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CONTENT

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GEOPOLITICAL AND DIGITAL GAME: THE CLASH OF EU AND RUSSIAN INTERESTS IN CENTRAL ASIAN STATES

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ABSTRACT. *In January 2024, the European Parliament adopted a resolution outlining the EU's strategy towards Central Asia, reaffirming its geopolitical ambitions and its intention to balance the influence of other global powers in the region. This article emphasizes the significance of Russian and Chinese influence in shaping the EU's approach to Central Asia. Through detailed analysis, the authors examine the main directions of the EU strategy, taking into account political, economic, and social aspects. The main objective of this study is to identify and interpret the strategic motives of all major stakeholders in the geopolitical landscape of Central Asia.*

Using an analytical framework based on game theory, this study constructs payoff matrices for the Central Asian countries, the EU, Russia, China, and the United States. The innovative application of game theory in this context offers a new perspective on the strategic calculations of the participating players, highlighting their competing and shared interests. In other words, the authors use game theory as a tool for analyzing strategic interactions between countries.

The presented article belongs to the category of analytical studies and incorporates elements of mathematical modeling. The primary aim of the article is to reveal the interconnection between the strategic interests of external actors and the internal stability of Central Asian countries. The authors have chosen a comprehensive interdisciplinary approach as the basis for their scientific exposition. The use of game theory tools makes the study particularly relevant in the context of current challenges to regional security. This allows for modeling the rational choices of players under conditions of uncertainty. Thus, the work contributes to the academic discussion on multi-level competition in Central Asia. Finally, it proposes tools for further forecasting the dynamics of geopolitical processes.

KEYWORDS: *Central Asia, EU strategy, game theory, strategic analysis.*

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INTRODUCTION

In January 2024, while the whole world closely monitored events in Ukraine and the Middle East, the European Parliament adopted a resolution (European, 2024), a pivotal step in shaping the European Union's (EU) strategy towards the Central Asian (CA) states. Facing the challenges of the modern world, where political ambitions intertwine with national interests, the EU Strategy for Central Asia declares the intention to utilize the region as a tool to achieve specific geopolitical goals.

In the present study, the development of digitalization in Central Asian countries, particularly Kazakhstan and Uzbekistan, is considered through the prism of a single region. The authors' approach is explained by the recent trend of regional cooperation among these countries. According to the sources studied by us, the states of the region strive to strengthen equality and multi-vectorism, promoting Eurasian regional cooperation. At the same time, of course, the interests of the leading world powers are taken into account (Karabayeva, 2021). For this purpose, the article employs a game-theoretic analytical method, which allows the identification and explanation of the strategic motives of all stakeholders.

The resolution's text suggests that digitalization is perceived as a key area for enhancing cooperation between the European Union and the Central Asian region. Specifically, the mention of digitalization in the context of ratifying the Enhanced Partnership and Cooperation Agreement (EPCA) (European, 2016) with Kazakhstan indicates the parties' desire to develop joint initiatives in digital technologies. Against the backdrop of regional conflicts, the question of the EU's role in advancing a strategic digitalization agenda in Central Asia becomes paramount. Digitalization is not merely a significant aspect of contemporary global politics but also a pertinent topic among the region's leaders. Thus, cooperation in digitalization has become an integral component of the Eurasian space, warranting increasingly significant scholarly attention.

To determine the research direction and objectives, outline the framework for data analysis and results, and define expected findings, the authors formulated two main hypotheses:

- The first hypothesis posits that collaboration with the European Union will bolster the economic, political, and social ties of Central Asian states with the international community.
- The second hypothesis asserts that active cooperation with Central Asian countries will expand the EU's influence and strengthen its role in the region, while also stimulating economic development and reinforcing political connections.

Overall, during their review of the literature, the authors observed that a number of studies challenge traditional models of international relations based on states as primary actors that no longer fully suit the realities of the digital age. The digital domain creates novel opportunities for conflict and cooperation not only among states, but also among other actors such as cybercriminals and cyber-spies (Choucri & Goldsmith, 2012). Accordingly, considerable scholarship has emerged examining the influence of digitalization and virtuality on security policy and international relations.

Previously conducted studies (Noone, 2019) have shown how game theory can be applied to the analysis of digital security. Also, in relation to the strategic behavior of states. The works studied by the authors laid the foundation for the present research on digitalization, as well as the issue of geopolitical interactions in Central Asia.

The authors also reviewed research that provided insights into the current state of affairs in Central Asia, key trends in the region's digitalization, and the positions and interests of the EU and Russia in this context. Notably, the studies by Karabayeva (2021), Muratova et al. (2023), and Kassenova & Duprey (2021) offered valuable conclusions that aided in understanding the complex political dynamics in Central Asia. For instance, the article "The EU and Kazakhstan in the Latest Geopolitical and Geoeconomic Conditions: New Dimensions of Partnership" (Muratova et al., 2023) examines the current state of EU–EU-Kazakhstan partnership in light of recent geopolitical and geoeconomic shifts. The study "Digital Silk Road in Central Asia: Present and Future" (Kassenova & Duprey, 2021) provides substantive information on the role of digital infrastructure in regional development and economic integration.

It is important to note that, although there is extensive literature on individual digital strategies of various actors in Central Asia, there is a lack of comprehensive comparative studies analyzing their interaction and the emerging geopolitical dynamics. In particular, the authors observe a clear deficiency in holistic analyses of the interplay between key global players. The majority of existing research focuses on digital initiatives of individual countries or regional blocs—such as China's "Digital Silk Road" or the EU's digital strategy in Central Asia—but lacks an encompassing analysis covering interactions among all major actors in the region's digitalization. This creates a gap in understanding how these strategies interrelate and influence one another.

The authors determined that existing studies predominantly focus either on technological aspects of digital transformation or on political implications of regional cooperation. The present study aims to address this gap by employing game theory to analyze the strategic interactions between the EU, Russia, and the Central Asian states in the digital domain. The application of game theory in current research on digitalization in Central Asia remains limited. Existing studies often miss the opportunity to model strategic decisions and outcomes of interactions between key actors.

During the period from 2023 to 2025, the focus of research was on competing models of digital connectivity in Central Asia: the European Global Gateway (including the Team Europe initiatives on digital connectivity) and the Chinese Digital Silk Road. Recent works show that the EU promotes a value-oriented approach (transparency, data protection, sustainability), whereas the PRC relies on rapid infrastructure solutions. In addition, it may also concern the export of equipment and data management standards. To reduce Western-centricity, the authors included in the analysis the publications of several Central Asian and Russian scholars. They highlight regional priorities, digital sovereignty, and diversification of routes, including the Digital Silk Way project, EUCAM-53 (Komilov, 2023); Andžāns & Djatkoviča (Rīga, 2023); CEPA (Öztarsu, 2024); RIAC/ Juraev (2024); Okeleke & Borole (2023); Lagutina (2015); Kurmangali, Yeraliyeva, & Beimisheva (2024); Greenleaf & Kaldani (2025); Welch (2025).

The regional perspective is represented by the works of Central Asian researchers. They, as it turned out, analyze national strategies for digitalization and AI, institutional barriers, as well as infrastructure deficits. The authors established that the focus of Russian researchers is directed at recording the evolution of the EU's approach to the region (from an "observer" to a geopolitical actor against the background of competition with Russia and China). We believe that these publications ensure geographical balance and better reflect local priorities and risks (Lagutina, 2015; Kurmangali et al., 2024).

A separate block of literature studied by the authors concerns the competition of normative standards in the field of personal data protection (digital regulation). Comparative studies show that, despite the influence of post-Soviet practices and the growing role of Chinese technologies, the countries of Central Asia are increasingly guided by international norms (GDPR, Convention No.108) (Greenleaf & Kaldani, 2025).

To test the hypotheses on the impact of EU–CA cooperation on the digital development of the region, the authors used comparative indicators of the E-Government Development Index (EGDI, UN). Data on the EU's digital initiatives (EPCA, Global Gateway, Team Europe Initiative) were also applied.

EGDI was chosen as a comparable metric applied to all Central Asian countries (this ensured a unified quantitative standard). Additionally, official EU documents (EEAS, European Commission) and reports of GSMA Mobile Economy Eurasia 2024 were analyzed. The authors considered that they reflect the launch of 5G networks and the development of mobile infrastructure in the region.

METHODS

Game theory is frequently mentioned in the context of discussions on the diversity of theoretical and methodological approaches in the history of international relations. In particular, from the 1960s to the early 1990s, game theory emerged as one of the developed approaches included in this diversity (Chatterji, 2013). The approach to the analysis of strategic situations and decision-making, as presented by various authors (Carlson & Dacey, 2006), is often related to concepts used in game theory, such as game forms, strategies, and equilibriums.

It is important to clarify that, to determine equilibrium in the cooperative game within this article, the authors used the following approaches and methods.

To analyze cooperative interactions, the Shapley concept (Shapley value) was applied, which enables the distribution of total gains among players, taking into account their contribution to the coalition. This approach helps to fairly distribute the benefits of cooperation between the EU and the CA countries, based on their contributions to the joint digitalization project. The authors also considered the use of the nucleolus – a solution to cooperative games based on minimizing the level of dissatisfaction with the payoff among subsets of participants/coalitions (as an alternative method for determining equilibrium). The nucleolus focuses on minimizing players' dissatisfaction, thus ensuring coalition stability. This method was used to verify the sustainability and fairness of the proposed cooperation strategies.

It is important to note that in the analytical part of the article, for the completeness of calculations, the authors presented a complete set of strategies for both players. For the countries of Central Asia, the following strategies were defined: S1 — full cooperation with the EU, S2 — partial cooperation, S3 — refusal of interaction. For the European Union — A1–A5, corresponding to the options of full, partial, or refusal models of cooperation. In the multi-step scheme (decision tree), each strategy is indicated. This makes it possible to clearly trace the sequence of the choice of parties.

It is worth noting that the authors developed a benefit function for the cooperative game that incorporates key parameters of digitalization. The authors believe that this function helps to determine the most favorable conditions for participants using the concept of Nash equilibrium (adapted for cooperative games). As a result of the analysis, the authors concluded that the proposed strategies are beneficial for all parties.

It is important to pay attention to the fact that previous studies show that game theory makes it possible to analyze decision-making and the influence of internal political factors on the international strategies of states. In the context of Central Asia, where conflicts have not yet reached an open stage, this approach remains the most appropriate for analyzing regional interactions (Williams & Williams, 2011; Noone, 2019; O'Doherty, 2023).

The authors of this study propose evaluating these trade-offs both in the abstract and with the use of concrete examples from contemporary research in the field of international relations. Accordingly, the authors applied game theory to model various scenarios for the development of digitalization in the CA region. Within the context of this study, the method plays a key role in analyzing potential scenarios for the development of digitalization in the Central Asian region in cooperation with the European Union.

Overall, we believe that game theory, as an analytical tool, allows for the identification of optimal strategies for cooperation and conflict minimization in conditions of uncertainty and competition in the CA region. Furthermore, game theory is presented as a method for studying decision-making by rational agents (actor-players) in the context of an impending conflict and cooperation through mathematical solutions (Orsini et al., 2005).

In the present work, the authors applied the classical variant of a payoff matrix, by means of which the corresponding calculations were presented. The matrix used as the basis for calculations is one for two players (the EU and the CA).

It should be noted that the payoff matrix in the study reflects combinations of strategies between the CA and the EU, as well as their interactions with other players (Russia, China, the USA). At the same time, it is considered that the decisions of one player affect the benefits of others. The authors selected a cooperative strategy for analysis, emphasizing the opportunities for collaboration in digitalization. As a result, the payoff matrices allow the determination of optimal strategies for each player depending on the goals pursued and the possible outcomes.

Thus, within the framework of the stated topic, the authors carried out the following work.

Firstly, an analysis of strategic players was conducted: the main participants in the digitalization process of the Central Asian region were examined, among which the European Union, the countries of Central Asia, as well as other actors such as Russia, China, and the USA, were highlighted. The selection of strategic players for the analysis of digitalization in the Central Asian region was determined on the basis of a review of research materials.

Here, the authors would like to note that, based on the data examined, they have reached the conclusion that the United States should not be included in the core payoff matrix. This is because its involvement in the digital transformation of Central Asia is predominantly observational. Unlike the EU, China, and Russia, the United States does not generate infrastructural projects or regulatory frameworks. In other words, it does not exert a direct influence on the region's digital ecosystem. Therefore, its role is reflected in the analytical section of the article, but not within the core game-theoretic model.

The countries of Central Asia, in the context of this article, are the object of interaction. That is, the CA countries, including Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan, are actively developing their digital infrastructures and striving to become regional hubs of digital technologies. The CA views digitalization as a means of modernizing its economy, improving public governance, and attracting greater volumes of foreign investment.

It is important to note that the digital development of the countries of Central Asia is characterized by pronounced heterogeneity. This fact directly affects the effectiveness of regional initiatives, as well as the strategy of interaction with other players. Kazakhstan acts as an unconditional leader in the level of digital infrastructure and cybersecurity, as well as in the regulatory framework, occupying the highest positions in regional and global digital indices (ITU, EGDI, GovTech).

Uzbekistan demonstrates accelerated rates of digitalization. This is especially noticeable in the field of public services and educational technologies, due to large-scale reforms and the national program "Digital Uzbekistan – 2030." Kyrgyzstan represents a developing market with an active IT community. However, limited infrastructure and a fragmented regulatory framework, as revealed by the authors, restrain the growth of the sector. At the same time, Tajikistan and Turkmenistan face institutional and infrastructural challenges such as a low level of Internet coverage, a shortage of personnel, and limited opportunities for digital integration with other countries. These differences are confirmed by data from the World Bank as well as by regional reviews of investment in the digital economy. They show that the heterogeneity of the digital potential of the countries of Central Asia is an important factor. They determine the country's strategy and the probability of success of joint projects.

The European Union is actively strengthening its influence in Central Asia through economic cooperation and the development of democratic institutions. The EU creates a favorable foundation for digital initiatives. Russia, in turn, views the region as a zone of traditional interests and maintains its positions through participation in digital projects, especially in Kazakhstan. China uses the Belt and Road Initiative to promote its technologies and reinforce its strategic presence, while the United States seeks to

restrain the influence of Moscow and Beijing. To some extent, it supports reforms and digitalization in Central Asia. These actors were chosen for analysis due to their key role in regional digital transformation. Based on game theory, their strategies and possible outcomes were modeled: the authors consider the most likely scenario to be "Win-Win," in which EU–CA cooperation accelerates development and infrastructure modernization; in the case of non-cooperation, both sides lose benefits and weaken their influence.

To analyze the probabilities of success/failure of cooperation, tables/matrices are presented that forecast possible outcomes depending on the chosen strategies:

- Probability of successful cooperation (Strategy 1 and Strategy A): P_{1A}
- Probability of failure of cooperation (Strategy 1 and Strategy B): $P_{1B} = 1 - P_{1A}$

Table 1. Strategies of cooperation success probabilities and cooperation failure probabilities

	Strategy A	Strategy B
Strategy 1	(a,b)	(c, d)
Strategy 2	(e, f)	(g, h)

Source: compiled by the authors

The above-mentioned probabilities describe the chances of success or failure of cooperation between the parties/players if they choose certain strategies. We consider it important to clarify the probability of successful cooperation (Strategy 1 and Strategy A): P1A. This means the probability that cooperation will be successful if the Central Asian countries and the European Union choose Strategy 1 and Strategy A, respectively. The probability is denoted as P1A. As for the probability of failure of cooperation (Strategy 1 and Strategy B): P1B. This means the probability that cooperation will not take place or will fail if one of the parties chooses a strategy different from Strategy A. The probability is denoted as P1B. What will be the relationship between these probabilities:

$$P_{1A} + P_{1B} = 1$$
$$P_{1B} = 1 - P_{1A}$$

This means that if the probability of success (P1A) is high, then the probability of failure (P1B) will be low, and vice versa. For example, if the probability of successful cooperation (P1A) is 70% (or 0.7), then the probability of failure (P1B) will be 30% (or 0.3). In other words, if the players choose the correct strategies, the probability of success will be P1A, and if they choose incorrect strategies, the probability of failure will be P1B. Overall, as can be seen, this matrix reflects the possible payoffs for each of the parties depending on the strategies they adopt. By analyzing the matrix, it becomes possible to identify optimal strategies for CA and the EU and their potential consequences.

The authors draw attention to the fact that, in calculating the numerical values in the payoff matrices, empirical indicators reflecting the level of digital development of the countries were used.

As source data, such international indices were applied as: UN E-Government Development Index (EGDI, 2024), World Bank GovTech Maturity Index (GTMI), and GSMA Mobile Connectivity Index (2024). They made it possible to compare the infrastructural, institutional, and technological potential of the states.

To ensure the comparability of indicators, the authors normalized the values of the indices. They also grouped them into three key factors:

- infrastructure and market;
- public institutions and governance;
- geopolitical involvement.

The relative significance of each group of factors was determined on the basis of the Analytic Hierarchy Process (AHP) method, through pairwise comparison of their influence on the effectiveness of digital cooperation between the EU and Central Asia.

As a result, weighting coefficients were calculated, reflecting the priority of infrastructural-market (≈40%), institutional (≈35%), and geopolitical (≈25%) factors. To update the theoretical base, sources were selected on Global Gateway, Digital Silk Road, and national digital strategies of the Central Asian countries, with the mandatory inclusion of works by Central Asian and Russian authors. This ensures thematic and geographical balance and reduces the risk of bias.

The consistency check of the AHP pairwise comparison matrix showed a satisfactory result: the consistency ratio $CR=0.026<0.1$, which confirms the internal logical coherence of the expert judgments and the correctness of the assigned weights (0.40 / 0.35 / 0.25).

It is important to note that the AHP coefficients were derived by the authors on the basis of pairwise comparisons of factors. Expert surveys, analysis of official reports (EU Global Gateway, GSMA, UN EGDI, World Bank GTMI), and the content of national strategic documents of the region's countries were used to assess the relative significance of infrastructural, institutional, and geopolitical factors. This ensured the validity of the weights. As the authors' calculations show, this also explains the high consistency of the matrix (CR = 0.026).

Fourthly, recommendations have been developed: based on the analysis of game situations, the authors have developed recommendations for the participants of the digitalization process. For example, the countries of Central Asia can be advised to actively engage with the goals and interests of the European Union countries, offering favorable terms of cooperation and supporting the development of infrastructure and technologies.

The study of the EU's geopolitical strategy towards Central Asia represents a comprehensive analysis. It is based on theories of international relations, including realism, liberalism, and constructivism. Thus, realism helps to understand the competitive aspects of relations between the EU, Russia, China, the USA, and the CA countries (focusing on the struggle for power and security). Liberalism reveals opportunities for cooperation between actors in the region, while constructivism highlights the role of identity in shaping foreign policy.

The combination of these theories and game theory enabled the authors to conduct a comprehensive analysis of strategic interaction. The article also considers the methodological connection of probabilities, using strategic analysis to forecast the outcomes of cooperation. We believe that the probabilities P1A and P1B play a key role in determining the success or failure of EU cooperation with Central Asia.

The main question of the article is what the optimal strategy for cooperation in the field of digitalization is.

DISCUSSION

As long-standing cooperation demonstrates, the Central Asian region and the European Union generally share common interests in the field of digitalization, including the development of digital infrastructure, the digital economy, and digital services (Borrell, 2022).

The comparison of contemporary literature indicates a long-term competition between models of digital development: "fast" infrastructure solutions of the PRC versus the value-oriented approach of the EU. For the countries of Central Asia, the practical consequence of this is the need to balance between the speed of implementation and the requirements for data protection and cybersecurity. It is also important to diversify connectivity channels (including Trans-Caspian routes) to strengthen digital sovereignty (CEPA, 2024; Okeleke & Borole, 2023; Welch, 2025).

Under current socio-economic conditions, Central Asian countries are showing increasing interest in developing cooperation with the European Union in the area of digital transformation. Regional leaders are increasingly voicing calls for the implementation of active digitalization projects (Tashetova, 2024). The European Union, for its part, is also showing interest in deepening its relations with the region in terms of digitalization. For instance, the European strategy initiative Global Gateway, launched by the European Commission in December 2021, addresses the development of intelligent, clean, and secure digital sector connections in cooperation with Central Asia. Central Asia is one of the most promising areas within the framework of the European Union's Global Gateway initiative (Andžāns & Djatkovica, 2023).

This interest on the part of the EU can be explained by the fact that, against the backdrop of uncertainty caused by the Ukrainian crisis, the EU began promoting initiatives in various regions beyond its borders. It was precisely in the context of the Ukrainian crisis that relations between Central Asian countries and the EU witnessed a shift, as demonstrated by the launch of another project – the Team Europe Initiative on Digital Connectivity (European Commission, 2022).

Nevertheless, the EU's choice of strategies is influenced by the fact that the onset of the Russia–Ukraine conflict has intensified the European Union's interest in Central Asia, primarily due to the need to reduce dependence on energy resources from Russia (Muratova, Sadri, Medeubayeva, & Issayeva, 2023). In other words, this factor will, in the near future, determine the strategy of whether or not to invest (to assist in the development of digital transformation in the Central Asian region).

Below, the authors present several scenarios for the Central Asian countries and the European Union. The strategies of Central Asia may be described as follows: Strategy 1 (S1) – Full cooperation with the EU, Strategy 2 (S2) – Partial cooperation with the EU and other players (e.g., China), and Strategy 3 (S3) – Refusal to cooperate with the EU.

The EU's strategies consist of: Strategy A (A) – Full cooperation with CA, Strategy B (B) – Partial cooperation, and Strategy C (C) – Refusal to cooperate. Thus, the simplified version of the matrix is as follows:

Figure 1. Payoff Matrix

$$\text{Payoff Matrix} = \begin{pmatrix} (5,5) & (4,6) & (3,2) \\ (6,4) & (3,3) & (2,1) \\ (2,3) & (1,2) & (0,0) \end{pmatrix}$$

Source: compiled by the authors

As can be seen from the matrix provided, full cooperation is beneficial for both parties, resulting in (5, 5). In the case where Central Asia agrees to full cooperation and the EU chooses partial cooperation, this yields a greater benefit for the EU (4, 6). If Central Asia engages in partial cooperation but the EU refuses, this reduces the gains for both sides. In such a case, the outcome will be (3, 2). And so on, in accordance with the schemes provided.

The calculations presented below provide the full empirical basis for explaining how the authors obtained the numerical values in the payoff matrix and the weighting coefficients in the AHP. The authors explain in detail how these calculations were conducted:

Table 2. Empirical Basis

Source	Content and Role in Calculations	Reference
UN E-Government Survey 2024	Actual EGDI (E-Government Development Index) values for Central Asian countries: Kazakhstan — 0.9009, Uzbekistan — 0.7999, Kyrgyzstan — 0.7316, Tajikistan — 0.6252, Turkmenistan — 0.5233	Basis for the institutional/ digital governance component
World Bank GTMI (2023)	Classification of countries by levels of digital governance maturity: Kazakhstan, Uzbekistan — Group A; Kyrgyzstan — Group B; Tajikistan — Group C; Turkmenistan — Group D. Regional average index — 0.689.	Basis for the governance maturity component
GSMA Mobile Connectivity 2025	Infrastructure indicators for the Europe & Central Asia region: 4G — 93%, 5G — 54%, usage gap — 18%, coverage gap — 4%.	Basis for the technological infrastructure component

Source: prepared by the authors. These documents are official reports of the United Nations, the World Bank, and GSMA (supported by UK Aid and Sida)

Example of Data Integration

The quantitative calculations of the payoff matrix are based on real international indices covering the countries of Central Asia.

All three indices are normalized to the [0; 1] range and combined into three groups of factors:

(1) Infrastructure-technological — based on GSMA;
(2) Institutional-governance — based on GTMI;
(3) Geo-cooperative — based on EGDI.

Their relative importance is determined using the AHP method: 0.40 / 0.35 / 0.25. The final normalized score for each country represents a weighted sum of the three factors; these scores are then converted into a six-point scale corresponding to the levels of payoffs in the matrix.

Table 3. Example Table

Country	EGDI (UN 2024)	GTMI Group (WB 2023) → score	GSMA MCI (2025, ECA region ≈)	Integrated Index (0.4·EGDI + 0.35·GTMI + 0.25·GSMA)	Score (1–6)
Kazakhstan	0.9009	A (0.90)	0.93	0.90	6
Uzbekistan	0.7999	A (0.85)	0.90	0.84	5
Kyrgyzstan	0.7316	B (0.65)	0.83	0.74	4
Tajikistan	0.6252	C (0.45)	0.72	0.60	3
Turkmenistan	0.5233	D (0.25)	0.65	0.49	2

Source: the 1–6 scores result from a linear transformation of the integrated index into the payoff matrix scale.

Step-by-Step Example

Example (Kazakhstan):
$0.4\times0.9009+0.35\times0.90+0.25\times0.93=0.9050.4\times0.9009+0.35\times0.90+0.25\times0.93=0.905$

This value, normalized within the [0; 1] scale, when converted to a six-point system (step ≈ 0.17), gives 6 points. Thus, the element (5; 5) in the payoff matrix reflects the equilibrium between the highest level of digital readiness and the mutual benefit of the EU and Central Asia.

Table 4. Payoff Matrix for Cooperation Strategies between the EU and Central Asia

Strategy	EU: Full Cooperation (A)	EU: Partial Cooperation (B)	EU: Refusal (C)
CA: Full Cooperation (S1)	(5, 5)	(4, 6)	(3, 2)
CA: Partial Cooperation (S2)	(6, 4)	(3, 3)	(2, 1)
CA: Refusal (S3)	(2, 3)	(1, 2)	(0, 0)

Source: compiled by the authors. The values are derived from normalized international indices (EGDI, GTMI, GSMA) and adjusted by efficiency coefficients calculated via AHP to reflect infrastructure, institutional, and geopolitical factors.

The obtained values of payoffs in the matrix are not arbitrary numbers. All this is the result of correlating real indicators of digital development (EGDI, GTMI, GSMA) with efficiency coefficients for three scenarios of interaction (full, partial, and absent cooperation).

These coefficients reflect the share of the realized potential of joint benefits, close to 100% for full cooperation, significantly lower for partial, and close to zero for refusal of interaction. We assess that such a ratio is consistent with the logic of international

evaluations by the OECD and EU Global Gateway, where institutional incompatibility is considered a key factor in the loss of efficiency of digital partnerships.

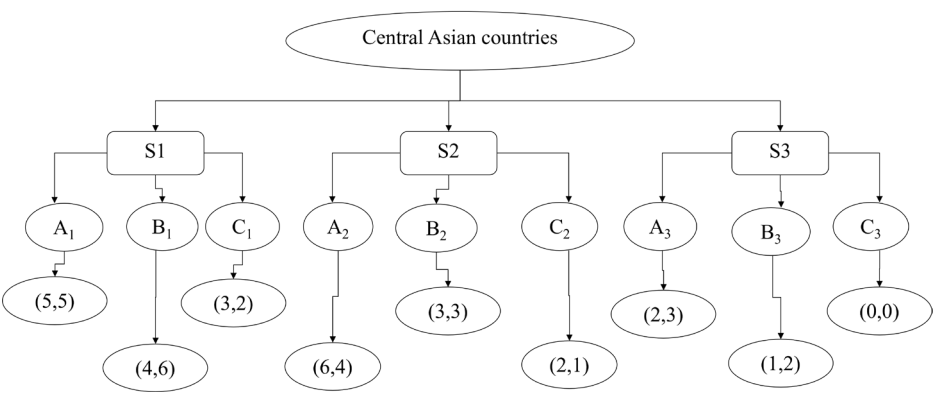
It is necessary to note that the numbers in the matrix represent the payoffs for different players depending on the chosen strategy. The figures were determined by the authors based on an analysis of probabilities and assumptions about their gains/losses. It is also important to clarify that the methodology includes the assessment of the interests and strategic objectives of the participants. At the same time, the values in the matrices reflect the estimated results of these interactions. It should be indicated that the authors considered the economic/political benefits for each side.

As can be observed, the matrix above describes the possible strategies of the Central Asian countries and the European Union, taking into account three options: full cooperation, partial cooperation, and refusal to cooperate. The values in the matrix were determined based on an analysis of strategic interests. Thus, for example, full cooperation (5, 5) leads to the maximum benefit for both parties; partial cooperation (e.g., 4, 6) shows greater gain for the EU while reducing the gain for Central Asia, and so forth.

In general, cooperation with the EU in the field of digitalization opens for the countries of Central Asia opportunities for the introduction advanced European technologies. One should not forget about the strengthening of digital sovereignty either. At the same time, special attention is paid to data protection, cybersecurity, and the development of secure digital infrastructure in accordance with European standards.

The EU's interest in cooperation with the region is reflected in the European Parliament Resolution of 17 January 2024. The authors note that digitalization is identified there as a key area of cooperation alongside energy and the "green" economy. At the same time, the need to develop mutually beneficial strategies is driven by competition with Russia and China, as well as by global trends in digital transformation.

Figure 2. A diagram of a sequential game with alternating decision-making by actors



Source: compiled by the authors

Figure 2 represents a sequential decision-making model, where each participant chooses a strategy in response to the actions of the other. For this reason, such a scheme shows

that the decisions of the parties mutually influence each other and, finally, form a chain of rational steps.

To provide clarity, it should be noted that Figure 2 presents the decision tree in the EU–Central Asia game. Node 1 represents the initial decision point for Central Asia, where one of the following strategies is selected: S1 (full cooperation), S2 (partial cooperation), or A (non-cooperation). Here, Node 2 reflects the corresponding response options from the EU side. The terminal nodes display the final payoffs (EU, CA). It is important to note that all strategy labels and payoff values (as presented in the figure) are described in detail in the main text of the article.

The authors would like to note here that the equilibrium (5,5) obtained under the S1–A strategy demonstrates that full cooperation between the EU and the Central Asian states is mutually beneficial. It also provides the maximum cumulative gain. This is further confirmed by the Shapley value, which shows that the contribution of Central Asia to the coalition's digital agenda increases the overall value of cooperation. Moreover, the comparison of EGDI growth (for example, Kazakhstan — 0.9009 in 2024) with the intensification of the EPCA and Team Europe programmes indicates a correlation with cooperation with the EU. Finally, it also indicates an acceleration of the region's digital integration with the global community, thereby confirming Hypothesis 1.

For Hypothesis 2, the key evidence lies in the results of the analysis of the success probabilities P1A. They show that, when a mutual cooperation strategy is chosen, the EU consistently receives high payoffs (5; 6; 4). This points to the expansion of its digital presence and political engagement. Moreover, the value of the payoff vector in situations of partial cooperation (for example, 4,6) highlights that the EU retains significant advantages even under asymmetric strategies. This confirms the hypothesis of the expansion of its influence.

Now, we consider it important to conduct an analysis of the payoff matrix in a zero-sum game. To this end, we consider a game between two participants with opposing interests (such games are called antagonistic). It is worth noting that for the analysis, the authors used the concept of a "pure strategy". In such a situation, one player selects a row of the payoff matrix, while the other selects a column. In the calculations, it was revealed that player I aims to maximize their gain, while player II aims to minimize player I's gain.

Table 5. Payoff matrix for saddle point verification

Strategies	B1	B2	B3	a = min(Ai)
A2	1	5.5	4.6	1
A3	2	6.4	3.3	2
A4	3	2.3	1.2	1.2

Source: compiled by the authors.
Note: the calculations are reproducible step by step from the selection of strategies and the elimination of dominated options to the determination of mixed strategies (and the calculation of the Nash equilibrium).

For the non-cooperative part, the authors consistently verified the presence of a saddle point in the game matrix. Also, since the minimum and maximum payoffs did not coincide, a stable solution was absent. This indicates the need to move to mixed strategies.

In the process of analysis, the authors excluded the dominated strategies (A1, A5, and B2). As a result, this made it possible to simplify the model and to highlight the really significant combinations (A2–A4 and B1, B3).

According to the matrix, the following is known: to find the optimal strategy, we check whether a saddle point exists: the maximum lower value of the game (a) and the minimum upper value of the game (b) are defined as a = max(1, 2, 1.2) = 2 and b = min(3, 6.4, 4.6) = 3. Since a ≠ b, a saddle point is absent. That is, to find the optimal strategy, the authors determined the minimum values of the matrix rows and the maximum values of the columns. Since the maximum lower value of the game (a) and the minimum upper value of the game (b) do not match, there is no saddle point.

Thus, this means that the solution of the game should be sought in mixed strategies. In this situation, the players randomly choose strategies in order to conceal their actions. Within the framework of the study, an analysis of dominant rows and columns was carried out to simplify the matrices. We will now conduct an analysis for the presence of dominant strategies according to the matrix below. It was found that strategy A2 dominates strategies A1 and A5, and strategy B3 dominates B2. By excluding dominated rows and columns, we obtain a simplified matrix.

Table 6. Simplified matrix

	B1	**B3**
A2	1	4.6
A3	2	3.3
A4	3	1.2

Source: compiled by the authors.
Note: the calculations are reproducible step by step from the selection of strategies and the elimination of dominated options to the determination of mixed strategies (and the calculation of the Nash equilibrium).

This allows us to eliminate strategies that will not lead to an optimal outcome. As a result, it was found that strategies A1 and A5, as well as column B2, are dominated (and are also excluded from further analysis).

As noted earlier, the game is solved in mixed strategies, where player I maximizes while player II minimizes their gains. We now solve the system of equations for player I:

2p2+3p3=2.42
3.3p2+1.2p3=2.42
p2+p3=1
After transforming the system, we obtain:
p2=0.58, p3=0.42
For player II, the system of equations:
q1=0.68, q2=0.32

Thus, the value of the game is y = 2.42, which indicates the optimal probabilistic strategies for the players: P(0, 0.58, 0.42) and Q(0.68, 0.32).

As can be seen, the final matrix was reduced to the size of 3x2. Using the geometric method, the probabilities of optimal strategies were found. The value of the game (2.42) was also calculated. The players' probability vectors were P(0, 0.58, 0.42) for

player I and Q(0.68, 0.32) for player II. The solution check confirmed its optimality. Thus, the criterion for the optimality of strategies confirmed that all equalities and strict inequalities are fulfilled. As a result, the obtained probabilities can be used to determine strategy in the context of international relations.

In the context of international relations, such probabilities indicate with what chances actors should apply certain strategies. This helps to determine the optimal course of action, taking into account possible losses and benefits from confrontation.

In the cooperative part, the analysis is based on the Shapley value, which shows how the total gain can be fairly distributed under a trust-based interaction (between the EU and the countries of Central Asia). In the non-cooperative model, on the contrary, the Nash equilibrium was used. It reflects the real stability of interaction under conditions where each party pursues its own interests.

Thus, the Shapley model describes an «ideal» scenario of mutually beneficial cooperation, whereas the Nash model represents a likely but more realistic balance under rational behavior of the players.

Presence of the Interests of Key States

The presence of other players (the USA, China, and Russia) in the region creates additional challenges and constraints for the development of cooperation in the field of digitalization. Trends indicate that China is becoming a key player in the region alongside Russia and Western powers. Some authors suggest that this may lead to a change in the political and economic environment in the region and to a clash of interests with other superpowers (Nam, 2010).

To carry out calculations using game theory, the authors determined the following parameters: to perform calculations for other players such as Central Asia, the European Union, China, Russia, the USA and other interested parties, it is necessary to take into account their potential strategies, gains and probabilities of success in the context of digitalization and cooperation with the Central Asian and European region. Considering Russia's role in the region, it is necessary to highlight its strategies separately.

Analysis of CA–Russia Relations

The role of Russian influence in the dissemination of international community institutions in Central Asia often remains underestimated. For many decades, Russia held an important position in ensuring progress in various fields in the Central Asian region. This view is shared by a number of other authors. Thus, in particular, in the studies (Costa Buranelli, 2014) within the framework of the English School of international relations, it is proposed to consider Russia as a «periphery at the centre». This means that although Russia was part of the European international society, in its influence on Central Asia, it employed its own history and culture. After the CA countries gained independence, for a conditional ten-year period (from the late 1990s to the early 2000s), the presence of Russian influence in the Central Asian region was at a historic minimum. In general, the period of Russia's influence on the region is characterized in sources as an alternative path of dissemination of the norms and institutions of international society into the Central Asian region, referred to as "mediated expansion".

It is obvious that in its current strategy, Russia will attempt to fully restore economic ties with former Soviet countries. In a certain sense, Russia is applying the Schmittian paradigm to the EAEU (Pizzolo, 2023). In other words, there is a global shift from nation-states to highly integrated regional blocs based on civilizational identity.

As an important detail, we consider it essential to note that in choosing their strategies, the CA countries are also guided by other indirect factors. One of the important reasons why CA countries are trying to move away from Russia's sphere of influence is the desire to nationalize and indigenize their territories in order to rectify the perceived dominance of foreign actors and ensure the protection of their indigenous cultures and languages. To some extent, changes are taking place in the CA countries that were also observed in Ukraine. In this case, we are talking about nation-building projects. There is a considerable body of literature that characterizes this issue as part of the problem of national identity formation, including through the example of Ukraine, in the context of its relations with Russia. And although the CA countries do not have the same complex historical connection to the West as Belarus and Ukraine (White, McAllister, & Feklyunina, 2010), the desire to develop along Western lines is popular among the population of the Central Asian region.

Thus, despite attempts by Russia and China to limit the influence of the EU in the region, the Central Asian countries continue to demonstrate their willingness to cooperate and develop their partnerships with various states and regional associations in the field of digitalization. In accordance with the ideas of the authors, a payoff matrix has been constructed below.

Table 7. Payoff/Loss Matrices for Players in the Central Asian Region (CA)

Actions of CA / Actions of Russia or China	Strong Obstruction	Moderate Obstruction	No Obstruction
Full Digital Integration with the EU	(-3, 2, 5)	(-1, 1, 4)	(0, 2, 3)
Partial Digital Integration	(-2, 1, 3)	(0, 0, 2)	(1, 1, 2)
No Digital Integration	(0, -1, 1)	(1, -1, 1)	(2, 0, 1)

Source: compiled by the authors

As can be seen from the matrix, in each case, the three numbers represent the payoffs/losses for different players. Thus, the first number denotes the payoff/loss for Russia or China. The second number denotes the payoff/loss for the CA countries, and the third number – the payoff/loss for the EU.

It is now important to consider the scenario of full digital integration with the EU. According to the calculations within the matrix, in the case of strong obstruction by Russia or China, the CA countries lose. These values would be (-3) for Russia/China, (2) for CA, and (5) for the EU. According to the authors, this reflects significant economic and political risks for CA. With moderate obstruction, the losses for CA become smaller (-1). The EU still gains (4), and Russia/China lose (-1). In the absence of obstruction, CA and the EU gain (2 and 3, respectively), while Russia/China lose nothing (0). In the case of partial digital integration, strong obstruction leads to losses for CA that are less than with full integration (-2). With moderate obstruction, no one particularly wins or loses (all values are close to 0). When there is no obstruction, the benefit is evident for all parties, though smaller than with full integration. Finally, in the case of no digital

integration, if Russia and China obstruct but CA does not integrate, the benefits shift to Russia/China. The values would be (0) for CA, (+1) for Russia/China. With moderate obstruction, the result is similar (Russia wins, CA loses (-1)). If there is no obstruction, Russia gains (2), and CA gains nothing.

China's Strategy

In their study, the authors came to the conclusion that the strategies of China and Russia in Central Asia largely coincide, since both countries strive to strengthen the Eurasian vector and to counter Western influence. Within the framework of the Digital Silk Road initiative, China seeks to establish a dominant role in the digital economy, reinforcing the interdependence of other states (Callahan, 2016; Hussain et al., 2023).

The Belt and Road Initiative, in which the CA countries are actively involved, includes significant digitalization components. The development of infrastructure for next-generation digital technologies such as artificial intelligence, cloud computing, and 5G networks is an integral part of the project. The provision of digital services and content, such as messaging applications, mobile payment systems, and e-commerce platforms in developing markets, only confirms China's (Malik, 2022) aspiration to assert its dominant role.

EU and Russia/China Matrix

The strengthening of digital cooperation between the EU and Central Asia compels Russia and China to seek to maintain their influence. At times, they resort to exerting pressure on the countries of the region. In response, the EU, guided by the principle of the "democratic peace," as can be observed, prefers diplomatic influence while avoiding direct confrontation.

Table 8. Payoff Matrix for the Choice of Diplomatic Influence Strategies

Russia/China (D/U)	EU (D) Diplomatic Influence	EU (P) Partial Pressure	EU (U) Increased Pressure
Russia/China (D) Diplomatic Influence	(3, 4)	(1, 2)	(-1, 1)
Russia/China (P) Partial Pressure	(1, 3)	(0, 1)	(-2, 1)
Russia/China (U) Increased Pressure	(0, 2)	(-1, 1)	(-3, 0)

Source: compiled by the authors

According to the calculations in the matrix, the value (3, 4) becomes relevant if both parties choose diplomacy. The payoffs increase to (+3) for Russia/China and (+4) for the EU, indicating stable cooperation and significant benefits. The value (1, 2) is relevant if the EU chooses partial pressure, while Russia/China choose diplomacy accordingly. This leads to smaller but still positive outcomes for both sides. The payoffs (-1, 1) indicate that increased EU pressure against Russia/China's diplomacy brings a small gain for the EU (+1) but losses for Russia/China (-1). The value (1, 3) occurs if both sides apply partial pressure, resulting in moderate payoffs for both. (0, 1) takes place if Russia/China increases pressure while the EU responds with partial pressure. Russia/China remain in a neutral status, while the EU gains a small payoff (+1). When the result is (-3, 0), both players lose under increased pressure: (-3) for Russia/China and a neutral outcome for the EU. This indicates the possibility of conflict escalation.

The payoffs presented in the matrix are derived from the fact that the interests of the Central Asian Republics (CAs) regarding the development of digital transformation are centered around choosing the EU as their main partner. The authors of this study analyzed reports by scholars who have examined China's influence (Kassenova & Duprey, 2021). These materials often state that China still has to earn trust in the CAs. It is important for the CAs to ensure the reliability of the data included in the platform and to consider how this data will be used. In this regard, trust is largely a barrier to cooperation between Central Asia and China. In general, it is important to understand that China's growing involvement in Central Asia in economic, cultural, political, and even military terms remains controversial for the region's inhabitants (Primiano, Rice, & Kudebayeva, 2022).

Another factor for choosing the EU as the main partner in the field of digitalization by the CAs is the emerging competition between China and Russia in the region. The CAs understand that although Russia and China may share similar interests and threats in this region, it does not necessarily mean they will form an alliance in the future (Thomas, 2010). This fact encourages the CAs to develop strategic partnerships with the EU.

Methodological limitations and directions for future research

The application of game theory to the analysis of the strategies of the European Union and the countries of Central Asia has a number of methodological limitations. Firstly, game theory is based on the assumption of the rationality of actors and the static nature of their strategies, whereas in real international politics, decisions are often formed under the influence of emotional, cultural, and historical factors.

For example, the strategic choice of Kazakhstan and Uzbekistan is often determined not only by economic benefits. There remains the memory of the Soviet past and the desire to preserve sovereignty and national identity. Similarly, the position of the EU may depend on value orientations as well as on domestic political fluctuations and public expectations.

Secondly, game theory does not take into account such elements as cultural codes, personalism of power, collective narratives, or historical traumas, which can significantly influence the perception of "gains" and "losses". This limits its predictive power when applied to the region of Central Asia.

The authors acknowledge that the rational-choice model used in this study performs an analytical function. In particular, it helps to structure strategic interactions but does not replace a broader political and cultural analysis. In the future, the methodology can be expanded by integrating behavioral and cognitive models, as well as through the application of qualitative approaches (narrative and discourse analysis) to identify the influence of cultural representations on strategic decisions. A promising direction may also be the comparison of model forecasts with empirical data on specific crisis episodes (including energy and sanctions crises).

Finally, it should be noted that a limitation of the model is the assumption of rationality and unity of actors (which does not always correspond to the political reality of Central Asia). In particular, in Turkmenistan, the personalist structure of decision-making may lead to the selection of strategies that do not correspond to economic rationality. This may also concern digital benefits. Thus, forecasts based on payoff matrices may

be less accurate for political systems in which rational–utilitarian criteria give way to ideological or personalist factors.

From the presented matrix and analysis of the materials on the topic, the authors have drawn several key conclusions. The study of this payoff matrix, considering the interests of the EU and Russia/China in Central Asia, may lead to the following conclusions.

As Central Asia becomes an increasingly significant region for geopolitical games, diplomatic influence is likely to remain a key element of cooperation. Both parties, the EU and Russia/China, may seek to use diplomatic channels to establish influence and protect their interests in the CAs.

In the context of competition for influence in Central Asia, increased pressure from the EU or Russia/China may be seen as a strategic move to achieve their goals. For instance, the EU might use increased pressure in response to human rights violations or breaches of democratic principles in the region, while Russia/China might apply pressure to protect their economic or geopolitical interests.

Thus, viewing the payoff matrix in the light of the EU and Russia/China's interests in Central Asia opens new perspectives for analyzing and understanding the geopolitical dynamics in this region.

Strategic Priorities of the USA in the Central Asian Region

Although the United States traditionally plays an important role in shaping the world order, its interest in digital cooperation with Central Asia remains limited. This is due to the priority of other regions (for example, the Middle East and the Asia-Pacific) and competition from Russia and China.

In other words, the presence of competition in the form of regional powers and various strategic interests may complicate the USA's attempts to establish cooperation in this field. We believe that, given the current situation and trends in digitalization, the USA may promote a strategy of observation and assessment of cooperation opportunities in the Central Asian region. This may include the following aspects.

Firstly, support for ongoing dialogues and consultations: the USA will continue active engagement with Central Asian states and other international players to understand the needs and priorities in the field of digitalization. This will allow the US leadership to better assess cooperation opportunities and determine strategic directions.

Secondly, investment in development: while the USA may not currently show significant interest in digital cooperation in the Central Asian region, it may continue to monitor developments and invest in projects that present potential long-term value. For example, there is great potential in media literacy for bridging the digital divide.

Thirdly, partnership with other countries and international organizations: the USA may promote a strategy of cooperation with other countries and organizations, such as the European Union, to share experience and resources in the field of digitalization in the Central Asian region.

Thus, the USA's strategy in terms of interaction with the Central Asian countries, the European Union, Russia, and China may be aimed at active observation, dialogue, investment, and support, leaving room for further development of cooperation in the field of digitalization in the future.

The Position of Central Asian Countries Regarding the Choice of Partner in the Field of Digitalization

In general, it is important to understand that in the matter of their strategic development in the field of digitalization/digital transformation, the Central Asian countries are primarily guided by the principles of democratic transformation. The Central Asian countries view the EU not only as a potential source of progressive ideas and technologies but also as a platform for strengthening their relations with the global democratic community.

After K. Tokayev assumed the presidency of Kazakhstan and Sh. Mirziyoyev was elected president of Uzbekistan, and the issue of changes in the foreign policy behavior of these two leading Central Asian countries became more relevant. There were various expectations and assumptions in the media regarding how the foreign policy orientation of the countries might change under the leadership of the new presidents. Some authors (Dadabaev, 2019) in their studies explain the continuity and changes in the country's foreign policy course following a change in leadership. Recent trends indicate that the countries are pursuing a policy of multi-vector diplomacy with democratic transformations.

Thus, it is important to understand that the ideological norms of the Central Asian states play a key role in forming new norms for the entire Eurasian space. In this case, we are talking about multi-speed and multi-level Eurasian regionalism, and its spread on a global level. As a result, Central Asia in some way contributes to the development of normative regionalism on a Eurasian scale, which, on the one hand, is beneficial for the main regional actor, Russia.

However, it is also important to note that in developing strategies, the Central Asian countries are guided by non-institutional factors (Lee, 2010). As shown by long-standing trends, in foreign policy decisions, the Central Asian countries fundamentally adhere to "preventive" and "multilateral" diplomacy; the region is dominated by the ideas of "desovietization" and "pragmatism". Finally, the environment in which the countries are developing represents an arena of competition for key international players and may be both a source of opportunities and challenges for Central Asia. These factors influence the foreign policy decisions of the Central Asian countries, particularly the regional leaders Kazakhstan and Uzbekistan, given their weight and significance. Taking into account these and other facts, which will be presented below, the authors of the study have constructed a matrix of gains.

On the other hand, the EU also sees itself as a promoter of values such as democracy, human rights, and innovation in the Central Asian region. Thus, in particular, for the Central Asian countries, further development of e-government is of special interest in the context of their relations with the EU. In the Central Asian countries, there is a real need to use digitalization and digital tools to ensure transparent governance systems (Jonsson & Kotetishvili, 2023).

In addition, with the increasing relevance of the topic of digital transformation in the region, the question arises about establishing ethical limits on methods of data collection for use by algorithms. This refers to ethical issues arising from the use of algorithmic data processing and automated analysis methods (Mutlu, 2015). Given the societal demand for democratic transformation in Central Asian countries, the approaches to digital development by the EU countries are the most appropriate for the Central Asian region.

Cooperation within the framework of EPCA and the digital initiative Global Gateway / Team Europe Initiative contributes to the institutional strengthening of the EU's position in the region. The EU remains the largest trading partner of Kazakhstan. It also actively finances projects on digital and transport connectivity through EIB Global.

These initiatives form sustainable channels of European influence and confirm the second hypothesis of the study, namely that cooperation with Central Asia expands the geopolitical and digital presence of the EU. This part was included by the authors closer to the end of the Discussion section in order to show the strategic consequences of interaction.

RESULTS

The analytical review of the key actors in Central Asia enabled the authors to examine strategic interactions in the sphere of digital transformation. It also made it possible to model potential scenarios for the development of relations between CA and the EU, as well as CA and Russia/China. The presented payoff matrices demonstrate the gains and losses associated with each strategic choice. Game-theoretic analysis allowed the identification of optimal strategies: for the EU — active engagement with CA in order to maximize economic and digital advantages; and for CA — selecting the most beneficial paths of digital integration with the EU while taking into account the potential actions of Russia and China.

The model also shows that diplomatic strategies yield more favorable outcomes for Central Asia, whereas increased pressure raises risks and may reduce gains. The results obtained indicate that the optimal course for the EU is to deepen cooperation with Central Asia, although, as established by the authors, the countries of the region may not always reciprocate. The January 2024 Resolution of the European Parliament reinforces this tendency and confirms the hypothesis that cooperation with the EU strengthens the region's international connectivity.

The comparison of EGDI indicators demonstrates the growth of the level of digitalization after the entry into force of the EPCA (EU–Kazakhstan Enhanced Partnership and Cooperation Agreement, 1 March 2020). Thus, the value of Kazakhstan's EGDI reached 0.9009 (2024), which is higher than in previous years.

Similar tendencies are observed in Uzbekistan (0.7999) and Kyrgyzstan (0.7316). Although this growth cannot be directly regarded as a consequence of the EPCA, the temporal correlation with the intensification of EU cooperation and the launch of the Team Europe Initiative (2022) on digital connectivity indicates an institutional link between European programs and measurable results of the digital development of the region. We believe that these data strengthen the evidential base and show that

hypothesis No. 1 ("The EU strengthens the connectivity of Central Asia with the global community") is supported by facts.

The study confirmed that active cooperation between the EU and Central Asia contributes to the EU's increased influence in the region. This supports both of the study's hypotheses: that cooperation with the EU strengthens CA's economic and political ties and expands the EU's role in the region. The use of game theory enabled the authors to understand the dynamics of actor interactions in digitalization. We believe that game theory, in the context of digital cooperation between the EU and CA, offers a new methodological approach that accounts for the complexity of strategic decisions. It also helps to understand the ethical and political aspects of cooperation. Additionally, it addresses their impact on global politics.

As a result of the work carried out, the authors identify the following key conclusions.

The necessity to eliminate the gap between normative ethics and political practice in the digital sphere of CA countries to ensure fairness, transparency, and the protection of citizens' rights and freedoms, following the European model.

Considering ethical aspects, there is a need for active interaction and cooperation between the regions of Central Asia and the EU in the field of digitalization to promote economic development, social integration, and improved quality of life for the populations of the CA countries.

Overall, it is important to understand that the nature of political power is being discussed globally in the context of modern information technologies and their influence on data governance in politics. Various studies present examples of the use of databases in areas such as counterterrorism, political campaigns, and biometric systems. For instance, there have been calls (Teboho Ansorge, 2011) for a deeper analysis of the role of databases in politics to better understand modern political dynamics. In light of these changes in digital transformation development, Central Asia views the European Union as a potential partner for deeper cooperation. The EU, in turn, seeks to actively involve Central Asia in its initiatives, such as partnerships in digitalization, knowledge exchange, and expertise. Financial support for the implementation of digital technology development projects in the region is also essential. "Digital tourism", rapidly developing as a promising economic sector (Tashpulatova & Suyunova, 2025), may be of particular interest to the region.

The importance of considering the interests of global powers such as Russia, China, and the United States when developing digital development strategies and mechanisms for international cooperation between CA and the EU.

Overall, taking into account the stated research objective, the authors, having conducted a thorough analysis, were able to draw several key conclusions. Specifically, they relate to digital transformation and international cooperation.

Firstly, probabilities P1A and P1B should be interpreted within the framework of a general strategic approach. In this case, success in cooperation depends on coordinated actions by CA and the EU.

Secondly, optimizing the described probabilities based on the chosen strategies enables the maximization of gains for both parties (CA and the EU).

Thirdly, based on the analysis of probabilities and strategies, specific recommendations are proposed, namely for CA countries to actively engage with the EU. This will ensure the sustainable development of digital infrastructure in the region as a whole.

CONCLUSION

Thus, in the course of the study, the authors analyzed the key aspects of interaction in the digital sphere, taking into account the interests of various actors in the CA region. Game theory analysis allowed for the examination of different strategies and the prediction of possible outcomes in interactions between CA and other actors.

Based on the conducted analysis, clear conclusions can be drawn that the strategy aimed at strengthening cooperation between CA and the EU (strategy 1 and A) has a high probability of success (P1A). This statement is confirmed by positive modelling results. They demonstrate that such a strategy leads to mutually beneficial development of digital infrastructure and strengthens regional competitiveness. However, it is also important to note that in the event of a refusal to cooperate (strategy 1 and B), the probability of a negative outcome (P1B) increases. This, in turn, may lead to a slowdown in digitalization as well as the deterioration of the political and economic situation in the region. In this regard, the authors recommend strengthening strategic interaction between CA and the EU based on the analysis of the presented probabilities. This approach is aimed at minimizing risks and maximizing the potential of digital technologies to achieve mutually beneficial goals.

As a result, the conducted analysis contributes to the development of game theory and can be applied to the study of strategic relations between East and West. The authors of the study believe that the results have practical value for diplomats, policymakers, and scholars dealing with issues of geopolitics and international relations (Hagemann, Kufenko, & Raskov, 2016).

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest related to the research, preparation, or publication of this article.

AUTHORS' CONTRIBUTIONS

AM: conceptualization, methodology, formal analysis, investigation, writing – original draft, writing – review & editing, visualization; YC: methodology, supervision; MS: conceptualization, investigation, project administration; GA: data curation, writing – review & editing.

REFERENCES:

1. Andžāns, M., & Djatkovica, E. (2023). The Global Gateway and Central Asia: Toward an EU-led post-New Silk Road. https://www.researchgate.net/publication/371170651_The_Global_Gateway_and_Central_Asia_Toward_an_EU-led_Post-New_Silk_Road
2. Borrell, J. (2022). The EU and Central Asia: By connecting regions, we are connecting people. European External Action Service. https://www.eeas.europa.eu/eeas/eu-and-central-asia-connecting-regions-we-are-connecting-people_en
3. Callahan, W. A. (2016). China's "Asia Dream": The Belt Road Initiative and the new regional order. Asian Journal of Comparative Politics, 1(3), 226–243. https://doi.org/10.1177/2057891116647806
4. Carlson, L. J., & Dacey, R. (2006). Sequential analysis of deterrence games with a declining status quo. Conflict Management and Peace Science, 23(2), 181–198. https://doi.org/10.1080/07388940600666022
5. Chatterji, R. (2013). Developments in international relations: Issues and controversies. Jadavpur Journal of International Relations, 17(1), 1–39. https://doi.org/10.1177/0973598414524120
6. Choucri, N., & Goldsmith, D. (2012). Lost in cyberspace: Harnessing the Internet, international relations, and global security. Bulletin of the Atomic Scientists, 68(2), 70–77. https://doi.org/10.1177/0096340212438696
7. Costa Buranelli, F. (2014). Knockin' on heaven's door: Russia, Central Asia and the mediated expansion of international society. Millennium, 42(3), 817–836. https://doi.org/10.1177/0305829814540356
8. Dadabaev, T. (2019). Uzbekistan as Central Asian game changer? Uzbekistan's foreign policy construction in the post-Karimov era. Asian Journal of Comparative Politics, 4(2), 162–175. https://doi.org/10.1177/2057891118775289
9. European Commission. (2022). Global Gateway: Team Europe launches two initiatives in Central Asia on energy and on digital connectivity [Press release]. https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/DEVE/DV/2022/11-30/TeamEuropeinitiativesinCentralAsiaonenergyandondigitalconnectivityEN.pdf
10. European Parliament. (2018). Convention 108+: Convention for the protection of individuals with regard to the processing of personal data. https://www.europarl.europa.eu/meetdocs/2014_2019/plmrep/COMMITTEES/LIBE/DV/2018/09-10/Convention_108_EN.pdf
11. European Parliament. (2024, January 17). EU strategy on Central Asia (2023/2106(INI)) [Resolution]. European Parliament. https://www.europarl.europa.eu/doceo/document/TA-9-2024-0027_EN.html
12. European Union. (2016). General Data Protection Regulation (GDPR). https://gdpr-info.eu/
13. European Union. (2016). Enhanced Partnership and Cooperation Agreement (EPCA) between the European Union and Kazakhstan. Official Journal of the European Union, 59(L29). https://eeas.europa.eu/sites/default/files/enhanced_partnership_and_cooperation_agreement.pdf
14. Greenleaf, G., & Kaldani, T. (2025). Data privacy laws in Central Asia: Between ex-SSR and "Belt & Road". International Data Privacy Law, 15(1), 67–80. https://academic.oup.com/idpl/article-pdf/15/1/67/62923095/ipaf001.pdf
15. Gundal, A., & Gusseinov, E. (2024). Competing digital futures: Europe and China in Central Asia's tech development. The Diplomat. https://thediplomat.com/2024/05/competing-digital-futures-europe-and-china-in-central-asias-tech-development/
16. Hagemann, H., Kufenko, V., & Raskov, D. (2016). Game theory modeling for the Cold War on both sides of the Iron Curtain. History of the Human Sciences, 29(4–5), 99–124. https://doi.org/10.1177/0952695116666012
17. Hussain, F., Hussain, Z., Khan, M. I., & Imran, A. (2023). The digital rise and its economic implications for China through the Digital Silk Road under the Belt and Road Initiative. Asian Journal of Comparative Politics. https://doi.org/10.1177/20578911231174731
18. Jonsson, U., & Kotetishvili, I. (2023). Europe and Central Asia: Investing to rebuild trust in public institutions and local and national levels [Report]. UNDP Oslo Governance Center & UNDP Regional Hub in Istanbul. http://southernvoice.org/wp-content/uploads/2022/05/EUROPE-AND-CENTRAL-ASIA-Investing-to-rebuild-trust-in-public-institutions-and-local-and-national-levels.pdf

19. Juraev, S. (2024). Central Asia between Digital Silk Road and Digital Silk Way. Russian International Affairs Council (RIAC). https://russiancouncil.ru/en/blogs/sh-Juraev/central-asia-between-digital-silk-road-and-digital-silk-way/

20. Karabayeva, A. (2021). Leaders, ideas, and norm diffusion in Central Asia and beyond. Asian Journal of Comparative Politics, 6(1), 25–44. https://doi.org/10.1177/2057891119887813

21. Kassenova, N., & Duprey, B. (Eds.). (2021). Digital Silk Road in Central Asia: Present and future. Davis Center for Russian and Eurasian Studies at Harvard University & Sustainable Kazakhstan Research Institute, Narxoz University. https://daviscenter.fas.harvard.edu/digital-silk-road

22. Komilov, A. (2023). The European Union and Central Asia: Bridging the digital divide (EUCAM Commentary No. 53). Centre for European Security Studies. https://eucentralasia.eu/wp-content/uploads/2023/07/EUCAM-Commentary-53_2023.pdf

23. Kurmangali, M., Yeraliyeva, Y., & Beimisheva, A. (2024). Digitalisation and artificial intelligence in Central Asia: Evidence from five countries. Public Policy and Administration, 23(2), 146–159. https://ojs.mruni.eu/ojs/public-policy-and-administration/article/view/7841/5858

24. Lagutina, M. (2020). A concept of Eurasia: From classical Eurasianism to pragmatic Eurasianism. In M. Lagutina (Ed.), Regional integration and future cooperation initiatives in the Eurasian Economic Union (pp. 1–15). IGI Global. https://doi.org/10.4018/978-1-7998-1950-9.ch001

25. Lee, J.-E. (2010). The non-institutional factors of foreign policy decision-making in Uzbekistan. International Area Review, 13(2), 125–141. https://doi.org/10.1177/223386591001300207

26. Malik, T. H. (2022). The Belt and Road Initiative (BRI) project legitimisation: The rhetor's innovation and the US response. Asian Journal of Comparative Politics, 7(4), 1070–1094. https://doi.org/10.1177/2057891120959476

27. Muratova, M., Sadri, H., Medeubayeva, Z., & Issayeva, A. (2023). The EU and Kazakhstan in the Latest Geopolitical and Geoeconomic Conditions: New Dimensions of Partnership. Journal of Eurasian Studies, 16(1), 20-31. https://doi.org/10.1177/18793665231215799

28. Mutlu, C. E. (2015). Of algorithms, data and ethics: A response to Andrew Bennett. Millennium, 43(3), 998–1002. https://doi.org/10.1177/0305829815581536

29. Nam, P. S. (2010). China's emergence as a key player in the global order and its impacts on geopolitics in Central Asia. International Area Review, 13(1), 155–165. https://doi.org/10.1177/223386591001300108

30. Noone, H. (2019). Two-level games and the policy process: Assessing domestic–foreign policy linkage theory. World Affairs, 182(2), 165–186. https://doi.org/10.1177/0043820019839074

31. O'Doherty, C. (2023). Assemblages of conflict termination: Popular culture, global politics and the end of wars. International Relations, 37(4), 567–588. https://doi.org/10.1177/00471178211052813

32. Okeleke, K., & Borole, S. (2023). Closing the digital divide in Central Asia and the South Caucasus. GSMA Intelligence. https://event-assets.gsma.com/pdf/Closing-the-Digital-Divide-in-Central-Asia-and-the-South-Caucasus-2023.pdf

33. Orsini, N., Rizzuto, D., & Nante, N. (2005). Introduction to game-theory calculations. The Stata Journal, 5(3), 355–370. https://doi.org/10.1177/1536867X0500500305

34. Öztarsu, M. F. (2024). EU seeks to match Chinese influence in Central Asia. Center for European Policy Analysis. https://cepa.org/article/eu-seeks-to-match-chinese-influence-in-central-asia/

35. Pizzolo, P. (2023). Exploring Eurasian integration through the lenses of Carl Schmitt: The Eurasian Economic Union as an example of Schmittian "Great Space". Journal of International Political Theory, 19(3), 292–316. https://doi.org/10.1177/17550882231159940

36. Primiano, C. B., Rice, D., & Kudebayeva, A. (2022). Perceptions of China in Central Asia: Findings from an elite university in Bishkek. Asian Journal of Comparative Politics, 7(4), 957–970. https://doi.org/10.1177/20578911211070870

37. Tashetova, A. (2024, February 1). Digital Forum of the Shanghai Cooperation Organization (SCO) takes place in Kazakhstan for the first time. Astana Hub International Technopark of IT Startups. https://astanahub.com/en/article/digital-almaty-2024-tsifrovoi-forum-shos-vpervye-prokhodit-v-kazakhstane

38. Tashpulatova, L., & Suyunova, F. (2025). Digital transformation of the tourism industry and its impact on export potential: Evidence from Kazakhstan. Journal of Central Asian Studies, 23(1), 40–60. https://doi.org/10.52536/3006-807X.2025-1.003

39. Teboho Ansorge, J. (2011). Digital power in world politics: Databases, panopticons and Erwin Cuntz. Millennium, 40(1), 65–83. https://doi.org/10.1177/0305829811409178

40. Thomas, P. (2010). Central Asia at the heart of Russian and Chinese issues. International Area Review, 13(3), 229–241. https://doi.org/10.1177/223386591001300312

41. United Nations. (2024). UN E-Government Survey 2024. https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2024

42. Welch, D. (2025, June 5). Russia and China in Central Asia's technology stack. German Marshall Fund of the United States. https://www.gmfus.org/news/russia-and-china-central-asias-technology-stack

43. White, S., McAllister, I., & Feklyunina, V. (2010). Belarus, Ukraine and Russia: East or West? The British Journal of Politics and International Relations, 12(3), 344–367. https://doi.org/10.1111/j.1467-856X.2010.00410.x

44. Williams, A. J., & Williams, R. H. (2011). Multiple identification theory: Attitude and behavior change in a simulated international conflict. Simulation & Gaming, 42(6), 733–747. https://doi.org/10.1177/1046878111429228

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LIVED EXPERIENCES OF STUDENT ENTREPRENEURS IN KAZAKHSTAN: INSTITUTIONAL AND CULTURAL INFLUENCES

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ABSTRACT. *The purpose of this study is to investigate the lived experiences of student entrepreneurs in Kazakhstan, with particular attention to how institutional and cultural contexts shape their entrepreneurial identities and actions. This research is a qualitative phenomenological study designed to capture the meanings that students attach to entrepreneurship within their academic and social environments. Data were collected through semi-structured, in-depth interviews with ten student entrepreneurs from two contrasting institutional settings: a private university, De Montfort University Kazakhstan (DMUK), and a public technical university, Satbayev University. Thematic analysis was employed to identify patterns across the narratives. The findings reveal that DMUK students often pursue entrepreneurship as a form of personal growth, experimentation, and self-expression, while Satbayev students frame entrepreneurship in terms of social impact and community benefit. Across both groups, barriers such as cultural resistance, limited funding opportunities, and regulatory challenges were consistently emphasized. However, evidence also points to a gradual shift in peer attitudes, with entrepreneurship gaining recognition as a viable and respected career path among young people. This study contributes to the theoretical understanding of entrepreneurial identity formation in emerging economies and provides context-rich insights into how higher education institutions influence entrepreneurial motivations. Its practical significance lies in informing policies and initiatives aimed at supporting youth-led innovation in Kazakhstan. Recommendations include the development of mentorship networks, the integration of entrepreneurship across disciplines, simplification of funding mechanisms, and the promotion of successful role models to strengthen entrepreneurial ecosystems.*

KEYWORDS: *student entrepreneurship, Kazakhstan, entrepreneurial identity, higher education, cultural context.*

INTRODUCTION

As Kazakhstan positions itself to become a diversified, innovation-driven economy, entrepreneurship has been identified as a critical driver of sustainable development. The government's initiatives, such as the "Kazakhstan 2050 Strategy" and "Business Roadmap 2025," reflect this focus (Sakenova, 2025). Student entrepreneurship, in particular, plays a strategic role by nurturing young talents to create jobs rather than only seeking them (Aubakirova et al., 2023).

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However, promoting student entrepreneurship in Kazakhstan involves overcoming deeply rooted cultural attitudes that prioritize stability and traditional career paths, as well as addressing systemic barriers in higher education and business environments. While the importance of entrepreneurship is acknowledged, support systems, mentorship, and risk-tolerant narratives remain underdeveloped (Sitenko et al., 2024; Tamenova & Sekerbayeva, 2022).

This phenomenological study investigates the lived experiences of 10 student entrepreneurs, i.e., five from De Montfort University Kazakhstan (DMUK) and five from Satbayev University in Almaty, to understand both the barriers they face and the opportunities they perceive. Institutional comparisons aim to reveal how private versus public university environments influence entrepreneurial trajectories (GEM, 2025).

This study deliberately focuses on De Montfort University Kazakhstan (DMUK) and Satbayev University to capture contrasting entrepreneurial environments within Kazakhstan's higher education landscape. DMUK, as the first British university in Kazakhstan, attracts many students from higher-income families with strong business backgrounds and an openness to entrepreneurial thinking. These students often arrive with a "business mindset" nurtured by family support and international exposure. In contrast, Satbayev University, a leading public technical institution, represents a different dynamic: it serves a broader demographic, emphasizes technological innovation, and operates its own incubator to support student ventures. As a public sector university with a long-standing technical focus, Satbayev University offers students practical, engineering-oriented pathways into entrepreneurship but within a more formal and resource-constrained setting. By examining these two distinct contexts, this study provides a richer, more nuanced understanding of how institutional environments and student backgrounds interact to shape entrepreneurial journeys in Kazakhstan.

The following are the research questions:
1. What are the key challenges faced by student entrepreneurs in Kazakhstan's higher education context?
2. What opportunities do they perceive for developing entrepreneurial ventures?
3. How do institutional environments (private vs. technical universities) influence entrepreneurial identity and outcomes?

LITERATURE REVIEW

Entrepreneurship education has become a critical driver in shaping students' entrepreneurial intentions and mindsets across various cultural and institutional contexts. Research suggests that tailored educational programs and supportive institutional climates can significantly enhance students' self-efficacy and willingness to start new ventures (Walter et al., 2013). In particular, the structure and focus of university departments play an important role in either encouraging or discouraging entrepreneurial career paths among students (Nabi et al., 2010). Furthermore, the presence of role models within university environments has been shown to strengthen students' perceived behavioral control and entrepreneurial attitudes, thus fostering a more proactive approach toward venture creation (Fellnhofer, 2017).

Beyond curriculum and departmental influences, the overall entrepreneurial climate at higher education institutions can shape students' confidence and perceived feasibility of starting a business. Bergmann et al. (2018) emphasize that a strong entrepreneurial climate, including mentorship opportunities and practical support systems, can create a sense of belonging and inspire students to pursue entrepreneurial activities. Similarly, university-based incubation and support structures have been found to positively impact students' entrepreneurial orientation and ability to transform ideas into viable ventures (Sitenko et al., 2024). These findings underscore the importance of embedding entrepreneurship into broader institutional strategies rather than treating it as a standalone curricular element.

However, entrepreneurship, particularly Student Entrepreneurship in Kazakhstan, remains an emerging sector, often overshadowed by traditional career preferences despite national programs like "Business Roadmap 2025" and various startup grants. Historically dominated by family-run businesses and small trading enterprises (Aitzhanova et al., 2021), Kazakhstan's high Uncertainty Avoidance score reflects a cultural preference for stability and risk aversion (Hofstede Insights, n.d.). This mindset discourages entrepreneurial initiatives among youth, who often favor secure public or corporate jobs (Sitenko et al., 2024).

Universities play a pivotal role in challenging this cultural narrative by embedding practical, hands-on entrepreneurship training into their curricula (Byun et al., 2018; Klofsten & Lundmark, 2016). Private institutions like DMUK emphasize applied learning and industry connections, while public universities such as Satbayev are gradually integrating entrepreneurship into their more theory-focused programs (Aubakirova et al., 2023). However, studies highlight that despite policy efforts, student ventures remain largely necessity-driven rather than opportunity-driven, reflecting deep-rooted skepticism and perceived social risks (GEM, 2022; Tamenova & Sekerbayeva, 2022). Nevertheless, the growing interest among young people suggests potential for change if institutional and societal support systems continue to evolve (Nabi et al., 2017; Fayolle & Gailly, 2015).

Studies on Student Entrepreneurship in Kazakhstan

Universities are key agents in transforming students' entrepreneurial intentions into real actions. The Global University Entrepreneurial Spirit Students' Survey (GUESSS) underscores that exposure to entrepreneurship education positively correlates with students' startup intentions and self-efficacy (Tamenova, 2021). Private universities such as De Montfort University Kazakhstan (DMUK) have integrated entrepreneurship into their curricula through mentorship programs and pitch competitions, although they still lack a formal incubator program to support ventures beyond the classroom. Nonetheless, these approaches align well with global best practices in experiential entrepreneurship education (Byun et al., 2018; Klofsten & Lundmark, 2016). In contrast, public universities like Satbayev University continue to emphasize theoretical learning and traditional academic development, focusing heavily on research and established disciplines. While recent reforms have introduced incubators, entrepreneurship modules, and startup weekends, the overall institutional mindset remains relatively conservative (Aubakirova et al., 2023). As a result, students in these environments

often view entrepreneurship more as a means of social contribution and community development rather than purely as a commercial pursuit.

Research indicates that Kazakhstanis are generally less inclined to accept failure as part of the entrepreneurial process compared to their Western counterparts. The stigma around business failure often discourages young people from pursuing startups or experimenting with innovative ideas (Tamenova & Sekerbayeva, 2022). This fear is compounded by family and societal expectations, which prefer clear, stable career trajectories.

Access to finance remains a primary obstacle. Many students depend on family savings or small personal loans because venture capital markets and angel investor networks are still underdeveloped in Kazakhstan (Aitzhanova et al., 2021). Government grants like those offered under the "Zhas Project" are perceived as complex and bureaucratic, limiting accessibility for first-time entrepreneurs (Sakenova, 2025).

Despite these challenges, there are encouraging signs. There is a growing trend among Kazakh youth to engage in e-commerce, digital services, and social enterprises, indicating a shift towards more innovative and value-driven business models (GEM, 2022). Social media and global exposure have played critical roles in shaping this mindset, offering new platforms for marketing, networking, and community building.

Collectively, the literature suggests that while Kazakhstan's student entrepreneurship ecosystem faces systemic and cultural barriers, there is a significant foundation on which to build. To unlock this potential, it is essential to strengthen practical entrepreneurial education, normalize risk-taking, and simplify access to financial and institutional resources (Passavanti et al., 2023).

Despite growing interest in entrepreneurship education in Kazakhstan, most existing studies focus on broad ecosystem-level factors, such as government policies, macroeconomic conditions, and overall startup infrastructure. There is limited research specifically examining the nuanced, lived experiences of student entrepreneurs within different university contexts. While some works discuss entrepreneurship intentions among Kazakhstanis, they rarely delve into how personal motivations, institutional environments, and cultural expectations interact to shape actual entrepreneurial behavior. In particular, comparisons between private institutions that emphasize applied learning and technical universities focused on technological innovation are almost entirely absent.

Furthermore, most current research relies on quantitative surveys, which often overlook the complex social and psychological dimensions of entrepreneurship, such as identity formation, family influence, and emotional resilience. This lack of qualitative, in-depth analysis creates a significant gap in understanding how young entrepreneurs navigate systemic barriers and cultural narratives in Kazakhstan. Addressing this gap is crucial for designing tailored educational programs and policy interventions that resonate with students' real experiences and needs. By exploring these underexamined aspects, this study aims to provide richer insights that can support more effective entrepreneurship development in transitional economies.

In addition to prior discussions on entrepreneurship education, this study's theoretical framing is informed by contemporary perspectives on entrepreneurial identity and institutional change. Rae and Carswell (2013) conceptualize entrepreneurial identity as a dynamic and socially constructed process, continually shaped through learning, interaction, and context. Shepherd and Patzelt (2011) extend this understanding by emphasizing how entrepreneurs operate within evolving institutional environments, responding adaptively to regulatory, cultural, and cognitive shifts. Together, these perspectives provide an interpretive lens for examining how Kazakhstan's students make sense of their entrepreneurial experiences within distinctive institutional settings. This alignment between individual sense-making and institutional context forms the conceptual backbone of the present research.

METHODOLOGY

Research Design

A phenomenological research design was chosen for this study to deeply explore the lived experiences of student entrepreneurs in Kazakhstan. Specifically, this study adopts an Interpretative Phenomenological Analysis (IPA) orientation. This approach emphasizes the researcher's interpretive role in engaging with participants accounts to uncover the meanings embedded in their experiences. The analysis, therefore, goes beyond description to explore how student entrepreneurs construct and negotiate their entrepreneurial identities within the institutional and cultural contexts of Kazakhstan.

Phenomenology is especially suitable for understanding how individuals construct meaning from their experiences and navigate complex social and institutional environments (Creswell & Poth, 2018). This approach aligns with the study's objective to capture not just events but also emotions, perceptions, and contextual nuances.

Phenomenology prioritizes depth over breadth, allowing rich, detailed insights into participants' subjective realities. Given the cultural and institutional complexities surrounding entrepreneurship in Kazakhstan, this design provides a means to uncover both explicit challenges (e.g., bureaucracy, funding) and implicit ones (e.g., social stigma, family expectations). A quantitative survey or purely descriptive study would not have sufficiently captured these deeper layers of meaning.

Participants and Sampling

Ten student entrepreneurs were purposively sampled, with five participants each from De Montfort University Kazakhstan (DMUK) and Satbayev University. DMUK represents a private, practice-oriented model, while Satbayev University offers a more traditional, theory-focused public university context. Participants were selected based on their active involvement in launching or running ventures during their studies, ensuring they could provide first-hand reflections on real entrepreneurial experiences. The sample included students aged between 20 and 24 years, with a balanced gender distribution (six male and four female participants), reflecting the growing diversity in student entrepreneurship. Their fields of study ranged from business management, marketing, and international relations at DMUK to engineering, information technology, and applied sciences at Satbayev University. The initial participants from DMUK were selected using purposive criteria focused on active student entrepreneurs. After these

interviews, a snowball sampling approach was used: several DMUK students referred peers from Satbayev University who were engaged in entrepreneurial activities. This informal referral network helped identify additional relevant participants who might have been otherwise difficult to reach, particularly from the public and technical university context. Snowball sampling allowed for richer insights into student entrepreneurial networks and experiences across institutional boundaries.

Institutional Context

The table below presents a comparative overview of De Montfort University Kazakhstan (DMUK) and Satbayev University in Almaty, highlighting their differing strategic approaches to entrepreneurship education.

Table 1. Comparative overview of DMUK and Satbayev University (entrepreneurship orientation)

Attribute	De Montfort University Kazakhstan (DMUK)	Satbayev University
Ownership / type	Private, British branch campus	Public, national technical university
Strategic emphasis	International, creativity-driven business/management education	STEM innovation, applied engineering, tech transfer
Typical student profile (as reflected in manuscript)	More exposure to business backgrounds; higher openness to entrepreneurial thinking	Broader demographic with strong technical focus
Curriculum approach	Practice-oriented, applied learning, workshops, mock pitch activities in classes	Strong theoretical grounding; growing but uneven practical exposure
Entrepreneurship integration	Embedded in taught modules; mentorship/guest talks; no formal incubator yet	University incubator present; formal tech-innovation pathway
Follow-through support	Events valuable but short-cycle; limited structured post-event mentoring	Incubator provides more structured early-stage support
Industry links	Visiting entrepreneurs, class projects, external talks	Partnerships aligned to engineering/technology domains
Funding / access	Emphasis on private/angel interest but traction-first expectations	Exposure to state/uni grant schemes; processes perceived as bureaucratic
Typical student orientation (per findings)	Personal growth, experimentation, self-expression	Social contribution, community benefit, ethical impact
Key constraints noted by students	Limited sustained mentoring after class activities	Practical “how-to” gaps (registration, pitching), admin complexity

Source: Author’s compilation based on Stam (2015)

Notes: This table summarizes key contrasts as described in the manuscript and drawn from interview insights. It is intended to illustrate how the two institutional settings, DMUK and Satbayev University, differ in their strategic orientations, pedagogical focus, and support structures for student entrepreneurship. The comparison is interpretive and based on qualitative data rather than institutional policy documents.

In short, Table 1 above provides a concise juxtaposition of institutional orientations and student experiences, clarifying how each context channels entrepreneurial identity and practice in distinct ways. These two institutions were selected as part of a qualitative

research design aimed at exploring how different pedagogical environments and institutional missions influence students' entrepreneurial mindset. DMUK, a British university branch campus, emphasizes international and creativity-driven business education (British Council Kazakhstan, 2023). In contrast, Satbayev University, Kazakhstan's leading technical university, integrates entrepreneurship through applied STEM-based innovation and state-driven technology transfer policies.

Data Collection

Semi-structured interviews were conducted over two months in early 2025, with each session lasting approximately 60–75 minutes. An interview guide included open-ended questions on topics such as motivations for entrepreneurship, perceived institutional support, societal reactions, personal and financial challenges, and future aspirations. This flexible format allowed the interviewer to probe further into unexpected themes or stories that emerged during the conversation.

Data Analysis

Interviews were transcribed verbatim and, where necessary, translated into English to maintain accuracy. Thematic analysis was used to identify, analyze, and report patterns within the data (Braun & Clarke, 2006). Coding was carried out inductively: initial codes were generated from close reading of transcripts, which were then grouped into higher-level themes through iterative analysis. The constant comparison method was used to ensure consistency and identify subtle differences between the two university contexts.

Table 2. Summary of Key Themes and Analytical Dimensions

Main Theme	Sub-Themes / Patterns	Analytical Interpretation
1. Institutional Contexts	• Availability of entrepreneurship education • Mentorship and incubation support • University culture (private vs. public)	Institutional environments shape the kinds of opportunities and support structures available to student entrepreneurs. DMUK's flexible, creative climate fosters experimentation, whereas Satbayev's formal structure encourages practical but cautious engagement.
2. Cultural Identity and Social Perceptions	• Family expectations • Societal attitudes toward entrepreneurship • Perceived risk and legitimacy	Students' entrepreneurial intentions are filtered through strong cultural narratives of stability and respectability. Entrepreneurship is often negotiated as both personal aspiration and cultural deviation.
3. Entrepreneurial Learning and Personal Growth	• Learning by doing • Resilience through failure • Balancing study and business	Entrepreneurial activity functions as a form of experiential learning, building self-efficacy, autonomy, and adaptive identity formation. Students see entrepreneurship as a means of self-discovery and capability building.

Source: Author's compilation based on Braun & Clarke (2006)

Validation and Credibility Measures

To enhance credibility, member checking was conducted by sharing summarized findings with participants for confirmation and feedback. Triangulation was achieved by comparing data across different participants and institutions. Additionally, peer debriefing with colleagues familiar with qualitative research methods helped refine interpretations and mitigate potential researcher biases. A detailed audit trail was maintained to document analytical decisions, adding transparency to the study process.

Ethical Approval and Informed Consent

Ethical approval was not required for this study, as per institutional guidelines on non-clinical educational research involving adult students. The study involved voluntary participation of university students in interviews focused on learning experiences, with informed consent obtained from all participants. Data were anonymized, and no identifying information was collected. The research was conducted in accordance with international ethical standards, including the British Educational Research Association (BERA) Ethical Guidelines (2018).

Limitations of the approach

While this qualitative approach offers rich and context-specific insights, it inherently limits the generalizability of the findings beyond these particular cases. By focusing on only two universities, the study may not fully capture the wider regional and institutional diversity that exists across Kazakhstan. Additionally, the relatively small sample size means some unique experiences might have been overlooked. Future research could build on these findings by including more diverse institutions, adopting longitudinal designs to follow students over time, or combining qualitative and quantitative methods to provide a broader and deeper understanding of student entrepreneurship.

FINDINGS

The analysis revealed several key themes that describe the experiences of student entrepreneurs in Kazakhstan: motivations and identity formation, institutional support differences, societal and cultural pressures, financial and regulatory obstacles, and evolving peer perceptions. Each theme is presented below with direct quotations from participants to ensure their voices are central.

Students from both universities spoke passionately about their desire for independence and self-definition. DMUK students frequently described their entrepreneurial pursuits as a way to "escape the system". One student shared, *"At DMUK, they encourage us to question everything. I started my marketing consultancy not because I was sure it would work, but because I wanted to take control of my learning."*

Another DMUK participant said, *"Working on my startup feels like designing my own curriculum. Every mistake is a lesson that no textbook could teach me."* For Satbayev students, motivations often stemmed from a sense of social responsibility. A student who launched a community recycling initiative stated, *"We need to show that business can solve social problems. My goal isn't just profit, but it's about the impact I create. I earnestly want to help people see sustainability differently."*

Students at DMUK spoke highly of workshops, mock pitch competitions in classes, and visiting entrepreneur lectures. A DMUK participant reflected, *"mock pitch competitions felt like the first time my ideas were truly heard. You present to the class, who act as actual investors, get immediate feedback, and realize what matters in the real world."* However, some felt these programs lacked sustained follow-up support: "After mock pitch competitions in classes, there is no structured way to continue. You win or lose, and that's it. I wish there were mentorships that lasted beyond those events."

In contrast, Satbayev students valued the theoretical grounding but felt disconnected from real business practice. One student noted, *"We learn frameworks and theories, but no one teaches us how to actually register a business or pitch to investors. We have to figure that out ourselves."* Several described forming informal peer networks as a workaround, such as creating Telegram groups for sharing tips. These findings support prior research indicating that institutional context shapes engagement with entrepreneurship.

A near-universal theme was tension with family and broader cultural norms. Many described families' preference for secure, stable jobs, especially in government or large state-owned enterprises. A Satbayev University student explained: *"My mother still thinks I'm going through a phase. She asks me when I'll get serious about a real career."* Similarly, a DMUK student revealed: *"My relatives openly say that business is only for those who fail academically. There's this idea that real success means an office job with a big company."*

Access to funding and bureaucratic challenges formed one of the most significant barriers. DMUK students highlighted problems with formal financing options: *"I pitched to a local investor, and he liked the idea but wanted me to prove revenue first. It's a catch-22: you need money to get customers but need customers to get money."*

Meanwhile, Satbayev University students described complicated grant applications and unclear criteria. One student said, *"I applied for a student entrepreneurship grant, but no one explained the criteria properly. After months of paperwork, I was told I didn't qualify because my business was too experimental."* Despite strong cultural headwinds, most students noted a positive shift among their peers. A DMUK student observed: *"In my first year, no one talked about startups. Now, many of us are either working on side projects or at least thinking about it."*

A Satbayev University student echoed: *"Before, entrepreneurship was seen as risky and irresponsible. Now it's starting to look brave and even admirable."* This cultural change, while still nascent, provides an important foundation for future policy and institutional efforts. While some DMUK students described pivoting their business ideas multiple times before achieving moderate traction. One student said, *"I started with an app idea, switched to a marketing service, and finally landed on customized merchandise. Every pivot taught me something new about what people actually want."* Others described struggling with imposter syndrome: *"Sometimes, I feel like I don't belong in entrepreneurship circles, especially when comparing myself to big success stories online."*

Satbayev University students shared stories of using academic skills in practical contexts. One participant noted: *"My research training helped me design better surveys for customer feedback. It's amazing how those academic skills can be transferred to business."* These deeper reflections illustrate the importance of flexibility and adaptability as critical entrepreneurial skills. Constant pivoting should be normalized as a sign of iterative learning rather than failure. Furthermore, the feeling of imposter syndrome among students suggests a need for stronger psychological support and mentorship to reinforce self-belief.

Finally, integrating academic rigor with practical application can bridge perceived gaps between theoretical education and business realities. Encouraging students to use research, analytical, and critical thinking skills within entrepreneurial projects can lead to stronger, evidence-based business decisions.

The following are the key themes that emerged from the interviews across both Universities.

DISCUSSION

The findings reveal that student entrepreneurship in Kazakhstan is not merely a reaction to economic opportunity but a process of meaning-making shaped by institutional and cultural forces. Interpreting these results through the lens of entrepreneurial identity, it becomes evident that students actively construct their sense of "being an entrepreneur" within the expectations and constraints of their university environments. DMUK's context nurtures more individualistic and creativity-driven identities, while Satbayev's framework fosters collective and socially oriented motivations. These variations reflect broader institutional logics and highlight how entrepreneurship education is mediated by values, norms, and learning cultures rather than simply course content.

The results contribute to theory by advancing our understanding of entrepreneurial identity formation within transitional economies. Unlike studies in Western contexts that highlight opportunity-driven motivations, this study reveals a strong interplay between social values, family expectations, and institutional frameworks in shaping entrepreneurial intentions. This theoretical contribution highlights the need to consider cultural narratives and localized institutional dynamics when designing entrepreneurship education in emerging markets.

In terms of policy implications, simplifying funding mechanisms and reducing bureaucratic barriers are crucial for empowering young entrepreneurs. Establishing long-term mentorship networks and showcasing young role models can help shift societal perceptions of entrepreneurship from a risky alternative to a respected career path. Additionally, integrating entrepreneurship education across disciplines and providing experiential learning opportunities can foster more inclusive and sustainable entrepreneurial ecosystems.

While the study focuses on Kazakhstan, its insights are relevant to other emerging and transitional economies facing similar cultural and institutional challenges. Future research should build on these findings by adopting longitudinal and comparative approaches across different regions to deepen understanding and improve generalizability.

Overall, the findings underscore that entrepreneurship education and policy in emerging economies must go beyond technical skills to address cultural resistance, psychological resilience, and institutional support structures. This holistic perspective can significantly enhance the development of young entrepreneurs and contribute to national innovation and economic diversification goals.

These findings reveal that student entrepreneurship in Kazakhstan is not merely an economic decision but a deeply personal journey shaped by motivations, institutional environments, cultural norms, and systemic barriers. DMUK students see

entrepreneurship as experimental learning that blends ambition with market realities, while Satbayev students emphasize ethical and community-centered missions. This duality shows that entrepreneurial intention is driven as much by social values as by economic opportunity.

The institutional context plays a pivotal role: DMUK fosters confidence through practical exposure but lacks sustained mentorship, while Satbayev offers strong ethical grounding but insufficient hands-on preparation. A hybrid model combining theory with long-term support, including joint incubators and shared mentorship, could address these gaps. Cultural resistance, often shaped by family narratives favoring stability, leads students to view entrepreneurship as temporary rather than permanent. Showcasing young entrepreneurs as role models and reframing failure as growth could help shift these perceptions.

Financial constraints and bureaucratic hurdles further hinder progress; students need success evidence to secure funding, but require funding to achieve success. Simplified grants, youth-focused microfinance, and clearer regulations are critical, and lessons from programs like Startup India and Start-Up Chile offer policy inspiration. Encouragingly, peer openness indicates a generational shift toward viewing entrepreneurship as respectable and aspirational. Universities can amplify this momentum by supporting student-led clubs, peer mentoring, and campus festivals that normalize innovation. Finally, competitions and workshops must be complemented by sustained mentoring, legal support, and financial coaching to guide ventures from ideation to scaling and exit, requiring coordinated efforts from universities and government agencies.

An important nuance that emerged from the interviews is the difference in support levels based on students' family backgrounds. Those from entrepreneurial or business-owning families often benefit from informal mentorship, seed funding, and emotional backing, which one might call a "safety net". Several DMUK students, for instance, shared that their parents, who run small businesses, not only encouraged them to take entrepreneurial risks but also provided capital to get started. In contrast, students from non-business backgrounds reported more pressure to pursue stable jobs, with little to no financial cushion for entrepreneurial experimentation. One DMUK participant noted, "My friend's father gave him money to try his startup idea twice, but my family keeps telling me to just find a 'normal job' after graduation." This aligns with broader global findings that family support and social capital often determine who gets to pursue entrepreneurship more confidently (Passavanti et al., 2023). While Satbayev University offers a technology-focused incubator that provides practical assistance for early-stage ventures, DMUK, despite its emphasis on applied learning, still lacks a formal incubator. This gap limits students' ability to build momentum after pitch events and workshops. A dedicated incubator at DMUK could help democratize entrepreneurial opportunity and allow students from all backgrounds to thrive.

CONCLUSION

This study sheds light on the deeply personal and complex journeys of student entrepreneurs in Kazakhstan. It reveals that entrepreneurship is more than a business activity rather it is an act of self-discovery, resilience, and cultural negotiation. DMUK students often see their ventures as creative laboratories for personal growth, while

Satbayev students connect their efforts to broader social impact and community service. These insights highlight the necessity for universities to offer supportive environments that not only teach technical skills but also nurture confidence, adaptability, and ethical values.

On a human level, the stories shared by these young entrepreneurs reflect courage, curiosity, and a willingness to challenge cultural norms. By listening to their voices, educators and policymakers can design more empathetic and inclusive strategies that recognize the emotional and social dimensions of entrepreneurship.

Ultimately, supporting student entrepreneurs means building ecosystems where failure is embraced as a learning experience, diverse backgrounds are celebrated, and young people feel empowered to shape their futures. As Kazakhstan and similar emerging economies continue to evolve, these human-centered approaches will be crucial for cultivating a generation of entrepreneurs ready to drive meaningful change.

This study has explored the nuanced experiences of student entrepreneurs in Kazakhstan, revealing how motivations, cultural narratives, and institutional contexts shape their journeys. While DMUK students tend to view entrepreneurship as a means for personal growth and skill development, Satbayev students emphasize social impact and ethical considerations. Despite financial challenges and societal skepticism, there is a noticeable cultural shift among young people who increasingly see entrepreneurship as a legitimate and respected path. These findings underscore the complex interplay among individual aspirations, family expectations, and broader policy environments, offering valuable guidance for universities and policymakers to create more supportive, tailored interventions.

This study both confirms and expands on prior research into student entrepreneurship in transitional economies. It affirms Tamenova and Sekerbayeva's (2022) observation that fear of failure and family expectations remain major psychological barriers. Furthermore, these insights align with Tariq's (2019) study on student entrepreneurs in Pakistan, which emphasized the importance of practical competencies and institutional support in shaping entrepreneurial motivations. However, this study also reveals a subtle but growing cultural shift among peers, who increasingly view entrepreneurship as an admirable and viable career path rather than a risky alternative. This emerging openness suggests a new dynamic not fully captured in previous studies, offering a more optimistic foundation for future policy and educational strategies.

Ultimately, student entrepreneurship in Kazakhstan emerges not merely as an economic activity but as a form of self-expression and cultural negotiation. The contrasting experiences of DMUK and Satbayev students highlight that entrepreneurship education cannot be approached with a one-size-fits-all model. While DMUK excels in practical skill-building, it could integrate stronger community-oriented and ethical perspectives, whereas Satbayev University socially conscious students would benefit from more experiential, hands-on opportunities. By nurturing this emerging entrepreneurial spirit that is rooted in resilience, creativity, and social impact, Kazakhstan has a unique opportunity to

cultivate a new generation of entrepreneurs poised to transform industries and tackle pressing societal challenges.

Recommendations

Universities should play a transformative role in cultivating student entrepreneurship by establishing long-term mentorship networks that include alumni and industry experts, as well as developing dedicated incubator programs. While Satbayev University has already launched a technological incubator, DMUK still lacks such a resource; creating one could significantly enhance student ventures beyond the classroom. Integrating entrepreneurship across all disciplines, not just in business courses, will empower students from technical, creative, and social science backgrounds to see entrepreneurial pathways in their fields. Shared entrepreneurship spaces and cross-disciplinary hubs can further encourage collaboration and innovation, while dedicated entrepreneurship centers can inspire cultural change, lead research, and support student-led initiatives that foster a vibrant entrepreneurial community on campus.

Universities should strengthen support for student entrepreneurship by creating mentorship networks, incubators, and cross-disciplinary hubs that connect business, technology, and creative fields. Integrating entrepreneurship into diverse curricula and establishing dedicated centers can foster collaboration, innovation, and a stronger entrepreneurial culture. At the policy level, simplifying business registration, offering digital support systems, and providing student-focused grants or low-interest loans can reduce barriers to start-up creation. Highlighting successful youth entrepreneurs in public media can also help shift social perceptions and make entrepreneurship a more respected career path.

Moreover, collaboration between universities, government, and private partners should be formalized through regular Student Entrepreneurship Councils or Innovation Forums, aligning student initiatives with national priorities and funding opportunities. Universities can further enhance impact by embedding policy literacy into entrepreneurship education to prepare students for regulatory and financial realities.

Finally, local governments and municipalities can host student entrepreneurship fairs and challenge grants to increase visibility and provide early-stage support. Collectively, these actions can create an enabling environment that inspires students to innovate, take initiative, and contribute to Kazakhstan's entrepreneurial ecosystem.

Lastly, students themselves have a crucial role: they should engage actively in peer networks, embrace failure as a learning tool, and start with small, low-risk experiments to build resilience and confidence. By leveraging available institutional and policy support and advocating for further improvements, students can collectively shape an ecosystem that truly nurtures entrepreneurial ambition and impact.

Limitations and Future Research

While this phenomenological study provides valuable insights, several limitations should be acknowledged. The focus on two universities in Almaty, i.e., one private (DMUK) and one public (Satbayev University) that limits the generalizability of the findings to all student entrepreneurs in Kazakhstan o r the wider Central Asian region. Students from other regions, such as Astana, Shymkent, or rural areas, may

face different institutional and cultural challenges that shape their entrepreneurial experiences. The small, self-selected sample may also introduce bias, as participants were likely those already engaged or interested in entrepreneurship. Furthermore, self-reported interview data carries a risk of social desirability bias, with participants potentially overstating successes or minimizing difficulties.

Future research should broaden the sample to include more diverse universities, disciplines, and regional contexts. A longitudinal approach would help track how students' entrepreneurial identities evolve after graduation and which institutional factors most influence venture sustainability. Mixed-method designs combining qualitative depth with quantitative validation could also strengthen generalizability. Comparative studies across Central Asia could uncover regional differences, while deeper exploration of psychological dimensions such as imposter syndrome, fear of failure, and resilience would enrich understanding of the personal side of entrepreneurship education.

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CONFLICTS OF INTEREST

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

AUTHORS' CONTRIBUTIONS

JT: conceptualization, methodology, investigation, formal analysis, writing – original draft, writing – review & editing, supervision; AK: conceptualization, formal analysis, writing – review & editing, visualization.

ETHICAL APPROVAL AND INFORMED CONSENT

Ethical approval was not required for this study, as per De Montfort University Kazakhstan and Satbayev University guidelines on non-clinical educational research involving adult students. The study involved voluntary participation of university students in interviews focused on learning experiences, with informed consent obtained from all participants. Data were anonymized, and no identifying information was collected. The research was conducted in accordance with international ethical standards, including the British Educational Research Association (BERA) Ethical Guidelines (2018), and complies with the Journal of Central Asian Studies' ethics policy based on COPE and Elsevier's PERK principles.

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REFERENCES:

1. Aitzhanova, D. N., Begentayev, M. M., Kunyazova, S. K., & Titkov, A. A. (2021). Youth entrepreneurship in the Republic of Kazakhstan: Concept, problems and solutions. Karaganda University Bulletin. Economy Series, (2), 4–15. https://doi.org/10.31489/2021Ec2/4-15
2. Aubakirova, S., Kozhamzharova, M., Artykbayeva, G., Iskakova, Z., & Zhayabayeva, R. (2023). Experience in forming entrepreneurial education in Kazakhstan universities: Trends and approaches. Frontiers in Education, 8, Article 1199392.
3. Bergmann, H., Geissler, M., Hundt, C., & Grave, B. (2018). The climate for entrepreneurship at higher education institutions. Research Policy, 47(4), 700–716. https://doi.org/10.1016/j.respol.2018.01.018
4. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.
5. British Council Kazakhstan. (2023). Transnational education in Kazakhstan: Opportunities and models.
6. British Educational Research Association (BERA). (2018). Ethical guidelines for educational research (4th ed.). https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018
7. Byun, C., Sung, C. S., Park, J. Y., & Choi, S. B. (2018). A study on the effectiveness of entrepreneurship education programs in higher education institutions: A case study of Korean graduate programs. Journal of Open Innovation: Technology, Market, and Complexity, 4(3), 26.
8. Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). SAGE Publications.
9. De Montfort University Kazakhstan (DMUK). (2024). Official website.
10. Fellnhofer, K. (2017). Facilitating entrepreneurial discovery in heterogeneous entrepreneurial teams: A simulation-based approach. Review of Managerial Science, 11, 591–611. 9
11. Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. Journal of Small Business Management, 53(1), 75–93.
12. GEM (Global Entrepreneurship Monitor). (2025). Kazakhstan national report. Global Entrepreneurship Research Association.
13. Klofsten, M., & Lundmark, E. (2016). Supporting the entrepreneurial process in academia: The role of university infrastructure. European Journal of Innovation Management, 19(3), 461–476.
14. Hofstede Insights. (n.d.). Country comparison: Kazakhstan.
15. Institutional Ethics Committee. (n.d.). Research ethics guidelines for non-clinical educational research involving adult students. De Montfort University. https://www.dmu.ac.uk/research/ethics-and-governance/research-integrity-and-ethics.aspx
16. Institutional Ethics Commission. (n.d.). Mandate and function of the ethics commission. Satbayev University. https://official.satbayev.university/en/eticheskaya-komissiya
17. Nabi, G., Holden, R., & Walmsley, A. (2010). Entrepreneurial intentions among students: Towards a re-focused research agenda. Journal of Small Business and Enterprise Development, 17(4), pp.537–551.
18. Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. Academy of Management Learning & Education, 16(2), 277–299.
19. OECD. (2018). Supporting entrepreneurship and innovation in higher education in Kazakhstan. OECD Publishing.
20. Passavanti, C., Ponsiglione, C., Primario, S., & Rippa, P. (2023). The evolution of student entrepreneurship: State of the art and emerging research direction. The International Journal of Management Education, 21, 100820.
21. Sakenova, S. (2025). Women lead among young entrepreneurs in Kazakhstan. The Astana Times.
22. Satbayev University. (2024). Official website.
23. Sieger, P., Gruber, M., Fauchart, É., & Zellweger, T. (2018). The climate for entrepreneurship at higher education institutions. Research Policy, 47(4), 700–716.
24. Stam, E. (2015). Entrepreneurial ecosystems and regional policy: A sympathetic critique. European Planning Studies, 23(9), 1759–1769.

25. Tamenova, S., Baizyldayeva, U., Nurmukhanova, G., Razakova, D., Turgumbayeva, A., Yeralina, E., Seitbatkalova, A., Zhakhanova, Z., & Sekerbayeva, A. (2021). GUESSS: Global University Entrepreneurial Spirit Students' Survey: National report GUESSS Kazakhstan – 2021 [National report]. Turan University.
26. Tamenova, S. S., & Sekerbayeva, A. (2022). Study of Kazakhstani students' entrepreneurial intentions. Bulletin of Turan University, (2), 117–124.
27. Tariq, J. (2019). Examining the impact of entrepreneurial competencies and knowledge base on entrepreneurial motivations: A quantitative study of student entrepreneurs in Pakistan. GARI International Journal of Multidisciplinary Research, 4(7), 1–18.
28. Walter, S. G., Parboteeah, K.-P., & Walter, A. (2013). University departments and self-employment intentions of business students: A cross-level analysis. Entrepreneurship: Theory and Practice, 37(2), 175–200.
29. World Bank. (2020). Fostering innovation in Kazakhstan's higher education system. World Bank Group.

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PUBLIC DEBT POLICY EFFECTIVENESS IN ENABLING SUSTAINABLE DEVELOPMENT IN CENTRAL ASIA

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ABSTRACT. *A steady increase in public debt, which occurs against a substantial lag in progress toward the United Nations' Agenda for Sustainable Development by 2030, brings research on the effectiveness of public debt policy to the forefront. This study thus examines the impact of public debt policy on sustainable development (SD) with a focus on Central Asian countries. Fixed effects regression with a dummy variable and moderated regression analysis are utilized to examine the nexuses between debt financing and the SD's four dimensions, drawing on panel data from 1996 to 2023. The results suggest that external public debt promotes economic, social, and institutional development, while hampering the environment. Moreover, the outcomes of debt financing change depending on the performance of public policies, leading to synergy, lost, and conflicting effects. When dealing with these policy trade-offs, it is advisable to ensure an SD-informed fiscal framework and rules, adopt strategic investment of borrowed funds, and apply SD-aligned criteria to evaluate projects financed by public debt.*

KEYWORDS: *external public debt, sustainable development, Central Asia.*

INTRODUCTION

What are the effects, if any, of public debt policy in accelerating progress towards sustainable development? This question has gained importance as rising public debt occurs against the backdrop of substantial gaps in achieving the Sustainable Development Goals (SDGs). Currently, less than one-fifth of the SDGs are on track, even though over two-thirds of the United Nations' Agenda for Sustainable Development (the 2030 Agenda) execution time has elapsed (UN, 2025). Central Asian countries are experiencing similar trends, reflecting challenges of cascading financial, environmental, social, and geopolitical shocks and addressing the funding gap of the 2030 Agenda through expansionary fiscal policy (UNCTAD, 2024; WB, 2024).

Notwithstanding existing studies that investigate the relationship between public debt and sustainable development, this nexus is scarcely studied. Specifically, Luu et al. (2024) highlight that external public debt can contribute to promoting sustainable development in emerging and low-income countries. Studies testing nexuses between debt financing and indicators that can be proxied for economic (Alsamara et al., 2024; Butkus et al., 2021; Doojav & Baatarkhuu, 2024; Martín et al., 2024; Mejia, 2024; Phuc Canh, 2018; Reinhart et al., 2012), social (Aladejare, 2023; Arshed et al., 2022; Farooq et al., 2022; Simionescu & Cifuentes-Faura, 2023; Tung, 2020), environmental (Akam

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et al., 2022; Bese et al., 2021a, 2021b; Carrera & de la Vega, 2024; Saleem et al., 2024; Stanciu & Mitu, 2024; Zhao & Liu, 2022), and governance (Ma & Qamruzzaman, 2022) dimensions of sustainable development also shed some light on the effects of public debt policy. These studies suggest that the effects of debt financing vary contingent upon country(region) specifics, debt regimes, access to natural resources, geographical heterogeneity, and institutional development.

To the best of my knowledge, there are no recent studies that provided a comprehensive view on how public debt policy affects sustainable development (SD) across its four dimensions. This study aims to fill this research gap by answering the following questions:

- Whether and, if so, how public debt financing affects the SD's economic, social, environmental, and governance dimensions?
- What are the moderating effects (if any) of public policies on the debt-SD nexus?

The study focuses on the case of Central Asian countries as a unique and suitable case for exploring the effects of public debt policy on the SD's perspectives due to their experience in transitioning from a Soviet-era planned economy to a market economy, resource dependency, arid climate, and distinct governance landscape. Moreover, this study is the first to examine the effects of public debt financing on sustainable development in Central Asian countries.

The panel data from 1996 to 2023 were analyzed using fixed effects regression with a dummy variable and moderated regression analysis, as they provide a robust framework for policy implications. The results show that external public debt benefits the SD's economic, social, and governance dimensions, while hampering environmental development. The outcomes of debt financing vary depending on the moderating effects of public policies.

The remainder of this paper is organized as follows. Section two reviews associated literature. Section three describes the model, data, and estimation methodology. Section four outlines and discusses empirical results. Section five concludes with policy implications and suggestions for future research.

LITERATURE REVIEW

The impact of public debt policy on sustainable development has been recently explored by analyzing relationships between debt financing and the SD's indicators. Luu et al. (2024) argued that external public debt improves the Sustainable Development Index; however, its impact varies across the SDGs, and excessive debt can hinder sustainable development. Similar findings are reported in studies that investigate how public debt affects individual SDGs (see, e.g., Biswal & Patra, 2024). There is also an abundance of research investigating the effects of debt financing on various economic, social, environmental, and governance indicators, which can be proxied for the SD's dimensions.

The economic dimension

Well-established indicators of economic development, such as gross domestic product (GDP) and gross national income (GNI), can serve as proxies for the SD's economic dimension. Theoretical research examines the debt-growth nexus by analyzing how the behavior of economic agents (consumption or saving) changes in response to

governments' financial decisions (whether to borrow more or cut spending). The classic economic school questions the role of debt financing as an asset productive in accelerating income growth since borrowing is associated with increasing interest rates and taxes on investors' profit, followed by decreasing consumption and crowding out of investment (Alsamara et al., 2024; Cifuentes-Faura & Simionescu, 2024; Phuc Canh, 2018). Moreover, excessive borrowing leads to a debt overhang and weakening financial discipline (Hilton, 2021). According to the Ricardian equivalence, public debt has no consequences for the economy because the effects of increasing debt financing are offset by economic agents' actions to save more, which subsequently forces governments to stimulate demand through tax cuts and other measures (Cifuentes-Faura & Simionescu, 2024; Hilton, 2021; Phuc Canh, 2018). In contrast, the Keynesians associate the debt financing with the crowding-in effects. When considering an imperfectly competitive market with unemployed resources and effects of externalities, expansionary fiscal policy stimulates demand, investment, and employment, leading to economic growth and debt repayment (Cifuentes-Faura & Simionescu, 2024; Phuc Canh, 2018). The Keynesian model, however, works for crowding-in if debt is used to overcome the recession and triggers crowding-out effects when deviating from this rule (Phuc Canh, 2018).

The recent empirical studies that have become a focal point of interest in response to economic crises indicate that the impact of debt on growth is contingent upon country(region) specifics, including the level of economic development (see, e.g., Mejia, 2024; Panizza & Presbitero, 2013), fiscal multiplier intensity (Butkus et al., 2021), access to natural resources (Ampofo et al., 2021), debt regimes (Reinhart & Rogoff, 2010), and geographical heterogeneity (Doojav & Baatarkhuu, 2024). Studies spurred by all-time high debt size indicate that economic development significantly affects the dynamics of debt accumulation, as well as interest rates, exchange rates, life expectancy, unemployment, trade openness, fiscal deficit, and institutional quality (see, e.g., Azolibe, 2021; Briceño & Perote, 2020). In turn, the institutional quality has a moderating effect on the debt-growth nexus (Shi et al., 2025; Abbas et al., 2021).

Then, many studies evidence a threshold effect, meaning the debt size beyond which debt financing becomes harmful to economic development. Interestingly, the debt threshold tends to increase as economic and financial systems advance, and it varies from 20 to 90% of GDP depending on social, environmental, and governance aspects (Alsamara et al., 2024; Martín et al., 2024; Ndoricimpa, 2020; Reinhart et al., 2012; Smyth & Hsing, 1995). Identifying an ideal debt threshold is unfeasible, given ever-evolving uncertainties. However, policy implications from these studies include preventing excessive debt, which undermines both economic and social development.

The social dimension

Unlike the debt-growth nexus, the relationship between debt financing and social development is studied fragmentarily. Moreover, using a wide range of indicators—from poverty rate to human development index—as proxies for social development makes it difficult to systematize theoretical and empirical results. Recently, scholars have examined the debt-social development nexus, grounding their analysis in theories of economic growth, distributional justice, and human development. Specifically, Arshed et al. (2022), relying on the Solow Growth Model and the Kuznets inequality curve, argued that long-term external debt exceeding 46% of GDP and short-term external debt

exceeding 97% of GDP are associated with a decline in the standard of living in highly indebted Asian countries. A debt threshold aligned with social development objectives varies depending on the institutional quality (Farooq et al., 2022).

Tung (2020) argued that public debt harms social development in the Asia-Pacific region since increasing debt financing is negatively associated with per capita GDP and domestic investment. The debt financing, therefore, can lead to an increase in poverty and, consequently, to excessive debt accumulation (Simionescu & Cifuentes-Faura, 2023). In countries with high poverty, this causality constrains governments' ability to mitigate crises through affordable debt relief (Okafor & Khalid, 2023). The distributional effects of debt financing are also confirmed when using income inequality as a proxy indicator for social development (Akram, 2016; Borissov & Kalk, 2020; Obiero & Topuz, 2022).

Studies that use social sector performance proxied by life expectancy, morbidity and mortality rates, school attendance, healthcare, and education spending also clarify the debt-social development nexus. Specifically, life expectancy can drive public debt accumulation (Abbas et al., 2020; Abd Rahman et al., 2021) and, in turn, external debt can boost life expectancy (Bese & Friday, 2021); however, unsustainable, illiquid, or insolvent external debt can reduce longevity (Aladejare, 2023). Then, debt financing may impede social development because of crowding out funds from infrastructure projects in the health, education, social care, water, and sanitation sectors (Fosu et al., 2025). Excessive or ineffective debt financing can hinder economic, human, and environmental development; these adverse effects are worse when institutional quality is weak (Sadiq et al., 2022; Wang et al., 2021).

The environmental dimension

The nexus between debt financing and the environment is explored through the lens of the Environmental Kuznets Curve (EKC) theory. In line with the EKC, as economies grow, the environment tends to degrade—the upward slope of an inverted U-curve—and, after reaching a certain threshold (peak of the curve), further economic growth improves environmental quality—the downward slope of the inverted U-curve (Grossman & Krueger, 1995). The non-linearity of the EKC results from a shift from industrialization, which prioritized economic growth over environmental protection, to the adoption of green technologies enabled by increased environmental awareness (Stern, 2017; Wang et al., 2024).

Well-tested proxies for environmental quality within the debt-environment nexus include greenhouse gas (GHG) emissions, especially carbon dioxide (CO2) emissions, which account for the largest share of GHG emissions, and the material footprint, which tracks the raw materials extracted to meet final consumption demands. In particular, external debt is positively associated with CO2 emissions in China, India, Malaysia, and Somalia, thereby implying that an increase in debt financing leads to environmental degradation (Bese et al., 2021a, 2021b; Shaari et al., 2024; Warsame et al., 2024) and supporting findings from the cases of heavily indebted poor countries, advanced, developing, and emerging economies (Akam et al., 2022; Carrera & de la Vega, 2024; Stanciu & Mitu, 2024). An increase in debt is associated with a decrease in CO2 emissions in Morocco (Bachegour & Qafas, 2023), while debt is statistically insignificant in explaining environmental quality in Turkey (Bese & Friday, 2022). Then, in advanced and emerging economies,

public debt is the second-largest determinant of CO_2 emissions, following economic growth (Stanciu & Mitu, 2024; Zhao & Liu, 2022). However, advanced economies can mitigate environmental disasters with minimal risks to economic growth when they utilize debt financing, whereas developing countries are compelled to choose between financing climate mitigation measures and long-term debt sustainability due to carbon lock-in effects (Fan et al., 2024; Jalles, 2023).

The load capacity factor (LCF), green total factor productivity, renewable energy consumption (REC), and energy efficiency are also well-suited proxies for environmental development. In particular, an increase in external debt leads to a decrease in the LCF, meaning the harmful impact of debt on ecological sustainability (Saleem et al., 2024). Hashemizadeh et al. (2021) argued that public debt reduces the REC in emerging economies, confirming the findings of Onuoha et al. (2023) based on the case of countries in Sub-Saharan Africa. Abbas et al. (2024) concluded that an increase in debt financing leads to an increase in CO2 emissions; however, the interaction between REC and public debt diminishes carbon emissions. Alhassan and Kwakwa (2022) and Carratu et al. (2019) argued that there is a threshold level beyond which an increase in debt distresses the environment, supporting the EKC-related argumentations. Moreover, when governments rely on debt financing, they are at risk of making politically sensitive decisions (Boly et al., 2022; Carrera & de la Vega, 2024), thereby exacerbating governance issues.

The governance dimension

Institutions are essential to public governance, in which governments, whether elected or appointed, function and remain in governance if their performance is regarded as effective by those who elect or appoint them. When exploring associations between debt and governance, scholars rely on the institutional theory, which explains agents' decision-making and behavior shaped by rules, norms, structures, and traditions (Kaufmann & Kraay, 2024; Meyer & Rowan, 1977). In turn, Worldwide Governance Indicators are the best proxies for institutional quality, covering core aspects of the SD's governance dimension (Glass & Newig, 2019; Kaufmann & Kraay, 2024; Liu et al., 2022). The institutional quality can serve as a moderator in the debt-growth nexus (see, e.g., Abbas et al., 2021; Abduvaliev & Bustillo, 2024). Butkus and Seputiene (2018) argued that improvements in government effectiveness raise the threshold of public debt considered safe for sustaining economic growth. However, the government effectiveness is insufficient to cope with the adverse effects of debt, while the trade balance is the most influential moderating factor in the debt-growth nexus (Butkus & Seputiene, 2018). Governance indicators also have a moderating effect on the nexuses of economic institutions and public debt (Nutassey et al., 2023), external debt and investment (Ojeka et al., 2024), and trade openness and external debt (Harsono et al., 2024).

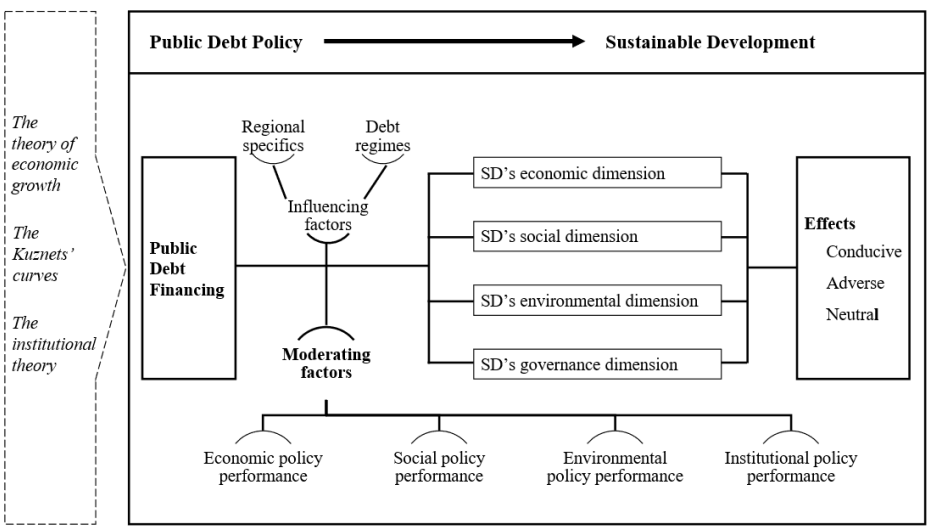
The institutional quality can prevent debt crises if a country has strong financial, economic, and trade positions and strengthens fiscal and macroeconomic policies (see, e.g., Ben Ali & Ben Abdul Aziz Al Yahya, 2019; Nguen & Luong, 2021). Political stability and control of corruption have a debt-reducing effect in EU countries and have no impact on debt size in non-EU nations with weaker institutions (Cooray & Ozmen, 2024). In Middle East and North Africa countries, poor governance, proxied by

political stability, regulatory quality, and rule of law, has a debt-increasing effect (Tarek & Ahmed, 2017). Furthermore, institutions that mitigate asymmetric information and lower transaction costs can promote a crowding-in effect when external debt remains below 40% of GNI in emerging economies (Phuc Canh, 2018). Kemoe and Lartey (2022) argued that once institutional quality surpasses a certain threshold, increased public debt can have a positive impact on growth.

The recent studies thus focused on the moderating role of governance or the effects that institutional quality has on debt accumulation. The effects of debt financing on governance remain unstudied, except for the research work of Ma and Qamruzzaman (2022) on BRICS countries. The authors concluded that government debt is negatively associated with institutional quality in the long and short run, and excessive debt may threaten institutional development (Ma & Qamruzzaman, 2022).

Reviewing theoretical and empirical research indicates that the theory of economic growth, Kuznets' hypotheses regarding the importance of quantitatively measurable factors of economic, social, and environmental development, and institutional theory collectively provide a foundation for constructing a conceptual framework to evaluate the impact of public debt policy on sustainable development (see Figure 1).

Figure 1. The conceptual framework



Source: The author's deliberations;

As demonstrated in Figure 1, the effects of public debt policy are identified through analyzing how public debt financing influences the SD's four dimensions. Public debt financing may have a conducive, adverse, or neutral impact on the economic, social, environmental, and governance dimensions. The debt's effects depend on both regional specifics and debt regimes. The interconnectedness and interdependence of the SD's pillars (Breuer et al., 2019; Mensah, 2019) may lead to moderating effects of corresponding public policies on the debt-SD nexus.

The literature review also suggests that there are no recent studies that comprehensively analyzed the impact of public debt policy on the SD's dimensions. The case of Central Asian countries is unexplored; only a few recent studies have examined the impacts of public debt on economic growth (see, e.g., Abduvaliev & Bustillo, 2024). Therefore, this study aims to explore the effects (if any) of public debt policy on the SD's four dimensions and examines whether public policies' performance moderates the debt-SD nexus, focusing on Central Asian Countries and utilizing econometric analysis methods.

DATA, MODEL, AND ESTIMATION METHODOLOGY

Data

This study utilized panel data from 1996 to 2023, covering five Central Asian countries—Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan—and sourced from open World Bank (WB) and United Nations (UN) databases. The external public and publicly guaranteed debt service (EPDebtS) was used as a key explanatory variable to assess the impact of public debt policy on the SD's economic, social, environmental, and governance dimensions. Proxies for these dimensions, such as gross national income (GNI), life expectancy (LifeEx), material footprint (FootPr), and government effectiveness (GovEf), are used as dependent variables (see Table 1). Assumptions about how public debt policy affects the SD's dimensions are made based on previous studies that explored the nexuses between debt financing and growth (Mejia, 2024; Panizza & Presbitero, 2013), social development (Aladejare, 2023; Bese & Friday, 2021), environmental performance (Akam et al., 2022; Carrera & de la Vega, 2024), and institutional quality (Ma & Qamruzzaman, 2022).

Table 1. Variables description

Variables	Definition (measurement; source)	Roles in modelling the impact of public debt policy on the SD's dimensions:			
		economic	social	environmental	governance
Trade	Trade (% of GDP; WB)	independent			
Unempl	Unemployment (% of total labor force; WB)	control			
FossilFu	Fossil fuel energy consumption (% of total; WB)				
ConCor	Control of corruption: Estimate (scale of − 2.5 to 2.5; WGI; WB)				
GNI	Gross national income (current US$; WB)	dependent	moderating	moderating	moderating
LifeEx	Life expectancy at birth (years; UN)	moderating	dependent	moderating	moderating
FootPr	Material footprint per capita (tones; UN)	moderating	dependent	dependent	moderating
GovEf	Government effectiveness: Estimate (scale of − 2.5 to 2.5; WGI; WB)	moderating	dependent	moderating	dependent

Source: The author's deliberations.

As demonstrated in Table 1, trade (Trade), unemployment rate (Unempl), fossil fuel consumption (FossilFu), and control of corruption (ConCor) are used as control variables in all models as they affect sustainable development. Specifically, trade is a well-tested determinant of economic growth that impacts social and environmental

development through income generation and production intensity, as well as governance through commitments to accountable engagement with international markets (Barros & Martínez-Zarzoso, 2022; Chen et al., 2025; Fankem & Feyom, 2024; Felbermayr et al., 2025; Seti et al., 2025). Being one of the key determinants of social development, unemployment impacts the economic, environmental, and governance dimensions as a labor factor of growth and an outcome indicator of institutional development (Ayad & Djedaiet, 2024; Boţa-Avram et al., 2021; Feng et al., 2024; Koyuncu Çakmak et al., 2025; Uddin & Rahman, 2023).

Next, increasing the consumption of fossil fuels is associated with an expanded ecological footprint and growing CO_2 emissions, leading to environmental degradation and, consequently, adverse social and economic effects, as well as changes in institutional quality (Arora & Kaur, 2020; Ozturk et al., 2022; Somoye et al., 2024; Umair et al., 2025). The control of corruption also impacts the SD's dimensions through either hindering or facilitating economic and social development by, respectively, siphoning resources away from productive sectors and bypassing bureaucratic hurdles, and having ambiguous effects on environmental quality (Ahmad et al., 2021; Akpan & Kama, 2023; Badur et al., 2024; Fhima et al., 2023; Uddin & Rahman, 2023).

Then, to explore whether and, if so, how the performance of corresponding public policies changes the impact of public debt policy on the SD's dimensions, the dependent variables' roles were replaced with the roles of moderating variables, as detailed in Table 1.

Model and estimation methodology

This study employed a fixed effects model with a dummy variable, also known as the least squares dummy variable model (LSDV; Wooldridge, 2010). The standard LSDV model was used as follows:

$$Y_{it} = \alpha + \beta X_{it} + \gamma_i u_{it} + \varepsilon_{it}, \quad (1)$$

where Y and X denote an outcome and independent variables, which are observed for units (i) over multiple periods (t), uit is a dummy variable that equals to 1 if the observation belongs to unit i and to 0 otherwise; α is the overall intercept (or constant), β and γ are vectors of coefficients for the independent and unit i's dummy variables (the fixed effects); and εit is the error term.

To evaluate the effects of public debt policy on sustainable development, the standard model (1) was specified as follows:

$$SD_{it} = \alpha + \beta X_{it} + \delta C_{it} + \sum_{i=1}^{n} \gamma_i u_{it} + \varepsilon_{it}, \quad (2)$$

where SD denotes an associated dimension of sustainable development, X is the key explanatory variable, C denotes control variables; α is the overall intercept; β, δ, and γ are the vectors of coefficients for the independent, control, and unit i's dummy variables; i and t represent the countries (i = 1, …,5) and the periods (t = 1996, …,2023); uit is a dummy variable; n is the number of dummy variables (n=5-1); and εit is the error term.

To moderated regression analysis, the corresponding moderating variables were integrated into the model (2) as follows:

$$SD_{it} = \alpha + \beta X_{it} + \delta C_{it} + (\varphi M_{it} + \omega IC_{it}) + \sum_{i=1}^{4} \gamma_i u_{it} + \varepsilon_{it}, \quad (3)$$

where M denotes moderating variables and IC is the interaction terms between the key explanatory variable and moderators [Xit × Mit]; φ and ω are the vectors of coefficients for the moderators and interaction terms.

The key explanatory, dependent, and control variables, except for GovEf and ConCor, which are negative, were transformed into natural logarithms to reduce potential autocorrelation and heteroscedasticity.

The empirical models for this study were thus specified as follows.

1) The economic dimension:

$$nGNI_{it} = \alpha + \beta LnEPDebtS_{it} + \delta_1 LnTrade_{it} + \delta_2 LnUnempl_{it} + \delta_3 LnFossilFu_{it} + -\delta_4 ConCor_{it} + (\varphi M_{it} + \omega IC_{it}) + \sum_{i=1}^{4} \gamma_i u_{it} + \varepsilon_{it}, \quad (3.1)$$

where moderating variables were added as follows –

(i) LifeEx, the moderator on social performance, with the interaction term IC.soc (IC.soc = EPDebtS × LifeEx);
(ii) FootPr, the moderator on environmental performance, with the interaction term IC.env (IC.env = EPDebtS × FootPr); and
(iii) GovEf, the moderator on governance performance, with the interaction term IC.gov (IC.gov = EPDebtS × GovEf).

2) The social dimension:

$$LnLifeEx_{it} = \alpha + \beta LnEPDebtS_{it} + \delta_1 LnTrade_{it} + \delta_2 LnUnempl_{it} + + \delta_3 LnFossilFu_{it} + \delta_4 ConCor_{it} + (\varphi M_{it} + \omega IC_{it}) + \sum_{i=1}^{4} \gamma_i u_{it} + \varepsilon_{it}, \quad (3.2)$$

where moderating variables were added as follows: (i) GNI, the moderator on economic performance, with the interaction term IC.ec (IC.ec = EPDebtS × GNI); (ii) FootPr and IC.env; and (iii) GovEf and IC.gov.

3) The environmental dimension

$$LnFootPr_{it} = \alpha + \beta LnEPDebtS_{it} + \delta_1 LnTrade_{it} + \delta_2 LnUnempl_{it} + + \delta_3 LnFossilFu_{it} + \delta_4 ConCor_{it} + (\varphi M_{it} + \omega IC_{it}) + \sum_{i=1}^{4} \gamma_i u_{it} + \varepsilon_{it}, \quad (3.3)$$

where moderating variables were added as follows: (i) GNI and IC.ec; (ii) LifeEx and IC.soc; and (iii) GovEf and IC.gov.

4) The governance dimension::

$$GovEf_{it} = \alpha + \beta LnEPDebtS_{it} + \delta_1 LnTrade_{it} + \delta_2 LnUnempl_{it} + \delta_3 LnFossilFu_{it} + \delta_4 ConCor_{it} + (\varphi M_{it} + \omega IC_{it}) + \sum_{i=1}^{4} \gamma_i u_{it} + \varepsilon_{it}, \quad (3.4)$$

where moderating variables were added as follows: (i) GNI and IC.ec; (ii) LifeEx and IC.soc; and (iii) FootPr and IC.env.

To ensure the applicability and reliability of the selected method, diagnostic tests and comparative analyses were conducted using ordinary least squares (OLS) and random effects (RE) regression methods for all generated models, including 16 models from the main estimation and 16 models from the robustness check.

Table 2 presents descriptive statistics. The correlation matrices and variance inflation factors (VIFs) are provided in Annex 1. In particular, VIFs in all models across the SD's four dimensions varied from 1.5 to 4.3, indicating moderate (acceptable) multicollinearity. The Hausman test results suggest that the selected method is more robust to endogeneity; the p-values in all models are <0.001. To address potential heteroskedasticity and/or serial correlation, diagnostics for RE models were conducted by integrating Arellano's approach to robust standard errors (see Tables 3, 4, 5, and Annex 2).

Table 2. Descriptive Statistics

Variables	Mean	Std. Dev.	Min	Max	Mean across countries: 1996-2023				
					KZ	KG	TJ	TM	UZ
EPDebtS	0.5170	0.6245	0.02	3.21	0.99	0.09	1.70	0.77	0.62
GNI	37.9585	52.5842	0.82	236.49	109.11	5.09	6.30	23.45	45.84
LifeEx	68.3276	2.8536	60.81	74.40	68.23	69.48	67.48	67.42	69.03
FootPr	7.6096	5.6208	1.39	23.76	15.46	3.13	3.48	11.67	4.31
GovEf	-0.8364	0.3854	-1.57	0.15	-0.41	-0.71	-1.04	-1.19	-0.83
Trade	83.4262	32.5727	29.19	181.59	75.69	108.79	100.44	75.60	55.62
Unemployment	6.4174	3.4670	1.53	13.46	7.50	2.86	8.11	6.52	7.10
FossilFu	82.4604	22.2401	34.61	100.00	98.42	69.58	45.59	100.00	98.71
ConCor	-1.1262	0.2470	-1.45	-0.19	-0.82	-1.14	-1.25	-1.31	-1.11

Source: The author's calculations.
**KZ – Kazakhstan, KG – the Kyrgyz Republic, TJ – Tajikistan, TM – Turkmenistan, UZ – Uzbekistan.*

As demonstrated in Table 2, the external public and publicly guaranteed debt service, the key explanatory variable of this study, ranged from US$0.02 billion to US$3.21 billion, with a mean value of US$0.52 billion. Tajikistan exhibits the highest EPDebtS at US$1.70 billion, followed by Kazakhstan (US$0.99 billion), Turkmenistan (US$0.77 billion), and Uzbekistan (US$0.62 billion), while the Kyrgyz Republic had the lowest at US$0.09 billion. Gross national income, used as a proxy for the economic dimension, ranged from US$0.82 billion to US$236.49 billion, with a mean of US$37.96 billion. Kazakhstan reported the highest GNI at US$109.11 billion, while the Kyrgyz Republic reported the lowest at US$5.09 billion. Life expectancy, serving as a proxy indicator for the social dimension, varied from 60.8 to 74.4 years, with a mean of 68.3 years. Comparing the average indicators among Central Asian countries, the Kyrgyz Republic demonstrated the highest LifeEx at 69.5 years, whereas Turkmenistan had the lowest at 67.4 years. Material footprint, used as a proxy for the environmental dimension, ranged from 1.39 to 23.76 tons (per capita), with a mean value of 7.61 tons (per capita). Kazakhstan recorded the highest value at 15.46 tons per capita, and the Kyrgyz Republic

reported the lowest value at 3.13 tons per capita. Government effectiveness, serving as a proxy indicator for the governance dimension, extended from -1.57 to 0.15, with a mean value of -0.84. Kazakhstan had the highest score at -0.41, while Turkmenistan reported the lowest at -1.19.

RESULTS AND DISCUSSIONS

Effects of public debt policy

The results of this study indicate that, in Central Asian countries, external public debt financing has a positive and statistically significant impact on all the SD's dimensions, thereby confirming that external debt affects sustainable development prospects (Luu et al., 2024). As demonstrated in Table 3, a one percent increase in EPDebtS is associated with a 0.57% increase in GNI, 0.02% increase in LifeEx and 0.12% increase in FootPr at the p <0.01 level, and 0.06% increase in GovEf at the p <0.05 level.

Table 3. Public debt policy effects on the sustainable development dimensions

Dependent Variables/ Models	The sustainable development dimensions:			
	economic	social	environmental	governance
	LnGNI	LnLifeEx	LnFootPr	GovEf
	Model1-ec	Model1-s	Model1-en	Model1-g
LnEPDebtS	0.568***	0.021***	0.121***	0.057**
	(0.091)	(0.004)	(0.033)	(0.028)
LnTrade	-0.820***	-0.041***	-0.265***	-0.176***
	(0.197)	(0.008)	(0.073)	(0.061)
LnUnempl	-0.816***	-0.034***	0.114**	-0.201***
	(0.144)	(0.006)	(0.053)	(0.045)
LnFossilFu	1.908**	0.089***	0.703**	0.455**
	(0.733)	(0.031)	(0.270)	(0.227)
ConCor	-0.722**	0.028*	0.434***	0.734***
	(0.339)	(0.014)	(0.125)	(0.105)
Constant	0.304	4.088***	0.802	-0.741
	(3.508)	(0.149)	(1.293)	(1.087)
Observations	139	139	139	139
R2	0.820	0.592	0.902	0.711
Adjust. R2	0.808	0.563	0.895	0.691
F-value	65.875***	20.935***	132.935***	35.610***
t-Hausman:				
Chi-square test value	14529.4	142.225	3837.74	1174.02
p-value	<0.001	<0.001	<0.001	<0.001

Notes: Robust standard errors are in parentheses.
****, **, and * denote significance at 1, 5, and 10 percent levels, respectively.*

Rising external public debt service financing, which leads to an increase in GNI (Model1-ec; Table 3), suggests that the public debt policy in Central Asian countries is, to a certain degree, effective in income accumulation and associated with the crowding-in effects, confirming the Keynesian theory. This finding contradicts studies that highlight adverse consequences of external debt due to (i) crowding-out effects (Mejia, 2024; Panizza & Presbitero, 2013) aggravated by excessive debt size (Martın et al., 2024; Ndoricimpa, 2020); (ii) using the debt financing to address the current funding gap instead of long-term investing in labour productivity and well-being (Alsamara et al., 2024); and (iii) low institutional quality (Abduvaliev & Bustillo, 2024). In the case of Central Asian countries, the positive association between debt financing and national

income can be explained by regional characteristics and external influences, such as public sector domination, limited liquidity in national financial markets, and cascading financial crises, which justify the use of expansionary fiscal policies (Butkus et al., 2021; Phuc Canh, 2018; Van Twillert & Halleck Vega, 2023).

The revealed positive association between EPDebtS and LifeEx (Model1-s; Table 3) is similar to that reported by Bese and Friday (2021). Thus, as Central Asian countries increase external public debt service, life expectancy tends to increase, meaning that public debt policy is relatively effective in translating borrowed financial resources into social benefits. The debt's favorable effect on the social dimension can be explained by comparably low debt burden coupled with a historical context of social sector developments (WB, 2024). However, the argument on the beneficial impact of increased debt financing on the social dimension can be either supported or contested due to variations in nexuses between debt financing and proxy indicators for social development. For instance, public debt can have detrimental effects on longevity when its size is excessive (Aladejare, 2023) or on human development when borrowed funds are used to pay more in interest instead of spending more on education and healthcare (Sadiq et al., 2022; Wang et al., 2021). Therefore, further research is needed to provide more evidence on the debt-social development nexus.

The adverse effect that external public debt service has on the environmental dimension (Model1-en; Table 3) indicates the ineffectiveness of the public debt policies of Central Asian countries in promoting better environmental performance, supporting the findings of studies that highlight the hampering effects of debt on environmental development (see, e.g., Akam et al., 2021; Carrera & de la Vega, 2024). However, these findings contradict studies that proved the contributions of debt financing to enhanced environmental quality in Morocco (over the study period spanning from 1984 to 2018; Bachegour & Qafas, 2023), BRICS countries (1990-2019; Sadiq et al., 2022), 22 emerging economies (1990-2020; Zeraibi et al., 2023), and the high-income panel of the Organization of Islamic Cooperation countries (1996-2018; Farooq et al., 2023). Specifically, Sadiq et al. (2023) explained the favorable impacts of external debt on environmental quality by the fact that "the economic and environmental authorities of BRICS countries utilize external debt funds efficiently by financing environmental protection and other alternative energy projects" (pp. 3304-3305). In Central Asian countries, the detrimental effect of debt on the environment can be attributed to the lack of alignment between borrowing policies and environmental development priorities, resulting in weak regulation and gaps in the adoption of green technologies (Filipović et al., 2024; Pobedinsky & Shestak, 2020).

The positive association between EPDebtS and GovEf (Model1-g; Table 3) is a novelty, as governance has been previously analyzed as a dependent variable in the debt-governance nexus only by Ma and Qamruzzaman (2022), who have indicated the harmful impact of debt financing on government effectiveness. Mixed results may stem from examining the relationship between debt financing and governance through different case studies, specifically, Central Asian countries, in contrast to the BRICS countries. The positive impact of external public debt financing on the governance dimension can be explained by the debt sustainability-related requirements of external creditors for gaining access to new financial resources. All five countries in the region are working closely with

international financial organizations and foreign governments to expand the lists of used debt instruments and loan (credit) portfolios (Nikonov et al., 2023).

Then, trade hampers the economic, social, and governance dimensions; however, as Central Asian countries expand their trading operations, the material footprint tends to decrease, meaning a beneficial impact of trade openness on the environmental dimension. These findings are consistent with studies that report negative and positive effects of trade on the SD's dimensions (Barros & Martínez-Zarzoso, 2022; Chen et al., 2025). Unemployment adversely affects all the SD's dimensions. The identified negative relationships between unemployment and GNI, LifeEx, and GovEf are mainly consistent with studies that explored determinants of economic, social, and institutional development (Bota-Avram et al., 2021; Uddin & Rahman, 2023). An unexpected finding on the hampering effect that unemployment has on the environmental dimension contradicts the studies that highlight an advantageous impact of increased unemployment on environmental quality (Koyuncu Çakmak et al., 2025) and calls for further research on the unemployment-environment nexus.

Next, fossil fuel consumption has positive effects across the economic, social, and governance dimensions while adversely affecting the environmental dimension. These results are consistent with studies that identify beneficial contributions of fossil fuel consumption to socio-economic and institutional development, as well as test its role in environmental deterioration (see, e.g., Arora & Kaur, 2020; Ozturk et al., 2022). The findings on relationships between the control of corruption and the SD's dimensions are similar to those reported in studies that suggest variations in the effects of corruption. Specifically, strengthening anti-corruption measures, which entails adverse consequences for the economic dimension, suggests that the Central Asian case confirms the "grease the wheels" hypothesis (Lui, 1985), as in other cases of developing countries (Fhima et al., 2023). In turn, a positive association between ConCor and GovEf and government effectiveness is consistent with the arguments of Kaufmann et al. (2011) on the interdependence of governance indicators.

Moderating effects of public policies

The performance of social (LifeEx), environmental (FootPr), and institutional (GovEf) policies is associated with a positive and statistically significant relationship with GNI, proxied for the SD's economic dimension. A one percent increase in EPDebtS coupled with a one percent rise in FootPr, i.e., the interaction term (IC.env = EPDebtS × FootPr), leads to a 0.03% decrease in GNI at the $p < 0.05$ level, and coupled with a one percent increase in GovEf (IC.gov = EPDebtS × GovEf) results in a 0.99% increase in GNI at the $p < 0.01$ level (Model3-ec, Model4-ec; Table 4).

Table 4. Public debt policy effects on the economic and social dimensions

Dependent	Economic dimension			Social dimension		
	LnGNI			LnLifeEx		
	Model2-ec	Model3-ec	Model4-ec	Model2-s	Model3-ec	Model4-ec
LnEPDebtS	0.230**	0.682***	0.811***	0.018***	0.021***	0.035***
	(0.093)	(0.116)	(0.102)	(0.003)	(0.005)	(0.004)
LnTrade	-0.049	-0.678***	-0.780***	-0.012*	-0.030***	-0.041***
	(0.121)	(0.204)	(0.183)	(0.007)	(0.008)	(0.007)
LnUnempl	-0.209**	-0.917***	-0.804***	0.001	-0.034***	-0.035***
	(0.104)	(0.154)	(0.142)	(0.006)	(0.006)	(0.006)

LnFossilFu	0.057 (0.424)	1.237* (0.717)	0.696 (0.686)		0.041* (0.024)	0.062** (0.030)	0.028 (0.028)
ConCor	-1.192*** (0.219)	-0.942** (0.406)	-2.136*** (0.389)		-0.022 (0.015)	0.002 (0.017)	-0.040** (0.016)
LifeEx	0.289*** (0.017)			GNI	0.001*** (0.000)		
IC.soc	-0.002 (0.002)			IC.ec	-2.253E-5 (0.000)		
FootPr		0.112*** (0.029)		FootPr		0.006*** (0.001)	
IC.env		-0.026** (0.012)		IC.env		-0.001 (0.000)	
GovEf			0.542** (0.261)	GovEf			0.018* (0.010)
IC.gov			0.997*** (0.206)	IC.gov			0.054*** (0.008)
Constant	-15.796*** (2.407)	1.539 (3.589)	4.992 (3.244)		3.986*** (0.116)	4.059*** (0.149)	4.335*** (0.130)
Observ.	139	139	139		139	139	139
R^2	0.947	0.841	0.859		0.767	0.656	0.716
Adjust. R^2	0.942	0.828	0.847		0.748	0.627	0.691
F-value	206.302***	61.700***	70.907***		38.412***	22.203***	29.313***
t-Hausman:							
Chi-square test value	445.855	965052	37.6032		6045.52	3348.23	73355.5
p-value	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001

Source: The author's calculations.
Notes: Robust standard errors are in parentheses.
****, **, and * denote significance at 1, 5, and 10 percent levels, respectively*

The revealed negative moderating effect of environmental performance suggests that public debt and environmental policies have conflicting effects on the economic dimension because increasing debt financing with deterioration in environmental quality adversely affects gross national income. The positive moderating effect of governance performance demonstrates that public debt and institutional policies effectively interact to improve the economic dimension (synergy effects). In contrast, the absence of a statistically significant moderating effect of social performance indicates that potential benefits from the interaction between public debt and social policies are not realized (lost effects). The data on net effects also suggest that the public debt and corresponding policies have synergy and lost effects; the net effect of environmental performance is 0.48 = –0.026 × 7.6096 + 0.682, i.e., the interaction coefficient × the mean of the moderator + the coefficient of the unconditional effect; the net effect of governance performance is –0.02.

The performance of economic (GNI), environmental, and institutional policies has a positive and statistically significant impact on LifeEx, proxied for the *SD's social dimension*. Only the governance performance has a moderating effect; the interaction of EPDebtS and GovEf (IC.gov) is 0.05% at the p <0.01 level (Model4-s; Table 4), meaning that public debt and institutional policies have synergy effects on the social dimension. In contrast, the public debt, economic, and environmental policies are associated with the lost effects because the corresponding interaction terms are statistically insignificant (Model2-s, Model3-s; Table 4).

The performances of economic, social, and institutional policies are associated with a positive and statistically significant impact on FootPr, proxied for *the SD's environmental dimension.* All these indicators have a moderating effect on the nexus between EPDebtS and FootPr. A one percent increase in EPDebtS coupled with a one percent increase in GNI (IC.ec = EPDebtS × GNI) and LifeEx (IC.soc = EPDebtS × LifeEx) decreases FootPr by 0.001% at the $p < 0.01$ level and 0.002% at the $p < 0.05$ level, respectively (Model2-en and Model3-en; Table 5). In turn, the interaction of external debt service and government effectiveness (IC.gov) is 0.201% at the $p < 0.05$ level (Model4-en; Table 5). Thus, public debt, economic, and social policies have synergy effects on the environmental dimension because better environmental quality is achieved through increased debt financing and improved economic and social performances. In contrast, public debt and institutional policies have conflicting effects because increased debt financing and improved governance performance hamper the environmental dimension. The net effects of economic, social, and governance performances are 0.106, -0.041, and -0.004, respectively.

Government effectiveness, proxied for the *SD's governance dimension*, is positively and significantly influenced by the performance indicators of economic and social policies, while the performance indicator of environmental policy is insignificant in explaining changes in governance. Only the social performance has a moderating effect; the interaction of EPDebtS and LifeEx (IC.soc) is 0.002% at the $p <0.05$ level (Model3-g; Table 5), meaning that public debt and social policies have synergy effects on the governance dimension. Interestingly, the effect of public debt policy on the governance dimension becomes insignificant when performance indicators of all corresponding policies are embedded (Model2-g, Model3-g, and Model 4-g in Table 5 versus Model1-g in Table 1). Thus, the public debt and corresponding policies have lost effects, meaning that the benefits from their interaction are not realized.

Table 5. Public debt policy effects on the environmental and governance dimensions

Dependent	**Economic dimension**				**Governance dimension**		
	LnFootPr				GovEf		
	Model2-ec	Model3-ec	Model4-ec		Model2-s	Model3-ec	Model4-ec
LnEPDebtS	0.144***	0.096**	0.164***		0.047	-0.074	0.030
	(0.031)	(0.048)	(0.040)		(0.030)	(0.050)	(0.038)
LnTrade	-0.086	-0.078	-0.237***		-0.074	-0.063	-0.127*
	(0.067)	(0.062)	(0.072)		(0.065)	(0.065)	(0.066)
LnUnempl	0.322***	0.231***	0.140**		-0.078	-0.068	-0.175***
	(0.056)	(0.054)	(0.056)		(0.054)	(0.056)	(0.050)
LnFossilFu	0.323	0.110	0.406		0.286	0.391*	0.436*
	(0.230)	(0.218)	(0.270)		(0.222)	(0.228)	(0.233)
ConCor	0.337**	0.405***	0.064		0.558***	0.544***	0.592***
	(0.138)	(0.113)	(0.153)		(0.133)	(0.118)	(0.132)
GNI	0.006***			GNI	0.003***		
	(0.001)				(0.001)		
IC.ec	-0.001***			IC.ec	-9.273E-5		
	(0.000)				(0.000)		
LifeEx		0.078***		LifeEx		0.031***	
		(0.009)				(0.009)	
IC.soc		-0.002**		IC.soc		0.002**	
		(0.001)				(0.001)	
GovEf			0.224**	FootPr			0.014
			(0.103)				(0.009)

IC.gov			0.201** (0.081)	IC.env		0.003 (0.004)
Constant	0.815 (1.100)	-2.688** (1.239)	1.834 (1.279)		-1.092 (1.064)	-3.690*** (1.295)	-1.316 (1.168)
Observ.	139	139	139		139	139	139
R^2	0.933	0.943	0.912		0.741	0.742	0.719
Adjust. R^2	0.928	0.938	0.904		0.718	0.719	0.695
F-value	163.081***	193.265***	120.662***		33.229***	33.398***	29.808***
t-Hausman:							
Chi-square test value	10173.5	61222.4	15499.1		636.178	40116.0	9857.83
p-value	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001

Source: The author's calculations.
Notes: Robust standard errors are in parentheses.
****, **, and * denote significance at 1, 5, and 10 percent levels, respectively*

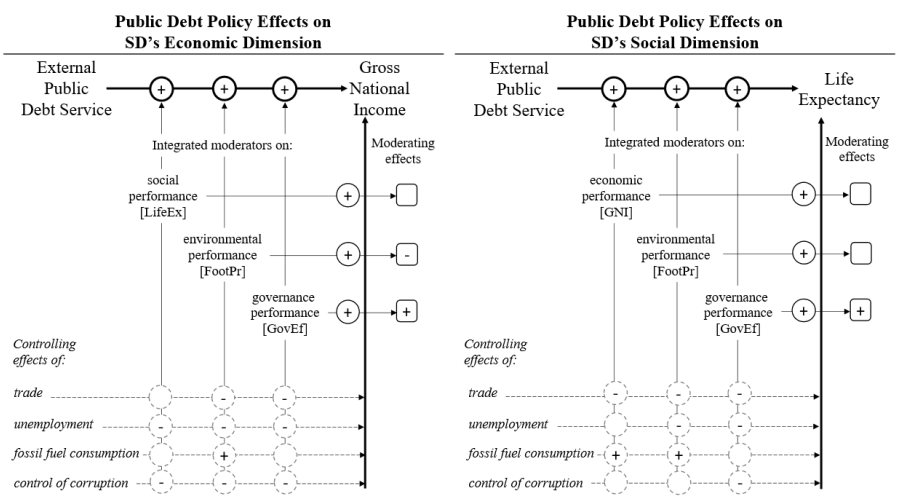
In sum, as demonstrated in Figure 1, by the economic dimension, the increased external debt service leads to a positive impact when embedded:

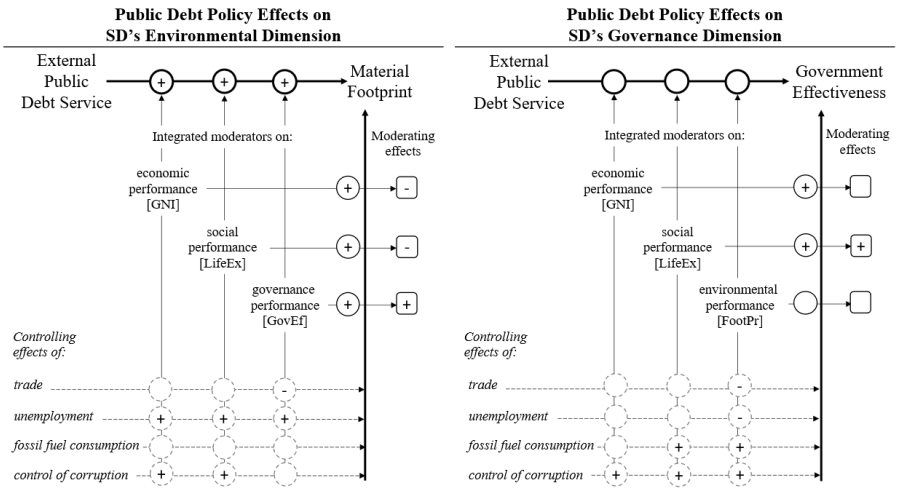
(i) the social policy performance (outcome), wherein the interaction coefficient is statistically insignificant, meaning the likelihood of a lack of consistency between public debt and social policies that results in lost effects;

(ii) the environmental policy performance; the interaction coefficient is negative and significant, meaning the likelihood of an inconsistency between public debt and environmental policies that results in conflicting effects; and

(iii) the governance policy performance; the interaction coefficient is positive and statistically significant, meaning the likelihood of consistency between public debt and institutional policies that result in synergy effects.

Figure 2. Public debt policy effects on the SD's dimensions





Source: The author's deliberations.
Notes: The figure illustrates the moderating effects of public policies—economic, social, environmental, and governance performances—on the debt-SD nexus across four dimensions.
⊕,⊖,◯ -denote positive, negative, and not significant coefficients, respectively; and
⊞,⊟,▢ -denote positive, negative, and not significant interaction coefficients.

By the social dimension, the increased external debt service leads to a positive impact when integrating the economic and environmental performances [lost effects by the interaction terms] and the governance performance [synergy effects; i.e., *increased debt financing alongside the better performance of institutional policy leads to better changes by the social dimension*]. By the environmental dimension, the increased external debt service leads to a positive impact when embedding the economic and social performances [synergy effects; i.e., *increased debt financing alongside the better performance of economic and social policies leads to the better changes by the environmental dimension*] and the governance performance [conflicting effects; i.e., *increased debt financing alongside the better performance of institutional policy leads to the worsened outcomes by the environmental dimension*]. By the governance dimension, while the effects of external debt service become insignificant due to embedded moderators of economic, social, and environmental performances, the corresponding policies are associated with lost effects.

These findings are relatively new, since this study is the first attempt to simultaneously evaluate the moderating roles of the performance of economic, social, governance, and environmental policies on the nexus between public debt policy and the SD's dimensions. In the categorical context, however, these results are consistent with studies that highlight challenges in achieving progress toward sustainable development caused by trade-offs across the SD's four pillars and goals (Breuer et al., 2019; Mensah, 2019; Bali Swain & Yang-Wallentin, 2020).

The findings on conducive effects of corresponding public policies on the SD's dimensions are generally consistent with theoretical considerations of the economic, social, environmental, and institutional development factors. Regarding the moderating

role of corresponding public policies, it is likely that governments still prefer to use public debt to finance projects that are detrimental to the environment and have low social returns while implementing public administration reforms. Although debt financing, in combination with improvements in economic and social policies, somewhat reduces the negative environmental effects of debt, these measures do not fully counteract the resulting environmental harm. This suggests that Central Asian countries remain heavily dependent on fossil fuel-based industries and, according to the EKC theory, are situated on the upward slope of the Kuznets curve. The missed opportunities for better changes in the institutional dimension, through debt financing, indicate a lack of coherence between institutional and corresponding policies. Therefore, Central Asian countries are in a position similar to that of most emerging economies, where economic growth is the main task that, due to both external and internal circumstances, continues to be accomplished at the expense of other aspects of sustainable development.

Robustness check

The robustness check corroborates the key findings of the main estimation, thereby meaning that the main results of this study can be relied upon (see Annex 2). In particular, a one percent increase in the external public and publicly guaranteed debt results in a 0.78% increase in GNI, 0.03% increase in LifeEx, 0.19% increase in FootPr, and 0.13% increase in GovEf at the $p < 0.01$ level. The findings confirm that public debt policy in Central Asian countries is relatively effective in promoting improvements in economic, social, and governance dimensions, but it impedes progress in the environmental dimension. The relationships between control and dependent variables are identical. While moderation analysis results are generally consistent, a few variations in the environmental dimension require further investigation.

CONCLUSION

The persistent rise in external public debt financing, coupled with limited progress toward the SDGs after more than two-thirds of the 2030 Agenda timeline, underscores the necessity of examining the impact of public debt policy on sustainable development. Since earlier studies investigated the impacts of debt on a few development indicators, there is a lack of a comprehensive analysis of the debt's effects on the SD across its economic, social, environmental, and governance dimensions. This study addresses that gap and is the first to explore the relationship between external public debt financing and all four dimensions of the SD through econometric analysis of panel data from five Central Asian countries spanning 1996 to 2023.

The case of Central Asian countries demonstrates that external public debt financing plays a significant role in fostering sustainable development. In these countries, the increase of debt financing is associated with rising gross national income and life expectancy, as well as enhanced government effectiveness, thereby suggesting that public debt policy leads to better changes across the SD's economic, social, and governance dimensions. However, an increase in external public debt financing leads to a rise in the material footprint. This indicates that public debt policy is unlikely to be effective in promoting environmental improvements. These findings partially align with the arguments of Luu et al. (2024), such as (a) external debt can benefit healthy lives, inclusive education, gender equality, economic growth, and innovation; and (b) external debt has harmful

effects on cities' resilience, safe human settlements, and land biodiversity. When making public debt-related decisions, governments in Central Asian countries should therefore apply effective strategies to translate debt financing into environmental gains. Simultaneously, employing public debt to finance environmentally friendly initiatives should be guided by policies that explicitly tie borrowing to measurable improvements across the SD's economic, social, and governance dimensions.

Next, the debt-SD nexus can change due to moderating effects that economic, social, environmental, and institutional policies have. More specifically, debt financing fosters the economic and social dimensions as governance performance becomes better, and the environmental and governance dimensions as social performance improves. However, when debt financing increases, it tends to hinder the economic dimension as environmental performance improves. Conversely, as economic and social performance improves, increased debt financing appears to foster the environmental dimension. The effects of public debt policy on the governance dimension become statistically insignificant when embedding the performance indicators of economic, social, and environmental policies. Thus, public debt and corresponding public policies may have conflicting, lost, and synergy effects. These results support earlier considerations related to challenges of the 2030 Agenda caused by synergies and trade-offs within and between the SD's dimensions and individual SDGs (Breuer et al., 2019; Mensah, 2019), thereby calling for well-balanced public policy decisions (Elder, 2024).

In particular, integrating an evaluation of the effects of debt policy on the SD's dimensions and the moderating effects of corresponding public policies on the debt-SD nexus into public debt management is advisable for fulfilling the 2030 Agenda. Increasing external debt financing appears to be a justified tactic due to its contribution to economic goals, improvement of social well-being, and strengthening of institutional quality, but it is questionable from an environmental development perspective. Addressing this trade-off necessitates moving beyond a traditional fiscal framework through, inter alia, upgrading budgetary rules and ensuring financial discipline. Specifically, it is recommended to use a debt threshold that aligns not only with economic growth objectives (as is the case) but also with social, environmental, and institutional development goals, i.e., a holistic debt threshold in the context of sustainable development. Adverse consequences of debt policy, which may arise from conflicting or lost effects of corresponding public policies, can be mitigated through the strategic investment of borrowed funds. This approach requires making SD-informed decisions regarding the prioritization and spending of borrowed funds. Applying SD-aligned criteria to evaluate the effectiveness of projects financed by public debt can enhance oversight and improve the implementation of public debt policy.

Last, but not least, the following limitations of this study should be acknowledged. The external public debt service and external public debt, used as key explanatory variables in the main estimation and robustness check, and gross national income, life expectancy, material footprint, and government effectiveness, that represent proxies for the SD's economic, social, environmental, and governance dimensions, are well-suited, but not sufficient, to fully clarify the impact of public debt policy on sustainable development. This study focuses solely on Central Asian countries, whereas both

regional and country-specific factors can significantly influence the debt-SD nexus. Therefore, future research that examines other regions or countries, incorporates a broader set of explanatory, control, outcome, moderating, and mediating variables, and explores a non-linearity of the debt-SD nexus may provide deeper insights into the effectiveness of debt policy, thereby informing and contributing to public policy decisions aligned with the 2030 Agenda.

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CONFLICTS OF INTEREST

No potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

AUTHORS' CONTRIBUTIONS

AM: conceptualization, methodology, data curation, formal analysis, investigation, validation, visualization, writing – original draft, writing – review & editing.

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REFERENCES:

1. Abbas, Q., HongXing, Y., Ramzan, M., & Fatima, S. (2024). Carbon reduction through renewable energy and digitalization in emerging economies: Moderating role of public debt. Environmental Science and Pollution Research, 31(30), 43096-43116. https://doi.org/10.1007/s11356-024-33873-y
2. Abbas, Q., Junqing, L., Ramzan, M., & Fatima, S. (2021). Role of governance in debt-growth relationship: Evidence from panel data estimations. Sustainability, 13(11). https://doi.org/10.3390/su13115954
3. Abbas, S., Wizarat, S., & Mansoor, S. (2020). External debt distress in South Asia: Evidence from panel data analysis. South Asian Journal of Macroeconomics and Public Finance, 9(2), 221-236. https://doi.org/10.1177/2277978720966485
4. Abd Rahman, N. H., Ismail, S., & Ridzuan, A. R. (2021). An ageing population and external debt: An empirical investigation. Journal of Business Economics and Management, 22(2), 410-423. https://hdl.handle.net/10419/317479
5. Abduvaliev, M., & Bustillo, R. (2024). External debt burden and economic growth: evidence from Central Asia. Post-Communist Economies, 36(7), 761-777. https://doi.org/10.1080/14631377.2024.2376969
6. Ahmad, N. A., Ismail, N. W., Tilde, A. Y., & Aliyu, A. J. (2021). Effects of air pollution and corruption control on life expectancy in middle-income countries. International Journal of Economics and Management, 15(2), 257-268. https://core.ac.uk/download/pdf/544027673.pdf
7. Akam, D., Nathaniel, S. P., Muili, H. A., & Eze, S. N. (2022). The relationship between external debt and ecological footprint in SANE countries: Insights from Kónya panel causality approach. Environmental Science and Pollution Research, 29(13), 19496-19507. https://doi.org/10.1007/s11356-021-17194-y
8. Akpan, U., & Kama, U. (2023). Does institutional quality really matter for environmental quality? Energy & Environment, 35(8), 4361-4385. https://doi.org/10.1177/0958305X231180702

9. Akram, N. (2016). Public debt and pro-poor economic growth evidence from South Asian countries. Economic Research, 29(1), 746-757. https://doi.org/10.1080/1331677X.2016.1197550

10. Aladejare, S. A. (2023). Does external debt promote human longevity in developing countries? Evidence from West African countries. Fudan Journal of the Humanities and Social Sciences, 16(2), 213-237. https://doi.org/10.1007/s40647-023-00365-1

11. Alhassan, H., & Kwakwa, P. A. (2023). The effect of natural resources extraction and public debt on environmental sustainability. Management of Environmental Quality: An International Journal, 34(3), 605-623. https://doi.org/10.1108/MEQ-07-2022-0192

12. Alsamara, M., Mrabet, Z., & Mimouni, K. (2024). The threshold effects of public debt on economic growth in MENA countries: Do energy endowments matter? International Review of Economics & Finance, 89, 458-470. https://doi.org/10.1016/j.iref.2023.10.015

13. Ampofo, G. M. K., Jinhua, C., Bosah, P. C., Ayimadu, E. T., & Senadzo, P. (2021). Nexus between total natural resource rents and public debt in resource-rich countries: A panel data analysis. Resources Policy, 74. https://doi.org/10.1016/j.resourpol.2021.102276

14. Arora, R., & Kaur, B. (2020). Fossil fuel consumption, economic growth and CO2 emissions. Causality evinced from the BRICS world. Theoretical & Applied Economics, 27(4). https://www.ebsco.ectap.ro/Theoretical_&_Applied_Economics_2020_Winter.pdf#page=131

15. Arshed, N., Nasir, S., & Saeed, M. I. (2022). Impact of the external debt on standard of living: A case of Asian countries. Social Indicators Research, 163(1), 321-340. https://doi.org/10.1007/s11205-022-02906-9

16. Ayad, H., & Djedaiet, A. (2024). Does the unemployment rate matter for environmental issues in the G7 nations? New testing for the environmental Phillips curve using the load capacity factor. Environment, Development and Sustainability, 1-31. https://doi.org/10.1007/s10668-024-04956-0

17. Azolibe, C. B. (2021). Determinants of external indebtedness in heavily indebted poor countries: What macroeconomic and socio-economic factors matter? The American Economist, 66(2), 249-264. https://doi.org/10.1177/0569434520938326

18. Bachegour, H., & Qafas, A. (2023). Does external debt worsen environmental pollution? Evidence from Morocco. International Journal of Energy Economics and Policy, 13(2), 68-76. doi:10.32479/ijeep.13944

19. Badur, M. M., Yılmaz, E., & Sensoy, F. (2024). Do corruption and inequality shape sustainable development? Evidence from the post-soviet countries. International Journal of Social Economics, 51(1), 115-132. https://doi.org/10.1108/IJSE-01-2023-0065

20. Bali Swain, R., & Yang-Wallentin, F. (2020). Achieving sustainable development goals: Predicaments and strategies. International Journal of Sustainable Development & World Ecology, 27(2), 96-106. https://doi.org/10.1080/13504509.2019.1692316

21. Barros, L., & Martínez-Zarzoso, I. (2022). Systematic literature review on trade liberalization and sustainable development. Sustainable Production and Consumption, 33, 921-931. https://doi.org/10.1016/j.spc.2022.08.012

22. Ben Ali, T., & Ben Abdul Aziz Al Yahya, B. (2019). The effect of governance on public debt: An empirical investigation for the Arabian Gulf countries. Journal of Economic Studies, 46(4), 812-841. https://doi.org/10.1108/JES-07-2017-0168

23. Beşe, E., Friday, H. S., & Özden, C. (2021a). Is India financing its emissions through external debt? International Journal of Energy Economics and Policy, 11(6), 170-179. doi:10.32479/ijeep.11533

24. Bese, E., Friday, H. S., & Özden, C. (2021b). The effect of external debt on emissions: Evidence from China. International Journal of Energy Economics and Policy, 11(1), 440-447. doi:10.32479/ijeep.10605

25. Bese, E., & Friday, H. S. (2021). The effect of external debt on life expectancy through foreign direct investment: Evidence from Turkey. International Journal of Economics and Financial Issues, 11(2), 1-11. https://doi.org/10.32479/ijefi.10958

26. Bese, E., & Friday, H. S. (2022). The effect of external debt on emissions from coal consumption: Evidence from Turkey. International Journal of Energy Economics and Policy, 12(5), 515-518. doi:10.32479/ijeep.13359

27. Biswal, A.K., & Patra, B. (2024). Role of Public Debt and Innovation in Achieving SDG-7: A Comprehensive Analysis of Asia–Pacific Regions. In: Mohapatra, S., Padhi, P., Singh, V. (eds) Financial Markets, Climate Risk and Renewables. Springer Proceedings in Business and Economics. Springer, Singapore. https://doi.org/10.1007/978-981-97-6687-1_2

28. Boly, M., Combes, J. L., Menuet, M., Minea, A., Motel, P. C., & Villieu, P. (2022). Can public debt mitigate environmental debt? Theory and empirical evidence. Energy Economics, 111. https://doi.org/10.1016/j.eneco.2022.105895

29. Borissov, K., & Kalk, A. (2020). Public debt, positional concerns, and wealth inequality. Journal of Economic Behavior & Organization, 170, 96–111. https://doi.org/10.1016/j.jebo.2019.11.029

30. Boţa-Avram, C., Groşanu, A., Răchişan, P. R., & Berinde, S. R. (2021). Granger causal nexus between good public governance and unemployment: Evidence from cross-country panel data investigation. Journal of Risk and Financial Management, 14(2). https://doi.org/10.3390/jrfm14020063

31. Breuer, A., Janetschek, H., & Malerba, D. (2019). Translating sustainable development goal (SDG) interdependencies into policy advice. Sustainability, 11(7), 2092. https://doi.org/10.3390/su11072092

32. Briceño, H. R., & Perote, J. (2020). Determinants of the public debt in the Eurozone and its sustainability amid the Covid-19 pandemic. Sustainability, 12(16). https://doi.org/10.3390/su12166456

33. Butkus, M., Cibulskiene, D., Garsviene, L., & Seputiene, J. (2021). The heterogeneous public debt–growth relationship: The role of the expenditure multiplier. Sustainability, 13(9). https://doi.org/10.3390/su13094602

34. Butkus, M., & Seputiene, J. (2018). Growth effect of public debt: The role of government effectiveness and trade balance. Economies, 6(4), 62. https://doi.org/10.3390/economies6040062

35. Carratù, M., Chiarini, B., D'Agostino, A., Marzano, E., & Regoli, A. (2019). Air pollution and public finance: Evidence for European countries. Journal of Economic Studies, 46(7), 1398-1417. https://doi.org/10.1108/JES-03-2019-0116

36. Carrera, J., & de la Vega, P. (2024). The effect of external debt on greenhouse gas emissions. Journal of Economics and Finance, 48(3), 754-776. https://doi.org/10.1007/s12197-024-09674-x

37. Chen, N., Sun, Z., Xu, Z., & Xu, J. (2025). A review of international trade impacts on sustainable development. Marine Development, 3(1), 1-16. https://doi.org/10.1007/s44312-025-00053-6

38. Cifuentes-Faura, J., & Simionescu, M. (2024). Analyzing the importance of the determinants of public debt and its policy implications: A survey of literature. Public Finance Review, 52(3), 345-375. https://doi.org/10.1177/10911421231215019

39. Cooray, A., & Özmen, I. (2024). The role of institutions on public debt: A quantile regression approach. International Review of Economics & Finance, 93, 912-928. https://doi.org/10.1016/j.iref.2024.03.065

40. Doojav, G. O., & Baatarkhuu, M. (2024). Public debt and growth in Asian developing economies: Evidence of non-linearity and geographical heterogeneity. Eurasian Economic Review, 14(2), 421-452. https://doi.org/10.1007/s40822-023-00259-3

41. Elder, M. (2024). Integration versus prioritization in the Sustainable Development Goals: An argument to prioritize environmental sustainability and a just transition. Sustainable Development, 33(1), 465-477. https://doi.org/10.1002/sd.3130

42. Fan, R. Y., Lederman, D., Nguyen, H., & Rojas, C. J. (2024). Calamities, debt, and growth in developing countries. IMF Economic Review, 1, 1-21. https://doi.org/10.1057/s41308-023-00200-3

43. Fankem, G. S. G., & Feyom, C. (2024). Does trade openness improve or worsen public governance in sub-Saharan Africa? International Economics, 178. https://doi.org/10.1016/j.inteco.2024.100502

44. Farooq, F., Faheem, M., & Gardezi, M. A. (2022). Dynamic common correlated effects of public debt on energy poverty alleviation in OIC member countries: Does institutional performance matter? Pakistan Journal of Commerce and Social Sciences, 16(4), 472-497. https://hdl.handle.net/10419/268832

45. Farooq, F., Zaib, A., Faheem, M., & Gardezi, M. A. (2023). Public debt and environment degradation in OIC countries: the moderating role of institutional quality. Environmental Science and Pollution Research, 30(19), 55354-55371. https://doi.org/10.1007/s11356-023-26061-x

46. Felbermayr, G., Peterson, S., & Wanner, J. (2025). Trade and the environment, trade policies and environmental policies—How do they interact? Journal of Economic Surveys, 39(3), 1148-1184. https://doi.org/10.1111/joes.12628

47. Feng, Y., Lagakos, D., & Rauch, J. E. (2024). Unemployment and development. The Economic Journal, 134(658), 614-647. https://doi.org/10.1093/ej/uead076

48. Fhima, F., Nouira, R., & Sekkat, K. (2023). How does corruption affect sustainable development? A threshold non-linear analysis. Economic Analysis and Policy, 78, 505-523. https://doi.org/10.1016/j.eap.2023.03.020

49. Filipović, S., Orlov, A., & Panić, A. A. (2024). Key forecasts and prospects for green transition in the region of Central Asia beyond 2022. Energy, Sustainability and Society, 14(1), 25. https://doi.org/10.1186/s13705-024-00457-0

50. Fosu, P., Eshun, J., & Ankrah Twumasi, M. (2025). The linkage between economic growth, debt servicing, pollution and health expenditures: Panel evidence from 42 African countries. African Journal of Economic and Management Studies, 1-16. https://doi.org/10.1108/AJEMS-01-2024-0039

51. Glass, L.-M., & Newig, J. (2019). Governance for achieving the Sustainable Development Goals: How important are participation, policy coherence, reflexivity, adaptation, and democratic institutions? Earth System Governance, 2. https://doi.org/10.1016/j.esg.2019.100031
52. Grossman, G. M., & Krueger, A. B. (1995). Economic growth and the environment, Quarterly Journal of Economics, 110, 353-377. https://doi.org/10.2307/2118443
53. Hashemizadeh, A., Bui, Q., & Kongbuamai, N. (2021). Unpacking the role of public debt in renewable energy consumption: New insights from the emerging countries. Energy, 224. https://doi.org/10.1016/j.energy.2021.120187
54. Harsono, E., Kusumawati, A., & Nirwana, N. (2024). External debt determinants: Do macroeconomic and institutional one's matter for selected ASEAN developing countries? Economies, 12(1), 1-16. https://doi.org/10.3390/economies12010007
55. Hilton, S. K. (2021). Public debt and economic growth: contemporary evidence from a developing economy. Asian Journal of Economics and Banking, 5(2), 173-193. https://doi.org/10.1108/AJEB-11-2020-0096
56. Jalles, J. T. (2023). Financial crises and climate change. Comparative Economic Studies, 1, 1-25. https://link.springer.com/article/10.1057/s41294-023-00209-7
57. Kaufmann, D., & Kraay, A. (2024). The worldwide governance indicators: Methodology and 2024 update. Policy Research Working Paper, 10952. http://dx.doi.org/10.2139/ssrn.5154675
58. Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues. Hague Journal on the Rule of Law, 3(2), 220-246. https://doi.org/10.1017/S1876404511200046
59. Kemoe, L., & Lartey, E. K. (2022). Public debt, institutional quality and growth in sub-Saharan Africa: A threshold analysis. International Review of Applied Economics, 36(2), 222-244. https://doi.org/10.1080/02692171.2021.1957785
60. Koyuncu Çakmak, T., Beşer, M. K., & Alola, A. A. (2025). Environmental effect of high-, upper, and lower middle-income economies' energy mix: Is there a trade-off between unemployment and environmental quality? Energy & Environment, 36(2), 851-869. https://doi.org/10.1177/0958305X231187034
61. Liu, H., Lee, C., & Alden, C. (2022). The dynamics of governance and sustainable development goals in the global south. Global Policy, 13, 5-10. https://doi.org/10.1111/1758-5899.13075
62. Lui, F. T. (1985). An equilibrium queuing model of bribery. Journal of political economy, 93(4), 760-781. https://doi.org/10.1086/261329
63. Luu, H. N., Luu, N. H., & Phung, H. T. T. (2024). Would external debts promote sustainable development in emerging and low-income countries? Journal of International Development, 36(2), 1110-1128. https://doi.org/10.1002/jid.3840
64. Ma, R., & Qamruzzaman, M. (2022). Nexus between government debt, economic policy uncertainty, government spending, and governmental effectiveness in BRIC nations: Evidence for linear and nonlinear assessments. Frontiers in Environmental Science, 10. https://doi.org/10.3389/fenvs.2022.952452
65. Martín, M. M. I., Rojas, M. L., & Dabús, C. (2024). Debt, economic growth and threshold effects: Evidence from developing countries. EconomiA, 25(1), 92-108. https://doi.org/10.1108/ECON-08-2023-0131
66. Mejia, S. A. (2024). The effects of debt dependence on economic growth in less-developed countries, 1990–2019. Social Science Research, 117. https://doi.org/10.1016/j.ssresearch.2023.102943
67. Mensah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. Cogent social sciences, 5(1). https://doi.org/10.1080/23311886.2019.1653531
68. Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. American journal of sociology, 83(2), 340-363. https://doi.org/10.1086/226550
69. Ndoricimpa, A. (2020). Threshold effects of public debt on economic growth in Africa: A new evidence. Journal of Economics and Development, 22(2), 187-207. https://doi.org/10.1108/JED-01-2020-0001
70. Nguyen, T. A. N., & Luong, T. T. H. (2021). Fiscal policy, institutional quality, and public debt: Evidence from transition countries. Sustainability, 13(19), 10706. https://doi.org/10.3390/su131910706
71. Nikonov, I. V., Radionov, S., A., & Mukhametov, O. R. (2023). Public debt in Central Asian Countries: Risks and management approaches. Economic Journal of the Higher School of Economics, 27(4), 550-673. https://ej.hse.ru/en/2023-27-4/879116704.html

72. Nutassey, V. A., Nomlala, B. C., & Sibanda, M. (2023). Economic institutions, political institutions and public debt in Sub-Saharan Africa. International Journal of Emerging Markets, 20(4), 1666-1685. https://doi.org/10.1108/IJOEM-03-2023-0490

73. Obiero, W. L., & Topuz, S. G. (2022). Do public and internal debt cause income inequality? Evidence from Kenya. Journal of Economics, Finance and Administrative Science, 27(53), 124-138. https://doi.org/10.1108/JEFAS-05-2021-0049

74. Ojeka, O. J., Egbetunde, T., Okoduwa, G. O., Ojeyode, A. O., Jimoh, M., & Ogunbowale, G. O. (2024). Moderating effect of institutional quality on the influence of debt on investment in sub-Saharan Africa. Future Business Journal, 10(76), 1-17. https://doi.org/10.1186/s43093-024-00362-0

75. Okafor, L., & Khalid, U. (2023). COVID-19 economic stimulus packages, tourism industry and external debt: The influence of extreme poverty. PloSone, 18(8). https://doi.org/10.1371/journal.pone.0287384

76. Onuoha, F. C., Dimnwobi, S. K., Okere, K. I., & Ekesiobi, C. (2023). Sustainability burden or boost? Examining the effect of public debt on renewable energy consumption in Sub-Saharan Africa. Energy Sources, Part B: Economics, Planning, and Policy, 18(1). https://doi.org/10.1080/15567249.2023.2214917

77. Ozturk, I., Aslan, A., Ozsolak, B., Atay Polat, M., & Turan, Z. (2022). Impact of fossil fuels and renewable energy consumption on economic growth in Paris Club Countries. Journal of Renewable and Sustainable Energy, 14(4). https://doi.org/10.1063/5.0086752

78. Panizza, U., & Presbitero, A. F. (2013). Public debt and economic growth in advanced economies: A survey. Swiss Journal of Economics and Statistics, 149, 175-204. https://doi.org/10.1007/BF03399388

79. Phuc Canh, N. (2018). The effectiveness of fiscal policy: contributions from institutions and external debts. Journal of Asian Business and Economic Studies, 25(1), 50-66. https://doi.org/10.1108/JABES-05-2018-0009

80. Pobedinsky, V., & Shestak, V. (2020). Improving environmental legislation in Central Asia. Environmental Policy and Law, 50(1-2), 69-79. https://doi.org/10.3233/EPL-200205

81. Reinhart, C. M., & Rogoff, K. S. (2010). Growth in a time of debt. American Economic Review, 100(2), 573-578. doi:10.1257/aer.100.2.573

82. Reinhart, C. M., Reinhart, V. R., & Rogoff, K. S. (2012). Debt Overhangs: Past and Present (No. w18015). National Bureau of Economic Research. doi:10.3386/w18015

83. Sadiq, M., Shinwari, R., Usman, M., Ozturk, I., & Maghyereh, A. I. (2022). Linking nuclear energy, human development and carbon emission in BRICS region: Do external debt and financial globalization protect the environment? Nuclear Engineering and Technology, 54(9), 3299-3309. https://doi.org/10.1016/j.net.2022.03.024

84. Saleem, S. H., Ahmed, D. H., & Samour, A. (2024). Examining the impact of external debt, natural resources, foreign direct investment, and economic growth on ecological sustainability in Brazil. Sustainability, 16(3). https://doi.org/10.3390/su16031037

85. Seti, T. M., Mazwane, S., & Christian, M. (2025). Financial openness, trade openness, and economic growth nexus: A dynamic panel analysis for emerging and developing economies. Journal of Risk and Financial Management, 18(2). https://doi.org/10.3390/jrfm18020078

86. Shaari, M. S., Sulong, A., Ridzuan, A. R., Esquivias, M. A., & Lau, E. (2024). The carbon conundrum: Exploring CO2 emissions, public debt, and environmental policy. Emerging Science Journal, 8(3), 933-947. http://dx.doi.org/10.28991/ESJ-2024-08-03-08

87. Shi, H., Song, D., & Ramzan, M. (2025). Institutional quality, public debt, and sustainable economic growth: Evidence from a global panel. Sustainability, 17(14). https://doi.org/10.3390/su17146487

88. Simionescu, M., & Cifuentes-Faura, J. (2023). Analysing public debt in the Mexican states: Spatial convergence, regional drivers and policy recommendations. Papers in Regional Science, 102(4), 737-761. https://doi.org/10.1111/pirs.12748

89. Smyth, D. J., & Hsing, Y. (1995). In search of an optimal debt ratio for economic growth. Contemporary Economic Policy, 13(4), 51-59. https://doi.org/10.1111/j.1465-7287.1995.tb00731.x

90. Somoye, O. A., Ozdeser, H., & Seraj, M. (2024, May). The asymmetric impact of fossil fuel and renewable energy consumption on life expectancy in Nigeria. In Natural Resources Forum, 48(2), 385-403. https://doi.org/10.1111/1477-8947.12312

91. Stanciu, C., & Mitu, N. E. (2024). Financial levers and carbon emissions: Analysing the debt-emission nexus in the European Union. Applied Economics, 1-20. https://doi.org/10.1080/00036846.2024.2393901

92. Stern, D. I. (2017). The environmental Kuznets curve after 25 years. Journal of Bioeconomics, 19, 7-28. https://doi.org/10.1007/s10818-017-9243-1

93. Tarek, B. A., & Ahmed, Z. (2017). Institutional quality and public debt accumulation: An empirical analysis. International Economic Journal, 31(3), 415-435. https://doi.org/10.1080/10168737.2017.1354906

94. Tung, L. T. (2020). Can public debt harm social development? Evidence from the Asian-Pacific region. Journal of International Studies, 13(2), 48-61. doi:10.14254/2071-8330.2020/13-2/4

95. Uddin, I., & Rahman, K. U. (2023). Impact of corruption, unemployment and inflation on economic growth evidence from developing countries. Quality & Quantity, 57(3), 2759-2779. https://doi.org/10.1007/s11135-022-01481-y

96. Umair, M., Yousuf, M. U., Cheema, A. R., & Ul-Haq, J. (2025). Assessing the environmental consequences of fossil fuel consumption in newly industrialized countries. International Journal of Energy Sector Management, 19(4), 1027-1044. https://doi.org/10.1108/IJESM-08-2024-0036

97. United Nations. (2025). The Sustainable Development Goals Report 2025. https://unstats.un.org/sdgs/report/2025/

98. United Nations Conference on Trade and Development. (2024). A world of debt: A growing burden to global prosperity. https://unctad.org/system/files/official-document/osgttinf2024d1_en.pdf

99. Van Twillert, N., & Halleck Vega, S. (2023). Risk or opportunity? The belt and road initiative and the role of debt in the China-Central Asia-West Asia economic corridor. Eurasian Geography and Economics, 64(3), 365-377. https://doi.org/10.1080/15387216.2021.2012816

100. Wang, Z., Bui, Q., Zhang, B., Nawarathna, C. L. K., & Mombeuil, C. (2021). The nexus between renewable energy consumption and human development in BRICS countries: The moderating role of public debt. Renewable Energy, 165, 381-390. https://doi.org/10.1016/j.renene.2020.10.144

101. Wang, Q., Wang, X., Li, R., & Jiang, X. (2024). Reinvestigating the environmental Kuznets curve (EKC) of carbon emissions and ecological footprint in 147 countries: A matter of trade protectionism. Humanities and Social Sciences Communications, 11(1), 1-17. https://doi.org/10.1057/s41599-024-02639-9

102. Warsame, Z. A., Dirie, A. N., & Nor, B. A. (2024). Towards environmental sustainability: The impact of external debt and government expenditure on carbon emissions in Somalia. International Journal of Energy Economics and Policy, 14(6), 566-573. doi:10.32479/ijeep.15666

103. Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data. MIT press.

104. World Bank. (2024). International Debt Report 2024. https://openknowledge.worldbank.org/entities/publication/f1700aa0-cc73-42b7-8ceb-630c5528a574

105. Zeraibi, A., Radulescu, M., Khan, M. K., Hafeez, M., & Jahanger, A. (2023). Analyzing the linkage between public debt, renewable electricity output, and CO2 emissions in emerging economies: Does the N-shaped environmental Kuznets curve exist? Energy & Environment, 35(5), 2407-2430. https://doi.org/10.1177/0958305X231151678 (Original work published 2024).

106. Zhao, T., & Liu, Z. (2022). Drivers of CO2 emissions: A debt perspective. International Journal of Environmental Research and Public Health, 19(3). https://doi.org/10.3390/ijerph19031847

Annex 1. Correlation matrixes

The economic dimension										
	GNI	EPDebtS	Trade	Unempl	FossilFu	ConCor	LifeEx	FootPr	GovEf	VIF
GNI	1									
EPDebtS	0.631**	1								2.244
Trade	-0.392**	-0.433**	1							2.415
Unempl	-0.154	-0.080	-0.321**	1						1.718
FossilFu	0.458**	0.508**	-0.518**	0.094	1					2.042
ConCor	0.658**	0.510**	-0.068	-0.079	0.227*	1				2.586
LifeEx	0.497**	0.372**	-0.376**	-0.351**	0.100	0.262**	1			2.087
FootPr	0.701**	0.615**	-0.338**	0.107	0.589**	0.472**	0.155	1		2.148
GovEf	0.696**	0.464**	-0.167	-0.252**	0.170	0.716**	0.559**	0.374**	1	2.723
The social dimension										
	LifeEx	EPDebtS	Trade	Unempl	FossilFu	ConCor	GNI	FootPr	GovEf	VIF
LifeEx	1									
EPDebtS	0.372**	1								2.226
Trade	-0.376**	-0.433**	1							2.111
Unempl	-0.351**	-0.080	-0.321**	1						1.540
FossilFu	0.100	0.508**	-0.518**	0.094	1					1.942
ConCor	0.262**	0.510**	-0.068	-0.079	0.227*	1				2.732
GNI	0.497**	0.631**	-0.392**	-0.154	0.458**	0.658**	1			4.321
FootPr	0.155	0.615**	-0.338**	0.107	0.589**	0.472**	0.701**	1		2.979
GovEf	0.559**	0.464**	-0.167	-0.252**	0.170	0.716**	0.696**	0.374**	1	2.769
The environmental dimension										
	FootPr	EPDebtS	Trade	Unempl	FossilFu	ConCor	GNI	LifeEx	GovEf	VIF
FootPr	1									
EPDebtS	0.615**	1								2.053
Trade	-0.338**	-0.433**	1							2.454
Unempl	0.107	-0.080	-0.321**	1						1.684
FossilFu	0.589**	0.508**	-0.518**	0.094	1					1.833
ConCor	0.472**	0.510**	-0.068	-0.079	0.227*	1				2.798
GNI	0.701**	0.631**	-0.392**	-0.154	0.458**	0.658**	1			3.225
LifeEx	0.155	0.372**	-0.376**	-0.351**	0.100	0.262**	0.497**	1		2.160
GovEf	0.374**	0.464**	-0.167	-0.252**	0.170	0.716**	0.696**	0.559**	1	2.940
The governance dimension										
	GovEf	EPDebtS	Trade	Unempl	FossilFu	ConCor	GNI	LifeEx	FootPr	VIF
GovEf	1									
EPDebtS	0.464**	1								2.244
Trade	-0.167	-0.433**	1							2.545
Unempl	-0.252**	-0.080	-0.321**	1						1.804
FossilFu	0.170	0.508**	-0.518**	0.094	1					2.038
ConCor	0.716**	0.510**	-0.068	-0.079	0.227*	1				2.077
GNI	0.696**	0.631**	-0.392**	-0.154	0.458**	0.658**	1			4.147
LifeEx	0.559**	0.372**	-0.376**	-0.351**	0.100	0.262**	0.497**	1		2.037
FootPr	0.374**	0.615**	-0.338**	0.107	0.589**	0.472**	0.701**	0.155	1	2.983

Source: the author's calculations.
Notes:
***. Correlation is significant at the 0.01 level (2-tailed);*
**. Correlation is significant at the 0.05 level (2-tailed).*

Annex 2. The robustness check

Dependent	**The economic dimension: LnGNI**					**The social dimension: LnLifeEx**			
Models	Model1r-ec	Model2r-ec	Model3r-ec	Model4r-ec		Model1r-s	Model2r-s	Model3r-s	Model4r-s
LnEPDebtS	0.782*** (0.074)	0.291*** (0.097)	0.882*** (0.090)	0.958*** (0.104)		0.033*** (0.003)	0.025*** (0.003)	0.031*** (0.004)	0.044*** (0.004)
LnTrade	-0.617*** (0.166)	-0.064 (0.117)	-0.551*** (0.169)	-0.487*** (0.169)		-0.030*** (0.007)	-0.016** (0.006)	-0.022*** (0.007)	-0.024*** (0.007)
LnUnempl	-0.546*** (0.123)	-0.208** (0.094)	-0.681*** (0.129)	-0.551*** (0.127)		-0.022*** (0.005)	-0.002 (0.005)	-0.022*** (0.005)	-0.023*** (0.005)
LnFossilFu	1.552** (0.601)	0.346 (0.406)	1.299** (0.580)	1.390** (0.592)		0.064*** (0.024)	0.048** (0.021)	0.052** (0.023)	0.056** (0.023)
ConCor	-1.264*** (0.291)	-0.922*** (0.265)	-1.003*** (0.371)	-1.866*** (0.367)		0.001 (0.012)	-0.020 (0.015)	-0.018 (0.015)	-0.029** (0.014)
GNI		0.281*** (0.021)			GNI		0.001*** (0.000)		
IC.ec		0.000** (0.000)			IC.ec		-2.111E-6 (0.000)		
LifeEx			0.091*** (0.027)		FootPr			0.004*** (0.001)	
IC.soc			-0.003*** (0.001)		IC.env			-1.174E-5 (0.000)	
GovEf				-0.035 (0.257)	GovEf				-0.007 (0.010)
IC.gov				0.096*** (0.033)	IC.gov				0.005*** (0.001)
Constant	-1.600 (2.855)	-16.737*** (2.227)	-1.224 (2.791)	-2.116 (2.799)		4.040*** (0.114)	3.954*** (0.102)	3.988*** (0.112)	4.008*** (0.109)
Observ.	139	139	139	139		139	139	139	139
R^2	0.875	0.947	0.887	0.883		0.748	0.811	0.775	0.776
Adjust. R^2	0.866	0.942	0.878	0.873		0.731	0.794	0.755	0.757
F-value	101.012***	206.950***	91.610***	87.583***		42.978***	49.825***	40.003***	40.388***
t-Hausman:									
Chi-square test value	291.915	238.332	278.643	3612.96		956.271	91938.2	12759.6	4.89145e+07
p-value	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001

Source: The author's calculations.
Notes: EPDebt denotes the external debt stocks, public and publicly guaranteed in current bln.US$.
*Robust standard errors are in parentheses. ***, **, and * denote significance at 1, 5, and 10 percent levels, respectively.*

Annex 3. The robustness check (cont.)

Dependent	**The environmental dimension: LnFootPr**					**The governance dimension: GovEf**			
Models	Model1r-en	Model2r-en	Model3r-en	Model4r-en		Model1r-g	Model2r-g	Model3r-g	Model4r-g
LnEPDebt	0.185*** (0.030)	0.158*** (0.034)	-0.010 (0.051)	0.163*** (0.044)		0.132*** (0.025)	0.114*** (0.032)	0.085* (0.051)	0.127*** (0.032)
LnTrade	-0.208*** (0.068)	-0.112* (0.066)	-0.044 (0.062)	-0.196*** (0.071)		-0.115** (0.057)	-0.075 (0.061)	-0.108* (0.061)	-0.101 (0.061)
LnUnempl	0.179*** (0.050)	0.314*** (0.057)	0.305*** (0.050)	0.199*** (0.053)		-0.154*** (0.042)	-0.098* (0.052)	-0.128** (0.049)	-0.153*** (0.047)
LnFossilFu	0.581** (0.245)	0.460** (0.224)	0.225 (0.214)	0.549** (0.248)		0.283 (0.206)	0.237 (0.206)	0.270 (0.212)	0.263 (0.209)
ConCor	0.288** (0.119)	0.421** (0.163)	0.252* (0.140)	0.227 (0.154)		0.591*** (0.100)	0.582*** (0.150)	0.482*** (0.139)	0.557*** (0.134)
GNI		0.005*** (0.001)			GNI		0.002** (0.001)		
IC.ec		0.000*** (0.000)			IC.ec		-2.768E-5 (0.000)		
LifeEx			0.081*** (0.011)		LifeEx			0.002 (0.011)	
IC.soc			2.834E-5 (0.000)		IC.soc			0.000 (0.000)	
GovEf				0.130 (0.108)	FootPr				0.007 (0.010)
IC.gov				-0.002 (0.014)	IC.env				-2.528E-5 (0.000)
Constant	0.475 (1.165)	0.175 (1.077)	-4.085*** (1.172)	0.578 (1.173)		-0.699 (0.980)	-0.887 (0.990)	-0.938 (1.165)	-0.791 (1.006)
Observations	139	139	139	139		139	139	139	139
R^2	0.916	0.932	0.941	0.917		0.754	0.762	0.756	0.755
Adjust. R^2	0.911	0.926	0.936	0.910		0.737	0.741	0.735	0.734
F-value	158.415***	160.035***	184.857***	129.209***		44.219***	37.164***	36.113***	35.845***
t-Hausman:									
Chi-square test value	277829	1528.61	39101.9	3391.83		1168.55	2290.94	2650.4	1008.51
p-value	<0.001	<0.001	<0.001	<0.001		<0.001	<0.001	<0.001	<0.001

Source: The author's calculations.
Notes: EPDebt denotes the external debt stocks, public and publicly guaranteed in current bln.US$.
*Robust standard errors are in parentheses. ***, **, and * denote significance at 1, 5, and 10 percent levels, respectively.*

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LINKING NATIONAL ROLE CONCEPTIONS TO FOREIGN POLICY BEHAVIOR: A COMPARATIVE STUDY OF KAZAKHSTAN AND UZBEKISTAN

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ABSTRACT. *Kazakhstan and Uzbekistan, two pivotal Central Asian states with broadly similar geopolitical contexts, have pursued markedly different foreign policy trajectories since independence. This article asks whether leadership-defined national role conceptions (NRCs) - the self-ascribed roles articulated in elite discourse - help explain these divergences under comparable structural conditions. Grounded in Role Theory and Foreign Policy Analysis, the study treats NRCs as mid-range, intervening frameworks that link systemic constraints and domestic politics to concrete choices, complementing realist and constructivist explanations rather than replacing them.*

Empirically, the article employs a most-similar cases design and a content analysis of 100 presidential speeches and interviews by Nursultan Nazarbayev and Islam Karimov (1991-2016), coded using Naomi Wish's refinement of Kalevi Holsti's NRC typology. The resulting role profiles are then read against patterns of foreign policy behavior, including engagement with regional organizations and partnerships with Western institutions, as well as unilateral initiatives.

The findings show that Nazarbayev constructed and performed a "Eurasian Bridge" role, emphasizing multilateralism, mediation, civilizational dialogue, and cooperative regionalism, reflected in Kazakhstan's multi-vector diplomacy and activism in regional and global fora. Karimov, by contrast, cultivated an "Independent Actor" role centered on sovereignty, regime security, and defensive self-reliance, manifested in Uzbekistan's selective, often reversible institutional commitments and guarded response to external influence. The article argues that these NRCs function as relatively stable scripts that mediate leaders' responses to common geopolitical, economic, and regime-security pressures, rather than as mere post-hoc legitimation.

The conclusion highlights the theoretical and methodological value of Role Theory for Central Asian foreign policy analysis. Then briefly traces how Nazarbayev's and Karimov's roles have been adapted, rather than abandoned, under Presidents Tokayev and Mirziyoyev, pointing to a shift toward "cautious bridging" and "cooperative independence".

KEYWORDS: *national role conceptions, foreign policy analysis, Kazakhstan's "Eurasian Bridge", Uzbekistan's "Independent Actor" roles.*

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INTRODUCTION

Explaining why governments behave as they do in the international system is a complex task, as foreign policy outcomes result from the interplay of external pressures, domestic conditions, and leaders' perceptions (George, 1980; Holsti, 1970; Jervis, 1976). Foreign policy analysis has long noted that even under similar structural constraints, states can respond differently because decision-makers interpret threats and opportunities through distinct cognitive and normative lenses (Holsti, 1970; Hudson, 2007). While classic theories of international relations have largely centered on great powers, smaller and medium-sized states in regions such as Central Asia also demonstrate agency that challenges structural predictions (Isaacs, 2010; March, 2003; Busygina, 2019; Bauyrzhankyzy, 2020).

From a realist perspective, weak states in insecure environments should either balance against threats or bandwagon with stronger powers (Waltz, 1979; Walt, 1987). By this logic, Kazakhstan and Uzbekistan, mid-sized, landlocked states situated between Russia and China, would be expected to align with a dominant patron for security and regime survival (Bohr, 1998; Olcott, 1996). Yet their foreign policies have not followed a single, convergent pattern. Despite broadly comparable geographic and political contexts, the two post-Soviet republics have pursued markedly different strategies: Kazakhstan has joined Russia-led alliances while initiating regional cooperation projects and cultivating Western partnerships, whereas Uzbekistan has maintained selective engagement and frequent realignments, avoiding deep integration with any bloc (Cummings, 2005; Fumagalli, 2007; Spechler & Spechler, 2010; Pikalov, 2014; Ambrosio & Lange, 2014). Kazakhstan has branded itself as a proactive, multi-vector "Eurasian" actor, while Uzbekistan has often preferred a low-profile, sovereignty-first stance (Cummings, 2005; Fumagalli, 2007).

This article takes these divergent trajectories as its central puzzle. It does not presume that the foreign policies of Kazakhstan and Uzbekistan must be identical; rather, it asks why such differences emerge under broadly similar structural conditions (Fumagalli, 2007). Kazakhstan and Uzbekistan are selected as cases not simply because they differ, but because they are widely recognized as the region's two most populous, politically and economically influential republics - the principal "poles" around which Central Asian regional order has been negotiated since independence (Bohr, 2004; Laruelle, 2018). Their post-independence rivalry and occasional accommodation have shaped attempts at regional integration and security cooperation, distinguishing them from structurally more vulnerable neighbors such as Kyrgyzstan and Tajikistan, or the inward-oriented Turkmenistan (Cummings, 2005; Bohr, 2004). In this sense, the smaller Central Asian republics function as a regional baseline: they exemplify what highly dependent, sovereignty-defensive behavior looks like under similar systemic pressures, against which the more autonomous and differentiated policies of Kazakhstan and Uzbekistan can be contrasted (Costa-Buranelli, 2014; Toktomyshev, 2016).

Role Theory offers a useful mid-range framework for addressing this puzzle. Derived from social psychology and introduced into foreign policy analysis by Holsti (1970), it conceptualizes states as actors performing roles based on leaders' perceptions of appropriate functions, orientations, and commitments in the international system.

National role conceptions (NRCs) capture how policymakers define their country's mission, status, and obligations, "scripts" about what their state is, whom it represents, and what it ought to do (Holsti, 1970; Wish, 1980). NRCs are shaped by domestic variables (historical experiences, ideology, leadership traits) and external ones (regional power dynamics and international expectations), and they tend to generate patterned, relatively stable foreign-policy behavior over time (Holsti, 1970; Wish, 1980; Thies, 2012). In this respect, the analysis has clear affinities with what Waltz (1959) termed the "first image", in that it foregrounds leaders' beliefs and worldviews. But rather than treating individuals in isolation, it embeds them in a multi-level framework where national roles mediate between structure and domestic politics and operate as intervening filters through which material constraints are interpreted (Harnisch, 2011; Hudson, 2007).

Applying Role Theory to Kazakhstan and Uzbekistan, this study argues that each country's leadership constructed a distinct NRC that has guided foreign-policy choices under shared structural conditions: Kazakhstan as a "Eurasian Bridge" and Uzbekistan as an "Independent Actor". Both states emerged from the Soviet Union in 1991 as authoritarian presidential regimes located between Russia and China, concerned with sovereignty, territorial integrity, and regime survival (Olcott, 1996; Cornell, 2000). Under President Nursultan Nazarbayev, Kazakhstan pursued a multi-vector and cooperative diplomacy, branding itself as a bridge between East and West and an advocate of Eurasian integration, peace, and dialogue (Nazarbayev, 1997; Hanks, 2009; Ayazbekov, 2013; Gnedina, 2015; Contessi, 2015). By contrast, under President Islam Karimov, Uzbekistan followed a sovereignty-first path, frequently recalibrating ties to maintain autonomy and emphasizing non-alignment, security, and self-reliance (Fumagalli, 2007; Spechler & Spechler, 2010; Fazendeiro, 2017). These role conceptions were not only articulated in elite discourse; they were also performed through concrete policies, Kazakhstan's deep engagement in Russian- and Chinese-led institutions alongside Western partnerships and nuclear disarmament activism, and Uzbekistan's selective, often reversible alignments and guarded regional cooperation (Fumagalli, 2007; Spechler & Spechler, 2010).

The study's theoretical contribution is twofold. First, it conceptualizes NRCs as mid-range, leadership-defined frameworks that are neither reducible to material interests nor mere post-hoc legitimation devices. Drawing on recent role-theoretical work, it treats roles and behavior as mutually constitutive. Leaders draw on established role vocabularies to interpret constraints and justify choices, while repeated enactment of certain behaviors reinforces or adapts those roles over time (Harnisch, 2011; Breuning, 2011; Thies, 2012). Second, it extends Role Theory to an understudied regional context. Much scholarship on Central Asia remains descriptive or framed by great-power rivalry and "New Great Game" metaphors, with limited application of psychological or ideational tools such as leadership trait analysis, operational code, or role analysis (March, 2003; Isaacs, 2010; Busygina, 2019; Bauyrzhankyzy, 2020). By reconstructing the NRCs of Kazakhstan and Uzbekistan and reading them against observable behavior, the article shows how leadership-driven ideas structure foreign-policy options and strategies under the same Russia-China security complex (Buzan, 1991), thereby broadening the empirical scope of role theory beyond traditional great-power cases (Harnisch, 2011; Cantir & Kaarbo, 2012).

Empirically, the analysis is based on a systematically constructed corpus of 100 speeches and interviews (50 by Nazarbayev, 50 by Karimov) from 1991 to 2016, in which the presidents speak in their own voice on foreign-policy matters (Bauyrzhankyzy, 2020). These texts are coded using a refinement of Holsti's and Wish's role-analytic framework to identify the dominant NRCs and motivational orientations of each leader (Holsti, 1970; Wish, 1980). The discursive findings are then compared with foreign-policy behavior and with secondary (Anceschi, 2014; Fumagalli, 2007; Kassenova, 2022). Finally, the article briefly sketches how these roles have been adapted, rather than abandoned, under Presidents Tokayev and Mirziyoyev, using the early post-succession period as a plausibility probe for role continuity and change.

RESEARCH OBJECTIVES AND HYPOTHESES

The study's central proposition is that the foreign policies of Kazakhstan and Uzbekistan are guided by distinct, leadership-defined national role conceptions. Specifically, it aims to: (a) Identify and analyze the NRCs of Kazakhstan and Uzbekistan as articulated by Nursultan Nazarbayev and Islam Karimov; (b) Determine the factors underpinning these roles - ideological narratives (Kazakhstan's "Eurasian Bridge" vs. Uzbekistan's "Independent Actor") and contextual influences; and (c) Examine the relationship between NRCs and observable foreign-policy behavior to assess correspondence between role and external conduct under shared structural conditions.

From these objectives, the following hypotheses are formulated:
H1a: Kazakhstan and Uzbekistan maintain distinct national role conceptions, observable in leadership rhetoric and policy justification.
H1b: The "Independent Actor" NRC is positively correlated with non-aligned and unilateral foreign-policy behavior.
H1c: The "Mediator/Bridge" NRC is positively correlated with cooperative and multilateral foreign-policy behavior.

Confirmation of H1a-H1c would support the broader argument that leadership-defined national role conceptions significantly shape and help explain the divergent trajectories of foreign policy in Central Asia. While operating alongside and mediating economic interests, great-power pressures, and regime-security concerns.

Following this logic, the article is structured as follows: it begins with a review of the existing literature, outlines the theoretical framework, then details the methodology, and presents the main findings. The final sections include the discussion and the conclusion, highlighting implications for further research.

LITERATURE REVIEW ON THE FOREIGN POLICIES OF THE CENTRAL ASIAN STATES

A large body of work explains Central Asian foreign policies through power distribution, security dynamics, and great-power competition (Olcott 1996; Abazov 1998; Gleason 2001; Fumagalli 2007; Gleason 2001; Deyermond 2009; Spechler & Spechler 2010; Cooley 2012; Contessi 2015; Gnedina 2015). "Great Game" analyses emphasize interactions with Russia, China, and the United States and their feedback on local strategies (Gleason 2001; Deyermond 2009; Spechler & Spechler 2010; Cooley 2012; Tolipov 2014). Within this paradigm, perceived security balances and regional

geopolitics are central drivers (Abazov 1998; Gleason 2001; Idan & Shaffer 2011; Ambrosio & Lange 2014). Early studies stressed dependence on Russia, demography, energy transit, and the regional security complex (Olcott 1996; Abazov 1998; Bohr 1998; Roy 2000; Allison & Jonson 2001).

Landlocked position and transit dependence are linked to limited maneuverability and specific alignment choices (Kuzio 2016; Idan & Shaffer 2011; Kassen 2018). Ambrosio & Lange (2014) combine geopolitics with leadership codes; Kassen (2018) extends the geography lens with "transcontinental nation," multi-vectorism, exit strategies, and soft power. Deyermond's (2009) "Matrioshka hegemony" posits layered hegemonies (U.S., Russia, China, Uzbekistan), while Tolipov (2014) argues Central Asian states also play "small games," challenging simple hierarchical logics; Cooley (2012) similarly shows great-power competition opening room for local agency.

Another stream highlights nationalism, elite politics, identity, and nation-building (Abazov 1998; Olcott 2010; Kazemi 2003; Cummings 2005; Deyermond 2009; Anceschi 2010; Laruelle 2010). Hybrid patrimonialism and regime legitimation shape external choices (Cummings 2005; Laruelle 2010; Contessi 2015; Anceschi 2010, 2014). Foundational myths and state ideologies underpin foreign policy narratives (von Soest & Grauvogel, 2016). Uzbekistan's Timurid heritage and sovereignty narrative (von Soest & Grauvogel 2016) and Kazakhstan's nomadic/Eurasian "bridge" identity (Nazarbayev 1994; Hanks 2009; Cummings 2005; Laruelle 2017) map onto external postures. Some caution that economic interests, threats, and regime concerns remain primary (Gleason 2001; Starr 2006), but acknowledge leader-filtered perceptions (Cornell 2000).

Integrative works stress the interplay of sovereignty fears, regime survival, and great-power pressures (Fumagalli 2007; Anceschi 2010; Ayazbekov 2013). On Uzbekistan's shifts, Fumagalli (2007) uses omni-balancing to foreground regime survival; Pikalov (2014) blends balance-of-power/threat with internal politics and geostructure. Differences in elite perceptions and worldviews matter (Ayazbekov 2013).

Despite frequent reference to presidents, leadership-centered studies are fewer (March 2003; Isaacs 2010; Ayazbekov 2013; Busygina 2019; Anceschi 2020). Psychological approaches, Leadership Trait Analysis, and Operational Code show leadership styles and traits can systematically affect policy (George 1969; Hermann 1987; Çuhadar et al. 2017). Research on charisma/populism and legitimation underlines leader agency (March 2003; Isaacs 2010; Busygina 2019). For Uzbekistan, March (2003) argues a nationalist content in Leninist form; for Kazakhstan, Anceschi (2014; 2020) and Cummings (2005) show regime-driven identity deployment.

Kazakhstan-specific literature spans regime/institutions (Luong 2004; Cummings 2005; Laruelle 2010; 2017), identity/nation-building (Laruelle 2010; Omelicheva 2010; Anceschi 2010; 2014), and social themes (Dave 2007; Kudaibergenova 2013). Identity as a policy filter is prominent (Cummings 2005), with Eurasianism and multi-vectorism framed as pragmatic statecraft under Nazarbayev (Idan & Shaffer 2011; Ambrosio & Lange 2014; Ayazbekov 2013; Anceschi 2020).

Uzbekistan-specific literature focuses on drivers (Kazemi 2003; Fumagalli 2007; Anceschi 2010; Fazendeiro 2013; Tolipov 2014), policy swings (Heathershaw 2007,

Cornell 2000), and identity (Anceschi 2010; Fumagalli 2007). Explanations include regime insecurity, Islamist threats, Russian hegemony, and socioeconomic constraints (Melvin 2000; Kazemi 2003; Starr 2016; Fazendeiro 2017). Role-conception work suggests cooperation/conflict aligns with role (in)compatibility (Walker 1987; Fazendeiro 2013). Kobilov (2025) looks at Uzbekistan's post-2016 foreign policy under Mirziyoyev shifted from Karimov's "geopolitical pendulum" toward a regionalism-based strategy.

Coined by Nazarbayev (Hanks 2009; Contessi 2015), multi-vectorism is variously read as cost-benefit rationality (Hanks 2009), bargaining by small states (Gnedina 2015), co-alignment/issue-splitting (Contessi 2015), or balancing variants (Pikalov 2014). Critics find it vague or incoherent (Kuzio 2016); most agree it denotes trade-offs across security-autonomy and issue areas (Aris 2010; Gnedina 2015; Contessi 2015; Pikalov 2014). Kassenova (2022) argues that Russia's invasion of Ukraine has unsettled Kazakhstan's long-standing multi-vector diplomacy, compelling Astana to recalibrate its relationships with Russia, China, the West, and regional partners and search for a new geopolitical equilibrium that preserves sovereignty and stability (Kassenova, 2022).

The literature skews toward systemic geopolitics and domestic regime logics; leadership-centred, decision-process, and role-analytic studies remain limited (Ayazbekov 2013; Fazendeiro 2013, Stanko 2024). The most recent application of Role theory is found in Stanko's (2024) study, which integrates role theory with soft power analysis, demonstrating that a state's foreign policy role conception shapes how it experiences and manages non-coercive influence. Comparative, theory-testing work is sparse. Hence, this study addresses these gaps by using Role Theory (NRCs) and tracing how leader-defined roles shape Kazakhstan's and Uzbekistan's foreign policy behaviors.

THEORETICAL FRAMEWORK

From Systemic International Relations theories (IR) to Agent-Centred Foreign Policy Analysis (FPA)

Foreign policy can be understood as the overall framework that directs how a sovereign state behaves within the international arena. It encompasses the variety of ways a government interacts beyond its borders through diplomacy, coalition-building, strategic doctrines, and participation in international institutions, as well as the choices it makes to act, respond, or deliberately remain inactive in world affairs (Holsti, 1970; Morin & Paquin, 2018).

Theories that study foreign policy vary according to their preferred level of analysis and their assumptions about what drives state behavior. Mainstream IR approaches privilege systemic pressures. Realism links state behavior to survival under anarchy and the distribution of capabilities (Morgenthau, 1948; Waltz, 1979).

Liberalism highlights interdependence, institutions, and domestic preferences (Keohane, 1984; Moravcsik, 1997). Constructivism stresses identities and norms that shape interests (Wendt, 1999), while the English School adds society-of-states logics (Bull, 1977). For small and medium-sized states, these systemic accounts typically

predict strategies such as balancing, bandwagoning, hedging, or omnibalancing (Walt, 1987; David, 1991). Yet, as the Central Asian cases show, similar systemic conditions can yield divergent policies. Kazakhstan and Uzbekistan confront the same Russia-China security complex, but have adopted different alignments and degrees of institutional engagement, complicating purely structural predictions.

While this analysis takes leadership and elite perceptions seriously, it does not adopt a strictly first-image, Waltzian model in which state behavior is explained solely by individual leaders' characteristics (Waltz, 1959). Instead, it follows Carlsnaes' (1992) multi-level conception of foreign policy as purposive action by leaders, filtered through their beliefs and role conceptions, yet embedded in domestic institutions and systemic constraints (Carlsnaes, 1992; Hudson, 2007). In this sense, national role conceptions function as an intervening ideational layer that links structural pressures and regime-security imperatives to concrete foreign policy choices (Holsti, 1970; Harnisch, 2011).

Domestic-level theories foreground how internal structures condition foreign policy. Regime type, selectorate incentives, and societal competition are seen as key drivers (Hey, 1995; Bueno de Mesquita et al., 2003; Goertz & Levy, 2007). Bureaucratic politics and organizational process models emphasise intra-state bargaining and rule-based routines (Allison, 1969), while two-level-game arguments link international bargaining to domestic ratification constraints (Putnam, 1988). Small-state literatures suggest role specialisation, niche diplomacy, and reliance on rules and institutions as typical strategies (Hey, 2003; Thorhallsson, 2012). These approaches capture important aspects of Kazakhstan's and Uzbekistan's behaviour - such as regime-security concerns, elite networks, and bureaucratic weakness - but do not, on their own, explain why similarly authoritarian regimes construct different self-images and external profiles.

Neoclassical realism retains systemic primacy but inserts Innenpolitik "filters" - state power, leadership perceptions, and ideas - through which external pressures are translated into foreign policy (Rose, 1998; Schweller, 2004; Ripsman, Taliaferro, & Lobell, 2016). It illuminates, for example, why regime insecurity and lower state capacity in Uzbekistan discouraged the delegation of authority to regional bodies, whereas Kazakhstan's relatively stronger bureaucracy and resource base facilitated outward engagement and multi-vector diplomacy (Melvin, 2008; Cooley, 2012). Still, when ideas are treated primarily as intervening variables that "distort" or "amplify" systemic signals, identity-laden role conceptions often remain under-specified, and the historically constituted "self" of the state is analytically thin (Krotz, 2015).

Constructivism reverses the explanatory direction, arguing that identities and norms shape interests, "anarchy is what states make of it" (Wendt, 1999). In Central Asia, it has been used to show how Kazakhstan cultivated a civic, multi-ethnic Eurasian identity to legitimise external partnerships and regional leadership, while Uzbekistan mobilized Timurid heritage and the rhetoric of "independence" to justify sovereignty-first, low-integration policies (Cummings, 2005; Dave, 2007; March, 2002). Related concepts such as ontological security highlight the need of political communities to maintain a consistent self-narrative amid uncertainty (Mitzen, 2006; Steele, 2008). These approaches help explain why leaders care about status, recognition, and "proper" conduct, but they offer fewer tools for linking specific belief systems to recurring

decision patterns and for specifying why one identity narrative, e.g. "Eurasian Bridge" versus "Independent Actor", becomes dominant in a given polity at a given time.

Foreign Policy Analysis (FPA) responds to these limitations by placing human decision-makers at the core of explanation. It treats foreign policy as the outcome of actor-specific perceptions and choices situated within institutional and structural contexts (Hudson & Vore, 1995; Hudson, 2007). Foundational work by Snyder, Bruck, and Sapin (1962), Rosenau (1966), and Sprout & Sprout (1956) already insisted that foreign policy is best understood as what officials do and decide under particular constraints, rather than as the automatic "output" of the system. Subsequent middle-range programmes have examined misperception (Jervis, 1976), images of self and other (Hermann, 1987; Cottam, 1977), bounded rationality and heuristics (Simon, 1985), operational code beliefs (George, 1969), leadership trait profiles (Levy, 2003), and poliheuristic decision-making (Mintz, 2004), among others. This literature justifies an actor-centred, multi-level methodology that traces how leaders interpret their environment and how those interpretations become embedded in state behaviour across time (Breuning, 2007; Hudson, 2007).

Although Waltz's (1959) First Image attributes foreign policy primarily to individuals, it offers limited tools for systematically linking leader psychology to patterned state behaviour. Role Theory builds on First Image insights by specifying how belief systems, identity narratives, and perceptions of "appropriate" conduct are translated into recurrent foreign-policy choices. Rather than treating leadership as idiosyncratic "noise", it conceptualises leaders' understandings of their state's role as structured, shared, and, in principle, observable. In this sense, Role Theory is employed here not as a competitor to First-Image analysis, but as its elaboration and operationalisation within FPA. By focusing on national role conceptions as the cognitive-normative link between leaders and systemic structures, it provides a tractable way to model how agency and structure interact in producing the divergent foreign policies of Kazakhstan and Uzbekistan.

Role Theory as a bridge between structure and agency

Role Theory bridges structure and agency by treating national role conceptions (NRCs) as policymakers' own definitions of appropriate functions and commitments for their state (Holsti, 1970; Wish, 1980; Walker, 1987; Tewes, 1998; Harnisch, Frank, & Maull, 2011; Thies, 2012). NRCs link identity to patterned behaviour through internal and external role expectations and the possibility of role conflict (Cantir & Kaarbo, 2012).

In his seminal article, Holsti (1970) argued that decision-makers construct role definitions such as regional leader, faithful ally, or mediator that act as normative frameworks guiding their foreign policy behaviour. These roles emerge through the interaction of two key dimensions:

Domestic factors: *internal elements such as state capability, ideology, leadership style, public opinion, and historical experience.*
External cues: *expectations and pressures from the international environment, including allies, adversaries, and systemic norms.*

Holsti (1970, pp. 245-246) described national role conceptions as the ways in which policymakers define what kinds of actions, responsibilities, and patterns of behaviour are appropriate for their state, including the ongoing roles or functions it should play within the international or regional system.

In addition to guiding how leaders interpret external pressures, national role conceptions also serve as legitimation tools, providing the rhetorical vocabulary through which elites justify policy choices to domestic and international audiences (Cantir & Kaarbo, 2016; Harnisch, 2011).

Role Theory thus serves as an analytical framework rather than a deterministic predictive model. It assumes that states, much like individuals, act according to the expectations attached to their "positions" within a broader social structure (Grossman, 2003). The framework employs a theatrical analogy, viewing international politics as a stage where states perform assigned or self-ascribed roles (Biddle & Thomas, 1966; Grossman, 2003).

Policymakers' perceptions of capabilities, values, and constraints determine which roles are deemed appropriate (Walker, 1987). These conceptions guide commitments and actions (Holsti, 1970; Hermann, 1987), while role performance depends on the congruence between internal and external expectations. External "role cues" arise from the international environment and other actors' perceptions (Holsti, 1970; Harnisch & Maull, 2011; Egelström & Smith, 2006; Harnisch, 2011). When self-perceived roles and external expectations diverge, "role conflict" may occur (Cantir &Kaarbo, 2016). For roles to be identified, the international system must be seen as a social structure composed of actors occupying hierarchically stratified positions based on power and capability (Holsti, 1970; Walker, 1987; Grossman, 2003). This hierarchy influences both perceived status and feasible role choices (Singer & Hudson, 1992). Leaders are aware of their state's relative rank, superpower, great, middle, or small state, and act within those constraints (Brecher, Steinberg, & Stein, 1969; Wilkinson, 1969).

Leaders' perceptions of others also matter. Cottam (1977) found that leaders classify other states as enemy, ally, imperial, or colonial, based on perceived threat levels. Similarly, Hermann (1987) proposed typologies such as barbarian, degenerate, or dependent. These images help explain how role expectations and role conflicts arise, such as during the Cold War rivalry between the Soviet Union and the United States. The role approach thus assumes that states enact roles envisioned by their leaders (Holsti, 1970; Krotz, 2015; Harnisch, 2012). These roles evolve through the interaction of domestic and international determinants, including motivation, regime type, decision-making style, and the dynamics of leadership perception (Holsti, 1970; Walker, 1987). Leaders' cognitive assessments of national capability and external context are especially crucial (Grossman, 2003).

Drawing from Holsti (1970), Le Prestre (1997a), and Grossman (2003), the determinants of NRCs include:

(a) policymakers' definitions of appropriate commitments and behaviour;
(b) geography and territory;
(c) resources and capabilities;

(d) economic and technological development;
(e) traditional policies;
(f) domestic socio-economic pressures;
(g) ideology and national values;
(h) identity and self-perception; and
(i) external expectations and constraints (Le Prestre, 1997a; Grossman, 2003).

Subsequent scholarship expanded and refined Holsti's typology (see Table 1), emphasising that roles are socially embedded but historically resilient. Material constraints (e.g., geography, power, economy) limit feasible roles, yet once established, national roles often persist due to institutional inertia and regime-legitimation needs (Walker, 1987; Harnisch, 2012). Still, leadership turnover or ideological shifts can trigger role adaptation or redefinition (Thies, 2012; Cantir & Kaarbo, 2016).

Table 1. National Role Conceptions Identified by K.J. Holsti (1970)

Type of Role	Definition
Active Independent	Emphasizes self-determination, potential mediation, and active programs to expand diplomatic and commercial relations globally.
Regional Leader	Involves perceived duties or responsibilities toward other states in a region or subsystem.
Mediator-Integrator	Focuses on reconciling conflicts between states or groups of states.
Regional-Subsystem Collaborator	Entails deep commitment to cooperative regional efforts to build wider communities.
Bridge	Acts as a translator or connector between states or cultures.
Independent	Pursues self-determination without a specific international mission.
Internal Development	Directs primary efforts toward domestic economic and social development.
Isolate	Seeks minimal external contact or international involvement.

Source: Holsti, K. J. (1970). National role conceptions in the study of foreign policy. International Studies Quarterly, 14(3), 233-309.

However, Holsti's (1970) formulation remains the foundational conceptual baseline for NRCs. Yet, contemporary Role Theory has evolved to integrate insights from constructivism (role contestation, socialization, norm diffusion) and socio-psychological approaches (leader cognition, belief systems, operational codes). These expansions are reflected in the work of Harnisch (2012), Cantir and Kaarbo (2012), Thies (2012), Hudson (2007), and Hermann (1987, 1999), all of whom conceptualize roles as intersections of cognitive schemas, institutionalized narratives, and public discourse.

At the same time, Role Theory has faced sustained criticism for its conceptual ambiguity and methodological weaknesses. Kuzma (1998) described it as a "noble attempt with a brief life", while Thies (2009) noted that efforts to revitalise the theory have often stalled and that applications remained fragmented (Le Prestre, 1997; Wehner & Thies, 2014). In response, more recent work has clarified key concepts such as role conception, role enactment, and role contestation and has developed systematic coding schemes and mixed-methods designs to study roles across time and cases (Harnisch, Frank, & Maull, 2011; Breuning, 2011; Cantir & Kaarbo, 2016).

Despite earlier scepticism, Role Theory retains strong potential as a multi-level analytical bridge linking individual, state, and systemic dimensions of foreign policy. Its application to diverse contexts, including small and non-democratic states, can illuminate how leaders' cognitive and psychological milieus shape external behaviour (Holsti, 1970; Hermann, 1999).

For Central Asia in particular, where foreign policy is closely tied to identity-based roles such as "Bridge" or "Independent Actor", Role Theory offers a valuable lens for examining how leadership style and regime dynamics interact in shaping state behaviour (Korany, 1986; Wehner & Thies, 2014; Bauyrzhankyzy, 2020). In this study, NRCs are thus treated as mid-range constructs that both reflect and structure Kazakhstan's and Uzbekistan's foreign policies, mediating between structural constraints and leadership agency.

While NRCs provide interpretive structure, they operate alongside material and political determinants. Economic dependence, transit constraints, Russian and Chinese leverage, and domestic crises (such as Andijan) shape the menu of feasible options. NRCs explain how leaders interpret these pressures and choose among them, not why constraints exist. Thus, NRCs are treated as explanatory cognitive frameworks rather than alternative causes.

Thus, NRCs are best understood as an ideational layer that interacts with, rather than overrides, material interests and regime-security imperatives, shaping how leaders interpret and prioritize economic, security, and status concerns (Holsti, 1970; Hudson, 2007).

METHODOLOGY

Research design and case selection

The study employs a comparative, most-similar-cases design that integrates content analysis of leadership discourse with analysis of foreign-policy behavior (George & Bennett, 2005). It is designed as a plausibility probe (George & Bennett, 2005), not a full causal test. The brief discussion of Presidents Tokayev and Mirziyoyev is therefore treated as a plausibility probe of role continuity and adaptation rather than as a full second generation of case studies.

As outlined in the introduction, Kazakhstan and Uzbekistan are treated as "most-similar" pivotal cases: post-Soviet, authoritarian presidential regimes of comparable size and geopolitical location whose sharply divergent foreign-policy paths call for explanation beyond structural factors. This design controls for background variables while isolating NRCs as the explanatory factor shaping variation in foreign-policy behavior.

These cases were not chosen ex post simply because they exhibit divergent foreign policy behaviors. Rather, they were selected ex ante as structurally similar, medium-sized regional pivots that, under neoclassical realist and regime-security assumptions, would be expected to converge on broadly similar patterns of accommodating great powers and defending sovereignty (Snyder et al., 1962). The persistent divergence between Kazakhstan's relatively institution-building, "bridging" strategy and Uzbekistan's more

sovereignty-defensive, "independent actor" posture, therefore, presents a theoretically meaningful puzzle under shared regional constraints.

Importantly, Kazakhstan and Uzbekistan were selected because they are the only two Central Asian states that simultaneously display:

(a) sufficiently dense and coherent national role narratives,
(b) long-term, stable leadership, allowing NRCs to be articulated and institutionalised; and
(c) the material state capacity required for sustained role performance.

Other regional states (Kyrgyzstan, Tajikistan, Turkmenistan) lack comparable "role density" and exhibit fragmented or inconsistent role signals (Anceschi, 2020; Laruelle, 2017; Kassenova, 2022), making them theoretically less suitable for an NRC-centred comparison. Historically entrenched leadership contestation between Kazakhstan and Uzbekistan, symbolised by the Kunayev-Rashidov rivalry in the late Soviet period (Roy, 2000; Collins, 2009), also created two competing political centres of gravity in Central Asia, providing fertile ground for divergent role conception development.

Within Central Asia, smaller and more structurally dependent states such as Kyrgyzstan, Tajikistan, and Turkmenistan tend to align more predictably with Russian and Chinese preferences, displaying less foreign policy autonomy than Kazakhstan and Uzbekistan (March, 2003; Isaacs, 2010). This broader regional pattern functions as a de facto background control, underscoring that the Kazakh and Uzbek trajectories are not simply the default outcome of shared structural pressures but rather reflect leadership-defined role conceptions. At the same time, the study does not "control for" economic structure, demography, or domestic crises in a strict econometric sense. As a qualitative, theory-probing design, it instead holds regime type, region, and broad structural context constant and then traces how different NRCs are associated with distinct foreign policy paths over time (George & Bennett, 2005).

Methodologically, the study follows a two-step strategy - reconstructing NRCs from leadership discourse and then comparing them to foreign-policy behavior under shared structural constraints.

Data collection and sampling

To reconstruct NRCs, a corpus of 100 speeches and interviews (50 by Nursultan Nazarbayev, 50 by Islam Karimov) from 1991-2016 was compiled (see Appendices 2-3). Texts were drawn from LexisNexis, BBC Monitoring, Interfax, Xinhua, and official presidential and foreign ministry archives, as well as such UzA and international press reports. The time frame captures the entirety of both leaders' overlapping tenures and thus allows observation of both initial role definition and subsequent adaptation.

Leadership traits and cognitive research support the assumption that core belief systems and role orientations are relatively stable over an adult leader's career (Hermann, 1987; Kaarbo, 1997). The sampling strategy, therefore, prioritises breadth across time and issue areas rather than concentration on short "crisis windows".

To minimise selection bias, the textual corpus was constructed using explicit inclusion criteria. A document was retained if it:

-*was authored directly by the president* (speech, interview, statement) rather than a journalistic paraphrase;

-*contained explicit foreign-policy content* (references to external partners, organisations, regional/global order, security, or economic diplomacy);

-*exceeded 150-200 words,* to ensure sufficient discursive density; and

-*addressed at least one, and preferably several, of the core issue domains* (security, economy, diplomacy, identity/status).

Within these constraints, all publicly available items meeting the criteria in the specified period were included. The sample is therefore not "cherry-picked" for particularly clear statements of "bridge" or "independent" roles, but represents the complete accessible set of foreign-policy relevant presidential texts.

Coding scheme and reliability

The discursive analysis follows Naomi Bailin Wish's (1980) coding framework, which refines Holsti's (1970) NRC typology. Each text was coded for three families of indicators (see Table 2).

Table 2 summarizes the main coding categories used in the analysis, while Appendix 1 provides the full list of role codes, along with the corpus of 100 presidential speeches and interviews (dates, venues, and sources). This allows readers to see precisely how the textual corpus was constructed and how the NRC profiles were generated (Wish, 1980; Holsti, 1970).

Table 2. Coding Framework for National Role Conceptions

Dimension	Category	Description
Status	Capabilities	*References to human, economic, military, or cultural resources.*
	Position toward Others	*Perceived relative position- equal, superior, or subordinate.*
Motivational Orientation	Wish to Expand	*Desire to extend engagement internationally.*
	Competitive/ Cooperative	*Orientation toward rivalry or partnership.*
	Desired Change	*Degree of change envisioned domestically or internationally.*
Substantive Issue Areas	Economic	*Development, reform, or resource management.*
	Security	*Defense, threats, or national security.*
	Political	*Governance, democracy, rule of law, institutions.*
	Universal Values	*Human rights, justice, equality.*
	Cultural / Historical	*Heritage, national identity, education, religion.*
	Unilateral	*Nationalist or zero-sum interests.*
	Multilateral	*Cooperation, integration, or partnership.*

Source: Wish, 1980; Holsti, 1970

Multiple categories could be coded within a single paragraph or speech. Coding was performed at the paragraph level to balance sensitivity to context with feasibility. Coded frequencies were then aggregated to generate leader-specific NRC profiles (see Appendix 1), indicating, for each president, the relative weight of different status perceptions, motivations, and issue emphases across the 1991-2016 period.

Linking discourse to behavior

Because role conceptions are expressed in discourse but enacted through behavior, the second empirical step traces discursive NRC profiles in foreign-policy behavior. For each state, a set of behavioral indicators was compiled for the 1991-2016 period, focusing on:

- *Regional organization participation and depth/consistency of engagement;*
- *Security alignments and basing agreements with Russia, the United States, and other external powers;*
- *Patterns of multilateral versus bilateral diplomacy* (e.g., hosting summits, mediation initiatives, participation in international organizations);
- *Major foreign-policy decisions illustrating self-reliance, non-alignment, or cooperative integration* (e.g., Kazakhstan's nuclear disarmament, Uzbekistan's withdrawals from and re-entries into regional organizations).

These behaviors were then read against the NRC profiles using a structured, focused comparison: for each hypothesized role (e.g., "Bridge/Mediator-Integrator" vs. "Independent/Active Independent"), the analysis asks whether we observe the expected patterns of cooperation, multilateralism, and mediation, or of self-reliance, non-alignment, and unilateralism. Where possible, process-tracing is employed for key episodes (for example, Kazakhstan's early 1990s nuclear decisions, Uzbekistan's post-Andijan realignment) to examine temporal sequencing between changes in role discourse and shifts in behaviour.

This two-step strategy addresses a central methodological criticism of role-analytic work, the alleged gap between "rhetoric" and "reality", by explicitly pairing discourse analysis with behavioural evidence rather than inferring behaviour from language alone.

In summary, the methodology integrates content analysis of leadership discourse with historical foreign policy analysis. By coding what each leader says and comparing it to what the state does, the study can draw conclusions about the influence of national role conceptions on foreign policy. The next section will present the findings from this empirical analysis.

FINDINGS

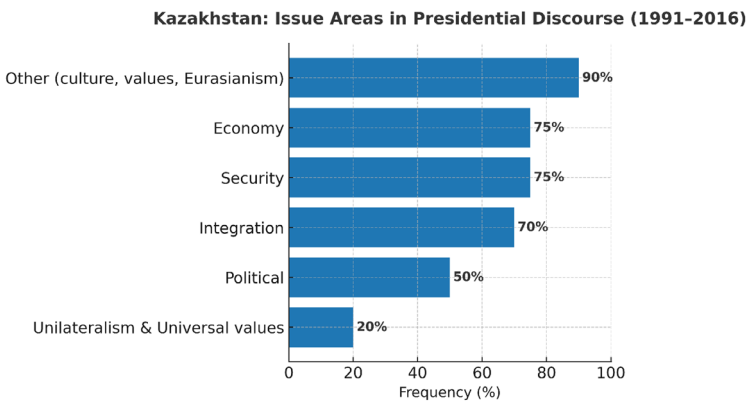
Kazakhstan's "Eurasian Bridge" Role Conception

According to the results, the dominant category in Nazarbayev's rhetoric was "other" (~90%), encompassing discussions on culture, history, traditional values, and Kazakhstan's Eurasian identity. This aligns with the "bridge" metaphor used to portray Kazakhstan as a mediator between East and West. The frequent use of terms such as peace, dialogue, friendship, and harmony emphasized Kazakhstan's pacific and cooperative image, distinct from power-based narratives.

Behaviorally, this "Eurasian Bridge" self-conception is reflected in Kazakhstan's consistent efforts to position itself as a mediator and institutional entrepreneur. However, the 'Eurasian Bridge' role does not imply equidistance between all partners on every issue. In critical security crises such as the Ukraine conflict and Russia's annexation of Crimea, Kazakhstan has refrained from directly challenging Moscow and has

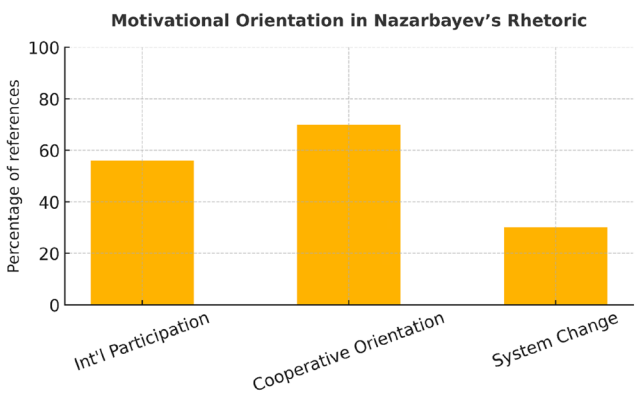
often prioritized its strategic partnership with Russia, while simultaneously stressing principles of sovereignty, territorial integrity, and non-interference (Kassenova, 2022). Rather than contradicting the "bridge" NRC, this pattern underscores its sovereignty-protecting and regime-security dimension. Nazarbayev's discourse frames Kazakhstan as a mediator and promoter of dialogue, but within a hierarchy of interests in which maintaining stable relations with Russia on core security questions is central. In this sense, the Eurasian Bridge NRC both guides policy preferences and provides a post hoc justificatory frame for foreign policy choices made under asymmetric power constraints (Holsti, 1970).

Figure 1. Distribution of Issue Areas in Nazarbayev's Discourse



Source: These are the results of the coding, percentages represent the proportion of total coded paragraphs (Bauyrzhankyzy, 2020). Based on Naomi Wish's (1980) methodology, see Appendix 1

Figure 2. Distribution of motivational orientation in Nazarbayev's Discourse



Source: These are the results of the coding, percentages represent the proportion of total coded paragraphs (Bauyrzhankyzy, 2020). Based on Naomi Wish's (1980) methodology, see Appendix 1

Economic and security issues ranked second (~75%), reflecting Kazakhstan's oil-dependent economy and regional vulnerabilities. Yet, these were consistently framed

within a cooperative and multilateral discourse, signaling support for integration and dialogue rather than confrontation.

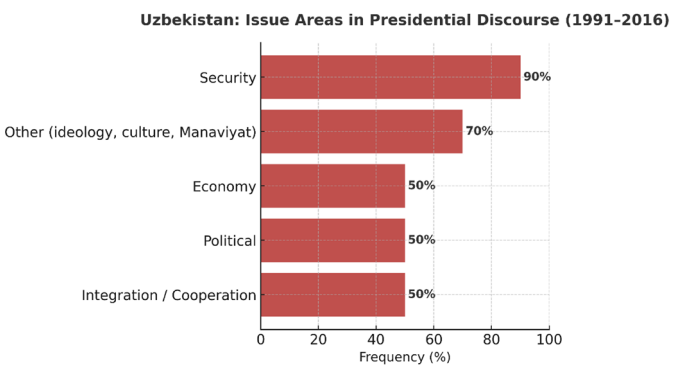
The motivational orientation results (Figure 2) show that ~56% of Nazarbayev's statements expressed willingness to participate in global affairs, while ~70% reflected a cooperative stance. Only ~30% mentioned the desire for systemic change, indicating that Kazakhstan sought incremental, not revolutionary, adjustments in the regional order. Nazarbayev's emphasis on *constructive dialogue, conflict mediation, and integration* demonstrates a preference for non-aggressive engagement. These findings show that Kazakhstan positioned itself as a connector, mediator, and regional collaborator - roles described by Holsti (1970) *as bridge, mediator-integrator, and regional subsystem collaborator.* The narrative was reinforced domestically through cultural rhetoric and externally through multilateral diplomacy. While Mostafa (2013) contends that Kazakh Eurasianism lacked a coherent theoretical foundation and reflected a subordinate "bridge" status, the data suggest that Nazarbayev consciously used this narrative to elevate Kazakhstan's international standing and legitimize his leadership as a promoter of peace and cooperation.

In sum, Kazakhstan's discourse consistently emphasized cultural diplomacy, multilateralism, and integrative rhetoric, confirming Hypothesis 1a, that its foreign policy behavior reflects a *bridge-type* role conception rooted in cooperative engagement and legitimizing national identity construction.

Uzbekistan's "Independent Actor" Role Conception

The results show that "security" dominated Karimov's discourse (~90%), reflects the primacy of regime protection and national sovereignty. Frequent mentions of external and internal threats- terrorism, extremism, and "color revolutions" indicate a perception of a hostile environment. The "other" category (~70%) captures themes such as *national ideology, Uzbekness*, and *cultural revival*, revealing how Karimov fused nationalism with defensive state-building. Economy, political issues, and integrational processes showed around ~50% marks.

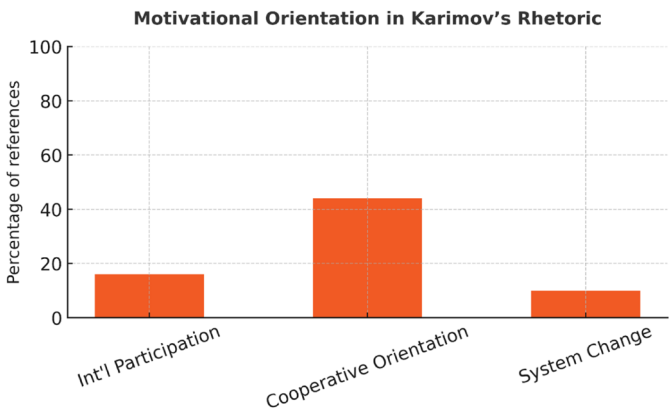
Figure 3. Distribution of Issue Areas in Karimov's Discourse (1991-2016)



Source: These are the results of the coding, percentages represent the proportion of total coded paragraphs (Bauyrzhankyzy, 2020). Based on Naomi Wish's (1980) methodology, see Appendix 1

Motivational orientation analysis shows that only 16% of Karimov's statements expressed willingness to participate internationally, compared to 56% for Nazarbayev. In 6% it showed a reluctant attitude, which can also be traced in the foreign policy of Uzbekistan. The category of "Competitiveness and Cooperation" illustrated that Uzbekistan (around 44% assertions) tended to act cooperatively. However, this wording depended on issues under consideration. The last categories of "Willingness to expand" (78 % no reference) and "Systemic changes" (70% no reference) indicated that Uzbekistan was less interested in the change of international order. Yet, 8% of assertions expressed by Islam Karimov referred to the need for internal reforms. This reflects a preventive and reactive foreign policy style, consistent with Uzbekistan's limited institutional integration and intermittent withdrawal from regional bodies (Fazendeiro, 2013).

Figure 4. Distribution of Issue Areas in Karimov's Discourse



Source: These are the results of the coding, percentages represent the proportion of total coded paragraphs (Bauyrzhankyzy, 2020). Based on Naomi Wish's (1980) methodology, see Appendix 1

Karimov's discourse operationalized the "Independent Actor" role (Holsti, 1970), emphasizing autonomy, sovereignty, and non-alignment. His 1993 and 2012 Foreign Policy Concepts codified principles of neutrality, de-ideologization, non-interference, and the primacy of national interests (Tolipov, 2014). Uzbekistan's avoidance of collective frameworks such as the CSTO or the Eurasian Economic Union further demonstrates this pattern. This corresponds with his tendency for abrupt foreign policy reversals, e.g., the expulsion of U.S. forces from Karshi-Khanabad in 2005 and oscillations in relations with Russia and the West.

In sum, Uzbekistan's rhetoric and behavior reveal a sovereignty-protective orientation. Its security-driven, independence-focused role conception confirms Hypothesis 1b, showing how Karimov's leadership reinforced a self-image of defensive self-reliance grounded in historical and ideological constructs.

Table 2. Coding Framework for National Role Conceptions

Dimension	Kazakhstan (Nazarbayev)	Uzbekistan (Karimov)
Dominant Issue	Culture / Integration	Security / Sovereignty

Motivational Orientation	Cooperative (70%), System-change modest (30%)	Competitive-cooperative (44%), 8% of assertions referred to the need for internal reforms.
Willingness to Engage	High (56%)	Low (16%)
Role Type (Holsti, 1970)	Bridge / Mediator-Integrator	Independent Actor
Policy Expression	Kazakhstan's NRC ("Eurasian Bridge") emphasized cooperation, integration, and identity legitimation through multilateral diplomacy	Uzbekistan's NRC ("Independent Actor") centered on security, sovereignty, and regime protection through defensive isolation

Source: These are the results of the coding, percentages represent the proportion of total coded paragraphs (Bauyrzhankyzy, 2020). Based on Naomi Wish's (1980) methodology, see Appendix 1

The comparison confirms Hypothesis 1c: despite similar structural and regional contexts, differences in *national role conceptions*, filtered through leadership perceptions, produced divergent foreign policy paths.

DISCUSSION

Congruence between Kazakhstan's "Eurasian Bridge" role and its organizational behavior

The empirical analysis of Nazarbayev's speeches (1991-2016) shows a high degree of congruence between Kazakhstan's articulated "Eurasian Bridge" NRC and its foreign-policy behavior. *Ideational themes* dominated his discourse, while *"economy"* and *"security"* appeared less frequently as standalone frames. Concepts such as *"Eurasian state"*, *"civilizational dialogue"*, and *"peaceful coexistence"* were most emphasized, signaling a self-image as a culturally grounded, peace-oriented connector rather than a hard-balancing power. Kazakhstan's unilateral foreign-policy behavior closely reflected the notions of (a) *peaceful development*, (b) *confidence-building, and* (c) *civilizational dialogue* (Starr 2016, pp. 13-19).

The image of a *"peace developer"* was reinforced by Kazakhstan's decision to dismantle its inherited nuclear arsenal and close the Semipalatinsk Test Site, where Soviet tests had been conducted between 1949-1989 (Nazarbayev 2001, pp. 11-13; Starr 2016, p. 14). By signing the 1993 Lisbon Protocol and renouncing nuclear weapons, Kazakhstan secured early international recognition and bolstered Nazarbayev's reputation as a responsible global actor. As he famously stated, *"I'm the first president in the world that, by force of his own decree, bans the testings on the Semipalatinsk nuclear testing grounds"* (Nazarbayev 2001). This decision is fully consistent with a "bridge/mediator" NRC that privileges status through moral leadership rather than military power.

Kazakhstan's *"confidence-builder"* role was similarly expressed through its regional security diplomacy, most notably Nazarbayev's 1992 proposal at the 47th UN General Assembly to establish the Conference on Interaction and Confidence Building Measures in Asia (CICA), an OSCE-like platform promoting sovereignty, non-interference, and cooperation across a broad Asian membership (Starr 2016, p. 17). Here again, the behavioral choice, sponsoring a confidence-building architecture, matches the discursive emphasis on dialogue and non-coercive security.

The *"civilizational dialogue-maker"* role drew upon Kazakhstan's multi-ethnic and multi-confessional identity to project itself as a bridge among cultures. This was

institutionalized through the triennial Congress of Leaders of World and Traditional Religions (launched in 2003) and through Turkic-based initiatives such as the Turkic Council, TURKSOY, and TURKPA, which emphasized shared cultural and historical heritage. These initiatives allowed Astana to perform the "bridge" role both symbolically and institutionally, linking domestic identity narratives to external positioning.

In sum, Kazakhstan strategically leveraged its domestic diversity and historical experience to promote *unilateral* and *"minilateral"* initiatives that reinforced its mediating, peace-oriented image. The match between Nazarbayev's role discourse and these policy choices illustrates how the "Eurasian Bridge" NRC structured both problem definition and instrument selection.

Kazakhstan's "Integrator/Mediator" role in regional organizations: CIS, CSTO, SCO, EEU/EEC

Kazakhstan's participation in post-Soviet regional organizations further demonstrates *role congruence*. Created to ease the Soviet breakup, the Commonwealth of Independent States (CIS) quickly exhibited low vitality and poor compliance, with average policy implementation of roughly 55-56% (Kubicek 1998, p. 15; Molchanov 2015). Early divergences - Ukraine's resistance to deeper integration, Georgia's exit after 2008, and downgraded delegations - underscored "failed regionalism", yet the forum persisted in energy, security, science, and information cooperation (Kubicek 2009; Molchanov 2015). Ineffectiveness reflected weak loyalty, Russia-centric dynamics, institutional incoherence, and sovereignty anxieties prompting members to hedge via other groupings (Molchanov 2015, p. 3; Kubicek 2009, p. 242; Collins 2009, p. 251). Despite these flaws, Kazakhstan consistently supported Commonwealth of Independent States (CIS) integration: initially driven by demographic and security-economic needs, and later sustained as part of a stable *"Integrator"* role even as Kazakhization and economic growth advanced (Starr 2016). The persistence of engagement in a low-performing organization demonstrates that the CIS served not only instrumental interests but also role performance as a regional collaborator.

Bilateral alliance ties with Russia and Collective Security Treaty Organization (CSTO) membership anchored Kazakhstan's security policy. Astana contributed substantially to CSTO forces and supported the Collective Rapid Reaction Force (KSOR), framing its priorities as counter-terrorism and peace maintenance in line with national interests (de Haas 2017). Yet the CSTO struggled to develop a shared identity, with Russia perceived simultaneously as a security provider and potential threat. Astana adopted a strict non-interference stance during the Kyrgyz and Andijan crises and avoided automatic alignment on Russia's more contentious moves (Moldashev & Hassan 2017, p. 16). As Nazarbayev explained:

> *"...The CSTO was not set up to meddle in the domestic affairs of sovereign states. The events took place within these countries. We did not see obvious aggression from outside. We did not see even terrorist attacks. And the main thing is these states did not invite us to take any part. When we were invited, we gave political help. For instance, in the case of Kyrgyzstan I had to address the people, talk to politicians, and so on. Therefore we, the CSTO, are not meant to do this. I think therefore that*

> *Uzbekistan and Kyrgyzstan should get down to reforming their economies and political courses in a very serious and profound way. They should draw conclusions from this. The sovereign state of Uzbekistan has the right either to let in international observers or not to (BBC Monitoring, 2005).*

This interpretation, coupled with Kazakhstan's abstentions on Crimea-related UN votes and on a Russia-sponsored Syria resolution (Tskhay & Buranelli 2020), signaled a sovereignty-first reading of collective security, consistent with a *"bridge/integrator"* role that avoids being locked into coercive behavior by allies.

Within the SCO, a club privileging sovereignty and non-interference - the "Shanghai spirit" - Astana used the organization to protect regime stability amid anxieties about "colour revolutions" and Western normative pressure (Ambrosio 2008, p. 1322; Allison 2018). Kazakhstan championed energy cooperation (SCO Energy Club; Asian Energy Strategy), became a key transit state via the Atasu-Alashankou pipeline, and backed collective transport and energy corridors, while resisting a Chinese-led common market that might erode economic sovereignty (Starr 2016, p. 40; Laruelle & Peyrouse 2013). Nazarbayev's support for the SCO Energy Club - arguing that *"the mechanism of Ministries of Energy meetings...must be organized within the framework of the SCO Energy Club, which from our point of view, would become one of the main elements of Asian Energy Strategy"* - illustrates how Kazakhstan sought to translate its "bridge" narrative into concrete regional frameworks.

The Eurasian Economic Union (EEU) emerged as a merger and deepening of earlier regional bodies, driven by the Eurasian "trio" of Russia, Belarus, and Kazakhstan (Moldashev & Hassan 2017). Eurasian initiatives evolved into the EEU in 2015, institutionalizing selective supranationalism far below EU density and constrained by a weak regional identity (Moldashev & Hassan 2017). Although economists questioned Kazakhstan's net gains relative to Russia's, Astana embraced membership as economic-pragmatic Eurasianism under sovereign equality, with explicit exit rights if independence were threatened (Chatterjee-Doody 2015). As Nazarbayev underlined:

> *"...talks about the disadvantages of Kazakhstan's membership in the EEU - is a reflection of dilettantism. The EEU is a purely economic union but not a political one: all member states have equal voting right; everything is resolved via consensus. Besides, Kazakhstan always reserves the right to pull out of this union if there will be a threat to its independence. And on the whole, the union has many advantages, and 'there are no arguments for pessimism'. Moreover, strengthening trade and economic relations with neighboring countries will make it possible to strengthen our security because it is beneficial for trade partners that the situation remains stable in their territories"(BBC Monitoring Central Asia Unit, 2014).*

Across CIS, CSTO, SCO, and EEU, Astana systematically favored cooperation even when benefits were modest or ambiguous, using participation to safeguard security, economic access, and status while managing sovereignty risks, chiefly Russia's

weight via parallel partnerships with China and Western institutions. This pattern expresses a consistent *"Bridge/Integrator"* role performed through accommodative, prestige-seeking diplomacy and confirms the behavioral relevance of Kazakhstan's NRC.

Temporal sequencing evidence shows that role conceptions did not merely emerge as post-hoc justifications. In Kazakhstan, Eurasian/bridge rhetoric appears consistently in early 1990s speeches, years before the creation of EurAsEC, CSTO, or the EAEU-indicating that *identity narratives pre-dated* institutional commitments. In this sense, legitimation is not an alternative to *role-driven behavior* but an intrinsic part of role performance. Leaders deployed role narratives to justify and sustain material choices, especially under asymmetric constraints.

Kazakhstan's "Bridging" partnership with NATO, the EU, and the OSCE

Kazakhstan's ties with Western institutions further validate the "Eurasian Bridge" role conception. From the mid-1990s, Kazakhstan joined the Euro-Atlantic Partnership Council (EAPC) and the Partnership for Peace (PfP), contributing to NATO's practical cooperation agenda and, later, to Afghanistan-related priorities after the 2004 Istanbul Summit's "special focus" on Central Asia (Weitz 2006, p. 163). The EAPC is a multilateral forum for dialogue and cooperation between NATO members and partner countries across Europe and Central Asia, providing a political framework for partnership activities and consultations (NATO, 2025).

The PfP, launched in 1994, is a practical cooperation program that allows non-NATO states, including those in Central Asia, to work directly with NATO on military training, interoperability, peacekeeping, and defense reform according to self-defined partnership objectives (NATO, 2024). Engagement in these frameworks enhanced Kazakhstan's interoperability and access to Western expertise while avoiding formal alliance commitments or sharp normative confrontation, fitting Astana's bridge posture.

EU-Kazakhstan ties developed early and, especially after 9/11, shifted toward security and energy within the framework of the 2007 EU-Central Asia Strategy (Melvin 2008, 2009). Energy interdependence, trade, and diversified political contacts made the EU a key Western vector within Kazakhstan's multi-vector foreign policy, even as persistent gaps over democracy and human rights limited deeper political integration.

Kazakhstan's Organization for Security and Co-operation in Europe (OSCE) Chairmanship in 2010, the first by a post-Soviet Central Asian state, aimed to showcase *conflict-mediation* credentials and to foster a Euro-Atlantic/Eurasian dialogue, culminating in the Astana Summit. Assessments note enhanced visibility and signals of increased autonomy, but limited direct impact on democratization or regional reconciliation (Contessi 2015). Kazakhstan's subsequent non-permanent membership on the UN Security Council (2017-2018) furthered the *"bridging"* script by linking regional organizations and UN agendas, amplifying its status while avoiding overt normative confrontations with major powers.

Overall, Kazakhstan's Western partnerships (OSCE, NATO, EU, UN) reproduced the same calculus as its regional engagements: use of multilateral forums to project a

responsible, mediating Eurasian middle-power identity, to seek recognition and security, and to insulate regime stability.

UN General Assembly roll-call data

Another behavioral indicator is the UN General Assembly roll-call data. It strongly supports the view that its foreign policy behavior is both regionally embedded and distinctively multi-vector. Costa-Buranelli (2014) shows that from 1992-2012 Kazakhstan shared the Central Asian pattern of high intra-regional voting convergence and a pluralist normative profile, prioritizing sovereignty, non-interference, international law, and multilateral conflict-management, especially on issues such as development, decolonization, and the Central Asian Nuclear-Weapon-Free Zone (ibid).

At the same time, Yuneman's (2023) 2007-22 analysis of more than 1,300 UNGA resolutions demonstrates that Kazakhstan's closest voting partner is China (roughly 76-89% cohesion) rather than its formal ally Russia (about 64-82%, with a clear downward trend), while cohesion with the United States remains persistently low (often below 25%). When Moscow and Beijing opposed each other, Astana sided with China in the majority of cases. When Russia clashed with Western states over conflicts in Abkhazia, South Ossetia, Syria, Crimea, and Ukraine, Kazakhstan typically abstained, refusing to endorse core Russian positions and even supporting some human-rights and non-proliferation resolutions that Moscow opposed (Yuneman, 2023). Kazakhstan also repeatedly championed nuclear disarmament and non-proliferation resolutions, underlining its self-image as a *"nuclear disarmament champion."* (Yuneman, 2023). Compared to structurally more dependent neighbors like Kyrgyzstan, Tajikistan, and Turkmenistan, whose S-scores reveal very high, stable affinity with Russia and China, and a sharp, long-term divergence from the United States. Kazakhstan thus might use UNGA voting as a hedging tool. Astana is combining bandwagoning with Moscow in hard-security institutions with a Beijing-leaning voting vector and an autonomous normative profile on disarmament and armed-conflict questions (Yuneman, 2023).

Congruence between Uzbekistan's "Independent Actor" role and its organizational behavior

The empirical evidence for Uzbekistan reveals a similarly strong, but contrasting, role-behavior congruence. Uzbekistan's "Independent Actor" role conception was rooted in security concerns and sovereignty preservation, encapsulated in a core principle of being *"better alone"* than accepting cooperation perceived as sovereignty-compromising. Shaped by Karimov's leadership style, Uzbekistan's foreign policy emphasized gradualism, flexibility, and regime preservation. His cautious, *"step-by-step"* approach to reforms and his reactive, opportunistic adjustments to external shifts exemplified by repetitive entry-exit behavior in regional organizations reflected a consistent prioritization of domestic stability (Hermann 1999, p. 9; Gleason 2001, p. 178). Karimov's tactics combined *"buying off"* and *"framing threats"* strategies, using state resources to manage internal and external pressures while constructing specific actors as potential dangers (Grove 2007, p. 5).

Uzbekistan's unilateral behavior was consistently framed around *"sovereignty," "independent stand,"* and *"self-reliance"* (Kazemi 2003; Fazendeiro Teles 2013; 2017). Tashkent's pursuit of economic self-sufficiency and political autonomy served

as a defensive shield against perceived ideological and external threats ranging from religious extremism to renewed Russian influence and regional instability (Karimov 1991). Domestically, Karimov's paternalistic governance promoted the National Independence Ideology, emphasizing national pride, moral upbringing, and regime continuity (Cummings 2005). Internationally, this paternalism translated into defensive self-reliance (Fazendeiro Teles 2013), manifested in Uzbekistan's selective, low-commitment participation in international organizations and its insistence on sovereign equality.

Karimov's public statements asserting that *"Uzbek people will never depend on anyone" and "nobody can turn us away from the chosen way"* (BBC Monitoring Central Asia, 2005) reflected this enduring doctrine of independence. As he explained, Uzbekistan's distinct mentality required its own path of democratic and economic renewal, consistent with national traditions and resistant to external "political games" (BBC Monitoring Central Asia, 2005).

Consequently, the congruence between role conception and performance was reinforced by Karimov's leadership profile, producing a foreign policy defined by non-cooperation, strict non-interference, and an uncompromising defense of state sovereignty. In the interview given to Russian media, Islam Karimov connected the features of Uzbek mentality to the state's developmental way:

> *"...In the days of the empire, we were regarded as second-class citizens. They did not realize that our people simply were brought up in a different way and would never stand for many of the things that were happening in other parts of the country. It is a different mentality, do you understand? Nevertheless, this does not mean that we can deviate from the path that was chosen in 1990 - the path of democratic renewal and the construction of civil society. It is just that everyone follows this path in his own way. We believe in the fundamental principles of democracy and we adhere to them unconditionally, but our actions must be consistent with the mentality of our people and with the lifestyle they have practiced for a thousand years" (BBC Monitoring Central Asia, 2005).*

> *"We will continue to pursue an independent policy that meets our national interests without being dependent on anybody or dancing to the tune of various political games. First of all, I trust and rely on you, who represent our people, to continue to pursue this policy and I promise you that I will pursue this policy to the end" (BBC Monitoring Central Asia, 2005).*

Uzbekistan's "non-cooperative" behavior in regional organizations: CIS, CSTO, SCO, and GUUAM

Like Kazakhstan, Uzbekistan operated in institutions characterized by weak enforcement and sovereignty sensitivities, but its responses diverged sharply. Consensus rules and low ratification rates in the CIS allowed members to cherry-pick cooperation, especially when national or personal interests clashed, and Russia was seen as a sovereignty risk (Kubicek 2009, pp. 242, 249). Uzbekistan doubted the CIS's viability and limited its participation, preferring bilateral arrangements to manage domestic threats (religious

extremism, border disputes) and to hedge against Russian influence. Organizational under-resourcing, sovereignty anxieties, and weak institutionalization compounded CIS failures. Regime-survival incentives pushed Tashkent toward a protectionist, reluctant stance within CIS mechanisms.

Though officially non-aligned, Uzbekistan joined collective security structures (CSTO) in the 1990s as "protective integration" against transnational threats, while seeking to cap Moscow's dominance (Allison 2018). Sovereignty primacy, however, drove repeated withdrawals and re-entries: concerns about external use of Uzbek troops, resistance to collective deployments, and insistence on non-stationing of foreign forces led Tashkent to leave the CSTO in 1999, rejoin amid post-Andijan and "colour revolution" pressures, curtail participation (for example, limiting involvement in KSOR), and exit again in 2012 (de Haas 2017). The Andijan uprising of May 2005 triggered a rupture with the US and the EU and reinforced a survival-first logic in security alignments. Karimov's reaction to Andijan is illustrative:

> *"Some large and powerful countries, which have large powers, want a nation or a country in the other part of the world to obey them and carry out their policy. What will happen if this is not done? They will put various accusations - which are becoming very common nowadays - against you. So, they say: 'You are against democracy. You do not protect human rights. You oppose certain journalists. You are like this, you are like that, so on and so forth.' And if necessary, it is no bother for them to gather their supporters in a big place as if they are going to deliver a verdict against you. I can provide many examples from our history. For example, the Andijon events [of 13 May 2005], how many fabrications, how many lies, and insults we have been exposed to. Time is the greatest and the justest judge. Now, after two years, everything is getting back normal. They realize themselves that all this was fabrications and the aim was to hold a color revolution here, to overthrow the government, to make people worried, to set them against one another, and if need be, insult our religion, so on and so forth"(BBC Monitoring Central Asia, 2005).*

Within the SCO, the non-interference "Shanghai spirit" aligned closely with Tashkent's priorities of stability, sovereignty, and gradualism; Russia and China's own separatism concerns underpinned their acceptance of this stance (Ambrosio 2008; Kazemi 2003). Uzbekistan supported the SCO's Regional Anti-Terrorist Structure (RATS) but remained generally passive, periodically downscaling engagement (for example, skipping meetings), even as it signed the SCO Charter and stayed in the organization to balance Russia via China and vice versa. Regional rivalries (with Kazakhstan; tensions with Kyrgyzstan and Tajikistan) and unresolved issues such as water management reinforced Tashkent's wariness of deeper economic or political integration; it backed SCO activity only insofar as it preserved the regional status quo (Laruelle & Peyrouse 2013; Cummings 2005).

In GU(U)AM (Georgia, Ukraine, (Uzbekistan), Azerbaijan, Moldova), widely seen as a project to limit Russian dominance (Moldashev & Hassan 2017), Uzbekistan briefly experimented with more overt balancing. GU(U)AM's members already had

problematic relations with Moscow due to conflicts like Nagorno-Karabakh and the crises in South Ossetia and Abkhazia. Convinced that GU(U)AM could serve as a hedge against Russia, Uzbekistan joined in 1999 after quitting the CSTO and pivoting westward post-9/11. However, Tashkent announced its withdrawal in 2002 and formally left in 2005 following Andijan. The grouping's regional impact remained limited, but it did help open EU partnership channels for some post-Soviet states. For Uzbekistan, the episode illustrates a short-lived attempt at collective balancing that collapsed once GU(U)AM appeared to entail political commitments incompatible with Karimov's regime-security priorities.

Across CIS, CSTO, SCO, and GU(U)AM, Uzbekistan consistently preferred minimal, selective, or reversible commitments, avoiding alliance-like bindings reminiscent of the Soviet past. Preventive and defensive behavior often traded potential material benefits and regional influence for sovereignty preservation and regime security. Russia functioned as the primary *"alter"* against which Tashkent's "Independent Actor" self-image was constructed (Holsti 1970; Walker 1987).

Uzbekistan's partnership with NATO, the EU, and the OSCE

Uzbekistan's relations with Western institutions reproduced the same pattern of guarded, contingent engagement. Cooperation began in the 1990s through the Partnership for Peace (PfP), the North Atlantic Cooperation Council (later the EAPC), defense-education programs such as Defence Education Enhancement Programme (DEEP)*, and transit support for Afghanistan-related operations.

However, human-rights concerns, especially after Andijan, prompted aid cuts and restrictions on military cooperation (de Haas 2017; Weitz 2012). While Germany retained limited access, overall, NATO-Uzbek ties were repeatedly recalibrated, mirroring Tashkent's preference for issue-based, reversible commitments rather than long-term alignment (de Haas 2017; Weitz 2012).

Relations with the EU were framed by a Partnership and Cooperation Agreement (PCA)**, but the 2005 Andijan events led the EU to impose sanctions, including an arms embargo, visa bans on officials, and the suspension of certain aid and high-level contacts (Schmitz, 2009). These measures effectively froze parts of the PCA's cooperation mechanisms and highlighted the clash between EU conditionality and Uzbekistan's sovereignty-first stance. Subsequent EU engagement was widely seen as contingent on credible reforms that Tashkent was reluctant to undertake (Kassenova 2008; Hasanova et al., 2013; Melvin 2008, p. 147). Cooperation on human rights, military reform, and criminal justice saw little Uzbek uptake and hardened further after critical assessments, encouraging Tashkent to limit Western access (Kassenova 2008; Hasanova et al., 2013; Melvin 2008).

Uzbekistan's sovereignty-first discourse is visible in early post-1991 speeches, preceding later withdrawals from Western frameworks after Andijan. This sequencing strengthens

*NATO Defence Education Enhancement Programme (DEEP). DEEP involves curriculum development, faculty training, and academic exchanges, improving teaching methods, and aligning military education with democratic standards and NATO best practices.

**PCA - EU–Uzbekistan Partnership and Cooperation Agreement.

the claim that NRCs acted as prior interpretive filters rather than retroactive legitimizing tools.

Overall, Western ties served primarily as hedging tools and as temporary sources of economic and security benefits but were repeatedly constrained, and, at times, ruptured, by regime-stability fears and democratization pressure. This confirms that the "Independent Actor" NRC was not merely rhetorical. It consistently shaped how Uzbekistan evaluated and managed engagement with Euro-Atlantic structures.

UN General Assembly roll-call data

For Uzbekistan, the UNGA literature is thinner but broadly consistent with portraying it as a sovereignty-defensive state whose behavior is closer to a conventional pro-Russian small-state pattern than Kazakhstan's China-leaning hedge. Costa-Buranelli's (2014) study finds that Uzbekistan participates in the same high Central Asian voting convergence on pluralist, Westphalian norms, territorial integrity, non-intervention, international law, equitable economic order, and nuclear-weapon-free-zone initiatives. This indicates that Tashkent's stance is not normatively revisionist but aimed at defending autonomy within the existing order (Costa-Buranelli, 2014).

This pattern reinforces Costa-Buranelli's (2014) conclusion that Uzbekistan speaks the same pluralist language as its Central Asian peers in the UNGA, even as it does not frame this convergence within an explicit "Central Asian" regional identity.

Yuneman's (2030) UNGA study demonstrates how S-score analysis of roll-call votes can serve as a "distant" behavioral test of multi-vector strategies, tracking a state's voting cohesion with Russia, China, the United States, and the EU. Although focused on Kazakhstan, the study shows that disaggregated UNGA data can complement regional-organizational evidence by revealing whether a Central Asian state behaves as a dependent small state (*high routine alignment with Russia/China*) or as a more autonomous hedger (Yuneman, 2023).

Role conflict, "alters", and divergent adaptation

Ultimately, both Kazakhstan's and Uzbekistan's self-defined roles were periodically challenged by the presence of their respective "alters" (Holsti 1970; Walker 1987). For Kazakhstan, the primary source of tension concerned the preservation of sovereignty, which risked erosion under Russia's dominant influence within regional organizations. This anxiety, however, was mitigated through Kazakhstan's active engagement with Western-oriented institutions and partnerships. By maintaining a balance between East and West, Astana sought to safeguard its autonomy while enhancing its international legitimacy. Still, relations with the Western alter carried inherent risks: external pressure for democratization could threaten the stability of Kazakhstan's authoritarian regime. Nevertheless, under Nazarbayev's leadership, Kazakhstan effectively sustained its *"bridging"* role through calibrated diplomacy within organizations such as the OSCE and NATO, avoiding normative confrontation and minimizing Western criticism of its domestic governance.

In contrast, Uzbekistan's *self-image* might be constructed in opposition to Russia as the principal *"alter"*. The components of *"sovereignty" and "security"* were the most threatened in Uzbekistan's relations with external actors. Consequently, regional

organizations, perceived as instruments of Russian dominance, were viewed with skepticism and often avoided. Tashkent instead favored a bilateral approach and selective cooperation with China, Türkiye, and/ or Western institutions as a means of balancing Moscow's influence. However, Uzbekistan's engagement with the Western *"alter"* eventually reached a deadlock. While Western partnerships initially provided an external counterweight to Russian pressure and helped uphold Uzbekistan's sovereign posture, the relationship deteriorated following the 2005 Andijan events. Western insistence on democratic reforms and human rights accountability was interpreted by the Uzbek leadership as an intrusion threatening regime stability. This perception of external pressure as a security risk reinforced Tashkent's defensive orientation, prompting renewed estrangement from the West and consolidation of its *Independent Actor* stance centered on sovereignty and regime survival.

Continuity and Adaptation Under New Leadership

The post-2016 period suggests that the national role conceptions identified under Nazarbayev and Karimov have been adapted rather than abandoned by their successors. This is consistent with Role Theory's expectation that roles are historically *resilient but open to reinterpretation and incremental change* as leadership and context evolve (Holsti, 1970; Thies, 2012; Cantir & Kaarbo, 2016). In this sense, Nazarbayev's "Eurasian Bridge/Integrator" and Karimov's "Independent Actor" roles function as inherited scripts that Tokayev and Mirziyoyev modify at the margins rather than replace.

In Kazakhstan, President Kassym-Jomart Tokayev's public discourse outlines a vision of governance and foreign policy grounded in pragmatism, national resilience, and *"responsible internationalism"*, but it does so within the established multi-vector, bridge-oriented framework. At the expanded Government meeting (January 2025), Tokayev emphasized that the *"main criterion for evaluating government performance is the well-being of citizens and economic progress, not bureaucratic reporting"*, calling for greater accountability, responsiveness, and digital transformation across public administration to deliver tangible societal results (Prezident Respubliki Kazakhstan, 2025a). At the fourth session of the National Kuryltai (March 2025), he linked structural reforms in tax transparency, regional equity, cultural renewal, and youth inclusion to the broader goal of building a *"just and strong state"* capable of fair development, effective governance, and national unity (Prezident Respubliki Kazakhstan, 2025b). These themes shift the emphasis of the role script toward domestic justice and resilience, but they do not alter the underlying assumption that Kazakhstan must remain an active, credible international interlocutor.

Tokayev's foreign-policy rhetoric similarly reiterates the core elements of the "Eurasian Bridge" NRC. In his UN General Assembly address (September 2025), he reaffirmed Kazakhstan's commitment to multilateralism and balanced diplomacy, called for comprehensive UN reform to strengthen the voice of mid-sized states, highlighted humanitarian concerns in global crises, and underscored Kazakhstan's nuclear-disarmament legacy as a foundation for global peace (Prezident Respubliki Kazakhstan, 2025c). At the Astana International Forum (May 2025) and in SCO summits, he advocated deeper connectivity, sustainable growth, and cooperative security responses, stressing that global challenges from economic fragmentation to

environmental risks require joint, inclusive solutions rather than unilateralism (Prezident Respubliki Kazakhstan, 2025d; 2022). These positions reproduce Nazarbayev's earlier emphasis on mediation, dialogue, and multi-vectorism, while placing more weight on economic modernization and crisis resilience.

The Ukraine-related crises have tested but not overturned this script. They have compelled Kazakhstan to recalibrate rather than abandon its multi-vector policy by maintaining ties with Russia, China, and the West while expanding regional cooperation to safeguard sovereignty and diversify options amid intensifying great-power rivalry (Wang, 2024). As Pieper (2021) argues, Kazakhstan's strategy continues to reflect a *balancing logic.* Leveraging Chinese infrastructure investments to mitigate landlocked isolation and over-reliance on Russian transit, while resisting excessive dependence on any single external patron. In role-theoretical terms, Tokayev's leadership thus appears to deepen the "bridge/integrator" NRC by fusing it more explicitly with a narrative of a "just and strong" state at home and a responsible, crisis-managing middle power abroad. The core role, Eurasian mediator and connector, remains intact. Its content is updated to reflect new structural pressures and domestic reform agendas.

In Uzbekistan, President Shavkat Mirziyoyev's discourse similarly points to adaptation of the "Independent Actor" role rather than its replacement. Since taking office in 2016, he has advanced a *reformist, people-centred, and more cooperative foreign-policy* vision that redefines Uzbekistan's place in regional and global arenas while maintaining a strong emphasis on sovereignty and regime control over the reform process. His early statements, notably the Address at the 72nd Session of the UN General Assembly, presented commitments to human rights, economic liberalization, and the rule of law, marking a clear rhetorical break from the previous course (Mirziyoyev, 2017a). Later that year, at the Samarkand International Conference *"Central Asia: One Past and a Common Future",* Mirziyoyev (2017b) framed Central Asia as a community of shared destiny, advocating trust, border settlement, and trade connectivity and thereby laying the foundations for a *"neighbourhood-first"* regional diplomacy. In 2018, he called for the professionalization of Uzbekistan's diplomatic service to align external engagement with domestic reform and investment attraction (Mirziyoyev, 2018), signaling that foreign policy should serve internal transformation rather than merely shield the regime from external influence.

From 2021 onward, his consultative speeches show an evolution from reconciliation to incipient integration. At the Third Consultative Meeting of Central Asian Heads of State, Mirziyoyev (2021) articulated a pragmatic agenda focused on regional value chains and digital connectivity. This agenda deepened at the Fourth Meeting (2022), which stressed institutionalized cooperation in trade, water, and energy security (Mirziyoyev, 2022), and it expanded at the Fifth Meeting (2023) toward proposals for a regional free-trade zone, a unified digital space, and a climate partnership (Mirziyoyev, 2023b). Complementing this regional drive, the Second Tashkent International Investment Forum showcased domestic reforms in taxation, privatization, and judicial transparency as part of an effort to create an investment-friendly economy (Mirziyoyev, 2023a). Collectively, these milestones outline a strategic narrative of internal transformation, regional reconciliation, economic modernization, institutional integration, and global

engagement - a model of foreign policy grounded in openness, sovereignty, and mutual prosperity.

Yet, from a role-theoretical perspective, this does not amount to a wholesale abandonment of the "Independent Actor" NRC. Uzbekistan continues to abstain from joining Russian-led military and economic alliances, carefully guards its decision-making autonomy, and frames cooperation as compatible only with national interests and sovereignty. The shift under Mirziyoyev is better understood as a move from a defensive "Independent" role toward a more outward-looking, economically and regionally engaged variant. It is closer to Holsti's "active independent" role conception in which Uzbekistan seeks partners and institutions on its own terms, rather than rejecting them by default. Sovereignty and self-reliance remain central, but they are now articulated alongside, rather than against, selective integration and regional institution-building.

Role Theory identifies three main mechanisms of *role transformation: leadership change, socialization and external feedback, and domestic contestation.* Uzbekistan under Mirziyoyev demonstrates all three: (1) leadership turnover introduced new cognitive priors and a reformist agenda; (2) external incentives, including regional rapprochement and reduced Russian pressure, encouraged cooperative behavior; and (3) new domestic coalitions aligned foreign policy with economic modernization goals. Together, these conditions explain the shift from defensive "independence" to "cooperative independence".

Because post-2016 leadership discourse is not subjected to the same systematic coding as Nazarbayev's and Karimov's statements, these observations are necessarily more tentative. However, the available evidence suggests that foundational NRCs, "Eurasian Bridge/Integrator" in Kazakhstan and "Independent/Active Independent Actor" in Uzbekistan, continue to structure expectations and provide cognitive scripts for policymakers. Leadership change has produced recalibration and re-interpretation within those roles, rather than abrupt role replacement, reinforcing the argument that NRCs function as historically embedded, yet adaptable, links between structure and agency in Central Asian foreign policy.

CONCLUSION

This study has applied Role Theory, a mid-range framework that bridges structure and agency, to explain why Kazakhstan and Uzbekistan, two post-Soviet authoritarian neighbors exposed to broadly similar external pressures, have pursued markedly different foreign policy paths. By systematically reconstructing leadership-defined national role conceptions (NRCs) from presidential discourse and linking them to patterns of foreign-policy behavior, the analysis shows that NRCs are powerful explanatory variables. They filter how leaders interpret structural constraints and opportunities, and they help to account for divergence where standard systemic theories would predict convergence.

The comparison challenges reductionist portrayals of Central Asian states as passive objects of great-power politics. Both Kazakhstan and Uzbekistan displayed strategic agency through consistent *role enactment.*

Kazakhstan's "Eurasian Bridge/Integrator" role - empirically visible in Nazarbayev's emphasis on peace, dialogue, and civilizational mediation, and in its sustained support for multilateral frameworks from CICA and the SCO to the EEU and OSCE - underpinned a cooperative, multi-vector, and status-seeking diplomacy.

Uzbekistan's "Independent/Active Independent Actor" role, grounded in a discourse of sovereignty, threat, and self-reliance and expressed in selective, reversible, and often non-cooperative participation in CIS, CSTO, SCO, and GU(U)AM, legitimized an autonomy-maximizing, defensive orientation. The evidence thus supports the central hypotheses (H1a-H1c): leadership-defined NRCs, rooted in worldviews, historical narratives, and leadership styles, translated into distinct and stable foreign-policy patterns even under analogous regional and systemic conditions.

A second contribution of the article is to show that the roles identified for the Nazarbayev–Karimov period have proven resilient but adaptable across leadership transitions. Although the core empirical window ends in 2016, subsequent developments indicate role adjustment rather than replacement. In Kazakhstan, Tokayev has updated and institutionalized his predecessor's multi-vector and bridge-building orientations, while in Uzbekistan, Mirziyoyev has moderated the previous autonomy-focused stance into a more outward-looking and cooperative version. These patterns align with Role Theory's expectation that roles function as historically embedded scripts that can be reinterpreted as contexts change, rather than being discarded entirely.

Substantively, the study makes three broader contributions to Foreign Policy Analysis and Central Asian studies:

a) It highlights the importance of leadership-driven narratives and cognitive lenses as differentiating factors in foreign policy, reinforcing the argument that one cannot predict state behavior from structural conditions alone. The same external environment was read as an opportunity for bridging and institution-building in Kazakhstan, and as a field of threats requiring defensive self-reliance in Uzbekistan.
b) It extends Role Theory to an understudied regional and regime context, showing that mid-sized, authoritarian states can also be fruitfully analyzed through NRCs, and that they actively interpret, negotiate, and sometimes resist the roles ascribed to them by major powers. Central Asian states emerge not as mere pawns in a "New Great Game", but as role-seeking and role-contesting actors that use invented roles to navigate asymmetric power structures and to manage regime security.
c) It helps bridge realist and constructivist approaches by demonstrating how material interests and security concerns are filtered through national self-conceptions and leadership traits, which themselves are shaped by historical experiences, domestic coalitions, and identity work. Kazakhstan's and Uzbekistan's external alignments cannot be fully understood without attention to how their leaders defined *"who we are", "what we are owed", and "what we must avoid".*

At the same time, several limitations must be acknowledged. First, the reliance on public discourse constrains access to private deliberations or strategic intentions. Sensitivity around elite decision-making in non-democratic settings limits transparency, and thus, this research interprets rather than reconstructs the full policy-making process. In highly securitized, non-democratic settings such as Kazakhstan and Uzbekistan, access

to genuinely informative elite interviews and internal documents is limited, which constrains the extent to which internal belief systems can be reconstructed directly (Hermann, 1999; Hudson, 2007). For this reason, the present study follows standard role-analytic practice by relying primarily on public speeches and policy documents, while treating interviews and more fine-grained behavioral data as priorities for future research.

Second, the qualitative design and small-N comparison constrain strong causal inference and leave open the possibility of reciprocal influence between roles and behavior. Hence, it raises potential endogeneity between rhetoric and behavior. Beach and Pedersen (2013) systematize process-tracing as a rigorous method for studying causal mechanisms, rather than just correlations or narratives. According to this, one must test a hypothesized NRC mechanism (*e.g., "Eurasian Bridge" → multi-vector diplomacy*) in one or more cases to see if evidence for each mechanism step is present.

Third, the study focuses on a period of uninterrupted leadership, suggesting that future research could explore role continuity and post-transition change. Although the time frame of this study is limited to 1991-2016, it leaves open important questions about how subsequent leaders reinterpret inherited national roles over time. Yet, these limitations do not undermine the explanatory value of Role Theory as well. Rather, they point to where the framework needs to be complemented by other tools, notably *process-tracing, elite interviews, and alternative data sources,* to further strengthen causal claims.

The analysis also points to clear avenues for future research. First, more fine-grained temporal work on role evolution, using longitudinal discourse analysis and process-tracing across critical junctures such as the Ukraine wars, Andijan, and leadership transitions. This could clarify the mechanisms of role adaptation and role contestation over time.

Second, studying "alter-casting" by major powers, how Russia, China, the EU, and the United States project specific roles onto Central Asian states and how these roles are accepted, resisted, contested, or reframed. It would deepen understanding of cooperation and conflict patterns in Eurasian regionalism.

Third, applying this framework to Kyrgyzstan, Tajikistan, and Turkmenistan would help map a broader *"role ecology"* in Central Asia and illuminate how *inter-role interactions* shape emerging regional identity, integration prospects, and the stability of regional organizations.

Finally, integrating Leadership Trait Analysis (LTA) with Role Theory offers a promising way to tie leaders' psychological profiles to their role choices and foreign-policy styles.

Ultimately, this study underscores that *"invented roles"*, the self-ascribed visions leaders develop about their nation's purpose, remain central to understanding the foreign policies of developing states. The post-2016 trajectories of Tokayev's Kazakhstan and Mirziyoyev's Uzbekistan, discussed above, suggest that NRCs have become partially institutionalized. They survive leadership change, but are reinterpreted and adjusted to new preferences and constraints. This supports the article's broader claim that roles are

neither purely personal nor fixed, but provide a durable repertoire that later leaders can recalibrate. Role Theory thus proves to be a valuable tool for decoding how such states craft agency, identity, and strategy in the shadow of larger powers.

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AUTHORS' CONTRIBUTIONS

AB: conceptualization, methodology, investigation, data curation, formal analysis, writing – original draft, writing – review & editing.

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REFERENCES:

1. Abazov, R. (1998). Foreign policy formation in Kazakhstan, Kyrgyzstan, and Uzbekistan: Perception and expert assessments. CERC Working Papers Series, No. 4, 1-97.
2. Aggestam, L. (1999). Role conceptions and the politics of identity in foreign policy (ARENA Working Paper No. 8). ARENA – Advanced Research on the Europeanisation of the Nation-State, University of Oslo.
3. Allison, R. (1999). The military and political security landscape in Russia and the South. In R. Menon, Y. E. Fedorov, & G. Nodia (Eds.), Russia, the Caucasus, and Central Asia: The 21st Century Security Environment (pp. 32-33). M. E. Sharpe.
4. Allison, R. (2004). Regionalism, regional structures, and security management in Central Asia. International Affairs, 80(3), 463-483.
5. Allison, R. (2008). Virtual regionalism, regional structures and regime security in Central Asia. Central Asian Survey, 27(2), 185-202. https://doi.org/10.1080/02634930802355121
6. Allison, G. T. (1969). Conceptual models and the Cuban missile crisis. American Political Science Review, 63(3), 689-718.
7. Allison, G. T., & Zelikow, P. (1999). Essence of decision: Explaining the Cuban missile crisis (2nd ed.). Longman.
8. Allison, R. (2018). Protective integration and security policy coordination: Comparing the SCO and CSTO. The Chinese Journal of International Politics, 11(3), 297-338. https://www.jstor.org/stable/48615978
9. Allison, R., & Jonson, L. (Eds.). (2001). Central Asian security: The new international context. Brookings Institution Press.
10. Ambrosio, T. (2008). Catching the "Shanghai Spirit": How the Shanghai Cooperation Organization promotes authoritarian norms in Central Asia. Europe-Asia Studies, 60(8), 1321-1344. https://doi.org/10.1080/09668130802292143
11. Ambrosio, T., & Lange, W. A. (2014). Mapping Kazakhstan's geopolitical code: An analysis of Nazarbayev's presidential addresses, 1997-2014. Eurasian Geography and Economics, 55(5), 537-559. https://doi.org/10.1080/15387216.2015.1024272

12. Anceschi, L. (2010). Integrating domestic politics and foreign policy making: The cases of Turkmenistan and Uzbekistan. Central Asian Survey, 29(2), 143-158. https://doi.org/10.1080/02634937.2010.498231
13. Anceschi, L. (2014). Regime-building, identity-making and foreign policy: Neo-Eurasianist rhetoric in post-Soviet Kazakhstan. Nationalities Papers, 42(5), 733-749. https://doi.org/10.1080/00905992.2014.928276
14. Anceschi, L. (2020). Analysing Kazakhstan's Foreign Policy: Regime Neo-Eurasianism in the Nazarbaev Era (1st ed.). Routledge. https://doi.org/10.4324/9781315674698
15. Aris, S. (2010). Striking a delicate balance: The foreign policy strategies of the Central Asian republics. Orient, 51(4), 6-12.
16. Ayazbekov, A. (2013). Independent Kazakhstan and the "Black Box" of Decision-Making: Understanding Kazakhstan's Foreign Policy in the Early Independence Period (1991-1994) [Doctoral dissertation, University of St Andrews].
17. Bauyrzhankyzy, A. (2020). National Role Conceptions, Leaders and Foreign Policy in Kazakhstan and Uzbekistan, 1991-2016 [Doctoral dissertation, Ege University]. YÖK Ulusal Tez Merkezi. https://tez.yok.gov.tr/UlusalTezMerkezi, https://www.academia.edu/144385806/National_Role_Conceptions_Leaders_and_Foregin_policy_in_Kazakhstan_and_Uzbekistan_1991_2016_thesis_
18. BBC Monitoring. (2005, July 3). Kazakh president says he will run for another term. Former Soviet Union. London.
19. BBC Monitoring Central Asia. (2005, January 20). Uzbek president gives a wide-ranging interview to Russian paper. BBC Monitoring.
20. BBC Monitoring Central Asia Unit. (2007, May 9). Uzbek leader says "powerful" states realize Andijon accusations "fabricated". Supplied by BBC Worldwide Monitoring.
21. BBC Monitoring Central Asia Unit. (2014, October 1). Kazakhstan to continue boosting cooperation with European Union – leader. Supplied by BBC Worldwide Monitoring.
22. Beach, D., & Pedersen, R. B. (2013). Process-Tracing Methods: Foundations and Guidelines. University of Michigan Press. https://doi.org/10.3998/mpub.10072208
23. Biddle, B. J., & Thomas, E. J. (1966). Role Theory: Concepts and Research. Wiley.
24. Bohr, A. (1998). Uzbekistan: Politics and Foreign Policy. Royal Institute of International Affairs.
25. Bohr, A. (2004). Regionalism in Central Asia: New geopolitics, old regional order. International Affairs, 80(3), 485-502.
26. Brecher, M., Steinberg, B., & Stein, J. (1969). A framework for research on foreign policy behavior. Journal of Conflict Resolution, 13(1), 75-94. https://doi.org/10.1177/002200276901300105
27. Breuning, M. (2007). Foreign Policy Analysis: A Comparative Introduction. Palgrave Macmillan.
28. Breuning, M. (2011). Role theory research in international relations. In S. Harnisch et al. (Eds.), Role Theory in International Relations (Routledge).
29. Bull, H. (1977). The Anarchical Society: A Study of Order in World Politics. Columbia University Press.
30. Busygina, I. (2019). Are post-Soviet leaders doomed to be populist? A comparative analysis of Putin and Nazarbayev. European Politics and Society, 20(4), 502–518. https://doi.org/10.1080/23745118.2019.1569345
31. Buzan, B. (1991). People, states and fear: An agenda for international security studies in the post–Cold War era (2nd ed.). Boulder, CO: Lynne Rienner Publishers.
32. Cantir, C., & Kaarbo, J. (2012). Contested Roles and Domestic Politics: Reflections on Role Theory in Foreign Policy Analysis and IR Theory. Foreign Policy Analysis, 8(1), 5-24. http://www.jstor.org/stable/24909851
33. Cantir, C., & Kaarbo, J. (Eds.). (2016). Domestic role contestation, foreign policy, and international relations. Routledge.
34. Carlsnaes, W. (1992). The agency-structure problem in foreign policy analysis. International Studies Quarterly, 36(3), 245-270. https://doi.org/10.2307/2600772
35. Chatterjee-Doody, P. (2015). Russia rising? The normative renaissance of multinational organisations. In J. Gaskarth (Ed.), Rising powers, global governance and global ethics. Routledge.
36. Collins, K. (2009). Economic and security regionalism among patrimonial authoritarian regimes: The case of Central Asia. Europe-Asia Studies, 61(2), 249-281. https://doi.org/10.1080/09668130802630854
37. Contessi, N. P. (2015). Foreign and security policy diversification in Eurasia: Issue splitting, co-alignment, and relational power. Problems of Post-Communism, 62(5), 299-311. https://doi.org/10.1080/10758216.2015.1026788

38. Cooley, A. (2012). Great games, local rules: The new great power contest in Central Asia. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199929825.001.0001

39. Cottam, R. W. (1977). Foreign policy motivation: A general theory and a case study. University of Pittsburgh Press.

40. Cornell, S. E. (2000). Uzbekistan: A regional player in Eurasian geopolitics? European Security, 9(2), 115-140. https://doi.org/10.1080/09662830008407454

41. Cuhadar, E., Kaarbo, J., Kesgin, B., & Ozkececi-Taner, B. (2017). Personality or role? Comparisons of Turkish leaders across different institutional positions. Political Psychology, 38, 39-54. https://doi.org/10.1111/pops.12333

42. Cummings, S. N. (2003). Eurasian bridge or murky waters between East and West? Ideas, identity and output in Kazakhstan's foreign policy. Journal of Communist Studies and Transition Politics, 19(3), 139-155. https://doi.org/10.1080/13523270300660021

43. Cummings, S. N. (2005). Kazakhstan: Power and the elite. I.B. Tauris.

44. Dave, B. (2007). Kazakhstan: Ethnicity, language and power. Routledge.

45. David, S. R. (1991). Explaining Third World alignment. World Politics, 43(2), 233-256. https://doi.org/10.2307/2010472

46. de Haas, M. (2017). Relations of Central Asia with the SCO and CSTO. Journal of Slavic Military Studies, 30(1), 1-16. https://doi.org/10.1080/13518046.2017.1271642

47. Deyermond, R. (2009). Matrioshka hegemony? Multi-levelled competition and security in post-Soviet Central Asia. Review of International Studies, 35(1), 151-173. http://www.jstor.org/stable/20542768

48. Elgström, O., & Smith, M. (2006). Role theory and European foreign policy: A framework of analysis. In O. Elgström & M. Smith (Eds.), The European Union's roles in international politics: Concepts and analysis (pp. 11–29). Routledge.

49. Fumagalli, M. (2007). Alignments and re-alignments in Central Asia: Rationale and implications of Uzbekistan's rapprochement with Russia. International Political Science Review, 28(3), 253-271. https://doi.org/10.1177/0192512107077098

50. George, A. L. (1969). The "operational code": A neglected approach to the study of political leaders and decision-making. International Studies Quarterly, 13(2), 190-222. https://doi.org/10.2307/3013944

51. Gleason, G. (2001). Foreign policy and domestic reform in Central Asia. Central Asian Survey, 20(2), 167-182. https://doi.org/10.1080/02634930120073488

52. Gnedina, E. (2015). "Multi-vector" foreign policies in Europe: Balancing, bandwagoning or bargaining? Europe-Asia Studies, 67(7), 1007-1029. https://doi.org/10.1080/09668136.2015.1066313

53. Goertz, G., & Levy, J. S. (Eds.). (2007). Explaining War and Peace: Case Studies and Necessary Condition Counterfactuals. Routledge.

54. Costa-Buranelli, F. (2014). May We Have a Say? Central Asian States in the UN General Assembly. Journal of Eurasian Studies, 5(2), 131-144. https://doi.org/10.1016/j.euras.2014.05.002

55. Grossman, M. (2003). Identity, Rhetoric, and Behavior in Post-Soviet Russia and Ukraine: Testing the Applicability of Role Theory in Foreign Policy Analysis [Doctoral dissertation, University of South Carolina].

56. Grove, A. (2007). Political leadership in foreign policy: Manipulating support across borders. Palgrave Macmillan.

57. Hanks, R. R. (2009). 'Multi-vector politics' and Kazakhstan's emerging role as a geo-strategic player in Central Asia. Journal of Balkan and Near Eastern Studies, 11(3), 257-267. https://doi.org/10.1080/19448950903152110

58. Harnisch, S. (2012). Conceptualizing in the minefield: Role theory and foreign policy learning. Foreign Policy Analysis, 8(1), 47-69. https://doi.org/10.1111/j.1743-8594.2011.00155.x

59. Harnisch, S., Frank, C., & Maull, H. W. (Eds.). (2011). Role theory in international relations. Routledge. https://doi.org/10.4324/9780203818756

60. Hasanova, N., Laruelle, M., & Peyrouse, S. (2010). Into Eurasia: Monitoring the EU's Central Asia Strategy (EUCAM Policy Paper No. 7). FRIDE & CEPS.

61. Heathershaw, J. (2007). Peacebuilding as practice: Discourses from post-conflict Tajikistan. International Peacekeeping, 14(2), 219-236. https://doi.org/10.1080/13533310601150826

62. Hey, J. A. K. (1995). Foreign policy in dependent states. In L. Neack, J. A. K. Hey, & P. J. Haney (Eds.), Foreign policy analysis: Continuity and change in its second generation. Prentice Hall.

63. Hermann, M.G. (1987) Leaders' Foreign Policy Orientations and the Quality of Foreign Policy Decisions. In S. Walker (ed.) Role Theory and Foreign Policy Analysis. Durham: Duke University Press, pp. 123–40.
64. Hermann, M. G. (1999). Assessing leadership style: A trait analysis. Social Science Automation Technical Report.
65. Hey, J. A. K. (Ed.). (2003). Small states in world politics: Explaining foreign policy behavior. Lynne Rienner Publishers.
66. Holsti, K. J. (1970). National role conceptions in the study of foreign policy. International Studies Quarterly, 14(3), 233-309. https://doi.org/10.2307/3013584
67. Hudson, V. M. (2007). Foreign policy analysis: Classic and contemporary theory (2nd ed.). Rowman & Littlefield.
68. Hudson, V. M., & Vore, C. S. (1995). Foreign policy analysis yesterday, today, and tomorrow. Mershon International Studies Review, 39(2), 209-238.
69. Idan, A., & Shaffer, B. (2011). The foreign policies of post-Soviet landlocked states. Post-Soviet Affairs, 27(3), 241-268. https://doi.org/10.2747/1060-586X.27.3.241
70. Isaacs, R. (2010). Informal politics and the uncertain context of transition. Democratization, 17(1), 1-25.
71. Jervis, R. (1976). Perception and Misperception in International Politics. Princeton University Press.
72. Jones Luong, P. (2004). The transformation of Central Asia: States and societies from Soviet rule to independence. Cornell University Press.
73. Kaarbo, J. (1997). Prime Minister Leadership Styles in Foreign Policy Decision-Making: A Framework for Research. Political Psychology.
74. Kaarbo, J. (2003). Foreign policy analysis in the twenty-first century: Back to comparison, forward to identity and ideas. International Studies Review, 5(2), 156-202. https://doi.org/10.1111/1521-9488.5020012
75. Kassen, M. (2018). Understanding foreign policy strategies of Kazakhstan: A case study of the landlocked and transcontinental country. Cambridge Review of International Affairs, 31(3-4), 314-343. https://doi.org/10.1080/09557571.2018.1520809
76. Kassenova, N. (2022). Between Scylla and Charybdis: Kazakhstan foreign policy in pursuit of a new equilibrium. Central Asia-Caucasus Institute & Silk Road Studies Program. https://www.cacianalyst.org/resources/pdf/220905_FT-Kazakhstan.pdf
77. Kazemi, L. (2003). Domestic sources of Uzbekistan's foreign policy, 1991 to the present. Journal of International Affairs, 56(2), 205-216. http://www.jstor.org/stable/24357728
78. Keohane, R. O. (1984). After hegemony: Cooperation and discord in the world political economy. Princeton University Press.
79. Kobilov, F. (2025). From geopolitical pendulum to regional player: Uzbekistan's regional foreign policy following the leadership change in 2016. Central Asian Survey, 1-21. https://doi.org/10.1080/02634937.2025.2482186
80. Korany, B. (1986). How foreign policy decisions are made in the Third World: A comparative analysis. Routledge. https://doi.org/10.4324/9780429038228
81. Krotz, U. (2015). Historical construction, international relations theory, and foreign policy. In History and Foreign Policy in France and Germany. Palgrave Macmillan.
82. Kubicek, P. (1998). Authoritarianism in Central Asia: Curse or cure? Third World Quarterly, 19(1), 29-43. http://www.jstor.org/stable/3993112
83. Kubicek, P. (2009). The Commonwealth of Independent States: An example of failed regionalism? Review of International Studies, 35(S1), 237-256. https://doi.org/10.1017/S026021050900850X
84. Kudaibergenova, D. T. (2013). "Imagining community" in Soviet Kazakhstan. Nationalities Papers, 41(5), 839-856. https://doi.org/10.1080/00905992.2013.775115
85. Kuzio, T. (2016). Nationalism and authoritarianism in Russia. Communist and Post-Communist Studies, 49(1), 1-11. https://www.jstor.org/stable/48610429
86. Kuzma, L. M. (1998). The Crusade to Resurrect the National Role Concept [Review of Role Quests in the Post-Cold War Era: Foreign Policies in Transition, by P. G. Le Prestre]. Mershon International Studies Review, 42(1), 167-169. https://doi.org/10.2307/254459
87. Laruelle, M. (2010). Russia and Central Asia. In E. Kavalski (Ed.), The new Central Asia (pp. 149-176). World Scientific.
88. Laruelle, M. (2012). Discussing neopatrimonialism and patronal presidentialism in Central Asia. Demokratizatsiya, 20(4), 301-324.

89. Laruelle, M., & Peyrouse, S. (2013). Globalizing Central Asia: Geopolitics and the Challenges of Economic Development. M. E. Sharpe.

90. Laruelle, M. (2014). The three discursive paradigms of state identity in Kazakhstan. In M. Omelicheva (Ed.), Nationalism and identity construction in Central Asia (pp. 33-52). Lexington Books.

91. Laruelle, M. (Ed.). (2017). Constructing the Uzbek state: Narratives of post-Soviet years. Lexington Books.

92. Laruelle, M. (2018). Kazakhstan's dilemma on Eurasian and Central Asian integrations. In D. Burghart & T. Sabonis-Helf (Eds.), Central Asia in the era of sovereignty: The return of Tamerlane? (pp. 395-414). Lanham, MD: Rowman & Littlefield. DOI: 10.5040/9781666987904.ch-016

93. Le Prestre, P. G. (Ed.). (1997). Role Quests in the Post-Cold War Era: Foreign Policies in Transition. McGill-Queen's University Press.

94. Levy, J.S. (2003). Political psychology and foreign policy. In D.O. Sears, L. Huddy, & R. Jervis (Eds.), Oxford handbook of political psychology (pp. 253-284). Oxford University Press.

95. March, A. F. (2002). The use and abuse of history: National ideology in Karimov's Ideology of National Independence. Central Asian Survey, 21(4), 371-384. https://doi.org/10.1080/0263493032000053190

96. March, A. F. (2003). From Leninism to Karimovism. Post-Soviet Affairs, 19(4), 307-336. https://doi.org/10.2747/1060-586X.19.4.307

97. Melvin, N. (2000). Uzbekistan: Transition to authoritarianism on the Silk Road. Amsterdam: Harwood Academic Publishers.

98. Melvin, N. (2008). Engaging Central Asia: The European Union's New Strategy in the Heart of Eurasia. Centre for European Policy Studies (CEPS).

99. Mirziyoyev, S. (2017a, September 19). Address by the President of the Republic of Uzbekistan at the 72nd Session of the United Nations General Assembly. President of the Republic of Uzbekistan. https://uza.uz/oz/posts/o-zbekiston-prezidenti-shavkat-mirziyoyev-bmt-bosh-assambley-20-09-2017

100. Mirziyoyev, S. (2017b, November 10). Vystuplenie Prezidenta Respubliki Uzbekistan Shavkata Mirziyoeva na mezhdunarodnoy konferentsii «Tsentralnaya Aziya: odno proshloe i obshchee budushchee, sotrudnichestvo radi ustoychivogo razvitiya i vzaimnogo protsvetaniya» v Samarkande. [Speech at the International Conference]. President of the Republic of Uzbekistan. https://president.uz/ru/lists/view/1227

101. Mirziyoyev, S. (2018, January 12). Vystuplenie Prezidenta Respubliki Uzbekistan Shavkata Mirziyoeva na soveshchanii, posvyashchennom deyatel'nosti MID i posol'stv za rubezhom [Speech at the Meeting of the Ministry of Foreign Affairs and Embassies Abroad]. President of the Republic of Uzbekistan. https://president.uz/ru/lists/view/1423

102. Mirziyoyev, S. (2021, August 7). Speech of the President of the Republic of Uzbekistan at the Third Consultative Meeting of the Heads of State of Central Asia. President of the Republic of Uzbekistan. https://president.uz/en/lists/view/4534

103. Mirziyoyev, S. (2022, July 21). Address by the President of the Republic of Uzbekistan Shavkat Mirziyoyev at the Fourth Consultative Meeting of the Heads of States of Central Asia. President of the Republic of Uzbekistan. https://president.uz/en/lists/view/5360

104. Mirziyoyev, S. (2023a, April 27). The New Uzbekistan will become an even more investment-friendly country [Speech at the Second Tashkent International Investment Forum]. President of the Republic of Uzbekistan. https://president.uz/en/lists/view/6221

105. Mirziyoyev, S. (2023b, September 14). The President of the Republic of Uzbekistan puts forward proposals on prospects for further interaction among Central Asian states [Speech at the Fifth Consultative Meeting of the Heads of State of Central Asia]. President of the Republic of Uzbekistan. https://president.uz/en/lists/view/6659

106. Mintz, A. (2004). How do leaders make decisions? A poliheuristic perspective. Journal of Conflict Resolution, 48(1), 3-13.

107. Molchanov, M. A. (2018). New regionalism and Eurasia. In S. Hua (Ed.), Routledge handbook of politics in Asia (pp. 504-519). Routledge. https://doi.org/10.4324/9781315627670

108. Morin, J.-F., & Paquin, J. (2018). Foreign Policy Analysis: A Toolbox. Springer.

109. Mostafa, G. (2013). The concept of "Eurasia": Kazakhstan's Eurasian policy and its implications. Journal of Eurasian Studies, 4(2), 160-170.

110. Mitzen, J. (2006). Ontological security in world politics: State identity and the security dilemma. European Journal of International Relations, 12(3), 341-370. https://doi.org/10.1177/1354066106067346

111. Moldashev, K., & Gulam Hassan, M. (2017). The Eurasian Union: Actor in the making? Journal of International Relations and Development, 20(1), 215-237. https://doi.org/10.1057/jird.2015.6

112. Moravcsik, A. (1997). Taking preferences seriously: A liberal theory of international politics. International Organization, 51(4), 513-553. https://doi.org/10.1162/002081897550447

113. Morgenthau, H. J. (1948). Politics among nations: The struggle for power and peace. New York, NY: Alfred A. Knopf.

114. NATO. (12 May 2025). Euro-Atlantic Partnership Council. NATO. https://www.nato.int/en/about-us/organization/nato-structure/euro-atlantic-partnership-council, Updated: 12 May 2025

115. NATO. (28 June 2024). Partnership for Peace programme. NATO. https://www.nato.int/en/what-we-do/partnerships-and-cooperation/partnership-for-peace-programme, Updated: 28 June 2024

116. Nazarbayev, N. A. (1997). Kazakhstan-2030: Prosperity, Security and the Welfare of All Kazakhs. Presidential Administration of Kazakhstan.

117. Nazarbayev, N. (1994). Strategy for the formation and development of Kazakhstan as a sovereign state. Kazakh University Press.

118. Nazarbayev, N. (1998). Kazakhstan 2030: Poslanie Prezidenta strany narodu Kazakhstana. Bilim.

119. Nazarbayev, N. (2001). Epicenter of peace. Puritan Press.

120. Omelicheva, M. Y. (2010). Counterterrorism policies in Central Asia. Routledge. https://doi.org/10.4324/9780203844946

121. Olcott, M. B. (1996). Central Asia's new states: Independence, foreign policy, and regional security. United States Institute of Peace Press.

122. Olcott, M. B. (2010). Kazakhstan: Unfulfilled promise. Carnegie Endowment for International Peace.

123. Omelicheva, M. Y. (2010). Counterterrorism policies in Central Asia (1st ed.). Routledge. https://doi.org/10.4324/9780203844946.

124. Pikalov, A. (2014). Uzbekistan between the great powers: a balancing act or a multi-vectorial approach? Central Asian Survey, 33(3), 297–311. https://doi.org/10.1080/02634937.2014.930580

125. Pieper, M. (2021). The linchpin of Eurasia: Kazakhstan and the Eurasian Economic Union between Russia's defensive regionalism and China's new Silk Roads. International Politics, 58(3), 462-482. https://doi.org/10.1057/s41311-020-00244-6

126. Prezident Respubliki Kazakhstan. (2022). Vystuplenie Prezidenta Respubliki Kazakhstan Kassym-Zhomarta Tokaeva na Sammite "SShOS + 5" [Speech by President of the Republic of Kazakhstan Kassym-Zhomart Tokayev at the SCO +5 Summit]. https://www.akorda.kz/ru/vystuplenie-prezidenta-respubliki-kazahstan-kasym-zhomarta-tokaeva-na-sammite-shos-plyus-562022

127. Prezident Respubliki Kazakhstan. (2025a, January 28). Vystuplenie Glavy gosudarstva Kassym-Zhomarta Tokaeva na rasshirennom zasedanii Pravitel'stva [Speech by President of the Republic of Kazakhstan Kassym-Zhomart Tokayev at the expanded meeting of the Government]. https://www.akorda.kz/ru/vystuplenie-glavy-gosudarstva-kasym-zhomarta-tokaeva-na-rasshirennom-zasedanii-pravitelstva-2801458

128. Prezident Respubliki Kazakhstan. (2025b, March 14). Vystuplenie Glavy gosudarstva Kassym-Zhomarta Tokaeva na chetvertom zasedanii Natsionalnogo Kuryltaya [Speech by President Kassym-Zhomart Tokayev at the fourth session of the National Kuryltai]. https://quryltai.kz/ru/article/vystuplenie-glavy-gosudarstva-kasym-zhomarta-tokaeva-na-iv-zasedanii-natsionalnogo-kurultaya

129. Prezident Respubliki Kazakhstan. (2025c, September 23). Vystuplenie Prezidenta Kazakhstana Kasym-Zhomarta Tokaeva na Obshchikh debatakh 80-y sessii General'noi Assamblei OON [Speech by President Kassym-Zhomart Tokayev at the general debates of the 80th session of the UN General Assembly]. https://www.akorda.kz/ru/vystuplenie-prezidenta-kazahstana-kasym-zhomarta-tokaeva-na-obshchih-debatah-80-y-sessii-generalnoy-assamblei-oon-2481155

130. Prezident Respubliki Kazakhstan. (2025d, May 29). Vystuplenie Prezidenta Kassym-Zhomarta Tokaeva na plenarnoy sessii Mezhdunarodnogo foruma "Astana" [Speech by President Kassym-Zhomart Tokayev at the plenary session of the International Forum "Astana"]. https://www.akorda.kz/ru/vystuplenie-prezidenta-kasym-zhomarta-tokaeva-na-plenarnoy-sessii-mezhdunarodnogo-foruma-astana-2944245

131. Putnam, R. D. (1988). Diplomacy and domestic politics: The logic of two-level games. International Organization, 42(3), 427-460.

132. Rasanayagam, J. (2011). Islam in post-Soviet Uzbekistan: The morality of experience. Cambridge University Press. https://doi.org/10.1017/CBO9780511719950

133. Rosenau, J. N. (1966). Pre-theories and theories of foreign policy. In R. B. Farrell (Ed.), Approaches in comparative and international politics (pp. 27-92). Northwestern University Press.

134. Roy, O. (2000). The new Central Asia: The creation of nations. New York University Press.

135. Ripsman, N. M., Taliaferro, J. W., & Lobell, S. E. (2016). Neoclassical Realist Theory of International Politics. Oxford University Press.

136. Rose, G. (1998). Neoclassical realism and theories of foreign policy. World Politics, 51(1), 144-172. https://doi.org/10.1017/S0043887100007814

137. Schmitz, A. (2009, November 11). Whose conditionality? The failure of EU sanctions on Uzbekistan. Central Asia-Caucasus Analyst. https://www.cacianalyst.org/publications/analytical-articles/item/11944-analytical-articles-caci-analyst-2009-11-11-art-11944.html

138. Simon, H. A. (1985). Human nature in politics: The dialogue of psychology with political science. American Political Science Review, 79(2), 293-304.

139. Singer, E., & Hudson, V. M. (1992). Political psychology and foreign policy (1st ed.). Routledge. https://doi.org/10.4324/9780429302282

140. Schweller, R. L. (2004). Unanswered threats: A neoclassical realist theory of underbalancing. International Security, 29(2), 159-201. https://doi.org/10.1162/0162288042879913

141. Slovic, P., Tversky, A., & Kahneman, D. (1982). Judgment under uncertainty: Heuristics and biases. In D. Kahneman, P. Slovic, & A. Tversky (Eds.), Judgment under uncertainty (pp. 3-20). Cambridge University Press.

142. Snyder, R. C., Bruck, H. W., & Sapin, B. (1962). Foreign policy decision-making. Free Press of Glencoe.

143. Spechler, D. R., & Spechler, M. C. (2010). The foreign policy of Uzbekistan: sources, objectives and outcomes: 1991–2009. Central Asian Survey, 29(2), 159–170. https://doi.org/10.1080/02634937.2010.490679

144. Sprout, M., & Sprout, H. (1956). Man–milieu relationship hypotheses in the context of international politics. Center for International Studies, Princeton University.

145. Stanko, J. C. (2024). Role theory, non-coercive influence, and the agency of target states: The case of Kazakhstan's ambassadorial corps and the Russian Diplomatic Academy. Foreign Policy Analysis, 20(3), orae017. https://doi.org/10.1093/fpa/orae017

146. Starr, F. S. (2006). Clans, authoritarian rulers, and parliaments in Central Asia. Silk Road Paper Series. https://www.files.ethz.ch/isn/30289/11_Clans_Authoritarian%20Rulers_Parliaments.pdf

147. Starr, S. F., Engvall, J., & Cornell, S. (2016). Kazakhstan 2041: The next twenty-five years. Silk Road Paper. Washington, DC: Central Asia-Caucasus Institute & Silk Road Studies Program.

148. Steele, B. J. (2008). Ontological Security in International Relations: Self-Identity and the IR State. Routledge.

149. Teles Fazendeiro, B. (2013). Uzbekistan's self-reliance 1991-2010: Public politics and the impact of roles in shaping bilateral relations (PhD thesis). University of St Andrews.

150. Teles Fazendeiro, B. (2017). Uzbekistan's foreign policy: The struggle for recognition and self-reliance under Karimov. Routledge.

151. Teles Fazendeiro, B. (2017). Uzbekistan's defensive self-reliance: Karimov's foreign policy legacy. International Affairs, 93(2), 409-427.

152. Tewes, H. (1998). Between deepening and widening: Role conflict in Germany's enlargement policy. West European Politics, 21(2), 117–133. https://doi.org/10.1080/01402389808425247

153. Thies, C. G. (2009). Role theory and foreign policy. ISA Compendium Project, Foreign Policy Analysis section. https://myweb.uiowa.edu/bhlai/workshop/role.pdf

154. Thies, C. G. (2012). International socialization processes vs. Israeli national role conceptions: Can role theory integrate IR theory and foreign policy analysis? Foreign Policy Analysis, 8(1), 25-46. https://doi.org/10.1111/j.1743-8594.2011.00170.x

155. Toktomushev, K. (2016). Kyrgyzstan - Regime Security and Foreign Policy (1st ed.). Routledge. https://doi.org/10.4324/9781315533490

156. Tolipov, F. (2007). The foreign policy orientations of Central Asian states: Positive and negative diversification. Acta Slavica Iaponica, 16, 23-40. https://src-h.slav.hokudai.ac.jp/coe21/publish/no16_1_ses/02_tolipov.pdf

157. Tolipov, F. (2014). Flexibility or strategic confusion? Foreign policy of Uzbekistan. Uzbekistan Initiative Papers No. 2, George Washington University. https://app.box.com/s/8as9nini2g2sek8kqj9lbg6ev5ppupt4

158. Thorhallsson, B. (2012). Small states in the UN Security Council: Means of influence? The Hague Journal of Diplomacy, 7(2), 135-160.

159. Tskhay, A., & Costa Buranelli, F. (2020). Accommodating revisionism through balancing regionalism: The case of Central Asia. Europe-Asia Studies, 72(6), 1033-1052. https://doi.org/10.1080/09668136.2020.1779184

160. von Soest, C. & Grauvogel, J. (2016). Comparing Legitimation Strategies in Post-Soviet Countries. In: Brusis, M., Ahrens, J., Wessel, M.S. (eds) Politics and Legitimacy in Post-Soviet Eurasia. Palgrave Macmillan, London. https://doi.org/10.1057/9781137489449_2

161. Walker, S. (1987). Role Theory and Foreign Policy Analysis. Duke University Press.

162. Walt, S. M. (1987). The origins of alliances. Cornell University Press.

163. Waltz, K. N. (1959). Man, the state, and war: A theoretical analysis. Columbia University Press.

164. Waltz, K. N. (1979). Theory of international politics. Addison-Wesley.

165. Wang, M. (2024). Balancing, challenges, and opportunities: Kazakhstan's multi-vector foreign policy after the Ukraine crisis. Trends in Social Sciences and Humanities Research, 2(2), 89-97. https://doi.org/10.61784/tsshrv2n2105

166. Wehner, L. E., & Thies, C. G. (2014). Role theory, narratives, and interpretation: The domestic contestation of roles. International Studies Review, 16(3), 411-436. https://doi.org/10.1111/misr.12149

167. Weitz, R. (2006). Averting a new great game in Central Asia. The Washington Quarterly, 29(3), 155-167. https://doi.org/10.1162/wash.2006.29.3.155

168. Weitz, R. (2012). The delicate dance: Uzbekistan and NATO. Second Line of Defense. https://sldinfo.com/2012/11/the-delicate-dance-uzbekistan-and-nato/

169. Wendt, A. (1999). Social theory of international politics. Cambridge University Press.

170. Wilkinson, D. (1969). Deadly quarrels: Lewis F. Richardson and the statistical study of war. University of California Press.

171. Wish, N. B. (1980). Foreign policy makers and their national role conceptions. International Studies Quarterly, 24(4), 532-554.

172. Yuneman, R. (2023). How Kazakhstani multivector foreign policy works: Analysis of its voting in UNGA. International Organisations Research Journal, 18(1), 151-169. https://doi.org/10.17323/1996-7845-2023-01-06

Appendix 1. Coding Rules for Content Analysis*

A) To avoid journalistic bias, statements must be an ample body of text and not just selected quotations made by reporters. These will not enter the tabulations indicated above but may nonetheless be used to later contextualize and discuss the results.

B) Analyze the paragraph (P) by filling in the table below and relating it to three variables: Status, Motivational Orientation and Substantial Issue-area. A paragraph may be related to more than one attribute in each given variable.

P	STATUS		MOTIVATIONAL ORIENTATION			SUBSTANTIAL ISSUE-AREAS								
	Capability	Status	Wish to expand	Coop/Comp	Systemic change	Eco	Security	Other	Political Aims		Universal		Unilateral	Integration
									+	–	+	–		
	(0,1,2,3)	(0,1,2,3)	(0,1,2)	(0,1,2)	(0,1,2,3,4)	(0;1)	(0;1)	(0;1)	(0;1)	(0;1)	(0;1)	(0;1)	(0;1)	(0;1)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Bi1	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Bi2	0	0	0	2	3	1	1	0	0	1	0	0	0	0
(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)	(…)

Status refers to which domestic endowments or capabilities leadership attributes greater absolute advantage (A) and how it perceives its relative position in the international system (B).

Motivational Orientation corresponds to statements on political and international affairs, meaning if it is willing to expand internationally (C), if it is for being cooperative or competitive in politics (D) and to which degree it wishes to change both its internal and external system (E).

Substantial Issue-area corresponds to the main themes being discussed: economics (F), security (G), others (H), such as culture or history, the defense or dismissal of political ideologies and systems (I,J), the defense or dismissal of universal values (K,L), the pursuit of unilateral goals or own interests (M), the wish to practice bilateral, multilateral or political/economic integration with other partners (N).

* This description was taken from the analysis of Bernardo Fazendeiro Teles (2013) which has implemented the same technique in his study of UZBEKISTAN'S SELF-RELIANCE 1991-2010: PUBLIC POLITICS AND THE IMPACT OF ROLES IN SHAPING BILATERAL RELATIONSHIPS

Appendix 2. List of Islam Karimov's interviews

1990s

1. Uzbek president voices concern about CIS restructuring, BBC Monitoring Former Soviet Union - Political; London [London]26 Jan 1999, Interfax
2. President Islam Karimov envisions independence, prosperity of Uzbekistan, THE KOREA HERALD August 31, 2001
3. Uzbek leader lauds economic ties with Ukraine, BBC Monitoring Former Soviet Union - Economic; London [London]11 Oct 1999

2000s

4. Uzbek leader notes need for neighbourly relations in Centasia, CIS, BBC Monitoring Central Asia; London 26 Aug 2005
5. Uzbek president urges Russia to unite CIS states, BBC Monitoring Central Asia; London [London]16 Sep 2004
6. Uzbek leader defends elections after criticism – fuller, BBC Monitoring Central Asia; London [London]26 Dec 2004
7. Uzbek leader on national TV advocates closer ties with Russia, BBC Monitoring Central Asia; London [London]16 Nov 2005,
8. Uzbek president says maintaining peace is "our sacred duty", BBC Monitoring Central Asia; London [London]10 Oct 2001
9. Uzbek president calls Shanghai group "authoritative international organization", BBC Monitoring Asia Pacific – Political, Supplied by BBC Worldwide Monitoring, June 10, 2006, Xinhua
10. Russian, Uzbek presidents' opening remarks at Tashkent talks - Kremlin text, BBC Monitoring Former Soviet Union – Political, Supplied by BBC Worldwide Monitoring, December 10, 2014
11. Karimov's book - mirror of will, expectation of Uzbekistan people, THE KOREA HERALD, March 28, 2006
12. Uzbekistan presents army development strategy, Trend News Agency, Baku, Azerbaijan, Distributed by McClatchy-Tribune Business News, January 14, 2012
13. Uzbek President: Improvement of combat readiness of the armed forces is of particular importance under growing threats, Trend News Agency, Baku, Azerbaijan, Distributed by McClatchy-Tribune Business News, January 12, 2013
14. President Islam Karimov Attends CIS Summit in Kazakhstan, Uzbekistan National News Agency (UzA), October 18, 2015
15. Uzbekistan should align with all big powers to ensure security, BBC Monitoring Newsfile; London [London]15 Apr 2004
16. Uzbek head says BBC asked "stupid" questions about Putin's visit: full version, BBC Monitoring Central Asia; London [London]19 May 2000
17. Uzbek leader slams idea of supervisory body over CIS – fuller, BBC Monitoring Central Asia; London [London]18 Sep 2003
18. Not too late to get CIS back on track, Uzbek president says, BBC Monitoring Central Asia; London [London]29 Nov 2001
19. Political parties must stand for peace and prosperity - Uzbek president, BBC Monitoring Central Asia; London [London]04 Apr 2002
20. Uzbek leader says economic interests, security behind joining Eurasian body, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, January 25, 2006
21. Uzbek leader's interview in parliament intermission - fuller version, BBC Monitoring Central Asia; London [London]03 Dec 2004
22. Uzbek leader rails against Islamic radicals, BBC Monitoring Central Asia; London [London]30 Aug 2001
23. Uzbekistan, Russia agree to set up military cooperation groups – fuller, BBC Monitoring Central Asia; London [London]06 May 2001
24. Uzbekistan, South Korea to Advance Strategic Partnership, Uzbekistan National News Agency (UzA), June 18, 2014

25. Uzbek president gives wide-ranging interview to Russian paper, BBC Monitoring Central Asia; London [London]20 Jan 2005
26. A NATION CHALLENGED: THE ALLIES; Uzbekistan's Leader Doubts Chances for Afghan Peace, The New York Times March 14, 2002
27. Uzbek president's interview on 11 December excerpts from Uzbek TV version, BBC Monitoring Central Asia; London [London]12 Dec 2003
28. Peace and tranquility are the foundation of all our achievements, Uzbekistan National News Agency (UzA) May 9, 2016
29. Uzbek head answers newspaper questions on national ideology, religion, policy, BBC Monitoring Central Asia; London [London]09 June 2000
30. Uzbek leader on military reform, freedom of speech, US presence, BBC Monitoring Central Asia; London [London]31 Aug 2002
31. Uzbek leader urges clerics to work against radical groups, BBC Monitoring Central Asia; London [London]01 Sep 2004
32. "International terrorism regrouping now" - Uzbek president, BBC Monitoring Central Asia; London [London]10 Apr 2004
33. Democratic reforms in Uzbekistan irreversible leader, BBC Monitoring Central Asia; London [London]01 Feb 2003
34. Uzbek president seeks to boost trade with Spain, BBC Monitoring Central Asia; London [London]27 Jan 2003
35. Uzbek leader says Afghan situation "not conducive" to optimism – fuller, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, May 2, 2006
36. Uzbek president: a "satisfied" Europe takes threat of extremism lightly – more, BBC Monitoring Central Asia; London [London]09 May 2002
37. Uzbek heads stresses need to tackle Afghan issue, access to Iranian port, BBC Monitoring South Asia - Political; London [London]10 June 2000
38. Uzbek president explains move to reduce his authority, BBC Monitoring Newsfile; London [London]24 Apr 2003
39. Uzbek leader says security main aim of Pakistani visit, BBC Monitoring Central Asia Unit Supplied by BBC Worldwide Monitoring, May 2, 2006
40. Uzbek leader hails Pakistan's potential, military might, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, May 2, 2006
41. Uzbek head talks up gains from Eurasian bloc entry, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, June 22, 2006
42. Uzbek leader says "powerful" states realize Andijon accusations "fabricated", BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, May 9, 2007
43. Uzbek leader frets over regional fallout if Iran nuked, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, May 9, 2006
44. Uzbek leader says politics pursue own goals, BBC Monitoring Central Asia UnitSupplied by BBC Worldwide Monitoring, December 24, 2007
45. Security, counterterrorism top issues for Shanghai summit - Uzbek leader, BBC Monitoring Newsfile; London [London]29 May 2003
46. Uzbek leader urges closer ties with Russia, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, January 24, 2006
47. Uzbek leader says treaty with Russia to ward off dangers, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, May 9, 2006
48. Uzbek leader: Shanghai summit outcomes "unexpected", BBC Monitoring Newsfile; London [London]01 June 2003
49. Terrorists outpacing antiterror coalition, Uzbek leader tells Putin, BBC Monitoring Central Asia: London [London]17 Apr 2004: 1.
50. Uzbek president hails Russia's new role in Central Asian body, BBC Monitoring Newsfile; London [London]18 Oct 2004:

Appendix 3. List of Nursultan Nazarbayev's interviews

1990s

1. REMARKS BY U.S. SECRETARY OF DEFENSE WILLIAM COHEN AND KAZAKHSTAN PRESIDENT NURSULTAN NAZARBAYEV AT SIGNING CEREMONY ALSO PRESENT: KAZAKHSTAN DEFENSE MINISTER LIEUTENANT GENERAL MUKHTAR ALTYNBAYEV THE PENTAGON, Federal News Service, NOVEMBER 17, 1997, MONDAY, Copyright 1997 Federal Information Systems Corporation
2. SOVIET TURMOIL: Kazakh Chief, Seeking What Works, Backs Both Order and Free Economy, The New York Times September 8, 1991, Sunday, Late Edition – Final
3. WE WILL COME TO TERMS WITH RUSSIA" (INTERVIEW WITH KAZAKH PRESIDENT NURSULTAN NAZARBAYEV), Official Kremlin Int'l News Broadcast, OCTOBER 8, 1992
4. Kazakh Sets Conditions On A-Arms; Nazarbayev Seeks Powers' Guarantees, The Washington Post, May 6, 1992
5. KAZAKHSTAN LEADER ASKS 'JUSTICE' IN COMPENSATION ON NUCLEAR ARMS "THE DESTRUCTION OF WARHEADS COSTS NO LESS THAN PRODUCING THEM," NURSULTAN NAZARBAYEV SAID, The Philadelphia Inquirer, February 8, 1994 Tuesday FINAL EDITION
6. KAZAKHSTAN DECLARES ITSELF TEMPORARY NUCLEAR POWER, Official Kremlin Int'l News Broadcast, APRIL 28, 1992
7. NATIONAL PRESS CLUB AFTERNOON NEWSMAKER PRESIDENT NURSULTAN NAZARBAYEV OF KAZAKHSTAN MODERATOR: JOHN SODERGREEN, KING PUBLISHING THE NATIONAL PRESS CLUB WASHINGTON, DC, Federal News Service, MAY 20, 1992
8. PRESIDENT NURSULTAN NAZARBAYEV: NEITHER DEVELOPMENT, NOR, Official Kremlin Int'l News Broadcast, AUGUST 18, 1992
9. REMARKS BY PRESIDENT NURSULTAN NAZERBAYEV OF KAZAKHSTAN AND KENNETH DERR, PRESIDENT AND CEO OF CHEVRON CORPORATION AT TREATY SIGNING CEREMONY BLAIR HOUSE, Federal News Service, MAY 18, 1992
10. Kazakh president says foreign businesses hindered by state interference, BBC Monitoring Former Soviet Union - Economic; London [London]08 June 1999: 1.
11. Kazakh president on foreign investors, Kazakh language, BBC Monitoring Former Soviet Union - Economic; London [London]10 June 1999: 1.
12. Interview of Franz Vranitzky, Chancellor of Austria, Nursultan Nazarbayev, President of Kazakhstan, and Ivan Silayev, Chairman of the Inter-Republican Committee on Economic Relations at the Baikonur Space Launching Site on October 2, 1991 (USSR Central Television, October 2, 1991), Official Kremlin Int'l News Broadcast, OCTOBER 2, 1991
13. EXCERPTS FROM INTERVIEW BY PRESIDENT OF THE KAZAKH SOVIET SOCIALIST REPUBLIC, FIRST SECRETARY OF THE CENTRAL COMMITTEE, NURSULTAN NAZARBAYEV, ON USSR STATE TELEVISION (Program "Who is Who?", March 2, 1991), Official Kremlin Int'l News Broadcast, MARCH 4, 1991
14. Kazahkstan President Nursultan Nazarbayev Interviewed, CNN February 2, 1994

2000s

15. Kazakh president against "double standards" against Iran, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, November 19, 2011
16. Kazakh president denies Shanghai group a "military bloc", BBC Monitoring Asia Pacific – Political, supplied by BBC Worldwide Monitoring June 8, 2006
17. Kazakh president tells Russian TV he is ready to help Kyrgyzstan, BBC Monitoring Former Soviet Union – Political Supplied by BBC Worldwide Monitoring, June 27, 2010
18. Kazakhstan has action plan in case oil prices drop to $40 – Nazarbayev, The Times of Central Asia, December 22, 2014
19. Nazarbayev calls for creation of new world currency under aegis of UN, Central Asia General Newswire, March 10, 2009
20. No Kazakh land to be sold to foreigners – president, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, December 24, 2009
21. Kazakh leader upbeat on "breakthrough" talks with Putin, BBC Monitoring Central Asia Unit Supplied by BBC Worldwide Monitoring, May 22, 2006
22. Kazakh president says he will run for another term, BBC Monitoring Former Soviet Union; London 03 July 2005
23. Kazakhstan to continue boosting cooperation with European Union – leader, BBC Monitoring Central Asia Unit Supplied by BBC Worldwide Monitoring, October 1, 2014

24. Kazakh president calls for economic diversification amid global crisis, BBC Monitoring Central Asia Unit Supplied by BBC Worldwide Monitoring, May 21, 2009
25. An Interview with Kazakhstan's President Nursultan Nazarbayev, Daily Outlook Afghanistan; Kabul [Kabul]21 Nov 2010.
26. Kazakh leader outlines international, domestic policies in people's interview, BBC Monitoring Central Asia; London [London]21 Sep 2002
27. Kazakh leader says security priority over democratic reforms, BBC Monitoring Central Asia; London [London]08 July 2002
28. Kazakh president urges SCO to fight terrorism, separatism and extremism, BBC Monitoring Asia Pacific – Political Supplied by BBC Worldwide Monitoring, June 9, 2006
29. Uzbekistan, Kazakhstan: cooperation for stability in the region, The Times of Central Asia June 19, 2013
30. Kazakh president fights protest calls, BBC Monitoring Central Asia; London [London]08 Dec 2003
31. Kazakhstan's autocratic president tells David Cameron: I would vote for you, The Guardian, July 1, 2013
32. Kazakh leader hails country's foreign policy, BBC Monitoring Central Asia Unit Supplied by BBC Worldwide Monitoring, December 30, 2008
33. REMARKS BY KAZAKH PRESIDENT NURSULTAN NAZARBAYEV AND RUSSIAN PRESIDENT DMITRY MEDVEDEV AT THE BEGINNING OF THEIR MEETING, Official Kremlin Int'l News Broadcast, December 19, 2008
34. REMARKS BY RUSSIAN PRESIDENT DMITRY MEDVEDEV; KAZAKHSTAN PRESIDENT NURSULTAN NAZARBAYEV; TURKMENISTAN PRESIDENT GURBANGULY BERDIMUHAMEDOV; AZERBAIJAN PRESIDENT ILHAM ALIYEV AT THE BEGINNING OF THEIR JOINT INFORMAL MEETING, Official Kremlin Int'l News Broadcast, September 11, 2009
35. Remarks by President Barack Obama and President Nursultan Nazarbayev of the Republic of Kazakhstan Before a Bilateral Meeting (As Released by the White House) Location: Grand Hyatt, Seoul, Republic of Korea Time: 2:27 p.m. KST Date: Monday, March 26, 2012
36. NURSULTAN NAZARBAYEV HOLDS MEDIA AVAILABILITY, FDCH Political Transcripts, December 21, 2001
37. MEDIA AVAILABILITY WITH SECRETARY OF STATE CONDOLEEZZA RICE AND KAZAKHSTAN PRESIDENT NURSULTAN NAZARBAYEV (AS RELEASED BY THE STATE DEPARTMENT), Federal News Service, October 13, 2005
38. KAZAKH-RUSSIAN RELATIONS AT HIGH LEVEL – NAZARBAYEV, Russia & CIS Presidential Bulletin, March 1, 2006
39. MADELEINE ALBRIGHT HOLDS MEDIA AVAILABILITY WITH THE PRESIDENT OF KAZAKHSTAN; ASTANA, KAZAKHSTAN, FDCH Political Transcripts, April 17, 2000
40. COLIN POWELL HOLDS JOINT NEWS CONFERENCE WITH NURSULTAN NAZARBAYEV, PRESIDENT OF KAZAKHSTAN, FDCH Political Transcripts, December 9, 2001
41. Kazakhstan's waiving nuclear status helped it to revive its economy - President Nazarbayev, ITAR-TASS, July 5, 2015
42. Kazakhstan will not apply non-market measures to support economy, The Times of Central Asia, December 14, 2015
43. Kazakhstan against repetition of Libyan scenario in Syria – president, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, November 19, 2011
44. REMARKS BY RUSSIAN PRESIDENT VLADIMIR PUTIN AT THE BEGINNING OF THE MEETING WITH THE PRESIDENT OF KAZAKHSTAN, NURSULTAN NAZARBAYEV, Official Kremlin Int'l News Broadcast, December 20, 2007
45. Kazakh president links Arab protests to global financial crisis, BBC Monitoring Central Asia Unit, supplied by BBC Worldwide Monitoring March 2, 2011
46. Kazakh leader says Shanghai body proved to be strong, promising, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, June 14, 2006
47. REMARKS BY VICE PRESIDENT RICHARD CHENEY AND KAZAKH PRESIDENT NURSULTAN NAZARBAYEV DURING THEIR MEETING, Federal News Service, May 6, 2006
48. Shanghai body may become key part of global security - Kazakh leader, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, June 14, 2006
49. OSCE summit in Kazakh capital to start new chapter – leader, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, November 26, 2010
50. No rivalry between Russia, Kazakhstan at energy market – leader, BBC Monitoring Central Asia Unit, Supplied by BBC Worldwide Monitoring, November 19, 2011

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EMPLOYMENT INSECURITY AS A DRIVER OF INFORMAL CROSS-BORDER TRADE: A CASE STUDY OF THE CHINA–KAZAKHSTAN BORDER

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ABSTRACT. *This research paper investigates the relationship between employment insecurity and informal cross-border trade (ICBT) at the China–Kazakhstan border. By conducting a survey of individuals involved in ICBT, this study aims to understand the factors that drive individuals to engage in this type of economic activity. The findings suggest that employment insecurity, characterized by factors such as inadequate wages, lack of social security, and precarious employment conditions, is a significant driver of ICBT. Individuals facing employment insecurity often turn to ICBT as a means of supplementing their income and ensuring their livelihoods. This research contributes to the understanding of the complex dynamics of informal trade and its relationship to employment insecurity in the context of the China–Kazakhstan border.*

KEYWORDS: *employment insecurity, informal cross-border trade, informal trade, informal economy, trade.*

INTRODUCTION

The informal economy, encompassing economic activities operating outside formal regulations and lacking legal protections (Godfrey, 2011), constitutes a significant portion of many economies, particularly in developing regions (ILO, 2023). While it provides crucial income and employment opportunities, especially for vulnerable populations, it is often characterized by precarious working conditions, inadequate wages, and limited access to social security benefits (Utzet et al., 2021). This precariousness can have significant social implications, including inequality (Senoret et al., 2022), increased poverty, and further social exclusion (Gallie et al., 2003). In fact, research on informality highlights that informal practices should not be conflated with the shadow economy, as they often constitute adaptive strategies to cope with weak or absent state structures (Polese et al., 2023).

Informal cross-border trade (ICBT), a subset of the informal economy, involves the cross-border exchange of legally produced/acquired goods outside official channels (Kahiya & Kadirov, 2020). While research has explored the impact of trade on both formal and informal employment (Tanaka & Greaney, 2024), there remains a gap in understanding the specific role of employment insecurity in driving individuals towards informal trade, particularly within border regions. Everyday practices of bypassing the state, documented across Eurasian contexts, demonstrate how informality can become embedded as a normalized mode of survival and exchange rather than simply a marginal

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economic activity (Polese, 2023). This is especially relevant in contexts like the China–Kazakhstan border, where bilateral trade has been steadily growing, reaching $43.8 billion in 2024 (Omarova, 2025). This growth, while indicative of economic dynamism, also presents challenges related to informality and its potential consequences.

This paper investigates the relationship between employment insecurity and ICBT at the China–Kazakhstan border. By examining the experiences and motivations of individuals engaged in ICBT, the objective of this study is to understand the factor of employment insecurity in driving individuals to engage in this type of economic activity. This study contributes to the understanding of the complex dynamics of informal trade and its relationship to employment insecurity in a specific border region context. By shedding light on the factor of employment insecurity that drives individuals towards informal economic activities, this research provides valuable insights for policymakers seeking to promote more inclusive and sustainable development in border regions.

LITERATURE REVIEW

Economic activities that operate outside the framework of formal institutions constitute a significant portion of many economies, often referred to as the informal economy (Hart, 1985; ILO, 2025). This sector often serves as a critical source of income, especially in developing countries. However, it is frequently characterized by challenges such as inadequate earnings and precarious working conditions (ILO, 2025).

The informal economy is a global phenomenon. According to estimates by the International Labour Organization (ILO), approximately 2 billion workers, constituting over 60 percent of the global adult labour force, are employed in the informal sector (IMF, 2021). There is considerable regional variation in the size of the informal economy, with Latin America and sub-Saharan Africa having the highest levels while Europe and East Asia have the lowest (IMF, 2021).

Studies have established connections between participation in the informal economy and issues like poverty, inequality, and employment insecurity (Rosser et al., 2000; Sharma & Adhikari, 2020; Tokman, 2007). The informal economy is a major source of livelihood for the marginalized and poor, and income from this sector has a significant impact on household livelihoods (Sharma & Adhikari, 2020). Despite the benefits of the informal economy in reducing poverty, workers in the informal economy are highly vulnerable to a lack of social protection, the absence of contracts, and other issues related to employment insecurity, as well as increased income inequality (Rosser et al., 2000; Tokman, 2007).

The factors motivating informal trade are generally discussed in two categories: push (i.e., "force") and pull (i.e., "opportunity") factors. Push factors compel individuals into informal trade due to unfavourable circumstances, while pull factors represent "opportunities" that attract individuals to engage in informal trade (Kahiya & Kadirov, 2020). Employment insecurity can serve as a push factor driving individuals to engage in informal trade.

Studies found that workers in the informal sector are often more vulnerable to job loss and income insecurity than those in the formal sector (ILO, 2018; Linh, 2024). This can

be attributed to a variety of factors, such as lack of job security and precarious working conditions (Hakansta et al., 2024; Jarosch, 2023). As a result, many people turn to informal trade as a means of supplementing their income or making a living. Studies have shown that informal trade can be a coping mechanism for poverty and inequality (Chadambuka, 2021; Leonard, 2000; Sharma & Adhikari, 2020). In many developing countries, informal trade is an essential way for people to earn a living or to cope with income insecurity (Rosser et al., 2000; Sikder & Sarkar, 2005). This is because they are often excluded from the formal economy or subjected to the intense pressure of employment insecurity, thus motivating them to engage in the informal economy.

The characteristics and trends of ICBT along the China–Kazakhstan border predominantly emerge from economic necessity and employment insecurity faced by local populations. The persistent youth unemployment crisis in China, driven by sluggish economic recovery, structural job mismatches, and intensified competition, has left many young workers struggling to secure stable employment (Yang, 2024). Similarly, in Kazakhstan, young people under 35 constitute about 40% of the workforce, yet many face barriers to employment, including skill mismatches and high rates of informal work (Alshanskaya, 2024). Nearly one-third of Kazakhstan's working population is engaged in informal employment, often without formal contracts, social guarantees, labour protections, or pensions (Vagit, 2025). ICBT in the China–Kazakhstan border region includes a range of activities, from small-scale smuggling to cross-border market exchanges, driven by limited access to formal employment opportunities (Hung, 2019; Lillis, 2023). In contexts where regulatory enforcement is weak, such as in border areas, individuals often engage in informal trade as a survival strategy (Anderson & de la Rosa, 1991; Kim, 2014). Informal networks flourish, exploiting the porous nature of the border, providing both goods and a livelihood. The precariousness of employment in the formal sectors exacerbates this trend, fostering a reliance on alternative economic practices that circumvent state regulations (IOM, 2023). Consequently, these informal trade dynamics not only reflect local economic adaptations but also illustrate the broader socio-political implications of employment insecurity in shaping cross-border interactions and livelihoods along the China–Kazakhstan border.

While existing literature has explored various aspects of ICBT and its socio-economic implications, there remains a gap in understanding the specific role of employment insecurity in driving individuals towards ICBT, particularly within border regions like the one shared by China and Kazakhstan. This paper aims to address this gap by examining the experiences and motivations of individuals engaged in informal trade at this specific border.

RESEARCH METHODOLOGY

This study employed a survey-based methodology to collect primary data from individuals engaged in informal cross-border trade at the China–Kazakhstan border. The survey captured comprehensive information on participants' socio-demographic characteristics, employment histories, nature and scope of informal trade activities, motivations for engaging in such trade, and perceptions of employment insecurity. This approach allows for an empirically grounded understanding of how employment

insecurity shapes involvement in informal trade, consistent with the study's exploratory and inductive orientation.

The sampling method involved purposive sampling, where the researcher initially identified a group of individuals known to be cross-border traders, some of whom were likely engaged in informal trade. The survey was then sent to this group to investigate their involvement in informal trade activities. This approach was deemed appropriate given the specific focus on traders at the border, and it allowed for targeted data collection from individuals who were most relevant to the study. This method, however, differs from the two-stage sampling process, including Adaptive Cluster Sampling (ACS), often employed in studies of informal businesses (Aga et al., 2023). ACS involves dividing a geographical area into grid squares and randomly selecting squares for full enumeration of informal businesses, allowing for a geographically representative sample (World Bank, 2023). This approach was not adopted in this study due to resource constraints and the difficulty in defining a clear geographical boundary for informal trade activities, which often occur across dispersed locations along the border.

Data collection was conducted through an online channel, Microsoft Forms, using a structured questionnaire. Based on the respondents' preferred language, the questionnaire was designed to include Chinese and Kazakh languages.

RESULTS AND DISCUSSION

Demographics of Informal Traders

The survey identified 52 participants involved in informal trade at the China–Kazakhstan border from 189 collected surveys. Table 1 presents the demographic characteristics of the participants. The survey revealed a diverse group of individuals participating in ICBT. Most participants were in the 25-35 age range, with a slightly higher proportion being male. A surprisingly high proportion held university degrees. This challenges the common perception of informal traders as primarily low-skilled individuals. It suggests that factors beyond education, such as limited formal employment opportunities or a desire for greater income and flexibility, may be driving this phenomenon.

Table 1. Demographic Characteristics of Participants

Characteristic	Category	Individual	Percentage
Age	18-24	12	23%
	25-35	27	52%
	36-45	7	13%
	46-55	6	12%
	56-65	0	0%
	65+	0	0%
Gender	Male	33	63%
	Female	19	37%
Education level	Primary	0	0%
	Secondary	9	17%
	Vocational & Collage	10	19%
	University	33	64%
Nationality	Kazakh	5	10%
	Chinese	47	90%

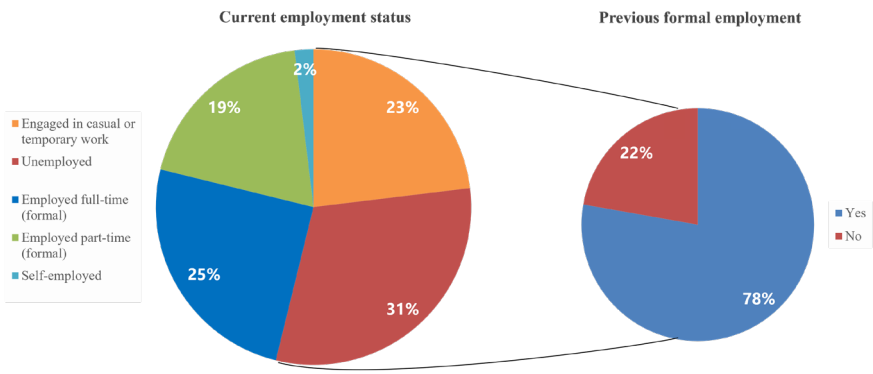
Country of living	Kazakhstan	25	48%
	China	27	52%

Source: author's compilation based on survey data

Employment History and Current Status

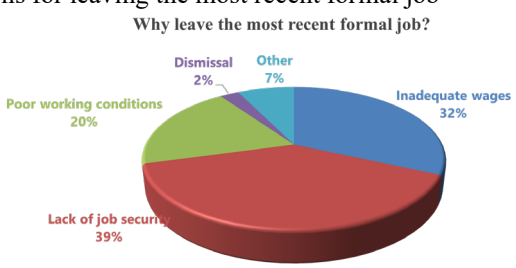
A substantial proportion of participants who were not currently employed reported having previous experience in formal employment (see Figure 1). However, many cited factors such as inadequate wages, lack of job security, and poor working conditions as reasons for leaving their formal jobs (see Figure 2). At the time of the survey, more than half of the participants were either unemployed or engaged in precarious employment arrangements, such as temporary or seasonal work. This highlights the role of employment insecurity as a push factor towards informal trade.

Figure 1. Current employment status and history



Source: authors' compilation based on survey data

Figure 2. Reasons for leaving the most recent formal job

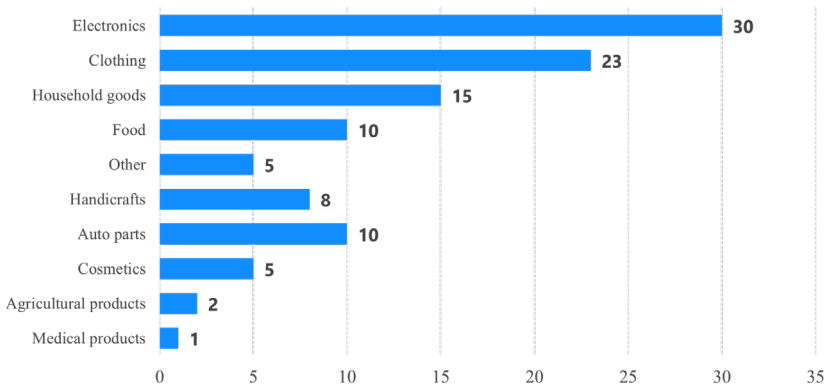


Source: authors' compilation based on survey data

Informal Trade Activities

Participants engaged in various informal trade activities, primarily involving the cross-border exchange of goods. Figure 3 provides a summary of the informal trade activities reported by the participants. The range of goods traded by participants mirrored formal trade patterns between China and Kazakhstan (OEC, 2023), indicating that ICBT is not limited to a narrow range of products. This diversification reflects a complex trade relationship between the two countries, with informal traders capitalizing on opportunities in various sectors.

Figure 3. Types of goods traded

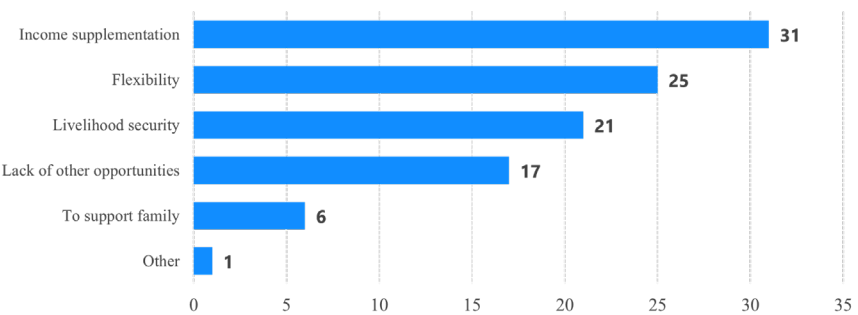


Source: authors' compilation based on survey data

Motivations for Engaging in Informal Trade

The economic motivations for engaging in informal trade primarily include income supplementation and livelihood security. A considerable number of participants engage in informal trade to supplement their income from other sources or to navigate periods of unemployment or underemployment. Additionally, informal trade serves as a safety net, enabling individuals to support themselves and their families, particularly in contexts of economic uncertainty and limited access to formal employment opportunities. Beyond economic factors, non-economic motivations also play a significant role. The flexibility and autonomy associated with informal trade appeal to many participants, as it allows them to determine their own working hours and operate their businesses independently.

Figure 4. Main reasons for engaging in informal trade



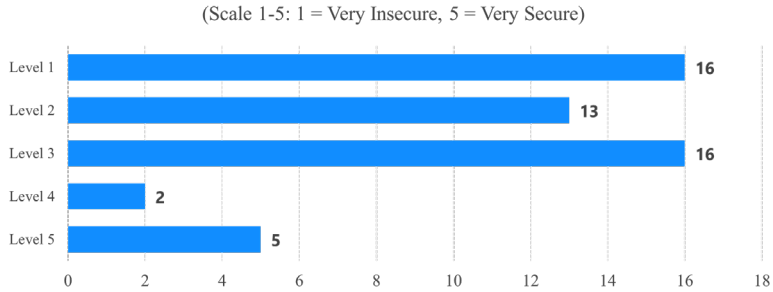
Source: authors' compilation based on survey data

Perceptions of Employment Insecurity

The survey revealed that participants were highly concerned about job security (see Figure 5). Many expressed concerns about losing their jobs or not being able to find stable employment (see Figure 6). Access to social security benefits was limited, with many participants lacking social security benefits, such as coverage for unemployment, healthcare, or retirement. Experiences of precarious employment conditions, such as

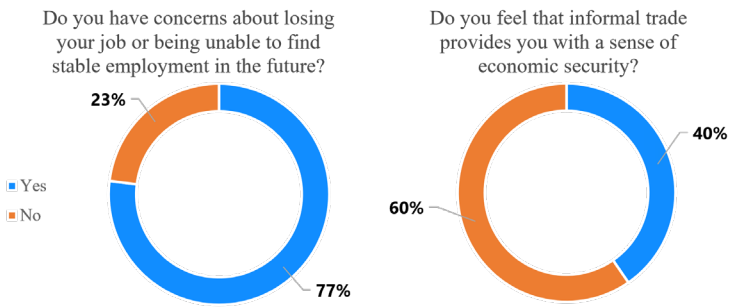
lacking contracts and related exploitative practices, were also common (see Figure 7). This leads to significant concerns about the economic security of participants

Figure 5. Overall employment security feelings



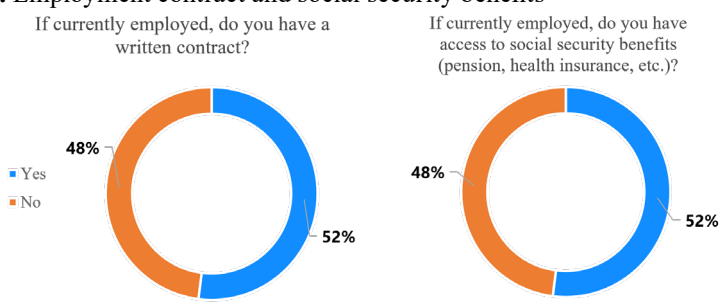
Source: authors' compilation based on survey data

Figure 6. Perceptions of employment insecurity



Source: authors' compilation based on survey data

Figure 7. Employment contract and social security benefits



Source: authors' compilation based on survey data

Employment Insecurity as a Driver of Informal Trade

The findings from the survey provide valuable evidence that employment insecurity is a driver of informal trade at the China–Kazakhstan border. Individuals facing precarious employment conditions, limited social security, and concerns about employment security often turn to informal trade as a means of generating income and ensuring their livelihoods. This aligns with previous research highlighting the link between informality and employment insecurity (Antonopoulos & Mitra, 2009; Horn,

2011; OECD/ILO, 2019). The anxieties and uncertainties associated with precarious employment push individuals to seek alternative avenues for economic survival, and informal trade, with its low barriers to entry and potential for immediate income generation, presents itself as a viable option.

The findings from this survey have important implications for labour market policies and cross-border trade regulations. Given the significant role of informal trade in providing employment and income security, policymakers should explore ways to integrate informal traders into formal economic structures without undermining their livelihoods. This could include strengthening labour market regulations, expanding access to microfinance and simplified tax regimes, and implementing targeted social protection measures to support informal workers and facilitate their transition to the formal economy. Furthermore, addressing employment insecurity requires a comprehensive approach that includes improving formal labour conditions, ensuring fair wages, and expanding job opportunities in both Kazakhstan and China. Enhanced cross-border trade policies that acknowledge and support informal trade activities could contribute to economic stability and foster regional economic cooperation. In conclusion, informal trade at the China-Kazakhstan border serves as both a livelihood strategy and a response to labour market insecurities. While it provides crucial economic opportunities, the lack of job security and social protections remains a pressing concern. Addressing these challenges requires a nuanced approach that balances regulation with support mechanisms to enhance the economic well-being of informal traders.

CONCLUSIONS AND LIMITATIONS

This study offers valuable insights into the relationship between employment insecurity and informal trade at the China–Kazakhstan border. The findings underscore the role of employment insecurity as a driver of informal trade, with individuals facing precarious employment conditions often turning to this type of economic activity as a means of survival. The study also emphasizes the importance of considering the broader economic and social context, including factors such as poverty, inequality, and migration, as well as regional policies and trade corridor developments.

This study has some limitations. The findings are limited by a modest sample size, which may underrepresent informal border traders. Reliance on self-reported data may introduce bias, and convenience sampling restricts generalizability. Future research should employ larger, representative samples and mixed-methods approaches to explore cross-border networks, policy impacts, and formalization pathways more comprehensively.

The findings of this study carry significant implications for policy considerations. To mitigate the drivers of informality, measures must be taken to address employment insecurity. Such measures may include the promotion of job creation, the improvement of working conditions, and the expansion of social security coverage. To this end, it is also imperative to foster economic development and reduce inequality in border regions. Specific policy recommendations include the following:

Analytics in Kazakhstan acts not only as a producer of interpretations, but also as a value system in the process of evolution, reflecting not only institutional realities, but also cultural matrices, intellectual trajectories, and public expectations. Spiral dynamics in this context becomes not just an analytical tool, but also a way of mapping the future in the logic of the transition from normative to integral forms of political consciousness.

- Strengthening labour market regulations: Implementing and enforcing labour laws that protect workers' rights, ensure fair wages, and provide access to social security benefits can improve the quality of formal employment and reduce the attractiveness of informal alternatives.
- Expanding social protection programs: Providing unemployment insurance, healthcare coverage, and retirement benefits can create a safety net for individuals facing economic hardship and reduce their vulnerability to precarious employment and informal work.
- Promoting entrepreneurship and formalization: Supporting small businesses and providing incentives for informal businesses to register and operate within the formal economy can contribute to economic growth and reduce informality.

This study contributes to the broader fields of informal economy research, labour market studies, and international trade by providing empirical evidence on the link between employment insecurity and informal trade in a specific border region context. It highlights the complex interplay of individual motivations, economic conditions, and policy influences that shape informal trade dynamics. The findings underscore the necessity for integrated policy approaches that address both the supply-side factors (employment insecurity) and demand-side factors (market access and opportunities) that contribute to the persistence of informal trade. By examining the experiences and motivations of individuals involved in informal trade at the China–Kazakhstan border, this research offers a nuanced perspective on the challenges and opportunities associated with informality in a dynamic and evolving economic environment. This research contributes to a more profound understanding of the factors that motivate individuals to engage in informal economic activities and the potential policy interventions that can foster more inclusive and sustainable development in border regions.

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CONFLICTS OF INTEREST

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

AUTHORS' CONTRIBUTIONS

The author conducted all aspects of the research and manuscript preparation, including conceptualization, methodology, data collection, formal analysis, validation, writing (original draft and review & editing), and visualization.

REFERENCES:

1. Aga, G., Francis, D. C., Jolevski, F., Rodriguez Meza, J., & Wimpey, J. S. (2023). An Application of Adaptive Cluster Sampling to Surveying Informal Businesses. Journal of Survey Statistics and Methodology, 11(5), 1246-1266. https://doi.org/10.1093/jssam/smac037
2. Anderson, J., & de la Rosa, M. (1991). Economic survival strategies of poor families on the Mexican Border. Journal of Borderlands Studies, 6(1), 51-68. https://doi.org/10.1080/08865655.1991.9695404
3. Alshanskaya, A. (2024). Kazakhstan's Youth: Navigating Future Employment Challenges. The Astana Times. Retrieved March 2, 2025, from https://astanatimes.com/2024/08/kazakhstans-youth-navigating-future-employment-challenges/
4. Antonopoulos, G. A., & Mitra, J. (2009). The Hidden Enterprise of Bootlegging Cigarettes Out of Greece: Two Schemes of Illegal Entrepreneurship. Journal of Small Business & Entrepreneurship, 22(1), 1-8. https://doi.org/10.1080/08276331.2009.10593438
5. Chadambuka, R. A. (2021). Exploring Informal Cross Border Trading and Poverty Reduction in Harare (Publication Number 31800977) [M.M., University of the Witwatersrand, Johannesburg (South Africa)]. ProQuest Dissertations & Theses Global. South Africa. https://www.proquest.com/dissertations-theses/exploring-informal-cross-border-trading-poverty/docview/3161872441/se-2?accountid=27169
6. Gallie, D., Paugam, S., & Jacobs, S. (2003). Unemployment, poverty and social isolation: Is there a vicious circle of social exclusion? European Societies, 5(1), 1-32. https://doi.org/10.1080/1461669032000057668
7. Godfrey, P. C. (2011). Toward a Theory of the Informal Economy. Academy of Management Annals, 5(1), 231-277. https://doi.org/10.5465/19416520.2011.585818
8. Hakansta, C., Gunn, V., Kreshpaj, B., Matilla-Santander, N., Wegman, D. H., Hogstedt, C., Vignola, E. F., Muntaner, C., Bodin, T., O'Campo, P., & Lewchuk, W. (2024). What is the Role of Minimum Wages in Addressing Precarious Employment in the Informal and Formal Sectors? Findings from a Systematic Review. International Journal of Social Determinants of Health and Health Services, 0(0), 27551938241286463. https://doi.org/10.1177/27551938241286463
9. Hart, K. (1985). The informal economy. Cambridge Anthropology, 10(2), 54-58.
10. Horn, A. (2011). Who's out there? A profile of informal traders in four South African city central business districts. Town and Regional Planning, 59, 1-6.
11. Hung, P. W. (2019). Shuttle trade at China's borders. Iias.asia. https://www.iias.asia/the-newsletter/article/shuttle-trade-chinas-borders
12. ILO. (2018). World Employment Social Outlook. International Labour Organization. Retrieved March 2, 2025, from https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2517&menu=1515
13. ILO. (2023). Women and men in the informal economy: A statistical update. International Labour Organization. Retrieved March 2, 2025, from https://www.ilo.org/publications/women-and-men-informal-economy-statistical-update
14. ILO. (2025). Statistics on the informal economy. Retrieved March 2, 2025, from https://ilostat.ilo.org/topics/informality/
15. IMF. (2021). Five Things to Know about the Informal Economy. Retrieved March 2, 2025, from https://www.imf.org/en/News/Articles/2021/07/28/na-072821-five-things-to-know-about-the-informal-economy
16. IOM. (2023). Baseline assessment and surveys: international migrant workers in Kazakhstan. Retrieved March 2, 2025, from https://dtm.iom.int/sites/g/files/tmzbdl1461/files/reports/KZ_Baseline%20and%20international%20migrant%20workers%20Survey%20R1_04042023%20%283%29.pdf
17. Jarosch, G. (2023). Searching for Job Security and the Consequences of Job Loss. Econometrica, 91(3), 903-942. https://doi.org/10.3982/ECTA14008
18. Kahiya, E., & Kadirov, D. (2020). Informal Cross Border Trade as a Substratum Marketing System: A Review and Conceptual Framework. Journal of Macromarketing, 40(1), 88-109. https://doi.org/10.1177/0276146719897115

19. Kim, S. K. (2014). "I am well-cooked food": survival strategies of North Korean female border-crossers and possibilities for empowerment. Inter-Asia Cultural Studies, 15(4), 553-571. https://doi.org/10.1080/14649373.2014.972663
20. Leonard, M. (2000). Coping strategies in developed and developing societies: the workings of the informal economy. Journal of International Development, 12(8), 1069-1085. https://doi.org/10.1002/jid.696
21. Lillis, J. (2023). Kazakhstan: Smuggling still rife on border with China. Retrieved March 2, 2025, from https://eurasianet.org/kazakhstan-smuggling-still-rife-on-border-with-china
22. Linh, B. K. (2024). Vulnerability of the informal sector in an emerging economy: a multi-level analysis. International Review of Applied Economics, 1-26. https://doi.org/10.1080/02692171.2024.2404876
23. OEC. (2023). China and Kazakhstan Trade. Retrieved March 2, 2025, from https://oec.world/en/profile/bilateral-country/chn/partner/kaz
24. OECD/ILO. (2019). Tackling Vulnerability in the Informal Economy. OECD Publishing. https://doi.org/10.1787/939b7bcd-en
25. Omarova, Z. (2025). Bilateral Trade Turnover Between Kazakhstan and China Reaches $43.8 Billion. The Astana Times. Retrieved March 2, 2025, from https://astanatimes.com/2025/01/bilateral-trade-turnover-between-kazakhstan-and-china-reaches-43-8-billion/
26. Polese, A. (2023). What is informality? (Mapping) "the art of bypassing the state" in Eurasian spaces - and beyond. Eurasian Geography and Economics, 64(3), 322-364. https://doi.org/10.1080/15387216.2021.1992791
27. Polese, A., Moisé, G. M., Tokyzhanova, T., Aguzzi, T., Kerikmäe, T., Sagynbaeva, A., Sauka, A., & Seliverstova, O. (2023). Informality versus shadow economy: reflecting on the first results of a manager's survey in Kyrgyzstan. Central Asian Survey, 42(1), 149-170. https://doi.org/10.1080/02634937.2022.2093328
28. Rosser, J. B., Rosser, M. V., & Ahmed, E. (2000). Income Inequality and the Informal Economy in Transition Economies. Journal of Comparative Economics, 28(1), 156-171. https://doi.org/10.1006/jcec.2000.1645
29. Senoret, A., Ramirez, M. I., & Rehner, J. (2022). Employment and sustainability: The relation between precarious work and spatial inequality in the neoliberal city. World Development, 153, 105840. https://doi.org/10.1016/j.worlddev.2022.105840
30. Sharma, B. P., & Adhikari, D. B. (2020). Informal Economy and Poverty Dynamics: A Review. Quest Journal of Management and Social Sciences, 2(1), 130-140. https://doi.org/10.3126/qjmss.v2i1.29028
31. Sikder, M. J. U., & Sarkar, B. K. (2005). Livelihoods and informal trade at the Bangladesh border. Inter-Asia Cultural Studies, 6(3), 432-445. https://doi.org/10.1080/14649370500170134
32. Tanaka, K., & Greaney, T. M. (2024). Trade and employment in the formal and informal sectors: A natural experiment from Cambodia. Journal of Asian Economics, 90, 101676. https://doi.org/10.1016/j.asieco.2023.101676
33. Tokman, V. E. (2007). The informal economy, insecurity and social cohesion in Latin America. International Labour Review, 146(1-2), 81-107. https://doi.org/10.1111/j.1564-913X.2007.00006.x
34. Utzet, M., Botias, F., Silva-Penaherrera, M., Tobías, A., & Benavides, F. G. (2021). Informal employment and poor self-perceived health in Latin America and the Caribbean: a gender-based comparison between countries and welfare states in a pooled analysis of 176,786 workers. Globalization and Health, 17(1), 140. https://doi.org/10.1186/s12992-021-00792-3
35. Vagit, I. (2025). Every Third Kazakhstani Works Informally or Hides Their Income. The Times Of Central Asia. Retrieved March 2, 2025, from https://timesca.com/every-third-kazakhstani-works-informally-or-hides-their-income/
36. World Bank. (2023). Methodology of the Informal Sector Enterprise Survey. World Bank. https://www.enterprisesurveys.org/en/informal-businesses/methodology
37. Yang, W. (2024). Unemployment continues to plague China's youth in 2024. Voice of America. Retrieved March 2, 2025, from https://www.voanews.com/a/unemployment-continues-to-plague-china-s-youth-in-2024-/7892948.html

GENDER EQUALITY POLICIES IN THE EUROPEAN UNION AND KAZAKHSTAN: A COMPARATIVE STUDY

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ABSTRACT. *Kazakhstan has made significant progress in institutionalizing gender equality. However, there are still existing challenges, including the gender pay gap, women's underrepresentation in leadership positions, and gender-based violence. This study aims to compare selected gender equality policy documents of the European Union and Kazakhstan to identify patterns, similarities, and differences. The study applied thematic analysis across three predefined categories: terminology and definitions, quotas and support measures, and conflict resolution mechanisms in the labor sector. The findings showed that the EU policy has comprehensive gender-related definitions, a legally binding framework for gender equality advancement, and a high level of interdepartmental cooperation. At the same time, the analysis of Kazakhstani documents revealed significant gaps in terminology, the absence of gender-specific quotas for women, and the conflation of gender equality policy and family and demographic issues. Based on the study's findings, key recommendations for improving gender equality policy in Kazakhstan were developed, including the introduction of precise and legally binding definitions related to gender equality, the establishment of a separate institution responsible for gender equality, and the implementation of quotas for women to strengthen their representation in leadership positions. The results contribute to the development of comparative research in Central Asia and provide practical recommendations for policymakers.*

KEYWORDS: *gender equality policy, European Union, Kazakhstan, comparative analysis, policy documents, document analysis.*

INTRODUCTION

Gender equality policy has become a fundamental field in international and national policymaking processes. In its effort to institutionalize gender equality, the Kazakhstani government has developed several regulatory documents, including the Law "On State Guarantees of Equal Rights and Equal Opportunities for Men and Women" (2009), the Law "On Prevention of Domestic Violence" (2009), and the Concept of Family and Gender Policy until 2030. However, according to the 2025 World Economic Forum (WEF, 2025), Kazakhstan has dropped 16 positions in the Gender Gap Index, highlighting persistent challenges, including the gender pay gap, women's political empowerment, and gender-based violence. Despite significant improvements, Kazakhstan is still on the way to achieving international standards of gender equality in society.

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One of the global leaders in promoting gender equality in society is the European Union. The policymaking achievements made by the region over several decades have had a positive effect on member states (European Commission, 2020). Recent data shows that four of the top ten countries in the Global Gender Gap index are EU member states (WEF, 2025). The developed policy instruments and institutional mechanisms may serve as a model for other countries around the world seeking to eliminate gender inequality.

Gender equality policy research is a well-established and relevant area in modern policy studies (Lombardo, Meier, & Verloo, 2016). However, there is a significant gap in the field of comparative gender equality policy research, especially those focusing on a comparison of EU and Central Asian countries, such as Kazakhstan. Comparing policy documents of both regions will help identify challenges and obstacles hindering the further development of gender equality in Kazakhstan. Thus, the purpose of this research paper is to compare selected gender equality policy documents in Kazakhstan and the European Union. To guide this study, the following research questions were formulated:

1. What similarities and differences exist in the Kazakhstani and EU gender equality policies?
2. How are gender equality-related concepts defined in the selected legal documents?
3. What gender quotas are provided for women, and how are they justified?
4. What mechanisms for resolving conflict situations in the workplace exist?

This article broadens the perspective on the problem of gender equality in Kazakhstan and provides insights into the field of gender equality policy research. The results of this study expand the scientific body in the field of comparative studies in gender equality policies and may offer practical recommendations for policymakers.

LITERATURE REVIEW

Gender equality is one of the key global priorities of the Sustainable Development Agenda (UN General Assembly, 2015). UN Women (n.d.) defines gender equality as "equal rights and opportunities for women and men, and girls and boys". According to Sustainable Development Goal 5, gender equality is achieved through the elimination of all types of discrimination and violence against women, women's political empowerment, protection of reproductive health and rights, provision of equal rights to economic resources, as well as the recognition of women's domestic and unpaid work at the state level (UN General Assembly, 2015). Achieving gender equality is not only a fundamental human right but also a crucial driver of economic growth and well-being (Woetzel et al., 2015). Therefore, the issue of gender equality is now embedded in the policymaking process and the development of gender-sensitive public policies (Hervías Parejo & Radulović, 2023).

Gender Equality Policy in the European Union

Gender equality policy in Europe dates back to the Treaty of Rome in 1957, which established the right to equal pay for men and women (von Wahl, 2021). In the early years of policymaking in the EU, hard regulations – treaties and directives – were

used as policy instruments (Ahrens & van der Vleuten, 2019). Hard laws prevailed in the 1990s and were legally binding for all EU member states. Up until the 2000s, the gender equality regime in Europe had a positive effect on the social and economic development of the region (Walby, 2004).

One of the important international documents regulating EU policy is the gender mainstreaming strategy adopted at the UN Beijing Conference in 1995 (Milner, 2021). The concept of gender mainstreaming implied the systematic integration of gender equality principles into all other state policies (von Wahl, 2021). However, as noted in previous studies, gender mainstreaming remained relatively symbolic, especially when intersecting with other policy areas such as climate or trade (Allwood, 2019). As some authors point out, in recent years, gender mainstreaming has been more bureaucratic and procedural, rather than transformative as it was in the beginning (Ahrens & van der Vleuten, 2019; Allwood, 2013).

The key political actors in the field of gender equality policy in the European arena are the European Commission, the European Parliament, the European Court of Justice, and the Council of the EU (Milner, 2021). In addition to institutional organizations, there are many NGOs and other non-institutional organizations in Europe that have a significant impact on shaping EU policy. For example, the so-called "velvet triangle", consisting of the European Commission, the European Parliament, and the European Women's Lobby. A major role in this cooperation was played by the FEMM Committee, a civil society organization (Jacquot, 2017).

Over the past decades, the EU has gone through many challenges, such as the Great Recession of 2008-2013, COVID-19, and other political events that have significantly influenced the line of development of gender equality policy. Due to the economic downturn and political fluctuations, including the rise of the right wing, populism, migration, budget cuts, and austerity, gender equality policy has experienced backsliding (Jacquot, 2017; von Wahl, 2021). Although gender rhetoric is present in many European policies, it remains more symbolic and lacks substantive coherence (Allwood, 2013).

In this regard, over the years, the EU has moved from hard law to soft policy instruments: various recommendations and agreements, the implementation of which is horizontal and advisory in nature (Ahrens & van der Vleuten, 2019). For example, the so-called OMC (open method of cooperation) tool was created, which aimed to evaluate policies by government ministers (Milner, 2021). As Ahrens & van der Vleuten (2019) argue, soft mechanisms were initially created for cooperation between political actors as a compromise, but ultimately resulted in gender equality policies losing their potential and shifting focus towards other areas.

According to the European Commission, Directorate-General for Justice and Consumers (2024), today the EU has set a comprehensive agenda to address gender equality issues in the labor market, political representation, violence against women, and gender mainstreaming. Contemporary gender equality policy in the European Union is shaped by binding regulatory documents such as the Lisbon Treaty, Gender Equality Directive 2006/54/EC, Equal Treatment Directive 2004/113/EC, etc., and soft strategic documents such as the Strategy for Gender Equality 2020–2025, Gender Action Plan III, and others.

Gender Equality Policy in Kazakhstan

Gender equality policy development in Kazakhstan differs from that in Europe due to the complex interplay of the Soviet legacy and Western democracy (Kuzhabekova & Almukhambetova, 2017). The influence of Soviet policies was reflected in the context of widespread access to education and literacy among women (Durrani, Kataeva, & Kuzhabekova, 2025), which considerably influenced the post-independence context. Although the USSR policy is controversial in terms of emancipation, women significantly benefited from it in terms of education and employment (Khairullayeva et al., 2022).

In line with international standards of human development and modernization of the country, independent Kazakhstan adopted international and national legal frameworks regulating issues of gender equality and women's rights (Kazakhstan Institute of Public Development, 2023). Gender equality was essential to increase competitiveness, raise the socio-economic level, and the image of the country on the world stage (Shakirova, 2015a). Key legal institutions and documents were created following international conventions such as the Beijing Declaration (1995), the Convention on the Elimination of All Forms of Discrimination against Women (1999), and the Convention on the Political Rights of Women (1952) (Kazakhstan Institute of Public Development, 2023). Additionally, the government created regulatory documents of state policy, including the Law "On State Guarantees of Equal Rights and Equal Opportunities of Men and Women" (2009), the Gender Equality Strategy for 2006–2016, and the Concept of Family and Gender Policies until 2030. Transnational organizations (UNDP, OECD, etc.) played a major role in the development and implementation of gender policies, funding a wide range of projects on gender mainstreaming and women's empowerment (Shakirova, 2015a).

The National Commission on Gender, Family and Demographic Policy has been appointed the main institution responsible for women's rights in Kazakhstan. It includes representatives of science, culture, business, and civil society who understand the socio-economic situation of women in the country (G. Abdykulova & G. Musabalina, 2024). This government body is responsible for the development, monitoring, and implementation of the national gender equality policy (OECD, 2017). However, as the OECD highlighted, the commission lacks further institutionalization and reliance not only on individuals within the commission but also on common sustainable goals for the country's gender policy agenda.

Initially, women's NGOs played a significant role in the trajectory of gender policy development in the country. In the 1990s, their number increased sharply amidst the growing women's movement and active grassroots level (Shakirova, 2015b). NGOs' line of work included women's rights, their promotion in entrepreneurship, provision of psychological support, and many other areas (Abdykulova & G. Musabalina, 2024). However, over time, some NGOs faced difficulties: funding problems, public wariness of feminist organizations, control of NGOs financed by foreign funds, and a lack of grassroots-level support (Shakirova, 2015a).

One of the comprehensive measures of gender policymaking in Kazakhstan was the Gender Equality Strategy for 2006-2016. This policy had a considerable impact on women in education, business, healthcare, and their participation in the labor force

(Sarsembayeva, 2017). Notably, women's NGOs participated in the development of the strategy (OECD, 2017). However, problems connected to policy expertise at the regional level were identified (ADB, 2018). As noted in the report, the document lacked clear implementation and budget planning, as well as monitoring; gender equality issues were closely linked to family and demographic policies (ADB, 2018). OECD (2017) pointed out challenges with gender mainstreaming implementation: an emphasis was placed mostly on education and the public sector. Additionally, a lack of understanding of the concept was identified at the local authorities' level.

The subsequent legal document was the Concept of Family and Gender Policy 2030. The significance of this policy was its dual approach: the integration of gender issues into all policy areas (Khairullayeva et al., 2022). It also aimed at equal opportunities for men and women, women's representation in politics, gender budgeting, and gender mainstreaming. However, as stated in the ADB (2018) report, this policy also connected the gender issue with family policy, which hinders gender equality from the foreground. In addition, the policy did not provide for monitoring of gender-specific data to track progress (Khairullayeva et al., 2022).

To sum up, gender equality policy in modern Kazakhstan has achieved notable advancements, especially in reaching parity of access to education and literacy between men and women (Khairullayeva et al., 2022). However, challenges in gender policy remain. These include a top-down approach, low support for grassroots activism, and a symbolic attitude to the gender approach (Shakirova, 2015a). The current problems include the underrepresentation of women in politics, a lack of gender-sensitive budgeting (Kazakhstan Institute of Public Development, 2023), the absence of gender-disaggregated data for analysis and coordination (OECD, 2017), as well as the separation of family and gender policies (Lipovka et al., 2023). In addition, there is a need to conduct public educational activities on gender equality, women's rights, and feminism to eliminate gender stereotypes about women in society (Kazakhstan Institute of Public Development, 2023). Moreover, a recent economic study by Olzhebayeva and Kireyeva (2025) highlights the gap in preschool education, which significantly affects women's economic participation in the labor market.

Thus, the literature review has shown that approaches to gender equality policy development in Kazakhstan and the European Union are fundamentally different. While gender policy in the EU is more focused on women's empowerment and their rights, Kazakhstani gender policy is closely linked to family and demographic policy. Although there are ongoing policymaking challenges in Europe today, the EU's political tools and approaches have led to impressive results. Moreover, the literature review identified a research gap in comparative studies focusing on gender equality policy documents in Europe and Kazakhstan. Therefore, this study aims to analyze policy documents of both regions to identify common and different themes and patterns in the policy framework.

METHODOLOGY

This research paper employed document analysis as the main research design. It involves a systematic examination of textual data (Bowen, 2009) and allows for analysis

of policy processes (Karppinen & Moe, 2019). The choice of this method was guided by the purpose and questions of the study. Deductive thematic coding was used to extract data from documents, specifically manual coding (Saldana, 2021). Predefined categories for analysis were determined: terminology and definitions related to gender equality, quotas and other support measures for women and their justification, and conflict resolution in the professional sphere. These categories were developed based on the literature review, as well as on the research questions. To ensure consistency, a codebook for working with research materials was created before the analytical process began (Creswell & Creswell, 2018).

The purposive sampling strategy was chosen with the following inclusion criteria: Kazakhstani and European regulatory documents that are currently in force and contain provisions on gender equality, women's rights, gender quotas, and mechanisms of conflict resolution and protective measures in the professional area. Since political systems and institutional structures might differ when analyzing policy documents (Karppinen & Moe, 2019), it was important to select comparable documents that perform similar functions. The exclusion criteria were legislative documents that are not related to gender equality and do not meet the criteria for analysis. Regulatory documents issued by the European Commission were selected for analysis, namely: Directive 2006/54/EC on equal treatment of men and women in employment, Directive (EU) 2022/2381 on improving gender balance on corporate boards, and EU Gender Equality Strategy 2020–2025. Among Kazakhstani legal documents, the following were chosen: Law of the Republic of Kazakhstan "On State Guarantees of Equal Rights and Equal Opportunities for Men and Women" (2009), Labor Code of the Republic of Kazakhstan (2015) (selected articles), Law "On Elections in the Republic of Kazakhstan" (1995) and Concept of Family and Gender Policy until 2030. All documents were publicly available for downloading through official institutional websites.

The data analysis procedure consisted of several stages. Firstly, a thorough reading of the document texts was performed. Secondly, the relevant segments were coded using a codebook and predefined criteria. Next, all data were entered into a table (Table 1) and sorted by themes and documents. Finally, a comparative analysis of the found material was performed to explore themes, patterns, similarities, and differences.

Table 1. Analytical Table Fragment on the Category "Terminology and Definitions"

Code	Document	Quotation
Discrimination definitions	On State Guarantees of Equal Rights and Equal Opportunities for Men and Women (2009)	"Discrimination on the basis of gender is any restriction or infringement of human rights and freedoms, as well as the humiliation of human dignity on the basis of gender." (author's translation)
	Labor Code of the Republic of Kazakhstan (2015)	"No one may be subject to any discrimination in the exercise of labor rights on the grounds of origin, social, official and property status, gender, race, nationality, language, attitude to religion…" (author's translation)
	Directive 2006/54/EC on equal treatment of men and women in employment	"Direct discrimination: where one person is treated less favorably on grounds of sex than another is, has been or would be treated in a comparable situation"

	Directive 2006/54/EC on equal treatment of men and women in employment	"Indirect discrimination: where an apparently neutral provision, criterion or practice would put persons of one sex at a particular disadvantage compared with persons of the other sex"

Source: Compiled by the author based on the following sources: On State Guarantees of Equal Rights and Equal Opportunities for Men and Women (Republic of Kazakhstan, 2009), Labor Code of the Republic of Kazakhstan (2015), Directive 2006/54/EC of the European Parliament & Council of the European Union (2006).

FINDINGS

This section examines three predefined categories: terminology and definitions, quotas and support measures, and conflict resolution. The section will provide a comparative analysis of the selected documents for each category.

Terminology and Definitions

This subsection focuses on the terms and definitions related to gender equality that were found in the analyzed documents. The data indicates that both Kazakhstani and EU documents contain the concepts of gender equality and discrimination, and emphasize the equal rights and opportunities for men and women. For example, the EU Gender Equality Strategy 2020-2025 (European Commission, 2020; hereafter "Strategy") defines gender equality as a central value of the region, while the Kazakhstani Concept of Family and Gender Policy until 2030 (Government of the Republic of Kazakhstan, 2016; hereafter "Concept") states the aim of achieving equal rights, opportunities, and benefits for men and women. However, as the comparative analysis shows, EU documents often provide a more comprehensive description of the definitions and their classification.

This is illustrated by Directive 2006/54/EC (European Parliament & Council, 2006) on equal rights in employment, which provides a clear distinction between direct and indirect discrimination and its scope: the concepts of harassment and sexual harassment are described in detail, and the boundaries of the term and illegal acts classified as harassment are defined. For example, the document gives the following definitions:

"Harassment": where unwanted conduct related to the sex of a person occurs with the purpose or effect of violating the dignity of a person, and of creating an intimidating, hostile, degrading, humiliating or offensive environment (European Parliament & Council of the European Union, 2006, Art. 2).

"Sexual harassment": where any form of unwanted verbal, non-verbal or physical conduct of a sexual nature occurs, with the purpose or effect of violating the dignity of a person, in particular when creating an intimidating, hostile, degrading, humiliating or offensive environment (European Parliament & Council of the European Union, 2006, Art. 2).

In contrast, in Kazakhstani documents, although the concept of discrimination based on gender is given in the Law on State Guarantees of Equal Rights and Equal Opportunities for Men and Women (2009), no distinction was made between direct and indirect discrimination, as well as the Labor Code of the Republic of Kazakhstan (2015) does not contain a legal definition of harassment and sexual harassment in the workplace. However, it is worth noting that some Kazakhstani media reported in 2024

on the Ministry of Labor's intentions to amend the Labor Code to introduce a definition of sexual harassment in labor relations, along with the procedure for protective measures and sanctions for violations (Zharbulova, 2024).

Unlike Kazakhstani documents, EU texts highlight the principle of equal treatment, which ensures equality of all individuals regardless of personal characteristics. For example, Directive 2006/54/EC repeatedly emphasizes compliance with this principle in labor relations. In Kazakhstani documents, the principle is not given, but the Labor Code (2015) suggests a similar concept of the prohibition of discrimination in labor rights based on gender, race, age, nationality, and other grounds.

It was also found that both Kazakhstani and EU documents emphasize the importance of combating gender stereotypes in developing gender policies. As an illustration, the Concept draws attention to the eradication of gender stereotypes and beliefs and calls for the introduction of gender education, while the Strategy stresses that stereotypes limit aspirations, choice, and freedom, and highlights the importance of gender equality in the media. Similarly, the Law on State Guarantees (2009) prohibits advertising containing offensive materials and gender discrimination: "prohibition of advertising containing text, visual, and audio information that violates generally accepted norms of humanity and morality through the use of offensive words, comparisons, and images in relation to gender" (Republic of Kazakhstan, 2009, Article 12).

A notable difference is the absence of definitions of gender mainstreaming in Kazakhstani documents, except for mentioning gender budgeting as an important area of economic development. For example, it was observed that the pilot project in the Akmola region showed the absence of gender aspects in budget planning, and the aim was set to introduce gender budgeting in the planning of the state budget. However, there were no legally binding measures and procedures for its implementation. In contrast, the EU Strategy emphasizes gender-sensitive budgeting as an element of financing following the framework of gender equality and the effort to combat gender segregation. The Strategy also notes the formation of a special interdepartmental working group named the Task Force, which will coordinate the work of services in different areas.

The EU Strategy highlights women's unpaid childcare and household work and the impact of this factor on women's economic inclusion and independence as one of the structural problems of inequality. To address this issue, the EU uses practical tools such as financing from EU funds to eliminate poverty, as well as investments in care services and specific legal measures such as the Child Guarantee, an EU initiative aimed at supporting children in need. In contrast, the Kazakhstani Concept does not prioritize the problem of the development of early childhood organizations. Nevertheless, the document points out several existing gender inequality problems within the family institution. Particularly, it stresses the need to support single parents and underlines the insufficient involvement of fathers in raising children. Moreover, the section observed that in the Kazakhstani approach, a necessary condition is the establishment of equal relations between women and men not only in the sphere of labor relations, but also in the family.

In addition, Kazakhstani documents underline the importance of promoting cultural values and family traditions in the media and the upbringing of the younger generation, the

formation of their "gender self-awareness" (Government of the Republic of Kazakhstan, 2016, Section 5, author's translation). Moreover, gender equality is often associated with demographic issues, as well as with traditional values and family institutions. For example, the Law on State Guarantees (2009) emphasizes ensuring equality in family relations, while the Concept merges both issues of state gender policy and family demographic policy. Overall, gender policy in Kazakhstan is viewed more as part of the state's social policy, rather than as an independent policy domain as in the EU.

Quotas and Support Measures

Another important aspect of the comparative analysis is existing quotas, their rationale, and other supportive measures for women, with a focus on the area of labor law. Each EU document provides a rationale and preconditions for the quotas or measures adopted. For example, Directive (EU) 2022/2381 of the European Parliament and of the Council (2022) requires that 40% of non-executive directors or 33% of all directors must be from the underrepresented sex at the level of corporate boards. As a rationale, the document cites gender equality as a driver of economic growth, social well-being, and competitiveness, as well as the optimal use of all talents. Moreover, the document emphasizes that, when candidates are equally qualified, preference should be given to representatives of the underrepresented sex. Similarly, the Kazakhstani Concept provides grounds for women's empowerment: "Increasing the share of women in executive, representative and judicial bodies of power… will expand the economic and political rights and opportunities for women." (Government of the Republic of Kazakhstan, 2016, Section 4, author's translation). However, as the analysis demonstrates, there are no existing gender quotas exclusively targeting women; only in 2020 were 30% quotas introduced in party lists of deputies for women, youth, and persons with disabilities (Constitutional Law of the Republic of Kazakhstan, 1995, art. 104). This means this is not a gender-specific quota, which reduces women's political representation and empowerment.

Regarding the gender gap in STEM and digital technologies, both the EU and Kazakhstan have recognized the problem of women's underrepresentation. The Concept underlines the stereotypical choice of traditionally female professions by women, while the Strategy cites the fact that girls outperform boys in digital literacy. In Kazakhstan, the Concept proposes to address this problem by lifting restrictions – including abolishing prohibited professions – as well as generally expanding women's opportunities, emphasizing the concept of the "Listening State" (Government of the Republic of Kazakhstan, 2016, Section 4). In contrast, the EU sets the aim to "improve gender balance in traditionally male or female-dominated professions" (European Commission, 2020, p. 10), and proposes specific action plans such as the Digital Education Action Plan, Skills Agenda, Women in Digital, and Youth Guarantee.

Another significant area concerns women's leadership, which is covered in the documents of both regions. In Kazakhstan, support for women's leadership and entrepreneurship is one of the main topics of discourse on gender equality policy. The examined documents corroborate the studies in the literature review: centers for the development of women's entrepreneurship have been established throughout the country, as well as projects aimed at developing women's leadership (Shakirova, 2015a). Moreover, the Concept specifically pays attention to the development of women's entrepreneurship in rural

areas. In general, the document emphasizes the importance of conducting information and educational activities of the state to overcome gender stereotypes about the role of women in society. In comparison, the EU Strategy focuses more on addressing structural inequalities and relies on legal regulation. Notable examples include the Work-Life Balance Directive, suggesting flexible working conditions; the Women in Digital scoreboard; pay gap reduction measures; and numerous investment projects aimed at developing women's participation in the economy.

Conflict Resolution

This section focuses on the category of conflict resolution in the field of gender equality and in the labor sphere in particular. EU legal documents, as mentioned earlier, provide a clear definition of harassment and sexual harassment. Directive 2006/54/EC on equal opportunities in employment provides clear mechanisms for conflict resolution and a robust structure for protecting complainants' rights. For example, the document highlights the importance of preventing victimization, meaning that the burden of proof is placed not on the complainant, but on the respondent: "...it shall be for the respondent to prove that there has been no breach of the principle of equal treatment." (European Parliament & Council of the European Union, 2006, Art. 19). Moreover, member states are obliged to have a legislative system that protects employees from unfavorable treatment in case of complaints. The document pays special attention to social dialogue and encourages employers to strive for gender equality within their teams, providing them with information on equal treatment. Similarly, the Kazakhstani Law on State Guarantees (2009) emphasizes the importance of collecting gender data on the number of male and female candidates for public service vacancies, although it does not suggest providing candidates with information on the wage differences:

The responsibility for providing the competition commissions with information on the professional training, education, and work experience of persons participating in the competition, as well as data on the ratio of the number of men and women working in the relevant civil service positions, is assigned to the personnel departments of state bodies (Republic of Kazakhstan, 2009, Art. 9, author's translation).

In addition, the Directive 2006/54/EC emphasizes structural legal protection for victims: elimination of discriminatory laws and procedures, pay transparency, monitoring of gender-disaggregated data, and involvement of NGOs in supporting complainants. The strategy strives for a victim-oriented approach to gender-based violence and includes preventive measures against gender discrimination, such as educating boys and girls in the norms of non-violent relationships. Moreover, the Strategy emphasizes the EU's commitment to the Istanbul Convention and provides a comprehensive system of criminal legislation. Special attention is paid to violence in the online field, and such protective mechanisms as the Digital Services Act, a measure that will define online platforms' responsibilities in regulating online content.

In contrast, a notable finding in Kazakhstani documents is that the concept of "zero tolerance" for gender-based violence is repeatedly mentioned. The Concept emphasizes ideological and moral engagement with the population on issues of gender equality and the promotion of moral values through educational programs. As for the legal practice, the Law on State Guarantees (2009) mentions the right of victims to seek judicial remedies

in cases of discrimination. However, there is no separate authorized body to address gender equality issues. As noted in the law, complainants may appeal to the president, the government, and central and local authorities. The Concept sets the goal of creating such a body, and also emphasizes the importance of working towards an interdepartmental response to gender-based violence and the creation of an institutional basis for gender policy. Regarding the complaint mechanism in the labor field, no provisions are made for the burden of proof. The Law on State Guarantees (2009) only prohibits employers from preventing employees from filing complaints on gender equality issues, and the Labor Code only emphasizes the right to appeal to the court and other authorities on discrimination issues. Therefore, at the moment, Kazakhstan lacks a clear legal system for protecting employees on gender equality issues.

DISCUSSION AND CONCLUSIONS

This study aimed to compare Kazakhstani and EU gender equality policy documents through conducting thematic analysis to indicate patterns, similarities, and differences. The findings revealed different approaches to policymaking in the context of the studied regions. The most notable gap was identified regarding terminology, definitions, and their scope. It was observed that EU documents pay special attention to clear distinctions and criteria for definitions. Directive documents contain sections explaining the key concepts of the document and the situations in which these definitions are applied, providing concrete examples. In contrast, Kazakhstani documents approach the issue of defining gender equality terms from another perspective. Notably, the absence of definitions for harassment and sexual harassment was identified, resulting in a lack of legal grounds for filing complaints with the competent authorities. The concept of discrimination is briefly introduced in a few sentences, without distinction between indirect and direct forms, and without specific examples of discrimination cases. Moreover, Kazakhstani documents do not introduce the concept of gender mainstreaming; instead, they emphasize the importance of gender budgeting, yet such recommendations have no legal force. These results are consistent with the findings of the OECD (2017) and ADB (2018) studies, which emphasize the need for the country to implement gender mainstreaming in policy and practice.

Kazakhstani documents place considerable attention on the family institution and its development. Based on the documents, it can be concluded that currently, this is a higher priority for the state than gender equality. Whereas EU gender policy documents briefly mention the concepts of family and upbringing, in Kazakhstani documents, it is an important ideological component of state policy. In addition, Kazakhstani gender equality policy is not considered as a separate state policy, but as part of social and family demographic policy, which, as was found in the literature review, shifts the focus from gender equality and hinders its advancement (ADB, 2018). A recent study on women's political leadership also noted the importance of separating family and gender policies for women's political empowerment (Lipovka et al., 2023).

Regarding quotas and support measures, it was found that there are no separate quotas for women in Kazakhstan apart from a non-exclusive 30% quota applied to party lists. In contrast, the EU places strong emphasis on the gap in leadership positions and has introduced a 40% quota for women on corporate boards. However, Kazakhstani

documents devote significant attention to female leadership and emphasize the importance of eliminating stereotypes about women in society. Yet, unlike EU policy, there is no reference to the importance of developing childcare services, which play a crucial role in women's career advancement and their involvement in the labor market (Olzhebayeva & Kireyeva, 2025). Overall, Kazakhstani support measures are primarily informational and educational rather than legally binding as in the EU.

In the category of conflict resolution, it was revealed that the EU policy pays greater attention to protecting workers in cases of gender discrimination. The documents provide clear definitions of victimization, burden of proof, procedures for responding to complaints, legal protection of complainants, and commitment to international conventions. In contrast, the analysis of Kazakhstani documents showed that the country adheres to a policy of "zero tolerance" for any type of discrimination, but currently lacks a comprehensive system of protection against discrimination of workers in the country. Moreover, there is a significant difference between the gender policies of the EU and Kazakhstan in terms of interdepartmental cooperation of various organizations and bodies, such as the "velvet triangle" or Task Force in the EU. A well-developed legal system for responding to cases of violation of rights in matters of gender equality would better protect complainants and establish a reliable legal basis.

To conclude, the analysis of the gender policies of the EU and Kazakhstan confirms the results of the literature review, namely that the EU political system of gender equality has an institutional basis, is legally binding, and has a strong interdepartmental cooperation. The Kazakhstani system, although it acknowledges many existing problems of inequality, prioritizes cultural, educational, and ideological activities over the creation of a legal system with effective mechanisms for gender equality. Despite the progress achieved in the field of women's entrepreneurship and access to education, Kazakhstan has yet to create an institutional basis for the development of gender equality, move from declarative statements to clear action plans, and ensure the systematic collection of gender-disaggregated data. The existing gaps in the legal system may create obstacles for women professionals in protecting their rights and freedoms.

The results of this study contribute to comparative research on gender equality policy in the context of Central Asia and the European Union. The findings helped to identify several possible areas for institutionalization of Kazakhstani gender equality policy: (1) the implementation of separate quotas for women in leadership positions; (2) the establishment of a specialized body for monitoring data and ensuring protection in matters of gender equality; (3) the introduction of legally binding and in-depth gender equality-related definitions. However, possible limitations of this article may include the limited sample of documents for the analysis, the lack of analysis of the implementation and practical application of policy documents, and considerations of challenges in adopting foreign policy practices. Future research could include the analysis of documents on gender-based violence or family policy, and their implementation processes.

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CONFLICTS OF INTEREST

The author declares no conflict of interest.

AUTHORS' CONTRIBUTIONS

GA: conceptualization, methodology, investigation, resources, writing – original draft, writing – review & editing, and supervision.

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REFERENCES:

1. Abdykulova, G., & Musabalina, G. (2024). Gender approach in the state policy of Kazakhstan: The history of implementation, results, and problems. Vestnik Karagandinskogo Universiteta. Series: History & Philosophy, (3), 26–40. https://doi.org/10.31489/2024hph3/26-40
2. Ahrens, P., & van der Vleuten, A. (2019). EU gender equality policies in times of crisis: Different instruments, different actors, different outcomes. In I. Jungwirth & C. Bauschke-Urban (Eds.), Gender and diversity studies: European perspectives (1st ed., pp. 31–54). Verlag Barbara Budrich. https://doi.org/10.2307/j.ctvqsf36t.5
3. Allwood, G. (2013). Gender mainstreaming and policy coherence for development: Unintended gender consequences and EU policy. Women's Studies International Forum, 39, 42–52. https://doi.org/10.1016/j.wsif.2013.01.008
4. Allwood, G. (2020). Gender equality in European Union development policy in times of crisis. Political Studies Review, 18(3), 329–345. https://doi.org/10.1177/1478929919863224
5. Bowen, G. A. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, 9(2), 27–40. https://doi.org/10.3316/QRJ0902027
6. Creswell, J. W., & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). SAGE Publications.
7. Constitutional Law of the Republic of Kazakhstan No. 2464 of September 28, 1995, On Elections in the Republic of Kazakhstan, art. 104. (1995). Adilet — Legal Information System of Regulatory Legal Acts of the Republic of Kazakhstan. https://adilet.zan.kz/rus/docs/Z950002464_
8. Durrani, N., Kataeva, Z., & Kuzhabekova, A. (2025). Policy context for gender equality reforms in education in Central Asia. In A. Kuzhabekova, N. Durrani, & Z. Kataeva (Eds.), Gender and education in Central Asia (pp. 21–41). Palgrave Macmillan. https://doi.org/10.1007/978-3-031-75301-5_2
9. European Commission, Directorate-General for Justice and Consumers. (2024). 2024 report on gender equality in the EU. Publications Office of the European Union. https://data.europa.eu/doi/10.2838/401813
10. European Commission. (2020, March 5). A Union of equality: Gender equality strategy 2020–2025 (COM/2020/152 final). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52020DC0152
11. European Parliament & Council of the European Union. (2006, July 5). Directive 2006/54/EC of the European Parliament and of the Council of 5 July 2006 on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation (recast). Official Journal of the European Union, L 204, 23–36. https://eur-lex.europa.eu/eli/dir/2006/54/oj/eng
12. European Parliament & Council of the European Union. (2022). Directive (EU) 2022/2381 of the European Parliament and of the Council of 23 November 2022 on improving the gender balance among

directors of listed companies and related measures. Official Journal of the European Union, L 315, 44–55. https://eur-lex.europa.eu/eli/dir/2022/2381/oj

13. Hervías Parejo, V., & Radulović, B. (2023). Public policies on gender equality. In Gender-competent legal education (pp. 405–428). Springer International Publishing. https://doi.org/10.1007/978-3-031-14360-1_12
14. Jacquot, S. (2017). A policy in crisis: The dismantling of the EU gender equality policy. In J. Kantola & E. Lombardo (Eds.), Gender and the economic crisis in Europe: Politics, institutions and intersectionality (pp. 27–48). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-50778-1
15. Karppinen, K., & Moe, H. (2019). Texts as data I: Document analysis. In H. Van den Bulck, M. Puppis, K. Donders, & L. Van Audenhove (Eds.), The Palgrave handbook of methods for media policy research (pp. 179–193). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-16065-4_14
16. Kazakhstanskii institut razvitiia obshchestva pri Ministerstve informatsii i sotsial'nogo razvitiia Respubliki Kazakhstan. (2023). Gendernaia politika v sovremennom kazakhstanskom obshchestve: Analiticheskii otchet po rezul'tatam sotsiologicheskogo issledovaniia [Gender policy in modern Kazakhstani society: Analytical report based on the results of a sociological study]. Astana. https://ru.kipd.kz/article/gendernaya-politika-v-sovremennom-kazakhstanskom-obschestve
17. Khairullayeva, V., Sarybayev, M., Kuzembayeva, A., Yermekbayev, A., & Baikushikova, G. (2022). Gender policy in Kazakhstan. Journal of International Women's Studies, 24(1), Article 25. https://vc.bridgew.edu/jiws/vol24/iss1/25
18. Lipovka, A., Yerimpasheva, A., Rakhimbekova, Z., & Zakirova, A. (2023). Women's participation in political leadership: Standpoints from Central Asia and Central Europe. Journal of Eastern European and Central Asian Research, 10(3), 376–386. https://doi.org/10.15549/jeecar.v10i3.1179
19. Lombardo, E., Meier, P., & Verloo, M. (2016). Policymaking from a gender+ equality perspective. Journal of Women, Politics & Policy, 38(1), 1–19. https://doi.org/10.1080/1554477X.2016.1198206
20. Milner, S. (2021). Social and employment policy. In G. Abels & A. MacRae (Eds.), The Routledge handbook of gender and EU politics (1st ed., pp. 253–264). Routledge. https://doi.org/10.4324/9781351049955
21. Olzhebayeva, O. M., & Kireyeva, A. A. (2025). Assessment of female employment, education, and political representation in Kazakhstan. Eurasian Journal of Gender Studies, 2(1), 19–29. https://doi.org/10.47703/ejgs.v2i1.31
22. Republic of Kazakhstan. (2009, December 8). Law of the Republic of Kazakhstan on state guarantees of equal rights and equal opportunities for men and women (No. 223-IV ZRK). https://online.zakon.kz/Document/?doc_id=30526983
23. Saldaña, J. (2021). The coding manual for qualitative researchers (4th ed.). SAGE Publications Ltd.
24. Sarsembayeva, R. B. (2017). Implementation of strategy for gender equality in the Republic of Kazakhstan for 2006–2016: The sociological analysis. Astana.
25. Shakirova, S. (2015a). Gender equality in Kazakhstan and the role of international actors in its institutionalization. In Y. Gradskova & S. Sanders (Eds.), Institutionalizing gender equality: Historical and global perspectives (p. 214). Lexington Books.
26. Shakirova, S. (2015b). Gender policy and nation building in Kazakhstan: Parallel or conflicting processes? https://www.academia.edu/5439557/
27. UN Women. (n.d.). Concepts and definitions: Equality between women and men (gender equality). Office of the Special Adviser on Gender Issues and Advancement of Women (OSAGI). https://www.un.org/womenwatch/osagi/conceptsandefinitions.htm
28. United Nations General Assembly. (2015, October 21). Transforming our world: The 2030 Agenda for Sustainable Development (A/RES/70/1). https://sdgs.un.org/2030agenda
29. von Wahl, A. (2021). The EU as a gender equality regime: A core research concept. In G. Abels, A. Krizsán, H. MacRae, & A. van der Vleuten (Eds.), The Routledge Handbook of Gender and EU Politics (1st ed., pp. 17–29). Routledge. https://doi.org/10.4324/9781351049955
30. Walby, S. (2004). The European Union and gender equality: Emergent varieties of gender regime. Social Politics: International Studies in Gender, State & Society, 11(1), 4–29. https://doi.org/10.1093/sp/jxh024
31. Woetzel, J., Madgavkar, A., Ellingrud, K., Labaye, E., Devillard, S., Kutcher, E., Manyika, J., Dobbs, R., & Krishnan, M. (2015). The power of parity: How advancing women's equality can add $12 trillion to

global growth. McKinsey & Company. https://www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth

32. World Economic Forum. (2025). Global gender gap report 2025. https://www.weforum.org/publications/global-gender-gap-report-2025/
33. Zharbulova, N. (2024, July 12). Mintruda ne khochet vvodit' ugolovnuyu ili administrativnuyu otvetstvennost' za kharassment na rabote [The Ministry of Labor does not want to introduce criminal or administrative liability for workplace harassment]. Kursiv. https://kz.kursiv.media/2024-07-12/zhrb-kz-hrssm-mintr/

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The Editor-in-Chief of the *Journal of Central Asian Studies* has decided to retract the article *"Regional Diplomacy and Economic Cooperation: Examining Uzbekistan-Taliban Relations in the Post-2021 Afghan Geopolitical Landscape"* published in issue 23(1) 2025. A post-publication review brought attention to concerns involving several cited references. The author was contacted, but the matters could not be resolved. In accordance with the editorial policy and COPE guidelines, the article has been formally retracted by the decision of the Editor-in-Chief.

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