the situation created (author's compilation)

Therefore, based on the above scheme, it can be concluded that the operational type of structure can be based on these types of relationships and mainly on the decision tree to make the optimal decision, from a financial point of view.

Direct financing of security and defence at the level of the North Atlantic Alliance

Starting from the idea that every country has a budget and an annual program for the purchase of military equipment to maintain national security and defence, it can be said that in both NATO and the European Union there is the same method,

namely the existence of a budget. This budget is at the basis of the North Atlantic Treaty ideology in relation to the possibility of mutual support and collaboration, both in terms of financial resources and in terms of the conduct of military operations and missions, but at the same time this common budget is also designed to help build an essential military infrastructure.

The common funding modality used by NATO is of a pooled funding type, and the shaping of such a budget is based on both the accumulated contributions from each ally and the following forms:

- Trust Funds;
- In-kind contributions;
- Ad hoc sharing arrangements;
- Donations.

The principle of joint financing

Since the conclusion of the North Atlantic Treaty in 1949, pooled funding has been at the heart of the Alliance's strategy to maintain consistent support for its objectives, priorities and tasks. The principle of this funding is that allies *"pool"* a portion of their financial resources to provide support for defence programs and capabilities.

The joint funding commitments will apply to both military and civilian budgets, but also within the sphere of influence of the NATO Security Investment Program (NSIP). Therefore, the way to calculate the share of financial resources that are pooled in a common budget is the relationship of the total agreed costs divided by the Gross Domestic Product of each member country. The formula for the relationship is as follows:

- Cfca = Tc/Vnb, of which the legend of the variables is as follows:
- C_{fr} = Resource Sharing Quota;
- T_c = Total costs;
- V_{nb} = Gross Domestic Product.

Following the principle and the joint funding, participating countries are obliged to identify funding priorities, while NATO has the role of ensuring political security. Jointly funded programs are therefore composed according to the number of countries involved, joint funding arrangements and management structures. The most recent funding initiative is the Defence Innovation Accelerator for the North Atlantic (DIANA) (NATO, 2024).

COMPARATIVE ANALYSIS: NATO VS. EU FINANCIAL APPROACHES

The financial mechanisms supporting national security policies in NATO and the EU are shaped by distinct organizational frameworks, political imperatives and historical legacies. However, both face common challenges in ensuring the allocation of sufficient resources to meet defence and security objectives. This chapter provides a comparative analysis of how NATO and the EU structure their defence spending, manage acquisition costs, address fiscal imbalances, and cope with the financial impact of economic crises on security financing. By exploring the similarities and differences in their financial approaches, this chapter highlights the challenges these organizations face in maintaining effective and sustainable defence capabilities.

Budget allocation and defence spending

One of the most significant differences between NATO and the EU is how each organization allocates its defence budget. NATO, as a military alliance, relies primarily on the national defence budgets of its member states, with a widely accepted benchmark of allocating 2% of GDP to defence spending. In practice, however, only a limited number of NATO member states consistently meet this target, leading to uneven burden-sharing. The United States of America, for example, has historically contributed a larger share of NATO's defence budget, leading to tensions with the European allies that fail to meet the spending threshold. This disparity in defence spending creates both political and operational challenges within NATO, as the alliance is heavily dependent on the financial contributions of a few key members.

Instead, the EU uses a dual financial structure for its defence initiatives. National defence budgets remain under the control of individual member states, but the EU has introduced collective funding mechanisms, such as the European Defence Fund (EDF) and the Permanent Structured Cooperation (PESCO). These initiatives are designed to pool resources, rationalize procurement and strengthen defence cooperation between EU member states. However, these collective mechanisms represent a step towards reducing the fragmentation of European defence spending, while the overall impact remains limited by the modest size of EU defence budgets compared to NATO contributions at national level. The Union's defence spending is constrained by competing priorities across the broad budgetary spectrum, including economic, social and environmental objectives.

Cost management: Procurement and innovation

Within NATO, procurement is largely decentralized, with each member state responsible for acquiring military equipment and technology. It leads to duplication of effort, as each country procures similar equipment independently, often resulting in inefficiencies and higher costs. In recent years, NATO has attempted to address this problem through initiatives aimed at increasing interoperability and joint procurement (Smith et al., 2020). However, the lack of a centralized procurement process continues to limit the organization's ability to achieve cost reductions and economies of scale.

The European Union has created some significant programs in collective purchasing namely EDF and PESCO. These initiatives are designed to encourage member states to collaborate on defence projects, reducing duplication of effort and increasing cost efficiency. For example, PESCO promotes the joint development of military capabilities by allowing member states to share research, development and procurement costs. Despite these efforts, the EU faces its own set of challenges, including bureaucratic delays, competing national interests and the relatively small scale of its defence projects compared to NATO's.

In terms of defence innovation, both NATO and the EU are investing in new technologies such as cyber defence, artificial intelligence and autonomous systems (Wrona et al., n.d.). However, the pace of technological progress poses a financial challenge for both organizations, which must balance the need to invest in state-of-the-art capabilities with the reality of constrained defence budgets. While NATO benefits from substantial defence investments from the United States of America, EU defence innovation efforts are more constrained by limited financial resources and a slower and more fragmented decision-making process.

Fiscal imbalances and the impact of economic crises on security financing

Fiscal imbalances and economic crises pose significant challenges to the financial stability of both NATO and the EU, affecting their ability to effectively implement security policies. These imbalances, driven by the unequal contributions of member states and the different economic capabilities of each nation, create long-lasting tensions within both organizations. In addition, economic crises – such as the 2008 financial recession or the recent COVID-19 pandemic – intensify these problems, forcing nations to prioritize domestic economic recovery at the expense of defence spending. This section examines how these fiscal imbalances and economic crises affect the financial structure and defence capabilities of NATO and the EU.

Fiscal imbalances: National versus collective interests

Within NATO, the burden-sharing debate highlights the disparity between member states, with wealthier nations such as the United States of America consistently meeting defence spending benchmarks while many European allies fail to do so. It creates political tensions and uneven financial burdens within the Alliance. In the EU, fiscal imbalances stem from the conflict between national sovereignty and collective security, leading to a fragmented defence market. Smaller member states facing financial constraints struggle to contribute effectively, further weakening common defence initiatives.

The impact of crises on security and the need for sustainable funding models

It is examined the impact of economic crises on defence funding in NATO and the EU, highlighting how recessions such as the 2008 financial crisis and the COVID-19 pandemic have led to significant cuts in military budgets. These cuts have undermined collective security efforts, delayed modernization programs and weakened operational readiness. Both organizations have struggled to maintain their defence capabilities, with governments prioritizing domestic economic recovery. Fiscal pressures have deepened imbalances between member states and the long-term sustainability of NATO and EU defence initiatives.

To mitigate the negative impact of fiscal imbalances and economic crises on security financing, both NATO and the EU need to adopt more flexible and sustainable financial strategies. NATO could improve its cost-sharing mechanisms, encouraging more equitable contributions from member states, while the EU could accelerate its efforts towards collective procurement and pooling of resources. In addition, both organizations need to develop contingency financial plans to ensure that defence funding remains resilient during economic downturns, possibly through the creation of emergency defence funds or long-term financial frameworks to protect defence budgets from external shocks.

Comparative study results

The study shows that fiscal imbalances within NATO and the EU have a significant impact on their ability to implement effective national security policies. Within NATO, the current burden-sharing issue remains unresolved, with a persistent dependence on a few key contributors, notably the United States of America, to meet the organization's defence requirements. Despite political pressure to reach the 2% of GDP spending target, many European members continue to fall short, leading to an uneven distribution of defence resources. This disparity creates political friction,

but it also weakens NATO's collective defence posture, underscoring the need for new funding mechanisms that consider the financial realities of member states while maintaining the Alliance's security objectives.

In the EU, the results show that the fragmentation of the defence market and the tension between national sovereignty and collective security hinder the development of an effective and unified defence strategy. Although initiatives such as the European Defence Fund (EDF) and Permanent Structured Cooperation (PESCO) have been designed to promote joint projects and rationalize defence spending, they have not yet reached their full potential. The reluctance of EU member states to pool their resources and transform defence capabilities into ongoing collaboration can limit the effectiveness of programs. This fragmentation often leads to inefficiencies and duplication in defence spending, hampering EU efforts to develop a stronger and more coherent defence policy.

Finally, the article highlights the long-term impact of economic crises on defence funding and preparedness in both organizations. Economic downturns, such as the 2008 financial crisis and the COVID-19 pandemic, have led to significant cuts in defence budgets as governments prioritize domestic recovery efforts. These cuts in defence spending have led to delayed modernization programs, diminished military capabilities and decreased operational readiness. The results of the approaches, indicate that both NATO and the EU need to build more resilient financial models that can sustain defence funding in times of economic stress, ensuring that national security policies are not undermined by external economic challenges. Overall, the study's findings underline the importance of adopting sustainable and adaptable financial strategies to maintain and enhance collective security within NATO and the EU.

CONCLUSIONS

The implications of this study underline the need for both NATO and the EU to rethink their financial structures for the implementation of national security policies, particularly in view of growing fiscal imbalances and the impact of economic crises on defence budgets. The main beneficiaries of these findings are policymakers and defence planners. By understanding the burden-sharing challenges and pressures on defence budgets in relation to economic downturns, policymakers can develop more resilient financial designs. This research also offers useful data to financial analysts and researchers by providing a comprehensive view of the cost architecture behind collective security efforts as well as insights into more sustainable defence funding models.

The added value of this paper lies in its in-depth analysis of fiscal imbalances, burden-sharing challenges and the implications of economic crises, all of which are explored in both NATO and EU contexts. While previous studies have often focused on isolated aspects such as political or institutional factors, this research integrates the financial dimensions, providing a broader understanding of the interlinked issues. Moreover, it introduces the concept of *resilient defence financing* in the face of economic crises, a timely and under-explored area in the existing literature, particularly considering recent events.

However, this study has certain limitations. While it provides a comprehensive overview, the analysis is constrained by the lack of access to classified financial data, focusing on larger member states, which may underestimate the contributions and challenges of smaller countries. In addition, the dynamic nature of global economic conditions may change the relevance of the findings over time, requiring further research to account for future developments. Comparisons with previous studies show that, while much has been written on the political and institutional challenges, the focus of this article is on the financial architecture that adds a critical dimension to the current discourse on collective security within NATO and the EU.

BIBLIOGRAPHY:

1. Fiott, D. (2023). *In every crisis an opportunity? European Union integration in defence and the War on Ukraine*. In *Journal of European Integration*, 45(3), pp. 447-462. https://doi.org/10.1080/07036337.2023.2183395, retrieved on 12 August 2024.
2. Hartley, K. (2012). *Conflict and Defence Output: An Economic Perspective*. In *Revue d'économie politique*, vol. 122(2), pp. 171-195, https://doi.org/10.3917/redp.218.0171, retrieved on 22 July 2024.
3. McDermott, R.N. (2013). *Russia's strategic mobility – Supporting "hard" power to 2020?* Sweden: Stockholm. The Swedish Defense Research Agency.
4. Minculete, Gh. (2021). *Conceptual Approaches of Industry 5.0. Correlative Elements with Supply Chain Management 5.0*. 22(5).
5. Minculete, Gh. (2023). *Determinări relaționale privind modernizarea logisticii operaționale*. Sibiu: Editura Techno Media.
6. Minculete, Gh., Chisega-Negrilă, M.-A. (2014). *Marketing Management Relational Approaches Focused on Consumer's and Customer's Needs and Desires*. 17(2).
7. Minculete, Gh., Stan, S.E., Ispas, L., Virca, I., Stanciu, L.&Milandru, M., Mănescu, G., Bădilă, M.-I. (2022). *Relational Approaches Related to Digital Supply Chain Management Consolidation*. *Sustainability*, 14(17), 10727, https://doi.org/10.3390/su141710727, retrieved on 22 May 2024.
8. Perry, J.C., Bond, M. (2012). *Change in Defense Mechanisms During Long-Term Dynamic Psychotherapy and Five-Year Outcome*. In *American Journal of Psychiatry*, 169(9), pp. 916-925, https://doi.org/10.1176/appi.ajp.2012.11091403, retrieved on 12 August 2024.

9. Sandler, T., Hartley, K. (2007). *Chapter 20 Defense in a Globalized World: An Introduction*. In *Handbook of Defense Economics*, vol. 2, pp. 607-621). Elsevier, https://doi.org/10.1016/S1574-0013(06)02020-5, retrieved on 12 August 2024.
10. Smith, S.J., Gebhard, C., Graeger, N. (2020). *EU-NATO Relations: Running on the Fumes of Informed Deconfliction* (1 ed.). Routledge, https://doi.org/10.4324/9780429454462, retrieved on 22 May 2024.
11. Wrona, K., Moye, T., Lagadec, P., Street, M., Lenk, P.&Jordan, F. (n.d.). *Cybersecurity Innovation in NATO: Lessons Learned and Recommendations*.
12. NATO TOPICS, https://www.nato.int/cps/en/natolive/official_texts_17120.htm, retrieved on 30 August 2024.
13. NATO (2017). NATO Headquarters Supreme Allied Command Transformation, Transforming NATO Logistics and Sustainability Today and into the Foreseeable Future: *A NATO Food-for-Thought Paper*, USA: Norfolk, Virginia, pp. 3-5.
14. North Atlantic Treaty (4 April 1949, updated on 19 October 2023), https://www.nato.int/cps/en/natolive/official_texts_17120.htm, retrieved on 22 May 2024.
15. NATO (2024). *Funding NATO*, https://www.nato.int/cps/en/natohq/topics_67655.htm#management, retrieved on 22 May 2024.
16. PESCO, https://www.pesco.europa.eu/about/, retrieved on 22 May 2024.