

# EMERGING DYNAMICS OF ASIA AND CENTRAL ASIA: INNOVATION, LOGISTICS, AND REGIONAL STABILITY

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**Abstract.** This academic article delves into the multifaceted aspects of Asia's ascendance as a global economic powerhouse and the pivotal role of Central Asia, with a specific focus on Kazakhstan, in shaping regional logistics and stability. Through an in-depth exploration of economic data, infrastructure development, and geopolitical collaboration, this article analyzes the transformative forces at play in the Eurasian continent.

**Keywords:** *Central Asia, regional stability, infrastructure projects, digitalization*

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## АЗИЯ МЕН ОРТАЛЫҚ АЗИЯНЫҢ ДАМУШЫ ДИНАМИКАСЫ: ИННОВАЦИЯЛАР, ЛОГИСТИКА ЖӘНЕ АЙМАҚТЫҚ ТҰРАҚТЫЛЫҚ

**Еркін Тұқымов**

**Андатпа.** Бұл академиялық мақала Азияның жаһандық экономикалық қуат орталығы ретінде өрлеуінің көп қырлы аспектілерін және аймақтық логистика мен тұрақтылықты қалыптастырудағы Қазақстанға ерекше назар аудара отырып, Орталық Азияның маңызды рөлін зерттеуге арналған. Экономикалық деректерді, инфрақұрылымды дамытуды және геосаяси ынтымақтастықты терең зерттеу арқылы бұл мақала Еуразия континентінде әрекет ететін трансформациялық күштерді талдайды.

**Түйін сөздер:** *Орталық Азия, аймақтық тұрақтылық, инфрақұрылымдық жобалар, цифрландыру.*

# РАЗВИВАЮЩАЯСЯ ДИНАМИКА АЗИИ И ЦЕНТРАЛЬНОЙ АЗИИ: ИННОВАЦИИ, ЛОГИСТИКА И РЕГИОНАЛЬНАЯ СТАБИЛЬНОСТЬ

**Еркин Тукумов**

**Аннотация.** В этой академической статье рассматриваются многогранные аспекты восхождения Азии в качестве глобальной экономической силы, а также ключевая роль Центральной Азии, с особым акцентом на Казахстан, в формировании региональной логистики и стабильности. Посредством углубленного исследования экономических данных, развития инфраструктуры и геополитического сотрудничества в этой статье анализируются преобразующие силы, действующие на Евразийском континенте.

**Ключевые слова:** *Центральная Азия, региональная стабильность, инфраструктурные проекты, цифровизация*

## **Introduction**

Asia's growing prominence in global affairs, marked by its innovation and economic prowess, sets the stage for this examination. With its overwhelming majority in population and a substantial share of the global Gross Domestic Product (GDP), the region stands as the veritable epicenter of contemporary global economic power. This scholarly endeavor is dedicated to the meticulous deconstruction of the principal driving forces behind this ascendancy, with a keen eye on the potential ramifications for regional collaborative efforts and the underpinning stability.

Transforming transit routes into robust logistical and economic arteries is vital for the region. Investments in transport corridors have great impact on the sustainability of regional development in Central Asia which is strategically positioned to play a vital role in Eurasian logistics. Initiatives like the Middle Corridor, supported by the Belt and Road

Initiative, have reduced transit times and increased cargo transport, demonstrating the potential of this region. Notably, in the case of Kazakhstan, this pursuit extends beyond mere fortification of the nation's transit potential; it is, in fact, an ambitious endeavor to catalyze regional development, with the explicit objective of benefiting no less than 30% of the country's populace, including the myriad inhabitants of approximately 200 settlements that lie astride the corridor's path [1].

It should be acknowledged that the conceptualization of sustainable transport extends well beyond the confines of a mere logistical endeavor; it serves as a pivotal catalyst for nurturing a sustainable economy. Together, sustainable transport and trade pave the way for sustainable logistics and economic development by boosting an innovative business environment, ultimately decreasing the dependence of the regional economy on mining and export of commodity goods.

## Methods

Within the context of this comprehensive examination, there is an endeavor to illuminate the multifaceted dynamics that underpin the ascendance of Asia and the central role played by Central Asia in the evolving landscape of the Eurasian continent.

The author's analytical approach is predicated upon the judicious employment of a methodological framework that encompasses the systematic acquisition of data and insights gleaned from a diverse array of sources. These sources provide crucial insights into the domains of Asia's economic expansion, the burgeoning e-commerce sector, and the ever-evolving landscape of industrial robotics utilization. Additionally, qualitative data from speeches and official statements are included to provide a comprehensive understanding of Asia's evolving landscape and the indispensable role of Central Asia plays in global transit system.

## Discussion

The contextual analysis of the Asian economic landscape and the role of Central Asia in it can be divided into three important points.

### I. Asia's Economic Dominance: A Decade of Growth

The past ten years have borne witness to an extraordinary trajectory in Asian economies, characterized by remarkable and sustained growth. A cohort of Asian nations has successfully transitioned into the echelons of medium and high-income countries, a feat emblematic of the enduring processes of industrialization,

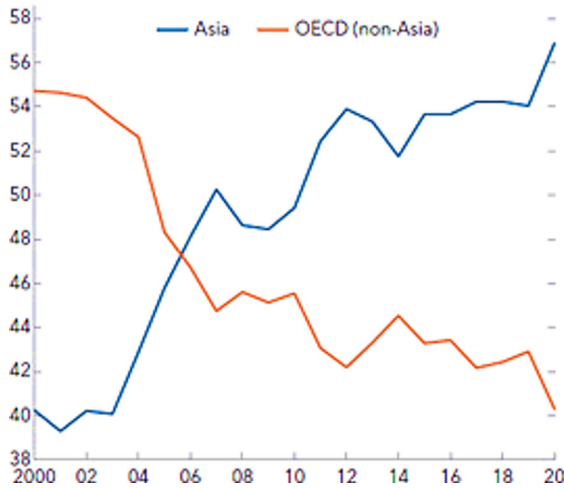
urbanization, a steady ascent in labor productivity, and the robust expansion of the corporate sector.

This narrative finds substantiation in the augmentation of Asia's share of the global Gross Domestic Product (GDP), surging from 38% to an impressive 45%, eclipsing the collective contribution of Europe and North America, which, combined, now account for a comparatively modest 36%. It is indeed noteworthy that prognostications portend Asia's impending dominance, with expectations that it will assert authority over more than half of the world's GDP by 2030 [2].

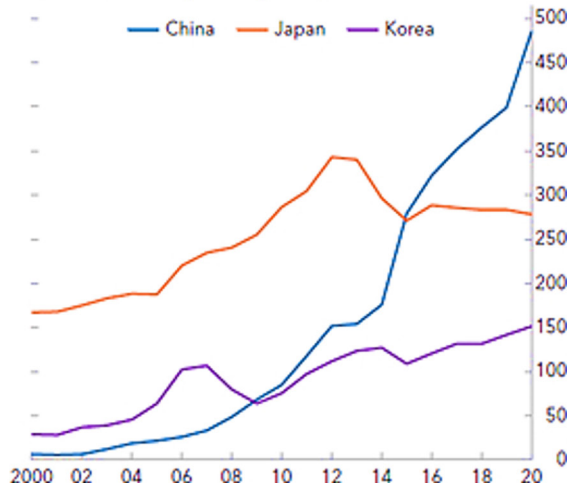
To buttress these prophesied outcomes, a salient observation comes to the fore: Asia stands as the vanguard of innovation, boasting ownership of over half of the world's patents. This preponderance of patents can be primarily attributed to a select triumvirate of countries, with China, Japan, and Korea emerging as patent powerhouses. The precipitous ascent of China in this sphere over the preceding decade is especially noteworthy.

Moreover, the crucible of the COVID-19 pandemic has served to catalyze the evolution of Asia's e-commerce sector, which, by 2022, accounted for a commanding 51% of global online retail sales revenue.

1. Share of World Patents (Percent)



2. Patents in Select Economies in Asia (Thousands of patent grants)



Source: International Monetary Fund [3].

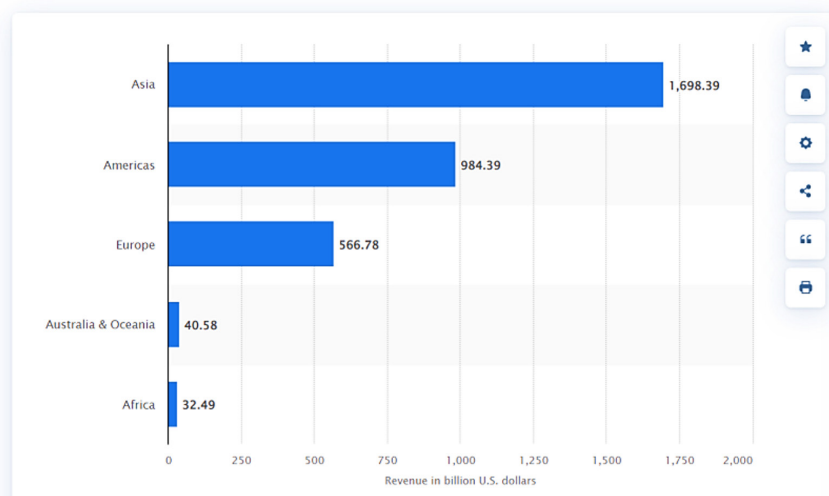
As of the Fortune Global 500 data for 2023, a staggering 201 major corporations have established their headquarters within Asian territories, thereby consolidating the region's position as the global "production center." [4]

In consonance with its economic ascendancy, Asia also stands resolute in its technological supremacy, as

it commands the deployment of approximately two-thirds of the world's industrial robots, notably concentrated in China. This technological hegemony is irrefutable, underscoring Asia's pivotal role in shaping the contemporary global technological landscape.

Scholarly analyses highlight the profound impact of Asia's integration

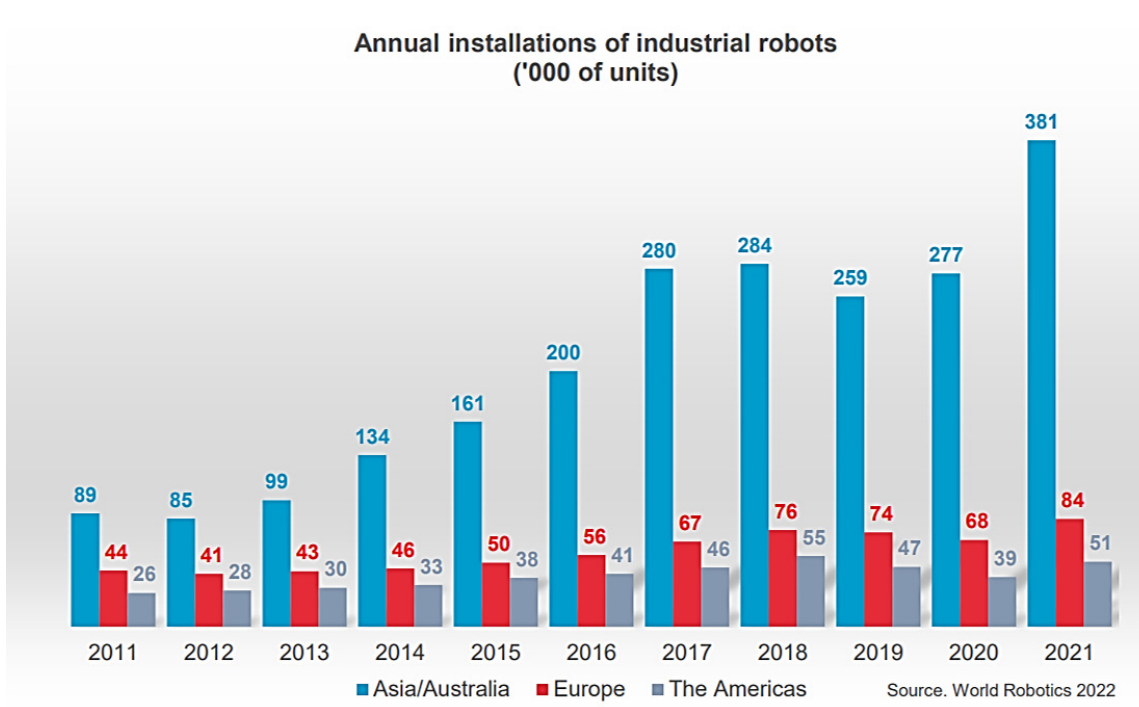
Total retail e-commerce revenue worldwide in 2022, by region (in billion U.S. dollars)



Source: Statista.com [5]

into the world economy and its adoption of free trade policies as critical drivers of its success. In the period spanning 1970 to 2005, Asia's share in global

trade exhibited an exponential twofold increase, in stark contrast to Latin America's declining share. However, it is essential to note that inter-regional



**Source:** World Robotics 2022 – Industrial Robots [6]

disparities are discernible in terms of participation in world trade, with China's rise, despite a belated entry with a lower economic base, placing it at the forefront of global trade dynamics. These economic transformations underscore the intricate interplay of policies and economic integration, elucidating Asia's impressive trajectory on the global stage [7].

## II. Central Asia's Role in Eurasian Logistics

The geopolitical and geographical features of Central Asia's territory have assumed pivotal importance in the context of contemporary international politics. In the aftermath of the dissolution of the former Soviet Union, the countries in this region have transformed into full-fledged subjects of international law,

actively engaging in diverse integration initiatives on the global stage. Central Asia stands out as a crucial link connecting the vast regions of China, India, Russia, and the Middle East, endowed with abundant population, a formidable labor force, expansive terrain, substantial natural resources, intricate transport logistics, and cutting-edge scientific and technological capabilities. When amalgamated with Afghanistan, this expansive region encompasses 4.5 million square kilometers and sustains a populace of over eighty million people.

Since attaining sovereignty, the landlocked Central Asian nations have diligently sought to attract investments by propelling the development of transport corridors. They have proposed innovative adaptations of the historic Silk Road routes, with the aim of re-



establishing the linkage between Europe and Asia. The endeavor to enhance territorial connectivity is a recurrent objective for countries at various stages of economic and social development. The development of well-structured transport corridors is universally acknowledged as a cornerstone for promoting sustainable trade and economic diversification, primarily owing to their capacity to facilitate the mobility of goods and people across regions [8].<sup>8</sup> Consequently, it is unsurprising that transport corridors have evolved into a strategic tool for propelling regional development.

Notably, Central Asia, under the stewardship of Kazakhstan, has assumed the mantle of a formidable driving force within the domain of Eurasian logistics. The Middle Corridor, synergizing with the Belt and Road Initiative, has effectuated significant reductions in transit times and a marked augmentation in cargo transport. Within a remarkably brief timeframe, the transit duration from China to Europe has plummeted by at least threefold, shrinking from an arduous 53 days to a significantly expedited 19-23 days, through collective endeavors. Simultaneously, the transit period through Kazakhstan has been halved, dwindling from 12 to a mere 6 days, with plans to further truncate this figure to 5 days by year's end. Noteworthy is the fact that container shipments burgeoned by a third over the preceding year, tallying up to an impressive 33,000 twenty-foot containers. The volume of cargo traversing the Middle Corridor from January to June 2023 swelled to 1.3 million tons, marking a 1.8-fold increase compared to the first half of the previous year. Anticipations are set on a trajectory where cargo transportation along the Middle Corridor will ascend to an annual

volume of 10 million tons in the medium term [9].

Kazakhstan's corridor development roadmap with Georgia, Turkey, and Azerbaijan, coupled with joint logistics companies, exemplifies a strategic push towards robust logistical and economic arteries. Now the main goal of Kazakhstan authorities is to transform these corridors from mere transit routes into robust logistical and economic arteries. This transformation entails the creation of export-oriented joint ventures that target European and Middle Eastern markets.

The region's conspicuous emphasis on e-commerce, particularly in the domain of agricultural products, infuses a dynamic dimension into the evolving logistics landscape. Recent fluctuations in the global food market underscore the compelling need for collaborative efforts within this sector. Kazakhstan is unwavering in its commitment to both broaden and diversify its agricultural exports to neighboring nations. Aligned with this vision, President K. Tokayev has proffered a proposition to establish a shared food hub with China, centered around the Khorgos International Trade Center [10].

### **III. Kazakhstan-China Partnership: A Pillar of Regional Stability**

The cooperation between Kazakhstan and China, grounded in mutual respect and non-interference principles, assume a paramount role in upholding regional stability. Active engagement within key organizations such as the Shanghai Cooperation Organization (SCO) and the Conference on Interaction and Confidence-Building Measures in Asia (CICA) serves to cultivate trust and delineate a shared regional security

agenda. Joint projects, especially in transport and logistics, contribute to economic interdependence and regional balance [11].

The Belt and Road Initiative (BRI) plays an important role in the development of independent Kazakhstan. It presents an opportune platform that could be strategically reimagined and fortified to serve as an "accelerator" for realizing the Sustainable Development Goals (SDGs), a priority in partner countries. This entails a dual imperative of elucidating and expanding the BRI's articulated approach within China, to render it more explicit and proactive in yielding the desired outcomes characterized by sustainable transformations. In particular, projects and investments endorsed by the BRI should be oriented towards the alleviation of poverty, the promotion of environmental sustainability, and the advancement of inclusive development objectives. It is essential for the BRI to transcend its prevailing perception as a mere facilitator of transportation routes and, instead, metamorphose into an instrument for the construction of comprehensive and multidimensional regional economic corridors [1].

Furthermore, the example set by China's industrial economy stands as a beacon of inspiration for Kazakhstan. The commitment of Kazakhstan to the economic transformation is underscored by the visionary initiatives championed by President K. Tokayev. A fundamental shift is underway, disengaging the nation from its historically prevalent reliance on raw materials and pivoting towards the ascendancy of the processing industry as the linchpin of this transformative trajectory. To fortify this transformation, both domestic and foreign investors will be granted a three-year reprieve

from tax burdens and other obligatory financial contributions, underscoring Kazakhstan's dedication to fostering a burgeoning industrial economy.

Moreover, Kazakhstan's abundant reservoirs of essential raw materials and resources, crucial for the production of electric vehicles, mobile devices, household appliances, drones, robots, and other technological equipment, underpin its aspirations to cultivate a 21st-century industrial economy. The nation evinces a keen interest in collaborative ventures in the realms of information technology and artificial intelligence. This transition towards an industrial economy, augmented by the provision of tax exemptions to domestic and foreign investors, seamlessly aligns with the prevailing global trends witnessed in the domains of electric vehicles, mobile technology, and artificial intelligence. China's spectacular progress in the automotive sector, marked by the burgeoning global popularity of Chinese vehicles, is an illuminating exemplar that reverberates both internationally and within the precincts of our nation.

## Conclusion

The approaches employed by states with vested interests in Central Asia and their involvement in the ongoing integration processes are grounded in a set of guiding principles, with "geopolitical regionalism" emerging as a salient one. This principle affords a perspective that regards the Central Asian region as a unified geopolitical domain characterized by shared political and economic interests. An examination of geopolitical developments within the Central Asian region yields the following suggestions and conclusions:

**First**, it is discernible that Asia is

exerting a transformative influence on the global stage. Collaborative initiatives between Central Asia and China represent strategic investments in regional stability. China, as the anchor economy of Asia, assumes a pivotal role in this transformative process. Expanding the scope of the Belt and Road Initiative within our region serves to cultivate interdependence between Central Asia and China. The ultimate outcomes of China's investments are contingent on public policies and safeguarding mechanisms implemented within the partner countries, as well as the extent of their engagement with the Belt and Road Initiative. This collaboration extends to the alignment of mutual interests and the coalescence of a shared vision for the future across an array of sectors, encompassing but not limited to the realms of economics and infrastructure development.

**Second**, large-scale international cooperation is the best guarantee for sustainable

development of the region. Contributing to the development of transport and logistics routes is the main direction that can give the necessary impetus for our countries' social and economic development. This necessitates the adoption of regional and transboundary approaches that transcend

national borders, particularly in light of the extensive magnitude and multifaceted repercussions of Belt and Road Initiative projects. This dimension assumes paramount significance in contexts where neighboring nations share vital resources such as water and critical habitats for wildlife.

**Third**, under the broad framework of regional connectivity BRI projects should strive to build human capital. This entails a comprehensive spectrum of exchanges across various levels, encompassing academic interactions, people-to-people engagements, and the active involvement of not only scholars but also decision-makers and policymakers. The objective is to promote the sharing of knowledge and the formulation of context-specific solutions that yield mutual benefits. The expansion of interactions between scientific and expert communities is proposed as a means to effectively comprehend and address prevailing challenges. A robust dialogue among experts, particularly among leading analytical institutions, stands as a formidable catalyst for economic progress and the enhancement of interstate relations, contributing to a holistic comprehension of the ever-evolving regional dynamics.

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