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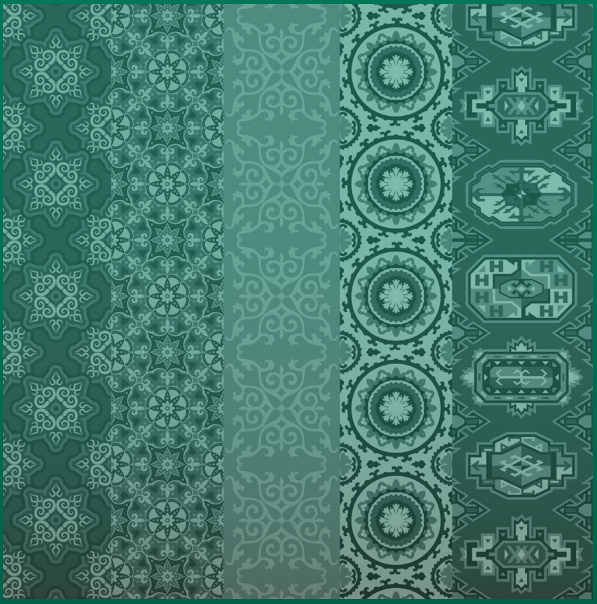
Investing in Central Asia

One Region, Many Opportunities



INVESTING IN CENTRAL ASIA

ONE REGION, MANY OPPORTUNITIES

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EXECUTIVE SUMMARY

Central Asia, broadly defined as the region east of the Caspian Sea incorporating the countries Uzbekistan, Kazakhstan, Tajikistan, Kyrgyzstan, and Turkmenistan, has the potential to be an attractive investment destination. The region benefits from macroeconomic stability and a relatively cheap and abundant labor force. Its demographic and economic trends have created a growing domestic market, estimated at $150 billion in 2017. Significant reforms have been implemented in most Central Asian countries, improving the investment climate in the region.

Central Asia remains overlooked for now, compared to other developing economies. Its FDI potential in non-extractive industries is estimated to be between $40 billion and $70 billion, which is a level of investment similar to Central America or the Balkans.

Historically, investment in the region has been directed towards extractive industries. While investors continue to perceive Central Asia as resource-rich because its extractive sectors have not reached their full potential yet, fluctuations in commodity prices and the region's will to diversify economies, along with steps to improve the business climate, have opened a window to other promising sectors. Numerous industries remain untapped in Central Asia, compared to the rest of the world. This is the case of agricultural processing, the petrochemical industry and tourism.

Despite sharing much culture and history, the Central Asian countries have followed divergent paths since their independence, making it difficult for investors to comprehend the region as a whole. They differ in level of development, investment climate, and regulatory environment.

Acknowledging their interdependence, the countries of Central Asia have made initiatives to establish regional cooperation. Economic cooperation has been limited so far. However, the countries are beginning to make bilateral agreements among themselves. These agreements between pairs of countries are, in effect, a step toward greater cooperation.

Better cooperation will benefit all the countries of the region. A steady stream of institutional improvements, major economic growth, and the liberalizing influence of the younger generation have created a greater basis for cooperation among the Central Asian countries.

Five keys to unlocking the region’s full potential:

- Better regional infrastructure: region-wide infrastructural improvements help create a more unified market in Central Asia; efforts are continuing in this direction
- Facilitating cross-border movement of goods, services, people and capital: trade facilitation measures have been implemented in both regional and international trade
- Harmonized regulations and investment climate: a harmonized investment climate allows the region to increase its FDI inflow (as was the case of NAFTA and ASEAN)
- Developing complementary advantages: cooperation helps build and reinforce regional value chains based on each country’s competitive advantages
- Coordinating investment promotional strategies: coordination leads to greater impact with fewer resources, particularly for promoting tourism.

INTRODUCTION

A SHIFT TOWARD CENTRAL ASIA AS A "FRONTIER" REGION

Due to a perceived market overvaluation, investors are more bearish today than at any time since the 2008 financial crisis

The ups and downs in the global economy over the last decade have led investors to reassess their strategies and expand their activities in both traditional and less traditional asset classes.

According to BCG's ninth annual investor survey[1], conducted in late 2017, 68% of investors think the market is overvalued – by an average of 15 percentage points – and therefore they expect lower total shareholder return (TSR) in coming years.

By comparison, in 2016, only 29% of investors thought the market was overvalued.

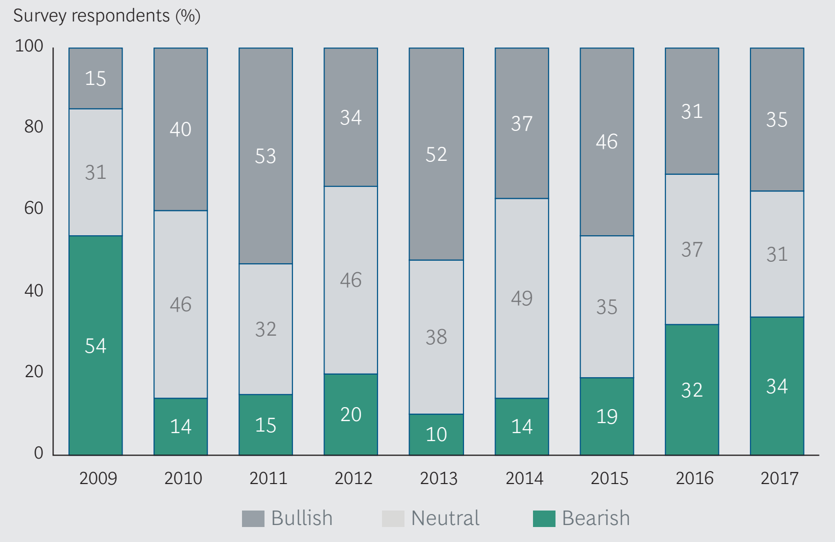
Investor pessimism in 2017 toward both equity markets and the macroeconomic environment was at its highest level since 2009. More than a third of investors (34%) were skeptical of the market's potential for the next three years, a substantial jump from 19% in 2015. Among self-described bearish investors in the 2017 survey, 79% cited market overvaluation as the reason for their pessimism.

Against this stark backdrop, investors are adopting a longer-term perspective. They are looking for sustained value creation, and 57% of respondents agreed that investments should be made in emerging markets. While this context may lead risk-averse investors to seek safer traditional destinations and assets, it offers opportunities for higher returns in "new frontier" markets that are unsaturated and cheaper for investors willing to explore new opportunities.

Indeed, in the current low-yield environment, emerging markets have attracted many investors in search of growth and higher returns. However, frontier markets, or countries in the early stages of their development, offer investors even greater potential. For investors with a long-term investment horizon who can withstand volatility, frontier markets can offer access to attractive growth potential and portfolio diversification benefits. Frontier markets also have the advantage of presenting low correlations with other global markets.

1 The survey—conducted in October-November 2017 by BCG— received responses from more than 250 portfolio managers and buy-side and sell-side analysts, representing firms that are collectively responsible for approximately $500 billion in assets under management. BCG has conducted the survey every year since 2009 to understand investors' views on global capital markets and priorities for shareholder value creation, soliciting their outlook on and expectations for the global macroeconomic environment, equity markets, and the continued ability of companies they invest in or follow to create value. Read the complete survey at www.bcg.com/publications.

FIGURE 1 | 2017 BCG investors' survey results. Investors are more bearish today than at any point since the 2007-2008 financial crisis



Note: Every year, respondents are asked, "where would you place yourself on the bear-bull spectrum for this year's performance of the equity markets you follow?" In 2017, they were asked that question about the next three years, through 2019.
Source: BCG investor survey, 2009-2017 analysis.

The growing attractiveness of emerging and frontier markets for investors has been confirmed by the latest foreign direct investment (FDI) flows. According to the World Bank, net FDI into Least Developed Countries (LDCs)[2] grew at a 12% compound annual growth rate (CAGR) from 2010 to 2015, while net FDI into wealthier emerging markets declined by 3% annually[3]. This trend is expected to continue in the coming years and to especially benefit emerging and frontier markets[4].

Meanwhile, the economic shift towards Asia is still underway, making the region highly attractive for investors

The global economic center of gravity continues to shift toward Asia's sustained growth and development of consumer economies, as investors unwaveringly seek exposure to the region for diversification and returns. As the economic realignment from West to East unfolded over the past decade, it was clear that the region's increasing population would drive growth for the foreseeable future. Economies within Asia are projected to expand through continued industrialization and development of infrastructure, the rise of a middle-class consumer society, and increased production and export of natural resources.

In this context, Asia, with its 6%+ projected growth rate, is expected to develop faster than the current 2% forecast for the Latin American and Caribbean region. Brazil is only slowly climbing out of a deep recession. Growth in Sub-Saharan Africa and the Middle East and North Africa is also expected to remain slow, at 3.2% and 3%, respectively[5].

China symbolizes the shift in global economic power away from the developed G7 economies. It has experienced rapid, double-digit growth over the first four decades of its reform thanks to an investment-driven model for exports and manufacturing. Moreover, China has a strong positive impact on the whole region, acting as both a global and regional locomotive. Its Belt and Road Initiative (BRI) is an illustration of China's positive impact on neighboring countries. As a core region along the Belt and Road Initiative, Central Asia benefits from the imple-

2 Least Developed Countries is a United Nations (UN) categorization, which incorporates most frontier markets, including Bangladesh, Madagascar, Myanmar and Senegal.
3 World Bank data
4 World Investment Report 2017, UNCTAD

5 World Bank Global Economic Prospects for 2018

Central Asia is poised to become a significant actor in this new global paradigm and the next frontier of economic opportunity for the world's investors

Central Asia has significant potential for strong growth over the next decades. The countries in this region are substantially below their potential production/ economic output levels

mentation of the initiative and receives FDI from China in industries other than natural resources. Chinese companies already own a large part of the FDI in extractive industries in countries such as Kazakhstan and Turkmenistan. Current Chinese investment planning in the region, however, has focused on building infrastructure and enhancing industrial capacities. Agriculture and related businesses are also being planned.

Central Asia is a new frontier for investors

Several international institutions and private equity funds agree that the Central Asian countries are becoming new FDI destinations, thanks to two main characteristics: an abundance of natural resources and a growing population that is increasing the market size. These markets have vast natural resource deposits, but most importantly they are home to a young and well-educated workforce capable of converting this raw metal, mineral and energy wealth into long-term sustainable economic growth and regional prosperity.

According to the Asian Development Bank (ADB), the outlook for the region brightened in 2017 after a few years of slowdown, thanks to stable oil prices, growing trade with neighboring China and Russia, and rising remittances. Growth is forecast at 3.9% in 2018, up from earlier forecasts of 3.5%. There are improved projections for Kazakhstan, expected to grow 3.3% in 2018[6], and 7.5% growth is forecast in Uzbekistan in 2018[7].

That is the highest in the region.

Moreover, the region has the advantage of neighboring and being influenced by fast growing economies such as India and China. The Central Asian markets form an important geo-strategic and economic trade hub and transit corridor, linking Asia with Europe, Africa and the Middle East, especially in the context of the BRI.

Hence, Central Asia is a key source of growth for investors over the medium-to-long term, and the world has started to take notice: due to their high potential, some Central Asian countries already are on investors' maps. This is the case of Kazakhstan, which has become an attractive destination for investment in the last decade. Between 2008 and 2017, the cumulative greenfield FDI[8] into the country was $82 billion[9]. With FDI mainly concentrated in extractive sectors, the country's diversifying economy offers attractive new opportunities. Uzbekistan has the potential to follow a similar trajectory and has begun a major transformation. The new leadership has been outlining plans for systemic economic reforms and the creation of a favorable business climate since late 2016. This opening up of the country can put the region on track to further cooperation and development. Based on current economic and political dynamics, the outlook for Central Asia in the coming years is positive for investors.

6 Asian Development Outlook (ADB)
7 However, Uzbekistan's government growth rate estimate is 5.9%.

8 Here and further only greenfield FDI is considered because greenfield FDI have a stronger impact on economic growth than Merger & Acquisition
9 FDI Markets, includes greenfield data only

CENTRAL ASIA HAS THE POTENTIAL TO BECOME

AN ATTRACTIVE INVESTMENT DESTINATION

Central Asia is a dynamic "frontier" region with high potential

Central Asia is a dynamic region with high potential

According to the Organization for Economic Cooperation and Development (OECD), the region's economic dynamism has been impressive over the last two decades. Since their independence from the Soviet Union in 1991, the five Central Asian countries have shown a significant level of development. Between 2000 and 2010, the region's GDP grew by 8% per year, labor productivity grew above world averages and FDI flows into Central Asia increased ninefold[1]. This positive trend persists. Since 2010, the region's GDP has grown by 25%[2].

The region's dynamism and potential have been acknowledged by the international organizations present here through development programs. The World Bank, for example, is setting up programs that increasingly view the development challenges of Central Asian countries through a regional lens. Moreover, investment and private equity funds, such as Sturgeon Capital ($25 million AuM[3]) and Altima ($400 million AuM), are also taking an interest in the region's untapped potential.

Central Asia has significant potential for further economic development. Today,

1 OECD, "Central Asia Competitiveness Outlook", July 2011

2 EIU

3 AuM - assets under management

THE WORLD BANK

"

The rapid economic expansion of China, Russia, and other nearby countries creates an unprecedented opportunity for Central Asia to emerge as a hub for trade and commerce

STURGEON CAPITAL

"

Central Asia and the New Silk Road promise to be a key source of growth for investors over the medium-to-long term, with regional listed equity markets currently some of the cheapest in the world

> The region has untapped potential to play an important economic role in the world

> The macroeconomic dynamics of the local market are incredible

Central Asia accounts for 0.3% of the world's GDP. The region's economic share has tripled since 2000. With a total GDP of around $240 billion in 2017, it is comparable to Central America[4] ($255 billion), Finland ($254 billion), or Chile ($275 billion) taken individually. Central Asia represents 1% of the world population (with ~70 million people), forming a market comparable in size to Thailand (~69 million inhabitants for a GDP of $455 billion) or Turkey (80 million for a GDP of $843 billion)[5] on an area of 4 million km^2, equivalent to the total area of the European Union (4.5 million km^2)[6]. Central Asia has a significant margin for further economic development: regional GDP per capita ($3,603) is lower than in developing economies like Thailand ($6,600) or Turkey ($10,440).

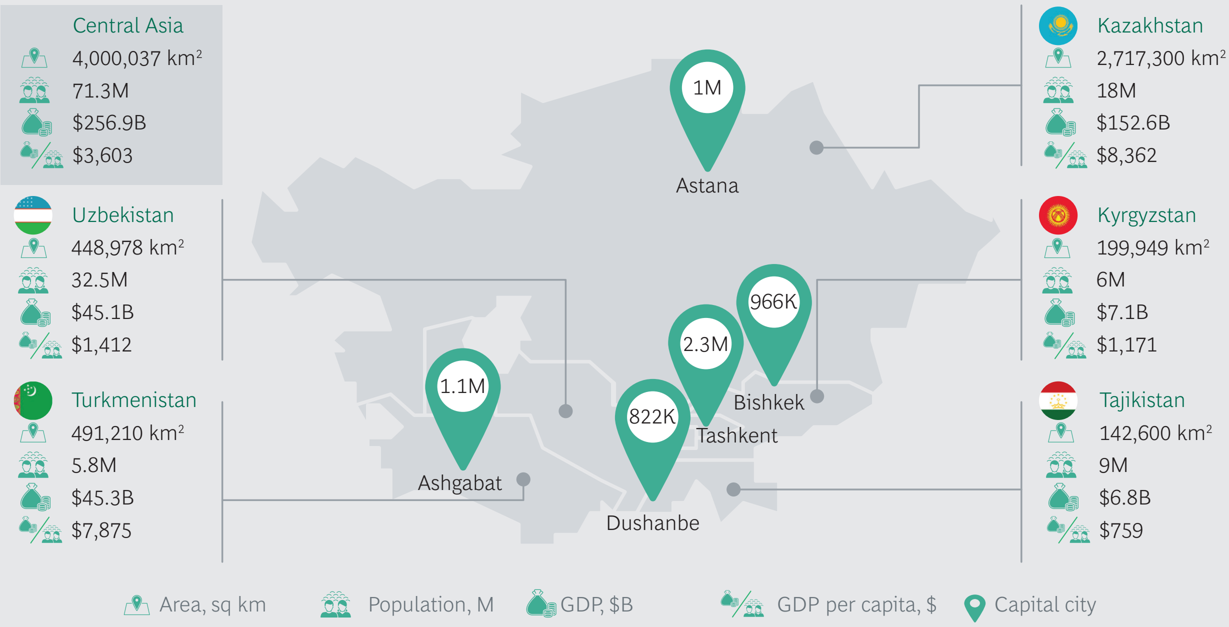
Moreover, the region's demographic and economic trends are translating into a growing domestic market estimated at $150 billion in 2017. All the Central Asian countries have a growing population, and private consumption per capita has been rapidly increasing in recent years (at an annual rate of 3.4% over the last decade[7], versus 1.5% in the world), reaching $2,107 in 2017[8,9].

The region is expected to continue its growth in the coming years. In the short term, its

4 Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua
5 United Nations, World Population Prospects, 2017
6 Also comparable to the area of India and Pakistan (3.3 and 0.8 million km^2) or to half of Brazil (8.5 million km^2)

7 At a growth rate similar to that of South Korea (3.3%), Singapore (3.4%) or Thailand (3.6%) over the same period
8 Similar to the private consumption level in North Africa ($2,120), Indonesia ($2,230) or the ASEAN ($2,390)
9 EIU

FIGURE 2 | Central Asia overview



Source: Open sources, EIU, country statistics, 2017.

pace is expected to pick up due to recovery and further growth in neighboring countries, an upgraded outlook for China, and a partial recovery in commodity prices, while the medium-to-long-term outlook for the region is favorable, as demand for its natural and labor resources is expected to be strong. The World Bank expects a relatively high uptake across the region (between 2.6% and 3.0% for Kazakhstan by 2020, 6.3% for Turkmenistan, between 5.6% and 6.5% for Uzbekistan, 4.2% to 4.8% for the Kyrgyz Republic and 5.0% to 5.7% for Tajikistan), while the global growth forecast for 2018 is 3.1% and only 2.2% in advanced economies[10].

Central Asia plays an important role in larger regional initiatives and offers relative security and stability, far from conflict zones

Despite being landlocked, Central Asia is at the center of major crossroads between Russia, Asia and Europe. Moreover, the rapid economic expansion of China and other nearby countries creates an unprecedented opportunity for Central Asia to emerge as an economic trade hub and a transit corridor between Europe and Asia.

10 World Bank, Global Economic Prospects: Europe and Central Asia, forecast as of January 2018

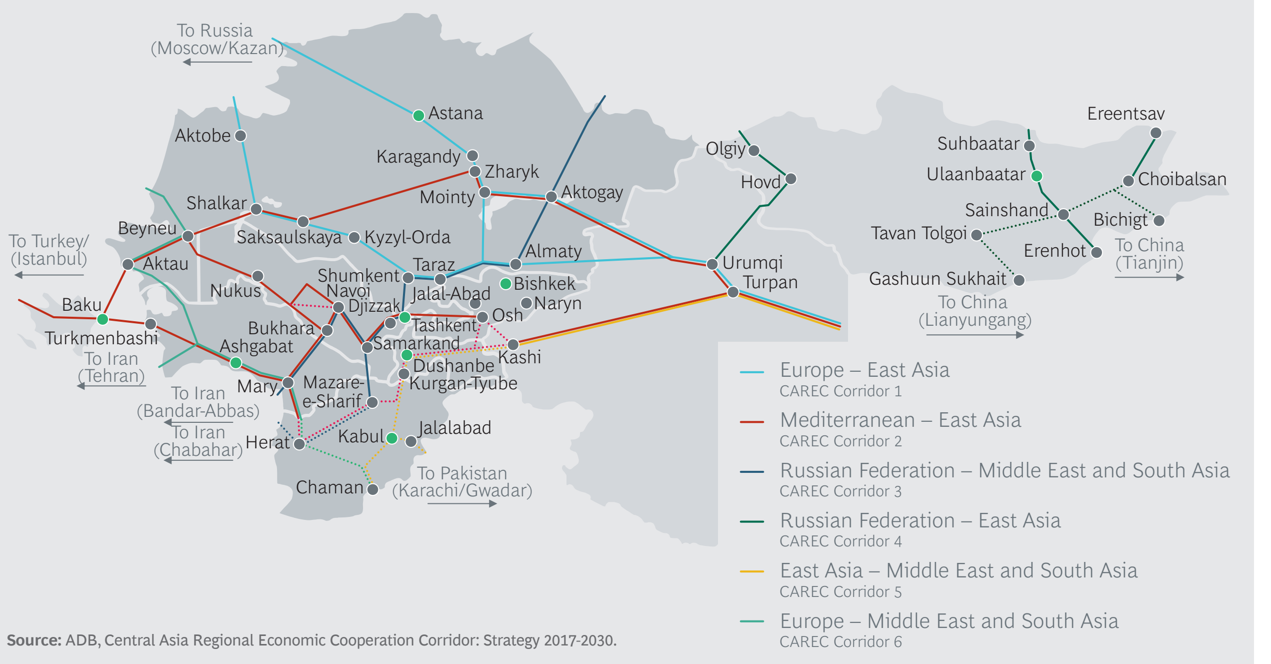
The region has been consistently improving its transport infrastructure to benefit from its location, with the help of international development banks and neighboring countries. The Central Asia Regional Economic Cooperation (CAREC)[11] in particular launched a program to improve cross-border movement and expand trade in the region[12]. Today, six CAREC corridors link the region's economic hubs to each other and connect the landlocked CAREC countries to other Eurasian and global markets.

For investors looking to enter the region, Central Asia is well connected to other countries. This is especially true of Kazakhstan and Uzbekistan. Astana is connected to more than 30 cities around the globe through direct flights by Air Astana and other carriers, while Uzbekistan Airways and foreign operators offer direct flights to Tashkent from more than 50 cities.

Central Asia will also benefit from the Chinese government's Belt and Road Initia-

11 The CAREC Program brings together the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the International Monetary Fund, the Islamic Development Bank, the United Nations Development Program (UNDP), and the World Bank.
12 ADB Institute: Connecting Central Asia with Economic Centers

FIGURE 3 | Main transport corridors in Central Asia



Source: ADB, Central Asia Regional Economic Cooperation Corridor: Strategy 2017-2030.

tive. China is planning to develop land and sea transportation corridors stretching all the way to Europe. The BRI will create an opportunity for the landlocked and relatively isolated Central Asian economies to improve their connectivity to China and other parts of the world as the overland routes wend their way through Central Asia. The five Central Asian countries will benefit from the Chinese program, which will open faster access routes to Asian and European markets. The China – Central Asia – Western Asia Economic Corridor runs from Xinjiang in China, and exits the country via Alashankou to join the railway networks of Central Asia and Western Asia, before reaching the Mediterranean coast and Arabian Peninsula[13]. Other current BRI projects include the development of the Khorgos dry port and free trade zone on the Kazakhstan-Chinese border, the construction of a China – Kyrgyz Republic – Uzbekistan railway, and the construction of major new roads in Tajikistan and the Kyrgyz Republic. China has already invested in transportation infrastructure to connect with Central Asia, and some of the projects have been completed. To decrease transportation costs between China and Europe, China has built a rail line that originates at the Pacific port of Lianyungang[14] on the Yellow Sea, traverses Kazakhstan, and continues on to Russia, Poland, and Germany. Another example is the railway corridor built by China that branches off to the south from the China-Kazakhstan railroad near Astana, going into Uzbekistan and Turkmenistan, and ending in Tehran.

There could be several channels through which the BRI might influence the foreign trade of Central Asian economies:

(i) development of transportation infrastructure facilitating these countries' trade with China and/or transit of goods from/to China to/from Europe and Western Asia

(ii) development of other infrastructure (electricity, irrigation systems, product quality testing, certification, etc.) in order to lower production and export costs,

13 The Belt and Road Initiative: http://beltandroad.hktdc.com; http://china-trade-research.hktdc.com
14 In which a container logistic terminal is being used by a Kazakhstan-Chinese joint venture

(iii) Chinese FDI into production sectors in the region

(iv) cooperative trade policy and facilitation to reduce the macroeconomic effects of trade costs. A general improvement in total labor productivity, due to better infrastructure, inflow of foreign investments or, in the longer term, foreign debt issues would exemplify this.

Despite the region's proximity to Afghanistan, Central Asia enjoys relative security and stability. This stability is both a blessing and a curse. It reassures potential investors, but, since it is rarely part of the news cycle, Central Asia is often overlooked and is largely unknown to the public. The region's stability has often been associated in the West with authoritarian regimes, which raises the question of power struggles during succession. However, the change in leadership in Uzbekistan in 2016 provided a positive example of political transition, as did subsequent reforms towards more openness in the country.

Central Asia is undergoing major positive changes, opening up the region to potential investors

Significant reforms are being implemented in most Central Asian countries, increasing their investment attractiveness. Structural improvements are critical to sustaining high growth in the region. Economic measures to diversify away from oil and other commodities will help the countries achieve that goal while building resilience against external shock. The Strategic Plan for Development of Kazakhstan through 2025 and the Action Strategy for the Further Development of Uzbekistan in 2017-2021 outline such reforms. Moreover, substantial changes in the investment climate can already be observed in all Central Asian countries. This is particularly so in Uzbekistan, where the new leadership has been taking steps to improve the business environment since late 2016, considerably opening up the country, which was previously perceived by foreign investors to be closed.

Initiatives like the opening of the Astana International Financial Centre (AIFC) in

January 2018 are also contributing to Central Asia's rising profile among investors. AIFC has ambitions of becoming a financial hub for Central Asia, the Caucasus, Eurasian Economic Union (EAEU), Middle East, West China, Mongolia and Europe. According to its CEO Stephen Glynn, "AIFC will help invite foreign investors to Central Asia." The center will serve as a home base for potential investors, offering a favorable tax regime and legal protection on par with international standards. AIFC operates in a special legal order based on common law to regulate legal relationships between its members and third parties and help develop the financial market. The center will fall under the jurisdiction of independent courts operating under English law. In addition, English is the official language of the financial center, helping foreign investors overcome potential language barriers in the region[15].

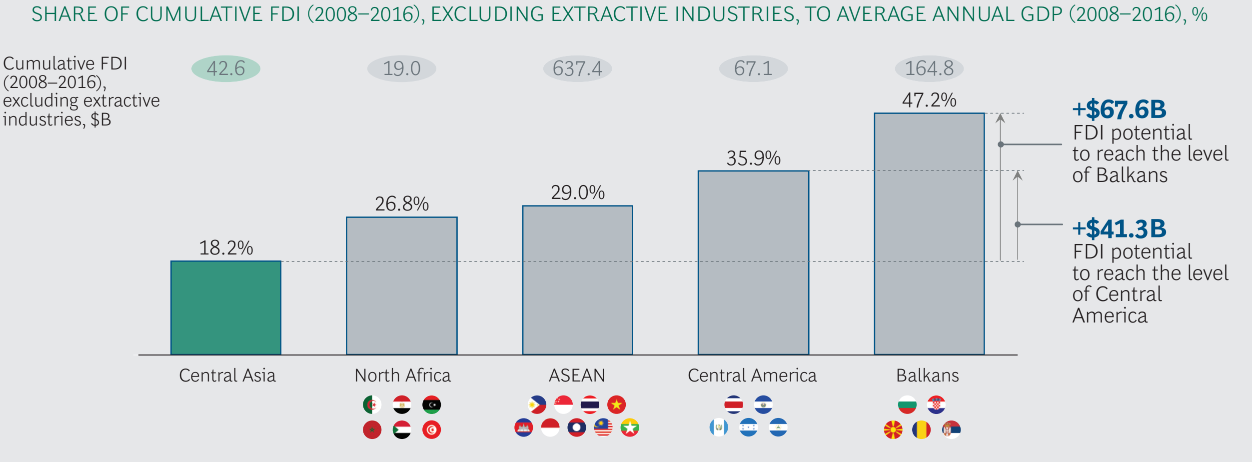
Central Asia remains an overlooked "frontier" region with potential for additional investment estimated at $40-70 billion

The Central Asian countries have the characteristics of frontier economies. "Frontier economies" are the markets in countries that are at an earlier stage of economic and political development than larger and more mature emerging economies. Frontier markets typically have modest market capitalization, limited investability and liquidity, and few market information sources. On the positive side, they generally have favorable demographics, relatively high economic growth, and good long-term prospects. This is the case of Central Asia.

Although Central Asian countries have the potential to attract investors, for now they are overlooked and undersaturated, even compared to regions like the Balkans or Central America. The region benefits from macroeconomic stability, a large domestic market, and a cheap and abundant labor force. However, except for resource-based industries, the share of FDI in the GDP is lower for Central Asia than for other developing regions. Cumulative FDI in other industries represented less than 20% of Central Asia's average GDP between 2008 and 2016, while it reached 47% of the Balkans' GDP and 36% for Central America. To reach the level of investment of the Balkans, Central Asia would need to more than double the amount of FDI in non-resource industries received between 2008 and 2016. Central Asia's FDI potential in

15 www.aifc.kz

FIGURE 4 | Central Asia is underinvested (excluding extractive industries)



Central Asia: Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan / ASEAN: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam / North Africa: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia / Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua / Balkans: Bulgaria, Croatia, Macedonia, Romania, Serbia
Extractive industries include: «Coal, Oil and Natural Gas,» «Minerals» and «Metals» in the fDi Intelligence classification.
Source: fDi Intelligence; EIU.

non-resource industries can be estimated at $40-70 billion—a level of investment similar to Central America or the Balkans[16].

So close and yet so different, Central Asian countries are difficult for investors to comprehend as a whole

Despite having a lot in common, Central Asian countries have followed divergent paths since their independence, making it difficult for investors to comprehend the region as a whole

Central Asian countries share a common history through several centuries, as well as a common culture and widespread knowledge of Russian. In Geert Hofstede's methodology, this common culture translates into a relatively homogeneous social profile in the region, characterized by a great distance between the authorities and the public, a low level of individualism (versus collectivism) and a preference to avoid uncertainty[17]. Based on those three indicators, the region's profile significantly lags behind countries like the U.S., Switzerland, Sweden, Great Britain or the Netherlands in innovation as, culturally, the public has a low tolerance for risk and is inclined to prefer stability over growth and achievement. However, Central Asia could still overcome this inherent tendency, as other countries with similar cultural backgrounds, such as China, Japan and South Korea, were able to become leaders in innovation.

The structures of the five economies are similar, as determined by natural resources. They also have several common advantages, such as low labor cost (which helps develop labor-intensive industries) and agriculture potential. All five countries are striving to attract more investment for their further development. However, the scale of their reform programs varies greatly from one country to another.

The Central Asian countries have followed divergent paths since their independence 26 years ago, and they are now at different stages of development. Kazakhstan's economic dynamism created a major gap with the other countries: it now represents more than 60% of the regional GDP for only 25% of the population. It has doubled its GDP per capita in the last 10 years and become a hub of regional immigration. On the other hand, Tajikistan and the Kyrgyz Republic remain relatively poor, relying heavily on remittances from expatriates; those money transfers represent 26% and 30% of their GDP[18], respectively.

The countries also differ greatly in their investment climates. As shown by their rankings in the Doing Business report, their attractiveness for investors varies significantly. Kazakhstan is the highest ranked country, at 36th place, while Tajikistan is in 123th place. Moreover, the current pace of reforms will likely deepen the gap between the countries. Even as the Kyrgyz Republic and Tajikistan are trying to implement reforms of their own, the fast-paced transformations in Kazakhstan and, more recently, Uzbekistan are having significant impact on their openness and attractiveness, putting those two countries in another category altogether for potential investors.

Moreover, the Central Asian countries have non-harmonized regulatory environments. In particular, disparities in customs requirements, among them sanitary, phytosanitary and veterinary regulation, make it impossible to consider the region one entity for trade purposes. Elimination of regulatory exemptions is critical to building a single Central Asian market. However, due to regulatory complexities and barriers to the unification of procedures, it is not possible at the moment to create a common market for certain products, such as pharmaceuticals.

16 FDI potential is defined as the amount of additional investments in non-resource industries to the level of actual amount of investments in similar sectors of a comparable region relative to the average regional GDP in 2008-2016. The amount of additional investments is the difference between the share of cumulative FDI in average GDP in a comparable region and such indicator in Central Asia multiplied by average regional GDP of Central Asia. The amount of cumulative FDI includes only greenfield investments made in 2008-2016.
17 Public data on Hofstede's cultural dimensions theory, a framework for cross-cultural communication

18 World Bank estimates based on IMF balance of payments data, data for 2016

FIGURE 5 | Doing Business ranking for Central Asian countries

	2008 Ranking out of 178	2018 Ranking out of 190	BEST DIMENSIONS	DIMENSIONS REQUIRING REFORMS
KAZAKHSTAN	71th	36th	• Protecting minority investor – 1st • Enforcing contracts – 6th • Registering property – 17th	• Trading across borders – 123th • Getting credit – 77th • Getting electricity – 70th
UZBEKISTAN	138th	74th	• Starting a business – 11th • Getting electricity – 27th • Enforcing contracts – 39th	• Trading across borders – 168th • Dealing with construction permits – 135th • Resolving insolvency – 87th
KYRGYZ REPUBLIC	94th	77th	• Registering property – 8th • Starting a business – 29th • Getting credit – 29th	• Getting electricity – 164th • Paying taxes – 151st • Enforcing contracts – 139th
TAJIKISTAN	153th	123th	• Protecting minority investors – 33rd • Enforcing contracts – 54th • Starting a business – 57th	• Getting electricity – 171th • Trading across borders – 149th • Resolving insolvency – 148th

Note: Turkmenistan is not included in the Ease of Doing Business index due to the lack of reliable data.
Source: World Bank Doing Business database, 2017-2018.

FIGURE 6 | Costs of starting a business in Central Asia and other regions

	COST OF STARTING A BUSINESS (USD)	COST OF LABOR (average wage, USD)	COST OF REGISTERING PROPERTY (% of property value)	COST OF CONSTRUCTION PERMITS (% of warehouse value)
Kazakhstan	$26	$516	0.1%	1.9%
Uzbekistan	$69	$284	1.2%	3.4%
Kyrgyz Rep.	$23	$216	0.2%	1.7%
Tajikistan	$214	$154	3.1%	2.0%
Middle East and North Africa	$1,417	n/a	6.0%	4.3%
Latin America and Caribbean	$3,102	$854	5.8%	3.2%

Source: World Bank Doing Business database, 2018; official country statistics.

FIGURE 7 | Intraregional trade in Central Asia

SHARE OF TOTAL EXPORT OF THE FIVE COUNTRIES TO OTHER CENTRAL ASIAN COUNTRIES (%)

Export to						Total	Main exported commodities in regional trade
KAZAKHSTAN	_	1.7 %	0.7 %	0.7 %	0.1 %	3.2 % ($1.7 b)	Wheat & wheat flour Resources (oil & gas)
UZBEKISTAN	1.3 %	_	0.1 %	N/A	N/A	1.4 % ($0.7 b)	Fruit & vegetables Resources (oil & gas)
KYRGYZSTAN	0.3 %	0.2 %	_	<0.1 %	<0.1 %	0.6 % ($0.3 b)	Transportation & machines Mineral products (ores)
TAJIKISTAN	0.3 %	N/A	<0.1 %	_	N/A	0.3 % ($0.2 b)	Mineral products (ores) Fruit & vegetables
TURKMENISTAN	0.1 %	N/A	<0.1 %	N/A	_	0.1 % (< $0.1 b)	Resources (oil) Seed oils

Exports from KAZ to UZB represent 1.7% of the total exports of the 5 countries

Source: World Bank Doing Business database, 2018; official country statistics.

Lack of intraregional economic and trade cooperation also points to significant gaps between the countries. Trade within Central Asia, a big part of which is informal, has declined in importance. Out of $58 billion total exports by the five Central Asian countries in 2016, less than 6% (or $3 billion) was intraregional. Regional trade represents less than 5% of Kazakhstan's total exports, 13% for Uzbekistan and less than 1% for Tajikistan. The lack of intraregional trade is mainly due to the difficulty of trading across borders in these countries, but also due to the similarity of the production structures in the region. Besides hydrocarbons and key commodities (cotton, aluminum, etc.), export in most of the countries is relatively similar, which limits the potential for intraregional trade. At the same time, this similarity creates opportunities for countries within Central Asia to benefit from a more trade friendly environment through trade-enabled regional value chains.

Initiatives to foster regional dialogue have so far failed to produce meaningful results in terms of economic cooperation, but bilateral processes seem to be more efficient

Aware of their interdependence, the Central Asian states are taking part in several regional cooperation processes. As early as 1992, the five new republics signed a treaty for the creation of an intergovernmental commission for the coordination of water resources. A Central Asian Union was proposed by Kazakhstan President Nursultan Nazarbayev in 2007 to create an economic and political union aimed at facilitating free circulation of goods, services, and capital, and encouraging agricultural and industrial cooperation. However, the organization remains at the proposal stage to this day.

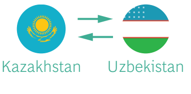
So far, regional organizations have failed to create a more fruitful regional dialogue. Although challenges in the region are numerous (water, energy, education…), regional organizations in Central Asia have been fragmented and weak, unable to tackle interstate tensions, and with, at best, limited resources and mandates to address regional infrastructure and cooperation needs. For instance, the only two Central Asian countries that entered the EAEU[19] (created in

19 The Eurasian Economic Union replaced the Eurasian Economic Community (EEC) that existed between 2000 and 2014 and also included Tajikistan.

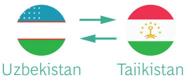
2014) are Kazakhstan and the Kyrgyz Republic, and the union itself has failed so far to increase cooperation in the region. On the contrary, the EAEU and, in particular, the Customs Union have had a pernicious effect, namely an increase in border controls between Kazakhstan and the rest of Central Asia (particularly the Kyrgyz Republic). Another example is the World Trade Organization (WTO), of which the Kyrgyz Republic, Tajikistan and Kazakhstan became members in 1998, 2013 and 2015, respectively, whereas Uzbekistan and Turkmenistan have only recently taken steps towards accession.

Some progress is underway, as shown by the C5+1 platform, an initiative launched from Washington in 2015 that brings together the five states of Central Asia and the United States to discuss and work on issues of common concern, among them counterterrorism, business, transportation, energy and climate change. More recently, the Central Asian countries agreed to meet once a year to discuss collaboration and regional challenges. This initiative, the first meeting of which took place in March 2018, is the first to reunite all five countries without any other countries. In the meetings, regional leaders considered establishing a five-sided working commission at the level of deputy prime ministers to promote regional economic cooperation.

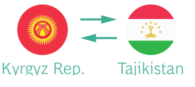
Those regional processes are likely to take a few years to produce full results, but bilateral processes have been progressing in parallel and seem to foster cooperation more efficiently for now.



The relationship between Kazakhstan and Uzbekistan has improved notably since the change of leadership in Uzbekistan[20]. The two countries are now set to boost their economic and trade relations. Their governments announced in October 2017 that they would work to reduce administrative barriers to cross-border trade. In March 2018, the two governments agreed to develop trade, raising trade turnover from $2 billion in 2017 to $3 billion in 2018 and $5 billion in 2020. The two countries also signed over $1 billion worth of commercial agreements in 2017 and launched joint ventures in food processing and the petrochemical and chemical sectors. Discussions are underway to build a transport and logistics center (dry port) on the border that will further increase bilateral trade.



The new Uzbekistan leadership also brought about an improvement in Uzbekistan-Tajikistan relations recently, after two decades of tensions. Symbolic of this improvement was the reopening in March 2018 of the railway between the countries, which was last used in 2011. At about the same time, agreements were also signed on the import and export of goods between the countries, including the export of electricity from Tajikistan and the import of gas from Uzbekistan.



The Kyrgyz Republic and Tajikistan also intend to intensify economic cooperation and increase the volume of bilateral trade, it was announced in January 2018. The creation of a Business Council by the two countries will be considered, and the organization of a business forum for Tajikistan entrepreneurs in Bishkek is being discussed.

20 2018 has been named the "Year of Uzbekistan in Kazakhstan," with plans to hold more than 200 events highlighting its economy, tourism and culture, while 2019 will be the "Year of Kazakhstan in Uzbekistan."

COUNTRY PROFILES

COUNTRY PROFILE: KAZAKHSTAN HAS SUCCEEDED IN ATTRACTING INVESTMENTS TO NON-RESOURCE SECTORS AND IS NOW FOCUSING ON DIVERSIFYING ITS ECONOMY

Kazakhstan is the most developed economy in Central Asia

With a GDP of $103 billion[1] (real GDP in $ at 2005 prices), Kazakhstan is the largest economy in Central Asia and accounts for around 64% of the region's GDP. Since its independence in 1991, Kazakhstan has achieved outstanding economic growth. Having started at a similar level to other Central Asian countries after its independence, Kazakhstan's GDP per capita reached $25,490 (in PPP terms) in 2017, which is four times greater than that of Uzbekistan, seven times greater than of the Kyrgyz Republic and nine times greater than that of Tajikistan[2]. This economic growth was also accompanied by social development. According to the UNDP, Kazakhstan is ranked 56th out of 188 countries in the Human Development Index[3], above both the global average and the average for countries in Europe and Central Asia, reaching the 15th position in the Asia-Pacific region, ahead of Lebanon (20th), Thailand (22nd) and China (23rd).

1 Comparable to Hungary ($137 billion) or Algeria ($165 billion), EIU data for 2017

2 EIU

3 The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development that takes into account, among others, life expectancy, education and per capita income indicators.

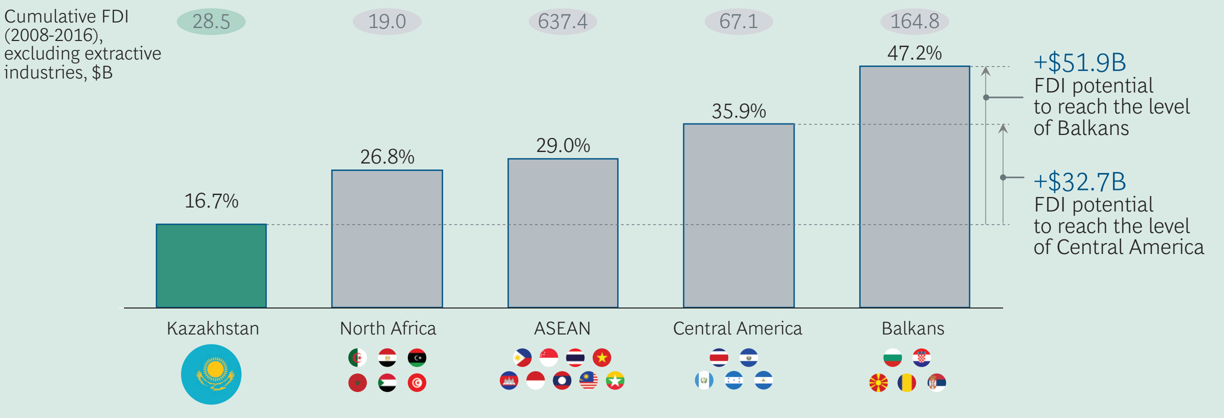
Kazakhstan fact sheet

Nominal GDP	$152.6B
Nominal GDP/capita	$8,362
Labor force	9.1 M
Urbanization	53%
Total export value	US$36.8B
Real GDP growth	2.5% (CAGR 2013-17)
Inflation	7.3% (consumer prices)
Unemployment	4.9%
Official currency	Tenge – KZT(USD/KZT = 325)
Languages	Kazakh (official), Russian
Main export commodities (in value)	Crude petroleum (53%); Metals (17%); Other min. (12%)
Main export destinations (in value)	Italy (20%); China (11%); Netherlands (9%)

Source: EIU, CIA Factbook, Central Bank, United Nations Statistical Division (COMTRADE), data for 2017 or latest available.

Kazakhstan has potential to increase FDI in non-extractive industries by up to $32-52B

SHARE OF CUMULATIVE FDI (2008-2016), EXCLUDING EXTRACTIVE INDUSTRIES, TO AVERAGE ANNUAL GDP (2008-2016)



Note: North Africa: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia / ASEAN: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam / Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua / Balkans: Bulgaria, Croatia, Macedonia, Romania, Serbia
Extractive industries include: «Coal, Oil and Natural Gas,» «Minerals» and «Metals» in the fDi Intelligence classification
Source: fDi Intelligence; EIU

The country's young, growing and skilled workforce is one of the drivers of its rapid economic development. Kazakhstan has a population of around 18 million inhabitants[4] and has shown +1.5% annual growth over the last decade. The population is expected to grow at a compound annual rate of around 1% and reach 20.3 million people by 2030. The population is relatively young, with an average age of 30. More than 70% of the country's working-age population is active on the labor market[5]. Moreover, with its relatively low wages, Kazakhstan has a competitive advantage in labor costs. The average salary in Kazakhstan is around $516/month, which is much lower than countries with similar GDP per capita — it is almost half of the average salary in Chile, Romania and Croatia[6].

Kazakhstan attracts investors with its abundant natural resources and relatively open investment climate

In the past two decades, Kazakhstan has become a major destination for foreign investment, mainly directed to resource-based industries. Between 2008 and 2017, the cumulative greenfield FDI[7] in the country reached $82 billion[8], which, however, was mainly driven by resource-based industries. Coal, oil and gas represented 54% of the cumulative FDI inflow of the last decade and metals and minerals came close to 10%.

Kazakhstan indeed benefits from abundant natural resources, including coal (8th largest reserves in the world), oil (10th largest proven reserves), iron (10th largest reserves), uranium and copper, among others[9]. Vast reserves, relatively cheap operating cost[10] and high demand in neighboring countries make Kazakhstan a top destination for resource-seeking FDI. In 2015-2016, FDI in oil and gas in Kazakhstan represented 17% of the total in the sector worldwide, making Kazakhstan one of the largest FDI destinations in natural resources[11]. However, despite the relatively high level of FDI in the sector, many of the country's resources remain relatively untapped. In production terms, Kazakhstan's mining industry is far from realizing its full potential.

4 World Bank data
5 United Nations Development Program
6 Wage: official country statistics, average 2017. GDP per capita at PPP: EIU
7 Here and further only greenfield FDI is considered because greenfield FDI has a stronger impact on economic growth than M&A

8 FDI Markets, includes greenfield data only
9 Kazakhstan possesses 15% of world uranium reserves, 8% of zinc, 7% of manganese and 4% of iron ore, according to the Gas Exporting Countries Forum (GECF).
10 With average operational costs of $11.5 per barrel, operating costs in Kazakhstan are more expensive than in the Persian Gulf and North Africa, but lower than in most of the other main oil producers, such as China ($14.3), the U.S. ($14.8), Nigeria ($15.3) or Brazil ($31.5) (data for 2015 is from statista.com).
11 fDi Intelligence

Foreign investment in the country has been made easier in recent years by significant reforms of the business environment. Kazakhstan has steadily improved its investment climate since its independence. It has streamlined bureaucratic practices, provided accelerated business start-up procedures, reduced minimum capital requirements for businesses, and simplified the procedures for registering property and obtaining construction permits. The most recent improvements have been achieved under the Kazakhstan 2050 Strategy, which sets forth seven economic, social and political objectives, including "comprehensive support of entrepreneurship." These improvements in the investment climate have been acknowledged by international rankings: Kazakhstan is in 36th place out of 190 countries in the 2018 Doing Business ranking, a significant jump from its 77th position in 2015. Kazakhstan was also recognized four times in the Doing Business report in the last decade as one of the top 10 reformers — a unique achievement among the countries benchmarked in the report[12].

Kazakhstan's main challenge in the coming years will be to create the social and economic conditions for diversification of the national economy

Kazakhstan is still heavily dependent on raw materials, making economic diversification a priority for the country. The extractive sector contributes 17% to the GDP[13]. Hydrocarbon exports represented two-thirds of Kazakhstan's export in 2017 by trade value. Kazakhstan's federal budget is also heavily dependent on hydrocarbons. The oil and gas sector generates up to 50% of state revenues. The recent commodity crisis has demonstrated the necessity of further economic diversification to reduce the country's vulnerability to external shock.

Measures have been implemented to begin diversification. Following the global economic crisis of 2008, Kazakhstan initiated extensive industrial development and innovation programs to decrease dependence on the raw materials sector and enhance overall productivity. Since 2010, the country has improved manufacturing. The sector grew at a compound annual growth rate of 13%[14]. In February 2018, the government announced that two-thirds of 2017 growth (4%) was provided by non-resource industries.

12 World Bank Doing Business Report 2018
13 Official country statistics 2017
14 Official country statistics, CAGR 2010-2017

Kazakhstan's diversification strategy also relies on the transition to a knowledge-based economy. The country is investing considerable efforts in the strengthening of its education system. Thanks to affordable primary and secondary education (the gross enrollment ratio in primary and secondary education is around 110%), Kazakhstan has a literacy rate of 99.8%[15]. However, the enrollment ratio for tertiary education remains relatively low at 46%, and an "inadequately educated workforce" is the third most problematic factor for doing business in the country, according to the World Economic Forum's Global Competitiveness Report 2017-2018. This is why the government has been working to increase the accessibility and quality of education. Programs to improve the quality of teaching, partnerships and joint programs with leading international universities, mobility programs, and educational grants[16] have been instituted.

Access to financing is also a constraint on the development of the private sector limiting the diversification process. Bank lending is the most important source of financing for firms, but domestic crediting to the private sector relative to GDP is relatively low in Kazakhstan, with a share of 33%. Kazakhstan lags behind countries such as Russia (53%), Chile (112%) or Malaysia (123%). This low level of financial intermediation generates financial constraints for SMEs[17] when investing in more advanced technologies or experimenting with risky innovations. Kazakhstan is also underdeveloped with regard to its stock market, with very low levels of trade and market capitalization. Kazakhstan market capitalization represents 29.3% of the country's GDP, while Russia's is 48.5% and Malaysia's reaches 121.3%[18].

To further develop non-extractive sectors of its economy, Kazakhstan has recently introduced a new strategy to enhance its FDI attractiveness, including

15 Total enrollment in a given level of education, regardless of age, expressed as a percentage of the official school-age population for the same level.
16 The Bolashak Program in particular is a scholarship awarded to high-performing students from Kazakhstan to study overseas, all expenses paid, provided that they return to Kazakhstan to work for at least five years after graduation. Since its implementation in 1993, more than 10,000 students have benefited from the program.
17 Small and medium enterprises
18 World Bank Market capitalization of listed domestic companies (% of nominal GDP), Dec 2016. Market capitalization (also known as market value) is share price times shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchange at the end of the year. Listed companies do not include investment companies, mutual funds and other collective investment vehicles.

the implementation of investment climate reforms, investment promotion on the international arena, and privatization programs. The creation of the Astana International Financial Center is one of the measures meant to attract foreign investment. However, some reforms are still needed to achieve Kazakhstan's full investment potential. Rule of law and corruption issues remain two of the main constraints on doing business in the country. The nontransparent application of laws remains a major problem and an obstacle to expanded trade and investment. Foreign investors complain of inconsistent standards. Although the central government has enacted several positive and progressive laws[19], local authorities may interpret rules in arbitrary ways. Moreover, the corruption perception index ranks Kazakhstan 122nd out of 180 countries. The 100 Precise Steps National Plan, launched in 2015, was a first attempt to address those systemic domestic challenges with concrete measures in five key areas (New Modern State Apparatus; Rule of Law; Industrialization and Economic Growth; Nation with a Shared Future; Transparent and Accountable Government). The government has made eradicating corruption a strategic priority and taken measures to reduce it by introducing anticorruption policies, raising government wages and making institutional reforms.

19 In particular, the independence of the court system has been increased (see Reform 4 of Strategic Plan 2025).

COUNTRY PROFILE: UZBEKISTAN IS THE MOST RAPIDLY EVOLVING COUNTRY IN CENTRAL ASIA, ON A POSITIVE TRAJECTORY THANKS TO STORM-LIKE REFORMS

Thanks to a strong growth rate, low level of public debt, and significant currency and gold reserves, Uzbekistan benefits from relatively strong macro-economic stability

Since the mid-2000s, Uzbekistan has enjoyed robust GDP growth, owing to favorable trade terms for its key export commodities, state economic management, and limited exposure to international financial markets, which protected it from economic downturn. From 2004 to 2016, Uzbekistan's economy grew at a rate of 7% to 9% per year[1].

Uzbekistan benefits from a relatively low level of public debt. In 2017, Uzbekistan public debt was under $9 billion, that is, less than 30% of the country's GDP[2]. Uzbekistan per capita debt in 2016 was estimated at $268 (versus $136 in 2006), making it the country with the 17th lowest level of debt per capita out of the 184.

1 World Bank
2 Estimated number, based on revised GDP after sum devaluation, since no official data on public debt were published between the devaluation of the currency and the writing of this report

Moreover, Uzbekistan has a relatively high level of gold and foreign currency reserves, which mitigates risks of further currency devaluation. In February 2018, the Central Bank of the Republic of Uzbekistan published the official gold and foreign currency reserves, which amount to a net total of $27.25 billion, estimated to cover about two years of imports.

Uzbekistan enjoys vast natural resources, while maintaining a relatively diverse economy. The country's resources include gas, gold (10th largest reserves), copper (10th largest reserves) and uranium (7th largest producer). Moreover, natural resource extraction has not reached its full potential. Despites its reserves, the country is only the 20th largest producer of copper globally. Its underutilized resource base creates opportunities in value chain extension in nonferrous metallurgy, production of building materials, and the chemical and petrochemical industry. However, despite the abundance of natural resources, dependence on them is limited, thanks to a diversified economy, with no sector representing more than 20% of GDP.

Uzbekistan fact sheet

Nominal GDP
$45.1B

Nominal GDP/capita
$1,412

Labor force
15.2 M

Urbanization
50%

Total export value
US$5.9B

Real GDP growth
6.0% (CAGR 2013-17)

Inflation
17% (consumer prices)

Unemployment
5.0%

Official currency
Som – UZS(USD/UZS = 8,140)

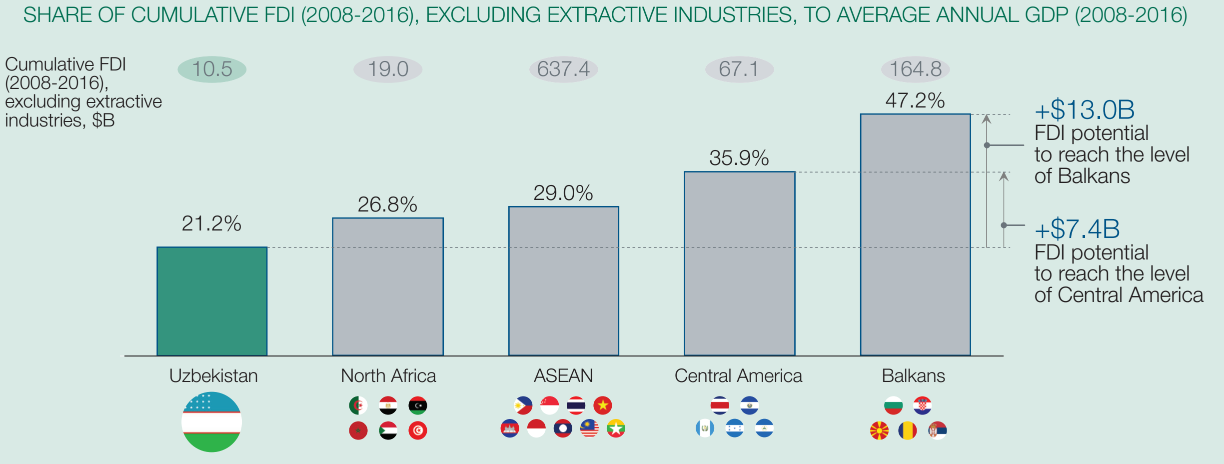
Languages
Uzbek (official), Russian

Main export commodities (in value)
Gold (32%); Cotton (14%);
Metals (12%); LPG (10%)

Main export destinations (in value)
Switzerland (32%)
China (21%)
Turkey (12%)

Source: EIU, CIA Factbook, Central Bank, United Nations Statistical Division (COMTRADE), data for 2017 or latest available.

Uzbekistan has potential to increase FDI in non-extractive industries by up to $7-13B



Note: North Africa: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia / ASEAN: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam / Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua / Balkans: Bulgaria, Croatia, Macedonia, Romania, Serbia
Extractive industries include: «Coal, Oil and Natural Gas,» «Minerals» and «Metals» in the fDi Intelligence classification
Source: fDi Intelligence; EIU

As is the case for its neighbors, the Uzbekistan economy remains dependent on commodity prices and the economic health of major trading partners. Uzbekistan was hit in 2016 by the recession in Russia – the country's second-largest trading partner and the main source of remittances from Uzbeks working abroad. It was also impacted by the sluggish economic growth of China, as well as by the falling prices of natural gas, copper and cotton, Uzbekistan's main export commodities.

Uzbekistan's young and growing population offers the largest domestic market in the region as well as a numerous and cheap labor force

Uzbekistan is the most populous country in Central Asia, with a population of 32.6 million[3], which is comparable to Malaysia or Morocco. In comparison, the total population of its regional neighbors is 38.9 million. Uzbekistan's population is growing fast, at the natural pace of half a million people a year, reaching 15th place out of 51 countries in Asia in terms of absolute population growth. The population is expected to reach 35 million by 2025 and 40 million by 2050[4], offering a large domestic market.

Moreover, the country's population is relatively young, with a median age of 28 years, and 72% of the population under 40[5]. Combined with a gradual rise in average income, this demographic dynamism contributes to the attractiveness of the country's consumer goods market.

Being the most populous country in Central Asia, Uzbekistan also has the largest labor force in the region. The country has enjoyed a steady increase in its labor force, from 12.5 million in 2000 to about 15.2 million people in 2017[6], comparable to the whole population of Cambodia, as the younger generation reached working age.

A cheap, well-educated and abundant labor force makes labor-intensive industries, such as mining, agriculture, textiles and industrial goods, attractive in Uzbekistan. The average salary in Uzbekistan is among the lowest in the world, at around $284 per month. It is comparable to Moldova ($314) and Vietnam ($236), and little more than half the average salary in Kazakhstan ($516)[7]. Moreover, the country offers universal access to general education, with high attainment in secondary education (99%), plus Uzbekistan has relatively strong vocational training.

3 Republic of Uzbekistan State Committee on Statistics
4 United Nations, Department of Economic and Social Affairs, Population Division
5 Republic of Uzbekistan State Committee on Statistics
6 International Labor Organization (ILO)
7 Trading Economics

Uzbekistan needs to sustain the reforms that have been implemented since the change of leadership in late 2016 to continue improving the investment climate in the country

Uzbekistan remains an overlooked investment destination, with a level of FDI significantly lower than peer countries. Indeed, cumulative FDI in Uzbekistan has barely reached $18 billion since 2008, while it amounts to $48 billion in Morocco and $213 billion in Vietnam[8]. According to the State Committee for Investments, more than 5,000 companies with foreign capital operate in Uzbekistan. As of February 2018, the portfolio of investment projects comprised more than 300 projects in a variety of industries, for a total of $9 billion. However, FDI inflow to Uzbekistan is mainly directed to the oil and gas industry, which represents more than 40% of all FDI over the last 10 years. Investment in other sectors is critical to modernizing the industrial base and improving its productivity, and thus helping the country achieve its full potential.

The country was, until recently, off the investors' map because of its closed economy and poor investment climate. In 2017, BCG conducted a series of deep-dive interviews on the investment climate in Uzbekistan, with foreign and local investors, international institutions, state-owned enterprises and local government agencies[9]. This survey highlighted the main barriers to business operation in the country. Respondents mainly mentioned: (i) currency conversion and profit repatriation limitations, (ii) the complexity and non-transparency of regulation and lack of rule of law, (iii) the low reliability and difficulty connecting to electricity, gas and water supplies, (iv) unequal customs treatment for certain market players and complicated customs clearance procedures, (v) the high tax burden and complexity of the tax regime. Since the survey, numerous reforms have been implemented to address these issues.

Following the change of leadership in late 2016, Uzbekistan has seen its investment climate improve rapidly in response to investors' concerns. Numerous reforms are ongoing to reduce the complexity and improve the transparency of the regulatory, customs and tax systems. One of the most emblematic reforms of this new era is the currency liberalization that was implemented in September 2017. The reform makes it much easier for foreign investors to consider Uzbekistan an investment destination.

Thanks to this path of reform, the investment climate is gradually improving in Uzbekistan, as shown by the leap the country made in the Doing Business ranking, from 166th place in 2012 to 74th in 2018[10]. However, additional reforms are still needed. Uzbekistan's challenge in the coming years will be to sustain the current pace of reforms and ensure their efficient implementation.

8 fDi Intelligence
9 Respondents represented broad areas in different fields, such as agriculture, construction, oil and gas, finance, technology and IT, pharmaceuticals, retail, chemicals, food, textile and garments, and the banking sector.

10 Data for the 2018 Doing Business rating were collected in 2016 and thus does not reflect the reforms in the investment climate achieved in 2017.

COUNTRY PROFILE: THE KYRGYZ REPUBLIC COULD UNLOCK ITS DEVELOPMENT POTENTIAL BY IMPROVING ITS EDUCATIONAL SYSTEM AND INFRASTRUCTURE

The Kyrgyz Republic is a small but a resilient economy

Unlike Kazakhstan and Uzbekistan, the Kyrgyz Republic does not possess vast petroleum resources to help support its economic growth. Despite its relatively small economy, the country has achieved significant economic development. For several years, the annual growth of the country's GDP was estimated at around 4% in real terms, allowing the Kyrgyz Republic's real GDP (in constant 2005 prices) to reach $4.2 billion in 2017, twice that of 2000[1]. According to the World Bank, the Kyrgyz Republic's economy has remained resilient in the face of an adverse and volatile external context in recent years.

The structure of the economy has changed significantly, shifting from an almost exclusively rural economy towards a more service-oriented one. The industrial sector is estimated at around 32% of GDP, while services now represent more than 50%. The agricultural sector represents around 14%[2].

Human capital is one the country's most vital assets. Despite being small, with around 6 million people, the Kyrgyz Republic's population is growing at a compound annual rate of 1.3%. The population is also young, with a median age of 25, and has universal basic education, with a literacy rate of 99.5%, as is the case in other Central Asian countries.

The Kyrgyz Republic faces the problem of an underskilled workforce. The educational system requires major improvement, leading the authorities to allocate almost 7% of the state budget to educational purposes[3]. Strong migration outflow of skilled and educated workers aggravates the problem. Many qualified Kyrgyz citizens have found lucrative jobs abroad as wages in the Kyrgyz Republic are relatively low ($216 a month on average[4]). This migration has a significant impact on the country's economy, since remittances from Kyrgyz migrant workers, predominantly in Russia

1 EIU, CAGR 2000-2017
2 In 2000, the share of agriculture was 37% and services 32%. The main drivers of services' growth were accommodation, education and food services. CIA World Factbook, estimate for 2017.
3 World Bank database
4 Wage: official country statistics, average 2017

Kyrgyz Republic fact sheet

Nominal GDP
$7.1B

Nominal GDP/capita
$1,171

Labor force
2.8 M

Urbanization
36%

Total export value
US$1.4B

Real GDP growth
3.9% (CAGR 2013-17)

Inflation
3.8% (consumer prices)

Unemployment
7.8%

Official currency
Som – KGS(USD/KGS = 69)

Languages
Kyrgyz (off.), Russian (off.)

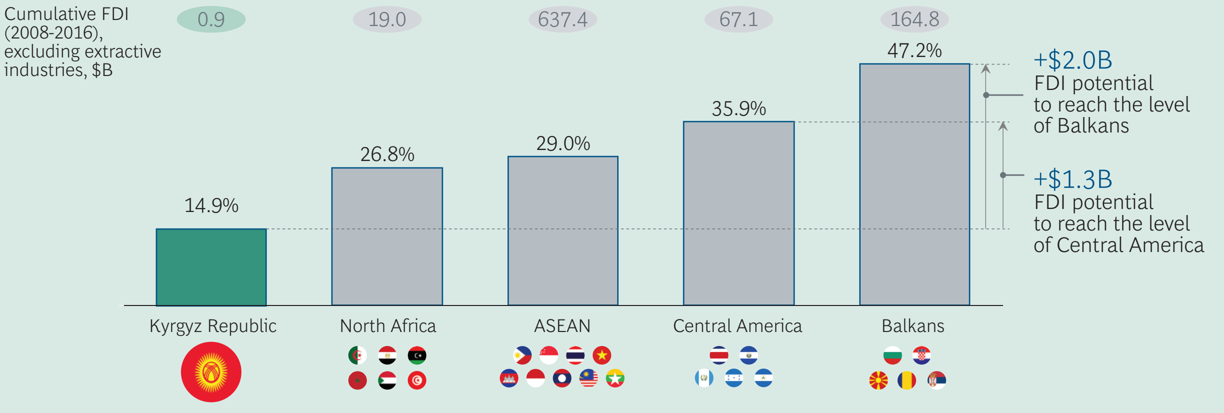
Main export commodities (in value)
Gold (49%);
Mineral products (9%)

Main export destinations (in value)
Switzerland (34%)
Kazakhstan (16%)
UAE (8%)

Source: EIU, CIA Factbook, Central Bank, United Nations Statistical Division (COMTRADE), data for 2017 or latest available.

Kyrgyz Republic has potential to increase FDI in non-extractive industries by up to $1-2B

SHARE OF CUMULATIVE FDI (2008-2016), EXCLUDING EXTRACTIVE INDUSTRIES, TO AVERAGE ANNUAL GDP (2008-2016)



Note: North Africa: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia / ASEAN: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam / Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua / Balkans: Bulgaria, Croatia, Macedonia, Romania, Serbia
Extractive industries include: «Coal, Oil and Natural Gas,» «Minerals» and «Metals» in the fDi Intelligence classification
Source: fDi Intelligence; EIU

and Kazakhstan, represent around 30% of the country's GDP[5].

Consumption fueled by remittances continues to be a key component of the economic growth driver. The middle class has grown substantially, especially in the capital city Bishkek, generating a growing demand for consumer goods.

So far, the Kyrgyz Republic's attractiveness for foreign investors has mainly relied on the country's natural resources

Investors mainly consider the Kyrgyz Republic a destination for extraction of natural resources. The country has abundant metal resources, with gold and other metals representing about 50% of all exported commodities[6]. Gold production at the Kumtor mine accounted for 9.7% of the country's GDP in 2017, with revenue totaling $685.2 million. Mining has attracted more foreign investment than any other sector – 58% of all greenfield FDI flows into the country were dedicated to ore production, but the sector remains underdeveloped and extremely politically sensitive. A lower portion of investments went to non-extractive industries and services, mainly to building & construction materials (20% of FDI) and renovating the current assets in hydropower energy (4%)[7].

In addition to continuing efforts to improve the investment climate, the country would greatly benefit from better energy and transport infrastructure

The Kyrgyz Republic's government has been improving the legal framework for entrepreneurship in the country. The government has reformed the legal environment for foreign investments, introduced special incentives for investors, established a liberal exchange rate, and implemented initiatives to attract foreign capital. The Kyrgyz Republic is one of ten countries that benefit from the EU program GSP+, a special incentive arrangement for sustainable development and good governance that opens up new markets for 6000 items of Kyrgyz origin by removing customs duties on over 66% of tariff lines.

Major reforms are still critically needed. The guarantees that are provided to foreign investors, such as national treatment[8], freedom of transfers and protection against nationalization meet

5 World Bank estimates based on IMF balance of payments data, data for 2016
6 Trade statistics for international business development, 2016
7 fDi Intelligence, from the Financial Times Ltd 2018, greenfield FDI only
8 National treatment is a principle in international law vital to many treaties. It essentially means treating foreigners and locals equally. Under national treatment, if a state grants a particular right, benefit or privilege to its own citizens, it must also grant those advantages to citizens of other states while they are in that country.

Western and international standards, although implementation could be further improved. Despite having strengthened access to credit by improving the credit reporting system and establishing a unified and modern collateral registry[9], access to financial resources remains an area for improvement in the future.

Public and private investments are crucial to improving basic infrastructure. The government has difficulty providing an adequate power supply, especially outside of the capital. Due to its aging infrastructure, increasing consumption of electricity at low tariffs and a lack of energy conservation, the Kyrgyz Republic has gone from an energy surplus to an energy deficient in the last decade. Power plants, secondary roads, and canals are in poor shape and in need of major capital investment. With support from development banks and investments from neighboring countries such as China, there have been projects to construct and rehabilitate roads and railways, but additional investments to modernize transportation and energy infrastructure are critical. For example, in March 2018, Electric Power Plants awarded a $104-million turnkey contract to a joint venture of GE Hydro (France) and GE Renewables (Switzerland) for the modernization of the Toktogul hydropower plant in the Kyrgyz Republic, which was also financed by the ADB and EDB. However, the plant still requires additional investment.

9 Doing Business 2018 by the World Bank

COUNTRY PROFILE: TAJIKISTAN IS RELYING ON ITS NATURAL RESOURCES TO DEVELOP AND ATTRACT FOREIGN INVESTORS

Despite the small size of its economy, Tajikistan has been able to sustain strong growth

Tajikistan is growing rapidly: its real GDP jumped from $1.5 billion in 2000 to $4.4 billion in 2017, benefiting from the country's stability since the late 1990s, after it ended a long civil war and recovered from a substantial economic decline following the collapse of the Soviet Union. Tajikistan's strong economic growth is expected to continue in 2018-2021, primarily supported by public investments. Tajikistan is rated B3 by Moody's and B minus by S&P; both give it a stable outlook. In 2017, Moody's noted that the country has "weak" institutions and low foreign reserve levels but mentioned that "despite the severe stress in the banking system, the government and central bank have maintained relative economic stability."

Tajikistan is reliant on agriculture, mineral resources, remittances from abroad, and volatile export prices for key products, which constrains the country's economic development. Tajikistan suffers from a narrow export base (primarily cotton, processed alumina, and electricity), a weak external position and reliance on workers' remittances (estimated to represent 26% of GDP), largely coming from the Russian Federation. At $763, Tajikistan's per capita GDP is among the lowest in the world[1]. Given low incomes, consumption is highly sensitive to key import prices, particularly of food and fuel. The internal market remains small, with a total population of 8.9 million people.

The country has the potential to create a knowledge-based economy in which information and knowledge can have greater contributing power to economic development, efficiency, novelty and competitiveness. The Global Competitive Index ranks Tajikistan at 79th place out of 137 in its 2018 report[2], the country's position being bolstered by the relatively high quality of the educational system (ranked 50th), levels of access to the Internet in schools, and staff training. Yet knowledge sharing is being hindered by lack of institutional support, low levels of technology absorption by companies and little FDI with technology transfer. To help Tajikistan develop its human capital, the World Bank

1 EIU, 2017
2 Global Competitive Index Report

Tajikistan fact sheet

Nominal GDP
$6.8B

Nominal GDP/capita
$759

Labor force
3.4 M

Urbanization
27%

Total export value
US$0.8B

Real GDP growth
3.1% (CAGR 2013-17)

Inflation
8.9% (consumer prices)

Unemployment
2.4%

Official currency
Somoni – TJS(USD/TJS = 8.8)

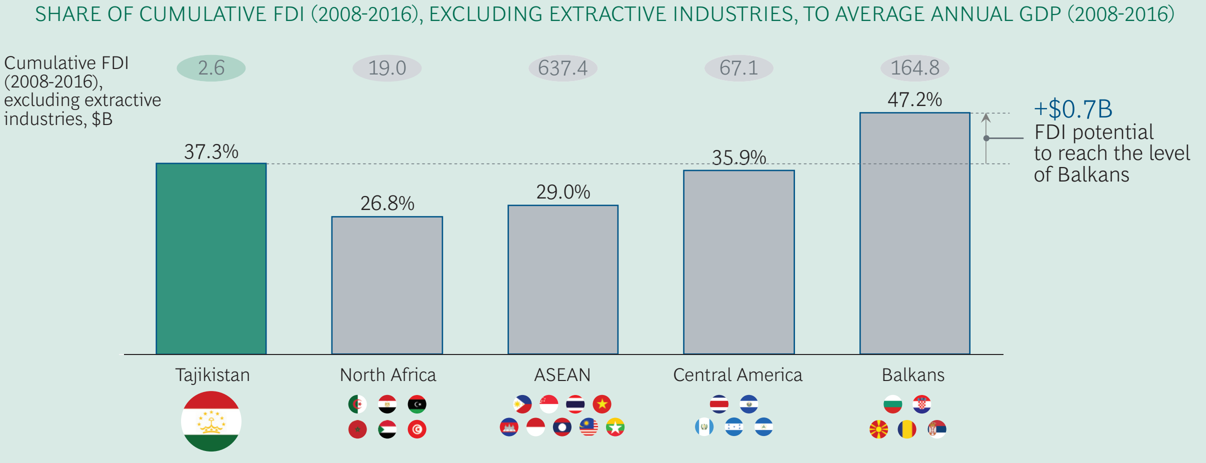
Languages
Tajik (official), Russian

Main export commodities (in value)
Metals incl. precious (47%);
Minerals (20%); Cotton (11%)

Main export destinations (in value)
Turkey (23%)
Kazakh. (18%)
Switz. (17%)

Source: EIU, CIA Factbook, Central Bank, United Nations Statistical Division (COMTRADE), data for 2017 or latest available.

Tajikistan has potential to increase FDI in non-extractive industries by up to $0.7B



Note: North Africa: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia / ASEAN: Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam / Central America: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua / Balkans: Bulgaria, Croatia, Macedonia, Romania, Serbia
Extractive industries include: «Coal, Oil and Natural Gas,» «Minerals» and «Metals» in the fDi Intelligence classification
Source: fDi Intelligence; EIU

launched the Tajikistan Higher Education Project in 2016 in coordination with the government. This project is aimed at improving higher education and its relevance to the labor market. The project will provide grants to students and professional development to teachers.

Tajikistan benefits from abundant natural resources that attract foreign investors

Tajikistan is home to vast natural resources. It has the largest silver deposits in the world, as well as significant gold deposits. Tajikistan has doubled its gold output over the last five years and increased its gold exports from $81 million in 2014 to $98 million in 2016, thanks to an increased inflow of FDI, mainly from China. Tajikistan is also the largest producer of aluminum in Central Asia. The country does not have any aluminum ore, but it owns a large aluminum plant that allows it to export $257 million worth of aluminum per year, its largest export. However, aluminum production in Tajikistan requires additional investment to improve its competitiveness. Recently, China agreed to invest $1.6 billion[3] in an aluminum plant, which will significantly bolster development of this strategic sector. Tajikistan is also one of the largest producers outside of China of antimony, a strategic minor metal.

3 https://www.geo.tv/latest/168141-china-to-build-16-bn-aluminium-plant-in-tajikistan

Tajikistan is in 8th place in the world for hydroelectric generation. Tajikistan accounts for 60% of all hydroelectric capacity in Central Asia. Although Tajikistan generates most of its electricity using hydropower plants, its potential remains mostly untapped. According to government estimates, only about 5% of the country's hydropower potential is being utilized. Despite its resources, Tajikistan's access to energy was problematic until recently, with electric shortages in the winter, when demand for electricity spikes and bodies of water freeze over, resulting in decreased output. The World Bank estimated that the country lost around $200 million (or 3% of GDP) per year[4] due to power shortages. However, power shortages have been reduced following the construction of a coal-fired plant in Dushanbe. More recently, the improvement of relations with Uzbekistan, which plans to buy power from Tajikistan, means that the country will be able to better utilize its hydropower potential in the near future. The rebuilding of the Central Asian Power Supply System will also help Tajikistan exploit its potential for hydropower generation and give it more options for balancing supply and demand in winter months. Despite those recent improvements, the sector's development remains hampered by lack of additional investment. Nevertheless, the country is relying on its hydrologic industry to diversify its economy and lower the share of remittance in it.

4 World Bank

In September 2017, Tajikistan raised $500 million from its inaugural 10-year international bond, paying a fixed rate of 7.125%, proving investors' appetite for relatively high-yielding sovereign debt from emerging and frontier economies and their trust in Tajikistan's economy[5]. The country will use the proceeds of the debt sale to fund an ambitious $3.9 billion power project. The Rogun hydropower dam was originally a Soviet project in the 1970s but was never finished and has since seen talks with a series of potential investors fall through. The dam would have an installed capacity of 3600 MW, producing as much power as three nuclear plants, according to research by the Economist Intelligence Unit.

Tajikistan's investment climate requires structural reforms to overcome existing barriers

The country receives a low share of FDI, by both regional and international standards. This is mainly due to the unfavorable business climate. The World Bank places Tajikistan in 128th place in its Doing Business ranking. Typically, investors cite corruption and bureaucracy, government intervention in the economy and a lack of real mechanisms for entrepreneurs to protect their rights as barriers to doing business in Tajikistan. Conducting business remains complicated due to cumbersome standardization and certification regulations, an unpredictable investment climate, underdeveloped banking and insurance sectors, currency fluctuations, and difficulty obtaining domestic loans. In addition, all private investment is screened and requires government approval, while investment legislation is implemented inconsistently.

5 The bond issue increases Tajikistan's external public debt from 35% of GDP to nearly 50%, the EIU estimates.

Some reforms are already underway, with assistance from international organizations, including the Asian Development Bank. Since 2008, the country has implemented 24 reforms to facilitate entrepreneurship in Tajikistan. One of these reforms is the introduction of a "one-stop shop" that has reduced the amount of time necessary to register a new business, demonstrating strong political will to improve the country's business reputation. In 2017, Tajikistan also made starting a business easier with preferential measures for small businesses[6] and made it easier and less costly to register property[7]. However, economic reforms in Tajikistan are often initiated by the donor community and poorly implemented by the Tajik government, which needs to take stronger ownership of its reform process.

The country is slowly seeing the results of its reforms and its efforts towards investment diversification. For example, Tajikistan and the UAE are planning to create a joint investment fund to boost economic ties between the two countries. The fund will facilitate investments in various sectors of Tajikistan's economy, including infrastructure, energy, tourism and agriculture.

However, Tajikistan still needs significant structural reforms to improve its investment climate and public finance management, especially for revenue collection, since it is classified as in "high risk of fiscal distress" by most international development banks, in part due to the rising level of public debt following the bond deal of September 2017.

6 By raising the revenue threshold for mandatory value-added tax registration
7 By eliminating the need to register a sale-purchase agreement at the municipal office

COUNTRY PROFILE: TURKMENISTAN'S INVESTMENT POTENTIAL OUTSIDE OF RESOURCE-BASED INDUSTRIES IS LIMITED BY A POOR INVESTMENT CLIMATE

Turkmenistan has important revenues thanks to abundant hydrocarbon reserves

Turkmenistan is the third largest economy in the region with a real GDP of $16 billion in 2017[1]. Its economy relies mainly on oil & gas: hydrocarbon exports[2] make up 25% of the country's GDP[3]. Turkmenistan has the fourth largest gas reserves in the world, with proven reserves of about 18 trillion cubic meters[4]. Aside from the hydrocarbon industry, the other business sectors worth mentioning are agriculture (cultivation of cotton, grains, fruits and vegetables), food, textiles and clothing, a handful of product groups in the chemical and building material industries and, particularly, construction. However, these industries are marred by inefficiency[5].

1 EIU, nominal GDP of $45.3 billion, making it the second largest economy in Central Asia in nominal terms
2 Most of which is natural gas exported to Russia and China
3 CIA World Fact Book
4 BP Statistical Review of World Energy, June 2017
5 The state-owned economic sector – predominant in the country – suffers from ineffective management, a non-transparent staffing policy and an absence of clear long-term strategies. Source: Bertelsmann Stiftung's (BTI) Transformation Index

Turkmenistan receives the third largest greenfield FDI in Central Asia, with cumulative FDI reaching $12 billion in 2003-2016. However, investment is mainly limited to the exploitation of natural resources. Since 2009, the extractive industry has accounted for 78% of cumulative greenfield FDI[6].

Macroeconomic forecasts remain optimistic for the country. Turkmenistan is in a comfortable position due to its revenues from the export of natural gas, oil, and petroleum products. Surpluses have been accumulated in a stabilization fund established in 2008. However, despite the country's revenues, Turkmenistan's relatively small population (around 5.5 million people) remains largely impoverished due to a poor system for the redistribution of wealth.

Turkmenistan benefits from its strategic location in Central Asia

Thanks to its strategic location and access to the Caspian Sea, Turkmenistan has the potential to

6 fDi intelligence. The extractive industry includes "Coal, Oil and Gas," "Metals," and "Minerals."

Turkmenistan fact sheet

Nominal GDP
$45.3B

Nominal GDP/capita
$7,875

Labor force
2.6 M

Urbanization
50%

Total export value
US$8.9B

Real GDP growth
4.1% (CAGR 2013-17)

Inflation
6% (consumer prices)

Unemployment
11%

Official currency
New Manat – TMT(USD/TMT = 3.5)

Languages
Turkmen (official), Russian

Main export commodities (in value)
LPG and petroleum products (90%);
Cotton (5%)

Main export destinations (in value)
China (78%)
Afghanistan (6%)
Turkey (6%)

Source: EIU, CIA Factbook, Central Bank, United Nations Statistical Division (COMTRADE), data for 2017 or latest available.

become a transit corridor. Turkmenistan is part of the international transport corridor created under the Ashgabat Agreement, signed by India, Oman, Iran, Turkmenistan, Uzbekistan and Kazakhstan, creating an international transit corridor between Central Asia and the Persian Gulf. Construction began in 2015 on the Turkmenistan – Afghanistan – Pakistan – India (TAPI) pipeline, a natural gas pipeline being developed by the Galkynysh – TAPI Pipeline Company Limited with the participation of the Asian Development Bank. It is expected to be operational by 2019. This new pipeline is intended to more than double Turkmenistan's gas export capacity. However, further improvement and development of infrastructure is required to achieve full potential as a transit corridor.

Despite an expressed desire to attract more investors, Turkmenistan's potential is limited by a poor investment climate

Turkmenistan's leadership has expressed the desire to attract more investors. The government is trying to attract more diversified investments in construction, chemicals, agriculture, healthcare, transportation and communications, logistics, banking, financial services and insurance. An international investment forum was organized in December 2016 to that effect. So far, however, Turkmenistan has not succeeded in attracting investors outside the oil and gas industry.

Tight administrative controls and the public sector's large overall role in economic activity remain the key obstacles to private sector development in Turkmenistan. The state controls all key sectors of the economy and state-owned enterprises are exclusively responsible for the production and export of oil, natural gas, electricity, raw cotton, petroleum-based products, and other raw and semi-finished products, as well as most finished products in the manufacturing sector.

The country's investment climate also suffers from weak protection of property rights, high corruption and bureaucracy[7]. Transparency International's 2017 Corruption Perception Index ranks Turkmenistan 167th out of 180 countries. In the short-term, the prospects of Turkmenistan transforming into a more liberal country are slight. The outlook for Turkmenistan in terms of foreign investment is therefore negative, pending the launch of more systemic political and economic reforms.

Turkmenistan is not considered in further analysis due to its limited investment opportunities outside of hydrocarbon resources and poor investment climate.

7 Turkmenistan is not included in the World Bank's Ease of Doing Business index because of the absence of reliable data

NEW OPPORTUNITIES ARE EMERGING

FOR INVESTORS IN CENTRAL ASIA

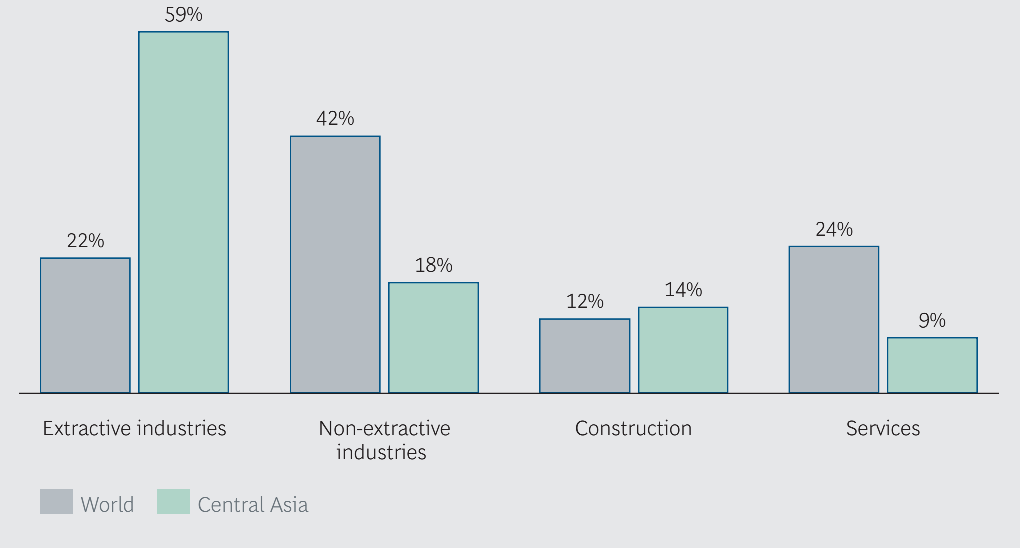
So far, FDI has gone mainly to extractive industries, but region-wide opportunities in other sectors are now emerging

Historically, FDI in Central Asia has been mainly directed towards resource industries

Greenfield FDI inflow to Central Asia has reached $113 billion since 2008 and accounted for almost 1.5% of global FDI.

Kazakhstan is the regional leader and has attracted 70% of all greenfield FDI inflows to Central Asia, followed by Uzbekistan with 16% and Turkmenistan with 8%, while the Kyrgyz Republic and Tajikistan combined received less than 6% of all regional FDI. Even though investor destinations and motivation are based on the competitive advantages of individual economies, patterns can be identified in FDI flows to Central Asia.

FIGURE 8 | Structure of greenfield FDI in Central Asia and the world



Note: Construction includes construction of buildings, real estate services and production of building materials.
Source: FDI Markets (includes greenfield data only) 2008-2016; BCG analysis.

So far, Central Asia has mainly attracted investors in industries related to natural resources. The largest portion of investments (~59%) has gone to extracting natural resources and support services for the extractive industries (e.g., geological exploration), while oil and gas, and metals and minerals, only represent 22% of FDI inflow worldwide. Production plants in these sectors in the region are mostly export-oriented.

Investors still see Central Asia as rich in natural wealth. According to experts, the extractive sectors have not reached their full potential yet due to the large reserves available and the potential efficiency gains that can be achieved in these industries. However, fluctuations and drops in commodity prices, strong regional will to diversify economies, and measures taken by governments to improve the business climate create opportunities in other promising sectors.

Besides extractive industries, other sectors are offering investment opportunities

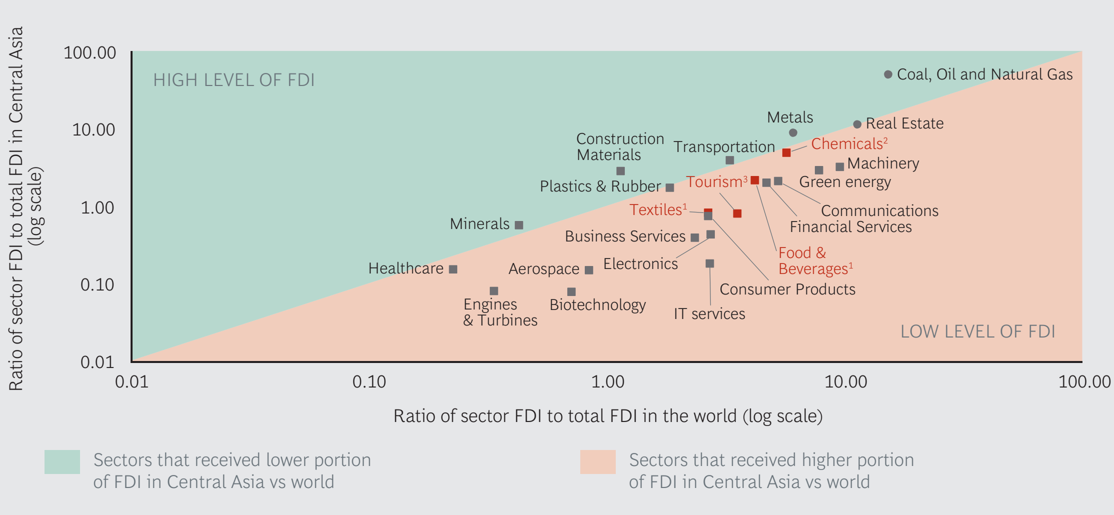
Investment flows to non-tradable sectors serving domestic needs like telecommunication, trade and financial services accounted for around 9%, which is significantly lower than the share of FDI going towards services worldwide (24%). Investors have been mainly interested in the transportation sector, which received a portion of FDI comparable to world levels[1].

Although some investors have already tapped into the region's financial sector, opportunities exist to develop the integrated financial system further. Investments in the financial sector represent 2% of all FDI in Central Asia (versus ~5% worldwide). Banking penetration in the region remains low: domestic credit to the private sector is 33% of GDP in Kazakhstan, 18% in Uzbekistan, 21% in the Kyrgyz Republic and 19% in Tajikistan, versus 56% in neighboring Russia and 54% in European countries, excluding high-income[2].

Further investment in information technology is necessary in the region. For Tajikistan and the Kyrgyz Republic, the most attractive investment niches are in telecommunication infrastructure: currently Internet penetration is 3.5% and 7.2% in Tajikistan and the Kyrgyz Republic, respectively. That is far behind Kazakhstan (84%)

1 Share of transport sector FDI in total FDI for the region and the world is similar at ~4%
2 Estimate from Silk Capital, an investment banking subsidiary focused on the Uzbekistan market; World Bank data 2016

FIGURE 9 | Greenfield FDI structure in Central Asia and the world



[1] Food & Beverages and Textiles form agricultural processing
[2] Chemicals include petrochemicals among basic chemicals, fertilizers, paints and coatings, pharmaceuticals
[3] Tourism includes hotel and entertainment infrastructure and reservation services
Note: Machinery includes industrial and automotive machines and components
Source: FDI Markets (includes greenfield data only) 2008-2016

and Uzbekistan (75%)[3]. In Kazakhstan, the authorities also seek to digitize agriculture, industry, transport automation, etc.[4]

The tourism industry has high investment potential throughout the region. The sector is underfunded and accounts for less than 0.8% of FDI in the region (versus 4% globally). Considering the large choice of attractions in Central Asia, it is possible to develop a variety of kinds of tourism (cultural, religious, sport…).

The construction sector has already attracted investors, but it still offers high development potential. The region has received a portion of FDI comparable to the world average: the share of building construction, production of construction materials, and real estate services in total investment inflows is 14%, that is, close to their share in world FDI (12%). However, the sector still interests investors. To meet UN standards of minimum space per person (30 m^2), 930 million m^2 of additional housing stock needs to be built in the region, providing investment opportunities. Moreover, floor area per person in Central Asia is relatively low, with only 11 m^2 of available housing per capita in Tajikistan, 12 m^2 in the Kyrgyz Republic, 15 m^2 in Uzbekistan, and 21 m^2 in Kazakhstan, which is significantly lower than in Eastern Europe (40 m^2) or the U.S. (70 m^2), thus creating significant growth potential to close the gap and reach international levels. Construction is one of the major economic drivers in the Kyrgyz Republic, Uzbekistan and Tajikistan, which are growing by 13%, 7%, and 5%, respectively, CAGR from 2010-2016. Among the main benefits for investors, the region offers a cheap workforce and sufficient sources of raw materials to produce numerous construction goods locally.

Unlike what can be seen in many other parts of Asia, investment projects in Central Asia rarely take part in global supply chains, mainly due to the lack of regional cooperation and transport infrastructure, combined with difficulties crossing borders[5]. Investment in manufacturing industries represents only 18% of the total FDI portfolio in Central Asia, less than half of global levels (42%). Value-added industries such as food production, garment production, and electronics remain largely untapped by investors, except for the chemical and automotive industries, and even those require additional investments for further development.

Several major automotive projects have been launched in the region. In Eastern Kazakhstan (Ust-Kamenogorsk), an automobile manufacturing plant with a production capacity of 120,000 cars annually was established as a joint venture between of AZIA AVTO Kazakhstan and AVTOVAZ Russia. The automotive sector has also attracted investments in Uzbekistan, with the Daewoo and General Motors automobile plant launched in 2008.

The chemical industry amounted to ~5% of regional FDI inflow, and it still represents a window of investment opportunity in Kazakhstan and Uzbekistan. Major investments went to Uzbekistan ($5.142 billion) and the rest to Kazakhstan ($789 million). Among the largest projects were French investments in industrial and medical gas production in Kazakhstan, and Korean investments in polymer production in Uzbekistan. Those two countries benefit from abundant and low-cost hydrocarbon resources of the kind needed for petrochemicals (i.e., with a high ethane content). The Central Asian countries are interested in further developing their petrochemical industries to benefit from exporting value-added petroleum products rather than raw materials.

The renewable energy sector is also promising for investors. Kazakhstan and Tajikistan benefited most in the region from FDI in green energy, with 64% and 33%, respectively, of total regional investments in alternative energy. Given the high hydro, solar and wind potential in Central Asia, the sector is strongly underinvested with a 3% share in total FDI, compared to the global average of 8%. For example, the hydro capacity in the Kyrgyz Republic is estimated at 142.5 billion kWh with current usage of only 10%[6].

3 International Telecommunication Union (ITU), 2016 data
4 KazakhInvest
5 ADB Institute: Connecting Central Asia with Economic Centers
6 Investment Promotion Agency, Kyrgyz Republic Economic Ministry

Seasonal energy shortages are still common in the region, making the implementation of renewable energy projects crucial to addressing future economic goals as well as meeting environmental needs.

The traditionally strong agricultural sector in Central Asia could be further developed to serve manufacturing industries like food and textile production. Agricultural processing is an attractive investment destination as the region benefits from natural conditions (land and climate) as well as a relatively cheap labor force. Food and textile manufacturing is underfinanced and amounts to only 3% of greenfield investments in the region, versus 7% in the world FDI portfolio.

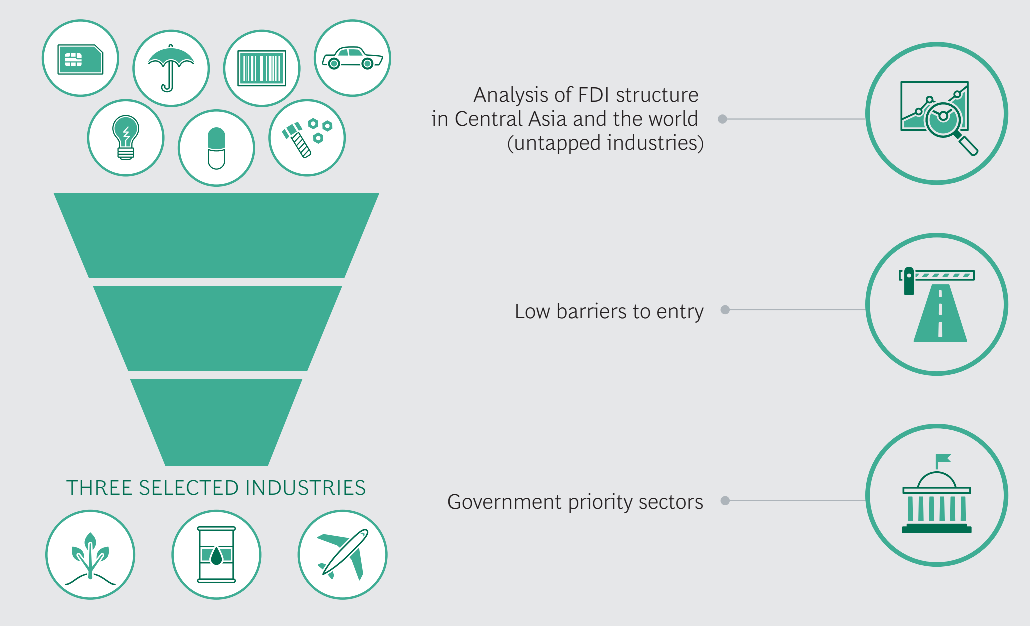
Knowledge-intensive sectors and industries are largely untapped, but currently there is a lack of competitive advantages to motivate FDI flows. Biotechnology, engines and turbines, and electronic components are highly underdeveloped in Central Asia and extensive work by the governments to build a knowledge-based economy and increase the quality and accessibility of higher education will be required for the region to compete in these sectors and attract investment.

Agriculture, the petrochemical sector and tourism illustrate the region's investment potential

Three industries have been selected to illustrate the region's investment potential, based on three criteria: (i) relatively low level of existing investment, (ii) low barriers to entry, and (iii) high government priority. Agriculture, the petrochemical sector and tourism fit those criteria.

Agriculture, the petrochemical sector and tourism are indeed underinvested in Central Asia, compared to the rest of the world, and they benefit from large untapped potential. The region's agricultural potential is largely untouched, the processing industry in particular: thanks to cheap labor and favorable climatic conditions, Central Asia has all the competitive advantages required to succeed in agricultural processing, as both domestic and export-oriented production. There is also potential to develop regional value chains by benefiting from each countries' competitive advantages. For petrochemicals, Kazakhstan and Uzbekistan's potential is clear when their industry is compared to that of other large oil producers, such as China and the U.S., which are usually net importers of crude petroleum as they export value-added derived products rather than

FIGURE 10 | Three choices of criteria for deep dives on attractive industries



raw materials. Moreover, investments in integrated-value chains in the petrochemical sector can complement the development of the manufacturing sector in the region. The region also benefits from a large potential to develop its tourist industry. For example, opportunities can be taken by considering Central Asia a single macro-destination offering various types of tourist attractions at competitive prices, as both private and public investments are required to improve tourism and travel infrastructure in the region.

Agricultural processing and tourism are industries easy to enter, requiring a relatively low level of CAPEX. They are also open to foreign investments and do not suffer from major administrative barriers, as could be the case for other growing sectors, such as education, insurance, and financial services. While the petrochemical industry is more capital-intensive, the industry benefits from local expertise and experience in the oil and gas sector that simplify entrance for potential investors.

The development of agricultural processing and tourism are high strategic priorities for all Central Asian countries, whereas petrochemicals are only on Kazakhstan and Uzbekistan's list of sectors to support. Investing in national priority industries often offers opportunities to benefit from support measures and preferential treatment for investors.

The region has all the competitive advantages to succeed in agricultural processing for both domestic and export-oriented production

Global consumption of higher-value goods is growing, driven by the expanding world population and increasing purchasing power

In recent years, consumption of goods has been on the rise, driven by population growth and increasing incomes. The global population has reached 7.6 billion people, implying that the world has added approximately one billion inhabitants over the last twelve years, and it is expected to grow further by approximately 1.1% per year[7]. Another tendency is the expansion of purchasing power as emerging economies are becoming wealthier: the world GDP per capita[8] has been climbing at a compound growth rate of ~2% annually[9].

The rapid growth of the world's middle class is expected to continue. According to the OECD, the size of the global middle class will increase from 1.8 billion in 2009 to 3.2 billion by 2020 and 4.9 billion by 2030. The major growth will come from Asia: by 2030, the continent will represent two-thirds of world middle-class consumption[10].

Moreover, consumption patterns are changing. With income growth, demand for products is shifting towards more value-added goods and services. Western trends towards eco-food – healthy, lightly processed food – are becoming more popular and merging with the natural shift to higher-protein diets. Having higher incomes, people are spending more on leisure activities and tourism. Clothes, electronics and cars are becoming "fast fashion" trends and being replaced faster.

Growing domestic consumption and access to large external markets make Central Asia an attractive investment destination for consumer goods. The dynamism of the growing young population in Central Asia, with its propensity to spend more, is a driver of regional opportunities in the consumer goods market. The region also has access to large external markets with growing purchasing power in countries and regions such as China, Southeast Asia and Russia.

Central Asia has a variety of primary agricultural commodities, but a shift towards processing is needed to add value to the regional economy.

The region has sufficient land resources and favorable climatic conditions suited to cultivating various raw agricultural products. Central Asia occupies a huge territory, 75% of which is agricultural land, and 10% is arable; 22% of that land is irrigated. Grazing land accounts for more than 200 million hectares.

7 World population prospects, United Nations, 2018

8 In PPP terms in constant prices

9 World bank indicators

10 OECD Yearbook 2012

Together, the countries have strong positions in cultivating crops like durum wheat, barley, potatoes, sugar beet, rice, maize, cotton, sunflower, beans, and various fruits and vegetables, as well as livestock breeding, etc.[11]

Central Asian countries are currently mainly exporting raw agricultural commodities, rather than producing higher-value processed goods. Kazakhstan is one of the world's largest exporters of grain and wheat flour (2% of global wheat production). The Kyrgyz Republic's top agricultural products for export are dry beans, unprocessed tobacco and cotton fiber. Exports of agricultural products (mainly cotton, fruits and vegetables) contributed approximately 22% to Uzbekistan's external earnings. Tajikistan exports raw cotton and dried fruits. The region is also highly import-dependent on several food products. The share of food in total imports varies from 11% to 15% across the region[12].

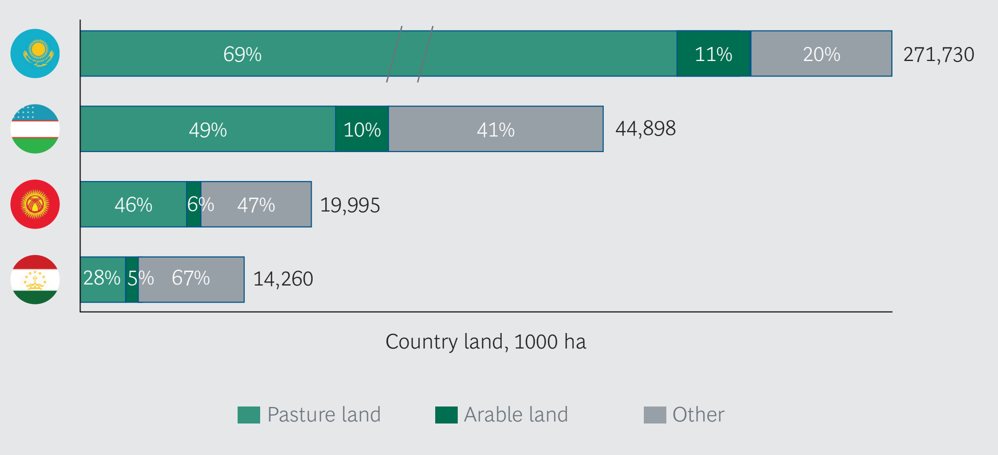
Authorities consider the agricultural and food processing sectors strategic for attracting investment. In Kazakhstan, the main policies are directed towards decreasing food import-dependency and increasing local food production. The Agriculture Ministry has introduced several incentives for local producers to improve efficiency, encourage development of the national agro-industrial complex and provide assistance and subsidies to local producers. The Kyrgyz Republic plans to boost its competitive export potential via the development of priority export goods, including processed meat, dairy products and fruits and vegetables. Uzbekistan's government is also taking measures to encourage production and exports. Recently, the government issued a standing order for fresh fruits and vegetables. Uzbekoziqovqatholding will purchase the produce for further industrial processing, the Uzbekoziqovqatzahira association will handle storage, and Uzagroexport will export it. Moreover, the government is taking steps to encourage farmers to become their own exporters. Under a presidential decision effective since July 2017, entrepreneurs may now export their farm produce directly to foreign partners.

A major source of competitiveness in agricultural value chains and sustainable food production is access to affordable physical infrastructure

One of the major challenges constraining the development of the agricultural sector in the region is inefficient irrigation systems that are technologically outdated and cover only a limited surface area of the region. Irrigation practices are inefficient. According to the World Bank, water consumption is high simply due to the loss of up to 79% of irrigation water in the region. Outdated irriga-

11 Food and Agriculture Organization of the United Nations
12 Kazakhstan 11%, Uzbekistan 12%, the Kyrgyz Republic and Tajikistan 15%

FIGURE 11 | Agricultural land in Central Asia



Source: Food and Agriculture Organization of the United Nation.

CASE IN FOCUS: DANONE PROCESSES RAW MILK FROM LOCAL FARMERS AND MAKES HIGH-QUALITY DAIRY PRODUCTS TO MEET CENTRAL ASIAN DEMAND

Danone is a French multinational food products corporation operating in more than 120 countries worldwide. In 2010, the company's first plant in Central Asia was commissioned with a capacity of 24,000 tons of dairy products in Almaty region, Kazakhstan. The project represented a total investment of 21 million euros.

The Danone plant supports local farmers as the company purchases domestic raw materials for the production of high-quality dairy goods. In addition to the widely known brands of Danone, Activia and Rastishka, special local brands like Biobalangs Ayran and Biobalangs Tang were developed specially for the Kazakhstan market. From Kazakhstan, Danone products are exported to the Kyrgyz Republic, Turkmenistan and Tajikistan.

Source: official company website (www.danone.com); KazakhInvest

tion systems also lead to further soil degradation and salinization, which has already become an issue in the Kyrgyz Republic and Uzbekistan. Investment in more up-to-date technology is required, as innovations in the irrigation system will ensure the growth of productivity, expand the irrigated agricultural area and improve the ecological situation in Central Asia.

Governments and international organizations have made a significant contribution to improving irrigation systems. Kazakhstan's government is finishing the reconstruction of the Kirovo-Chizhin water channel. The irrigation system, which will cost approximately $6 million to renovate, will serve 130,000 hectares in Western Kazakhstan and channel water directly from the Ural River. The government is planning to spend an additional $3 million on 12 irrigation systems in the south of the country that will cover 4 million hectares of agricultural land. In addition, Kazakhstan has attracted $180 million from the European Bank for Reconstruction and Development (EBRD) to finance the creation and renovation of irrigation systems in the south and west of Kazakhstan[13]. In the Kyrgyz Republic, the city of Karakol received a grant through the U.S. Agency for International Development (USAID) Collaborative Governance Program that allowed the government to reconstruct the country's irrigation systems[14]. The country has also invested in drip irrigation technologies. In 2017, the World Bank approved $145 million to sponsor the second phase of a water resources project in the Ferghana Valley, Uzbekistan. The project will improve water supply and drainage for over 103,000 hectares of land, using new state-of-the-art engineering[15]. In Tajikistan, in January 2018, the World Bank financed the Zarafshon Irrigation Rehabilitation and Management Improvement Project for $16.5 million, which will renovate, reinforce and extend water infrastructure in Zarafshon Valley, as well as increase pumping efficiency and reduce sedimentation. Currently, 40% of the valley is used for rainfed agriculture, which is drastically inefficient compared to irrigated systems[16].

Moreover, there is a strong need for investments and government efforts to support primary production and provide access to markets. Modernization in crop handling and storage after harvest would minimize or eliminate losses. According to an agriculture expert interviewed by BCG, the region currently loses up to 40% of its harvest due to poor pre- and post-storage infrastructure. This also results in a negative percep-

13 http://www.ebrd.com/news/2017/ebrd-finances-irrigation-in-three-regions-of-kazakhstan-.html

14 https://www.usaid.gov/results-data/success-stories/thousands-karakol-lost-irrigation-water-they-mobilize-it%E2%80%99s-too-late

15 http://documents.worldbank.org/curated/en/980471499047339716/pdf/Uzbekistan-Feghana-PAD-06122017.pdf

16 http://projects.worldbank.org/P158576?lang=en

RAW AGRICULTURAL PRODUCTS	MANUFACTURING EXAMPLES
Horticulture	Frozen and canned fruits & vegetables; dried fruits; organic juices; confectionary (jams); baby food
Oil crops	Oil
Wheat	Cereals, pasta, bread, flour, etc.
Cattle, poultry	Fresh & frozen meat; byproducts; dairy products; leather & wool
Cotton	Fabrics, garment production

tion in some countries of the sanitary norms and quality of agricultural products from Central Asia. The introduction of modern refrigeration systems will partly solve the problem with perishable products and prolong product life. Development of market information systems is required to provide farmers with basic information and ensure efficient trading and exchange via telecommunications and digital technologies.

Access to packaging facilities makes it possible to improve the shelf life and quality of horticultural products. Currently Central Asia cannot offer products ready for consumption, thus losing significant potential profits. It is a common practice for trucks from neighboring countries to come to farms just to collect fruits and vegetables for a minimum price. Large-scale packaging hubs across the region will enable Central Asia to offer value-added fruits and vegetables for export. The creation and promotion of a single brand and package designs indicating the benefits of the products would make it easier for the region to compete on the international arena.

Investment is required in processing plants to speed up processing from the farm to the finished product. The abundant variety of primary agricultural products makes it attractive for investors to establish processing units to produce higher-value goods. In terms of economic development, it means that the region could benefit from economic diversification by increasing its manufacturing production.

The region has the potential to serve both domestic and international markets for beef

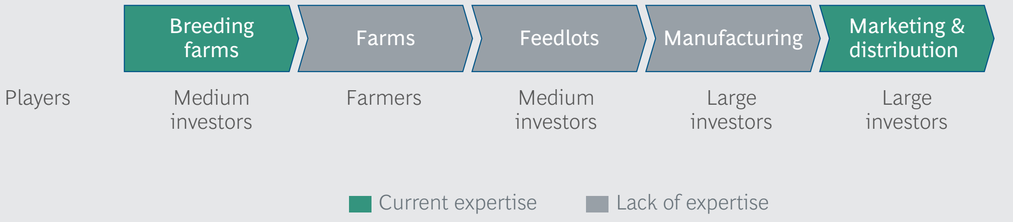
Central Asia has competitive benefits to attract investments in meat production. The amount and quality of pastures make it possible to produce high-quality meat products to serve domestic and international markets, among them China, Iran, Saudi Arabia and Vietnam. Comparatively low wages and large labor resources in the region are an additional advantage for a competitive pricing policy.

Investments could be attracted along the entire meat production value chain. For medium-size investors, the main potential is in cattle breeding, including stock selection and ensuring genetic improvement through breeding. For larger investors, opportunities are emerging in building feedlots and meat-processing plants, as well as organizing distribution channels.

Primary products of cotton and wool open doors to textile manufacturing in Central Asia

Central Asia has a long tradition of cotton cultivation. Currently cotton grows in all the countries in the region as a result

FIGURE 12 | Value chain opportunities in meat production in Central Asia



of Soviet economic planning aimed at meeting the needs of the entire Soviet Union for cotton. In several countries, cotton still plays a crucial role in the economy: pure cotton yarn and raw cotton accounted for almost 14% of exports in Uzbekistan and 11% in Tajikistan[17]. Uzbekistan grows approximately 3.5 million tons of raw cotton annually and produces 1.1 million tons of cotton fiber. The country is the world's sixth largest cotton producer (with 849,000 tons, 4% of global production) among 90 cotton-growing countries, with export flows predominantly directed to China, Bangladesh, Korea and Russia. While in other parts of the world cotton often goes hand in hand with textile production, Central Asia exports mainly raw and primary processed (fiber) cotton, rather than high value-added goods.

The scale of wool production could be increased in the region. Central Asia is historically a sheep-rearing area. Sheep production in the USSR was the largest in the world and accounted for 139 million head, concentrated mainly in the Asian regions of the country. Vast areas of mountain land are devoted to merino sheep and cashmere goat production in Central Asia. Regional herders tend to sell raw wool in bulk, mainly to China, where it is then used in manufacturing.

17 BACI international trade base, data from 2016

CASE IN FOCUS: INALCA HAS INVESTED IN BEEF PRODUCTION IN KAZAKHSTAN

INALCA is the absolute leader in Italy in the beef sector and a major European player. Its entire production sector includes 12 production plants in Italy, 22 distribution platforms abroad and 5 production facilities in Russia and Africa. The company oversees the entire beef production chain, from rearing to the finished product, and operates successfully in international markets with its own food distribution platforms. All its plants use modern production technologies and innovative safety systems that put the company at the forefront of control methodologies, chain programs and meat identification and labelling processes.

On a 10-year horizon, the company is planning to invest about 500 million euros in beef production in Kazakhstan. Funds will be allocated to create a vertically integrated company, including feedlot facilities, a meat processing plant, logistics and a distribution platform. INALCA will focus on the domestic market and exporting beef products to China and the Middle East.

The first investment phases have already been made. The distribution hub has been operating in Almaty since 2017. According to plans, feedlot facilities and a meat processing plant with total production capacity of 120,000 head annually will start operating in 2019.

Source: expert interview; official company website (www.inalca.it)

CASE IN FOCUS: TAJIKISTAN IS CONSTRUCTING THE LARGEST TEXTILE COMPLEX IN CENTRAL ASIA, SUPPORTED BY CHINESE INVESTORS

In August 2016, the first phase of the Dzhungtai-Dangara Sin-Silu Textile complex was launched in Tajikistan. With a processing capacity of 52,000 tons of cotton and a production capacity of 150 million m2 of textile per year, it is one of the largest textile complexes in Central Asia. The new plant uses the latest technology from the U.S., Italy, Switzerland, Germany and China. At full capacity, the complex will employ more than 6,000 people.

This textile complex was built in cooperation with Chinese investors. In the first stage of the project, 600 million somoni ($71 million) were invested. The government of Tajikistan plans to launch the second stage of the textile complex with private investors in 2018. The construction is part of the government's plans to increase the volume of cotton processing in the country, as well as exports of finished garments.

The Kyrgyz Republic has shown rapid growth in its textile industry over the last decade. Textiles have reached almost 18% of total import value ($827 million) in the country in 2016. The main advantage is the low cost of labor compared to international competitors, as the industry is highly labor-intensive. A second advantage is low trade barriers with Russia, Belarus and Kazakhstan. Experts also note good knowledge of consumer preferences in the market. The industry is mainly represented by small and medium enterprises. No major global producers have entered the garment market so far.

The development of value chains in the textile industry, stretching from primary raw material production to fabric and garment production, offers new opportunities in Central Asia. The region as a whole can produce raw cotton and wool and has the expertise to transform them into final products. However, closer cooperation and investment are required to make Central Asia recognizable on the global apparel market. Foreign companies could embrace international quality standards and improve design capabilities, which are currently mostly limited to reproducing international models. Uzbekistan has been taking steps towards 100% fiber processing by 2021. The country plans to establish 112 processing factories and modernize current operational facilities. Petroleum resources in Kazakhstan and Uzbekistan will also make it possible to produce artificial fabrics in the future, which would allow the region to offer all kinds of textile goods from synthetics to premium pure cotton and woolen garments.

FIGURE 13 | Textile value chain opportunities in Central Asia

Rich resources and growing world demand make the petrochemical sector an attractive investment

Central Asia could successfully compete in petrochemicals now

Chemicals are a growing global industry with a large market size and high growth rates. Covering a wide variety of products, the world chemical market has reached $3.4 trillion[18]. Global chemical production growth (3% to 9% CAGR, depending on the specific industry) is mainly driven by consumption, which is increasing by 4% average annually[19]. Petrochemicals make up almost 15% of the total chemicals market in value, with global demand of around $500 billion, which is expected almost to double over the next decade[20].

Kazakhstan and Uzbekistan have competitive advantages only in the most basic element of the petrochemical industry: cheap and abundant feedstock. Kazakhstan has 30 billion barrels of crude oil reserves, ranking 12th in the world and second in Eurasia after Russia. Uzbekistan ranks 19th globally by proven gas reserves. The Kyrgyz Republic and Tajikistan do not have rich hydrocarbon resources[21].

The feedstock is relatively cheap: e.g., oil and gas feedstock in Kazakhstan is approximately 30% cheaper than in Russia and almost half as expensive as in the EU. Among the major drawbacks that complicate the current development of higher value-added chemical industries like specialty chemicals[22] are complicated logistics to access the main markets (railway only), high CAPEX requirements, low competence in marketing and sales, and lack of innovation[23].

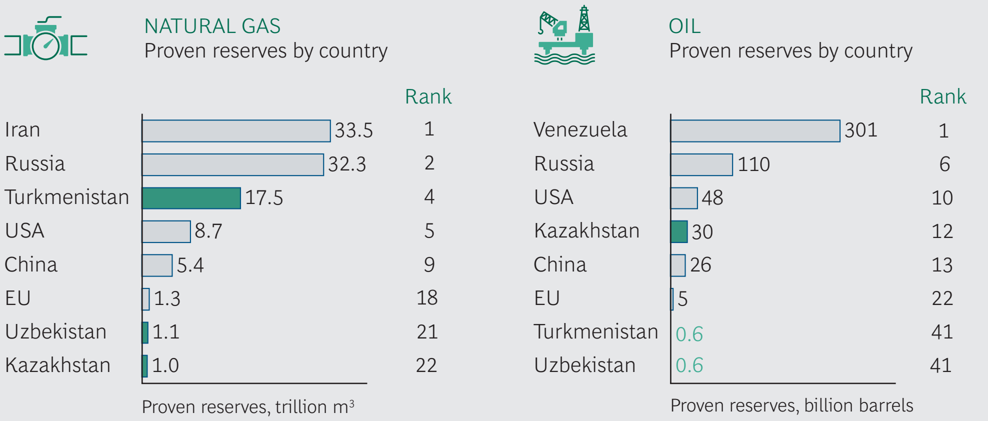
Polyethylene and polypropylene production are attractive sectors to invest in

Global ethylene and propylene production accounts for up to 50% of global petrochemical demand and reached $240 billion in 2015[24]. Global demand growth for polymers comes mainly from developing economies like China (approximately 30% of world demand). World demand for polymers is forecast to grow further, driven by the rising demand of the plastics industry.

Relatively high ethane content and cheap petroleum resources provide opportunities to invest in polymer industries in Kazakhstan

18 CEFIC (The European Chemical Industry Council): Facts and Figures 2017
19 Mainly by the packaging and construction industries
20 https://www.statista.com/statistics/696921/petrochemical-market-value-worldwide/; interview with BCG expert
21 Central Intelligence Agency (CIA) World Factbook 2017. Data for 01.01.2017.
22 Some of the categories of specialty chemicals are adhesives, agrichemicals, cleaning materials, cosmetic additives, food additives, fragrances, etc.
23 Model of calculation based on the cost of Brent oil $50/bbl, raw materials NGL. Source: BCG interviews with experts, the assessment of largest engineering companies
24 https://www.chemlandscape.cefic.org/

FIGURE 14 | Crude oil and natural gas proven reserves



Source: BP Statistical review, June 2017

CASE IN FOCUS: KOREA HAS INVESTED $1.4 BILLION IN THE PETROCHEMICAL VALUE CHAIN IN UZBEKISTAN

Uz-Kor Gas Chemical is a joint venture between Uzbekneftegaz and a consortium of Korean companies (Korea Gas Corporation (KOGAS), Lotte Chemical Corporation, GS E&R). The project is one of the largest Korean investments in Central Asia and symbolizes the strategic cooperation between Korea and Uzbekistan. The construction of the Ustyurt Gas Chemical Complex (UGCC) was completed in September 2015.

The complex consists of five main plants: a gas separation plant, ethylene production plant, polyethylene production plant, polypropylene production plant and energy supply plant. The total production capacity of the complex is 387,000 tons of polyethylene and 83,000 tons of polypropylene. The Uz-Kor Gas Chemical Complex serves the domestic market and exports products to Central Asia.

Source: official company website (http://www.uz-kor.com)

and Uzbekistan. According to a petrochemicals expert interviewed by BCG, it is considered efficient in world practice to process natural gas with a minimum 3% ethane content. Ethane is an important component for petrochemistry and its content in total gas volume varies from 1% to 6% from different gas sources. The crude oil and gas resources in Kazakhstan are characterized by a high ethane content: 10% to 13% in the Tengiz and Kashagan fields and 5% to 6% in Karachaganak[25]. In Uzbekistan, the ethane level is around 3.6 to 6%[26].

Kazakhstan is focusing on crude oil export rather than producing petrochemical goods. In spite of its rich raw material base (Kazakhstan's crude oil production is five times greater than its domestic demand[27]), the country's internal consumption of polymers strongly depends on imports. While consuming up to 300,000 tons of polymers for various purposes, Kazakhstan has only one polypropylene production plant – the Nephtechim Company, with total capacity of 65,000 tons[28]. The government of Kazakhstan has implemented measures to support modern petrochemical production in the country. In particular, the special petrochemical zone in the Atyrau region with tax and customs preferences has been created. The projected plant's capacities are 500,000 tons of polypropylene and 800,000 tons of polyethylene[29], but the project has been delayed until 2020 and requires further investments.

Investments in integrated value chains in petrochemicals can complement the development of the manufacturing sector in the region

With the development of basic petrochemical products, further opportunities in polymer end-user industries open doors for investors. Synthetic polymers represent essential components of packaging materials, pipes, engineering materials (window frames, doors, etc.), and automobile and electronics production components.

Some pioneering projects in deep petrochemical processing have already been implemented. In the Atyrau region, Kazakhstan's largest production of plastic bags and polyethylene film was launched in 2012 and currently consumes imported polypropylene and polyethylene granules[30] from a new plastic containers plant opened in Uzbekistan in late 2017. The enterprise processes 2,500 tons of polyethylene and polypropylene to produce boxes for produce and liquids, as well as containers for storage facilities[31].

25 KazakhInvest: Investor guide 2017
26 NefteGaz.ru
27 Kazakhstan production of crude oil: 1.6 million bbl/day, export 1.3 million bbl/day. Souce: Central Intelligence Agency (CIA) World Factbook 2017. Data for 01.01.2017.
28 www.petroleumjournal.kz; https://nephtechim.kz/
29 http://www.kpi.kz
30 www.polymerproduction.kz
31 Uzbekneftegas press center 16.12.2017

CASE IN FOCUS: CHEVRON INVESTMENTS IN POLYETHYLENE PIPES IN KAZAKHSTAN

Chevron is one of the world's leading integrated energy companies. It has nearly 30 years of experience working in the oil and gas fields of Kazakhstan. It is the largest private oil producer in Kazakhstan, holding important stakes in the nation's two biggest oil-producing projects – the Tengiz and Karachaganak fields.

Chevron is helping Kazakhstan meet the goal of diversifying its economy. Since 2003, the company has owned and operated a polyethylene pipe plant in Atyrau – one of Kazakhstan's largest producers of polyethylene pipes for use in industry and communal services. The plant's five processing lines have a production capacity of 15,000 tons of polyethylene pipe per year. The plant also makes metal-plastic pipe that is used in heating and hot water supply systems. In 2013, Chevron opened another plant in Atyrau that produces up to 30,000 iron gate valves per year.

In its operations, the plant applies the company's 20 years of experience manufacturing polyethylene pipes in the U.S. and Mexico. The Atyrau Polyethylene Pipe Plant has the most advanced technology and high-quality raw materials, innovative solutions, a highly qualified technical and production staff, and latest production technology. All products are internationally certified and meet world standards.

Source: official company website (https://www.chevron.com; http://www.atyraupipe.kz)

Central Asia has great potential for tourism development as a macro-destination with a variety of types of tourism

The tourism sector is highly underdeveloped in Central Asia, but the region has the potential to become an attractive destination for investment

In recent decades, tourism has become one of the fastest growing sectors worldwide. Its contribution to the world economy has reached almost 10%[32]. The value of international tourism has climbed to $1.4 trillion, more than doubling in 16 years. As a global export category, tourism takes third position after chemicals and fuels and ahead of food and the automotive sector[33]. Many new destinations have emerged in addition to traditional destinations like Europe and the U.S. In Central Asia, the rich tourism potential remains largely untapped. The industry only contributes a fraction of regional GDP: 1% to 3% across the countries; and its share in total FDI is below 1%[34].

32 World Tourism Organization
33 World Tourism Organization, Tourism Highlights 2017
34 FDI Markets, includes greenfield data only; Official country statistics

According to the Travel & Tourism Competitiveness Index, Central Asia needs improvement. The report identifies the region's main strengths as relatively low prices and good health security, but there remain opportunities for state and private investors to improve the tourism sector. Out of 136 countries, the Kyrgyz Republic and Tajikistan are almost at the end of the ranking. Kazakhstan is far below average, ranking at 81st position. Main areas for improvement are promotion of cultural resources, development of tourism and travel infrastructure and international openness.

Kazakhstan, Uzbekistan, the Kyrgyz Republic and Tajikistan have the potential to become an attractive tourist destination. As a "macro-destination," they possess unique natural, cultural and historical attractions to satisfy the major touristic needs. The Central Asian region (also termed the Silk Road region) as an emerging destination is ripe for future tourism development and has something to offer for almost every traveler: picturesque valleys, crystal-clear lakes and the Caspian Sea, vast deserts, mountain meadows, dozens of incredible historic sights and local cuisine. Each country has its specificities, together offering almost all

FIGURE 15 | Central Asia's tourism industry

	KAZAKHSTAN	UZBEKISTAN	KYRGYZ REP.	TAJIKISTAN
Rank 2017 (out of 136 countries)	81	n/a	115	107
International tourist arrivals, millions	4.6M	5.2M	3.1M	0.4M
Travel & Tourism direct contribution to GDP, US$ millions	$2,796M	$700M	$100M	$200M
Travel & Tourism direct contribution, share of GDP, %	1.9%	1.0%	1.4%	3.3%

Source: Travel & Tourism infrastructure competitiveness report 2017, World Economic Forum; Travel & Tourism Economic Impact 2017, World Travel & Tourism Council; World Tourism organization; open sources

types of tourism packages all year long. For example, Uzbekistan currently focuses on cultural tourism, attracting tourists interested in the country's masterpieces of medieval architecture in the fabled cities of Samarkand, Bukhara and Khiva. Kazakhstan offers ancient sites and its famous singing dune, a 3-kilometer long, 150-meter high dune that makes musical sounds when the wind blows through it, but it mainly attracts business travelers in its modern cities such as Astana and Almaty. Tajikistan offers the extreme tourism of the Pamir peaks, while the Kyrgyz Republic is associated with beach activities near Lake IssykKul, renowned as the world's second largest alpine lake. The region also has strengths to develop sports tourism (both winter and summer), eco- and ethno-tourism, religious tourism and safaris.

Proximity to China and Russia strengthens Central Asia's potential to attract large numbers of tourists. China continues to be the world's top tourism spender: expenditures of Chinese travelers have increased by 12% and reached $261 billion (21% of all tourism receipts) as the number of Chinese tourists reached 135 million annually. Russia, on the other hand, has shown a decline in spending abroad, mainly as a result of ruble depreciation, and Russian tourists have shifted preferences towards more affordable destinations. Thus, widespread proficiency in the Russian language is another competitive advantage for Central Asia in attracting Russian visitors[35]. Moreover, Central Asia is a 5-6 hour flight for European tourists.

Central Asia is not yet on Westerner travelers' maps. TripAdvisor ran a consumer survey in February 2017 to discover travelers' opinions of the Silk Road, receiving 15,711 responses. One of the key findings from the survey is that, despite their significant historical heritage, none of the Central Asian countries is mentioned in the Top 10 Countries that travelers associate with the Silk Road[36]. Promotional efforts are a priority for the Central Asian tourism industry.

Both private and public investments are required to improve the tourism and travel infrastructure in the region

Some projects have already been implemented to improve the regional infrastruc-

35 World Tourism Organization, Tourism Highlights 2017
36 Top 10 Countries that travelers associate with the Silk Road are, in descending order: Italy, Spain, Greece, Turkey, China, Indonesia, Egypt, Croatia, Japan and Russia.

FIGURE 16 | Central Asia's main touristic attractions

Source: open sources.

CASE IN FOCUS: HYATT REGENCY IS ADDRESSING THE TRAVEL MARKET IN CENTRAL ASIA

Hyatt Hotels Corporation, headquartered in Chicago, is a leading global hospitality company with a portfolio of 14 premier brands. As of December 31, 2017, this portfolio included over 700 properties in more than 50 countries on six continents.

Hyatt's operations in Central Asia date back to 1995 with the opening of the Hyatt Regency Rahat Palace Almaty, making it the first international hospitality brand to have a presence in this emerging part of the world. It is currently present in Bishkek (since 2001), Dushanbe (since 2007) and Tashkent (since 2016).

Hyatt continues to grow sensibly in various locations so that it can efficiently address the travel needs of both business and leisure travelers.

A representative of the Hyatt Hotels Corporation acknowledged the high potential for tourism development in Central Asia but emphasized the need for improved infrastructure and airline connectivity.

Source: expert interview, official company website (http://newsroom.hyatt.com)

ture; however, much remains to be done. Standards, particularly in customer service, remain weak and inconsistent across the sector, and service capacity is underdeveloped. Tourism infrastructure is slowly improving, but significant capital investment is needed to reverse two decades of decay. Promotion of the sector, particularly in external markets, is getting better, but it lacks a unified marketing and information campaign. As the average level of tourism infrastructure remains below international standards, investment opportunities are opening in the whole tourism infrastructure value chain, such as hotel and accommodations at various price levels (from hostels to luxury hotels), café and restaurant services, tour operators, information centers, etc.

Transport infrastructure requires significant investment to improve connectivity, both inside and outside the region. This includes further work by the governments on bilateral air service agreements and reconstruction of roads to connect tourist zones. Tajikistan and the Kyrgyz Republic in particular suffer from poor international flight connections. Turkish Airlines is the only major international airline that flies to Dushanbe, with only a few expensive flights. The Kyrgyz Republic needs to solve its national airline's issues to have it removed from the European Union blacklist. Since 2006, it has been impossible to take a direct flight to Bishkek from any EU country. Moreover, Tajikistan and the Kyrgyz Republic need to develop information and telecommunications technologies to improve connections and provide Wi-Fi facilities in the main tourist areas.

The tourism sector could significantly benefit from regional cooperation in promotion

As a core Silk Road tourist destination, Central Asia could benefit significantly if further efforts are made by the countries to cooperate in promoting the region as a macro-destination. Many tourists are already considering Central Asia and plan to visit several countries during their trip. But more cooperation is needed on connectivity, visa requirements and promotion.

According to the UNWTO, "promoting multi-country destinations can be an efficient and profitable strategy to attract visitors that might not otherwise consider visiting the destination"[37]. This is particularly true of tourists from long-haul source markets who want to make the best of a long trip by combining various countries in the same area that complement each other and enrich the travel experience. Other regions, for

37 UNWTO, International Seminar on Multi-Destination Opportunities for Regional Integration

instance ASEAN with its Tourism Strategic Plan 2016-2025, have been developing multi-country tourism promotion.

Governments involved in multi-country tourism collaboration need to align visa policies for third countries, consider multi-country visas, simplify visa processing and enhance services at border crossings. Indeed, visa requirements have been one of the major pain points for the development of tourism in Central Asia. The governments have recently taken steps towards simplifying the visa process. To increase tourist flow, the countries of the region are simplifying visa entry. The Kyrgyz Republic has introduced visa-free entry for citizens of 58 countries, Uzbekistan for 35, and Kazakhstan for 63 countries, while a Tajikistan visa is issued by a simplified process – within three days – for nationals of 80 countries. Implementation of a single visa for Central Asia would be the next step to increase tourist inflow. According to the recent TripAdvisor survey, 47% of travelers would be more likely to travel to this region if they could obtain a single tourist visa similar to that used across the Schengen countries to travel along Central Asia's Silk Road[38]. Recently, efforts to develop such a process for Central Asia have been initiated by the Kazakhstan's Ministry of Culture and Sport, in partnership with the Kazakh Tourism company.

38 TripAdvisor survey 2017; data for Uzbekistan is unavailable

AS WITH ALL FRONTIER ECONOMIES, CENTRAL ASIA PRESENTS SOME

RISKS THAT NEED TO BE MITIGATED

Investment in frontier markets does come with higher risks than investment in developed or emerging markets. Central Asia in particular has four major risks.

Political tensions between the countries could negatively impact the region's outlook

The region may be affected by political risks, such as friction and disputes between the countries (e.g., disputes over water sharing). A lack of cooperation or too harsh competition between the Central Asian countries would translate into protectionist measures such as barriers, exemptions and restrictions, thus reducing the benefits of cooperation and opportunities for investment at the regional level. On the other hand, if the countries do improve their cooperation, greater economic interdependence will increase the risk of negative spillover impact from a crisis in one of the states.

Central Asia is dependent on large neighboring economies such as Russia and China

Central Asian countries have relatively small economies that are dependent on the export of a handful of commodities, and their trade is concentrated in a handful of markets outside the region (in particular, China and Russia). This dependence on a small number of exports and trade partners creates vulnerability to changes in import demand and other external shocks. Central Asia has been affected in the past by shocks and slowdowns in neighboring countries. For example, the region was hit hard by the economic slowdown in Russia in recent years. International sanctions against Russia following the Crimean crisis also indirectly affected Central Asia.

The Kyrgyz Republic, Tajikistan and Uzbekistan are among the most remittance-dependent countries in the world. The slowdown in Russia thus affected the region through a drop in remittances. Such slowdowns also pose the risk of migrants returning home en masse and putting pressure on the domestic job market. Furthermore, external crises may have consequences for currencies. For example, during Russia's slowdown, Central Asian countries were forced to let their currencies weaken along with the ruble to avoid losing competitiveness.

Volatility of commodity prices may impact Central Asian countries as their economies remain dependent on natural resources

Central Asian countries depend heavily on natural resource prices both for import and export. During periods of lower oil prices, hydrocarbon exporters Kazakhstan, Turkmenistan and Uzbekistan are particularly affected, since these resources represent a significant part of their economy. These countries are also affected by lower prices for exports such as gold, copper and aluminum. Moreover, price volatility can have an indirect impact by affecting trading partners.

Regional security risks should be taken into account, although they remain limited

Some security concerns must be mentioned, as Central Asia has seen Islamist terrorist groups developing within its territory in recent years[1]. However, this threat remains low, especially since the most prominent group in the region, the Islamic Movement of Uzbekistan (IMU), which has operated there for some 15 years, has been substantially weakened. Moreover, even though the security crisis in Afghanistan and Pakistan represents a minor risk of regional destabilization, Central Asian countries should not be perceived as facing the same level of security risk: Central Asia remains relatively safe and secure.

1 Over the past five years, up to 4,000 Central Asians have reportedly travelled to the Middle East to join jihadist groups, in particular the Islamic State (according to Global Risk Insights).

A GREATER LEVEL OF COORDINATION BETWEEN THE COUNTRIES IS NEEDED

TO HELP THE REGION ACHIEVE ITS FULL POTENTIAL

Central Asia is ripe for further cooperation

A window of opportunity now exists for the region to revisit its development trajectory. As the Soviet Union broke up, long-established intensive economic links between the republics were dramatically ruptured. However, steady improvement of institutions, significant (if uneven) economic growth, and the liberalizing influence of the younger generation have all created a greater basis for cooperation among the Central Asian countries, specifically in priority areas such as cross-border infrastructure in transportation, energy and information and communications technology, as well as policy reforms to support market-driven trade and investment-led diversification and integration.

New momentum has been generated for sub-regional cooperation by recent larger regional initiatives such as China's Belt and Road, the Republic of Korea's Eurasia Initiative, and discussions of South Asian – Central Asian transportation connectivity. All of these aim to advance the connectivity of Central Asia and the Caucasus to the wider Asia-Pacific region and beyond. Moreover, the increased activity of multilateral development banks, and the recent establishment of China's Silk Road Fund and the Asian Infrastructure Investment Bank, offer new vehicles and financing conduits for the infrastructure required for closer cooperation and sustainable development.

Strengthening of bilateral relations will probably be the first step in regional cooperation. This process is critically dependent on two key states – Kazakhstan and Uzbekistan. These are the largest countries in Central Asia, as well as the most economically advanced and most stable in terms of governance. A strong partnership between them would be a first step towards more cooperation in the region, and they appear to have the political will and capability to champion regional cooperation. The two countries have indeed already taken leadership on cooperation issues.

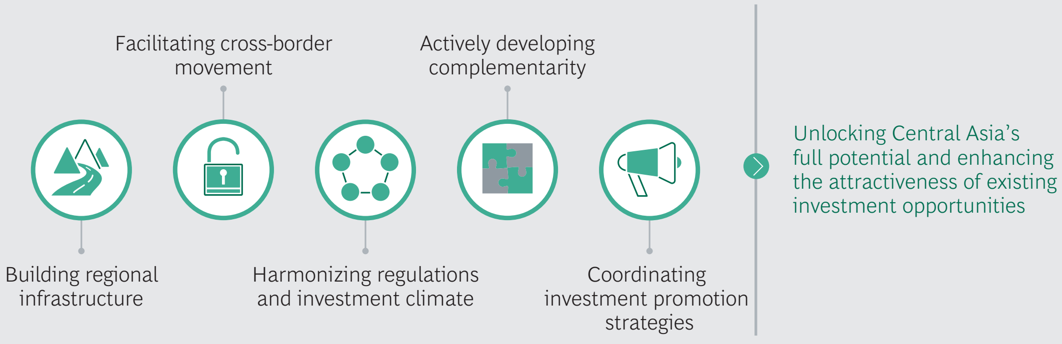
Five keys to unlocking the region's full potential

Cooperation initiatives will fully unlock the potential that Central Asia has to offer and greatly enhance the attractiveness of existing investment opportunities in the region.

Building regional infrastructure

Building regional infrastructure is the first step towards better cooperation and is direly needed since Central Asian countries are landlocked and the existing infrastructure in the region needs major improvements. Being reliant on other countries for transit to reach ports, improvements in one country

FIGURE 17 | Five keys to unlocking the Region's full Potential



alone will not yield the expected results. A joint approach to corridor management and border crossing procedures in particular would contribute considerably to more efficient movement of goods and people.

Developments are underway, especially with the support of international organizations, and some national projects have already been launched. Kazakhstan is an example of the effort being made in the region to upgrade its transportation infrastructure quickly. The country embarked on an ambitious road development program – the Western Europe – Western China (WE-WC) International Transit Corridor Project (part of CAREC). Nevertheless, further improvements are still needed to bring the infrastructure network in the region up to international standards.

Central Asia needs to improve its connectivity with the rest of the world. This requires more direct flights to and from major international cities and between regional cities, especially in the Kyrgyz Republic and Tajikistan, where connectivity remains low compared to Kazakhstan and Uzbekistan. Connectivity is particularly critical to attracting foreign investors and tourists.

Facilitating cross-border movement of goods, services, people and capital

After the construction of cross-border infrastructure is finished, trade facilitation will be one of the most pressing priorities. Given the region's remote geographical location, its complicated borders, infrastructure inherited from Soviet times, and cultural proximity, unrestricted movement of goods, services, people and capital between Central Asian countries would greatly contribute to their economic development.

The five countries must take measures to facilitate intraregional trade and exchange with other countries. Currently, Central Asia has the lowest share of intraregional trade in Asia and the Pacific. Inefficient border procedures and time-consuming customs clearance processes prolong transport time by days or sometimes even weeks. The resulting slowdown in trade processes means higher costs for enterprises. Stronger regional trade integration is therefore imperative to better link these economies among themselves and to world markets and global value chains. It would open up new opportunities for potential investors that would then have access to a single large market. Such reforms would also help the region achieve its potential as a transit hub.

Customs reforms are required in particular, which could include the implementation of risk management systems to reduce the number of physical inspections of incoming goods or the streamlining of cross-border transport and transit processes through simplified guarantee systems for transit goods. Harmonization of visa requirements – or visa waivers for citizens of the five countries – would also be needed to improve the movement of people, in addition to goods.

Harmonizing regulations and the investment climate

The current low levels of extra- and intraregional investment flows could be increased through regulatory harmonization. Other regional examples suggest that these flows have the potential to increase significantly following credible regional regulatory harmonization, as evidenced by the experience of NAFTA and recent new entrants to the EU. NAFTA entered into force in January 1994 and contained 900 pages of regulatory harmonization to which each nation was required to conform its domestic laws. In Mexico, the share of FDI to GDP increased from 1.1% in 1980-1985 and 1.2% in 1985-1993 to 3.0% in 1994-2001[1]. More recently, the same trends have been observed in the Association of Southeast Asian Nations (ASEAN), which promotes intergovernmental cooperation and facilitates economic, political, security, military, educational and socio-cultural integration among its ten members. With the deepening of cooperation between the countries, the share of FDI to GDP has been increasing, from 2.3% in 1982-1986 and 3.3% in 1987-1992 to 4.0% in 1993-1999, after the creation of the ASEAN Free Trade Area (AFTA) in 1992. Since 2000, the rate has reached an average of 4.7%[2] with the deepening of the economic cooperation between the members.

Cross-country investment flows would benefit from increased credibility of commitments to openness and stability through regulatory harmonization. Harmonization of national investment laws through an international best practice regional code could further enhance investor confidence in the region while avoiding a costly "race to the bottom" that countries engage in when awarding investment incentives (provided incentives are also harmonized).

However, while regulatory reform and investment climate harmonization would offer large gains to the region, coordination takes time and effort, and should not defer reforms in individual countries. As most Central Asian countries still have a significant margin for the improvement of their investment climate, they should proceed to reform individually while working to agree on common reforms.

Actively developing complementary competitive advantages

Despite having a lot in common, the five Central Asian countries have their own specificities that could allow them to build complementarity among themselves. The countries have more to gain by collaborating than by competing with each other.

The countries should try to build regional value chains to produce higher value addition in their industries. Value-added agricultural and chemical exports and cross-border tourism are examples of the tremendous untapped potential that can only be fully unlocked through a regional agenda where countries work together, share expertise and pool their resources.

Moreover, in collaborating with each other, the countries could benefit from scale effect. Efficient production requires a minimum assured output to achieve reasonably low costs. Assembly of vehicles or farm machinery, a major manufacturing industry in the Kyrgyz Republic, is subject to economies of scale that cannot be fully exploited at the scale of the country alone.

Coordinating investment promotion strategies

For greater impact using fewer resources, Central Asian countries should coordinate their promotion strategies for investment attraction. The first level of coordination would be to make sure to communicate coherent and complementary messages instead of competitive ones. The next level of coordination – when a higher level of economic cooperation has been achieved – may be to pool resources in a unified message and promote the region as a single investment destination. Effective investment attraction is resource-intensive and therefore impractical for the smaller countries of the region by themselves. But it can be mutualized in the region to promote it as one investment destination, thus creating a scale effect.

1 See D. Lederman, W. Maloney and L. Serven, "Lessons from NAFTA for LAC Countries: A Summary of Research Findings," The World Bank, December 2003
2 EIU

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A report by BCG, September 2018

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