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The Overlapping Interests of Defense and Higher Education: A Strategic Funding Response to NATO and University Advancement

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Abstract

This document explores the significance of finance in higher education. A well-funded higher education system leads to the establishment of higher-ranked universities. American universities with multi-billion-dollar endowments are among the wealthiest in the world, which is why they consistently rank among the top global institutions. The supremacy of American universities in these rankings is partly a result of government funding for research and institutional operations. This government support fosters collaboration between the Department of Defense and universities, creating various opportunities for advancement in research and technology.

President Donald Trump of the United States threatened to withdraw from NATO unless member countries increased their defense spending to 2% of their gross domestic product (GDP). The impact of President Trump on the defense budgets of NATO members is undeniable. For instance, Romania raised its defense spending from 1.6% of its GDP in 2016 to 2.26% in 2024. However, Romania allocates only 0.4% of its GDP to higher education. This funding gap results in limited access to education, particularly in rural and low-income areas, and has led to outdated infrastructure at some institutions.

This document argues that the Romanian government could improve both its defense capabilities and higher education by reallocating defense budgets to fund scientific and technological research relevant to the military. This strategy would create mutual benefits for both the defense sector and educational institutions, similar to practices in the United States. The article highlights examples of how defense spending in universities has had a positive impact on society. Additionally, the U.S. model of nondiscriminatory defense funding for both private and public universities serves as an example that other countries can follow to strengthen their higher education systems. In conclusion, increasing defense spending to support science and technology research at Romanian universities could lead to a shift in warfare ideology from traditional mechanized approaches to smarter, more innovative strategies that benefit the broader population.

The Overlapping Interests of Defense and Higher Education: A Strategic Funding Response to NATO and University Advancement

Introduction

Finance is arguably the most critical factor determining the performance and effectiveness of any higher education system. The overall quality of higher education, its scope, scale, operational efficiency, and ability to meet national objectives largely depend on how well it is funded to achieve these goals. A well-designed higher education system without sufficient funding will inevitably result in poor outcomes. The importance of financing in higher education has been well-documented over the years. Noble ideals, without the financial means to realize them, remain mere fantasies.

The performance of the higher education system depends not only on the amount of funds allocated to the sector but also on how these funds are distributed among competing needs. Increased funding that is ill-distributed accomplishes little. To enhance higher education, attention must be paid to the level of funding and its allocation among competing institutional needs and priorities.

Higher education in the United States is widely considered to be among the best in the world. This achievement can be attributed not only to substantial funding but also to the way the funding system is structured. For instance, many are unaware of the significant role that defense funding plays in financing higher education in the U.S. NATO countries, particularly Romania, which are under pressure to increase their defense budgets, could learn valuable lessons from how the U.S. utilizes defense budgets to support its universities.

Purpose

The primary focus of this article is how the United States government utilizes defense spending to foster a collaborative relationship with higher education institutions. The global prominence of American universities today is partly attributed to the funding they receive from U.S. defense spending, which supports both institutional research and educational operations. This article examines the role that defense funding has played in the growth and expansion of higher education in the United States.

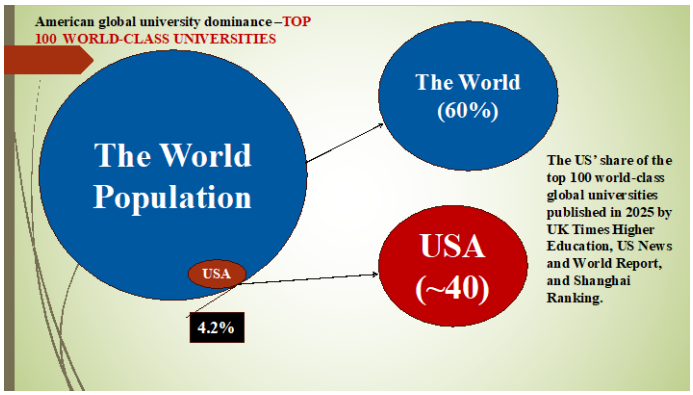
As NATO countries, including Romania, strive to increase defense spending, they could learn from the U.S. strategy of pursuing multiple objectives at once—both boosting military budgets and enhancing the higher education system. The article concludes with recommendations that could be valuable for the Romanian government and leaders in higher education.

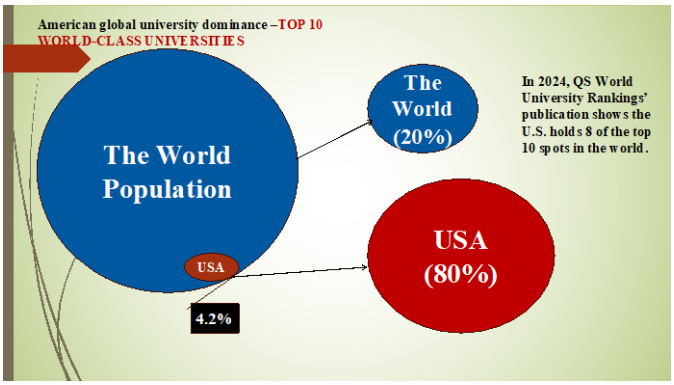
The U.S. Higher Education Dominance

According to the rankings of the world's best universities by the UK Times Higher Education ranking, the China Shanghai Ranking, and the U.S. News & World Report, almost 40% of the

top 100 universities in the world are in the United States. As illustrated in Figure 1, this is particularly notable considering that the U.S. population makes up only 4.2% of the world's total population. Thus, the proportion of top global universities in the United States is impressive

Notably, as illustrated in Figure 2, the U.S. holds 8 out of the top 10 global universities, representing 80%, according to rankings from agencies in the UK, U.S., and China.

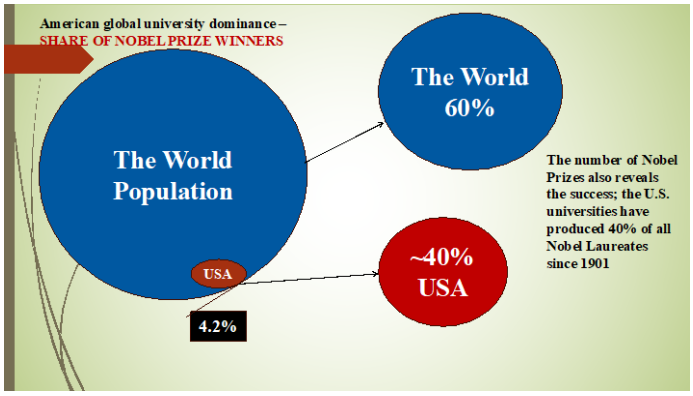


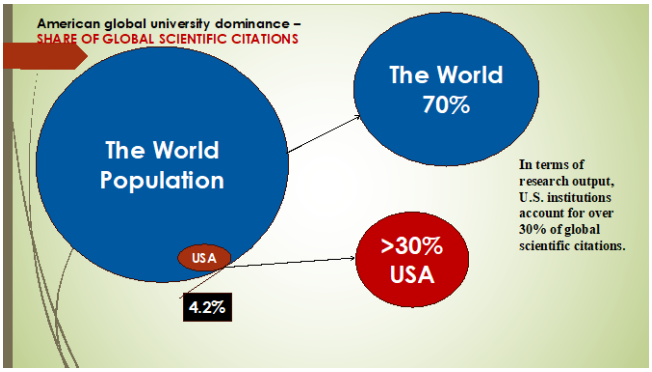


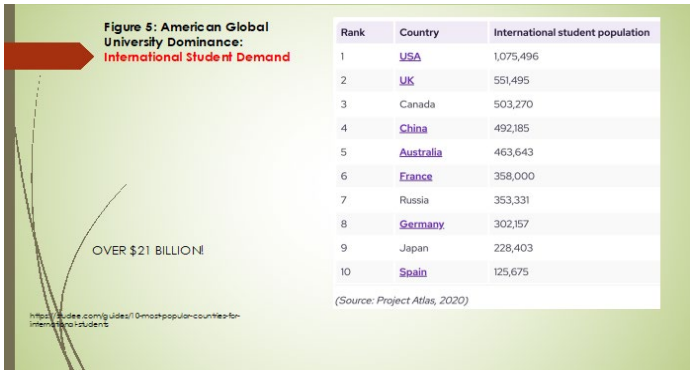
Additionally, the number of Nobel Prize winners is significant, as illustrated in Figure 3. Since 1901, the United States has accounted for 40% of all Nobel Prize winners.

Figure 4 illustrates the U.S. share of scientific citations, which exceeds 30%.

Until a few weeks ago, the United States took great pride in its share of international students. The high demand for American higher education is reflected in the significant number of international students studying in the country. As shown in Figure 5, over one million international students are enrolled in U.S. institutions, which is almost double the number of students in the second most popular destination for studying abroad.



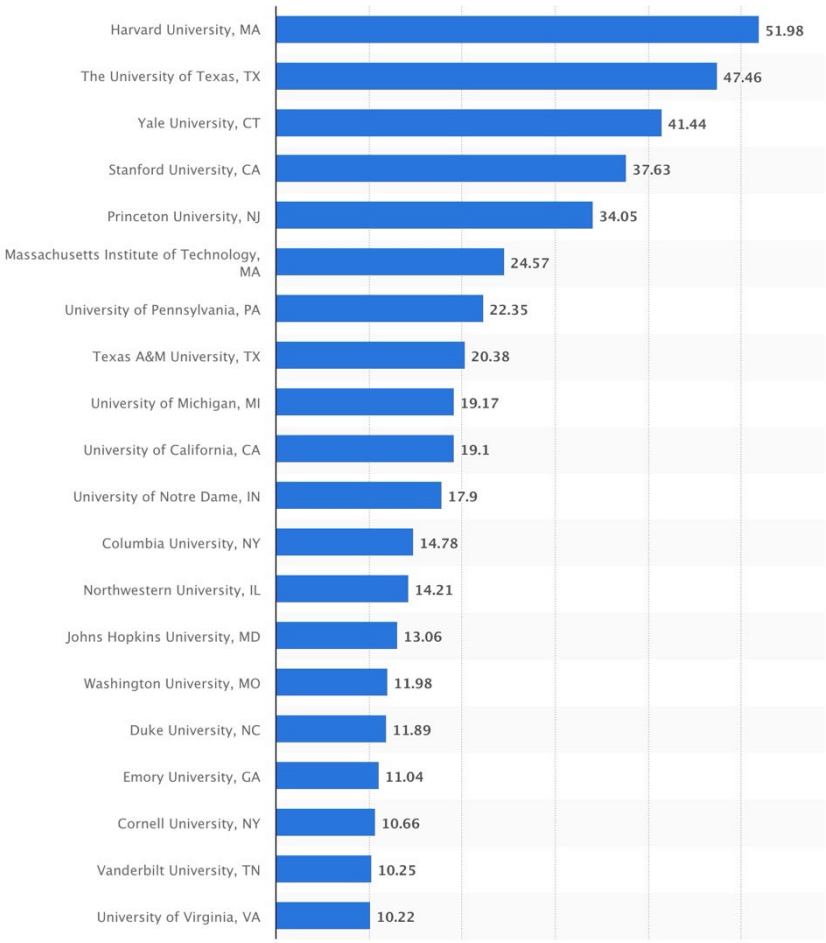




Rank	Country	International student population
1	USA	1,075,496
2	UK	551,495
3	Canada	503,270
4	China	492,185
5	Australia	463,643
6	France	358,000
7	Russia	353,331
8	Germany	302,157
9	Japan	228,403
10	Spain	125,675

The U.S. Boasts the Richest Universities in the World

Figure 6: Top 20 Largest University Endowments



Overall, the United States can proudly claim to have the wealthiest universities in the world. American universities benefit from diverse revenue streams, including government funding, tuition and fees, entrepreneurial ventures, endowments, and investment activities.

Figure 6 shows universities with the highest endowments in the United States. Endowment funds are gifts donated to an institution either for specific or general use at the institution's discretion.

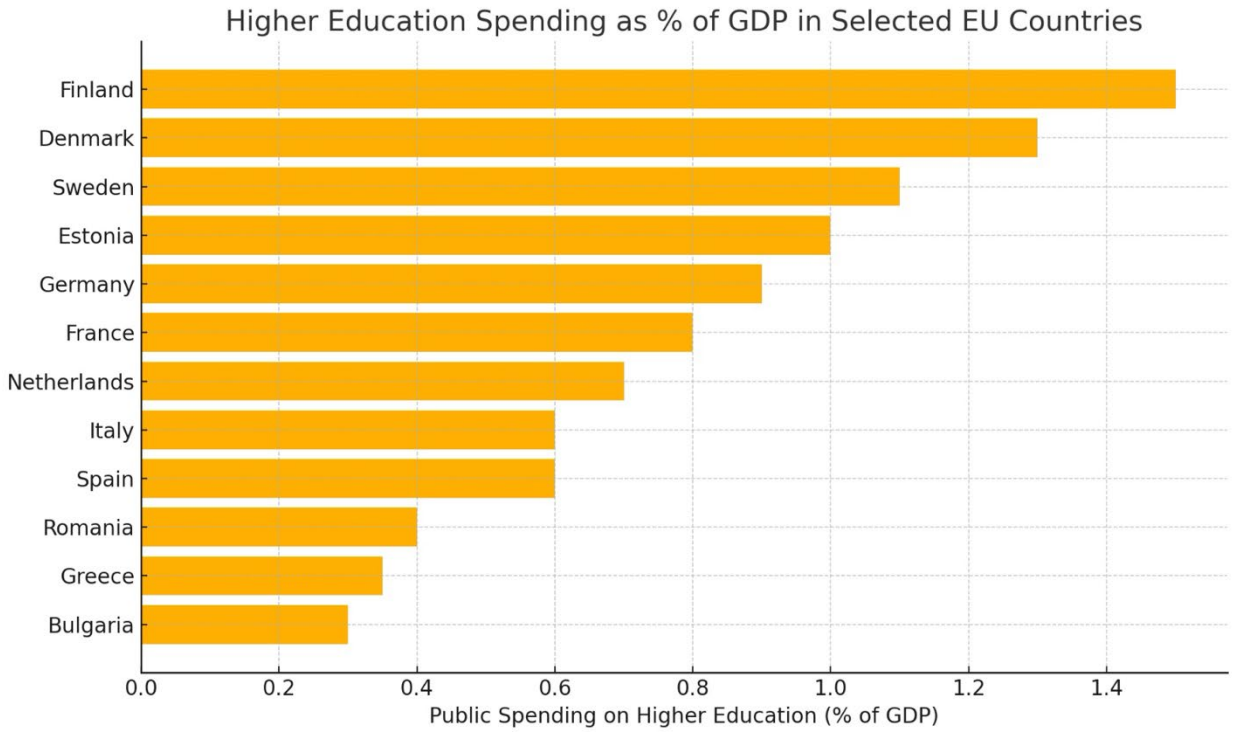
As of the time of writing, Harvard University leads the pack with an endowment exceeding $51 billion. Depending on the terms of a specific endowment, the annual interest earnings may be available to support the institution's general operations. For example, if we assume an interest rate of 5%, one billion dollars would yield approximately $50 million annually, which is a substantial amount to help fund institutional activities. Following closely behind Harvard are the University of Texas, with around $48 billion, and Yale University, with $41 billion.

A careful review of this list reveals that most institutions with the highest endowments in the United States are private universities. Out of the top 20 institutions with the largest endowments, 15—representing 75%—are private. This approach ensures that both the private and public higher education sectors receive adequate funding, a commendable aspect of the U.S. higher education system.

Higher Education Funding in Romania

It is interesting to note that while governments advocate for increased defense spending, a corresponding level of fervor is absent for higher education funding among European Countries. Figure 7 shows the proportion of GDP allocation to higher education in these countries.

Figure 7: EU Higher Education Funding



Finland allocates only 1.5% of its GDP to higher education, which is the highest percentage among the countries listed in Figure 7. Romania, on the other hand, ranks third lowest, with just 0.4%. The allocations of these countries to higher education are far below NATO's minimum defense budget requirement of 2%.

Research and Development Allocation

Figure 8 illustrates the allocation of research and development funding by EU countries as a percentage of their GDP for the years 2013 and 2023. In 2013, Romania's research and development budget was 0.21% of its Gross Domestic Product. However, by 2023, this percentage had decreased to 0.15%. Romania was one of approximately 12 European countries that saw a decline in their research and development budgets from 2013 to 2023.

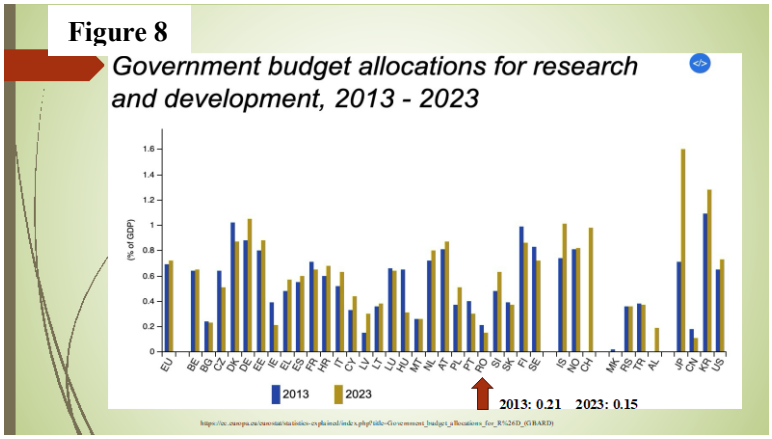


Table 1 summarizes ChatGPT's state of higher education funding in Romania. As indicated, access to higher education is limited in rural and low-income areas. To address this issue, Danubius International University, located in Galati-Braila, provides essential educational opportunities for students from rural and low-income regions such as Buzău, Bacău, Bârlad, Botoșani, Brăila, Onești, Roman, Tecuci and Focșani. Financial support from the Romanian government to private institutions, such as Danubius International University, would not only recognize these institutions' significant contributions to workforce development but also acknowledge the educational needs of communities in these areas.

Student support is considered inconsistent, and many institutions have outdated digital and research infrastructure. Additionally, research and development are often underfunded. As a result, few Romanian universities are represented in top global rankings. This situation highlights a gap in infrastructure, quality, and international visibility caused by insufficient funding.

However, progress can be achieved through careful allocation of resources, as discussed below. The government can enhance funding for higher education by aligning university research and educational activities with the interests of other government sectors that receive separate funding.

Table 1:
Assessment of Romania's Low Model (ChatGPT)

Indicator	Value/Description
Public Spending	**~0.4% of GDP**
Tuition Fees	Free for merit students; others pay moderate fees
University Access	Limited in rural/low-income areas
Faculty Quality	Low salaries; brain drain among academic staff
Student Support	Inconsistent financial aid; housing and food often costly
Digital & Research Infra	Outdated in many institutions; R&D underfunded
Graduate Employability	Moderate to low; many graduates seek jobs abroad
Global Rankings	Few Romanian universities appear in global rankings

🔷 **Result**: Romania struggles with **underfunding**, which leads to gaps in infrastructure, quality, and international visibility.

Increased NATO Defense Budget

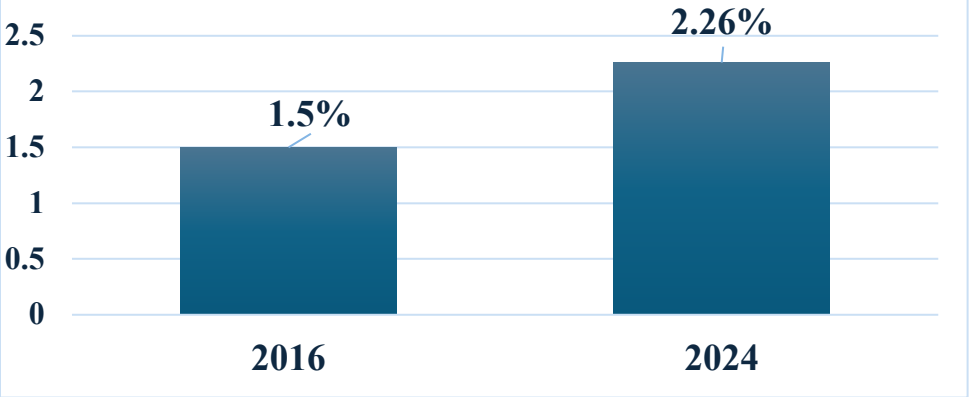
In response to President Donald Trump's criticism and threats, NATO countries have been increasing their defense budgets. During his first term in office, from 2017 to 2021, President Trump made the issue of NATO defense spending a key focus. He used the possibility of cutting U.S. support for NATO or even withdrawing from the alliance as leverage, criticizing member countries for failing to meet the agreed-upon target of spending 2% of their GDP on defense.

In 2016, only the United States, the United Kingdom, and Greece met this 2% threshold. For example, Romania's defense budget as a percentage of GDP in 2016 was only 1.5%. In 2017, 23 of the 28 NATO members did not meet the 2% defense spending target. Romania was among these countries.

Recently, President Trump intensified his pressure on NATO countries by renewing the threat to increase defense spending targets to 4% or possibly even higher. His influence has significantly impacted NATO's commitment to raising defense budgets, which grew from $871 billion in 2016 to $1.2 trillion by 2020 among NATO allies. As of now, most member nations have either met or

exceeded the 2% spending target. Romania is one such country, allocating approximately 8.6 billion euros, which represents 2.26% of its GDP, to defense (See Figure 9). General Jens Stoltenberg noted, "President Trump's leadership on defense spending has made a real difference."

Figure 9: Before Trump and Current Romania Defense Budgets as a Fraction of GDP



Allocation of Romania's Defense Spending

While increased defense spending is commendable, the allocation of funds among defense priorities is equally important.

Table 2 shows the allocation of Romania's 2024 defense spending of 8.6 billion euros among priorities. Over 50% was allocated to personnel and operations, and 30% allocated to procurement and modernization.

Table 2: Romania's Defense Budget Allocation

Category	Allocation (% of Budget)	Notes
Personnel & Operations	~50%	Salaries, training, and operational costs
Procurement & Modernization	~30%	Acquisition of new equipment and modernization of existing assets
Research & Development (R&D)	~2%	Investment in defense technology and innovation
Infrastructure & Logistics	Remaining ~18%	Base construction, maintenance, and logistical support

Note: These percentages are approximate and based on available data. SIPRI +1

Only 2% of the 8.6 billion euros (about 172 million euros) is allocated to research and development.

Forecast of Future Spending

KPMG provides a forecast for future defense budget allocations in Romania. While the specific proportions for research and development, as well as training, are not clearly shown in

Figure 10, the forecast indicates a gradual increase in the total defense budget from now through 2029.

Figure 10: The Romanian Defense Budget Forecast until 2029

https://assets.kpmg.com/content/dam/kpmg/ro/pdf/2025/romanian-defense-market.pdf?utm_source=chatgpt.com

The proportion of the budget allocated to research, technology, and education in partnership with Romanian universities going forward will demonstrate the Romanian Government's creative ingenuity. While investing in military equipment and hardware is anticipated, funding for science and technology that benefits society will yield a significantly higher return on investment for everyone.

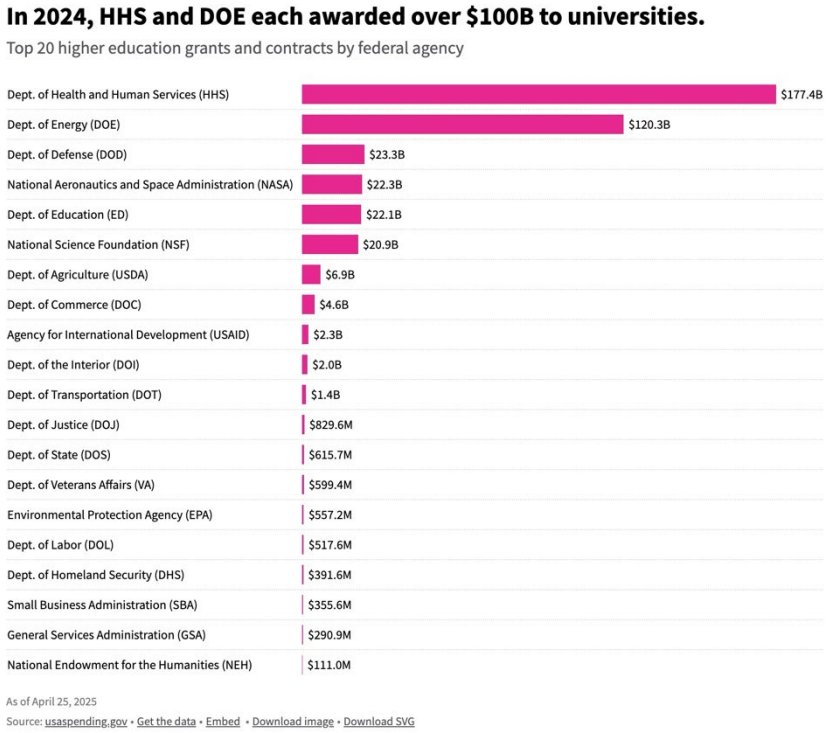
The U.S. Defense Budget and Higher Education

Both Trump administrations have been critical of the North Atlantic Treaty Organization's (NATO) defense spending and have prioritized pressuring the organization to increase its defense funding. Ironically, at the same time, the Trump administration has been defunding and undermining leading universities in the United States.

Nevertheless, the U.S. Department of Defense has historically played an essential role in funding higher education. NATO members, such as Romania, may find value in examining the link between higher education funding and defense in the U.S.

Among the U.S. government agencies, defense is the third-largest contributor to university research and operations. Over $23 billion in contracts were awarded to universities by the Department of Defense in 2024. See Figure 11. https://usafacts.org/articles/what-do-universities-do-with-the-billions-they-receive-from-the-government/

Figure 11: U.S. Defense Spending to Higher Education



On October 2, 2024, in an article entitled "The Military Showers Universities with Hundreds of Millions of Dollars," meant as a critique of defense funding of universities, William Hartung wrote

> *Yes, the Pentagon's funding of universities is indeed rising once again, and it goes well beyond the usual suspects like MIT or Johns Hopkins University. In 2022, the most recent year for which full data is available, 14 universities received at least — and brace yourself for this — $100 million in Pentagon funding from Johns Hopkins's astonishing $1.4 billion (no, that is not a typo!) to Colorado State's impressive $100 million. And here's a surprise: two of the universities with the most extensive connections to our weaponry of the future are in Texas: the University of Texas at Austin (UT-Austin) and* Texas A&M. https://responsiblestatecraft.org/pentagon-divestment/

The U.S. military has historically maintained a strong relationship with universities. As mentioned earlier, this relationship is, in part, what is responsible for the infusion of military dollars into higher education institutions. Hartung observed that the relationship between the military and universities in the U.S. continues to expand and deepen: "In January 2023, Secretary

of Defense Lloyd Austin announced the creation of a defense-funded research center at Howard University, the first of its kind at a historically black college."

Figure 12 illustrates the spending allocations within the U.S. Defense budget. Notably, 15% of the total budget is dedicated to research, development, testing, and evaluation. In comparison, only 2% of the Romanian defense budget is allocated for research and development. Additionally, it is worth noting that a substantial portion of the research funding is allocated in collaboration with American universities.

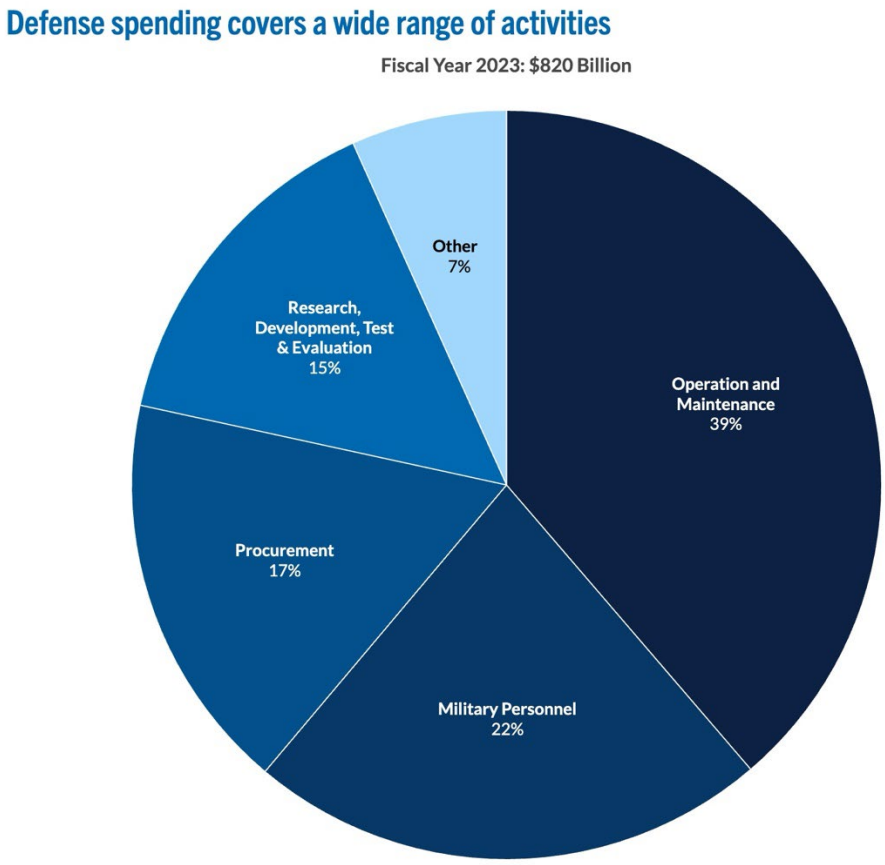


Figure 12: Allocation of U.S. 2023 Defense Budget

In the 2025 Defense Budget Overview, the DoD states that:

Building enduring advantages means the Department must continue innovating and modernizing, enabling technical breakthroughs and integrating emerging technologies to strengthen national security and enhance defense capabilities. Of the $143.2 billion we invest in Research, Development, Test, and Evaluation (RDT&E), $17.2 billion is dedicated to science and technology. Within these categories, we invest significantly in maturing artificial intelligence (AI) and Future Generation (FutureG)/5G programs.
https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/FY2025_Budget_Request_Overview_Book.pdf

Trend Analysis of DoD spending on higher education

Table 4 illustrates the steady increase in the Department of Defense's funding for higher education from 2013 to 2023. The DoD's support for university initiatives has undoubtedly played a significant role in the success of the U.S. higher education sector and the high rankings of American universities.

Table 3: Defense Spending to Higher Education 2013-23

Federally financed higher education R&D expenditures, by federal agency: FYs 2013–23

(Millions of current dollars)

Source of funds	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	% change 2022–23
All R&D expenditures	66,978	67,161	68,520	71,737	75,149	79,026	83,490	86,306	89,701	97,670	108,681	11.3
All federal R&D expenditures	39,446	37,961	37,847	38,788	40,248	41,860	44,460	46,107	49,118	53,975	59,604	10.4
DOD	5,023	4,927	5,090	5,313	5,634	5,892	6,652	7,078	7,363	7,980	9,048	13.4
DOE	1,876	1,805	1,710	1,772	1,821	1,819	1,940	2,038	2,217	2,488	2,671	7.4
HHS	21,211	20,298	19,994	20,663	21,627	22,837	24,407	25,365	27,522	30,273	33,098	9.3
NASA	1,332	1,329	1,418	1,491	1,406	1,516	1,644	1,758	1,768	2,044	2,296	12.3
NSF	5,393	5,127	5,120	5,114	5,206	5,271	5,333	5,414	5,406	6,037	6,700	11.0
USDA	1,092	1,062	1,119	1,209	1,223	1,186	1,224	1,250	1,304	1,513	1,700	12.4
Other	3,519	3,414	3,397	3,226	3,330	3,339	3,260	3,204	3,537	3,641	4,092	12.4

DOD = Department of Defense; DOE = Department of Energy; HHS = Department of Health and Human Services; NASA = National Aeronautics and Space Administration; NSF = National Science Foundation; USDA = Department of Agriculture.

Note(s):
Because of rounding, detail may not add to total. Institutions reporting less than $1 million in total R&D expenditures completed a shorter version of the survey questionnaire and those totals are not reflected here. R&D expenditures from institutions reporting less than $1 million in R&D in FY 2023 were $160 million. Total federally funded R&D for these institutions in FY 2023 was $75 million.

Source(s):
National Center for Science and Engineering Statistics, Higher Education Research and Development Survey.

Defense Spending, University Advancement, and Societal Benefits

Table 5 showcases recent examples of university discoveries and inventions funded by the defense sector. These breakthroughs resulted from collaborations between U.S. universities and the military. One of the most significant contributions is the development of the internet, which originated from the efforts of the University of California, Los Angeles (UCLA), Stanford University, the Massachusetts Institute of Technology (MIT), the University of Utah, and the University of California, Santa Barbara (UCSB), with funding from DARPA (Defense Advanced Research Projects Agency). Today, the entire world benefits from this innovation.

Table 4: Societal Benefits of Defense-University Partnership

Invention/Discovery	Origin of Funding	Civilian Use	Universities Associated
Internet	Defense Advanced Research Projects Agency--DARPA	Transformed global communication, Commerce, media, and education	UCLA, Stanford, MIT, University of Utah, UC Santa Barbara
GPS	U.S. Department of Defense	Navigation for smartphones, cars, aviation, shipping	MIT, Stanford
mRNA Vaccine Technology	HIH consortium/DARPA	COVID-19 vaccines	University of Pennsylvania
Microwave Oven	U.S. Department of Defense	Common household appliance	MIT
Speech Recognition	DARPA	Integrated into phones, smart homes, ATMs, tablets	Carnegie Mellon University, MIT, Stanford
Touchscreen Technology	Military projects--U.S. Department of Defense	Integrated into phones, smart homes, ATMs, tablets	University of Kentucky, MIT
Solar Cells	Military projects--U.S. Department of Defense	Renewable energy systems, home solar panels	MIT, Caltech
Google Search Algorithm	NSF	Transformed web search and digital advertising	Stanford University
Drone Technology	Military projects--U.S. Department of Defense	Use for agriculture, photography, deliveries	MIT, Georgia Tech., University of Maryland
Autonomous Vehicles	DARPA- U.S. Department of Defense	Self-driving car system	Carnegie Melon University, Standford, MIT, UC Berkeley
CRISPR Gene Editing	NIH	Revolutionizing medicine, agriculture, and biotech	Harvard, MIT, UC Berkeley
Semiconductors & Chips	Military projects--U.S. Department of Defense	Power everything from PCs to satellites to cars	Stanford, MIT, UC Berkeley

The U.S. Department of Defense was the original funder of the research on the Global Positioning System (GPS) conducted at the Massachusetts Institute of Technology and Stanford University. The rapid development of COVID-19 vaccines was primarily due to mRNA vaccine technology, which was created at the University of Pennsylvania. Additionally, the microwave, now a common household appliance, was invented at the Massachusetts Institute of Technology and initially funded by the U.S. Department of Defense.

DARPA was the original funder of the speech recognition technology that is now integrated into cell phones, smart homes, and Automatic Teller Machines (ATMs), developed at Carnegie

Mellon University, the Massachusetts Institute of Technology, and Stanford University. Collaboration between universities and the military also contributed to the discovery of touchscreen technology, which was funded by the U.S. Department of Defense through a partnership between the Massachusetts Institute of Technology and the University of Kentucky.

Numerous discoveries and inventions have emerged from defense or military funding of university research. Some notable examples include solar cells, the Google search algorithm, drone technology, autonomous vehicles, gene editing, and semiconductors and chips. These innovations would not have been possible without the collaboration of military interests and the capabilities of universities.

The return on investment from defense spending that supports university research and operations is immeasurable.

Changing Philosophy

Hitherto, nations fought and won their battles through larger armies and more lethal weaponry. Modern warfare may depend less on the size of the army and the equipment and more on the sophistication of science and technology. The need for a smart army requires a shift in military philosophy—a shift from militarization to the science of warfare.

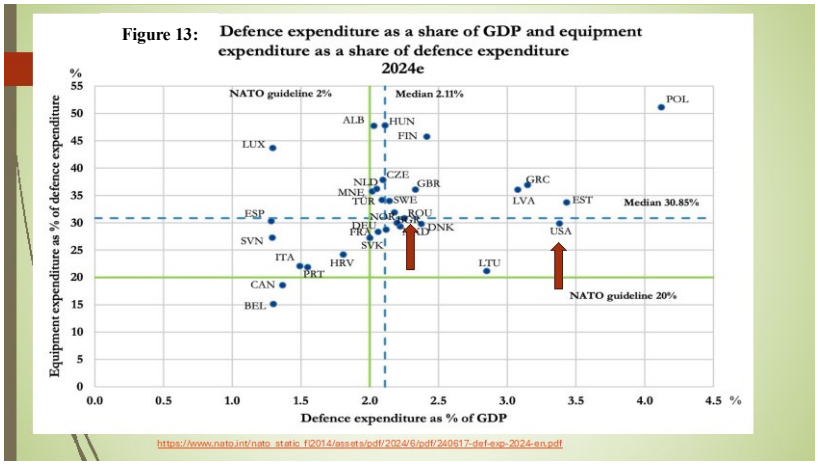
Webster's dictionary defines militarization as *"the action or process of equipping or supplying a place, organization, etc., with soldiers and other military resources."* AI describes the science of warfare as *"encompassing the study of military processes, institutions, and behavior, along with the theory and application of organized coercive force.* ***It is a multidisciplinary field that considers the strategic, political, economic, psychological, and technological (as well as scientific) aspects of conflict****. Essentially, it aims to understand and enhance the effectiveness of military operations, encompassing the development of strategies, tactics, and technologies for both peacetime and wartime scenarios.*

The traditional army philosophy depends on size and mechanized warfare. However, the future requires a focus on the science of warfare; thus, there is a need to strengthen the collaboration between defense and academic institutions.

Mechanized warfare demands a significant investment in equipment. This investment primarily benefits the countries that manufacture such equipment. However, equipment can depreciate over time, regardless of whether it is used or unused, and is also vulnerable to becoming obsolete as newer and more advanced technologies emerge.

Therefore, it is essential to balance investment in science and technology, which fosters innovative thinking that leads to the creation of new equipment, with investment in the equipment itself.

Figure 13 presents the proportion of individual NATO country's budget allocation to equipment. Romania's allocation to equipment expenditure in 2024 is slightly above the median of 30.45%. Romania's equipment expenditure is much higher than NATO's guideline of 20%. In contrast, the United States' defense budget is about 3.4%, but its equipment expenditure is slightly below the median.



This is understandable, given the U.S.'s higher investment in science and technology, which has led to innovations and inventions.

Reviewing Figure 13 further, it seems that Romania could effectively reallocate its defense budget by increasing investment in science and technology. This funding could be utilized to enhance university research, thereby strengthening the higher education system. For instance, Romania could significantly enhance its universities by increasing the defense allocation for science and technology from 2% (€172 million) to 5% (€430 million). This goal can be achieved within the current defense budget through a small reallocation from equipment expenditures. The additional funds (an increase of €258 million) could be used to improve existing research in science and technology at public universities and to develop research infrastructure at select private universities. Even with this reallocation, Romania's equipment spending would still exceed the NATO guideline of 20% of the defense budget. If the government adopts the advocated non-discriminatory approach toward the private higher education sector, reallocating defense spending to higher education could significantly transform the Romanian higher education landscape.

Lessons from the U.S. Defense Spending

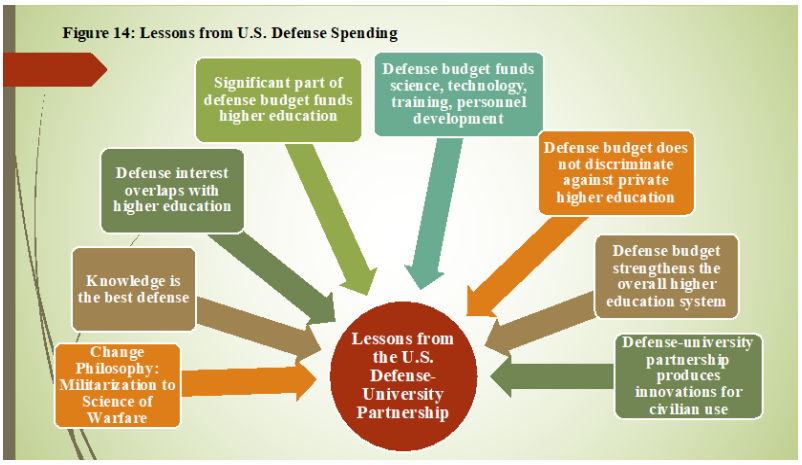


Figure 14 highlights several lessons from the collaborative relationship between the defense sector and universities in the United States. The transition in military ideology from a focus on large-scale hardware to more strategic, efficient approaches underscores the importance of leveraging partnerships between defense organizations and academic institutions in the field of warfare.

Advancing knowledge is arguably the most vigorous defense a nation can have. Investing in universities, as part of the knowledge sector, is therefore a wise choice. This realization aligns with the interests of both the defense industry and the academic sector.

The U.S. Department of Defense has been increasing its spending on higher education since the end of World War II, primarily through the GI Bill, which was designed to train and educate servicemen and women returning from the war. Currently, a significant portion of the defense budget is allocated to support universities across the United States. In particular, a significant portion of the science and technology research conducted at American universities is funded by the Department of Defense.

To enhance the overall higher education system, the U.S. government uses defense funds to support and expand both private and public universities without favoring one sector over the other. This inclusive approach by the U.S. government is crucial for fostering healthy competition between private and public institutions while promoting effective collaboration between the two. Many of the world's top 10 universities are private institutions located in the United States. These universities strive to operate efficiently, are agile and entrepreneurial, and respond effectively to market demands and the needs of their stakeholders.

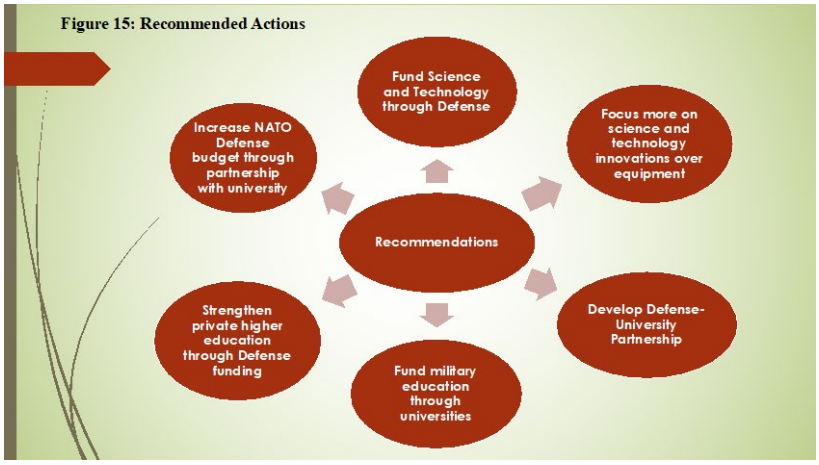
A key lesson from U.S. defense spending is the societal benefits it provides. The numerous discoveries and innovations resulting from partnerships between defense agencies and universities, as well as from defense funding in higher education, demonstrate that defense budgets do more than just help win wars. They also play a crucial role in deterring conflict and promoting social progress.

Caveat

Funding university research and operations through the defense budget is not without criticism. It is expected that the military will show more interest in applied research rather than basic research. However, a significant portion of the U.S. defense budget is also dedicated to basic

research. Universities have faced criticism for contributing to the nation's military efforts, as many deadly inventions, such as nuclear and atomic bombs, could not have been developed without university research.

Furthermore, defense funding makes universities more susceptible to the influence of defense politics and government. This concern is particularly relevant in light of President Trump's actions regarding universities. He has either canceled or withheld billions of dollars from some of the top universities in the U.S. The more a university relies on defense funding, the more vulnerable it becomes to the political pendulum. However, it is important to note that universities, whether private or public, cannot completely shield themselves from the politics surrounding them.



Recommendations

Figure 15 summarizes key recommendations that Romanian leaders should consider when planning future increases in defense funding and reallocating spending priorities.

1. **Focus Military Budget on Science and Technology**: Romania's defense budget should prioritize funding for science, technology, and development. By so doing, Romania will achieve two simultaneous goals: smarter defense and a more productive higher education.

2. **Emphasize Innovation Over Equipment**: Greater importance should be placed on science and technology rather than just acquiring new equipment. Investing in science and technology is more beneficial than focusing heavily on mechanized warfare.

3. **Strengthen University-Defense Sector Partnerships**: It is crucial to cultivate stronger partnerships between universities and the defense sector. This collaboration will enhance higher education and better prepare the nation for modern warfare.

4. **Increase Education Funding for Defense Personnel**: Allocate more funds for the education of defense personnel at Romanian universities. Service members should be encouraged to enroll in institutions of their choice, irrespective of sector.

5. **Transform Higher Education Through Partnerships**: The defense budget can play a significant role in transforming Romanian higher education by fostering non-discriminatory partnerships with both public and private universities. Evidence from the United States indicates that a robust private higher education sector can strengthen the public higher education system.

To achieve this goal, a portion of the defense budget allocated for science and technology will be essential for developing research infrastructure at specific private universities. If this initiative is implemented, the long-term benefits to higher education and society as a whole will be significant.

6. **Strategically Increase Defense Spending**: While it is essential to increase the proportion of GDP allocated to defense to meet NATO goals, this should be done strategically to also align with advancements in higher education.

Conclusion

Finance plays a crucial role in the quality and performance of higher education systems. The global dominance of American universities in various ranking exercises highlights the substantial financial resources available to these institutions. It is undeniable that American universities are the wealthiest in the world, boasting endowments in the billions. With such significant resources at their disposal, they have near-endless opportunities to innovate in research, improve operations, attract top talent, offer scholarships, and exceed quality benchmarks.

The U.S. government demonstrates strategic foresight by aligning its defense interests with those of higher education. By forging close partnerships between the defense sector and universities, the government enhances the capabilities and productivity of both areas. This collaboration has led to innovations and inventions that are transforming society.

Romania can learn valuable lessons from the United States' approach to defense-university collaboration and can utilize its defense budget to strengthen and transform its universities. By using defense funding to support science and technology initiatives at both private and public universities, Romania can redefine its approach to warfare, moving toward smart warfare rather than relying primarily on mechanized methods.

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