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MODELS OF PUBLIC ADMINISTRATION IN THE STRATEGIC AEROSPACE INDUSTRY: A COMPARATIVE ANALYSIS OF INTERNATIONAL EXPERIENCE AND IMPLICATIONS FOR UKRAINE

Abstract. The aerospace and defense (A&D) industry constitutes a critical object of public administration, functioning not merely as a commercial sector but as a strategic arena of national sovereignty and geopolitical competition. Unlike typical self-regulating markets, this domain is defined by high entry barriers, capital intensity, and monopsonistic state relationships. This paper investigates the administrative paradox currently defining Ukraine's Defense Industrial Complex (DIC): the dissonance between substantial, inherited scientific-technical potential and obsolete, path-dependent public administration mechanisms. This institutional friction creates a "capability trap," where legacy structures stifle the agility required for modern warfare.

The study aims to conduct a rigorous comparative analysis of public intervention models applied in global hegemony—specifically the United States, China, and the European Union—to formulate actionable policy recommendations for Ukraine as it confronts a high-velocity 'war of innovation.' The research is anchored in a combined theoretical framework: The Entrepreneurial State Concept [9], which challenges the minimal-state dogma by emphasizing the public sector's role in risk-taking, and Strategic Trade Policy Theory. Through qualitative comparative analysis, the study demonstrates that successful governance models transcend the neoclassical 'market failure' paradigm. Instead, dominant nations actively practice 'market creation' and assume the role of an investor of first resort. For instance, the US leverages agile intermediaries like DARPA to bypass bureaucratic rigidity.

In contrast, the maintenance of Ukraine's centralized legacy model is identified as a strategic vulnerability. The core conclusion argues for a paradigm shift: transitioning from static bureaucratic control to the formation of 'innovative state capital.' This necessitates dismantling heavy procurement hierarchies in favor of ecosystem orchestration and establishing flexible, iterative R&D support mechanisms specifically adapted to the accelerated lifecycles of Unmanned Aerial Systems (UAS).





Keywords: Aerospace Industry, Public Administration, War of Innovation, Entrepreneurial State, Unmanned Aerial Systems (UAS), Strategic Trade Policy, Defense Industrial Complex (DIC).

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МОДЕЛІ ПУБЛІЧНОГО УПРАВЛІННЯ У СТРАТЕГІЧНІЙ АЕРОКОСМІЧНІЙ ГАЛУЗІ: ПОРІВНЯЛЬНИЙ АНАЛІЗ МІЖНАРОДНОГО ДОСВІДУ ТА НАСЛІДКИ ДЛЯ УКРАЇНИ

Анотація. Аерокосмічна та оборонна промисловість є критично важливим об'єктом публічного управління, функціонуючи не просто як комерційний сектор, а як стратегічна арена національного суверенітету та геополітичної конкуренції. На відміну від типових саморегульованих ринків, ця сфера характеризується високими бар'єрами входу, значною капіталомісткістю та монополістичними відносинами з державою. У цій роботі досліджується адміністративний парадокс, що наразі визначає оборонно-промисловий комплекс (ОПК) України: дисонанс між значним успадкованим науково-технічним потенціалом та застарілими механізмами публічного управління, що є залежними від попередньої траєкторії розвитку (path-dependent). Це інституційне тертя створює «пастку спроможності», в якій успадковані структури придушують гнучкі інновації, необхідні для ведення сучасної війни.

Метою дослідження є проведення ретельного порівняльного аналізу моделей державного інтервенціонізму, що застосовуються світовими гегемонами — зокрема США, Китаєм та Європейським Союзом, — для формулювання дієвих політичних рекомендацій для України в умовах високошвидкісної «війни інновацій». Дослідження ґрунтується на комбінованій теоретичній базі: концепції «Підприємницької держави» (The Entrepreneurial State) [9], яка ставить під сумнів догму «мінімальної держави», підкреслюючи роль публічного сектору у прийнятті ризиків, та теорії стратегічної торговельної політики. За допомогою якісного порівняльного аналізу доведено, що успішні моделі управління виходять за межі неокласичної парадигми «фіаско ринку». Натомість провідні держави активно практикують «створення ринків» та беруть на себе роль





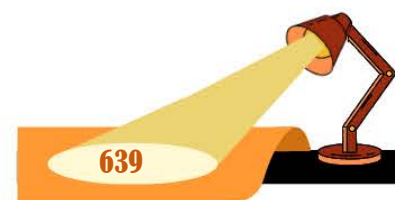
інвестора першої інстанції. Наприклад, США використовують гнучких посередників, таких як DARPA, для обходу бюрократичної інертності.

На протипагу цьому, збереження централізованої спадкової моделі в Україні ідентифіковано як стратегічну вразливість. Головний висновок полягає в необхідності зміни парадигми: переходу від статичного бюрократичного контролю до формування «інноваційного державного капіталу». Це вимагає демонтажу громіздких закупівельних ієрархій на користь «оркестрування екосистем» та створення гнучких, ітеративних механізмів підтримки R&D, спеціально адаптованих до прискорених життєвих циклів безпілотних авіаційних систем (БАС).

Ключові слова: аерокосмічна промисловість, публічне управління та адміністрування, війна інновацій, підприємницька держава, безпілотні авіаційні системи (БАС), стратегічна торговельна політика, оборонно-промисловий комплекс (ОПК).

Problem Statement. The Aerospace and Defense (A&D) industry in Ukraine, despite its significant historical and scientific-technical legacy, faces an existential administrative dilemma. There exists a sharp functional gap between the sector's high potential and obsolete public administration mechanisms that are fundamentally unsuited to modern market dynamics and military imperatives. This structural disconnect has acquired critical urgency amid the full-scale war, which has confirmed Unmanned Aerial Systems (UAS) as "essential elements of modern warfare" [2]. The requirements for public administration have fundamentally shifted: the task is no longer solely about managing the multi-year cycles of complex aircraft design, but about administratively enabling the monthly production and replacement of thousands of attritable, high-loss systems. The mismatch between the inherited centralized, bureaucratized governance model and the necessity for rapid, decentralized innovation in a "war of innovation" constitutes a profound strategic vulnerability that inhibits the mobilization of the A&D sector as a driving force for national security and economic modernization.

Analysis of Recent Research and Publications. An analysis of the existing academic discourse on aerospace sector governance reveals its bifurcation into two main scientific currents, creating a research gap. The first, the Geopolitical Current, largely emanating from security studies, analyzes the sector through a state-centric, geopolitical lens [11; 14]. This work provides critical insights into high-level state ambitions and strategic goals (e.g., China's Made in China 2025 policy). The second, the Economic Current, rooted in economic science [10; 6], focuses on market dynamics, R&D spillovers, and the issues of internationalization, explaining firm-level motivation and competitive mechanisms. Consequently, there is an underdeveloped theoretical and empirical bridge connecting these two spheres. Few studies have systematically applied the lens of public administration to analyze how high-level state strategic goals translate—or fail to translate—into sectoral performance. The scientific





gap lies in the deficit of research focusing on how states administratively organize themselves to achieve strategic goals in the high-tech A&D sector. To fill this gap, a dual theoretical framework is necessary, encompassing the Concept of ‘The Entrepreneurial State’ [9] to assess the state’s role as the primary risk-taker and investor in fundamental, high-uncertainty research, and Strategic Trade Policy Theory [10] to evaluate how state intervention is utilized to create international competitive advantages. This study, therefore, moves away from questions of what states desire or what firms do, toward the question of how states design their governance to be effective partners, investors, and competitors, especially in the context of wartime innovation cycles.

The Purpose of the Article. The primary aim of this research is to conduct a comparative analysis of institutional models of public administration in the aerospace industry (focusing on the US, China, the EU, and Turkey) to identify the most effective mechanisms for R&D funding, risk management, and innovation acceleration. Based on this analysis, a strategic “Hybrid Adaptive Model” must be developed for the reform of the Ukrainian Defense Industrial Complex (DIC) under the conditions of full-scale war, combining the necessary military agility with long-term integration into Euro-Atlantic structures.

The Scientific Novelty of this paper is defined by the systematization of A&D public administration models based on their role in the value chain, the theoretical combination of the ‘Entrepreneurial State’ [9] and ‘Strategic Trade Policy’ [10] paradigms, and the empirical justification for the necessary shift from Ukraine’s centralized, legacy administrative model to a decentralized, iterative model of innovative state capital, specifically tailored for UAS production cycles.

Presentation of the Main Material. The aerospace and defense (A&D) industry is a unique object of public administration, distinguished by its exceptionally high capital intensity, protracted research and development (R&D) cycles, and a critical dual-use nature that fundamentally impacts both national security and economic competitiveness [3]. This sector operates less as a conventional market driven by purely commercial demand and more as a strategic arena—a primary locus for the exercise of state power where national ambitions are fiercely contested. To address the administrative paradox identified in the problem statement, this study applies a qualitative comparative analysis of four global archetypes. The analysis is conducted by the systematization of A&D public administration models based on their role in the value chain, utilizing the theoretical combination of the ‘Entrepreneurial State’ [9] and ‘Strategic Trade Policy’ [10] paradigms to analyze mechanisms of state intervention.

Comparative Analysis of International Experience The comparative analysis of the four archetypal models—the U.S., the EU, China, and Turkey—demonstrates that successful A&D governance is not an ideological choice between state and market, but a function of effective institutional design. Each model achieves its strategic objectives through a distinct configuration of public administration mechanisms.

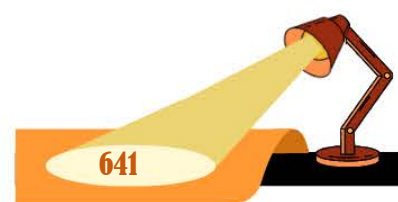


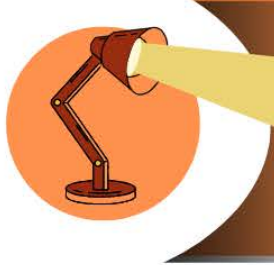


The **United States model** is a state-managed market for strategic goods and the archetype of the "Entrepreneurial State" [9], where the public sector acts as the primary risk-taker and lead investor. The system is polycentric, dominated by a triumvirate of public agencies, with the Department of Defense (DoD) acting as the "anchor client," setting technological specifications and directing the industry's innovative trajectory through massive procurement budgets. The Defense Advanced Research Projects Agency (DARPA) is the purest institutional embodiment of the "public venture capitalist," characterized by an agile, non-bureaucratic administrative structure [12, 13]. Its core mechanisms include Demand-Pull (Strategic Procurement) via long-term, large-scale DoD contracts, which provide the stable demand necessary to de-risk investment in R&D, and Technology-Push (Mission-Driven R&D) via the DARPA/NASA mechanism, which funds radical, non-linear research (e.g., GPS, ARPANET) disconnected from immediate commercial needs. Despite these strengths, the model is cumbersome and slow in adapting to the UAS revolution, being optimized for high-cost, high-performance, low-quantity platforms. This symbiotic nature often leads to the pathology of the "military-industrial complex", manifesting as regulatory capture and inefficiency.

The **EU model** is a unique case of pooled sovereignty, defined by two primary, sometimes conflicting, administrative logics: Strategic Trade Policy (aimed at creating global champions like Airbus [16]) and the Regulatory State. The model was born from a commercial and political desire to challenge the post-war U.S. monopoly, with the critical administrative innovation being the creation of the GIE (Groupement d'Intérêt Économique). The European Aviation Safety Agency (EASA) is the most powerful administrative body, wielding its mandate to certify airworthiness and safety across the single market. By enforcing harmonized, high standards, EASA effectively sets global standards (the "Brussels Effect"), acting as a powerful non-financial tool of industrial policy [8]. Financially, the European Defence Fund (EDF) [7] is designed to force the integration of Europe's fragmented defense industry, mandating that funding be conditional on cross-border consortia. However, the consensus-driven, negotiation-based nature of this transnational consortium model results in exceptional slowness, hindering the agility required for rapid defense innovation. The model is chronically vulnerable to the political pathology of "Juste Retour" (Just Return), where member states demand industrial contracts proportional to their financial contribution, leading directly to inefficiency and delays in major programs.

China's model represents the most ambitious embodiment of state-led strategic ambition [14]. The state is the primary player; the A&D industry is a critical instrument of national strategy designed to achieve technological self-sufficiency (autarky) [1]. The doctrine is techno-nationalism, executed through a "whole-of-nation" approach. Administrative authority is unambiguously hierarchical, resting with the Chinese Communist Party (CCP), which sets the strategic direction through 5-Year Plans. Operational bodies are massive State-Owned Enterprises (SOEs) like AVIC and





COMAC, managed by the SASAC to align perfectly with CCP strategy [15]. Core mechanisms include Civil-Military Fusion (CMF), which deliberately erases the traditional barriers between the defense and commercial industrial bases to facilitate the mandatory transfer of technology, and State-Directed Planning (MiC 2025) [11], which outlines specific, quantitative goals for domestic market share and guides massive state-directed financial investment. While effective at resource mobilization, this model is prone to massive inefficiency, malinvestment, and debt driven by political, not economic, logic. The central paradox is that while the state is a brilliant systems integrator, it maintains a structural dependency on Western core technology (e.g., engines), which remains a profound strategic vulnerability.

The **Turkish model** offers a compelling case of rapid, state-directed "catch-up," defined by administrative agility and institutional centralization [17]. It is born from the doctrine of strategic autonomy [5]. The model is highly centralized, pivoting around a single, powerful administrative body: the Presidency of Defence Industries (SSB/TDA) [4]. Its administrative design unifies the roles of regulator, procurement office, and funding body. A critical 2018 reform placed it under the direct authority of the Presidency, giving the agency "cradle-to-grave" authority over key defense projects. Core mechanisms include Targeted Niche Investment, where the TDA/SSB was agile enough to nurture new, agile private-sector partners (Baykar) and provided guaranteed early procurement contracts for the TB2, and "Leapfrogging" via Asymmetric Systems, a conscious calculation to bypass high-barrier legacy sectors and focus instead on asymmetric capabilities, most notably the network-centric UAS. However, the model's stunning success is tied to its hyper-centralization, which creates two significant risks: it is institutionally brittle and, more critically, concentrating the roles of funder, regulator, and client into one body with limited independent oversight creates significant risks of non-transparent governance and corruption.

Discussion and Policy Implications for Ukraine: The Hybrid Adaptive Model

The comparative analysis of the four archetypal A&D models conclusively demonstrates that there is no singular "best practice." Success is highly context-dependent, relying on the state's capacity to deploy adaptive public administration mechanisms aligned with its financial scale, political goals, and technological legacy. The central finding of this study is that Ukraine's primary challenge in revitalizing its world-class aviation legacy is one of governance—specifically, a debilitating "institutional path dependency" on rigid, opaque post-Soviet administrative structures. This legacy structure stifles the innovation, impedes the rapid procurement, and actively hinders the deep public-private integration necessary for a modern, wartime R&D sector. While the state sector has historically struggled, the war has paradoxically spurred a new, bottom-up administrative-industrial model pioneered by civil society, private firms, and volunteer groups ("Aerorozvidka"), creating a fertile domestic technological ecosystem [2]. The fundamental failure of public administration has been the inability to scale, formalize, and integrate this proven bottom-up "military





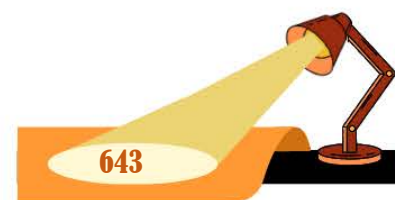
ecosystem" with the industrial power of the legacy state sector. Therefore, direct imitation of any single model is impractical. The optimal policy solution is the development of a "Hybrid Adaptive Model" (HAM), a strategy of strategic institutional hybridization that "unbundles" and integrates the most effective mechanisms from the case studies. The proposed Hybrid Adaptive Model (HAM) is a strategic synthesis designed to meet Ukraine's unique twin imperatives: the short-term, existential need for wartime agility and the long-term, structural need for Euro-Atlantic integration. This model consists of three core, interlocking components.

Component 1: The Administrative "Hub" (Solving for Agility). This component adopts a centralized "hub-and-spoke" institutional design, adapted from the Turkish Model (Section 3.1) [4, 17]. The actionable policy involves the creation of a single, empowered national agency—a Ukrainian "Strategic Capabilities Agency" modeled on the TDA/SSB [4]. Its function is to be politically empowered to coordinate across ministries, thereby breaking bureaucratic silos, and be granted "cradle-to-grave" authority over key national projects (e.g., long-range drones, EW) to manage the entire project lifecycle. This is crucial for scaling innovations from volunteer-led projects to mass-produced industrial endeavors.

Component 2: The "Innovation Engine" (Solving for R&D). This component adopts the competitive, mission-driven R&D funding mechanism adapted from the U.S. Model (Section 3.1) [9, 12]. The actionable policy is the establishment of a "DARPA-like" function or entity [12], tasked with channeling funds via open, competitive challenges. This function solves the post-Soviet R&D pathology of block-funding legacy state institutes by making R&D funds available to the most promising proposals, regardless of origin, fostering a truly competitive, meritocratic, and dynamic ecosystem perfectly suited to continuously fund, cultivate, and professionalize the next generation of UAS, AI-powered FPV drones, and C-UAS solutions.

Component 3: The "Integration Engine" (Solving for the Future). This component adopts the deep regulatory alignment and integration strategy adapted from the EU Model (Section 3.1) [8, 16]. The actionable policy is the administrative task of proactively, systematically, and relentlessly aligning all Ukrainian certification, airworthiness, and safety standards with those of EASA and NATO [8]. This alignment is the non-negotiable precondition for all future Euro-Atlantic integration. By tasking this "integration engine" with aligning Ukrainian systems with NATO STANAGs (like 4586 and 4817), Ukraine not only solves its own problem of fielding a fragmented "panoply of UAS" but also makes itself an indispensable and interoperable future security partner, which is the only path to co-production with Western firms, deep supply chain integration, and full access to European defense and aerospace markets.

Risks and Final Conclusion The success of the proposed Hybrid Adaptive Model hinges on successfully mitigating the structural risks inherent in the adopted mechanisms. The primary risk of the highly agile Turkish model is its hyper-centralization, which creates a massive target for corruption and institutional





brittleness. Any Ukrainian attempt to emulate this agility must be counter-balanced with unprecedented transparency and robust anti-corruption safeguards and independent oversight mechanisms. This study confirms that in the A&D sector, success is not a product of a state-versus-market ideology, but of effective institutional design. The most successful models have created adaptive public administration mechanisms to manage deep uncertainty, fund long-term R&D, and align all national actors toward a single, strategic mission. The Hybrid Adaptive Model provides the most viable strategy for transforming Ukraine's vast latent potential into a resilient, adaptive, and globally competitive aerospace industry.

Conclusion. This study addressed the critical administrative paradox facing Ukraine's aerospace and defense (A&D) industry: the deep functional mismatch between high inherited technical potential and rigid, obsolete public administration mechanisms. By employing a qualitative comparative analysis of four global A&D governance models—the defense-driven entrepreneurial state (US), the transnational regulator (EU), the state-led mobilizer (China), and the centralized emerging power (Turkey)—this research has identified the specific institutional mechanisms that correlate with success. The key findings confirm that proactive, deliberate, and sustained state intervention is the definitive factor for success, but that effectiveness is determined by institutional design, not ideology. The US model excels at managing innovation uncertainty through competitive R&D funding (DARPA) and creating demand signals (DoD) [12]. The EU model uses powerful non-financial tools, leveraging its massive market to set global standards (EASA) [8], but suffers from administrative slowness. The Turkish model demonstrates that institutional hyper-centralization can bypass bureaucratic friction to achieve rapid, mission-driven success in niche sectors (UAS) [17], but at the cost of high political and corruption risks. The overarching conclusion is that the primary barrier to revitalizing Ukraine's aviation legacy is its own administrative inheritance. Wholesale imitation is infeasible. Therefore, the most viable path forward is the proposed Hybrid Adaptive Model (HAM), a strategic institutional hybridization that combines the necessary components for immediate defense needs and long-term integration: Administrative Agility (Turkish Model), Innovation Capital (U.S. Model), and Future Integration (EU Model). This study, focused on high-level administrative models, must conclude by acknowledging the significant implementation challenges, emphasizing that profound and sustained political will is needed to overcome entrenched bureaucratic resistance, conduct deep civil service reform, and, most critically, design robust and transparent anti-corruption safeguards to counterbalance the necessary centralization of power inherent in the agile Turkish mechanism. Ultimately, by forging a new, adaptive public management mechanism, Ukraine can transform its vast latent potential into a resilient, adaptive, and globally competitive aerospace industry, securing both its critical existential defense needs and its long-term economic and industrial future within the Euro-Atlantic community.



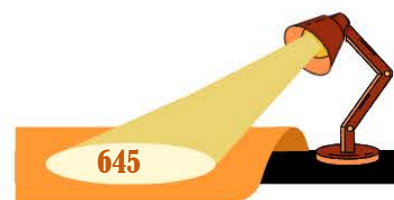


References:

1. Bitzinger, R. A. (2017). "China's defense-industrial transformation: A new era of state-led innovation." *Journal of Strategic Studies*.
2. Borsari, F., & Davis Jr., G. B. (2023). *An Urgent Matter of Drones*. Center for European Policy Analysis (CEPA).
3. Commission on the Future of the United States Aerospace Industry. (2002). *Final Report*.
4. Defense Turkey. (2019). *The Role of the Presidency of Defence Industries (SSB) in the Turkish Defence and Aerospace Sector*.
5. Donelli, F. (2022). *UAVs and beyond: Security and defence sector at the core of Turkey's strategy in Africa* (Megatrends Afrika Policy Brief).
6. Gold, D. (2010). *The Rise of the BRICs in the Global Aerospace Industry* (MIT Center for International Studies).
7. Gros-Verheyde, N. (2021). *European defence industrial development policy (EDIDP)* (B2 Briefing).
8. Kassim, H. (2017). "The European Commission and the governance of the Single European Sky." *Journal of European Public Policy*.
9. Mazzucato, M. (2013). *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*.
10. McGuire, S. (2014). "Strategic trade policy: The state of the debate." *The World Economy*.
11. Moisoiu, C. (2021). "China's Aerospace Industry, In The Context Of Made in China 2025 Strategy." *Revista de Economie Mondiala*.
12. Mowery, D. C. (2010). "Military R&D and the advance of commercial technologies: U.S. aircraft." In *State of Innovation: The U.S. Government's Role in Technology Development*.
13. National Aeronautics and Space Administration (NASA). (2018). *NASA's Contributions to Aeronautics*.
14. Nolan, P. (2015). "China and the global aerospace industry: A strategic challenge." *The Brown Journal of World Affairs*.
15. RAND Corporation. (2016). *Implications of China's Aerospace Industrial Policies* (Testimony).
16. Schmitt, A. (2012). "Airbus: A case study of successful European industrial policy?" *Intereconomics*.
17. Yesiltas, M., & Yasar, M. (2020). "The transformation of the Turkish defense industry: The performance of public and private firms." *Defence and Peace Economics*.

Література:

1. Bitzinger, R. A. (2017). "China's defense-industrial transformation: A new era of state-led innovation." *Journal of Strategic Studies*.
2. Borsari, F., & Davis Jr., G. B. (2023). *An Urgent Matter of Drones*. Center for European Policy Analysis (CEPA).
3. Commission on the Future of the United States Aerospace Industry. (2002). *Final Report*.
4. Defense Turkey. (2019). *The Role of the Presidency of Defence Industries (SSB) in the Turkish Defence and Aerospace Sector*.
5. Donelli, F. (2022). *UAVs and beyond: Security and defence sector at the core of Turkey's strategy in Africa* (Megatrends Afrika Policy Brief).
6. Gold, D. (2010). *The Rise of the BRICs in the Global Aerospace Industry* (MIT Center for International Studies).
7. Gros-Verheyde, N. (2021). *European defence industrial development policy (EDIDP)* (B2 Briefing).





8. Kassim, H. (2017). "The European Commission and the governance of the Single European Sky." *Journal of European Public Policy*.
9. Mazzucato, M. (2013). *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*.
10. McGuire, S. (2014). "Strategic trade policy: The state of the debate." *The World Economy*.
11. Moisoiu, C. (2021). "China's Aerospace Industry, In The Context Of Made in China 2025 Strategy." *Revista de Economie Mondiala*.
12. Mowery, D. C. (2010). "Military R&D and the advance of commercial technologies: U.S. aircraft." In *State of Innovation: The U.S. Government's Role in Technology Development*.
13. National Aeronautics and Space Administration (NASA). (2018). *NASA's Contributions to Aeronautics*.
14. Nolan, P. (2015). "China and the global aerospace industry: A strategic challenge." *The Brown Journal of World Affairs*.
15. RAND Corporation. (2016). *Implications of China's Aerospace Industrial Policies* (Testimony).
16. Schmitt, A. (2012). "Airbus: A case study of successful European industrial policy?" *Intereconomics*.
17. Yesiltas, M., & Yasar, M. (2020). "The transformation of the Turkish defense industry: The performance of public and private firms." *Defence and Peace Economics*.

