ABSTRACT

of the dissertation summitted for the degree of Doctor of Philosophy (PhD) in the educational program **"8D03105 – International Relations" by KYDYRBEK FARANGIS on the topic «The Global Belt and Road Initiative as one of the factors for solving regional problems in Central Asia»**

The relevance of the research topic is driven by the large-scale transformation of Eurasia, where Central Asia (CA) is moving from isolation to becoming a strategic hub for cross-regional connectivity under the Belt and Road Initiative (BRI). Integrating into this mega-project allows the region's countries to overcome their infrastructure vulnerabilities, turning their lack of sea access into geopolitical agency and modernization.

The scientific relevance lies in the need to look beyond one-sided Western approaches. Combining classic International Relations (IR) theories with Chinese concepts creates a multi-dimensional model to analyze Beijing's policy.

The rapid institutional growth of this partnership between 2020 and 2026 adds further weight to the research. Through the "C5+China" format and the SCO (with summits in Xi'an, Astana, and Tianjin), the relationship has clearly shifted from political declarations to practical tools, such as the SCO Development Bank, artificial intelligence programs, and the Green Silk Road. This consensus is backed by Xi Jinping's vision of a Community with a Shared Future and K.K. Tokayev's focus on a pragmatic transport and energy partnership.

The evolution of Beijing's approach shows that Central Asia's stability has become vital for China's own development. While cooperation in the 1990s was limited to borders and security, the BRI today serves as a flexible tool for inclusive growth, aligning directly with national modernization programs like Kazakhstan's "Nurly Zhol" and Uzbekistan's strategies.

The goal of this study is to analyze political and economic processes to conceptualize and scientifically prove how the Belt and Road Initiative (BRI) helps solve the key structural problems of Central Asia. It also aims to identify the conditions and mechanisms needed to transform the region into a sustainable transit-logistics and manufacturing hub for Eurasia.

To achieve this goal, the author set the following **tasks**:

1. Combine classic schools of International Relations (IR) theory with modern Chinese concepts to create a multi-dimensional analytical framework for studying the BRI.

2. Develop a comprehensive, multi-factor methodology to evaluate the real impact of the Belt and Road Initiative on overcoming regional challenges and promoting modernization.

3. Study the evolution of China's foreign policy toward Central Asia, tracing its path from the pragmatic diplomacy of the Deng Xiaoping era to the region's current status as a key pillar of China's Eurasian policy.

4. Categorize the main structural problems of Central Asian states (such as geographical isolation, energy shortages, and reliance on raw materials) and assess how much they affect regional development.

5. Identify the structural limits to Central Asia's growth and use the author's custom methodology to evaluate the impact of Chinese investment and infrastructure projects on the region's economy.

6. Assess how the Belt and Road Initiative helps reduce the commodity dependence of Central Asian states by analyzing the dynamics of Trade Complementarity Indexes (TCI) and Revealed Comparative Advantages (RCA) within new production chains.

7. Build a forecast for trade cooperation up to 2033, highlighting long-term trends and the potential risks of growing asymmetric dependence.

The hypothesis suggests that the Belt and Road Initiative (BRI) helps transform Central Asia from an isolated, land-locked space into a key land-linked transit and logistics hub for Eurasia. However, fully unlocking this potential depends not only on Chinese investments but also on the region's readiness for structural and institutional adaptation.

Research Methods. The methodological foundation of this dissertation is based on a comprehensive, interdisciplinary approach and economic-mathematical tools.

A custom multi-factor measurement methodology was developed by the author. For the first time, a new system of seven key indicators is introduced: foreign direct investment (FDI) share, debt burden, trade balance, sectoral specialization, institutional alignment, socio-political reaction, and innovation-environmental adaptation. Applying this matrix shifted the discussion about the Belt and Road Initiative (BRI) away from general commentary toward measurable figures that address the region's systemic issues. Additionally, to evaluate the structural transformation of Central Asian economies under the BRI, the study combines two quantitative indicators for the first time: Revealed Comparative Advantage (RCA) and the Trade Complementarity Index (TCI).

The author also designed a forecasting model up to 2033. This model predicts trade complementarity between China and Central Asian countries using additive log-ratio transformation (ALR). The results prove that the economic convergence between China and Central Asia is a stable, long-term trend.

Finally, the study proves that Chinese investments yield different results depending on the country. When strong domestic institutional conditions are present, real economic diversification occurs (as seen in Kazakhstan, Uzbekistan, and Kyrgyzstan). However, without these internal conditions, the economy remains trapped in a resource-dependent, raw-material export model (as seen in Tajikistan and Turkmenistan).

Key Statements to be Defended. The following scientific hypotheses and conclusions form the core of this dissertation and will be presented and discussed during the defense:

1. A comprehensive analysis of Central Asian countries' participation in the Belt and Road Initiative (BRI) requires combining classic Western International

Relations theories (from realism and liberalism to constructivism and regime theory) with Chinese foreign policy concepts (peripheral diplomacy, a community with a shared future, the "March West" strategy, and the new role of a major power). Based on this multi-dimensional approach—complemented by theories of transregionalism and connectivity—the study shows that Central Asian states build pragmatic bilateral relations. They use their participation in the BRI as a tool for sovereign interdependence, turning their transit location into strategic independence.

2. The Chinese initiative should be viewed as an adaptive strategy that adjusts to the political, economic, and geographical realities of each country. To evaluate this process, a matrix of seven key indicators was developed (FDI share, debt burden, trade balance, sectoral specialization, institutional alignment, socio-political reaction, and innovation-environmental adaptation). This tool allows us to measure how Chinese projects alter the economic structure of regional states. Using these indicators, the study proves that the Initiative has an uneven, varied effect on the modernization of Central Asian countries.

3. In China’s modern strategy, Central Asia has completely lost its status as a mere resource periphery. The launch of the BRI should not be viewed simply as an economic project, but as the culmination of China’s policy in the region: evolving from a tool to ensure security—especially in Xinjiang (1990s)—and a source of resources (2000s) into an irreplaceable transit hub. The stages of cooperation show that Central Asia acts less as a passive transit zone and more as a vital component of China's Eurasian strategy.

4. The idea that the BRI automatically solves all problems for Central Asian states is flawed. Large-scale foreign investment in logistics and energy cannot overcome the region's deep-rooted systemic issues (geographical isolation, the resource curse, capital shortages, and the digital divide). The study proves that when national institutions are weak, the influx of Chinese capital does not lead to genuine industrialization. Instead, it transforms historical underdevelopment into new forms of asymmetric dependence: financial (debt), technological, and transit-based. Thus, building physical infrastructure without deep domestic structural reforms will not lift these states out of the global periphery; it will only lock them into serving as a resource and transit link for more powerful economies.

5. The effectiveness of the Belt and Road Initiative should not be judged solely by the volume of capital attracted, the kilometers of roads built, or the growth of connected businesses. Applying the author’s multi-factor matrix proves that Chinese investments fail to solve the systemic problems of Central Asian countries unless national interests are strictly protected (through local workforce training, technology transfer, and debt control). Without these safeguards, such investments create a new form of dependence, preserving underdevelopment and turning weak regional states into raw-material suppliers and mere transit corridors.

Main Results of the Study. *First Result.* The study reinterprets how Central Asian countries participate in the Belt and Road Initiative (BRI) by combining classic Western International Relations theories with Chinese foreign policy concepts. This framework shows that the relations built by these regional states are not just about transit cooperation. Instead, they serve as a tool for sovereign

interdependence, allowing these countries to turn their geographical location into strategic autonomy.

Second Result. The Chinese initiative is conceptualized as an adaptive geo-economic strategy based on a custom seven-factor evaluation matrix. This matrix makes it possible to measure structural changes in regional economies. It shows that the influx of Foreign Direct Investment (FDI) is not a universal good, but rather a complex, uneven process that affects the modernization of individual Central Asian countries differently.

Third Result. The study rethinks Central Asia's geostrategic status in modern Chinese foreign policy. This allows us to view the rollout of the BRI not merely as an economic project, but as the peak of China's evolving approach: moving from seeing the region as a security buffer zone and a resource periphery to establishing it as an irreplaceable transit hub and a foundational piece of Beijing's global Eurasian strategy.

Fourth Result. The research demonstrates the limited modernization potential of external infrastructure projects. It proves that when national institutions are weak and structural reforms are missing, the influx of Chinese capital does not drive re-industrialization. Instead, it acts as a factor that transforms the region's historical underdevelopment into new forms of asymmetric dependence (financial/debt, technological, and transit-based).

Fifth Result. The study transforms how the effectiveness of the Belt and Road Initiative is evaluated by moving away from purely quantitative metrics (like investment volumes or kilometers of infrastructure) in favor of a multi-factor analysis. This analysis proves that regional economies will remain trapped as raw-material suppliers and transit links if projects are implemented without strictly protecting national interests (such as controlling external debt, transferring technology, and training local staff).

Novelty and Significance of the Results. The scientific novelty of this research is defined by the following points:

First, a comprehensive conceptualization of the BRI is proposed as a practical tool for Central Asian (CA) countries to achieve their own goals. Regional states are presented as independent actors who convert their geography and resources into the status of a Eurasian transit hub.

Second, for the first time in domestic scholarship, classic Western International Relations (IR) theories and modern Chinese foreign policy concepts are combined as complementary analytical filters, avoiding one-sided evaluations.

Third, a custom multi-factor methodology has been developed, shifting the study of the BRI from abstract discourse into a concrete, measurable mechanism of cooperation to evaluate the results of each country.

Fourth, a unique system of seven key indicators has been introduced for the first time (BRI share, debt burden, trade balance, sectoral specialization, institutional alignment, socio-political reaction, and innovation-environmental adaptation), making it possible to verify the impact of Chinese projects on overcoming five structural problems in Central Asia.

Alignment with Scientific Development Trends and Government Programs. This study aligns with the development priorities of political science, contributing to the research on transregionalism and connectivity theories through the author’s custom multi-factor measurement methodology. In practical terms, the work directly relates to Kazakhstan's strategic documents (including the "Foreign Policy Concept for 2020–2030" and the "Nurly Zhol" program), supporting the national goal of transforming the country into a key transit hub for Eurasia. The dissertation also correlates with the national development strategies of other Central Asian countries (such as "Uzbekistan – 2030" and the national strategies of Kyrgyzstan and Tajikistan) by offering mechanisms to overcome transport isolation, reduce reliance on raw materials, and facilitate technology transfer.

The Doctoral Candidate's Contribution to Each Publication. Between 2023 and 2026, under the supervision of scientific advisors Professor Fatima Kukeyeva (Al-Farabi Kazakh National University) and Professor Xu Xinpeng (The Hong Kong Polytechnic University), the author of the dissertation, Kydyrbek Farangis, published: One article in a journal indexed in Scopus; Three articles in journals recommended by the Committee for Quality Assurance in the Field of Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan; One scientific monograph and one analytical annual book (see list).

The doctoral candidate's contribution is significant: she independently formulated the research titles, theoretical foundations, and methodology, and personally conducted the data collection, analysis, and writing of the articles. Throughout her work on the dissertation, the candidate demonstrated steady growth in her research skills, analytical capabilities, and expert knowledge, proving her competence as an independent researcher and scholar.