

# How Central Asians Pushed Chinese Firms to Localize

Dirk van der Kley and Niva Yau

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# China Local/Global

China has become a global power, but there is too little debate about *how* this has happened and what it means. Many argue that China exports its developmental model and imposes it on other countries. But Chinese players also extend their influence by working through local actors and institutions while adapting and assimilating local and traditional forms, norms, and practices.

With a generous multiyear grant from the Ford Foundation, Carnegie has launched an innovative body of research on Chinese engagement strategies in seven regions of the world—Africa, Central Asia, Latin America, the Middle East and North Africa, the Pacific, South Asia, and Southeast Asia. Through a mix of research and strategic convening, this project explores these complex dynamics, including the ways Chinese firms are adapting to local labor laws in Latin America, Chinese banks and funds are exploring traditional Islamic financial and credit products in Southeast Asia and the Middle East, and Chinese actors are helping local workers upgrade their skills in Central Asia. These adaptive Chinese strategies that accommodate and work within local realities are mostly ignored by Western policymakers in particular.

Ultimately, the project aims to significantly broaden understanding and debate about China's role in the world and to generate innovative policy ideas. These could enable local players to better channel Chinese energies to support their societies and economies; provide lessons for Western engagement around the world, especially in developing countries; help China's own policy community learn from the diversity of Chinese experience; and potentially reduce frictions.

Evan A. Feigenbaum Vice President for Studies, Carnegie Endowment for International Peace

# **Summary**

There has been a sea change in China's economic involvement in Central Asia. Large-scale transport and electricity projects funded by Chinese government loans have dried up. Hydrocarbon exports to China continue, but they are not the focus of most new projects. Instead, there are a growing number of industrial projects that seek to make value-added products that can be exported. These projects are increasingly staffed by Central Asians who receive technical training from Chinese firms.

This change has been primarily driven by Central Asian states. The region's governments have long pushed for industrial capacity building, including the upskilling of local workers. In addition, debt concerns in Kyrgyzstan in particular have made Chinese loans less attractive and less prevalent. This trend has coincided with Chinese policy banks' embrace of more conservative lending policies globally for infrastructure projects.

Chinese firms have begun adapting to these demands. They have steadily increased their proportions of local hires by training Central Asian workers both onsite and in China to address skills shortages. They have tried to engage local communities to earn a social license for their overseas operations. The Chinese government is now following suit. It is developing more formal cooperation agreements on industrialization and upskilling in addition to pre-existing, ad-hoc arrangements by individual companies.

So far, the outcomes have been mixed. Many Chinese firms in Central Asia are employing more locals. Yet the more closely integrated these Chinese firms become with the region's economies, the more they must deal with, or be co-opted by, localized corruption and political fights. Newly available polling data shows that public sentiments toward China are becoming more negative.

Chinese companies are flexibly adapting to this environment of heightened expectations in a variety of ways. The views that outside observers in Washington and elsewhere harbor of China's infrastructure investments through the Belt and Road Initiative (BRI) in Central Asia are outdated and do not reflect how much Chinese firms and eventually the Chinese government have adapted to meet local needs. Any Western-proposed alternative to the BRI needs to take these considerations into account.

#### Introduction

Chinese companies' overseas operations first and foremost seek to generate profits, yet they must also reflect and advance (or be seen to advance) the broad policy goals of the Chinese government. As a former chairman and president of the Export-Import Bank of China (Exim Bank of China) wrote in 2015, "[Chinese companies are] the implementers at the pointy end of the broad policy direction. [The Belt and Road Initiative] BRI is completely reliant on the positive participation of [Chinese] companies." As a result, Chinese firms abroad find themselves managing competing priorities.

One of those priorities is adapting to the demands of the countries in which they do business. In Central Asia, national governments, local politicians, and local communities now demand more from their international commercial partners. The governments and citizens of Central Asian countries want more jobs, exports, government revenue, and Chinese support for local community projects and skills training. To continue operating in the region without disruptions, Chinese firms simply cannot ignore these local demands. Consequently, Chinese firms in Central Asia have been responding by, for example, localizing their workforces, facilitating local economic development near major investment projects, and trying to create links with local communities.

But many Central Asians' strong distrust of foreign, and particularly Chinese, firms and their misgivings about their own governments have made this task more difficult. The more that Chinese companies involve themselves in Central Asian communities, the more enmeshed they have become to local problems like corruption or local political fights.

The Chinese government's three main strategic and political interests in Central Asia have been largely consistent over time. China hopes to ensure a stable flow of hydrocarbons, to ensure the region is as economically and politically stable as possible, and to secure tacit cooperation (or at least a lack of criticism) from regional actors with China's political agenda. Kazakhstan in particular has faced more pressure in the last five years from China as Kazakh authorities deal with local anger at the Chinese government's forced detentions of ethnic minorities (especially Uyghurs) in the Xinjiang region.

Yet Chinese firms' economic and commercial roles in Central Asia have changed much more rapidly. Prior to Chinese leader Xi Jinping's rise to power in 2012, China had three main economic roles in the region. First, China funded and built roads, power plants, and electrical grids in Kyrgyzstan and Tajikistan. Second, Chinese firms invested in oil and gas assets in Kazakhstan, Uzbekistan, and Turkmenistan, while hydrocarbon exports to China have ballooned since the 1990s. And third, China began importing moderate levels of unprocessed metals from Kazakhstan and cotton from Uzbekistan.

While hydrocarbons still dominate Central Asian exports to China, Beijing's emphasis has shifted over the last five years to helping the region's economies industrialize. Gone are the large infrastruc-

ture loans that characterized China's earlier economic engagement in Central Asia. Indeed, the last major loan deal for Kyrgyzstan or Tajikistan, the major regional recipients of Chinese lending, was signed in 2014. Instead, Chinese firms now are trying to build factories, develop processing facilities for raw materials, and modernize local agricultural operations and facilities. These efforts are part and parcel of a strategic push to help four of the five Central Asian countries (all except for Turkmenistan, which remains too economically and politically isolated) to develop export industries that employ locals and improve the skills of local workers.

Multiple trend lines are driving these changes. First, Central Asian states have learned how to push both the Chinese government and Chinese companies to meet their needs. They increasingly insist on programs and stipulations to hire and upskill more local workers, and government officials in the region have begun coordinating with Chinese companies and the Chinese government to formulate joint development plans. Today, unlike before, they seek investment instead of government-to-government loans.

Second, China's central government and its two leading policy banks—the China Development Bank (CDB) and the Exim Bank of China—have encouraged this move toward investment and away from large, debt-funded infrastructure projects.

Third, Chinese firms are adapting to this new environment. An ever-growing number of Chinese companies are investing abroad due to overseas market opportunities, cutthroat competition at home, industrial overcapacity, rising wages for Chinese workers, and stricter environmental regulations in China.

A few of these Chinese firms have ended up pursuing opportunities in Central Asia. As a result, more Chinese companies are acting and investing in ways that broaden Chinese economic engagement from the handful of big, loan-financed projects that characterized the earlier phase of Chinese commercial ventures in the region. This pattern of Chinese companies—big and small, public and private—searching for market opportunities in a less competitive part of the world has been a steady long-term trend, not the result of some Chinese government edict to enter Central Asian markets.

Chinese investment alone cannot upgrade the skills of local labor forces and transform these countries' economies. For example, China's ambassador to Tajikistan claimed in a January 2020 interview that Chinese firms employed over 7,000 locals in the country prior to the outbreak of the coronavirus pandemic.<sup>2</sup> By comparison, it is estimated that between 400,000 and 1 million Tajik citizens live in Russia; many of them work there and send back remittances, which make up a major element of the Tajik economy.<sup>3</sup> So, while China is making a modest difference to employment and skills training in certain sectors of Tajikistan's economy, the Russian economy is vital to the Tajik economy because it directly employs at least hundreds of thousands of Tajik migrants in Russia itself. Even so, such employment arrangements in Russia are not necessarily offering Tajik migrant laborers new skills or improving Tajikistan's underlying base of human capital.

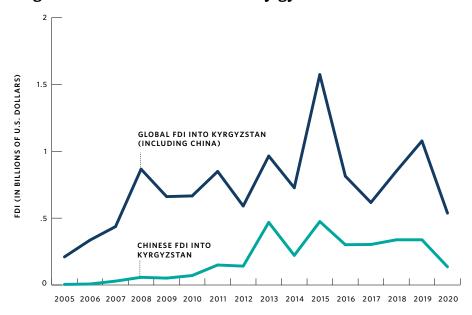
The roles of Chinese firms operating in Central Asia are changing as they face evolving demands from local government officials and citizens in Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan. These firms have employed various strategies and tactics to navigate the region's business environments as Central Asian governments, communities, and commercial partners increasingly ask more of their actual and potential Chinese partners.

# Central Asia's Changing Economic Landscape

China's economic engagement in Central Asia has progressed in roughly four phases, with developments in one phase sometimes overlapping with the next.

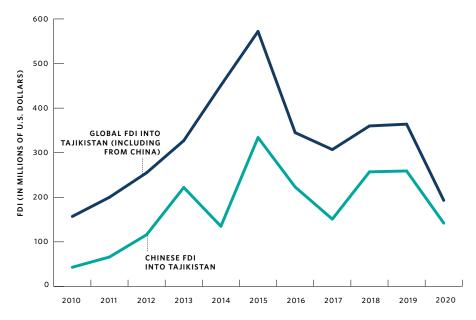
- **Phase 1:** From the late 1990s to 2014, Chinese engagement focused principally on state-backed investments in hydrocarbon and mineral extraction in Kazakhstan and Turkmenistan. This engagement later shifted to hydrocarbon pipeline construction to move gas and oil to China. But these investments have slowed dramatically since around 2014.
- **Phase 2:** From 2006 to 2014, Chinese policy banks lent funds to the governments of Tajikistan and Kyrgyzstan for transportation, power generation, and electrical grid projects. Some projects have continued to be built since 2014, but no new major loan agreements have been signed since then.
- **Phase 3:** Since the late 2000s, there has been a steadily growing number of Chinese companies, often private firms, making small investments in a range of diversified industries in Central Asia beyond the hydrocarbons sector and related industries and services. Most of these Chinese investors have been driven by difficult business conditions in China and a relative lack of competition in Central Asia.
- Phase 4: Since around 2012–2013, Central Asia has seen a proliferation of projects that could be described as industrial capacity building. In Kazakhstan and Uzbekistan, for example, such projects have involved hydrocarbon processing. In Tajikistan, by contrast, the focus has been on textiles, modernizing agriculture, and cement and glass factories. In Kyrgyzstan, Chinese firms have invested in oil refineries, cement factories, and mineral mining. There appears to be an upper ceiling on the number of Chinese firms willing to invest in Kyrgyzstan and Tajikistan, likely due to their limited market size and challenging business environments. Figure 1 shows that Chinese foreign direct investment (FDI) flows into Kyrgyzstan have remained consistent since 2013 (except for a drop in 2020 likely caused by the coronavirus pandemic). Figure 2 shows a similar consistency for Chinese FDI flows into Tajikistan since 2015 (with a similar pandemic-related drop in 2020). The steady flow of FDI contrasts with the lack of new infrastructure-related deals financed by loans from Chinese policy banks in those two countries.

FIGURE 1 **China's Foreign Direct Investment Flows Into Kyrgyzstan** 



SOURCE: National Statistical Committee of the Kyrgyz Republic, "4.04.00.07 Postupleniye Pryamykh Inostrannykh Investitsiy po Stranam" [4.04.00.07 Foreign Direct Investment Inflow by Country], last accessed October 3, 2021, http://stat.kg/ru/statistics/investicii.

FIGURE 2 **China's Foreign Direct Investment Flows Into Tajikistan** 



SOURCE: National Bank of Tajikistan, "Pryamyye Inostrannyye Investitsii v Respubliku Tadzhikistan po Stranam" [Foreign Direct Investment in the Republic of Tajikistan by Country], last accessed September 14, 2021, https://nbt.tj/ru/statistics/tavozuni-pardokhti-jt/ sarmoyaguzori-oi-mustakimi-khorii/sarmoyaguzorihoi-mustakimi-khoriji-ba-jt-az-r-kishvarho.php.

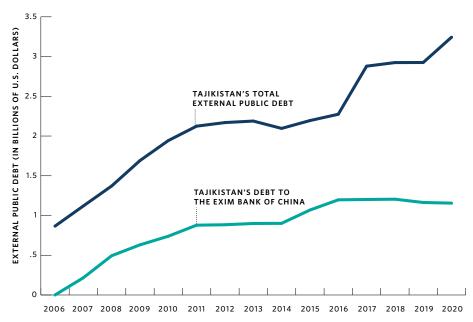
The first Chinese companies with the capacity to invest abroad were the national state-owned oil companies. China's downstream supply of hydrocarbons was limited, while demand was booming. Kazakhstan and Turkmenistan both had potentially large, yet poorly mapped, hydrocarbon deposits. Kazakhstan and Uzbekistan were looking to use hydrocarbons to power their economies after the collapse of the Soviet Union, yielding a confluence of shared interests. China's national oil companies and smaller operators, underwritten by cheap financing from the Chinese government, invested in hydrocarbon exploration and extraction in the region through both greenfield and brownfield investments.

China's first big hydrocarbons play in the region came in 1997 when the China National Petroleum Corporation (CNPC) purchased a 60.3 percent stake in one of Kazakhstan's significant hydrocarbon companies, AktobeMunaiGas.<sup>7</sup> That same year, China and Kazakhstan signed an intergovernmental agreement for an oil pipeline, which became operational in 2006.<sup>8</sup> This set off several other investments, such as CNPC's acquisition of PetroKazakhstan in 2005.<sup>9</sup> A set of three gas pipelines from Turkmenistan through Uzbekistan and Kazakhstan to China began transporting gas in 2009.<sup>10</sup>

The next phase of China-spurred economic activity in Central Asia was set off in 2006 when Tajiki-stan, the region's poorest country with a per capita gross domestic product (GDP) of around \$400 that year, signed loan deals with China to finance road projects, electrical grids, and a hydropower plant. Not all of these initial Chinese-Tajik deals progressed, but the Exim Bank of China's loan disbursements were at their highest between 2007 and 2009. The most recent large deals (over \$100 million) were signed in 2014, but these projects already have been completed. One deal worth \$79 million was signed in 2017, but that one is relatively small compared to Tajikistan's total \$1.2 billion in debt to the Exim Bank of China. Before the coronavirus pandemic, Tajikistan's debt to China was gradually decreasing as it paid back the old loans (see figure 3). Dushanbe has since continued to borrow from elsewhere, so China's share of Tajikistan's overall debt load, contrary to popular perceptions, decreased from 53.6 percent in 2016 to 35.6 percent in July 2020. China suspended Tajikistan's loan repayments due to the effects of the pandemic in the second half of 2020, so that trend has momentarily slowed.

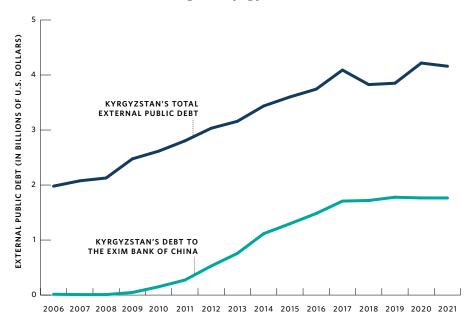
Kyrgyzstan, meanwhile, signed its first big loan deal with the Exim Bank of China in 2009 and its last one in 2015. The most recent deal was the North-South Alternative Road in Kyrgyzstan, a project that is still being constructed with a target completion date of late 2021. The Exim Bank of China has continued to disburse money as part of that project. However, Kyrgyzstan's total debt to the Exim Bank of China basically has remained flat for the last four years (see figure 4), so it is likely that the country's loan repayments are roughly similar to the ongoing disbursements for the road project. During the pandemic, Kyrgyzstan borrowed not from Beijing but from the International Monetary Fund to meet its immediate budgetary shortfalls. <sup>20</sup>

FIGURE 3 **China's Falling Share of Tajikistan's External Public Debt** 



SOURCE: Tajikistan Ministry of Finance, "Otchet o Sostoyanii Gosudarstvennogo Dolga na 2013 God" [Report on Public Debt 2013]; Tajikistan Ministry of Finance, "Otchet o Sostoyanii Gosudarstvennogo Dolga na 2018 God" [Report on Public Debt 2018]; and Tajikistan Ministry of Finance, "Otchet o Sostoyanii Gosudarstvennogo Dolga na 2020 God" [Report on Public Debt 2020].

FIGURE 4 The Exim Bank of China's Static Holdings of Kyrgyzstan's External Public Debt



SOURCE: Kyrgyzstan Ministry of Finance, "Struktura Gosudarstvennogo Vneshnego Dolga KR na 2021 God-Novosti Vedomstva-Ministerstvo Finansov Kyrgyzskoy Respubliki" [Structure of the External Public Debt of the Kyrgyz Republic for 2021—Department News— Kyrgyzstan Ministry of Finance], August 9, 2021, http://www.minfin.gov.kg/ru/novosti/mamlekettik-karyz/struktura-gosudarstvennogovneshnego-dolga-kr-na-2.

The Exim Bank of China is the main Chinese government lender to both Kyrgyzstan and Tajikistan. But there are other small sources of funds. It was reported in 2015 that the National Bank of Tajikistan would have a line of credit of up to \$500 million from the CDB.<sup>21</sup> Documents from Tajikistan's Ministry of Finance show that the country's national bank had only borrowed \$10 million by 2016 and that the debt owed has since fallen to \$2 million.<sup>22</sup> Between 2013 and 2015, the CDB and the People's Bank of China made five separate lending pledges to Tajik state-owned bank Amonatbonk with a cumulative value of around \$91 million.<sup>23</sup> It remains unclear if this money has been disbursed. It could be hidden as it is not a direct loan to the Tajikistan government. Either way, the amount is small compared to lending by the Exim Bank of China. And there have been no large lending pledges to the Tajikistan government or government-related entities by lenders other than the Exim Bank of China since 2015. In Kyrgyzstan, lenders apart from the Exim Bank of China have made loan pledges (though it remains unclear if they were actually disbursed) to Kyrgyz banks, but these pledges are in the order of tens of millions of dollars versus over \$1.5 billion actually disbursed by the Exim Bank of China.<sup>24</sup>

Just two companies have constructed the bulk of these important infrastructure projects in Kyrgyzstan and Tajikistan. The China Road and Bridge Corporation (CRBC) built the roads, and TBEA, a company formerly known as Tebian Electric Apparatus, built the electrical grids and power plants. Many of these projects had long been planned, but neither state had been able to finance them on their own.

While Chinese policy banks have largely stopped funding new infrastructure projects in Tajikistan and Kyrgyzstan, Chinese firms at times still construct this type of infrastructure in Central Asia. Some firms win tenders from multilateral banks. For example, the Hunan Road and Bridge Construction Group started building a road in Tajikistan in 2021 funded by the Asian Development Bank, the Organization of the Petroleum Exporting Countries (OPEC) Fund for International Development, and the government of Tajikistan. Chinese Chinese and Kazakhstan have agreed to a total of fifty-five projects, some of which involve electricity and transportation infrastructure. Some of these will likely attract Chinese policy bank funding, but they are a relatively small part of an agreement that focuses mainly on industrial capacity building. Chinese policy bank funding.

In the late 2000s, a handful of other Chinese investors started opening businesses in Central Asia. But these firms were spread across a diverse range of industries. In general, these companies sought to escape increasingly competitive conditions, and often significant industrial overcapacity, in China. Central Asia offered markets with less intense competition, notwithstanding the region's difficult business environments.<sup>27</sup> There was also the attraction of lower labor costs and tax incentives from some recipient governments.

These companies represented the first wave of Chinese investors in Central Asia who drove a new phase of economic activity due to overcapacity and difficult conditions in China. Under Xi, China's central leadership strived to move the country's industrial overcapacity overseas as part of the BRI,

which was launched in 2013. But even before then, the Chinese government had encouraged the country's policy banks and commercial banks to provide cheap financing for overseas investments as part of the Go Out policy.

The BRI led to much clearer policy-related communication between the governments of China and Central Asia. For example, in December 2014, during a visit to Kazakhstan by Chinese Premier Li Keqiang, the countries reached an \$18 billion agreement on industrial cooperation, although it is unclear how much follow-through there has been. Nearly 300 Chinese business leaders joined Li on the trip, and the government of Kazakhstan prepared a list of almost eighty project proposals for their Chinese counterparts to consider. China and Kazakhstan established a \$2 billion fund in 2015 to kick-start planning for industrial tech transfers from China to Kazakhstan. By 2019, more than fifty of the projects had received a stamp of approval, and at least fifteen of them already have been completed (though some of the completed projects began before 2013).

Table 1 below demonstrates that, while there are transportation and power station projects on the list, its focus on industry is very clear. <sup>33</sup> If mineral processing, hydrocarbon processing, manufacturing, chemical production, and agroindustrial ventures are considered industrial projects, then these projects account for 72.6 percent of the value of the projects in the intergovernmental agreement.

TABLE 1

Value of Projects by Type From the Intergovernmental Framework Agreement

Project Type	Completed Projects	Approved Projects	Projects Under Consideration	Total Value (U.S. dollars)
Mineral Processing	2	3	6	\$7.4 billion
Hydrocarbon Processing	3	1	3	\$5.5 billion
Manufacturing	5	2	4	\$1.8 billion
Chemical Production (Nonhydrocarbons)	0	0	2	\$2.8 billion
Agroindustrial	2	2	1	\$387 million
Healthcare	0	0	1	\$189 million
Finance	1	0	0	\$13 million
Mineral Extraction	0	0	1	\$1.5 billion
Fossil Fuel Electricity Generation	0	0	3	\$1.4 billion
Renewable Energy	5	2	2	\$680 million
Transportation	1	2	1	\$2.9 billion
Water Treatment	0	1	0	\$60 million
Total	19	13	24	\$24.6 billion

**SOURCE:** "Construction of Kazakh-Chinese Investment Projects Will Be Carried Out in Accordance With the Legislation of Kazakhstan," Kazakh Invest, September 10, 2019, https://invest.gov.kz/media-center/press-releases/stroitelstvo-kazakhstansko-kitayskikh-invest-proektov-budet-vestis-v-sootvetstvii-s-zakonodatelstvom/.

**NOTE:** While the raw data came from the official project list, the authors of this paper devised a new set of categories and made judgment calls about which project belonged in which category.

The funding model varies by project. Some will be direct investments by Chinese players, often through joint ventures. For others, Chinese policy banks will lend money to Kazakh state-affiliated entities, including for some of the electricity and transportation projects (but these will be smaller as a percentage of GDP than previous such projects in Kyrgyzstan and Tajikistan). The CDB, for instance, lent \$2 billion to a subsidiary of Kazakhstan's sovereign wealth fund, Samruk-Kazyna, to help bankroll a \$2.6 billion plastics factory being built in Atyrau, a city in western Kazakhstan.<sup>34</sup> In this case, the parties involved used a build-transfer (BT) model, in which the Chinese companies involved are building the project and hand it over to the Kazakh partner to operate. Sometimes the Chinese company involved operates a project for a time before handing it back over. In this instance, a Kazakh state-run company will operate the plant once the Chinese construction firm finishes building it. It is one of multiple such BT projects that Chinese investors have undertaken in the country.

BT projects appeal to both the government of Kazakhstan and Chinese companies investing or operating in the country. For Kazakhstan, the benefit is that such deals usually help build industries that the country historically has not had and ones that Kazakh firms themselves simply would not have the capacity to build indigenously. For their part, Chinese companies must build the projects but are absolved of the need to deal with the hassles and obstacles that often arise when operating a business in Kazakhstan.

Available evidence suggests that the Chinese government and Chinese firms deepening their involvement in Kazakhstan have been responding to strong pull factors from the country itself. In January 2014, then Kazakh president Nursultan Nazarbayev described industrial plans for 2030 and 2050 in which he outlined a roadmap for continued economic growth. One of the key strategies was to "develop new industries with an emphasis on expanding [the] export-oriented non-energy sector." These plans are on top of Kazakhstan's dedicated industrialization plans from 2010–2014 and 2015–2019, which sought to expand manufacturing and processing facilities for natural resources. In November 2014 (when planning for Li's December trip would have already been underway), the government of Kazakhstan announced the Nurly Zhol program for industrial development, a national program for economic renewal that sought to attract businesses in sectors like transport; energy; and industries such as food and chemical manufacturing, engineering, and others. These areas of emphasis coincide closely with what Chinese firms have offered since around 2015.

Following Kazakhstan's success with China, neighboring countries sought to follow its lead. During a December 2015 visit to Beijing, then Kyrgyz prime minister Temir Sariyev declared his intent for Kyrgyzstan to become another Central Asian destination for Chinese industrial production capacity.<sup>37</sup> Six months later, when Chinese Foreign Minister Wang Yi visited Bishkek, then Kyrgyz foreign minister Erlan Abdyldaev said that forty projects had been submitted to China for consideration.<sup>38</sup> Few, if any, of these Kyrgyz-proposed investments involving China ever materialized.

Tajikistan, meanwhile, never publicly laid out a list of specific projects, but the term "industrial capacity" started to appear in Dushanbe's bilateral statements with Beijing in 2017.<sup>39</sup> This reflects an underlying Tajik interest in emulating its neighbors: the idea of cooperating to build new industries in Tajikistan had been mentioned even before 2017.

In certain sectors, Chinese investors have helped establish export industries for Tajikistan. Gold mining in Tajikistan, for example, rose within a seven-year period from 2.4 metric tons to 8.1 metric tons in 2019, with a great deal of this production apparently stemming from a single Chinese-Tajik joint venture. Likewise, in a five-year stretch, Tajikistan went from importing most of its cement to exporting a surplus of domestically produced wares. By 2018, the country produced almost 4 million metric tons of cement and exported 1.4 million—a striking reversal and growth of the country's indigenous industry. Chinese firms made the vast majority of this cement in factories in Tajikistan.

Overall, China plays a sizable, but not dominant, role in Tajikistan's export markets. Estimates vary by agency, but Tajikistan's three largest exports are metal ores, aluminum, and cotton. As outlined above, Chinese firms are heavily involved in metal ore extraction. Aluminum exports are dominated by a Tajik state-owned firm called Talco. Despite announcements from Chinese firms about ostensible deals with Talco, there is little evidence that they have materialized in practice. At Chinese firms do some processing of cotton but are not heavily invested in the farming of cotton yet.

This Chinese investment may not be enough to enhance Tajikistan's overall export profile, as exports are equivalent to only 12.3 percent of the country's GDP (a relatively low figure). <sup>46</sup> By comparison, Kazakhstan's exports are equivalent to 36.4 percent of GDP in current U.S. dollars. <sup>47</sup> Tajikistan is known to be highly corrupt and still depends on a relatively closed economic model, so the country will likely struggle to grow jobs and increase its people's incomes, despite these useful Chinese-invested projects. <sup>48</sup>

Then there is Uzbekistan, a country whose experience has differed somewhat from the rest of Central Asia. Under its late leader, Islam Karimov, who governed from the last stages of Soviet rule through the country's early decades of independence until his death in 2016, the country had a closed economy and a repressive political system. On Karimov's watch, China's economic role in Uzbekistan remained small. But under President Shavkat Mirziyoyev, who came to power in December 2016, Uzbekistan has become more open economically. This shift marked the start of China's growing involvement in the Uzbek economy beyond its limited reach into hydrocarbons.

During Mirziyoyev's rule in Uzbekistan, Chinese companies have largely cherry-picked projects off an informal list of sectors of interest to the government of Uzbekistan. Uzbekistan's 2035 development strategy argues that the country needs to modernize and increase the export capacity of its agricultural and textile sectors, with a particular need to develop processing technologies.<sup>49</sup> Thus, Uzbekistan declared in late 2019 that it would stop exporting raw cotton in 2020 and instead stimulate its own domestic textile industry.<sup>50</sup>

A Chinese conglomerate based in the province of Jiangsu, the Jinsheng Group, invested in a textile factory in Uzbekistan that became operational in 2017. With an annual output of 22,000 metric tons of cotton yarn, 95 percent of this factory's products are exported, and half of them are sold to China.<sup>51</sup> Foshan-based Xin Zhong Yuan Ceramics began a \$150 million ceramics production line in Uzbekistan in 2017.<sup>52</sup> As a company statement explaining the investment noted, "Uzbekistan has relatively cheap raw ceramic materials and energy [costs]." The statement added that "the local consumer market is very large."<sup>53</sup>

In March 2021, Beijing and Tashkent took an initial step toward a more formal governmental framework for channeling Chinese investment into industrial cooperation with Uzbekistan. During a virtual meeting, both governments committed to deepening cooperation on trade, investment, and industrial capacity building.<sup>54</sup>

In the same meeting, the two sides discussed collaborating more in the "chemical, electrical, textile, leather . . . , and building materials industries." They struck an agreement to draw major Chinese companies to Uzbekistan, and the government of Uzbekistan put together forty project ideas for prospective Chinese investors to consider. These efforts are similar to some of those underway in Kazakhstan, as Chinese companies have worked with both countries governments to develop a pipeline of potential projects in line with Kazakhstan's national development plans. As with Kazakhstan, China's policy banks have pledged money to the government of Uzbekistan since 2015 for transport and power plant projects, but these are small amounts compared to the largest loan—valued at \$1.2 billion and signed in 2017—from the CDB to Uzbekneftegaz for the Oltin Yo'l gas-to-liquid processing plant. States of the Oltin Yo'l gas-to-liquid processing plant.

The stated goals of all four of these Central Asian states are the same: to leverage collaboration with China to attract investment that can help develop local export industries. The Chinese government claims to want to help them achieve this objective. But there have been wide disparities among the four countries in terms of attaining this goal and producing real export industries. Chinese companies, not state bureaucrats or policy bankers, need to develop and realize these projects. Unsurprisingly, the region's largest economies, Kazakhstan and Uzbekistan, have attracted more interest.

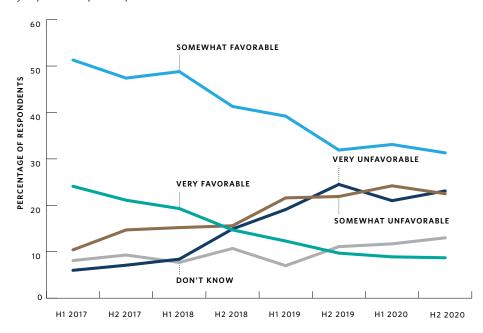
# Chinese Companies' Quest for a Social License in Central Asia

As the economies of Central Asia have evolved, the Chinese companies active in the region have had to adapt accordingly. Like Chinese firms operating elsewhere in the world, Chinese companies with operations in Central Asia are seeking to win over communities in the region, or at least defuse local opposition to their presence. Negative sentiments toward China in Central Asia are not ubiquitous, but they are becoming more common.

Central Asia Barometer is a Bishkek-based nonprofit that engages in applied social science research. It conducts large-scale sentiment surveys in the region twice each year. One key question is how respondents feel in general about China. In Kazakhstan, Kyrgyzstan, and Uzbekistan (this question is not asked in Tajikistan), the most common response to this question is "somewhat favorable." Yet in all three countries, when asked about China, the share of people giving a favorable answer has dropped noticeably in recent years (see figures 5, 6, and 7).58

FIGURE 5 **Public Opinion Toward China in Kazakhstan** 

Survey Question: "Thinking about other countries, please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of . . . China."

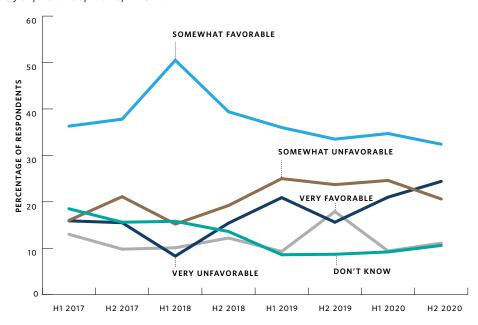


SOURCE: Central Asia Barometer, "Databases," Central Asia Barometer, last accessed October 11, 2021, https://ca-barometer.org/en/ cab-database. (Central Asia Barometer provided the data directly to the authors. The data for 2017, 2018, and H1 2019 are available on the Central Asia Barometer website.)

#### FIGURE 6

#### **Public Opinion Toward China in Kyrgyzstan**

Survey Question: "Thinking about other countries, please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of . . . China."

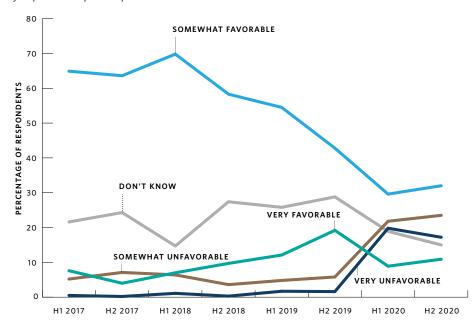


**SOURCE:** Central Asia Barometer, "Databases," Central Asia Barometer, last accessed October 11, 2021, https://ca-barometer.org/en/cab-database. (Central Asia Barometer provided the data directly to the authors. The data for 2017, 2018, and H1 2019 are available on the Central Asia Barometer website.)

#### FIGURE 7

### **Public Opinion Toward China in Uzbekistan**

Survey Question: "Thinking about other countries, please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of . . . China."



**SOURCE:** Central Asia Barometer, "Databases," Central Asia Barometer, last accessed October 11, 2021, https://ca-barometer.org/en/cab-database. (Central Asia Barometer provided the data directly to the authors. The data for 2017, 2018, and H1 2019 are available on the Central Asia Barometer website.)

This trend of increasingly negative sentiments toward China is a problem for Chinese companies operating in Central Asia. Many of them have run into local opposition and protests that delay their projects. As Chinese firms' presence and local stature have grown, some have adjusted to the downsides of negative public opinion by seeking to nurture a form of social license (or public buy-in) to operate, not just government approval.

However, achieving a social license is difficult. Widespread corruption in Central Asia often seeps into Chinese projects, influencing government approval processes and local hiring decisions, so much so that the Chinese projects come to reflect the problems writ large in each of these countries. Worsening matters is the opacity of the Chinese government and the Central Asian states themselves. Without credible alternative sources of information, whisper campaigns run wild, fueling perceptions of corruption that now tend to follow all Chinese firms in the region, even ones that have been trying to keep their operations clean.

The challenge is particularly tricky in Kyrgyzstan, where most major Chinese projects in the country have, at some point, been delayed or stopped by social protests. Long-standing negative sentiments toward foreign mining projects have contributed to some of the problems Chinese firms have faced in Kyrgyzstan.<sup>59</sup>

To deal with the Kyrgyz people's antipathy, and sometimes hostility, for China and foreign investors, Kyrgyzstan has legislated to promote corporate social responsibility. The government introduced a law that requires all mining companies to pay 2 percent of revenue to local communities. <sup>60</sup> The revenue from the law has become a new part of a narrative contest over the lack of public trust that pervades the country. <sup>61</sup> The authors conducted seventeen semi-structured interviews in November 2020 with locals who live near Chinese projects in Kyrgyzstan. The locals had mixed perceptions as to whether Chinese firms were providing benefits to their communities.

Take the example of the Full Gold Mining Company, a local firm founded by a Chinese state-owned enterprise called Lingbao Gold. Some former employees pointed out the firm does offer some benefits to local employees, while others were more critical of the company. One Kyrgyz former employee of Full Gold Mining argued, "the company provided its staff with free coal for [heating their homes in] winter and sold coal at cheap prices to village residents. We also do not have road issues because the Chinese workers repair and restore the roads." Yet a current company employee claimed that the company is "not implementing [its responsibility to pay 2 percent of revenue to local communities], because the company [allegedly] gave a bribe to Kyrgyz officials." The same interviewee added, "In my opinion, Full Gold Mining brings zero benefits to the community except providing local people with jobs."

While specific allegations can be difficult to prove, there are perceptions among Kyrgyz workers that bribes are necessary to gain work at some Chinese firms. To be fair, interviewees from companies like CRBC and Altynken did not mention such behavior. <sup>64</sup> By contrast, bribes are reportedly needed to get hired at other Chinese companies in Kyrgyzstan. One interviewee claimed, "My older brother was employed at the oil refinery [in Kara Balta] . . . He was employed through an acquaintance and [allegedly] gave a \$300 bribe" to win the job. <sup>65</sup> Three additional Kyrgyz local interviewees in Kara Balta also alleged that a bribe was necessary merely to get a job at the refinery. <sup>66</sup>

According to another interviewee in Kara Balta, bribes also can reportedly be demanded by "higher positioned local [Kyrgyz] workers who threaten [to fire] lower positioned workers." Meanwhile, a former employee of the Full Gold Mining Company claimed that "you can only get a job through corruption or relatives." These alleged practices are not unique to Chinese firms or Chinese-invested local companies in Kyrgyzstan. If policy research on the subject is any indication, bribery reportedly can be required for employment in Kyrgyz organizations too. 69

In Tajikistan, the autocratic and repressive government tightly controls most aspects of civic life, so public expressions of dissatisfaction with Chinese companies rarely occur. As in Kyrgyzstan, Chinese companies have gone to great lengths, sometimes in conjunction with the Chinese Embassy and other Chinese government bodies, to be seen as having a social license to operate by offering benefits to local individuals and communities.

But that license, such as it is, seems to be driven more by pressure from the government of Tajikistan than by civil society groups. The Chinese Ministry of Commerce's 2020 country-by-country investment guide states, "Tajik society pays attention to whether foreign enterprises are performing social responsibilities in their projects in Tajikistan. Sometimes government officials in Tajikistan will directly make requests to enterprises." Table 2 shows examples of how Chinese firms have sought to accommodate these requests from Dushanbe.

TABLE 2 **Chinese Company's Community Outreach Projects in Tajikistan** 

Company	Projects in Tajikistan	Relevant Community Outreach Efforts
Tibet Summit Resources	Zarnisor Gold Mine	The company claims that it funds scholarships for Tajik students to study at eight partner universities in China, has funded a China-Tajikistan cultural center in Dushanbe, and has funded the construction of two Confucius Institute facilities. <sup>71</sup> It also claims that it has donated to schools and hospitals, has funded new roads, has repaired reservoirs, and has provided electricity to local communities. <sup>72</sup>
Zijin Mining Group	Zeravshan Gold Mine	The firm claims to have regularly made donations to homes for the elderly, orphanages, schools, and hospitals and to have provided about \$5 million to build a kindergarten for local communities. <sup>73</sup>
Huaxin Cement	Multiple cement plants	The company claims to have built schools, repaired local roads and bridges, provided training to locals, and engaged in other poverty reduction work. By June 2016, it claimed to have spent 20 million Tajikistani somoni on poverty alleviation and charitable projects through its own charitable fund. <sup>74</sup>
China Road and Bridge Corporation	Multiple roads in Tajikistan (funded by the Exim Bank of China)	The firm funded local schools and repaired local roads free of charge, and it also claims to have engaged in postearthquake reconstruction. <sup>75</sup>
Tebian Electric Apparatus (TBEA)	Multiple energy projects in Tajikistan (funded by the Exim Bank of China)	The company built four institutions known as friendship schools in Tajikistan. <sup>76</sup>
Xinjiang Zhongtai	A textile production campus with the Xinjiang Production and Construction Corps (in Dangara, Tajikistan)	The firm reportedly purchases raw materials from local cotton farmers, has introduced technology and training to increase yields for farmers, and uses local contractors where possible. <sup>77</sup>
China National Petroleum Corporation	Small exploration operations and a gas pipeline construction project, which is currently stalled	The company has trained Tajik technicians, offered scholarships, and provided resources to Tajikistan's national library and materials for students from impoverished families, according to China's Ministry of Foreign Affairs. <sup>78</sup>

**SOURCES:** Various media, governmental, and corporate sources (see endnotes).

Unlike in Kyrgyzstan, the authors did not interview employees of Chinese companies in Tajikistan for security reasons—it is simply too politically sensitive to talk directly to employees of these firms. Tajikistan also has a highly corrupt government—it was ranked 149 out of 180 countries on the 2020 Corruption Perceptions Index.<sup>79</sup> (By comparison, Kyrgyzstan ranked 124, Kazakhstan was 94, and Uzbekistan was 146.)

So it is plausible that many of the corruption issues (or perceptions of corruption) faced by Chinese firms in Kyrgyzstan are also faced by firms in Tajikistan. Numerous Chinese firms have struggled to manage corruption in Tajikistan's business environment. As one Chinese observer with local knowledge of Tajikistan said in a 2017 interview with the *South China Morning Post*, "You know how Tajik shoot pigeons? . . . They scatter some food on the ground and then wait around the corner with a shotgun. When pigeons come, they just blast away from a short distance. That's the dire situation facing Chinese businessmen here."

China's growing economic involvement in Uzbekistan is more recent than in the rest of the region. Perhaps this has led to more positive views toward Chinese investment in the country. One recent survey by Central Asia Barometer shows that 60 percent of people in Uzbekistan believe that Chinese investment will have "some" or a "great deal" of benefits for the country, down from 75 percent of respondents in 2019.<sup>81</sup> By comparison, Kyrgyzstan and Kazakhstan have had much more negative views toward Chinese investment (see table 3).

TABLE 3
Central Asians' Sentiments Toward Chinese Investment

Survey Question: "How much confidence do you have that China's investment in our country will create jobs in our country for our citizens?"

Country	<b>Great Deal</b>	Some	Not Very Much	None At All	Don't Know
Kazakhstan	5 (8)	20 (16)	35 (31)	35 (38)	4 (7)
Kyrgyzstan	6 (7)	25 (21)	33 (34)	31 (32)	5 (6)
Uzbekistan	26 (34)	34 (41)	11 (8)	15 (6)	13 (10)

**SOURCE:** David Trilling, "Poll Shows Uzbeks, Like Their Neighbors, Growing Leery of Chinese Investments," Eurasianet.com, October 22, 2020, https://eurasianet.org/poll-shows-uzbeks-like-neighbors-growing-leery-of-chinese-investments. (This table draws on data from a Central Asia Barometer survey.)

NOTE: The 2020 answers are listed on the left in each box, while the 2019 figures are listed in parentheses on the right.

The bottom line is that Chinese firms operating across Central Asia face anti-China sentiment. According to a database on regional protests compiled by the Oxus Society for Central Asian Affairs based in Washington, DC, there have been ninety-seven known anti-China protests since 2018 in Kazakhstan and Kyrgyzstan.82 In Kazakhstan, in particular, the human rights atrocities committed against Uyghurs and ethnic Kazakhs in neighboring Xinjiang have led to protests by civil society organizations that have prompted a crackdown by Kazakh authorities. This crushing of protests has only exacerbated negative public opinion toward China. These developments, in turn, have had a direct impact on some government decisions. For example, early plans to permit the leasing of Kazakh agricultural land to foreign farmers, which were widely interpreted as a basis for expanded Chinese economic activity in the country, were canceled in the wake of protests.<sup>83</sup>

# Chinese Firms' Push to Hire Locals and Invest in Human Capital

In response, Chinese firms have come up with ways to try to navigate these anti-China sentiments in Central Asia while seeking to satisfy local government officials' demands for these firms to add more economic value in the region. After years of importing Chinese labor for certain projects, almost all large Chinese companies in Central Asia have made significant efforts to localize their workforces.

Chinese localization practices across the region are not uniform. But localization of hiring, human capital development, and the upskilling of Central Asian workers is happening in Chinese enterprises. Almost all major Chinese firms have now shown a desire to localize their Central Asian workforces. The difference among these firms is the speed at which they are doing so.

In earlier research, one of the paper's co-authors investigated relative levels of local hiring at major Chinese investment projects in Kyrgyzstan and Tajikistan. Table 4 builds on the results of that inquiry.84

TABLE 4 **Localizing Major Chinese Investments in Kyrgyzstan and Tajikistan** 

Project [Country]	Investor	Early Share of Local Hires	Subsequent Share of Local Hires	Notes
Zhongda Oil Refinery [Kyrgyzstan]	Shaanxi Coal and Chemical Industry	30 percent, according to a 2013 media report that quotes the governor of the region who says local employment will increase to 90 percent over time. <sup>85</sup>	67 percent, with 586 out of 873 employees being locals, according to a 2016 media interview with a refinery human resources executive. <sup>86</sup>	The original contract stipulated 90 percent local hires over an unclear timeframe, according to a 2016 media interview with a refinery human resources executive. <sup>87</sup>
Altynken Gold Project [Kyrgyzstan]	Zijin Mining Group (a 60 percent ownership stake) and the Kyrgyz firm KyrgyzAltyn (40 percent stake)	No more than 50 percent as of 2012.88  Contract mandated 50 percent local hires during construction. Union reps complained that this goal was not met.	90 percent, according to a 2016 media report. <sup>89</sup>	A former employee states that the company employs around 1,000 locals. <sup>90</sup>
Kuru-Tegerek Gold Mine [Kyrgyzstan]	China National Gold Group	60 percent, according to a 2014 author interview. <sup>91</sup>	60 percent, according to a 2018 author interview with an employee. <sup>92</sup>	None
Sino-Tajik Mining Company [Tajikistan]	Tibet Summit Holdings	70 percent (as of 2014), with 1,200 local workers out of 1,700 total workers, according to a journalist who interviewed locals near the mine. <sup>93</sup> Another source of the same journalist said there were 650 Chinese workers, which would equate to 62 percent local hires if there were 1,700 total workers.	Around 70 percent, according to a company representative answering shareholder questions in 2017.94	Goal of 90 percent local hires, according to the same company representative. 95

Project [Country]	Investor	Early Share of Local Hires	Subsequent Share of Local Hires	Notes
Zeravshan Gold Mine [Tajikistan]	Zijin Mining Group	Over 1,500 local employees as of 2011; overall ratio unknown. <sup>96</sup>	97 percent, according to an in-depth 2015 Sputnik report; the mine employs 2,229 people, 2.6 percent of whom are Chinese citizens, according to the report. <sup>97</sup>	None
Huaxin Gayur Cement (a joint venture that operates the Yovon Cement Plant) [Tajikistan]	Huaxin Cement	70 percent with 250 local employees, according to a 2016 Xinhua report, which included a site visit and an interview with a Yovon Cement executive. 98	79 percent, with 270 locals out of 340 employees, according to a 2020 media interview with a Huaxin Cement executive in Tajikistan. <sup>99</sup>	Plan to reduce Chinese staff to less than fifty by replacing them with locals, according to Huaxin Cement's chief representative in Tajikistan. <sup>100</sup>
Huaxin Gayur (Sugd) Cement (a joint venture that operates the Sughd Cement Plant) [Tajikistan]	Huaxin Cement	Max of 63 percent. Out of more than 800 workers during construction, 500 were locals, according to a 2015 Asia Plus report. <sup>101</sup>	Unknown	Tajikistan's Presidential Press Service claimed in 2016 that over 90 percent of workers are locals after the project opened. <sup>102</sup>
Dangara Textile Complex [Tajikistan]	Xinjiang Zhongtai Chemical Company	Many local workers, based on a 2016 site visit by one of the authors. <sup>103</sup>	95 percent, with 600 locals out of 630 workers, according to a 2019 site report from Xinhua. <sup>104</sup>	None

**SOURCES:** Various media, government, and corporate sources (see endnotes).

There are many more Chinese firms in Kazakhstan than there are elsewhere in the region, so it is difficult to capture the full scope and intensity of localization efforts at all the major Chinese project sites in the country. Despite this, there is strong evidence that some larger Chinese firms have already localized their workforces. CNPC, which is the largest Chinese investor in Kazakhstan, claims that 97 percent of its workforce in the country is localized. Employees for the two major Chinese telecoms players—ZTE and Huawei—told one of the authors in research interviews that over 80 percent of workers for their business operations in Kazakhstan were locals.

Table 5 shows completed and partially constructed projects valued over \$100 million on China and Kazakhstan's list of projects from the China-Kazakhstan Intergovernmental Framework Agreement (which means that some earlier large hydrocarbon projects are not included). For most of those projects, public statements have been released claiming that they hire mostly locals. These examples show that Chinese firms are localizing their workforces to adapt to local pressure and to take advantage of lower wages for local workers.

TABLE 5 **Localized Workforces on Major Chinese Projects in Kazakhstan From the Joint Bilateral Project List** 

Project (Company)	Completion Date and Project Value	Notes on Local Employment
Car Assembly Plant (China General Technology)	Project completed in 2018 (with plans for an expansion in 2021). \$1.1 billion	Joint venture with SaryarkaAvtoProm. 51 percent owned by the Chinese side. Public comments by the company claim the factory will provide local jobs. <sup>107</sup> The project's localization goal is projected to be 50 percent, but this includes components from suppliers and contractors. (It is not clear how this figure is calculated.) <sup>108</sup> Kazakh Invest states 500 permanent jobs were created by this project. <sup>109</sup>
Orda Glass Factory in the Region of Kyzylorda (China Triumph International Engineering)	Project completed in 2020. \$198 million	Plans for gradual localization. The plans called for 160 Chinese employees and 160 locals to work at the plant by 2019. By 2020, there would be sixty Chinese employees and 260 locals. By 2021, ten Chinese employees would work alongside 310 locals, according to 2018 comments by the head of the Kyzylorda industrial and innovative development department. <sup>110</sup> (It remains unclear if these plans have been implemented.) Kazakh Invest states that this project created 226 permanent jobs. <sup>111</sup>
Reconstruction of the Shymkent Oil Refinery (China Petroleum Engineering and Construction Corporation)	Phase 1 completed in 2017 and Phase 2 completed in 2018. <sup>112</sup> \$2.1 billion	Build-transfer project. At peak construction, 7,000 workers were on site—70 percent of them Chinese and 30 percent locals. <sup>113</sup> A few Chinese engineers remain to provide technical support, and occasionally upkeep teams visit from China. <sup>114</sup> Kazakh Invest states that this project created 2,296 permanent jobs. <sup>115</sup>

Project (Company)	Completion Date and Project Value	Notes on Local Employment
Kyzylorda Cement Factory (Gezhouba Group)	Project completed in 2019. \$177 million	Investment project. The Chinese Embassy in Kazakhstan claims the project directly employs 200 locals and indirectly has created 400 jobs. <sup>116</sup> No information is available on employment during construction. Kazakh Invest states that the project created 260 permanent jobs. <sup>117</sup>
Construction of 100- Megawatt Solar Power Plant (Universal Energy)	Project completed in 2019. \$107 million	Joint venture with Kazakh partner. Universal Energy claims several hundred local jobs were created during the construction, operations, and upkeep of the project. <sup>118</sup> The Kazakh Energy Ministry states that thirty-five permanent jobs were created for locals. <sup>119</sup> Kazakh Invest states that this project created thirty-two permanent jobs. <sup>120</sup>
Steel Pipe Plant (China National Petroleum Corporation)	Project scheduled for 2021. \$100 million <sup>121</sup>	Joint venture with KazMunayGas. An employee of the joint venture said that, across all projects in Kazakhstan, around 90 percent of hires are locals. <sup>122</sup> According to Kazakh Invest, the venture will create 300 permanent jobs in the region (nationalities were not specified). <sup>123</sup>
Nuclear Fuel Fabrication Plant (China Guangdong Nuclear Power Group)	Numerous agreements signed between 2014 and 2016; finalized in 2020. New plant to open in late 2021.	The Chinese company purchased a 49 percent stake in Kazatomprom subsidiary Ortalyk, with a cash injection to develop a new fuel fabrication plant. <sup>124</sup> The new joint venture also holds exploration and exploitation rights to numerous uranium deposits in Kazakhstan. The joint venture claims the plant will create more than 130 new jobs. <sup>125</sup> Kazakh Invest states that the project will create 129 permanent jobs. <sup>126</sup>
Polypropylene Factory (China National Chemical Engineering)	Factory slated to open in the third quarter of 2021.  (The build contract was for \$1.9 billion, while Kazakh Invest quotes the total cost of the plant at \$2.6 billion.) <sup>127</sup>	Build-transfer project constructed by China National Chemical Engineering. Nearly 2,000 workers were on site at the peak of construction: about 1,500 of them were from Kazakhstan, according to a media interview with a company employee. <sup>128</sup> After it is completed, the project will be handed over to Kazakhstan Petrochemical Industries, which says it will employ 586 locals. <sup>129</sup> Kazakh Invest states that the project will create 550 permanent jobs. <sup>130</sup>
Construction of the 100-Megawatt Zhanatas Wind Farm in Zhambyl (China Power International Holding Limited)	Project partially opened in 2020. Full opening in late 2021. \$150 million, (according to Kazakh Invest) or \$160 million (according to the company) <sup>131</sup>	Joint venture between China Power International Holding Limited and Visor Capital with the project jointly financed by the Asian Infrastructure Investment Bank, the European Bank of Reconstruction and Development, and the Industrial and Commercial Bank of China. <sup>132</sup> A projected 250 workers are needed for the peak of the construction phase. <sup>133</sup> Most of the workers are from nearby villages and the city of Zhanatas, according to environmental and social analysis on the project. <sup>134</sup> Fifteen maintenance staff will be employed in an ongoing capacity. <sup>135</sup> Kazakh Invest states that the project will create thirty permanent jobs. <sup>136</sup>

SOURCE: Kazakh Invest, "Construction of Kazakh-Chinese Investment Projects Will Be Carried Out in Accordance With the Legislation of Kazakhstan."

NOTE: The Khorgos TechnoPark SEZ was not included in the table because it is a location for companies to move to rather than a direct employer itself.

#### Regionwide Pressure From Governments and Social Actors

Government officials throughout Central Asia—along with trade unions and civic activists in Kyrgyzstan and Kazakhstan—have ratcheted up the pressure for Chinese firms to localize their workforces. Central Asian governments try to encourage local hires by writing local hiring obligations into project contracts, legislating the proportion of local hires for all or some foreign-funded projects, and placing caps on foreign worker permits. In the past, there have been questions about government officials' willingness or capacity to enforce such measures, though there are some signs of heightened vigilance.

The government of Kazakhstan is becoming noticeably stricter on enforcement. Kazakhstan is reducing its quota of foreign workers and increasing inspections for those flouting the rules. <sup>137</sup> In 2019, the quota for foreign workers was set to 49,000, and it was reduced to 29,000 in 2020. <sup>138</sup> A guide from the Chinese Ministry of Commerce on doing business in Kazakhstan states:

The government of Kazakhstan continues to increase inspections of enterprises that employ foreign labor. Severe disciplinary measures were taken by companies that violated regulations. In 2019, a Chinese-funded enterprise which was undertaking a highway renovation project in Kazakhstan violated relevant laws and regulations of Kazakhstan. Many Chinese employees held business visas and travel visas. This resulted in the company receiving a fine and employees being deported.<sup>139</sup>

In Kazakhstan, protests over Chinese economic projects have more often been directed at the government of Kazakhstan rather than at the Chinese companies involved. Thus, Kazakhstan's government feels pressure to proactively demonstrate that Chinese firms are not flouting laws. Kazakh officials, due to public pressure, occasionally prevent certain activities that would benefit Chinese businesses, such as leasing farmland to foreigners.

Tajik law states that foreign workers may not exceed 30 percent of the total workforce of a given company, and a quota system is also in place. In 2019, the quota was 7,500.<sup>140</sup> It remains unclear, perhaps even unlikely, that Tajikistan strictly enforces the quota. However, the enforcement of the 30 percent law has changed. Relying on Chinese Embassy reports from Dushanbe, the top firm for insuring Chinese overseas projects, Sinosure, wrote in its 2015 Tajikistan country report that, since 2014, Tajik officials have informally stipulated that four out of every five hires be local workers. <sup>141</sup> Since 2016, this informal figure has been increased to 90 percent, according to the Chinese Ministry of Commerce's 2020 country report. <sup>142</sup>

Large-scale infrastructure projects and industrial projects have sometimes been exempt from labor requirements. Yet, as Table 4 above shows, most Chinese industrial projects in Tajikistan are serious about localization. Large infrastructure projects have dried up, so labor exemptions for those projects are not so consequential now. One major infrastructure project called Dushanbe-2, a combined heat and power plant, has continued to be operated by TBEA after construction was completed in 2016. According to a TBEA executive, three-quarters of the plant's employees are local workers. 143 Even after building in some margin for error, TBEA has made considerable strides from the days when less than 10 percent of its more than 1,000 employees at its first project in the country in 2009 were locals.144

There are localization laws in Kyrgyzstan too, but the pressure to localize comes not just from the state but directly from local actors. 145 Virtually every large-scale Chinese commercial venture in Kyrgyzstan has been stymied to some degree by delay-inducing protests. In most cases, the Chinese investors are firms with deep experience in China but are new (at least when they first arrive) to overseas investing, particularly in the rough-and-tumble world of Kyrgyz social mobilization and civic action.

The newcomers among these Chinese investors initially tend to bring their own staff from China to Kyrgyzstan, and they invariably meet severe local pushback. A case in point is the Taldy-Bulak Gold Mine, located southwest of Bishkek. The Zijin Mining Group (a diversified, Fujian-based mining company partly owned by a Chinese county government) holds a 60-percent stake, while a Kyrgyz state-run firm called KyrgyzAltyn holds the remainder: the joint venture company that runs the project is called Altynken). 146

Disputes at the project site were frequent in the early 2010s. Notably, in October 2012, a fight with local residents drove Chinese workers from the site for a time. 147 Local political and union representatives claimed that the company did not meet its contractual obligation to hire half local workers during construction. 148 This incident set off alarm bells for the Chinese company. Subsequently, according to a company executive, the company gradually hired more locals and improved its training for Kyrgyz employees. 149

There are other indications that the company has followed through. A 2016 report by Radio Azattyk, the Kyrgyz-language service of Radio Free Europe/Radio Liberty, says that nine out of every ten of the project's 1,000-plus workers are local hires. 150 While these disagreements have not subsided, union representatives are now more intent on winning concessions on wages and working conditions for local workers, as the number of local hires has markedly improved. 151

Uzbekistan is the missing link in this story, in part because China is a much newer player at scale in its economy (outside of hydrocarbon exports). Chinese governmental reports state Uzbekistan's foreign worker quota is not centralized. In practice, permits have to be approved by local governments of individual Uzbek states, an approach that leads to regional variation. Like in Tajikistan, there are provisions for international agreements to circumvent local laws. There has been no obvious push for localization as seen elsewhere in the region. But given the localization trends across Central Asia, patterns of localization could be replicated in Uzbekistan too.

#### Lower Wages

Wages for local workers throughout Central Asia tend to be lower than those for imported Chinese workers. In certain cases, this tendency has been a driver for increased localization. The effect of cheaper wages is most pronounced in the poorer Central Asian countries (Kyrgyzstan and Tajikistan) where wages are lowest, but this principle applies to the wealthier Central Asian countries too (Kazakhstan and Uzbekistan).

Chinese firms face higher secondary costs associated with employing Chinese workers, such as "visa processing [costs], hardship allowances, and subsidized travel to and from China."<sup>154</sup> The costs for foreign worker permits alone in Uzbekistan are \$2,000 per employee per year, although the Chinese Ministry of Commerce states that some firms get exemptions. <sup>155</sup> That said, foreign work permits in Tajikistan only cost \$300 per person per year. <sup>156</sup> Some Chinese companies may try to cut corners, but doing so could conceivably mean the added cost of payoffs. Total ancillary costs are significant when compared to average salaries in all Central Asian states (see tables 6 and 7 below). <sup>157</sup>

It is hard to directly compare the salaries of Chinese workers with those of local workers on the same project due to the opaque nature of many Chinese companies operating in Central Asia. However, there are two data points indicating that Chinese workers are generally more expensive than locals. First, the authors looked (in mid-September 2021) at the average wages offered in job ads for roles in Central Asia for Chinese workers on the popular job website Liepin. Most roles had a salary range attached. For each country, the averaged lower and upper bounds of the salary range for the Chinese job ads were many multiples higher than the average wages in that Central Asian country.

TABLE 6 **Average Monthly Salary Per Worker in Central Asia** 

Country	Average monthly salary per worker	Time Period
Kazakhstan	\$601 (average) <sup>158</sup>	August 2021
Kyrgyzstan	\$225 (average) <sup>159</sup>	Quarter 1 (2019)
Tajikistan	\$132 (average) <sup>160</sup>	Reported in August 2021
Uzbekistan	\$278 (average) <sup>161</sup>	Quarter 2 (2021)

**SOURCE:** Various sources (see endnotes).

TABLE 7 **Average Monthly Salaries for Posted Jobs in Central Asia for Chinese Workers** 

Country	Number of jobs ads	Average Lower Bound (Multiples of Average Wage in that Country)	Average Upper Bound (Multiples of Average Wage in that Country)
Kazakhstan	52	\$2,923 (4.9)	\$4,277 (7.1)
Kyrgyzstan	19	\$1,524 (6.8)	\$2,155 (9.6)
Tajikistan	62	\$2,493 (18.9)	\$4,030 (30.5)
Uzbekistan	43	\$2,210 (8)	\$3,545 (12.8)

**SOURCE:** Authors calculations based on table 6 data and Liepin job post wage data.

Despite this general pattern, there are caveats that help explain this apparent wage gap. Lower-paying jobs for Chinese workers may be advertised in places other than Liepin. Chinese firms also may pay more than the average wage to their local staff. Furthermore, Chinese workers probably occupy more skilled roles than locals. Nonetheless, the wages for the job ads for Chinese workers in the region are astronomically high compared to average local wages. It is logical that Chinese companies operating in the region would want to lower their labor costs.

This insight leads to the second piece of evidence: Chinese companies openly say that they want to hire more locals because they are cheaper. One such firm is the Tajik-Sino Mining Company, a major Chinese investor in Tajikistan; it is developing lead and zinc deposits in the northwestern province of Sughd. In one public statement, a company representative said the firm is seeking to curtail its labor overhead by hiring a smaller share of Chinese workers in its local operations even beyond the levels stipulated by law:<sup>162</sup>

One of [the] Tajik-Sino Mining Company's core competitive advantages is the cost of its labor. [The company] has consistently kept the ratio of Chinese to Tajik workers at three (Chinese) to seven (Tajik), which is required by the Tajik government. However, since 2016, Tajik-Sino Mining is incrementally limiting the number of Chinese employees [beyond these requirements]. The company hopes that, through three to five years of hard work, the ratio of Chinese workers to Tajiks will be limited to one to nine. Right now, the monthly salary level of Tajik workers employed by the Tajik-Sino Mining Company does not exceed \$300. The company hopes to control expenditures at a stable level through adjustments to the ratios of Chinese to Tajik workers and the total number of employees while increasing labor productivity.

Another major Chinese investor, the Zijin Mining Group, holds stakes in both Kyrgyz and Tajik mines. Zijin also has seen cost benefits from hiring more local labor in these two countries. In 2015, the firm's chief executive officer underscored that high "labor costs" in China helped explain the firm's decision to move business overseas:<sup>163</sup>

Along with rising labor costs domestically [in China] and the shortage of resources, the cost of mining development has been on the rise. In order to maintain the core competitiveness of Zijin and build a leading global mining enterprise, we simply have to choose to "go out" (zou chuqu).

# Upskilling and Management Challenges Amid Chinese Localization

Even as Chinese companies aim to hire more locals throughout Central Asia, achieving this goal has been difficult. Three major structural challenges are some of the main culprits: a lack of skilled workers in Central Asia, significant cultural and linguistic barriers to training and entry for Central Asian workers, and difficulties with integrating locals into management positions without upskilling.

But Chinese firms recognize these issues and have transitioned from exhibiting an earlier penchant for standoffish engagement to making new investments in upskilling local workers through a host of technical training, knowledge transfers, and language programs that seek to overcome these problems.

#### Skills Shortages

Soviet-era industrialization in Central Asia relied heavily on highly skilled Russian engineers who were sent to the region and subsidies to prop up Central Asian industries that would otherwise have been uncompetitive. But this model fell apart when the Soviet Union collapsed in 1991. Brain drain and skills shortages across many industries were severe, as most countries in the region deindustrialized between 1991 and 2015.

The Chinese Ministry of Commerce's guide to doing business in Kazakhstan highlights this challenge for prospective Chinese investors, arguing that "the professional skills of industrial workers in Kazakhstan are low, and there are big problems with low efficiency and difficulties with retention. The shortage of professional technicians and high-quality talent still needs to be improved." 164 Similarly, Sinosure writes, "Tajikistan's local labor force has relatively low technical capability and cannot meet the requirements for important positions. This has created many difficulties for Chinese-funded firms' commercial activities in Tajikistan."165

Brain drain poses its own challenges because so many of the skilled workers of Central Asia have already left the region for jobs in Russia. Kyrgyzstan saw approximately 454,000 workers leave for Russia for work in 2019, as did approximately 1.2 million Tajik workers, 2.1 million people from Uzbekistan, and 136,000 laborers from Kazakhstan (though precise estimates vary widely for all countries and the coronavirus pandemic had a big impact in 2020). 166

As Chinese firms have sought to localize their operations, they have had to increase training opportunities to upskill their local workforces. So far, only companies have provided dedicated technical training. But China's foreign minister said in a May 2021 meeting with his five Central Asian counterparts that the Chinese government will set up a vocational training center in each country called a "Luban Workshop" (named after a legendary Chinese craftsman) within the next three years. 167 The scale of these government-led workshops remains unknown, but this approach could develop into the vocational equivalent of Confucius Institutes.

Current company training programs are a response to the immediate demand for skilled technical workers on Chinese projects in Central Asia, not least from the region's government officials, who want to address skilled labor shortages and reindustrialize their economies. Overall, these programs seem to be quite successful so far at creating a workforce skilled at job-specific tasks. The principal avenues to such upskilling have included offering on-the-job training and apprenticeships, training employees in China, or a combination of the two.

TABLE 8 **Examples of Chinese Firms Providing Training in China for Central Asians** 

Company	Date Started	Details
China Petroleum Engineering and Construction Corporation	2000	Annual traineeship in China for selected local workers to meet oil refinery upgrading demands. <sup>168</sup> 7,200 workers received training in China as of 2020. <sup>169</sup>
		Annual scholarship with traineeship program for high school graduates in Aktobe region, with 150 Kazakh students enrolled by 2017. <sup>170</sup>
China National Petroleum Corporation	2002	Annual traineeship in China for selected local workers, with 300 of them receiving training in China by 2017. <sup>171</sup>
		About \$9 million was spent on training programs by 2017. <sup>172</sup>
Tebian Electric Apparatus (TBEA)	2009	Technical exchange for selected Kyrgyz workers at the company's headquarters in Xinjiang. <sup>173</sup>
China Triumph International Engineering	2010	Traineeship in China for selected local workers to learn modern cement factory operation. <sup>174</sup>
Zhenhua Oil	2010	Annual traineeship for mid-level local workers. <sup>175</sup>
Geo-Jade Petroleum Corporation	2014	Annual traineeship in China for selected local workers in oil technologies. <sup>176</sup>
CITIC Group	2014	Traineeship in asphalt production technologies in China for selected local workers. <sup>177</sup>
Sinopec	2017	Traineeship for twenty local workers to learn a unique refinery modernization technique in Nanjing. <sup>178</sup>
China International Water and Electric Corporation	2018	Traineeship in China for selected local workers to learn operation of Moynak-style hydropower stations. <sup>179</sup>
Gezhouba Group	2019	Traineeship in China for selected local workers to learn modernized cement production. <sup>180</sup>
Shaanxi Coal and Chemical Industry Group	2014	Training in China for some workers, who returned with promotions. The company maintains a training partnership with China's Northwest University. <sup>181</sup>
Henan Guiyou Industrial Group	2018	Scholarship for children of local workers. Selected local workers trained in modern farming practices. <sup>182</sup>

**SOURCES:** Various sources (see endnotes).

But on-the-job training does not take place only to meet Central Asian government localization quotas or to control wage costs. It can also be necessary when a company imports Chinese technologies and equipment. A documentary by the Chinese broadcaster China Central Television (CCTV) claims that 95 percent of the technologies supplied for modernizing an oil refinery in Pavlodar, Kazakhstan, were made in China. (The documentary was filmed on site and interviewed Chinese and Kazakh technicians.)<sup>183</sup> As the vice president of an aluminum-processing plant in Pavlodar built by a Chinese firm told CCTV, he frequently goes to China because "technology keeps updating and there is a need to catch up." 184 Similarly, according to the documentary, 90 percent of the technologies at the hydropower station in Moynak, Kazakhstan, are also Chinese-made. 185 As a result, the Kazakh chief operator of Moynak underwent training at Chinese hydropower stations on the Tianwan River. 186 The China International Water and Electric Corporation told CCTV that the company has sent about forty Kazakh workers to China for training. 187

It is difficult to say if companies in certain industries are more likely to send their staff to China for training. Table 8 above shows a snapshot of companies from many industries that have sent Central Asian staff to China. At an anecdotal level, it seems the more technically difficult the tasks, the more likely that employees will have to go to China to gain familiarity with complex equipment. BT projects, too, seem to require staff to go to China because the Chinese firms involved hand over all technical operations as soon as construction is complete, so there are few opportunities in such cases for on-the-job training.

The rate at which local staff from Central Asia are promoted into the management ranks of Chinese firms is company-dependent. In some cases, there are clear ceilings. One interviewee working for a large firm in Kazakhstan stated, "in our company, we have examples of promoting locals from engineering positions to management positions. But always there is a senior manager from China overseeing his job. The promotion could be very quick if the local can speak Chinese." <sup>188</sup> In another Chinese firm in Kazakhstan, a local employee stated that promotion for locals happens "up to the level of deputy director," but, by implication, not much further up the chain. <sup>189</sup> In January 2018, an employee of China National Gold Group in Kyrgyzstan told one of the authors that management positions are mainly given to Chinese staff but added that "senior engineering and administrative positions go to locals if they have experience."190

It is possible to expect there will be more local managers at Chinese firms in Central Asia in the future. Tajikistan is already implicitly requiring 50 percent of management positions to be held by locals, according to a 2015 report from Sinosure. <sup>191</sup> As other Central Asian governments and firms' efforts to control wage costs both drive worker localization, sheer numbers will mean some locals end up in management positions. But there is still a way to go until Chinese firms operating in the region have predominantly localized management.

## **Cultural and Language Barriers**

Linguistic differences remain a barrier for Chinese firms that aim to upskill workers in Central Asia, albeit less so in some companies than others. A worker in one of Huawei's Central Asian offices said the typical language of communication was, in fact, English—not Chinese, Russian, or Kazakh—and that most Chinese and local workers all spoke English well. Meanwhile, a ZTE employee in Kazakhstan told the authors, "Maybe sometimes the English level of Chinese [workers] is not so good, but basically it is not a big problem." 193

At the other end of the spectrum, an interviewee at a large Chinese project in Kyrgyzstan told one of the authors in January 2018 that language barriers have caused confrontations between Chinese and local staff when there are not enough interpreters to go around. There is also evidence that language difficulties have hampered work at the oil refinery in Kara Balta. The general manager acknowledged that language barriers had played a role in the delays that have at times plagued the refinery, a view corroborated by other interviewees as well.

While language barriers remain a problem at certain companies, the bigger staffing challenge continues to be finding skilled technical workers. This is a problem for almost all companies. Both authors have encountered Central Asians who speak Chinese well but cannot find a job with Chinese firms because the firms need technical skills rather than language skills. Translators and interpreters alone are not going to help meet localization goals. Numerous companies offer language training to their existing staff rather than hiring Chinese-speaking Central Asians because they value the skills and experience of the workers they already have.

Overall, Central Asian governments are serious about industrializing their economies and upskilling their workforces. Chinese companies and, increasingly, economic policy coordination with the Chinese government are the best external option to make that happen for Central Asian governments, notwithstanding the long-standing structural impediments that countries in the region face.

## Initial Lessons on Chinese Localization in Central Asia

The countries of Central Asia, even the poorer ones, are more than capable of exercising agency in their economic interactions with Beijing and Chinese firms. For the Chinese government, the specifics of these commercial interactions are not nearly as important as signaling that Central Asia is stable, a source of exportable hydrocarbons, and increasingly aligned politically with Beijing. This alignment includes trying to win Central Asian support for alternatives to U.S. financial and technology monopolies. Central Asian states have had a measure of power within these broad strategic and political parameters to negotiate the specific shape and terms of their economic engagement with China.

For Central Asian governments, meanwhile, getting China to build basic infrastructure is no longer the main priority. Instead, these governments want Chinese firms to provide the region with opportunities to reindustrialize, receive transferred knowledge and skills, and build up their human capital. This reality is often lost on U.S. and European policymakers. Many of them are now promoting alternative infrastructure finance schemes, such as U.S. President Joe Biden's Build Back Better World, to compete with China's BRI—without recognizing the degree to which Chinese policies and practices have shifted from hard infrastructure to developing human capital, upskilling workers, and otherwise meeting the needs, where feasible, of Central Asian states. Partly in response to the demand signals that Central Asian governments and communities are sending to Chinese firms, Chinese actors are now increasingly focused on providing jobs, nurturing export-led industries, and bolstering Central Asian budgetary coffers with greater tax revenues. Any cooperative or competitive strategy from Washington, Brussels, Tokyo, or elsewhere should recognize that this is now a key part of Chinese activities in the region and thus a positive source of leverage for Beijing.

In this sense, Central Asian countries are not being taken for a ride by a predatory Chinese government or corporate sector. They are well aware of the risks and opportunities of economic engagement with Beijing, but they have tried to leverage these openings to meet their own growth, labor, innovation, and development needs. Government officials across the region are hungry for transformation, not incremental change that does not close the gap with more developed countries. And they are insisting that even Chinese firms leave more of the value added from their regional investment projects in Central Asia itself.

Central Asian countries have learned that they themselves need to press for economic development goals to be incorporated into contracts and reinforce their expectations of Chinese investors. Ultimately, however, while Chinese firms can provide financial and technical support and while China

can open its market to value-added Central Asian exports, these governments will have to overcome the internal challenges their economies have long faced by pursuing bolder and deeper structural reforms. This is a reality that any major foreign investor, Chinese or otherwise, must still reckon with.

Meanwhile, Chinese investors still face deep local mistrust in Central Asia. The attitudes of the region's people toward China are becoming more negative, and there are public perceptions that Central Asian governments make overly generous concessions to their Chinese partners. These currents of dissatisfaction have made Kyrgyzstan an especially difficult destination for Chinese investment. But despite this dislike and mistrust, China will remain a major economic presence in the region, especially if viable alternatives do not materialize.

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