

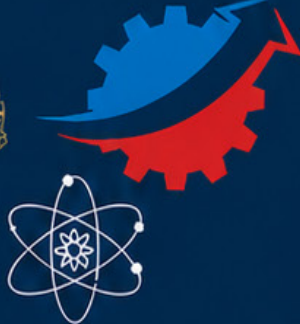
MUHANDISLIK

& IQTISODIYOT

ijtimoiy-iqtisodiy, innovatsion texnik,
fan va ta'limga oid ilmiy-amaliy jurnal

2026-YIL

AVGUST 8-SON, I-QISM



Milliy nashrlar

OAK: <https://oak.uz/pages/4802>

05.00.00 - Texnika fanlari

08.00.00 - Iqtisodiyot fanlar



Google
Scholar

ISSN
INTERNATIONAL
STANDARD
SERIAL
NUMBER
INTERNATIONAL CENTRE

OpenAIRE



ISSN: 3060-463X

РЭУ.РФ
РОССИЙСКИЙ ЭКОНОМИЧЕСКИЙ УНИВЕРСИТЕТ
ИМЕНИ Г.В. ПЛЕХАНОВА
ФИЛИАЛ В г. ТАШКЕНТЕ



muhandislik & iqtisodiyot

ijtimoiy-iqtisodiy, innovatsion texnik,
fan va ta'limga oid ilmiy-amaliy jurnal

Elektron nashr, 2026-yil, avgust.

Bosh muharrir:

Zokirova Nodira Kalandarovna, iqtisodiyot fanlari doktori, DSc, professor

Bosh muharrir o'rinbosari:

Shakarov Zafar G'afarovich, iqtisodiyot fanlari bo'yicha falsafa doktori, PhD, dotsent

Tahrir hay'ati:

Abduraxmanov Kalendar Xodjayevich, O'z FA akademigi, iqtisodiyot fanlari doktori, professor

Sharipov Kongratbay Avezimbetovich, texnika fanlari doktori, professor

Maxkamov Baxtiyor Shuxratovich, iqtisodiyot fanlari doktori, professor

Abduraxmanova Gulnora Kalandarovna, iqtisodiyot fanlari doktori, professor

Shaumarov Said Sanatovich, texnika fanlari doktori, professor

Turayev Bahodir Xatamovich, iqtisodiyot fanlari doktori, professor

Nasimov Dilmurod Abdulloyevich, iqtisodiyot fanlari doktori (DSc), professor

Allayeva Gulchexra Jalgasovna, iqtisodiyot fanlari doktori, professor

Arabov Nurali Uralovich, iqtisodiyot fanlari doktori, professor

Maxmudov Odiljon Xolmirzayevich, iqtisodiyot fanlari doktori, professor

Xamrayeva Sayyora Nasimovna, iqtisodiyot fanlari doktori, professor

Bobonazarova Jamila Xolmurodovna, iqtisodiyot fanlari doktori, professor

Irmatova Aziza Baxromovna, iqtisodiyot fanlari doktori, professor

Bo'taboyev Mahammadjon To'ychiyevich, iqtisodiyot fanlari doktori, professor

Shamshiyeva Nargizaxon Nosirxuja kizi, iqtisodiyot fanlari doktori, professor,

Xolmuxamedov Muhsinjon Murodullayevich, iqtisodiyot fanlari nomzodi, dotsent

Xodjayeva Nodiraxon Abdurashidovna, iqtisodiyot fanlari nomzodi, dotsent

Amanov Otabek Amankulovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent

Toxirov Jaloliddin Ochil o'g'li, texnika fanlari bo'yicha falsafa doktori (PhD)

Qurbonov Samandar Pulatovich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

Zikriyoyev Aziz Sadulloyevich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

Tabayev Azamat Zaripbayevich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

Sxay Lana Aleksandrovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent

Ismoilova Gulnora Fayzullayevna, iqtisodiyot fanlari nomzodi, dotsent

Djumaniyazov Umrbek Ilxamovich, iqtisodiyot fanlari nomzodi, dotsent

Kasimova Nargiza Sabitdjanovna, iqtisodiyot fanlari nomzodi, dotsent

Kalanova Moxigul Baxritdinovna, dotsent

Ashurzoda Luiza Muxtarovna, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

Sharipov Sardor Begmaxmat o'g'li, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

Tursunov Ulug'bek Sativoldiyevich, iqtisodiyot fanlari doktori (DSc), dotsent

Bauyetdinov Majit Janizaqovich, Toshkent davlat iqtisodiyot universiteti dotsenti, PhD

Botirov Bozorbek Musurmon o'g'li, Texnika fanlari bo'yicha falsafa doktori (PhD)

Sultonov Shavkatjon Abdullayevich, Kimyo fanlari doktori, (DSc)

Jo'raeva Malohat Muhammadovna, filologiya fanlari doktori (DSc), professor.

Yusupov Maxamadamin Abduxamidovich, iqtisodiyot fanlari nomzodi (DSc), professor

Kalonova Moxigul Baxritdinovna, iqtisodiyot fanlari nomzodi (PhD), dotsent

Mirzayev Kulmamat Djanzakovich, iqtisodiyot fanlari nomzodi (DSc), professor.

Karimova Nilufar Sadirdin qizi, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

Norboyev Odil Abrayevich, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD), dotsent

Karimova Nilufar Sadirdin qizi, iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)

Pardaev Umidjon Uralovich, iqtisodiyot fanlari doktori (DSc), professor

Xolmirzayev Ulug'bek Abdulazizovich, Iqtisodiyot fanlari doktori (DSc)

muhandislik & iqtisodiyot

ijtimoiy-iqtisodiy, innovatsion texnik,
fan va ta'limga oid ilmiy-amaliy jurnal

- 05.01.00 – Axborot texnologiyalari, boshqaruv va kompyuter grafikasi
- 05.01.01 – Muhandislik geometriyasi va kompyuter grafikasi. Audio va video texnologiyalari
- 05.01.02 – Tizimli tahlil, boshqaruv va axborotni qayta ishlash
- 05.01.03 – Informatikaning nazariy asoslari
- 05.01.04 – Hisoblash mashinalari, majmualari va kompyuter tarmoqlarining matematik va dasturiy ta'minoti
- 05.01.05 – Axborotlarni himoyalash usullari va tizimlari. Axborot xavfsizligi
- 05.01.06 – Hisoblash texnikasi va boshqaruv tizimlarining elementlari va qurilmalari
- 05.01.07 – Matematik modellash
- 05.01.11 – Raqamli texnologiyalar va sun'iy intellekt
- 05.02.00 – Mashinasozlik va mashinashunoslik
- 05.02.08 – Yer usti majmualari va uchish apparatlari
- 05.03.02 – Metrologiya va metrologiya ta'minoti
- 05.04.01 – Telekommunikatsiya va kompyuter tizimlari, telekommunikatsiya tarmoqlari va qurilmalari. Axborotlarni taqsimlash
- 05.05.03 – Yorug'lik texnikasi. Maxsus yoritish texnologiyasi
- 05.05.05 – Issiqlik texnikasining nazariy asoslari
- 05.05.06 – Qayta tiklanadigan energiya turlari asosidagi energiya qurilmalari
- 05.06.01 – To'qimachilik va yengil sanoat ishlab chiqarishlari materialshunosligi
- 05.08.03 – Temir yo'l transportini ishlatish
- 05.08.06 – "G'ildirakli va gusenisali mashinalar va ularni ishlatish" (texnika fanlari)
- 05.09.01 – Qurilish konstruksiyalari, bino va inshootlar
- 05.09.04 – Suv ta'minoti. Kanalizatsiya. Suv havzalarini muhofazalovchi qurilish tizimlari
- 10.00.06 – Qiyosiy adabiyotshunoslik, chog'ishtirma tilshunoslik va tarjimashunoslik
- 10.00.04 – Yevropa, Amerika va Avstraliya xalqlari tili va adabiyoti
- 08.00.01 – Iqtisodiyot nazariyasi
- 08.00.02 – Makroiqtisodiyot
- 08.00.03 – Sanoat iqtisodiyoti
- 08.00.04 – Qishloq xo'jaligi iqtisodiyoti
- 08.00.05 – Xizmat ko'rsatish tarmoqlari iqtisodiyoti
- 08.00.06 – Ekonometrika va statistika
- 08.00.07 – Moliya, pul muomalasi va kredit
- 08.00.08 – Buxgalteriya hisobi, iqtisodiy tahlil va audit
- 08.00.09 – Jahon iqtisodiyoti
- 08.00.10 – Demografiya. Mehnat iqtisodiyoti
- 08.00.11 – Marketing
- 08.00.12 – Mintaqaviy iqtisodiyot
- 08.00.13 – Menejment
- 08.00.14 – Iqtisodiyotda axborot tizimlari va texnologiyalari
- 08.00.15 – Tadbirkorlik va kichik biznes iqtisodiyoti
- 08.00.16 – Raqamli iqtisodiyot va xalqaro raqamli integratsiya
- 08.00.17 – Turizm va mehmonxona faoliyati

Ma'lumot uchun, OAK
Rayosatining 2024-yil 28-avgustdagi 360/5-son qarori bilan "Dissertatsiyalar asosiy ilmiy natijalarini chop etishga tavsiya etilgan milliy ilmiy nashrlar ro'yxati"ga texnika va iqtisodiyot fanlari bo'yicha "Muhandislik va iqtisodiyot" jurnali ro'yxatga kiritilgan.

Muassis: "Tadbirkor va ishbilarmon" MChJ

Hamkorlarimiz:

1. Toshkent shahridagi G.V.Plexanov nomidagi Rossiya iqtisodiyot universiteti
2. Toshkent davlat iqtisodiyot universiteti
3. Toshkent irrigatsiya va qishloq xo'jaligini mexanizatsiyalash muhandislari instituti" milliy tadqiqot universiteti
4. Islom Karimov nomidagi Toshkent davlat texnika universiteti
5. Muhammad al-Xorazmiy nomidagi Toshkent axborot texnologiyalari universiteti
6. Toshkent davlat transport universiteti
7. Toshkent arxitektura-qurilish universiteti
8. Toshkent kimyo-texnologiya universiteti
9. Jizzax politexnika instituti



MUNDARIJA

IQTISODIYOTGA TO'G'RIDAN-TO'G'RI XORIJIY INVESTITSİYALARNI JALB ETISHNING SAMARALI DAVLAT BOSHQARUVI.....	9
Amirov Otabek Xudoyberdi o'g'li	
РОЛЬ БУХГАЛТЕРСКОГО УЧЕТА В СИСТЕМЕ ФИНАНСОВОГО КРИЗИС-МЕНЕДЖМЕНТА ПРЕДПРИЯТИЯ.....	14
Маннапова Раъно Абборовна	
METROPOLITEN SANOATIDA MAHALLIYLASHTIRISH SAMARADORLIGINI BAHOLASHNING INTEGRAL METODOLOGIK MODELİ	22
Mansurov Xamrokul Iloxomovich	
INVESTMENT COOPERATION BETWEEN UZBEKISTAN AND CHINA: CHALLENGES AND PROSPECTS ..	29
Liu Qing	
JISMONIY SHAXSLAR TOMONIDAN OLIB KIRILADIGAN TOVARLARGA BOJSIZ OLIB KIRISH NORMASINI QO'LLASH VA BOJXONA TO'LOVLARINI UNDIRISHNI TAKOMILLASHTIRISH	36
Nomozov Abduvohid Abdurazzoq o'g'li	
MINTAQAVIY IQTISODIYOT: MUAMMOLAR VA XALQARO TAJRIBA.....	41
Yorqin Xudoyberdiev	
BIZNES SUBYEKTLARINING EKSPORT FAOLIYATINI MOLİYALASHTIRISH TIZIMINI TAKOMILLASHTIRISHNING ASOSIY OMILLARI	45
Karamatdinova Aysawle Paraxatovna	
YOSHLAR TADBIRKORLIGINI RIVOJLANTIRISHNING PDCA TAMOIYILIGA ASOSLANGAN 7 BOSQICHLI TAKOMILLASHTIRILGAN TASHKILIY-IQTISODIY MEXANIZMI	53
Xojiyev Ma'murjon Muxsinjon o'g'li	
HUDUDIY SPORT-SOG'LOMLASHTIRISH TURIZMINING RIVOJLANISHIGA TA'SIR ETUVCHI OMILLAR..	62
Misirxonov Habibxon Iskandar o'g'li	
TRANSPORT SOHASIDA AYOLLAR BANDLIGINI TA'MINLASHNING INTEGRATSIYALASHGAN BOSHQARUV MODELINI TAKOMILLASHTIRISH	71
Abdukarimova Dilnozaxon Mamurjon qizi	



INVESTMENT COOPERATION BETWEEN UZBEKISTAN AND CHINA: CHALLENGES AND PROSPECTS

Liu Qing

Sichuan Zhiying Education Consulting Company

Abstract. Investment cooperation between the Republic of Uzbekistan and the People's Republic of China is examined through a comprehensive macroeconomic and structural perspective. Following the large-scale economic liberalization reforms initiated by Tashkent in **2016**, bilateral investment relations evolved from fragmented asset acquisitions into a systematic **Comprehensive Strategic Partnership**. Using a mixed-methods approach that combines quantitative econometric analysis of foreign direct investment (FDI) inflows with qualitative policy analysis, the distribution of Chinese capital across key sectors, including energy, manufacturing, transport logistics, and high-technology industries, is assessed. The analysis also identifies major structural challenges, such as increasing external debt vulnerability, asymmetric trade dependence, and barriers to local technology transfer. Based on these findings, strategic recommendations are proposed to enhance portfolio diversification, mitigate fiscal risks, and strengthen the institutional framework for sustainable and mutually beneficial investment cooperation toward **2030**.

Keywords: foreign direct investment (FDI), Uzbekistan, China, Belt and Road Initiative, industrial policy, sovereign debt, strategic partnership.

Аннотация. Инвестиционное сотрудничество между Республикой Узбекистан и Китайской Народной Республикой рассматривается с позиций комплексного макроэкономического и структурного анализа. После масштабных реформ экономической либерализации, начатых в Ташкенте в **2016-году**, двусторонние инвестиционные отношения трансформировались от фрагментарного приобретения активов к системному формату **всеобъемлющего стратегического партнерства**. На основе смешанного подхода, сочетающего количественный эконометрический анализ притока прямых иностранных инвестиций (ПИИ) и качественный анализ государственной политики, оценивается распределение китайского капитала по ключевым секторам экономики, включая энергетику, обрабатывающую промышленность, транспортную логистику и высокотехнологичные отрасли. Проведенный анализ также выявляет основные структурные проблемы, включая рост уязвимости, связанной с внешним долгом, асимметричную торговую зависимость и барьеры, препятствующие передаче технологий. По результатам исследования предложены стратегические рекомендации, направленные на диверсификацию инвестиционного портфеля, снижение фискальных рисков и укрепление институциональных основ долгосрочного и взаимовыгодного инвестиционного сотрудничества **до 2030-года**.

Ключевые слова: прямые иностранные инвестиции (ПИИ), Узбекистан, Китай, инициатива «Один пояс — один путь», промышленная политика, суверенный долг, стратегическое партнерство.

Annotatsiya. O'zbekiston Respublikasi va Xitoy Xalq Respublikasi o'rtasidagi investitsiya hamkorligi makroiqtisodiy hamda tarkibiy yondashuv asosida kompleks tahlil qilinadi. Toshkentda **2016-yilda** boshlangan keng ko'lamli iqtisodiy liberallashtirish islohotlaridan so'ng ikki tomonlama investitsiya munosabatlari parchalangan aktivlarni sotib olish amaliyotidan tizimli **«Keng qamrovli strategik sheriklik»** bosqichiga o'tdi. To'g'ridan to'g'ri xorijiy investitsiyalar (TTXI) oqimini ekonometrik usullar orqali miqdoriy baholash hamda davlat siyosatini sifat jihatidan tahlil qilishni uyg'unlashtirgan aralash metodologiya asosida Xitoy kapitalining energetika, ishlab chiqarish, transport-logistika va yuqori texnologiyali sanoat tarmoqlari bo'yicha taqsimlanishi baholanadi. Shuningdek, tashqi qarz yukining ortishi, savdo munosabatlardagi nomutanosiblik hamda texnologiyalar transferiga to'sqinlik qilayotgan omillar kabi asosiy tarkibiy muammolar aniqlanadi. Olingan natijalar asosida investitsiya portfelini diversifikatsiya qilish, fiskal xatarlarni kamaytirish va **2030-yilgacha** uzoq muddatli hamda o'zaro manfaatli investitsiya hamkorligining institutsional asoslarini mustahkamlashga qaratilgan strategik tavsiyalar ishlab chiqilgan.

Kalit so'zlar: to'g'ridan to'g'ri xorijiy investitsiyalar (TTXI), O'zbekiston, Xitoy, «Bir kamar, bir yo'l» tashabbusi, sanoat siyosati, suveren qarz, strategik sheriklik.

INTRODUCTION

The geopolitical and economic architecture of Central Asia has undergone profound transformations over the past decade. At the core of this structural shift is the rapidly expanding investment partnership between the Republic of Uzbekistan—the demographic center and economic hub of Central Asia—and the People's Republic of China, one of the world's leading sources of industrial capital. Historically connected through the commercial routes of the ancient Silk Road, modern Tashkent and Beijing have strategically aligned their geo-economic priorities to establish a highly integrated industrial and financial partnership.

For Uzbekistan, a significant turning point occurred in **late-2016**. The administration of President Shavkat Mirziyoyev launched an unprecedented program of market liberalization, currency convertibility reforms, enhanced fiscal transparency, and greater institutional openness. These reforms transformed Uzbekistan from a highly protected and inward-oriented economy into an increasingly attractive destination for international investment. At the same time, China's global outward investment strategy, implemented through the multi-trillion-dollar Belt and Road Initiative (BRI), focused on establishing stable and strategically located continental partners to strengthen supply chains, expand industrial cooperation, and develop alternative trade corridors linking mainland China with Europe, the Middle East, and South Asia.

As a double-landlocked country, Uzbekistan views substantial capital inflows as an important prerequisite for overcoming geographical constraints, modernizing its post-Soviet industrial base, and facilitating the transition from a raw-material exporter to a competitive producer of higher value-added goods. China, with its considerable foreign exchange reserves and advanced technological capabilities, has become one of Uzbekistan's leading strategic investment partners.

At the same time, as the volume of Chinese foreign direct investment (FDI) and concessional financing continues to expand, increasing attention is being devoted to ensuring the long-term sustainability and effectiveness of bilateral investment cooperation. In this context, issues related to sovereign debt sustainability, trade balance dynamics, and the effectiveness of technology transfer have become important areas for academic research. Accordingly, this study analyzes the key drivers, structural characteristics, and long-term prospects of investment cooperation between Uzbekistan and China.

LITERATURE REVIEW

The academic discourse on Sino–Central Asian economic cooperation, particularly in the field of Foreign Direct Investment (FDI), is extensive and multifaceted. Scholars generally classify the existing literature into two principal analytical perspectives: one that interprets Chinese outward FDI through the lens of mutually beneficial economic development (the **win–win cooperation** paradigm), and another that examines it within the frameworks of neo-mercantilism or dependency theory.

Proponents of the developmental synergy approach, such as Shen [8] and Ganiyev [4], argue that Chinese investments under the Belt and Road Initiative (BRI) help address the critical infrastructure gap in developing countries that has historically received comparatively limited attention from traditional international financial institutions. According to classical neoclassical investment models, capital flows from capital-abundant economies, such as China, to capital-scarce economies, such as Uzbekistan, generate mutually beneficial returns while facilitating cross-border technology transfer. Zhao [9] emphasizes that Chinese investment in Central Asia has gradually evolved beyond traditional extractive industries, including oil, gas, and mineral resources, toward advanced manufacturing, green energy, and high-technology telecommunications. This transformation is closely aligned with national modernization strategies, including **“Digital Uzbekistan – 2030.”**

From another analytical perspective, scholars applying dependency theory frameworks [5] emphasize the importance of maintaining a balanced approach to managing the structural characteristics of large-scale investment cooperation. In this context, particular attention is devoted to issues related to sovereign debt sustainability and the long-term effectiveness of concessional financing provided by state-supported financial institutions, including the Export–Import Bank of China (Exim Bank of China). In addition, historical studies examining Chinese FDI in resource-rich regions, such as Sub-Saharan Africa and parts of Southeast Asia, indicate that the initial stages of investment were, in some cases, characterized by a relatively high share of imported labor, vertically integrated supply chains, and varying levels of knowledge transfer to local workforces [2]. These findings underscore the importance of strengthening localization policies and enhancing technology transfer mechanisms in future investment cooperation.

Focusing specifically on Uzbekistan's transformation since **late-2016**, regional economists such as Khidirov [6] and Akhmedov [1] note that Tashkent has adopted a more balanced and proactive approach to managing foreign investment than many neighboring countries. In contrast to earlier resource-oriented development models, Uzbekistan's contemporary economic diplomacy places greater emphasis on joint



ventures, production localization, and technology-oriented cooperation. Nevertheless, the existing academic literature still contains a noticeable gap regarding empirical assessments of the distribution of Chinese capital across Special Economic Zones (SEZs) and emerging high-technology industries, including Electric Vehicles (EVs) and renewable energy systems in Uzbekistan. The present study contributes to addressing this gap by examining the latest investment developments through **2026**.

RESEARCH METHODOLOGY

This study employs a mixed-methods research design that combines quantitative econometric analysis with qualitative institutional assessment to provide a comprehensive evaluation of investment cooperation between Uzbekistan and China (Figure 1).

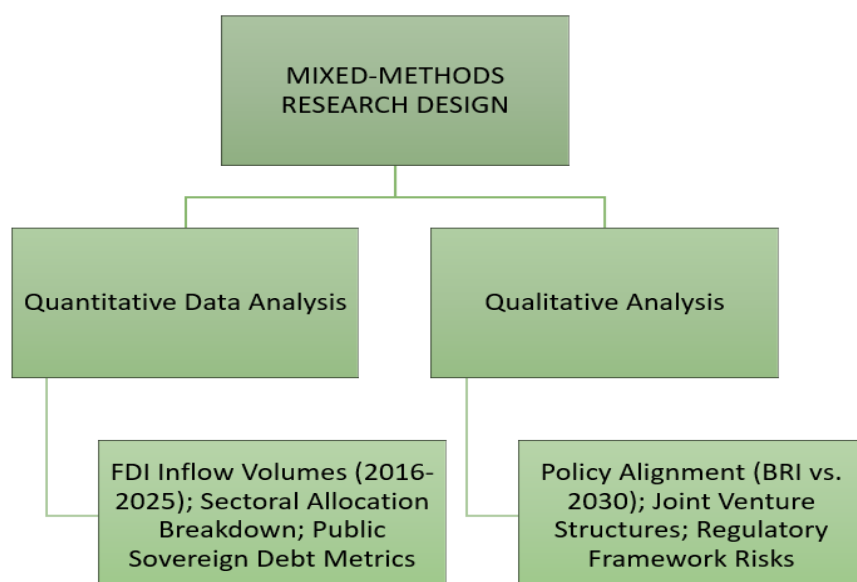


Figure 1. Mixed-methods research design

The quantitative dataset is derived from official macroeconomic publications of the Ministry of Investment, Industry and Trade of the Republic of Uzbekistan, the Central Bank of Uzbekistan, the National Bureau of Statistics of China, and international financial institutions, including the International Monetary Fund (IMF) and the World Bank. The primary indicators analyzed include:

Annual gross inflows of Chinese Foreign Direct Investment (FDI) into Uzbekistan during **2016–2025**.

The sectoral distribution of Chinese investment across key sectors, including energy, industrial manufacturing, transport infrastructure, telecommunications, and agriculture.

The dynamics of Uzbekistan's external sovereign debt owed to Chinese state-supported financial institutions in relation to GDP.

The qualitative component applies a systematic policy-alignment framework to evaluate the consistency between China's Digital Silk Road (DSR) and green energy initiatives and Uzbekistan's domestic industrial development strategies. In addition, institutional case studies are conducted on flagship joint investment projects—specifically, the Peng Sheng Industrial Park and the BYD–UzAuto mobility manufacturing venture—to assess the extent of technology transfer and local employment generation. By integrating quantitative statistical evidence with qualitative institutional analysis, this study provides a balanced and objective assessment of the opportunities, institutional characteristics, and long-term prospects of the Uzbekistan–China investment partnership.

ANALYSIS AND RESULTS

The quantitative analysis confirms a structural shift in both the volume and composition of Chinese capital entering Uzbekistan following the economic liberalization reforms introduced in 2016 (Figure 2).

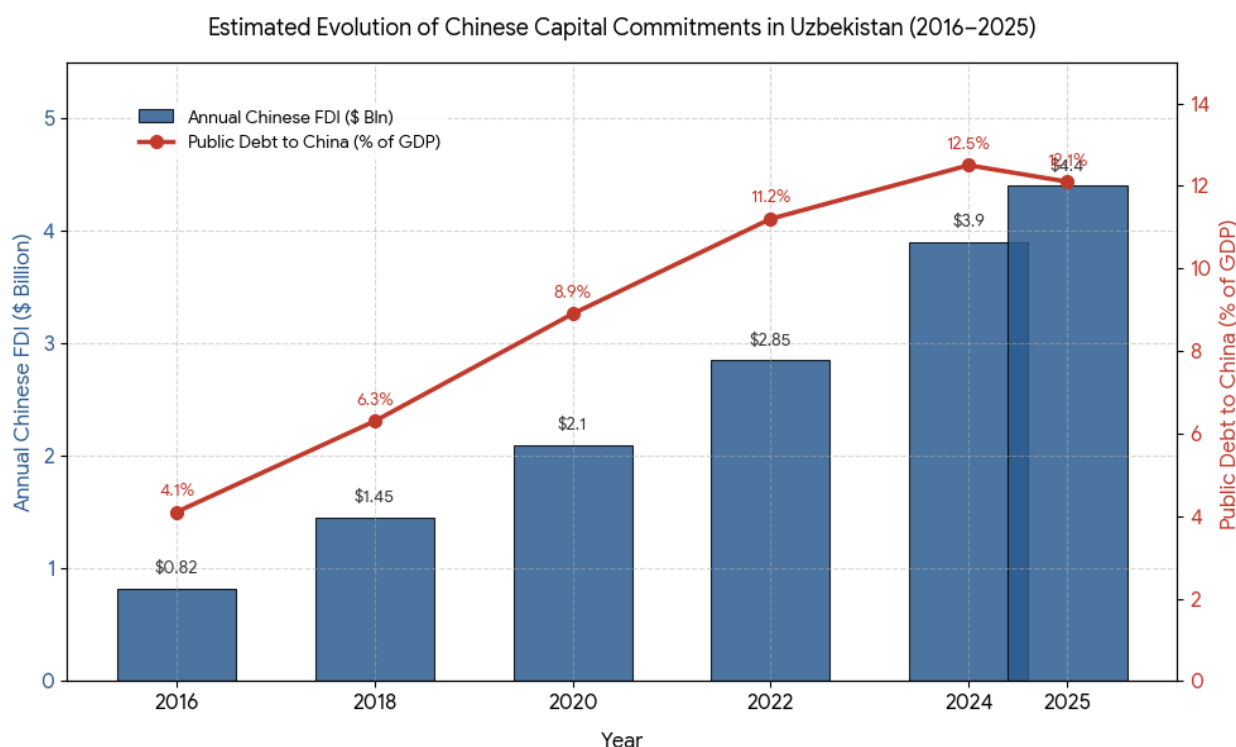


Figure 2. Estimated Evolution of Chinese Capital Commitments in Uzbekistan (2016–2025) [7]

Analytical Points of Interest (POIs) of Figure-2:

The FDI Surge (2016–2025): The blue bars indicate that annual Chinese Foreign Direct Investment (FDI) inflows increased by more than fivefold, rising from **USD 0.82 billion** in **2016** to an estimated **USD 4.40 billion** by **2025**, following Uzbekistan’s comprehensive economic liberalization reforms.

The Sovereign Debt Peak (2024): The red trend line illustrates the share of public debt owed to Chinese state-supported entities relative to Uzbekistan’s GDP. Supported by capital-intensive projects, including the expansion of the Central Asia–China Gas Pipeline and the initial planning stages of the China–Kyrgyzstan–Uzbekistan (CKU) Railway, this indicator reached **12.5% of GDP** in **2024**.

The Structural Stabilization in 2025: In **2025**, the debt-to-GDP ratio declined slightly to **12.1%**. This trend reflects the continued improvement of Uzbekistan’s macroeconomic management through a gradual shift from government-guaranteed sovereign borrowing toward Public–Private Partnerships (PPPs) and direct corporate joint ventures, including the BYD–UzAuto manufacturing facility.

The empirical evidence indicates that annual Chinese FDI inflows increased more than fivefold during **2016–2025**. During the same period, the number of joint ventures and wholly Chinese-owned enterprises operating in Uzbekistan expanded from approximately **600** to more than **3,200**, reflecting the growing institutional integration of Chinese investment into the national economy.

The findings also demonstrate a significant diversification of investment away from traditional oil and gas industries toward high-value-added manufacturing, renewable energy, and digital infrastructure (Figure 3).



Sectoral Distribution of Chinese Investment in Uzbekistan (2025)

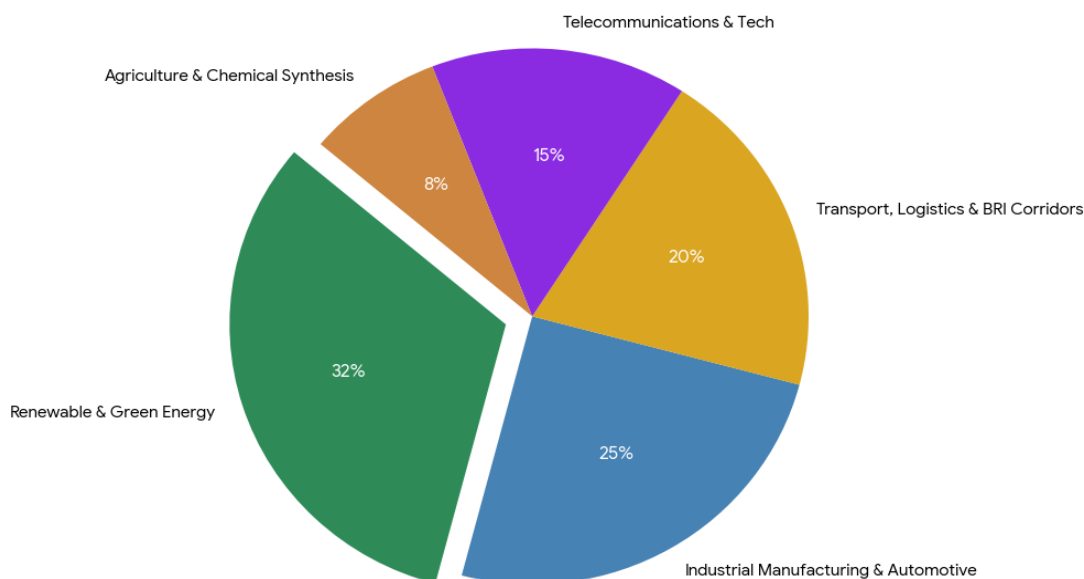


Figure 3. Sectoral Distribution of Chinese Investment in Uzbekistan (2025 Allocation Index)

Strategic Analytical Insights from the Sectoral Distribution

Green Energy Leadership (32%): Representing the largest share of Chinese investment, this sector demonstrates China's substantial contribution to the modernization of Uzbekistan's energy system. Large-scale solar photovoltaic (PV) and wind power projects in the Navoi and Samarkand regions support the country's renewable energy objectives for 2030.

High-Value Industrial Development (25%): Moving beyond traditional resource-based industries, one-quarter of total Chinese investment is concentrated in advanced industrial manufacturing. The BYD–UzAuto electric vehicle manufacturing facility in the Jizzakh region represents one of the flagship projects within this investment trend.

Transport Infrastructure and Connectivity (20%): Consistent with the strategic objectives of the Belt and Road Initiative (BRI), this investment segment focuses on logistics infrastructure and the development of major regional transport corridors, including the China–Kyrgyzstan–Uzbekistan (CKU) Railway project.

Digital Silk Road (15%): Supported primarily by leading technology companies such as Huawei and ZTE, this investment category contributes to the expansion of national 5G infrastructure, e-government data centers, and Smart City technologies.

In line with Uzbekistan's objective of generating 30% of its electricity from renewable energy sources by 2030, Chinese green technology companies have become important participants in the country's renewable energy market. Major Chinese energy corporations, including China Energy Investment Corporation, China Power International Development, and leading solar equipment manufacturers, are implementing large-scale solar photovoltaic (PV) and wind energy projects across the Navoi, Samarkand, and Bukhara regions.

A notable example of advanced industrial investment is the joint venture established between China's BYD and Uzbekistan's UzAuto Motors in the Jizzakh region. This project represents a transition from importing finished vehicles to developing localized production of Electric Vehicles (EVs) and plug-in hybrid vehicles. The initiative contributes to the development of local engineering capabilities, strengthens domestic supply chains for electronic components, and enhances Uzbekistan's potential as a regional EV manufacturing and export center for the Commonwealth of Independent States (CIS).

In the telecommunications sector, Huawei and ZTE have played a significant role in the development of Uzbekistan's digital infrastructure. Huawei supplies key technologies supporting the expansion of the national 5G network, e-government cloud architecture, and data center facilities. In addition, advanced digital solutions, including artificial intelligence (AI)-based software and intelligent video surveillance technologies, have contributed to the implementation of the "Safe City" framework, enhancing urban traffic management and supporting more efficient public security coordination.

Despite the strong growth trends, the investment partnership continues to present several structural characteristics that require sustained policy attention to support its long-term effectiveness and sustainability.

Table 3
Matrix of Core Structural Challenges in Uzbek–Chinese Investment Cooperation

Core Challenge Dimension	Primary Macroeconomic Characteristic	Systemic Implication	Strategic Mitigation Target
Sovereign Debt Management	Concentration of public financing through state-supported institutions (Exim Bank of China, China Development Bank).	Increased sensitivity to exchange rate fluctuations and potential fiscal pressures.	Expand the use of Public–Private Partnerships (PPPs) and non-recourse project financing.
Technology Transfer	Extensive use of Chinese engineering expertise, specialized software, and integrated supply chains.	Gradual localization of advanced technological knowledge and skills.	Strengthen the localization of R&D centers and expand joint university–industry technology programs.
Trade Value Structure	Export of relatively lower value-added products alongside imports of technologically sophisticated manufactured goods.	The need to increase domestic value creation and strengthen industrial competitiveness.	Accelerate local component manufacturing and deepen supply chain localization, particularly in the EV industry.

As illustrated in **Table-3**, Uzbekistan's bilateral external debt to Chinese financial institutions—primarily the Export–Import Bank of China and the China Development Bank—expanded steadily before stabilizing at approximately **12% of GDP** by **2025**. Although this level remains within generally manageable macroeconomic parameters, the concentration of financing from a single major external source highlights the importance of continued debt portfolio diversification and prudent fiscal management. In the event of significant global macroeconomic fluctuations or substantial depreciation of the Uzbek soum, maintaining a diversified financing structure would further strengthen fiscal resilience and budgetary stability.

An important feature of the initial stages of several Chinese FDI projects was the relatively extensive participation of Chinese technical specialists and managerial personnel. As investment cooperation has evolved, regulatory reforms have encouraged higher levels of local employment and workforce participation. Nevertheless, qualitative interviews and corporate assessments indicate that senior management functions and proprietary technology operations are still, in many cases, coordinated within Chinese corporate structures. These observations highlight additional opportunities to accelerate knowledge transfer and further enhance the professional development of local engineers, managers, and technical specialists.

Another important structural characteristic is observed in the value-added composition of bilateral trade and investment flows. Chinese investment in Uzbekistan is frequently accompanied by the procurement of Chinese industrial equipment, specialized software, and manufacturing inputs. As industrial production continues to expand, further development of domestic component manufacturing and localized supply chains would enhance national industrial capacity, increase domestic value creation, and strengthen the long-term competitiveness of Uzbekistan's manufacturing sector while supporting a more balanced structure of bilateral economic cooperation.

CONCLUSION AND RECOMMENDATIONS

This study demonstrates that investment cooperation between Uzbekistan and China has entered a mature and highly institutionalized stage. The alignment of Uzbekistan's market liberalization policies with China's Belt and Road Initiative (BRI) has facilitated substantial capital inflows, accelerated infrastructure development, expanded manufacturing capacity, and strengthened Uzbekistan's position as an emerging regional leader in green energy and electric mobility. At the same time, ensuring the long-term sustainability of this partnership through **2030** requires continued attention to such strategic priorities as balanced sovereign debt management, enhanced technology transfer, and the further development of domestic industrial capabilities.

To maximize the developmental benefits of Chinese investment, the following policy measures are recommended:

Strengthen Technology Transfer and Localization Mechanisms

The Ministry of Investment, Industry and Trade should continue linking future large-scale Chinese industrial investments with clearly defined localization objectives. Chinese technology companies should be encouraged



to establish local Research and Development (R&D) centers, increase procurement from domestic small and medium-sized enterprises (SMEs), and support the development of advanced engineering laboratories within Uzbekistan's technical universities.

Optimize the External Debt Structure Through Public–Private Partnerships (PPPs)

Uzbekistan should continue expanding the use of Public–Private Partnerships (PPPs), Build–Operate–Transfer (BOT) models, and non-recourse project financing for major infrastructure projects alongside traditional financing mechanisms. Such an approach would diversify financing sources, allocate commercial risks more efficiently, and further strengthen long-term fiscal sustainability.

Establish a Regional Digital and Green Technology Hub in Tashkent

Building on the significant presence of Chinese investment in cloud technologies and 5G infrastructure, Uzbekistan should establish specialized technology zones within IT Park Tashkent. Targeted investment incentives, including tax preferences, could encourage Chinese software companies to expand coding, data analytics, digital services, and regional customer support operations in Uzbekistan, thereby creating additional high-value export-oriented service opportunities for the country's skilled and multilingual workforce.

Expand Local Currency Settlement Mechanisms

To reduce exposure to exchange-rate volatility, the Central Bank of Uzbekistan, in cooperation with the People's Bank of China, should continue developing bilateral settlement mechanisms based on the Uzbek soum and the Chinese yuan (RMB). Expanding local currency transactions would enhance financial efficiency, improve transaction stability, and contribute to the long-term resilience of bilateral investment cooperation.

References

1. Akhmedov, T. *The Political Economy of Market Liberalization in Post-Soviet Central Asia: The Case of Uzbekistan*. – Tashkent : Economic Review Publishing, 2024.
2. Brautigam, D. *Deconstructing the Debt-Trap Diplomacy Rhetoric: Empirical Realities of Chinese Outward Venture Capital*. – Oxford : Development Policy Press, 2020.
3. Central Bank of the Republic of Uzbekistan. *Balance of Payments and International Investment Position Statistical Bulletin*. – Tashkent : CBU, 2025.
4. Ganiyev, J. *Central Asia and the Belt and Road Initiative: Economic Realities and Horizons*. – Tashkent : Academy of Sciences, 2022.
5. Kaplan, M. Asymmetric Interdependence: Analyzing Chinese Foreign Direct Investment Portfolios in Eurasia // *Journal of Global Economic Integration*. – 2022. – Vol. 14, No. 3. – P. 211–234.
6. Khidirov, S. Special Economic Zones as Catalysts for Industrialization: Evaluating the Sino-Uzbek Joint Venture Matrices // *Central Asian Journal of Economics and Management*. – 2023. – Vol. 9, No. 2. – P. 45–67.
7. Ministry of Investment, Industry and Trade of the Republic of Uzbekistan. *Report on Foreign Investment Attraction and Industrial Localization Programs*. – Tashkent : MIIT, 2025.
8. Shen, R. *The Digital Silk Road in Central Asia: Connectivity, Infrastructure, and Geopolitics*. – Shanghai : Academic Press, 2021.
9. Zhao, H. *China's Economic Diplomacy in Central Asia: A Focus on Uzbekistan's Reforms*. – Beijing : Sinological Press, 2023.

muhandislik **& iqtisodiyot**

ijtimoiy-iqtisodiy, innovatsion texnik,
fan va ta'limga oid ilmiy-amaliy jurnal

Ingliz tili muharriri: Feruz Hakimov

Musahhih: Zokir Alibekov

Sahifalovchi va dizayner: Abdurahmon Qurbonov

2026. № 8

© Materiallar ko'chirib bosilganda "Muhandislik va iqtisodiyot" jurnali manba sifatida ko'rsatilishi shart. Jurnalda bosilgan material va reklamalardagi dalillarning aniqligiga mualliflar ma'sul. Tahririyat fikri har vaqt ham mualliflar fikriga mos kelamasligi mumkin. Tahririyatga yuborilgan materiallar qaytarilmaydi.

"Muhandislik va iqtisodiyot" jurnali 26.06.2023-yildan
O'zbekiston Respublikasi Prezidenti Adminstratsiyasi huzuridagi
Axborot va ommaviy kommunikatsiyalar agentligi tomonidan
№S-5669245 reyestr raqami tartibi bo'yicha ro'yxatdan o'tkazilgan.
Litsenziya raqami: №095310.

**Manzilimiz: Toshkent shahri Yunusobod
tumani 15-mavze 19-uy**





+998 93 718 40 07



<https://muhandislik-iqtisodiyot.uz/index.php/journal>



t.me/yait_2100