

U.S.-Ukraine Defense Tech Partnership: Enhancing Global Security Through Strategic Cooperation

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SUMMARY

This report summarizes the outcomes of **MITS Forum 2024**, bringing together insights from industry experts, stakeholders, and policymakers. MITS Forum emphasized the strategic significance of U.S. investments in Ukraine's defense sector and proposed actionable strategies and policy recommendations.

We invite all Forum attendees to collaborate with us to refine and advance the recommendations outlined in this report.

PREPARED BY

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Executive Summary

Key Findings:

1. **The strategic partnership between the U.S. and Ukraine in defense technology is crucial for regional stability and global security.**
2. **Ukrainian defense innovations are reshaping modern warfare, offering novel and low-cost scalable solutions for NATO and democratic allies.**
3. **A targeted investment of \$10 billion in Ukraine's defense sector can significantly accelerate Ukraine's victory and benefit U.S. geopolitical interests.**

Recommendations:

Implement policy measures to facilitate U.S. investments in Ukraine's defense industry.

- Tax Incentives for U.S. Companies
- Creation of Bilateral Investment Funds
- Streamlined Export Licensing for Dual-Use Technologies
- Facilitating Joint R&D Initiatives
- Developing Insurance Programs
- Strengthening Cybersecurity Protocols for Shared Infrastructure
- Public-Private Partnership Programs (PPPs)
- Incentivizing Ukraine's Adoption of NATO Standards
- Enhancing Regulatory Support for Private Debt and Equity Investment

Strengthen Ukraine's manufacturing capabilities to create a sustainable defense industrial base.

- **Direct Investment and Financial Support**
 - Foreign Military Financing (FMF) Grants and Loans
 - Loan Guarantees for American Companies
 - Defense Production Act (DPA) Funding for Critical Projects
- **Technical Assistance and Training Programs (Two-Way)**
 - Technology Transfer Programs
 - Engineering and Manufacturing Expertise Development
- **Facilitating Access to U.S. Defense Markets**
 - Easing Pathways for Ukrainian Products
 - Integrating Ukrainian Suppliers into the U.S. Supply Chain

Deepen NATO integration and cooperation with Ukraine to enhance collective security.

Enhanced Military Training, Joint Exercises, and Interoperability

- Bilateral and NATO-led exercises, specialized training programs, standardization of equipment and communications, and logistics and supply chain integration.

Advanced Defense Technology and Cybersecurity Cooperation

- Intelligence and surveillance sharing, cybersecurity assistance, and support for secure, NATO-compatible infrastructure, including air and missile defense.

Security Assistance, Defense Financing, and Strategic Infrastructure Investment

- Foreign Military Financing (FMF) for NATO-standard equipment, military aid pre-positioning, and investments in NATO-compatible infrastructure.

Policy and Diplomatic Pathways toward NATO Membership

- Defining a Membership Action Plan (MAP), engaging allies for support, and including Ukraine in NATO exercises, missions, and response mechanisms, especially in cyber and intelligence networks.

From the inception of the Russian full-scale invasion, the U.S. has been a critical partner to Ukraine with multiple initiatives that have contributed to Ukraine's defense, including:

1. **Strategic Defense Framework Agreements:** In August 2021, the U.S. and Ukraine signed the Strategic Defense Framework to enhance defense cooperation, focusing on defense industry collaboration and cybersecurity. [[Wilson Center](#)]
2. **Defense Industrial Base Conferences:** In December 2023, the U.S. Department of Commerce hosted the U.S.-Ukraine Defense Industrial Base Conference, bringing together over 300 representatives from U.S. and Ukrainian industries and governments to explore co-production and industrial cooperation opportunities. [[Commerce](#)]
3. **Foreign Military Financing (FMF):** In May 2024, the U.S. announced \$2 billion in FMF to help Ukraine develop its defense industry, including potential co-production with U.S. companies. [[Defense News](#)]
4. **Technical Data Sharing:** The U.S. Department of Defense has provided Ukraine with technical data packages to enable local production of specific defense systems, facilitating parallel production in both countries. [[White House](#)]
5. **Sanctions and Export Controls:** The U.S. has imposed sanctions on entities supporting Russia's war efforts, aiming to disrupt adversarial supply chains and create opportunities for Ukraine's defense industry to fill gaps. [[AP News](#)]

1. Introduction

Purpose of the Report

This report synthesizes the insights from the **MITS Forum**¹ into actionable strategies and policy recommendations, highlighting the strategic importance of U.S. investments in Ukraine's defense sector. It also incorporates a broader geopolitical context to provide a comprehensive roadmap for enhancing Ukraine's defense capabilities and fostering U.S.-Ukraine cooperation.

Context and Background

Overview of the ongoing war in Ukraine and its global implications.

A New Era of Modern Warfare: The conflict has redefined contemporary military strategy, emphasizing asymmetric tactics, cyber warfare, and advanced technologies like drones and electronic warfare. Ukraine's innovative use of these tools to counter a larger force has shifted global military thinking, prompting NATO and other nations to reevaluate their defense approaches and prepare for a new era of tech-enabled, agile combat. This evolution is setting precedents for future conflicts, especially regarding rapid response, integrated defense systems, and resilience against cyber threats.

Economic Repercussions of Dependence on Russian Resources: The war has exposed the vulnerabilities in Europe's and Asia's reliance on Russian oil and gas, triggering an urgent drive to secure alternative energy sources. This shift has fueled investments in renewable energy and diversification of supply chains. The economic impact of these changes has been significant, contributing to rising energy prices, inflation, and the need for resilient supply chains to minimize geopolitical risks.

Democratic Resilience Against Authoritarian Hegemony: Ukraine's stand against Russian aggression has underscored a global ideological divide, with democracies uniting to defend against a growing authoritarian influence. This alignment has strengthened democratic resilience, reinforcing support for Ukraine as a symbol of sovereignty and freedom. It has also deepened alliances among democratic nations committed to countering authoritarian expansion, marking a new era of ideological unity and strategic collaboration among democracies in the face of emerging threats.

Ukraine's evolution into a hub of defense technology innovation: Ukraine has become a global center for defense technology innovation, advancing in UAVs, precision munitions, and electronic warfare to meet the demands of modern warfare. Driven by partnerships between the Ministry of Digital Transformation, Ministry of Strategic Industries and the Ministry of Defense, along with international support, Ukraine's tech

¹ MITS Capital, LLC organized the first international MITS Forum: U.S. - Ukraine Defense Tech Partnership, dedicated to the defense technology partnership between Ukraine and the United States and issues of global collective security. The Forum was held on October 10, 2024, and brought together around 300 government officials, leading experts, military personnel, Ukrainian mil-tech companies, start-ups and investors.

ecosystem has grown rapidly, with drone manufacturers expanding from about 20 to over 200 since the conflict's start. This evolution has positioned Ukraine as a critical, innovative partner for NATO.

Ukraine is an important Defense Industrial Base Partner for the U.S.: Ukraine's low-cost industrial base has enabled it to hold back the invader. It could be a major asset for the U.S. in closing the U.S.'s cost gap with China for the production of everything from drones to ordinance. In 2025, Ukraine will double its defense production and be able to start supplying the U.S. and democratic allies with some of the lowest-cost, battle-tested, China-component-free, and most effective weaponry in the free world.

The necessity of U.S.-Ukraine cooperation in addressing global security challenges: The U.S.-Ukraine defense partnership has become essential for addressing international security challenges, particularly as Ukraine serves as a frontline defense against authoritarian aggression. This collaboration leverages Ukraine's strategic geographic position and growing defense capabilities, making it a valuable partner in NATO's security framework and a critical force for regional stability. Through joint ventures and technology sharing, the U.S. can enhance Ukraine's resilience and diversify its own defense supply chains, reducing dependence on other global powers like China. This partnership strengthens collective defense mechanisms, fosters innovation in defense technology, and contributes to the democratic world's ability to counter emerging global threats.

Methodology

- Compilation and analysis of discussions from the MITS Forum held on October 10, 2024, which gathered the key stakeholders in the industry.
- Integration of expert opinions, panel discussions, and case studies presented during the event.
- Expert analysis of public sources, and interviews with opinion leaders.

2. Strategic Importance of U.S.-Ukraine Defense Tech Partnership

Enhancing Ukraine's Defense Capabilities

The critical role of U.S. investments in building Ukraine's local production and technological implementation.

U.S. investments are pivotal in accelerating Ukraine's path toward economic resilience and technological advancement, especially as it rebuilds amidst ongoing conflict. Early investments in local production and technology will support Ukraine's defense and economic foundation that aligns with Western standards.

U.S. investment in local production will fuel growth in critical sectors, including infrastructure, energy, Aerospace. Investors can straighten Ukraine's regional economies by focusing on immediate and localized rebuilding efforts, fostering a decentralized model that boosts efficiency and resilience. As highlighted by the Atlantic Council, initiating these efforts now rather than post-conflict will stabilize communities, preserve human capital, and lay the groundwork for long-term recovery. Furthermore, prioritizing renewable energy infrastructure will reduce Ukraine's reliance on traditional power sources, ensuring energy security and global sustainability goals.

Technology and innovation are integral to this transformation, with U.S. investments driving advancements in Ukraine's production capabilities. Ukraine's strengths in digital governance, exemplified by its Diia platform, show how public services can be streamlined, enhancing transparency and attracting investments. As the CSIS report emphasizes, supporting SMEs with impact investing will create jobs and foster a resilient, diversified economy. Modernizing sectors like agriculture and energy through technology will enhance productivity and position Ukraine as a critical player in regional and global supply chains.

For U.S. investors, Ukraine's rebuilding represents a dual opportunity: achieving financial returns while advancing democratic resilience on a global scale. By facilitating the growth of Ukraine's local production and technological capacity, U.S. investments will play a decisive role in strengthening Ukraine's economic independence and its integration with Western markets, creating lasting stability in Eastern Europe.

[Source: CSIS](#)

[Source: Atlantic Council](#)

Fostering a robust startup ecosystem to drive innovation in defense technologies.

Ukraine's startup ecosystem has become a driver of innovation in defense technologies. Supported by government initiatives and private investment, Ukraine has accelerated advancements in drones, artificial intelligence (AI), and cyber defense—increasingly vital technologies on the battlefield.

Significant investments in defense-focused tech startups have turned Ukraine into a center for technological breakthroughs, delivering unique solutions tailored to the challenges faced by its defense forces. For example, the development of unmanned aerial vehicles (UAVs) for reconnaissance and strike capabilities has empowered Ukraine to confront larger adversaries with a level of sophistication and adaptability that is reshaping defense tactics.

Government support and international funding have been key to nurturing this growth. Through venture capital partnerships and accelerator programs, Ukraine has built a framework that encourages tech innovation and emphasizes scalable solutions compatible with NATO standards. This environment has attracted substantial foreign interest, enabling startups to expand their capacities and sustain critical R&D efforts even amid ongoing conflict.



In fostering this collaborative innovation ecosystem, Ukrainian defense tech companies work closely with the military, receiving direct field feedback to refine their products rapidly. By supporting these dynamic partnerships, U.S. and allied investments can further accelerate advanced defense tech development while bolstering Ukraine's economic resilience.

Ukraine's approach has created a model for rapid defense innovation, strengthening both its national security and the security of its allies. Continued investment in Ukraine's tech sector can secure this vital innovation pipeline, enhancing defense capabilities and global stability.

[Source: United 24](#)

[Source: Tech Ukraine](#)

An Asset for the Democratic World

Ukraine's position as a frontline defender of democratic values against authoritarian aggression.

Ukraine stands as a bulwark for democratic values, actively defending against authoritarian aggression on Europe's eastern flank. Its commitment to resisting Russian expansionism underscores Ukraine's role as a partner in NATO's security architecture, aligning closely with the alliance's core values and strategic interests. Integrating Ukraine into NATO would not only strengthen regional stability but would provide NATO with an ally skilled in countering hybrid warfare tactics, including cyber threats and asymmetric combat methods.

For the United States, Ukraine's potential NATO membership offers a strategic advantage, enhancing the alliance's deterrence capabilities while supporting the democratic order in Europe. By empowering Ukraine as a full NATO member, the U.S. would benefit from a more distributed defense framework, reducing the need for American resources in the region and fostering a collaborative approach to regional security.

Ukraine's frontline experience against authoritarian forces also brings expertise to NATO, which can be applied to emerging security threats faced by all member states. Ultimately, Ukraine's integration into NATO would secure its pro-Western alignment and reinforce the collective strength of democratic nations against authoritarianism, advancing the U.S. vision of a secure and unified Europe.

[Source: Atlantic Council](#)

The symbolic and practical implications of supporting Ukraine for global democracies.

Supporting Ukraine holds symbolic and practical significance for democracies worldwide, representing a stand against authoritarian aggression and reinforcing the principles of sovereignty and self-determination. Despite the challenges posed by conflict, Ukraine's steady path toward European Union integration demonstrates its commitment to democratic values and institutional reform. For global democracies, backing Ukraine sends a message that the free world stands united in defense of these ideals.



Supporting Ukraine helps stabilize Eastern Europe, mitigating risks of further territorial ambitions by authoritarian regimes. Increased economic and military assistance strengthens Ukraine's defense and accelerates its integration into Western structures, contributing to regional stability. As outlined in recent analyses, the success of Ukraine's democratic transition will also serve as a blueprint for other nations facing similar threats, reinforcing a democratic precedent in contested regions.

Moreover, Ukraine's journey underscores the importance of solidarity among democracies in protecting the international order. By bolstering Ukraine, democracies safeguard a vital partner in the fight against authoritarian influence, ensuring that democratic resilience remains a priority on the global stage. This support reflects a commitment to upholding democratic integrity worldwide, demonstrating that freedom and the rule of law can withstand even the gravest threats.

[Source: Carnegie Europe](#)

[Source: Centre for Economic and Policy Research](#)

Economic and Security Benefits for the U.S. and its Allies

Strengthening Regional Stability and Deterrence

Supporting Ukraine's security aligns with U.S. national interests by promoting stability in Eastern Europe, a region essential to NATO's strategic defense. As a crucial ally on NATO's eastern flank, Ukraine reinforces the alliance's ability to deter further Russian aggression. Integrating Ukraine into NATO would solidify regional security, helping contain threats and prevent them from spreading into allied territories. Ukraine's active contributions play a crucial role in maintaining NATO's collective defense posture, reinforcing the alliance's longstanding peacekeeping framework in Europe.

[Source: U.S. Department of Defense](#)

Economic Opportunities through Defense Partnerships

Beyond security, Ukraine's defense sector presents economic potential for U.S. partnerships. Joint ventures with Ukrainian defense companies enable U.S. firms to access a skilled workforce and leverage Ukraine's fast-developing military technology expertise. Establishing these partnerships boosts Ukraine's production capabilities and generates new revenue streams for U.S. companies, integrating economic growth with strategic objectives. Such collaboration strengthens Ukraine's self-sufficiency in defense and aligns economic benefits with U.S. security goals.

[Source: Carnegie Europe](#)

[Source: MOD Ukraine](#)

3. Ukrainian Defense Technology Innovations: Resources Needed to Win the War

Shaping the Future of Global Security

Battlefield Innovation and Modern Warfare

Ukraine's advancements in defense technology, particularly in unmanned systems, precision munitions, and electronic warfare, are influencing modern military strategies. These innovations enable smaller forces to counter larger adversaries effectively, demonstrating Ukraine's capability to respond to complex threats. As a result, Ukraine stands out as a strategic partner for NATO, contributing effective solutions that enhance global security and align with modern combat needs.

[Source: Cipher Brief](#)

Accelerated Development Cycles in Defense Tech

Unlike traditional defense models, Ukraine's defense tech sector operates on rapid development cycles, allowing it to respond to battlefield requirements. This agility has propelled Ukraine to the forefront of defense technology innovation, positioning it as a valuable source of cutting-edge advancements. With its efficient, accelerated approach, the country's defense tech sector sets a new standard in rapid military innovation that can benefit NATO and allied forces globally.



[Source: Business Ukraine](#)

[Source: Cipher Brief](#)

Case Studies and Success Stories

Digital Transformation in Defense: Ministry of Digital Transformation and Ministry of Defense initiatives on leveraging technology for military advantage:

- **Army of Drones:** This initiative has increased drone production and the development of ground-based robotic platforms, electronic warfare systems, and drone ammunition. Fedorov emphasizes that asymmetrical warfare involves deploying technologies to outmaneuver adversaries. [Source: Le Monde](#)
- **Brave1 Platform:** Launched in collaboration with defense agencies and the National Security and Defense Council, Brave1 serves as a defense tech cluster fostering scientific research and development. As of May 2024, over 1,600

developments and 1,000 producers have registered on the platform, accelerating the deployment of technological solutions to the front lines.

[Source: Ukrinform](#)

- **AI-Enhanced Drones:** In October 2024, Ukraine began deploying domestically developed AI-augmented systems for drones. These systems enhance target acquisition and enable autonomous flight in electronically contested environments, improving operational effectiveness.

[Source: Reuters](#)

Human Resource Development: Maria Berlinska, a veteran and aerial reconnaissance specialist, leads the [Victory Drones](#) project under the [Dignitas charitable foundation](#). The project focuses on:

- **Drone Training and Production:** Victory Drones has launched initiatives like the "People's FPV" program, which educates Ukrainians on assembling kamikaze drones at home. This grassroots approach has empowered citizens to contribute directly to defense efforts. [Source: Ain](#)
- **Advocacy and Development:** Berlinska has been a vocal advocate for technological advancement in Ukraine's military, emphasizing the critical role of engineers and innovation in modern warfare. She has highlighted the necessity of developing interceptor drones to counter enemy UAVs effectively. [Source: Pravda](#)

In addition, an integral part of the international training ecosystem, [Boryviter Military School](#) provides free, intensive training to Ukrainian military personnel in areas such as fixed-wing and multi-rotor UAVs, FPV drones, military communications, land navigation, and command and staff training - enhancing the battlefield readiness of the Armed Forces of Ukraine. Further, Boryviter is actively involved in retraining wounded warriors and has been mandated to help Ukraine's military to institutionalize lessons learned processes.

- As of November 2024, Boryviter has trained over 24,000 service members across 12 specialized programs, contributing to Ukraine's defense capabilities. [Source: Boryviter](#)

The synergy between government initiatives and grassroots projects has led to:

- **Increased Drone Production:** The Ministry of Defense, in cooperation with the Ministry of Digital Transformation, has contracted 1.8 million drones for nearly 147 billion UAH [\$3.55 billion] for 2024-2025. [Source: Liga News](#)
- **Technological Advancements:** The development of AI-driven drones and platforms like Brave1 have established Ukraine as a leader in defense technology innovation.

Challenges and Resource Gaps

Critical Resource Shortages Hindering Ukraine's Defense Efforts

Ukraine faces resource shortages that limit its ability to sustain momentum on the battlefield. Insufficient artillery ammunition and long-range fires, combat air (to interdict Russia's ability to deliver glide bombs), layered air defense systems, and counter-drone technologies are significant obstacles, reducing Ukraine's ability to conduct decisive operations. Filling these critical gaps - along with replenishing operational stocks of conventional maneuver assets and spare parts/specialty tooling - is essential for bolstering Ukraine's defense and enabling sustained operations.

[Source: CSIS](#)

The Need for Advanced Technologies, Funding, and International Collaboration

To overcome these challenges, Ukraine requires advanced technologies, reliable funding, and strategic international collaboration. Support from global investors in Ukraine's defense tech sector can maintain its momentum in innovation and help address resource needs. These investments, alongside coordinated international partnerships, will provide Ukraine with the advanced capabilities needed to secure stability and enhance its defense infrastructure.



[Source: Atlantic Council](#)

The Cost of Insufficient Support

While the resources required to militarily defeat the Russian Federation Army on Ukrainian soil are substantial, they are far less than what the Western Alliance would need to mobilize if Ukraine were to fall, transforming into a key asset for an imperial Russia—let alone the effort required to deter other potential aggressors emboldened by a perceived lack of Western resolve.

4. Ukrainian Manufacturing and Geopolitical Impact: A Win-Win Scenario

The Role of Manufacturing in Ukraine

Scaling Defense Production Amidst Conflict

Despite much international funding directed toward allied defense industries, Ukraine has proven its capability to strengthen its defense production. Drawing on its legacy as a defense industrial base during the Soviet era, Ukraine has adapted to wartime demands, expanding production capabilities since the full-scale invasion. This rapid scaling underscores Ukraine's resilience to sustain a self-reliant defense infrastructure.

[Source: MoD - Ukraine](#)

Leveraging Skilled Workforce and Existing Infrastructure

A skilled workforce and existing infrastructure support Ukraine's defense manufacturing and position it for scaled production. With a foundation in engineering and advanced manufacturing expertise, Ukraine is using digital advancements to upgrade its defense capabilities. By leveraging these assets, Ukraine can continue to develop and expand its defense industry, contributing to national security and the stability of Eastern Europe.

[Source: CSIS](#)

[Source: Issues in Science and Technology](#)

Impact on Geopolitical Strategies

Enhancing Economic Self-Sufficiency

Strengthening Ukraine's economy is pivotal in reducing its dependence on foreign aid, thereby increasing national self-sufficiency. By bolstering domestic industries and fostering economic resilience, Ukraine can withstand external pressures and contribute more effectively to regional stability. This economic fortification aligns with broader strategic objectives, enabling Ukraine to play an autonomous role in international affairs.



[Source: World Bank](#)

Elevating Strategic Position and Partnership with the U.S.

A robust Ukrainian economy enhances its strategic position in global geopolitics, making it a more valuable partner to the United States. Economic strength allows Ukraine to engage more assertively in diplomatic and security initiatives, aligning with U.S. interests in promoting stability and democracy in Eastern Europe. This partnership is further solidified through collaborative defense and economic development efforts, reinforcing the mutual benefits of a strong U.S.-Ukraine alliance.

[Source: Atlantic Council](#)

Economic Benefits for Ukraine and the U.S.

Job Creation and Economic Growth within Ukraine

Strengthening Ukraine's defense industry has led to job creation and economic growth. The post-war recovery, mainly through green initiatives in sectors like transportation, energy, healthcare, education, and water supply, has the potential to create over 4.2 million jobs, compensating for wartime losses. This expansion not only revitalizes the economy but also enhances national resilience.

[Source: European Parliament](#)

Mutual Benefits through Joint Ventures and Expanded Markets for U.S. Companies

Collaborative ventures between U.S. and Ukrainian defense firms benefit both nations. For U.S. companies, these partnerships provide access to Ukraine's workforce and emerging markets, fostering innovation and economic growth. For Ukraine, such collaborations bring capital, technology transfer, and integration into global supply chains, strengthening its defense capabilities and economic stability. This synergy enhances the defense sectors of both countries and contributes to broader economic prosperity.

[Source: White House Fact Sheet](#)

Defense Procurement Strategies and Collaboration

Optimizing defense procurement to support domestic manufacturing

Strengthening defense procurement within Ukraine enhances NATO's and the U.S.'s ability to meet regional security needs by diversifying and expanding allied production capabilities. By bolstering local



manufacturing, Ukraine can serve as a source of critical defense equipment, reducing NATO's reliance on a limited number of suppliers and enabling faster deployment of resources across Europe. This approach supports NATO's objectives by ensuring a more resilient and autonomous European defense industry while aligning with U.S. priorities to strengthen allied production bases, ultimately increasing readiness and responsiveness in times of crisis.

[Source: Congressional Research Service](#)

Integrating U.S. defense expertise with Ukrainian capabilities.

Collaborating with Ukrainian defense manufacturers allows the U.S. and NATO to tap into Ukraine's advancing military technologies, in areas like drones, precision weaponry, and cyber defense. Through joint projects, training, and co-development efforts, U.S. defense expertise and Ukrainian innovation can create interoperable solutions with NATO standards. This integration strengthens Ukraine's role within the alliance and provides NATO forces with tested, effective technology for immediate application. Enhancing Ukraine's defense production ensures that both the U.S. and NATO benefit from a more agile, self-sufficient European partner, reinforcing collective security across the region.

[Source: Institute for the Study of War](#)

5. Ukraine's Pivotal Role in NATO and Global Security

Strategic Importance to NATO

Ukraine as a Frontline Defender and Contributor to Global Security

Ukraine is a frontline defender against aggression, playing a key role in ensuring regional and global security through its domestic defense industry. The country's defense efforts, supported by military aid from the U.S. and its allies, are essential in countering Russian advances and upholding the security architecture in Europe. Ukraine's resistance underscores the strategic value of its partnership with NATO, reinforcing collective defense measures that protect European stability.

[Source: Atlantic Council](#)

Contributions to Intelligence Sharing and Defense Capabilities within NATO

Ukraine's contributions extend beyond its battlefield efforts, significantly bolstering NATO's intelligence-sharing and defense capabilities. Through collaboration on intelligence and military strategy, Ukraine provides NATO with critical insights into Russian operations and tactics, enhancing the alliance's situational awareness and preparedness. This cooperation strengthens NATO's overall security framework, making Ukraine a key partner in the alliance's strategic planning and defensive posturing.

[Source: Carnegie Europe](#)

Mutual Benefits

Strengthening NATO's eastern flank enhances collective security.

With U.S. support, integrating Ukraine's defense capabilities into NATO's eastern flank enhances European collective security. Ukraine's strategic location provide a buffer against Russian expansion, benefiting the U.S. by reducing the need for an extensive American military presence in Europe. This partnership strengthens NATO's deterrence posture, freeing U.S. resources to address other global priorities while ensuring that European allies are well-prepared to respond to regional threats. For the U.S., a fortified eastern flank means a more balanced and distributed security framework within NATO, promoting European stability and reinforcing American influence.

[Source: Polish Institute of International Affairs](#)

Security Assurances and Defense Modernization for Ukraine

Ukraine should receive security assurances and resources needed for defense modernization through NATO and U.S. support. With American assistance, Ukraine can gain access to cutting-edge technology, intelligence, and advanced military training,

enabling it to develop a capable, NATO-compatible military force. For the U.S., this modernization benefits American defense companies engaged in joint ventures and technology transfers, creating economic returns and expanding the U.S. defense footprint in Europe. Moreover, a stronger Ukraine reduces the risk of destabilization in Eastern Europe, helping the U.S. achieve the goal of a secure, democratic Europe with minimal direct American intervention.

[Source: Carnegie Europe](#)

Consequently, Ukraine's position as an asset to NATO and the democratic world cannot be overstated.

The trilateral partnership among Ukraine, NATO, and the U.S. is a shared investment in regional and global stability. For the U.S., supporting Ukraine enhances American strategic interests by creating a resilient ally on Russia's border, containing authoritarian influence and minimizing the need for U.S. deployments. Additionally, a secure Ukraine aligned with NATO values strengthens the transatlantic alliance, providing the U.S. with a stable and cooperative partner in Eastern Europe. This arrangement bolsters democratic resilience, showcases U.S. commitment to allied defense, and demonstrates that American support can enable democracies to withstand aggression—reinforcing U.S. influence globally and promoting a united front against emerging security threats.

In addition, Ukraine's integration into NATO supply chains would further bolster the alliance's collective defense via increased manufacturing efficiency, creating a stronger deterrent against future aggression. Additionally, Ukraine's defense industry innovations are vital to the global security, providing NATO and its allies with advanced military solutions critical for maintaining international security in an evolving threat environment.

6. U.S. Investments in Ukrainian Defense Tech: Pathways and Potential

Navigating the Current Investment Landscape

Regulatory and Geopolitical Barriers

U.S. investments in Ukraine's defense sector face regulatory and geopolitical obstacles, primarily due to export controls like the International Traffic in Arms Regulations (ITAR) and complexities associated with investing in an active conflict zone. These restrictions limit the influx of U.S. capital, confining most investments to early-stage funds willing to navigate the challenges of Ukraine's defense industry. Furthermore, strict export controls and concerns over repatriation discourage larger, long-term investments, as the elevated risk profile demands cautious entry. These constraints underscore the need for policy adjustments to incentivize broader external capital participation and support the resilience of Ukraine's defense industry.

[Source: U.S. Department of State](#)

Balancing Risks and Rewards in Conflict Investments

Investing in Ukraine's defense sector presents a high-risk, high-reward scenario. The active conflict introduces political instability, potential security threats, and economic volatility, creating a challenging environment for investors who seek to balance risks with potential returns. Early-stage funds and venture capital investors are drawn to the opportunity for substantial returns, particularly in sectors like unmanned systems, cyber defense, and advanced military technology. However, these risks necessitate mitigation strategies, such as secure legal frameworks and potentially U.S.-backed investment protections, to make the investment environment more appealing.



[Source: CSIS](#)

Strategic Engagement Opportunities for U.S. Investment

Despite the challenges, U.S. investments in Ukraine's defense technology sector offer opportunities for strategic engagement that align with American security interests. Collaborative projects focused on technology transfer, research and development, and

production capacity-building could support Ukraine's defense needs and U.S. objectives. By fostering dual-use technologies and encouraging public-private partnerships, the U.S. can spur innovation within Ukraine's defense sector, while simultaneously nurturing a self-sufficient and resilient ally on NATO's eastern border. Expanding U.S. support in these areas would help overcome existing barriers and build Ukraine's defense capabilities for long-term stability.

[Source: CSIS](#)

[Source: Atlantic Council](#)

Attracting \$10 Billion in Investments

Identifying High-Potential Sectors within Ukraine's Defense Industry

Ukraine's defense sector offers a range of areas for investment, including energy, machine building, and heavy industry. Significant U.S. investment in sectors like UAVs, cybersecurity, and advanced manufacturing could secure Ukraine's defense and enhance U.S. and NATO capabilities by diversifying supply chains and reducing reliance on non-allied nations. Investments in energy resilience, for example, would strengthen Ukraine's self-sufficiency and stability, while machine building and industrial manufacturing can support critical defense needs such as vehicle and equipment production. The defense industry also encompasses cybersecurity, aerospace, and electronics, all of which hold potential for strategic innovation and collaboration with U.S. partners.

[Source: Dentons](#)

[Source: CSIS](#)

Overcoming Challenges Through Supportive U.S. Policies and Risk Mitigation

Investing in Ukraine's defense industry poses challenges, especially given the risks of operating in a conflict zone. However, targeted U.S. policies can mitigate these challenges, allowing for feasible investments. Initiatives such as government-backed risk insurance and investment guarantees can offer U.S. investors a safety net, making investing in Ukraine's high-growth sectors feasible. These measures are essential in unlocking the full potential of Ukraine's defense industry. They will enable the U.S. to strengthen Ukraine as a strategic partner in global security, reinforcing the country's critical role on NATO's eastern flank.

[Source: Wilson Center](#)

[Source: CSIS](#)

Unlocking Strategic Value in Ukraine's Undervalued Defense Assets

Ukraine's defense sector offers a compelling investment opportunity, with assets historically undervalued on the global stage. A notable example is Motor Sich, a premier Ukrainian manufacturer of aircraft engines used worldwide, which was the subject of a Chinese acquisition attempt for under \$1 billion in 2021. This valuation starkly contrasts with the strategic importance of such assets.

Allocating \$10 billion to Ukraine's defense industry could catalyze a modernization of critical facilities, including Motor Sich. This investment would not only enhance production capabilities but also ensure that pivotal defense technologies remain under allied control, thereby preventing adversarial access. The infusion of capital aligns with both U.S. and NATO strategic interests.

A \$10 billion investment would secure critical technologies and bolster global security. In comparison, the U.S. Department of Defense's budget for fiscal year 2024 is approximately \$842 billion. Allocating \$10 billion to Ukraine's defense sector represents about 1.2% of this budget, a relatively modest expenditure considering the substantial strategic benefits. This investment would not only strengthen Ukraine's defense capabilities but also contribute to regional stability and the broader security objectives of the U.S. and its allies.

[Source: Atlantic Council](#)

[Source: Dentons](#)

Potential Global Impact

Diversifying Global Defense Supply Chains and Reducing Reliance on Non-Allied Nations

In an era of constrained global supply chains and increasing dependence on China, Ukraine's defense sector and vast mineral reserves offer an opportunity for diversification. By integrating Ukraine's defense manufacturing capabilities into NATO's supply chains, the U.S. and its allies can reduce reliance on non-allied nations for critical materials and technology. Furthermore, Ukraine's innovations in areas like unmanned systems and cybersecurity contribute to its defense and global commitment to democracy and freedom, securing Ukraine's position as a pivotal partner in the future of defense strategy.

A key example of Ukraine is the city of Dnipro, often called Ukraine's "space city". It has been a cornerstone of the nation's aerospace industry since the Soviet era. The city is home to major enterprises like Yuzhmash (Pivdenmash) and Yuzhnoye (Pivdenne), which have been instrumental in manufacturing launch vehicles and spacecraft components. Notably, Yuzhmash produces the first stages of Northrop Grumman's Antares rocket, which was used to launch the Cygnus cargo vehicle to the International Space Station, and engines for Europe's Vega rockets. This strategic importance has been recognized globally, with Dnipro's contributions integral to international space missions.

[Source: CSIS](#)

[Source: Wilson Center](#)

[Source: Space](#)

Accelerating Technological Advancements for Global Security

Ukraine's defense sector has demonstrated impressive agility and innovation, particularly in cyber defense, artificial intelligence, and advanced military technology. By supporting technological advancement in Ukraine, U.S. investments can accelerate the development of these capabilities, benefiting global security. As these technologies evolve within Ukraine's defense ecosystem, they strengthen the capacity of NATO and allied nations to address emerging security threats, setting new global defense technology standards.

[Source: USAID](#)

[Source: CSIS](#)

7. Ukrainian Defense Tech Ecosystem

Developing the Startup Ecosystem

Unified Pursuit of Innovation Amidst Conflict

The ongoing conflict has accelerated an alignment among academia, industry, and government in Ukraine, driven by the common goal of rapidly advancing defense technology to strengthen national resilience. Faced with urgent defense needs, academia, industry, and the government in Ukraine are collaborating more closely than ever. This unprecedented alignment is fostering a developing startup ecosystem producing breakthroughs that meet immediate operational requirements and drive the future of defense innovation. Academia is focusing its research on high-impact areas like cybersecurity, artificial intelligence, and unmanned systems, addressing the needs of the defense sector. Industry partners are collaborating to bring these innovations to market, fast-tracking product development to meet real-time demands on the battlefield. Through targeted policies, grants, and infrastructure investment, government support further strengthens this ecosystem, providing the resources and incentives needed to scale new technologies.

A Model for Defense Tech Success

This unified effort in Ukraine is setting a new standard for defense innovation, with the potential to achieve success as a defense technology powerhouse. By aligning goals across sectors, Ukraine's startup ecosystem is uniquely positioned to produce innovations at a pace and scale that is difficult to achieve elsewhere. Government incentives ensure that research evolves into practical applications, while collaboration with industry enables rapid deployment and scaling of these innovations. The collective focus on a shared mission creates an environment ripe for breakthroughs that enhance Ukraine's defense capabilities and offer strategic benefits to NATO and U.S. partners. By fostering this unprecedented cooperation, Ukraine's defense tech ecosystem could emerge as a leader, delivering advanced solutions that fortify security internationally.

[Source: Dentons](#)

[Source: CSIS](#)

[Source: USAID](#)

8. Recommendations and Strategic Proposals

Policy Measures

Beyond directly infusing capital into the Ukrainian Defense firms, the overall ecosystem could be bolstered through:

- **Tax Incentives for U.S. Companies:** Introducing tax credits or deferrals for U.S. defense firms investing in Ukrainian operations could reduce financial risk and encourage for American companies to partner with Ukraine's defense industry.
- **Creation of Bilateral Investment Funds:** Establishing a dedicated U.S.-Ukraine defense investment fund (fund of funds) with contributions from both governments could provide early-stage funding and venture capital for joint defense projects, similar to the Israel-U.S. Binational Industrial Research and Development (BIRD) Foundation model.
- **Streamlined Export Licensing for Dual-Use Technologies:** Easing export control regulations on specific dual-use or defense technologies could simplify the process for U.S. companies to share necessary technologies with Ukrainian partners while ensuring security compliance.
- **Facilitating Joint R&D Initiatives:** Launching grant programs for joint R&D projects between U.S. and Ukrainian defense companies or academic institutions could support advancements, particularly in cybersecurity, drone technology, and advanced materials.
- **Developing Insurance Programs for Conflict Zones:** Partnering with institutions like the World Bank or private insurers to create insurance products specifically for investments in active conflict zones like Ukraine would mitigate risk for U.S. investors and companies operating in Ukraine.
- **Public-Private Partnership Programs (PPPs):** Expanding U.S. government-backed PPPs in Ukraine's defense sector could mobilize private capital for projects with high initial costs, such as manufacturing facilities or technology development.
- **Incentivizing Ukraine's Adoption of NATO Standards:** Supporting Ukraine in adopting NATO interoperability standards for its defense products would make it easier for U.S. defense companies to collaborate and invest, as products would align with broader alliance requirements.
- **Enhancing Regulatory Support for Private Debt Financing:** To bolster Ukraine's defense sector, it's crucial to enhance regulatory support for private debt financing. One effective approach is to expand the mandate of the U.S. International Development Finance Corporation (DFC) to include defense-related projects. This expansion would enable private U.S. lending institutions to extend credit lines to Ukrainian defense firms, with the DFC providing partial guarantees to mitigate risks.

Strengthen Ukraine's manufacturing capabilities to create a sustainable defense industrial base.

- **Direct Investment and Financial Support**

- **Foreign Military Financing (FMF) Grants and Loans:** Increasing FMF grants and low-interest loans for Ukraine's defense sector would provide critical funds for building new facilities, upgrading plants, and maintaining operational capital, fostering sustainable production growth.
- **Loan Guarantees for American Companies:** Issuing U.S.-backed loan guarantees for American companies investing in Ukraine's defense manufacturing could encourage private sector engagement by reducing investment risks, especially in active conflict zones. The U.S. International Development Finance Corporation (DFC) has already implemented such measures, providing a \$40 million loan portfolio guarantee to Raiffeisen Bank Ukraine to support lending to small and medium-sized enterprises. Extending similar guarantees to American investors in the defense industry would further stimulate investment in Ukraine's defense sector.
- **Defense Production Act (DPA) Funding for Critical Projects:** Through the DPA, the U.S. could allocate funds specifically to support Ukrainian production in high-priority sectors, such as drones, precision munitions, and cyber-defense technologies, helping Ukraine scale its capabilities.

- **Technical Assistance and Training Programs**

- **Technology Transfer Programs:** Facilitating technology transfer for essential defense components, like unmanned systems or encrypted communication equipment, would help Ukrainian manufacturers produce critical components locally, reducing dependence on imports.
- **Engineering and Manufacturing Expertise Development:** Deploying U.S. advisors and establishing training programs could upskill Ukrainian workers in precision manufacturing, quality control, and electronics, equipping Ukraine with production capabilities.

- **Facilitating Access to U.S. Defense Markets**

- **Easing Pathways for Ukrainian Products:** Simplifying procurement pathways for Ukrainian defense products that meet U.S. standards could increase Ukraine's market access, providing a revenue stream that supports further development and growth in Ukraine's defense industry.
- **Integrating Ukrainian Suppliers into the U.S. Supply Chain:** Programs that incorporate qualified Ukrainian manufacturers into the supply chains of U.S. defense companies would help strengthen the U.S. supply base while providing Ukraine with sustainable business opportunities.

Policy and Diplomatic Support for NATO Membership Pathways

- **Defining a Membership Action Plan (MAP):** The U.S. could advocate within NATO for a structured Membership Action Plan for Ukraine, setting milestones for

integration. By outlining a clear path to membership, the U.S. would reinforce Ukraine's position and commitment to the alliance's collective security.

- **Engaging Allies for Support:** Through diplomatic channels, the U.S. can work to secure backing from NATO allies for Ukraine's membership aspirations, particularly from countries with reservations. Increased advocacy for Ukraine's NATO integration would promote unity and incentivize reforms.

Strategic Infrastructure and Defense Readiness

- **Investment in NATO-Compatible Infrastructure:** Funding and advising Ukraine on the construction of NATO-standard military infrastructure, including command centers, airfields, and logistics hubs, would allow Ukraine to serve as a forward-operating base for NATO, enhancing regional readiness.
- **Integrated Air and Missile Defense:** Working with NATO allies, the U.S. could help integrate Ukraine into NATO's air and missile defense network, establishing interoperable early-warning systems, radars, and interceptors to protect Ukraine and allied territories from aerial threats.

Inclusion in NATO's Response and Defense Mechanisms

- **Participation in NATO Exercises and Missions:** Encouraging Ukraine's active participation in NATO's Response Force exercises and humanitarian missions would help familiarize Ukrainian forces with NATO's rapid deployment and operational protocols.
- **Incorporating Ukraine into NATO Cyber and Intelligence Networks:** The U.S. can facilitate Ukraine's involvement in NATO's intelligence-sharing platforms and cyber defense mechanisms, enhancing cooperation on regional security threats and building collective response capabilities.
- **Integrate Ukraine into NATO's Forward Defense:** With the recent addition of Finland and Sweden and potential accession of Ukraine into the Western Alliance, NATO has the potential to create for the first time in its history a contiguous and integrated Eastern front. As a NATO member, Ukraine could be tasked with denying freedom of movement of Russia's Black Sea fleet, acting as a protective glacis for Moldova, Romania and Bulgaria, blocking Russian aggression against Poland, and hosting NATO air bases to surveil and - if necessary - interdict Belarusian and Russian forces.

9. Conclusion

Strengthening a Crucial Alliance for Global Security

The U.S.-Ukraine defense partnership extends beyond regional stability; it is a cornerstone of global security and the preservation of democratic values worldwide. By bolstering Ukraine's defense capabilities and integrating its industry into the broader Western defense ecosystem, the United States reinforces a strategic alliance that drives both countries to the forefront of modern military innovation. This partnership promises profound benefits: fortified security, economic growth through collaborative ventures, and accelerated technological leadership that enhances NATO and allied defense capabilities.

A Call to Action for Lasting Impact

Policymakers, industry leaders, and investors are called upon to take decisive steps to expand this critical partnership. By facilitating U.S. investments, fostering joint ventures that harness Ukraine's manufacturing strength, and promoting alignment with NATO standards, we can build a robust foundation for shared security and prosperity. The window of opportunity is narrow; immediate and sustained commitment is essential to secure a future where democratic nations stand united and resilient against authoritarian threats.

This is a moment to act with purpose. Together, through collaborative support and bold investments, we can build a defense alliance that not only safeguards our current security but also anchors a global democratic order for generations to come.