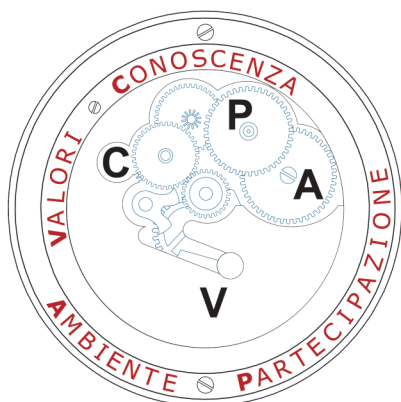


# RIVISTA DI STUDI SULLA SOSTENIBILITÀ

*Review of studies on sustainability*



## Thematic Issue

### **Sustainability Governance: Legal, Economic, and Institutional Mechanisms**

Guest Editors: Karlis Ketners, Vitalii Kotsur

**FrancoAngeli** 



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# Rivista di Studi sulla Sostenibilità

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## *Sustainability Governance: Legal, Economic, and Institutional Mechanisms*

### **Guest Editors:**

Karlis Ketners, Vitalii Kotsur

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## *Editorial*

by *Karlis Ketners and Vitalii Kotsur*

Sustainable development governance has become an increasingly important area of academic research and practice recently. The need for sustainable governance structures that promote long-term stability is highly urgent given global challenges such as climate change, economic inequality and political instability on a significant scale. The articles collected in this thematic issue provide a comprehensive study of the legal, economic, and institutional mechanisms that form the basis for sustainable governance practices in different national and regional contexts. Presenting the contributions of leading scholars, this issue critically examines the interplay between law, policy, and institutional frameworks that drive sustainable development initiatives and shape sustainable governance in practice.

This themed issue on Sustainability Governance with its Legal, Economic, and Institutional Mechanisms is relevant for our journal as it addresses the urgency to rethink how societies manage sustainable development in a world affected by systemic risks and correlated crises. Climate change, demographic change, geopolitical tensions and economic instability place increasing demands on coordinated governance solutions that combine legal predictability, institutional adaptability and economic forethought. The contributions included in this issue demonstrate that sustainable development is not just an environmental concern, but a multidimensional governance approach that integrates law, economics and institutional design and determines the long-term stability of countries and regions. The publication provides critical insights into how models of sustainable governance can build social trust, ensure policy coherence and promote equitable development by examining a variety of national experiences, from Central Asia and Eastern Europe to broader horizons.

The issue contains a selection of studies on essential aspects of sustainability governance, all of which offer a unique outlook on the sustainable development challenges and opportunities in different sectors,

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regions and governance systems. The principal task of this compilation of articles has been to represent the multidisciplinary nature of sustainable development governance, with its legal, economic and institutional areas recognised as complementary and interlinked. It is important to acknowledge the significant contributions of the authors and to highlight the implications of their findings.

One of the central themes of this issue is the complex relationship between economic development and sustainability. Several articles explore the role of economic sectors traditionally associated with high environmental impact, such as the oil industry, in advancing sustainable economic models. For example, Kamran Abdullayev et al. critically examine the role of Azerbaijan's oil sector in driving economic diversification and fostering long-term sustainability. The paper outlines the challenging economic dependence on natural resources and the importance of fostering human capital development in the oil industry to ensure social stability and environmental sustainability through focusing on the country's efforts to build a more resilient economic model. In a rather related way, Emin Alirzayev in his study examines the financial sustainability of Azerbaijan's pension system, analysing the institutional and economic factors that determine its long-term viability. This paper contributes to the research on sustainable social security systems by providing a detailed analysis of the legal and methodological framework that regulates social security and provides valuable insights into how financial sustainability can be achieved in the context of demographic change and economic pressures.

Another aspect of sustainability governance highlighted in this issue is the importance of legal frameworks in supporting or restricting sustainable practices. One such example is the study by Nurbol Batyrbay et al. where the legal characteristics and classification of crimes against the order of governance in Kazakhstan are analysed. In this article, the authors examine how legal definitions and classifications of corruption and governance-related crimes influence the stability and resilience of governance structures. Through a comparison of Kazakhstan's legal norms with international standards, the article emphasises the necessity of legal reforms that align with international best practices, particularly in the area of combating corruption and ensuring the rule of law. The study also highlights the necessity of robust legal protections for public servants, as explored in Nurbol M. Batyrbay's et al. article, which examines criminal liability for attacks on law enforcement officers, military personnel, and other state agents. This paper reveals major weaknesses in legal protection of public officials in some countries and proposes legislative reforms aimed at



enhancing the resilience of state institutions by safeguarding those charged with ensuring the rule of law.

One of the most well-established features of sustainability governance is the ability of institutions to be responsive to crises and political transformations. The issue explores this through a comparative analysis of governance responses to crises in different national settings. Olena Dashkovska et al. in their article explore the role of sustainable governance practices in Japan and New Zealand in managing crises, such as the 2011 earthquake and the COVID-19 pandemic. The research demonstrates the fundamental role of long-term planning and the integration of sustainability-oriented policies in building resilience to potential crises by analysing how the above-mentioned countries have integrated sustainability principles into their disaster risk reduction strategies and health governance systems. On the other hand, the paper authored by Kalin Boyanov examines the role of public-private partnerships (PPPs) in addressing infrastructure deficits and promoting sustainable development in Bulgaria. The study defines the institutional and legal barriers to successful PPPs, based on case studies from the United Kingdom and Bulgaria, and offers policy recommendations to strengthen Bulgaria's infrastructure and public service delivery systems. It raises the importance of strengthening the institutional capacity and transparent legal framework to facilitate effective cooperation between the public and private sectors for sustainable development.

The theme of legal and institutional mechanisms in sustainability governance is further analysed in papers devoted to mediation and international diplomacy. Manshuk Kalshabayeva et al. contribute a comparative study of mediation systems in Kazakhstan and other countries, analysing how legislative frameworks and practical implementations of mediation procedures contribute to more sustainable dispute resolution practices. The article stresses the importance of updating national mediation systems to meet international standards with the overall intention of creating sustainable legal institutions capable of resolving conflicts effectively and fairly. The role of diplomatic mechanisms and confidence-building measures in fostering regional security and sustainable development in Central Asia is discussed in the article by Ganiy Karassayev et al. The authors of the article provide an overview of how diplomatic practices can contribute to long-term regional stability, sustainable economic growth and shared governance in an increasingly interconnected world through a detailed analysis of Kazakhstan's engagement with China and its role in regional organisations such as the Shanghai Cooperation Organisation (SCO).

The issue additionally draws attention to the role of education and capacity building in promoting sustainable development. Hanna Yatsenko's

article on the role of business schools in the post-war recovery of national economies highlights how higher education institutions can contribute to economic resilience and sustainable governance, especially in countries that are constantly experiencing various conflicts and are trying to gradually recover from them. The author of the article makes a compelling case for the strategic role of education in fostering leadership, innovation, and sustainable economic growth by studying the American experience after the post-World War II period and analysing the challenges faced by business schools in Ukraine. Thus, this study reinforces the idea that education, particularly in fields such as business and public administration, serves a vital role in the formation of the future of sustainable governance.

Lastly, this thematic issue presents a critical analysis of the governance of sustainable development, summarising the legal, economic and institutional frameworks required to deal with current challenges. All the papers emphasise the interdisciplinary nature of sustainable development, drawing out the critical interplay between regulatory structures, economic strategies and institutional resilience. The authors provide understanding of how different governance structures can contribute to sustainability through exploring different national and regional experiences. The findings contribute to a deeper theoretical and practical understanding of governance for sustainable development, reinforcing the need for coherent interdisciplinary approaches that combine legal reform, economic adaptation and institutional innovation. This issue offers valuable insights for the academic community seeking to continuously advance sustainable development.

# *Foreign Persons in Kazakhstan's Civil Proceedings and the Sustainability of the Civil Justice System*

by Zhadira Shukenova\*, Gulnara Ansatbayeva<sup>^</sup>

## ***Abstract***

International organisations and cross-border mobility are driving up civil conflicts involving foreigners in Kazakhstan, challenging the capacity, inclusiveness, and predictability of national civil justice. This article analyses the legal status and procedural rights of foreign citizens and stateless persons in civil actions under Kazakhstani law in the context of sustainable legal growth. The study uses a dialectical approach and normative and comparative legal analysis of the Civil Procedure Code, private international law rules, and relevant international instruments governing court access, judgement recognition and enforcement, and legal assistance. Persistent shortcomings in institutional resilience include fragmented jurisdictional regulations, inconsistent service standards abroad, language and cost constraints, and inadequate digital accessibility for cross-border litigants. Addressing these issues through improved connectivity, recognition procedures, translation and fee-waiver safeguards, e-justice tools, and treaty alignment would improve fairness, efficiency, and non-discrimination. Strengthening foreign people's procedural status can boost societal trust, investment climate, and the rule of law while complying with international responsibilities. A more resilient and sustainable civil justice system in Kazakhstan can be achieved by embedding principles of accessibility, transparency, equality before the law, and effective remedy into proceedings involving foreign persons. The article proposes incremental legislative and institutional reforms that are timely and necessary.

**Keywords:** Civil Procedure, Civil Procedural Law, Judicial Defence of Foreign Persons, Powers of Foreigners, Sustainable Legal Development.

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## Introduction

Civil law disputes with the presence of a so-called “foreign entity” have long ceased to be a rarity in almost any country in the world. However, this issue is currently receiving particular attention in the Central Asian region. The countries of the Central Asian region, considering their geographical location and tendency to develop in the economic, political dimension, constitute one of the most important geopolitical centres, with the Republic of Kazakhstan (RK) leading the way (Bharti, 2022). This pace of international relations has led to the active development of legal relations involving foreign persons, and directly to their judicial defence, as well as to the need for effective settlement of legal disputes under international law (Tsurkan-Saifulina et al., 2019; Zhanibekov et al., 2024).

The RK, as a country interested in the active development of foreign economic relations and actively demonstrating this on the world market, pursues the goal of creating a justice system with the highest degree of protection not only for its citizens, but also for foreign persons. The principal issues that are acute today in the legal dimension are the legal status of foreigners and their powers in the judicial process, the principles of justice in civil proceedings involving foreigners, and the improvement of the procedure of consideration of civil cases with the introduction of an effective mechanism for protecting the rights and interests of citizens of other countries.

This issue is not new in the legal science of the RK, although recently it has become particularly relevant. From a sustainability perspective, formal national treatment must be matched by functional equality – removal of de facto barriers that disproportionately burden foreigners (information asymmetries, translation, distant participation). A series of both national and foreign researchers have been engaged in the research of this subject, including Lisitsa and Moroz (2019), and Smashnikova (2018). A massive part of their research lies in the sphere of legal status and powers of foreign citizens residing in the territory of the RK. Sabitova (2016) focused on the aspect that foreign citizens in the RK enjoy the principle of national treatment, i.e., they enjoy the same rights and freedoms, as well as have identical obligations as citizens of the Republic itself, and therefore, in case of legal disputes, like all other participants of civil turnover, they are obliged to obey the applicable laws, including those that determine the civil procedural aspects.

Shchukin (2018) analysed a series of international regulations, including the Hague Convention on Civil and Commercial Cases, the Minsk Convention on Legal Assistance and Legal Relations in Civil Matters,

reducing to the need to follow the principle of equality of all before the law and the court. Talzhanov (2014) made a special contribution to the study of the problems of representation of foreigners in civil proceedings, investigating in detail the issue of jurisdiction, as well as the problems of representation of foreigners directly in civil proceedings. Talzhanov also favours the idea of national treatment, which is in force in the national legislation of the Republic, based on the Constitution of the RK (1995) and other regulations. Furthermore, it is Talzhanov who raises the issue of proper execution of documents in Kazakh courts, which often become the reason for the closure of proceedings and proper notification of the parties to a civil case in other countries, emphasising that the Kazakh court should actively establish relationships with courts in other countries on this issue.

In terms of the study of the issue of jurisdiction of courts in international civil law, it is worth mentioning the studies of Roper (2019) and Lavinbuk (2005). Their research is based on the principle of universal jurisdiction, which allows a state to exercise jurisdiction over cases with which the state has no connection, territorial, national, or otherwise, departing from the standard three-tier system of jurisdiction. Muidenova and Issayeva (2019), comparing legal proceedings in Kazakhstan with other Commonwealth of Independent States (CIS) countries, focused on the fact that in Kazakhstan such cases are considered by economic courts, while in a series of CIS countries (Belarus, Kyrgyzstan) – by arbitration courts.

The purpose of this study is to investigate the specific features of civil proceedings involving foreign persons under the current legislation of the RK, directly analysing the legal status of foreign persons, their procedural powers, and the jurisdiction of the courts, alongside a comparative analysis with selected European jurisdictions. In addition, the study situates these issues within the framework of sustainable legal development, understood as fair, efficient, and non-discriminatory access to justice consistent with SDG 16 (Peace, Justice and Strong Institutions), and evaluates how existing norms and institutional practices affect the institutional sustainability of the civil justice system. Furthermore, the study aims to identify current legislative and procedural problems and to outline evidence-based avenues for their resolution, with a view to enhancing accessibility, transparency, predictability, and resilience in civil proceedings involving foreign persons.

## **Materials and Methods**

The study employed the following general and special methods and techniques of scientific cognition: the dialectical method, the method of

synthesis and analysis, and comparative legal method. This study provided a detailed investigation and analysis of civil proceedings involving foreign persons, as well as their legal status and powers. The basis of the methodological research was the dialectical method, which was used to analyse the principles of justice implementation in civil cases involving foreign persons, focusing on their essence and features. This method is particularly useful in studying fundamental concepts such as national treatment and most-favoured-nation treatment, which underpin the legal status of foreign nationals. In practice, the dialectical method facilitated a comparative approach, allowing for the examination of the evolution of these principles within the context of civil proceedings. It involved contrasting different legal interpretations, tracing historical developments in their application, and synthesizing varying positions from both national and international legal frameworks. Furthermore, the specific features of the court proceedings themselves, namely the process of proper preparation of procedural documents, the process of court notices, the verification of procedural standing, and other aspects were examined.

The analysis prioritized a comparative approach, focusing on the examination of national and international legal frameworks to understand the legal status and procedural rights of foreign persons in civil proceedings. Additionally, historical and practical aspects were emphasized to trace the evolution of key principles, such as national treatment and most-favoured-nation treatment, and their application in practice. The method of synthesis and analysis were frequently used, which allowed analysing the legal status of foreign citizens both in general and directly in the context of their powers in legal proceedings. In addition, to investigate in detail the international treaties and bilateral treaties regulating the relations in the issue of consideration of civil cases in the presence of a foreign element. Considering the legal status of foreign persons, the study investigated its difference from the legal status directly in the context of the right to judicial defence in civil disputes. The formal legal method helped to study such categories as the right to defend one's interests in court, the competence of the courts, as well as the structure of jurisdiction and the structure of the principles of justice.

Using the comparative legal method, a comparativist analysis of national legislation and the legislation of individual countries (China, Great Britain) was performed, and the shortcomings and advantages of national legislation in this area were analysed. The study of the legislative experience of other countries helped to formulate a proposal to improve the existing laws regulating the legal status of foreign persons and the consideration of civil cases involving them. Based on this, and utilizing predictive legal modelling, a series of potential changes were proposed to address gaps in the legislative

framework. This modelling approach involved simulating different legal scenarios to identify the most effective measures for improving the handling of cases involving foreign persons and enhancing procedural efficiency in practice.

The selection of specific European and CIS jurisdictions for comparison was guided by a combination of factors. These included the presence of similar legal systems, particularly in terms of civil procedure and the treatment of foreign persons, as well as contrasting models that highlight different approaches to judicial protection and procedural rights. Additionally, economic ties with Kazakhstan played a crucial role, as these jurisdictions represent key partners in international trade and legal cooperation, providing a relevant context for understanding the practical implications of civil proceedings involving foreign persons in Kazakhstan.

The study is a perspective of development and reform of the existing Civil Procedural Code of the RK (2015) as well as laws regulating the legal status of foreigners and their powers directly in the field of civil proceedings. The materials that were used in this study formed the theoretical basis and included works of national, post-Soviet, and foreign scientists and practitioners, as well as the legal framework of the RK. The study examined the Civil Procedural Code of the RK (2015), the Law of Georgia No. 2045-II “On the Legal Status of Aliens and Stateless Persons” (2014), as well as a series of international conventions ratified by the RK – Hague Convention on Civil Procedure (1954), Minsk Convention on Legal Assistance in Civil, Family and Criminal Matters (1993). In addition, the relevance of the study, the problematic, purpose, and objectives of the study were formed and highlighted, and the methods that contributed to the findings were explored.

## Results

The emergence of legal relations with the participation of foreign persons is inevitable, considering the trend of growth of international cooperation in the RK, which, in turn, necessitates the sustainable development of civil justice – its resilience, predictability, and non-discriminatory accessibility for cross-border litigants (SDG 16). Accordingly, this refers to unambiguous contact of foreign persons with the judicial system of Kazakhstan, including civil proceedings. For many years, any dispute, the subject of which is a foreign person is defined as a special category of civil cases, which have their specific features of consideration (Khamzina et al., 2020). The first and main factor of distinction is the legal status and procedural position of a foreign person, which is generally regulated by the norms of national legislation, as

well as limited within the international legal treaties. The International Covenant on Civil and Political Rights (1966) and the Hague Convention on Civil Procedure (1954) are among such treaties governing the legal position of foreigners and also enshrining their right of access to the judicial system, according to the latter of which it follows that “in civil and commercial matters, nationals of each of the Contracting States shall enjoy in all other Contracting States free legal aid as their own nationals of the latter States under the laws of the State where free legal aid is required”.

Furthermore, the right to defence and access to the judicial system is also set out in the Minsk Convention on Legal Assistance in Civil, Family and Criminal Matters (1993), which provides that citizens of each Contracting Party, as well as other persons residing on its territory, are entitled to freely and without hindrance to apply to the courts, prosecutor’s offices, internal affairs bodies and other institutions of the other Contracting Parties whose competence includes civil, family, and criminal matters (institutions of justice), may appear before them, file petitions, commence suits, and carry out other procedural actions under the same conditions as nationals of the Contracting Party concerned.

However, the primary document regulating the legal status of foreign citizens is the Constitution of the RK (1995) and the Law of the RK No. 2337 “On the Legal Status of Foreigners” (1995). Thus, this regulation governs a series of issues related to the entry and stay of foreigners in the RK, education, and medical care, payment of taxes and family legal relations, as well as the issue of protection of foreigners and their access to the judicial system. According to Article 18 of the Law of the RK No. 2337 “On the Legal Status of Foreigners” (1995), foreign nationals in the RK are entitled to have their interests protected in court and also in other state bodies whose competence includes the protection of property and personal non-property rights. Therewith, the list of procedural rights of foreigners is equal to citizens of the Republic, without restrictions. Another regulation that covers the issue of procedural powers of foreign citizens is the Civil Procedural Code of the RK (2015), which states in Item 2 of Article 413 that foreign citizens, as well as stateless persons and international organisations for the protection of their rights, freedoms, and interests, enjoy procedural rights and perform procedural duties on an equal basis with citizens of the RK. It is this rule that is key to the representation of foreign persons in court proceedings. Notably, such a formulation is basic for almost all countries of the post-Soviet space. For instance, the Law of Georgia No. 2045-II “On the Legal Status of Aliens and Stateless Persons” (2014), which governs the issue of protection of foreign citizens, almost identically establishes the equality of procedural rights of foreigners with Georgian citizens for the protection of



their personal non-property or property rights. Legal Status of Foreign Nationals in the Kyrgyz Republic (2011) has an analogous wording. The conducted analysis suggests that the legislation of Kazakhstan, as well as other post-Soviet republics, follows the principle of “national treatment” in the issue of the legal status of foreign citizens.

The issue of principles of justice in proceedings involving foreign persons is one of the key points in the procedural law of any state, as well as in the science of the present time. It is the analysis of the principles of dispute resolution and the implementation of justice that determine the nature of the courts’ activity in this area, which, according to generally accepted norms, is usually identified as international civil procedure. The principles of international civil procedure are nothing but fundamental ideas that govern the transnational civil legal relations that have arisen, and their aim is the fair resolution of civil cases (Rexhepi and Murtezaj, 2024).

Protection of the rights of foreign persons, as well as access to the judicial system and its effective functioning, are the key to building quality international relations, integration of Kazakhstan’s economy into the world economy, and, consequently, development of business activities and international investments within the country. The level of development and functioning of the judicial system in the RK directly affects the processes of strengthening political and economic relations in the international arena (Akimbekova et al., 2021; Apakhayev et al., 2017). That is why the issue of the legal status, as well as the consideration of civil cases, the principle of justice plays such a vital role in the system of national legislation.

As mentioned above, in the RK, as well as in many other post-Soviet republics, the principle of national treatment in civil proceedings prevails, the essence of which is that all foreign citizens, as well as stateless persons, are equal to Kazakh citizens in terms of their rights and obligations. It is meant to equate such categories as procedural legal competence and legal capacity of foreign individuals and legal entities. However, despite this scientific formulation, the Civil Procedural Code of the RK (2015) clearly indicates the need to distinguish between the terms “legal capacity” and “subjective right” to understand the differences between objective reality and general legal possibility. This refers to Article 473 of the Civil Procedural Code of the RK, which states that the civil procedural capacity of stateless persons and foreigners is determined by their personal law, and if they have more than one nationality, their personal law is the law of the country with which they are most closely associated. However, Article 472 also indicates the right of foreigners to exercise procedural rights and perform procedural obligations on an equal footing with individuals and legal entities of the RK. Furthermore, the Kazakh legislator introduced a provision in the Civil

Procedural Code of the RK that “... a person of a foreign state recognised as procedurally incapable based on personal law may be procedurally capable in the territory of the RK if, according to the national legislation in force, they have legal capacity”. The existence of this Article suggests a real guarantee of access of foreign persons to judicial protection of their rights in the RK. As for the procedural capacity of a foreign and international organisation, it is also determined according to the law of the foreign state under which it is established. The legal capacity of an international organisation is established based on an international treaty. However, in practice, it is quite common to encounter problems with verification of legal capacity of foreign legal entities. The point is that when verifying the competence of the governing body of the respective legal entity to issue a power of attorney on behalf of the legal entity, the courts often do not pay due attention to the fact of the competence of the person who was issued the power of attorney to perform such actions. That is, the court scrutinises the competence of the person in whose name the power of attorney is issued but misses the point whether the power of attorney is properly issued and whether the person who issued it has the right to perform such actions (Talzhano, 2014). A solution could be the adoption of a resolution of generalised judicial practice of the Supreme Court of Kazakhstan, which would regulate this issue. Such uniform guidance would enhance institutional sustainability by reducing adjudicative uncertainty, transaction costs, and delays in cross-border cases.

Notably, the wording on legal capacity is characteristic not only for the RK. The lack of complete identity of rights, as in the RK, is also observed in the legislation of other CIS countries, namely Belarus and Kyrgyzstan. When applying the single principle of national treatment, in the RK, there is no equalisation of foreign nationals not only in rights and obligations, but also in granting them special rights (Fedorchenko et al., 2020). At the moment, the national legislation of Kazakhstan has gaps in the regulation of this issue, and therefore it is necessary to consider the possibility of introducing this norm either in the Civil Procedural Code of the RK (2015) or in the Law of the RK No. 488-V “On arbitrage” (2016).

The legal position of foreign nationals in civil proceedings is detailed in a series of international and bilateral treaties (Shchukin, 2018). This treaty-based safety net functions as a sustainability mechanism, cushioning vulnerable litigants and stabilising caseload management through predictable cooperation procedures. Thus, the Hague Convention (1954) and the Minsk Convention (1993) are universal ratified instruments. An important aspect enshrined in these international treaties is the fact that legal aid is provided free of charge, as well as exemption from payment and

reimbursement of court and notary fees, even though the latter is not mandated in the national legislation itself. However, this norm is prescribed individually in bilateral treaties on mutual legal assistance in civil, family, and criminal cases concluded with a series of countries in Europe (Georgia, Lithuania, Turkey), Asia (Vietnam, India, Mongolia, Korea, Pakistan, UAE), and the CIS (Azerbaijan, Kyrgyzstan, Turkmenistan, Uzbekistan) (Supreme Court..., 2022). These contracts have quite analogous content, prescribing the fundamental rights of citizens to access to the court system, provide legal aid without payment, and ensure benefits in the matter of court costs. The absence of such a treaty does not entail the RK's refusal to follow the principle of national treatment in civil cases with citizens of other states, but signing treaties with other countries would contribute to a more effective settlement of this issue and rid the existing regulations of gaps. However, targeted expansion/modernisation of the treaty network is a sustainability-oriented policy that closes protection gaps and streamlines recognition and service arrangements (Osanova et al., 2024).

Another principle is most-favoured-nation treatment, the essence of which is that foreign persons are accorded treatment as favourable in access to the judicial system and protection of their legal rights as that which will be accorded in the future to nationals of a third state. However, the manifestation of this principle is more characteristic of trade agreements of the RK (Liu, 2020).

Civil proceedings involving foreign persons in the RK, as mentioned above, are governed by the Civil Procedural Code of the RK (2015). It follows that the activities of all courts, the procedural rights and obligations of foreign persons, the question of jurisdiction and jurisdiction and other aspects of civil proceedings are regulated within the limits of national law, unless otherwise prescribed by international treaties (Khamzin et al., 2015; 2016). Thus, according to the Civil Procedural Code of the RK, the courts of the RK consider cases involving foreign persons if the defendant organisation or the defendant citizen has its seat in the territory of the RK. The competence of the courts of the RK is regulated by Article 466 and Article 467 of the Civil Procedural Code of the RK, as well as within the framework of ratified international treaties. That is, the national legislator states that the courts have jurisdiction over cases involving foreign citizens, organisations, as well as international organisations (Civil Procedure Code..., 2015).

However, the analysis of the exclusive competence of the RK with the participation of foreign nationals deserves special attention. Thus, according to Article 467 of the Civil Procedural Code of the RK (2015), the legislator refers to the exclusive competence of the courts: questions about the right to

immovable property in the RK; claims against carriers, if the latter is located in the territory of the RK; cases of special action proceedings; questions about the dissolution of marriage between foreigners and citizens of the RK. Exclusive jurisdiction contains the protection of areas such as national legal order and state sovereignty (Civil Procedure Code..., 2015). The first case involves the protection of personal non-property and property rights, i.e., dissolution of marriage and adoption. In the second one – cases related to the right to immovable property of the RK, as it is directly located on the land plots of the Republic itself. For this reason, only Kazakh courts can hear such civil disputes, even if there are foreign parties. However, the list of exclusive international jurisdiction can be expanded, centred on the China model. Thus, comparing the Civil Procedural Law of the People's Republic of China, (2017), a draft to amend the Civil Procedural Law of the People's Republic of China was passed on 30 December 2022, which considerably expands the issue of exclusive jurisdiction. Thus, according to the draft law, the Chinese legislators intend to subject to the exclusive jurisdiction of Chinese courts the enforcement of contracts of Sino-foreign enterprises; the establishment, reorganisation, and liquidation of legal entities established in China; and intellectual property law cases that extend into China (Yuxin and Chang, 2023). Admittedly, these disputes also fall within the realm of national order and state sovereignty. However, presently, international intellectual property disputes are most effectively and frequently dealt with by the UK courts, even if they are based on foreign intellectual property rights and neither party is located in the UK (Brownlow, 2021). This is explained by the effective long-standing procedures for resolving foreign law disputes in the English courts (Clifford, 2019). Properly framed exclusive jurisdiction supports sustainability by increasing legal certainty and reducing forum shopping; however, over-expansion risks fragmentation, which should be weighed against efficiency and access considerations.

The issue of parallel court proceedings should also be effectively regulated by national legislation. The aforementioned draft Civil Procedural Law of the People's Republic of China (2017) proposes to allow a Chinese court to try the same case that is also tried in a foreign court. This is a situation in which one party files a lawsuit in a foreign court and the other party files a lawsuit in a Chinese court. In this case, if the Chinese court has jurisdiction, it can commence and conduct proceedings on the dispute. The only exception is where the parties have agreed in writing to choose a foreign court of exclusive jurisdiction, but where this does not violate sovereignty, security, or national interests (Yuxin and Chang, 2023). Kazakhstan's legislation currently contains only a rule on contractual jurisdiction, which regulates the issue of consideration of a dispute in a foreign court, with the

exception of cases with exclusive jurisdiction under Article 31 of the Civil Procedural Code of the RK (2015). The issue of the so-called “parallelism of court proceedings” is currently absent from the national legislation. That is, if a civil dispute between the same parties and on the same claim is already being considered in a court of a foreign state, the court of the RK leaves the application without consideration and stops proceedings on the case, which indicates that there is no parallelism of court processes. However, its incorporation into the national legal system would be a major step towards the development of civil litigation, promoting procedural sustainability through caseload efficiency, avoidance of duplicative proceedings, and consistent outcomes across fora.

The Civil Procedural Code of the RK (2015), as well as international legal treaties in force, regulate the issues of the trial process itself. The issue of obtaining ship’s notices to a foreign person deserves special attention. Under the general rules, countries that have ratified the Hague Convention are obliged to serve notices following its requirements. Since the RK is a signatory to the Convention, according to its rules, notices, court notices, and summonses may be served through the Central Authority of the State of which the defendant is a national, through international mail, or directly through the embassy located in the country of the defendant. Notably, under the Convention, failure to properly serve court notices on a party who resides outside the Republic cancels all subsequent proceedings against that person, except where the address of the defendant is unknown (Hague Convention, 1954). In the current Code, the only reference to court orders for foreign citizens who reside in the territory of another country is the right to apply to foreign courts by a Kazakh court with an order to execute certain procedural actions. However, there is a complete absence of a process for this appeal, which can significantly affect the case from the moment it is opened, as well as during the preparation phase and at the trial itself. These norms should be included directly in the Civil Procedural Code of the RK (2015) in the section on consideration of disputes involving foreign persons, thereby aligning the Code with sustainability benchmarks of accessibility, transparency, and predictability.

## Discussion

Judicial protection of rights and freedoms is one of the fundamental rights guaranteed by the Constitution of the RK (1995), which applies not only to citizens themselves but also to foreigners and stateless persons. Despite this,

problems in determining the legal status of a foreign person arise quite often, especially when taking part in court proceedings.

According to Law of the RK No. 2337 “On the Legal Status of Foreigners” (1995), a foreign citizen is a natural person who is not a citizen of the RK and has proof of citizenship of another country. In the absence of such evidence, the person shall be recognised as stateless. According to this law, the national legislator guarantees all rights, freedoms, and obligations established by the Constitution of the RK (1995) and international treaties on an equal footing with citizens, with the exception of a series of constitutional rights (e.g., suffrage). Furthermore, the law includes the right to appeal to a court to protect one’s interests, indicating equality in the exercise of procedural rights. This applies not only to the protection of the rights of the individual, but also to the protection of the rights of foreign and international organisations, even though the Constitution of the RK (1995) explicitly mandates only the protection of human rights (European Justice, 2022).

Sabitova (2016) investigated the issue of the legal status of foreign nationals in the context of court proceedings. Thus, proceeding from Sabitova’s findings, Kazakhstan’s legislation is based on the following principles of the legal status of foreign nationals:

1. Equality in the enjoyment of rights and freedoms, as well as the performance of obligations on an equal basis with the citizens of the RK, the initial principle of which is the principle of national treatment.
2. Equality of aliens before the law regardless of origin, race, nationality, property, social status, faith, religion, language, descent, and other circumstances.
3. The possibility of imposing reciprocal restrictions on citizens whose countries have special restrictions on the rights and freedoms of citizens of the Republic.
4. Mandatory compliance with all applicable laws by foreigners as well as other participants in the civil turnover (Sabitova, 2016).

It is worth agreeing with the arguments of Sabitova, since these principles are expressed not only in the current laws, but also in international treaties to which Kazakhstan is a signatory. The principle of national treatment is particularly evident in the issue of international civil procedure discussed above.

Building on our results, Mahmutović and Alhamoudi (2024) conceptualise the rule of law as an enabling infrastructure for sustainable development; applied to Kazakhstan, formal national treatment for foreign litigants must be paired with effective access measures such as predictable remedies, language assistance, and proportionate costs to realise SDG 16.

Mills (2024) reframes sustainability as an internal constraint on jurisdictional design; for Kazakhstan this supports codifying coordination of parallel proceedings, clarifying connecting factors to limit opportunistic forum selection, and streamlining treaty-compliant service and evidence taking to lower systemic costs and improve predictability. From a city level perspective, Fan (2025) demonstrates that access to justice design advances urban sustainable development; for Kazakh urban courts that implies electronic filing for cross border users, guaranteed interpreter services, and publicly monitored time standards that enhance trust and attract investment.

According to the Civil Procedural Code of the RK (2015), foreign citizens enjoy the same procedural rights, and the rule on civil procedural legal and legal capacity of both a foreign citizen and an organisation, prescribed in Articles 473-474, speaks about the guarantee of its implementation. As Talzhanov (2014) points out, the existence of these norms contributes to the active growth of participation of foreign individuals and organisations in international economic life. In case of deprivation of the right to a free defence and a fair trial in the state, the conduct of business activities and, consequently, the integration of the RK into the world economy and socio-political system will be suspended. However, there is still no full equation of foreign citizens with citizens of the Republic. An example of this is the granting of benefits in the arbitration process discussed earlier. This is exactly what Rachman (2021) points out in his study. Rachman states that despite the desire and obligation of each country to provide and ensure legal protection to the alien, it will still be provided within certain limitations, based on the lack of a close legal connection, namely nationality.

As Shchukin (2018) points out, the Civil Procedural Code of the RK (2015) does not contain restrictions or conditions for applying to the court for protection of one's rights and interests. This right is granted to both foreign individuals and organisations, regardless of their permanent residence in the territory of the Republic, or whether they are visiting the country as tourists or students. For instance, some legislators (Argentina, Venezuela) prescribe mandatory bail to cover court costs. Although the Civil Procedural Code of the RK does not directly contain this norm, this aspect is regulated by the Hague and Minsk Conventions, which the Republic has ratified. Thus Article 17 of the Convention mandates that no bond or security in any form may be demanded from nationals of a Contracting State residing in one of those States and appearing as plaintiffs or third parties before the courts of the other State on the ground that they are aliens or have no permanent or temporary residence in that country (Hague Convention, 1954). These conventions also make provision for access to free legal aid, although this issue is more fully expressed in bilateral treaties.

The issue of the jurisdiction of courts in civil proceedings is one of the key areas of discussion both in academia and among practitioners. The limits of jurisdiction of civil cases involving foreign persons are determined by Chapter 57 of the Civil Procedural Code of the RK (2015). International procedural science identifies three systems for determining jurisdiction: according to the nationality of the parties to the dispute, according to the “presence of the defendant”, and according to the rule of extending internal territorial jurisdiction to cases involving foreign nationals. Thus, in the first variant, it is a question of sufficient competence of the court to consider a civil dispute in case the dispute concerns legal relations to which a citizen of this country is a party, and, for example, the place of the transaction does not play a role. In the second case, the court has jurisdiction to hear the case if the defendant stayed in the state even for a brief period. However, Roper (2018) is inclined to the idea of the so-called principle of “universal jurisdiction”, which allows a state to exercise jurisdiction over cases with which the state has no ties, territorial, national, or otherwise. This is the type in which the English courts operate. The Civil Procedural Code of the RK (2015) clearly establishes the competence of the courts of the Republic, including the right to hear a case involving foreign persons if:

1. The respondent organisation or the respondent citizen has a place of residence in the territory of the RK.
2. The representative office of a foreign person is located in Kazakhstan.
3. The Respondent owns property in Kazakhstan.
4. In a case on establishment of paternity, collection of alimony, if the plaintiff has a place of residence in the RK.
5. Regarding compensation for damage caused by injury or other damage to health, if the damage was caused in Kazakhstan or the claimant has a place of residence in Kazakhstan.
6. In terms of compensation for damage to property that occurred on the territory of the RK.
7. If the claim arises out of a contract the performance of which took place in Kazakhstan or was to be performed.
8. Concerning unjust enrichment occurring in the territory of Kazakhstan.
9. In a case on the dissolution of marriage, if one of the spouses is a citizen of the RK or one of the spouses has a place of residence in the territory of Kazakhstan.
10. Concerning the protection of honour and dignity if the claimant resides in Kazakhstan.
11. Regarding the protection of personal data rights or compensation for moral damages if the plaintiff resides in the territory of the RK (Civil Procedure Code of the RK, 2015).



Thus, having analysed this issue, all three systems of jurisdiction have been implemented in the national legislation of Kazakhstan. However, some researchers argue that the definition of jurisdiction based on nationality is quite controversial and needs to be reconsidered. The fact is that *de jure*, an individual may be a citizen of one country, but *de facto* reside in another country for a long time, conduct business activities there, and accordingly have a weak connection with the state of which they are a citizen. Agreeing with the opinion of Muidenova et al. (2020), it is worth noting that the most effective is jurisdiction in civil proceedings depending on the last place of residence, which is the most common in the Civil Procedural Code of the RK (2015). However, it would also be logical to establish a certain period of residence to understand the existence of a stable legal link between the foreign person and the state in which they reside.

There are also debates around the judicial process itself. Thus, Talzhanov (2014) points out that there are problems with legal regulation regarding the proper execution of documents in consideration of civil disputes. Article 475 regulates the recognition of documents issued by other states, but the Code does not regulate the proper execution of documents by the Republic itself, which may lead to doubts about the authenticity and reliability of the documents, as well as to the cancellation of the dispute due to improper notification of the defendant. The only way to eliminate the gap in this area is to amend the Code to clearly regulate this issue.

Analogously, there is a problem with the very notification of defendants who do not reside in Kazakhstan, which is also pointed out by Talzhanov (2014). There is still no clear mechanism for notifying the parties to a civil action by the national legislator, although the regulation is based on international treaties. However, building a responsive notice structure could help avoid the problem of inadequate notice, which often leads to the closure of proceedings.

## Conclusions

The findings of the study suggest that despite the existence of an extensive body of legislation in the field of settlement of civil proceedings involving foreign persons, there are still many gaps in the legal regulation of this issue. Admittedly, the national regime, which is the basis of the legal status of foreign nationals, assumes that legal proceedings are conducted identically to those involving exclusively Kazakh nationals, but it is still impossible to speak of an absolute equation. Sustainable legal development requires not only formal national treatment but also functional equality in

practice. Exceptions are such aspects as the procedural status of foreign persons, their procedural legal competence and legal capacity, jurisdiction of the courts of the RK in cases involving foreign individuals and organisations. The process of court orders, recognition of documents, in the courts of Kazakhstan, which are issued by other states, is also different.

Thus, after studying the national legislative base, the legislative base of other countries, as well as a series of international treaties in the field of civil disputes involving foreign persons, it can be concluded that it is necessary to improve not only internal laws, but also to promote the conclusion of new bilateral treaties, the purpose of which is to regulate in detail the rights and freedoms of foreign persons in the sphere of their access to the judicial system. Expanding and updating the treaty network would advance sustainable legal development and stabilise cross border cooperation. As of today, the RK already has a series of bilateral agreements with such countries as Georgia, Latvia, Turkey, India, Mongolia, Pakistan, UAE. However, considering the transformation processes and the entry of Kazakhstan's economy into the world market, as well as the establishment of transnational ties with European countries, this area should also be investigated.

The study found that issue of the civil litigation process itself also requires improvement. It is a question of both expanding the jurisdiction of the courts, the basis of which may be the project of the Law of the Republic of China, and eliminating the most typical problems faced by the courts when considering a case. Such problems include the lack of regulation of the process of sending ship's notices to foreign persons who live outside Kazakhstan. Furthermore, the process of proper execution of documents by the RK itself for sending to foreign persons, the verification of civil procedural capacity, and the need to check with the extract from the commercial register regarding the status of foreign organisations are also problems. In each of the mentioned cases, it is necessary to talk about amending the existing Civil Procedural Code of the RK (2015), namely Chapter 57, which regulates international civil procedure or adopting separate regulations with reference to them in the Code. Such amendments should be evaluated against sustainability criteria of accessibility, transparency, predictability, and resilience.

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# *Export of educational services as a driver of sustainable economic development: A comparative study of Kyrgyzstan and the Czech Republic*

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## *Abstract*

This study explores the role of international educational services in promoting sustainable economic development, using Kyrgyzstan and the Czech Republic as case studies. The research methodology included a survey of 50 experts in Kyrgyzstan and 50 in the Czech Republic, comparative analysis and recommendations. The main results of the study showed that the Czech Republic is much more competitive in the international education market than Kyrgyzstan. Several important aspects, such as student infrastructure and scholarships, also showed an advantage for the Czech Republic. The Czech Republic exhibits higher sustainability in its education export model, characterized by institutional support, inclusive infrastructure, and alignment with global sustainability standards. Kyrgyzstan shows potential for growth by enhancing educational accessibility, reducing language barriers, and increasing investment in sustainable education strategies.

**Keywords:** educational exports, internationalisation, human capital, higher education, student mobility, economic resilience.

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## **1. Introduction**

In an era of globalisation, education is increasingly viewed not only as a tool for personal development but also as a vital factor in economic growth and social stability. At the same time, education is becoming a core element of sustainable development, contributing to long-term social equity,

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institutional resilience, and economic diversification (Yepifanova and Dzhezdzhula, 2024). The relevance of this research is driven by the need for a deeper understanding of the interconnectedness between investments in education, the development of the knowledge economy, and the potential for exporting educational services. Educational systems that effectively contribute to national sustainability priorities often combine internationalisation with a focus on social inclusion, innovation, and capacity building (Guliyeva and Azizova, 2022; Yevseiev et al., 2020). In this context, international education is not only a tool of economic strategy but also a channel for enhancing the sustainability of national development, particularly through investments in human capital, social mobility, and institutional partnerships (Zhou et al., 2024). The research also brings to the fore issues of inclusivity, accessibility, and the alignment of educational programmes with the requirements of sustainable development.

The export of educational services is today considered not only a factor in enhancing countries' international image but also as a significant component of economic development (Rexhepi et al., 2024). Akylbekova et al. (2024) demonstrated that the development of medical tourism through the export of educational services fostered the creation of new opportunities for the economy of Central Asia. Baidybekova et al. (2022) highlighted the need for a balanced approach to investing in different levels of education to achieve long-term development outcomes. Multiple studies confirm the link between education quality and economic development, showing that modernising education systems yields significant long-term economic benefits. Baktymbet et al. (2024) found that in Kazakhstan, the development of educational infrastructure directly contributed to increased economic activity, innovation, and a reduction in youth unemployment. Bepalyy et al. (2024) noted that while Kazakhstan, Tajikistan, Kyrgyzstan, and Uzbekistan are implementing sustainable development education, they face challenges in resources and teacher training.

Global challenges, such as the COVID-19 pandemic, have significantly transformed the landscape of education and employment (Gulaliyev et al., 2023). Linkeschova and Tichá (2021) observed that in the Czech Republic, the pandemic necessitated revising traditional learning methods and increasing focus on students' digital skills, aligning with digital economy demands. The authors emphasised the importance of the flexibility of educational programmes for rapid responses to crises. Studies involving cross-country comparisons demonstrate that higher education is a fundamental factor in sustainable economic development. In the countries of Central Asia, education is viewed not only as an economic resource but also as a tool for social integration and the support of social cohesion (Ji et al.,



2023; Yang et al., 2025). Ozawa et al. (2024) analysed the political economy of education in the region, pointing to inequalities in access to quality educational services, which deepened social divides and potentially threatened stability. Using examples from South Korea and Kyrgyzstan, Sakmurzaeva (2018) demonstrated that sustainable economic growth depends on targeted state education policies.

The research aimed to examine factors influencing international education in Kyrgyzstan and the Czech Republic, specifically comparing support for foreign students, accessibility of educational programmes, and financial aid. The objectives of the research were to analyse existing support programmes for foreign students in Kyrgyzstan and the Czech Republic, to assess the level of language barriers and infrastructure for students in these countries, and to develop recommendations for improving the development of international education in Kyrgyzstan.

## **2. Materials and Methods**

The analysis used several reputable statistical and analytical sources to ensure completeness and relevance. The main international materials included reports by the United Nations Educational, Scientific and Cultural Organization (2023), the Organisation for Economic Co-operation and Development (2024), and the World Bank (2024) database. The results of a special Organisation for Economic Co-operation and Development (2023) report and the British Council analytical review were also utilised. At the national level, for the analysis of the situation in Kyrgyzstan, the report of the National Statistical Committee of the Kyrgyz Republic (Kudaibergenov et al., 2023), as well as the analytical reviews by International Organization for Migration (2025), were consulted.

To assess the state of education and its export in the Czech Republic, statistical data from the Czech Statistical Office (2025) and the analytical material, prepared by the European Commission (2025), were used. Thus, the use of these documents allowed for a comprehensive analysis of the current state and prospects for the development of educational services export in Kyrgyzstan and the Czech Republic. These countries demonstrate contrasting approaches to the development of educational exports: Kyrgyzstan as a state with a transitional economy actively integrating into the global educational space, and the Czech Republic as a representative of a developed European education system with established mechanisms for international academic cooperation.

To obtain information on the experience of experts in the field of education and to assess the quality of education in Kyrgyzstan and the Czech Republic, a survey was conducted among 100 experts (50 from Kyrgyzstan and 50 from the Czech Republic), with a 50% male and 50% female representation. Only those experts with at least 5 years of experience in the educational sphere were involved in the survey. This ensured that all participants possessed a sufficient level of knowledge and experience to evaluate current trends in education in Kyrgyzstan and the Czech Republic, as well as to analyse the impact of international educational exports. Furthermore, an important requirement was that the experts had practical experience working with international students or were involved in the development of international educational programmes for students from other countries. Exclusion criteria included individuals lacking sufficient qualifications, relevant experience, or current employment in institutions serving international students. All survey participants had to be over 18 years of age. During the research, the provisions of the Code of Ethics of the American Sociological Association were adhered to. The survey was conducted using the Google Forms platform from September 2023 to December 2024. The questions were as described in Table 1.

*Table 1 - The survey form*

No.	Question	Answers
1	What is your country of origin?	a. Kyrgyzstan b. Czech Republic
2	What is your age?	a. 25-30 years old b. 31-45 years old c. 46-60 years old d. Over 60 years old
3	How long have you been working in education?	a. 5-10 years b. 10-15 years c. More than 15 years
4	How do you assess the quality of education in Kyrgyzstan/Czech Republic?	a. Very good b. Good c. Average d. Poor
5	What is the main reason, in your opinion, for choosing Kyrgyzstan/Czech Republic as a country for foreign students?	a. High quality of education b. Low tuition fees c. Career opportunities d. Other
6	How do you assess the level of language barriers for international students in these countries?	a. No barriers b. Easy barriers c. Difficult barriers

- 7 How often do international students receive support from the university or government agencies of the country of study?
  - a. Often
  - b. Sometimes
  - c. Rarely
  - d. Never
- 8 How do you assess the cost of studying in Kyrgyzstan/Czech Republic in comparison to other countries?
  - a. Affordable
  - b. Moderate
  - c. Expensive
- 9 What factors, in your opinion, influence the development of international educational exports in Kyrgyzstan/Czech Republic?
  - a. State policy
  - b. Tuition fees
  - c. Quality of study programmes
  - d. Other
- 10 Does your organisation support international student mobility programmes?
  - a. Yes
  - b. No
- 11 Do you provide sufficient assistance to international students in adapting to a new country?
  - a. Yes
  - b. No
- 12 In your opinion, what role do international rankings and educational reports play in choosing a country for study?
  - a. A big role
  - b. Not very big
  - c. No role
- 13 What are the most common problems that international students face when studying in another country?
  - a. Cultural differences
  - b. Quality of infrastructure
  - c. Language problems
  - d. Other
- 14 How do you assess the social conditions for international students in these countries?
  - a. Very good
  - b. Good
  - c. Average
  - d. Poor
- 15 How often do international students receive scholarships or other forms of financial support?
  - a. Yes
  - b. No
- 16 How often do you encounter problems with obtaining a visa or residence permit for international students?
  - a. Never
  - b. Sometimes
  - c. Often
- 17 How would you assess the process of cultural adaptation for international students during their studies?
  - a. Light
  - b. Moderate
  - c. Severe
- 18 Do you think that the education system in Kyrgyzstan/Czech Republic is conducive to the career development of international students?
  - a. Yes
  - b. No
- 19 If you had a choice, would you support studying in another country for the development of international education?
  - a. Yes
  - b. No

20	How do you assess the prospects for the development of export of educational services in Kyrgyzstan/Czech Republic?	a. Very high b. Moderate c. Low
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*Source:* compiled by the authors.

The collected data was used to conduct a comparative analysis between Kyrgyzstan and the Czech Republic. The analysis included a comparison of educational strategies, education funding, and the level of support for international students in each country.

### 3. Results

#### 3.1. Support programmes for international students in Kyrgyzstan and the Czech Republic

Kyrgyzstan, with its growing educational services market, could enhance this sector by reforming higher education policies, improving programme quality, and creating better conditions for international students (Castro Ijiri, et al., 2025). According to World Bank (2024) data, Kyrgyzstan’s gross domestic product in 2023 amounted to USD 13.99 billion, a 6.2% increase compared to the previous year. In Kyrgyzstan’s higher education system in 2023, there were 78 institutions, including 28 state and 50 private universities. The total number of students in the 2022-2023 academic year was 221,604, with 26,286 students studying with state funding and 195,318 students paying for their education themselves (Abazbek uulu et al., 2024). One of the most important indicators of success in the export of educational services is the attraction of international students. According to data from the International Organization for Migration (2025), in 2022, Kyrgyzstan hosted 71,700 international students. The main countries of origin for these students were Uzbekistan (40,282 students), India (15,306 students), and Pakistan (8,407 students).

According to United Nations Educational, Scientific and Cultural Organization (2023), Kyrgyzstan ranks 97th out of 130 countries in terms of higher education quality, indicating the need for further reforms. From a sustainability perspective, such reforms should not only aim to raise academic standards but also ensure that educational programmes support broader societal goals like social cohesion, digital inclusion, and environmental awareness. Key challenges include insufficient international accreditation, a lack of English-language programmes, and limited academic exchange opportunities. An additional source for analysis is the Organisation

for Economic Co-operation and Development (2023) analytical report, which indicates that investment in education in Kyrgyzstan amounted to about 4.6% of GDP in 2022. This is lower than the Organisation for Economic Co-operation and Development average of 5.1%, but it shows a positive trend compared to previous years. The Czech Republic is an example of a country actively developing its educational exports. In 2024, 315,000 students studied at Czech universities, of which about 18% were foreign nationals (Czech Statistical Office, 2025). The majority of international students came from EU countries, as well as from China, Kazakhstan, and Russia. The Czech Republic provides high-quality education, as evidenced by its positions in global university rankings and a wide network of English-language programmes.

A more in-depth analysis was carried out based on data from national reports, in particular based on report of the National Statistical Committee of the Kyrgyz Republic (Abazbek uulu et al., 2024; Kudaibergenov et al., 2023). According to the yearbook, the proportion of young people aged 18-24 who are receiving higher education is about 28%, which is a relatively high figure for the Central Asian region. The British Council, in its report notes that the main factors attracting international students to higher education are the affordability of tuition, the multicultural environment, and employment prospects after graduation (Karabalaeva et al, 2021; Teymurova et al., 2025). Thus, exporting educational services can become a key driver of Kyrgyzstan's long-term economic growth, as shown by countries like the Czech Republic.

### *3.2. Assessment of the level of language barriers and infrastructure for students in the countries*

A large amount of data has been collected, which allowed for a detailed analysis based on a survey of experts (Table 2). These findings are relevant to sustainability, showing how infrastructure, language access, and institutional support influence the inclusivity, social cohesion, and resilience of higher education over the long term (Čajka et al., 2023).

The survey results point to aspects that need attention and improvement for the further development of international education in Kyrgyzstan and the Czech Republic: language support, social conditions for students, and more effective use of international rankings and reports. Such improvements contribute not only to short-term competitiveness but also to sustainable internationalisation, ensuring that the benefits of global education flows are shared more evenly and responsibly. The survey made it possible to conduct a comparative analysis between Kyrgyzstan and the Czech Republic in several key aspects of international education development (Figure 1).

*Table 2 - Results of the survey for education experts*

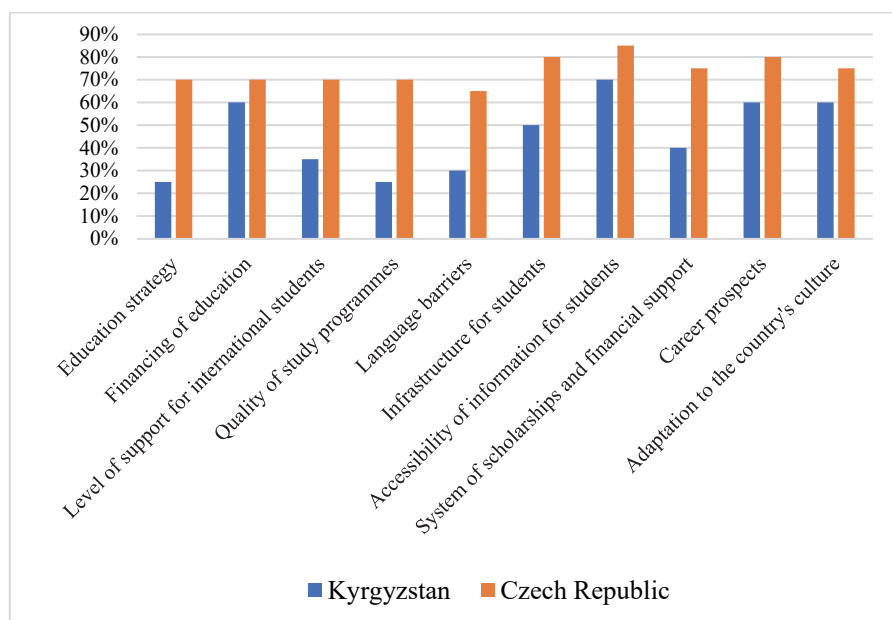
No.	Questions	Kyrgyzstan (%)	Czech Republic (%)
1	What is your country of origin?	Kyrgyzstan - 50%, Czech Republic - 50%	
2	What is your age?	25-30 years old - 30%, 31-45 years old - 45%, 46-60 years old - 20%, Over 60 years old - 5%	25-30 years old - 35%, 31-45 years old - 40%, 46-60 years old - 15%, Over 60 years old - 10%
3	How long have you been working in education?	5-10 years - 35%, 10-15 years - 45%, More than 15 years - 20%	5-10 years - 25%, 10-15 years - 50%, More than 15 years - 25%
4	How do you assess the quality of education in Kyrgyzstan/Czech Republic?	Very good - 25%, Good - 45%, Average - 20%, Poor - 10%	Very good - 40%, Good - 45%, Average - 10%, Poor - 5%
5	What is the main reason, in your opinion, for choosing Kyrgyzstan/Czech Republic as a country for foreign students?	High quality of education - 25%, Low tuition fees - 35%, Career opportunities - 25%, Other — 15%	High quality of education - 70%, Low tuition fees - 15%, Career opportunities - 10%, Other - 5%
6	How do you assess the level of language barriers for international students in these countries?	No barriers - 30%, Easy barriers - 40%, Difficult barriers - 25%, No answer - 5%	No barriers - 50%, Easy barriers - 30%, Difficult barriers - 15%, No answer - 5%
7	How often do international students receive support from the university or government agencies of the country of study?	Often - 35%, Sometimes - 40%, Rarely - 15%, Never - 10%	Often - 70%, Sometimes - 10%, Rarely - 10%, Never - 10%
8	How do you assess the cost of studying in Kyrgyzstan/Czech Republic in comparison to other countries?	Affordable - 40%, Moderate - 20%, Expensive - 35%, No answer - 5%	Affordable - 40%, Moderate - 30%, Expensive - 20%, No answer - 10%
9	What factors, in your opinion, influence the development of international educational exports in Kyrgyzstan/Czech Republic?	State policy - 50%, Tuition fees - 30%, Quality of study programmes - 15%, Other - 5%	State policy - 35%, Tuition fees - 45%, Quality of study programmes - 10%, Other - 10%

10	Does your organisation support international student mobility programmes?	Yes - 60%, No - 40%	Yes - 80%, No - 20%
11	Do you provide sufficient assistance to international students in adapting to a new country?	Yes - 55%, No - 45%	Yes - 75%, No - 25%
12	In your opinion, what role do international rankings and educational reports play in choosing a country for study?	A big role - 40%, Not very big - 30%, No role - 30%	A big role - 35%, Not very big - 50%, No role - 15%
13	What are the most common problems that international students face when studying in another country?	Cultural differences - 20%, Quality of infrastructure - 30%, Language problems - 25%, Other - 25%	Cultural differences - 30%, Quality of infrastructure - 25%, Language problems - 10%, Other - 35%
14	How do you assess the social conditions for international students in these countries?	Very good - 30%, Good - 20%, Average - 25%, Poor - 25%	Very good - 35%, Good - 45%, Average - 15%, Poor - 5%
15	How often do international students receive scholarships or other forms of financial support?	Yes - 40%, No - 60%	Yes - 70%, No - 30%
16	How often do you encounter problems with obtaining a visa or residence permit for international students?	Never - 30%, Sometimes - 20%, Often - 50%	Never - 30%, Sometimes - 50%, Often - 20%
17	How would you assess the process of cultural adaptation for international students during their studies?	Light - 40%, Moderate - 20%, Severe - 40%	Light - 40%, Moderate - 35%, Severe - 25%
18	Do you think that the education system in Kyrgyzstan/Czech Republic is conducive to the career development of international students?	Yes - 60%, No - 40%	Yes - 80%, No - 20%

19	If you had a choice, would you support studying in another country for the development of international education?	Yes - 50%, No - 50%	Yes - 70%, No - 30%
20	How do you assess the prospects for the development of export of educational services in Kyrgyzstan/Czech Republic?	Very high - 30%, Moderate - 50%, Low - 20%	Very high - 55%, Moderate - 25%, Low - 20%

Source: compiled by the authors.

Figure 1 - Comparative analysis between Kyrgyzstan and the Czech Republic



Source: compiled by the authors.

### 3.3. Recommendations for improving the development of international education in Kyrgyzstan

The Czech Republic has a more developed educational strategy that promotes the attraction of foreign students. It is important that Kyrgyzstan



develops a strategic plan for the development of international education, which will include not only marketing and promotion of education in the country, but also programmes that improve the quality of the educational process and infrastructure for students. In the Czech Republic, a whole system of assistance to foreign students has been created, including language courses, visa and accommodation advice, and social adaptation programmes. Kyrgyzstan should create similar programmes to provide students from other countries with proper support at all stages of their studies. One of the factors influencing the development of international education is funding, in particular the availability of scholarships and other forms of financial support for international students (Giyasova et al., 2025; Ismayilzade et al., 2021). It is important that Kyrgyzstan significantly increase the number of scholarships for international students, as well as create specialised financial programmes to support students from low-income countries.

Attracting international students to Kyrgyzstan could significantly increase the country's economic potential. However, this requires the creation of a funding system that includes both public and private scholarships, grants and loans. In addition, it is important to consider financial support options for those students who have the opportunity to work while studying, which will allow them to cover part of their living and study expenses. The language barrier is one of the main factors hindering the development of international education in Kyrgyzstan. It is recommended that Kyrgyzstan more actively introduce English into university curricula and create language training programmes for international students. This includes not only English courses, but also training in languages of international communication, such as Russian and Arabic, for students from these regions. This will reduce language barriers and make education more accessible to students from different countries.

It is recommended that attention be paid to improving the academic quality of programmes, in particular by expanding cooperation with international universities, creating joint exchange programmes and implementing international standards in educational processes. This will increase the competitiveness of programmes in the international market and attract more students. In addition, the infrastructure for students in the Czech Republic is provided at a high level – from dormitories to sports and cultural facilities, which facilitates student adaptation. Kyrgyzstan should actively work to create comfortable conditions for foreign students to live and study, including improving living conditions, access to medical services, sports and cultural facilities. Investments in student infrastructure should follow sustainability principles, prioritising energy efficiency, universal accessibility, and long-term usability of facilities, in line with global best

practices in sustainable campus development. Another significant problem for foreign students in Kyrgyzstan is the difficulty in obtaining visas and residence permits (Rexhepi and Murtezaj, 2024). According to the survey, 50% of respondents said that international students often face problems when applying for these documents. In the Czech Republic, this problem has been solved through a simplified procedure for obtaining visas and permits, which greatly facilitates the process of foreign students' stay.

Another important factor that stimulates international student mobility is the availability of career prospects. The Czech Republic has a well-developed system of internships and employment for international students, which allows them to gain valuable experience in the international labour market. In Kyrgyzstan, this aspect is underdeveloped, so it is important to pay attention to creating opportunities for students to participate in internships and training at local companies and international organisations. Embedding structured career development into international education also supports sustainable economic growth by cultivating globally competent graduates who contribute to innovation, entrepreneurship, and regional development.

## **4. Discussion**

The conducted research demonstrated that the export of educational services had a significant positive impact on the economic development of countries. These findings confirm the hypothesis that education serves not only a social but also a strategic economic role. This strategic role is crucial for sustainability, as international education fosters inclusive societies, reduces inequality, and boosts resilience to economic shocks. The results align with the conclusions of Abu Alfoul et al. (2024), who found that education was a key driver of economic growth in Sub-Saharan Africa, provided appropriate institutional support was in place. The research results also aligned with the work of Bah (2023), which showed that education contributed to long-term economic growth through increased labour productivity and the development of human capital. Aidaraliev and Madaliev (2025) emphasised that education underpins national identity and social capital, aligning with findings on education's role in export-driven economic growth. At the same time, the results coincided with the conclusions of Dragoi (2020), who drew attention to the differences between economic growth and development. These dimensions are central to sustainable development, which requires educational systems to deliver not only

economic dividends, but also social and environmental co-benefits over the long term.

The work of Fomba et al. (2023) found that the quality of institutions significantly amplified the effects of education on the economy. The identified correlation between the quality of education and economic growth also corresponded with the conclusions of Goczek et al. (2021), which showed that the level of workforce training determined a country's competitiveness at a global level. Gong (2024) proved that in response to global economic challenges, the education sector was becoming one of the most important resources for maintaining economic resilience. The research by Gruševá and Blašková (2022) established a positive link between investment in education and the economic development of the Visegrad Group countries, which corroborated the conclusions regarding the effectiveness of exporting educational services. The data obtained also corresponded with the work of Jungo (2024), who showed that state funding of education, alongside financial inclusion, played a crucial role in stimulating economic growth. A comparison with the research by Kalyuzhna and Dashkov (2023) revealed that the export of educational services could be considered part of a broader process of technological specialisation of exports. The results confirmed the observations of Kritikos (2024), who emphasised the importance of entrepreneurial activity, developed through the expansion of educational services.

Kučerová (2021) established that the quality of education had a direct and significant impact on the development of the knowledge economy. Li et al. (2024) demonstrated that the popularisation of higher education not only accelerated economic growth but also significantly reduced poverty levels, which confirmed the multiplier effect of exporting educational services. The results of the conducted research also corresponded with the observations of Nazukova (2020) regarding the role of state funding of education as one of the main drivers of economic growth. At the same time, within the framework of the conducted analysis, it was established that the export of educational services required not only financial support but also strategic planning and a clear vision of the long-term goals of the sector.

Data obtained by Novotný (2023) regarding expenditure on higher education in the Czech Republic indicated that investments in education had a high economic impact, provided there was effective management. The work of Pal (2023) argued that education remained a fundamental factor in economic development even in the context of the transformation of economic models, which coincided with the identified trend of stable demand for educational services on the international market. The research by Suzuki (2023) showed that the expansion of the export of educational

services contributed to the development of higher education in developing countries, which aligned with the conclusions regarding the need to intensify educational diplomacy. Schulz and März (2023) emphasised the role of lifelong learning as a factor in sustainable economic development. The research by Vafa et al. (2020) highlighted that in post-Soviet countries, the effectiveness of economic development largely depended on the level of education, which corresponded to the observations within the conducted analysis.

Yan et al. (2022) emphasised the importance of education for ensuring sustainable development and attracting foreign investment. The research by Xiao et al. (2024) demonstrated that the expansion of educational services contributed to the growth of human capital, which was fully consistent with the results obtained. However, the research also identified some discrepancies with individual works. For example, Bostan et al. (2022) emphasised that economic growth in Central and Eastern European countries was largely determined by external factors, whereas the research showed the significance of internal development through education. Thus, the export of educational services should be considered not only a mechanism of economic expansion, but also a structural element of sustainable national development strategies.

## **5. Conclusions**

The study collected a significant amount of data that allowed to clearly outline the current state of international education in Kyrgyzstan and the Czech Republic. First of all, an important result is that the Czech Republic is significantly higher than Kyrgyzstan in terms of support for international students. Around 70% of respondents in the Czech Republic noted that international students often receive assistance from universities and government agencies, while in Kyrgyzstan this figure is only 35%. Another important aspect is the financing of education. In the Czech Republic, 70% of respondents consider tuition fees to be moderate or affordable, making the country attractive to students from different countries. At the same time, in Kyrgyzstan, only 60% of respondents noted the affordability of higher education, which may indicate the need for additional public investment in education to increase its accessibility for international students. Another important aspect is the quality of education. The Czech Republic scores higher in this category, as about 40% of respondents rated the curriculum of their higher education institutions as high quality. In Kyrgyzstan, only 25% of respondents agreed with this statement.

In terms of language barriers, in the Czech Republic, the majority of respondents indicated that language problems are minimal, which again indicates the high level of internationalisation of education in this country. In Kyrgyzstan, the situation is somewhat more complicated: about 30% of respondents indicated that there were no language barriers. Another important aspect is the social conditions. The Czech Republic is higher than Kyrgyzstan in this category: 80% of respondents rated the conditions for students as excellent or good, while in Kyrgyzstan this figure is only 50%. The support provided to international students by universities or government agencies is another key aspect. In the Czech Republic, 70% of respondents reported that international students often receive support, compared to only 35% in Kyrgyzstan. This difference highlights the stronger institutional support available in the Czech Republic, which may contribute to a more positive experience for international students. In the Czech Republic, 80% of respondents indicated positive career prospects for international students, while in Kyrgyzstan only 60% indicated such prospects. This may indicate the need to develop professional programmes and internships for international students in Kyrgyzstan, which will facilitate their further integration into the labour market. Cultural adaptation for international students is also an important aspect. In the Czech Republic, 75% of respondents believe that international students adapt easily or moderately to a new culture, while in Kyrgyzstan this figure is only 60%.

In view of the findings, Kyrgyzstan was recommended to actively implement changes in its education policy, in particular through the development of international programmes, improving conditions for students and attracting additional financial resources. A limitation of the study is the narrow range of indicators analysed and the absence of a qualitative review of both countries' education policies. Prospect for further research is to study the opinions of students, teachers and administrators on the effectiveness of international educational integration.

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# *Fixed capital reproduction as a factor of sustainable development: Approaches, challenges and perspectives*

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## *Abstract*

The aim of this study was to investigate the reproduction of fixed capital as a factor of sustainable development, as well as to analyse the approaches, challenges and prospects in this area, focusing on the example of the United States, China, Spain, Italy, India, Syria, Libya, Vietnam, Mexico, Brazil, Germany, South Korea, Singapore, Denmark, Norway, Sweden. The study uses a combined approach that includes regression and comparative analysis, as well as systematic analysis to study the relationships between fixed capital reproduction and sustainable development, in particular economic, social, and environmental aspects. The study found that fixed investment fluctuated, with USD 33 trillion in 2018, increasing to USD 34 trillion in 2019, but declining to USD 30 trillion in 2020 due to the negative impact of the COVID-19 pandemic. In 2021, there was a partial recovery to USD 32 trillion, indicating the ability of economies to adapt to new conditions. Key findings show that the level of fixed investment is directly correlated with gross domestic product growth and job creation. For example, in Brazil, infrastructure investment created 1.5 million jobs in two years, while in India, the level of fixed investment reached 30% of gross domestic product, contributing 6% to economic growth. The study also developed recommendations for the reproduction of fixed capital in Kyrgyzstan. The conclusion emphasises the need for an integrated approach to investment strategies that takes into account economic, social and environmental factors to achieve sustainable development.

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## 1. Introduction

The problem of effective capital management becomes especially relevant against the backdrop of global challenges such as climate change, growing inequality and digitalisation. These factors challenge countries not only to maintain current production capacities, but also to adapt them to new conditions.

Existing research in this area emphasises the importance of capital reproduction as a tool to promote economic growth and improve the quality of life. For example, Melnyk et al. (2021) point out the importance of fixed capital investment in improving labour productivity and the sustainability of economies. Similarly, the work of Vysotska and Vysotskyi (2022) confirms that an increase in fixed capital investment leads to a significant increase in the gross domestic product (GDP) of countries. The study by Arsenijević and Perić (2021) also notes that effective management of fixed capital has a positive impact on economic growth.

Nevertheless, despite the extensive amount of research, many aspects of this process remain insufficiently studied. In particular, insufficient attention has been paid to the interaction between fixed capital reproduction and environmental factors, which creates gaps in understanding the complex impact of these processes on sustainable development. The study by Cheng and Adejumo (2021) shows that environmental aspects such as the use of renewable energy can significantly improve the efficiency of industries, but this requires additional investment in equipment modernisation.

Studies by Zapata-Cantu and González (2021) and Woźniak and Woźniak (2021), focus on individual aspects of capital reproduction, such as technological innovation or investment strategies. They also focus on the importance of strategic planning to achieve sustainable growth and minimise investment-related risks.

Valuable insights are also provided in the works of other researchers. For example, Chakraborty (2020) emphasises that focusing on technological innovation ignores social aspects such as the skill level of workers, which can lead to lower productivity in the long run. In turn, the work of Ganjoo and Verma (2021) reveals that insufficient attention to human capital during

capital reproduction processes can lead to increased unemployment and social discontent.

Additionally, the work of Ramazanov et al. (2022), Guteta and Worku (2022) analyses the impact of state programmes on investment in fixed capital, stressing that active participation of the state in financing infrastructure projects can significantly accelerate the processes of capital reproduction and create new jobs. This is confirmed by the study of Kurmaiev et al. (2020), who point out the need for a balanced approach between private and public investment to achieve sustainable economic growth.

Thus, the problem field of this study is to identify the approaches, challenges and perspectives of fixed capital reproduction in the context of sustainable development. This study analyses the existing approaches to the reproduction of fixed capital and their impact on economic growth, and identifies the key challenges faced by countries in the process of reproduction of fixed capital, including environmental and social aspects. Also, one of the objectives of the study was to develop recommendations for optimising the processes of reproduction of fixed capital taking into account current challenges and trends, including for Kyrgyzstan.

## **2. Materials and Methods**

This study used a combined approach, which includes both quantitative and qualitative methods. The time frame of the analysis covers the period from 2015 to 2023, which enables to assess the dynamics of fixed capital reproduction and its impact on sustainable development. The choice of this period is due to the significant changes in the world economy caused by both economic crises and increasing globalisation, which makes the analysis particularly relevant.

Data was collected through various sources, including reports from the World Bank (2024), International Monetary Fund (2020), and Organisation for Economic Co-operation and Development (2023). These organisations provide extensive data on macroeconomic performance, fixed capital investment and sustainability trends. Additionally, data from the International Labour Organization (2023) and the United Nations (2024) were used, which offer information on social and environmental aspects affecting capital reproduction. Studies published in BloombergNEF (2024) and Korea Smart City Project (2023) were also important sources.

The analysis covers the following countries: the United States (Bureau of Economic Analysis, 2021), China (National Bureau of Statistics of China,

2023), Spain and Italy (Organisation for Economic Co-operation and Development, 2023), India, Syria, Libya, Vietnam and Mexico (International Monetary Fund, 2020), Brazil (Brazilian Institute of Geography and Statistics, 2020), Germany, South Korea, Singapore, Denmark, Norway and Sweden (McKinsey Sustainability, 2023). These countries were chosen because they represent a wide range of economic systems, levels of development, and different approaches to capital reproduction and sustainability. The countries were selected based on their diverse economic systems, levels of development, and varying approaches to capital reproduction and sustainability. This range allows for a comprehensive comparison of different models and practices across both developed and developing economies, highlighting key trends and challenges in fixed capital reproduction.

Regression analysis was used to investigate the relationships between the reproduction of fixed capital and indicators of sustainable development. This method helps to determine which factors most significantly influence this process, as well as to identify potential patterns and trends. Comparative analysis, in turn, allowed to compare different models of fixed capital reproduction in different countries. This approach helps to identify best practices and adapt successful capital management models to the specific conditions of other countries.

A systems analysis approach was used to interpret the results. This approach identifies the interrelationships between the various factors affecting the reproduction of fixed capital, including economic, social and environmental aspects. It also helps in identifying key factors that facilitate or hinder the integration of sustainable development principles into fixed capital management practices.

### **3. Results and Discussion**

#### *3.1. Dynamics of fixed capital reproduction*

Analysing the changes in fixed capital investment shows significant fluctuations from 2018-2021. According to World Bank (2024), total fixed capital investment worldwide increased from USD 33 trillion in 2018 to USD 34 trillion in 2019, but declined to USD 30 trillion in 2020, driven by the COVID-19 pandemic. This decline was driven by multiple factors, including business closures, reduced consumer demand, and uncertainty about future economic prospects. The pandemic has been a catalyst for changing approaches to business and investment, forcing companies to rethink their strategies and adapt to new conditions.

For many small and medium-sized enterprises (SMEs) that did not have sufficient financial reserves, this situation led to serious financial difficulties. In the US, over 30% of small businesses closed temporarily or permanently during the early months of the pandemic. This significantly reduced fixed capital investment (Bureau of Economic Analysis, 2021). Companies started rethinking their business models, focusing on digitalization, automation, and remote work. This shift led to more investment in the IT sector and a change in the economic investment structure.

According to McKinsey Sustainability (2023), companies that invested in digitalization and automation survived while boosting their productivity. In the logistics and manufacturing sectors, automated systems cut lead times by 20-30%. This improvement helped increase profits and gain market share, highlighting the importance of strategic investments in the new environment.

In 2021, there was a rise in investments in green technologies and sustainable energy. BloombergNEF (2024) reports that global clean energy investment hit a record \$500 billion in 2020, which was a 9% increase from 2019. This growth shows a shift in priorities among public and private investors who recognize the need to combat climate change and adopt sustainable production methods. Countries wanting to lower carbon emissions actively developed renewable energy projects, such as solar and wind farms.

There was a gradual economic recovery in 2021, which, however, was not homogeneous across countries and sectors. Countries that were able to quickly adapt to the new conditions and innovate have started to recover faster. For example, in China, fixed capital investment increased by 7% in 2021, contributing to GDP growth of 8.1% (National Bureau of Statistics of China, 2023). On the other hand, global trends show that in many countries, including those with slower recovery like Italy and Spain, investment remained below pre-crisis levels, reflecting broader challenges in capital formation (Table 1). This global investment trend highlights the ongoing difficulties in revitalizing economies, particularly in regions facing structural policy limitations and slower adaptation to post-pandemic conditions.

*Table 1 – Volume of fixed capital investment worldwide*

<i>Year</i>	<i>Volume of investments in fixed assets (trillion USD)</i>
2018	33
2019	34
2020	30
2021	32

*Source:* Compiled by the authors based on Organisation for Economic Co-operation and Development (2023).

While the growth in fixed capital investment may have contributed to job creation, the quality of these jobs and the mismatch between the skills of the workforce and market demand remain concerns. Many of the new jobs created in rapidly recovering sectors, such as digitalization and automation, require higher skill levels, which may not align with the existing workforce's capabilities. This skills gap could potentially hinder long-term sustainable growth, as workers may need significant retraining to meet the evolving needs of industries investing in advanced technologies.

Key trends affecting fixed capital formation include changes in tax policy, levels of political stability, and shifts in global trade. India's 2019 tax incentives for manufacturers, which included reduced corporate tax rates and accelerated depreciation on plant and machinery, boosted investment by 15%, contributing significantly to the growth of the manufacturing sector. The "Make in India" initiative, aimed at promoting India as a global manufacturing hub, further attracted international factories, increasing both foreign direct investment and domestic production capacity (International Monetary Fund, 2020). These measures, while effective in stimulating short-term investment, may only yield sustained growth if accompanied by broader institutional reforms, such as improvements in infrastructure, labor market flexibility, and regulatory frameworks. Without these structural enhancements, the long-term impact on fixed capital formation could be limited.

Regional instability, especially in the Middle East, continues negatively impacting investment volumes. In countries like Syria and Libya, investment has nearly stopped due to civil conflicts. As global challenges like climate change and pandemics arise, political stability becomes more important, as investors look for safe and predictable markets.

Investment fluctuations relate to changes in market conditions, shifts in supply and demand, and global crises. The 2019 US-China trade war cut manufacturing investment in both countries (Bureau of Economic Analysis, 2021). Companies diversified their production chains by moving facilities to lower-cost countries like Vietnam and Mexico, which changed global supply chains and has lasting economic effects (World Bank, 2024).

Global economic conditions greatly influence the investment climate (Krylovskiy, 2024; 2025). Low interest rates enable easier borrowing to promote growth, while high inflation raises input costs and reduces investment. In 2021, central banks increased rates in response to inflation, which impacted investment decisions. Fixed asset investment is also shaped by interest rates, inflation, and access to credit.

Thus, the dynamics of fixed capital reproduction represent a complex process influenced by political and economic stability as well as global



trends. More research is needed to uncover the less obvious relationships and mechanisms involved.

3.2. Relationship with sustainable development indicators

Reproduction of fixed capital has a significant impact on economic growth and employment. Studies show that an increase in fixed capital investment is directly linked to GDP growth and job creation. For example, in India, the level of fixed capital investment reached 30% of GDP in 2019, contributing 6% to GDP growth (International Monetary Fund, 2020). In Brazil, infrastructure investment led to the creation of over 1.5 million jobs in the construction sector in two years (Brazilian Institute of Geography and Statistics, 2020). These data emphasise the importance of investment in infrastructure projects in driving economic growth and job creation in key sectors (Table 2).

Table 2 – Impact of investment on employment and GDP

Country	Level of investment (%) of GDP	GDP Growth(%)	Jobs created (million)
India	30	6	1.8
Brazil	25	4.5	1.5
Germany	21	2.8	0.7
South Korea	23	3.5	0.9
Singapore	30	5.2	0.6

Source: Compiled by the authors based on International Monetary Fund (2020).

The correlation between capital reproduction and environmental performance is also an important aspect. Increased investment can lead to higher CO<sub>2</sub> emissions if environmental factors are not taken into account. For example, in China, CO<sub>2</sub> emissions increased by 2% in 2019 despite significant investment in infrastructure (National Bureau of Statistics of China, 2023). Adopting clean energy technologies and switching to renewable energy sources can significantly change the emissions picture and lead to positive environmental outcomes (Caglar et al., 2025; Iurchenko et al., 2024). A sustainable approach to capital reproduction is becoming increasingly important for long-term economic stability. Integrating environmental and social criteria into investment decisions can lead to more sustainable development and improved quality of life (Pata, 2025; Hadasik et al., 2025). For example, adopting green technologies in the energy sector

can not only reduce carbon emissions, but also create new jobs in renewable energy.

It is worth noting that investments in environmental technologies can lead to significant economic benefits. According to a report by the World Economic Forum (2024), shifting to a sustainable economy could create up to 24 million jobs by 2030 through the Green Economy Initiative alone. This emphasises the need to actively incorporate sustainable practices into business practices.

Moreover, it is important to emphasise that successful capital reproduction requires an integrated approach that includes not only economic, but also social and environmental aspects. This is because investments in fixed capital can often have unpredictable consequences for the environment and society. For example, the growth of energy projects can lead to improved living conditions in regions, but can also cause negative consequences such as environmental degradation and socio-cultural tensions. Therefore, it is important to conduct environmental impact assessments early in the design and implementation of investment projects in order to minimise potential negative effects.

### *3.3. Comparative analysis of reproduction models*

Comparative analysis of fixed capital reproduction patterns reveals significant efficiency differences across countries. Germany and Singapore reach high efficiency by using innovative technologies and sustainable practices. In Germany, the “Industry 4.0” concept has prompted more than 70% of manufacturing companies to implement digital technologies. This has reduced costs and raised efficiency (Organisation for Economic Co-operation and Development, 2023).

The identification of best practices in capital reproduction shows that successful models can be applied in other countries. South Korea's smart city technologies reduced energy consumption by 20% while improving residents' quality of life (Korea Smart City Project, 2023). Singapore's “City of Tomorrow” programme promotes sustainable urban infrastructure through green spaces, optimized traffic flows, and smart lighting technologies (Cities of Tomorrow, 2017).

Countries adopting innovative, sustainable approaches show superior economic growth and quality of life (Khan et al., 2025; Ketners et al., 2025). Denmark exemplifies this by achieving 47% electricity production from renewable sources in 2020, among the world's highest rates (Organisation for Economic Co-operation and Development, 2023). This demonstrates

how renewable energy investment creates jobs while reducing fossil fuel dependence.

Successful financing schemes also merit consideration. Norway and Sweden actively use “green bonds” to fund environmental protection and climate change projects (World Bank, 2024). These instruments promote green investment growth while raising public awareness about sustainable development importance.

However, not all countries can easily adopt successful practices from others. Adapting capital reproduction models requires considering local conditions, cultural aspects, and development strategies, including workforce training, innovative infrastructure building, and local market development. Adaptation necessitates examining both external factors and internal economic structure, including education systems, finance access, and technological readiness levels (Table 3).

*Table 3 – Comparative analysis of countries in terms of efficiency of fixed capital formation*

Country	Investment rate (%) of GDP	Innovation ranking	Employment rate (%)	Environmental performance (CO <sub>2</sub> /GDP)
Germany	21	1	75	0.2
Singapore	30	5	70	0.3
South Korea	23	6	67	0.25
Denmark	19	3	72	0.15
India	30	48	54	0.5
Norway	24	2	70	0.1

*Source:* Compiled by the authors based on United Nations (2024).

Table 3 shows a comparative analysis of countries in terms of efficiency of reproduction of fixed capital and provides several key findings. Singapore and India have the highest level of fixed capital investment (30% of GDP), indicating a desire for economic growth. At the same time, Germany and Denmark show lower investment, which can be attributed to their developed economies. South Korea tops the innovation ranking, which contributes to its competitiveness. High employment rates in Germany and Denmark (75% and 72% respectively) indicate stable labour markets, while India and South Korea have lower employment rates.

Norway stands out with low CO<sub>2</sub> emissions per unit of GDP (0.1), indicating its sustainable development, while India faces high emissions (0.5), which requires attention to environmental issues. Overall, the efficient reproduction of capital depends on a combination of investment, innovation,

employment and environmental performance, emphasising the need for integrated strategies for sustainable development.

### *3.4. Impact of investment in research and development (R&D) on economic growth*

The findings show that investment in R&D plays a key role in the economic growth of countries. The data analysis shows that countries with high shares of R&D investment, such as South Korea and Denmark, have higher productivity growth and patents per capita. This indicates that investment in innovation contributes to the creation of new technologies and improved production processes, which in turn affects the overall competitiveness of the economy.

Institutional factors play a key role in supporting or hindering the process of capital reproduction, particularly in the context of sustainable development. Effective institutions that provide a stable legal framework, transparency, adequate protection of property rights, and fair regulation create conditions for long-term investment. They promote the integration of environmental, social, and economic standards into capital investment processes, which is necessary to achieve sustainable development. Weak institutions and unstable regulations can hinder investment, limit access to finance, and reduce confidence in the economy, leading to lower capital reproduction efficiency and slower environmental and social transformation (Kraievskiy, 2024).

A study conducted by Tadevosyan et al. (2023), Inojosa et al. (2024) emphasises that countries that make high investments in R&D show significant improvements in their economic productivity and innovation performance. The authors analyse data from 30 countries and show that increasing the share of R&D in GDP contributes to GDP per capita growth. The study highlights key factors, such as efficient resource allocation and government support, that contribute to this process.

India, despite a relatively low level of R&D investment at 0.7% of GDP, has an impressive productivity growth of 5.0%. Delima et al. (2019) argues that in developing countries like India, there may be alternative ways to achieve high productivity growth that do not necessarily depend on the amount of R&D investment. He emphasises that human capital development and access to education have a significant impact on economic growth, even when the level of investment in R&D is low.

Nikolić and Antonijević (2020) and Malhotra and Dobriyal (2023) also note that a number of countries can achieve significant economic growth through the efficient use of available resources and the development of the

services sector. They cite examples such as Singapore, where a focus on service and education development has been a major driver of economic growth. The authors stress that in the context of globalisation, service-oriented countries can experience higher growth rates than those that focus on the manufacturing sector.

In a study by Yarmatov and Jumayev (2022), Adamkulova et al. (2025) point out that underinvestment in R&D can lead to stagnation and reduced international competitiveness. The examples of Latin American countries that, despite having natural resources, have not achieved significant economic growth due to insufficient investment in innovation and R&D are discussed. The author emphasises that in order to achieve economic growth in such countries it is necessary not only to increase investment in R&D, but also to develop innovation infrastructure.

Research shows that countries actively investing in R&D demonstrate higher economic growth rates. Zhakupov et al. (2021) and Makovoz and Haiduk (2020) examine Israel's strategic investment allocation to key sectors, emphasizing targeted investment for specific innovation goals rather than mere volume increases.

Singh et al. (2020) and Spangenberg (2019) demonstrate that alternative growth models based on SME development can succeed in countries with low R&D investment levels. SMEs play crucial roles in innovation processes and can drive economic growth with limited resources through government-SME cooperation models (Bashtannyk et al., 2020; Tiurina et al., 2023).

Prados-Peña et al. (2019), Osmonkulova et al. (2025) emphasize the importance of government regulation and creating innovation infrastructure. Countries that actively support start-ups and small innovative enterprises experience higher growth rates by combining financial support with favorable R&D environments. The study shows that managing fixed capital in a way that considers both economic and social factors, including labor conditions and employee skills, greatly improves efficiency.

Nurlanova et al. (2024) examine how international R&D cooperation affects economic growth. Countries that take part in international research projects gain access to new technologies and knowledge, which helps foster innovative growth. European Union cooperation examples show significant R&D investment increases.

Zhironkin et al. (2021) and Petrivskiy and Medvid (2022) investigate digitalization's R&D impact, finding that digital technology integration significantly improves R&D efficiency through lower costs and faster product development.

However, success isn't always directly related to R&D investment levels. Human capital availability, education system quality, strategic resource

allocation, and government support significantly impact productivity and living standards (Kichurchak, 2024; Vasyl'yeva et al., 2023).

An integrated R&D development approach including increased investment, infrastructure, education, and innovative enterprise support can significantly improve economic success chances, particularly for developing countries where effective resource management yields significant results despite limited budgets. Country-specific considerations remain crucial, as contextual factors significantly alter outcomes.

### *3.5. Recommendations for future research directions*

Based on the analysis, practical recommendations for policymakers and business structures have been developed. It is important to integrate sustainable approaches into strategic planning and investment decisions. For example, Norway has developed a “Green Transition” strategy to reduce greenhouse gas emissions and shift to sustainable energy sources. This includes the development of infrastructure for electric vehicles and the introduction of renewable energy sources such as wind and solar farms.

The need to integrate sustainable practices into capital management is supported by the study of Makovoz and Haiduk (2020), which emphasises the importance of sustainability in investment strategy. Successful examples of integrating sustainable practices, such as the research of Kabiru and Goni (2023), demonstrate positive impacts on economic and environmental outcomes. For example, companies that actively adopt sustainable practices often see an increase in their reputation and consumer trust, which in turn leads to increased sales and revenues.

Identifying areas for further investigation is also an important part of future research. Methodological approaches based on analysing the missing aspects identified in the literature can help in developing more effective capital reproduction and sustainability strategies. This includes examining the impact of new technologies such as artificial intelligence on capital reproduction and sustainability, as well as exploring the social implications of new technologies in different contexts.

Further research could also focus on how different countries adapt their investment strategies in response to changes in the global economy, as well as assessing the long-term effects of sustainable practices on economic growth and social welfare. Additionally, attention should be paid to the impact of climate change on investment decisions, which may be a key factor in the future. For example, analysing how different countries are responding to climate change and how investments in sustainable infrastructure play a

role in this can provide new insights for shaping effective investment policies.

*Table 4 – Impact of investment on living standards and social development*

Country	Human Development Index (HDI)	Poverty rate (%)	Access to education (%)	Access to clean water (%)
Germany	0.947	5	100	100
Singapore	0.935	2	99	100
South Korea	0.906	7	97	99
Denmark	0.940	6	100	100
India	0.645	22	75	88
Norway	0.961	4	100	100

*Source:* Compiled by the authors based on International Labour Organization (2023).

Table 4 demonstrates how the level of fixed capital investment correlates with the social development of countries. Countries with high investment, such as Germany, Singapore and Norway, have high HDIs, indicating high living standards, access to education and clean water. At the same time, India, with investment levels comparable to the leading countries, performs lower on these criteria, indicating the need to improve social infrastructure and quality of life for citizens.

This analysis examines the impact of R&D investment on different economies. Key indicators include the share of R&D investment in GDP, patents per capita, productivity growth and living standards measured by HDI. These data allow us to assess how innovation investment contributes to economic growth and quality of life in different countries (Table 5).

*Table 5 – Investment in innovation and its impact on the economy*

Country	Investment in R&D (% of GDP)	Number of patents per capita	Productivity growth (%)	Standard of living (HDI)
Germany	3.0	12	1.5	0.947
Singapore	2.5	9	2.0	0.935
South Korea	4.0	14	3.0	0.906
Denmark	3.5	11	2.5	0.940
India	0.7	0.5	5.0	0.645
Norway	2.2	8	1.8	0.961

*Source:* Compiled by the authors based on International Monetary Fund (2020).

Table 5 shows the link between R&D investment and economic growth. Countries like South Korea and Germany, which invest heavily in R&D, display high productivity growth rates and a significant number of patents per capita. This highlights how innovation drives economic competitiveness. At the same time, India, with its low level of R&D investment, performs less well in these areas, indicating the need to increase investment in innovation to achieve sustainable economic growth.

Effective R&D investment drives economic growth and social welfare, particularly in healthcare, enhancing quality of life and life expectancy (Inozemtsev, 2024; Malanchuk et al., 2024). An integrated approach to capital reproduction, addressing economic, social, and environmental factors, is essential. Given challenges like climate change and economic instability, sustainable development requires collaboration between policymakers and business leaders to support innovation and infrastructure. In a world of globalization and economic interdependence, fixed capital investment is critical for both individual countries and the global economy (Varnaliy et al., 2016; Tleubayev et al., 2024). Sustained growth in one country can foster economic development in other countries and create new opportunities for trade and cooperation. Improving infrastructure in developing countries enhances transport and logistics chains, making global supply processes more efficient and lowering costs for international businesses. Kyrgyzstan needs to increase infrastructure investment in roads, bridges, and energy facilities to strengthen its transport and logistics systems. It is essential to create favorable conditions for foreign investors by simplifying business registration and offering tax incentives for key industries.

Technology significantly affects capital reproduction (Nunes and Sytnychenko, 2024; Issayeva et al., 2024). With the rapid growth of AI, blockchain, and IoT, companies must change and streamline their processes. Introducing AI in production can increase efficiency and lower costs, leading to higher fixed capital investment. Kyrgyzstan should focus on developing digital technologies and innovative start-ups that can integrate into global supply chains and attract investment.

To ensure sustainable growth, the dynamics of fixed capital reproduction need constant monitoring and analysis. This helps identify trends and adapt to changes in the economic environment, fostering more equitable and sustainable societies for future generations.

## 4. Conclusions

This study revealed that fixed capital reproduction dynamics are closely



tied to R&D investment and economic growth. COVID-19 caused fixed capital investment to drop to \$30 trillion in 2020 due to business closures and reduced demand, but recovery to \$32 trillion in 2021 demonstrated economic adaptability. Investment in digitalization and green technologies drove this recovery. Companies that transformed their business models and adopted new technologies-maintained operations while boosting productivity. McKinsey data shows automation reduced lead times by 20-30%, contributing to profit growth.

Fixed capital investment correlates directly with GDP growth and job creation, as evidenced in India and Brazil. Brazil's infrastructure investment alone created over 1.5 million construction jobs in two years, highlighting infrastructure's economic importance. However, the study emphasized integrating environmental factors into investment strategies. Rising CO2 emissions in some countries underscore the need to balance economic growth with sustainability. Clean energy adoption could create up to 24 million jobs by 2030, demonstrating sustainable development's economic benefits.

Comparative analysis showed successful models like Germany's "Industry 4.0" and Singapore's "City of Tomorrow" can guide other countries, though local adaptation is essential. For Kyrgyzstan, recommendations include infrastructure investment, R&D development, and environmental integration to create a sustainable, adaptable economic model.

Future research should examine AI's impact on capital reproduction efficiency and climate change effects on investment strategies. Study limitations include regional data gaps and difficulty assessing long-term sustainable practice effects.

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# *From ESG integration to strategic resilience: Rethinking corporate financial governance*

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Alla Tkachenko<sup>\*\*\*\*</sup>, Mykhailo Yanushkevych<sup>\*\*\*\*\*</sup>

## *Abstract*

The purpose of this study is to evaluate the effectiveness of implementing sustainable practices in corporate financial management, with particular attention to their impact on strategic planning, financial performance, and long-term resilience. The research methodology combines a review of current approaches to environmental, social, and governance (ESG) integration with an analysis of international practices and frameworks. The findings of the study indicate that the adoption of sustainable practices in corporate financial management plays a crucial role in ensuring the long-term stability of companies. However, the implementation process is met with several challenges, including resistance to change, significant financial costs, and a lack of expertise in sustainable development. Integrated strategies that incorporate ESG factors contribute to improved financial planning, reduced risks, and enhanced business appeal to investors. Overall, the study underlines the importance of embedding sustainable practices into corporate financial governance to support efficient resource allocation, increased transparency, and sustainable value creation.

*Key words:* integration of balanced decisions; operational productivity; strategic planning; system performance; sustainable development.

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# 1. Introduction

In the context of rapid changes in the global economic and business environment, sustainable practices in corporate financial management are becoming increasingly significant. In the face of global transformations and rising requirements for social and environmental responsibility, as well as financial resilience, traditional management approaches are becoming less effective. The absence of clear mechanisms for evaluating the implementation of sustainable solutions, combined with the challenges of incorporating them into corporate financial strategies, underscores the need to develop new approaches to ensure long-term stability and growth.

Integrating Environmental, Social, and Governance (ESG) indicators is vital for evaluating a company's impact on sustainability through quantifiable metrics that support financial planning and risk management. ESG, while a tool for assessing performance, is part of a broader corporate sustainability strategy that combines ESG indicators with long-term economic, social, and environmental goals. Corporate social responsibility (CSR) provides the ethical basis for these initiatives, emphasizing voluntary acknowledgment of social and environmental impacts. This study distinguishes between ESG as a practical mechanism, corporate sustainability as a strategic objective, and CSR as the moral framework that supports sustainable practices, clarifying their interplay in achieving both operational efficiency and sustainable development.

The study by Zaitseva (2019) highlights the use of innovative solutions for resource efficiency and energy-saving technologies in corporate governance, aiming for sustainable development across diverse businesses. Zhytar (2024) emphasizes that integrating environmental, social, and governance (ESG) factors improves financial stability, competitiveness, and lowers operational and reputational risks for companies. Drozhzhyn (2024) developed methodological approaches to enhance strategic planning with consideration of ESG aspects. Barauskaite and Streimikiene (2021) confirmed that corporate social responsibility initiatives can contribute to improved financial performance, particularly through the enhancement of corporate image and reputation.

Mio et al. (2022) investigated the impact of sustainable development tools, including balanced scorecards (BSC), on corporate management. Chofreh et al. (2020) examined the significance of integrating sustainable practices into corporate management to ensure long-term viability. Barbosa et al. (2020) developed a sustainable strategic management model tailored to small businesses. Almagtome et al. (2020) found that the interaction between corporate governance quality and stakeholder pressure significantly



influences sustainability reporting. Shahzad et al. (2021) assessed the impact of knowledge management on the implementation of green innovations in manufacturing firms, demonstrating that effective knowledge management significantly enhances social, economic, and environmental sustainability indicators. Scherer and Voegtlin (2020) analysed the role of responsible innovation in addressing social and environmental challenges through effective corporate governance models.

This study focuses on evaluating the impact of sustainable practices on the effectiveness of corporate financial management, with particular attention to developing approaches for integrating these practices into corporate financial strategies. Such integration has the potential to enhance business sustainability and performance in conditions of economic uncertainty. To fulfil its aims, the document sets objectives to analyse current methods of integrating sustainable practices in corporate financial management; identify challenges in embedding these solutions in governance; assess the effects of sustainability on financial performance and long-term growth; compare existing evaluation models for sustainable practices; explore international best practices for local adoption; and develop recommendations for improving management strategies to integrate sustainability in financial management. The study introduces a conceptual framework – the ESG-Governance Triangle – designed to capture the interconnection between ESG integration capacity, governance quality, and economic resilience. This framework serves as a methodological basis for linking sustainable management practices with the effectiveness of corporate financial decision-making and the overall resilience of organisations.

## **2. Materials and Methods**

To analyse contemporary approaches to integrating sustainable practices into corporate financial management, a study was undertaken of existing methods and strategies used to incorporate sustainable development principles into strategic planning and managerial decision-making processes. The aim was to understand how companies apply these practices to ensure financial sustainability and to evaluate their impact on long-term planning and the effectiveness of management decisions. Simultaneously, the study explored the main challenges associated with the implementation of sustainable solutions in corporate governance, particularly in the context of adapting to changing economic conditions and increasing demands for environmental responsibility.

To conduct a comparative analysis, a detailed examination was carried out of existing models used to assess the effectiveness of implementing sustainable solutions within corporate settings. These included the Triple Bottom Line (TBL), BSC, ESG metrics, Social Return on Investment (SROI), and Life Cycle Assessment (LCA). The analysis considered the practical application of each model, evaluating their strengths and limitations across various companies and industries. A study of international approaches to the implementation of sustainable practices in corporate management was also conducted. The research examined the barriers to implementing these practices and the strategies employed to overcome them, while also identifying effective models for integrating sustainable solutions into corporate governance. Based on the analysis, several recommendations were developed to enhance management approaches to integrating sustainable practices into corporate financial management.

To bridge the theoretical and practical perspectives on sustainability-orientated corporate management, this study introduces a simplified conceptual model – the ESG-Governance Triangle. The model is designed to capture the dynamic interrelationship between the organisation's capacity to integrate ESG principles, the quality of its strategic governance, and its level of economic resilience. Within the methodological framework of the study, the ESG-Governance triangle serves as an analytical tool that systematizes and visualizes the key determinants of effective ESG integration into corporate financial management. It reflects how the organisation's ability to embed environmental, social, and governance considerations in its systems, culture, and technologies interacts with the coherence, adaptability, and long-term orientation of financial decision-making processes. At the same time, the model illustrates how these interactions influence the company's economic resilience, which is defined as its ability to maintain stable performance under uncertainty, preserve investor confidence, and sustain reputational strength. This conceptual framework provides a structured basis for assessing how ESG integration mechanisms and governance quality jointly contribute to corporate sustainability and supports the comparative analysis developed in the subsequent sections of the study.

For the comparative analysis of existing models for assessing the effectiveness of sustainable practices in corporate environments, data were drawn from international sources such as the United Nations Development Programme (2025), and the European Environment Agency (n.d.). These sources supported the analysis and enabled a more accurate evaluation of the impact of sustainable practices on corporate management and the financial performance of companies. To explore international experience in the

implementation of sustainable practices in corporate governance, information was gathered from the United Nations (2010), the European Commission (2023), and official reports of the Organisation for Economic Co-operation and Development (2020; 2024). This allowed for an in-depth analysis of global trends in sustainable development, the identification of best practices, and the assessment of opportunities for adapting these practices to local contexts in order to enhance corporate competitiveness and sustainability.

3. Results

Modern economic realities require companies to implement sustainable practices in financial management, contributing to their long-term stability and enhanced competitiveness. Emphasis on ESG criteria is transforming approaches to strategic planning and financial decision-making, ensuring the responsible use of resources and the minimisation of risks. An analysis of contemporary approaches to the implementation of sustainable practices in corporate financial management enables the identification of their impact on companies’ financial policies and facilitates the assessment of the effectiveness of tools that support the integration of financial and socio-environmental objectives (Table 1).

Table 1 – Contemporary approaches to the implementation of sustainable practices in corporate financial management and their impact on strategic planning and decision-making

Approach	Approach core	Impact on strategic planning	Impact on decision making
ESG factors integration	Integration of ESG considerations into financial planning	Formulation of strategies aimed at long-term stability and alignment with international standards	Assessment of risks associated with environmental and social challenges, with investment decisions made in consideration of ESG factors
Responsible investment	Utilisation of instruments such as green bonds and socially responsible investment funds	Reorientation of capital investments towards environmentally and socially responsible projects	Selection of investment objects based on their long-term impact on business sustainability

Financial sustainability assessment	Analysis of non-financial indicators and their impact on the company's financial performance	Optimisation of costs and enhancement of operational efficiency	Utilisation of non-financial data to evaluate profitability and risk
Sustainability risk management	Identification and mitigation of risks associated with climate change, social responsibility, and regulatory compliance	Development of strategies to mitigate adverse impacts on business resulting from changes in the external environment	Decision-making processes that account for potential ESG risks and their influence on financial outcomes
Sustainable financial management digitalization	Application of modern analytical tools to evaluate ESG indicators	Implementation of automated systems for sustainability analysis and financial forecasting	Application of big data and artificial intelligence to support ESG-based decision-making

*Source:* Created by the authors based on Kaizen (2025).

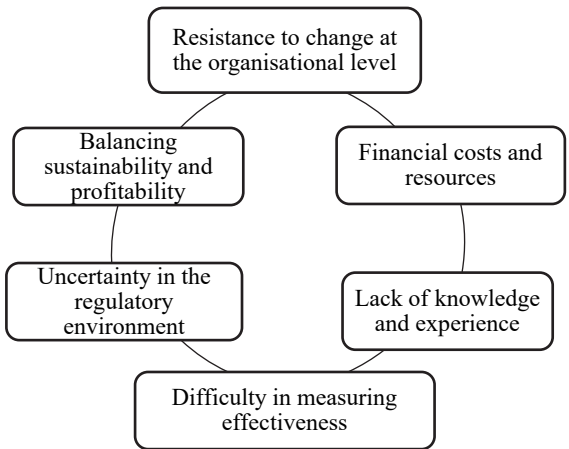
ESG integration is defined as a management process that systematically incorporates environmental, social, and governance factors into financial planning, risk assessment, and decision-making. It enhances corporate governance by increasing transparency, accountability, and management efficiency, while also fostering long-term capacity for sustainable development. Thus, ESG integration serves both an operational role as a management mechanism within corporate financial systems and a strategic role in developing a sustainable business model that maintains competitiveness amid uncertainty.

The inclusion of ESG aspects enables companies to better evaluate risks and opportunities that extend beyond traditional financial analysis. As a result, they are able to formulate more balanced strategies that address societal and environmental needs while also delivering economic benefits. Consequently, companies that implement ESG principles are better positioned to attract investment and enhance their competitiveness in the marketplace. On the other hand, responsible investing and the use of financial instruments to assess sustainability also contribute to enhancing financial stability, but are often constrained by short-term objectives or limited investment volumes.

The integration of sustainable solutions into corporate management represents one of the most pressing challenges for contemporary business. In

the context of rapid economic transformation and increasing demands for social responsibility and environmental sustainability, enterprises are increasingly compelled to adopt sustainable management practices (Shahini et al., 2025). These practices encompass not only environmental and social considerations but also the assurance of long-term economic development. However, the integration process is often accompanied by a range of challenges, including shifts in corporate culture and difficulties in maintaining financial stability and operational efficiency. Identifying the key issues associated with this integration is a critical step in the formulation of effective corporate management strategies aimed at sustainable development (Figure 1).

*Figure 1 – Challenges in integrating sustainable solutions into corporate governance*



*Source:* Created by the authors based on Rose (2024), Hobbs (2024).

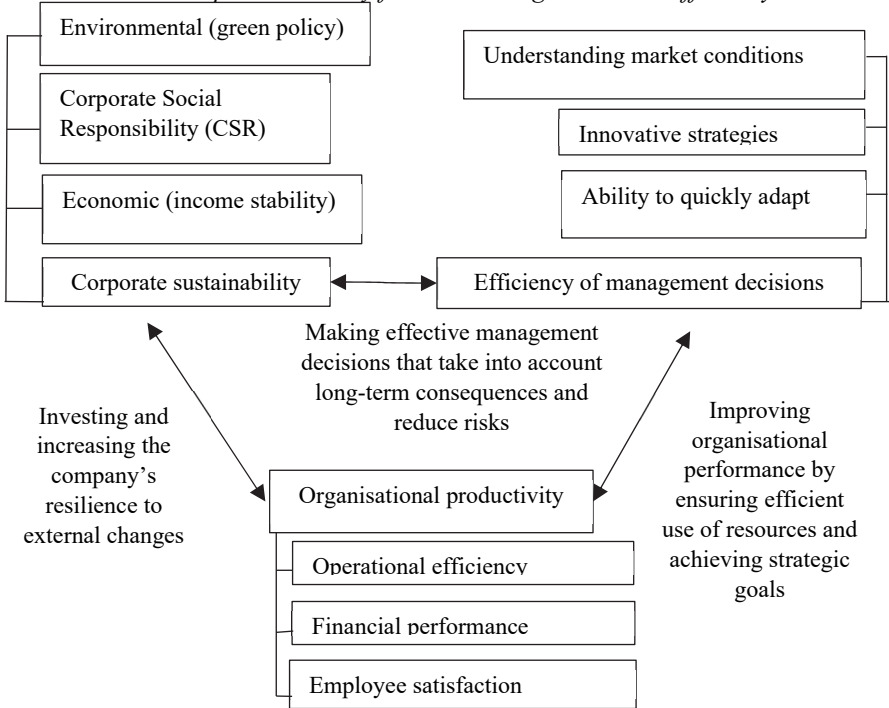
Integrating qualitative measures, such as leadership culture and ethical climate, into ESG performance assessments is methodologically sound, as these factors determine the sustainability of ESG principles in corporate practice. Traditional ESG assessment focuses on quantitative indicators, but the inclusion of qualitative aspects, such as surveys and expert assessments, broadens the understanding of ESG performance, making the assessment more substantive. This provides a deeper internal understanding of the processes, values, and behavioral patterns that influence the sustainability of an organization.

Another critical challenge lies in the associated financial costs and resource demands. The adoption of sustainable solutions typically requires

considerable investment, both in financial terms and human capital (Lis et al., 2024). As the outcomes of these initiatives may only become evident over time, it can be difficult to evaluate their immediate impact. This complicates the monitoring process and makes it harder to justify the necessity of these changes during the initial stages. Another significant challenge is the uncertainty surrounding the regulatory environment. Frequent changes in legislative and regulatory requirements related to sustainability compel companies to continually adjust their strategies and approaches.

In today's dynamic business environment, an organisation's ability to maintain stability and adapt to change is a critical determinant of its success and continued growth (Kerimkhulle et al., 2022a; 2022b; Jakubik et al., 2017). An analysis of the interrelationship between corporate sustainability, management effectiveness, and productivity enables a deeper understanding of how these elements interact to support the long-term competitiveness of an organisation (Figure 2).

Figure 2 – Challenges in integrating sustainable solutions into corporate governance: relationships between key factors and organisational efficiency



Source: Created by the authors based on Directors' Institute (2024).

Making effective management decisions under these conditions requires consideration of numerous factors, including shifts in the market environment, opportunities for innovation, and the organisation's capacity for rapid adaptation. In addition, corporate sustainability has a direct influence on the effectiveness of management decisions. A company's sustainability equips it with the capacity to make informed decisions that consider long-term consequences and help mitigate risks (Ketners et al., 2024; Matskiv et al., 2025). The effectiveness of management decisions is closely linked to organisational productivity. When decisions are informed by a thorough analysis of the company's actual needs and capabilities, they enable the most efficient allocation and utilisation of resources, thereby enhancing productivity (Kerimkulov et al., 2015).

The implementation of sustainable solutions requires not only changes to internal processes but also the development of effective assessment models to evaluate their impact. At present, several models exist for assessing the effectiveness of sustainability implementation, each characterised by distinct features, advantages, and limitations. This is crucial not only for the company's growth and competitiveness but also for fulfilling its social responsibility and minimising its environmental impact (Table 2).

One of the key distinctions lies in the scope of sustainability criteria employed. Models such as the TBL and the BSC offer comprehensive frameworks that incorporate economic, social, and environmental dimensions, enabling companies to gain a multifaceted understanding of their overall position. While TBL concentrates on the three pillars of sustainability (Jonker, 2023; Oklander et al., 2025), BSC adopts a more strategic orientation by embedding these dimensions into business operations and performance management (Balanced Scorecard Institute, n.d.). This integration allows for a more precise evaluation of the effectiveness of corporate strategy.

Other models, such as ESG and SROI, place greater emphasis on social and environmental dimensions. ESG is particularly well-suited for evaluating a company's impact on environmental and social issues, making it increasingly popular among investors who prioritise corporate responsibility (Panchenko et al., 2023; 2024). SROI, on the other hand, converts social and environmental outcomes into quantifiable financial metrics, providing a valuable tool for assessing investments in sustainable practices. LCA focuses exclusively on environmental considerations by measuring the impact of products and processes across all stages of their life cycle (Sytnik et al., 2023). This approach enables companies to substantially reduce their environmental footprint.

*Table 2 – Comparative analysis of models for assessing the effectiveness of implementing sustainable solutions in the corporate environment*

<i>Model</i>	<i>Model description</i>	<i>Key aspects</i>	<i>Advantages</i>	<i>Drawbacks</i>
TBL	A model that evaluates performance across three key dimensions: financial, social, and environmental. It enables companies to assess their impact not only on the economy but also on society and the environment	Economic, social and environmental aspects	Provides a comprehensive approach to assessing sustainability across three main criteria: financial, social, and environmental	Social and environmental outcomes are difficult to quantify; the model is broad and universal, which may reduce specificity
BSC	A model that measures business performance across four dimensions: financial, customer, internal processes, and learning and development. It integrates sustainable practices into the overall strategic framework	Financial performance, consumers, internal processes, training and development	Ensures the integration of strategy and sustainable practices into the overall business model	Implementation can be challenging if the company's strategy is not clearly defined or aligned with sustainability goals
ESG	A model focused on three core dimensions: ESG, assessing their influence	Environmental, social and governance performance assessment	Popular among investors; facilitates the evaluation of	Requires extensive data collection and detailed analysis across



	on company operations. It has gained popularity among investors and in emerging markets		not only financial performance but also social and environmental impacts	multiple dimensions, which may be resource-intensive
SROI	A model that quantifies the social and environmental impact of investments in monetary terms. It is typically used to evaluate social projects with clearly defined community and environmental outcomes	Measures social and environmental impact in financial units	Enables the measurement of social and environmental effects, allowing for a more accurate assessment of investment effectiveness	Implementation demands significant resources for data collection and analysis; measuring results can be difficult, particularly in the short term
LCA	A model that assesses the environmental impact of a product or process throughout its entire life cycle – from development to disposal – with the aim of minimising ecological harm	Assessment of the entire life cycle of a product taking into account environmental aspects	Assesses environmental impact at each stage of the production cycle, supporting efforts to reduce the ecological footprint	Requires substantial time and resources to collect comprehensive data across all stages of the life cycle

*Source:* Created by the authors based on United Nations Development Programme (2025), European Environment Agency (n.d.).

Studying international experiences in integrating sustainable practices within corporate governance highlights effective approaches for promoting sustainable development locally. Incorporating sustainability into corporate

strategy not only minimizes environmental damage but also enhances transparency for investors and stakeholders. It is crucial to take local conditions into account, as this improves the adaptation process (Organisation for Economic Co-operation and Development, 2024).

A comprehensive management system that integrates ESG aspects is recommended for implementing sustainable development strategies. Key stages for successful implementation include a thorough analysis of the company's current ESG practices, assessing environmental impacts, social operations, governance quality, and existing control mechanisms. Identifying strategic priorities follows, focusing on optimizing natural resource usage, improving working conditions, increasing transparency in decision-making, and instituting robust monitoring for ESG compliance.

The next phase is to create clear implementation roadmaps with specific objectives, timelines, assigned responsibilities, and measurable performance indicators. Integrating sustainability indicators into financial and management systems is vital for consideration in decision-making. A pivotal stage involves engaging all employees through training, awareness initiatives, and the formation of internal committees to track progress.

Establishing an effective management training system is a vital step towards the successful implementation of ESG principles in financial management (Tepavicharova et al., 2020). To this end, specialised training programmes, certification courses, and internal educational initiatives should be introduced to provide relevant knowledge and practical skills. A particularly effective approach involves collaboration with educational institutions and professional organisations, enabling managers to access modern methodologies and practical experience in the field of sustainable financial management (Innola et al., 2022; Shahini, 2024). This approach not only enhances managerial awareness but also contributes to fostering a culture of sustainable development within the company. To effectively assess the impact of financial decisions on organisational sustainability, the implementation of innovative digital platforms and analytical systems is essential (Taishykov et al., 2025). These tools can automate the processing of ESG data, while the use of artificial intelligence and big data technologies will optimise the collection and analysis of indicators, resulting in more accurate and timely decision-making. A key element in this process is the development of interactive dashboards that provide management with real-time information on sustainability progress. These dashboards enable timely evaluation of initiative effectiveness, strategic adjustments, and evidence-based decision-making. Integrating such tools into overall financial reporting systems will help prevent data duplication, improve forecast accuracy, and

ultimately enhance the transparency and efficiency of financial management within the organisation.

To motivate managers and employees to implement sustainable financial solutions, it is essential to develop an incentive system directly linked to the achievement of ESG goals. An effective approach involves introducing bonus schemes that incorporate sustainable development indicators into the financial performance assessment. These may include public recognition of achievements at the corporate level, opportunities to participate in strategic projects, or career development programmes for employees who actively contribute to the implementation of sustainable solutions. Moreover, for the effective management of sustainable development, companies should align their reporting systems with international sustainability standards. This enhances transparency and strengthens the trust of investors and other stakeholders.

The application of these recommendations will contribute to enhancing the efficiency of corporate financial management, strengthening the company's market position, and supporting its long-term development. The implementation of sustainable development strategies, the integration of ESG factors into financial processes, and the optimisation of reporting practices will enable the company to align with modern market requirements, mitigate risks, and enhance its competitiveness. Furthermore, such a transformation will assist in building a positive corporate image, attracting investors, and establishing a sustainable financial foundation for future growth.

The comparative review reveals key strengths and limitations in the way existing models address the financial dimension of sustainability. While ESG frameworks provide broad alignment, they often lack an integrated governance lens. Tools like BSC or TBL offer operational depth but may underrepresent strategic interdependencies.

## **4. Discussion**

The results of the conducted study indicate that the implementation of sustainable practices in corporate financial management contributes to enhanced strategic decision-making efficiency and strengthens the financial stability of companies. This is consistent with the findings of Lăzăroiu et al. (2020), Bartolacci et al. (2020), and Bruna et al. (2022), who analyse the influence of sustainable corporate approaches on the financial performance of enterprises. A positive correlation was identified between the transparency of non-financial reporting and improved economic indicators,

reinforcing the importance of mandatory disclosure of sustainability-related information. A correlation was found among studies by Malik et al. (2020), Al Aina and Atan (2020), and Ziolo et al. (2021), highlighting the influence of sustainable financing on Sustainable Development Goals in OECD EU countries. These studies indicate that sustainability-focused financial models improve the execution of social and environmental initiatives and support long-term economic stability. The implementation of environmental HR practices and employee development enhances corporate stability, which can improve financial management effectiveness.

Tien et al. (2020) and Setyowati (2023) explored the role of government support and technological innovation in the development of small and medium-sized enterprises, emphasizing the need for financing and human resources. Their study used both quantitative and qualitative methods to evaluate sustainable practices and discussed regulatory support and financial flow management for environmental sustainability. The findings showed strong adherence to sustainable financing procedures but highlighted significant variations in the definition of “green” projects, which impede effective environmental financial strategies. These findings align with the study on sustainable practices in corporate financial management and their effect on financial performance, analyzing the interaction between social and environmental initiatives and financial stability.

The results of the present study align with the findings of Aguilera et al. (2021), Larcker and Tayan (2020), and Aureli et al. (2020), who emphasise the importance of implementing sustainable practices in corporate financial management to ensure the long-term viability of companies, particularly in the context of evolving external regulatory frameworks. The study also highlights that the transition to mandatory non-financial reporting and the introduction of new requirements necessitate a revision of corporate management strategies to align with sustainable development objectives. This involves not only compliance with regulatory standards but also proactive engagement in sustainability management processes, which have a direct impact on financial outcomes. Mandatory non-financial reporting and increased transparency contribute to higher levels of trust among stakeholders and enhance the effectiveness of corporate governance (Musayeva et al., 2024). Furthermore, management strategies that prioritise environmental initiatives are increasingly recognised as critical tools for achieving sustainability and corporate growth, underscoring the significance of sound financial management in a dynamic regulatory environment. The study finds that a key consideration is not only adapting to external changes but also understanding how these shifts can be leveraged to advance both financial and environmental sustainability in the long-term.

The results of this study confirm that the implementation of sustainable financial practices within corporate financial management has a positive impact on overall enterprise performance and economic stability. This, in turn, enables a more accurate assessment of the relationship between the application of such practices and a company's financial outcomes. These findings are consistent with Migliorelli (2021), Cunha et al. (2021), and Settembre-Blundo et al. (2021), who likewise highlight the importance of adopting sustainable financial approaches to improve enterprise management in response to contemporary economic challenges. Their studies emphasise the need for the clear standardisation of sustainable development practices to ensure their effectiveness at every stage of corporate management. It is particularly noteworthy that the study of these practices underscores the significance of environmental and social dimensions in corporate financial management.

Martínez-Peláez et al. (2023), Scherer and Voegtlin (2020), and Shahzad et al. (2021) highlight the importance of digital transformation for the sustainability of small and medium-sized enterprises, focusing on organisational change and data utilisation. Their research emphasizes responsible innovations in corporate governance to tackle social and environmental issues, linking closely to sustainable financial practices. However, their findings diverge from the present study, which prioritizes contextual factors – such as economic conditions, local environments, governmental support, and robust corporate governance – as essential for the successful implementation of digital and sustainable financial practices.

The results of this study highlight the importance of integrating sustainable practices into corporate financial management through the optimisation of investment strategies and the enhancement of corporate governance to support the sustainable development of enterprises. These findings align with Dzwigol and Dzwigol-Barosz (2020), Achim et al. (2023), and Rehman and Hashim (2021), who emphasise the influence of economic and social factors on investment strategies and propose expert assessment models to optimise companies' strategic development. While those studies support the conclusion that a systematic approach to investment attraction is essential, they tend to focus on broader aspects of investment, whereas the present study concentrates specifically on sustainable financial management practices.

The findings of this research underscore the vital role of modern performance assessment methods in facilitating the implementation of sustainable practices within corporate financial management. The application of these methods has enabled a more in-depth analysis of the effects of sustainable financial strategies, particularly in terms of

organisational adaptability and long-term stability. A comparison with other studies further reveals that investments in environmental and social initiatives contribute to improved financial performance and foster greater trust in companies – an especially valuable advantage in today's dynamic and uncertain economic climate.

## **5. Conclusion**

This study confirms a strategic shift: sustainability is no longer peripheral to corporate financial management – it is becoming a central driver of long-term viability, competitive advantage, and investor confidence. The results of a comparative analysis of models for assessing the effectiveness of sustainable practice implementation indicate that each model offers valuable tools for evaluating the impact of sustainability on strategic management. The choice of model should align with a company's objectives: the TBL and BSC frameworks offer a holistic approach, ESG and SROI focus on social and environmental dimensions, while LCA analyses the environmental impact of products throughout their life cycle. The combined use of these models enhances both the sustainability and competitiveness of companies.

An analysis of international practices in implementing sustainable strategies in corporate management highlights the importance of adapting advanced solutions to local conditions. This adaptation significantly contributes to effective execution of sustainable strategies. Integrating ESG principles into strategic planning mitigates environmental and social risks while enhancing transparency and attractiveness to investors. The use of innovative technologies and active stakeholder engagement are crucial for achieving long-term competitiveness through successful sustainable solutions.

Based on research findings, several recommendations are presented for improving management approaches to integrate sustainable solutions into financial management. Key components include strategic planning, cultivating managerial competencies, aligning financial reporting with international sustainability standards, and establishing a personnel motivation system that supports ESG objectives. These actions can enhance transparency, fortify competitive positioning, and promote long-term sustainability.

Future research may focus on improving econometric models to more accurately assess the impact of sustainable practices on corporate financial performance, as well as investigating the role of digital technologies in monitoring and evaluating such practices. Comparative studies of ESG

strategy implementation across different countries would be valuable in identifying best practices and facilitating their adaptation to local contexts.

Among the limitations of the study, it is important to note the difficulty in obtaining reliable data on the financial impact of sustainable practices, as well as the inherently long-term nature of their effectiveness. The specificity of the research sample may limit the generalisability of the conclusions, indicating the need for an expanded empirical research base in future studies. In a world shaped by volatility and accountability, sustainability is not a cost centre – it is a strategic capability. The firms that act accordingly will define the next cycle of business leadership.

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# *Assessment of Sustainable Development of Furniture Manufacturing Enterprises and its Strategic Analysis*

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## *Abstract*

The paper examined the sustainable development of the furniture industry, focusing on three main components: environmental, economic and social aspects. The study examined the level of development of such companies as IKEA and Herman Miller, as well as the current state of the furniture industry in Kyrgyzstan, including the enterprises “Lima Mebel”, “Mebelnaya masterskaya”, “Mosmebel” and “Kerege”. The results showed that the use of certified materials, the introduction of closed production cycles and the use of innovative technologies significantly reduce the negative impact on the environment. The economic aspect includes the need to achieve business profitability while respecting the principles of sustainable development. The study emphasized the importance of finding a balance between economic benefits and environmental constraints. Investments in modern technologies allow not only to reduce production costs but also to improve product quality, which in turn contributes to reducing the negative impact on the environment. The social aspect is related to the well-being of workers and society as a whole.

**Keywords:** Ecology, Social Responsibility, Circular Economy, Digital Technologies, Cooperation.

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## Introduction

Sustainable development of furniture manufacturing companies is becoming an increasingly relevant topic in the face of global changes in the economy, environment, and society. Modern businesses are facing increasing pressure to implement environmentally friendly technologies and social practices that contribute to long-term success and minimize negative environmental impact. The furniture industry is no exception, and businesses operating in this field are increasingly focusing on the need to find a balance between economic, environmental and social factors. However, despite the increasing importance of this topic, many businesses face challenges related to a lack of awareness of sustainability practices as well as a lack of resources to implement them. One of the main challenges is the integration of sustainability principles into companies' long-term strategies.

Enterprise sustainability encompasses several key concepts. Firstly, it is the concept of sustainable development, which involves integrating economic, environmental and social aspects into an enterprise's strategy. Also, it is stakeholder theory, which emphasizes the importance of engaging with different groups: from customers and suppliers to employees and local communities (Makhazhanova et al., 2024). Thirdly, it is strategic analysis models, which allow us to evaluate internal and external factors affecting the sustainability of the company. Many scholars have contributed to the understanding of this topic with their works on the sustainability of furniture manufacturing companies. Xiong et al. (2020) highlighted the importance of adopting environmentally friendly technologies in the production stages. Fan and Feng (2019) revealed that the use of renewable materials such as Forest Stewardship Council (FSC)-certified wood increases the company's market share in the premium segment. Barbaritano et al. (2019) pointed out the social aspect of sustainability and showed that companies that actively invest in employee training and a safe working environment exhibit higher productivity and lower turnover rates.

According to Jarosiński and Janiuk (2020), companies with long-term environmental policies are more adaptable to external shocks like economic crises and legislative changes. In 2020, Susanty et al. stressed the need of working with local suppliers and communities. Close collaboration with local partners reduces logistics costs and a company's environmental impact. Digitalisation of production processes has helped furniture companies minimise waste and optimise resource utilisation, according to Leiting et al. (2023). Oblak et al. (2020) found that customers will pay more for eco-friendly furniture. Suhardi et al. (2019) showed that manufacturing waste management methods boost efficiency. Abu et al. (2019) found that investors

and the public rate socially and environmentally responsible enterprises higher, which helps them survive.

Despite several studies on furniture firms' sustainable growth, numerous key areas remain unexplored. Sustainability monitoring across the product life cycle using novel technology and digitalisation is one example. Furniture firms' sustainability partnerships with the government and local communities are understudied. The aim of this study was to comprehensively analyse how sustainability practices contribute to the financial stability and long-term competitiveness of furniture companies in the market. The objectives of the study were to assess the environmental initiatives and innovativeness of furniture companies such as IKEA and Hermes Miller, and to develop a strategy for sustainable development of furniture companies in Kyrgyzstan.

## **Materials and Methods**

This study used a comprehensive approach to analyse the sustainable development of the furniture industry in Kyrgyzstan. The study covered three main components of sustainable development: environmental, economic and social aspects, each of which was investigated through a variety of methods and analytical tools. Both qualitative and quantitative methods were used to analyse the sustainable development of the furniture industry. The environmental aspect relates to the environmental impact of industries, which in the context of furniture manufacturing includes material utilization, energy consumption, waste management and emission reduction. To assess the environmental impact, the practices of companies such as IKEA, and Herman Miller, which use wood from certified forests and apply the concept of circular economy, were analysed.

The economic aspect of the study involved assessing business profitability in the context of sustainable development principles. In order to achieve this balance, the data on investments of furniture companies in innovative technologies, which allow reducing production costs, improving product quality and at the same time reducing the negative impact on the environment, were used. The social aspect of the study focused on the well-being of employees and society as a whole. This aspect was assessed through the lens of safe working conditions, fair remuneration, and staff training and development. The study also examined digital platforms and software (Manufacturing Execution System (MES), Computer-Aided Design (CAD), Enterprise Resource Planning (ERP)) to track the product lifecycle from raw

material extraction to recycling to help improve working conditions and meet international standards for sustainable production.

In addition, the study covered global trends in the furniture industry, focusing on examples of companies, such as IKEA, and Herman Miller, that are adopting sustainable practices and actively participating in environmental initiatives. Using data from the International Trade Centre (2023), key furniture exporting countries were identified, providing a global context and comparing it with the situation in Kyrgyzstan. The comparative analysis of IKEA and Herman Miller was based on documentary and literature review methods, which included studying corporate sustainability reports (2019-2023), official websites, and peer-reviewed publications. This analysis was conducted using content analysis methodology, which allowed for a systematic comparison of sustainable development practices and the use of these international examples as benchmarks for assessing the furniture industry in Kyrgyzstan.

The study focused on analysing the status and prospects of sustainable development of the furniture industry in Kyrgyzstan. Quantitative data on furniture production volumes in Kyrgyzstan for the period from 2015 to 2023 were obtained from official sources such as the National Statistical Committee of the Kyrgyz Republic (2019). The study also considered several key furniture enterprises in Kyrgyzstan, each of which contributes to the development of the industry and the implementation of sustainable production principles: “Lima Mebel”, “Mebelnaya masterskaya”, “Mosmebel”, “Kerege”.

## Results

### *Key Aspects of Sustainable Development in the Furniture Industry*

Industry sustainability requires balancing economic growth, environmental conservation, and social well-being. The 1987 Brundtland Commission study introduced this strategy, which has since been used in many industries, including furniture manufacture. Sustainable development requires minimising environmental damage and providing long-term circumstances that meet future requirements (Ruggerio, 2021). Sustainable business practices help companies satisfy market expectations and improve their reputation with customers and partners. Sustainability is becoming a competitive element due to global transformation and stricter environmental norms (Sytnik et al., 2023). Businesses must address environmental, economic, and social factors to be sustainable. The company's



environmental impact is considered. Furniture manufacturing involves material use, energy use, waste management, and emission reduction. Companies using certified forest wood and pursuing a circular economy path can drastically minimise their environmental effect and raise their environmental responsibility. Sustainability is enhanced by closed-loop production and recycled resources (Kudrenko and Hall, 2024). The economic aspect affects firm profitability and sustainability. Economic gains and environmental limits must be balanced. Innovative technologies can lower production costs, increase product quality, and lessen furniture companies' environmental impact (Bumgardner and Nicholls, 2020; Karnaukh et al., 2020). Automation and digitalisation boost productivity and reduce waste and resource use.

Social issues include employee well-being and the company's social environment. This study focusses on local communities, consumers, and other stakeholders directly affected by furniture company activity. Safe working conditions, fair wages, and professional development improve employee well-being, while socially responsible initiatives like community engagement, local employment, and consumer awareness improve community life. According to Teymurova et al. (2025), sustainable practices provide concrete social value at multiple levels of interaction by addressing the demands of these specific social groupings rather than "society as a whole".

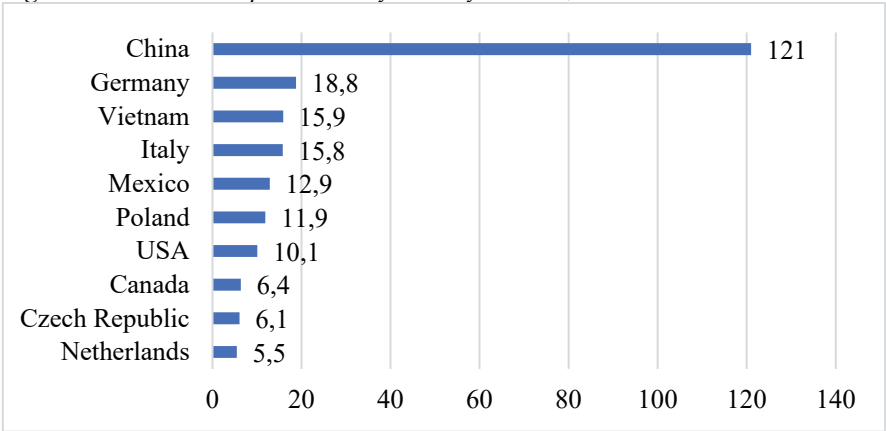
Digital technologies play an increasingly important role in maintaining and promoting sustainability. Digital platforms and software allow companies to track and analyse all stages of the product lifecycle, from raw material extraction to disposal. Automated inventory management systems reduce the need for excess resources and transport, which also has a positive impact on the environment (Panigrahi et al., 2021). In addition, digital technologies enable businesses to engage with stakeholders more transparently and efficiently. This increases brand trust and helps build a loyal audience that is orientated towards sustainability (Pauli et al., 2021).

As part of sustainability, furniture companies are actively using various digital platforms and software to help optimize production processes and resource management. For example, MES allows tracking and monitoring of each stage of production, minimizing waste and increasing efficiency. Design software such as CAD helps optimize the cutting of materials, which reduces waste. Supply chain management platforms such as ERP enable efficient inventory and logistics management, reducing transport costs and carbon footprint (Bisenovna et al., 2024).

# International Experience of Sustainable Development of the Furniture Industry

The global furniture industry is one of the fastest growing segments of the global commodity market. Many countries, possessing natural resources, developed industrial base and technological potential, have taken leading positions in furniture exports. Figure 1 shows the countries with the largest furniture exports in the world.

Figure 1 - Furniture export value by country in 2023, USD billion



Source: Compiled by the authors based on International Trade Centre (2023).

The global furniture market shows significant economic potential. In 2023, the total value of furniture exports reached 298.3 USD billion, confirming the industry’s stable growth and its growing influence on sustainable production trends. As mentioned earlier, environmental initiatives are playing a key role in the transformation of the furniture industry, which has historically been associated with intensive use of natural resources such as wood and water, as well as high levels of carbon dioxide emissions. Swedish company IKEA is one of the most prominent examples in the implementation of environmental initiatives in the furniture industry. IKEA has set ambitious goals such as using only renewable and recycled materials by 2030. The company is actively working with FSC wood certification, which ensures that the forests used for furniture production are regenerated and managed sustainably. In 2023, more than 98% of the wood used by IKEA was sourced from environmentally responsible sources. In addition, IKEA has introduced the concept of a circular economy, in which

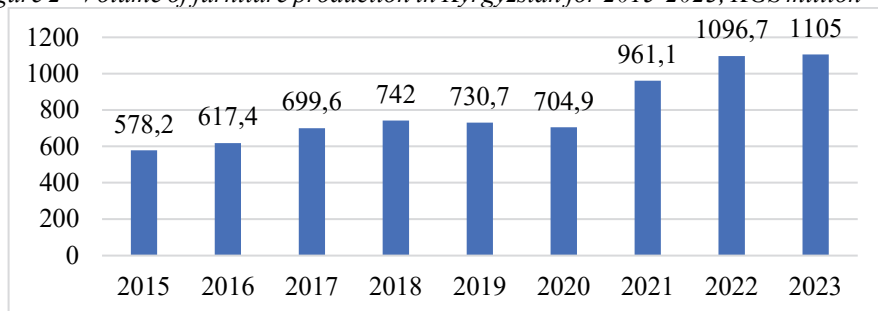
products must be reused, recycled or reclaimed. For example, in some countries, the company offers customers a service to return old furniture.

Herman Miller, an American company specializing in office furniture, is also known for its innovative approaches to sustainable production. It was one of the first companies in the furniture industry to achieve Cradle to Cradle (zero-waste production system) environmental certification, which confirms their commitment to a circular economy. Herman Miller has implemented eco-friendly materials and minimized the use of harmful chemicals such as lead and polyvinyl chloride (PVC) in the manufacturing process. Herman Miller has implemented the Zillow programme, for example, their factories use solar energy to power equipment, which significantly reduces carbon emissions. Furthermore, Herman Miller participates in global reforestation initiatives.

## Features of the Furniture Industry in Kyrgyzstan

Furniture production in Kyrgyzstan represents an important part of the local industry, which, despite its small scale, has significant potential for growth and development. Figure 2 shows the volume of furniture production in the country. The volume of furniture production in Kyrgyzstan over the analysed period shows a positive trend, especially from 2020 to 2023. However, the dynamics are also influenced by external factors such as pandemic, which led to short-term recessions.

*Figure 2 - Volume of furniture production in Kyrgyzstan for 2015-2023, KGS million*



*Source:* Compiled by the author based on National Statistical Committee of the Kyrgyz Republic (2019).

The furniture industry in Kyrgyzstan is mainly focused on the production of furniture for homes, offices, schools and public institutions. However, the main challenge for the industry remains competition with imported products. Furniture from countries such as China, Turkey, and the United States offers

a variety of models and relatively low prices, making it difficult for local manufacturers to compete for the domestic market. In addition, most Kyrgyz furniture enterprises are small and medium-sized companies that find it difficult to compete with large foreign manufacturers. Lack of modern technology, high raw material costs and limited access to finance also create obstacles to expanding production and improving its efficiency.

The industrial and environmental regulations of the Kyrgyz Republic significantly influence the operations of furniture manufacturers alongside market factors. Key legislative acts include the Law of the Kyrgyz Republic No. 53 “About Environmental Protection” (1999), which establishes principles of sustainable resource use and obliges enterprises to prevent and mitigate environmental harm; the Law of the Kyrgyz Republic No. 160 “On Industrial Safety of Hazardous Production Facilities” (2016), which sets safety and risk management requirements; and the Law of the Kyrgyz Republic No. 89 “On Waste from Production and Consumption” (2001), which governs waste treatment and hazardous materials management. The Technical Regulation on Furniture Safety TR KG 004:2018, harmonized with Eurasian Economic Union standards, stipulates chemical safety, product labelling, and conformity assessment rules. Oversight is provided by the Ministry of Economy and Commerce and the State Agency for Environmental Protection and Forestry, which monitor compliance through inspections. However, despite the comprehensive legal base, enforcement remains inconsistent due to insufficient institutional capacity and weak incentives for eco-innovation. Enhancing regulatory compliance and introducing financial instruments, such as tax benefits for certified green production, could foster sustainability in the sector.

The Kyrgyz furniture industry features several notable enterprises. “Lima Mebel” is one of the leading manufacturers, specializing in home and office furniture for middle and premium market segments. It emphasizes modern design and high-quality materials while updating production lines to adopt new technologies. “Mebelnaya masterskaya” focuses on custom-made furniture for living spaces, offering flexible and individualized design solutions. “Mosmebel” is recognized for producing cabinet furniture for educational institutions and maintaining high quality standards at reasonable prices. “Kerege”, whose name refers to the frame of a traditional Kyrgyz yurt, integrates ecological principles and cultural symbolism by producing furniture from natural materials with minimal environmental impact.

A key constraint for the industry is limited access to raw materials. Local manufacturers rely heavily on imported wood, which increases production costs and weakens competitiveness. According to the National Statistical Committee (2019), Kyrgyzstan’s forest resources cover about 1.23 million

hectares, or 6.1% of the territory, with an estimated annual sustainable yield of 550-600 thousand m<sup>3</sup>, enough to satisfy up to 40% of domestic demand if properly managed. Yet practical use is restricted by fragmented ownership, insufficient reforestation, and the absence of international certification systems such as FSC or PEFC. The resulting scarcity of quality materials forces firms to import from neighbouring states. Additionally, outdated technologies and equipment hinder efficient resource use and waste reduction, while the shortage of skilled personnel limits the implementation of sustainable production principles. Strengthening professional education, improving technological modernization, and promoting ecological certification could thus enhance the industry's competitiveness and environmental responsibility.

The furniture industry in Kyrgyzstan is in the early stages of ecological transformation, but local enterprises are already demonstrating significant initiatives to implement sustainable development principles. The use of local wood materials is becoming an important aspect. Forests in Kyrgyzstan, although limited in area, have the potential for sustainable utilization. Some manufacturers have started to co-operate with local timber suppliers who adhere to the principles of sustainable forest management. This involves cutting down trees and then reforesting them, which helps prevent ecosystem degradation (Shahini and Shahini, 2025). This approach also reduces dependence on imported materials that were previously shipped from neighbouring countries such as Kazakhstan and Russia. Transporting wood over long distances increases a company's carbon footprint and raises the final cost of products. The use of local materials helps to reduce these costs while supporting the local economy (Koszewska and Bielecki, 2020).

Government programmes aimed at supporting green technologies, as well as international organizations such as the United Nations Development Programme, are helping to promote environmental projects in the region. For example, in recent years, pilot projects to install solar panels and water treatment systems at production facilities have started to be implemented in Kyrgyzstan, which could provide a strong impetus for further environmental development of the furniture industry. Financial instruments play an important role in supporting the sustainable development of furniture manufacturers (Phan et al., 2020). Kyrgyzstan, as a developing country with a growing furniture industry, faces the need to attract financial resources to support sustainable development in this sector. In this context, institutional support becomes critically important. The creation of a national fund to support sustainable furniture production, modelled on European green financing mechanisms, could attract both domestic and international investors. Access to preferential "green loans" and targeted subsidies, as

successfully implemented in Germany and Canada (Yaroshenko et al., 2023), would stimulate the modernisation of production facilities and accelerate the introduction of energy-efficient and waste-reduction technologies.

Furniture industries, especially in underdeveloped nations, rely on bank finance. As demand for sustainable practices rises, more banks are offering “green loans”. Businesses using environmentally friendly technologies, renewable energy sources, or reducing industrial carbon footprint receive preferential financing terms (Šūmakaris et al., 2023). Furniture producers seeking sustainable development can benefit from government subsidies and grants. In Germany and Canada, governments are funding enterprises that use environmentally friendly technologies and processes (Yaroshenko et al., 2023). Programmes usually reduce carbon footprints, use renewable energy, reduce waste, and improve energy efficiency. Sustainable industry also benefit from private investment (Jakubik et al., 2017; Tleubayev, 2024). International sustainability investment funds are increasingly looking at companies that practise social and environmental responsibility. Specialised funds invest in sustainable furniture companies in developed countries (Amin and Kumar, 2022). A successful partnership between furniture companies, government organisations, and local communities is crucial to sustainability. Sustainable behaviours can be supported by government regulations and policies (Bano, 2019). Dialogue and contact between business and society can also be mediated by public authorities. Creating platforms to debate company sustainability issues helps.

Local communities are also important in promoting sustainability. They can act both as consumers supporting local producers and as participants in the development of environmentally friendly solutions. Involving communities in decision-making processes allows local needs and concerns to be considered and contributes to the creation of products that will actually be in demand. Introducing innovative approaches to partnerships can significantly improve sustainability outcomes. For example, the creation of joint projects between government agencies, local communities and furniture companies can lead to the creation of new products that utilize local materials and technologies. Such projects can include recycling initiatives, the creation of unique designs and the development of small furniture-based businesses. In Italy, one of the leading countries in furniture exports, digital technology has significantly improved the control of environmental standards and increased production efficiency.

# Strategy for Sustainable Development of Furniture Enterprises in Kyrgyzstan

To develop a sustainable furniture industry in Kyrgyzstan, it is necessary to develop a comprehensive strategy that takes into account economic, environmental and social factors, as well as opportunities for innovation and partnership mechanisms. Table 1 presents the strategy for sustainable development of furniture enterprises in the country. The main objective of the strategy is to increase the competitiveness of furniture companies through the adaptation of sustainable practices, government support and the introduction of new technologies aimed at long-term growth with minimal environmental impact. One of the key areas of sustainable development is the transition to sustainable sources of raw materials. The use of local materials, such as wood extracted in accordance with the principles of sustainable forest management, will reduce dependence on imported supplies and reduce the carbon footprint.

*Table 1 - Strategy for sustainable development of furniture enterprises in Kyrgyzstan*

<b>Direction of strategy</b>	<b>Specific actions</b>
Environmental strategy	Transition to sustainable sources of raw materials: use of local materials and development of waste recycling.
	Introduction of energy efficient technologies: modernization of equipment and use of renewable energy sources (solar panels, biomass systems).
	Development of eco-certification to increase consumer confidence and improve export opportunities.
Economic strategy	Providing access to ‘green’ credits to finance environmental projects.
	Creation of a state support fund to finance sustainable development programmes in the furniture industry.
	Optimizing logistics and supply chains using digital technologies.
	Active promotion of products on international markets, with a focus on environmentally friendly furniture.
Social strategy	Improving the skills of employees through training in modern technologies and sustainable production methods.
	Establishing innovation centres to test and implement new technologies and materials.
	Collaborating with local communities to organize reforestation and sustainable consumption initiatives.

Technological strategy	Introducing automation and digital solutions to improve production efficiency.
	Creating online platforms for sales and customer interaction.
	Developing new products from innovative materials (e.g. bamboo, recycled plastic) and producing modular furniture to reduce transport costs.

*Source:* Compiled by the authors.

Energy efficiency is an important element of the environmental strategy. Modernizing production equipment and switching to renewable energy sources, such as solar panels or biomass systems for heating production facilities, will help reduce costs and environmental impact (Kerimkhulle et al., 2022; Murtezaj et al., 2024). In addition, introducing an eco-certification system, such as FSC or Programme for the Endorsement of Forest Certification (PEFC), will increase consumer confidence and improve export opportunities. On the economic side, it is necessary to ensure that furniture companies have access to green loans, which provide favourable conditions for environmental projects. It is also important to establish a government support fund that will finance sustainability programmes in the furniture industry.

To reduce costs and increase efficiency, it is important to improve logistics supply chains using digital technologies. This will reduce transport costs and the carbon footprint of transporting materials and finished products. At the same time, it is necessary to actively promote the products of Kyrgyz manufacturers in international markets, focusing on the segment of environmentally friendly furniture. State export support programmes, participation in international exhibitions and promotion of cooperation with foreign partners will help to strengthen positions in the global market.

The social aspects of sustainable development imply improving the qualifications of furniture industry employees. The state and enterprises should invest in employee training to enable them to work effectively with modern technologies and materials. The creation of innovation centres where new materials and technologies can be tested also stimulates cooperation between furniture companies. In addition, co-operation with local communities is an important element of social strategy. Furniture companies can organize reforestation initiatives, use sustainable resources and promote consumer awareness of the benefits of sustainable furniture. The technology strategy includes automating production processes and implementing digital solutions to improve efficiency. This will not only reduce production costs, but will also allow businesses to adapt more quickly to market changes and consumer demands. The introduction of online platforms for sales and



customer interaction will open up new opportunities for growth. The development of new products such as furniture made from innovative materials (e.g., bamboo, recycled plastic) will offer consumers unique eco-friendly products.

## Discussion

The results of the sustainable development of the furniture industry emphasize the need to integrate environmental, economic and social aspects. The most important challenge is to minimize environmental impact, which is linked to the responsible use of resources, reducing emissions and waste, and implementing closed production cycles. Furniture companies that are committed to sustainability must use wood from certified forests and recycled materials (Horbachova et al., 2025; Shahini et al., 2025). For example, major players such as IKEA are actively working towards achieving a circular economy by offering recycled and reused furniture. The economic aspect of sustainability is equally important, as businesses must maintain profitability while adhering to environmental standards. The use of innovative technologies, such as digitalization and automation of production, can reduce costs and improve product quality while reducing resource consumption. An example of a successful implementation of this approach is the introduction of design software that minimizes waste by optimizing the cutting of materials. Investing in sustainable technologies and digital platforms also helps to increase productivity and reduce carbon footprints. Wieruszewski et al. (2023) focused on the cost-effectiveness of sustainability, arguing that it is economic benefit that is the main driver of sustainability. However, the authors believe that the environmental aspect is secondary to the economic benefits, which contradicts the current findings that there is a need for a balanced approach that should include environmental initiatives. Environmental initiatives can increase consumer confidence and lead to long-term business sustainability.

The social aspect is not only concerned with employee wellbeing, but also with contributions to local communities and maintaining the social responsibility of the business. Furniture companies can play a meaningful role in regional development by offering jobs and participating in social programmes (Alqsass et al., 2023). Providing safe working conditions, decent pay, and opportunities for professional development improve corporate reputation and attract loyal employees. In a globally competitive environment, such measures can be critical in reducing employee turnover. Sedliačiková et al. (2020) emphasized social responsibility, arguing that

sustainable development is impossible without engaging local communities and improving the social status of employees. In particular, the authors investigated the practices of companies' participation in educational and charity programmes. However, the authors went further by suggesting that companies that do not invest in social programmes will not achieve long-term employee and community loyalty. This can be agreed, but the social aspect should be considered alongside the economic and environmental aspect, whereas the author makes it a priority.

Kumar et al. (2021) considered the use of renewable energy in furniture manufacturing as the main way to minimize the negative environmental impact. This direction is in line with current findings, which also emphasize the importance of alternative energy sources. However, the authors believe that without mandatory government subsidies, this process will be too slow, which was not noted in the current findings. Xu et al. (2020) conducted a study on the impact of consumer preferences on sustainability in the furniture industry. They argued that the demand for sustainable products is increasing, and companies that do not adapt to this trend may lose significant market share. However, the authors are more optimistic in their forecast, believing that in the next few years, eco-friendly products will become the standard.

A key instrument for furniture sustainability is digital technology. Supply chain management, factory automation, and product lifecycle tracking platforms optimise resource use and environmental performance. Process management systems help firms reduce waste, energy use, and production transparency (Jablonskis et al., 2018). Tracking key environmental indicators using data analytics tools helps make more efficient judgements. Jimeno-Morenilla et al. (2021) examined furniture sector digital technology use. Digitalisation of production and logistics reduces carbon impact, they say. Schöggel et al. (2023) noted that digital platforms improve inventory management and reduce transit costs, supporting the current findings. The authors stressed that digitalisation of production is the only way to sustainability, and a more holistic approach from environmental, social, and economic perspectives is needed. These technologies also improve stakeholder transparency. Supply monitoring tools tell consumers about material origins and environmental standards, building brand confidence and attracting sustainability-minded consumers. Through better customer communication and compliance with international environmental norms, digitalisation boosts enterprises' internal efficiency and market position.

Jia et al. (2019) examined how global supply chains affect furniture sector sustainability. They found that relying on foreign raw material suppliers, especially in nations with low environmental standards, hinders environmental sustainability. This study supports current findings that

supply chain management is crucial to sustainability. Technology and supplier selection can simplify this procedure. The furniture sector faces environmental issues globally, but firm strategies are improving. Digital solutions can help integrate environmental, economic, and social factors for long-term success and competitiveness in today's market. Lack of financing is the biggest challenge to furniture sector survival, according to Popova (2019). Companies cannot apply current environmental technologies without green investments and loans, she claims. This supports existing findings that emphasise green loans and bonds. Both money and company desire to modernise production processes are crucial.

Ratnasingam et al. (2020) analysed the role of public policy and regulation in developing sustainability in the furniture industry. Nußholz et al. (2019) cited examples of countries where the introduction of tax incentives and subsidies for companies adopting eco-innovation led to significant changes in the industry. This coincides with current findings on the need to support environmental initiatives, but there was an emphasis on voluntary initiatives by businesses and the green investment market, while the authors believe that government support should play a key role.

In summary, discussions of other studies show that the sustainable development of the furniture industry depends on the consistent integration of environmental, economic and social aspects into the digital structure. Environmental responsibility, including circular production and the use of renewable energy sources, must be balanced with economic viability and social engagement to ensure long-term sustainability. The convergence of innovative technologies, transparent supply chains, and supportive financial and policy mechanisms creates the foundation for sustainable competitiveness. For developing economies such as Kyrgyzstan, developing institutional support, promoting green finance and upgrading the skills of the workforce are key factors in facilitating this transformation. Thus, sustainability in the furniture industry should be seen not only as an environmental commitment, but as a strategic path to innovation, efficiency and long-term market relevance.

## Conclusions

This study assessed environmental, economic, social, and technological sustainability elements in the furniture sector. International experience and local industry illustrate that sustainable transformation requires coordinated work in all these interrelated areas. The study found that renewable resources, trash recycling, and circular production cycles are necessary for

furniture production sustainability. Energy-efficient technologies and renewable energy sources help meet global climate targets, while certified wood and closed material cycles lessen environmental effect. Local timber and sustainable forestry can help Kyrgyzstan reduce imports and carbon emissions.

Environmental and social norms must be protected while achieving financial stability. Automation, digital platforms, and resource optimisation systems boost competitiveness, lower manufacturing costs, and boost long-term profitability. Eco-loans and public sustainable development funding promote the modernisation of Kyrgyzstan's small and medium-sized furniture industries, according to research. Beyond workplace safety, sustainability includes community participation and human capital development. Promote social responsibility by training staff in eco-innovation, fair pay, and community cooperation. Promotion of vocational education in environmentally friendly production, enterprise participation in reforestation, and public awareness campaigns can accomplish social sustainability in Kyrgyzstan.

Sustainable practices depend on digital tools. Implementing MES, ERP, and CAD helps organisations track product lifecycles, reduce waste, and boost energy efficiency. Digitalisation helps Kyrgyz furniture companies improve transparency, supply chain management, and integration into circular economy markets. Kyrgyzstan's furniture sector is tiny but has sustainable growth potential, according to the study. "Lima Mebel", "Mebelnaya masterskaya", "Mosmebel" and "Kerege" are integrating green technologies and industrial processes. Policy support is needed for systemic improvement, including renewable energy incentives, environmental certification programs, and government-business-community partnerships. Lack of factual data on environmental initiatives and technology adoption in Kyrgyz furniture manufacturing limits the study. Future study should quantify government programs, international green innovation investment, and digital transformation's impact on long-term sustainability metrics.

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# *Sustainable Transformation of Civil Service Organisational Culture in the Era of Globalisation*

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## *Abstract*

The relevance of this study stems from the need to integrate international standards into the public administration system of the Republic of Kazakhstan, particularly in the context of globalisation, the shifting political and economic landscape, and the imperative of sustainable governance. The aim of the research is to analyse the process of adapting international standards within Kazakhstan's civil service system, with particular emphasis on the recommendations of the Organisation for Economic Co-operation and Development (OECD) and their influence on sustainability in public institutions. The research methodology includes a comprehensive analysis of national and international practices, employing historical and comparative approaches to identify best practices for integrating global experience into Kazakhstan's administrative system. The findings indicate that the implementation of international standards contributes to the development of a sustainable organisational culture, the strengthening of ethical norms, and enhanced governance efficiency. The conclusions of the study include proposals for legislative updates in Kazakhstan, enhancement of public service ethics standards, and institutional mechanisms that support sustainable administrative transformation and ethical continuity.

**Keywords:** International Standards; Civil Service; Ethics; Sustainability; Organisational-Legal Culture; Civil Society; Adaptation.

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## Introduction

The development of organisational culture in the civil service is a complex and multifaceted process encompassing both axiological foundations and practical aspects of governance. A value-based paradigm of public service is employed to understand the moral and ethical principles that should guide civil servants' behaviour and their interaction with society. The transformation of organisational culture as a value system within public service has evolved over many years under the influence of economic, social, and political factors. Rethinking the role of administrative ethics in fostering public trust and enhancing civil servants' accountability calls for a shift from rigid bureaucratic norms to more flexible, results-oriented governance models. This topic is particularly relevant due to the necessity of incorporating international public service standards into Kazakhstan's legislative framework. Reconsidering and updating the value foundations of the civil service are essential to addressing issues such as corruption, bureaucratic inertia, and public distrust in governmental institutions.

In this context, several recent studies contribute to a deeper understanding of global and local dynamics in public administration and organisational ethics. Önder et al. (2022) examine administrative systems in multiple countries, highlighting how governance structures impact the effectiveness and delivery of public services. Mukhopadhyay (2022) compares the evolution of ethical standards in public administration from historical and cultural perspectives. Mieg (2024) explores Max Weber's concept of the "ethics of responsibility" and its application to professional ethics. Ibrahim et al. (2023) study the impact of managerial autonomy in Indonesia's public sector, emphasising that such reforms can enhance efficiency but necessitate structural and cultural transformations. Marreiros et al. (2023) investigate how organisational culture influences leadership in public administration. Xanthopoulou et al. (2022) assess the influence of robust organisational cultures on public administration performance. These studies underscore the importance of disseminating best practices and adapting them to the specific context of Kazakhstan.

Organisational culture within institutions is considered a critical success factor. Core concepts include a shared belief system, value orientation, problem-solving approaches, a socio-spiritual corporate environment, and a dynamic system of shared rules (Dogra and Sharma, 2021). Equally important is the philosophical view of culture as a mode of thought and existence, considered both a component of the management process and a framework of foundational assumptions and norms (Nurekenova et al., 2022; Taitorina and Kabklakatov, 2024; Tlessova et al., 2016). It is argued that civil

servants tend to demonstrate greater commitment in public organisations where behavioural norms, rules, and shared goals prevail. Within the framework of strategic management, an ethical climate is deemed pivotal to organisational success (Dolzhenko et al., 2025). The Global Encyclopedia of Public Administration comprises thousands of entries covering the latest developments in policy and public governance, including crisis management, ethics, and accountability across numerous countries (Romero-Carazas et al., 2023; Yudina et al., 2025). A valuable contribution to academic inquiry is the report by the European Public Administration Network (EUPAN).

Contemporary research integrates a configurational approach with machine learning techniques, leveraging digital platforms (Jilani et al., 2024). The deployment of Artificial Intelligence (AI) in public administration aims to deliver personalised and efficient services (Wilson and Mergel, 2022; Madan and Ashok, 2023). Digital transformation is emerging as a strategic imperative for governments seeking modernisation (Gong et al., 2020; Ongaro et al., 2021). Research also addresses the relationship between public service motivation and adherence to ethical standards (Lee et al., 2024). Enhancing the productivity of civil servants necessitates both strategic interventions and a conducive organisational environment (Tannimalay et al., 2021). Ethics in public service is inherently tied to both individual and institutional responsibility (Bowman and West, 2021). The significance of civil service organisational culture lies in its capacity to facilitate more effective and ethical governance (Garrett and Peterson, 2006). Kazakhstani scholars actively contribute to the global academic discourse on the transformation of civil service organisational culture (Janenova and Knox, 2019; Agubayev, 2024; Aitkhodzhin and Baisalova, 2024; Arslan et al., 2022; Bokayev et al., 2024; Karsembayeva and Junusbekova, 2024; Taitorina and Kabklakatov, 2024).

Overall, research aims to improve the understanding of organisational culture as a critical approach to resolving the identity crisis within organisational contexts, which often stems from inefficiency and ineffectiveness (Bogale and Debela, 2024). Within the civil service, organisational culture shapes not only internal dynamics but also relationships with citizens and society at large, thereby significantly enhancing trust in public institutions. The aim of this article is to explore the challenges of adapting international organisational culture standards to the civil service system of the Republic of Kazakhstan, with particular attention to fostering ethical integrity and institutional sustainability in the context of globalisation.

## **Materials and Methods**

The research methodology is aimed at a comprehensive analysis of the current state of civil service organisational culture in Kazakhstan, the application of international standards, and the development of recommendations for their integration. A holistic approach grounded in the social constructivist paradigm was employed. The main data collection technique was documentary analysis. A comparative approach was employed to analyse foreign practices that have incorporated international standards into their public governance systems, with the aim of identifying effective approaches and strategies. This method proved useful in developing mechanisms for adapting these standards to the legislation of the Republic of Kazakhstan. It enabled the formulation of an operational algorithm tailored to the specificities of the national legal framework. Particular emphasis was placed on practices that promote not only short-term compliance but also long-term sustainability of ethical governance.

The methodology further incorporated the cultural and historical contexts of the countries studied to examine how such factors affect the development of global practices and their localisation in Kazakhstan. The research revealed the extent to which each country's historical and cultural context affects the implementation of international standards, and how these standards can be adapted to align with national characteristics. This allowed for the identification of sustainable reform pathways that are both culturally resonant and institutionally viable.

Sociological methods, including observation, content analysis, and case studies, were employed to gain deeper insight into civil servant behaviour and to assess public opinion and media representations of the public service. Observation facilitated the identification of key behavioural aspects of civil servants in various contexts, including professional and ethical dimensions. Content analysis was applied to materials related to public service – such as publications and media resources – enabling an assessment of the impact of public opinion and media narratives on the development of organisational culture. The case study method was used to examine specific instances of successful adaptation of international standards within the Kazakhstani public administration system, which helped to highlight effective practices and propose pathways for their legislative implementation.

## **Results and Discussion**

Contemporary scholarly literature broadly concurs on a five-stage

periodisation model of the development of the civil service institution in the Republic of Kazakhstan: 1991-1997 – establishment of institutional foundations; 1997-2007 – adoption of the “Kazakhstan-2030” Strategy and formulation of strategies in public service; 2007-2017 – emergence of a new vision based on the “Kazakhstan-2050” Strategy; 2017-2020 – implementation of the Strategic Plan for the Civil Service of the Republic of Kazakhstan. The dissolution of the USSR and Kazakhstan’s attainment of independence prompted a profound reconsideration of policy, governance, and the structure of the civil service. The new republic was compelled to reassess all dimensions of governance, including organisational culture. Establishing a new value paradigm required the development of a robust legal foundation. The Constitution of the Republic of Kazakhstan (1995), Decree of the President of the Republic of Kazakhstan No. 2730 “On Civil Service” (1995), and Resolution of the Government of the Republic of Kazakhstan No. 940 “On the Programme for Further Reform of the Civil Service of the Republic of Kazakhstan and the Action Plan of the Government of the Republic of Kazakhstan for Its Implementation” (1997) constitute the key legal documents. However, the governmental programme failed to resolve core conceptual issues such as the legal and staffing frameworks for the civil service, and the presidential decree remained largely declarative, lacking concrete implementation mechanisms.

Between 1997 and 2006, the implementation of organisational culture and civil service ethics in Kazakhstan did not experience significant practical development (Khamzin et al., 2016). However, the central policy document of this period, the Kazakhstan-2030 Strategy (Message of the President..., 1997), did set forth ambitious goals for the development of organisational culture. These included the creation of a professional state, ministerial accountability, and anti-corruption efforts, which laid the conceptual groundwork for future reforms. Nevertheless, neither this strategic programme nor the Law of the Republic of Kazakhstan No. 453-I “On Civil Service” (1999) provided a detailed articulation of the principles underlying public service. The legal and regulatory framework for public service was expanded through the adoption of the Regulations on the Procedure for Civil Service, Rules of Professional Ethics for Civil Servants, guidelines for imposing disciplinary sanctions, certification procedures, Regulations on the Formation of the Personnel Reserve, the Concept of Civil Servant Training, the Law of the Republic of Kazakhstan No. 148 “On Local Government and Self-Government in the Republic of Kazakhstan” (2001), Decree of the President of the Republic of Kazakhstan No. 827 “On Further Measures to Implement the Development Strategy of Kazakhstan until 2030” (2003), and other regulatory acts.

Changes in organisational culture and professional ethics regulation and development are the third stage of civil service evolution in Kazakhstan. The essential values of the civil service are covered by Law No. 416-IV LRK “On the Civil Service of the Republic of Kazakhstan” (2015). The Law of the Republic of Kazakhstan No. 453-I (1999) on civil servant anti-corruption highlights the necessity of fighting corruption to ensure state institution openness and public confidence in governance systems. Effective governance in modern society requires public authorities to fight corruption ethically as well as legally.

Amendments to Law of the Republic of Kazakhstan No. 416-IV LRK “On the Civil Service of the Republic of Kazakhstan” (2015) considerably changed organisational culture and professional ethics. Unlike previous laws, the law requires a government servant Code of Ethics, providing clearer and more defined behavioural norms. The 2015 Act began processes to optimise public administration, including ethical conduct and anti-corruption upgrades. Law of the Republic of Kazakhstan No. 410-IV LRK (2015) expanded many of these clauses. However, real execution showed that oversight methods were ineffective: Unethical behaviour and corruption often went unpunished, weakening public trust in government.

Public servants and state institutions and civil society share ideals, behavioural standards, and rules of interaction through the civil service’s organisational culture. Institutional and legislative instruments and a strong organisational culture have driven civil service reform. Despite strong political support, Kazakhstani reforms have focused on institutional, structural, and legislative changes without evaluating their influence on public service quality (Janenova and Knox, 2019). Researchers also note a contradictory coexistence of two political environments: a *de jure* centralised administrative structure and *de facto* decentralisation at various civil service levels (Zhetpisbayev et al., 2017).

The introduction of open or electronic government in Kazakhstan has significantly improved access to public services. Over 80% of state services are now delivered electronically. In this regard, in 2024 Kazakhstan has performed impressively in terms of digital transformation, ranking 28th out of 193 countries in the United Nations E-Government Development Index and 8th in terms of online service quality. The rapid development of e-government in the country has fundamentally altered the delivery of public services. At the same time, critical issues related to ethics and organisational culture have come to the forefront, as digitalisation has heightened the need for transparency and accountability within state structures. Service provision must be impeccable and honest, with strict adherence to ethical standards to mitigate corruption risks and the misuse of information. Civil servants must

exhibit readiness to adopt new tools and embrace adaptability. In this context, citizen feedback and participation are essential: public authorities must incorporate public input into service delivery processes, thereby fostering a culture centred on societal needs. Thus, qualitative transformations in the civil service through digital service formats must be complemented by the development of ethical standards and organisational culture to ensure not only effectiveness but also public trust.

At the current stage of public service development in the Republic of Kazakhstan, it has been acknowledged that the existing administrative-control model of governance – characterised by hierarchical relations between public institutions and citizens – fails to fully meet societal expectations. There is a growing demand for a service-oriented model of governance that is citizen-centric. The core principle of this model is state accountability, coupled with informational transparency, accessibility of services, and responsibility to the public.

Effective mechanisms for integrating international norms contribute to improving the quality of public administration (Khamzina et al., 2021; 2022). International legal instruments not only establish legal frameworks for the civil service but also set the tone for an organisational culture based on the principles of equality, integrity, and accountability. The Universal Declaration of Human Rights (1948), the International Covenant on Civil and Political Rights (1966), the International Covenant on Economic, Social and Cultural Rights (1966), and the Convention for the Protection of Human Rights and Fundamental Freedoms (1950) laid the foundations for the development of ethical norms and behavioural standards within public institutions. In the context of globalisation and state integration, international standards play a pivotal role in shaping organisational culture. This is clearly reflected in the International Code of Conduct for Public Officials (1996), the Recommendation No. R(2000)10 of the Committee of Ministers to Member States on Codes of Conduct for Public Officials (2000), and the United Nations Convention against Corruption (2004). Table 1 outlines the key aspects of civil service organisational culture in Kazakhstan and other countries covered in this study.

Importantly, the adoption of international standards in Kazakhstan's civil service reform needs to be assessed not just for their institutional and normative alignment but also for their ability to promote sustainability over the long run. Beyond simply adhering to moral principles, sustainable public administration necessitates the institutionalisation of principles like transparency, accountability, inclusivity, and flexibility (Khamzina et al., 2020). Public trust in state institutions is increased, continuity is supported during political transitions, and resilience against corruption is ensured when

these values are ingrained in the organisational culture of the civil service (Lisitsa and Moroz, 2019). The Recommendation of the Council on Public Service Leadership and Capability (OECD Legal Instruments, 2019) underscores the importance of a professional, efficient, and responsive civil service as a basis for public trust. The Recommendation of the Council on Public Integrity (OECD Legal Instruments, 2017), which replaced the 1998 Recommendation, updated ethical standards for the civil service. Based on risk assessment and the cultivation of a culture of integrity within society, this document provides a strategy for transitioning from fragmented measures to a comprehensive approach.

*Table 1 - Comparative analysis of organisational culture in civil service across different countries*

Country	Ethical Standards	Oversight Mechanisms	Legislative Framework	Key Characteristics
Kazakhstan	Code of Ethics for Civil Servants of the Republic of Kazakhstan (2015)	Ethics Commissioner, Disciplinary Committees, Ethics Compliance Monitoring	Law of the Republic of Kazakhstan No. 453-I (1999), Law of the Republic of Kazakhstan No. 410-IV LRK (2015)	Anti-corruption measures, fostering a culture of integrity
USA	Standards of Ethical Conduct for Employees of the Executive Branch (2017)	Office of Government Ethics, Ethics Commission	Ethics in Government Act of 1978 (1978), Executive Order No. 12731 - Principles of Ethical Conduct for Government Officers and Employees (1990)	High levels of transparency and accountability



United Kingdom	Civil Service Code (2015)	Committee on Standards in Public Life, Parliamentary	Code of Conduct for Members of Parliament (1995)	Emphasis on moral principles and public accountability
Netherlands	Code of Conduct for Integrity in the Central Public Administration 2016 (2016)	Bureau for Ethics and Integrity in Public Administration	Ministry-specific staff regulations, etiquette guidelines	Focus on decorum and propriety
Lithuania	Republic of Lithuania Law No. VIII-371 “On the Adjustment of Public and Private Interests in the Civil Service” (1997)	Chief Commission on Civil Service Ethics	Republic of Lithuania Law No. VIII-371	Strict enforcement of civil service ethics

*Source:* Compiled by the authors.

Kazakhstan, in the era of globalisation, has been adapting international standards concerning civil service organisational culture, taking into account OECD (Organisation for Economic Co-operation and Development) guidelines and recommendations. In countries with well-established democratic institutions, both statutory and regulatory acts govern this area, and dedicated oversight bodies ensure compliance:

- in the United States – the Ethics in Government Act of 1978, Executive Order No. 12731 – Principles of Ethical Conduct for Government Officers and Employees (1990), the establishment of a dedicated Office of Government Ethics; the Standards of Ethical Conduct for Employees of the Executive Branch (2017);
- in the United Kingdom, the Code of Conduct for Members of Parliament (1995) was adopted, and the office of the Parliamentary Commissioner for Standards was established;
- in the Netherlands, general regulations for public officials and ministry staff charters include specific rules of conduct in public service; the Code

of Conduct for Integrity in the Central Public Administration 2016 was adopted; and the Bureau for the Promotion of Ethics and Integrity in Public Administration was established under the Ministry of the Interior in 2006 (Ismailov and Mansurova, 2021; Pchelintsev and Pchelintsev, 2009; Levakin and Trifonova, 2015; Obolonskiy, 2015).

According to the Law of the Republic of Kazakhstan No. 416-IV LRK (2015), one of the fundamental principles of the civil service is the observance of official ethics. The law defines “official ethics of civil servants” as the ethical standards set by the Code of Ethics for Civil Servants of the Republic of Kazakhstan, which regulate their behaviour. Chapter 8 of the Law of the Republic of Kazakhstan No. 416-IV LRK (2015) is devoted to official ethics. The Law of the Republic of Kazakhstan No. 410-IV LRK (2015) also contains provisions whose violation may result in disciplinary, administrative, or criminal liability. Paragraph 1 of Article 9 of the Law of the Republic of Kazakhstan No. 416-IV LRK (2015) explicitly states that “entities engaged in combating corruption, within their competence, shall promote and strengthen in society a system of values that reflects intolerance towards corruption”. In this regard, the “Baseline Report of the Fifth Round of Monitoring Anti-Corruption Reforms in Kazakhstan: Istanbul Anti-Corruption Action Plan” (OECD, 2024) drew particular attention to the fact that Kazakhstan’s legislation contains “only basic provisions regarding the prevention and resolution of conflicts of interest, which are insufficient to ensure an effective system for managing conflicts of interest in public service.

In Kazakhstan, the aforementioned laws on public service and anti-corruption display duplication of provisions related to conflicts of interest, preventive measures, and other anti-corruption regulations, which runs counter to the principles of legal drafting technique. It would be advisable to exclude corruption-related disciplinary offences from the Law on Public Service, while instead introducing a general clause covering other disciplinary offences that discredit public service. The ethical principles of public service in Kazakhstan require particular attention, especially concerning the regulation of conflicts of interest. Article 10 of the Law of the Republic of Kazakhstan No. 416-IV LRK (2015) should include a provision stipulating the obligation of civil servants to avoid conflicts of interest, in order to render anti-corruption regulation more effective. Despite the existing legal framework, these rules are not always observed.

The rules of professional ethics in Kazakhstan are set forth not only in the Law of the Republic of Kazakhstan No. 453-I (1999), but also in other normative legal acts. In particular, Article 49 and subparagraph 13) of Article 1 of the aforementioned law contain a reference provision to the Code of Ethics for Civil Servants of the Republic of Kazakhstan (2015). Code of

Ethics for Civil Servants of the Republic of Kazakhstan (2015) approved Decree of the President of the Republic of Kazakhstan No. 153 “On Measures to Further Improve the Ethical Standards and Rules of Conduct of Civil Servants of the Republic of Kazakhstan” (2015). Norms of professional ethics are explicitly anti-corruption in orientation. These include prohibitions on pursuing illegitimate financial or material interests, misuse of official position to resolve personal matters or to benefit non-profit organisations, the obligation to comply with legal restrictions, and the avoidance of conflicts of interest, among others. The direct interrelation between ethical norms and anti-corruption regulations is emphasised by numerous scholars (Işık et al., 2025; Shalbolova et al., 2021).

Safeguarding the rights and interests of both the state and its citizens constitutes an additional ethical standard of conduct for civil servants. These include ensuring the protection of state property, combating violations of state rights and interests, and using public assets solely for their intended purposes (Işık et al., 2024; Krechko and Mikhaylov, 2025; Mukayev et al., 2022). These obligations are primarily derived from the provisions of the Law of the Republic of Kazakhstan No. 416-IV LRK (2015), which outlines the specific duties of civil servants. Among the ethical standards expected of civil servants is the requirement to refrain from visiting gambling establishments, except in cases where such visits are directly related to official duties (e.g., conducting inspections as part of oversight functions). It should be noted that this requirement is driven by the issue of gambling addiction prevalent in Kazakhstani society. Unfortunately, this destructive psychological dependency is increasingly affecting individuals. In this regard, the enshrinement of this requirement in the Code of Ethics for Civil Servants of the Republic of Kazakhstan (2015) appears to be both timely and appropriate. It would be expedient to amend subparagraph 10 of paragraph 6 of the Code of Ethics for Civil Servants of the Republic of Kazakhstan by adding the phrase “including via digital services” after the word “establishments”.

The Code of Ethics for Civil Servants of the Republic of Kazakhstan (2015) establishes requirements regarding the appearance of civil servants, their conduct in official interactions with colleagues, and their behaviour during off-duty hours. These regulations are designed to foster a favourable and healthy moral and psychological working climate. The Code includes provisions concerning the public speeches of civil servants, which stem from the principles of corporate ethics, prohibiting public criticism by ordinary members of their own corporation (in this case, the state).

The alignment of Kazakhstani civil servants with ethical codes and public service norms can be better understood through Public Service Motivation (PSM) and Self-Determination Theory (SDT). PSM suggests that civil

servants driven by a sense of civic duty and altruism are more likely to internalize ethical standards, such as those outlined in the Code of Ethics for Civil Servants of the Republic of Kazakhstan (2015), as integral to their professional identity. However, when PSM is weak, ethical codes may be perceived as bureaucratic formalities, leading to superficial compliance. SDT further highlights that civil servants who feel empowered, competent, and autonomous are more likely to embrace ethical norms, while those facing bureaucratic resistance, inadequate support, or top-down reforms may struggle with motivation. In Kazakhstan, the success of digital transformation and decentralization reforms depends on whether civil servants view them as tools for improving public service or as additional burdens. To strengthen ethical alignment, policymakers should cultivate PSM by emphasising the societal impact of ethical behaviour, enhance autonomy and competence through professional development, and address institutional barriers that hinder motivation. This approach will foster a civil service culture that not only complies with ethical standards but also upholds them as a core professional value.

If we consider the concept of “public service”, which encompasses all state bodies financed from the state budget, the legislative regulation of ethical conduct is not limited to this Code alone. For instance, Chapter 23 of the Resolution of the Parliament of the Republic of Kazakhstan “On the Regulations of the Parliament of the Republic of Kazakhstan” (1996) defines the rules of parliamentary ethics, the violation of which entails disciplinary liability. There are frequent instances where civil servants use their official identification to obtain goods or services free of charge or without waiting in line. The Code of Ethics for Civil Servants of the Republic of Kazakhstan (2015) contains an anti-corruption provision prohibiting the use of one’s official position to resolve matters of a personal nature or in the interests of third parties. However, this norm is primarily oriented towards informal influence or “telephone justice”, whereby psychological pressure is exerted on decision-making bodies or individuals in the interest of the civil servant.

Another noteworthy provision of the Code of Ethics for Civil Servants of the Republic of Kazakhstan (2015) is the requirement for Members of Parliament to publicly apologise to organisations, bodies, or individuals whose interests and honour were harmed, in the event of making public statements based on inaccurate or unverified facts. It would be advisable to enshrine a similar norm in the Code of Ethics for civil servants. The obligation to adhere to the rules of parliamentary ethics also applies to members of the maslikhats (local representative bodies), and violations are subject to disciplinary measures (paragraph 4 of Article 21 of the Law of the Republic of Kazakhstan No. 148, 2001). However, the rules of parliamentary

ethics themselves are established by the regulations of the respective maslikhats. Article 21 of this Law contains a legal inconsistency: disciplinary measures are stipulated for violating ethical rules, yet no corresponding obligation to adhere to them is prescribed. Therefore, paragraph 2 of Article 21 of the aforementioned Law should be supplemented with a provision obligating maslikhat deputies to observe the rules of parliamentary ethics.

Judges, too, have their own code of ethical standards – the Code of Judicial Ethics (2024), adopted by the IX Congress of Judges of Kazakhstan. Additionally, the provisions of the Code are reinforced by applicable legislation. Thus, the Constitutional Law of the Republic of Kazakhstan No. 132 “On the Judicial System and Status of Judges in the Republic of Kazakhstan” (2000) imposes an obligation on judges to comply with judicial ethics and to refrain from actions that undermine their authority and dignity, or that cause “doubt regarding their integrity, fairness, objectivity, and impartiality” (Article 28). Among the criteria for judicial candidates are high moral standards and an impeccable reputation (Article 29).

In 2020, the United Nations Development Programme (UNDP) and the Agency of the Republic of Kazakhstan for Civil Service Affairs conducted a study assessing the level of ethical conduct among civil servants. The results indicated the following: “15% and 37.5% of respondents believe that the Code of Ethics is followed by all or, respectively, more than half of civil servants”. Meanwhile, 23.6% and 14% of respondents noted that the Code is observed by half or, respectively, fewer than half of civil servants. According to 4.1% of those surveyed, the Code is not followed by anyone (UNDP and the Agency..., 2021). In an effective, transparent, corruption-free state apparatus with a healthy moral and psychological climate and a citizen-oriented approach, ideally, at least 90% of civil servants must adhere to the standards of professional ethics. Achieving this level of adherence is essential, though it may not always reach 100%. By ignoring such incidents, the state undermines its authority and cultivates public suspicion.

In this regard, we believe that the Law of the Republic of Kazakhstan No. 416-IV LRK (2015) and other constitutional and ordinary laws regulating the status of individual public officials, as well as the Constitutional Law of the Republic of Kazakhstan No. 2464 “On Elections in the Republic of Kazakhstan” (1995) and the subordinate normative legal acts based on them, should provide for a mandatory resignation of a public servant or an equivalent official under such circumstances. If a voluntary resignation is not submitted, dismissal on these grounds should be imposed (Dzhanenova et al., 2017).

## Conclusions

Kazakhstan's civil service culture is influenced by global trends and historical, cultural, and administrative traditions. This institution went from nomadic clans and colonial administration to hierarchical, traditional Soviet management. Every time public administration changed its policies and organisation, its legal foundations and value paradigm did too. Early civil service normative legal actions lacked organisational structure and ethics regulation. Later periods have declared public institution value paradigms. The Code of Ethics for Civil Servants of Kazakhstan promoted organisational culture by setting conduct and values. To persist, these reforms must be fully integrated into institutional practice and public expectations.

The Code encourages an ethical and professional workplace atmosphere. The age of developing a new organisational culture has seen ethical victories and disasters. The civil service cannot reconcile public officials' values and deeds. Professional ethics training and progress are rushed due to officials' internal resistance to change. Poor monitoring and formal ethics training degrade policy implementation and public trust in government. These variables endanger reforms' long-term viability and efficacy. Improvements may be temporary or symbolic without ethical education, institutional learning, and systemic reinforcement. Lack of qualified workers, bureaucratic obstacles, and low civil servant salaries limit public administration modernisation.

Such a framework makes "sustainable development in governance" in Kazakhstan practical and ideal. The legislative framework, digital change, and OECD-aligned ethics initiatives suggest institutionalising sustainable governance. However, bureaucratic inefficiency, ethical lapses, and uneven accountability preclude its full implementation. Implementing "sustainable development in governance" and driving reform requires consistent execution, measurable ethical performance metrics, and long-term human capital investment. It will remain an ambitious aim rather than a governing model until these prerequisites are realised.

A "listening state" and open government, as well as a renewed wave of public service legislation reform, are current themes in Kazakhstan's civil service organisational culture. To address citizen needs and develop a respectable reputation and image of the civil service at all levels, the goal is to turn the bureaucratic and hierarchical organisational culture into a good and productive one. Sustainability principles must underpin such a change to ensure efficient governance in the present and the institutional ability to serve future generations with honesty, openness, and public legitimacy.

This study helps examine Kazakhstan's civil service organisational culture's sustainable reform. It adjusts OECD principles for the US, UK, Netherlands, and Lithuania to Kazakhstan's needs. The study highlights ethical resilience and sustainability, offering a unique perspective on public administration reforms that prioritise institutional trust and corruption reduction. Update the Law of the Republic of Kazakhstan and establish an independent Ethics Commissioner utilising a multi-method approach, according to the paper. It critically examines policy-practice gaps and systemic ethical and governance issues. The report also advocates for citizen-centric governance amid global open government and participatory democracy trends and suggests how Kazakhstan's experience could shape reforms in other transitional economies.

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# *The Role of Business Schools in the Post-War Recovery of National Economies*

by *Hanna Yatsenko*\*

## *Abstract*

The aim of this study was to identify the ways in which business schools can contribute to the restoration of a country's national economy following the end of a war, and to examine the potential implementation of such practices in Ukraine. The research analysed the successful experience of American business schools in contributing to economic recovery in the post-war period. Additionally, an analysis of the operational environment of business schools in Ukraine was conducted based on statistical data, in order to assess the feasibility of applying American practices within the Ukrainian context. Between 2010 and 2023, the number of business entities in Ukraine increased by 12.41%. In 2020, the country recorded a high ease of doing business score (80.9 out of 100), and in 2022, the human capital development index stood at 0.734 out of 1.0. It was established that, by adapting curricula and implementing new teaching strategies, American business schools made a significant contribution to the country's economic recovery following the World War II. These strategies included prompt responses to labour market demands and to changes in national economic activity. An analysis of high-quality internationally accredited business schools was conducted, revealing that the development of such institutions in Ukraine remains problematic. The primary obstacles to their effective functioning stem from the instability of the external socio-economic environment resulting from the ongoing Russo-Ukrainian War, as well as from the declining performance of educational institutions. For business schools to make a meaningful contribution to post-war reconstruction, following the American example, it is crucial to implement relevant strategies and teaching approaches that respond swiftly to societal changes and foster leadership among business school graduates.

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## 1. Introduction

The Russo-Ukrainian War has led to a significant decline in the functioning of Ukraine's economy. Following the occupation of the Autonomous Republic of Crimea and parts of Donetsk and Luhansk regions by Russia in 2014, Ukraine's gross domestic product (GDP) decreased by 50.40% between 2013 and 2015, amounting to USD 183.31 billion. After overcoming the consequences of the COVID-19, Ukraine seemed poised for renewed economic development. However, the full-scale military invasion by Russia disrupted this trajectory, delaying efforts toward economic stability and long-term sustainability. In 2022, Ukraine's GDP was recorded at USD 160.52 billion, indicating a 19.66% decrease compared to 2021 (Statista, 2024c). The Ukrainian economy lost much of its potential, with only approximately 1% of enterprises unaffected, while the vast majority experienced significant adverse impacts due to the large-scale hostilities (Becker *et. al.*, 2022).

As of 2024, despite Ukraine remaining in a state of war, Ukrainian scholars, researchers, and policymakers have begun to address the question of national development in the post-war period. The central issue concerns what the immediate future holds for every citizen and which actions could effectively contribute to the restoration and long-term sustainability of the Ukrainian economy.

Numerous international researchers have explored the issue of economic recovery through various lenses following crises such as wars, military conflicts, or pandemics. For instance, the findings of G. Sharma *et al.* (2022) demonstrated that recovery is possible via a post-crisis framework involving business continuity, impact analysis, and subsequent innovation-driven transformation. Similar conclusions were reached by D. Sharma *et al.* (2021) in their analysis of economic recovery after the pandemic, highlighting two effective mechanisms: financial assistance to households and credit support for businesses. In a related vein, P. Muñoz *et al.* (2020), examining Chile's crisis response, found that reorienting entrepreneurship programmes could minimise short-term crisis impacts and facilitate long-term entrepreneurial infrastructure development.



Examining the performance of the United States economy in overcoming the repercussions of the COVID-19, J. Ramírez (2022) concluded that investments in small businesses and continued support for American entrepreneurs significantly contributed to economic growth, particularly through job creation. In exploring potential recovery pathways, M. Galindo-Martín et al. (2021) noted that since the 2008 crisis, increasing attention has been paid to the role of entrepreneurship during recessions as a driver of economic revival. Similarly, in analysing post-crisis recovery in Greece, C. Challoumis (2024) concluded that for economic restoration, the country must improve technological innovation and liquidity through strategic investments, support for start-ups and SMEs, and the creation of an effective regulatory environment.

Nevertheless, despite these proposed measures, it may be concluded that most researchers focus predominantly on entrepreneurship development and its outcomes. Various studies have analysed the correlation between entrepreneurial activity and economic growth, incorporating variables such as innovation and fiscal change. However, few researchers highlight the need to enhance the foundational source of entrepreneurial skills, namely, the education system. The ability to effectively manage entrepreneurial activity is crucial to fostering economic recovery (Varnaliy et al., 2016; Yudina et al., 2025).

In the process of economic recovery following a war, a vital role is played by specific units within institutions of higher education and corporate universities, along with particular educational programmes that merit closer attention (Vagonova et al., 2025).

The objective of the study was to identify the potential contributions of business schools to various aspects of post-war national economic development within the current Ukrainian context. Achieving this objective entailed the following tasks:

- an analysis of the global business school landscape and the identification of successful examples of their significant contributions to post-war recovery;
- identification of the main determinants of the impact of business education on national economic recovery after military conflict;
- an exploration of the operational characteristics of business schools in Ukraine and the entrepreneurship development environment;
- the identification of challenges hindering the development of business education in Ukraine and the formulation of measures to address them.

## **2. Materials and methods**

The study initially examined the potential impact of business schools

across nations and identified key determinants influencing the possible process of post-war economic recovery, particularly in Ukraine. To analyse potential strategies of business schools and their contribution to post-war economic development, the successful operational models of three US business schools in the post-World War II period were investigated: Harvard Business School (HBS) (Amdam, 2016, 2020; Krakhmalova and Khvoshchenko, 2022), the University of Chicago Booth School of Business (Cornuel, 2022; Krakhmalova and Khvoshchenko, 2022), and the Haas School of Business at the University of California, Berkeley, due to their innovative programmes compared to other institutions (Chirosa-Cañavate et al., 2022).

To derive conclusions and recommendations from the US business schools' success for Ukraine's post-war economic recovery following the Russo-Ukrainian War, an analysis of the global and Ukrainian business school market in 2024 was conducted, focusing on their role as primary providers of entrepreneurial education. Specifically, the accreditation status of the Association to Advance Collegiate Schools of Business (AACSB) was evaluated for educational institutions worldwide (MBA Today, 2024).

The analysis of prerequisites for entrepreneurship development and Ukraine's post-war economic recovery involved an assessment of the country's economic conditions and educational progress. At this stage, the study relied on secondary data, categorised into three analytical dimensions: economic indicators: Total Early-Stage Entrepreneurial Activity (TEA) index (World Bank Group, 2023), number of business entities (Statista, 2024a, 2024b), Ease of Doing Business Index (World Population Review, 2024), Global Innovation Index (GII) and European Innovation Scoreboard (EIS) (European Commission, 2024a, 2024b, 2024c).

During the period of martial law in Ukraine, national statistical agencies do not publish official statistical data relating to demographic indicators. Consequently, most of the indicators used for analysis were sourced from studies conducted by international researchers and organisations. The indicators of human capital included the following: the number of internally displaced persons (IDPs) within the country (International Organization for Migration (IOM), 2023), the number of Ukrainian refugees abroad (United Nations High Commissioner for Refugees (UNHCR), 2024), the Human Development Index (HDI), the total population, the size of the labour force, and the unemployment rate (Statista, 2024d).

The indicators related to higher education encompassed: the number of active higher education institutions (HEIs) in Ukraine, the number of applicants and graduates from these institutions (State Statistics Service of

Ukraine, 2024), and the level of government expenditure on education as a percentage of GDP (Statista, 2024d).

A comparative analysis was conducted between Ukraine's indicators and those in countries hosting the highest number of accredited business schools as of 2024, namely the United States, France, Canada, and the United Kingdom (MBA Today, 2024). Following assessment of Ukraine's entrepreneurial environment potential, key aspects were identified based on US post-war experience. These aspects may be relevant for Ukrainian business schools undergoing wartime operational transformation and for investigating key determinants of prospective management strategies aimed at enhancing business school service quality and fostering Ukraine's entrepreneurial capacity.

### **3. Results**

Business education's foundation lies in practical orientation and real-world application of acquired skills and competencies. Business schools produce numerous highly qualified managers and entrepreneurs essential for specific national economy sectors and pivotal in advancing sustainability. Entrepreneurs respond to macroenvironment changes and consumer demand. In crisis periods like post-war recovery, small and medium-sized enterprises (SMEs) founded by entrepreneurs require lower initial investments, have reduced production costs, and promptly adapt to consumer demand (Krakhmalova and Khvoshchenko, 2022). Scholars observe that academic practice acts as a progressive tool for promoting social and economic fairness in society. Entrepreneurs have crucial roles in improving nations' economic performance. Starting new businesses benefits both entrepreneurs and national economies, as new market entrants offer innovative goods, services, or solutions that create consumer demand among individuals or companies. Entrepreneurs drive significant economic changes by investing resources in important economic sectors (Makhazhanova et al., 2024; Shtal et al., 2023; Vodovozov et al., 2021). This, in turn, boosts production and leads to general economic growth, which supports wider sustainability and resilience goals.

Moreover, entrepreneurs can indirectly affect economic changes by tackling major social issues, such as lowering unemployment. These factors show why entrepreneurship is a key focus for policymakers in most countries around the world (World Population Review, 2024).

The development of educational institutions capable of equipping populations with theoretical and practical skills is a fundamental prerequisite for fostering effective entrepreneurship in the post-war recovery phase.

Business schools serve as key instruments in this regard. The quality of business schools directly impacts the speed and efficacy of national economic recovery and sustainability, as they rapidly adapt to societal changes and undergo necessary transformations (Bashtannyk et al., 2020). It is pertinent to examine case studies of post-war economic revitalisation facilitated by the effective operation of business schools across different countries.

A. Contu (2019) demonstrated that entrepreneurs drive global change through crisis-responsive intellectual activism, with business schools playing a crucial role. The United States provides a particularly instructive example, as European business schools suffered greater wartime disruptions while US institutions retained operational flexibility (Cornuel, 2022). Leading institutions like Harvard Business School (HBS), the University of Chicago Booth School of Business, and UC Berkeley's Haas School offer valuable lessons for post-war reconstruction.

Between 1945 and 1970, universities offered traditional programmes, but HBS pioneered specialized executive education in the 1960s. While conventional education focused on theoretical knowledge, executive programmes emphasized experiential learning (Amdam, 2016, 2020). This innovation legitimized advanced management training to meet growing corporate sector demands. The proven effectiveness led to rapid growth. US business school enrollment in similar programs tripled by 1953 and increased sixfold by 1957 compared to 1949. Around 10,000 people completed advanced management programs between 1948 and 1958, making Harvard's program the global standard (Amdam, 2020).

In 1943, the University of Chicago Booth School launched the first Executive MBA program for part-time students. It focused on experienced managers who lacked formal business education. The first group had 52 students from various sectors, with participants averaging over 40 years old. This initiative improved the American business landscape after World War II by meeting wartime managerial needs and filling labor shortages (Cornuel, 2022).

UC Berkeley's Haas School responded to the need for skilled managers during industrialization. They implemented three crucial steps: forming an Advisory Board of corporate leaders, hiring qualified faculty who worked with government agencies, and updating curricula to focus on leadership development through social and behavioral sciences. This quick response led to a 25-fold increase in graduates between 1944 and 1964 (Bouman and Freu, 2016). These different approaches improved the skill level of post-war US workers and raised the reputation of business schools as graduates took on important corporate leadership positions (Chirosa-Cañavate et al., 2020).

As of 2024, numerous business schools operate both in Ukraine and internationally, though not all hold the same significance as their 20th-century American counterparts. Today, various national and international accreditations assess the quality of business schools (de-Almeida-e-Pais et al., 2023). AACSB accreditation is commonly recognized as a leading benchmark of business school quality, reflecting a commitment to collaboration, innovation, and continuous institutional improvement. The preeminent value of AACSB also stems from its long-established brand equity, flexibility toward accredited institutions, and support in maintaining their accreditation status (Babu, 2018). The AACSB was established in the 1920s as business schools gained popularity in the United States. By the 1950s, business schools were proliferating across Western Europe (Krakhmalova and Khvoshchenko, 2022). This growth facilitated the development of business education in the US and Europe, aiding post-war economic recovery and fostering institutional sustainability after both World Wars.

However, it is crucial to consider specific aspects of business school operations, such as historical and cultural particularities and their implications within Ukrainian realities. In Ukraine, the development of business-related education began later than in Western European and North American countries, which initially delayed the integration of sustainability-oriented curricula. This delay was due to the protracted transition from the centralised planned economy of the Soviet Union to a new market-based economic model. In post-Soviet states, the practical implementation of business schools only commenced after independence and the shift to a market economy in the late 20th century (Kalaganov et al., 2018). Business schools in Ukraine began operating only after the adoption of a market economy. These historical circumstances created a significant gap in business education development between Western Europe and North America on one side and post-Soviet states on the other. Therefore, a markedly reduced number of business schools in post-Soviet countries currently hold accreditation, posing challenges to their institutional sustainability, global competitiveness, and potential for enduring international recognition.

As of 2024, the legitimisation of business schools remains a complex challenge for Ukraine, requiring resolution to enable these institutions to contribute to the country's post-war economic recovery (Shtal et al., 2024; Shevchuk and Radelytskyy, 2024). Another issue is determining the developmental trajectory of business schools, as post-Soviet institutions differ fundamentally from Western European and North American models in aspects such as language and programme duration. This has necessitated new

strategic approaches for Western European business schools, which are not directly applicable in Ukraine. In Ukraine, this disparity poses a significant obstacle to post-war reconstruction, particularly as, by 29 December 2024, no Ukrainian business school has obtained AACSB accreditation. Globally, 1,035 public and private AACSB-accredited business schools operate worldwide. The highest concentration of these is in the United States (MBA Today, 2024).

According to the statistical data presented in Table 1, 55.07% of all internationally accredited business schools are located in North America, 2.89% in Latin America, 3.47% in Africa and the Middle East, 19.52% in Asia and Oceania, and 12.46% in Europe – with none in Ukraine (MBA Today, 2024). Countries with a high number of accredited business schools, as shown in Table 1, also exhibit a large proportion of entrepreneurs within their populations. This is corroborated by the TEA index, which measures the percentage of adults aged 18-64 who are either nascent entrepreneurs or owner-managers of new businesses. For instance, the US TEA index in 2023 stood at 14.71 points, a 32.88% increase from 2001. In the UK, the 2023 TEA index reached 11.76 points, an 87.26% rise over 2001. France saw its index double by 2023, reaching 10.75 points. Conversely, Hungary’s TEA index declined from 10.86 points in 2001 to 9.88 in 2023. Poland experienced a threefold decrease, with its index dropping to 2.59 points in 2023 (World Bank Group, 2023).

*Table 1 - Number of business schools by country accredited by AACSB in 2024*

Country	Number	Country	Number	Country	Number
Europe		Europe		Africa/Middle East	
Austria	3	United Kingdom	48	Bahrain	2
Belgium	6	Turkey	6	Egypt	3
Cyprus	1	Asia/Oceania		Israel	2
Croatia	2	Australia	23	Jordan	2
Bosnia and Herzegovina	1	Brunei	1	Kuwait	4
Czechia	1	Darussalam		Lebanon	4
Denmark	2	China	52	Morocco	2
Finland	8	Hong Kong	9	Nigeria	1
France	28	India	22	Qatar	1
Germany	16	Indonesia	4	Saudi Arabia	7
		Japan	8		

Hungary	1	Macao	1	South Africa	4
Ireland	6	Malaysia	10	UAE	11
Italy	4	New Zealand	7	Latin America	
Lichtenstein	1	Pakistan	2	Argentina	1
Monaco	1	Philippines	1	Brazil	5
Netherlands	8	Singapore	4	Chile	3
Norway	3	South Korea	20	Colombia	6
Poland	3	Taiwan	30	Costa Rica	1
Portugal	6	Thailand	8	Ecuador	1
Slovakia	1	North America		Mexico	6
Slovenia	2	Canada	28	Peru	3
Spain	8	USA	542	Puerto Rico	2
Sweden	7			Uruguay	1
Switzerland	10			Venezuela	1

*Source:* Compiled by the author based on MBA Today (2024).

Ukraine had 1.9 million business entities in 2023, representing a 12.41% decrease from 2010 (Statista, 2024a). In contrast, the USA recorded 1.05 million enterprises under one year old in 2023, reflecting an 88.09% increase since 2010 (Statista, 2024b). This Ukrainian trend reflects wartime conditions, as entrepreneurship growth depends fundamentally on state-fostered institutional environments.

The economic environment creates a demand for business education, and business education provides the resources and skills needed for professionals who can lead sustainability transitions (Krakhmalova and Khvoshchenko, 2022; Kubiczek, 2020).

In 2020, Ukraine's ease of doing business score was 80.9 out of 100. This was relatively high compared to the USA (61.5), France (48.0), and the UK (84.0) (World Population Review, 2024).

The Human Development Index (HDI) shifts the focus from economic factors to social aspects. It assesses how national economies help develop the potential of their populations (De Castro Placido and Hwang, 2019). According to B. Dasic et al. (2020), HDI classifications are as follows: below 0.55 (low), 0.55-0.70 (medium), 0.70-0.80 (high), and 0.80-1.00 (very high). In 2022, Ukraine's HDI was 0.734, ranking 100th out of 193 countries. This is compared to the global average of 0.739. Between 2014 and 2023, Ukraine's HDI fell by 0.03 points but stayed in the medium development category. The USA (0.927), Canada (0.935), the UK (0.940), and France (0.910) all showed very high human development in 2022 (United Nations Development Programme, 2024). Countries with more accredited business

schools often have higher human development levels, which are crucial for sustainability.

In the 2023 Global Innovation Index (GII), Ukraine ranked 55th out of 132 countries with a score of 38.2 points. This was an improvement from 57th in 2022; however, it dropped to 60th (29.5 points) by 2024. The USA (62.4), the UK (61.0), and France (55.4) were ranked 3rd, 5th, and 12th, respectively (World Intellectual Property Organization, 2023, 2024).

In the 2023 European Innovation Scoreboard (EIS), Ukraine was identified as an emerging innovator with a score of 35.7%. It showed progress in knowledge-intensive services, environmental technologies, and expenditures on venture capital (53.6 percentage points).

Human capital is the driving force behind the country's economic recovery and a vital pillar of sustainability in post-war reconstruction (Ketners, 2025; Teymurova et al., 2025). Considering migration trends in Ukraine from 24 February 2022 to December 2023 inclusive, 3.7 million Ukrainians were internally displaced persons (IDPs), of whom over 80% were granted IDP status, and more than 35% were displaced more than once (IOM, 2023). Between February 2022 and February 2024, 6.8 million Ukrainians became refugees in various countries worldwide. Approximately 10% of Ukrainian refugees resided outside the EU, while the majority settled in European countries. Over 5.0 million Ukrainians sought asylum or temporary protection abroad (UNHCR, 2024). The unemployment rate is of particular concern. According to researchers' estimates, by 2025, Ukraine's population will stand at 38.76 million, with a labour force of 20.41 million, resulting in a projected unemployment rate of 12.71%. In 2022, the unemployment rate was 24.53% (Statista, 2024d).

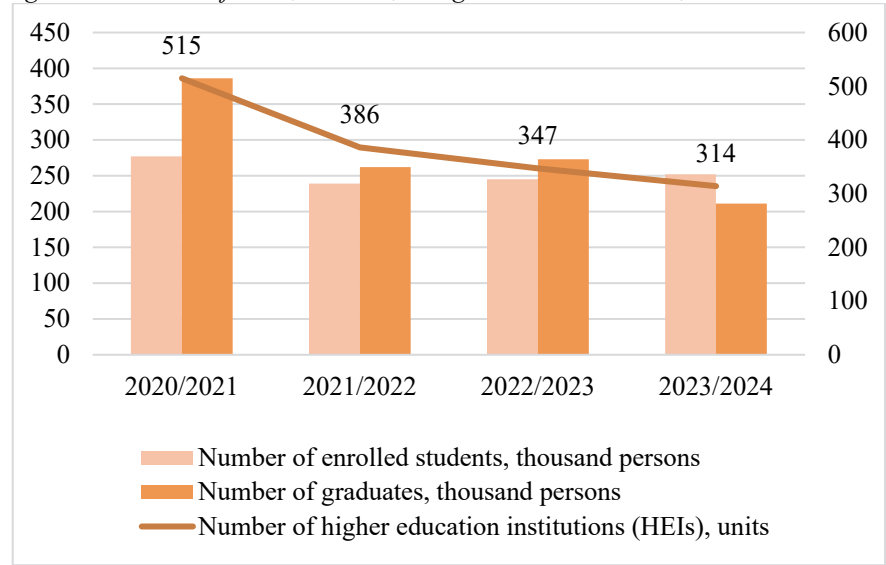
Most business schools are established within higher education institutions (HEIs) (Naumenkova et al., 2023). In Ukraine, between 2020 and 2024, the effectiveness of higher education declined. As of 2023-2024, the rate of HEI closures compared to 2020-2021 was 39.03%. Excluding the temporarily occupied Autonomous Republic of Crimea, parts of Donetsk and Luhansk regions, and other territories where hostilities have occurred, 201 HEIs ceased operations between 2020 and 2024. The number of graduates in 2020-2023 decreased by 1.8 times, or by 175,000 individuals (State Statistics Service of Ukraine, 2024) (Figure 1).

Given these statistics, it can be concluded that while human capital development in Ukraine is relatively high, there are challenges in the operational environment, and business education is not contributing sufficiently. Researchers predict that public expenditure on education, as a percentage of GDP, will decrease by 14.0% in 2029 compared to 2022 (Statista, 2024d). Global values survey empirically demonstrated that



Ukrainians’ trust in the education system declined by 7.2% in 2020 compared to 2011, while trust in large businesses increased by 2.4% over the same period (World Values Survey, 2020).

Figure 1 - Number of HEIs, entrants, and graduates in Ukraine, 2020-2024



Source: Compiled by the author based on State Statistics Service of Ukraine (2024).

Considering Ukraine’s business education development prospects and the successful experiences of American business schools, several conclusions and recommendations appear for Ukraine’s context in 2025. First, all business schools used different strategies to respond to societal changes, ranging from small adjustments to more significant transformations (Cornuel, 2022). There is no single effective strategy, as shown by the three US business schools analyzed that operated in 2024, all of which are AACSB-accredited (MBA Today, 2024). Second, business school leaders initiated change by quickly addressing post-war societal needs. They engaged strong leaders, sometimes at the expense of traditional academic ideals about democracy. Given Ukraine’s low level of innovation and its impact on economic development, leaders can discover and apply high-quality business ideas and innovations (Kuznietsova et al., 2025; Taishykov et al., 2025). Thus, developing leadership should be a top priority for Ukrainian business schools. Third, a critical change involved connecting personal purpose with shared goals.

These ideas provide foundations for Ukrainian business schools to contribute meaningfully to post-war economic recovery by embedding sustainability into institutional missions, curricula, and stakeholder partnerships. Ukrainian business schools face a dilemma: maintain conventional operations focused on knowledge acquisition through research and teaching application typical of most global business schools (Kalambet et al., 2016; Trieschmann et al., 2000), or focus on collective societal goals related to the Russo-Ukrainian war. Statistics indicate conventional approaches do little to improve situations.

A critical challenge involves whether to recruit leader-educators (as US business schools did) or retain existing faculty while ensuring sustainability in institutional development and pedagogical innovation. Faculty research output remains essential for international accreditation, yet when survival and post-war economic contributions are at stake, practical experience from leader-educators becomes equally vital. Such changes entail high risks that most Ukrainian business schools, operating as profit-driven entities, are unprepared to take.

The core question is whether to prioritize contributing to human capital through highly skilled graduates who can drive post-war economic growth, or retaining research-focused faculty to secure international accreditation and adapt to volatile post-war environments. Collective goals need not necessitate lower educational quality but may enable Ukrainian business schools to redefine their societal role in previously unthinkable ways.

## **4. Discussion**

Post-war economic recovery is Ukraine's top priority. As the analysis shows, human capital is a central element in this process. These findings align with prior research by E.E. Širá et al. (2020), who studied how knowledge, skills, and competencies enhance national competitiveness through direct economic impact. Their conclusion, that population knowledge underpins a country's resilience, is echoed by V. Ratten (2020), who analysed entrepreneurship during crises and noted that entrepreneurial innovation integrates societal change. This supports the study's core argument: Ukraine's long-term economic development hinges on human capital advancement.

For instance, W. Lim et al. (2022), analysing the impact of the full-scale Russian invasion of Ukraine on the country's social conditions and entrepreneurship, concluded that the consequences for Ukrainian entrepreneurs are both short-term and long-term, driven by changes within

society and external determinants. This aligns with the findings of M.O. Lemeshko and O.A. Laktionova (2020), who, in their comparative study of the business process support ecosystem in Ukraine and other countries, highlighted the critical role of financial support, business education, and regulatory frameworks. Ukraine has been actively implementing measures such as tax incentives and reduced lending rates for small and medium enterprises, aiming to enhance the sustainability of its business environment. This approach resonates with the broader conclusions drawn by other scholars, such as those examining the post-war experience of U.S. business schools, which also emphasized the importance of responsive institutional frameworks in fostering economic recovery and sustainability (Shahini et al., 2022; 2025).

American experience analysis regarding business schools' role in post-World War II economic recovery offers valuable lessons for Ukrainian business schools' potential contribution to national economic recovery after the Russo-Ukrainian war ends. Key lessons include the diversity of strategies business schools employed responding to societal needs, the crucial alignment of individual business school missions with collective societal goals, and focus on leadership development among graduates – a responsibility of business school administrators.

These conclusions are supported by the empirical research of K. Koziol-Nadolna (2020), who analysed the role of leadership within organisations, concluding that leadership among company executives is a key driver in fostering innovation through the recruitment of highly qualified personnel, stimulation of employee creativity, and rewarding innovative behaviour. This finding complements the earlier conclusions drawn by W. Lim et al. (2022), who highlighted the importance of human capital in the entrepreneurial ecosystem, particularly during times of crisis. Similarly, B. Avolio and J. Benzaquena (2020) emphasized that effective leadership at the helm of an institution, alongside strong organisational management, is critical to enhancing performance and ensuring long-term institutional sustainability. These insights align with the experiences of U.S. business schools in post-war recovery, as examined by HBS, Chicago Booth, and Haas, where leadership was pivotal in responding to societal shifts and accelerating economic recovery.

In implementing the measures identified in this study, Ukrainian business schools may encounter difficulties arising from the divergence between collective societal development goals and their own institutional objectives, particularly in financial and structural terms (Dyomin et al., 2021; Ivanov et al., 2021). Business schools are predominantly profit-oriented enterprises, which may lead to a dilemma in financing teaching staff that includes both

academic scholars and leaders from efficiently operating companies in the market. In order to maintain competitive positions, business schools must attract scholars whose contributions to international science can bring Ukrainian business education institutions closer to international accreditation. However, it is also essential that business schools integrate practitioner-lecturers into their operations – individuals capable of transferring experience to students, i.e., future entrepreneurs. Similar conclusions were drawn by A. Sánchez-Bayón and E. Aznarb (2021) in their research on the development of Spanish business schools. They concluded that the best path forward for business school development is a return to a personalised strategy, involving entrepreneurs as instructors and focusing on contributing directly to the wellbeing economy and educational sustainability. This aligns with the findings of our study, which also emphasizes the importance of adapting business school strategies to meet the evolving needs of society and the economy, particularly in post-war contexts. By fostering closer connections between business schools and the entrepreneurial ecosystem, Ukraine can enhance its educational and economic recovery post-conflict.

Beyond challenges identified regarding Ukrainian business school development, B. Schlegelmilch (2020), investigating global business school operations, noted significant competition in the business education market. Therefore, most business schools must consider altering their operational business models. Some educational institutions might benefit from employing few faculty members acting as systems integrators in the market. Others might find short-term interventions more effective, delivering entrepreneurs new and relevant market-required knowledge. Ultimately, the determining factor is the business school's mission and strategy.

## **5. Conclusions**

Ukraine's post-war economic recovery hinges significantly on expanding entrepreneurial activity, with business schools playing a crucial role in training qualified entrepreneurs capable of implementing sustainable practices and fostering resilient economic models. Analysis of successful US business school experiences reveals various applicable strategies, all focused on cultivating entrepreneurial leaders in sectors critical for post-war recovery.

Currently, Ukraine's business schools fail to meet international standards and cannot substantially contribute to economic reconstruction due to

unfavorable operating conditions. However, Ukraine's strong human capital potential creates opportunities for future improvements.

This research identifies key directions for Ukraine's post-war economic recovery through entrepreneurial activity and business school influence. The proposed measures could prove effective both short-term for improving business schools and long-term for enhancing the economy through robust human capital development.

Ukraine's human capital market shows efficient functioning and significant development potential, which business schools can facilitate. However, this study's limitation is the absence of analysis regarding the evolution of Ukrainian business education across different ownership structures – public versus private universities and standalone schools. Since ownership directly influences financial capabilities and managerial practices, future research should examine both external economic environments and internal factors affecting business schools.

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# *Legal methods of environmental law enforcement*

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## *Abstract*

The relevance of the subject matter of this research study is due to raising issues in the field of environmental law enforcement in the Republic of Kazakhstan as well as the need to improve the existing methods of protecting environmental law and order in the country. The main purpose of this research study is to examine the legal means of protecting environmental law and order in Kazakhstan and the rights of the country's citizens to protect and enforce environmental law. The methodological approach in this research paper consisted of a combination of systematic analysis and the synthesis with abstraction of research data. The findings demonstrated a whole set of objective prerequisites for the establishment of effective legal remedies for the protection of the environmental legal order in the country. The Republic of Kazakhstan has adopted and successfully applied in practice the Environmental Code, which regulates the rights and obligations of citizens in the field of environmental law and order. At the same time, there is prosecutorial surveillance in the area of natural resource management and environmental protection. It is an effective tool for monitoring compliance with the rule of law in protecting the citizens' rights in environmental law enforcement. These rights are also under protection of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. This convention was the subject of ratification by the Parliament of the Republic of Kazakhstan. The practical significance of the results obtained in this research is in the possibility of their application in the development and practical implementation of effective legal ways to protect the norms of environmental safety in Kazakhstan.

*Keywords:* crime, environmental protection, criminal responsibility, legal regulation, Environmental Code.

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## Introduction

The problematic of this research stipulates the high level and diversity of environmental issues in contemporary Kazakhstan. These problems inevitably cause a deterioration in the general quality of life of the citizens and entail an aggravation of a whole range of problems of a completely different kind, notably economic, social and public and among others. At the same time, the term “environmental law enforcement” has a relatively rare occurrence in legal science due to low level of research. However, this legal category has significant practical and theoretical relevance to both general legal theory and environmental law (Esetova and Imangazyev, 2022). This fact necessitates research into the current legal means of protecting environmental law and order and the rights of citizens of the Republic of Kazakhstan to self-protection in ensuring their statutory rights in the field of natural resource management and environmental protection. The issue is of considerable relevance in the context of the economic and social development at state level. The environmental protection and environmental law enforcement issues are highly relevant and important in building a democratic and empowered society in the Republic of Kazakhstan (Issayeva et al., 2024; Madiyarova et al., 2015).

The research team consisting of Esetova et al. (2022) addressed the need for a research into environmental law enforcement in Kazakhstan in a joint academic study. They established that a concept of “enforcement” has not been the subject of separate research in relation to environmental law issues in the Republic of Kazakhstan. The scientists note that defining environmental law in Kazakhstan is an urgent problem at the current stage of the development of science in the country.

In turn, Mataeva and Mukasheva (2020) conducted a joint analysis of the effectiveness of environmental crime management in the Republic of Kazakhstan, where they draw attention to the reforms of legislation in the field of environmental protection during last two decades. At the same time, the overall environmental situation in the country has deteriorated markedly, having shown no progress in improving environmental protection even with the adoption of the environmental code.

A group of scientists Fetkulov et al. (2015) considered selected issues of the citizens’ responsibility for environmental criminal offences in the Republic of Kazakhstan. The authors think that most effective criminal law remedies today should come in force intelligently to protect the environment and natural diversity. The 1 January 2015 saw the adoption and implementation of the Criminal Code of the Republic of Kazakhstan, specifically designed to apply this conceptual provision.

The author Shaimerdenova (2020) studied specific aspects of enhancing the law enforcement system in the Republic of Kazakhstan, particularly focusing on strengthening mechanisms for safeguarding the rights and freedoms of citizens. Shaimerdenova's work emphasizes the importance of developing a scientifically grounded legislative framework to improve the enforcement of environmental laws. According to the scholar, effective legal tools are needed to safeguard environmental order and ensure robust protection for citizens' environmental rights, particularly in the context of natural resource management and environmental protection. This necessitates the creation of a comprehensive legal approach that can effectively address the complexities of environmental law enforcement.

The author Khanov (2012) conducted a scientific study of the current achievements and prospects for the development of criminal law and procedure in the Republic of Kazakhstan. According to it, the significant updating of the main branches of national legislation in Kazakhstan has been determined by the provisions of Decree of the President of September 20, 2022 "On the Concept of the Legal Policy of the Republic of Kazakhstan" No. 858 (2022). At the same time, many questions about the regulation of environmental law and order remain open up to the present day, which implies the need to improve the national legal system in this area.

The main purpose of this research paper is to examine the legal aspects of environmental law enforcement in Kazakhstan as well as the rights of the country's citizens in the legal perspective.

## **Materials and Methods**

The basis of the methodological approach in this scientific study is a combination of theoretical research methods, in particular, systematic analysis of the current prospects and opportunities for legal protection of the environmental law and order in the Republic of Kazakhstan with the generalization and abstraction of the data obtained in this research work. The theoretical basis for this research work was the subject of a review of a number of scientific studies examining a wide range of issues related to the search for effective legal ways to protect environmental law and order in a number of countries around the world.

A systematic analysis of the real prospects for ensuring legal protection of the norms of environmental law and order in the Republic of Kazakhstan to date involved research into current regulations governing the enforcement of environmental legislation. It helped to define the state's declared objectives in the field of environmental protection and the conduct of environmental policy in

the current legislation. The theoretical study provided an opportunity to note the role of law enforcement agencies in determining legal liability for violation of the citizens' rights in the area of environmental law and order. It also helped to outline the existing means of enforcing environmental law, including the prosecutors' inspections of compliance with statutory environmental safety standards and the regulation of procedures for citizens to appeal to the courts to protect their rights in the manner prescribed by law.

The application of generalisation and abstraction methods has contributed to the research into selected normative acts defining the priorities of Kazakhstan's state policy in the search for effective legal ways to protect environmental law and order. In particular: Environmental Code of the Republic of Kazakhstan, materials of the Aarhus Convention, ratified by the Parliament of Kazakhstan and defining a set of regulatory measures to ensure the rights of citizens in the field of environmental use. It also included materials of the Decision of the Plenum of the Supreme Court of the Republic of Kazakhstan "On practice of application by courts of the provisions of current legislation in the field of environmental protection" of 22 December 2022. In particular, an analysis of the provisions of the Environmental Code of the Republic of Kazakhstan No. 400-VI (2021) helped to establish the key legal fundamentals, principles and objectives of the state policy implementation in the field of environmental protection and enforcement of the environmental law. The study of the available materials of the ratified Aarhus Convention in Denmark (2000) contributed the existing priorities on the citizens' rights to self-protection in all relevant aspects of environmental law enforcement. The consideration of the materials of the Resolution of the Plenum of the Supreme Court of the Republic of Kazakhstan No. 16 "On the practice of application by courts of legislation on environmental protection" (2000) provided an opportunity to analyse the understanding of the concept of the environment adopted within the provisions of legislative documents of the Republic of Kazakhstan. This also helped to assess the degree of legal liability of the citizens for violations of environmental law.

This study also examined the legally defined standards of liability for violations of environmental legislation (Kuzhakhmetova, 2017). This helped to establish standards for the legal liability of Kazakh citizens for violations of environmental legislation as well as an established procedure for compensation for material damage in the cases detected by law enforcement agencies.

## Results

The territory of Kazakhstan has a unique set of natural complexes: from

deserts to high mountains and ecological systems of inland waters and seas. Given the gradually increasing pace of economic development of the country and the steady increase in the use of natural resources, the question of further improving the system of territorial protection of natural resources remains highly relevant. The conditions entirely similar to those mentioned above predetermine the need for further development of specially protected areas as an effective system of biodiversity conservation and nature protection in the country. According to the provisions of the Environmental Code of the Republic of Kazakhstan No. 400-VI (2021) currently in force, the main purpose of state legislation in the field of ecology and environmental protection is to define the legal fundamentals, principles and tasks of the state environmental enforcement. The Code thereby declares the following key objectives of Kazakhstan's environmental legislation (Environmental Code..., 2021):

1. Creating conditions for maintaining an adequate level of environmental protection by introducing public regulation measures aimed at preventing environmental pollution and any damage to the environment, including mitigating the consequences of environmental damage that has already occurred.
2. Gradual reduction of the negative anthropogenic impact on the environment.
3. Creating conditions in the environment that are favourable to human life and health.
4. Formation of a solid base for the development of the Republic of Kazakhstan in the environmental field.
5. Ensuring that the state can effectively contribute to strengthening the global response to the threat of climate change towards sustainable development and to the implementation of international, regional and other public programmes for environmental protection and adaptation to climate change.
6. Protection, control and restoration of the environment, including areas and sites that may be of significant ecological, scientific, historical, cultural and recreational value.
7. Creation of effective management mechanisms in the field of environmental protection, involving efficient interaction between the relevant government agencies.
8. Creating conditions for securing state support for green investments.
9. Continuous monitoring of environmental information in order to make it available to the public.
10. Strengthening environmental law and order and maintaining an adequate level of environmental security.

11. Creating and maintaining a high level of environmental culture in society.
12. Creating conditions for attracting investments in the organisation and implementation of environmental protection measures.
13. Development of cooperation between public organizations of the Republic of Kazakhstan in the area of expansion of international relations on environmental protection issues.
14. Dissemination of environmental knowledge and competences in the existing education system.

In addition, this regulation provides legal liability for violations of the legislation of the Republic of Kazakhstan in the field of environmental protection (Kuzhakhmetova, 2017). Specifically, the main types of offences in the field of ecology and environmental protection include violations of the legislation of the Republic of Kazakhstan in the field of ecology that result in property liability for citizens, administrative violations in the field of environmental protection and the use of natural resources, and violations of criminal law in the field of ecology and environmental protection.

Moreover, legal liability for damage caused by citizens of Kazakhstan to objects of the environment requires compensation in several cases (Bulatov et al., 2019; Kunelbayev et al., 2017; Kuzhakhmetova, 2017). These cases include the destruction or damage to the natural resources of the state, the irrational or illegal use of the country's natural resources, unauthorized emissions, and emissions made in excess of the permitted norm.

The environmental prosecutors' offices in major regions of Kazakhstan are responsible for monitoring compliance with the country's current environmental and ecological legislation. The work of these prosecution offices is under guidance by a team of prosecutors from the Prosecutor General's Office of Kazakhstan. The prosecutor's supervision of natural resource management and environmental protection takes place through specialised inspections and analyses of compliance with the law. Regardless of the subject matter of a particular prosecutorial investigation, the Prosecutor General of the Republic of Kazakhstan has formulated a mandate to investigate environmental protection issues, in particular those related to pollution (Bissenov et al., 2014; Sagatov, 2013). Along with that, the order of the Prosecutor General advises particular attention to the following issues (Borisov, 2021):

1. Respect for the economic interests of the state in the fulfilment of contractual obligations including interests in taxes and other budgetary revenues.
2. Compliance with commitments to participate in the socio-economic and environmental development of a particular region, including its infrastructure.



3. Full implementation of contractual obligations in the area of attracting human resources of the Republic of Kazakhstan as well as in the issues of procurement of goods, works and services of Kazakh origin.

To date, the prosecutors' offices specialising in detecting environmental violations in Kazakhstan have established themselves as an indispensable element of the prosecutorial surveillance system. The environmental prosecutors initiate regular inspections, which reveal violations of existing legislation in the field of environmental law and order (Umair and Guliyeva, 2025). The persons found guilty shall undergo prosecution and compensation by force for the damage they have caused in accordance with the current legislation in the Republic of Kazakhstan. However, there are alarming indications of corruption revealed in state environmental control agencies (Huseynli et al., 2024a; Mataeva and Mukasheva, 2020). The corruption offences of individual officials notably caused a number of the country's industrial enterprises to exceed their emissions standards. There is a legal gap to use natural resources without the appropriate permits as well as to abuse the power by officials in favour of certain commercial organisations (Khan et al., 2025; Zhao et al., 2025).

All issues of access to justice for the country citizens in matters relating to legal means of protection of the environmental law in Kazakhstan are governed by the provisions of the Convention on Access to Information, Public Participation in Decision-Making Procedures and Participation in Justice in Environmental Matters (Aarhus Convention), ratified by the Parliament of Kazakhstan. In addition, the Environmental Code, the Code of Civil Procedure and other legislation regulate these aspects. This fact is essential in the context of the economic security of the state and society as well as the stable functioning of the economy as a whole (Iskaliev, 2019; Işık et al., 2025; Miller et al., 2023).

The right of citizens to self-protection in environmental law enforcement is under guarantee by the provisions of the national constitution as well as a number of legal acts (presented above) and the norms of the ratified Convention on Access to Information Relating to the Protection of the Environment. The article No. 9 of the Aarhus Convention regulates the ability of each ratifying state to ensure the public access within the legal framework of each particular state (Aarhus Convention, 2000). This applies to the full spectrum of issues relating to environmental protection and environmental law enforcement. Ensuring access for Kazakhstan's citizens to justice in environmental matters and finding effective legal means to protect the environmental order would help cover key aspects of the functioning of the judiciary, judges, and bailiffs. In this context, several provisions are particularly relevant (Borisov, 2021; Mukayev et al., 2022;

Shalbolova et al., 2020). One of these provisions is to open the possibility for citizens or members of voluntary associations to apply to the courts for filing claims at a minimal cost (legal expenses) and with guaranteed access to qualified legal assistance when necessary. Another important aspect is setting a reasonable time frame for the preparation of the case for trial in the court proceedings.

Additionally, there should be a reasonable time limit for the trial, with the condition that litigants are promptly notified of the time and place of the trial, or informed of any specific procedural steps taken. It is also essential for the courts to issue substantial decisions, followed by sending and releasing copies to the citizens involved in the proceedings, along with an explanation of their legal rights to appeal if they disagree with the decision. Furthermore, setting acceptable procedural deadlines for appeals (supervisory appeals) by higher courts is important, with attention to ensuring timely notification of the time and place of the appeals court hearing.

Moreover, timely preparation of judicial acts and court decisions by higher appellate courts is critical, with the sending and issuing of copies to the concerned parties. It is also necessary for enforceable court decisions to be prepared and provided in a timely manner, with an explanation (if necessary) of the plaintiff's right to appeal to the courts against actions considered unlawful by bailiffs. Finally, determining suitable time intervals for the initiation of enforcement proceedings by bailiffs is key, followed by the appointment of measures to ensure the timely and effective enforcement of the court decision.

As an addition to the essence of the provisions in question, it is appropriate to pay attention to the Resolution of the Plenum of the Supreme Court of the Republic of Kazakhstan No. 16 "On the practice of application by courts of legislation on environmental protection" (2000). Paragraph 3 of this Resolution interprets the concept of natural resources of the state as components of natural objects, which are constituent parts of the environment that have active use in the process of economic or any other activity in order to satisfy various public needs (Umbetbayeva, 2020). The regulation also states that the relevant authorities in court proceedings should take into account that the natural areas under special protection, the atmosphere above natural objects, plants and animals included in the Red Book and other natural objects not used in direct economic activities do not fall under the category of natural resources. (Resolution of the Plenum..., 2000).

Today, the legislation of the Republic of Kazakhstan classifies land plots, areas of water surface and airspace above them located in natural complexes and objects of special nature conservation, as having special state

significance and as protected scientific, cultural, aesthetic, health and recreational objects. These territorial formations are fully or partially withdrawn from economic use by decisions of the public authorities and a special legal protection regime is established for them (Kayzhakparova, 2020). It is the responsibility of the local, prosecutorial and judicial authorities to implement measures to protect these areas and the rights of citizens to use them. Their responsibilities include identifying violations in the field of environmental protection and making decisions regarding the enforcement of Kazakh citizens' rights to self-protection.

Therefore, the legal means of protecting environmental law in force are currently relevant to the Republic of Kazakhstan and constitute a reliable tool for ensuring the rights of citizens to self-protection in matters of environmental protection and the use of natural resources and the environment.

## **Discussion**

This research reveals the critical role of legal frameworks in protecting environmental law and order in Kazakhstan. Specifically, it confirms that the Environmental Code, along with effective prosecutorial oversight, provides a solid foundation for citizens' rights in environmental matters. The findings align with key conclusions drawn from various studies, such as those by Elvan and Turker (2015), who emphasize the importance of direct public participation in environmental justice as outlined in the Aarhus Convention. This research supports their argument by showing how Kazakhstan's legal system integrates these participatory rights, which has been proven effective in enhancing environmental governance (Iurchenko et al., 2024). Unlike previous studies that discuss the theoretical importance of participation, this study adds an empirical dimension by demonstrating how these principles are embedded in Kazakhstan's legal practices, making it a significant contribution to the field.

Rorie et al. (2019) note the tensions between offenders' and regulators' perceptions of environmental offenses, which often lead to ineffective legal regulation. This research confirms these challenges, but also provides an additional layer of insight by examining how these regulatory gaps are being addressed through Kazakhstan's prosecutorial surveillance system. The regulatory bodies not only oversee compliance but also engage with the local community, thus improving the effectiveness of environmental law enforcement. This direct comparison highlights how Kazakhstan's approach goes beyond the theoretical findings of Rorie et al. by incorporating a more

proactive legal monitoring process, thus offering a fresh perspective on the enforcement of environmental laws.

Further, Matsukawa and Tatsuki (2018) address the role of community empowerment in preventing environmental crime, stressing that community-based approaches are essential for effective environmental criminology. While their research largely focuses on community efforts in Japan, this study finds similar trends in Kazakhstan, where community involvement and public organizations play a crucial role in ensuring environmental security (Destek et al., 2024; 2025; Giasova et al., 2025). However, unlike Matsukawa and Tatsuki, this study explores the integration of legal measures within community empowerment efforts, offering a more nuanced view of how legal frameworks can support such initiatives.

Johnson et al. (2016) discuss the exploitation of freshwater resources within the framework of human rights and green criminology. This research corroborates their findings, emphasizing the significant environmental degradation caused by corporate exploitation of natural resources. However, it extends their analysis by identifying the legal mechanisms, such as prosecutorial investigations and judicial interventions, that directly address these issues in Kazakhstan (Caglar et al., 2025). This integration of legal action into environmental protection offers a unique contribution to the broader field of green criminology, showing how legal frameworks can be adapted to mitigate the ecological impacts highlighted by Johnson et al.

Fetanat and Tayebi (2023) focus on the importance of increasing environmental culture and awareness for effective pollution control. Their findings align with this study, which also underscores the importance of public environmental culture. However, this research goes a step further by connecting environmental culture to concrete legal mechanisms, showing how legal norms can incentivize better environmental practices among citizens and industries alike (Huseynli et al., 2024b; Huseynov et al., 2024). This comparison adds depth to Fetanat and Tayebi's argument by linking the theoretical concept of environmental awareness to its practical enforcement through law.

The study of Wang (2022) on urban environmental safety in China highlights the serious threat of excessive pollutant emissions in urban areas. This research corroborates Wang's findings but builds upon them by demonstrating how Kazakhstan's legal framework is actively addressing these issues. By examining Kazakhstan's proactive legislative and regulatory measures, this research provides a model for other nations facing similar urban environmental challenges. The comparative analysis presents Kazakhstan's approach as an actionable solution, contrasting it with the more

passive regulatory responses observed in other regions, such as those in China.

Chasse (2019) examines how legal precedents in environmental pollution lawsuits set the stage for future legal actions in the US. This study finds similar trends in Kazakhstan, where judicial decisions have helped shape environmental law enforcement practices. However, it also goes further by detailing how Kazakhstan's legal system incorporates both international frameworks and domestic laws, offering a more robust model of legal intervention. The study shows that Kazakhstan's legal system not only follows judicial precedents but also proactively adapts to emerging environmental challenges, setting a significant precedent for the region.

Boyer and Porrini (2011) discuss the impact of legal errors on environmental liability in industrial accidents, highlighting the need for judicial efficiency in environmental law enforcement. This research agrees with their conclusions but extends the analysis by detailing Kazakhstan's efforts to streamline legal procedures and enhance the efficiency of the judicial system. By emphasizing the role of prosecutorial oversight and judicial action, this study suggests that Kazakhstan's legal system is increasingly capable of addressing such issues more effectively than in the past, thus making a unique contribution to this area of research.

Liu et al. (2022) focus on the role of public protests in improving environmental legislation in China, a concept also observed in Kazakhstan. This study agrees with Liu et al. on the power of public action but goes further by showing how public pressure is integrated into the legal system through the courts and prosecutorial oversight (Bulatov, 2025; Tastemir et al., 2025). The findings illustrate that in Kazakhstan, legal mechanisms are in place to ensure that public actions have tangible effects on environmental law enforcement, making this research a valuable addition to the field of public participation in environmental governance.

Xu et al. (2022) discuss innovative methods for reducing pollutant emissions through regulatory frameworks, which aligns with the findings of this study. However, this research emphasizes the role of the judiciary and prosecution services in supporting these innovations, providing a more comprehensive view of how legal structures can foster environmental protection. The study's comparison with Xu et al. adds a unique legal perspective to the ongoing discussion on innovative environmental solutions.

Therefore, discussed the findings of this research in the context of their analytical comparison with the results of a number of scientific works aimed at studying key aspects of the search for effective legal means of protecting environmental law and order were discussed. These findings have demonstrated their fundamental correspondence on a number of factors

under consideration. This is a clear illustration of the objectivity and scientific validity of the results of this study as well as the admissibility in principle of their use in the search for effective legal means of environmental law enforcement.

## **Conclusions**

Therefore, current study established that the current legislation of the Republic of Kazakhstan clearly regulates the legal means of protecting the environmental legal order and the right of the citizens to self-protection within the established legal framework. The country has developed and implemented an Environmental Code as well as a clearly regulated system of relations between citizens and environmental authorities. The order of enforcement of the rule of law in the field of ecology and environmental protection takes place through the activities of the prosecution services. They are responsible for receiving and examining complaints from citizens concerning violations of environmental law and for carrying out prosecutorial investigations into these matters. In addition, legal remedies for environmental law enforcement in Kazakhstan include opportunities for the citizens to assert their rights in the courts. These rights are present in the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. As the Parliament of the Republic of Kazakhstan has ratified the Convention, its provisions are legally applicable to its citizens.

At the same time, there are certain problems associated with identified instances of corruption in the state bodies responsible for environmental control. This is among the reasons why a number of companies increase their emissions, which leads to compromised environmental safety standards in the regions, where they are located. The effective solutions to these kinds of problems would have a positive impact on the environmental situation in the country as a whole. In addition, the legal precedents in the application of legislative norms in protecting the environmental order in the Republic of Kazakhstan will be applicable in conjunction with measures to increase the effectiveness of legal protection of citizens in matters of environmental law enforcement and the use of natural resources.

The prospects for further scientific research in the chosen direction are due to the high relevance of environmental issues in the Republic of Kazakhstan in the context of compliance with the country's current environmental legislation. This will contribute to the search for effective

legal ways to protect the environmental law and order in the country and to improve the general level of environmental culture in society as a whole.

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# *The role of the Non-Oil Sector in Advancing Sustainable Economic Development in the Republic of Azerbaijan*

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## *Abstract*

This paper investigates the role of the oil sector in Azerbaijan's sustainable economic development and its impact on economic diversification, job creation, infrastructure development, and increased export earnings. By analysing data on gross domestic product and investment, the oil sector is shown to be growing steadily, reflecting a gradual shift towards a more resilient and sustainable economic model. The study also examines the role of small and medium enterprises within the non-oil sector and highlights initiatives promoting regional recovery and entrepreneurship. It emphasizes the importance of developing human capital in the oil and non-oil sectors by providing qualified personnel and social support for workers as prerequisites for long-term sustainability.

**Keywords:** diversification, technological progress, investment, sustainability, human capital.

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## Introduction

The decline in oil prices, due to both external factors and internal changes in the development strategies of the global economy, calls into question the sustainability of economies strongly oriented towards the oil and gas sector. In the context of Azerbaijan, a country with abundant oil resources, the need to diversify the economy becomes even more vivid. Limited investment in the non-oil sector, particularly in innovation and technology development, is a serious constraint to its potential. In addition, insufficient infrastructure development and human resource shortages may also hamper the successful advancement of the non-oil sector.

Investing in the non-oil industry can generate new jobs, boost employment, and enhance the socio-economic conditions for the population (Aliyev et al., 2023; Huseynova et al., 2022). Additionally, the expansion of the non-oil sector supports the improvement of infrastructure, education, and healthcare, all of which contribute to the sustainable economic progress of the nation holistically. The key factors influencing the development of the non-oil sector are investment, technological progress, and human capital development (Pürhani et al., 2022). Creating an environment conducive to the expansion of the non-oil industry necessitates the attraction of both domestic and foreign investment.

Huseynli (2022) and Ideh, Okolo, and Emengini (2021) emphasize that the advancement of non-oil industry can significantly reduce economic risks for the country, especially during periods of oil price fluctuations. Rzayeva and Rzayeva (2020), in turn, proposed specific strategies for government support and stimulation of investment in the non-oil industry. Babayev and Huseynov (2021), Omodero and Ehikioya (2020) drew attention to the importance of infrastructure development in the non-oil sector. Waheed, Sarwar, and Dignah (2020) and Al-Khalidi Al-Maliki (2021) delved into the significance of innovation and technological advancement within the non-oil industry. Ezu and Osakwe (2023) explored how the advancement of the non-oil sector affects employment and socio-economic progress in the country. Moreover, Mirhoseyni, Izadi, and Khorasani (2023) underscored the critical role of small and medium enterprises (SMEs) in the non-oil sector, demonstrating their capacity to drive economic expansion and job creation. Li et al. (2021) investigated the non-oil sector's significance within the broader context of global economic shifts.

The authors' results show that the development of this sector can significantly reduce economic risks for the country and increase its resilience, especially in the context of oil price fluctuations. They also emphasize the importance of government support and investment in new

industries, infrastructure, and innovation in the non-oil industry. Analyses of the role of this sector also cover its impact on employment and socio-economic development, as well as the importance of SMEs. However, issues such as the advancement potential of the non-oil sector in light of changing conditions and the growing attention to the environmental aspects of energy production remain unexplored. It also remains relevant to study the impact of global economic trends such as digitalization and international trade on the economic advancement of the non-oil sector in Azerbaijan.

The main objective of this study is to assess the influence of Azerbaijan's non-oil sector on its sustainable economic development, taking into account diverse methodologies and the challenge of uncertainty. To fulfil this objective, the study has identified the following goals: to pinpoint uncertainties within this domain and to evaluate the sector's growth potential amidst shifting conditions and global economic patterns.

## **Materials and Methods**

Various datasets sourced from multiple channels were utilized to analyse the economic progress of Azerbaijan. The primary reservoir of information was derived from the materials provided by the State Statistical Committee of the Republic of Azerbaijan (2023). The first key aspect of the analysis was data on gross domestic product (GDP) by economic sectors. For this purpose, GDP data covering different economic sectors from 2014 to 2023 were used. This data allowed analysing the contribution of different sectors to the overall economic growth of the country and identifying trends in their development. To examine the trajectory of non-oil sector development in Azerbaijan, the study employed the method of time series analysis. This methodology hinges on scrutinizing data amassed over a specific duration to discern trends and shifts in industry development over time. This strategy also makes it possible to spot long-term trends that promote sustainable development by emphasising industries with strong economies, high employment rates, and minimal environmental impact.

A comprehensive analysis of policies and initiatives aimed at promoting the advancement of the oil sector has been conducted. This analysis reveals the regulatory framework and motivational measures that encourage investment and entrepreneurship in the sector. Next, data on investment in the economy for the period 2014 to 2022 was used to examine investment activity in the non-oil sector. The year 2014 was chosen as the starting point because it marked a period of significant economic restructuring following the global decline in oil prices and the subsequent adjustment of Azerbaijan's

development strategy towards diversification. In addition, consistent and comparable industry data became available from 2014 onwards, ensuring methodological accuracy in the longitudinal analysis.

Analysing this data allowed estimating the amount of investment in the non-oil industry and its effect on the overall economic growth of the country. Assessing the distribution of investments to areas that support the Sustainable Development Goals (SDGs), like green technologies, infrastructure, and education, received particular attention. To gain a comprehensive insight into the economic landscape of Azerbaijan, the study analysed the contribution of SMEs to the economy from 2020 to 2022. This analysis involved examining data on the quantity and proportion of SMEs within the overall framework of entrepreneurial activities. These findings offered an additional dimension to understanding Azerbaijan's economic evolution, underscoring the pivotal role of the SME sector in fostering sustainable and vibrant national growth.

To analyse foreign trade activities, data on the structure of exports and imports of non-oil products for the period from 2014 to 2022 were used. These data helped to identify the main directions of Azerbaijan's foreign trade in the non-oil sector and assess their contribution to the country's economy. The sustainability aspect of trade was considered by examining the diversification of exports in relation to environmentally sound and value-added goods, in line with global green trade practices. For the study, a statistical method was used to assess the impact of various factors on economic indicators. The examination of indicators enabled the identification of pivotal trends and factors influencing the non-oil sector's progression. Statistical datasets encompassing investment patterns, the prevalence of SME, and the composition of exports and imports within the non-oil sector were scrutinised up to 2022, utilising information provided by the State Statistical Committee of the Republic of Azerbaijan.

The method of comparison was used to compare different periods and economic indicators. It allowed identifying changes and differences in the advancement of the non-oil and oil sectors in Azerbaijan. The comparative method also helped to identify the steady growth of the non-oil sector compared to the oil sector. In order to evaluate the sustainability potential of economic diversification initiatives and their conformity to environmental and social development standards, this comparative analysis was essential. Thus, the use of a variety of data sources enabled a comprehensive analysis of Azerbaijan's economic development and identified the key factors affecting its economy. Qualitative analysis was used to assess the quality of the data and conclusions. This stage included checking whether the results

were consistent with the objectives of the study and assessing the relevance of the findings to the economic situation in the country.

## Results

The non-oil sector plays a vital role in the economic advancement of numerous countries, Azerbaijan included. The non-oil sector generates a substantial number of employment opportunities across various industries, thereby curbing unemployment rates and enhancing living standards (Ogunbiyi and Abina, 2019). This directly supports the pillars of sustainable development by fostering social stability, regional economic inclusion, and job creation. Investments in the non-oil sector contribute to the improvement of the country's infrastructure. Government support and private sector investments in the construction of roads, energy facilities, communications, and other infrastructure projects not only contribute to the development of the sector itself but also create favourable conditions for the advancement of other sectors of the economy (Nakashydzze et al., 2021). Among the most effective state measures fostering non-oil sector growth are the “State Program on Socio-Economic Development of the Regions of the Republic of Azerbaijan (2019–2023)”, which promoted balanced regional development and SME formation, and the “Strategic Roadmap for the Development of Small and Medium Enterprises (2016)”, which introduced tax relief measures, preferential loans, and business incubation support. Additionally, the Azerbaijan Investment Company and the Entrepreneurship Development Fund have provided financial incentives and guarantees for investment in non-oil industries, while targeted infrastructure initiatives under the “Azerbaijan 2030: National Priorities for Socio-Economic Development” strategy have facilitated logistics, energy, and digital connectivity. These coordinated policy instruments have collectively enhanced the competitiveness, innovation capacity, and export potential of the non-oil economy (Al-Abri, Önel, and Grogan, 2019; Mayis et al., 2021). Table 1 delineates the GDP volume by economic sector in Azerbaijan.

The non-oil sector has exhibited consistent growth from 2014 to 2023. This sustained expansion underscores the trajectory of Azerbaijan's economy towards greater diversity and sustainability. Firstly, the stable growth observed in the non-oil industry implies the advancement of other sectors within the economy. Table 2 delineates the investment structure within Azerbaijan's economy. The volume of investment in the non-oil sector has been gradually increasing over the period under study. This trend indicates that both governmental and private investors are demonstrating

keen interest in diverse sectors of the economy beyond the oil industry. The breadth of investments across different sectors contributes significantly to the diversification of Azerbaijan's economy and bolsters its sustainability.

*Table 1 – Volume of GDP by economic sectors in Azerbaijan from 2014 to 2023, million manat*

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
GDP	5901	5438	6042	7033	8009	8189	7257	9320	13397	12300
Oil sector	4	0	5	8	2	6	8	3	3	5
Part of GDP, %	2140	1538	1955	2500	3223	3005	2041	3450	62491	43473
Non-oil sector	5	2	3	5	2	2	8	1		
Part of GDP, %	36.3	28.3	32.4	35.6	40.2	36.7	28.1	37	46.6	35.3
Net taxes on products and imports	3319	3413	3595	4032	4166	4448	4531	5112	61509	68341
Part of GDP, %	6	9	1	8	2	2	2	2		
Net taxes on products and imports	56.3	62.8	59.5	57.3	52	54.3	62.4	54.9	45.9	55.6
Part of GDP										
Net taxes on products and imports	4413	4859	4921.	5004.	6198.	7362.	6848.	7579.	9973.	11191.
Part of GDP			5	4	3	5	4	6	1	7
Net taxes on products and imports	7.5	8.9	8.1	7.1	7.7	9	9.4	8.1	7.4	9.1

*Source:* Compiled by the authors based on State Statistical Committee of the Republic of Azerbaijan (2023).

*Table 2 – Investment in the economy of Azerbaijan from 2014 to 2022, million manat*

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total	17619	15957	15773	17430	17245	18539	17226	16815	17878
Oil sector	5959	7137	8648	8484	5995	5848	5987	5813	5464
Share of total investments, %	33.8	44.7	54.8	48.7	34.8	31.5	34.8	34.6	30.6
Non-oil sector	11659	8820	7125	8946	11250	12691	11238	11002	12413
Share of total investments, %	66.2	55.3	45.2	51.3	65.2	68.5	65.2	65.4	69.4

*Source:* Compiled by the authors based on State Statistical Committee of the Republic of Azerbaijan (2023).

In the context of Azerbaijan's economic progress, the evolution of transport infrastructure holds paramount importance for the non-oil industry. Transport infrastructure development promotes logistical efficiency for the non-oil sector. Improved road, railway and maritime infrastructure can



reduce the delivery time of raw materials and finished products, which reduces logistics costs and improves product competitiveness (Aliyev, 2014). From a sustainable development perspective, efficient transport systems contribute to reduced emissions, lower energy consumption, and more equitable access to economic resources across regions (Aliyev et al., 2024). Furthermore, expanding markets is an important aspect of the development of transport infrastructure influences the non-oil industry. Improved transport links allow reaching new markets and expanding the customer base. Sustainable transport networks also promote inclusive economic participation, linking rural areas with industrial and commercial hubs, thus reducing spatial inequality and supporting regional development goals (Karlilar Pata et al., 2025). The advancement of transport infrastructure plays a key role in establishing favourable conditions for attracting investment in the non-oil sector (Yang et al., 2023).

The expansion of the Zangezur and Middle Corridors represents a significant opportunity for the growth of the non-oil sector in Azerbaijan. The development of the Zangezur and Middle Corridors opens up new prospects for the export of non-oil products from Azerbaijan to world markets. These transport routes provide more direct and efficient transport routes, reducing the time and costs of delivering goods to Europe and other regions of the world (Valiyev, 2023). By encouraging international collaboration, facilitating low-carbon trade routes, and permitting effective resource use throughout Eurasia, these corridors also promote regional sustainable development. Investments in the construction and modernisation of ports, railway and road networks create more efficient and reliable transport routes. Thanks to the advancement of the Zangezur and Middle Transport Corridors, the development of transport and transit relations between Central Asia, Azerbaijan, and Europe is becoming increasingly important.

Azerbaijan's experience in developing its non-oil sector both confirms and refutes the key assumptions of the “resource curse” theory. Traditionally, this theory argues that countries rich in natural resources tend to have slower economic growth, weak institutions, and limited diversification due to excessive dependence on resource revenues. In the case of Azerbaijan, the initial dominance of the oil industry fit this paradigm, as high oil revenues limited incentives for structural reforms and investment in other sectors. However, in recent years, the country has consciously pursued policies that challenge the resource curse by prioritizing economic diversification, human capital development, and investment in non-oil sectors such as agriculture, manufacturing, transportation, and information technology. These measures demonstrate a strategic effort to transform resource wealth into long-term

sustainable development, thereby repositioning Azerbaijan as an example of how proactive governance and institutional modernization can mitigate and possibly overcome the negative effects predicted by the resource curse theory.

In the sphere of transport and logistics services, public-private partnership (PPP) plays a pivotal role in the development of the economy and ensuring the effective functioning of transport infrastructure (Ramsey and El Asmar, 2020). In the context of the influence of the non-oil sector on the economic development of Azerbaijan, the consideration of PPP becomes particularly important, as it allows for the effective management and modernization of the country's transport infrastructure, including roads, railways, ports, and airports. Initially, PPP in Azerbaijan's transport and logistics sector focused on developing infrastructure to support oil and gas production and exports (Işık et al., 2025). However, over time, the partnership has expanded to include non-oil sectors such as agriculture, manufacturing, and services. In order to support inclusive, resilient, and sustainable infrastructure growth, sustainable PPP models encourage risk sharing, environmentally friendly practices, and long-term investment planning.

Sustainable reconstruction uses energy-efficient technologies, environmental conservation, and inclusive social development to rebuild better (Shafa, 2021; Shalbolova et al., 2014). This involves restoring the Karabakh Khan palace, building new roads and bridges, and creating tourism and cultural event-friendly environs (Gyulamirov, 2022). These developments promote sustainable tourism, cultural preservation, and economic sustainability.

The government also offers SMEs incentives and subsidies to develop in certain territories. This may include financial assistance, business training, advice, tax incentives, and preferential credit terms. SME growth creates jobs, raises income, and improves the region's socioeconomic status. SMEs operate in agriculture, consumer products, services, tourism, IT, and other non-oil industries (Krechko and Mikhaylov, 2025). This diversifies the economy and reduces oil dependence. SME development in the non-oil industry creates competitive products and services, increasing exports and foreign investment. SMEs also innovate and pioneer, which advances technology and the economy (Arnouz and Hamdani, 2024).

Table 3 shows the country's micro, SMEs' economic share. SMEs' investment share is much lower in the non-oil industry than other metrics, which may suggest restricted access to funding and investment resources. Overall, SMEs play a vital role in Azerbaijan's economy, notably in the non-

oil sector, and their contribution remains considerable in numerous economic sectors.

*Table 3 – Share of SMEs in Azerbaijan's economy from 2020 to 2022, %*

	2020			2021			2022		
	Total	Small	Average	Total	Small	Average	Total	Small	Average
In total value added by economy	16.7	9.3	7.4	16.4	9.6	6.8	13.9	8	5.9
Non-oil sector	23.7	13.4	10.3	26.6	15.9	10.7	27.2	13	11.2
Total employees of enterprises	42.1	16	26.1	41.8	16.7	25.1	41.8	16.6	25.2
Non-oil sector	43.8	19	24.8	43.3	17.3	25.9	43.1	17.2	25.9
Total investments directed to fixed capital by enterprises	23.2	11.7	11.5	31.1	23.9	7.2	29.1	18.6	10.5
Non-oil sector	11.5	11.1	0.4	30.8	23.6	7.2	22.8	14.6	8.2
Total operating enterprises	99.7	98.8	0.9	99.7	98.9	0.8	99.6	98.8	0.8

*Source:* Compiled by the authors based on State Statistical Committee of the Republic of Azerbaijan (2023).

Human capital advancement in the non-oil sector plays a key role in ensuring sustainable and efficient functioning of the economy. This includes not only the training and professional development of employees, but also the creation of conditions for developing human potential and ensuring a high level of qualification (Ndombi Ondze, 2021). An essential part of human capital development is also the creation of conditions for career development and professional development of employees. It is also important to provide social support for non-oil workers. One of the important aspects of social economy advancement in the non-oil industry is to ensure the safety and health of workers. This involves adhering to labour protection standards, ensuring access to healthcare and insurance, and implementing preventive measures to mitigate injuries and occupational diseases (López-Cabarcos, Vázquez-Rodríguez, and Quiñoa-Piñeiro, 2022). This can be achieved through the organization of training programmes, retraining courses, and internships, as well as through the participation of companies in various professional associations and communities.

The dynamics of import-export and production of non-oil products plays a key role in the economic advancement and sustainability of the country (Table 4). It is important to note that along with basic commodities such as vegetable products, textiles and machinery, there has also been an increase in exports of several other categories of goods, including precious metals and non-precious metals. This demonstrates the diversity of export commodities and the desire to diversify the export base.

*Table 4 – Structure of exports of non-oil products from 2014 to 2022, million USD*

<i>Product groups</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>
All exports	21828.6	12729.1	13457.6	15320	19489.1	19635.2	13732.6	22208	38146.6
Non-oil products:	1401.7	1332.7	1000.8	1225.9	1367.4	1499.6	1453.3	1822.4	1986.8
Live animals, animal products	3.3	2.3	4.2	12.6	12.1	23.2	19.4	16.1	24.5
Vegetable products	331.1	335.9	386.6	518.3	584.7	625.9	624.3	658.6	695.1
Animal or vegetable fats and oils	190.3	153.3	17.1	17	16.9	18.5	24.7	32.2	30.6
Prepared foods; beverages, spirits, and vinegar; tobacco	316.1	278.9	117.6	111	90.7	104.6	91.4	109.2	162.2
Untreated hides, leather, natural fur, and products made of them	24.1	12.2	15.2	15.2	13.3	11.9	8.4	12.2	13.1
Wood and wood products, weaving materials	1.4	0.9	1.2	1.1	0.3	0.7	0.8	1.1	4.2
Wood pulp; paper, cardboard, and products made from them	5.4	4.7	4.5	5.4	9.9	7	4.4	4.9	4
Textiles and textile products	33.2	32.9	38.7	76.8	135.2	185.4	182.1	303	246.7
Shoes, hats, umbrellas, canes, feathers, artificial flowers.	0.03	0.2	0.3	0.4	0.2	0.8	0.9	0.4	0.6
Products made of stone, gypsum, cement, asbestos, mica; glass and glassware	3.2	0.4	0.8	7.9	4.8	3.2	2.8	14.5	27.6
Pearls, precious and non-precious stones, precious metals, and articles thereof	77.1	83.2	77.2	141.5	146.7	174.4	198.6	205.7	190.2
Non-precious metals and	141.8	133.6	223.5	245.1	252.5	232	208.5	375.5	402.5

articles made of non-precious metals									
Machines and mechanical devices, electrical equipment, apparatuses	63.6	59.2	39.1	50.4	64.6	77.7	67.2	54.5	113.4
Vehicles, associated transport equipment	7	2.5	60.8	11.5	9.4	10.9	4.4	7.9	44.7
Optical, photographic, cinematographic, control, medical instruments, and apparatus; clocks; musical instruments	7.8	17.5	7	6.8	12.3	17.3	9.1	15.8	13.4
Miscellaneous industrial goods	1.8	1.4	1.9	2.4	1.8	3.9	3.6	6.1	8.8
Works of art, collectibles, and antiques	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.2	0.2

*Source:* Compiled by the authors based on State Statistical Committee of the Republic of Azerbaijan (2023).

Continued investment across diverse sectors of the economy and the modernization of production are vital to ensuring the sustainable and well-rounded development of the country (Table 5).

*Table 5 – Structure of imports of non-oil products from 2014 to 2022, million USD*

<i>Product groups</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>
All imports	9187.7	9216.7	8489.1	8783.3	11465.9	13667.5	10732	11703.2	14539.9
Non-oil products	7718.5	8033.5	7071.1	7107	9240.8	11138	8809.7	9492.4	10979.6
Live animals, animal products	149.6	136	176.1	255.9	278.9	299.5	322.8	313.8	387
Vegetable products	427	457.4	592	559.5	560.3	745.7	714.5	788.8	968.8
Animal or vegetable fats and oils	88.1	83.8	144.1	148.3	140.9	141.2	161.9	221.8	297.5
Prepared foods; beverages, spirits, and vinegar; tobacco	889	688.8	662.4	735.9	723.5	739.6	704.7	890.4	1038.6
Untreated hides, leather, natural fur and products made of them	6.7	5.4	19.8	19.3	28.1	29.7	17.7	22.6	27.7
Wood and wood products,	129.6	230.4	190.2	213.8	298.2	286.3	259.2	325	385.9

weaving materials									
Wood pulp; paper, cardboard, and products made from them	123.3	90.5	116.2	144.3	162.5	197.2	195.5	212.2	287.4
Textiles and textile products	100.3	89.1	314.3	316	431	461.7	401.9	496.7	532.9
Shoes, hats, umbrellas, canes, feathers, artificial flowers. Products made of stone, gypsum, cement, asbestos, mica; glass and glassware	12.6	10.1	73.1	71.6	86.1	96.0	74	87.7	104.5
Pearls, precious and non-precious stones, precious metals, and articles thereof	426.7	7.3	28.7	30.8	839.1	2149.5	14.1	121.5	38.4
Non-precious metals and articles made of non-precious metals	1245.2	1872.3	1275.8	1060.8	1409.7	1288.8	1165.3	1115	1355.3
Machines and mechanical devices, electrical equipment, apparatuses	2583.4	2460.7	2013.4	1866.7	2589	2661	2536.7	2748.5	2891.6
Vehicles, associated transport equipment	810.9	706	787.9	598.2	818.8	1199.9	1028.5	1293	1669.8
Optical, photographic, cinematographic, control, medical instruments, and apparatus; clocks; musical instruments	287.3	243.7	191.9	175.8	214.2	253.6	240.1	243.5	300.7
Miscellaneous industrial goods	191.5	201.6	278.4	233.1	297.6	293.1	244.3	307.4	307
Works of art, collectibles, and antiques	0.2	0.3	0.2	2.1	0.4	0.7	0.6	0.2	0.7

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*Source:* Compiled by the authors based on State Statistical Committee of the Republic of Azerbaijan (2023).

The integration of the digital economy and information and communications technology (ICT) into the non-oil sector presents a myriad of opportunities and challenges for the industry (Abdullayev et al., 2024b). The automation of production processes and the implementation of digital management systems improve resource efficiency and reduce costs. ICT development facilitates better communication and interaction between different market players. The creation of digital business platforms and electronic marketplaces allows entrepreneurs to find new partners, close deals and expand their business. Big data collected through ICT can be analysed with specialized algorithms and used for demand forecasting, inventory optimization and risk management (Abdullayev et al., 2024a). The creation of digital platforms, applications, and services allows companies to expand their product range, attract new customers and increase revenues. The digital economy opens new opportunities for entrepreneurs to launch their projects and obtain funding, which contributes to the development of the startup and innovation ecosystem (Olowo et al., 2020). Thus, the development of the digital economy and ICT in the non-oil sector is a key factor for improving production and business processes, increasing the competitiveness of companies, and creating new opportunities for business development.

## Discussion

For Azerbaijan, which has traditionally depended on oil revenues, diversity in the economy helps mitigate the impact of oil price fluctuations and increase resilience to external shocks. The non-oil industry creates a significant number of jobs in various industries. This helps to reduce unemployment and improve the standard of living of the population. Adedapo (2023) underscore the significance of diversifying the country's economy and explore the role of the non-oil sector in this endeavour. The findings of the present study corroborate the importance of economic diversity in mitigating dependence on oil revenues. The advancement of the non-oil industry necessitates a skilled workforce, thereby fostering education and the advancement of human capital. Investments in sectors other than oil also play a pivotal role in enhancing the country's infrastructure (Guliyeva, 2023; Hasanov et al., 2025). According to Raid et al. (2024), state support is vital for the advancement of the non-oil sector. Their conclusions align with the arguments presented in the current study regarding the significance of state support in creating favourable conditions for the growth of the non-oil sector.

The evolution of transport infrastructure directly influences the expansion of non-oil exports. Enhancements in international transport routes and port infrastructure facilitate more efficient product transportation to global markets, thereby bolstering export potential and augmenting revenues (Hasanova and Najafova, 2024; 2025). Alshubiri, Tawfik, and Jamil (2020) highlight the critical importance of infrastructure, particularly transport infrastructure, for the advancement of both oil and non-oil sectors. The findings of both the authors and the present study underscore the necessity of investing in infrastructure development to bolster the non-oil industry.

To maintain long-term environmental and economic sustainability, green infrastructure must be incorporated into transportation expansion initiatives (Guliyev and Azizov, 2022). A significant opportunity for the advancement of the non-oil industry in Azerbaijan is the expansion of the Zangezur and Middle Corridors. The development of these transport corridors opens up new prospects for the export of non-oil products from Azerbaijan to world markets. The development of SMEs in the non-oil industry is pivotal in catalysing economic growth and diversification. These enterprises serve as engines of innovation, job creation, and economic competitiveness (Korsunska et al., 2022). They play a crucial role in generating a wide array of goods and services, thereby enriching consumer choices and fostering diversity in market supply. Surya et al. (2021) also argue that SMEs play a critical role in stimulating economic growth and diversification. The study confirms that SMEs contribute to job creation, innovation, and economic competitiveness. Government programmes may include wage subsidies, tax credits, credit incentives, staff training and marketing and promotion support. Gherghina et al. (2020) show that SMEs are the engine of innovation and advancement of new sectors of the economy. The authors describe support programmes such as wage subsidies, tax credits, credit incentives and staff training.

Human capital development in the non-oil sector is a key element in ensuring the sustainability and efficiency of the economy (Pata, 2025). This process encompasses a wide range of activities, from training and professional development of employees to creating conditions for unlocking human potential and ensuring a high level of qualification. Training programmes may include both general skills (e.g. management and communication skills) and the specialised knowledge and skills required to work in a specific area of the non-oil industry. Saliu (2023) and Obo, Iheanacho, and Lebo (2020) also drew their attention to the importance of human capital development in the non-oil sector and its relationship with employee training and professional development. This aspect aligns with the conclusions drawn from the current study regarding the significance of



training and human capital development for the sustainability and efficiency of the economy. The results corroborate the findings of these authors, rendering their research pertinent and significant in elucidating the role of human capital in the development of the non-oil sector. Banerjee and Majumdar (2021) focus in their study on the digitalisation of the non-oil sector and the role of ICT in its development. Their results concur with the findings of the current study on the importance of digital transformation in increasing the efficiency and competitiveness of the non-oil sector.

## Conclusions

The study unequivocally affirms the significance of the non-oil industry in Azerbaijan's economic development. The advancement of this sector fosters economic diversification, diminishing reliance on oil revenues and enhancing resilience to external shocks. Its progression creates alternative income streams and stimulates inclusive growth, thereby reinforcing socio-economic stability. By strengthening institutional capacity, promoting entrepreneurship, and encouraging innovation across diverse industries, the non-oil sector contributes to the long-term transformation of Azerbaijan's economic structure. Furthermore, sustained investments in non-oil industries enhance infrastructure and human capital development, which in turn support broader national objectives of sustainable and balanced growth. These outcomes are not only essential for national economic stability but also serve as critical enablers of the United Nations SDGs, particularly those related to inclusive economic growth, resilient infrastructure, and reduced inequalities.

The non-oil industry of Azerbaijan grew steadily over the review period. The country's economy is improving. Non-oil industry production and services are rising, which could boost other industries. This opens up chances for agriculture, tourism, manufacturing, and services. The non-oil sector supports a more equitable, sustainable, and diversified economic model by promoting multi-sectoral growth. This symbiosis helps Azerbaijan's economy grow sustainably and diversify, making it less dependent on certain industries and more resilient to global market changes.

Transport infrastructure is crucial to the non-oil industries. Expansion and upgrading of the transport network ensures efficient transport of petroleum products and related goods and enhances non-oil sector potential in all aspects of operations. Transport infrastructure boosts non-oil logistical efficiency. The sector grows as non-oil exports to global markets increase, attracting investment and jobs. Transport development improves

environmental performance, smart logistics, and green connectivity between areas and trading partners when linked with sustainable planning. Economic growth and diversification depend on non-oil SMEs. Human capital development in the non-oil sector is essential for economic sustainability and efficiency. Government support and a favourable business environment boost SME development, creating jobs and raising incomes. This includes staff training and professional development, as well as creating settings that foster human potential and ensure high qualification and motivation among non-oil industry employees.

More research might examine how certain initiatives and investments have advanced the non-oil business in different Azerbaijani regions. Further research is needed on the factors that affect non-oil product competitiveness in global markets. The limited data in the studied tables may not cover all elements affecting Azerbaijan's non-oil business.

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# *Contemporary issues of financial sustainability in the pension system in Azerbaijan*

by *Emin Alirzayev\**

## *Abstract*

The article examines the problems of financing and forecasting within Azerbaijan's system of social insurance and pension provision. Through a thorough theoretical and methodological analysis based on the current regulatory and management framework, the main aspects of financial sustainability challenges were identified. The research evaluates the complex interplay between demographic, economic, and institutional factors affecting the pension system's long-term viability. The study's main scientific innovation lies in the development of a comprehensive analytical approach to a specific country model, providing methodological frameworks to handle financial security and sustainability issues, thereby expanding and improving the methodological foundation for financial management and forecasting in social protection systems. Particular attention is drawn to relevant priorities for strengthening the financial foundation of social protection, identified as the most critical factor in improving overall social protection. The findings provide a valuable theoretical basis for policy development at the national management level within the current pension system, which operates solely on the solidarity principle.

*Key words:* social protection; forecasting in social protection; replacement rate; Pay-As-You-Go; social security.

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## 1. Introduction

Financial planning and forecasting play a priority role in the effective organization and management of social protection as a specific economic sphere. This sphere is influenced by social, economic, demographic processes occurring in society, and especially decisions made at the management level. The growing relevance of studies on the long-term financial viability of retirement provision schemes is due to the need to ensure adequate ensuring social security for the population in the short, medium, and long term.

As noted by Otchere et al. (2024), problems of financial stability of pension funds are becoming increasingly relevant, especially in the context of economic instability and demographic changes. Dumiter et al. (2024) conducted research demonstrating that financial sustainability of pension systems in Central and Eastern Europe countries depends heavily on integrated approaches that consider both economic and demographic factors. The comparative analysis of retirement benefits systems in Central Asian countries conducted by Aliev et al. (2024) demonstrates common problems and risks characteristic of the region. Special attention in the context of financial sustainability of retirement benefits systems deserves the approach to assessing various influencing factors. Figari et al. (2023) emphasize the critical role of financial literacy and public awareness of pension issues for ensuring effective reforms. This is complemented by research from Świecka et al. (2025), who demonstrate that sustainable pension outcomes require consideration of consumer behaviour patterns and systemic incentives.

As noted by Lenney et al. (2022), the approach to ensuring the sustainability of pension systems must rely on careful analysis of public finances and macroeconomic indicators. In the context of Azerbaijan, this means the necessity of taking into account the peculiarities of the country's economic structure, dependence on the oil sector, and demographic trends. Research by Helmdag and Väänänen (2024) reveals that recommendations for pension reforms in most countries are determined primarily by financial sustainability considerations. However, the authors emphasize the importance of a balanced approach that takes into account not only financial but also social aspects of pension provision. Bocchialini et al. (2025) demonstrate that sustainable pension systems increasingly integrate environmental and social dimensions into their financial frameworks, suggesting a pathway for Azerbaijan's future development.

The analysis of recent research and publications demonstrates the limited nature of fundamental economic-scientific research on the chosen topic in the direction of improving social protection in Azerbaijan. Most discussions were conducted predominantly based on provisions of local regulatory and legislative acts, which limits the possibilities for systematic scientific analysis of the problem.



The principal aim of this research was to determine the primary obstacles and challenges facing the challenge of maintaining the fiscal stability of Azerbaijan's pension scheme as a key aspect of its development. To achieve this objective, the following research tasks have been established:

1. To analyse the financial foundations of Azerbaijan's insurance-pension system.
2. To develop and apply a quantitative modelling framework for evaluating the sustainability of Azerbaijan's retirement benefits system.
3. To identify the key factors influencing the prolonged economic resilience viability of the retirement system.
4. To formulate evidence-based recommendations for strengthening the financial sustainability of Azerbaijan's pension system.

## **2. Materials and Methods**

The methodological framework employed in this research is multifaceted, encompassing various approaches to ensure a comprehensive analysis of financial sustainability in Azerbaijan's pension system. The analysis is based primarily on the directions and requirements defined by the relevant national economic and regulatory framework, taking into consideration the specific content of the selected problem. The foundational methodological approach relies on a combination of empirical and theoretical research methods. Comparative analysis was used to examine the differences and similarities between Azerbaijan's pension system and those of other countries with similar economic profiles, focusing on structural elements such as revenue generation, pension distribution, and sustainability mechanisms.

Theoretical modeling was applied to develop a quantitative financial model, which assessed the sustainability of Azerbaijan's retirement income support system. This model incorporated various financial coefficients to evaluate the balance between pension contributions, benefits, and the demographic dynamics of the working population versus pensioners. Empirical analysis was based on historical data from national statistical bodies, such as the State Statistical Committee and the State Social Protection Fund, to assess the financial stability of the pension system using specific financial metrics and sustainability ratios. The inductive and deductive approaches allowed the study to draw general conclusions from specific data trends (inductive reasoning) and test existing theories about pension system sustainability in light of Azerbaijan's unique regulatory and economic environment (deductive reasoning). Synthesis and abstraction were applied to integrate various data sources and theoretical perspectives,

helping to construct a coherent understanding of the systemic challenges facing Azerbaijan's pension system and its long-term financial viability.

To establish a robust analytical foundation, the research extensively utilized Azerbaijan's pension legislation, including the Law of the Republic of Azerbaijan No. 250-IQ "On Social Insurance" (1997), Law of the Republic of Azerbaijan No. 221-IIQ "On Individual Accounting in the State Social Insurance System" (2001), and Law of the Republic of Azerbaijan No. 54-IIIQ "On Labour Pensions" (2006). These legislative acts provide the main regulatory framework within which the retirement benefits system operates and formed the basis for analysing institutional structures and operational mechanisms. Demographic analysis constituted another essential methodological component, examining trends affecting the pension system, including population aging, birth rates, and workforce dynamics. This demographic analysis was integrated with financial sustainability metrics to develop a comprehensive understanding of the system's long-term viability.

For quantitative analysis, specific mathematical-statistical methodologies were applied to assess financial sustainability, including the development of various coefficients. Several key coefficients were developed to measure different aspects of financial sustainability. The first coefficient evaluates the relationship between accumulated funds and expenses, taking into account various income sources and expenditure categories. A second coefficient measures integral financial stability by examining the relationship between collected mandatory contributions and social transfers to the population. For assessing the demographic foundation of the retirement benefits system, a coefficient was developed to measure the ratio of active insured contributors to pensioners. Building upon this, a more comprehensive metric was created to evaluate current financial security by incorporating not only the ratio of insured persons to pensioners but also the average monthly insurance premium and the average monthly pension payment. The data collection process incorporated multiple sources to ensure comprehensiveness and accuracy, including official statistics the State Statistical Committee of the Republic of Azerbaijan (2024a; 2024b; 2024c), financial reports from the State Social Protection Fund (SSPF), and economic indicators from the Ministry of Economy of the Republic of Azerbaijan.

### **3. Results**

#### *3.1. Financial foundations of the insurance-pension system in Azerbaijan*

There are significant dependencies between the possibilities of

developing social protection and the labour market from an economic point of view. At the centre of these influencing stands the financial factor. Wages in social protection are key in Azerbaijan, serving as the main financial source and accounting base for the state social insurance system, which funds mandatory insurance, benefits, and pensions managed by the SSPF.

The importance of the insurance-pension system can also be expressed by the fact that, according to authors' calculations based on the latest official statistics for 2022, the state extra-budgetary fund – the SSPF, formed mainly through mandatory state social insurance contributions, averages 14% of the total household budget income.

According to the national legislation, SSPF, which is the source of financing the old-age security framework, is considered the third largest budget (more than 6.9 billion manat) after the state budget (with 39.7 billion manat expenses) and the budget of the State Oil Fund of the Republic of Azerbaijan (with 12.9 billion manat expenses) (Law of the..., 2023a; 2023b; 2023c). From the point of view of determining the financial activities of the pension system for the future, the importance of assessment of financial indicators and promoting of methodology on models is obvious (Table 1).

*Table 1 – Financial architecture and fiscal balance analysis of Azerbaijan's social security system: 2024 budget structure*

<i>A. Revenue directions</i>	<i>In percentage terms of the whole</i>	<i>Total amount (mln manat)</i>
Revenue from mandatory social insurance payments	76.42	5288.1
Treasury transfers to the Fund for covering statutory pension obligations and maintaining fiscal equilibrium	20.12	1392
Other revenues	0.18	12.7
The amount allocated to the expenses of the current year from the unused funds of the SSPF in previous years	3.28	227.02
In total		6919.82
<i>B. Expenditure directions</i>		
Pension payments	93.93	6500
Social payments provided to the population through funds accumulated from obligatory state social contributions	2.63	181.58
Other	3.44	238.28
In total		6919.86

*Source:* Created by the author based on State Statistical Committee of the Republic of Azerbaijan (2024a), Law of the Republic of Azerbaijan No. 1029-VIQ “On the 2024 Budget of the State Social Protection Fund” (2023b).

The primary financial challenge for Azerbaijan's pension system stems from sustainability concerns. According to current social insurance

legislation (including the Law of the Republic of Azerbaijan No. 250-IQ “On Social Insurance” (1997) and Law of the Republic of Azerbaijan No. 54-IIIQ “On Labour Pensions” (2006)), financial viability depends on the system's capacity to meet diverse social insurance commitments using exclusively internal revenue sources rather than external funding. However, treasury transfers play a critical role in addressing historical liabilities, such as pensions related to periods before the establishment of the current pension system in 1992, and in providing temporary assistance to bridge gaps in funding. These transfers, which make up 20.12% of the total revenue, are essential for covering past pension commitments that the current system, based solely on mandatory contributions, cannot fully support. Therefore, while the system aims for long-term self-sufficiency, government transfers remain necessary to manage these legacy costs and ensure stability in the short to medium term (Ongan et al., 2025). This self-sufficiency requirement represents the fundamental solvency test for the national insurance framework. In accordance with the provisions of current legislation, the financial stability coefficient of the insurance and old-age security framework, used to assess the system's ability to meet its obligations to the population (including pensions and benefits financed through mandatory state social insurance contributions), may be theoretically determined by formula (1):

$$K_s = (F_c + F_o)/(C_p + C_b + C_m), \quad (1)$$

where  $K_s$  – sustainability coefficient;  $F_c$  – accumulated fund of contributions of mandatory state social insurance;  $F_o$  – other income;  $C_p$  – old-age security expenses,  $C_b$  – payments financed through mandatory state social insurance contributions;  $C_m$  – other expenses.

It is evident from Table 1, given that other income in the budget of the Fund is about 0.18%, but is not considered as a source of financing, also membership fees to international organizations represent insignificant figures, it would be more appropriate to assign a financial stability coefficient (2):

$$C_s = F_c/(C_p + C_b). \quad (2)$$

Using the same approach, expressing pension expenses and benefits paid on collected fees as social transfers to the population in the amount through “T”, the coefficient of integral financial stability can be determined in the current old-age security framework in Azerbaijan according to the following formula (3):

$$C_s = F_c/T. \quad (3)$$

While rapid expansion of contribution revenue appears improbable in the short term, addressing Azerbaijan's pension system sustainability requires comprehensive, multifaceted analysis rather than quick solutions. Any meaningful conclusions about system viability must emerge from extended temporal perspectives that consider demographic, economic and administrative factors over decades rather than years (Kerimkhulle et al., 2023a; 2023b). Thus, it is noteworthy that the assessment of this coefficient in terms of the elasticity problem, in turn, is not applicable using the elasticity coefficient described in formula (4), since within the existing structure of the pension system in Azerbaijan it is impossible to expect that an increase will necessarily increase pension expenditures (4):

$$\varepsilon = (\frac{\partial C_p}{C_p})/(\frac{\partial F_c}{F_c}). \quad (4)$$

Currently, according to the amendments made to the pension legislation in 2018, the part of pension expenses formed based on work experience before 1992 (until the collapse of the Soviet system of government), which is not an insurance basis, or determined on preferential terms, should be accepted as a liability of the state budget and paid to the SSPF in the form of a transfer, but the experience of recent years shows that in practice the actual transfers allocated are not in the amounts covering those liabilities, which, on the other hand, is one of the relevant factors that can negatively affect the sustainability of pension financing mechanisms.

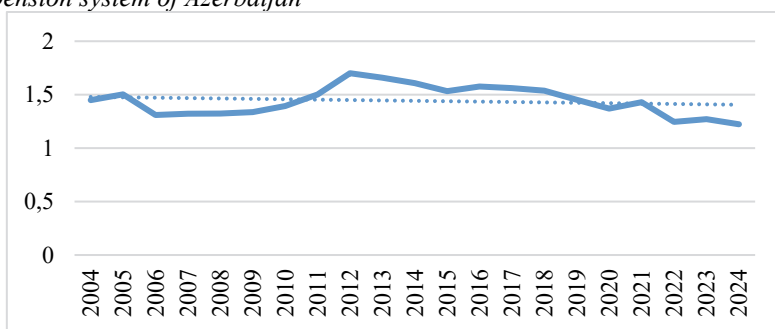
### *3.2. Evaluating Azerbaijan's pension system sustainability: A quantitative modelling framework*

Applying the methodological framework outlined above, and considering historical data showing pension pay-outs constitute roughly 95% of the SSPF's total expenditures, we can derive a holistic financial sustainability indicator for Azerbaijan's old-age security framework. As shown in Figure 1, while the long-term trend of these coefficients improves (approaching "1"), fluctuations remain, requiring a multi-factor assessment for a clearer long-term picture.

Taking into account that the existing old-age security framework in the country is still managed in a single-tier structure based on the principle of solidarity ("Pay-As-You-Go" or PAYG), and at the same time the problem

of population aging has been accelerating in recent years in Azerbaijan, in order to increase the pension income of the population, in order to strengthen the savings potential of the pension system, first of all, the management of expenses should be carried out on an optimal basis, at the same time increasing the possibilities of increasing the number of active insured persons who are payers of mandatory state social insurance contributions, increasing overall economic activity and labour productivity, tax collection administration, especially the correct assessment of financial potential, becomes a matter of necessity.

*Figure 1 – Ratio of payments to the population to revenues from mandatory state social insurance contributions (integral financial sustainability ratio) calculated for the pension system of Azerbaijan*



Source: Created by the author.

Many Organisation for Economic Co-operation and Development (2023) countries are planning to raise retirement age thresholds, viewing this as an effective policy to strengthen pension system viability without cutting benefits. As the economically active population decreases and the elderly and disabled population grows, contributions to mandatory social insurance decline, while pension expenses rise (Ismayilov et al., 2024; Angjeli et al., 2025). A sign of the effect of these processes is a constant decrease in the number of active insured persons (payers of social insurance contributions) per 1 pensioner, which is considered one of the main indicators of ensuring long-term financial sustainability in the context of ensuring the continuity of pension provision (5):

$$R_n = N_c / N_p, \quad (5)$$

where  $R_n$  – coefficient of the number of active insured persons (social insurance payers) per 1 pensioner;  $N_c$  – number of contributors;  $N_p$  – number of pensioners.

A possible deviation of this coefficient from “1,0” should be considered favourable from the point of view of the financial potential of the pension system. The real nature of the coefficient is considered one of the important elements of assessing the PAYG system, since it shows how many insured persons work and pay social insurance contributions per 1 pensioner in the current situation. At this point, it is necessary to evaluate the coefficient determined by formula (6), showing the ratio of the share of the result of multiplying the number of active insured persons per 1 pensioner by the average amount of social insurance  $\bar{c}$  – paid by 1 payer in the amount of the pension ( $P_{ave}$ ), paid on average per 1 pensioner (6, 7):

$$R_f = R_n * \bar{c}/P_{ave}, \quad (6)$$

$$\bar{c} = \overline{W}K_h, \quad (7)$$

where  $R_f$  – coefficient of current financial security of the retirement benefits system;  $\overline{W}$  – indicator of the average monthly nominal salary;  $K_h$  – standard insurance contribution for hired work;  $\bar{c}$  – average monthly insurance premium paid by an average wage earner.

In Azerbaijan, the majority of mandatory state social insurance contributions come from insured persons employed under contracts, with a 25% contribution rate (0.25). Official statistics on hired workers are based on those with employment contracts. The number of workers not contributing to mandatory state social insurance is considered an ineffective factor, as it has a minimal impact on the overall indicator. In 2023, the collected mandatory state social insurance contributions amounted to 5,197,700,000 manat (Sadiqov, 2024a), with an average monthly nominal wage of 933.8 manat (Sadiqov, 2024b; State Statistical Committee of Azerbaijan, 2024b). The number of pensioners at the beginning of 2023 was 1,114.2 thousand, decreasing to 1,099 thousand by early 2024, with an average of 1.1 million pensioners in 2023 (State Statistical Committee of Azerbaijan, 2024c). Based on these figures and using formulas (5) and (6), the replacement rate for 2023 was approximately 1.68:

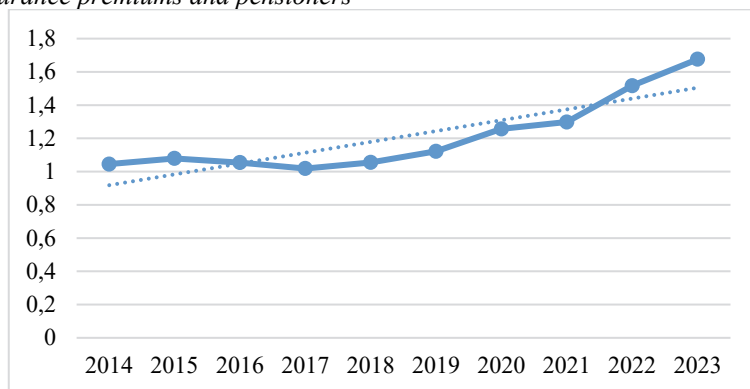
$$N_c = 5,197,700,000/0.25/12/934 = 1,854,996.43$$

and

$$R_n = 1,854,996,43/1,106,600 = 1,676.$$

If it take into account that according to the published data for 2022 (Budget revenues from..., 2023) and according to official statistics, the average monthly salary was 839.4 manat, and the number of pensioners is 1,200,475, then can be also calculated that in 2022 the specified coefficient will be 1,517 manat (Figure 2).

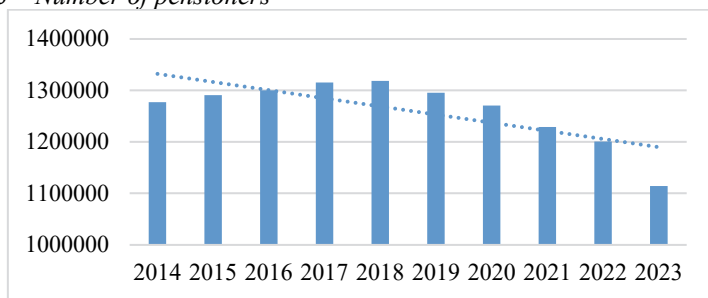
*Figure 2 – Conditional replacement rate depending on the number of active payers of insurance premiums and pensioners*



*Source:* Created by the author.

In Figure 3, it can be seen that, starting in 2018, the number of pensioners has sharply decreased.

*Figure 3 – Number of pensioners*



*Source:* State Statistical Committee of the Republic of Azerbaijan (2024c).

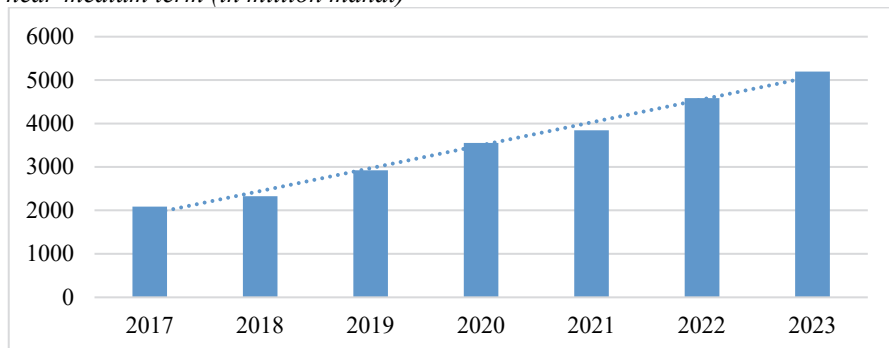
In recent years, there has been a marked upward trend in mandatory state social insurance contributions – the core funding mechanism of the insurance-pension system (Buribayev et al., 2016; Ibraev et al., 2017). According to Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan (2022) data, SSPF revenues from such



contributions have increased significantly during this period. During the specified period, the receipt of mandatory state social insurance contributions increased by 84.3% or by 1757.68 million manat. This growth is based on the positive results of the socio-economic reforms carried out in the country, including the regular growth of employment opportunities and wages, and the expansion of the legalization of labour relations. In 2021, the private sector accounted for 63.5% or 2441.2 million manat of the mentioned revenues. This is 1103.8 million manat or 82.5% more than in 2017.

As can be seen from the Figure 4, in the last medium-term period, the trend of increasing collection of contributions for mandatory state social insurance has been maintained, which is one of the important conditions for improving the conditional replacement rate in relation to the number of active payers of insurance contributions and pensioners. However, in relation to 2023 the coefficient calculated using formula (8) will be equal to 1.427, from which can be conclude that the improvement of the financial situation may be largely associated with the results of administrative measures.

*Figure 4 – Collection of mandatory state social insurance contributions in the latest near-medium term (in million manat)*



*Source:* Created by the author based on Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan (2022; n.d.).

The number of insured persons registered individually during 2021 increased from year to year, and in the last year alone it increased by 219.4 thousand people or 5% by January 1, 2022 and constituted 4.60 million people (Azerbaijan State News Agency, 2022). If author applies the formula (6) compiled as the coefficient of the current financial sustainability of the system of retirement income support to the corresponding indicators for 2023, taking into account that the average monthly pension in 2023 is 436 manat, can be get a result of 0.897, then:

$$R_f = 1.676 \times (934 \times 0.25)/436 = 0.897.$$

As reported by the SSPF, the number of individual personal accounts opened in the individual accounting system, which represents the accounting and organization of mandatory state social insurance premium payments to form pension capital, which plays a fundamental role in calculating pensions, reached 5.08 million by the end of the 2023 half-year period (Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan, 2023).

In this regard, in the context of the Azerbaijan Republic, the reasons for the discrepancies between the projected and subsequently achieved performance indicators of mandatory state social insurance contributions depend primarily on the calculation-forecasting methodology, as well as on the level of organization of the work of state tax authorities on collection issues. The Chamber of Accounts' official assessment highlights a noteworthy improvement in the Fund's financial position during 2021, with a substantial reduction in outstanding liabilities compared to the year's beginning. Their analysis emphasizes that maintaining minimal accounts payable represents a crucial parameter for developing accurate revenue projections based on actual financial conditions rather than theoretical estimates. This relationship between reduced outstanding obligations and forecasting accuracy demonstrates the interconnection between current financial health and future planning reliability (Issayeva et al., 2024; Prokhorova et al., 2025). Compared to the beginning of the year, the increase in both accounts receivable and accounts payable in the first half of the year is associated with the payment of social insurance contributions by insurers, but the report was not provided as of the date of information generation (Draft Budget of ..., 2022).

In accordance with legislative procedures, the Ministry of Economy submits key economic indicators for forecasting the SSPF's budget to the Ministry of Labour and Social Protection. The Ministry of Finance also provides information on wage and social insurance deductions from budgetary organizations. Budget projects are submitted to both ministries by March 15 and July 1 each year. These projects include data from the State Tax Service on insurers' debts for social insurance and unemployment contributions. Table 2 reflects the forecast and performance indicators of the SSPF under current conditions.

These results highlight the main challenges to the financial sustainability of Azerbaijan's pension system, particularly in the context of demographic change and the increasing ratio of pensioners to workers. Despite positive trends such as growth in mandatory contributions, dependence on

government transfers to cover historical liabilities and fluctuations in financial indicators point to the need to develop a long-term strategy. To ensure the stability of the pension system, it is necessary to optimise expenditure, increase the number of active contributors and take demographic changes into account.

*Table 2 – Forecast and performance indicators of the SSPF*

<i>Year</i>	<i>Initial forecast indicator</i>	<i>Fact</i>	<i>Execution (in%)</i>
2017	2125	2085.7	98.2
2018	2273.26	2327.1	102.4
2019	2419.37	2921.6	120.8
2020	3392.59	3553.2	104.7
2021	3502.499	3843.4	109.7
2022	4148.202	4586.3	110.6
2023	4783.6	5197.7	108.7

*Source:* Created by the author based on Ministry of Labour and Social Protection of the Population of the Republic of Azerbaijan (2022; n.d.), Law of the Republic of Azerbaijan No. 449-VQ “On the 2017 Budget of the Relevant Executive Authority Implementing Social Security and Protection” (2016), Law of the Republic of Azerbaijan No. 904-VQ “On the 2018 Budget of the Relevant Executive Authority Implementing Social Security and Protection” (2017), Law of the Republic of Azerbaijan No. 1350-VQ “On the 2019 Budget of the Relevant Executive Authority Implementing Social Security and Protection” (2018), Law of the Republic of Azerbaijan No. 1697-VQ “On the 2020 Budget of the Body (Institution) Determined by the Relevant Executive Authority Implementing Social Security and Protection” (2019), Law of the Republic of Azerbaijan No. 234-VIQ “On the 2021 Budget of the State Social Protection Fund” (2020), Law of the Republic of Azerbaijan No. 402-VIQ “On the 2022 Budget of the State Social Protection Fund” (2021), Law of the Republic of Azerbaijan No. 673-VIQ “On the 2023 Budget of the State Social Protection Fund” (2022).

#### 4. Discussion

The current single-tier pension system in Azerbaijan presents notable contrasts with multi-tier systems implemented in various nations globally. Unlike diversified pension frameworks that incorporate private pension funds and occupational schemes, Azerbaijan’s reliance on a single state-managed system creates both advantages in terms of administrative oversight and challenges regarding long-term sustainability. This aligns with observations by Ijzereef et al. (2023), Alifiana and Najjiyya (2024), who note that pension systems with limited diversification often face heightened sustainability challenges during demographic transitions. The statistical data

presented in the results section demonstrates that Azerbaijan's system of retirement income support currently maintains adequate financial stability. The coefficients calculated in this study, particularly the conditional replacement rate dependent on the number of active insurance premium payers and pensioners, indicate a concerning trend. This finding corresponds with research by Anantanasuwong (2023), who emphasizes the importance of looking beyond short-term financial indicators when assessing pension system sustainability. The growing dependence on treasury transfers to maintain fiscal equilibrium suggests potential weaknesses in the system's self-sustainability (Khamzin et al., 2015; Khamzina et al., 2015). Willows (2023) similarly emphasizes that system of retirement income supports requiring increasing budgetary support often signal fundamental structural issues.

The primary financial challenge for Azerbaijan's pension system stems from sustainability concerns. Financial viability depends on the system's ability to meet social insurance commitments using internal revenue sources. Treasury transfers, made by the government to the SSPF, help cover pension obligations and maintain fiscal equilibrium. These transfers act as subsidies, particularly for non-contributory benefits or to fill funding gaps due to insufficient revenue from mandatory contributions, and are crucial for covering any budget deficits in the pension system. The financial stability coefficient of the insurance and old-age security framework, used to assess the system's ability to meet its obligations to the population (including pensions and benefits financed through mandatory state social insurance contributions), may be theoretically determined by formula (1).

The gap between projected and actual collection rates suggests limitations in current forecasting methodologies. Improved forecasting models could significantly enhance financial planning capabilities, allowing for more proactive policy responses to emerging challenges. This finding is consistent with international experiences documented by Muslumov and Ibrahimov (2009). A critical finding from the study is that Azerbaijan's pension system lacks a maximum benefit ceiling, allowing pensions to scale indefinitely with higher lifetime earnings and contributions. Aliyev et al. (2011), Bayramov et al. (2020) similarly identified benefit structure design as a critical element of social protection sustainability in Azerbaijan.

Developing more effective mechanisms for integrating self-employed individuals and agricultural landowners into the formal social insurance system could substantially enhance financial sustainability (Abdullayeva, 2021; Işık et al., 2025). Mammadov (2023) similarly noted that administrative arrangements significantly influence the effectiveness of public financial systems in Azerbaijan.

The sustainability coefficient analysed in the study provides a valuable metric for evaluating the current financial health of Azerbaijan's system of retirement income support. The integral financial sustainability ratio calculated for Azerbaijan's system of retirement income support demonstrates an improving long-term retrospective trend. However, the observed fluctuations in this ratio suggest potential instability in the system's financial foundation.

## 5. Conclusion

The analysis of financial sustainability in Azerbaijan's pension system reveals multiple challenges requiring systematic policy responses. Through examination of the current financial management model implemented through the SSPF, several key aspects have been identified.

The financial sustainability of Azerbaijan's state system of retirement income support presents distinctive characteristics compared to Eurozone pension schemes. Challenges stem primarily from managerial factors rather than solely demographic issues, with a significant limitation being the non-diversified structure of the system. Since its inception in 2006, the system of retirement income support has operated as a single-pillar structure based exclusively on mandatory state social insurance contributions, lacking both occupational pension schemes and an active funded component within the system.

The research demonstrates that traditional parametric reforms, such as increasing retirement age or tightening regulatory requirements, provide insufficient solutions for reducing fiscal burden. More promising approaches include expanding mandatory state social insurance coverage through labour relation legalization and implementing strategies to encourage extended labour market participation among older workers. A significant methodological limitation identified relates to forecasting practices. Under existing budget system legislation, pension forecasting operates on a medium-term basis, which proves inadequate for long-term financial stability analysis. Contemporary pension management requires multi-spectral calculations using comprehensive databases to project long-term viability accurately. While actuarial methods would enhance long-term forecasting capacity, their implementation faces practical challenges related to institutional competence and management structures.

The research highlights a structural issue: the retirement income support system is funded through a PAYG system based on mandatory state social insurance, requiring efficient management and control. Legislative changes

in 2018 improved efficiency for payers but weakened the Fund's ability to assess and forecast insurance potential. This consolidation of functions within one entity, lacking direct responsibility for the pension system, complicates accurate forecasting. Without precise electronic management, inaccurate transfers may deplete reserves. The focus should be on diversifying the pension system, improving forecasting, enhancing institutional coordination, and expanding the contribution base through better labor market formalization.

## Funding

None.

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# *Sustainable protection of state authority: criminal liability for attacks on law enforcement, special state bodies, and military personnel*

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## *Abstract*

The sustainability of public institutions and the rule of law depends heavily on the safety and resilience of those entrusted with enforcing them, namely, law enforcement officers, members of special state bodies, and military personnel. These individuals, while performing their professional duties, are increasingly exposed to threats against their life and health, highlighting the urgent need for effective and consistent legal protection. This study analyses the criminal legislation of Kazakhstan, Ukraine, Mongolia, Belarus, China, Japan, and France concerning offences committed against these categories of public servants. Using dialectical, structural-functional, analytical, and synthetic methods, the research evaluates the extent to which national legal frameworks provide sustainable and targeted protection for state agents. The findings indicate that only a subset of these countries, Ukraine, France, Belarus, and Japan, have clear statutory provisions that establish criminal liability for such offences, while others treat them as general domestic crimes. This gap in legal protection risks undermining the operational sustainability of state institutions and signals a degree of decriminalization of threats against public officials. A key determinant in the criminal classification of these acts is often the offender's knowledge of the victim's official status. As states aim to reinforce institutional legitimacy and ensure uninterrupted service delivery, establishing strong, consistent legal protections for state agents becomes essential. The practical value of this study lies in its policy relevance: its conclusions and recommendations can inform legislative reform to strengthen institutional resilience and promote justice systems aligned with the goals of sustainable development.

*Keywords:* criminal liability, protection of law enforcement officers, offences against state officials, institutional resilience, sustainable governance, comparative criminal law.

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## Introduction

The sustained development of every state fundamentally relies on the robustness and stability of its institutional frameworks, especially those responsible for maintaining public safety, law, and order. Law enforcement agencies, specialised state entities, and military troops are essential in maintaining the rule of law, ensuring national security, and fostering societal unity. These institutions are vital for the prompt execution of laws and for promoting long-term social and institutional sustainability – fundamental elements of resilient, equitable, and peaceful communities.

The rising incidence of violent acts and threats against individuals in these roles underscores a critical weakness in the system. Such acts threaten the welfare of public personnel, damage trust in governance, destabilise institutions, and diminish public security (Zaiets et al., 2024). The absence of sufficient legal protections for these professionals undermines the credibility of law enforcement and justice systems, jeopardising the viability of public administration and social order (Cherleniak and Tokar, 2024).

Isabaev (2021) notes that the rapid proliferation of organised crime and the rise in violent acts have led to the intensification of the criminal environment, signalling a growing threat to state stability and public security. These trends are associated with heightened efforts to undermine state authority, underscoring the necessity for legal protections to maintain the continuation of institutional operations. Shayaxmetova (2022) asserts that the state's principal duty is to safeguard human rights and freedoms, with law enforcement and specialised agencies acting as primary implementers. Their capacity to function efficiently is largely contingent upon the safeguarding of their lives and welfare.

Moldabaev (2022) asserts that the legal and physical safeguarding of these people transcends a mere human resource concern; it is a structural need that ensures the enduring sustainability of state institutions. Shakerov (2023) observes that threats to law enforcement officers hinder all tiers of criminal justice operations, from investigation and prosecution to national security and forensic services, thereby compromising the state's ability to operate effectively and sustainably.

In light of these issues, the formulation of criminal legal standards that guarantee the safety and protection of law enforcement officials and military personnel is crucial for the viability of law enforcement infrastructure. Smyshlyaev and Kalkamanuly (2022) call for certain legal frameworks that offer both punitive measures and preventive precautions to deter such attacks and maintain the professional responsibilities of state personnel. These protections additionally fulfil a wider societal role: bolstering the legitimacy

of state power and guaranteeing that state officials can perform without fear or hindrance.

Presently, the congruence between national criminal statutes and advancing international standards for the safeguarding of public officials is insufficiently examined. This paper examines the legal frameworks of Kazakhstan, Ukraine, Mongolia, Belarus, China, Japan, and France, with a particular emphasis on criminal culpability for acts against law enforcement and military personnel. Accordingly, the central research question guiding this study is: to what extent do national criminal statutes in the mentioned countries align with international standards in providing effective and sustainable legal protection for law enforcement officers, special state bodies, and military personnel. The underlying hypothesis posits that countries with explicit statutory provisions criminalising offences against public officials demonstrate higher levels of institutional resilience and governance continuity than those where such acts are treated as general crimes.

This research enhances a sustainable criminal justice model by comparing legislative norms and analysing their actual application, so safeguarding the rights of individuals serving and preserving the institutions vital for enduring governance and social stability.

## **Materials and Methods**

The structural and functional method was employed to explore key concepts central to this study, namely “criminal responsibility,” “law enforcement agency,” and “special state body”, in order to assess the global crime landscape and analyse crime indices in the selected countries: Mongolia, Kazakhstan, Japan, Belarus, France, China, and Ukraine. The selection of these countries was determined by the need to represent diverse legal traditions, governance models, and levels of institutional development. These countries collectively encompass civil law systems with varying degrees of adherence to international legal norms, providing a robust comparative foundation for analysing the criminal protection of public officials. Kazakhstan, Ukraine, and Belarus exemplify post-Soviet transitional systems; Mongolia represents a hybrid legal order influenced by both socialist and democratic traditions; China provides a model of state-centred criminal justice; while Japan and France serve as examples of mature and institutionally stable legal frameworks grounded in codified law and human rights protection. This cross-national design allows for a comprehensive assessment of how differing legal and political contexts

shape the sustainability and effectiveness of criminal safeguards for state officials.

This approach allowed for the examination of how offences against state officials threaten not only individual safety but also the stability and functionality of public institutions. These crimes disrupt managerial processes, erode trust in governance, and weaken the structural integrity of state power, thereby posing long-term risks to institutional sustainability. The study investigated the pressing need for robust criminal-legal protections for law enforcement personnel, members of special state bodies, military personnel, and their close relatives

It further identified why these actors are particularly vulnerable in conflict situations and categorized the types of encroachments that represent the greatest threat to public sector resilience. The analysis considered the broader societal and institutional consequences of such offences, including operational disruptions and the economic costs incurred by state agencies – factors that directly undermine the sustainability of public service delivery and state governance systems. The dialectical method was used to investigate the views of other scientists on this problem, helping to formulate a unified idea about the criminal-legal protection of employees of law enforcement, special state bodies, and military personnel, as well as responsibility for encroachment on their lives and health.

Criminal codes of different countries were analysed based on the Caspian Public University of Almaty. Logical methods were used, namely methods of analysis and synthesis. For an in-depth study of the topic, the work was conditionally divided into several parts. In the first part the criminal codes of those countries, where clear standards of responsibility for encroachment on the life of an officer are fixed, were analysed. The norms of Articles 345 and 348 of the Criminal Code of Ukraine (2001) and provisions of Section 13 of the Penal Code of the Republic of Belarus (1999) were studied. The Penal Code of the French Republic (1990), chapter I, section I, paragraph II “On encroachment on the person of a person”, and article 95 “Obstruction or coercion in the performance of official duties”, section 5 “Offences related to obstruction of official duties”, Penal Code of Japan (2006) were also studied. The measures of responsibility, which are provided for offences against the employee of law enforcement, special state body and serviceman considering the norms of criminal legislation of the above-mentioned countries, have been investigated. It is highlighted which party the legislator gives priority to in case of conflict situations.

The second part of the study employed the analysis method to examine the criminal codes that lack unambiguous laws concerning criminal liability for offences against the life of law enforcement officers, special state bodies,

and military personnel. Such are normative-legal documents in Kazakhstan, China, and Mongolia. The study addressed how the offences against the life of employees of the above-mentioned bodies or physical harm to them are qualified in the absence of specific norms. With the help of the second method, synthesis, all the received information was formed into a logically structured study.

Results

Crime persists and poses serious challenges to the political, economic, technological, and socio-cultural transformations that are rapidly reshaping contemporary societies (Pak and Gannon, 2023). Exploring ways to effectively ensure security for individuals, society, and the state is therefore essential, given the instability of the political, ideological, economic, social, environmental, and informational foundations of the modern world order (Thomas et al., 2022; Spytska 2023). Globally, there is great variation in crime rates (Table 1).

Table 1 – Crime rates in the surveyed countries in 2023

Country	Crime index
Mongolia	4.01
Kazakhstan	4.26
Japan	4.53
Belarus	5.08
France	5.66
China	6.01
Ukraine	6.18

Source: Most Violent Countries (2024).

Penalties for offences such as murder, rape, torture, and other violent crimes must be contextually varied, particularly when these atrocities are perpetrated against individuals in law enforcement, special state agencies, or the military (Ogbe, 2023). These professionals serve not only as individual victims but also as emblematic representatives of the state's ability to administer, safeguard, and uphold justice. Consequently, criminal activities directed at them jeopardise institutional survival by endangering the entities that maintain public order. Although others denounce the escalated severity of penalties, such as the tripling of punishment levels when the victim belongs to such entities (Ogbe, 2022), this distinction underscores the

amplified social repercussions of assaults that undermine fundamental governmental operations.

Law enforcement agencies constitute a fundamental element of the criminal justice system, responsible for implementing laws, investigating offences, and maintaining public order (Umam et al., 2022). Specialised state agencies, reporting directly to high-ranking state leaders such as the President, are frequently tasked with national security responsibilities, including intelligence, counterintelligence, and safeguarding public officials and state resources (McCollister et al., 2010). Ensuring the physical protection of these individuals is essential for sustaining long-term public faith in institutions, mitigating violence, and bolstering the legitimacy of governance (Pilyukov et al., 2023). The criminal protection of public officials directly enhances institutional resilience and sustainable justice systems.

Criminal protection of officials is seen not only as a guarantee of individual rights and security, but above all as a mechanism for ensuring the continuity, legitimacy, and stable functioning of management structures. Although the protection of the life and health of law enforcement officers and civil servants is recognized as a moral and legal imperative, the article emphasizes that such protection serves a broader institutional function: preserving the stability of the state, public order, and citizens' trust in the justice system. Attacks on officials are interpreted as an attack on the operational viability of the government itself, rather than as isolated acts of interpersonal violence. Thus, criminal liability for crimes against public officials is seen as an instrument of institutional stability, designed to protect the functional and symbolic foundations of state power and maintain the integrity of the legal and administrative systems necessary for sustainable development and the rule of law.

Research performed at Caspian Public University in Almaty indicates that the penal codes of Kazakhstan, Ukraine, Belarus, Mongolia, China, Japan, and France encompass broad culpability for acts of violence or threats directed at public officials. Nevertheless, only a limited number, specifically France, Ukraine, Belarus, and Japan, have implemented explicit rules that impose increased culpability for assaults on the lives of such officials. These explicit legal frameworks function as instruments for both punishment and prevention, so enhancing a more sustainable judicial infrastructure by preventing targeted violence and maintaining institutional efficacy.

Article 348 of the Criminal Code of Ukraine (2001) establishes criminal culpability for acts of violence or threats against law enforcement officers, military members, and other public officials. This statute aims to protect persons and preserve institutional credibility by allowing public servants to



execute their responsibilities without apprehension. Legal academics have observed that when state agents perceive a threat, they may respond with excessive caution or even engage in unlawful behaviour to safeguard themselves and their family. In this context, Article 348 is crucial in fostering accountable governance and maintaining the operational integrity of state institutions.

Article 362 of the Penal Code of the Republic of Belarus (1999) similarly criminalises the homicide of law enforcement or special state agency personnel committed in connection with the performance of their official duties. Additional pertinent provisions further classify such offences as intentional murders of persons performing official functions, thereby recognising the aggravated nature of attacks on representatives of state authority. These legal distinctions fulfil both punitive and preventive functions – strengthening social respect for public officials, a fundamental component of healthy government.

The Penal Code of the French Republic (1990) embraces a comprehensive and inclusive methodology. Chapter 1, Section 1, Paragraph 2 delineates safeguards for various public authorities, encompassing magistrates, jurors, police officers, and customs officials. French criminal law emphasises the safeguarding of human life and dignity, irrespective of an individual's particular public position. This adherence to constitutional values signifies a profound acknowledgement that safeguarding those who maintain the state's legal and ethical foundations is crucial for the state's sustainability and moral validity (Sharifi, 2023).

In Kazakhstan, although Chapter 14 of the Penal Code (2014) lacks explicit provisions for the protection of law enforcement personnel, Chapter 15 offers pertinent safeguards as delineated in Article 340. This article penalises assaults against judicial and investigative officials and their family members. Nevertheless, significant disparities persist: there are no specific safeguards for law enforcement officials engaged in general public safety duties. This judicial oversight may jeopardise both the safety of state actors and the robustness of institutions responsible for public protection.

The criminal legislation of Mongolia has a comparable challenge. Article 91 of the Penal Code (2002) stipulates harsh punishments, including life imprisonment and the death penalty, for homicide related to official duties; nevertheless, it lacks clarity about law enforcement officers and military members. The imposition of these sanctions depends on the offender's established awareness that the victim was a public official. In the absence of clear legal classification, such offences may be regarded as domestic rather than institutional risks, undermining both deterrence and the overall viability of law enforcement frameworks.

Article 135 of China's Penal Code (1997) criminalises acts of violence against officials performing their duties. However, the variation in punishments based solely on the level of harm reflects an absence of clear differentiation between offences committed against ordinary citizens and those directed at state officials, thereby underscoring the need for a more stratified legal framework and potential legislative reform. Sustainable governance necessitates legal frameworks capable of proportionately addressing assaults that compromise state authority, particularly when such assaults possess symbolic and systemic significance. Japan provides a more explicit illustration of focused legal safeguarding. Article 95 of the Penal Code (2006) criminalises the obstruction of official activities via force or intimidation, stipulating specific punishments. This legislative strategy enhances deterrence and bolsters the operational sustainability of state institutions by safeguarding their personnel. The concept of "institutional stability" is understood in a broad sense, covering not only legal and criminal protection through legislative guarantees and accountability mechanisms, but also broader socio-political aspects such as institutional legitimacy, public trust, and the stability of governance structures.

While numerous countries acknowledge offences against public officials as criminal acts, only a limited number have developed legal systems that distinctly differentiate these offences from ordinary violent crimes. This difference is essential for the longevity of state institutions, especially those tasked with justice, public order, and national security. Establishing strengthened legal protections deters potential offenders and demonstrates society dedication to upholding the rule of law and institutional resilience – essential components of sustainable development and democratic government.

## Discussion

The actions of law enforcement agents are crucial for the institutional resilience, the preservation of order, and the effective implementation of the rule of law. Their efforts directly facilitate the establishment of stable, peaceful, and inclusive societies are essential components of sustainable development. Nonetheless, the nature of their duties inevitably subjects them to increased dangers of violence and targeted assaults. According to Roach and Thomaneck (2023), this requires enhanced criminal legal protection to both protect these professionals individually and to maintain the continuity and credibility of public administration. Legal systems must recognise the distinct societal functions of these players and provide protections to

safeguard them, thereby enhancing the sustainability of institutional operations.

This necessity is emphasised by study conducted by Jetelina et al. (2022), which illustrates the everyday exposure of law enforcement and special state agency staff to violence while enforcing citizens' rights, public safety, and constitutional order. Criminal law provisions are essential in fortifying these rights, serving as a regulatory barrier against actions that jeopardise the health, life, and stability of state actors. Kramarczyk (2022) asserts that law enforcement agents must swiftly react to unanticipated and volatile situations, which frequently expose them to physical peril. Their capacity to perform efficiently, without doubt or trepidation, is essential for preserving institutional efficacy and hence guaranteeing sustainable governance.

Crimes targeting state officials are especially harmful to societal sustainability (Hunko 2023). They not only erode the legitimacy of public authority but also impair the efficient functioning of governmental organisations and diminish public trust. Such transgressions engender instability, fear, and insecurity within the social fabric – elements that can swiftly undermine state-society ties. Nanan (2023) and Goulette et al. (2022) underscore that violent assaults on police officers jeopardise both the persons directly engaged and the wider community they serve. Officers frequently cannot withdraw from such encounters owing to their sworn duties, heightening the risk of harm, escalation, and wider societal repercussions.

These assaults also incur substantial financial and social burdens on governmental institutions. Prolonged investigations, medical treatment, administrative obligations, and diminished labour capability post-incident impact the operational and financial viability of law enforcement agencies (Bekishev et al., 2019) Furthermore, public opinions can swiftly change based on the application of force in certain circumstances – eroding trust in the criminal justice system even when police officers operate legally. The erosion of legitimacy presents enduring threats to the sustainability of governmental power and the rule of law, which are essential to democratic society (Ketners 2025; Kushenova et al., 2025).

As Grabowska and Kresiński (2023) elucidate, deliberate assaults on public officials frequently incite retaliatory legal or administrative actions that might subsequently curtail rights more extensively, resulting in a cycle of resistance and repression. Neglecting the fundamental political and socio-economic factors contributing to this violence may further erode public trust in the justice system. Thus, specialised criminal law safeguards serve not merely as reactive instruments but also as proactive strategies that safeguard the efficacy and integrity of state institutions (Auanasova et al., 2024).

Borovyk et al. (2023) assert that these protections are essential for maintaining a secure working environment for public officials, allowing them to perform their responsibilities successfully and ethically. This facilitates the reliable provision of services, public safety, and legal order – results consistent with the objectives of institutional and social sustainability. The resilience of law enforcement agencies is closely linked to the degree to which the state ensures their safety, dignity, and operational autonomy free from intimidation or intervention (An et al., 2024; Auanasova and Auanassova 2024). Therefore, protection must be afforded not only to officials but also to their families, who frequently become targets of indirect coercion or violence.

Recent patterns identified by Shjarback and Maguire (2021) indicate a worldwide increase in assaults on police officers. These tendencies jeopardise the essence of institutional resilience by eroding the authority and operational efficacy of public entities. In numerous civilisations, increasing opposition to state initiatives signifies underlying concerns such as inequality, distrust, or political polarisation (Fedorchenko et al., 2020; Khamzina et al., 2021). In these situations, a prompt and legal response is crucial not only to maintain order but also to reinstate confidence in the court system. Nonetheless, when officers operate without adequate legal safeguards, they may resort to reactionary or disproportionate measures, thereby exacerbating the erosion of public trust (Apakhayev et al., 2017; Buribayev and Khamzina 2025).

The ongoing operation of public institutions depends on a robust framework of legal and procedural protections for law enforcement and other state officials. As governments enhance these systems, they must acknowledge the vital role these entities play in promoting sustainable development, especially concerning peace, justice, and robust institutions (Sustainable Development Goal 16). Guaranteeing the physical and legal protection of law enforcement personnel is not solely an issue of professional safety; it is a fundamental necessity for establishing robust institutions that can facilitate enduring societal advancement.

## Conclusions

The comparative analysis of the criminal protection of law enforcement officers, members of special state bodies, and military personnel across Kazakhstan, Ukraine, Mongolia, Belarus, China, Japan, and France reveals significant variation in the scope and precision of legal safeguards. All seven countries recognise criminal liability for violence or threats against public

officials; however, the degree of legal specificity and institutional protection differs substantially. Ukraine, Belarus, Japan, and France have enacted explicit statutory provisions that directly criminalise such offences, thereby reinforcing both individual security and the institutional legitimacy of state authority. In contrast, Kazakhstan, Mongolia, and China address these crimes within broader categories of offences against the person, which reduces the deterrent effect and blurs the distinction between attacks on private individuals and those targeting state representatives. This inconsistency weakens the sustainability of law enforcement and governance systems in contexts where institutional stability is closely linked to the perceived inviolability of state agents.

While the French legal framework remains notable for its comprehensive and humanistic orientation, it represents only one model among several effective approaches. The Japanese Penal Code, through its precise categorisation of obstruction and violence against officials, demonstrates a pragmatic deterrent model, whereas Ukraine and Belarus emphasise the dual function of legal protection – safeguarding individuals and preserving state credibility. The absence of detailed statutory provisions in other jurisdictions underscores the need for harmonisation with international standards to enhance institutional resilience and the rule of law. Overall, the findings suggest that sustainable governance depends not solely on punitive norms but also on coherent, clearly codified systems that protect public officials as embodiments of state authority. Such convergence between legal precision and institutional legitimacy forms the foundation for enduring stability, public trust, and justice-oriented governance across diverse legal traditions.

This study's scholarly contribution is its comparative analysis of criminal culpability for attempts on the lives and health of law enforcement officials, special state agents, and military personnel across various legal systems. This analysis critically examines the scope and uniqueness of legal standards safeguarding these groupings, focussing on institutional integrity and sustainability. Future research should further investigate the legal protections afforded to military personnel, whose susceptibility in high-risk environments is crucial for maintaining national security and the continuity of state operations.

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# *Information resilience of society and sustainable democratic development in the context of political transformations*

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## *Abstract*

The study analyzes information resilience in Ukrainian and German societies and assesses its implications for political transformations and sustainable democratic development. Using comparative public policy analysis, content analysis of legislative initiatives, and evaluations of media literacy and public resistance to disinformation, the research compares state and societal responses. Findings show that in Ukraine, information resilience is shaped by hybrid warfare and sustained information attacks, with polarization and low trust in official sources as key constraints. In Germany, policy prioritizes countering online extremism, preventing foreign interference, and regulating digital platforms under the Network Enforcement Act, yet election-period disinformation remains impactful despite higher media literacy. Consistent information policy and close collaboration with civil society and international partners can enhance adaptive capacity, protect democratic deliberation, and sustain institutional trust.

*Keywords:* disinformation, media literacy, propaganda, sustainable development, polarisation.

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## 1. Introduction

The relevance of this study lies in the need for a comparative analysis of Ukraine's and Germany's approaches to information resilience, with the aim of identifying their respective strengths and weaknesses. In the modern world, the information space has become a battleground of global competition, where traditional channels of influence intersect with hybrid warfare tactics, disinformation, opinion manipulation, and coordinated information operations. Information resilience, information security, and media literacy are separate but interrelated concepts. Information resilience refers to a society's ability to withstand and recover from harmful information threats, ensuring the continuity of democratic processes and social cohesion. Information security, on the other hand, focuses on protecting the integrity, confidentiality, and availability of information systems from cyberattacks and other technological threats. Media literacy is the individual and collective ability to critically approach and evaluate media content, recognizing bias, misinformation, and manipulation. While information resilience encompasses both society's response to disinformation and the protection of information, media literacy is a tool within this framework that empowers people to navigate and counter harmful narratives, making it a key component of building resilience.

According to V. Georgievskaya et al. (2021), a society's information resilience is the ability of governmental institutions, civil society, and media organisations to oppose detrimental information influences, stop misleading information, and maintain democratic stability. This idea is becoming more relevant, especially for countries undergoing political upheaval or external involvement, due to rising information threats. The issue is severe in Ukraine.

After 2014, Ukraine's information policy focused on countering disinformation, propaganda, and information sovereignty, according to D.V. Nelipa and V.E. Turenko (2024). These efforts included establishing specialised state bodies like the Centre for Countering Disinformation (CCD) under the National Security and Defence Council (NSDC) and the Centre for Strategic Communications and Information Security under the Ministry of Culture and Information Policy, as well as active collaboration with international cybersecurity and information hygiene partners.

Germany is not in open war, but information threats have increased, affecting its domestic politics, media trust, and information security. O. Churanova and V. Romaniuk (2023) note that external players, particularly the Russian Federation, have used disinformation campaigns, social media manipulation, fake news, and cyber operations to influence. Under martial

law, media management has been crucial to information resilience in Ukraine. Y. Bidzilya et al. (2024) warn that excessive governmental participation in the media may lead to censorship and weaken public trust in official information sources, balancing national security with democratic values of free expression.

The Ukrainian and German information resilience strategies demonstrate the need for a comprehensive approach that incorporates legislative regulation, digital literacy improvement, and cybersecurity tools. According to O. Butyrsky (2024), modern information policy should promote thought plurality, high-quality media material, and public trust in official sources. Ukraine and Germany share information policy tendencies despite different threat situations.

This study analyses information resilience in Ukraine and Germany, focussing on key factors affecting information security and its impact on political transformations, democratic institutions, and social cohesion. The study's main goals are to theoretically examine “information resilience” and information security principles, assess the impact of political crises and transformation processes on state information resilience, accounting for internal and external factors, and develop recommendations to strengthen national information resilience.

## **2. Materials and Methods**

This study employed a comprehensive interdisciplinary approach to analyze societal information resilience amid political transformations. Conducted in three phases from September 2024 to January 2025, it focused on Ukraine and Germany due to their distinct information security challenges. Ukraine confronts extensive disinformation campaigns caused by the war with Russia, hybrid threats, and social polarization. Conversely, Germany faces significant external disinformation pressures related to the migration crisis, electoral processes, and extremist influences.

The study employed content analysis, comparative analysis, and case study methodology. Content analysis was applied to examine regulatory frameworks and strategic initiatives, including the Digital Services Act (2022), the Network Enforcement Act (2017), Presidential Decree No. 685/2021 of Ukraine “On the Decision of the National Security and Defense Council of Ukraine “On the Information Security Strategy”, and the 2022 Decree on implementing a unified information policy under martial law. Analytical sources such as reports from the Federal Ministry of the Interior (2024a, 2024b), digital technology overviews from Data Reportal

(Kemp, 2025), studies by the Open Society Institute – Sofia (Lessenski, 2022, 2023), and analyses from Media Detector (2024) were also reviewed. This allowed for the identification of key policy domains and institutional measures aimed at safeguarding the information space.

Comparative analysis was employed to examine Ukraine's and Germany's responses to disinformation, with a focus on media literacy initiatives and institutional resilience. The study reviewed reports from international organizations, including the Council of Europe (Doublet, 2019) and Freedom House (2024), as well as media monitoring projects by Reporters Without Borders (2024), StopFake (2025), VoxUkraine (2025), and Correctiv (2025). The case study method was used to investigate specific instances of disinformation and propaganda, including findings from EU DisinfoLab (2025), interference in the 2025 German elections (Litnarovych, 2025; Escritt, 2025; Reuters, 2025), manipulative coverage of the refugee issue (Morris and Oremus, 2022), and information attacks on Ukraine (Mykhailiv, 2025; Oliarnyk, 2022). This enabled the identification of dominant narratives and instruments of information influence, as well as institutional response mechanisms.

The research was conducted in three stages. The first involved collecting and classifying regulatory and institutional frameworks, including national legislation and documents from international organizations. The second stage focused on content analysis of strategies, laws, and analytical reports, followed by the interpretation of prevailing approaches. The third stage employed comparative analysis and case studies to examine models of information resilience in Ukraine and Germany. This analysis enabled the identification of key trends in the development of sustainable information environments and an assessment of the effectiveness of existing mechanisms within the context of international coordination. The review of primary sources also revealed significant limitations, including the absence of unified response standards, weak institutionalization of intergovernmental cooperation, and fragmentation across national strategies.

## 3. Results

### *3.1. The role of information resilience in ensuring democratic stability*

Information resilience is a multidimensional concept that reflects a society's capacity to withstand harmful informational influences while preserving institutional stability and maintaining the secure functioning of its information environment. It encompasses political, social, and security

dimensions that interact to shape a society's overall resistance to information threats. From a political perspective, information resilience is closely linked to the role of state policy and institutions in safeguarding the information space. The effectiveness of governance depends on the state's ability to design and implement strategies that address both external and internal threats. In the context of hybrid warfare and information attacks, legislative and institutional frameworks are essential for enhancing societal resistance to destabilizing narratives.

Information resilience is a complex concept that can be partially operationalized using cross-national indices such as media literacy and trust levels, but it is more effectively understood as a contextual phenomenon shaped by historical and political conditions. While indices can provide valuable comparative data, they do not always fully reflect the nuances of resilience development in different socio-political contexts. For example, the challenges Ukraine faces in relation to hybrid warfare and disinformation campaigns may require different resilience strategies than those needed in Germany, where external interference plays a more prominent role. Therefore, while cross-national indicators provide useful information, information resilience must be adapted to the specific political and historical context of each country to take into account its unique vulnerabilities and needs.

The sociological perspective emphasises how information processes affect social cohesion, public opinion, and stability. Information technology's rapid progress has made deception and manipulation easier, potentially fuelling societal conflict. Security approaches regard information resilience as essential to national security (Varnaliy et al., 2016). Information is now a strategic factor that can cause technology failures, military conflicts, public administration disturbances, and other problems. Social polarisation and distrust of governmental institutions make citizens more susceptible to manipulation during political crises (Destek et al., 2025; Ketners, 2025). People who distrust authorities accept other sources of information, regardless of authenticity. Fear appeals are dangerous cognitive tactics because manipulators employ them to induce emotional rather than intellectual reactions (Khoma et al., 2024).

German misinformation techniques were similar during the 2015-2016 refugee crisis and Russia's 2022 invasion of Ukraine. German society was misled about immigration by deceptive narratives about refugee crimes and manipulative narratives regarding the energy crisis and Ukraine support (Morris and Oremus, 2022). The 2016 narrative about "Lisa", a Russian-speaking Berlin youngster purportedly molested by migrants, was invented. Although police denied the claim, the disinformation sparked protests and

influenced politics (Meister, 2016). Disinformation's widespread delegitimisation of state institutions threatens democratic governance long-term. Public distrust in elections, judges, and law enforcement can contribute to election rejection, civic disengagement, and societal instability (Perbawa et al., 2024). These processes may accelerate authoritarian drift, as governments use disinformation to justify censorship, limit free speech, and control the media.

In Germany, legislative measures, most notably the Network Enforcement Act (NetzDG, 2017), have contributed to mitigating information attacks on digital platforms. While Ukraine lacks a dedicated law on countering disinformation, institutional efforts have intensified. In 2021, the Centre for Countering Disinformation (CCD) was established under the National Security and Defence Council to monitor threats and respond to disinformation. The same year, the Centre for Strategic Communications and Information Security (CSCIS) was created within the Ministry of Culture and Information Policy to coordinate strategic communications and enhance societal resilience. In December 2024, the CSCIS was restructured into an independent institution, strengthening Ukraine's strategic communication infrastructure.

EU research shows that voters with stronger digital and media literacy are better able to get verified information and resist manipulation, which increases election turnout (Doublet, 2019). Pre-election periods are extremely risky for deceptive campaigns, thus information resilience is crucial. German experience shows that better digital advertising transparency rules and social media misinformation control can dramatically reduce external electoral involvement. Despite encouraging improvements in Ukraine, anonymous information campaigns and bot farm activity highlight the need to refine information security policies.

Media literacy helps citizens spot manipulative content, disinformation, and critical engagement with information flows (Iasechko et al., 2020). The NGO Detector Media yearly publishes a Media Literacy Index in Ukraine to assess the population's ability to resist informational impact and adapt to changing media. Media literacy is assessed via sociological surveys, content analysis, and expert judgements. KIIS and USAID-Internews surveys examine public trust in media, ability to spot misinformation, and critical engagement with content. Detector Media, StopFake, and VoxCheck give qualitative media literacy examinations to uncover information ecosystem weaknesses.

Ukraine's information security strategy combats disinformation, promotes independent media, critical thinking, and digital literacy. International rankings and analytical assessments on freedom of expression

and the information climate examine such policies. Freedom House (2024) rates media independence, availability to objective information, and journalist pressures annually. Reporters Without Borders (2024) tracks journalist threats and state censorship worldwide. The European Digital Media Observatory (EDMO) studies disinformation's social impact and recommends information security policies.

Information stability, as described in the context of political transformation and democratic development, is closely linked to Jürgen Habermas' concept of the public sphere and his theory of deliberative democracy. Habermas emphasizes the role of rational discourse in the public sphere, where citizens can participate in informed debates, shaping public opinion and influencing political decision-making. Within this framework, information resilience becomes a decisive factor in preserving democratic debate.

It ensures that society is able to critically evaluate and counteract disinformation, allowing citizens to participate in constructive discourse. For example, efforts in Ukraine and Germany to combat disinformation through legislative measures, media literacy programs, and civil society engagement reflect the need to create a robust public sphere in which diverse viewpoints can be expressed free from manipulation. Thus, strengthening information resilience is essential for maintaining a democratic space in which deliberative democracy can flourish, ensuring that citizens can fully participate in political processes without being influenced by external or internal information threats.

Societal information resilience underpins stability through the coordinated interaction of state policy, civic activism, and security measures. Its advancement demands a systematic strategy focused on enhancing media literacy, reinforcing legal frameworks against disinformation, and adapting to evolving information threats.

### *3.2. Comparative analysis of information stability: The experience of Ukraine and Germany*

In Ukraine, following the 2014 Revolution of Dignity and the onset of the war with Russia, information attacks intensified significantly. These multifaceted assaults encompassed cyberattacks targeting government agencies, financial institutions, and media outlets, alongside widespread disinformation campaigns, public opinion manipulation, and information-psychological operations. For instance, in February 2022, a large-scale Distributed Denial of Service (DDoS) attack targeted the websites of the Ministry of Defence and two major banks, PrivatBank and Oschadbank

(Oliarnyk, 2022). The strategic objectives of disinformation campaigns typically focus on undermining the state's decision-making capacity, which is vital for stability and security. These attacks erode citizens' trust in democratic processes, diminish social capital, and weaken institutional effectiveness. Additionally, they foster uncertainty and fear, heightening social tensions and destabilizing society. Framed within a sustainability perspective, information resilience contributes to the social sustainability of democracy by preserving the continuity of public deliberation, institutional reliability, and social cohesion over time (Kharchenko et al., 2017).

Russia is the main disinformation supplier in Ukraine. Russia spends approximately \$1 billion on media propaganda annually. The 2025 Russian draft state budget allocates over RUB 137 billion (USD 1.4 billion) for state propaganda, up 13% from 2024. These funding focus on discrediting Russia's international and domestic policy. Russian propagandists portray Ukraine as a burden on the EU to ruin its worldwide image. Russian media falsely reported that a Ukrainian soldier killed his partner to defame the Ukrainian army and state (Mykhailiv, 2025). Information attacks cause public unrest, social polarisation, and state institution collapse, threatening national security. Disinformation and manipulation decrease information resilience, reducing citizens' ability to critically analyse and objectively evaluate events. Crisis coordination is complicated by critical infrastructure cyberattacks that interrupt government operations, banking systems, and communication routes (Mikhnevych et al., 2023; 2024). Germany amid the 2015-2016 migration crisis and Russia's global disinformation effort during its 2022 invasion of Ukraine are examples.

From 2022 to 2023, Germany faced significant disinformation attempts to erode popular support for Ukraine and exacerbate social tensions. Russian propaganda aimed to disparage Ukrainian refugees, erode government trust, and incite xenophobia. Operation "Doppelgänger" (EU DisinfoLab, 2025) saw many bogus websites imitate Western media outlets like The Guardian, Bild, and Der Spiegel. These sites spread anti-Western myths to undermine Ukraine and European government policy. To lend legitimacy to fake content, the effort mostly used typosquatting, or registering domain names that resembled official ones. Fake social media profiles boosted the reach and impact of misinformation.

The German government increased disinformation detection and countermeasures. A unit to counteract information attacks was established by the Federal Ministry of the Interior and the Ministry of Foreign Affairs in 2024 (Federal Ministry, 2024b). At the same time, authorities tightened social media regulations, requiring fast removal of falsehoods. Operation



“Doppelganger” shows the complexity of modern information threats and the need for constant attention to protect public opinion and national security.

Multiple large-scale disinformation initiatives tried to destabilise democratic processes and alter electoral opinion before the 2025 German federal elections. The CeMAS analytical centre found a Russian campaign boosting the far-right Alternative for Germany (AfD) while criticising major political parties in January 2025 (Litnarovych, 2025). This campaign, linked to the Russian “Doppelganger” operation, used fake news sites to undermine Ukraine and boost economic fears.

In February 2025, researchers discovered over 700 bogus social media profiles called “Geist” that spread pro-Russian disinformation about conservative chancellor candidate Friedrich Merz. The network employed fake photos and anti-conservative messaging to damage his brand and voter support (Escritt, 2025). German Interior Ministry warned of Russian misinformation effort targeting Hamburg and Leipzig elections with false social media videos. This operation, linked to the pro-Russian “Storm-1516” network, used pseudo-media sites and false social media accounts to spread misinformation to subvert democratic processes (Reuters, 2025).

In the face of hybrid threats, state policy is essential for information resilience. Ukraine has established several strategic papers to preserve the information environment, promote media literacy, and combat damaging information influence since 2014. Ukraine's Information Security Strategy requires an early warning system for information threats, improved coordination between state institutions, media, and civil society, and support for independent journalism (Decree of the President..., 2021). For disinformation countermeasures, especially during wartime, the National Security and Defence Council's Strategic Communications Centre and the Ministry of Culture and Information Policy's Centre for Strategic Communications and Information Security are crucial to this strategy.

Ukraine strengthened its information security after the 2022 invasion. Blocking Russian propaganda channels, sanctioning media and information attackers, and creating state communication platforms were among the measures (Decree of the President..., 2022). These activities changed Ukraine's information ecosystem, boosted media trust, and raised disinformation awareness. Along with population media literacy changes, social networks became the main news source (Table 1).

Data analysis reveals a general decline in public trust in the president from 2022 to 2024, reflecting the prolonged military conflict and shifting public sentiment amid the ongoing crisis. However, since reaching a low of 52% trust in December 2024, confidence in President Zelenskyy has gradually increased, rising to 74% by May 2025 (Grushetsky, 2025). Notable shifts

have also occurred in media consumption: while television remained a primary information source in 2022, by 2024 social networks – particularly Telegram and YouTube – surpassed it.

*Table 1 - The impact of disinformation on Ukrainian society (2022-2024)*

Year	Level of trust in the president	Most popular media resources	Percentage of citizens who consider disinformation to be a serious problem	Level of media literacy
2022	90%	Television, social networks (Telegram, Youtube, Facebook)	61%	81%
2023	77%	Social networks (Telegram, Youtube)	90%	76%
2024	59%	Social networks (Telegram, Youtube)	89%	No data

*Source:* Compiled by the authors based on Detector Media (2024), EU Neighbours East (2024), Ukrinform (2024), A. Grushetsky (2025).

The paradox of declining trust in political leaders, despite growing awareness of disinformation, can be understood by recognizing that increased awareness often leads to greater skepticism about the reliability of official sources of information. As citizens become more aware of the pervasiveness of disinformation, they may begin to question the reliability of all information, including that provided by political leaders and institutions. This decline in trust occurs because disinformation campaigns exploit existing vulnerabilities in public trust, making people more likely to view state-sanctioned narratives as biased or manipulated rather than reliable sources of truth. Consequently, while recognizing disinformation is crucial, it may inadvertently reinforce public cynicism, thereby undermining trust in institutions rather than strengthening it.

At the federal level, several ministries collectively shape media literacy policy by addressing different facets of the information environment. The Federal Ministry of Digital and Transport regulates digital platforms, while the Federal Ministry of Education and Research supports educational initiatives that enhance media literacy. The Federal Department for Media Harmful to Young Persons manages age-related content restrictions, and the Federal Centre for Health Education runs campaigns on digital hygiene and

mental health. At the state level, the Standing Conference of Ministers of Education and Cultural Affairs develops educational standards, ensuring the integration of media literacy across general, vocational, and higher education curricula. Together, these institutions foster a comprehensive approach to media literacy, emphasizing critical thinking, information analysis, and the ability to evaluate sources, thus contributing to overall information resilience.

Several German laws control the digital environment. The 2017 Act to Improve Law Enforcement in Social Networks was the first significant European law to tackle illegal digital materials like disinformation, hate speech, and extremism. Major German technology corporations must remove blatantly illegal content within 24 hours and seven days for more difficult circumstances under this rule. Failure to comply can result in a EUR 50 million fine. The Digital Services Act (2022) was heavily influenced by the Law to Improve Law Enforcement in Social Networks, which advanced European digital legislation. The former focusses on material removal, whereas the Digital Services Act requires platforms to moderate content, disclose algorithmic transparency, and prevent foreign intervention in democratic processes. A more balanced regulatory approach is promoted by the Act's improved reporting and collaboration procedures between digital platforms and public agencies. Regional educational programs, state-funded media literacy projects, and strict legislation have improved societal information resilience in Germany (Table 2).

Analysis of disinformation's impact on German citizens between 2022 and 2024 reveals a steady rise in public concern over information threats alongside declining trust in political leadership. The gradual erosion of trust in the chancellor appears linked to systematic disinformation campaigns aimed at delegitimizing state institutions. While the Law to Improve Law Enforcement in Social Networks (2017) and the Digital Services Act (2022) set frameworks to control harmful content, their success hinges on state institutions' enforcement capacity and digital platforms' cooperation. At the EU level, combating information manipulation is complicated by the pervasive influence of Russian propaganda, which exploits social media as a hybrid warfare tool – particularly amid rising concerns over foreign interference in democratic processes such as elections and public discourse.

Table 2 - The impact of disinformation on citizens in Germany in the period 2022-2024

Year	Level of trust in the chancellor	Most popular media resources	Percentage of citizens who consider disinformation to be a serious problem (%)	Media Literacy Index, (0-100*)
2022	30%	Television, social networks (WhatsApp, Instagram, Facebook)	77%	62
2023	20%	Television, social networks (WhatsApp, Instagram, Facebook)	84%	61
2024	18%	Television, social networks (WhatsApp, Instagram, Facebook)	81%	No data

Note: \*Media Literacy Index, which determines the level of media literacy in an EU country, is calculated on a 100-point scale.

Source: Compiled by the authors based on M. Lessenski (2022, 2023), E. Başay (2024), S. Kemp (2025).

Comparative results between Ukraine and Germany show that, although media literacy initiatives and regulatory approaches are crucial for strengthening information resilience, their effectiveness can vary depending on the context and political situation. In Ukraine, where external disinformation campaigns and social polarization are widespread, media literacy programs have helped the public recognize false narratives, although regulatory measures aimed at combating disinformation have also played an important role in controlling external threats.

In Germany, where foreign interference is a serious problem, regulatory frameworks such as the Network Enforcement Act have proven effective in combating harmful content, while media literacy initiatives have strengthened the public's ability to critically evaluate information. The study's findings suggest that a combined approach, in which media literacy programs empower citizens to critically evaluate information and regulatory frameworks ensure the accountability of digital platforms, may be a more sustainable model for resilience. However, the success of this dual strategy depends on the level of public trust, the effectiveness of enforcement mechanisms, and the adaptability of both approaches to emerging information threats.

### *3.3. Key challenges to information resilience in Ukraine and Germany*

Internal socio-political processes and external information attacks polarise Ukraine's information ecosystem. People only read "information bubbles" that support their ideas due to polarisation. Fractionation inhibits public discussion and deepens social divides, which could destabilise the state. In entrenched ideological blocs, social groups reject alternatives and preserve opposing views, especially on national security. A Razumkov Centre (2021) study found that 21% of eastern Ukrainians desire Russian-Ukrainian unity, compared to 0.4% in western Ukraine.

Also polarised is foreign policy. Ukrainian support for Euro-Atlantic integration decreased substantially after 2022. Over 82% of individuals backed NATO in 2024, up from 47.8% in 2021 (Razumkov Centre, 2024). Another issue is poor trust in state media due to oligarchic media control, political meddling in editorial decisions, and inefficient state communication strategies that fail to respond to information threats. While censoring pro-Russian propaganda and punishing destructive content are important for national security in the wake of a full-scale invasion, Reporters Without Borders and the OSCE have warned against free expression abuses in Ukraine.

Germany struggles with foreign electoral intervention and influence. Russia and China have expanded social media disinformation tactics and supported fringe political groups to influence public opinion and politics since early 2016. Russian propaganda manipulates migration, energy security, and European integration with bogus news and history. The Russian-linked "Alley of Angels" propaganda effort was revealed in 2025 to undermine German support for arming Ukraine (Saito et al., 2025). The campaign included emotional images of children supposedly murdered in the conflict and was partly organised and distributed by a Russia-affiliated network. European intelligence found that Russian agents worked to influence German protests and politics.

A February 2025 Bitkom study found that approximately 90% of Germans are apprehensive about foreign influence in the next national elections, mostly from Russia (45%) and the US (42%), with China (26%) and Eastern Europe (8%) registering less anxiety. The people is more conscious of the risks foreign influence poses to democracy. Germany's Federal Office for the Protection of the Constitution (BfV) formed a working group to prevent foreign intervention in the 23 February 2025 early federal elections (Federal Ministry of the Interior, 2024a). This followed threats of Russian espionage and sabotage. The BfV noted that disinformation,

cyberattacks, espionage, and sabotage might influence elections to discredit or support politicians.

Regulating online platforms in Germany involves complex legal and technological dimensions. The 2017 Law to Improve Law Enforcement in Social Networks was among Europe's earliest regulations targeting illegal content. However, it has generated debate among human rights advocates, digital technology experts, and platform operators. A central concern involves algorithmic modeling and automated content moderation, as many platforms employ artificial intelligence and machine learning to identify potentially illegal material (Işık et al., 2025).

State abuse of the law is another issue. Journalists warned that a government proposal to strengthen the 2017 Law to Improve Law Enforcement in Social Networks could censor political opponents in 2022. A proposed amendment compelled platforms to remove content and provide user data with the Federal Criminal Police Office (European Audiovisual Observatory, 2023), raising data privacy and law enforcement misuse concerns. Germany needs legal reform to address filtering, excessive moderation, and disinformation migration to unregulated platforms.

External assistance from organizations such as the EU, NATO, and the OSCE can strengthen democratic stability by providing technical support, facilitating dialogue, and reinforcing the rule of law, without undermining national sovereignty or domestic legitimacy. However, the key to success lies in how such assistance is formulated and implemented. When external actors cooperate with local institutions, respecting national priorities and ensuring local ownership of reform processes, this can strengthen democratic resilience without compromising sovereignty. Risks arise when external support is perceived as imposing foreign interests or ignoring the national context, which can lead to resistance from domestic actors. Therefore, a balanced approach that aligns external assistance with a country's democratic aspirations is crucial for maintaining both stability and sovereignty.

## 4. Discussion

The findings support the idea that democratic systems must curb viral disinformation through proportionate measures that preserve media pluralism and civic voice. This explains why content removal alone may harm discourse in Ukraine and Germany. 2024 (de La Brosse & Holt). Ott's sustainability-oriented literacy paradigm emphasises long-term capacity building by integrating critical and civic literacies into formal education and

public communication, enhancing citizens' source evaluation, reducing manipulative narratives, and promoting democratic resilience (Ott, 2024). The sociological dimension, according to N. Myers (2021), emphasises media literacy, critical thinking, and citizen involvement with information. This study supports their media literacy centrality claim but also shows its variation in society.

In the security-oriented perspective, E. Humprecht et al. (2020) view information threats as hybrid warfare and political destabilisation tools. This study agrees with their findings, especially with digital foreign meddling. However, our research supports including internal vulnerabilities such as social fragmentation and low institutional trust in the security system. Political crises often lead to disinformation campaigns and deteriorating faith in state institutions, reducing information resilience (Bashtannyk et al., 2020). Crisis makes citizens more susceptible to external and internal manipulation, according to R.P. Bagozzi et al. (2023). Social tensions, distrust of official sources, and instability foster disinformation, propaganda, and panic. When manipulative narratives are used to change public opinion and promote destabilising political views, the threat increases (Tsurkan-Saifulina et al., 2019).

Russia has launched hybrid warfare-related information strikes on Ukraine since 2014, causing military conflict, political instability, and societal discontent. D. Geissler et al. (2023) found that Russia uses state and proxy media, social media, botnets, troll farms, and conspiracy theories to spread disinformation. These attacks aim to undermine trust in governmental, military, volunteer, and disinformation-fighting media. Disinformation efforts in Germany have varied in strength and concentration depending on the political climate. Russian propaganda spread misleading accusations of refugee-related crimes and the imposition of Islamic values on European society during the 2015 migration crisis, according to Piguet (2021).

Despite efforts to improve information resilience, both countries confront major problems, this study revealed. Deep social polarisation, low trust in state media, and legislative risks from excessive information space control are major issues in Ukraine (Fedorchenko et al., 2020; Tsurkan-Saifulina and Dudchenko, 2018). Krykavska et al. (2023) agree that information restrictions may be appropriate during warfare, but a long-term balance between security and free speech is necessary. Kampfner (2020) found that Russia and China interfere in German elections and media. Regulation of online platforms is complicated, with regulations like the 2017 Law to Improve Law Enforcement in Social Networks criticised for censorship and content moderation transparency. The political and historical situations of

Ukraine and Germany differ, yet both governments are implementing thorough disinformation suppression tactics. During the crisis, Ukraine prioritises external threats, whereas Germany prioritises digital legislation and online platform monitoring.

## 5. Conclusions

Research suggests that media literacy, counter-disinformation measures, independent media, digital regulation, and social cohesion are crucial for societal information resilience during political changes. Media literacy in Ukraine was 81% in 2022 and 76% in 2023, while public acknowledgement of disinformation as a severe problem rose from 61% to 90% to 89% in 2024. Trust in the president fell from 90% in 2022 to 59% in 2024, then recovered to 74% by May 2025. Germany's media literacy scores were 62/100 in 2022 and 61 in 2023, but concern about disinformation rose from 77% to 84% and stayed high. Trust in the chancellor declined from 30% to 20% to 18% in 2024. Rising threat awareness and falling political trust suggest information environment structural vulnerabilities.

In reaction to hybrid warfare, internal polarisation, and low faith in state media, Ukraine has implemented legislative efforts, platform sanctions, and increased strategic communications. Germany prioritises preventing foreign meddling and extremist content under the Law to Improve Law Enforcement in Social Networks and the EU Digital Services Act, but balances free expression with platform accountability as manipulation tactics evolve. Both incidents demonstrate that technical takedowns alone are insufficient without public capability and credible communication. Sustainable democratic development relies on resilient information ecosystems to ensure access to verified knowledge, institutional trust, and media pluralism, aligning with SDG 16. Policy design should prioritise sustainability indicators including stable trust, consistent funding for media and fact-checking, transparent enforcement, algorithmic accountability, and targeted inclusion of vulnerable populations.

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# *Crimes Against the Order of Governance: Legal Characteristics and Classification Issues*

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## *Abstract*

In contemporary legal studies, crimes against the order of governance have gained particular relevance, as they directly impact the functioning of state authorities and societal stability. The aim of this research is to develop the legal characteristics of crimes against the order of governance and to identify the key issues in classifying such offences. The methodological foundation is based on an analysis of current legislation, academic works, and law enforcement practices in Kazakhstan and other countries. The article examines crimes against the order of governance, their legal characteristics, and classification challenges within the framework of Ukrainian legislation. Particular attention is given to the evolution of anti-corruption legislation in Kazakhstan. The study includes a comparative analysis of Kazakhstani legal norms with international law standards and the legislation of other countries. The research findings highlight the need to improve the legislative framework and implement international standards into national legislation to enhance the effectiveness of anti-corruption measures and ensure proper governance and sustainability in public administration. The practical value of this study lies in its potential application by law enforcement agencies and legislators to refine the legal regulation of crimes against the order of governance, as well as by legal scholars and students in academic settings.

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## 1. Introduction

In the modern context of the dynamic development of legal systems, ensuring proper governance is of particular importance. Crimes against the order of governance constitute one of the most significant categories of offences aimed at undermining established norms and rules governing the functioning of state and public institutions. Research into these crimes helps to identify gaps in law enforcement mechanisms and develop strategies to address them. The study of such offences in the context of Kazakhstan holds great practical significance, as effective legal regulation of these violations is a key factor in maintaining public order, strengthening the rule of law, and ensuring the sustainability of citizen security and institutional trust.

Against the backdrop of Kazakhstan's integration into the global community and the process of adapting national legislation to international standards, the issue of classifying crimes against the order of governance has become particularly relevant. A clear legal characterisation of such offences contributes to improving law enforcement practices, increasing the efficiency of law enforcement agencies, and reducing the risks of abuse and violations in public administration, thereby supporting the sustainability of democratic institutions and governance processes.

Crimes against the order of governance, particularly corruption-related offences, significantly undermine public trust in government authorities and jeopardize the sustainability of legal and administrative systems by eroding institutional legitimacy and compromising the long-term resilience of governance frameworks (Ketners et al., 2025; Dudchenko et al., 2018). Studying these crimes and improving law enforcement practices will help enhance public confidence and ensure transparency in the functioning of state institutions.

The relevance of this research is confirmed by numerous academic studies examining crimes against the order of governance in various contexts. Ali et al. (2023) explore a human rights-based approach to corruption, highlighting the potential for aligning anti-corruption regulations with human rights principles. Their study examines the balance between punitive measures and the protection of fundamental rights, which is a crucial aspect in the development of an effective anti-corruption policy.



Akimova et al. (2020) highlight the negative impact of corruption on a state's economic security, emphasising that crimes against public order can significantly weaken national institutions. This study provides a crucial analysis for understanding the relationship between corruption and a country's economic resilience.

Capus and Bozinova (2023) analyse impression management by authorities involved in corporate corruption investigations. They focus on how corruption case narratives are shaped and the factors influencing prosecutorial decision-making.

Corneau (2023) explores the implementation of criminal compliance as a tool for anti-corruption policy, stressing the importance of compliance programmes in corporate governance. This research is crucial for understanding mechanisms that can prevent violations of public order.

Kussainov et al. (2023) examine anti-corruption mechanisms in the financial sector of the European Union (EU), highlighting the role of artificial intelligence in enhancing security. This study demonstrates how modern technologies can contribute to combating crimes against public order.

Thus, previous studies have focused on different aspects of corruption, ranging from its economic impact to human rights, international practices, corporate compliance, and innovative technologies for preventing corruption-related crimes.

The aim of this study is to explore the legal characteristics of crimes against the order of governance and examine the challenges in their classification.

## **2. Materials and Methods**

In the study of crimes against the order of governance in Kazakhstan, several methodological approaches were applied to analyse legal phenomena, providing a comprehensive perspective on this complex issue.

The historical-legal method was key to examining the evolution of anti-corruption legislation in Kazakhstan. A detailed analysis was conducted on the legal acts regulating crimes against the order of governance, namely: the Constitution of the Republic of Kazakhstan (1995), the Criminal Code of the Republic of Kazakhstan (1997), Law No. 410-IV LRK “On Combating Corruption” (2008), and Law No. 107 “On Administrative Procedures” (2000). This analysis allowed for the identification of trends in strengthening liability for corruption-related offences and other crimes against the order of

governance, which are crucial for ensuring the rule of law and long-term governance sustainability.

To assess the effectiveness of Ukrainian legal norms in combating crimes against the order of governance, a comparison was made between Ukrainian legislation, particularly the Criminal Code of Ukraine (2001), and international standards as well as the legal frameworks of other countries, such as the United States of America (USA) (Foreign Corrupt Practices Act, 1977, 1980), Germany (German Criminal Code, 1998), Switzerland (Swedish Criminal Code, 1962), and Singapore (Protection from Online Falsehoods and Manipulation Act, 2019). This comparative analysis helped identify the strengths and weaknesses of Ukrainian legislation in this field, particularly its capacity to support the sustainability of governance structures through effective legal mechanisms.

The analytical method was employed to identify challenges in the classification of crimes against the order of governance, particularly corruption-related offences. Special attention was given to the qualification of offences, which in some cases may fall under both administrative and criminal law, creating difficulties in law enforcement. It is important to note that ambiguity in legal qualification can lead to the improper application of the law.

The system analysis method was used to explore the interconnections between different types of crimes against the order of governance and their impact on the functioning of state institutions. This approach helped identify key factors influencing the efficiency of public administration and the effectiveness of control over officials' activities.

Together, these methodological approaches provided a multifaceted perspective on crimes against the order of governance in Kazakhstan, contributing to the identification of key issues and opportunities for improving legislation and legal practices in this area.

### **3. Results**

Crimes against the order of governance are defined as offences aimed at undermining or violating established state norms that regulate the activities of government bodies, administrative institutions, and individual officials. Such crimes provide a considerable risk to society by undermining both the efficacy and the institutional sustainability of administrative governance, so reducing the capacity of state processes to adapt and operate under intricate socio-political and economic circumstances.

Legal doctrine presents various approaches to understanding these crimes. They are often viewed as offences that undermine public order or as acts that disrupt state governance. In some classifications, they are considered a subset of administrative offences, while in others, they are defined as a distinct category within the criminal law system. In international law, crimes against the order of governance may include aspects such as corruption, abuse of power, forgery of official documents, and other acts that hinder the proper functioning of government institutions.

The study of crimes against the order of governance in Kazakhstan aims to explore and clarify the legislative framework that regulates the functioning of state institutions and ensures the sustainability of legal order and governance. The primary legal sources for the characterisation and classification of such crimes include the Constitution of the Republic of Kazakhstan (1995), the Criminal Code of the Republic of Kazakhstan (1997), and other legal acts governing state administration.

The Constitution of the Republic of Kazakhstan (1995) serves as the fundamental law that establishes the legal foundations of state structure, citizens' rights and freedoms, and the responsibilities of government institutions. It enshrines the principles of the rule of law, which form the basis for classifying and preventing crimes against the order of governance. The Criminal Code of the Republic of Kazakhstan (1997) is the primary legislation that defines liability for such crimes, outlining penalties for acts that obstruct the functioning of state authorities or undermine the authority of the government.

The Law of the Republic of Kazakhstan No. 410-IV LRK "On Combating Corruption" (2008) is designed to prevent corruption by establishing strict liability measures for bribery, abuse of office, and other corruption-related offences that fall within the category of crimes against the order of governance. This law also sets out procedures for investigating and prosecuting such violations, providing legal instruments essential for the sustainability of accountability systems within public administration. Meanwhile, the Law of the Republic of Kazakhstan No. 107 "On Administrative Procedures" (2000) regulates the procedures of government bodies, the interaction between public authorities and citizens, and mechanisms for preventing violations in governance, thereby contributing to crime prevention in this domain.

Kazakhstani law defines offences against the order of governance as those that disrupt state institutions, public order, and administrative processes. These crimes try to denigrate government structures, disrupt officials' tasks, and hinder public institutions' efficiency and sustainability. Kazakhstan's criminal code defines offences against the order of governance as those that

impair or disturb state bodies and officials' administrative activities, undermine governmental authority, or interfere with their tasks. This category also includes crimes that undermine government or exploit power for personal benefit (see Table 1).

*Table 1 – Main Types of Crimes Against the Rule of Law*

<i>Category</i>	<i>Types and features</i>
Corruption Crimes	<ul style="list-style-type: none"> <li>– Bribe Taking: Acceptance of material or other benefits by a public official for performing or failing to perform certain actions in the interests of third parties.</li> <li>– Bribe Giving: Offering a benefit to a public official in exchange for assistance in making decisions.</li> <li>– Mediation in Bribery: Actions aimed at organizing or facilitating the transfer of a bribe.</li> </ul>
Abuse of Office	<ul style="list-style-type: none"> <li>– Exceeding Authority: Performing actions beyond the granted powers, causing harm to state interests.</li> <li>– Abuse of Official Position: Using official powers for personal gain or for the benefit of third parties, to the detriment of public or state interests.</li> </ul>
Obstructing State Authorities	<ul style="list-style-type: none"> <li>– Violence or Threats Against Officials: Intimidation or use of force to influence the official activities of state employees.</li> <li>– Obstruction of Law Enforcement: Actions that hinder law enforcement agencies from performing their duties, such as blocking their activities or sabotage.</li> </ul>
Forgery and Falsification of Documents	<ul style="list-style-type: none"> <li>– Forgery of Official Documents: Creating or using fake documents intending to deceive government authorities or commit illegal actions.</li> <li>– Use of Fake Documents: Using forged documents to gain personal benefits or manipulate data for administrative purposes</li> </ul>

*Source:* Compiled by the authors based on the Criminal Code of the Republic of Kazakhstan (1997).

Crimes against the order of governance in Kazakhstan manifest in various forms, but they all aim to disrupt the lawful functioning of state institutions, undermine their authority, and destabilise public administration, thereby threatening the sustainability of institutional integrity and rule-based governance. A clear classification and definition of such crimes are crucial for maintaining legal order and protecting public interests.

In Kazakhstan's legal framework, crimes against the order of governance have distinct features that differentiate them from other types of offences. Their legal characterisation involves specific aspects of the object of encroachment, the perpetrator, legal consequences, and the influence of international regulations on their classification. These crimes target the state or public order and the stable operation of government institutions. The primary object of these offences is the public administration system that

ensures proper governance, the functioning of public authorities, and the smooth execution of administrative processes.

Many crimes against the order of governance require a special subject – an official (Denega, 2022). Public officials responsible for administrative functions or representing state authority are key actors in such offences. Their liability is heightened due to the broad and lasting impact their actions or inactions can have on public relations, institutional credibility, and the sustainability of administrative justice. However, non-officials may also be subjects of such crimes, for instance, individuals resisting lawful activities of government representatives or other officials.

Kazakhstan's legislation imposes strict penalties for these offences, including fines, imprisonment, restrictions on holding office, and additional measures such as asset confiscation in cases of corruption-related crimes. Officials bear greater responsibility for crimes against the order of governance since their actions affect the stability, sustainability, and credibility of state administration, directly influencing the durability of governance systems and the trust of future generations. This is essential for preventing abuses of power and ensuring transparency in administrative processes.

International standards play a significant role in developing effective mechanisms to combat corruption in Kazakhstan and globally (Buribayev et al., 2015; Mukhamadiyeva et al., 2017). One key initiative is the United Nations Convention against Corruption (2006), which sets out fundamental principles for countries seeking to combat corruption at all levels. The Convention emphasises the necessity of creating transparent governance systems where information about state institutions and officials is accessible to the public. This includes transparent public procurement procedures and financial oversight. The Convention mandates that states implement anti-corruption strategies and awareness-raising programmes while ensuring criminal liability for bribery, abuse of office, and related offences.

The Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997) contains recommendations on financial transparency, accounting, auditing, and measures to prevent money laundering. It obligates signatory states to criminalise the bribery of foreign public officials and ensure stringent oversight of financial reporting, thereby reducing the possibility of concealing illicit transactions and laundering funds. These measures promote financial transparency, uphold ethical business practices, and foster fair competition in global markets.

Kazakhstan is progressively integrating international legal standards to combat crimes against the order of governance, particularly in the realm of anti-corruption (Sloma et al., 2024; Kostiuk and Iryna, 2024). This includes

adopting global norms such as the United Nations Convention against Corruption (2006). Incorporating international standards reinforces the national legal system and aligns it with global practices in tackling governance-related offences.

One notable example is the case of Mukhtar Ablyazov, a former banker and politician. Ablyazov, who served as the head of BTA Bank, was accused of embezzling billions of dollars from the bank and using his political influence to cover up the illicit activities. He allegedly misappropriated funds through fraudulent loans and conducted financial transactions that enabled him to funnel money into offshore accounts. Ablyazov's case became an international scandal, with legal proceedings unfolding in multiple countries, including the UK, France, and Kazakhstan. His assets were frozen in various jurisdictions, and he was eventually convicted in absentia in Kazakhstan. The case highlights challenges related to international cooperation in asset recovery, the role of foreign jurisdictions in enforcing judgments, and the complexities of cross-border legal battles in corruption cases.

Kazakhstan has joined the Group of States Against Corruption (GRECO) under the Council of Europe. GRECO provides recommendations on improving anti-corruption policies and practices, and Kazakhstan actively implements these recommendations, particularly regarding corruption prevention in the public sector and among government officials. The country also adopts guidelines from the Financial Action Task Force on Money Laundering to combat money laundering and terrorist financing, often linked to corruption offences. Integrating these standards into national legislation enhances financial transparency, especially concerning government officials, and supports the sustainability of anti-corruption systems through long-term institutional capacity-building and accountability mechanisms.

The Organization for Security and Co-operation in Europe (OSCE) actively supports Kazakhstan in developing and implementing legislative initiatives aimed at increasing transparency in public administration. OSCE assists in formulating measures to prevent abuse of office and incorporating anti-corruption standards into Kazakhstan's legal system. Additionally, Kazakhstan participates in the Open Government Partnership, which promotes transparency in governance and citizen engagement in decision-making processes. Open government practices enhance official accountability and reduce corruption risks.

Kazakhstan cooperates with the International Anti-Corruption Academy (IACA), which provides assistance in implementing comprehensive anti-corruption standards, including measures to prevent corruption-related offences in state institutions. IACA's training programmes enable Kazakhstani officials and legal professionals to adopt best practices in anti-corruption

efforts. The Organisation for Economic Co-operation and Development (OECD) also offers anti-corruption standards and recommendations for member states and partner countries, including Kazakhstan. OECD provides guidance on transparency in public procurement and management of state resources, which Kazakhstan incorporates into its governance system to strengthen oversight of public expenditure. As part of its deepening economic and political ties with the European Union (EU), Kazakhstan is adopting European standards in public administration and anti-corruption measures. Following EU standards assists in synchronising Kazakhstan's legislation with European frameworks and promoting a more transparent and accountable governmental system, therefore strengthening the sustainability of governance reforms and institutional credibility.

Kazakhstan has made significant strides in addressing corruption through legal and institutional reforms, such as the establishment of the Anti-Corruption Agency and the adoption of the 2022-2026 Anti-Corruption Policy Concept. However, the effectiveness of these frameworks is influenced by political dynamics, as informal networks and patronage systems persist within the civil service, undermining formal legislative efforts. While transparency measures have been implemented, challenges remain in the application of whistle-blower protections and the Code of Ethics for Civil Servants, limiting the development of a robust ethical governance framework. Political will is crucial for ensuring the success of these reforms, as the independence of anti-corruption institutions and the involvement of civil society in oversight processes are essential for maintaining integrity and accountability in governance.

The classification of crimes against the order of governance in Kazakhstan can be based on several key criteria. This approach allows for the consideration of various factors such as the purpose of the crime, the degree of public danger, the object of infringement, and the specificity of the perpetrator (Table 2).

The classification of crimes against governance, particularly in the context of Kazakhstan, faces several challenges that complicate law enforcement and the clear definition of legal boundaries. There is a lack of distinction between crimes against governance and related offences, such as financial or economic crimes. For instance, abuse of office may exhibit characteristics of an economic crime, making legal qualification more difficult. The ambiguous differentiation between administrative offences and crimes under the Criminal Code creates challenges for law enforcement, as certain actions may exhibit elements of both. For example, a bribe below a certain threshold may be classified as an administrative offence, whereas a higher amount may constitute a criminal offence. The variety of approaches to handling cases related to crimes against

governance leads to inconsistencies in law enforcement, negatively affecting legal certainty and public trust in the judiciary.

Table 2 – Classification of Crimes Against the Rule of Law

Crime criteria	Forms of crime
Object of crime	Crimes can be classified depending on which public relations they violate. These may include crimes affecting: state governance (e.g., abuse of power), the conduct of public functions (e.g., corruption), or the legality of law enforcement activities.
Subject of crime	Depending on who committed the crime, the following categories can be identified: public officials (e.g., civil servants, judges), executives (e.g., company leaders), and citizens not holding official positions but violating the order of governance (e.g., bribe givers).
Form of guilt	Crimes can be classified according to the form of guilt: intentional crimes (e.g., bribery), unintentional crimes (e.g., professional negligence).
Degree of Social Danger	Classification can be based on how dangerous the crime is to society: especially dangerous crimes (e.g., organized corruption), less dangerous crimes (e.g., minor abuse of office).

Source: Compiled by the authors based on the Criminal Code of the Republic of Kazakhstan (1997).

To improve the classification of crimes against governance, the following measures can be proposed. Legislative amendments should be introduced to clearly delineate the boundaries between administrative offences and criminal offences. This will help prevent legal conflicts and simplify the work of law enforcement agencies. Developing uniform methodological guidelines for judges and law enforcement officers in handling cases of crimes against governance will help ensure a more consistent approach in law enforcement practice. Conducting analytical research and creating a database of court decisions related to crimes against governance will aid in forming a unified judicial practice and studying trends in this area. Developing and implementing strategies aimed at preventing crimes against governance, particularly by enhancing transparency in government activities, improving control mechanisms, and ensuring public oversight.

The classification of crimes against governance is a crucial element of criminal law, assisting in shaping law enforcement practices and ensuring proper legal order. Despite the challenges in this field, improving classification will enhance the effectiveness of combating such crimes and provide legal certainty.



The enforcement of laws concerning crimes against governance in Kazakhstan, as in many other countries, encounters several issues that reduce the effectiveness of compliance and the implementation of legal norms in this area (Table 3):

*Table 3 – Problems in the Application of Law Regarding Crimes Against the Rule of Law*

<i>Issues</i>	<i>Main aspects</i>
Ambiguity of Legislative Norms	Some provisions of the Criminal Code are insufficiently defined, complicating their interpretation and creating a risk of ambiguous interpretation. This leads to issues with crime classification and can result in different approaches in law enforcement. For instance, certain provisions of the Criminal Code of the Republic of Kazakhstan (1997) are not consistent with other legal acts, such as the Law No. 107 “On Administrative Procedures” (2000), which can create difficulties in determining jurisdiction and the competence of authorities.
Problems with Classification and Distinction from Other Crimes	Due to the similarities in the characteristics of crimes against the rule of law and other offenses (including economic and official crimes), there are challenges in correct classification, which may lead to errors in identifying the elements of the crime. Since crimes against the rule of law often involve violations of official duties, their classification becomes more complicated and requires additional investigation into the motives and circumstances of the crime.
Low Qualification of Law Enforcement Personnel	Law enforcement officers may lack sufficient training in the classification and application of laws related to crimes against the rule of law, leading to ineffective investigations and improper evidence collection.
Imperfect Mechanisms of Proof	Many crimes against the rule of law are committed in ways that leave minimal traces or evidence, making their documentation and subsequent proof in court difficult. This is particularly relevant for corruption-related crimes, which often involve hidden schemes.
Corruption Risks in Law Enforcement Bodies	Corruption within law enforcement and judicial bodies can have a significant impact on the application of law in crimes against the rule of law. This can lead to falsification of investigation results, manipulation of evidence, or even complete avoidance of responsibility by the perpetrators.
Insufficient International Cooperation	Crimes against the rule of law, particularly corruption, are often linked to international schemes. The limited cooperation with international organizations such as Interpol or Europol restricts Kazakhstan’s ability to fight transnational crimes.

*Source:* Compiled by the authors.

Overcoming these challenges requires improvements to the legal framework, enhancing the qualifications of law enforcement officers, strengthening anti-corruption measures, and increasing international cooperation to ensure legal and institutional sustainability.

Additional sanctions could be introduced specifically for individuals holding high-ranking positions in government structures, as well as for

crimes related to budget management, the allocation of state contracts, and similar activities. Anti-corruption mechanisms should be improved, particularly by more actively incorporating provisions of international conventions such as the United Nations Convention against Corruption (2006) and other anti-corruption initiatives into national legislation. Kazakhstan should also strengthen cooperation with international organisations (e.g., Interpol, Europol, and the United Nations (UN)) to combat transnational crimes related to governance and facilitate information exchange and expertise in fighting corruption.

To minimise crimes against administrative order, it is imperative to improve the transparency of state institutions, ensure public access to government information, and facilitate public consultations. These actions collectively reinforce the sustainability of participatory and accountable governance. Improving legislation on crimes against administrative order will not only ensure an effective response to such offences but also establish a legal framework for fair and just governance and the sustainability of democratic institutions. The proposed measures will help reduce corruption, abuse, and violations of law and order, thereby increasing public trust in state institutions. Different countries adopt various approaches to regulating crimes against administrative order (Table 4).

*Table 4 – International Experience in Regulating Crimes Against the Rule of Law*

<i>Country</i>	<i>Main aspects</i>
USA	In the USA, crimes against the rule of law are regulated at both the federal and state levels. Key components include anti-corruption laws such as the Foreign Corrupt Practices Act of 1977 (1980), which prohibits bribery, and laws governing conflicts of interest. The focus is also on transparency in government procurement and administrative procedures, ensuring public oversight of government activities.
Germany	In Germany, crimes against the rule of law are covered by the German Criminal Code (1998), which includes provisions on abuse of office, bribery, and corruption. German law also provides for strict penalties for corruption-related offenses, including criminal penalties for officials.
Sweden	Sweden is known for its high level of transparency in government administration. Legislation provides strict rules on conflicts of interest, as well as mechanisms for overseeing government procurement, regulated by the Swedish Criminal Code (1962). Anti-corruption agencies actively investigate offenses in the country.
Singapore	Singapore is renowned for its successful fight against corruption, attributed to the implementation of strict legislative measures and effective oversight of public officials. The government actively promotes awareness campaigns about corruption and its consequences, as seen in the Protection from Online Falsehoods and Manipulation Act (2019).

*Source:* Compiled by the authors based on Capus and Bozinova (2023), Teichmann and Wittmann (2022), Lytvyn et al. (2021), Mahendra et al. (2024).

The implementation of successful foreign practices in Kazakhstan could be an important step in combating crimes against the rule of law. Legislation can be improved by adapting best practices, particularly from Germany and the USA, in anti-corruption laws and control mechanisms. This could include clearer definitions of crimes and accountability for public officials. It is also vital to implement the practice of transparent public procurement, similar to Sweden, to reduce opportunities for corruption in the public sector. This could involve open access to information on government spending and contracts. Conducting awareness campaigns about the consequences of corruption, drawing on the experience of countries with high levels of transparency, such as Sweden, could help increase awareness among citizens and officials of the importance of adhering to legislation.

Ukraine, like Kazakhstan, faces numerous challenges in combating corruption and crimes against the rule of law. However, in recent years, Ukraine has achieved some success in reforming its legislation and introducing new mechanisms to address these crimes. The implementation of successful practices could significantly improve the effectiveness of the fight against corruption and other crimes, increasing trust in state institutions and ensuring law and order.

In Ukraine, independent bodies have been established specialising in the fight against corruption. This includes the National Anti-Corruption Bureau of Ukraine (NABU), which investigates corruption crimes among officials. NABU is independent from political influence and ensures effective investigation and accountability of those involved in corruption (Ivaniuk, 2024; Tymoshenko et al., 2022). It also includes the Specialized Anti-Corruption Prosecutor's Office (SAPO), which works alongside NABU to ensure proper judicial proceedings in anti-corruption cases. Kazakhstan should consider creating similar independent bodies to combat corruption at all levels of government, ensuring transparency and independence from political influence. However, recent developments in July 2025 have raised concerns over the undercutting of NABU and the Specialized Anti-Corruption Prosecutor's Office (SAPO) independence, which threatens the effectiveness of their work in combating corruption and may negatively impact public trust in Ukraine's anti-corruption efforts.

Ukraine is actively carrying out reforms aimed at increasing the transparency of state institutions. These initiatives include Transparent State Procurement (ProZorro) – an electronic procurement system that ensures maximum transparency in government spending. All participants can view the procurement process, which significantly reduces the risk of corruption. Public officials in Ukraine are required to publicly declare their income and expenses via an electronic system. These fosters increased trust from citizens

in the government. Kazakhstan could consider similar initiatives to ensure transparency in government activities, which would help reduce corruption risks and increase trust in state institutions.

Ukraine actively cooperates with international organisations, such as the UN, World Bank, European Union, and other countries in the fight against corruption. Ukraine is a signatory to the United Nations Convention against Corruption (2006) and other international agreements that ensure cooperation in the fight against corruption at the global level. Kazakhstan should become more actively integrated into international anti-corruption initiatives, which would not only improve the effectiveness of combating corruption within the country but also enhance its international reputation.

An essential component of success in the fight against corruption is changing cultural and educational standards. In Ukraine, initiatives have been launched to foster intolerance towards corruption among youth and society as a whole. Kazakhstan should also implement such educational initiatives to create an atmosphere of intolerance to corruption and ensure continuous public awareness of the importance of tackling this issue.

## **4. Discussion**

The research identifies patterns in the development of Kazakhstan's legal framework regarding crimes against the rule of law, highlighting both the progress and the challenges related to institutional legal change. Recent amendments to anti-corruption legislation have strengthened accountability, reflecting the state's efforts to improve transparency and management effectiveness. The study examines the classification and legal characteristics of such crimes, revealing how normative conflicts and the interpretation of legislative acts complicate the enforcement of penalties. This analysis is crucial for advancing legal science, enhancing the protection of the rule of law, and fostering an effective anti-corruption system.

Damijan (2023) highlights the importance of local conditions and political will for the effective fight against corruption. This conclusion is also significant for Kazakhstan, as political will is indeed a decisive factor in the successful implementation of anti-corruption reforms. Given that corruption is one of the main obstacles to the stable development of the state and ensuring fair law enforcement, political will is a determining factor for the long-term sustainability of anti-corruption initiatives, democratic institutions, and the broader legal environment. The blurred distinction between administrative violations and criminal offences complicates the classification process of crimes against the rule of law. This is also an issue

for Kazakhstan, where such a distinction is often unclear, creating challenges in law enforcement.

Mitskaya (2023) emphasises the importance of criminal law in the fight against corruption, which is the widely accepted tool for such crimes. Accordingly, criminal law should be an important mechanism in combating abuse of power; however, Mitskaya also points out the complexity of the evidence base, which remains a current problem for Kazakhstan's law enforcement agencies.

Omelchuk et al. (2021) focus on the challenges of cooperation between law enforcement agencies in the fight against corruption-related crimes. While this is indeed a significant issue, it should also be added that not only the lack of clear procedures but also insufficient technical support for law enforcement and transparency issues play a major role in law enforcement in Kazakhstan.

Priyanto et al. (2023) stress the importance of clearly distinguishing between the competencies of government bodies to ensure the effective fight against corruption, and this issue is particularly relevant for Kazakhstan. One of the serious problems hindering effective anti-corruption policy in the country is the duplication of functions among anti-corruption bodies.

Research by Mahendra et al. (2024) shows how different Asian countries adapt mechanisms to counter corruption depending on their socio-economic conditions, historical factors, and legal systems. The experience of other countries provides Kazakhstan with important examples for implementing relevant reforms, particularly in terms of political will and the functional independence of anti-corruption bodies.

Pane and Pudjiastuti (2020) state that corruption impedes the state's ability to provide proper access to public services and the effectiveness of law enforcement agencies, which is also true for Kazakhstan. The deterioration of access to services such as law enforcement or social programmes due to corruption is a significant risk for governance. This undermines citizens' trust in state institutions and stimulates the shadow economy.

Research by Saragih et al. (2023) addresses issues related to the qualification of corruption-related crimes, which is indeed an important topic. However, in Kazakhstan's case, attention should not only be focused on the problem of distinguishing abuse of power and other crimes against the rule of law but also consider the specifics of Kazakhstan's legal culture and the low level of legal education among officials. Increasing competence in legal enforcement issues would reduce confusion in the classification of crimes.

According to Ramashov et al. (2023), the importance of strengthening the

constitutional basis for combating corruption is also highly relevant for Kazakhstan. Kazakhstan's legal framework has significant contradictions that complicate the law enforcement process. To effectively combat corruption, it is necessary to ensure clear and coherent legislative regulation with specific legal mechanisms.

While Suyanto et al. (2023) make a valid point regarding the need for the unification of criminal legislation in the fight against corruption, it should be noted that in Kazakhstan, the problem lies not only in harmonising the legislation but also in its effective implementation. The lack of clear procedures and political pressure on the judicial system creates difficulties in effectively combating corruption (Tsurkan-Saifulina and Dudchenko, 2018).

Thus, law enforcement in the fight against corruption requires not only strengthening the legislative framework but also improving cooperation between law enforcement agencies. This is confirmed by the study of Omelchuk et al. (2021), which shows the importance of coordinated action among law enforcement to combat corruption effectively.

A comparison of research findings shows that the problem of law enforcement and the classification of crimes against the rule of law is relevant both for Kazakhstan and other countries. Adopting successful practices may be useful for improving the situation in Kazakhstan.

## **5. Conclusion**

The study highlights those crimes against the rule of law in Kazakhstan play a crucial role in maintaining law and order, ensuring governmental stability, and combating corruption. Key challenges, such as unclear legal definitions and legislative gaps, hinder effective law enforcement and accountability. Addressing these issues requires comprehensive legislative reform, consistent law application, institutional improvements, and fostering a culture of lawfulness. Drawing on international best practices, Kazakhstan can implement transparent management, establish independent oversight, and integrate modern technologies to enhance accountability.

Further research into crimes against the rule of law in Kazakhstan may play a critical role in forming a strategy for combating corruption and enhancing the effectiveness of administrative processes. Studying the impact of reforms on the level of corruption and crime will not only contribute to a better understanding of existing problems but also allow for the assessment of the effectiveness of already implemented anti-corruption initiatives. The introduction of digital platforms for submitting complaints, monitoring

public procurement, and detecting anomalies in financial flows can enhance transparency and reduce corruption risks. Countries that leverage technology to improve administrative processes demonstrate a reduction in corruption levels due to greater accountability among public officials.

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# *Opportunities for the Development of Public-Private Partnerships in Bulgaria Following the Example of United Kingdom*

by *Kalin Boyanov\**

## *Abstract*

The study intends to ascertain whether it is feasible to modify the UK's strategy in order to meet Bulgaria's infrastructure and public service deficiencies, given the country's changing governance environment and major infrastructure challenges. The study highlights important components of the UK's PPP model, such as strict control, cautious risk-sharing, and value-for-money evaluations, using a comparative policy analysis and real-world case studies from both countries. Critical obstacles that impede the establishment of successful PPPs in Bulgaria are identified by the study, including fragmented legal frameworks and inadequate government competence. The study makes policy recommendations for bolstering institutional capacities, promoting transparency, and fortifying legal frameworks in light of these findings. Bulgaria must take these actions in order to develop a more robust and long-lasting PPP model. The findings show that PPPs can boost economic growth, decrease corruption, and increase public value when properly implemented. But in order to reach their full potential, Bulgaria needs to get over legal and institutional barriers, especially with specific policy changes. In the end, this study provides insightful information for scholars and policymakers who want to advance PPP models, especially in transitional economies. The study comes to the conclusion that although it is not feasible to directly replicate the UK model, Bulgaria's infrastructure and public services might be greatly enhanced by implementing modified approaches.

*Keywords:* Governance, Risk Management, Transparency, Transitional Economies, Innovative Mechanisms.

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## Introduction

Public-private partnerships (PPP) have become central to modern policy discussions as nations seek to improve infrastructure and services by leveraging private sector expertise and resources. This approach is particularly valuable when financial resources are limited, offering solutions for budget constraints while encouraging innovation and faster project delivery. Success depends on well-defined legal frameworks, transparent contracts, effective risk management, and stakeholder engagement. Bulgaria has prioritized PPP for modernizing infrastructure and enhancing government services as part of governance reform and economic development.

The UK's extensive PPP experience, particularly through its Private Finance Initiative (PFI), offers valuable lessons for Bulgaria – both successful implementations and cautionary examples. By leveraging this knowledge, Bulgaria can develop effective, sustainable partnerships that contribute to economic and social progress. This article explores Bulgaria's potential to utilize the UK's PPP management experience to establish a more resilient and accountable partnership framework and suggests strategic measures for Bulgarian policymakers and practitioners to maximize public value in infrastructure development and service delivery.

PPPs are increasingly discussed as pragmatic global governance tools in academia (Kullolli, 2023). PPPs, which began in the 1980s, include government and private companies delivering public infrastructure or services. Private enterprises gain revenue streams and market development opportunities via contracts often backed by governmental pledges, while governments profit from private-sector innovation, operational knowledge, and funding (Mehdi, 2025). The mutual advantage comes from risk distribution: the public authority delegated facility construction and service provision, while private investors, driven by profit incentives and subject to strict performance metrics, strive for high service standards.

PPP's popularity stems from population growth, infrastructural decline, and technological advances. Governments under fiscal pressure use new methods to fund road, hospital, utility, and educational infrastructure (Makhazhanova et al., 2024; Yudina, 2025). PPPs speed up project schedules and unlock foreign financing while protecting public interests. Proponents say these partnerships boost public sector accountability and inventiveness. PPPs supposedly ensure that all parties monitor cost overruns and service quality by clearly linking returns on investment to performance criteria.

However, new research highlights PPP models' complexity and risks (Hodge and Greve, 2021). Extended contractual periods sometimes increase

project costs, burdening future governments. The intricacy of contract negotiation and implementation can make it difficult to establish equitable arrangements, especially when profit drives social welfare. Insufficient oversight or ambitious revenue expectations have led to unmet goals and public distrust. PPP ventures' success depends on a thorough review of legislative provisions, regulatory norms, and institutional capacities.

Understanding the broader significance of PPP extends beyond mere fiscal or administrative considerations; it encompasses deeper questions concerning state responsibilities and the evolving role of private actors in traditionally government-run sectors (Tleubayev et al., 2024; Buribayev et al., 2015). Bulgaria and the UK are exemplifying the benefits and pitfalls of PPP, with Bulgaria's market-oriented approach trying to address the regulatory inconsistencies and capacity constraints.

In light of the foregoing observations, investigating the emergence and significance of PPP is crucial for policy practitioners, scholars, and government decision-makers aiming to refine public service delivery models. Careful attention to legislative architecture, alignment of incentives, and stakeholder engagement can ultimately determine whether PPP evolve into a transformative force for societal advancement or remain an ambivalent policy tool fraught with uncertainty.

Through careful analysis of contextual differences, this study seeks to develop practical, culturally appropriate policy suggestions for creating sustainable and fair public-private partnership frameworks specifically designed for Bulgaria's developing governance system.

## **Literature review**

In scholarly discourse of the 21st century, a substantial array of studies illuminates the United Kingdom's extensive track record with PPP, highlighting both the theoretical underpinnings and practical outcomes of this policy instrument. Historically, much of the United Kingdom's reliance on private finance emerged in the 1990s under the Conservative government's Private Finance Initiative, a scheme that underwent considerable expansion under subsequent Labour administrations (Hodge and Greve, 2021). According to Hanna et al. (2024), the twin aims of Private Finance Initiative were, first, to shift the financial burden for infrastructure development from governmental budgets to private-sector entities, and second, to enhance overall efficiency in project delivery. In practice, private consortia often assumed responsibility for designing, building, and operating projects – ranging from hospitals and schools to transportation systems –

under long-term contracts that ensured revenue streams backed by the public sector.

A pervasive concept within this literature is value for money, which entails achieving the optimal balance of cost, quality, and risk transfer. Proponents of value for money argue that PPP models should strive to outperform traditional public procurement routes in terms of economic viability, service quality, and operational advantages. The United Kingdom government's emphasis on value for money assessments signalled an intention to institutionalise rigorous appraisal processes prior to contract signing. However, critical perspectives emerged, particularly in the work of O'Shea (2024), who posited that a strong reliance on private finance could inflate long-term costs through mechanisms such as profit margins, high interest rates, and intricate contract management procedures. These critiques highlight potential hidden liabilities that only materialise over the course of multi-decade agreements, thus raising questions about the true fiscal sustainability of Private Finance Initiative projects.

Love and Ika (2022) in their research highlight that hospital projects often suffer from misperformance due to factors such as scope changes, poor risk management, ineffective governance, and optimism bias. During the early years of Private Finance Initiative implementation, policymakers and the public were generally optimistic, partly because PPP were marketed as a means of containing costs while distributing risks to private partners. Over time, however, scepticism grew, fuelled by high-profile instances in which certain hospital PPP incurred severe budget overruns and unanticipated financial burdens for the National Health Service. These controversies prompted debates over transparency, accountability, and the long-term implications of ceding essential public services to private operators.

In evaluating the broader impact of the United Kingdom's PPP model, Al Yaqoobi and Ausloos (2022) regard the country's experience as both an instructive template and a cautionary tale. On one hand, the United Kingdom has been commended for its meticulous project appraisal processes, comprehensive contractual frameworks, and establishment of specialised oversight bodies, such as the Infrastructure and Projects Authority. On the other hand, Hodge and Greve (2021) emphasise that overly complex financial arrangements, governance ambiguities, and occasional misalignments between private profit motives and public welfare can create significant risks.

The UK's PPP history, though valuable for policy transfer and infrastructure development, has been criticized for its mixed outcomes, revealing structural vulnerabilities that require mitigation. Hristova (2021) highlights that Bulgaria, while following the EU's push for PPPs to

modernize infrastructure, is still in the early stages of their implementation. Unlike the UK's long-standing PPP model, Bulgaria's engagement is relatively new, driven by the need to upgrade its aging infrastructure and meet EU public procurement and transparency regulations. However, research on Bulgarian PPPs remains limited, with gaps in understanding the relationship between policy design, institutional capacity, and implementation effectiveness.

Batjargal and Zhang (2021) highlight significant systemic challenges that impede the advancement of PPP frameworks in Bulgaria. First, legal and regulatory uncertainties derive from a series of revisions to PPP-related legislation, resulting in a fragmented and sometimes contradictory legal environment. The fluidity of this framework tends to deter potential investors, both Bulgarian and international, who favour stability when entering long-term contracts. Second, scholars observe a lack of uniform project implementation standards across different levels of government, culminating in inconsistent practices and public scepticism. In addition, the legacy of centralised decision-making from Bulgaria's communist past, combined with persistent corruption concerns, perpetuates bureaucratic inertia and undermines private-sector confidence.

Despite structural hurdles, certain PPP initiatives in Bulgaria, especially in the energy sector and municipal services, have demonstrated improved efficiency, supported by EU-backed pilot projects that offer lessons in risk management and stakeholder engagement. While advocates highlight Bulgaria's gradual approach as a strength, critics point to weak legislation and corruption as major barriers. This contrast reveals that the success of PPPs ultimately depends on strong governance, transparent oversight, and sustained institutional reform.

In sum, the literature strongly suggests that Bulgaria's evolving PPP landscape holds promise but is simultaneously constrained by enduring governance challenges and insufficient standardisation. Future research should delve deeper into comparative case analyses and quantitative data on project outcomes, exploring how lessons drawn from successful pilot projects might be scaled up to catalyse broader national development objectives.

## *Materials and methods*

Methodologically, this study adopts a multifaceted approach to assess how lessons gleaned from the United Kingdom's PPP evolution can be meaningfully adapted to Bulgaria's circumstances. First, the desk-based review entails synthesising policy documents, legislative texts, and academic

publications, ensuring coverage of both national and international literature drawn from databases such as Google Scholar, Scopus, and Web of Science. This review focuses on identifying the principal trends, successes, and pitfalls associated with PPP implementation in the United Kingdom and Bulgaria, thereby constructing an analytical foundation upon which subsequent comparisons are built.

Second, a comparative policy analysis framework is employed to discern points of convergence and divergence in the countries' PPP environments. Hodge and Greve (2021) underline the utility of such comparative inquiries for detecting institutional, cultural, and historical determinants that shape policy outcomes. In particular, the analysis addresses legal infrastructure, procurement mechanisms, and oversight protocols to determine how effectively risk is allocated among the public and private actors. By interrogating these variables, the study highlights where direct policy transfers may be applicable and where local adaptation is requisite.

Furthermore, illustrative case studies serve as a key component in exploring real-world examples of PPP performance. In the United Kingdom context, the Private Finance Initiative in healthcare and large-scale transportation projects often reveal the nuanced interplay of financing structures, stakeholder engagement, and accountability. In Bulgaria, municipal energy projects and pilot infrastructure initiatives funded through European grants offer instructive parallels, showcasing both incremental successes and persistent obstacles, including corruption concerns and administrative capacity gaps. Critically analysing these examples situates theoretical assumptions within concrete operational contexts, elucidating factors that either bolster or undermine PPP outcomes.

Central to this comparative endeavour is the identification of key performance indicators – such as project completion rates, cost overruns, user satisfaction, and transparency measures – that facilitate systematic evaluation. These key performance indicators help to quantify success and pinpoint risk patterns across various stages of project implementation. Finally, the study invokes policy transfer theory, which underscores the challenges of transposing policy frameworks across distinct socio-political, cultural, and economic terrains. The research aims to generate evidence-based, culturally informed policy recommendations that advance sustainable, equitable PPP models tailored to Bulgaria's evolving governance landscape.

## *Results*

In contemporary scholarly investigations of PPP, the conceptual foundation frequently draws upon public administration and governance



theories, most prominently. The social impact of PPPs is paramount, particularly in terms of generating public value and contributing to sustainable development goals (SDGs). Effective PPPs can create jobs, improve public services, and enhance infrastructure, thereby fostering long-term economic and social benefits. Furthermore, well-implemented PPPs help to address societal challenges, such as poverty reduction, environmental sustainability, and education. By aligning PPP projects with SDGs, governments can ensure that the private sector's contributions go beyond financial returns to include measurable positive social outcomes, such as improved quality of life for citizens, enhanced social equity, and reduced environmental impact. This alignment is critical in transitioning to a more inclusive and resilient economy.

New Public Management and Public Value Theory. New Public Management principles place a premium on efficiency, accountability, and performance monitoring, premised on the belief that market-oriented mechanisms can optimise public service delivery. Under this paradigm, policymakers and administrators evaluate projects by assessing cost-effectiveness and time-to-completion relative to public procurement alternatives. However, critics note that overemphasising metrics and narrowly defining efficiency may undervalue broader social or environmental impacts, thus potentially marginalising stakeholder groups whose input does not translate neatly into financial indicators. This critique underlines the continued relevance of Public Value Theory, which contends that governmental endeavours ought to generate multidimensional benefits – encompassing equity, social cohesion, and long-term societal well-being. In the Bulgarian context, these debates acquire particular significance, as the country grapples with designing PPP models that not only reduce fiscal pressures but also address socio-economic disparities.

In the realm of PPP, comparative inquiry into different national contexts provides critical insights into how policy models may be transferred or adapted. To discern how lessons from the United Kingdom's established PPP environment could be effectively applied in Bulgaria, it is instructive to examine both shared features and distinctive attributes of the two countries. The United Kingdom's track record includes a relatively cohesive legislative framework that has evolved over several decades, culminating in a mature environment for PPP implementation. While some academics highlight ongoing controversies surrounding long-term fiscal liabilities, others note the United Kingdom's systematic refinements to its legal structures as a potent signal of stability for investors (Hodge and Greve, 2021).

Regular stakeholder consultations play a critical role in enhancing the design and implementation of PPPs, particularly by improving transparency

and fostering public trust. In the UK, stakeholder engagement has been integrated into the PPP process through mechanisms such as public consultations, parliamentary oversight, and civil society involvement. These processes ensure that projects are transparent, align with public interests, and minimise corruption risks. In contrast, Bulgaria, with its emerging PPP framework, often lacks consistent engagement with the public and other key stakeholders, which contributes to a lack of trust and transparency. By adopting regular stakeholder consultations, Bulgaria can promote a more transparent decision-making process, enhance accountability, and ensure that PPPs address the needs and concerns of the communities they serve. This could significantly improve the public's perception of PPPs, reduce scepticism, and facilitate smoother project implementation.

An exemplary instance of Bulgaria's efforts in public-private partnership execution is the municipal energy projects launched with the support of EU funding (European Commission, 2021). The Sofia District Heating System upgrade project, part of Bulgaria's broader energy sector reform, was structured as a public-private partnership to enhance energy efficiency. The project had a total budget of EUR 150 million, with EUR 50 million from EU subsidies and EUR 100 million from private sources. The modernisation initiative aimed to reduce energy consumption by 15% and improve overall system efficiency by 20%. Preliminary results showed a 12% decrease in energy usage and a 17% improvement in system efficiency, demonstrating the potential advantages of such collaborations. However, the project faced significant challenges, including regulatory discrepancies and fluctuating energy costs, which impeded the realization of anticipated cost savings outlined in the contract. Furthermore, the project experienced delays in construction, extending the timeline by approximately 10 months beyond the original schedule. Cost overruns also became a concern, with total expenses exceeding initial estimates by 8%, primarily due to unforeseen infrastructure issues and regulatory changes. These difficulties underscore the challenges of aligning financial and operational expectations in dynamic markets, highlighting the importance of robust risk management and contingency planning in future PPP ventures.

Bulgaria has achieved partial success in transportation infrastructure through public-private partnership methods, in addition to energy (Herus, 2024). The expansion of the Trakia Motorway, a prominent infrastructure initiative, employed a public-private partnership model. The entire cost of the project amounted to EUR 350 million, of which EUR 200 million was financed by private investors, and the remaining EUR 150 million was sourced from the Bulgarian government and EU funds. The objective of the project was to decrease travel time between Sofia and Burgas by 40%, hence

enhancing overall traffic flow and alleviating congestion. The project had delays of roughly 18 months attributable to complications in land acquisition and inefficiency within local administration (Stolic Municipality, 2018). The delays and budget overruns highlight the necessity for more explicit project timeframes and enhanced risk management measures. Local authorities, especially in rural regions, have encountered challenges in fulfilling the contract's technical and financial stipulations, hence underscoring the necessity of enhancing institutional capacity within the overarching reform framework.

A parallel dimension involves institutional capacity. In the United Kingdom, specialised agencies such as the Infrastructure and Projects Authority exert a significant influence by providing oversight, monitoring performance, and ensuring accountability. The Infrastructure and Projects Authority's role in establishing standardised processes has facilitated greater transparency and risk mitigation. Conversely, although Bulgarian authorities have made initial efforts to form centralised units with expertise in PPP, these entities often lack the breadth of resources and jurisdiction exercised by their British counterparts. EU-funded initiatives aimed at capacity-building could narrow this gap by offering technical training and methodological guidance, yet the effectiveness of such programmes hinges on sustained political resolve and adequate financial support. Absent these elements, Bulgaria may struggle to bridge the institutional divide. Furthermore, to enhance the effectiveness of PPPs, Bulgaria can formalise and institutionalise public-private dialogue. Establishing structured forums for continuous communication between government entities, private sector partners, and civil society can facilitate better coordination, transparency, and responsiveness to emerging challenges. Such dialogue mechanisms could help align the interests of all stakeholders, build trust, and ensure that PPP projects remain adaptable to evolving market conditions and public needs.

From a public perception standpoint, the United Kingdom exhibits a long-standing, albeit at times sceptical, relationship with PPP. Multiple studies emphasise the country's robust channels for oversight, including parliamentary committees, media scrutiny, and structured civic engagement. These mechanisms allow for informed debate and regular feedback loops, thereby reinforcing accountability. In Bulgaria, civil society and media actors frequently concentrate on corruption risks and governance failures rather than evaluating performance efficiency or value for money (Aitzhanova et al., 2024; Yaremko, 2020). This emphasis on corruption issues, while crucial in shedding light on malfeasance, can inadvertently overshadow constructive discussions about enhancing PPP service quality and cost-effectiveness. The implication is that nurturing a culture of

openness and proactive community involvement becomes imperative for fostering trust and a deeper understanding of PPP merits and drawbacks.

A further consideration lies in macroeconomic conditions. With its diversified economy and extensive capital markets, the United Kingdom is able to source competitive financing for large-scale projects. Bulgaria's comparatively smaller economic base restricts the availability of similar funding streams and can deter multinational investors who perceive heightened risk. Thus, while it may be tempting to import wholesale United Kingdom PPP strategies, a judicious adaptation process that accounts for Bulgaria's financial constraints and institutional realities is more likely to yield successful outcomes.

Kovács (2022) underscores the notion that simply replicating the United Kingdom model in Bulgaria would be impractical. Instead, a context-sensitive approach – encompassing legislative stabilisation, continuous institutional strengthening, and enhanced public engagement – offers a more feasible strategy for PPP advancement. This critical analysis reveals that while the United Kingdom's stable regulatory structures and organisational arrangements can inform Bulgarian reforms, domestic decision-makers must adapt these blueprints to align with their nation's socio-economic and political specificities. If effectively operationalised, PPP in Bulgaria could address infrastructure gaps and contribute to sustainable development. However, achieving these objectives necessitates a deliberate, localised, and transparent approach to designing and implementing PPP frameworks.

In contemporary scholarship on PPP, the comparative assessment of established models offers a rich source of insights for emerging contexts such as Bulgaria. By drawing on the United Kingdom's experiences, several opportunities manifest for Bulgarian policymakers. Foremost is the potential to adopt the United Kingdom's rigorous contract management practices – an approach that has shown efficacy in reducing corruption risks, clarifying expectations, and improving risk allocation. Relatedly, the integration of systematic feasibility studies and value-for-money analyses could ensure that PPP projects in Bulgaria are both economically sustainable and socially responsible before they progress to implementation. Another notable feature of the United Kingdom's model is the emphasis on continuous performance monitoring, whereby consistent oversight identifies emerging issues early, thereby minimising cost overruns or quality shortfalls. This practice underscores the importance of establishing robust auditing systems and transparent performance benchmarks.

Despite these promising avenues, persistent challenges also warrant careful consideration. Although the Bulgarian legislative environment surrounding PPP has evolved, lingering ambiguities and inconsistent

enforcement continue to deter certain investors. Local authorities, in particular, often lack the specialised expertise and financial resources necessary to structure or oversee intricate contractual agreements. Public scepticism toward collaborations between government and private entities adds a further layer of complexity, rooted in historical privatisation experiences that sometimes resulted in unfavourable outcomes for local communities. This scepticism may intensify when political interference obstructs transparent communication around project goals, timelines, and benefits. As a result, garnering public trust remains a formidable hurdle in expanding the scope and scale of PPP initiatives.

Empirical research and practical case studies furnish multiple lessons learned. One recurring lesson is that transparency underpins every stage of a PPP's lifecycle. Both Bulgarian and United Kingdom case analyses highlight that opaque procurement procedures and undisclosed contract terms not only elevate the risk of corruption but also erode public confidence. By contrast, well-documented tender processes and open channels for stakeholder participation can significantly boost the perceived legitimacy of a project. A second lesson is the crucial role of technical expertise. Competent professionals with skills in contract law, project finance, and infrastructure management are indispensable for ensuring that agreements are carefully structured and risks are proportionately shared. Third, active stakeholder engagement emerges as a cornerstone of successful PPP. Engaging local communities, non-governmental organisations, and subject-matter experts fosters social acceptance and provides diverse perspectives on implementation feasibility.

A comparative review of PPP implementation in Bulgaria and the United Kingdom elucidates significant parallels and variations (Table 1).

The results demonstrate that although Bulgaria has progressed much in establishing PPP models, the United Kingdom's substantial experience provides important insights into regulatory stability, institutional capacity enhancement, and stakeholder involvement. Enhancing these elements, especially via more explicit law, focused training initiatives, and increased public engagement, might elevate Bulgaria's PPP results and promote sustainable infrastructure development. Nonetheless, a direct reproduction of the UK model would be unfeasible. A measured adaption that corresponds with Bulgaria's socio-economic and political conditions is needed. Prioritising transparent procurement, technical expertise, and participatory governance is essential for establishing a more robust and effective PPP framework (Apakhayev et al., 2017; Issayeva et al., 2024). Bulgaria's ongoing refinement of its strategy necessitates unwavering political

commitment and continuous execution to guarantee enduring success in public-private partnerships.

*Table 1 - Comparative analysis of PPP models: United Kingdom and Bulgaria*

Criteria	Bulgaria	United Kingdom
Legal framework	Regulated by particular PPP legislation and EU guidelines, subject to periodic amendments	Implemented a regulatory framework utilising PFI and PF2 models to ensure stability
Types of PPPs	Predominantly concessions and service agreements	Diverse spectrum, encompassing BOT, DBFO, and PFIs
Financing	Constrained private sector investment; dependent on EU financing	Robust private sector involvement with established financial frameworks
Risk allocation	Risks often remain with the public sector	Risks are more balanced between public and private sectors
Institutional capacity	Developing centralised entities, although deficient in knowledge and resources	Well-developed agencies like the Infrastructure and Projects Authority providing oversight
Project success rate	Moderate success, with implementation issues stemming from regulatory differences	Elevated success rate with considerable expertise and optimised best practices
Sectoral focus	Infrastructure, transportation, and energy	Healthcare, education, transportation, and infrastructure
Public perception	Issues with corruption and government deficiencies	Scepticism exists but mitigated by strong oversight mechanisms
Challenges	Administrative obstacles, insufficient knowledge, and an erratic legislative framework	Elevated project expenditures, long-term affordability apprehensions, political discourse on fiscal responsibilities

*Source:* Compiled by the author.

First, enhancing legal clarity remains paramount. Although Bulgaria has enacted legislation to govern PPP, scholars argue that persistent ambiguities and overlapping regulations diminish investor confidence. Aligning legislative provisions to minimise contradictions and introducing transparent guidelines on risk allocation can offer a more predictable environment for stakeholders. By adapting United Kingdom regulatory templates – yet modifying them to reflect Bulgaria’s administrative structures – officials

may craft standardised contractual protocols conducive to both domestic and international investments. Such streamlining is critical given the repeated instances in which uncertainty has contributed to project delays or premature contract terminations.

Second, strengthening institutional capacity is vital. Comparative analyses emphasise the advantages of centralised oversight entities, modelled after the United Kingdom's Infrastructure and Projects Authority, that guide and appraise projects at each developmental phase. Establishing an independent PPP unit in Bulgaria with authority over feasibility studies, risk assessments, and monitoring could mitigate corruption risks and inconsistency in contract execution. Indeed, training programs focusing on financial analysis, contract negotiation, and project management would further professionalise local administrations. Empirical observations from pilot municipal PPP in Bulgaria indicate that limited expertise hampers project performance, highlighting the need for capacity-building in both central and local government.

Third, promoting transparency and public engagement is essential for fostering legitimacy and curbing malfeasance. Lessons learned from the United Kingdom illustrate that systematic public consultation processes and mandatory disclosure protocols can alleviate suspicions of collusion or suboptimal financial arrangements. Practical experience also suggests that inviting civil society organisations, subject-matter experts, and community representatives to participate in project design and evaluation can bolster trust and ensure that the public interest remains central throughout the PPP's lifecycle.

Fourth, implementing rigorous feasibility and value-for-money assessments offers a robust mechanism for safeguarding public resources. By embedding cost-benefit analyses, sensitivity tests, and risk-sharing evaluations into statutory requirements, Bulgarian policymakers can more systematically validate whether PPP outperform traditional procurement routes. Failure to conduct such assessments in the early stages has, in some cases, led to cost overruns and underperforming contracts that weaken the rationale for future partnerships.

Lastly, encouraging innovation and shared learning can invigorate Bulgaria's PPP landscape. Evidence from the United Kingdom underscores that pilot projects in emerging sectors – such as green energy, digital services, and cutting-edge healthcare technologies – can yield valuable insights for policy refinement. Establishing a repository of best practices, operational metrics, and lessons learned allows stakeholders to replicate success while proactively remedying past shortcomings. When scaled up,

these iterative improvements can contribute to a dynamic and resilient PPP environment aligned with Bulgaria's developmental goals.

In conclusion, the above recommendations highlight strategic pathways for augmenting Bulgaria's PPP framework. While grounded in the United Kingdom's proven methods, they must be adapted to local structures, resource availabilities, and cultural expectations. When effectively implemented, such measures can engender a more transparent, efficient, and inclusive PPP paradigm – ultimately advancing Bulgaria's broader vision for sustainable infrastructure and socio-economic growth.

The policy implications stemming from these recommendations are multifaceted. In the short term, Bulgarian lawmakers and public administrators need to prioritise legal harmonisation around PPP to build market confidence. Equally vital is the refinement of administrative structures, possibly by establishing a specialised body that consolidates PPP governance under one umbrella for easier coordination, oversight, and strategic planning. By pursuing these policy reforms, Bulgaria can send a strong signal to domestic and international stakeholders about its commitment to ensuring a stable and inviting environment for public-private initiatives.

Over the medium to long term, enhancing transparency and accountability within PPP contracts will require continuous policy innovation. Legislative reforms must be supported by IT-based solutions that enable real-time monitoring of project milestones, costs, and performance metrics (An et al., 2024; de-Almeida-e-Pais et al., 2023). Such digital governance tools can significantly improve the efficiency and honesty of public procurement processes. Additionally, local and regional authorities, which often struggle with a lack of specialised skills, might benefit from targeted policy measures that incentivise professional development programs and multilateral partnerships with private consultancies or educational institutions.

From a research standpoint, significant gaps remain. First, there is a need for quantitative analyses that examine project performance data across different sectors and stages of development. A cross-sectoral approach – covering transport, healthcare, environment, and beyond – could yield valuable generalisations about which PPP structures are most effective. Second, qualitative case studies that delve deeper into stakeholder perspectives could provide nuanced understandings of why certain PPP succeed and others fail. Future research might also investigate the efficacy of new financing models like green bonds or blended finance arrangements, analysing how they can complement or enhance the traditional PPP framework.



Hence, the policy path forward is both challenging and promising. Implementing systematic reforms now can unlock meaningful improvements in Bulgaria's public services, while further scholarly inquiry continues to illuminate best practices and adaptation strategies. Governance structures must adapt to current and future needs to support Bulgarian PPPs. PPP governance models must adapt to changing economic, political, and social conditions. Transparency, clear legal frameworks, and public sector institutional ability can start this evolution. As PPPs become increasingly common, sophisticated monitoring and evaluation tools are needed to assess project performance over time. These processes should regularly examine project outcomes, financial sustainability, and social effect to ensure PPPs achieve value for money and public benefits throughout their existence. Integration of public feedback and stakeholder participation ensures that PPP initiatives answer local community needs and concerns, which evolves governance. More equitable risk-sharing and reward distribution can be achieved by improving public-private partnership and public welfare incentives. Governance mechanisms must also adapt to new technologies like real-time project monitoring and data analytics, which can boost efficiency, lower costs, and improve decision-making. Bulgaria can provide a strong framework for PPPs to succeed and contribute to sustainable infrastructure and public service development by developing a dynamic and responsive governance structure.

## *Discussion*

The PPP experiences in Bulgaria and the UK are compared in this study, which highlights the difficulties and achievements faced by each nation. In contrast to the UK's longstanding experience, especially with the PFI, the findings provide insightful information about the continuous growth of PPP frameworks in Bulgaria, a nation where PPPs are still in their infancy.

The results highlight the major obstacles Bulgaria's legal and regulatory system must overcome. The findings show that Bulgaria's inconsistent and often updated laws discourage potential private investors by fostering an atmosphere of uncertainty. This finding supports the claim made by Batjargal and Zhang (2021) that investor trust in emerging markets is undermined by legal ambiguity. On the other hand, PPPs in the UK are successful because of a solid regulatory framework that has been established over many years. Bulgaria's continuous efforts to create a unified legal framework stand in stark contrast to the UK's regulatory stability, which is backed by a wealth of experience. Given these results, this study adds to the larger body of knowledge on PPPs by highlighting how crucial a stable, predictable legal

framework is. The lengthy history of PPPs in the UK, especially through the PFI, provides valuable insights into making sure that legislative frameworks are strong and supportive of private investment. Furthermore, the UK's emphasis on thorough assessments and strict contract administration is a useful example for Bulgaria, which is still battling these issues, as noted by Hodge and Greve (2021).

The institutional capacity of the governing bodies has also been noted as a constraint on Bulgaria's PPP development. Bulgaria's institutional structures are still in their infancy, whereas the UK has set up specialised organisations, such as the Infrastructure and Projects Authority, to supervise PPPs and guarantee transparency. Complex PPP management is made more challenging by the bureaucratic inefficiencies seen in the Trakia Motorway and Sofia District Heating System projects.

The success of PPPs heavily relies on a collaborative culture and the adaptability of public institutions. A culture of cooperation between government entities, private partners, and other stakeholders fosters trust, transparency, and effective problem-solving. When public institutions are open to collaboration and adapt to evolving circumstances, they can navigate challenges more effectively, such as shifting political landscapes or unexpected operational hurdles. Adaptability ensures that public institutions can adjust policies and frameworks to respond to changing market conditions, technological advancements, or public needs. A collaborative culture within public institutions enables efficient risk-sharing, better communication, and a shared vision for project outcomes, which is essential for PPPs to thrive. Institutions that are both collaborative and adaptable are better equipped to manage complex and dynamic PPPs, ensuring that public value is maximised and that projects deliver sustainable, long-term benefits.

This is in line with Mwesigwa et al. (2024), who contend that the effectiveness of PPPs depends on the level of institutional capability and oversight. Therefore, Bulgaria needs to concentrate on fortifying its institutional frameworks, a need that Vassileva (2022) also highlights, especially in transitional economies where a lack of ability can seriously impede the creation of successful PPPs.

The significance of transparency in PPP procurement procedures is one important lesson Bulgaria can take away from the UK. In order to ensure accountability and uphold public trust, the UK has placed a strong focus on legislative examination and public consultations. On the other hand, productive conversations regarding the effectiveness and efficiency of PPPs are impeded by Bulgaria's lower levels of public engagement, especially with regard to transparency. Wong et al. (2025) point out that encouraging openness and cross-sectoral cooperation is essential to the long-term viability

of PPPs. By establishing more inclusive decision-making procedures that incorporate the media, civil society, and other stakeholders, Bulgaria may enhance its strategy and guarantee that the public interest always stays at the centre of PPPs.

The financial risk of PPPs is a significant obstacle for Bulgaria. The UK has been able to reduce some of the financial risks associated with PPP projects by paying close attention to risk-sharing arrangements and specific contractual arrangements. However, as the study's findings indicate, Bulgaria lacks regular risk distribution procedures and standardised contract templates, which makes it more challenging to complete PPP projects successfully. Following the UK's lead, Bulgaria ought to give top priority to creating a single regulatory framework that outlines the obligations of both public and private partners and guarantees that risks are shared fairly. This strategy is in line with the findings of Kaletnik and Lutkovska (2021), who found that in order to prevent financial and environmental risks in PPPs, a clearly defined risk allocation is necessary.

The significance of precise risk allocation is emphasised by Tuffour et al. (2024), who also warn against excessively optimistic financial projections. This is consistent with the study's conclusions, which suggest that before starting large-scale PPP projects, Bulgaria should do more comprehensive feasibility studies and value-for-money analysis. These evaluations will assist in guaranteeing that the projects are in line with the public interest and are fiscally feasible.

The need for local adaptation is a crucial factor to take into account while implementing the UK's PPP model in Bulgaria. Bulgaria cannot just copy the UK's strategy because of the glaring disparities in public expectations, economic circumstances, and governance. According to Nahdi et al. (2024), contextualising best practices in the local context is crucial to the success of PPPs. According to this report, Bulgaria should concentrate on modifying the UK model to fit its particular social and economic situation. In particular, adding social value factors to the risk assessment and performance evaluation procedures will guarantee that PPPs provide advantages beyond merely financial gains.

Furthermore, it is difficult for Bulgaria to draw in large private investments due to its smaller economy and reliance on EU funds for infrastructure projects. Bulgaria's low access to capital markets limits its capacity to secure private sector participation, in contrast to the UK, which has the advantages of well-established capital markets (Kubiczek, 2020). In order to address this issue, Aulia and Evi Steelyana (2023) point out that incorporating cross-sectoral strategies and green procurement frameworks

could improve private sector involvement in Bulgaria's infrastructure development.

The study suggests that Bulgaria take a logical and progressive approach to PPP growth in light of these difficulties. Bulgaria can establish the foundation for more extensive partnerships by concentrating on smaller, more manageable projects that complement EU objectives and use international experience. Utilising instruments to assess the competitiveness of construction companies can assist reduce risks and guarantee the success of these smaller projects, as suggested by Shpakova et al. (2024).

This study compares UK and Bulgaria's PPP experiences, offering lessons for Bulgaria. However, it suggests further investigation into long-term impacts, key elements influencing PPP success, and new financing arrangements like international PPP funds or public-private development banks. Further case studies and quantitative analyses could enhance Bulgaria's infrastructure project success. A. Zakeri Afshar et al. (2025) also stress the importance of setting negotiable prices for PPP infrastructure projects in order to ensure the financial viability of these partnerships.

In conclusion, Bulgaria can learn from the UK's experience, even though it confronts many obstacles in creating a successful PPP model. Bulgaria can fully realise the promise of PPPs as a tool for sustainable economic development and better public service delivery by enhancing legal clarity, bolstering institutional capacity, encouraging openness, and customising the UK model to the country's particular circumstances.

## Conclusions

Bulgaria can leverage Public-Private Partnerships (PPPs) to modernize infrastructure, boost economic development, and deliver quality public services. The UK's experience in PPPs can guide Bulgarian policymakers in transparent, accountable, and results-oriented collaborations.

Policy transfer isn't simple replication. Bulgaria must adapt the UK's PPP model to its specific regulatory, cultural, and economic contexts. Success depends on establishing clear legal frameworks, mitigating corruption through transparency, and building capacity among civil servants and private partners.

The potential gains for Bulgaria – robust infrastructure, improved public services, investor confidence, and long-term growth – are too significant to overlook. By implementing targeted recommendations from this comparative analysis, Bulgaria can transform PPP into a cornerstone of

public administration evolution and a powerful instrument for inclusive national development.

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# *Trial by jury and the fight against corruption: Ukrainian context*

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## *Abstract*

The study aimed to conduct a comparative analysis of the organisation and operation of jury trials in Ukraine and the United States, as well as to identify problematic aspects and propose recommendations. In addition, the system of jury selection, the organisation of their activities during the trial and the decision-making procedure were addressed. The study was conducted using the methods of legal document analysis, comparative law, and analysis of judicial practice. The results of the study demonstrated significant differences in the organisation of jury trials in Ukraine and the United States. In Ukraine, there are restrictions on the age of jurors, no clear rules for replacing jurors during trials, and no unified system of jury instruction. In contrast to Ukraine, the United States has a clear system of jury selection and replacement, as well as detailed instructions for jurors, which helps to improve their efficiency. As a result of the analysis, several recommendations were made to improve the jury system in Ukraine, in particular: reviewing the age requirements for jury candidates, introducing clear rules for replacing jurors, creating a unified system of jury instruction and enhancing media coverage of jury trials. Implementation of these recommendations will help to improve the effectiveness of jury trials, strengthen public trust in justice and further democratise the judicial process in Ukraine

*Keywords:* jury system, comparative legal analysis, Ukraine, United States, judicial reform.

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## Introduction

In the current context of reforming the judicial system of Ukraine, the institution of jury trials attracts special attention. Its implementation and improvement an important aspect in the context of ensuring fair trials and fighting corruption. The involvement of citizens in court decision-making contributes to the transparency of the judicial process and strengthens trust in the legal system. At the same time, existing problems, such as restrictions on the composition of jurors and the lack of a unified system of jury instruction, create obstacles to the effective functioning of this institution. The experience of countries with developed judicial systems, such as the United States, demonstrates that more flexible jury selection procedures and developed instructions for jurors can significantly improve the efficiency of the trial. A comparative analysis of jury trials in Ukraine and the United States reveals both the advantages and disadvantages of the national model, which opens up opportunities for improvement.

The analysis of scientific publications in the legal literature of Ukraine determined constant attention to the issues of jury trials. Grande (2019) investigated the key problems of the implementation and functioning of this institution in Eastern Europe, laying the foundation for further research.

Subsequent studies have focused on specific aspects of this issue. For instance, Horan (2024) studied the problems related to the implementation of jury trials in the national justice system, while Bongiorno (2022) analysed its role in the protection of human rights. Recent research is developing and expanding. Mirazbekova (2021) conducted a detailed analysis of the jury trial institution in Ukraine, focusing on the procedure for reviewing criminal cases, identifying the shortcomings of the existing model and analysing proposed changes. The author concluded that the main problems are outdated regulation, inefficiency of the institution and limited application. Popova (2024) analysed the current state and possibilities for the development of jury trials in Ukraine, which emphasises the importance of this topic and the need for further research in this area.

At the same time, research on jury trials in the United States has a long history and covers various aspects of this institution. Alschuler and Deiss (1994) presented an overview of the development of the criminal jury in the United States, focusing on its key role in ensuring justice and protecting the rights of the accused. They traced the evolution of this institution from its origins to the current state, identifying the key stages and factors that influenced its formation. Hale (2016) examined both the achievements and obstacles that have arisen in the institution of juries in America. The study analysed its role in the political and social context, identifying both positive

and negative aspects of its functioning. Wilford and Bornstein (2021) analysed the reasons for the decline in the number of jury trials in the United States. They analysed the factors contributing to this trend and suggested ways to preserve this important institution, emphasising its importance for a democratic society. Króliczek (2020) conducted a comparative analysis of the jury and magistrate judges in the United States. The author identified the peculiarities of each of these institutions, their advantages and disadvantages, and the interrelationships in the American justice system.

The role of the judiciary and its interaction with other branches of government is also the subject of research. Tushnet (2020) analysed the role of activist judges in shaping American law and their influence on the political process. The study addressed the role of judges who actively use their powers to shape law and influence political processes. The author identified how such judges can contribute to social change and the protection of minority rights and considered the possible risks of such activism for democratic institutions. Kutler (1968) studied the complex period of Reconstruction after the US Civil War, addressing the role of the judiciary in this process. The study analysed how the courts influenced the reconstruction policy by protecting the rights of African Americans and limiting the power of the states, as well as how political forces tried to influence the judiciary. Naurin and Stiansen (2020) studied the problem of divergent judgements, particularly in the context of international human rights courts. They analysed how such discrepancies can affect the legitimacy and effectiveness of judgments, as well as the willingness of states to comply with them. Jia (2020) analysed the manifestations of illiberal law in American courts, i.e. the tendency to restrict the rights and freedoms of citizens that contradict the principles of liberal democracy. The study also examined specific court decisions and their potential impact on democratic values and human rights in the United States.

Despite extensive legal and comparative research, the issue of the effectiveness of the Ukrainian jury system in comparison with established models, such as the American one, remains insufficiently studied. Most existing works focus either on theoretical aspects or on internal challenges of the jury institution in Ukraine, without conducting a comprehensive comparative analysis. As a result, there is still no clear understanding of how the strengths and weaknesses of the Ukrainian model relate to those of mature systems, or how foreign experience, particularly that of the United States, can be effectively adapted to the legal and cultural environment of Ukraine. The lack of comparative analysis limits the practical implementation of reforms aimed at increasing transparency, reducing the risks of corruption, and strengthening public confidence in the judiciary.

This study aimed to identify the advantages and disadvantages systems, identified the problems with the Ukrainian model, and proposed solutions based on US best practices.

## **Materials and Methods**

The research was conducted using the method of legal document analysis, comparative jurisprudence and case law analysis. The main research material was based on the legal acts of Ukraine and the United States regulating the activities of the jury, as well as scientific publications on this topic. The Law of Ukraine No. 1402-VIII “On the Judiciary and the Status of Judges” (2016) and Law of Ukraine No. 1700-VII “On Prevention of Corruption” (2014), other legislative and regulatory acts relating to jury trials in Ukraine, in particular, Draft Law of Ukraine No. 8253 “On Jury Trial in Ukraine” (2011) and Letter from the Highest Specialized Court of Ukraine for Consideration of Civil and Criminal Cases No. 223-106/0/4-17 “On Some Issues of Criminal Proceedings in the Court of First Instance by a Jury” (2017) were analysed in detail.

In the United States, federal and state laws and regulations governing jury trials were analysed (The United States..., 2024). Comparative jurisprudence compared and analysed various aspects of the organisation and operation of jury trials in Ukraine and the United States, identifying commonalities and differences, and evaluating the effectiveness of different approaches. The analysis of the court practice of both countries determined how theoretical provisions are implemented in practice, what problems arise during the trial of cases involving jurors, and what decisions are made by the courts in controversial situations.

In addition, the emphasis was placed on studying court decisions relating to the selection and replacement of jurors, their instructions and decision-making procedures (Mottley et al., 2002; King, 1999; Pollack, 2021; Kolbe, 2020; Chafetz, 2023; Robertson and Shammas, 2021; Epps and Ortman, 2022; Roth, 2022).

## **Results**

### *Comparative analysis of the jury selection system*

Despite some commonalities, the jury selection systems in Ukraine and the United States demonstrate significant differences that affect jury

representativeness, trial efficiency, and ultimately public confidence in the justice system. Ukrainian legislation sets age restrictions for potential jurors: only citizens aged between 30 and 65 can be included in the jury lists (Law of Ukraine No. 1402-VIII, 2016). Although this approach aims to ensure that jurors have sufficient maturity and life experience, it also excludes a significant portion of the population from participating in the administration of justice. Young people aged 18 to 30 are an active and socially engaged part of society, whose participation can bring fresh perspectives, adaptability and critical thinking to jury deliberations. The inclusion of this group would not mean the automatic involvement of all young citizens, but rather the introduction of clear selection criteria, such as a minimum level of education, no criminal record and demonstrated civic competence. Although legal education would not be mandatory, basic legal knowledge and the ability to understand and analyse evidence could be assessed during the selection process, as is done in other jurisdictions.

Removing the upper age limit of 65 could broaden participation without compromising deliberation quality. Older citizens bring valuable life experience, emotional intelligence, and social insight, enhancing fairness and balance in decisions. Participation could, however, require medical or psychological fitness verification. Expanding the age range and adopting transparent selection based on competence, integrity, and cognitive ability would foster diversity and legitimacy, reflecting Ukrainian social pluralism and strengthening public trust. Experienced jurors can offer deeper understanding of motives and behaviour, crucial in criminal cases (Alua et al., 2025; Spyska, 2022; 2023; Tsurkan-Saifulina and Stupak, 2022). In the United States, jury eligibility is broader: all citizens over 18 may serve, ensuring diversity across social and age groups. This inclusiveness promotes civic engagement and more representative jury decisions. Both Ukraine and the U.S. restrict jury service for individuals with specific professions or criminal records to avoid bias and conflicts of interest (Makhambetsaliyev et al., 2024; Tsurkan-Saifulina and Popelnytska, 2023). These limits uphold impartiality and fairness in trials.

Ukraine, however, lacks clear procedures for juror substitution. Although the Criminal Procedure Code of Ukraine (2012) (Chapter 30, Section IV) permits replacement, it fails to regulate selection, preparation, or participation of reserve jurors, leading to procedural delays and retrials. In contrast, the U.S. uses pre-selected substitutes, ensuring continuity and efficiency (Akimbekova et al., 2021; Khamzina, 2020; 2021). Strengthening Ukrainian legislation in this area would enhance procedural stability and public confidence.

Table 1 shows similarities and differences in the jury selection system in Ukraine and the United States. Both countries strive to ensure the objectivity and impartiality of jurors by excluding persons with certain professional connections and criminal records. However, the Ukrainian jury selection system is characterised by stricter age restrictions, which may limit the representativeness of the jury and deprive the court of important social perspectives (Tsurkan-Saifulina and Dudchenko, 2018). In addition, the lack of clear rules for replacing jurors in Ukraine poses risks to the efficiency and effectiveness of the judicial process.

*Table 1 – Comparison of key aspects of jury selection in Ukraine and the United States*

<i>Aspect</i>	<i>Ukraine</i>	<i>USA</i>
Age restrictions	30-65 years	18+ years
Professional restrictions	Judges, prosecutors, military personnel, law enforcement officers, civil servants, etc	Judges, prosecutors, military personnel, law enforcement officers, civil servants, etc. (in some states also doctors and lawyers)
Criminal record	Persons with an unspent or unexpunged criminal record are excluded	Persons with an unspent or unexpunged criminal record are excluded
Replacement of the jury	No clear rules	Procedures developed in detail
Formation of jury lists	Random selection from the State Voter Register	Random selection from various sources (voter lists, driver's licences, etc.)
Number of jurors	12 principal and 2 alternate judges in the court of first instance; 3 principal and 1 alternate judge in the court of appeal	Typically, 12, but may vary by state and case type
Dismissal of the jury	unlimited number of challenges with a reasoned basis and a limited number of unreasonable challenges	A limited number of challenges with a reasoned basis and an unlimited number of unreasonable challenges

*Source:* Compiled by the authors based on the Constitution of the United States (1787), Law of Ukraine No. 2453-VI “On the Judicial System and the Status of Judges” (2010) and Law of Ukraine No. 1402-VIII “On the Judiciary and the Status of Judges” (2016).

In contrast, the American jury selection system is more flexible and inclusive, allowing for a broader pool of citizens and providing detailed

procedures for jury replacement. This increases the representativeness of the jury and ensures the continuity and efficiency of the trial. The Ukrainian system has stricter age limits and unclear rules for replacing jurors, which can negatively affect its effectiveness. In contrast, the US jury selection system is more flexible and provides for detailed replacement procedures, which helps to ensure the continuity and efficiency of the trial.

### *Organisation of the jury*

An important aspect that distinguishes the Ukrainian and American jury models is the approach to jury instruction. In Ukraine, there is currently no unified, standardised system of jury instructions, which can lead to ambiguous interpretations of legal provisions and evaluation of evidence by jurors. Ukrainian legislation does not contain detailed instructions on the content and form of the jury instructions, which leaves considerable room for subjective interpretation by judges (Letter from the Highest Specialized Court..., 2017). This situation creates a risk that jurors may misunderstand complex legal terms and misjudge evidence.

In the United States, by contrast, there is a well-developed and standardised system of jury instructions based on years of experience and practice. These instructions, which are provided to jurors before the start of a trial, contain clear and understandable explanations of their rights and responsibilities, how to evaluate evidence, definitions of legal terms, and explanations of key legal concepts such as the presumption of innocence and the “beyond a reasonable doubt” standard of proof (Kolbe, 2020). This approach ensures that all jurors have the same understanding of the law, minimises the risk of subjective interpretations, and facilitates more informed and fair decisions. In addition, the American system provides for the use of various auxiliary materials during instruction, such as diagrams, videos, etc., which facilitates better assimilation of information by jurors and increases their awareness of legal issues.

Juror participation in the trial is an important element of both systems, but its forms and mechanisms also differ. In Ukraine, jurors can ask questions of witnesses and the accused, but their role in the evidentiary process is limited. They cannot initiate the collection of evidence or request additional investigative actions. In the United States, juries play a more active role in gathering and evaluating evidence (Zhanibekov et al., 2024). They have the right to ask questions of witnesses and the defendant, as well as to ask the judge for additional clarification or instructions. Their questions and deliberations can have a significant impact on the course of the trial and the final decision. This gives American jurors a greater opportunity to

directly influence the truth-finding process in a case and ensures more active participation of citizens in the administration of justice.

In each country, juries make decisions differently. The jury and judge in Ukraine decide the accused's guilt and punishment (Muratova et al., 2024). The judge and jury share final decision-making responsibility in this arrangement. Juries in the US only decide guilt, whereas judges decide sentence. Since the jury does not determine punishment, which may affect their guilt verdict, this separation of functions is meant to make evidence evaluation more objective and unbiased. However, the judge has the professional knowledge and experience to establish a fair sentence based on all the case aspects and legal criteria.

Ukraine has much less jury involvement than the US, where juries hear criminal and civil cases. The Criminal Procedure Code of Ukraine and Law of Ukraine No. 1402-VIII "On the Judiciary and the Status of Judges" (2016) limit juries to particular criminal trials. For life-sentenced crimes, jury trials are available. Two professional judges and three jurors decide guilt and punishment in the first instance court. For procedural and impartial reasons, the defendant can request a jury trial. Without this right, only professional judges hear the case. US jurors handle serious criminal cases and a wide range of civil claims, including tort, contract, and constitutional disputes, while Ukrainian juries have restricted jurisdiction. Only competent judges hear Ukrainian civil and administrative issues. Scholars claim restricted jury use impairs public engagement in justice and the institution's anti-corruption capacity (Mirazbekova, 2021; Popova, 2024). Expanding juror competency to civil or corruption proceedings could boost transparency, accountability, and public trust in courts. The Ukrainian model is hybrid, with expert adjudication and few lay participants. Jurors share responsibility with judges for major criminal verdicts but cannot participate in civil justice. Future reforms could gradually increase jury competency based on global experience and domestic legal ability to foster a more democratic and participatory judicial procedure.

Another difference between Ukraine and the US is how public and media opinion affects jury trials and their operation. American jury trials receive substantial media coverage, which can shape public impressions of specific cases and the jury system. This can increase judiciary transparency and public scrutiny or create prejudice against the accused before the verdict. The media's coverage of jury trials in Ukraine may be reduced due to the institution's lesser prevalence and limits on journalists' access to court sessions. However, as jury trials evolve in Ukraine, the media's effect on public opinion on this institution may increase and intensify, requiring assessment of both the pros and negatives.



Jury management in Ukraine and the United States has both similarities and significant differences. The American model, characterised by a clear system of instructions, detailed procedures and active participation of jurors in the process, can be an important tool for improving the Ukrainian jury system. Ukraine should consider introducing more detailed and standardised jury instructions, expanding the role of jurors in the evidentiary process and dividing the functions between jurors and the judge in reaching a decision. Such changes could increase the effectiveness of the jury, ensure greater fairness and objectivity of court decisions, and strengthen public confidence in the justice system.

### *Impact on corruption and trust in the judiciary*

In Ukraine, despite the establishment of specialised anti-corruption bodies, such as the National Agency for the Prevention of Corruption (NAPC) (18 March 2015) and the National Anti-Corruption Bureau (NABU) (16 April 2015), and the adoption of relevant legislation, Law of Ukraine No. 1700-VII (2014), the level of corruption remains high, undermining trust in state institutions and hindering the country's socio-economic development. In this context, jury trials can be seen as one of the effective tools to combat this negative phenomenon. The involvement of the public in the judicial decision-making process contributes to the transparency and objectivity of the judicial process. Jurors, who are not professional lawyers and are not connected to the judicial system, are less susceptible to corrupt influence and bias. Their decision is based on personal assessment of the evidence and internal conviction, therefore difficult for interested parties to manipulate the trial.

The potential of a jury is particularly important in the fight against political corruption, which poses a serious threat to national security (Ketners, 2025). In cases involving influential individuals or politicians, the participation of jurors can guarantee that a decision is made based on the law and evidence, and not under pressure or influence from outside. Jurors, due to their independence and lack of direct connection to the state apparatus, can act as a “collective judge”, which makes it difficult for attempts to corrupt or influence the outcome of a trial.

Jurors, acting as a kind of “barrier” against corrupt influence, can help to restore justice and ensure the rule of law. Their independent and impartial decision can send a powerful signal to society that even the most powerful individuals cannot escape responsibility for their crimes. By acting as a “collective judge” and a “barrier” against corrupt influence, jurors help ensure that the guilty are held accountable. This approach not only serves to

punish wrongdoing but also carries significant preventive value, demonstrating that corrupt practices will not go unpunished. A vivid illustration of this potential is the Honolulu public corruption trial in the United States (Kaplan Marino, 2023). In this high-profile case, six defendants, including an elected city prosecutor and prominent business figures, were charged with conspiracy, bribery, and obstruction of justice in connection with alleged political favoritism and retaliatory prosecution. The ten-week federal trial involved extensive evidence and forty-one government witnesses. Despite the complexity of the proceedings and strong public and media pressure, the jury deliberated for less than twelve hours before acquitting all defendants on all counts. The verdict underscored the jury's crucial role in ensuring that justice prevails through evidence-based deliberation rather than political influence or prosecutorial power. As legal analysts noted, the outcome highlighted the jury's ability to resist external pressure, critically evaluate complex evidence, and uphold due process even in politically sensitive corruption cases.

Such examples demonstrate how jury trials can act as a structural safeguard against corruption and the misuse of authority. When citizens collectively assess facts and determine guilt independently of political hierarchies, the process not only ensures fairness in individual cases but also strengthens public belief in the impartiality and resilience of the legal system (Ospanova et al., 2024a; 2024b; Buribayev and Khamzina, 2025).

In addition, jury service can help to raise legal awareness and civic engagement. Jurors who have gone through this experience have a better understanding of the principles of justice, the importance of observing the law and the role of each citizen in ensuring law and order.

Thus, jury trials can be important not only in ensuring fairness in specific cases but also in building trust in the judicial system and contributing to the fight against corruption. This is especially true in Ukraine, where these problems remain urgent and require comprehensive solutions. If citizens are more actively involved in the decision-making process, it will help to create a more active and responsible citizenry and increase trust in the judiciary (Karibayeva et al., 2021). This will strengthen democratic institutions and the rule of law, which in turn will be an important precondition for sustainable development in Ukraine. Table 2 shows the impact of jury trials on corruption and trust in the judiciary in Ukraine and the United States (Table 2).

*Table 2 – Impact of jury trials on corruption and trust in the judiciary*

<i>Aspect</i>	<i>Ukraine</i>	<i>USA</i>
Level of corruption	High, despite the state's efforts	Significantly lower, especially concerning political corruption
Trust in the judiciary	Low, about 20%	High, especially before a jury trial
The role of the jury in the fight against corruption	A potential way to increase transparency and objectivity of judicial proceedings	A less pressing issue, but an important element of public control
Impact on the legitimacy of court decisions	Can increase the legitimacy of decisions in the eyes of the public	High level of legitimacy, especially in jury trials
Impact on legal awareness and civic engagement	Potential to improve legal culture and civic responsibility	Promotes active participation of citizens in the administration of justice and formation of legal awareness

*Source:* Compiled by the authors based on Deviatnikovaitė (2024), Moreira (2024), Keck (2014), Kenedi (2023), Amin and Motta (2023), Garbaccio et al. (2023), Clemente and de Sousa (2024).

Table 2 demonstrates that in Ukraine, where corruption remains high and trust in the judiciary is low, jury trials can significantly improve the situation. In the United States, where corruption is lower and trust in the judiciary is higher, jury trials play an important role in maintaining these positive trends. A comparison of the two countries shows that if the jury is functioning effectively, it will ensure justice and have an effective impact on society. In the United States, jury trials are an integral part of the legal system, ensuring a high level of public participation in the administration of justice and contributing to the strengthening of democratic values (Apakhayev et al., 2017). In Ukraine, despite certain steps towards the development of this institution, many unresolved issues and problems remain.

The study confirmed that the effectiveness of jury trials is related to the level of corruption and trust in the judiciary. In Ukraine, where these problems remain acute, jury trials have significant potential to contribute to their resolution. However, to implement this potential, it is necessary to improve the Ukrainian model of jury trials, accounting for the most efficient international practices and adapting them to the Ukrainian reality. This includes improving the procedure for selecting jurors, ensuring that they are properly trained and instructed, and creating conditions for their independent and impartial functioning.

One of the key challenges is the need to ensure the implementation of jury trials in a context of high levels of corruption and low trust in the judiciary (Ketners et al., 2024; 2025; Rysin and Sukh, 2024). Therefore, it is necessary not only to improve the legal regulation and procedures for selecting jurors but also to create conditions for their independent and impartial work. This requires an approach that includes raising the level of legal culture in society, ensuring adequate funding and effectively combating corruption in all spheres of public life. Only if these challenges are successfully addressed will jury trials be able to become effective in ensuring justice, democracy and the development of the rule of law in Ukraine (Zarosylo et al., 2020). A comparative analysis of the experience of Ukraine and the United States in the field of jury trials has revealed many shortcomings and gaps in the Ukrainian system that need to be addressed immediately to ensure the fairness of the institution:

1. An important aspect of the Ukrainian jury system is the imperfection of the selection procedure. Although Law of Ukraine No. 1402-VIII (2016) establishes certain selection criteria, they need to be clarified and detailed. There is a need to clearly define the list of officials eligible for jury service and to revise the age limit. In addition, it is necessary to ensure transparency and objectivity in the process of compiling jury lists, minimising the risk of manipulation and biased selection. For this purpose, the experience of the United States can be used, where jury lists are formed based on random selection from various sources, such as voter lists, driver's licences, etc.
2. The current age limit (30-65 years) is controversial and limits access to jury service for a large part of the population. Lowering the age limit to 25 years, as is the practice in the United States, would allow for younger people who can bring new perspectives and critical thinking to the process. Raising the upper age limit to 70 years would help utilise the experience and wisdom of the older generation, which can be particularly valuable in complex cases.
3. The absence of clear rules on the replacement of jurors during trials is a serious problem that can lead to delays and violations of the rights of litigants. Detailed and transparent procedures for replacing jurors in case of illness, recusal or other circumstances should be developed to ensure the continuity and efficiency of the trial. Clear rules and procedures will allow for quick and efficient resolution of jury replacement issues, minimising the risk of delay and ensuring the stability of the trial.
4. The absence of a unified system of jury instructions is also one of the shortcomings of the Ukrainian model. It is necessary to develop clear and understandable instructions that would explain to jurors their rights and

obligations, the procedure for evaluating evidence, and key legal concepts and terms. This will increase the awareness of the jury and ensure a more informed and fair decision-making process. In addition, consideration should be given to the use of auxiliary materials, such as diagrams and videos, to enhance the jury's comprehension of the information. It is also necessary to ensure that the instructions are tailored to the specific case and the level of legal knowledge of the jury, allowing them to better understand the prosecution and the evidence presented by the parties.

5. Another aspect of the development of jury trials is the intensification of media coverage of their activities. In turn, this will increase transparency in the judicial process, ensure public control and create a positive image of the jury. Television broadcasts of court hearings with the participation of jurors can be effective for legal education and increase public confidence in the judicial system.

The analysis revealed significant differences in the organisation and operation of juries in Ukraine and the United States, which directly affect the effectiveness of this institution. The Ukrainian system has stricter age restrictions for jurors, no clear rules for replacing jurors during the trial, and no unified system of jury instruction. In contrast, the United States has a more flexible selection system, detailed procedures for replacing jurors and standardised instructions, which ensures higher efficiency of jury service. Based on the results obtained, the author offers recommendations for improving the jury system in Ukraine, including revision of the age limit for candidates, development of clear rules for replacement of jurors, creation of a unified system of instruction, and increased media coverage of jury proceedings. Implementation of these proposals will help to increase the efficiency of the judicial process and strengthen public confidence in the judicial system of Ukraine.

## Discussion

The results of this study confirmed that the functioning of jury trials largely depends on the level of corruption and public trust in the judiciary, which is in line with the findings of such researchers as Kenedi (2023), and Clemente and de Sousa (2024). In Ukraine, where these problems remain acute, jury trials have the potential to contribute to the transparency and objectivity of justice, but this requires certain improvements. It is necessary to improve the procedure for selecting jurors, and their training, and ensure their independence and impartiality in decision-making.

When comparing the jury trial models in Ukraine and the United States, significant differences were found. In the United States, there is a clear standardised system of jury instruction that ensures an unambiguous understanding of the legal provisions, as confirmed by Alschuler and Deiss (1994). At the same time, in Ukraine, the absence of such a system may lead to ambiguous interpretations of legal provisions by jurors, as noted by Melnyk et al. (2023).

The study also determined that juror participation in the trial process varies significantly between countries. In the United States, jurors have an active role in the evidentiary process and can directly influence the truth, as analysed in detail by Horan (2024). Another difference is the decision-making procedure. In the United States, juries only decide on the guilt of the accused, while the judge decides on the punishment, which contributes to a more objective assessment of the evidence, as noted by Bongiorno (2022) and Hale (2016). In Ukraine, jurors are also involved in sentencing, which may put additional pressure on them in their decision-making.

The findings of the study are coordinated with the conclusions of such researchers as Mirazbekova (2021) and Popova (2024), who also highlighted the shortcomings of the existing jury trial model in Ukraine and the need for its reform. At the same time, this study expands the understanding of the issue by proposing specific ways to address the identified problems, based on the US experience and best international practices.

Comparing the development of the judicial system and especially jury trials in Ukraine with the activities of jury courts in countries with extensive experience in this area identified the advantages and disadvantages of different models and suggested ways to adapt best practices to the Ukrainian legal system. This principle is consistent with the study of Króliczek (2020), who conducted a comparative analysis of the jury and magistrate judges in the United States, identifying the features of each of these institutions, their advantages and disadvantages, as well as the relationship between them in the American justice system.

The recommendations for improving the jury system in Ukraine proposed in this study are supported by other researchers. For instance, the idea of revising the age limit for jurors is consistent with the research of Wilford and Bornstein (2021), determined that younger jurors are more prone to critical analysis of evidence and less prone to stereotypes and prejudice. The need to develop clear rules for replacing jurors is emphasised in many studies on jury trials. This will help to avoid delays in the trial and ensure its stability, which will have a positive impact on trust in the judicial system. Lastly, the importance of creating a unified system of jury instructions is confirmed by research by American scholars, who indicate that detailed and standardised

instructions contribute to the legal awareness of jurors and ensure more informed and fair decision-making.

The problematic issues of jury functioning in Ukraine, such as the lack of a unified standardised system of instruction and the limited role of jurors in the process of proof, identified in the study, echo the work of Melnyk et al. (2023). Although this article addressed the broader issue of state control, it also highlights the importance of clear procedures and instructions to ensure the effectiveness of any state mechanism, including jury trials. Therefore, there is a need to evaluate the effectiveness of the introduced measures, analyse the impact of jury trials on different categories of cases, and study the attitude of citizens to this institution and its role in society. It is important to analyse the psychological aspects of jurors' participation in the trial, their interaction with the judge and professional lawyers, and the influence of the media on their decisions. This will help develop more effective methods of selecting and training jurors, as well as ensure their psychological comfort and protection from undue influence.

Thus, the study not only identified important problems and further steps for the development of jury trials in Ukraine but also offered specific recommendations for its improvement. If these recommendations are implemented, it will increase the effectiveness of jury trials and increase the level of public trust in the judicial system. Further democratisation of society will then occur.

## **Conclusions**

This study aimed to conduct a comparative analysis of the organisation and functioning of jury courts in Ukraine and the United States in order to identify weaknesses in the Ukrainian model and develop practical recommendations for its improvement. By analysing the legal framework, procedural rules, and judicial practice, the research explored how the experience of a mature jury system, such as in the United States, could be adapted to enhance transparency, efficiency, and public confidence in Ukraine's judicial system. The comparative findings indicate that the current Ukrainian jury system faces significant organisational and procedural deficiencies that hinder its effectiveness. The most pressing problems include the absence of a uniform and standardised system of jury instructions, restrictive eligibility criteria, and a lack of clearly defined procedures for replacing jurors during ongoing trials. These shortcomings undermine the consistency and reliability of verdicts, slow court proceedings, and restrict public participation in the administration of justice.

In contrast, the United States has established a structured and transparent model characterised by detailed jury instructions, inclusive selection procedures, and comprehensive mechanisms that ensure trial continuity.

Adapting key elements of the American model, such as expanding eligibility criteria, introducing clear replacement rules, and creating standardised jury instructions, could substantially improve the functioning of jury trials in Ukraine. Implementing these reforms would strengthen transparency and objectivity in decision-making, reduce opportunities for corruption, and foster greater civic engagement in judicial processes. Consequently, the Ukrainian system would align more closely with international standards while contributing to the fight against corruption and reinforcing democratic governance.

At the same time, the study recognises certain limitations. The analysis focused solely on Ukraine and the United States, without accounting for socio-psychological and cultural factors that may influence juror behaviour. Future research should therefore broaden the comparative scope to include other jurisdictions that have effectively integrated jury systems. This would provide a deeper understanding of how best to adapt global practices to Ukraine's specific legal and cultural context. Overall, this study contributes to ongoing discussions on judicial reform by offering a scientifically grounded comparative foundation for improving Ukraine's jury system and enhancing the integrity and legitimacy of its judiciary.

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# *Legislation of the Republic of Kazakhstan and foreign countries in the field of mediation*

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## *Abstract*

Examining foreign practices helps determine the optimal models of legislation and principles that can be applied in the context of the Kazakh mediation system. Given the issue's significance, the study aimed to deliver an exhaustive analysis of mediation legislation and its implementation in the Republic of Kazakhstan and abroad. The legal nature of mediation was examined, during which the main principles on which the procedure is based were identified and analysed. The research contributed to a comprehensive understanding of the foundational conditions necessary for establishing mediation institutes within a national context, while simultaneously tracing the evolutionary trajectory through which mediation developed into one of the most sophisticated alternative dispute resolution mechanisms. Through systematic comparative analysis, the investigation examined both legislative frameworks and the practical implementation of mediation procedures in the Republic of Kazakhstan and various international jurisdictions. The analytical findings revealed quantitative measures of mediation effectiveness within the Republic of Kazakhstan, establishing comparative benchmarks against international jurisdictions where mediation procedures have been systematically implemented and evaluated.

*Keywords:* principles, legal nature, dispute resolution, confidentiality, volunteerism.

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## **Introduction**

The judicial system remains the most mature, effective, universal, and

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rational mechanism for defending and challenging violations of rights and legal interests. However, the ongoing evolution of contemporary society has generated increasingly complex social relations, which produce conflicts of interest and add to the intricacy of legal disputes. The growing number, scope, and complexity of such disputes have exceeded the capacity of judicial institutions to resolve them with consistent quality, necessitating sustainable alternatives. While judicial reform can partially address procedural deficiencies, the scale of challenges demands exploring parallel approaches. The transformation of judicial systems highlights the need for mechanisms that complement traditional court proceedings. International experience has shown the success of non-state procedures, giving rise to what Anglo-American jurisprudence terms alternative dispute resolution (ADR). Among these, mediation has emerged as a particularly significant approach. Mediation is a voluntary, confidential process where a neutral third party helps disputing parties reach a mutually acceptable resolution without imposing a decision. It is a key method of ADR, offering a flexible and cost-effective alternative to court proceedings. The implementation of mediation in the Republic of Kazakhstan (its core concepts and governing principles) constitutes the central focus of this investigation.

The relevance of this topic stems from several factors. First, mediation fosters a more amicable and constructive dispute resolution environment. Second, it is economically efficient, avoiding lengthy and costly judicial processes. Third, advancing mediation legislation helps establish a stable, sustainable, and predictable legal environment. Examining the mediation laws of Kazakhstan and other countries facilitates the identification of best practices, their adaptation for domestic use, and the enhancement of mediation's role in dispute resolution. This area remains crucial for academic research, legal practice, and legislative development to ensure its long-term viability.

Moreover, the comparative study of mediation laws poses several challenges. Each country applies distinct models and principles, complicating jurisdictional comparisons. This demands a thorough analysis of national laws and precedents to understand their context and features, especially for developing sustainable mediation frameworks. Evaluating mediation legislation's effectiveness also requires precise analysis and outcome measurement.

A study by Kenzhebekova et al. (2023) highlights mediation's success rates in different countries and its advantages and limitations compared to conventional courts. Kalshabaeva et al. (2022) identified differences in mediation approaches, models, and principles, contributing to a broader comparative analysis and identifying effective legal norms. The evolution of

best practices can be traced in Zayniyeva and Kassymbekova (2020), whose analysis evaluated fundamental mediation principles like voluntariness, neutrality, and confidentiality, and examined how various countries incorporate these principles in practice.

Research by Imanbaiev and Romanova (2021) and Bilyalova et al. (2022) explores mediation across civil, family, and commercial contexts, revealing domain-specific applications and the effectiveness of related legislation. A notable contribution from Kaidarova and Imanbayev (2020) assesses how well legislation protects the rights and interests of mediation participants. Their analysis of legal guarantees, enforcement mechanisms, and procedural safeguards helped determine the overall strength of legal protections and fairness in mediation processes.

This study aims to comprehensively examine the development of mediation in Kazakhstan and assess relevant legislation both domestically and in leading foreign jurisdictions. Its purpose is to enhance understanding of mediation through an in-depth analysis of its essential components. A key task is to clarify the meaning of core concepts and terminology in mediation legislation to promote consistency and shared understanding among legal and professional communities. The main research question is how the mediation practices and legislative frameworks in Kazakhstan compare to those of other jurisdictions, and what can be learnt from international best practices to enhance the effectiveness and sustainability of mediation in Kazakhstan.

## **Materials and Methods**

The methodological basis of the study comprised various methods, including historical analysis, logical analysis, the dogmatic method, the formal legal method, and comparative legal studies. The historical analysis involved tracing the legislative evolution of mediation in Kazakhstan and other countries, considering changes over time, the development of mediation practices, and influencing factors.

The formal legal method focused on analysing Kazakhstani legislation and regulations governing mediation. It enabled the examination of formal legal norms and their interpretation, defining the status, rights, and obligations of participants, procedures, mediator requirements, and alignment with sustainability principles. In conjunction with this, the dogmatic method was used to systematise legal norms, assess their applicability, and identify universally accepted principles and standards in mediation. The logical analysis method supported the evaluation of the

coherence and justification of legal arguments, principles, and procedures. It helped identify logical connections within mediation processes and assess compliance with legislation and recognised norms. This was paired with comparative legal studies, which identified similarities and differences in mediation laws, approaches, and practices across jurisdictions, highlighting the strengths and weaknesses of various systems.

The normative basis of the research included key legal acts: the Law of the Republic of Kazakhstan No. 401-IV “On Mediation” (2011), which defines mediation, regulates mediator competencies, and outlines procedures; the Administrative Procedural Code No. 350-VI (2020) and the Civil Procedure Code No. 377-V (2015), both of which contain provisions on mediation. Comparable foreign legislation was also analysed to enable deeper comparative insights. To address problematic issues, the study conducted in-depth analysis and interpretation of legislation and mediation practices across various contexts. Academic literature and publications were reviewed to clarify ambiguities. Studies by researchers from Kazakhstan, Ukraine, the UK, the USA, Poland, and Japan were utilised to capture diverse perspectives on mediation.

To establish a broader view of international standards applicable to mediation, relevant international regulations were examined, particularly the Singapore Convention on Mediation (2018) and the UNCITRAL Model Law on International Commercial Mediation and International Settlement Agreements (2018), which promote principles of long-term legal sustainability. Special attention was also given to documentation from the Ministry of Justice and the Association of Mediators of the Republic of Kazakhstan, whose regulatory materials helped clarify specific issues surrounding mediation practice in Kazakhstan.

A number of important factors were considered while choosing which foreign countries to compare. First, the selected nations offer a wide range of perspectives on mediation methods since they reflect a variety of legal traditions, including both Anglo-Saxon and Continental systems. Second, the reason these jurisdictions were chosen was because they have a long history of using mediation as a formal conflict resolution process, with differing degrees of incorporation into their legal systems. Finally, the inclusion of nations with sophisticated mediation frameworks made it possible to conduct a thorough examination of institutional frameworks, best practices, and legislative strategies, offering insightful information about how mediation processes are applied and developed across various legal contexts.



## Results and Discussion

### *Legal nature of mediation*

The investigation of mediation primarily required a general understanding of the legal nature of this institution, which over the past decades has gained particular popularity in the countries of the world and, in particular, the Republic of Kazakhstan (hereinafter referred to as the RK). Therefore, the analysis of this mechanism appropriately began with a general theoretical framework, which established the conceptual basis for subsequent research. Consequently, the mechanism of mediation was described as legal since its nature is related to legal aspects. All management activities require choosing from several alternative options to achieve the desired state of the system (Zhukorska, 2024; Galymzhan et al., 2020). However, this choice is limited by a certain framework, which forms it. In today's society, it is rare to find a situation where one individual's decision sets universal norms. The study by Kravtsov et al. (2022) led to the conclusion that such norms are always a subjective act of will, while the rules have an objective character, which is due to the formalisation of legal norms. The objectivity of the rules is based on the will that lies in their basis, which reflects generally accepted ideas about what should be at the specified stage of the historical development of society (Khamzina et al., 2021, Nuryshchenko, 2025).

Any non-trivial mechanism, including human activity, requires a universal platform that allows solving emerging problems by cultural and logical norms (Perbawa et al., 2024; Apakhayev et al., 2017). Therefore, the versatility of the platform must be correlated with the complexity of the mechanism. In the context of society, such a communication platform may include internal regulations that may differ from legal regulations and contain other rules. However, as stated by Zayniyeva and Kassymbekova (2020), globally in society, only the law can provide adequate communication and methodological support. As a result of the historical development of society, law has become an integral part of it. It is essentially the embodiment of a cultural, normative, hierarchical, and subordinate system.

Therefore, the processes of mediation are limited and regulated by law, which confirms the legal nature of mediation. In the context of a mediator's work, the right is the basis for controlling social interactions (Ivaniuk, 2024; Khovpun et al., 2024). Thus, the process of mediation has a legal nature because the norms within which the mediator and participants in the conflict realise their tasks are legal, and the dispute is a contradiction between the subjective understanding of the proper and the proper, expressed in law.

Similarities in the approach to this concept were also traced in the studies of Kravtsov et al. (2022), whereas in the findings of Gayo (2022), mediation was considered primarily as a phenomenon that had a socio-cultural beginning.

### *Mediation in the alternative dispute resolution (ADR) system*

The ADR system was generally examined, which is interpreted as a general term that describes various methods of resolving disputes outside the judicial system. ADR is preferred by many commercial parties due to its efficient and confidential dispute resolution principles (Deineha, 2022; Parasiuk et al., 2025). It can also substantially reduce the costs that arise during the judicial resolution of conflicts, thereby contributing to the economic sustainability of the justice system. During the study, it was emphasised that ADR promotes the autonomy of the parties and is more friendly than conventional judicial proceedings, which ultimately create more positive conditions for maintaining and developing relations after the settlement of a conflict.

The most prevalent ADR approaches at the time of analysis were reconciliation, agreement, arbitration, mediation, and negotiations. Theory and practice suggest that arbitration can replace judicial proceedings. Gjorgjioska et al. (2022) studied this topic further. It usually occurs through an arbitration agreement or as a clause in an existing agreement with two or more parties' willing cooperation. An impartial arbitrator decides a dispute in arbitration. Reconciliation, where a conciliator resolves a dispute, was also investigated. Conciliators utilise their judgements and recommendations to help parties reach a settlement, unlike mediators. Reconciliation theory is related to mediation, which requires procedure boundaries.

In general, mediation is defined as part of the broader concept of "ADR", which by its very nature, is a large system that includes many different ways of resolving disputes in court. In the scientific community, this position has great authority, which has been observed in the papers by Kravtsov et al. (2022), Gayo (2022), and Subrata (2023). After analysing the studies conducted by these researchers, it was established that mediation plays a pivotal and prevalent role in contemporary legal practice, which has been especially evident in recent decades, highlighting its potential for ensuring long-term sustainability in dispute resolution.

### *Formation and development of the institute of mediation in the RK*

The analysis of the formation and development of mediation institute in

the RK reveals that this phenomenon is a relatively new form of ADR in terms of its formal institutionalisation, including the involvement of a neutral third party with no interest in a particular dispute. A distinctive feature of mediation in the study was that it differed from the methods of dispute resolution adopted in the RK, including both conventional and alternative methods. The further development of legal institutions in the country prevented assessing other similar beginnings of mediation during the study. This might be attributed to the fact that, for the first time in international law, such a concept was addressed only in the latter half of the 20th century. Although the roots of restorative justice and earlier conciliatory practices date back much further, shaping the traditional conflict resolution landscape in the region. From the standpoint of historical modelling, it was necessary to examine the social and economic situation in the United States, where a new form of conflict related to the confrontation between emerging trade unions and employers concerned issues of working conditions and wages. The inability to quickly resolve these disputes created the threat of riots, mass layoffs, and interruptions in the production of enterprises.

In the case of RK, the evolution of legal doctrine under the regime of the Union of Soviet Socialist Republics (USSR) and in the subsequent period reflected patterns common to all post-Soviet states, marked by instability across most spheres of governance. In turn, the current situation took away the opportunity to transfer the best experience of advanced states quickly, and as a result, signed by the president of the RK, the Law of the Republic of Kazakhstan no. 401-IV “On Mediation” (2011) and the Law of the Republic of Kazakhstan no. 402-IV (2011) were as late as January 28, 2011. On the other hand, compared to countries from the post-Soviet space, only a few states, including Moldova, could have made such a breakthrough in this area.

Before these laws were passed, restorative justice, international conciliation, and the best dispute resolution methods were studied. This involved studying other countries' experiences, antecedents, and experimental and pilot project results. This analytical and research process has identified the best conflict resolution methods and alternatives. These endeavours sought to produce best-practice laws and policies and offer dispute resolution methods that promote fairness, efficiency, and institutional sustainability.

Further analysis of the situation in the country regarding mediation led to the fact that the relevant processes were activated, which were necessary to ensure the integrity of the mechanism. Thus, as a result, four more stages were identified, but their implementation after the adoption of the above-mentioned law was conducted in parallel. The first was the creation of

specialised mediation centres in the RK, which provide mediation services in various fields, including family disputes, labour conflicts, and commercial disputes, laying the groundwork for the sustainable operation of non-judicial dispute resolution systems. At the time of the study, the United Centre for Mediation and Peacemaking “Mediation”, the Centre for Mediation and Law “Parasat”, and the West Kazakhstan Centre for Mediation and Negotiation Process were particularly relevant. The next key point in the study is professional education and certification, which was manifested in the training of qualified mediators, for which professional training and training programmes for mediators were developed.

An important stage was conducting information campaigns and educational measures to raise awareness about mediation, its advantages, and its role in fostering legal and social sustainability. Analysing this stage, it can be concluded that its main goal was to attract the attention of society and the legal community to the practice of mediation. The last key fourth point in the formation of the mediation institute was the introduction of changes and additions that should improve the practice of mediation in the country and reinforce its procedural sustainability. For example, in 2016, changes were made to the Law “On Mediation” (2011), which expanded the possibilities of applying mediation in various areas, including family, labour, civil, and administrative law. In 2018, several other changes were made to the law, which increased the status of mediators and improved the conditions for the development of the mediation institute.

### *Principles of mediation*

This study investigated Article 4 of Kazakhstan's Law “On Mediation” (2011), which stipulates five principles: volunteerism, equality of parties, mediator independence and impartiality, non-interference in procedures, and confidentiality. These laws establish mediation as a confidential, voluntary, and equitable procedure facilitated by neutral and independent intermediaries. Jafarov (2021) found that volunteerism assumes parties cannot be forced to engage in alternative dispute resolution. Subject to mutual agreement or legal constraints, parties can withdraw from mediation at any time. Mediation only commits parties to seriously investigate settlement options and temporarily suspend litigation. These principles ensure that mediation is voluntary, confidential, impartial, and sustainable, offering parties an alternative to court proceedings while protecting procedural safeguards and participant autonomy.

This principle has been examined from several perspectives:

- voluntary consent of the parties to resolve the dispute in accordance with the established procedure;
- voluntary involvement in the procedure, the ability to refuse to continue the procedure;
- voluntary performance of the obligation obtained as a result of dispute resolution.

Confidentiality represents a fundamental principle whereby all aspects of a mediation session remain strictly classified from initiation to conclusion, aligning with theoretical frameworks proposed by Jafarov (2021). This principle encompasses comprehensive protection of negotiated information and written documentation, prohibiting unauthorised disclosure to external parties. The confidentiality framework explicitly forbids verbatim recording and electronic documentation during proceedings while extending protection to any information discovered throughout the procedural course, preventing its utilisation in subsequent discussions. Disclosure may occur solely for the portion of the contract that will be performed. Article 20 of the United Nations Commission on International Trade Law (UNCITRAL) conciliation rules provides relevant guidance on this matter, establishing that confidentiality protections operate independently of whether disputing parties subsequently engage in arbitration or judicial proceedings, thereby ensuring that protected information cannot be introduced as evidence in alternative forums:

- comments and suggestions on the possibility of resolving a dispute;
- acknowledgements from the parties during the reconciliation procedure;
- intermediary's offer;
- the fact that the other party is ready to accept the proposals of the intermediary for dispute resolution is not referred to.

Neutrality of the intermediary and independence of its activities:

1. The mediator is disinterested in attaining any outcomes from the procedure during the execution of their actions.
2. The intermediary does not depend on any party on other subjects.
3. The intermediary does not judge, accuse, or defend any of the parties.
4. Interference with the mediator's activities is not allowed.
5. According to the basic regulations, the mediator is not obligated to disclose details of the ongoing procedure to any party; yet, the mediator may report the outcomes to the governing body they represent. Here, this refers to the special bodies that serve the intermediary.

The examination of principles represented a significant aspect of the research. A special importance in their examination at the moment has been

established by many researchers. Jafarov (2021) significantly contributed to comprehending the principle of confidentiality and its implementation.

### *Mediation in the RK*

At this stage, the study turned to an in-depth investigation of the mediation procedure as implemented in the RK. First of all, considering the development and formation of the institute of mediation in the country, a general global comparison of terminology was conducted, among which there were different approaches to the concept of “mediation” from the side of the current legislation of different countries, including the RK, and the analysis of opinions of both researchers related to jurisprudence and practicing lawyers. The following interpretation of this term was proposed: “Mediation – the process of resolving a dispute or conflict between the parties, where mediators help them (the parties) to reach an agreement that will be mutually acceptable to all, while initially based on the principle of voluntary agreement between both parties to the dispute.” As for the current situation of mediation in the RK, the analysis allowed asserting with confidence that it is the most effective ADR in terms of its success rate, with 69% of cases resolved through mediation. This was explained by a number of factors that have been described in detail by researchers in the field of civil law, in particular, Zienkiewicz (2021), and in combining the legal and psychological standpoints – in the study of Kaidarova and Imanbayev (2020).

Mediation differs from judicial proceedings in a number of key aspects, such as accessibility, confidentiality, economy, deadlines, and its potential to support sustainable legal outcomes (Morris, 2025; Ospanova et al., 2024). These factors led to the conclusion that mediation is particularly attractive for parties in a conflict since the procedure is aimed at finding a dispute resolution based on the real interests of the parties to the dispute and not just on their initial positions. Further, an investigation of the status of the mediator as the person responsible for conducting the mediation procedure was conducted. Thus, a number of its main obligations were formulated, which were based on the current practice of the Association of Mediators and the Law (2011):

1. Maintaining neutrality and unbiasedness towards the parties to the conflict. They should remain impartial and avoid predicting outcomes during mediation.
2. They should consider the interests and needs of the parties, which should contribute to finding the best solution. Various techniques and tools can be used to encourage constructive discussion and search for solutions.

3. Compliance with the principle of confidentiality and not disclosing information obtained in the course of mediation without the consent of the parties. This helps create a trusting atmosphere, ensures free dispute discussion, and contributes to the sustainability of the dispute resolution framework.
4. Providing the parties with information about the mediation process and its principles, their rights and obligations, and possible options for resolving the dispute contributes to transparency, trust, and the sustainability of mediated outcomes.
5. Responsibility for managing the mediation process, including setting schedules, holding meetings, monitoring compliance with the rules, and maintaining a balance in communication between the parties.
6. Upon concluding mediation, the mediator may aid the parties in drafting a mediation agreement, a legally enforceable document that encapsulates the accord achieved between the parties.

An important component of this institute in the framework of the study was the analysis of the functionality and nature of mediator organisations, which are voluntarily created mediators' organisations that exist for the development of organisational, material, and other conditions necessary to help conduct the procedure by mediators. The main function of the study was to introduce a register of professional mediators by such organisations and to develop and approve conditions for the membership of mediators. In addition, the function included information and methodological support for members, representation of mediators' interests with government bodies, Organisation of professional training of specialists, and improvement of their qualifications, which, for example, in the study by Bilyalova et al. (2022), were also considered to be the main ones. Additional functions in the course of the study were identified as promotion of mediation among the population, for example, ways of conducting thematic educational events and other mechanisms that can influence the development of the institute in the country.

### *Comparative analysis of mediation procedures in the RK and foreign countries*

The study of mediation procedures began with the RK, where most procedural aspects are outlined in Chapter Three of the Law "On Mediation" (2011). Key provisions include the procedure and methods of mediation, its timing and location, the language used, conditions, contract form and content, associated costs, and application across various legal relations (civil, labour, family, and administrative) covering both individuals and legal

entities. The law specifies five methods of mediation: individual meetings, telephone, video conferencing, electronic messaging, and other ICT-based methods not contradicting the law. Aside from individual meetings, all others can be classified as forms of online mediation.

Regarding time, place, and language, the legislation ensures dispositive principles, allowing parties to choose these freely, with the mediator making decisions based on their preferences. The conditions of mediation include voluntary participation, freedom in choosing a mediator, and the mandatory conclusion of a mediation agreement. The latter, as defined in Article 21, includes fourteen essential terms and confirms mutual intent to resolve the dispute. Mediation can be either paid or free, with compensation agreed in advance and shared equally unless otherwise specified.

The study also examined the specific features of mediation across legal domains. While legislation lacks many detailed provisions in civil, labour, family, and administrative cases, it mandates that mediation should conclude within 30 calendar days, with the possibility of a 30-day extension. More specific provisions apply in administrative and criminal matters, where mediation does not imply guilt and proceedings continue. As Imanbaiev and Romanova (2021) noted, mediation in criminal cases is limited to minor or moderate offences without fatal outcomes.

After examining RK's framework, a comparative analysis followed, beginning with the United States and Great Britain – jurisdictions representing the Anglo-Saxon and Continental legal systems. In the U.S., the American Arbitration Association and American Bar Association have issued flexible mediation guidelines. Typically, mediation begins with the parties' consent, a brief statement of the dispute, discussion of expectations, mediator selection, and information exchange. Parties may hold joint and separate meetings with the mediator, aiming to gather as much information as possible to craft a resolution.

The influence of U.S. practice on UK mediation is evident, just as British legal traditions influenced American law. Over time, U.S. mediation became more accessible, while UK mediation became slightly more formal under American influence. Still, core procedures remain similar. Clark (2022) highlighted subtle differences resulting from this formalisation, which the study also explored.

Germany offered another compelling case, where mediation is closely integrated into the judicial system. Court-appointed intermediaries significantly reduce litigation volumes. Mediation is widely taught in German law faculties, making it part of core legal education. A distinctive feature is the “information stage”, requiring parties to be informed about mediation before filing a court claim. This pre-court step encourages



consideration of ADR methods and supports judicial efficiency. As Kury and Kuhlmann (2017) note, such integration enhances mediation's popularity and effectiveness in Germany.

In contrast, Ukraine represents a jurisdiction where mediation is still developing. The Law of Ukraine No. 1875-IX "On Mediation" (2021) was only recently adopted, and prior to that, the process lacked regulation. Currently, mediation is applied across family, labour, economic, administrative, and even criminal contexts – primarily to reconcile victims and offenders and restore social ties (Albanesi and Teasdale, 2025; Horislavska, 2025). Due to its novelty, strict mediator requirements apply: completion of a 90-hour training course, including 45 hours of practice. In comparison, RK requires a minimum of 48 hours of training (Order of the Minister of Information and Social Development, 2023).

The study also examined Japan, where cultural attitudes toward the court system have shaped the popularity of ADR. Traditionally, resorting to courts was ethically discouraged, but the need for dispute resolution persisted, leading to widespread mediation use. Japanese law distinguishes between "reconciliation", where the mediator actively proposes solutions, and "mediation", where the mediator remains neutral and facilitates dialogue. This distinction reflects Japan's unique cultural and legal context and highlights the adaptive nature of mediation in diverse jurisdictions.

### *The system of legislation of the RK and foreign countries in the field of mediation*

Since various laws have already been mentioned many times in the study (first of all, the Law of the Republic of Kazakhstan No. 401-IV "On Mediation" (2011)) and codes in this section of the division concerning the legislation in the field of mediation, all key regulatory legal acts were summarised, including some options for their improvement and changes. In fact, the basis for investigating the legislation of the RK in the field of mediation was evidently the analysis of the mentioned law. In addition to investigating the specific features of specific legal relations, attention was paid to the necessary provisions of the procedural nature of the codes: Code of the Republic of Kazakhstan No. 377-V (article 24) (2015); Criminal Procedure Code No. 231-V (article 85) (2014); Code of the Republic of Kazakhstan No. 350-VI (article 121) (2020). Another important part of the legislation in the field of mediation was defined as the order of the Minister of Information and Social Development of the Republic of Kazakhstan No. 244-NC (2023) and codes of ethics developed by the Association of Mediators of the RK. A separate place was given to international

documentation headed by Directive 2008/52/EC of the European Parliament and of the Council of 21 May 2008 (2008).

For example, paragraph 1 of part 2 of article 21 of the law in the question of the essential terms of the agreement should be reformulated from “date and place of conclusion of the mediation agreement” to “date, place, and time of conclusion of the mediation agreement”. Moreover, having examined the experience of Germany, an information stage can be added, during which the participants in the dispute will explain the possibility of resolving disputes by means of mediation to the court proceedings. The next aspect that raised doubts is the absence of a specific body that would maintain the register of professional mediators, which is essential for ensuring the sustainability of mediator accreditation and oversight. At the time of the study, this was done by mediator organisations, but there is no need for a general register for the entire RK that would be controlled by the state. The foundational ideas of mediation may be jeopardised by the establishment of a state-run registry of mediators. By portraying mediators as quasi-state actors, such a system may simultaneously weaken mediators' independence even while it could increase professional accountability and procedural transparency. This change could change mediation's theoretical underpinnings as an alternate, voluntary, and non-coercive method of resolving disputes by undermining the sense of impartiality and autonomy that sets it apart from legal procedures. Therefore, any governmental participation in mediators' certification or registration should be weighed against protections that maintain the profession's self-regulation and the fundamental values of independence and neutrality.

Comparing the data, it was concluded that in other countries, the situation on the issue of the legislative system is similar, though some systems demonstrate higher levels of institutional sustainability. There was also specialised law “On mediation”, which was the main act in relation to the procedure; then codes that indirectly remembered the procedure; regulatory acts or practice, which is more typical for the countries of the Anglo-Saxon system; and international legislation. The analysis specifically identified post-Soviet countries such as Moldova, Uzbekistan, and Ukraine, where the situation with regard to legislation is very similar to that of RK.

In the United States, for example, there was a National Institute for Dispute Resolution in the United States, which developed new methods of mediation. The theoretical and practical aspects of mediation in the United States are covered by publications such as *Mediation Quarterly* and the *American Journal of Mediation*, which enjoy authority among readers. In addition, in 2001, the Uniform Mediation Act (2001) was adopted, which was in force at the time of analysis. The Uniform Mediation Act in the United States provides for the use of mediation in civil and commercial disputes that

do not affect constitutional issues. There are special procedural rules for certain categories of disputes. For example, for labour disputes, there are arbitration rules and mediation procedures for the labour affairs of the American Arbitration Association. On the other hand, in some countries, the mediation procedure was provided for in the codes many decades ago, which did not require special innovations in legislation, particularly the profile law. In France, the mediation procedure has been fixed in the Criminal Code since 1993. The same applies to labour legislation, in which the relevant study in the Labour Code is devoted to mediation.

RK is a signatory to the Singapore Convention on Mediation (2018), though it has yet to ratify it. Regarding the UNCITRAL Model Law on International Commercial Mediation and International Settlement Agreements (2018), RK has made significant strides in aligning its national legislation with international standards. Through the Law “On Mediation” (2011), which governs the practices and purposes of mediation in RK, the Model Law's provisions have been integrated into the country's mediation framework. Some elements, like the requirement to employ the mediation procedure in specific situations, are still being discussed further by the legislative body.

### *Application of mediation procedures in different countries*

The study used publicly available statistical data, which allowed assessing the effectiveness of the mediation procedure in actual practice. Thus, the most positive conclusion was that the results in most countries where the institute of mediation was in demand showed quite high indicators of successful resolution of conflicts. On average, the world figure ranges from 70% to 80%. Indicators in the RK are equal to 69%, which separated the country from the statistical average by only one indicator. In general, this result was defined as good but required improvements in comparison with other countries. In general, the indicators in the UK were particularly impressive, at 92%, which indicated a high level of development of the institute and the quality of work of mediators (Tables 1, 2).

However, the results shown in Table 2 were called negative, as they indicated a very low level of mediation demand. This was explained by the fact that citizens of the RK, not looking at various educational campaigns, need to be made aware of the mediation procedure and its role in achieving sustainable conflict resolution. The fact that the indicator was close to the figures in the United States – in the country where mediation originated – could not be used as an argument for the sustainability of the mediation system in RK. The data showed that at the time of the analysis, less than 5%

of cases that were being tried in the United States were completing the process. Table 2 demonstrates that in the vast majority of instances, disputes were settled through alternative techniques, with mediation comprising 5% of the total disputes. In RK, the popularity of the ADR system is comparable to that in America, but further efforts are required to enhance its sustainability through systematic promotion and public education. In other countries, mediation is considered for about 30% of disputes in their total number, which is almost eight times higher than in the RK.

*Table 1 – Comparison table of success of the mediation procedure in different countries*

<i>Percentage of disputes that successfully ended in the country by mediation</i>	<i>Value</i>
Average indicator in the world	70-80%
RK	69%
United Kingdom	92%
USA	80%
Finland	80%

*Source:* Compiled by the authors.

*Table 2 – Comparison table of the demand for the mediation procedure*

<i>Percentage of disputes considered by mediation from the total number of disputes</i>	<i>Value</i>
RK	4%
USA	5%
China	26%
Slovenia	29%
Austria	30%
United Kingdom	35%

*Source:* Compiled by the authors.

## Conclusions

A comprehensive analysis of the current legislation in the RK and various foreign jurisdictions, alongside a review of scholarly research and statistical data, led to the conclusion that the mediation process has consistently evolved since the enactment of the law in 2011. However, there were many points in which this institute is inferior to the countries of the European Union, the United States or Japan, which was explained by certain circumstances: cultural context, better qualifications of specialists and

extensive experience in the field. The results also showed that the popularisation of mediation among the common population had an insufficient effect, and therefore, the indicators of using the procedure were inferior to those of other countries. Additionally, the study found that the mediation legislation, while not requiring changes based on its findings, highlighted areas where updates could be beneficial.

Particular attention was focused on the legal nature of mediation and its key principles: volunteerism, confidentiality, and neutrality. However, further research requires a more extensive knowledge of other principles of mediation, which will contribute to a better understanding of the legal nature of mediation itself. In the historical context, a connection was established between the court and the modern mediation procedure, which was essential for investigating the formation and development of the institute. In the future, other similar mechanisms that existed before the mediation on the territory of RK may be established. Mediation is recognised globally as a process that emerged in the latter half of the 20th century in the United States, where it remains pertinent and highly advanced. Ultimately, several recommendations were also formed: to review and supplement the current legislation, in particular, the Law “On Mediation” in the question of the existing terms of the agreement; to create a state body that would deal with centralised management of the register of mediators and deal with other key issues; to improve the stages of the procedure, for example, by adding a mandatory information stage; and to provide a more preferred level of public awareness of the procedure to increase the level of its demand.

This can be done by conducting thematic seminars and educational events and using other mechanisms that increase the knowledge of legal awareness among citizens; review the training programme of mediators. The required training time in courses or generally conducting mediation, as a mandatory discipline in higher educational institutions can be increased to train more high-quality specialists. The procedure itself is based on the fact that the parties settle the dispute, avoiding judicial proceedings and supporting a sustainable model of conflict resolution. The results showed that the mechanism is favourable both for the state and for the parties to the dispute and mediators, contributing to the sustainability of dispute resolution practices. Further development of the institute may drain the country’s judicial system, which will increase its effectiveness.

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# *Economic Cooperation and Sustainable Development: Kazakhstan and China's Confidence-Building Measures*

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## *Abstract*

This study aimed to analyse institutional and diplomatic approaches to confidence-building measures in Kazakhstan and China, with a particular emphasis on assessing their impact on regional security and the sustainability of bilateral relations. The research employed methods such as comparative analysis of foreign policy strategies, content analysis of official documents, and an examination of integration processes within the Eurasian Economic Union (EAEU), the Shanghai Cooperation Organisation (SCO), and the Conference on Interaction and Confidence-Building Measures in Asia (CICA). The role of China as a leading economic and geopolitical player in Central Asia was analysed, focusing on its strategy of infrastructure project diplomacy and the use of economic influence mechanisms within the Belt and Road Initiative (BRI). Key challenges identified in the study include border demarcation, water management, Kazakhstan's growing economic dependence on Chinese investment, and the necessity to balance economic benefits with the preservation of strategic autonomy. The study underscores the importance of sustainable development in fostering long-term regional stability and cooperation.

**Keywords:** diplomacy, geopolitics, security, conflicts, partnerships, sustainable management

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## **1. Introduction**

Despite the existing mechanisms of trust between Kazakhstan and China, their effectiveness remains ambiguous. Kazakhstan seeks to balance the interests of various international factors, while China uses a centralised approach in which economic power plays a leading role. This poses challenges for regional security and requires a detailed analysis of trust mechanisms, considering their strengths and weaknesses. The study aimed to analyse the institutional and diplomatic mechanisms of confidence-building measures in Kazakhstan and China, assess their impact on regional security, and identify prospects for their development, with a particular focus on sustainable development.

Previous studies, by D.M. Turtugulova et al. (2024), emphasised that Kazakhstan has a unique geopolitical position in Central Asia, which determines its important role in regional and international processes. B. Zhang et al. (2024) emphasize that China's economic strategy within the framework of the Belt and Road Initiative aims to achieve political aspirations through economic dominance, thereby creating a virtuous cycle for all parties involved. The study by R. Hasanov et al. (2025) underscores the lack of empirical research examining the relationship between renewable energy adoption and manufacturing value added in Kazakhstan. The findings suggest that while progress has been made in renewable energy adoption, substantial challenges persist in achieving effective integration.

G. Birimkulova et al. (2024) emphasized the dual nature of Chinese initiatives in the region, noting that, on the one hand, active economic cooperation with China contributes to the deepening of interstate relations, the expansion of trade and economic cooperation, and the development of transport and logistics infrastructure. On the other hand, researchers highlight the risks of unequal partnership due to the imbalance of economic potential between China and partner countries. S. Kozhirova et al. (2024) emphasized that Kazakhstan, having a strategic geopolitical position in Central Asia, relies on multilateral mechanisms of diplomatic cooperation, such as the SCO, EAEU, and CICA. M. Sarybaev and C. Lai (2024) emphasize that China's foreign policy strategy, focused on large-scale investments and infrastructure projects, has a significant impact on China's economic interaction with developing countries. However, despite the economic benefits, such as increased trade, job creation, and infrastructure

development, the Chinese model raises certain concerns among partner countries, such as excessive dependence on Chinese investment.

G. Duysen and D. Aitzhanova (2024) emphasized that Central Asia is characterized by a multi-layered structure of interactions, where economic, political, and military factors interact, creating a unique context for analysing regional security and stability. At the same time, Baisalbek et al. (2024) demonstrated that trust in the region is often built through institutionalized mechanisms such as the SCO and CICA, which create platforms for negotiation and conflict reduction.

The study aimed to conduct a comprehensive analysis of the trust mechanisms in Kazakhstan and China, incorporating political, economic, and institutional aspects, with a particular focus on sustainable development. The study has identified the following key objectives: to analyse the institutional mechanisms of trust in Kazakhstan and China, to identify their features and impact on regional security; to consider the economic aspect of trust, including investment cooperation and infrastructure projects; to conduct a comparative analysis of the strategies of Kazakhstan and China, using SWOT analysis to identify strengths, weaknesses, opportunities, and threats in a structured manner; and to identify key challenges and propose areas for improving trust mechanisms, with an emphasis on sustainability.

## **2. Materials and methods**

The research utilised a thorough multidisciplinary method to analyse institutional and diplomatic confidence-building initiatives in Asia. The study was conducted in three stages between March 2024 and December 2024. Kazakhstan and China were selected for the study of interaction and confidence-building measures in Asia due to their key role in regional security, economic cooperation and integration processes. Kazakhstan, with its strategic geopolitical position in Central Asia, is an important participant in multilateral initiatives, making it a significant factor in the formation of regional confidence-building mechanisms. China, in turn, is the leading economic and political power in the region, whose foreign policy is characterised by large-scale investment projects and the development of strategic partnerships with neighbouring states. An analysis of these two countries reveals both successful diplomatic and institutional practices and structural problems related to asymmetrical economic opportunities, cross-border resource management and the preservation of strategic autonomy. The time frame for the analysis (2010-2024) was determined based on the availability of statistical data on trade relations between Kazakhstan and

China, the long-term dynamics of China's economic growth and its impact on the region from 2010 to 2024. This highlighted the evolution of economic and diplomatic interactions between the countries.

The study analysed official documents, bilateral agreements and joint initiatives aimed at developing cooperation between the two countries. Strategic programmes, such as Kazakhstan's concept of multi-vector foreign policy and China's BRI, were examined to identify their impact on regional stability (Conference on Interaction..., 2021; Trains-Caspian International Transport Route (TITR), 2023; Bureau of National Statistics..., 2025).

The study included an analysis of the diplomatic instruments used by China to strengthen bilateral relations. The economic aspects of cooperation, including China's investment policy, the nature of cooperation in infrastructure and energy projects, as well as the mechanisms for controlling and regulating these initiatives by Kazakhstan, were emphasised. The issues of Kazakhstan's strategic autonomy in the context of growing economic interdependence, mechanisms for minimising the risks of unequal partnership, and institutional instruments used to protect national interests in bilateral cooperation were considered (Centre for Strategic & International Studies (CSIS), 2018; Ernst & Young Global Limited, 2021; National Bureau of Statistics of China, 2023).

The geopolitical aspects of cooperation were assessed, including the balance of interests between China, Russia and Central Asian countries. The role of international organisations and multilateral forums as instruments of trust to minimise China's asymmetric influence in the region was analysed. The potential risks of Kazakhstan's growing dependence on Chinese investments and technologies, as well as possible scenarios for diversifying Kazakhstan's foreign policy course, were considered (ChinaPower, 2020; Official Information Source, 2023; OECtoday, 2025).

### **3. Results**

#### *3.1. Institutional and diplomatic approaches to confidence-building measures in Kazakhstan*

Sustainable development plays a crucial role in strengthening trust among Asian countries as it fosters long-term and mutually beneficial relationships. By integrating sustainable development principles into economic and political strategies, countries can address current issues while laying the foundation for future cooperation. For instance, joint projects in renewable energy and water resource management enhance trust as they require close

collaboration and mutual understanding among participants. In this context, Kazakhstan, through its active role in promoting sustainable development initiatives, can serve as a model for other countries in the region, demonstrating how environmental and social aspects can be integrated into trust-building strategies.

Economic interdependence theory suggests that countries with strong economic ties are less likely to engage in conflicts due to the high cost of disruptions (Abykeeva-Sultanalieva et al., 2022). When these economic ties are built on sustainable practices, they contribute to long-term stability and trust. Kazakhstan and China can leverage their economic interdependence to promote sustainable development. For instance, joint ventures in green technology and sustainable infrastructure projects can create a robust framework for trust. The BRI can incorporate sustainability criteria to ensure that economic cooperation also addresses environmental and social concerns.

Since gaining independence in 1991, Kazakhstan has been actively promoting initiatives aimed at strengthening regional security and cooperation. One of the key strategies in this direction is the development and implementation of institutional and diplomatic approaches to confidence-building measures, both in multilateral and bilateral formats. Given that Central Asia has traditionally been a zone of geopolitical rivalry between various powers, including Russia, China, the US and the EU, Kazakhstan seeks to act as a moderator of dialogue, which strengthens its international credibility (Karabalaeva et al., 2025; Zhetpisbayev et al., 2017).

Another rationale for the vigorous advocacy of initiatives to foster trust is Kazakhstan's aspiration to enhance its position as a pivotal actor in international diplomacy. One of the first and most significant steps in this direction was the proposal to convene the CICA in 1992 (Speech by the President..., 1992). The CICA has developed a Catalogue of Confidence Building Measures, which includes several key areas of cooperation (Conference on Interaction..., 2021). Military-political confidence-building measures include the exchange of information on military activities, notifications of major military exercises, and measures to ensure transparency in the defence policies of the participating states. Environmental security includes joint projects on environmental monitoring, water management, and combating the effects of climate change (Khan et al., 2025; Krechko and Mikhaylov, 2025.). Given the importance of transboundary water resources for Central Asia, Kazakhstan plays a substantial role in the formation of mechanisms for the collective management of water flows of the Irtysh, Ili and Syr Darya rivers.

Kazakhstan's military and political confidence-building initiatives have effectively averted potential escalations in the area. For example, in 2017,

Kazakhstan signed a Memorandum of Understanding with China in the field of defence (Belt and Road Portal, 2017a), which increased the transparency of military cooperation and reduced tensions on the border. In addition, Kazakhstan is also actively involved in United Nations (UN) peacekeeping initiatives. In 2018, a Kazakh peacekeeping contingent was deployed to Lebanon as part of the United Nations Interim Force in Lebanon (UNIFIL, 2018), which increased international confidence in the country and demonstrated its commitment to global security.

Kazakhstan's economic initiatives within the framework of confidence-building measures have demonstrated their effectiveness. One of the key difficulties is that the measures taken under the CICA are recommendatory, which reduces their binding effect on the participating states. In addition, political competition between major powers such as China, Russia and India make it difficult to reach a common consensus on many regional security issues. A further problem is the necessity to continuously oversee and adjust confidence-building tactics in response to emerging challenges. The threat of cybersecurity has increased, requiring the development of additional coordination mechanisms in this area. Kazakhstan is already taking steps in this direction by initiating discussions on digital security within regional organisations.

The asymmetry between Kazakhstan and China is most critical in economic, political, and military dimensions. Economically, China's dominance through investments and loans, particularly under the BRI, creates a dependency that limits Kazakhstan's economic sovereignty. Politically, Kazakhstan's multi-vector foreign policy contrasts with China's centralized approach, which sometimes pressures Kazakhstan to align more closely with Chinese interests. Militarily, Kazakhstan's smaller military capacity relies on multilateral security frameworks like the SCO and CICA, while China's growing influence in the region, particularly in Central Asia, raises concerns for Kazakhstan's strategic autonomy. This asymmetry challenges Kazakhstan's ability to balance its diplomatic priorities and safeguard its independence in the face of China's expanding power.

Kazakhstan's bilateral relations with China are developing in the context of the national overall foreign policy strategy aimed at multi-vectorism and balancing between the world's leading and regional actors (Table 1). Kazakhstan has traditionally maintained partnerships with Russia, the EU, Turkey, Central Asian states and the United States. However, it is China that is Kazakhstan's largest trading partner and is crucial in ensuring the country's infrastructure and investment development. In 2023, trade between the two countries reached 43 billion USD (Kazinform International..., 2025).

*Table 1 - Key economic indicators of trade relations between Kazakhstan and China*

Year	Chinese exports to Kazakhstan, billion USD	Kazakh exports to China, billion USD	Chinese imports to Kazakhstan, billion USD	Kazakh imports to China, billion USD
2020	8	9.5	10.4	1.9
2021	9.8	10.2	11.3	2.4
2022	12.4	13.4	14.8	3.5
2023	18.7	15.2	16.4	16.7
2024	14.9	15.9	15.1	15.8

*Source:* Compiled by the authors based on OECtoday (2025), Trading Economics (2025a, b), Eurasia (2025).

Analysis of Kazakhstan-China relations is relevant for the assessment of the impact of economic interdependence on regional trust mechanisms. Kazakhstan occupies a strategic position in Eurasia, which makes it a key element of China's BRI. As part of its cooperation with China, Kazakhstan is implementing major investment programmes aimed at modernising infrastructure and developing logistics. For example, China ranks second among Kazakhstan's foreign partners in terms of the number of joint projects, with 62 projects worth 8.7 billion USD (Omarova, 2025). Energy cooperation also remains an important element of bilateral relations: China is actively involved in the development of Kazakhstan's oil and gas fields, which contributes to the diversification of Kazakhstan's export flows. In 2024, 16 bilateral documents were signed, including agreements on the development of twinning relations between the regions of Kazakhstan and the Xinjiang Uyghur Autonomous Region of China (Official Information Source, 2023).

Despite the economic benefits, there are structural challenges to the relationship between Kazakhstan and China. One of them is the risk of economic dependence, as Kazakhstan attracts significant amounts of Chinese investment and loans, which potentially limits its economic sovereignty. In addition, the issue of water allocation of the transboundary Ili and Irtysh rivers remains unresolved and could harm Kazakhstan's agriculture and ecosystem. The social factor is also significant in shaping the perception of Chinese influence in Kazakhstan. Despite official efforts to strengthen bilateral trust, a part of Kazakh society fears the expansion of Chinese capital. This is expressed in protests against the leasing of agricultural land to Chinese companies (Carnegie Endowment..., 2024).

Kazakhstan's involvement in integration initiatives, such as the EAEU and SCO, significantly influences the establishment and enhancement of security measures in the region. The EEU, established in 2015, unites the

member states of Russia, Belarus, Armenia and Kyrgyzstan to deepen economic integration (Musarova and Adamkulova, 2023). The impact of the EAEU on confidence-building measures is to create transparent conditions for interaction between states, which strengthens economic ties and reduces the likelihood of conflict. For example, mutual economic interests, including energy and infrastructure projects, contribute to building mutual understanding and reducing political tensions (Abikenov et al., 2019; Nurekenova et al., 2022). Russia remains Kazakhstan's most important partner within the EAEU, accounting for 91.1% of total trade with the EAEU countries. The share of Kyrgyzstan is 5.5%, Belarus 3.2%, and Armenia 0.2% (Bureau of National Statistics, 2025).

Kazakhstan is one of the founding members of the SCO, established in 2001 together with China, Russia, Kyrgyzstan, Tajikistan and Uzbekistan. The organisation emphasises multilateral cooperation in areas such as security, the fight against terrorism, extremism and drug trafficking, as well as strengthening economic and cultural ties (UN, 2017). Kazakhstan has been actively promoting confidence-building initiatives within the SCO, including the exchange of information on military activities, joint anti-terrorism exercises and coordination of political and diplomatic efforts (Kushenova et al., 2025). These confidence-building measures contribute to strengthening regional security and creating mutual guarantees on security and development issues.

In addition to the EAEU and SCO, Kazakhstan is actively involved in other international organisations that promote confidence-building in Asia. For instance, the Asian Infrastructure Investment Bank (AIIB) finances transport and energy infrastructure projects, which strengthens economic cooperation between countries in the region. Kazakhstan, as an active member of the AIIB, has access to long-term financing, which allows it to develop transport corridors and energy networks, strengthening interstate trust. Kazakhstan demonstrates a high level of institutional adaptation, actively using the mechanisms of international organisations to strengthen trust in the region. The focus on multilateral diplomatic initiatives, such as the CICA, the SCO, and the EAEU, confirms the national desire to build sustainable mechanisms of interaction at various levels, from the military and political to the economic and humanitarian.

Kazakhstan's strategy of confidence-building measures is based on a combination of economic integration, diplomatic dialogue and institution building (Khamzin et al., 2016). The economic interdependence formed within the EAEU and BRI creates conditions for reducing conflict risks, while participation in international anti-crisis initiatives, such as the SCO, helps to minimise security threats, including extremism, terrorism and cross-



border crime (Centre for European Reform, 2017). Nonetheless, despite considerable accomplishments, the efficacy of Kazakhstan's building trust strategy is not unequivocal. The limited binding nature of decisions taken within the CICA and SCO reduces their institutional effectiveness, making it difficult to implement long-term initiatives. In addition, the competition of geopolitical interests in Central Asia, including the influence of Russia, China, the US and the EU, creates additional challenges for Kazakhstan to promote domestic diplomatic priorities.

Kazakhstan's approach to confidence-building measures can be viewed within the framework of strategic neutrality. S. Gunasekara (2024) and M. Szalai (2025) note that small and medium-sized states, being in the zone of geopolitical rivalry, seek to balance between major actors, minimising the risks of involvement in conflicts. Following a multi-vector course, they use dialogue platforms such as the CICA and the SCO to strengthen their diplomatic positions.

Institutionalised mechanisms within regional organisations, as noted by J. Park and A. Adibayeva (2023), provide the region with regular consultations and joint activities aimed at combating cross-border threats. This was confirmed by the present study, demonstrating that data exchange mechanisms within the SCO and CICA reduce the probability of conflict escalation in the region. However, R. Kulnazarov (2024) indicates that the competition between China, Russia and the United States for influence in Central Asia creates difficulties for the formation of common standards of trust. These geopolitical forces are interacting in the region, giving rise to conflicting interests and increasing political instability. N. Nyshanbayev et al. (2024) confirmed that Kazakhstan's vulnerability to external pressure requires a flexible and multi-level system of diplomacy that could balance the interests of all parties. However, the absence of a clear and transparent confidence-building strategy, especially in the context of regional security, weakens the opportunities for constructive engagement and confidence-building both domestically and internationally.

As noted by M. Koçak and G. Yeşilçimen (2024), public perceptions of Chinese influence in Kazakhstan remain ambiguous, as evidenced by protest moods emerging both at the level of individual citizens and organised social groups. This perception is largely shaped by a variety of factors, including economic dependence on China, cultural differences, and Kazakhstan's geopolitical position in the context of Chinese initiatives.

### *3.2. Strategy of trust in regional policy in China*

The People's Republic of China (PRC) is central in the political and

economic architecture of Asia, playing a key role in shaping global and regional economic and political processes. Chinese economic power, rapidly developing industry, and strong foreign trade relations make it one of the leading players in the global economy. However, in addition to economic aspects, China is actively working to strengthen political trust and stability in its region, which is an integral part of its foreign policy. China has significantly strengthened its presence in key international organisations such as the UN and the SCO and is actively promoting initiatives aimed at improving regional and global stability, including the BRI project (Council on Foreign Relations, 2023).

One of the key challenges facing China is the need to balance its growing economic power with regional security. The complex political situation in the South China Sea, territorial disputes with neighbouring states and competition with global powers such as the United States and India require subtle diplomacy and increased confidence-building in the region. Confidence-building measures play an important role in China's strategy.

China recognizes the importance of sustainable development as a key component of its strategy to build trust and ensure long-term stability in the region. By integrating sustainable practices into its economic and infrastructure projects, China aims to foster trust and cooperation with its partners. For instance, the BRI not only focuses on economic interconnectivity but also emphasizes the importance of sustainable and green development. Projects under the BRI increasingly incorporate environmental considerations, such as reducing carbon emissions and promoting renewable energy sources, which helps in building trust through shared environmental goals. Moreover, China's commitment to sustainable development is evident in its efforts to address climate change and environmental degradation through international cooperation. By participating in global environmental agreements and promoting green technologies, China demonstrates its dedication to sustainable practices, thereby enhancing its credibility and trustworthiness on the global stage.

In the field of security, China prioritises diplomatic channels and international legal agreements, striving to build a stable and predictable environment for its economic and political development. Examples include strategic relations with Russia, Germany, African and Latin American countries, where China uses a model of asymmetric dependence, offering infrastructure projects, loans and investments in exchange for access to natural resources, technology markets and political influence. Cultural and educational cooperation is also significant in building trust. China is actively developing academic exchange programmes, opening university centres in foreign countries and attracting foreign students to its leading universities.

Social sustainability emphasizes the importance of cultural exchange, education, and social equity in building trust. Cultural diplomacy and educational exchanges can foster mutual understanding and respect, which are vital for sustainable international relations. Kazakhstan and China can enhance their confidence-building measures by promoting cultural and educational exchanges focused on sustainable development. China seeks to create sustainable mechanisms of trust based on economic power, diplomatic initiatives and cultural exchanges.

One of China's key instruments in building confidence is the BRI, launched in 2013. This programme is a comprehensive strategy for international cooperation aimed at creating a network of trade, transport, energy and digital corridors connecting Asia, Europe and Africa. The main goal of the BRI is to promote global economic interconnectivity through large-scale infrastructure investment, which in turn contributes to the formation of a new geo-economic architecture in which China is a central factor (Council on Foreign Relations, 2023). One of the key aspects of the BRI is the creation of new transport corridors, such as the Silk Road Economic Belt (Belt and Road Portal, 2023a) and the 21st Century Maritime Silk Road (Belt and Road Portal, 2023b), which ensure accelerated logistics development and reduce transaction costs for international trade.

Kazakhstan is central to the implementation of the Silk Road Economic Belt, being a key transit hub between China and Europe (Adamkulova et al., 2025). Due to its strategic geographical location, Kazakhstan has become an integral part of the BRI land routes, which have assisted in the modernisation of transport infrastructure and establishing the region as a regional logistics hub. One of the most significant projects under the BRI was the construction of the Khorgos International Centre for Border Cooperation (Belt and Road Portal, 2017b), which serves as the largest trade and logistics hub on the border between China and Kazakhstan.

China is actively developing military contacts and concluding security agreements with neighbouring states, which is an important element of its strategy to strengthen its position as a regional hegemon. Military cooperation is carried out through the mechanisms of bilateral and multilateral agreements, participation in joint exercises and the provision of military assistance. In addition, China has bilateral military cooperation agreements with several countries in Asia, Africa and Latin America. An example is the agreement with Pakistan, under which China supplies modern weapons, participates in the joint production of military equipment and provides Pakistan with loans for the purchase of defence technologies (Lalwani, 2023). China is also actively developing its naval presence in the Indian Ocean and South China Sea, which is a cause for concern for

neighbouring states such as India, Vietnam and the Philippines. The construction of the naval base in Djibouti was the first example of the deployment of a Chinese contingent outside the national territory, which is indicative of Beijing’s global security ambitions (East Asia Forum, 2020).

In addition to the military sphere, China uses economic instruments of influence, concluding long-term investment agreements, infrastructure contracts and providing loans to partner countries (Işık et al., 2025). An example of economic dependence is Sri Lanka, which, having received a Chinese loan for the construction of the Hambantota port, was unable to service the debt, which led to the transfer of the port to Chinese control for 99 years (CSIS, 2018). This case has become a symbol of China’s “debt diplomacy”, in which countries unable to repay loans are forced to provide Beijing with strategically important facilities (Peter, 2024). China, as a regional hegemon, uses multi-vector mechanisms of influence, including military cooperation, investment agreements, infrastructure contracts and financial support, to expand its sphere of control (Table 2).

*Table 2 - Chinese economic growth and its impact on the region*

Metric	2010	2015	2020	2024
China’s gross domestic product (GDP) (trillion USD)	6.09	11.06	14.6	18.2
China’s share in global GDP (%)	12.5%	15.5%	18.3%	19%
China’s direct investment in Asia (billion USD)	10.3	49.4	13.7	No data available

*Source:* Compiled by the authors based on National Bureau of Statistics of China (2023), Statista (2025a, b), World Bank Group (2025).

Despite its successes, the Chinese credibility policy faces a range of challenges. The growth of Chinese economic and military capabilities is causing concern among international competitors, leading to increased geopolitical tensions. The formation of asymmetric dependencies in the framework of investment initiatives may also generate counteractions from partner countries seeking to diversify their foreign economic relations. In the military sphere, China’s increased presence in key strategic areas has provoked mixed reactions, requiring China to further develop diplomatic channels and contribute to the transparency of its initiatives. The sustainability of China’s confidence-building strategy will depend on its ability to adapt to changing international conditions, maintain a fair balance of interests with partners, and minimise the risks associated with states’ overdependence on Chinese influence.

Analysing China’s and Kazakhstan’s confidence-building measures, it is possible to note both commonalities and differences in approaches to

strengthening bilateral relations and regional security. Both states actively use diplomatic and economic instruments to ensure mutual understanding and stability in the region, but the methods and focus differ depending on their national interests and foreign economic policies.

China and Kazakhstan's common approaches in trust are based on a mutual desire to deepen economic cooperation, which is reflected in numerous projects under the BRI. Nevertheless, there are differences in approaches related to the internal and external challenges of each country. Kazakhstan prioritises stability of strategic autonomy and independence in decision-making, which is often expressed in its desire for multilateral cooperation, through participation in international structures such as the Organisation for Security and Cooperation in Asia (OSCE) and the SCO. In contrast, China, to strengthen its geopolitical position, emphasises centralised leadership and decision-making, which sometimes raises concerns among its neighbours about Beijing's excessive influence on the internal affairs of other countries. A SWOT analysis (Table 3) of the strategies of Kazakhstan and China was conducted to identify their strengths and weaknesses, as well as to assess opportunities and threats that could affect the further development of bilateral relations.

*Table 3 - SWOT analysis of the strategies of Kazakhstan and China*

Factor	Kazakhstan	China
Advantages	Multilateral diplomatic approach, participation in international organisations (CICA, EAEU, SCO)	Economic power, investment programmes, BRI
Disadvantages	Limited economic resources, dependence on external partners	Growing criticism of unequal economic relations and the "debt diplomacy"
Possibilities	Expansion of cooperation with alternative partners (EU, USA, Turkey)	Strengthening of position in Central Asia, further developing infrastructure
Risks	Pressure from major powers, dependence on Chinese investment	Increased geopolitical competition and protectionism on the part of partners

*Source:* Compiled by the authors.

Kazakhstan's key strengths include its multi-vector foreign policy and ability to balance the interests of major geopolitical players. In turn, China's advantages include strong economic potential, large-scale investment programmes and a high degree of institutional stability, which allows Beijing

to effectively use economic instruments as a diplomatic lever. However, some weaknesses may limit the effectiveness of confidence-building measures. For Kazakhstan, this is the risk of economic dependence on external partners, including China. China, in turn, faces challenges related to distrust on the part of neighbouring states that fear its growing influence, as well as the potential overload of investment programmes, which may affect the sustainability of individual projects.

## **4. Discussion**

The findings of Z. Han and M. Papa (2020) and B.T.F. Lee et al. (2024) confirm that Chinese diplomacy is based on a combination of economic influence and political pragmatism, which is particularly evident in its bilateral relations with key partners. Y. Sun et al. (2022) demonstrate that this approach is part of China's broader strategy to create an "economic belt of trust" that reduces the probability of political conflict and strengthens interdependence.

In turn, studies by S.L. Kastner and M.M. Pearson (2021) and M. Zreik (2022) confirm that the BRI not only strengthens China's economic ties with other countries but also serves as a tool of geopolitical influence. However, this also creates risks of "debt dependence", as demonstrated in the studies of M. Himmer and Z. Rod (2022) and F. Al-Fadhat and H. Prasetyo (2024), which analysed the impact of Chinese loans on the economic stability of developing countries. X. Hu et al. (2025) emphasize the lack of empirical research examining the relationship between renewable energy adoption and manufacturing value added in Kazakhstan. The study by D.J. Lim and G.J. Ikenberry (2023) analysed the theoretical foundations and features of the Chinese model of international order, which is being formed in the context of growing geopolitical competition. The Chinese approach is focused on integrating economic mechanisms and diplomatic instruments into the process of shaping a new order. The study emphasises that this order is aimed at protecting China's domestic political and economic model, which is manifested in its practice of international interaction.

## **5. Conclusions**

A study of institutional and diplomatic approaches to confidence-building measures in Kazakhstan and China has revealed both significant achievements and important challenges faced by both countries in their

foreign economic and political practices. Kazakhstan is actively involved in multilateral and bilateral formats of cooperation aimed at strengthening regional security and stability. The country uses international platforms, such as the Conference on Interaction and Confidence-Building Measures in Asia, to deepen trusting relations with neighbouring states. However, despite its successes, Kazakhstan faces several challenges, including dependence on external partners, border demarcation, and water management.

China is executing a strategy of economically driven confidence-building measures, utilising the Belt and Road Initiative as a principal tool for its foreign policy development. This initiative not only contributes to the modernization of transport, logistics, and energy infrastructure in Central Asia but also creates asymmetric economic interdependence, in which partner states become integrated into Chinese value chains. Financial support provided by China in the form of loans and investments is often accompanied by limited transparency of the terms of cooperation, which can lead to the phenomenon of debt dependence and strengthening of Beijing's political and economic influence. China uses geo-economic soft power tools, including infrastructure diplomacy and an investment strategy aimed at creating a sustainable dependence of regional partners on Chinese financial institutions.

Comparative analysis has shown that Kazakhstan pursues a multi-vector foreign policy, while China operates within the framework of a centralized strategy focused on economic dominance. The main challenges remain managing economic risks, balancing foreign policy priorities, and protecting Kazakhstan's strategic autonomy. The analysis showed that Kazakhstan's participation in confidence-building measures helps to reduce political tensions in the region, but the degree of their effectiveness varies. As of 2023, 62 investment projects worth USD 8.7 billion had been signed, highlighting the depth of its dependence on China. Kazakhstan should diversify its national economic partners and deepen cooperation not only with China but also with other countries, including the EU and Central Asian states, which can reduce economic dependence on certain factors and increase resilience to external shocks.

The study faced several challenges, including the limited data available on specific confidence-building measures implemented under multilateral and bilateral agreements. Moving forward, bilateral and multilateral confidence-building mechanisms should be further developed, with particular attention devoted to harmonizing security, economic, and sustainable development interests. Emphasizing sustainable development is crucial for ensuring that the economic and political cooperation between Kazakhstan and China is not only beneficial in the short term but also viable and equitable in the long term. By integrating sustainable practices into their

joint initiatives, both countries can foster a relationship that supports environmental stewardship, social equity, and economic stability, thereby laying a foundation for enduring trust and cooperation.

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# *Exploring Sustainability in State Governance during Crises: A Case Study of Japan and New Zealand*

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## *Abstract*

The purpose of this study was to analyse effective practices of sustainable public governance in crisis management, with a particular focus on Japan and New Zealand. The study was based on public administration in Japan and New Zealand. For the Japanese government, the 2011 earthquake was a crisis event, and for New Zealand government, the COVID-19 pandemic was a crisis event. The study analysed how the Sendai city authorities have been actively involved in modernizing critical infrastructure and residential buildings since the 2011 earthquake and promoting renewable energy programs. In November 2023, within the Sendai Framework for Disaster Risk Reduction 2015-2030, a lecture on earthquake safety was held for Kyoto University students. The Ministry of Education, Culture, Sports, Science and Technology of Japan has been strengthening the earthquake resistance of educational institutions and as of 2024, 100% of schools have been modernized. After the outbreak of the coronavirus pandemic, New Zealand authorities introduced a system of 4 levels of warning, according to which different rules for staying in public places were applied depending on the level of epidemiological danger. The vaccination rate reached more than 80% in a brief period, which enabled the introduction of a traffic light system, according to which, if the population had a vaccination certificate, they could return to their pre-pandemic lifestyle. The study explores how sustainable approaches – such as infrastructure modernization, disaster risk reduction, renewable energy promotion, and inclusive health governance – contributed to long-term societal well-being. The findings emphasize that sustainability-oriented

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strategies in public administration strengthen crisis resilience and enhance national preparedness for future challenges.

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## 1. Introduction

In the modern world, effective public management is the key to the sustainable development of society. Society's dependence on effective public administration becomes even more pronounced in times of crisis. The key to effective anti-crisis management is the preliminary preparedness of government agencies for emergencies. Such preliminary actions may include careful planning, regular training of both civil servants and civilians in responding to certain emergency events, and modelling potential emergencies.

Effective public administration is a foundational element of sustainable development, particularly in times of crisis (Aliyev et al., 2024a; Işık et al., 2024; 2025). The integration of sustainability principles – such as long-term resilience, resource efficiency, and inclusive governance – ensures that state institutions not only respond to emergencies, but also contribute to systemic transformation in line with the UN Sustainable Development Goals (SDGs).

The very notion of a crisis involves a certain amount of chaos and, in some cases, the inability to build effective vertical communication. For this reason, the effectiveness of public administration relies not least on the ability of local communities to act and respond in a coordinated manner (What role does the..., 2024). If the crisis occurred due to an unpredictable epidemiological situation, the main tasks of the authorities may include, for instance, building an “institution of trust” in the authorities, increasing the confidence of the local population in the anti-epidemic measures taken and the quality of the reasoning behind these actions (Responding to COVID-19..., 2024).

One example of a serious challenge for national governments in recent years has been the coronavirus pandemic, the effectiveness of governments' responses to the pandemic can already be observed. Governments with strong institutions and a prominent level of public trust in them coped much better with the pandemic and proved to be more resilient, as they were able to manage many processes in a coordinated manner (To respond to crises...,

2022). In the context of investigating the international practices of effective public management in emergencies and crises, the study analysed the existing sets of strategies, procedures, and mechanisms aimed at rapid response, development of relevant measures, and their coordination for recovery and adaptation to the conditions created by the crisis, which were also covered by O. Odyntsova and H. Kuzmenko (2023). O. Hudyma (2021) investigated the introduction of organizational and technical situational centres in the system of public authorities, which should aim to predict and detect crises, including military ones.

The study also reviewed the findings of S. Khalatur et al. (2020) and the practice of enterprise management during crises in the USA, Japan, China, and the European Union to find effective global experience in solving economic and financial problems. The study conducted a thorough analysis of the mechanisms of technical support for security forces in crises in advanced countries, specifically among the member states of the North Atlantic Treaty Organisation; this issue was also investigated by V. Yemanov (2023). A. Terentieva (2023) addressed the management of the security of the Israeli civilian population in crises and highlighted that the civil defense system requires quality cooperation between central and local authorities to respond effectively to emergency and crisis events. The study analyzed the world experience of investigating the characteristics of healthcare system resilience based on the study of the consequences of the Ebola and COVID-19 epidemics by O.L. Korolchuk (2021). The study reviewed the recommendations of O. Havva (2023) for Ukrainian healthcare institutions, considering the practices of Israel and Japan in meeting the medical needs of territorial communities, and outlining the main challenges of the medical sector in emergencies. L. Danylenko (2022) covered the issue of public administration of educational institutions based on the generalization of international practices in responding to crises, specifically, with the provision of practical cases from Europe, Asia, and the United States, with the relevant consideration of the response of higher state and local government bodies to certain emergencies.

Considering the above, the purpose of this study was to analyse the international practices in responding to, counteracting, and overcoming the consequences of crises through effective public administration.

## **2. Materials and Methods**

The study was based on articles, monographs, and other types of scientific publications, the analysis of which helped to identify the key aspects of

public administration, the typology of crises, as well as the most vulnerable areas of socio-political life. The countries analysed in this study were Japan and New Zealand. Japan is geographically located in a region of active volcanic and seismic activity, and therefore its experience is essential.

In Japan Basic Act No. 223 “On disaster countermeasures” (1961) was adopted. The analysis of this document helped to identify the main aspects of public administration in crisis that are most common in the Pacific region. The Sendai Framework for Disaster Risk Reduction 2015–2030 by the United Nations Office for Disaster Risk Reduction (2015) was important for the analysis, as its provisions helped to identify the activities set out in it that had a qualitative impact on public risk management and disaster recovery in Japan and in developing countries that are located in seismically active regions. An analysis of the Japanese government’s actions under subsidy programs has made it possible to trace the extent to which educational institutions have been modernized to strengthen the earthquake resistance of buildings (Ikeda, 2023). An analysis of the actions taken by the local authorities of Sendai after the 2011 earthquake has helped to outline the key aspects of overcoming the consequences and preventing analogous damage to infrastructure. Attention was drawn to the modernization of sewerage facilities and the strengthening of residential buildings (Earthquake countermeasures in..., 2024; Improvements in the..., 2024).

The study of the New Zealand government’s actions to counter the spread of COVID-19 infection focused on different strategies to overcome the epidemic. In terms of the vaccination rate, it was essential to analyse the messages from the New Zealand Ministry of Health and the information and statistics published by it, COVID-19 Vaccine Data (2024). The New Zealand Government introduced the 'traffic light' regime in 2021 to understand the differences between the two strategies, explore the approved reasons for switching from one strategy to the other, and delve into the specifics of social distancing and staying in crowded places across the 4 alert levels (COVID-19: New Zealand..., 2021; Explained: What the..., 2021). To compare the effectiveness of national governments’ actions during the pandemic, it was useful to consider the statistics provided by the World Health Organization, which specifically addressed the number of deaths per 100,000 people in “Number of COVID-19 deaths reported to WHO, New Zealand” (2024a) and “Number of COVID-19 deaths reported to WHO, Ireland” (2024b). The analysis also addressed the significance of the New Zealand government having an active dialogue with the country’s population. The survey “Royal Commission of Inquiry into COVID-19 pandemic response: What you need to know” (2022) played a major role in this.



### 3. Results

#### *3.1. Prevention and management of natural disasters in Japan*

Japan, located in a region prone to volcanic and seismic activity, has developed a robust governance framework to address natural disasters (Recount with digital..., 2023). This experience is pivotal in understanding how effective public administration practices can enhance crisis resilience and sustainability. The Japanese government's commitment to disaster risk reduction and recovery is demonstrated through its institutional frameworks and proactive policies, such as the Sendai Framework for Disaster Risk Reduction 2015-2030 (United Nations Office..., 2015). These measures emphasise resilience-building, risk-informed planning, and community engagement, key components of sustainability-orientated governance (Caputo and Fasiello, 2024; Murtezaj et al., 2024).

Japan is located within an area with volcanic activity and frequent earthquakes. Generally, up to 90% of earthquakes and 75% of volcanic eruptions occur in this region. Tsunamis and typhoons are not uncommon in Japan (Reza, 2019). In March 2011, a strong tremor occurred near the north-eastern part of Japan, which triggered one of the strongest earthquakes in recent decades and the tsunami. Apart from the thousands of people who died and hundreds of thousands of people who lost their homes, the tsunami triggered an accident at three nuclear reactors at the Fukushima nuclear power plant (NPP), which led to the release of massive amounts of toxic and radioactive substances (Mar 11, 2011, CE..., 2023).

GlobalData's World Risk Report (2023) notes that Japan is among the ten most vulnerable countries to natural disasters and ranks third, behind only China and Mexico. The Basic Act No. 223 "On disaster countermeasures" (1961) adopted by the Japanese authorities has also come into force. Its main tasks were to formulate a public administration action plan for the aftermath, rescue planning, disaster prevention and preparedness. The 2011 tsunami came as a surprise to the Japanese government. Since then, the Japanese parliament has passed a law on creating safe during natural disasters cities (Disaster Management in Japan, 2015).

The implementation of a range of security measures is also related to the adoption of the Sendai Framework for Disaster Risk Reduction 2015-2030 of the United Nations Office for Disaster Risk Reduction (2015) during the Third United Nations World Conference on Disaster Risk Reduction in Sendai, Japan, in March 2015. Under this program, 5 main risk reduction priorities were identified: understanding risks, strengthening risk management, investing in disaster reduction measures, enhancing disaster

preparedness, and implementing of “Build Back Better” during recovery. The modernization of wastewater systems and the implementation of energy-efficient technologies as part of post-disaster recovery can be viewed as integral to environmental sustainability strategies (Karlilar Pata et al., 2025; Nakashydz et al., 2021; Niyazbekova et al., 2021). These efforts represent not just reconstruction, but also transformation.

The program introduced by the United Nations Office for Disaster Risk Reduction (2015) contains many useful provisions. One of them is awareness should be raised among government officials at all levels. For instance, a seminar “Disaster Prevention Training Held for International Students” (2023) was held for Kyoto University with the mediation of the Kyoto Prefectural International Centre and the Sakyo Fire Department. Specifically, the Japanese expert Mr. Seiya Yamamoto from the Kansai Centre of the Japan International Cooperation Agency explained how to obtain truthful and reliable information and what actions should be taken to evacuate to a safe place. Firefighters explained how to respond to an earthquake, and the seminar participants had the opportunity to feel tremors of magnitude six to seven on the Japanese seismic scale. Educational initiatives in this domain enhance individual awareness and foster collective adaptability (Rexhepi et al., 2024b; Umair and Guliyeva, 2025).

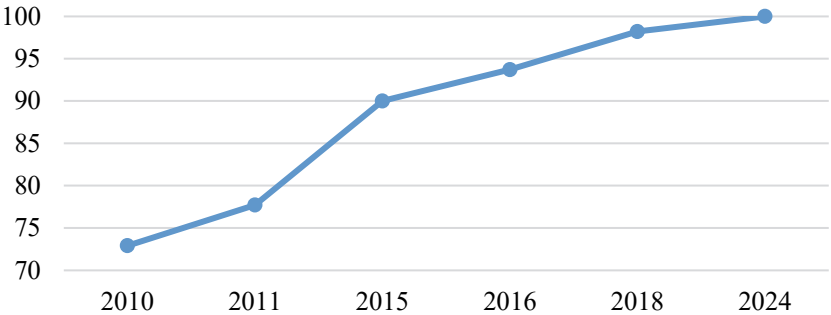
Apart from national and local measures, the United Nations Office for Disaster Risk Reduction (2015) also calls for increased international cooperation with scientists, parliamentarians, and other stakeholders outside Japan. In February 2024, a workshop on improving understanding and management of disaster risks was held in Sofia (Results of the survey..., 2015). The event was organized by the Government of Japan and attended by representatives of all countries of the Balkan Peninsula. One of the cities that suffered the most from natural disasters in Japan in 2011 was Sendai. Sendai city authorities began implementing disaster prevention measures including the rehabilitation of wastewater treatment facilities and the strengthening of buildings. By prioritizing renewable energy, environmental safety, and inclusive education, Japan’s recovery strategy following the 2011 earthquake contributes directly to sustainability at multiple levels (Artykbaev et al., 2024; Markhaba et al., 2024).

Construction of sewerage facilities in Sendai City began in 1899. The importance of earthquake-resistant sewerage structures lies in the fact that their damage caused by lithospheric plate movements can lead to loss of flow functions and complete collapse of traffic (Cholponbek et al., 2025). After being damaged during the Great East Japan Earthquake, the Minami-Gamo wastewater treatment plant, which is crucial for Sendai City, was destroyed

and rebuilt to meet modern earthquake resistance standards. (Earthquake countermeasures in sewage facilities, 2024).

Since the mid-1990s, the city of Sendai has been strengthening seismic insulation of both residential and municipal buildings, carrying out seismic diagnostic measures, and providing subsidies for the repair of wooden houses. From 2004-2022, over 2,400 wooden houses in the city were modernized and strengthened (Improvements in the..., 2024). In line with the experience of damage caused by numerous earthquakes, the Japanese authorities have been actively promoting seismic resilience in public schools over the years. (Figure 1).

*Figure 1 - Percentage of Japanese schools by year with enhanced earthquake resistance*



*Source:* Results of the survey on refurbishment of the earthquake resistance of public-school facilities (2015), M. Ikeda (2023).

The above data shows that even before one of the most destructive earthquakes in 2011, the Japanese authorities were concerned with the issue of protection, adaptation, and strengthening of earthquake resistance in schools. Accordingly, as of 2010, 72.9% of Japanese schools already had the necessary technological basis to withstand the effects of the earthquake (Results of the survey..., 2015). In subsequent years, the Japanese government’s programs have been rapidly strengthening the educational institutions, and as of 2024, 100% of schools in Japan are already earthquake-resistant. The Ministry of Education, Culture, Sports, Science, and Technology continues to work actively and cooperate with victims of natural disasters in the most damaged areas of the country (Ministry of Education..., 2022).

World Bank regularly and systematically collects data on the Japanese government’s efforts in recent decades to improve disaster resilience. World Bank experts reviewed Japan’s national school modernization programs,

earthquake-resistant school buildings program, and other regulations and technical acts to apply this knowledge to developing countries (Integrating Japan's experience..., 2023).

Consequently, the organisation of Japanese disaster management methods has facilitated the creation of two global instruments for disaster control in developing nations. One of them is the Roadmap for Safer and Resilient Schools (2020). This guide is a step-by-step set of recommendations designed to support governments in developing countries. The purpose of the roadmap is to increase cooperation between stakeholders, government agencies, financial institutions, and organizations. The second tool is the "Global Programme for Safer Schools: Library" (2024), which is a unique tool with open access for all stakeholders to information such as taxonomy, catalogue of building types, information on possible vulnerabilities, and data collection tools.

### *3.2. Responding to the COVID-19 pandemic in New Zealand*

Between the end of 2019 and April 2024, more than 775 million cases of COVID-19 were detected worldwide. The lowest number was in Africa, with about 9.5 million, and the highest number in Europe with almost 280 million cases (Number of COVID-19 cases..., 2024). In February 2020, New Zealand confirmed the first case of the disease (Agence France-Presse, 2020). A little later, in March 2020, New Zealand announced that from that moment on, state borders would be closed to anyone who was not a citizen or resident (Roy, 2020). The Prime Minister of New Zealand, Jacinda Ardern, said that she did not want to take any risks, as all 28 cases of the disease were due to people who had arrived from abroad.

A crucial part of New Zealand's pandemic response was the 4-level alert system (COVID-19: New Zealand, 2021). This balanced approach shows how emergency measures can fit into sustainable development. First level: country has coronavirus infection. Up to 100 people can congregate on the second floor. Healthcare recommends public access to businesses, hotels, sports, and entertainment. The second level of alert is safe for children to attend school. Under the third alert level, residents should only leave their houses when required. Businesses could not provide direct consumer service (Bisenovna et al., 2024). Libraries, museums, cafés, restaurants, and sports facilities were closed. The 4th level of alert banned people from leaving their houses unless in emergencies, and schools and other educational institutions went fully remote (Kubiczek et al., 2023).

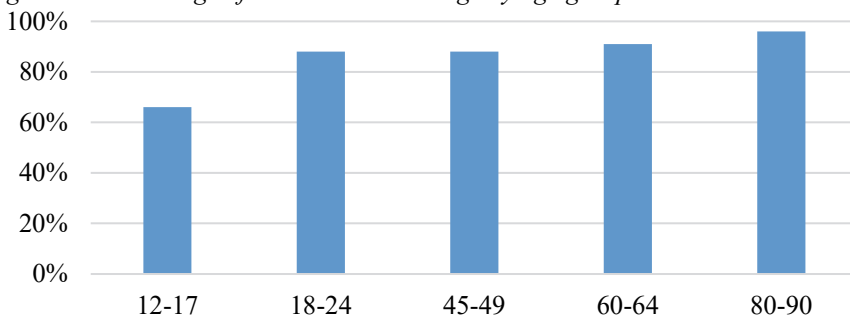
The time gained by the New Zealand government during the severe lockdowns allowed it to improve the system of checking for possible

infection, and the healthcare system could conduct 10,000 tests a day, and in case of a positive result, specialists could warn everyone who had contact with that person (Jones, 2020). Population of New Zealand (83%) was positive about the restrictions (Manhire, 2020). These results are in stark contrast in the G7 countries, where only 54% of the population trusted the actions of public authorities. As the population of New Zealand became increasingly more active in adapting to the reality of the time and increasingly vaccinated, the government introduced a system of “traffic lights”, replacing the lockdown system according to 4 levels of epidemiological danger alerts. Thus, in 2021, certain rules were introduced in the country, according to which the vaccinated population could continue to live as they did before the pandemic (Explained: What the..., 2021). At the red level, hospitality establishments such as bars, cafés, restaurants, and hotels were allowed to open with a vaccination certificate, but restrictions such as wearing masks and a ban on mass gatherings of more than 100 people still applied. People were advised to work from home, schools could only operate if health precautions were followed. At the orange level, the limit of gatherings of up to 100 people was lifted, and hospitality establishments that decided not to use vaccination certificates were closed. The green level means that there are several cases of coronavirus among the population of a community, but fully vaccinated people can live as they did before the pandemic (Ismayilzade et al., 2021; Rexhepi et al., 2024a).

The reported number of coronavirus cases in New Zealand was around 2.5 million between the end of 2020 and April 2024 (Number of COVID-19 deaths..., 2024a). In the same period, Ireland recorded 1.7 million cases of coronavirus (Number of COVID-19 deaths..., 2024b). It appears that Ireland, with a population almost identical to that of New Zealand, has fared much better in the epidemic. However, looking at the number of recorded deaths from the coronavirus, for New Zealand this figure was 3,944 cases, while in Ireland there were almost 10 thousand cases (Number of COVID-19 deaths..., 2024a; 2024b). The epidemiological measures taken by the New Zealand authorities were focused on achieving “zero COVID”, and the key task was to vaccinate the country’s most vulnerable population (Figure 2).

According to statistics provided by the Ministry of Health of New Zealand, the number of coronavirus cases among the population aged 1 to 29 years was about 1 million, while the number of hospitalizations due to the extremely complicated course of the disease was about 7.5 thousand cases (COVID-19: New Zealand..., 2021). For people aged 50 and over 70, the number of cases was about 820 thousand. However, compared to the number of hospital admissions for this age group, it already amounted to more than 26 thousand cases.

Figure 2 - Percentage of vaccination coverage by age group in New Zealand



Source: Compiled by the authors of this study based on COVID-19: New Zealand has 4 alert levels, here's how they work (2021).

In September 2022, the New Zealand authorities cancelled the restrictions that were applied during the so-called “traffic light” regime (Manhire, 2020). Latest medical research and recommendations showed a sharp decline in the number of illnesses and hospitalizations (COVID-19 traffic light..., 2022). This approach underscores the importance of institutional learning and long-term planning in achieving sustainability in crisis response. The number of cases continued to be volatile, there were no dramatic peaks as there were in 2022 (Bornemann et al., 2024).

Members of the Faculty of Public Health at the University of Otago in Wellington and epidemiologists M. Baker and N. Wilson (2022) noted that most indicators of how the New Zealand authorities responded to the spread of the epidemic were among the most successful in the world. Another aspect is the constructive dialogue between the government and the population. In December 2022, the New Zealand government announced the establishment of a Royal Commission of Inquiry into the response to the coronavirus pandemic (Royal Commission of..., 2022). The purpose of the institution was to help both the government and the population prepare for possible future pandemics.

In June 2023, the commission was to move on to face-to-face meetings with healthcare workers, teachers, and others involved in anti-epidemic measures. The chairman of the commission, epidemiologist and professor T. Blakely, said that such actions could be interpreted as election campaigning, and therefore the commission's work would continue after the elections, in early 2024 (Quinn, 2023). As of February 2024, Minister of the Interior B. van Felden stated that the government wanted to expand the scope of the commission and engage the public in discussions about the measures taken during the pandemic (Government mulls expanding..., 2024). The public

consultation period started on 8 February 2024 and lasted until 24 March 2024 (Consultation process timelines, 2024).

The Royal Commission of Inquiry into the Coronavirus Response had received more than 13 thousand responses from New Zealanders from all levels of society sharing their experiences. (Blakely, 2024). New Zealand authorities were approaching an investigation into the impact of the pandemic and the effectiveness of the measures taken. The investigation into the consequences differed markedly from the effectiveness of the measures taken due to the conflict-free form of the commission's work with respondents. New Zealand's inclusive consultation process – via the Royal Commission – demonstrated a sustainability-focused approach to governance by integrating public feedback into institutional learning. The establishment of the Royal Commission of Inquiry and its inclusive consultation process reflect a commitment to transparent, participatory, and accountable governance.

Therefore, the decisions taken by the New Zealand government in the field of public administration contributed to the fastest possible reduction in the number of deaths from coronavirus. Measures proved to be effective in 2020-2021, although they did not help protect against the Omicron coronavirus strain in February 2022 (COVID-19 vaccine data, 2024; COVID-19: Current cases, 2024).

## 4. Discussion

For Japan one of the most pressing issues is natural disasters. N. Mori et al. (2021) also investigated this issue, they also noted the role of active climate change and its impact on tropical cyclones. However, the adoption of relevant legislation that would allow the government to make urgent decisions in the field of security took place only in 1962 with the adoption of Basic Act No. 23 “On disaster countermeasures” (1961). Exploring the issue of natural disasters and the Japanese government's experience in this area, T. Nakasu (2023) also addresses the consequences of the largest typhoon in Japanese history in 1959, which became the catalyst for the adoption of the above act. Findings highlight that sustainability in disaster risk governance cannot be reduced to infrastructural or institutional preparedness alone. It requires multilateral cooperation and long-term strategies (Hadasik et al., 2025; Karlilar Pata and Pata, 2025).

The primary task of the governance was to inform the public about how to behave during natural disasters. M.T. Chaudhary and A. Piracha (2021) explored this issue, noting that disaster management training and education

is an essential part of the curricula in Japan. Japanese government has continued its preferential subsidy programs for local communities. Thus, as of 2024, absolutely all schools in Japan are earthquake-resistant. In the study of K. Shirai et al. (2022), the researchers concluded that previously modernized schools on the island of Hokkaido withstood a seismic activity of 6 points after the 2018 earthquake, with only cracks in columns and walls. K. Kusunoki (2021) reached analogous results, noting the role of the Japanese Ministry of Education, Culture, Sports, Science and Technology in the development of nationwide projects for seismic assessment and rehabilitation of school buildings.

The authorities of Sendai, which was severely affected by natural disasters in 2011, began to develop and implement security measures and projects. O. Murao (2020) noted that government and local disaster recovery strategies have been crucial for the most affected communities. Apart from local actions, the Sendai Framework for Disaster Risk Reduction 2015-2030 of the United Nations Office for Disaster Risk Reduction (2015) has become an important program in preventing and overcoming the consequences of natural disasters.

The “Build Back Better” principle is the basis for learning from past disasters, as well-prepared policymakers, workers, civilians, and other stakeholders will contribute to risk reduction based on the experience of rebuilding affected areas (Aliyev et al., 2024b; Guliyeva, S. 2023; Zhao et al., 2025). The principle of “Build Back Better” is deeply embedded in the philosophy of sustainable development. E. Maly and A. Suppasri (2020) also investigated the implementation of the Sendai framework for disaster risk reduction 2015-2030 and concluded that the overall people-centred and inclusive approach of this program, the global goals, and some of the priorities contribute to the development of good practices in reconstruction and assessment of the progress of reconstruction of destroyed cities and territories. Furthermore, some cities located on the coast and most vulnerable to new disasters are actively implementing the safety standards “Earthquake countermeasures in sewerage facilities” (2024) and “Improvements in the earthquake resilience of wooden houses and apartment building” (2024).

In times of pandemic the New Zealand authorities, took measures to close borders, except for citizens and residents of the country, and then introduced a system of strict lockdowns. J. Gibson (2022) considered this issue in the context of the problem of the New Zealand authorities’ response to the epidemic. In his study, Gibson concluded that in those countries where strict epidemiological measures were implemented after the peak of the disease, they were ineffective in reducing the total number of deaths from the infection.



The use of strict lockdowns was no longer necessary when the number of cases and deaths from infection began to decline. In response, the New Zealand authorities introduced the so-called “traffic light” system, when individual cities or regions could receive a certain level of restrictions. The transition to a new strategy to combat the infection was because the majority of the New Zealand population had been vaccinated and to continue the country’s economic development during the crisis, the traffic light system became the most effective. L.A. Taylor et al. (2024) investigated the impact of this system and overcoming infection-related mortality, focusing on its impact on higher education staff. They concluded that although the staff of the schools was dealing with considerable changes, they were proud to continue to adapt to the pandemic realities within the framework of the “traffic light”.

The actions of the New Zealand authorities led to a rapid vaccination of the vast majority of its population. Most people responded positively to the vaccination measures. N. Steyn et al. (2022) put forward a thesis that confirms the effectiveness of mass vaccination of the population, which was done in New Zealand. Using the modelling method, the researchers emphasized that a progressive reduction in risk occurs as vaccination coverage increases, e.g., 90% vaccination among children over 12 years of age reduces the risk of an outbreak in a community by 3 times. A.H.Y. Chan et al. (2024) analysed the effectiveness and involvement of the population in the vaccination process. The researchers’ study was based on a survey of 611 respondents from New Zealand, 99.2% of whom had received at least one dose of the vaccine.

The review of the findings of other researchers helped to compare the results of the present study and confirm the effectiveness of public administration in Japan and New Zealand. In terms of the effectiveness of state governance in New Zealand, researchers have believed only governments with strong institutions can effectively overcome the consequences. The analysed practices of the New Zealand government have shown that actions were taken to severely restrict the rules of behaviour in public places, but at the earliest opportunity, the vaccinated population was able to return to their normal lifestyle. Overall, the two national case studies confirm that governance models informed by sustainability are more effective in managing crisis impacts and guiding societies.

## 5. Conclusions

The study confirmed that sustainability-oriented governance not only

mitigates risks but also fosters inclusive and adaptive development trajectories.

The research emphasized that the Sendai Framework for Disaster Risk Reduction (2015-2030) serves as a key tool not only for managing and mitigating the impacts of natural disasters, but also for promoting sustainable development through risk-informed planning, resilient infrastructure, and community engagement. Japan's efforts after the 2011 disaster reflect a clear commitment to sustainability, as evidenced by the modernization of water treatment and sewage systems, the seismic reinforcement of residential structures, and the implementation of nationwide subsidy programs to ensure the earthquake resistance of all educational institutions.

In the case of New Zealand, the study identified several elements of sustainability-oriented governance, including flexible public health management, evidence-based decision-making, and public trust-building. Transparency and inclusivity are not only external facilitators of governance, but they also constitute intrinsic dimensions of resilience. These qualities contribute directly to the adaptive capacity of a society by fostering a sense of collective responsibility, enhancing social cohesion, and enabling timely, informed decision-making. As integral components of resilient governance, they ensure that policy measures are not only accepted but also effectively implemented in the long term, promoting continuous learning and adaptation. By embedding transparency and inclusivity into crisis management practices, governments can strengthen societal trust and bolster resilience against future challenges.

The phased system of alert levels and the subsequent “traffic light” framework allowed for targeted interventions that minimized disruption while preserving essential services. The rapid vaccination of more than 80% of the population and the government's transparent dialogue with citizens – facilitated through the Royal Commission of Inquiry – exemplify participatory and inclusive governance practices aimed at enhancing societal preparedness and institutional learning. These approaches contributed to both effective crisis response and the strengthening of democratic resilience. The findings indicate that integrating the principles of sustainability into public governance enhances national capacities to respond to crises in a coherent and future-oriented manner.

Among the limitations of the study is the absence of the final report from the Royal Commission of Inquiry into New Zealand's pandemic response, expected in September 2024. Future research should incorporate this document, as it will likely offer valuable policy insights and recommendations relevant to sustainable crisis governance. In addition, a comparative analysis involving other countries with high disaster risk

exposure – such as China, Mexico, and island nations in seismically active regions – would enrich the global perspective on sustainability-driven public administration in emergencies.

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# *Sustainable Security in Central Asia: Kazakhstan and the Shanghai Cooperation Organisation (1996-2011)*

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## *Abstract*

This paper investigates Kazakhstan's position in the Shanghai Five and Shanghai Cooperation Organisation (SCO), focussing on multilateral security mechanisms and sustainable regional development. This study uses qualitative analysis of SCO documents, legal texts, and United Nations Office on Drugs and Crime data to examine Kazakhstan's role in regional security and sustainable development. It was noted that the main objectives of the “five” in the 1990s were to establish trusting relationships to prevent military and border conflicts in Central Asia. It is analysed that separatist rallies took place in the northern regions of Kazakhstan in the mid and late 1990s, but the provisions of the Shanghai Convention on Combating Terrorism, Separatism, and Extremism helped to minimise separatist phenomena in Kazakhstan. The provisions of the Agreement of the SCO in 2004 became important for such changes, where a role was given to the development of a health protection system. Counteraction to the transportation of narcotic substances in Kazakhstan was extremely weak since 730 kg of heroin were seized in 2009 and 323 kg – in 2010, considering 70-75 t of heroin that arrived in transit to Kazakhstan in 2010. The findings reveal that Kazakhstan's SCO engagement shows a regional cooperation model that links security governance to sustainability, resilience, and equitable development. The data also shows that institutional corruption and law enforcement's ineffective narcotics control continue to impair sustainable outcomes.

**Keywords:** Regional Security, Institutional Resilience, Transit of Drug Trafficking, Sustainable Development, Transnational Threats, The Afghan Factor.

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## Introduction

Regional and global security is a key aspect in the work of many international organisations, including the Organisation for Security and Co-operation in Europe (OSCE), the North Atlantic Treaty Organisation (NATO), and the Organisation of American States (OAS). Security in each individual region, be it Europe, Africa, or the Middle East, is critical to ensuring security on a global scale, all over the world. Historically, Central Asia (CA) is a region located at the crossroads of routes between East and West and borders areas of frequent conflict and insecurity, such as Afghanistan and Iran. During the Cold War, this region was practically not marked by substantial security events, but in the 21st century, CA has simultaneously become an energy hub for a number of states, in particular China, and a transit zone for the development of criminal, especially religious extremist activities. The increased attention to this region after the September 11 terrorist attacks in New York in the context of security is used as an arena for playing power politics by external players (Makarenko, 2010).

The process of disintegration of the Union of Soviet Socialist Republics (USSR) and the formation of new, independent and sovereign actors of international relations on the world stage, including in CA, certainly led to a series of problems in regional security. Weak governance and lack of experience greatly complicated the creation of high-quality political institutions, which is a distinctive feature of most states of the former USSR (Galymzhan et al., 2020; Mukhamadiyeva, et al., 2017; Spytska, 2023). In addition, many ethnic tensions arose, which even led to the civil war in Tajikistan (Pannier, 2017a), where, according to various estimates, 20,000 to 150,000 people died (Pannier, 2017b; RFE/RL, 2021). In addition, substantial consequences for the CA states at the end of the 20th century were economic instability and cross-border threats such as drug trafficking, weapons. These challenges not only undermined regional peace but also impeded pathways toward sustainable development by destabilising institutions, health systems, and economic cooperation. Such a tense situation in the region contributed to the search for the most optimal solution to new security problems. The formation of the Shanghai Five, and after that, the Shanghai Cooperation Organisation (SCO), became revolutionary for the states in CA after gaining independence since multilateral meetings provided an opportunity for the leaders of the CA countries to conduct a direct dialogue on various issues. Over time, the SCO began to address a broader agenda, including public health, environmental risks, and development cooperation, aligning with the principles of sustainable regional governance

(Apakhayev, et al., 2018; Kalaganov et al., 2018; Smagulova, et al., 2018). The fundamental changes in international relations in the 1990s, in particular, the changing balance of power, the tense geopolitical situation in Eurasia, along with the active processes of globalism and regionalism, had a strong impact on the formation of a modern security structure in the region (The role of the SCO..., 2021).

The former Permanent Representative of the Republic of Tajikistan to the SCO noted that the SCO is not a classic example of a traditional alliance (Alimov, 2018). The institutional feature of the organisation, which consists in consensus decision-making, emphasises the equality of all member states, regardless of their potential and capabilities. Due to this, the example of the SCO's activities shows not only how different in size, influence, paradigms of public administration and national and cultural characteristics of the state can coexist but also how favourable conditions are created for the development of dialogue between civilisations to achieve a mutually beneficial result (Khamzina et al., 2020; Ketners, 2025). Islamova (2020) and Auanasova (2023) analysed the history, goals, and objectives of the SCO, the practical importance of the organisation for the government of Kazakhstan, and bilateral projects and programmes. The partnership relations between Kazakhstan and the SCO member states in the field of education, in particular, student exchange programmes, exchange of experience among pedagogical specialists, are analysed. Studies by Kozhirova (2022), and Sarsenbayeva and Kuldibaev (2023) considered this problem. The international legal aspects of the fight against bioterrorism and the role of the efforts of the Government of Kazakhstan within the framework of the SCO anti-terrorist structure were examined. The importance of the government of Kazakhstan being an active participant in building a security architecture in the region to strengthen its geopolitical orientation is investigated. This architecture, increasingly responsive to transnational threats, also became essential for promoting the long-term sustainability of socio-economic systems in the region (Kushenova et al., 2025). The above questions were the domain of analysis by researchers such as Doshmanov (2021), and Joldybaeva, and Abikenova (2020).

Based on the above, the purpose of the study was to analyse the security problems in CA, in particular, in Kazakhstan, the role of structures involved in ensuring security in the region and the contribution of the Government of Kazakhstan to their development. The objectives of the study were the identification and assessment of risks and threats in the field of security and how these challenges affect the prospects for sustainable development, the analysis of the regulatory framework, and the examination of data from international organisations in the field of security in CA.

## Materials and Methods

During the study, materials published by the SCO press service (Information message on the..., 2010; Anti-terrorist exercise..., 2011) were reviewed. This helped to identify the key stages in the development of cooperation and the role of the Government of the Republic of Kazakhstan in approving the fundamental principles of security in the CA region. The key regulatory documents of the initial period of the Shanghai Five's existence were analysed, namely the Agreements between the heads of the Republic of Kazakhstan, the Kyrgyz Republic, Russia, the Republic of Tajikistan, and the People's Republic of China in 1996 and 1997 (Law of the Republic..., 1996; 1997). By analysing the publications of the online publication Orda and the regional division of the Radio Free Europe "Radio Azattyk" media corporation (Alieva, 2023; Tokayeva, 2011), important security issues for the Government of Kazakhstan in the 1990s and 2000s, including separatism and terrorism, were identified. Based on this, the Shanghai Convention on Combatting Terrorism, Separatism, and Extremism (2003) and the Shanghai Cooperation Organisation Convention Against Terrorism (2009) were analysed.

The basis for understanding the effectiveness of the SCO's activities in the areas of illicit drug trafficking was data from the United Nations Office on Drugs and Crime in CA in 2010-2011, which allowed identifying critical security issues for the government and society of Kazakhstan (Trafficking in opiates..., 2012). It was also important to analyse the statistics of the number of drug-addicted citizens of Kazakhstan before and after the adoption of the SCO Agreement on Cooperation in Combating Illicit Drug Trafficking, psychotropic substances, and their precursors (The program on counteracting..., 2001; Drug treatment to..., 2015; Agreement between member..., 2004).

Since drug trafficking was also a concomitant problem of drug addiction among the population of CA states, reports in the mass media of Kazakhstan in 2011 on the suppression of attempts by organised criminal groups to transport narcotic substances were analysed (Kosenov, 2011).

## Results

Since the newly formed CA states have been extremely unstable in political, social, economic, and security terms since the early 90s, within the framework of the first meeting of the Shanghai Five in 1996, the ratification of the Agreement between the Republic of Kazakhstan, the Kyrgyz Republic,

Russia and the Republic of Tajikistan and the People's Republic of China on confidence-building in the military field in the border area (1996) were signed.

The second landmark international legal document signed within the framework of the second meeting of the Shanghai Five in 1997 was the ratification of the Agreement between the Republic of Kazakhstan, the Kyrgyz Republic, Russia, the Republic of Tajikistan, and the People's Republic of China on mutual reduction of armed forces in the border area (1997).

Ensuring security on the territory of Kazakhstan is directly related to security in neighbouring countries. In 1996, the Islamic Movement of Uzbekistan (IMU) was founded in Uzbekistan (Gozii, 2014), whose main task was to overthrow the secular regime in Uzbekistan and create an Islamic state in its place. In this context, the subsequent meeting of the heads of the "five" in 1998 was important, where the parties focused on security issues, noting the substantial contribution of the international legal documents signed earlier and agreeing to continue to adhere to the new concept of security, which was actively developing after the end of the Cold War (Dossier on the SCO..., 2006).

The problem of separatism in Kazakhstan was a political reality that the state faced immediately after the declaration of independence. For example, in 1994 in Ust-Kamenogorsk, about a thousand people rallied under the slogans of creating Russian autonomy, approving the status of the Russian language as the state language, and demanding the introduction of dual citizenship (Alieva, 2023).

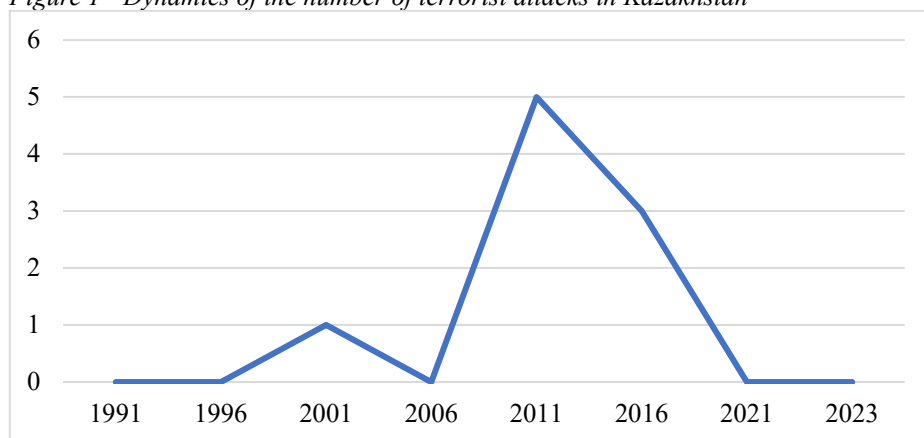
Later, in 1996, Kazakhstan faced a significant separatist attempt in the city of Ust-Kamenogorsk, where a group of Cossack military organisations, including the Union of Cossack Forces of Kazakhstan, rallied for autonomy. The group demanded the recognition of the Russian language as the state language and the establishment of dual citizenship, aiming to create a new type of 'Abkhazia' on the territory of Kazakhstan. In response, the government of Kazakhstan took swift and decisive action, deploying security forces to prevent the escalation of the unrest. The authorities conducted targeted arrests and implemented a series of legal measures to disband the separatist organisations. These efforts successfully minimised the development of separatist sentiments, ensuring no further such incidents occurred in the country. This early intervention was crucial in preserving national unity and stability. However, as mentioned above, ensuring national security is directly related to the broader situation in the region. Based on this provision, the Shanghai Convention on Combatting Terrorism, Separatism, and Extremism (2003), laid the foundation for further preventing

the development of separatist movements both in the region and in Kazakhstan, in particular. Political stability, social cohesiveness, and regional integrity were all supported by the institutionalisation of anti-separatist cooperation through legal norms.

In 2001, the Shanghai Five formally transitioned into the SCO, marking a significant evolution in the group's role and objectives (Declaration on the Establishment..., 2001). This change was crucial because the SCO began to address issues of economic, cultural, and wider regional security in addition to border security and military cooperation. Furthermore, Uzbekistan's admission as a full member expanded the organisation's reach and impact. The signing of the Charter of the SCO (2002), which created a more formal and long-lasting framework for member state cooperation, cemented the SCO's official formation.

The problem of the spread of terrorism in the CA region was one of the priorities of the Regional Anti-Terrorist Structure (RATS) of the SCO, established in 2002 (Agreement between the..., 2002). It was a valuable experience for the government of Kazakhstan to conduct counter-terrorism exercises "Interaction-2003" on the territory of its state (The SCO counter-terrorism..., 2003). These exercises were conducted in accordance with the above-mentioned Agreement (Shanghai Convention on..., 2003), and their purpose was to coordinate joint actions in the interests of the SCO member states. Among the proven mechanisms of interaction were the organisation of combat operations, landing, coordination of staff officers, blocking terrorist groups. Therewith, terrorism was not an acute problem for the CA states, especially Kazakhstan (Figure 1).

*Figure 1 - Dynamics of the number of terrorist attacks in Kazakhstan*



Source: Created by the authors based on Global Terrorism Index by the Institute for Economics and Peace (2024).

The greatest activity of terrorist activity in Kazakhstan since the approval of the “five” and after the SCO until 2011 was recorded in 2011. The Jund al-Caliphate group claimed responsibility for a series of terrorist attacks (Glushkova, 2011), and later it was confirmed by the Prosecutor’s Office of Kazakhstan (Tokayeva, 2011). Shortly before these terrorist attacks, the Shanghai Cooperation Organization Convention Against Terrorism (2009) was adopted in 2009. In it, the SCO member states, being deeply concerned about the escalation of international terrorism and recognising that crimes cannot be justified under any circumstances, pledged to increase the effectiveness of cooperation against terrorism. However, the Parliament of the RK ratified the SCO convention against terrorism (2010) only at the end of the year.

According to the UN (A knowledge-based approach..., 2023), Afghanistan has been and continues to be one of the world’s largest producers of heroin and methamphetamine. By the end of 2000, the number of injected drug users registered with rehabilitation services in Kazakhstan amounted to 250,000 people and an increase in cases of injected drug addiction was recorded annually, from 90 in 1996 to 250 cases per 100,000 population in 2000 (The program on counteracting..., 2001). However, by 2013 (the earliest available information), the number of people who inject drugs had decreased to 25,480 people (Drug treatment to the..., 2015).

The territory of Kazakhstan, which is the last transit zone before narcotic substances enter the final consumption market in Russia, as of the end of the 2000s, there was a tendency to extremely low volumes of drug seizures, – follows from the report of the United Nations Office on Drugs and Crime (Trafficking in opiates in..., 2012). On average, with the exception of a jump in 2008, in 2010-2011, drug seizures in Kazakhstan accounted for less than 1% of the total estimated flow entering the country (Figure 2).

The low level of seizures on the territory of Kazakhstan was partly explained by the rather long 3,600 km border and the difficulty of patrolling it. The risk of being caught was extremely low since the possibility of detection in the border areas, bypassing official checkpoints, was small. The same report stated that during a visit by the UN Office on Drugs and Crime to the northern Kazakh border, border guards noted that it was not uncommon for the scanner of Kazakh border guards to detect nothing, while large quantities of drugs were subsequently seized on the other side of the border (Trafficking in opiates in..., 2012).

Figure 2 - Heroin seizures in CA 2010-2011



Source: Created by the authors based on Trafficking in opiates in northern Afghanistan and CA: A risk assessment (2012).

One of the ways to transport drugs was to hide them in products, often in vegetables or fruits. Therewith, for the Government of Kazakhstan, the export of these products was not of economic interest, which meant that the largest part of fruits and vegetables came from other CA states (Trafficking in opiates in..., 2012). It was precisely these methods that illegal criminal formations used to hide hundreds of kilogrammes of narcotic substances in trucks transporting fruits. Smugglers actively used international legal aspects within the framework of the Customs Convention on the International Carriage of Goods (About the TIR Convention, 2015). According to the convention, goods must be transported in reliable vehicles or containers, which should completely exclude the possibility of access to the cargo without damaging seals.

By the end of 2004, the SCO Agreement on Cooperation in Combating Illicit Trafficking in Narcotic Drugs, Psychotropic Substances, and Their Precursors was signed between the parties (Agreement between member..., 2004.). The provisions of the Agreement indicated concern about this problem; therefore, further activities were aimed at coordinating relevant national bodies and ministries, public and other organisations, and other subjects of regional cooperation to combat drug trafficking. The report of the United Nations Office on Drugs and Crime noted (Trafficking in opiates in..., 2012) that substantial efforts and initiatives in the field of countering illicit drug trafficking have been undertaken by many regional and



international organisations, including the SCO. However, such cooperation often remained at the rhetorical level when specific actions were required.

The efforts of the Government of Kazakhstan, along with active work within the SCO, have not led to a solution to the problem of transportation of narcotic substances in CA. In 2009, law enforcement agencies seized only 730 kg of heroin, and in 2010 – 323 kg. As of November 2011, only 93 kg of heroin had been seized (Kosenov, 2011), although by the end of 2012, these figures had increased to 137 kg of heroin (Information bulletin on..., 2013). In total, in 2011, almost 34 t of drugs were seized by all services responsible for combating illicit drug trafficking. However, these figures were still scanty, given the figures of 70-75 t of heroin that arrived in transit from Kyrgyzstan in 2010 and subsequent years (Trafficking in opiates in..., 2012).

In October 2010, a meeting of the general prosecutors of the SCO member states was held in the Chinese city of Xiangmen, and the delegation of Kazakhstan was headed by Prosecutor General Kairat Mami (Prosecutors General of the..., 2010). The meeting resulted in the signing of a protocol confirming the readiness of the SCO member states to continue strengthening cooperation between prosecutor's offices in the field of combating terrorism, extremism, and separatism, a different range of transnational threats, including drug trafficking, for which it was proposed to create a mechanism for regular meetings of prosecutors of the SCO member states. The aforementioned Prosecutor General of Kazakhstan, Kairat Mami, noted shortly before the meeting that the generalisation of judicial practice and the exchange of experience qualitatively helps to establish the integration process between the SCO member states and best contributes to solving security problems in the region (Yumashev, 2008). He also stated that the decision to hold annual meetings of representatives of the judicial system within the SCO was overdue by itself since an effective solution to the problems arising in the region is possible only with the participation of all SCO members with international coordination of national legislations and the adoption of uniform documents binding on each of the parties.

Already in June 2011, the right to receive the Attorneys General of the SCO member states passed to the then-presiding Kazakhstan (Consolidation is needed in..., 2011). At that time, the newly appointed Prosecutor of the Republic of Kazakhstan, Askhat Daulbayev, noted that only joint efforts and cooperation of law enforcement agencies are the key to success in countering organised crime. In total, exactly one year after the meeting of the Council of Heads of State of the SCO Uzbekistan (Information message on the..., 2010), which was marked by the transfer of the right of chairmanship in the

organisation to representatives of Kazakhstan, in June 2011, Astana hosted a meeting of the PRC (Astana hosted a meeting of..., 2011). During the meeting, the heads of the SCO member states noted with high appreciation the period of the presidency of the Republic of Kazakhstan in the SCO in 2010-2011.

Nursultan Nazarbayev, the former President of the Republic of Kazakhstan, in June 2011 noted the contribution (N. Nazarbayev voiced at the..., 2011), which, over the 10 years of its existence, has brought the SCO to the region of CA, Kazakhstan, and the general world order. In particular, under the motto of the Kazakh presidency, “Ten years on the path of security and cooperation”, more than 110 joint events, anti-terrorist exercises, and the signing of documents strategically important for the security of the region were held and the efforts of the SCO member states had a substantial impact on the process of resolving problems with Afghanistan. In addition, Nursultan Nazarbayev proposed the introduction of concepts that were revolutionary for international relations in the region at that time, such as the electronic border, electronic sovereignty, and put forward the idea of creating a new special SCO body like a Cyberpol. In addition, the Kazakh leader brought to everyone’s attention specific supranational goals that meet key trends in the development of the world for the next decade, namely, the creation of a Meeting on the settlement of territorial and regional conflicts within the SCO, a single transport and energy space, a Water and Food Committee and a Development Fund to finance joint projects and innovations, and an Emergency Council and a single SCO Forecasting Center with the ability to develop forecasts for the development of the region until 2030 and 2050.

An important achievement in the fight against illicit drug trafficking during the period of Kazakhstan’s chairmanship in the SCO was the continued strengthening of cooperation between the SCO member states. This includes the adopted in 2011 in Astana, the Decision of the Council of Heads of State of the Shanghai Cooperation Organisation “On Approval of the Anti-Drug Strategy of the Member States of the Shanghai Cooperation Organisation for 2011-2016” (2011), confirming its commitment to preventing the negative impact of this threat in the CA region and, in general, to ensure sustainable development in the SCO space. The substantial role of the Government of Kazakhstan in ensuring security in the region was repeatedly confirmed in 1990 and 2000.

A substantial event of the summit in July 2024 (Kazakhstan completes chairmanship of..., 2024), at which the right of chairmanship in the SCO was transferred from Kazakhstan to the PRC, was the adoption of the document “On World Unity for Just Peace and Harmony, which will help in

promoting and consolidating international efforts to resolve conflicts in various regions of the world. This document was proposed by the President of Kazakhstan at the Delhi Summit (Seilekhanov, 2023).

In total, since the approval of the Shanghai Five, the Government of Kazakhstan has actively participated in building a security system in the region and has made a great contribution to preventing the development of the “three evils” – terrorism, separatism, and extremism. The peak period was 2010-2011 when the right to chair the organisation passed from Uzbekistan to Kazakhstan. During this period, many events were held under the chairmanship of the Kazakh side, ranging from anti-terrorist exercises to scientific and practical conferences. What is also important is that the Kazakh authorities were also awarded the right to chair the OSCE, which added to the acquisition of additional experience, which was subsequently used to ensure security within the SCO. The right of Kazakhstan’s representatives to chair the SCO in 2023 has once again shown the intentions and active actions of the Government of Kazakhstan within the framework of the SCO to ensure both regional and international security. Kazakhstan’s strategy increasingly included developmental aspects in addition to traditional security accomplishments, placing a strong emphasis on regional cooperation, institutional strengthening, inclusive policymaking, and strategic foresight. This approach reaffirms that peace and stability are not only ends in and of themselves but also necessary prerequisites for equitable and sustained regional advancement, bringing security efforts into line with the larger objectives of sustainable development.

## Discussion

During the analysis, it was established that in the period from 1996 to 2001, there was an association called the Shanghai Five. The initial tasks of the association were to strengthen confidence in the military field and the reduction of armed forces in the border area, fixed by the relevant agreements in 1996 and 1997 (Law of the Republic..., 1996; 1997). T. Pradt (2020) also analysed the activities of the Shanghai Five as the predecessor of the SCO in the field of confidence-building and security in the CA region, noting the goals of the “five” similar to the results of the study. The organisation’s activities were focused on rapid response to certain events in the regional security system. Founded in 1996, the IMU posed the greatest threat to the secular regime in Uzbekistan (Pannier, 2017b), but unrest and tension in any of the CA states could negatively affect public sentiment in Kazakhstan.

The problem of separatism in Kazakhstan took place in the 1990s in a number of cities and regions of the state, but the measures taken at the state level helped to prevent this threat from spreading more than at the local level. In this regard, it is important that, as in the case of the IMU, the stability of the region depended on the general regional order (Auanasova et al., 2024; Bekishev et al., 2019). For the government and for the society of independent Kazakhstan as a whole, the Shanghai Convention on Combatting Terrorism, Separatism, and Extremism (2003) was one of the fundamental documents containing specific mechanisms to prevent threats and overcome the consequences of separatist sentiments both in the region and in the state.

During the existence of the Shanghai Five and the SCO, representatives of Kazakhstan took part in many events aimed at training armed personnel and other law enforcement agencies to counter terrorist attacks. Among them, the experience gained during counter-terrorism measures on the territory of Kazakhstan itself is notable, namely the exercises “Interaction-2003” and “Peace mission 2010” (The SCO counter-terrorism..., 2003; Trafficking in opiates in..., 2012). Such security measures were a consequence of the above-mentioned Convention, and their purpose was to work out cohesive and coordinated actions of the structural units of the five SCO member states (Shanghai Convention on..., 2003). The analysis of counter-terrorism mechanisms was the basis for the study conducted by S. Rauf (2020). Researchers noted that since terrorism was increasingly becoming a problem for each SCO member state, it was decided that this problem should be solved collectively, which subsequently helped prevent hundreds of terrorist attacks. Although terrorism was not the main threat to the states of the CA region, as evidenced by the study data (Figure 1), timely response and proper regional management contributed to the formation of an immediate response in the event of a terrorist threat. Despite this, in the autumn of 2011, a number of terrorist attacks occurred in Kazakhstan (Tokayeva, 2011), which, however, some research organisations called internal political and clan struggle.

An urgent problem for the then Government of Kazakhstan was the widespread and massive use of injected drugs by the population (The program on counteracting..., 2001). A large proportion of them came from Afghanistan, which has been one of the largest suppliers of opiates and heroin worldwide. The territory of Kazakhstan and the rest of the SCO member states was used as a transit zone for transporting illegal goods to the final consumer on the territory of Russia. In Kazakhstan in the early 2000s, estimates of the number of drug addicts varied, but on average, their number reached 250,000 people (The program on counteracting..., 2001), which was a catastrophically large number for the health system. Akhtar and Javaid

(2024) also note the important role of the SCO member States in countering the illicit distribution of narcotic drugs and supporting efforts to stabilise Afghanistan in the early 2000s. In total, the results of the authors' studies confirm the thesis put forward about the importance of the government of Kazakhstan developing high-quality relationships within the organisation, which contributed to strengthening both the regional security system and helped solve the state's internal problems. This integrated approach offers a model for tying security governance to sustainable development pathways by tying public health reform and institutional development to transnational security threats.

Despite a series of decisions taken within the framework of the SCO, in Kazakhstan at the end of the 2000s, the scale of drug seizures was extremely small compared to other states in the CA region. This, according to a report by the United Nations Office on Drugs and Crime (Trafficking in opiates in..., 2012), was the result of a number of reasons, ranging from the length of the northern border of 3,600 km and the inability to control every section of it, the lack of a sufficient number of high-quality scanners at checkpoints, ending with the corruption of border services. S. Biswas (2021) addresses a different important aspect of the presence of illicit drug trafficking in the CA region. The researcher noted that drug trafficking has almost completely destroyed the governance architecture in the region and, thus, made states vulnerable to all non-state actors involved in the drug trade, with the exception of the architecture of public administration in Kazakhstan. Due to the focus of the subject, the rest of the states of the CA region were not examined, nevertheless, even for the government of Kazakhstan in the late 1990s and 2000, the problem of injected drug use by the population and their transportation by organised criminal groups across the territory of the state remained relevant and countering these threats was extremely weak. This demonstrates that even though Kazakhstan made great institutional strides, more systemic changes were required to bring security results into line with the more general ideas of accountability, transparency, and development-oriented planning.

The development of multilateral cooperation within the SCO has also actively contributed to the strengthening of bilateral relations between the member States. For example, in 2003, a summit meeting of the heads of state of Kazakhstan and China (Joint Declaration of..., 2003) was held, in which a number of agreements were reached in the field of further maintaining security in the region and, in particular, an agreement not to conclude agreements with third countries that could damage the sovereignty and territorial integrity of the parties.

The period of Kazakhstan's chairmanship in the SCO in 2023-2024 was marked by a number of important decisions in the field of security, such as updating already implemented strategies and the development of new documents in the field of security. However, in addition, close attention was also paid to issues of trade and economic cooperation and aspects of "green" policy, which is also extremely important for the sustainable and safe development of the region. Ferrari and Ambrosetti (2023) stated that one of the main reasons and justification for the participation of the government of Kazakhstan in the SCO is territorial security since the country borders Russia and the People's Republic of China, as well as the opportunity to use its position as a crossroads between East and West. This is confirmed in the conducted study since the President of Kazakhstan noted the importance of maintaining beneficial relations and preventing a rift between East and West (Nurullin, 2023).

The analysis of the papers of a number of authors helped to compare them qualitatively with the results of this study. Thus, an understanding was reached of additional aspects of Kazakhstan's participation in the SCO and the importance of ensuring regional security through the adoption of high-quality consensus decisions and fundamental international legal documents.

## **Conclusion**

In the course of the study, the initial goals of the Shanghai Five in 1990 and the SCO in 2000 were identified. They consisted of a mutual reduction in the number of troops in the border territories, a limitation in the number of personnel and weapons, and an obligation not to attack the other sides of the "five". It was stated that the problem of separatism was urgent for the government of Kazakhstan in the 1990s. In this regard, not only did the measures taken at the national level play a qualitative role in reducing separatist sentiments in the state, but also the obligations of the "five" states to take measures against destructive activities on the territories of their states and to help prevent such in neighbouring states. In addition, already within the framework of the SCO, the Shanghai Convention on Combatting Terrorism, Separatism, and Extremism has become the basis for preventing the further development of separatist sentiments. These steps helped create a stable security environment, which is necessary for sustainable development and collaboration.

It was determined that the problem of terrorism during 1990-2011 was not so substantial for the government of Kazakhstan. However, the peak period of terrorist activity was precisely in 2011, when the society of Kazakhstan faced a series of terrorist attacks. Nevertheless, timely response

and readiness to all kinds of threats was the basis for the functioning of the SCO, as a result of which the Convention of the Shanghai Cooperation Organisation against Terrorism was additionally adopted, and anti-terrorist exercises “Interaction-2003” and “Peace Mission-2010” were held on the territory of Kazakhstan. It is noted that in the early 2000s, one of the most serious problems for the Kazakhstani society was the mass consumption of injectable narcotic drugs and the use of the territory of Kazakhstan by organised criminal groups, mainly from Afghanistan, to transport drugs to the end user in Russia. In this regard, it was valuable for the government of Kazakhstan to adopt within the framework of the SCO an appropriate international legal document on cooperation in combating illicit trafficking in narcotic drugs, psychotropic substances, and their precursors. Subsequently, the number of injected drug users decreased from 250,000 in 2000 to just over 25,000 in 2013. However, the number of seizures of narcotic substances was extremely small. While 730 kg of heroin were seized in 2009, 323 and 137 kg were seized in 2010 and 2012, respectively.

It is analysed that during the presidency of Kazakhstan in the SCO, former President of Kazakhstan Nursultan Nazarbayev put forward supranational goals for the organisation, such as the formation of structural institutions like a Cyberpol, the creation of a single transport and energy space. In addition, the Kazakh side contributed to the further formation of anti-drug strategies and by 2011, the Anti-Drug Strategy of the SCO member states for 2011-2016 was adopted in Astana. Notably, the 2023 proposal to establish a UN Regional Centre for Sustainable Development Goals in Almaty further underscored Kazakhstan’s recognition that sustainable peace is inseparable from environmental, economic, and institutional development.

The limitations of the study include incomplete statistics, and sometimes even their absence in some aspects of ensuring health protection in Kazakhstan in the 2000s, and the difficulty in objectively assessing the fight against illegal transportation of narcotic substances due to the difference in data from international organisations and official law enforcement agencies of Kazakhstan, which did not allow to fully determine the effectiveness the measures taken in the field of security. Future research on the subject may include a comparative analysis of the effectiveness of regional cooperation within the SCO with cooperation within other regional and international organisations of which Kazakhstan is a member state.

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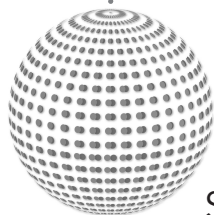


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È così che il volto del giovane, ormai uomo, reso forte ed ottimista per la conoscenza acquisita, guarda verso il futuro, verso i suoi obiettivi, qui rappresentati dalla stella e dall'orizzonte: egli è pensoso ma anche sereno, poichè è certo di poterli raggiungere.

L'elemento acqua-mare, sintetizzato con due lievi onde marine, è l'ambiente ideale in cui tutti vorremmo perderci entro una dimensione temporale illimitata che va oltre la realtà.

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