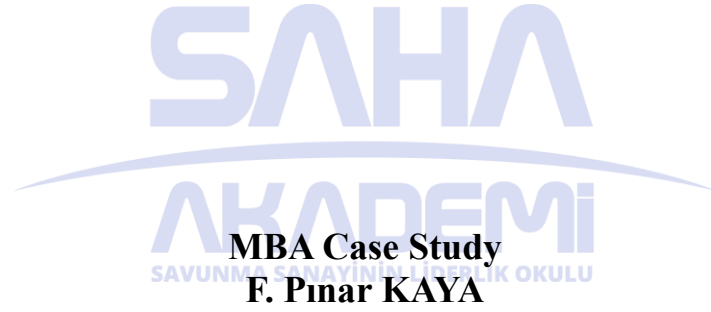


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SAHA İSTANBUL & TÜBİTAK TÜSSİDE
SAHA AKADEMİ MBA YÖNETİCİ GELİŞTİRME PROGRAMI

**Defence Expenditure of NATO Countries; Before and After The War
Between Ukraine and Russia**



Danışman
Dr. Uğur TARÇIN
Ankara-2025

1. SAHA İstanbul Yönetim Kurulu kararıyla, 2024-2025 eğitim döneminden itibaren SAHA AKADEMİ MBA katılımcılarına “Araştırma Projesi” hazırlama yükümlülüğü getirilmiştir. Bu uygulama; katılımcıların sektörel bilgi, stratejik düşünme ve akademik üretkenlik yetkinliklerini geliştirmeyi hedeflerken, savunma sanayii ekosistemine bilimsel katkıyı artırmayı amaçlamaktadır. Bu girişim, Türk savunma sanayii ekosisteminde bilimsel katkıyı artırmaya yönelik önemli bir adımdır.

2. SAHA İstanbul-SAHA AKADEMİ tarafından yayımlanan bu çalışma, ilgili yazar tarafından özgün biçimde hazırlanmış ve beyan edilmiştir. Çalışmada yer alan görüşler yazara ait olup, SAHA İstanbul’un kurumsal görüşünü yansıtmamaktadır. İçerikte sunulan bilgi, yorum ve sonuçların doğruluğu sorumlu yazara aittir. SAHA AKADEMİ; benzerlik oran tespitini yapmıştır.

3. Bu çalışma, [Pınar KAYA] tarafından hazırlanmıştır. Araştırma Projesi danışman tarafından değerlendirilmiş ve sunumu [20 Mayıs 2025] tarihinde yeterli görülerek kabul edilmiştir.

Araştırma Projesi Sunum Jüri Üyeleri

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DEFENCE EXPENDITURE OF NATO COUNTRIES; BEFORE AND AFTER THE WAR BETWEEN UKRAINE AND RUSSIA (CASE(VAKA)STUDY)

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Abstract:

This case study is analyzing the defence expenditures of NATO countries before and after 24th February 2022, when the war between Ukraine and Russia starts. It shows the increase of the defence budgets of the countries and focused areas of the expenditures and what will be the indications of those expenditures in the future. Furthermore, it gives detailed information on how the NATO countries' shape their strategic defense plans, how they change their armament policy, and how NATO affected the general security structure after the war. This case study examines the difference in the defense budgets of the various NATO countries before and after the war by using NATO's announced data, the main point of increased defence budgets of the NATO countries, and how NATO will shape its defense strategy in the future.

Extended Turkish Abstract (See pq..10-12)

1. Introduction

The war between Ukraine and Russia has become a very critical military crisis for all over the world since the Cold War era in the world. Because of the Russian threat, there are serious effects for all the NATO countries to reconsider their defence policy and force to increase their defence budgets, especially northern NATO countries.

Since world peace has been maintained for a long time, no one could have imagined that such serious conflict would arise between nations that would affect all over the world, especially NATO countries.

In 2014, NATO targeted defence expenditure up to 2% of GDP of the member countries (NATO. (n.d.); however, lots of them find it unnecessary until the war between Ukraine and Russia. After the war, this target became more important for all the member countries. For instance, in Germany, the leading political party's policy was against the defence expenditure before the war; however, after the Ukraine and Russian war, Germany has changed its defence expenditure policy. Starting with Germany, France, the United Kingdom, and Scandinavian countries have increased their defence budgets significantly. Moreover, since Poland and all Baltic countries became a target of

Russia after Ukraine, they allocated the highest share of defence expenditure among the NATO countries (NATO, n.d.; SIPRI, n.d.).

In addition to changes in the country's defence policy, the war has led to other transformations. The reconsideration of NATO's collective defence policy could be an important example of this. NATO opens or reopens new bases in Northern Europe and increases military deployments to the Eastern European countries. Furthermore, leading NATO countries such as the USA and Canada deploy additional military troops to support the alliance in this area. In this case, the changes in the defence expenditures of the NATO countries become an important factor in transforming the strategic future of the alliance of the NATO countries.

As a result of the increase in defence and military expenditures of the member states, NATO aims to create new funds such as NATO Innovation Fund (NIF) and Defence Innovation Accelerator for the North Atlantic (DIANA), new investment opportunities in defence industries, and sign new military/defence partnerships between the member countries. These initiatives improve the cooperation defence between the member states (NATO, n.d.; SIPRI, n.d.).

In this context, NATO supports the member states to make investments in the new military technology and cybersecurity to enhance national security and to take measures for hybrid security threats. All these developments are the key players to shape NATO's future defence policy.

2. Defence Expenditures in NATO Countries: Before the Ukraine-Russia War

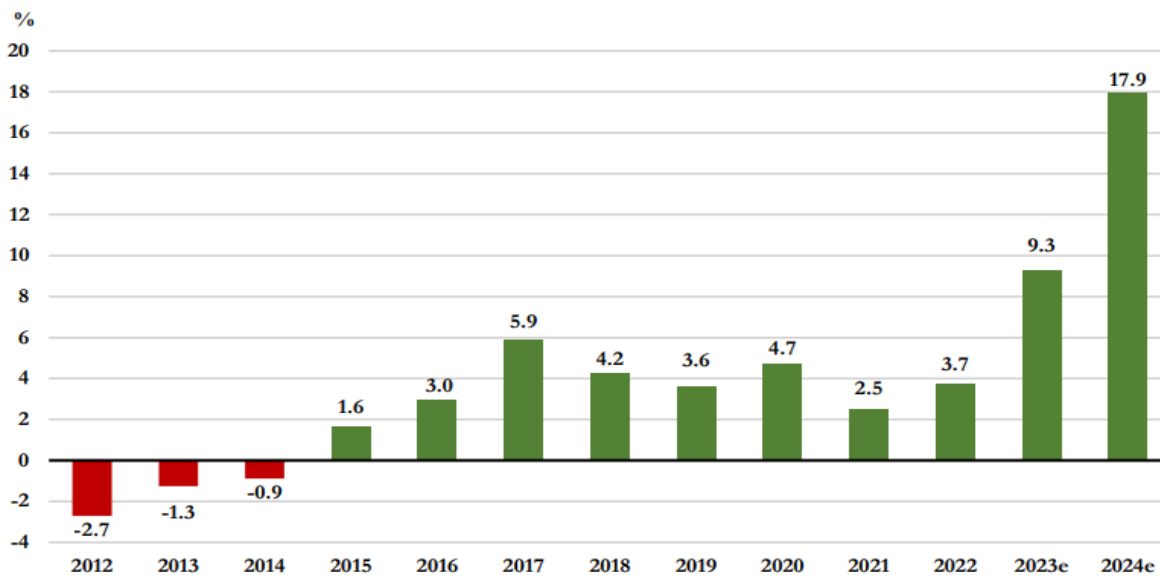
In 2021, the total value of the defence expenditures of the NATO countries was around 1.1 trillion dollars. The USA has contributed 70% of this amount, with other European countries and Canada sharing the remaining 30%. To explain this by the numbers, the United States has allocated 770 billion dollars, Germany 50 billion dollars, the United Kingdom 59 billion dollars, France 56 billion dollars, and Poland 14 billion dollars (NATO, n.d.; SIPRI, n.d.).

Those expenditures are the highest level of NATO after the Cold War era. The expenditures show a difference between the countries defence strategies; however, some of the NATO countries reconsidered their defence budgets after the war between Russia and Georgia in 2008 and the occupation and annexation of Crimea by Russia in 2014. As it has become apparent that Russia's rising threat was directed at northern European countries, many European nations underestimated and failed to recognize these threats during the peace and thus did not increase their defense expenditure to the expected level.

Before the war, those expenditures were up to 2% of GDP of the member countries and mainly on counterterrorism, cybersecurity, nuclear deterrence, hypersonic missiles, and enhancing electronic

warfare systems. But after the Ukraine and Russian war and the increase of the Russian threat, NATO countries changed their policy on new war doctrines and focused on new technologies such as Unmanned Air Vehicles (UAVs), Unmanned Ground Vehicles (UGVs), Unmanned Maritime Vehicles (UUVs), new air defence systems such as air domes/air shields and new war fields such as space and cyber systems. And this new approach required more spending for defence. Bayraktar's TB2 and Akıncı UAVs play a game-changing role in the Ukraine and Russia war and become very popular all around the world. The relevant graph on defence expenditure is below:

Graph 1 : NATO Europe and Canada - defence expenditure
(annual real change, based on 2015 prices and exchange rates)



Notes: Figures for 2023 and 2024 are estimates. The NATO Europe and Canada aggregate from 2017 onwards includes Montenegro, which became an Ally on 5 June 2017, from 2020 onwards includes North Macedonia, which became an Ally on 27 March 2020, from 2023 onwards includes Finland, which became an Ally on 4 April 2023 and from 2024 onwards includes Sweden, which became an Ally on 7 March 2024.

Kaynak: NATO ATLANTIC TEATİY ORGANIZATION (2019)

3. Defence Expenditures in NATO Countries: After the Ukraine-Russia War

After Russia's invasion of Ukraine, NATO countries, especially Eastern European countries, increased their defence expenditures noticeably.

For instance, Germany changes its policy and makes a significant move to raise its defence budget, allocates an additional 100 million euros, and begins to make new and large-scale military plans. Moreover, Poland makes a significant raise up to 4% of its GDP to the defence expenditure. The United Kingdom increased its defence budget from 68.5 billion dollars to 74.9 billion dollars. This indicates the defence expenditure of the UK was raised by 6.4 billion dollars from 2022 to 2023. Furthermore, France also increased its defence budget by 7.7 billion dollars from 2022 to 2023 and allocates 61.3 billion dollars to defence expenditure. In addition to this, Türkiye's

defence budget was raised by 5.2 billion dollars from 2022 to 2023 and allocates 15.8 billion dollars to defence expenditure (NATO, n.d.; SIPRI, n.d.).

In addition to this, Baltic countries, especially Estonia, Latvia, Lithuania, and the new NATO countries Finland and Sweden, also make significant raises in their defence budgets.

Due to Russia's neighboring countries, regional security concerns have escalated in those countries, and they make cooperations and partnerships with the USA and other NATO countries to increase their security level, such as air defence systems, anti-air missiles, heavy weapons, and cyber security cooperation to enhance their national security.

Finland has increased its GDP by 2% up to its defence expenditures following NATO membership, and Sweden provides new funds to modernize its military and army.

To increase the security of the eastern part of Europe, NATO increases the number and scale of the military exercises and empowers the collective defence mechanism between the alliance.

4.Main areas of increased Defence Expenditures

After the Ukraine-Russia war, the increased defence expenditures of NATO countries are mainly focused on those areas;

- Air defence systems (Patriot, NASAMS, etc.)
- Cybersecurity and electronic warfare capabilities,
- Purchases of heavy weapons and tanks
- F-35 and other modern fighter jets,
- Unmanned aerial vehicles (UAVs) and unmanned ground vehicles (Bayraktar TB2, Bayraktar Akıncı, etc.)
- Space-based surveillance and defense systems,
- Hybrid warfare strategies and countermeasures against asymmetric threats,
- Modernization projects for logistics and supply chain management,
- Next-generation hypersonic missile technologies (NATO, n.d.; SIPRI, n.d.).

Because of the escalation in regional security concerns in NATO countries, they focused on new war doctrines and have a tendency to make an investment in new technologies such as Unmanned Air Vehicles (UAVs), Unmanned Ground Vehicles (UGVs), Unmanned Maritime Vehicles (UUVs), new air defence systems such as air domes/air shields, and new war fields such as space and cyber systems. They also allocate a budget to military research and development activities for advancing new defence technologies. In addition to this, modernization projects for logistics and

supply chain management become a critical topic for the war, and NATO starts to support member countries investments in this area. It is expected that in the future, NATO's policy will focus more on supporting investments in the research and development of new-generation threats, such as cyber warfare and hybrid attacks, for the member states. In this context, Türkiye's alliance will play a key role in future cooperation.

5. NATO's Future Defence Strategy

As it is understood NATO aims to make a long-term defence expenditure strategy to increase the collective defence capacity of the member states. In this context, it aims to allocate more resources to new military infrastructures and joint exercises to strengthen its deterrence strategy. The alliance plans to enhance and modernize the NATO bases, which are located in Eastern Europe, to give a quick reaction to any threats or military crisis.

NATO's future defence strategy will not only focus on increasing defense expenditures but also on strengthening integration and cooperation in the defense industry among member states. In this sense, it aims to focus on new-generation weapon systems to improve the alliance's defence capacity. With the new investment in cyber and space security areas, NATO will become more flexible and resilient against the threats.

6. Conclusions:

The war between Ukraine and Russia radically alters the defence expenditures of the NATO countries. European countries become volunteers to increase their defence budget. NATO's long-term budget expansion in defence expenditure to enhance the collective defence deterrence strategy of the member states will cause changes in a geopolitical equilibrium in the world. The war between Ukraine and Russia causes a permanent change in NATO's defence policies and encourages the member countries to make cooperations to invest in the new military infrastructures and joint military projects.

In the future, NATO will increase the cooperation between the alliance against the common threats and aims to create a coordinated defence strategy among the member states. In addition to this, NATO will support the Eastern European countries military infrastructure and integration into the new-generation defence technologies. The cooperation in the defence industry and military projects on the new defence and weapon technologies will play a key role in the NATO defence policies and aims to improve the alliance's defence capacity. The evolving threat perceptions, ranging from cybersecurity to space security, will be among the key factors shaping NATO's future military structure.

The ongoing discussion between the USA and European allies regarding increased defense spending in NATO remains a critical issue. The Trump administration strongly emphasized the need for European allies to increase their defense expenditure, arguing that the financial burden should be more equitably shared. In response, European allies have been working to strengthen their national defense capabilities, also exploring EU-led initiatives. However, achieving this goal is expected to take considerable time with a significant financial burden.

The rising defence expenditures of NATO members present an opportunity for Türkiye's defence industry.



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Geniş Türkçe Özeti:

NATO Ülkelerinin Savunma Harcamaları; Ukrayna-Rusya Savaşı Öncesi ve Sonrası

Bu çalışmada, NATO ülkelerinin savunma harcamalarının Ukrayna-Rusya savaşı öncesi ve sonrası nasıl değiştiği analiz edilmektedir. 24 Şubat 2022'de savaşın başlamasıyla birlikte NATO ülkeleri, savunma bütçelerini artırarak özellikle belirli alanlara yatırım yapmaya başlamışlardır. Çalışma, bu harcama eğilimlerini, NATO'nun savunma stratejisindeki değişiklikleri ve gelecekte bu harcamaların nasıl şekilleneceğini incelemektedir.

1. Ukrayna-Rusya Savaşı Öncesinde NATO Ülkelerinin Savunma Harcamaları

2021 yılı itibarıyla NATO ülkelerinin toplam savunma harcamaları yaklaşık 1.1 trilyon dolar seviyesindeydi. Bu bütçenin %70'i ABD tarafından karşılanırken, geri kalan %30'u Avrupa ülkeleri ve Kanada tarafından paylaşılmaktaydı.

ABD: 770 milyar dolar

Almanya: 50 milyar dolar

Birleşik Krallık: 59 milyar dolar

Fransa: 56 milyar dolar

Polonya: 14 milyar dolar

NATO, 2014 yılında üye ülkeler için savunma harcamalarını GSYİH'nin %2'sine çıkarma hedefi belirlemişti. Ancak birçok ülke bunu gereksiz bulmuş ve bu hedefe tam olarak ulaşmamıştı. Ancak, Ukrayna-Rusya savaşıyla birlikte bu hedef zorunlu hale gelmiştir.

Savaş öncesinde NATO ülkeleri genellikle siber güvenlik, terörle mücadele, nükleer caydırıcılık ve hipersonik füzeler gibi alanlara yatırım yapıyordu. Ancak savaşın başlamasıyla birlikte insansız hava araçları (İHA), insansız kara araçları (UGV), hava savunma sistemleri ve siber savaş sistemleri gibi yeni nesil teknolojilere yönelim artmıştır.

2. Ukrayna-Rusya Savaşı Sonrasında NATO Ülkelerinin Savunma Harcamalarındaki Değişimler

Savaşın başlamasının ardından NATO ülkeleri, özellikle Doğu Avrupa ülkeleri olmak üzere savunma bütçelerinde önemli artışlar yapmıştır:

Almanya: 100 milyar euro ek savunma bütçesi tahsis etti ve büyük ölçekli askeri planlamalara başladı.

Polonya: Savunma harcamalarını GSYİH'nin %4'üne yükseltti.

Birleşik Krallık: Savunma bütçesini 68.5 milyar dolardan 74.9 milyar dolara çıkardı.

Fransa: 2022-2023 yılları arasında 7.7 milyar dolar artış yaparak 61.3 milyar dolarlık bir savunma bütçesi belirledi.

Türkiye: Savunma bütçesini 5.2 milyar dolar artırarak 15.8 milyar dolara çıkardı.

Baltık Ülkeleri: Estonya, Letonya, Litvanya gibi ülkeler de önemli harcama artışları yaptı.

İsveç ve Finlandiya: NATO'ya katılımları sonrası savunma harcamalarını artırma ve ordularını modernize etme kararı aldılar.

Bu artışlarla birlikte NATO, Doğu Avrupa'daki askeri tatbikatları artırmış ve savunma mekanizmalarını güçlendirmiştir. Özellikle Rusya sınırına yakın ülkelerde NATO varlığını artırarak hava savunma sistemleri, siber güvenlik önlemleri ve ağır silahlanmaya yönelik yatırımları hızlandırmıştır.

3. Artan Savunma Harcamalarının Ana Alanları

Savaş sonrası NATO ülkelerinin savunma harcamalarındaki artış şu alanlara yönelmiştir:

Hava savunma sistemleri (Patriot, NASAMS vb.)

Siber güvenlik ve elektronik savaş sistemleri

Ağır silah ve tank alımları

F-35 ve diğer modern savaş uçakları

İnsansız hava araçları (İHA) ve insansız kara araçları (UGV)

Uzay tabanlı gözetleme ve savunma sistemleri

Hibrit savaş stratejileri ve asimetric tehditlere karşı önlemler

Lojistik ve tedarik zinciri yönetiminde modernizasyon projeleri

Yeni nesil hipersonik füze teknolojileri

Özellikle Bayraktar TB2 ve Akıncı İHA'lar, Ukrayna savaşında önemli bir rol oynayarak savaşın seyrini değiştirmiş ve NATO ülkeleri arasında büyük ilgi görmüştür. NATO ülkeleri,

gelecekteki savař doktrinlerini deęiřtirmeye ve yeni nesil teknolojilere yatırım yapmaya bařlamıřtır.

4. NATO’nun Gelecekteki Savunma Stratejisi

NATO, savař sonrası dönemde uzun vadeli savunma harcamalarını artırmayı ve kolektif savunma kapasitesini güçlendirmeyi hedeflemektedir.

Bu kapsamda:

Doęu Avrupa’daki askeri üslerin modernize edilmesi ve güçlendirilmesi planlanmaktadır.

Yeni askeri inovasyon fonları (NATO Innovation Fund, DIANA) oluřturulmaktadır.

Üye ölkeler arasında savunma sanayi iř birlięi artırılmaktadır.

Siber ve uzay güvenlięi alanlarında yeni yatırımlar yapılmaktadır.

Gelecekte NATO, siber savař, uzay güvenlięi ve hibrit savař tehditlerine daha fazla odaklanacaktır. NATO, doęrudan askeri harcamaların yanı sıra, teknolojik yatırımları da artırarak caydırıcılık stratejisini güçlendirecektir.

5. Sonuç ve Deęerlendirme

Ukrayna-Rusya savařı, NATO ölkelerinin savunma politikalarında köklü deęiřikliklere neden olmuřtur.

Avrupa ölkeleri, savunma harcamalarını artırarak NATO ile daha yakın iř birlięine gitmiřtir.

ABD ve Avrupa arasındaki savunma harcamalarının adil daęılımı konusu tartıřma yaratmıřtır.

NATO’nun savunma bütçesinin geniřlemesi, küresel jeopolitik dengeleri deęiřtirmiřtir.

Doęu Avrupa ölkeleri, Rusya tehdidine karřı önlemlerini artırmıřtır.

Gelecekte NATO, ortak askeri projelere ve yeni savunma teknolojilerine daha fazla yatırım yapacaktır.

Sonuç olarak, NATO’nun savunma harcamalarının artıřı, hem bölgesel hem de küresel güvenlik dengelerinde önemli deęiřikliklere yol açmıřtır. NATO’nun gelecekteki stratejisi, daha güçlü bir savunma altyapısı, yeni nesil savař teknolojileri ve üye ölkeler arasındaki iř birlięinin artırılması yönünde ilerleyecektir.