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ENSURING THE STATE FINANCIAL SECURITY AMIDST HYBRID THREATS: INSIGHTS FROM THE RUSSIAN-UKRAINIAN WAR

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ЗАБЕЗПЕЧЕННЯ ФІНАНСОВОЇ БЕЗПЕКИ ДЕРЖАВИ В УМОВАХ ГІБРИДНИХ ЗАГРОЗ: ДОСВІД РОСІЙСЬКО-УКРАЇНСЬКОЇ ВІЙНИ

This article aims to analyze the multifaceted nature of hybrid financial security threats, particularly in the context of Russian aggression against Ukraine. It addresses the scientific problem of safeguarding state financial security amidst hybrid warfare, focusing on identifying key threats, evaluating their impact on financial stability, and proposing comprehensive measures to enhance resilience and protect financial infrastructure.

Analytical techniques such as thematic analysis and comparative analysis are utilized to examine the nature and impact of hybrid threats on financial security. The study focuses on the Russian-Ukrainian war as a case study to illustrate these threats' real-world implications.

The research reveals that hybrid threats, which combine conventional military tactics with cyber-attacks, misinformation, and economic pressures, pose significant challenges to financial stability. The ongoing Russian-Ukrainian war exemplifies these threats, with Ukraine facing severe economic destabilization. The study highlights the critical nature of cyber-attacks, misinformation campaigns, and economic espionage, which have undermined Ukraine's financial infrastructure and public trust.

The findings offer practical insights for policymakers and financial institutions. Building resilience against hybrid threats requires dynamic strategies, including advanced cybersecurity measures, public awareness campaigns, and stronger international cooperation. Policymakers should enhance detection and response capabilities, foster public-private sector collaboration, and invest in innovative technologies to protect financial systems.

This study contributes to the understanding of contemporary security challenges by highlighting the novel and complex nature of hybrid threats. It provides a strategic framework for enhancing financial security, distinguishing itself from previous research by focusing on the specific context of the Russian-Ukrainian war and offering adaptive measures to address evolving threats. Limited access to certain classified information restricted the scope of the research. Future studies could benefit from real-time data to provide more dynamic insights.

Метою статті є аналіз складності гібридних загроз фінансовій безпеці, зокрема в умовах російської агресії проти України. У дослідженні розкрито наукову проблему забезпечення фінансової безпеки держави в умовах гібридної війни, зосереджено увагу на виявленні ключових загроз, оцінці їх впливу на фінансову стабільність і розробленні комплексних заходів для підвищення стійкості та захисту національної фінансової інфраструктури.

Для виявлення характеру та впливу гібридних загроз на фінансову безпеку держави у статті застосовано тематичний та порівняльний аналіз. Дослідження фокусується на російсько-українській війні як прикладі, що ілюструє реальні наслідки цих загроз.

У статті показано, що гібридні загрози, які поєднують традиційну військову тактику з кібератаками, дезінформацією та економічним тиском, створюють значні виклики для фінансової стабільності держави. Прикладом таких загроз є російсько-українська війна, у результаті якої Україна зіткнулася з серйозною економічною дестабілізацією. У дослідженні підкреслено критичний характер кібератак, дезінформаційних кампаній та економічного шпигунства, які руйнують фінансову інфраструктуру та підривають суспільну довіру в Україні.

У статті наведено практичні рекомендації для політиків і фінансових установ. Формування стійкості до гібридних загроз вимагає використання динамічних стратегій, які охоплюють інноваційні заходи з кібербезпеки, кампанії з інформування громадськості та посилення міжнародної співпраці. Політики повинні посилити можливості виявлення та реагування, сприяти співпраці між державним і приватним секторами та інвестувати в інноваційні технології для захисту фінансової системи держави.

Це дослідження сприяє розумінню сучасних викликів безпеці, висвітлюючи новий і складний характер гібридних загроз. У ньому запропоновано стратегічні рамки для посилення фінансової безпеки держави. На відміну від попередніх досліджень, у статті фокус зосереджено на конкретному контексті російсько-української війни та запропоновано адаптивні заходи для протидії загрозам, що еволюціонують. Відсутність у авторів можливості використовувати інформацію з обмеженим доступом є головним обмеженням цієї статті. У майбутніх дослідженнях перспективним є використання даних у режимі реального часу для отримання динамічніших висновків.

Key words: financial resilience, hybrid threats, national security, Russian-Ukrainian war, state financial security.

Ключові слова: фінансова стійкість, гібридні загрози, національна безпека, російсько-українська війна, фінансова безпека держави.

GENERAL STATEMENT OF THE PROBLEM AND ITS CONNECTION WITH IMPORTANT SCIENTIFIC OR PRACTICAL TASKS. IN AN ERA MARKED BY THE COMPLEXITIES OF HYBRID WARFARE, THE NECESSITY TO SAFEGUARD STATE FINANCIAL SECURITY HAS BECOME INCREASINGLY URGENT

Hybrid threats, which blend conventional military tactics with cyber-attacks, disinformation, and economic pressures, pose significant challenges to national stability. The ongoing Russian-Ukrainian war exemplifies the multifaceted nature of these threats, as Ukraine grapples with both military

aggression and severe economic destabilization. This research is essential as it delves into the intricate dynamics of ensuring financial security amidst such volatile conditions. By analyzing the impact of the Russian-Ukrainian conflict, this study aims to provide valuable insights into the resilience of financial systems under hybrid threats. The topicality of this research lies in its relevance to current global security concerns, offering strategic frameworks that can be adapted by other nations facing similar adversities. Through comprehensive analysis, this article seeks to contribute to the development of robust financial defense mechanisms in the face of evolving hybrid threats.

ANALYSIS OF RECENT STUDIES AND PUBLICATIONS

The literature on financial security in the context of hybrid threats is vast and varied, offering numerous perspectives and analytical frameworks. Hybrid threats, as Lupulescu describes, have become a persistent feature in contemporary geopolitical dynamics, leveraging unconventional tactics by state and non-state actors to gain strategic advantages [1, p. 621]. These threats introduce new challenges in assessing societal impacts during ostensibly peaceful periods, encompassing physical, material, psychological, and emotional consequences. Lupulescu's study highlights the importance of understanding these multifaceted threats and their impact on populations, especially in neighboring European countries. However, the study does not delve deeply into the financial security implications, necessitating further research to bridge this gap.

Varnalii and Bondarenko focus on the critical security concerns for Ukraine, exacerbated by both external and internal factors such as military conflicts, cyberterrorism, and economic instability [2, p. 111—112]. Their research underscores the paramount importance of financial security management for enterprises, particularly during wartime and post-war recovery. They emphasize the need for robust financial management systems to counteract threats and ensure the continuity of business operations. Despite acknowledging the war's impact, the study lacks specific empirical evidence linking financial security of Ukrainian enterprises to hybrid threats from the Russian-Ukrainian conflict.

Kovalenko, Slatvinska, Sheludko, Makukha, and Valihura explore the influence of monetary components on Ukraine's financial security amidst political and socio-economic imbalances [3, p. 19-20]. Their research assesses monetary policy effectiveness and its impact on state financial security, highlighting the critical role of monetary policy in stabilizing macroeconomic processes during martial law. While the study identifies key threats and emphasizes the need for enhanced policy coordination, it falls short in providing actionable recommendations tailored to Ukraine's specific context and the ongoing hybrid threats.

Nimani and Spahija analyze the direct impact of Russian aggression on the European financial market, comparing financial policies across European countries and the Balkan Peninsula [4, p. 142-143]. They highlight the exacerbation of existing socio-economic and financial trends due to the conflict, proposing an economic stabilization forecast model. However, the study lacks precise data or forecasts, and specific policy recommendations tailored to mitigating financial security risks amidst hybrid threats are also absent.

Hanziuk and Drai emphasize the importance of continuous monitoring and analysis of key financial security indicators amidst escalating financial instability and heightened security threats [5, p. 33]. Their study identifies critical threats to national financial security, such as state budget debt burden, inflation, and banking system reliance on foreign capital. While providing forecasts and highlighting the need for transformative measures, the study does not adequately contextualize these impacts

within the broader geopolitical and economic context of the Russian-Ukrainian war.

Blikhar, Vaolevska, Ortynska, Vinichuk, and Kashchuk examine the economic and legal mechanisms for forming and implementing financial policy amidst the Russian-Ukrainian war [6, p. 301]. Their research reveals significant destabilizing factors, such as heightened inflation and exchange rate instability, impacting Ukraine's financial policy. While they propose solutions for enhancing the economic and legal framework, the study lacks specific, actionable policy recommendations or strategies tailored to hybrid threats.

Wyr?bek discusses the erosion of public trust due to hybrid threats like misinformation and manipulation of information, undermining state legitimacy [7, p. 328]. The article emphasizes the broad impact of these threats on societal functioning but lacks practical examples or empirical evidence related to financial security. Specific strategies or mechanisms for enhancing financial resilience against hybrid threats are not explored, limiting its relevance to practical policy discussions.

Korobtsova focuses on legislative foundations and strategies for safeguarding Ukraine's financial security during wartime [8, p. 144-145]. The study identifies current threats and evaluates the state's capacity to protect financial interests. While proposing improvements in economic and legal mechanisms, the text does not outline concrete, actionable policy recommendations or strategies tailored to address hybrid threats.

Chakalov and Nosan discuss the adaptation of traditional methods of managing financial and economic security to project management during wartime [9, p. 108]. They highlight the importance of modern security systems enabling remote control and functioning in digital environments. However, the study lacks emphasis on the unique challenges posed by hybrid threats, such as cyber warfare and information operations.

Varnalii emphasizes the critical urgency of national security in the face of Russia's military aggression [10, p. 92—93]. The study aims to deepen theoretical foundations and define mechanisms for security across various domains. Despite mentioning hybrid warfare, the text does not provide detailed analysis or practical recommendations for enhancing financial security amidst hybrid threats.

Yastrubetska, Krupka, Kovalenko, Zhmurko, and Mykuliak propose a financial security management mechanism for Ukrainian companies operating amidst hybrid conflicts [11, p. 122]. Their study highlights the lack of sufficient research in this area and the inadequate government regulations governing financial security. While proposing development directions for financial security management, the study does not sufficiently discuss practical challenges or feasibility of these strategies.

Klymenko and Savostianenko review current approaches to assessing the impacts of Russian military aggression on Ukraine's economic losses and post-war recovery plans [12, p. 71]. They emphasize the need for legislative measures to establish diverse financial support sources for Ukraine's reconstruction. However, the study lacks a clear differentiation between traditional military

Table 1. Comparing traditional and hybrid threat to financial security of the state

Criteria	Traditional threats	Hybrid threats
Source of threat	State actors and economic policies	State and non-state actors, including cybercriminals and terrorists
Method of attack	Economic sanctions, trade embargoes	Cyber-attacks, misinformation campaigns
Duration of impact	Long-term economic policies	Rapid and unpredictable events
Detectability	Relatively easy to detect through economic indicators	Often concealed, requiring advanced cybersecurity measures
Legal framework	Governed by international laws and treaties	Often operates outside legal norms, exploiting regulatory gaps
Economic focus	Direct impact on macroeconomic indicators	Targeted disruption of financial institutions and services
Mitigation strategies	Diplomatic negotiations, economic reforms	Cybersecurity measures, public awareness campaigns
Scale of impact	National or international scale	Can be highly localized or global
Actors involved	Governments, international organizations	Hacktivists, criminal organizations, state-sponsored entities
Mitigation strategies	Diplomatic negotiations, military defense	Cybersecurity measures, public information campaigns

Source: elaborated by authors.

aggression and hybrid warfare tactics, limiting the depth of analysis required for understanding financial security implications.

Busol argues that modern national security hinges significantly on human capital and the comprehensive public administration encompassing all dimensions of national security [13, p. 10—12]. The article highlights the importance of addressing hybrid warfare but lacks detailed analysis or specific case studies related to hybrid threats faced by Ukraine. The list of high-priority steps to strengthen Ukraine's protection against hybrid threats lacks detailed rationale or evidence of feasibility.

Varnalii and Tomashevskiy identify and address challenges in ensuring Ukraine's financial security amidst hybrid warfare [14, p. 176; 15, p. 11—12]. They emphasize the importance of comprehensive data integration across all security domains. While comparative methods are mentioned, there is little explicit comparison with other countries facing similar hybrid threats, limiting the studies' generalizability.

Zachosova and Babina analyze trends in bank and non-bank financial institutions in Ukraine, identifying traditional and hybrid threats to financial market participants [16, p. 87]. Their study highlights the necessity for financial institutions to adapt to these challenges. However, the text offers limited practical recommendations or strategies for government structures to mitigate these threats effectively.

Yordanova discusses the dynamic security landscape influenced by hybrid threats and the strategic role of sovereign debt in shaping national security strategies [17, p. 192—194]. The article emphasizes the evolving role of sovereign debt but does not provide a balanced analysis of potential counterarguments or alternative viewpoints, limiting its depth and persuasiveness in academic discourse.

Despite the wealth of insights into various aspects of financial security and hybrid threats, the literature reveals a notable gap in research on the peculiarities of ensuring state financial security amidst hybrid threats specifically caused by warfare.

FORMULATION OF THE OBJECTIVES OF THE ARTICLE (TASK STATEMENT)

The article aims to analyze the multifaceted nature of hybrid financial security threats, particularly in the context of Russian aggression against Ukraine. It seeks to identify key threats, evaluate their impact on financial stability, and propose comprehensive, adaptive measures for enhancing resilience and safeguarding financial infrastructure.

SUMMARY OF THE MAIN RESEARCH MATERIAL

Financial security threats refer to any actions or events that jeopardize the financial stability of a state. These threats can undermine the economic foundation, disrupt financial markets, and erode public confidence in the financial system. Traditional threats to financial security typically involve direct and overt actions by nation-states or organized criminal groups. These threats often manifest through economic sanctions, military actions, or blockades. For instance, a country might impose sanctions to cripple another nation's economy, leading to a direct and immediate impact on financial stability. Traditional threats are generally easier to detect and respond to due to their overt nature and established legal frameworks.

Hybrid threats represent a blend of conventional and unconventional tactics aimed at destabilizing a state's financial security. These threats often involve non-state actors, cyber attackers, and misinformation campaigns. Unlike traditional threats, hybrid threats are covert, multifaceted, and harder to detect. For example, cyber-attacks on financial institutions can disrupt services, steal sensitive data, and undermine public trust. The spread of false economic news through social media can also create panic and volatility in financial markets. The motivation behind hybrid threats is often to cause disruption and destabilization rather than direct dominance.

Table 1 highlights significant differences between traditional and hybrid threats across various criteria. Traditional threats, with their overt and direct nature, contrast

Table 2. Hybrid financial security threats from Russian aggression against Ukraine

Threat category	Essence	Indicators	Level of security in Ukraine
Cyber attacks	Attacks on financial institutions and infrastructure	Frequency of attacks, financial losses	Critical
Misinformation	Spreading false economic information to cause panic	Volume of false news, public sentiment shifts	Dangerous
Economic espionage	Stealing sensitive financial data	Incidents of data theft, breach reports	Unsatisfactory
Sabotage	Disrupting financial operations through physical means	Instances of sabotage, operational downtime	Critical
Sanctions evasion	Circumventing international sanctions	Number of evasion incidents, economic impact	Unsatisfactory
Corruption	Promoting corrupt practices to undermine financial stability	Corruption index, financial irregularities	Dangerous
Market manipulation	Influencing financial markets through covert actions	Market volatility, unexplained fluctuations	Unsatisfactory
Resource theft	Illegal extraction of resources	Reports of illegal activities, economic losses	Dangerous
Insider threats	Infiltrating institutions with hostile insiders	Incidents of insider actions, breach impacts	Critical
Political pressure	Using political means to influence financial policies	Changes in policies, economic indicators	Satisfactory

Source: elaborated by authors.

sharply with the covert and multifaceted nature of hybrid threats. While traditional threats have clear and established response mechanisms, hybrid threats require innovative and rapid response strategies. Both types of threats have unique impacts and necessitate different mitigation strategies.

Understanding and addressing both traditional and hybrid threats are essential for safeguarding financial security. The evolving landscape of threats necessitates a dynamic and multifaceted approach to ensure stability and resilience in the face of diverse challenges.

Hybrid threats to financial security have become a significant concern, particularly in the context of Russia's aggression against Ukraine. These threats blend conventional and unconventional tactics, targeting various aspects of financial security to destabilize the country (Table 2).

Cyber-attacks involve targeted attacks on financial institutions and infrastructure, aiming to disrupt operations and steal sensitive data. Indicators include the frequency of attacks and the financial losses incurred. The security level in Ukraine is critical due to the high frequency and severity of these attacks. Misinformation is the spread of false economic information designed to create panic and instability. Indicators include the volume of false news and shifts in public sentiment. Ukraine's security level is dangerous as misinformation campaigns are rampant and difficult to counter.

Economic espionage involves stealing sensitive financial data to gain competitive or strategic advantages. Indicators include incidents of data theft and breach reports. Ukraine's security level is unsatisfactory due to numerous reported incidents. Sabotage, physical disruption of financial operations, such as destroying infrastructure, can cause significant downtime. Indicators include instances of

sabotage and operational downtime. The security level is critical due to the severe impact of these actions.

Circumventing international sanctions undermines the economic pressure intended to curb aggression. Indicators include the number of evasion incidents and their economic impact. Ukraine's security level is unsatisfactory as evasion tactics are sophisticated and prevalent. Promoting corrupt practices to weaken financial stability is a common tactic. Indicators include the corruption index and financial irregularities. The security level is dangerous due to the high prevalence of corruption.

Covert actions to influence financial markets cause volatility and instability. Indicators include market volatility and unexplained fluctuations. Ukraine's security level is unsatisfactory due to frequent manipulation attempts. Illegal extraction of resources deprives the state of revenue and destabilizes the economy. Indicators include reports of illegal activities and economic losses. The security level is dangerous given the ongoing illegal extraction activities.

Infiltrating institutions with hostile insiders can lead to breaches and operational disruptions. Indicators include incidents of insider actions and their impacts. The security level is critical due to the difficulty in detecting and preventing insider threats. Using political means to influence financial policies can destabilize the economy. Indicators include changes in policies and economic indicators. The security level is satisfactory, reflecting effective but not foolproof countermeasures.

CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH IN THIS AREA

The study on state financial security amidst hybrid threats, with a focus on the Russian-Ukrainian war, highlights the

complex and evolving nature of modern threats to financial stability. Key findings underscore that hybrid threats, blending conventional and unconventional tactics, pose significant challenges due to their covert, multifaceted, and rapidly changing characteristics. Unlike traditional threats, which are often overt and governed by established legal frameworks, hybrid threats such as cyber-attacks, misinformation, and economic espionage are harder to detect and mitigate.

The case of Ukraine illustrates how these hybrid threats can critically undermine financial security. Cyber-attacks on financial institutions and infrastructure, along with misinformation campaigns, have created a precarious financial environment. The spread of false economic news has destabilized markets, while economic espionage and sanctions evasion further complicate the financial landscape. The prevalence of corruption and insider threats exacerbates the situation, highlighting the need for robust, adaptive security measures.

For policymakers, the study suggests several practical implications. Building resilience against hybrid threats requires a dynamic approach, including advanced cybersecurity measures, comprehensive public awareness campaigns, and stronger international cooperation to enforce sanctions and combat corruption. Policymakers should focus on enhancing the detection and response capabilities of financial institutions, fostering collaboration between the public and private sectors, and investing in innovative technologies to safeguard financial infrastructure.

Further research is recommended in areas such as the integration of artificial intelligence and machine learning for threat detection, the development of more sophisticated misinformation countermeasures, and the exploration of new regulatory frameworks to address the legal ambiguities surrounding hybrid threats. As hybrid warfare continues to evolve, ongoing research and adaptive policy strategies will be crucial in maintaining financial security amidst contemporary geopolitical challenges.

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