

“Exploring Scandinavian approaches to defense budget transparency in Ukraine: A theoretical review of opportunities and challenges”

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EXPLORING SCANDINAVIAN APPROACHES TO DEFENSE BUDGET TRANSPARENCY IN UKRAINE: A THEORETICAL REVIEW OF OPPORTUNITIES AND CHALLENGES

Abstract

The paper examines the transparency of public finances, with a specific focus on the transparency of Ukraine's defense budget. The relevance of this study arises from the ongoing war and the increasing public demand for accountability. The study aims to identify concrete measures to address existing gaps in defense budget transparency. The paper applies a comparative methodology, analyzing the feasibility of implementing Scandinavian transparency practices, particularly from Sweden and Norway, which are known for their advanced budgetary oversight mechanisms.

The study identifies key challenges, including bureaucratic inertia, limited technical capacity, political constraints, and national security concerns. To address these issues, the paper evaluates strategies such as developing digital budget platforms for real-time access to defense expenditures, participatory budgeting, and enhanced institutional accountability. The results indicate that Ukraine could benefit from secure digital platforms for real-time access to defense budget data, targeted legislative amendments to improve oversight, strengthened institutional capacity for in-depth budget reviews, and public consultations on non-sensitive areas of defense spending to foster public trust.

The findings suggest that gradual and context-sensitive improvements in defense budget transparency are both feasible and essential for optimizing resource allocation and strengthening public confidence. By providing a structured approach, this study contributes to the broader discourse on public finance transparency, offering practical recommendations tailored to Ukraine's specific challenges.

Keywords

defense budget transparency, Ukraine, Scandinavian models, public finance, accountability, legislative reforms, public participation

JEL Classification H56, H61, H83

INTRODUCTION

Transparency in defense budgeting is fundamental to good governance and democratic accountability. It ensures public trust, promotes efficient resource allocation, and mitigates corruption risks. In democratic societies, public scrutiny of government spending is essential for maintaining legitimacy and fostering civic engagement.

In Ukraine, defense budget transparency has gained heightened importance due to the ongoing war and geopolitical tensions. Since 2014, following the annexation of Crimea and the war in Eastern Ukraine, defense expenditures have risen substantially. This increase necessi-

tates robust oversight mechanisms to ensure the effective and accountable use of resources. The full-scale Russian invasion in 2022 further amplified the urgency of transparency, as Ukraine receives significant foreign military aid. International donors and organizations require assurances that funds are managed responsibly, strengthening the country's defense capabilities rather than being lost to inefficiencies or corruption.

Despite efforts to reform public finance management, Ukraine faces persistent challenges in achieving full transparency in defense spending. Limited parliamentary oversight, restricted public access to budget details, and institutional inefficiencies hinder accountability. Additionally, the need to safeguard national security often complicates transparency initiatives, requiring a careful balance between confidentiality and public accountability.

This study examines defense budget transparency in Ukraine, identifies key obstacles, and explores actionable solutions. A comparative analysis of Scandinavian best practices – particularly from Sweden and Norway, known for their advanced transparency mechanisms – serves as a basis for recommendations. By adapting effective models while considering Ukraine's unique security and institutional constraints, the study aims to propose feasible steps toward improving transparency in defense budgeting.

1. THEORETICAL BASIS

Defense budgets, by their nature, involve significant expenditures that are often shielded from public scrutiny due to national security concerns. However, the lack of transparency in defense spending can lead to several critical issues, including inefficiencies, misallocation of funds, and increased opportunities for corruption. These issues undermine public confidence in government institutions and hinder the effective management of defense resources.

First, transparency ensures that defense funds are allocated and spent efficiently. Without transparency, there is a risk that resources may be diverted away from their intended purposes, leading to wastage and underfunding of essential defense activities. This misallocation can compromise the effectiveness of military operations and readiness, posing a direct threat to national security.

Second, transparency helps to minimize corruption. The defense sector is particularly vulnerable to corrupt practices due to the large sums of money involved and the secrecy that often surrounds defense contracts and procurement processes. By making budget information publicly available and subject to scrutiny, the opportunities for corrupt practices are significantly reduced. Transparency acts as a deterrent against fraud and ensures that defense spending is conducted in a fair and accountable manner.

Transparency in the public sector is critical for maintaining high ethical standards in governance, ensuring stability, minimizing corruption, and fostering trust among stakeholders (Ubaldi, 2013). Transparency is not only a concern for academics but also for governments aiming to implement effective monitoring mechanisms for transparency initiatives (Ubaldi, 2013). Both the Council of Europe and the OECD have significantly contributed to the theoretical foundation and practical recommendations for government transparency (OECD, 2016).

Transparency is a multifaceted concept applied across various fields, such as economics, finance, sociology, and political science, with diverse interpretations. It is broadly defined as the degree to which information is available to outsiders, enabling them to make informed decisions and assess those made by insiders (Florini, 2007). In a narrower sense, transparency encompasses elements like open government, responsive institutions, freedom of information, protection of public interest disclosure, free media, and an active civil society (Sturges, 2004). Transparency can be perceived as both a tool for improving government efficiency and effectiveness by promoting public scrutiny and as a norm that establishes the right to access public information (Ball, 2009).

Different scholars have offered various definitions and interpretations of transparency. Florini (2007)

emphasizes the informational basis for decision-making, while Sturges (2004) identifies key components such as open government and free media. Ball (2009) distinguishes between transparency as a tool and a norm, highlighting its dual role in governance. Hyytinen et al. (2022) focus on clearly defining rules for managing public funds and the system for collecting, processing, and sharing financial data. Klaus (2016) highlights transparency as a catalyst for creating effective informational conditions. Holmberg and Rothstein (2012) discuss transparency as a device for signaling trustworthiness in negotiations, and Friedman and Hansen (2012) underline the importance of legal, political, and institutional structures in ensuring transparency.

The concept of transparency is closely linked to several complementary ideas, such as the right to information, publicity, openness, and accountability (Wehmeier & Raaz, 2012). The right to information is a fundamental citizen's right to access reliable and comprehensive state information (U.S. Department of State, n.d.). Publicity refers to public awareness of government activities and is often associated with political openness and freedom of information (Klaus, 2016). Openness involves not only disclosing information but also encouraging citizen participation in political processes (Chen & Ganapati, 2023). Accountability ensures that information is accessible to the public and monitoring and audit agencies, serving as a mechanism for oversight and sanctions (Bovens, 2010).

Transparency in public administration has evolved due to the development of digitalization and the new public management (NPM) paradigm, which emphasizes efficiency and visibility in government operations (Meijer, 2009; Grimmelikhuijsen, 2012). Digitalization has increased the availability of public information, while NPM-inspired reforms have aimed to enhance transparency in public services, thereby improving their efficiency (Meijer, 2009; Grimmelikhuijsen, 2012).

The literature review reveals that while the concept of transparency is well-explored from the perspective of information providers, there is less focus on the needs and capabilities of information recipients (Wehmeier & Raaz, 2012). This gap highlights the importance of understanding transparency as

a bilateral process involving providing and receiving reliable, relevant, and timely information by all stakeholders (Mendel, 2008).

Transparency in the public sector is essential for ethical governance, public trust, and effective monitoring. The various definitions and interpretations of transparency reflect its multifaceted nature and application across different fields. The complementary concepts of the right to information, publicity, openness, and accountability further enrich the understanding of transparency. The evolution of transparency in public administration, driven by digitalization and NPM, underscores its importance in modern governance. Addressing the needs of information recipients and understanding transparency as a bilateral process is crucial for advancing transparency initiatives (Florini, 2007; Grimmelikhuijsen, 2012).

Moreover, transparency in the defense sector is crucial in Western and Northern Europe and North America, supporting democratic governance and enabling citizen participation in decision-making processes (Ubaldi, 2013). Effective military capacity management relies on accountability, participation, predictability, and transparency, enhancing trust and interregional cooperation by improving resource allocation (Fiott, 2024). Unlike general public sector transparency, defense transparency deals with the inherent secrecy of national security matters.

Defense transparency involves making key documents from defense ministries and agencies publicly available, ensuring accountability through administrative reforms, and providing information to various stakeholders appropriately.

This process involves credibility, timeliness, relevance, sufficiency, informativeness, accessibility, and consistency with strategic state interests. Defense Minister of Singapore Theo Chi Hin highlighted three types of defense information: military potential, state plans and intentions, and ongoing interaction and confidence-building measures (Singapore Ministry of Defence, 2020; Baele et al., 2018). He notes that defense transparency includes studying military power and the ongoing interpretation process to promote peaceful coexistence.

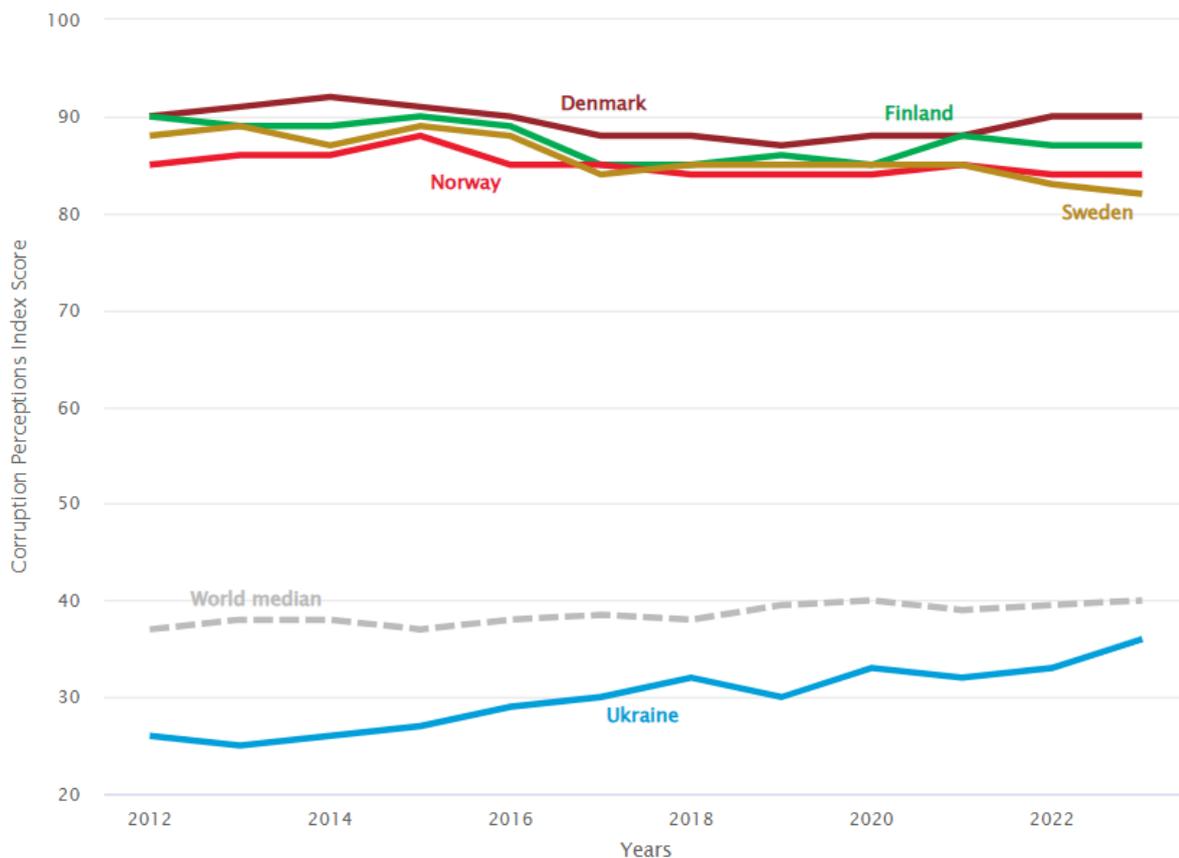


Figure 1. Corruption Perceptions Index score (2012–2023)

Defense budgeting, a critical part of this information flow, involves financial resource allocation, future plans, and operations. It allows citizens to understand military spending and hold governments accountable (Transparency International, 2020). However, defense budgets often contain sensitive information, limiting openness due to national security concerns.

Despite accepted transparency norms, no uniform rules exist for internal defense sector transparency. It involves multiple dimensions, including policy, resources, activities, and external (information to other countries) and internal (public availability) areas. Stiglitz (2002) identifies data transparency principles like completeness, primacy, timeliness, and ease of access. The International Budget Partnership (IBP) uses transparency, participation, and oversight principles in its Open Budget Survey. The Global Initiative for Fiscal Transparency out-

lines high-level fiscal transparency principles, including access to information, clear objectives, quality information, legal bases, defined government sectors, legislative oversight, audit independence, and public participation (Treisman, 2007).

Assessing Ukraine's defense budget transparency involves criteria such as access to information, corruption risks, clarity of objectives, information quality, legislative roles, oversight, transparency of secret items, and public participation. These criteria guide the empirical analysis of Ukraine's defense budget transparency (Treisman, 2007; Persson et al., 2004; Constantinescu, 2024).

Defense budget transparency is vital for modern governance. It ensures efficient resource allocation, minimizes corruption, and maintains public trust in government institutions. International organizations, such as the International Monetary

Source: Transparency International (2020).

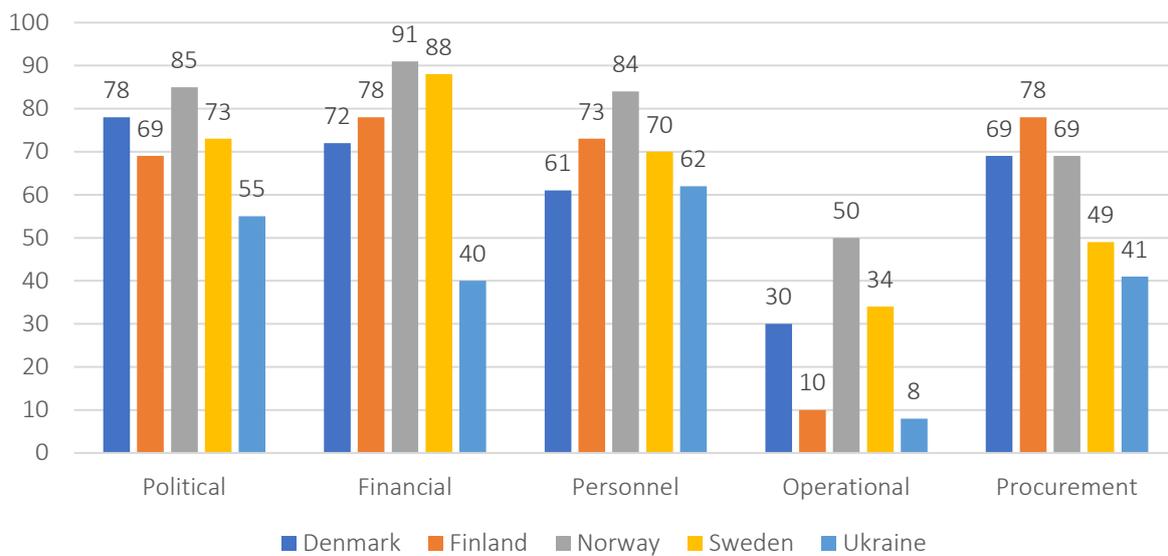


Figure 2. Government Defense Integrity Index in 2020

Fund (IMF) and Transparency International, have established standards to promote transparency in defense budgeting.

The IMF's Fiscal Transparency Code advocates for clear and comprehensive disclosure of budget information, including publishing detailed budget documents, conducting independent audits, and ensuring public access to budget data. These practices enhance fiscal transparency, mitigate corruption risks, and improve public spending efficiency (IMF, 2018). Carlitz (2013) supports that greater fiscal transparency leads to better budgetary outcomes and reduced corruption (Figure 1).

Transparency International's Government Defense Integrity Index (Figure 2) evaluates countries on the openness of defense budgets, parliamentary oversight, and anti-corruption measures.

Transparent defense budgeting reduces corruption risks in the defense sector, which is often vulnerable due to large sums of money and secrecy (Transparency International, 2020). Vakulenko (2020) also highlights the correlation between defense budget transparency and lower corruption levels.

The Open Government Partnership (OGP) encourages open budgeting practices and improved public access to budget information, fostering

trust between governments and citizens (OGP, 2024). Carlitz (2013) shows that higher budget transparency correlates with better governance and higher public trust.

NATO has developed several key documents related to defense budget transparency and document classification, including Policy on the Public Disclosure of NATO Information (NATO, 1999), NATO Information Management Policy (NATO, 2008), and NATO Records Policy (NATO, 2011). These documents, while crucial, mainly address external transparency and do not standardize internal transparency principles across nations.

Global standards generally emphasize full budget disclosure, robust oversight mechanisms, active civil society participation, and strong anti-corruption measures, and their elements ensure effective management of the defense budget, reduce waste and corruption and increase public trust in public institutions. Thus, the study attempts to outline practical steps for Ukraine to enhance transparency in its defense budget. Improved transparency can build public trust, support more efficient resource use, and minimize risks of corruption. These efforts are expected to contribute to more effective defense management, greater confidence in public institutions, and strengthened national resilience.

2. RESULTS

Scandinavian countries are globally renowned for their exceptional levels of transparency (Figure 3) and accountability in managing public finances (Rothstein & Teorell, 2008), making them exemplary models for defense budget transparency (Marklund, 2015).

These nations have established robust systems that ensure their defense budgets are not only transparent but also subject to extensive scrutiny and public involvement (Mungiu-Pippidi, 2013; Elliott, 2006). This recognition is not arbitrary (Figure 4); it stems from a consistent and deliberate implementation of best practices in public finance management (Marklund, 2015; Gil-Garcia et al., 2020).

This study examines the transparency frameworks employed by Sweden, Norway, Denmark, and Finland. Each country has developed unique yet effective approaches to maintaining transparency and accountability in its defense budgets.

Numerous national and international initiatives aim to establish clear standards and legal frameworks to institutionalize transparency in the public sector and mitigate secrecy. However, the dilemma of secrecy remains a persistent issue in public administration. As Thompson (1999) states, “Some of the best reasons for secrecy are based on the same democratic values that argue against it. The democratic presumption against secrecy (and in favor of publicity) can be defended, but not as easily as is often supposed. The conflict includes this basic dilemma of accountability: democracy demands publicity, but

Source: Transparency International (2023a, 2023b).

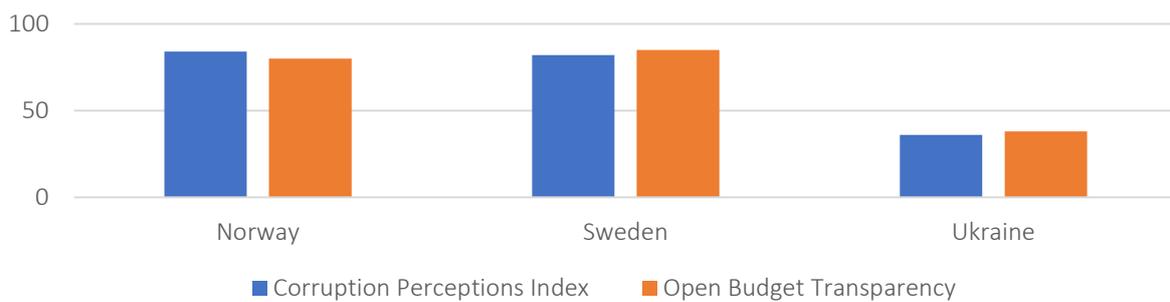


Figure 3. Comparison of Corruption Perceptions Index and Open Budget Transparency scores

Source: International Budget Partnership (2023).

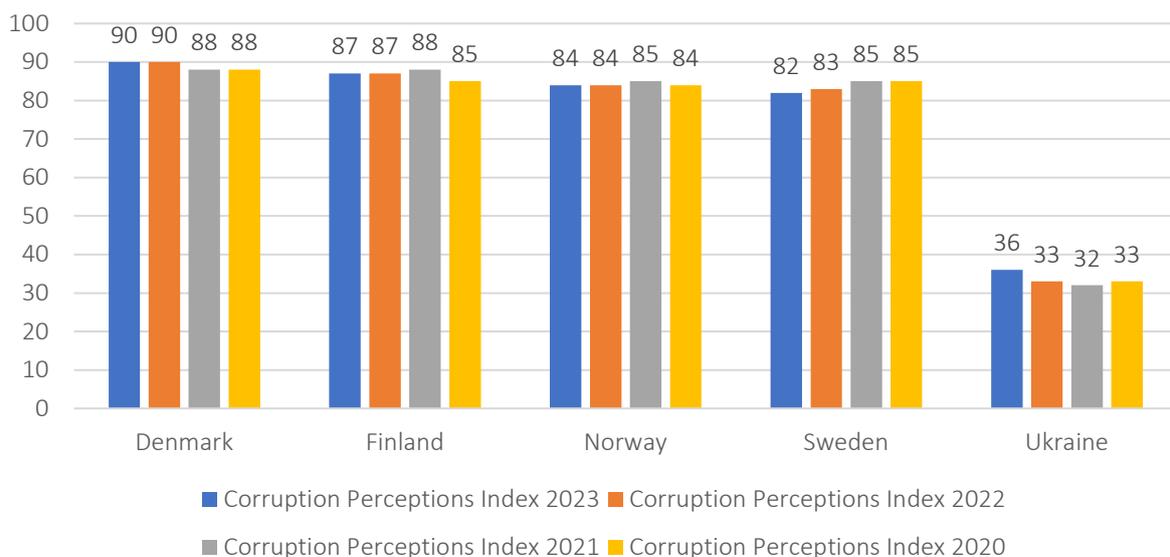


Figure 4. Corruption Perception Indexes 2020–2023

some democratic policies require secrecy.” Secrecy, essential in national security and defense, prevents the disclosure of information that could threaten national security. However, the concept of “security threat” in information terms is vague. Secrecy protects valuable organizational assets through concealment (Friedman & Hansen, 2012) and safeguards democratic processes and security policies (Curtin, 2014).

Secrecy’s legitimacy hinges on justified grounds for classification. Aftergood (2010) suggests two practical secrecy categories: real national security secrets, which protect critical information from threats, and bureaucratic secrets, often used for convenience and to avoid scrutiny. Excessive secrecy can increase budget costs and breed inefficiency and corruption (Mendel, 2008). Balancing transparency and national security in the defense sector is challenging. Scarazzato and Lipson (2023) note, “The goal of being transparent in defense becomes more complex with new technological challenges.” For example, Open Source Intelligence (OSINT) gathers seemingly harmless independent facts, creating strategic vulnerabilities (Posen, 2014) and illustrating the “mosaic theory” of information security.

State administration and management of public finances require adherence to principles of openness and transparency, ensuring public access to information on the formation and use of public funds, and providing citizens with opportunities to participate in budget review, approval, and monitoring.

Ukraine has taken significant steps in recent years to enhance transparency and accountability in state budget processes, both at the legislative and executive levels. Information technologies have facilitated these efforts, leading to the development of electronic document flow and the creation of a single web portal for public funds usage as part of the State Finance Management System Strategy. This includes the “Transparent Budget” system, open budget portals, and other online resources.

Ukraine is a member of the “Open Government” Partnership, established in 2011, supporting EU and NATO initiatives for government transparency and accountability. The “Open Government”

initiative has produced and implemented multiple action plans promoting transparency. Several key measures have been implemented:

- introduction of open data access;
- provision of information about public fund usage via the Unified web portal;
- enhanced transparency of public procurement through the “ProZorro” system;
- updating the “Transparent Budget” system with detailed budget program information.

In the defense sector, Ukraine cooperates with NATO, focusing on transparency as a security principle. The NATO/REAP Program, which Ukraine joined in 2008, aids in implementing transparent systems for managing defense and security resources and countering corruption. Significant reforms in the defense sector began post-2014, driven by the war with Russia, increasing military funding and restructuring.

Despite legislative frameworks aimed at promoting transparency, practical implementation in Ukraine remains a challenge (Figure 5).

In recent years, Ukraine has made strides toward improving transparency in public administration, including the defense sector (Nate et al., 2023). However, the actual implementation of these practices often falls short of international standards. According to Lyutiy et al. (2022), while legislative provisions exist, their execution is inconsistent, resulting in limited public access to detailed budgetary information. This inconsistency is partly attributed to the entrenched bureaucratic culture and resistance to change within government institutions (Vakulenko, 2020).

Defense budget documents are generally published in summary form, lacking the granularity needed for comprehensive public scrutiny (Zatonatska et al., 2024). For example, the Ministry of Defence releases annual budget reports, but these reports often omit detailed breakdowns of expenditures (Lyutiy et al., 2022). This practice contrasts sharply with international best practices, where detailed budgetary information is made readily available to the public (Klaus, 2016).

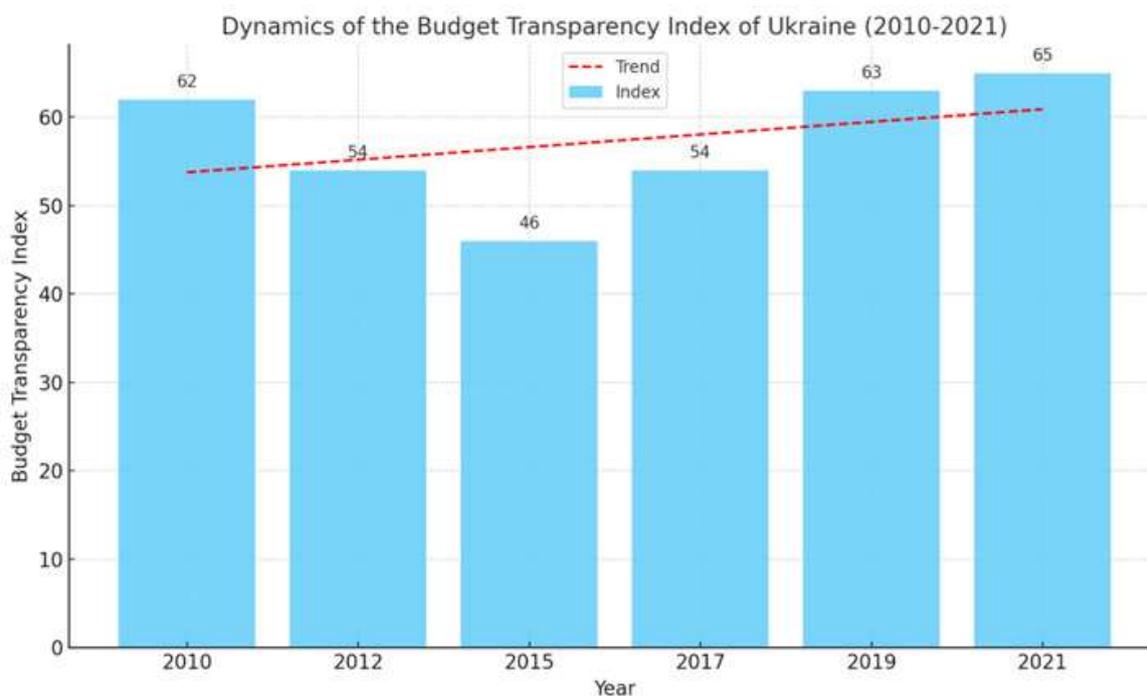


Figure 5. Budget Transparency Index of Ukraine (2010–2021)

Public access to defense budget information in Ukraine is hampered by several factors. Firstly, the dissemination channels are often inadequate. The government's web portals, intended to provide budgetary information, frequently suffer from outdated data and technical issues (Baillie et al., 2024). Additionally, the bureaucratic procedures required to obtain detailed budget information are cumbersome and deter public inquiry (Wehmeier & Raaz, 2012).

The effectiveness of public access is further compromised by the lack of proactive disclosure. As noted by Lyutiy et al. (2022), Ukrainian authorities tend to release information reactively, often in response to specific requests rather than as part of a routine transparency policy. This reactive approach limits the availability of timely and relevant information necessary for informed public debate and oversight.

Furthermore, the full-scale invasion of Ukraine by Russia has significantly impacted transparency efforts. Many ongoing reforms have been halted, and access to information has become severely restricted. The Ministry of Defence's website, for instance, only publishes budget requests up to 2024, while the most recent available reporting data date back to 2020. This regression highlights the chal-

lenges posed by the conflict in maintaining transparency (Klaus, 2016).

Several challenges impede the advancement of transparency in Ukraine's defense sector. A major challenge is the cultural and institutional inertia within the defense establishment. The legacy of secrecy inherited from the Soviet era persists, creating an environment resistant to transparency reforms (Freeman, 2021). Furthermore, the technical capacity of governmental institutions to manage and disseminate detailed budget information is often lacking. According to Vakulenko (2020), many government departments are under-resourced and lack the expertise needed to implement comprehensive transparency measures.

Political resistance also plays a significant role. Transparency efforts can face pushbacks from political actors with vested interests in maintaining opacity around defense spending. As Toropin (2022) argues, the politicization of defense budgets often leads to selective disclosure practices, where information is withheld or manipulated to serve specific political agendas.

Security concerns are another critical factor. While legitimate national security issues justify

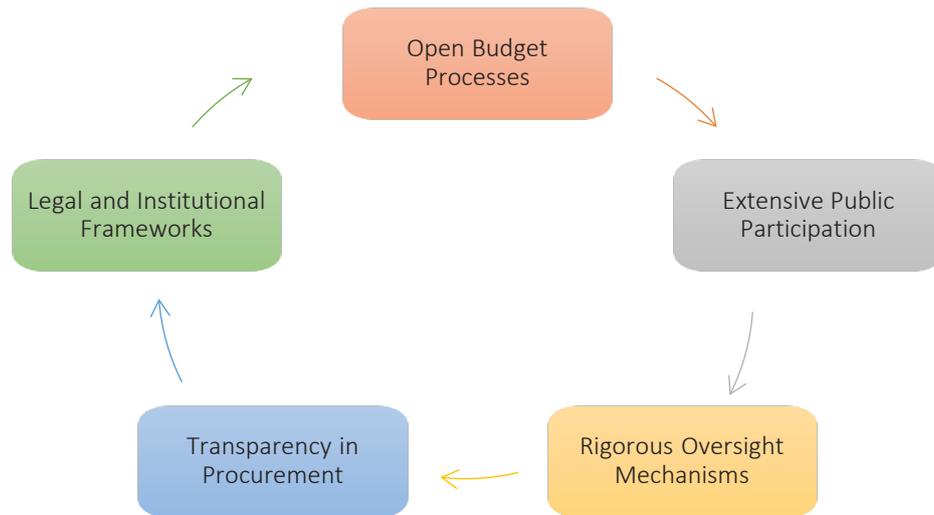


Figure 6. Key features of Scandinavian models

some level of information classification, this can be exploited to withhold information that could otherwise be disclosed without compromising security (Marton, 2020). This misuse of security prerogatives undermines efforts to foster a transparent defense budgeting process.

Scandinavian models of defense budget transparency are widely regarded as exemplary due to their comprehensive and systematic approach to ensuring accountability and public trust in governmental financial practices. These models are grounded in robust legal and institutional frameworks that mandate openness, extensive public participation in the budgeting process, and rigorous oversight mechanisms. The successful implementation of these practices in countries like Sweden, Norway, Denmark, and Finland provides a compelling case for their effectiveness in promoting transparency, reducing corruption, and enhancing the efficient use of defense resources. The analysis highlights several key features that are common across these Scandinavian models (Figure 6).

Figure 6 illustrates several key features that are common across Scandinavian models of defense budgeting. First, Scandinavian countries ensure that budget documents are comprehensive, detailed, and publicly accessible. This commitment to openness facilitates thorough scrutiny by oversight bodies, civil society, and the general public, thereby enhancing accountabil-

ity and trust in governmental financial practices (Arndt, 2008; Holmberg & Rothstein, 2012).

Second, these nations actively involve their citizens in budgeting, seeking input and feedback on defense spending priorities and policies. This public engagement is achieved through mechanisms such as public consultations, feedback systems, and participatory budgeting initiatives (Hansen & Flyverbom, 2015). By doing so, they foster a culture of inclusivity and transparency, ensuring that the defense budget reflects the public's priorities and concerns (Inglehart & Welzel, 2005; Teorell et al., 2008).

Third, Parliaments in these countries play a critical role in overseeing defense budgets, supported by independent audit institutions conducting regular audits and evaluation of defense expenditures (Bovens, 2010; Peters et al., 2011). These rigorous oversight mechanisms are designed to ensure that funds are used effectively and responsibly, reducing the risk of mismanagement and corruption (Peters et al., 2011; Holmberg & Rothstein, 2012).

Fourth, transparent procurement processes are a hallmark of Scandinavian models, with competitive bidding, public disclosure of contracts, and strict anti-corruption measures (Bauhr & Grimes, 2017; Brammer & Walker, 2011). This transparency reduces the risk of corruption and ensures fair and efficient resource use (Søreide & Williams, 2011; Treisman, 2007).

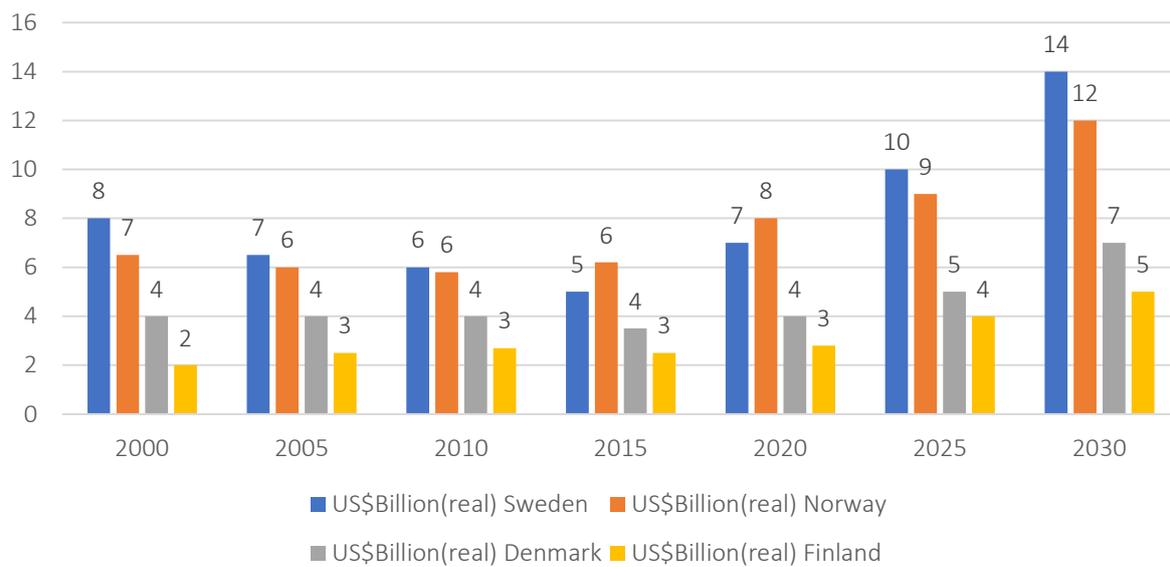


Figure 7. Defense spending of Scandinavian states, 2000–2030 (forecast)

Finally, strong legal and institutional frameworks support transparency efforts with constitutional provisions, laws, and regulations that mandate openness and accountability in defense budgeting (Boix & Svobik, 2013; Persson et al., 2004).

By exploring these key features in detail, the valuable insights are gained as to Sweden's, Norway's, Denmark's, and Finland's successful implementation of the transparent and accountable defense budgeting systems.

Such comprehensive examination will serve as a foundation for understanding how these practices can be adapted and applied to enhance defense budget transparency in other contexts, such as in Ukraine. The Scandinavian experience (Figure 7) demonstrates that high levels of transparency and accountability are achievable and beneficial, contributing to more effective governance and greater public trust in government institutions (Treisman, 2007; Persson et al., 2004).

Sweden is often cited as a leader in public finance transparency. The Swedish constitution mandates that all government documents are public unless restricted by law (SFS 1949:105) (Holmberg & Rothstein, 2012). The Swedish defense budget process is highly transparent, with detailed budget proposals and spending reports available online (Downes et al., 2017; Arndt, 2008). The Swedish

National Audit Office ensures accountability by conducting independent audits of defense expenditures and reporting findings to Parliament and the public (Hellberg, 2023; Marklund, 2015). Public participation is encouraged through consultations and feedback mechanisms, allowing citizens and interest groups to contribute to budget discussions (OECD, 2017; Mungiu-Pippidi, 2013). Downes et al. (2017) highlight how Sweden's transparency in public finance, including defense spending, has led to greater public trust and lower corruption levels.

Norway's approach to defense budget transparency is characterized by a robust legal framework and active parliamentary oversight. The government publishes comprehensive budget documents detailing defense expenditures, procurement plans, and financial forecasts (Anderson et al., 2006; Bovens, 2010). The Parliament (Storting) exercises strong oversight through committees that scrutinize spending and ensure appropriate use of funds (Peters et al., 2011). Norway emphasizes transparency in defense procurement, requiring competitive bidding and public disclosure of contract details (Peters et al., 2011). Civil society and media engagement are crucial for fostering a culture of transparency and accountability (Holmberg & Rothstein, 2012). Bernstein (2012) demonstrate that Norway's transparent governance model, including defense budgeting, enhances institutional trust and reduces corruption.

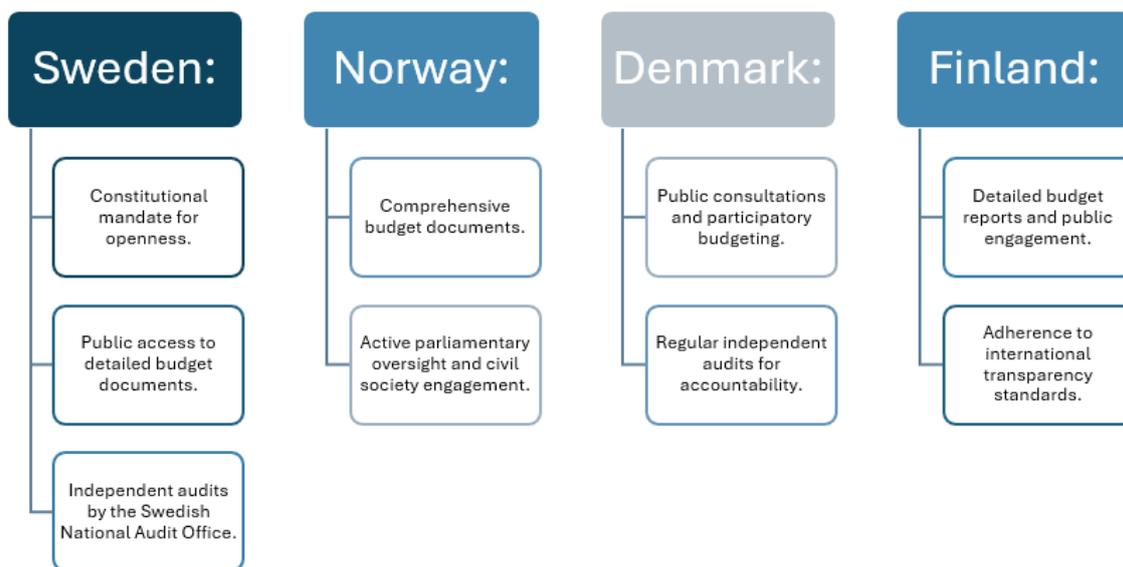


Figure 8. Detailed examination of Scandinavian models

Denmark's defense budget transparency is rooted in its commitment to open government and public engagement. The Danish government publishes detailed defense budget proposals and expenditure reports, accessible to the public through various platforms (OECD, 2019a, 2019c). The Danish Parliament (Folketing) plays a vital role in overseeing defense spending, with committees reviewing budget proposals and monitoring implementation (Bernstein, 2012). Public participation is integrated into the budget process, encouraging citizens to provide input and feedback on defense policies and spending priorities (Transparency International Denmark, 2019; Boix & Svulik, 2013). Denmark's transparency framework includes stringent anti-corruption measures and regular independent audits to ensure accountability (Persson et al., 2004). Greve and Ejersbo (2015) support the view that Denmark's high transparency levels are linked to effective public management and low corruption.

Finland's transparency in defense budgeting is supported by its legal and institutional framework, promoting openness and accountability. The Finnish government provides detailed and easily accessible budget documents, including information on defense spending and procurement (Hyytinen et al., 2022). The Parliament (Eduskunta) conducts thorough reviews of defense budgets and expenditures, supported by the National Audit Office of Finland, which performs

independent audits and assessments (National Audit Office of Finland, 2024). Public participation mechanisms allow citizens to engage and contribute to budget discussions (OECD, 2019a, 2019b, 2019c; Gil-Garcia et al., 2020). Finland's commitment to transparency is demonstrated by its adherence to international standards and best practices in public finance management (Transparency International Finland, n.d.; Treisman, 2007). Treisman (2007) and Hyytinen et al. (2022) indicate that Finland's transparent budgetary practices contribute to effective governance and low corruption levels.

Appendix A presents the generalized data of this analysis. By exploring key features in detail, valuable insights can be gained into how these Scandinavian countries (Figure 8) have successfully implemented transparent and accountable defense budget systems. This study provides a foundation for understanding how such practices can be adapted to enhance defense budget transparency in other contexts, such as Ukraine, demonstrating that high levels of transparency and accountability contribute to more effective governance and greater public trust (Treisman, 2007; Persson et al., 2004).

Assessing the applicability of Scandinavian models (Figure 8) to the Ukrainian context requires a nuanced approach, particularly given the cur-

rent wartime conditions. Ukraine is engaged in significant military actions with Russia, necessitating substantial defense expenditures supported by international aid. Political challenges include entrenched bureaucratic practices and variable commitment to transparency reforms (Lyutiy et al., 2022). Economically, Ukraine faces resource constraints and varied technological infrastructure, while culturally, historical governance practices and public trust levels impact the feasibility of adopting Scandinavian practices. Nonetheless, the potential for enhancing transparency through these models remains high, especially with Ukraine’s ongoing reforms and aspirations for European integration (OECD, 2019a, 2019c).

Enhancing transparency in Ukraine’s defense budgeting process is crucial for ensuring public trust, optimizing resource allocation, and mitigating corruption risks. Table 1 shows the key reforms Ukraine can implement, drawing from the best practices of Scandinavian countries.

By implementing these reforms, Ukraine can significantly enhance transparency in defense budgeting while balancing national security concerns. A gradual but firm approach, drawing from the successful Scandinavian models (Lindblad, 2019), will help build public trust, attract foreign aid, and ensure responsible management of defense resources; however, many of these measures will be more feasible after the end of active military operations.

While full transparency in defense budgeting is challenging during wartime, several measures can still be implemented to enhance accountability and oversight. Most comprehensive reforms will be feasible after the end of war operations, but the following steps can be taken immediately (Table 2).

Measures requiring post-war implementation include:

- full public disclosure of defense budgets (security risks);

Table 1. Key defense budgeting reforms for Ukraine to implement

Reform	Explanation
Strengthen Open Budget Processes	<ul style="list-style-type: none"> • enact legal mandates requiring the publication of comprehensive budget documents, including detailed defense expenditures and procurement plans (Sweden’s experience); • develop user-friendly online platforms that provide real-time access to defense budget reports, ensuring broad public accessibility (Finland’s experience); • implement standardized budget reporting formats to enhance clarity and comparability (Norway’s experience).
Foster Public Participation	<ul style="list-style-type: none"> • introduce structured public consultation mechanisms that involve civil society, academia, and independent experts in defense budget discussions (Denmark’s experience); • establish feedback channels for citizens to provide input on defense spending priorities, similar to Sweden’s participatory budgeting initiatives (Sweden’s experience); • encourage media engagement and public oversight by facilitating access to defense budget data (Norway’s experience).
Enhance Oversight Mechanisms	<ul style="list-style-type: none"> • strengthen parliamentary oversight by creating specialized defense budget committees with independent auditing authority (Norway’s experience); • empower Ukraine’s National Audit Office to conduct detailed audits of defense expenditures, ensuring independent verification of financial integrity (Sweden’s experience is the best case); • improve whistleblower protections to encourage reporting of financial irregularities in defense procurement and spending (Denmark’s case).
Increase Transparency in Procurement	<ul style="list-style-type: none"> • adopt mandatory public disclosure of defense contracts, including competitive bidding details, to minimize risks of corruption (Sweden’s case); • establish an independent regulatory body to monitor defense procurement, ensuring compliance with anti-corruption standards (Norway’s case); • introduce digital procurement platforms to facilitate competitive bidding and track contract performance transparently (Finland’s case).
Strengthen Legal and Institutional Frameworks	<ul style="list-style-type: none"> • amend existing legislation to establish a constitutional mandate for budget transparency, following Sweden’s example (Sweden’s case); • align national transparency policies with international best practices, including OECD and EU guidelines on public finance management (Denmark’s example); • ensure institutional independence of auditing bodies to prevent political interference in financial oversight (Finland’s case).

Table 2. Steps to enhance accountability and oversight in defense budgeting

Steps	Explanation
Enhancing Budget Transparency	<ul style="list-style-type: none"> publishing general budget documents without revealing sensitive military details; developing structured budget reports to ensure public and international partners have access to aggregated financial data; creating digital platforms for controlled budget monitoring with restricted access for oversight institutions.
Public Engagement and Civil Society Involvement	<ul style="list-style-type: none"> cooperating with civil society and media under controlled conditions to enhance monitoring and prevent corruption; consultations with international donors on transparency mechanisms for military aid; introducing feedback mechanisms for non-military defense.
Strengthening Oversight Mechanisms	<ul style="list-style-type: none"> empowering the national audit office to conduct independent audits of defense expenditures; implementing whistleblower protection measures in defense procurement; establishing specialized parliamentary committees for defense budget oversight.
Transparency in Procurement	<ul style="list-style-type: none"> mandatory competitive bidding for non-critical defense procurements; disclosing summarized procurement contracts without classified military details; creating an independent monitoring body to oversee procurement without security risks.
Legal and Institutional Frameworks	<ul style="list-style-type: none"> aligning national legislation with international transparency standards while maintaining security restrictions; ensuring the independence of anti-corruption institutions to effectively monitor defense budgets; expanding reporting obligations to international partners to increase trust in financial management.

- detailed transparency on procurement contracts and suppliers;
- open public hearings on defense expenditures;
- participatory budgeting in military spending.

By adopting incremental and security-sensitive transparency measures, Ukraine can strengthen public trust, improve international cooperation, and establish a foundation for post-war financial governance reforms while maintaining national security.

3. DISCUSSION

By conducting a detailed comparative analysis of Scandinavian models, this study contributes to the existing discussion on practical recommendations for Ukraine (Yahelska et al., 2021; Petlenko et al., 2023).

A well-functioning defense budget transparency system requires robust legislative frameworks and institutional mechanisms. While Ukraine has taken steps to improve transparency, further reforms are needed to align its practices with international standards and ensure a balance between security needs and public accountability.

Studies on public finance transparency highlight the importance of clear legal mandates in securing access to budgetary information (Florini, 2007). Scandinavian countries have successfully implemented transparency through constitutional provisions that guarantee public access to government data while defining strict classification rules for sensitive information (Boix & Svulik, 2013). Ukraine could benefit from a more structured approach to legislative reforms, including amendments to the Law on Access to Public Information and the Budget Code, to introduce precise criteria for budget disclosure and classification (Verkhovna Rada of Ukraine, 2011). Unlike Sweden, where detailed defense expenditures are openly published (OECD, 2019b), Ukraine must tailor its framework to allow partial disclosure of non-sensitive defense budget items while strengthening oversight of classified expenditures (Persson et al., 2004).

Institutional oversight is another critical factor. Research by Transparency International (2020) underscores that independent audit institutions with sufficient authority and resources significantly enhance accountability. The Norwegian model, where the National Audit Office conducts independent evaluations of defense spending (Norwegian Parliament, 2018), could serve as a reference for Ukraine. However, Ukraine faces

additional challenges due to ongoing military operations, necessitating flexible audit mechanisms that can function in wartime conditions. Strengthening the institutional capacity of the Court of Auditors and parliamentary oversight committees through additional training and expanded jurisdiction could improve scrutiny of defense expenditures (O'Brien et al., 2012).

Public engagement remains a cornerstone of transparency, yet research suggests that public trust in budgetary processes depends on meaningful participation (Holmberg & Rothstein, 2012). While full-scale participatory budgeting, as seen in Denmark, may not be feasible during wartime, Ukraine can introduce secure digital platforms where civil society organizations and experts provide input on non-sensitive aspects of defense spending (OECD, 2007). Virtual consultations, modeled after Scandinavian approaches, can help bridge the gap between transparency and security concerns (Transparency International Denmark, 2019).

One of the key technological advancements in budget transparency involves digital tools for budget monitoring. Countries such as Finland have developed real-time budget tracking systems, making financial data accessible to both policymakers and the public (Finnish Ministry of Finance, 2019). Ukraine could implement a phased approach, initially using closed-access digital platforms for oversight bodies and gradually expanding public access to selected budget information (Boix & Svoboda, 2013). However, these efforts must be accompanied by strong cy-

bersecurity protections to prevent misuse and leaks of classified information (Treisman, 2007).

While this study has identified key measures for improving transparency in Ukraine's defense budget, several areas require further exploration (Klitgaard, 2019). Longitudinal studies tracking the effectiveness of transparency reforms over time provide insights into the impact of legal amendments and institutional changes. Additionally, comparative case studies of countries that improved transparency following military conflicts – such as post-war Bosnia and Herzegovina – could offer valuable lessons.

International cooperation is another area requiring deeper analysis. Research should examine how international donor requirements influence transparency efforts and whether conditional aid mechanisms effectively encourage stronger oversight practices (Treisman, 2007). Furthermore, studying public perception of defense budget transparency through surveys and focus groups could inform future policy adjustments to ensure that transparency efforts align with public expectations.

By building upon these findings, Ukraine can develop a context-specific approach to defense budget transparency, ensuring accountability while safeguarding national security. This balance will not only strengthen domestic governance but also reinforce international trust and cooperation, positioning Ukraine as a responsible recipient of international aid and a model for post-conflict financial transparency.

CONCLUSION

This study investigated the challenges of defense budget transparency in Ukraine and assessed the applicability of Scandinavian models to improve governance in this domain. By conducting a comparative analysis, the paper identified key obstacles, including bureaucratic inertia, limited technical capacity, political constraints, and national security concerns, which hinder progress toward greater transparency.

The findings indicate that Scandinavian models provide several viable solutions, including legislative reforms mandating comprehensive budget disclosure, institutional capacity-building for enhanced oversight, mechanisms for structured public participation, and digital tools to facilitate accessibility and accountability. However, their implementation in Ukraine requires careful adaptation to wartime conditions.

A key conclusion of this study is that balancing transparency and security is essential. Legislative amendments should establish clear procedures for classifying and declassifying sensitive information while ensuring the publication of non-sensitive budget data. Strengthening institutions such as audit bodies and parliamentary committees is critical to ensuring effective oversight of both domestic and international defense funds. Moreover, fostering public engagement through secure digital platforms can enhance accountability while maintaining operational security.

The practical implications of these findings include a roadmap for gradual reforms, incorporating best practices from Scandinavian countries while accounting for Ukraine's security context. These measures can strengthen public trust, improve resource allocation, and enhance international confidence in Ukraine's defense budget management.

Future research should focus on evaluating the real-world impact of transparency reforms in Ukraine's defense sector. Longitudinal studies can assess the effectiveness of legislative and institutional changes over time. Comparative analyses with other post-conflict countries that have successfully improved budget transparency could provide further insights. Examining the role of international aid and advisory programs in fostering transparency will also be crucial for refining policy recommendations.

By implementing these tailored reforms, Ukraine can make meaningful progress in defense budget transparency while ensuring national security, reinforcing democratic governance, and optimizing financial management during wartime and beyond.

However, it is important to note that all these changes and assumptions are most relevant in a post-war scenario. If the world is drawn into a new wave of global conflicts, the challenges will be more significant, and the lessons from these reforms will be tested by time.

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APPENDIX A

Table A1. Detailed characteristics of Scandinavian models for defense budget transparency

Key Feature	Sweden	Norway	Denmark	Finland
Open Budget Processes	Comprehensive budget documents are public by law (SFS 1949:105). Detailed budget proposals and reports available online (Downes et al., 2017)	Comprehensive budget documents detailing expenditures and forecasts are published (Anderson et al., 2006)	Detailed budget proposals and expenditure reports accessible online (OECD, 2019a)	Detailed budget documents, including defense spending and procurement, are publicly accessible (Finnish Ministry of Finance, 2019)
Extensive Public Participation	Public consultations and feedback mechanisms involving citizens and interest groups in budget discussions (OECD, 2017)	Active engagement with civil society and media to foster transparency (Norwegian Press Association, n.d.)	Citizens provide input and feedback on defense policies through public consultations (Transparency International Denmark, 2019)	Mechanisms for public participation in budget discussions and feedback on defense spending (OECD, 2019a, 2019b, 2019c)
Rigorous Oversight Mechanisms	Parliament exercises oversight, supported by the National Audit Office conducting independent audits (Hellberg, 2023)	Parliament (Storting) oversees defense budgets with dedicated committees and independent audits (Norwegian Parliament, 2018)	Parliamentary committees review budget proposals and monitor implementation, supported by independent audits (Folketinget, 2018)	Parliament (Eduskunta) reviews defense budgets and expenditures, with audits by the National Audit Office (National Audit Office of Finland, 2018)
Transparency in Procurement	Competitive bidding, public disclosure of contracts, and strict anti-corruption measures (Swedish National Financial Management Authority (Government Offices of Sweden, n.d.))	Transparent procurement processes with public disclosure of contract details and competitive bidding (The Norwegian Agency for Public and Financial Management (DFØ, n.d.))	Transparent procurement with public contract disclosures and competitive bidding (Danish National Audit Office, n.d.)	Transparent procurement processes, public disclosure of contracts, and competitive bidding (Hyytinen et al., 2022)
Legal and Institutional Frameworks	Constitutional mandate for openness and public access to government documents (SFS 1949:105)	Legal frameworks mandate transparency, supported by robust parliamentary oversight and independent audits (The Norwegian Agency for Public and Financial Management (DFØ, n.d.))	Legal frameworks ensure transparency and accountability, supported by regular audits and public participation (Transparency International Denmark, 2019)	Legal frameworks and institutional support for transparency, with adherence to international standards (Transparency International Finland, 2020)