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An “Inside-out” Perspective on the Impact of the Belt and Road Initiative in Central Asia and the South Caucasus: How to Maximize Its Benefits and Manage Its Risks

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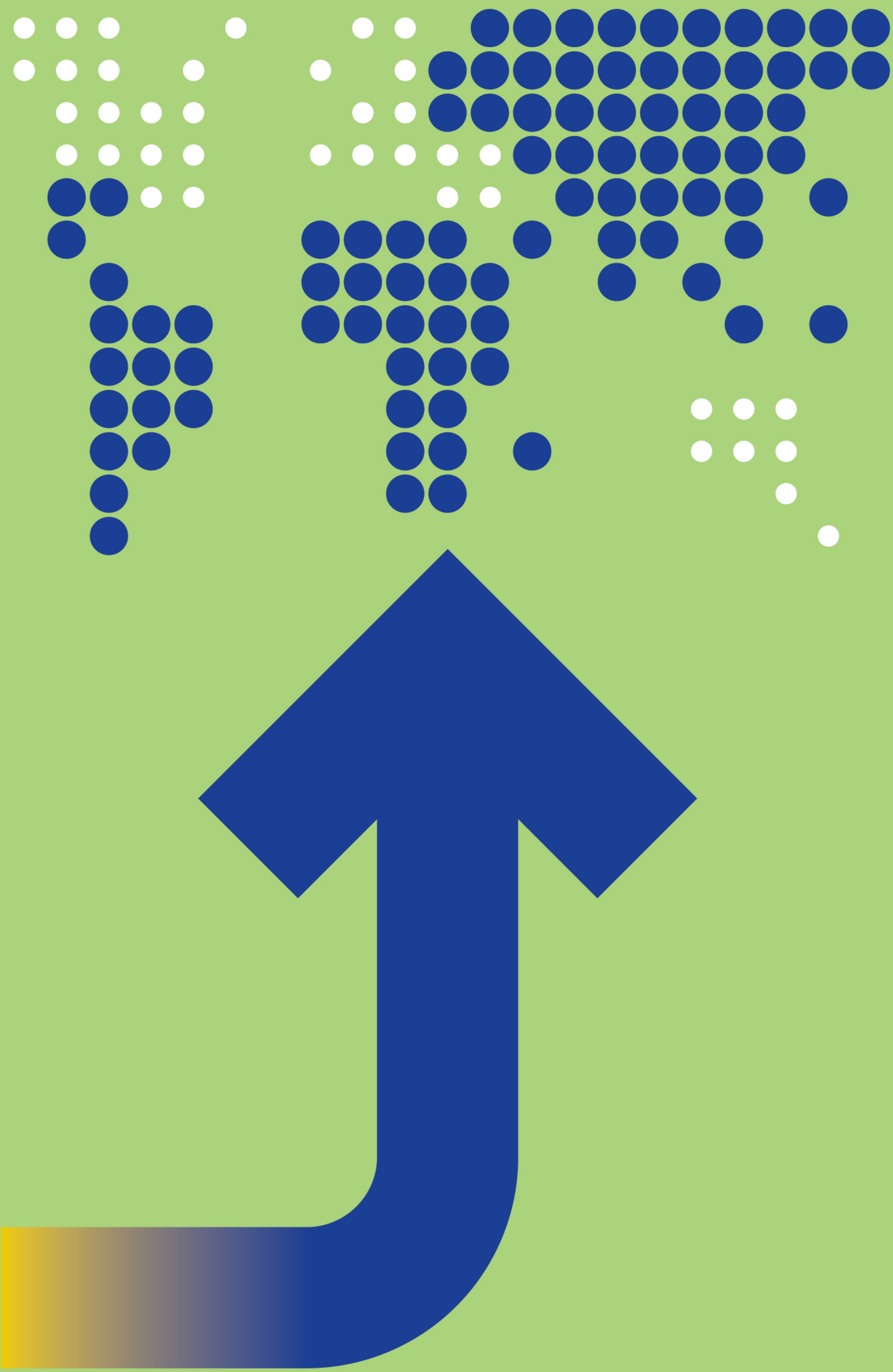
Background Paper



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Executive Summary

This paper looks at the current status and prospects of Belt and Road Initiative (BRI) engagement in the Central Asia and South Caucasus (CASC) region, considers its potential impacts and risks and explores how countries in the region can best manage the BRI to optimize its benefits and manage its risks. The study analyzes the BRI principally from an "inside-out" perspective, i.e. as seen from the vantage point of participating countries and by experts from CASC countries considering national priorities and popular perceptions, rather than from the usual "outside-in" perspective, i.e. as seen by external experts advising on what might be best for the CASC countries and region.

This study draws on five background notes prepared by experts from the CASC region on their countries' perspectives on the BRI and provides a preliminary assessment of what is known about the BRI in the region, its potential benefits and risks and how to best manage them, and its policy implications for the countries in the CASC region, for China, and for other partner countries and organizations. The resulting policy lessons are also informed by a review of five background notes that were prepared by experts from China, Russia, the EU, India and the US, in which they summarize the perspectives of their countries on the BRI in the CASC region.

The "inside-out" perspective shows that country experiences with and reactions to the BRI differ, but it also points to shared opportunities and challenges on a national and regional basis. Our study finds that there is great potential for the BRI to support the development of the countries in CASC region, enhance their connectivity with each other, with their neighbors and with the rest of the world, and promote the economic integration of the Eurasian supercontinent. However, there are also important risks that need to be managed by all concerned—by the countries in the CASC region, by China, and by other partner countries and organizations.

The key policy lessons can briefly be summarized as follows:

- BRI investments should reflect country priorities, be integrated with national and regional plans, and be underpinned by thorough cost-benefit analysis;
- BRI investments in connectivity infrastructure need to be balanced across different transport and transit infrastructure areas and across hard and soft infrastructure (logistics, border management, etc.), and complemented with investments in secondary and tertiary infrastructure and with appropriate policy reforms;
- New investments in infrastructure need to be balanced with adequate, and often strengthened O&M capacity and finance;
- BRI investments in infrastructure, mining, industry, services and agriculture should address social and environmental impacts and related concerns of the local population;
- BRI engagement must focus on creating local employment opportunities, facilitating technology and knowledge transfer, and building institutional capacity;
- The BRI should provide for transparent planning, design, procurement, implementation, monitoring and reporting of BRI investments, with all relevant information in the public domain;
- Macroeconomic constraints must be carefully monitored and respected (especially debt sustainability);
- CASC countries need to work together to ensure regional coherence, learning and leverage;
- Countries need to work with other international partners (multilateral and bilateral) in implementing BRI-related activities; and they need to strengthen and effectively use regional institutions in support of BRI investments.

The paper concludes with a brief exploration of potential research issues, but also encourages all concerned actors to consider and apply the policy lessons learned to date, preliminary as they may be, in designing, implementing and supporting BRI projects and programs.

An "Inside-out" Perspective on the Impact of the Belt and Road Initiative in Central Asia and the South Caucasus: How to Maximize Its Benefits and Manage Its Risks

Johannes F. Linn and Leo Zucker

1. Introduction

The Belt and Road Initiative (BRI) was first announced by President Xi Jinping of China in Astana, Kazakhstan, in September 2013. Since then the initiative has grown in terms of its coverage of continents and countries, but much of it is focused on connecting China with the rest of the Eurasian continent. As such it undoubtedly will contribute to Eurasian economic integration, a process that has lagged much behind the trans-oceanic economic integration which spearheaded the 20th century globalization process. Eurasian economic integration may well be one of the most significant global economic trends in the 21st century (Linn 2005) and the BRI will likely be a major factor contributing to its realization. Central Asia and the South Caucasus (CASC) will play a critical role in this integration process, as far as the development of land-based connectivity is concerned, since these two sub-regions lie at the hub of potential East-West and North-South cross-continental transit routes (Hermann and Linn 2011). At the same time, this integration process will also be of great significance to the countries of CASC, as it will enhance their connectivity with each other, with their big neighbors and with world markets; the region will no longer be landlocked, but instead land-bridged.

This paper looks at the current status and prospects of BRI engagement in CASC, considers its potential impacts and risks and explores how countries in the region can best manage the BRI to optimize its benefits and manage its risks. The study analyzes the BRI principally from an "inside-out" perspective, i.e. as seen from the vantage point of participating countries and by experts from CASC countries considering national priorities and popular perceptions, rather than from an "outside-in" perspective, i.e. as seen by external experts advising on what might be best for the CASC countries and region. This inside-out perspective is complemented by a view of the BRI in CASC from the perspective of major neighbors and country partners (China, the EU, India, Russia and the US), which considers how the interests of these countries are affected by the BRI and its impacts on CASC and assesses their posture towards the BRI in the region.

This paper and the broader study of which it is part focus principally on the economic and social dimensions, impacts and risks of the BRI and on how to manage these most effectively. It does not explore political and geopolitical aspects of the BRI to any significant extent. The study recognizes the differences across countries in the region in how the BRI affects them; but it also takes a regional perspective to allow for the need to plan infrastructure as an efficient regional network, to allow for regional spill-overs, and to explore the potential of regional cooperation to help optimize the benefits and minimize the risks of the BRI.

The paper is exploratory and in due course should be followed by a more in-depth analysis of key issues. Based on limited research to date we endeavor to (a) lay out what we know and don't know, drawing on readily accessible data and information, (b) draw policy lessons to help the countries in the CASC region most effectively engage with the BRI, and (c) identify key questions which need to be addressed in follow-up research.

The next two sections set the stage: Section 2 provides a brief overview of the BRI's dimensions, issues and trends, while Section 3 provides the reader with essential economic, social and institutional background on the CASC region. Section 4 summarizes the main findings for each of the five country background notes on how the BRI is seen from the perspective of national experts from the region.[1] Section 5 takes a crosscutting look at commonalities and differences across countries, at the potential benefits from the BRI for the countries in CASC, and at the risks that have to be managed if the BRI is to generate sustained benefits for the region and its people. Section 6 explores at how BRI is seen from the perspective of major partner countries (China, Russia, the EU, India, and the US) since their support for BRI—or lack thereof—may affect the way the BRI can be implemented in CASC. The concluding

1. Readers familiar with the BRI and the CASC region may wish to skip reading Sections 2 and 3.

Section 6 draws a number of preliminary policy lessons for how countries in CASC, with support from China and other partners, can draw the greatest benefit from the BRI while also managing its risks. This section closes with a brief summary of principal issues that future research might address.

2. The BRI: A Brief Overview of Key Dimensions, Issues and Trends

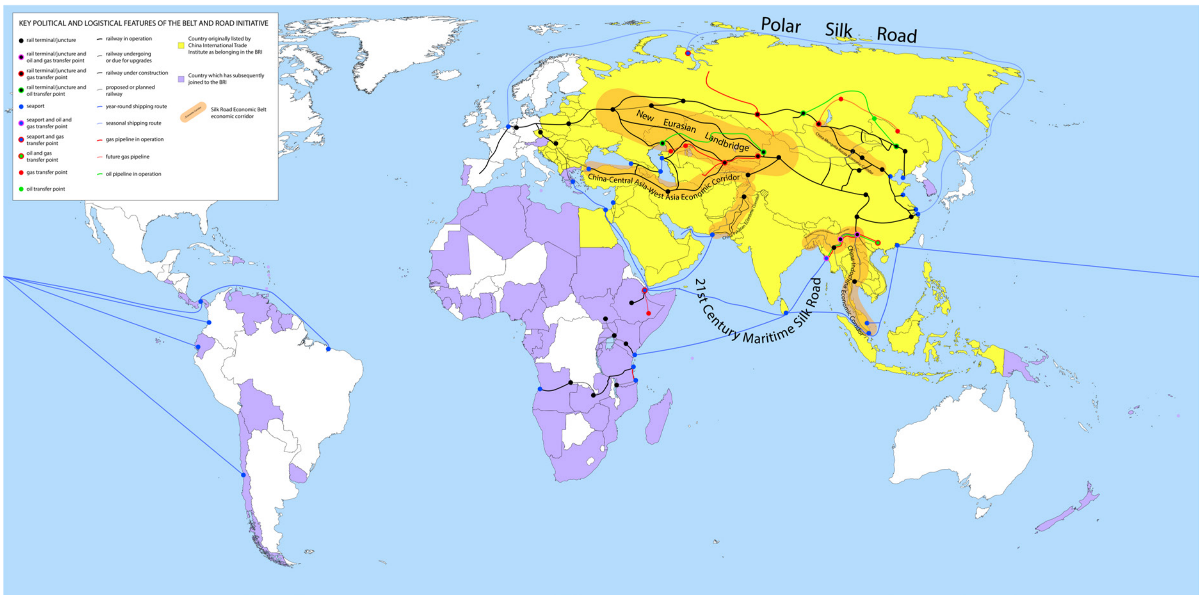
In their companion overview paper on the BRI, Kohli and Zucker (2019) have taken stock of the current status and prospects of the BRI. We summarize briefly their main findings as they are relevant to the focus of this paper.

The BRI concept as developed by China's leadership is visionary in design and ambitious, comprehensive, flexible and dynamic in execution. It by now covers 126 countries (up from 65 in 2013) on five continents (Asia, Europe, Africa, North America, and South America). It envisages six broad overland corridors in Eurasia under the Silk Road Economic Belt, two maritime corridors (the Maritime Silk Road in the Indian Ocean region and the Polar Road in the Arctic region), and even a "Cyber Route" or "Digital Silk Road" (Figure 1). Two of the land-based corridors traverse Central Asia and the South Caucasus (Box 1).

The BRI covers five thematic areas: (1) *policy coordination* in planning and supporting large-scale infrastructure investments; (2) *facilities connectivity* along the BRI routes; (3) *trade and investment* facilitation across borders; (4) *financial integration* and coordination; and (5) *cultural exchange* through people-to-people contacts. So far BRI projects have focused mostly on developing transport and energy infrastructure, industry and agriculture.

There is no plan or blueprint, no concrete list of projects nor a precise timetable for the BRI. There is not even a clear

Figure 1: Map of BRI Corridors



Source: Kohli and Zucker (2019)

Box 1: Two BRI Corridors Traverse CASC

Two of the six overland BRI corridors identified in official communications by Chinese authorities run through the CASC region. These are the "New Eurasian Landbridge" and the "China-Central Asia-West Asia Economic Corridor" (see Figure 1). As the map demonstrates, the corridors are wide—or, one might say, vague—and some specific routes marked on the map actually fall outside the broad shaded corridors (including a Trans-Caspian branch and a branch passing north-south from Kazakhstan through Turkmenistan to Iran). The New Eurasian Landbridge involves only Kazakhstan from among the countries of CASC, while the China-Central Asia-West Asia Economic Corridor involves potentially all of the region's countries. In the absence of a unique Chinese BRI blueprint of corridors and routes, this vagueness is not surprising. It reflects the flexibility and dynamic nature of the BRI approach. However, it means that in interpreting and assessing different options for corridor development under the BRI, one has to be careful as to what specific assumptions one makes about the routes actually involved and compared. We will look in more detail at these corridors below when exploring connectivity aspects of the BRI.

definition of what constitute investments under the BRI as against Chinese investments more generally.[2] Since there are no hard official numbers, guesstimates of the expected size of BRI investments funded by China accordingly vary widely—from US$1-8 trillion until 2049—but even at the lower end of this range the size of the BRI would dwarf the US-funded Marshall Plan (estimated at about US$140 billion in current prices).[3]

BRI financing consists of a mixture of grants, concessional loans and equity contributions offered by the Chinese government, governmental "policy" and commercial banks, state-owned enterprises and private Chinese companies. In line with past Chinese investments overseas, BRI investments carry little, if any overt policy and institutional conditionality. However, loans may be secured explicitly through future commodity exports to China or from revenues of exports more generally, or implicitly by an expectation that the assets created will be transferred to Chinese control in the case of loan default.[4] Contractors are overwhelmingly from China[5] and generally bring not only their own management and technical teams, but also general labor from China.

Kohli and Zucker (2019) note various potential benefits for BRI countries, including access to scarce capital for essential national investments and improvements in connectivity with regional and global markets and value chains. For the world economy, benefits include reducing barriers to transport, transit, and hence trade regionally and globally; raising global investment rates, productivity and growth; and recycling China's financial and production surpluses. But they also point to a number of challenges, especially for BRI countries, including (i) maintaining macroeconomic, fiscal and debt sustainability; (ii) assuring that BRI projects meet real needs in an efficient and sustainable manner; (iii) improving national governance and policies to maximize the benefits of BRI investments, and (iv) understanding and addressing the cross-border, regional dimensions of large infrastructure projects.[6] They also note that China and national authorities need to deal with the social and environmental concerns that inevitably arise from large-scale infrastructure programs. Moreover, BRI projects need to have win-win outcomes, so as to meet public expectations regarding a fair distribution of benefits within host countries and between host countries and China. Finally, they point to the need for China to manage potential financial risks it is taking on as a result of the rapidly growing exposure of its government, banks and firms in high-risk country and project environments.

Many of these benefits and concerns have accompanied China's investments in Africa in recent decades even before the advent of the BRI.[7] Now they are multiplied across continents by the sheer size of BRI plans. The fact that a number of governments of BRI countries have recently taken steps to terminate or renegotiate BRI-related investment contracts reflects the need for heightened care by China and the national authorities alike to ensure that project identification, preparation and implementation meet high standards of technical, financial, economic, social and environmental prudential management. China has begun to adapt its operating model in Africa in response to some of the difficulties that it encountered there, and Kohli and Zucker (2019) report that China is currently reviewing its experience to date with BRI to learn lessons for the future.[8]

Finally, Kohli and Zucker (2019) summarize what data are available on progress with BRI investments to date at the global level. They note that relatively reliable data are available for some sources of BRI funding, including the Silk Road Fund, Asian Infrastructure Investment Bank (AIIB) and New Development Bank (NDB), as well as data on Chinese foreign direct investment by China's Ministry of Commerce. Also, there are data available on Chinese official lending by AidData, but so far only through 2014.[9] They conclude that it is impossible to reliably estimate overall numbers—projects, investments or financing (and its terms)—for the BRI program by year, country and in aggregate. They draw several tentative conclusions from their data analysis: (i) Chinese exposure (equity and loans) to BRI countries "is very significant and appears to be rising"; (ii) Chinese official lending to BRI countries has a significant concessional component, with 20 percent qualifying as ODA during 2013-14; (iii) energy extraction and generation have been the main sectors benefiting from BRI investments; and (iv) only a small share of BRI investments has gone to CASC countries. However, reliable information

2. Kohli and Zucker (2019) identify all Chinese investments in the 126 officially designated BRI countries as BRI investments.

3. The numbers in this sentence are based on a presentation by Jonathan Hillman at a CSIS conference in Washington, DC, on 1 October 2018. See also Hillman (2018b).

4. There are also implicit policy conditionalities such as recognition of the One China Policy, cooperation in fighting what China regards as extremism or terrorism, and support for China in international bodies.

5. According to Hillman (2018b), 89 percent of BRI project contracts go to Chinese contractors, compared to 29 percent of contracts for projects financed by the multilateral development banks.

6. China generally deals with countries on a bilateral basis, rather than through regional bodies, but as we will note later in the paper, in Central Asia and the South Caucasus China has been engaged in regional bodies and at least some of its BRI projects are reported to be consistent with regional corridor plans developed by these organizations (especially CAREC).

7. See Sun (2014) and Bräutigam (2018).

8. There are also reports that oversight bodies in Beijing are getting more concerned about the financial viability of BRI investments. See Blume (2018).

9. Project level data are also available through the CSIS Reconnecting Asia project, but they are very difficult to aggregate for an overall perspective.

on the BRI in CASC is also in short supply. Box 2 and Annex 1 summarize what is available.

With this as background, we now turn to a review of the recent economic developments in the CASC region and a brief overview of the BRI to date in the region, before turning to a more detailed analysis of specific issues.

3. Central Asia and the South Caucasus: The General Context[10]

The Central Asia and South Caucasus region is geographically situated at the core of the Eurasian continental

10. For more detailed discussions of the CASC region see IMF (2018), Hermann and Linn (2011), Nag et al. (2016), and Pomfret (forthcoming).

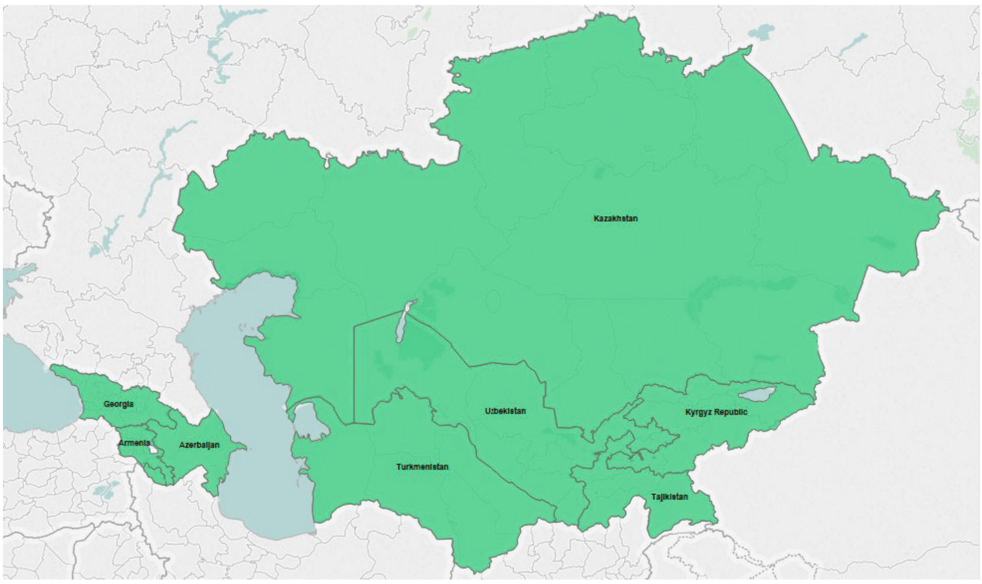
Box 2: Information on the BRI in Central Asia and the South Caucasus

As with the BRI globally, hard information on BRI investments in Central Asia and the South Caucasus is hard to come by. Generic data bases mentioned above provide limited country-specific information for the CASC region (see Annex 1) and our "inside-out" country background notes were able to assemble country specific information only to a limited degree, partly due to constrained study resources, but mainly due to the non-transparency of national and Chinese communications about the BRI projects in the region. The country with the most information is the Kyrgyz Republic, because it has legal requirements for transparent publication of relevant data that were reinforced by a strong and independent national parliament (Mogilevskii 2019).[1] For Uzbekistan we have what appears to be a complete listing and brief description of projects, but with little information on costs and financing (Ganiev 2019). For Kazakhstan, such a list can probably also be assembled, although the author encountered difficulties in gaining access to project specific information (Aitzhanova 2019). For Tajikistan, no reliable information on specific projects and their financing appears to be available; only aggregate figures for Chinese funding at the national level are (Aminjonov and Kholmatov 2019). Information on BRI investments in the South Caucasus is also largely absent, but it appears that so far no major Chinese investments have actually taken place in this sub-region, although investments in regional infrastructure funded by others (including AIIB), but consistent with the BRI corridor approach, have taken place over the last decade or so (Khishtovani et al. 2019).

For the future, more intensive research at the country level will hopefully lead to better information on BRI investments in the region, but such research efforts would be much enhanced by increased transparency with which the BRI countries' and China's authorities make project data available, similar to what is now the practice in the Kyrgyz Republic (and standard practice among some of the institutions associated with BRI [AIIB and Silk Road Fund]). Without such information it will be difficult to effectively assess what benefits and costs will be generated by the BRI and how to manage them best.

1. Mogilevskii further noted in a personal communication to the authors that "[t]here are no any specific information disclosure requirements for foreign investment projects in Kyrgyzstan. There are standard requirements that all laws must be published and that all government loan agreements should be ratified by the parliament thus making all loan agreements a part of the Kyrgyz legislation. These requirements have been in place for quite a while even before switching to the parliamentary rule system in the country."

Figure 2: Map of Central Asia and the South Caucasus



Source: IMF

space, separated by the Caspian Sea into two sub-regions and surrounded by large neighbors, including Russia, China, Iran, Turkey and—across the Black Sea—the European Union (Figure 2).[11] In this sense, the CASC region is at the crossroads of the Eurasian continent, with all countries landlocked, with the exception of Georgia.

3.1. Socioeconomic Development of the CASC Region

While the CASC region covers a large land area, its population is only 86.5 million people, ranging from the largest country, Uzbekistan (with 31.8 million), to the smallest one, Armenia (with 2.9 million) (Table 1). After the breakup of the Soviet Union in 1990, the region's eight newly independent republics faced a dramatic economic decline lasting until about 1995, an experience shared with the other republics of the former Soviet Union. Subsequently their economic growth rates recovered and during the years 2000-2008 were among the highest for emerging and developing countries (Figure 3).[12] After the global financial crisis of 2008, and especially after the major fall in international energy prices in 2014, most of the countries in CASC experienced a substantial and sustained slowdown in economic growth due principally to low commodity prices for the oil exporters and drops in remittances to the oil importers.

Kazakhstan stands out in terms of the size of its economy, which is over 20 times larger than the economies of Tajikistan and Kyrgyz Republic (Table 1). Kazakhstan also has the highest per capita income, with Turkmenistan ranking second[13]; the Kyrgyz Republic, Uzbekistan and Tajikistan are the poorest—close to the threshold of low-income status—while the three economies of the South Caucasus occupy the middle ground.

The countries of CASC are poorly connected with the rest of the world. This is reflected in the World Bank's Multidimensional Connectivity Index (World Bank 2018), which ranks 112 countries according their links with the rest of the world in terms of trade, FDI, migration, ICT, airlines and portfolio investment. The CASC countries rank in, or close to, the bottom quintile (Table 1).

Social conditions are reflected in two comparative indexes: UNDP's Human Development Index (which combines measures of income, education and life expectancy) and the World Bank's Human Capital Index (which combines measures of education and health). They tell a consistent story about the differences in social conditions between the eight countries: Kazakhstan ranks among or close to the top quartile globally, the countries of the South Caucasus in the middle of the pack, and the Kyrgyz Republic and Tajikistan in the lower third or fourth quartiles of the global rankings (Table 1).

Macroeconomic vulnerability is reflected in the measure of external indebtedness (Table 1). In terms of public and publicly guaranteed debt, Armenia, Georgia and the Kyrgyz Republic show a high degree of debt exposure.[14] As concerns total external debt, Kazakhstan needs to be added to the list of countries that face a high external debt level.

3.2. Business, Governance and Political Conditions

In terms of ease of doing business, Georgia stands out as a top performer in the CASC region and globally. Kazakhstan and Armenia are also doing relatively well, while other countries in the region are ranked lower—and in the case of Tajikistan, much lower—in the international comparison (Table 1). The Freedom House Index of Freedom in the World and the Corruption Perceptions Index tell a similar story as regards political freedom and the quality of governance in the region, with Georgia performing much better than the other countries, which perform quite poorly (though Armenia scores somewhat better than the rest).

In terms of domestic politics, the countries have been relatively stable, with the principal exception of Tajikistan in the mid-1990s (when it experienced a traumatic civil war) and of the Kyrgyz Republic (which went through a period of domestic violence in 2010).[15] However, this political stability is subject to possible threats as opposition voices are generally suppressed (except in Armenia, Georgia and the Kyrgyz Republic), as youthful populations strain the labor markets, and as religious fundamentalism and radicalism,

11. The CASC region covers eight countries: Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan. In this paper Afghanistan is not treated as part of Central Asia, although it could—and, according to some observers, should—be included in the region. We have not done so on the grounds that history and present political conditions confront Afghanistan with distinct socioeconomic issues than those facing the rest of the CASC region.

12. The IMF groups countries in the CASC region according to whether they are oil exporters or oil importers.

13. The authors were reminded by Roman Mogilevskii in a personal communication that "[u]nlike other countries of the region, Turkmenistan still maintains multiple exchange rate regime, so the exchange rate used for calculating the GDP per capita in current US$ is an artificially strong one (these days, the black market exchange rate is 4-5 times weaker than the official rate). So, the second place of Turkmenistan (almost on a par with Kazakhstan) seems to be a statistical artifact rather than a reality."

14. Tajikistan has added substantial public debt since 2016 and is therefore more vulnerable than Table 1 indicates.

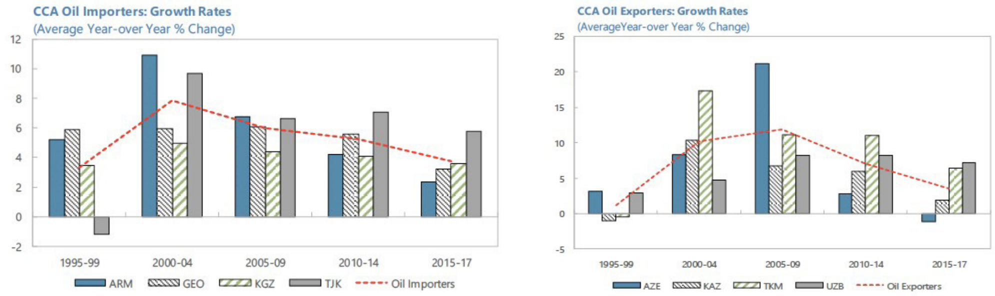
15. Georgia in 2003, and Armenia in 2018, also experienced generally non-violent domestic political upheavals.

Table 1: Key Indicators for Central Asia and the South Caucasus

Indicator	Armenia	Azerbaijan	Georgia	Kazakh-stan	Kyrgyz Republic	Tajik-istan	Turkmen-istan	Uzbeki-stan
Population 2016 (mln) [1*]	2.9	9.8	3.7	17.8	6.1	8.7	5.7	31.8
GDP 2017 (current US$ bln) [2*]	11.5	40.7	15.2	159.4	7.6	7.1	37.9	48.8
GDP per capita, 2017 (current US$) [2*]	3,860	4,140	4,090	8,760	1,210	800	6,640	1,520
GDP per capita (PPP), 2017 [2*]	9,480	17,530	10,740	26,310	3,700	3,190	18,160	6,940
Multidimensional Connectivity Index per capita, 2018 (rank of 112 countries) [3*]	87	106	84	76	95	102	n.a.	n.a.
Human Development Index, 2018 (score [higher is better] & rank of 189 countries) [4*]	0.76 (83)	0.76 (80)	0.78 (70)	0.80 (58)	0.67 (122)	0.65 (127)	0.71 (108)	0.71 (105)
Human Capital Index, 2018 (score [higher is better] & rank of 157 countries) [5*]	0.57 (78)	0.60 (69)	0.61 (61)	0.75 (31)	0.58 (76)	0.53 (89)	n.a.	n.a.
External public & publicly guaran-teed debt, 2016 (% of GDP) [6*]	42.4	27.8	41.1	15.6	52.3	26.8	0.7	11.1
Total external debt, 2016 (% of GDP) [6*]	94.3	37.2	112.1	122.4	118.7	70.2	1.4	24.2
Index of Freedom in the World, 2018 (score [higher is better]) [7*]	44	12	64	22	37	11	4	7
Ease of Doing Business, 2019 (rank of 190 countries) [8*]	41	25	6	28	70	126	not ranked	76
Index of Economic Freedom, 2018 (rank of 180 countries) [9*]	44	67	16	41	78	106	169	152
Corruption Perceptions Index, 2017 (rank of 180 countries) [10*]	107	122	46	122	135	161	167	157
Belt and Road Country Cooper-ation Development Index, 2017 (score & rank of 65 countries) [11*]	0.61 (50)	0.68 (49)	0.88 (33)	1.38 (12)	0.92 (28)	0.73 (43)	0.63 (54)	0.70 (46)

Sources:
1* World Development Indicators, December 2017 version
2* World Economic Outlook, October 2018 update
3* World Bank Critical Connections: Promoting Economic Growth and Resilience in Europe and Central Asia
4* United Nations Development Programme
5* World Bank
6* World Bank International Debt Statistics
7* Freedom House
8* World Bank Doing Business 2019
9* Heritage Foundation
10* Transparency International
11* Shanghai Stock Exchange and Association of Chartered Certified Accountants

Figure 3: GDP Growth Rates for Central Asia and the South Caucasus



Source: IMF (2018)

homegrown or imported from abroad, may be spreading in some countries.

3.3. External Relations, Regional Cooperation and Connectivity

In terms of external relations and regional cooperation, CASC countries also have different perspectives. Central Asia has been spared cross-border military conflict since independence, although for many years the political relations between Uzbekistan and its neighbors, especially the Kyrgyz Republic and Tajikistan, were tense, mostly on account of interstate water issues. Fortunately, this source of tension has been much reduced in recent months after the leadership change in Uzbekistan. As a sign of change in regional relations, four of the five presidents of Central Asia met in March 2018 for a previously rare summit—with Turkmenistan represented at a lower level—and committed to meeting annually to help develop closer political and economic relations (RFE/RL 2018). All five Central Asian countries belong to the Central Asia Regional Economic Cooperation (CAREC) Program, and all but Turkmenistan are members of the Shanghai Cooperation Organizations (SCO), while only Kazakhstan and the Kyrgyz Republic belong to the Eurasian Economic Union (EAEU).[16]

Central Asian countries' relations with partners external to the region are generally characterized by a "multi-vector" approach, under which each Central Asian country tries to maintain good relations with all major international actors, including Russia, China, the EU and the US. Some of the countries have closer relations with Russia (especially Kazakhstan and the Kyrgyz Republic) than others, while all of them have increasing economic ties with China, not least due to the emergence of the BRI. Relations with the EU and the US tend to be more distant, but all Central Asian governments seek a broad balance among their external partners as a way to safeguard their sovereignty and gain maximum support for their domestic economic development and national security.

The external relations of the three countries of the South Caucasus are more conflict-ridden than those of Central Asia, especially across borders. Georgia has good relations with Azerbaijan and Armenia, but is engaged in a long-standing "frozen" (and sometimes "hot") conflict with Russia over de facto Russian control of two of Georgia's provinces, Abkhazia and South Ossetia. Also, Georgia aims to link itself more closely with the EU and NATO, to which Russia strenuously objects. Meanwhile, Armenia and Azerbaijan are locked in a decades-old conflict over Nagorno Karabakh, a breakaway province of Azerbaijan associated with Armenia.[17] Armenia is closely linked with Russia through its EAEU membership and also in the security sphere, but its borders with Azerbaijan and Turkey are closed. Azerbaijan has had an ambiguous relationship with Russia, not least because of Russia's closeness to Armenia. Azerbaijan, Georgia and Turkey have cooperated in various regional projects, including the construction of two major oil and gas pipelines and of the Baku-Tbilisi-Kars railway. Azerbaijan and Georgia are members of CAREC, but there is no regional organization that supports economic cooperation and integration among the three countries of the South Caucasus.

In 2018 significant progress appeared to have been made in settling long-standing disputes about the riparian rights of the countries bordering on the Caspian Sea (Azerbaijan, Kazakhstan, Iran, Russia and Turkmenistan). The agreement on a Caspian Sea convention reached at a summit of the leaders of the five Caspian Sea neighbors in August 2018 appears to go some way towards settling longstanding disputes over sharing the rich natural resources of this important inland sea and should facilitate the development of a trans-Caspian pipeline to carry Turkmen gas to the South Caucasus pipeline network. Moreover, it promises to open up the Caspian Sea for development as a major transit route under the Belt and Road Initiative (Devonshire-Ellis 2018).

The Shanghai Stock Exchange and the Association of Chartered Certified Accountants in 2017 published their Belt and Road Country Cooperation and Development Index (BRCCDI), which ranks 65 BRI countries on the basis of of their readiness to cooperate and their country risk (SSE & ACCA 2017). This index provides a helpful snapshot of how countries in the CASC region are seen by outside investors (Table 1). Kazakhstan is ranked 12th among the 65 BRI countries, while Turkmenistan ranks close to last at 54th. The Kyrgyz Republic and Georgia occupy the middle ground with the 28th and 33rd positions, respectively, while Tajikistan and Uzbekistan are ranked 43rd and 46th. Azerbaijan's and Armenia's even lower ranks (49th and 50th, respectively) undoubtedly reflect their frozen conflict.

Finally, as concerns connectivity, Central Asia fares particularly poorly when measured in terms of time and cost requirements, as shown in Figure 4. The countries in

16. Armenia also belongs to the EAEU, making it the only country in the South Caucasus to do so. Note that Turkmenistan generally goes its own way, adhering to its traditional strict neutrality, which prevents it from joining regional organizations and summits (CAREC being one of the few exceptions). For a recent analysis of regional cooperation in Central Asia, its history and prospects, see Cornell and Starr (2018).

17. Recent political changes in Armenia appear have opened the door for a softening of the conflict with Armenia. See Vartanyan (2018).

the South Caucasus are much better connected, but still not as well as the majority of their neighbors in Europe. Connecting Central Asia and the South Caucasus with their neighbors and the rest of the world—and the potential role of the BRI in bringing this about—are therefore of special significance.

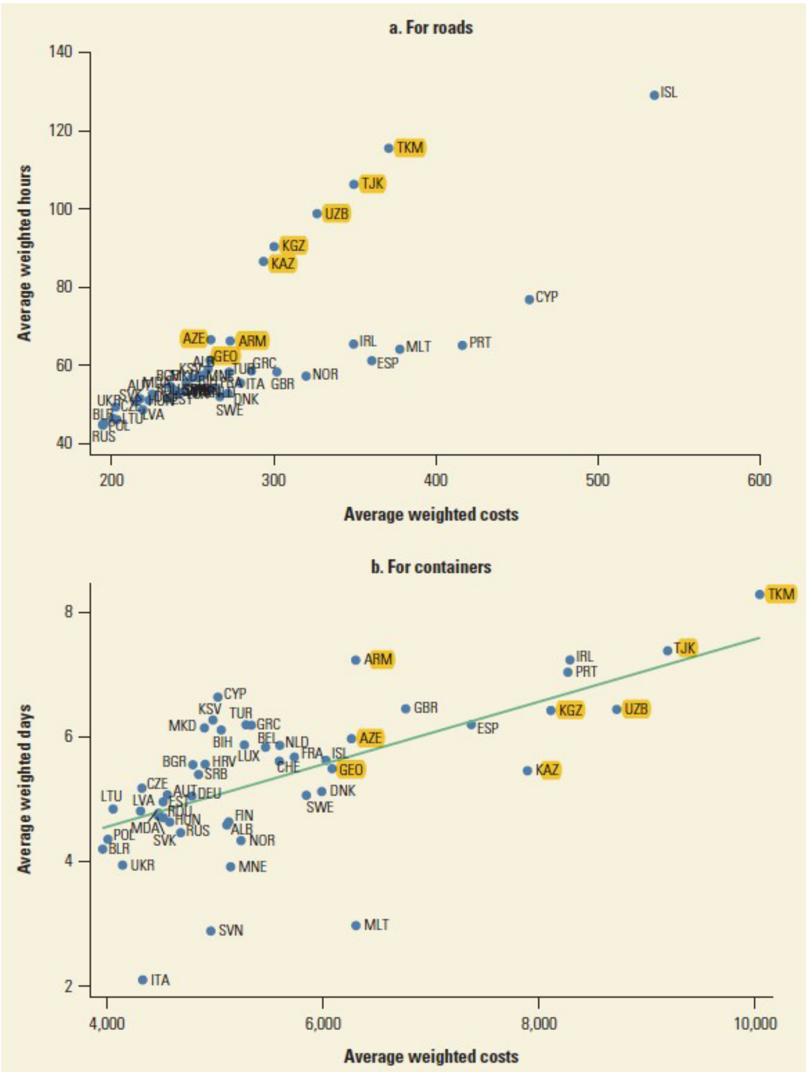
4. The BRI in Central Asia and the South Caucasus: The "Inside-out" Country Perspective

As mentioned in the introduction, five country background notes were commissioned in support of the initial, exploratory phase of our study: one note each on four Central Asian countries (Kazakhstan, the Kyrgyz Republic, Tajikistan and Uzbekistan)[18] and one note covering all three South Caucasus countries. The notes were prepared by local experts within limited time and resources and thus can only give a preliminary and likely partial perspective on the BRI in their respective countries. Each of the authors was given a set of structured questions about the BRI. However, the extent to which these questions could be systematical addressed varied from country to country, given different constraints on information.

The country background notes provide unique insights into how the BRI is seen from a country perspective, but they represent only the beginning of an "inside-out" analysis. All authors agree that the time elapsed since the announcement of the BRI five years ago is too short to allow for a comprehensive and reliable assessment of its likely impact and prospects. More extensive research will

18. We did not commission a note on Turkmenistan since we could not readily identify an independent local expert and also judged the likelihood of accessing usable information as very low.

Figure 4: Cost and Time Connectivity in the Europe and Central Asia Network



Source: de Soyres et al. (2018)

be needed to get a more complete view of the dimensions of BRI investments in each of the countries, of their potential benefits and risks, and of how to manage them. The full country notes are well worth reading. But, at the risk of oversimplification, let us summarize the main highlights of each of the country background notes.[19]

4.1. Kazakhstan

In her background note, Aitzhanova (2019) observes that Kazakhstan can be seen as the "buckle on the belt" of the BRI, since all major trans-Eurasian corridors towards the west from China have to pass through Kazakhstan (Box 3).[20] Hence it is fortunate that Kazakhstan has long focused on its role in facilitating east-west transit as well as improved the connectivity of its economy to its neighbors and to world markets.

Aitzhanova stresses a number of special factors about Kazakhstan's involvement with the BRI:

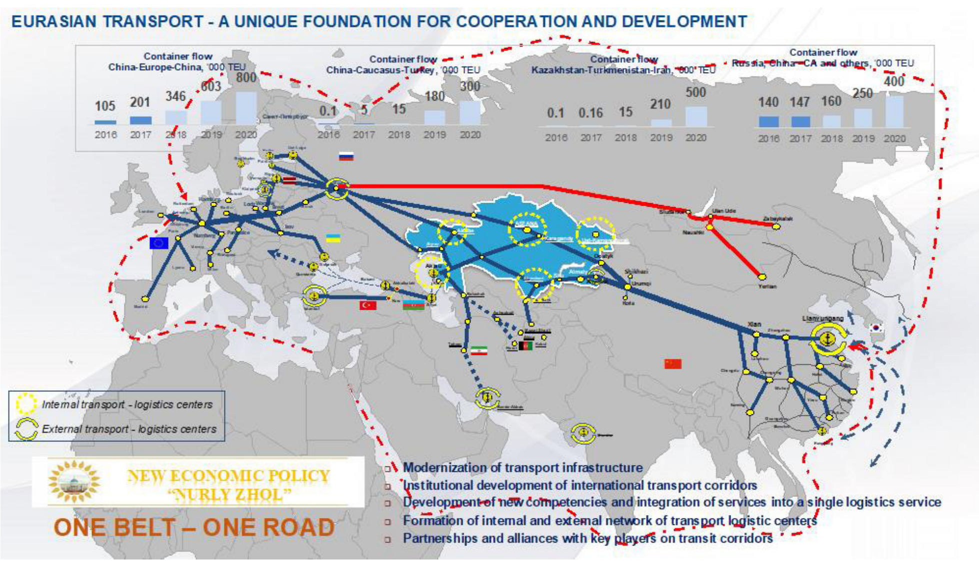
- The country had close economic and financial relations with China before the BRI started, with US$16 billion worth of Chinese investments in Kazakhstan, by far the largest among countries of the CASC region, mostly in the oil and gas sector. China also has become Kazakhstan's second-largest trading partner over the last decade.
- Kazakhstan's infrastructure development plan ("Nurly Zhol") was developed nationally and its implementation initiated in 2014 with the support of and financing by the international financial institutions (almost US$9 billion of a total cost of US$16 billion), before China was invited in 2015 to join under the BRI umbrella as one of the partners. The plan involves the development of new roads, railways and logistics centers, consistent with wider regional corridor plans developed by

19. These papers complement a number of the papers prepared by Central Asian experts in Laruelle (2018). However, the focus of our background notes is more squarely on the economic aspects of the BRI.
20. This does not include the China-Mongolia-Russia economic corridor and a potential route from China through the Kyrgyz Republic and Uzbekistan towards Iran and/or the Caspian Sea.

Box 3: A Pivotal Role for Kazakhstan in Trans-Eurasian Transport

As one considers alternative BRI corridors and potential routes for Eurasian connectivity, one simple fact stands out: the critical role of Kazakhstan as the major hub of all east-west transcontinental transit. This point is brought out clearly in Figure 5, which shows a map of the principal east-west Eurasian rail corridors. It demonstrates that (with the exception of the China-Mongolia-Russia and trans-Siberian railroad corridors) they all pass through Kazakhstan. This map, which was produced by the Kazakhstan Railways authority, also shows key logistics centers and the potential for significant expansion in container traffic along these routes.

Figure 5: Kazakhstan as the Major Transit Hub for BRI Corridors



Source: Kazakhstan Railways

CAREC. China's role in funding this infrastructure plan so far has been relatively minor.

- Kazakhstan's cooperation with China under the BRI is expected to extend much beyond energy and infrastructure. Chinese investment in large productive sector projects ("51 projects") identified jointly in ongoing negotiations between Kazakhstan and China may reach US$27 billion. These projects would include investments in industry, services, transport and logistics, with the goal being "to attract high-quality and clean production to its territory, to modernize industries, and thereby accelerate industrial development with the involvement of Chinese investors" (Aitzhanova 2019, p. 1).
- Financial cooperation takes place through investments by China in Kazakhstani banks, through the establishment of joint investment funds, and through loan financing from the two largest Chinese policy banks (so far with state guarantees). The Development Bank of Kazakhstan is an active partner in some of these engagements. Initiatives have also been undertaken to expand the settlement of contracts in national currencies, although so far most contracts are still denominated in US dollars. Despite these expanding financial links with China, Kazakhstan's total debt to China (US$12 billion) remains a small fraction (7 percent) of the country's total external debt, which in turn remains manageable.
- People-to-people exchanges, especially Kazakhstani students studying in China, are also expanding. But a recent public opinion survey shows that while a large fraction (43 percent) of Kazakhstani people regard China as an "economic leader" and only a small fraction (17 percent) as a "threat to peace and security," a great majority of Kazakhstanis (75 percent) view China negatively or with indifference, and only a very small fraction (6 percent) see cooperation with China as a top priority, with Russia still seen as by far the most important partner (62 percent).[21]
- Aitzhanova notes that detailed information about BRI projects is hard to come by due to a pervasive lack of transparency about their design, costs, terms of financing and implementation progress. However, she believes some of the BRI's potential impacts can already be discerned: discrete infrastructure network improvements have taken place; and a World Bank analysis shows that (i) shipping costs in Kazakhstan and waiting times at the border have been substantially reduced, (ii) trade facilitation has increased foreign direct investment in Kazakhstan, and (iii) trade costs between domestic centers in Kazakhstan have significantly decreased and regional incomes increased commensurately.

In conclusion, Aitzhanova (2019) wonders about the future of the BRI, as financial conditions for the state banks in China are tightening and the risks of China's rising BRI exposure are rising. Moreover, she notes that China's push for the BRI has been criticized in the West and has recently elicited negative reactions in some BRI partner countries in other regions. However, she holds up Kazakhstan's approach to its partnership with China in general, and to the BRI in particular, as a model for other countries. By developing its own national plans, by engaging with other partners, especially the international financial institutions, and by keeping close control over the programs and projects supported by China, Kazakhstan can ensure that these investments are aligned with national priorities and do not undermine macroeconomic stability or national sovereignty.

4.2. Kyrgyz Republic

Mogilevskii (2019) notes in his background paper that the Kyrgyz Republic, a small neighbor of China with an open economy (and a member of WTO for over two decades), has had strong ties with China for many years, but the BRI could further reinforce these economic links. The Kyrgyz Republic appears to be the only country in the CASC region for which a reasonably complete set of data on Chinese investments is readily accessible. Mogilevskii provides detailed information—including year of commitment, amount of funding and its terms, etc.—for 12 projects funded with Chinese loans, amounting to US$2.2 billion.[22] In addition, he tracks US$1.9 billion of foreign direct investment (FDI) by Chinese investors in the Kyrgyz Republic, for a total Chinese investment of US$4.1 billion over the period 2011-2017.

Mogilevskii provides the following insights into key aspects of the BRI's role in the Kyrgyz Republic:

- The infrastructure projects to date are mostly in the road and energy sectors. Most projects

21. Young people tend to have a more positive attitude towards China as compared with those of older generations of Kazakhstanis.

22. Only four of these projects (for a total of US$548 million) were agreed after 2013 and hence could be considered BRI projects in a narrow sense (i.e. initiated after the BRI's announcement by the Chinese authorities).

are focused on improving domestic transport connectivity—including intra-urban transport—and coal-based energy supplies, as well as on cross-border transit and connectivity. Line D of the Central Asia gas pipeline and the potential future China-Kyrgyz Republic-Uzbekistan railroad are principally regional projects. All projects are consistent with the Kyrgyz Republic's national development framework and with the regional corridor plans of CAREC and the EAEU.

- Chinese companies have implemented these projects using almost exclusively Chinese labor. Most machinery, equipment and materials have also been imported from China.
- Chinese FDI to date has been heavily concentrated on gold mining and petroleum refining. Mining has contributed to tax revenues—but probably too little, due to low tax rates compared to worldwide practice—while one of the two refineries built with Chinese investments has been a major tax payer. But the refineries are problem projects, as they have difficulty competing with imports from Russia. In the future, continued investments in mining and new investments in agro-industrial activities are likely.
- In terms of economic impacts, Mogilevskii concludes that the growth and employment benefits of these investments are limited in the short to medium term and uncertain in the long term, but that significant budget revenues can accrue from FDI, while the operations and maintenance (O&M) implications of infrastructure investments deserve more attention. The direct impact on foreign trade with China as a result of increased exports of minerals and increased imports of machinery and equipment has been significant, but the indirect impact on trade with third countries due to improved transport connectivity appears to be negligible so far.
- As regards costs and risks, Mogilevskii notes the significant impact of Chinese investments on Kyrgyz external public debt, with rapid increases in Chinese debt exposure (reaching about 20 percent of GDP and more than 40 percent of total external public debt in 2017). He also notes that Chinese investments in the Kyrgyz Republic have been subject to accusations of shoddy work and corruption. These have led to political scandals and criminal investigations.
- The mining investments have resulted in significant community protests over environmental impacts and a perceived lack of local benefits;[23] similar community reactions may occur if Chinese FDI gets heavily involved in agriculture and agribusiness. More generally, according to a recent survey, Kyrgyz public opinion on China is mixed, with 32 percent of respondents considering China an important partner and 35 percent a threat. As a result of intensive parliamentary oversight, transparency and public access to information on BRI projects is relatively good in the Kyrgyz Republic.

Mogilevskii concludes that the Kyrgyz Republic is now well endowed with transport infrastructure and that further investments should be carefully scrutinized to ensure that the benefits accruing from transit or domestic traffic are commensurate with these investments' (often high) costs. Other constraints deserve more attention, including demand (especially for transit traffic, for which, in Mogilevskii's view, demand is likely to be limited), supply (domestic constraints are significant), and "soft" infrastructure (including trade and transit facilitation). He believes there is scope for investment in agriculture and agroindustry, as well as in tourism. The Kyrgyz Republic might also benefit from the offshoring of Chinese industrial production, given the country's relatively lower labor costs. However, labor productivity would have to be raised, trade and transit costs reduced, modern technology transferred, and environmental costs controlled if such relocation were to be successful.

4.3. Tajikistan

Aminjonov and Kholmatov (2019) note in their country case study on Tajikistan that in recent years China has become the largest source of investment in the economy, the largest donor country and one of Tajikistan's major trading partners. In 2015 Tajikistan signed a Memorandum of Understanding with the Chinese authorities on the joint promotion of the BRI. This confirmed that China was ready to provide significant financing for the implementation of the country's National Development Strategy until 2030 (NDS), with a special focus on transport and energy infrastructure projects. A bilateral coordinating mechanism has been set up to select projects from the NDS for financing and implementation, including projects supported by AIIB, NDB and the Silk Road Fund.

23. Mogilevskii notes that earlier mining operations by foreign investors from other countries had also resulted in community protests over the same complaints.

The authors recognize that the BRI could bring substantial benefits to Tajikistan: “[The] BRI has the potential to be a major opportunity for the Central Asian countries to develop physical infrastructure, access new markets via cheaper routes, generate revenues, and strengthen their competitiveness. In the long term, the initiative could transform Central Asia from a landlocked region to a land-bridged region. Tajikistan, as well as all Central Asian countries, could also enjoy many potential benefits from greater connectivity: trade volumes, growth, reductions in the costs of delivered goods, and firm competitiveness” (Aminjonov and Kholmatov 2019, p. 63).

However, Aminjonov and Kholmatov identify the following key issues with the BRI in Tajikistan:

- The implementation of BRI programs provides a short- to medium- term macroeconomic stimulus to the Tajik economy, but it also increases Tajikistan’s debt. As of January 2018, the country had an external debt burden amounting to 40 percent of GDP, of which 41 percent is owed to the Export-Import Bank of China (CHEXIM). With significant further increases in debt to China under the BRI, Tajikistan’s debt burden may become unsustainable. This outcome is also projected in a recent study by the Center for Global Development, to which the authors refer (Hurley et al. 2018).
- China is rapidly becoming the dominant foreign donor and investor in Tajikistan, displacing traditional (European, Russian, American, Turkish, etc.) donors and investors. As a donor it is highly attractive to the Tajik authorities, since the procedures and conditions for contracting and using Chinese money are much less stringent and burdensome than those of other bilateral and multilateral donors. This preference also spills over into the domain of foreign direct investment, where Chinese investors have enjoyed a preferential position and have significantly expanded their footprint, including in construction, agriculture, services (e.g. restaurants), health (e.g. clinics) and education.
- Tajikistan has to create enough employment opportunities for its youthful and rapidly growing population. Chinese investments are not helping address this challenge, since they rely very substantially on Chinese workers. Moreover, the growing presence of Chinese workers and increasingly of long-term Chinese migrants creates resentment and fear among the native Tajik population, especially as many migrants do not easily integrate into the local language and culture.
- Transfers of technology and knowhow can be major benefits of foreign direct investment. However, Chinese projects tend to use outdated technology, and knowledge transfers are limited by the fact that most managerial and technical staff are Chinese. Moreover, technical documentation and manuals are typically in Chinese, which makes them inaccessible to most local staff.
- Chinese engagement in agriculture, while welcome in principle, has resulted in significant tracts of scarce arable land being taken over by Chinese firms, ostensibly displacing Tajik farmers. Cheap Chinese seeds displace more suitable local or foreign seeds. And the widespread application of chemical fertilizers and insecticides by Chinese cultivators carries serious ecological risks.
- Chinese investments in cement plants, in coal extraction and coal-based industries (including power stations), in mining and in oil refining also create serious environmental problems, while environmental protection is not given enough attention and environmentally friendly solutions (such as renewable energy sources) are being neglected.
- Access to “easy” Chinese money risks distorting investment decisions in an environment where public investment management is already weak, undermining the helpful discipline previously imposed by international financial institutions, and opening the door to questionable deals. Over the long term, moreover, Tajikistan may become excessively dependent on its big neighbor and find its national sovereignty impaired, while also facing challenges in maintaining its cultural identity.

Aminjonov and Kholmatov note that while Chinese support was initially welcomed by the Tajik public, the issues flagged above have led to increasing popular indignation and discontent. Looking ahead they recommend that Tajikistan carefully assess the benefits and costs of Chinese investments under the BRI, limit increases in financial exposure to prudential levels, ensure that BRI investments contribute to local employment and to technology and skills acquisition, and develop a common strategy with its Central Asian neighbors to assure that BRI investments are contributing to the region’s development and prosperity.

4.4. Uzbekistan

In his background paper on Uzbekistan, Ganiev (2019) notes that his country is of critical importance for the BRI, since it is located at the center of Central Asia, has by far the largest population of the countries the CASC region and has a relatively large and diversified national economy. Uzbekistan signed onto the BRI in 2015 and has since significantly expanded cooperation with China across a broad spectrum of economic activities, especially after the accession of its current president in September 2016. Agreements on BRI investments have been closely aligned with the Uzbek government's plans and priorities across a broad range of economic sectors, as the government has been trying to leverage the BRI to achieve its development objectives, such as improving transport links with East, South and West Asia, fully realizing the country's potential as a transit country and a logistics hub, and expanding the production and export of goods with high value added.

Chinese engagement includes major actual and planned investments in national and regional rail and road transport links as part of the BRI's China-Central Asia-West Asia Economic Corridor, in view of creating effective east-west rail and road transport links from China through the Kyrgyz Republic to Uzbekistan and on to its neighbors to the west and south (including Afghanistan). Ganiev reports significant expected reductions in transport costs and times along the corridor once the projects are completed. These infrastructure investments are complemented by the construction of a multimodal logistics center in Andijan. These investments are broadly consistent with the CAREC transport corridors and some of them have been complemented by projects funded by multilateral development banks.

In the energy sector, three lines of the Central Asia-China gas pipeline have been completed (the first two lines before the BRI was initiated) and a fourth is under development (Line D, from Turkmenistan through Uzbekistan, Tajikistan and the Kyrgyz Republic), all with Chinese engagement. The fourth line will allow export of Uzbek gas and generate transit fees. China is also involved with gas production development and in joint projects in the oil, gas and petrochemical industries in Uzbekistan.

Other areas of Chinese engagement include agriculture and the food industry, modernization of irrigation infrastructure and construction of small hydropower stations, establishment of joint industrial parks for high-technology goods production, and tourism. Moreover, Chinese banks have agreed to lend to two Uzbek banks for on-lending to local firms. China has also supported various educational, training and scientific initiatives in Uzbekistan, including the establishment of the first of China's Confucius Institutes, which are dedicated to the dissemination of Chinese language and culture.

Ganiev identifies a number of risks that need to be managed by Uzbekistan as it further pursues BRI engagement:

- The BRI may hinder Uzbekistan's goal of diversifying its economy away from heavy reliance on commodity exports, unless it strongly supports the expansion of modern industrial and service sectors. Reductions in transport costs and times will facilitate Uzbekistan's integration in world markets, but diversification will also require far-reaching economic reforms at home (some of which have been initiated under the new president).
- Over the last decade China has become Uzbekistan's most important trading partner and source of foreign investment. This makes the country vulnerable to economic developments in China, especially should there be a major downturn. Hence, Uzbekistan needs to diversify its export and import markets by opening up transport access to its southern, western and northern neighbors and by joining the WTO.
- Uzbekistan's current external debt exposure is low by international standards. But if large, indiscriminate borrowing from China for BRI investments were to take place, this could eventually create debt sustainability challenges for the country. Careful selection and implementation of projects with proven economic benefits, prudent debt management and effective monitoring of debt sustainability by the international financial institutions can minimize this risk.
- Uzbekistan's record of maintaining its infrastructure has so far been poor. With a rapid expansion of infrastructure assets, it will be essential that O&M capacity and financing be strengthened.
- Uzbekistan has been undertaking institutional reforms, but the country remains subject to corruption and weak governance, including an opaque public procurement system. A rapid expansion of BRI-related investments brings with it a high risk of rent-seeking and corruption. More transparency, especially in public procurement, will be essential to help minimize this risk.
- So far, Chinese investments have not created a public backlash over negative environmental or social impacts, in part because (1) until recently

these investments had been relatively limited, (2) no agricultural land has been sold to Chinese investors, and (3) there are relatively few Chinese workers in Uzbekistan. However, with a rise in BRI investments by China, careful environmental assessments will be necessary (so far there is no evidence of such assessments having been carried out), stakeholders and affected communities will need to be consulted, information about BRI projects should be transparently shared with the public and steps taken to assure that BRI projects' benefits are widely shared. Transnational crime may also increase in tandem with increased connectivity and will have to be controlled in close coordination with Uzbekistan's neighbors.

Ganiev concludes by noting that the BRI is a useful framework for bilateral cooperation with China and for multilateral engagement with other partners, provided there is a clear alignment with national plans and priorities. As BRI projects in Uzbekistan have rapidly expanded of late, there is the potential for significant benefits across a broad range of sectors and activities, including: improved connectivity not only with China, but also with many other neighbors and with global markets; economic diversification and integration into global value chains; increased export earnings and public revenues (including from transit fees); and improved water and energy efficiency and security. But with expanded programs and benefits come also greater risks that will have be addressed proactively if significant problems—as encountered in some other BRI countries—are to be avoided.

4.5. The South Caucasus: Armenia, Azerbaijan, Georgia

In their background paper, Khishtovani et al. (2019) note that the three countries of the South Caucasus, despite their common heritage as republics of the former Soviet Union, differ substantially in resource endowments, levels of income, political and governance conditions and regional economic and geopolitical relations. At the same time, they share a geographic space at the center of major Eurasian east-west and north-south corridors. And all three suffer from serious deficits when it comes to connectivity with their neighbors and with world markets. Therefore, they all have opportunities to potentially benefit from BRI investments which, as and when they take place, would help them increase their connectivity nationally and internationally and develop their potential as a transit hub and as a thriving regional economy.

Khishtovani et al. note that regional energy and transport links across the South Caucasus were already being developed before the BRI, mostly focusing on major east-west pipelines connecting Azerbaijan's oil and gas fields to Western Europe through Georgia and Turkey and on the transport corridor between Azerbaijan and Georgia. The development of transport and trade links was supported by the EU's TRACECA program and by the international financial institutions under the CAREC umbrella. Azerbaijan, Georgia and Turkey also cooperated on and jointly financed the construction of the Baku-Tbilisi-Kars Railway, which ultimately is expected to offer railway connectivity to Europe.

Currently, major new projects are underway or under consideration, mostly without BRI engagement. These projects include (a) the ongoing development of port facilities in Baku (Azerbaijan) and Anaklia (Georgia); (b) the ongoing Trans-Anatolian Natural Gas Pipeline (TANAP) project, which will transport gas from Azerbaijan's Caspian gas fields to Turkey and Europe; (c) the ongoing Batumi Bypass highway project in Georgia as part of the Azerbaijan-Georgia East-West Highway; (d) a proposed multimodal Trans-Caspian International Transport Route (TITR) from Kazakhstan through Azerbaijan to Turkey; and (e) a possible "Lapis-Lazuli Transport Corridor" connecting Afghanistan, Turkmenistan, Azerbaijan, Georgia and Turkey. In addition, there are proposals for two competing north-south road corridors: the Persian Gulf-Black Sea Corridor connecting Iran, Armenia, Georgia, Greece and Bulgaria and the International North-South Transport Corridor from India to Iran and on through Azerbaijan to Russia.[24]

Khishtovani et al. highlight that while Azerbaijan and Georgia are very actively engaged in various initiatives to improve regional connectivity, Armenia is largely absent, with the exception of ongoing improvements to the road connection between Armenia and Georgia, which will allow Armenia easier access to Georgia's ports, and the possible development of the Persian Gulf-Black Sea Corridor that would connect Iran with Europe.

Bilateral trade between China and Armenia, Azerbaijan and Georgia has increased rapidly over the last decade from initially low levels. Georgia has been particularly active in expanding its economic relations with China, which is now Georgia's third-largest export market (excluding the EU). Georgia signed a free trade agreement with China in

24. Khishtovani et al. do not specifically note the improved chances of trans-Caspian pipeline construction after the recent agreement on the sharing of resources of the Caspian Sea (see Section 3 above). It is possible that this project will be further delayed, not least because the agreement only defines broad parameters and many details still have to be worked out among the neighboring countries. See Devonshire-Ellis (2018).

2017 (complementing a Deep and Comprehensive Free Trade Agreement with the EU). It has also attracted a diversified portfolio of Chinese foreign direct investments, including in the transport, communication, energy, real estate and financial sectors. However, at 2 percent of all FDI inflows, China's role remains limited so far. More generally, China's engagement in the South Caucasus has thus far been more limited than its engagement in Central Asia. This also applies to the BRI.

Georgia has proactively engaged with the BRI, since it sees it as a valuable means to help implement its 2016 "4-point plan" that stresses Georgia's potential as a transit hub through infrastructure modernization. Actual investments by China in BRI-related transport infrastructure remain limited, although AIIB has taken a share of the financing of the Batumi Bypass Road project, along with the Asian Development Bank, and a Chinese firm is investing in Anaklia port. AIIB is also investing in the Trans-Anatolian Gas Pipeline, which involves Azerbaijan, Georgia and Turkey. In the absence of an overarching agreement between China and Georgia on the BRI, initiatives have thus far been mostly project-specific, with planned and actual investments by Chinese firms in various sectors, including in free economic trade zones, in a railway factory, in the wine export industry, and in the planned Georgian Development Bank and Georgian National Construction Fund.[25]

Azerbaijan, which also had a history of prior engagement with China, so far appears to have been less intensively involved in BRI, although in 2015 it signed an MoU on construction of the Silk Road Economic Belt, which envisages "a series of deals in areas including trade, judiciary, civil aviation, education, transportation and energy" (Khishtovani et al., p. 46). Armenia has had the least direct engagement with China, which could be partly explained by its close economic and security relationship with Russia. However, it has aimed to develop the Persian Gulf-Black Sea corridor, in which China has also expressed some interest.

Although the BRI has so far not had much of an impact on the countries in the South Caucasus, Khishtovani et al. see considerable potential future benefits for the region from engagement with the BRI, in terms of more systematic infrastructure development, improved connectivity, economic diversification and regional cooperation, albeit limited by the Armenian-Azerbaijani conflict. Khishtovani et al. highlight the following risks of engagement with the BRI, which will have to be carefully managed:

- Debt sustainability will have to be prudently maintained in a context where the external indebtedness of the three countries has significantly increased in recent years. Khishtovani et al. note that a recent CGD study (Hurley et al. 2018) characterizes Armenia as facing a "significant risk" of debt unsustainability, and Georgia and Azerbaijan as facing "low debt sustainability."
- Social and environmental impacts of infrastructure and energy projects can be significant and will have to be managed, with national and international standards transparently enforced. Two recent railway projects in Georgia that were implemented by a Chinese firm encountered protests over a lack of local employment generation and, where local employees were hired, poor working conditions.
- More generally, it will be important to ensure transparency in the planning and implementation of all BRI projects.
- Regional cooperation on and coordination of trade and transit facilitation and investments in infrastructure will be essential to achieving regional benefits from the BRI; ideally this collaboration would encompass all three countries. However, Khishtovani et al. judge the likelihood of this happening as remote at best due to the continuing conflict between Armenia and Azerbaijan. As the next best option, they see the countries of the region building on the already existing role of Georgia as the pivot, given its good bilateral relations with its two neighbors. This would permit regional transport and transit networks to develop across its borders, despite the closed borders between Armenia and Azerbaijan (and between Armenia and Turkey).[26]

Khishtovani et al. conclude that "it is still uncertain as to how [the BRI] will be implemented. While synergies could be observed between the BRI and current infrastructure development needs in the countries of the [South Caucasus] region, cooperation is still limited due to a lack of policy coordination, financial risk and concerns about the

25. Some of the potential risks of engaging with Chinese private firms under the BRI umbrella are demonstrated by Georgia's experience with investments by the Chinese firm CEFC China Energy Co., which had invested in a Georgian free trade zone and in the soon to be established development bank. However, since the head of CEFC was arrested in February 2018 on charges of corruption, CEFC's engagement in these projects has been thrown into doubt. See Schmidt (2018).

26. One might speculate on whether a thawing of the frozen conflict between Armenia and Azerbaijan, potentially made possible by the recently installed government in Armenia, could be supported by BRI engagement in support of regional infrastructure and related development efforts in the border region of the two countries.

transparency and fairness of the BRI" (Khishtovani et al. 2019, p. 51).

5. Benefits, Risks and "Dogs that Didn't Bark": What We Can Learn from the "Inside-out" Country Perspectives

In this section, let us take a look across the "inside-out" country perspectives on the BRI in Central Asia and the South Caucasus. First, we consider a number of overarching points of agreement among the authors of the background notes and then dig a bit deeper into the benefits and risks that they have identified. Finally, we consider issues that might have been raised, but weren't prominently flagged in the notes—"dogs that didn't bark"—and their possible significance. This crosscutting analysis will help identify preliminary policy lessons and potential questions for further analysis.

5.1. Agreement on Basic Aspects of the BRI

Connectivity at the national, regional and continental levels is critical for the future growth and prosperity of Central Asia and the South Caucasus. Access to markets, value chains, technology and knowledge is seen as a clear positive factor in helping the CASC countries develop. At a time when globalization and the benefits of economic integration are being questioned in many countries, this agreement cannot be taken for granted. Indeed, it was only recently that Uzbekistan's government replaced its inward-looking, protectionist policies with outward-looking, open ones; Turkmenistan's official policies remain largely isolationist. The uniformity of views among our authors may in part reflect the predisposition of the economist expert community to which the authors of our background notes belong. At the same time, Uzbekistan's new direction provides an unprecedented opening for increased cooperation among Central Asian countries. Unfortunately, the conflict between Armenia and Azerbaijan shows no sign of abating and will remain a serious barrier to effective regional cooperation and economic integration in the South Caucasus region. Future research into political dynamics and public opinion might revisit this issue by drawing on a broader and perhaps more representative set of views.

A lot was happening to improve connectivity in and of the CASC region even before the BRI. National governments in various countries actively pursued efforts to integrate economically with their neighbors and world markets. Foremost among them were Kazakhstan in Central Asia and Georgia in the South Caucasus. There were also important regional initiatives and institutional developments that aimed at supporting economic cooperation and integration among their members (TRACECA, CAREC, EAEU, SCO, SPECA and others). These regional cooperation initiatives' efforts were more intensive in Central Asia than in the South Caucasus, although all of them faced obstacles and achieved only mixed success (Linn and Pidufala 2008, Cornell and Starr 2018). It is also worth mentioning here the fact that over the last ten years there has been a rapid expansion of cross-continental container rail traffic between China and Europe (Vinokurov 2019, Pomfret 2018). Pomfret's (2018) observation that this was largely driven by private initiative rather than intergovernmental cooperation is worth keeping in mind.[27]

The BRI will support increased connectivity for CASC, but downside risks have to be assessed and managed. All authors recognize the unique scale of the BRI's ambition and the potential benefits it can bring to their countries and region. However, they all also note possible risks that have to be understood and actively managed.

The BRI should—and does—have a broad-gauged approach that promotes not only hard infrastructure investments, but also complementary investments in soft infrastructure, productive capacity, technology and knowledge sharing. Country authors generally welcome the broad coverage of BRI activities as necessary to assure maximum benefits in terms of improved connectivity, diversification and developmental impact.

Countries are affected differently by the BRI and there are differences across countries and sub-regions in how the BRI is perceived. Various factors are at work: Central Asia, with its geographic proximity to China and—presumably—a greater priority for China (see Section 6 below), has seen a greater and more rapid build-up of Chinese engagement under the BRI than has been seen in the South Caucasus. But even within sub-regions there are differences, such as a greater concentration of BRI investments in natural resource extraction in some Central Asian countries (especially in Kazakhstan and Turkmenistan) and broader engagement across multiple sectors (as in Tajikistan) than elsewhere; in the South Caucasus, there has been less Chinese engagement in Armenia than in Azerbaijan or Georgia. With greater BRI engagement comes greater recognition of its benefits, but also potentially greater awareness of its risks. Moreover, large countries (Kazakhstan and Uzbekistan) may find it easier to

27. Chinese freight subsidies provide a helpful incentive and governmental responsiveness in supporting private initiative has been helpful to the expansion of transcontinental freight rail traffic.

manage their relations with China, and hence the impacts of the BRI, than small countries (the Kyrgyz Republic and Tajikistan) do; in particular, fears of losing control over national resources and policies, of being potentially swamped by Chinese immigration, and hence of ending up with seriously impaired sovereignty and cultural identity may be stronger in smaller countries, especially those bordering on China.[28]

A key factor in determining the success of a country's ability to benefit from the BRI and manage associated risks is how effectively it integrates BRI investments into its national plans and priorities and their execution. All country notes explore the consistency between BRI investments and national plans and priorities. However, some governments—especially those of Kazakhstan and Uzbekistan—have gone further in taking control of the BRI agenda in their countries than have the others. Their experience points to the need to engage intensively in negotiations with Chinese counterparts to forge win-win agreements, and Aitzhanova (2019) holds up Kazakhstan's approach as a model for other countries to emulate.

Regional cooperation is needed to assure effective BRI investments for regional and continental connectivity. China tends to operate on a bilateral basis in its relations with the countries of Central Asia and South Caucasus. However, to be maximally beneficial, BRI investments need to be seen as part of regional corridors or networks. Hence, assuring their consistency with, for example, regional corridor transport plans and regional electricity transmission networks is essential. Regional organizations, such as CAREC, can play an important role in this regard, especially as China is a member already.

It helps to link and complement BRI investments with support from other partners, especially the international financial institutions (IFIs). Some of the country notes mention specific instances of collaborative or complementary investments by IFIs in connection with BRI programs. The fact that collaboration has been pledged at a high level between China and the IFIs is noted with approval. But at the same time, there are also indications that this collaboration could be more systematic at the country level, particularly in regard to engagement by the Chinese authorities in country-level partner coordination activities. AIIB's collaboration with national authorities and other multilateral development banks is seen as a positive example.

28. A recent article in The Economist magazine notes that from China's perspective most BRI countries are small and that China's approach has been to treat smaller and larger countries with equal attention.

More transparency and information sharing about BRI investments are critical. Effective regional cooperation and partnership require the sharing of information about investment plans, implementation and impacts. But the authors note that so far it has been difficult to collect information from publicly available sources for an analysis of BRI investments in their countries. Additionally, procurement processes in most countries need to be reformed to allow for greater transparency and accountability. More generally, greater transparency about large (and small) public and private investments is part of good governance.

We next review the potential benefits of the BRI in greater depth. We not only draw on the country notes, but also bring to bear other evidence and insights from the available literature. This is be followed by an assessment of risks.

5.2. Potential Benefits of the BRI for Countries in CASC

BRI investment brings short-term macroeconomic stimulus with an expansion in investment and trade. In Central Asia, Chinese investment in general, and BRI investment in particular, have served as a way to stimulate the economy (as in Tajikistan) or to cushion economic recessions (especially in Kazakhstan). However, for the Kyrgyz Republic, Mogilevskii notes that while over the period 2011-17 the inflow of Chinese resources was on the order of 7-8 percent of GDP per annum, "the contribution to aggregate demand was much smaller, as most of these resources were spent on imports of goods and services from China" (Mogilevskii 2019, p. 21). This high import content shows up in the Kyrgyz trade figures, especially for machinery and equipment. For Uzbekistan, Ganiev comments similarly: "BRI projects don't have a significant stimulus impact on the Uzbek economy because of (i) the amounts of the BRI-related capital inflows to Uzbekistan have so far been small relative to the size of the economy and (ii) these capital inflows have a large import component."[29] For the other Central Asian countries we have no similarly detailed analysis of the macroeconomic impact of BRI investments, aside from the fact that significant Chinese investments in Tajik infrastructure were likely a reason for Tajikistan's continued robust growth despite the slowdown in the Russian economy in recent years and the resulting drop in remittances to Tajikistan in the mid-2010s. In the South Caucasus region, Chinese investments have been limited in size to date and hence their macroeconomic impacts likely have been limited.

29. Personal communication to the authors.

In the energy and mining sectors, BRI investments allow for more intensive utilization of the countries' natural resources and offer greater energy security. China has been investing heavily in oil and gas exploration and transit (pipelines); in the mining of coal, gold and other minerals; and to some extent in the processing of locally produced energy resources (but also refineries for imported oil in the Kyrgyz Republic [Mogilevskii 2019]). From the Chinese perspective, main goal of these investments is to secure access to natural resources for the Chinese economy. For Central Asia, the benefits have been in increased export earnings and public as well as private earnings from natural resource rents. To our knowledge, there have been no systematic quantified estimates of the aggregate benefits from these investments or their distribution between China on the one hand and Central Asian countries on the other. Much depends on the specific conditions negotiated between Chinese investors and the national authorities (or private partners) in each country.[30] Investment in local power generation and improved national and regional power interconnection also has provided greater energy security for some of the countries concerned (the Kyrgyz Republic, Tajikistan). So far it appears that China has not invested in large-scale hydropower plant (HPP) projects (e.g. Rogun HPP in Tajikistan and Kambarata HPP in the Kyrgyz Republic).[31] However, Uzbekistan has signed an agreement with China on the joint development of small HPP stations (Ganiev 2019).

Investments in transport infrastructure can significantly reduce the time and cost of goods shipments and personal travel. A recent World Bank study tries to quantify potential reductions in travel time and associated benefits from BRI investments. It concludes that CASC countries are among the greatest potential beneficiaries: trade times are expected to fall by more than 5 percent in all Central Asian countries, and trade costs by between 2.3 percent in Kazakhstan and 6 percent in the Kyrgyz Republic (Figure 6).[32] Various of our country notes also cite significant reductions in travel time and cost as a result of investments in improved road and rail infrastructure. For example, Ganiev (2019) notes a transport cost reduction of 35 percent for passengers and 50 percent for oil and oil products due to the construction of the 124 km Angren-Pap railway in Uzbekistan, which shortened travel from the densely populated Fergana Valley to the rest of Uzbekistan while avoiding transit through Tajikistan (which was previously required). China funded the construction of a major tunnel as part of the project, while the World Bank financed the electrification of the railway line. However, two caveats are in order: one is that the hypothetical cost and time savings may not materialize in practice on a sustained basis, as was demonstrated by an elaborate system of travel time and cost monitoring by CAREC along the transport corridors that it supports (CAREC 2016); the other is that travel cost and time reductions, while beneficial in their own right, may not necessarily lead to significant improvements in connectivity and in increases in trade flows, since necessary complementary improvements in soft infrastructure (border crossing procedures, logistics, etc.) may not have taken place or because demand and supply conditions may constrain utilization of the increased transport capacity. These concerns are raised by Mogilevskii (2019) about the Kyrgyz Republic, where he notes that despite major investments in transport infrastructure, trade flows have not significantly increased. On the other hand, Aitzhanova (2019) notes that freight turnover between the regions in Kazakhstan increased 2.5 times between 2015 and 2017, in part due to significant investments in the domestic road and rail network.[33] These issues deserve further study and will also be explored below in considering risks.

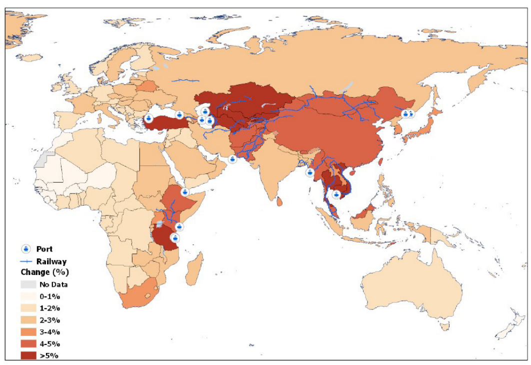
30. It should be noted that this parallels the situation for other foreign investors in the natural resource sector and is not specific to the Chinese case.

31. This is likely for two reasons: (a) these projects have been subject to considerable tension between the upstream and downstream countries in Central Asia and hence would have drawn China into potentially sensitive political confrontations, and (b) the leadership of the Kyrgyz Republic and Tajikistan may not have wanted to lose control over critical national assets. Recently the Uzbek authorities have signaled greater acceptance of upstream development of hydro resources. This may open the door for foreign investments in large HPP projects, including from China, provided contractual arrangements can be negotiated that are satisfactory for all parties.

32. See de Soyres et al. (2018). As noted by Schrader (2018), this study makes various heroic assumptions, including that all transport projects covered in the study are actually BRI projects (Schrader cites various projects that do not involve China) and that all planned projects included in the study will actually be implemented.

33. Aitzhanova (2019) also cites a Word Bank study that demonstrates that the BRI can reduce trade cost among the principal urban centers in Kazakhstan by 2-7 percent, with resulting increases in income in these regions of 5-10 percent.

Figure 6: Average Decrease in Shipping Time by Country (upper bound)



Source: de Soyres et al. (2018)

BRI investments can contribute substantial fiscal resources from natural resource rents and transit fees. Natural resource extraction can generate significant fiscal revenues, depending on the terms negotiated with investors. Mogilevskii (2019) provides estimates of aggregate resource rents generated by Chinese enterprises in the Kyrgyz Republic: they contributed about US$53 million in state revenues, or 2.5 percent of total revenues. One third of this was generated by mining companies with Chinese participation. But Mogilevskii notes that the tax burden on gold mines in the Kyrgyz Republic is generally lower than in other countries. Transit fees can also be substantial, as demonstrated by an estimate cited in Aitzhanova (2019) for Kazakhstan: the projected increase in China-Europe container transit through Kazakhstan is expected to yield US$5 billion per year. Of course, ultimately the question is how these public revenues are utilized. Some time ago, Azerbaijan and Kazakhstan set up special natural resource revenue funds that are designed to ensure transparent accounting and efficient utilization of all natural resource revenues. Other countries would be well advised to learn lessons from this precedent and from other countries that have instituted such funds. Some of the risks of poor public resource mobilization and management will be explored below. This also is an area that deserves more study.

The BRI supports the expansion of productive capacity through investments in agriculture, industry and services (including financial services) in participating countries. This has indeed been an important feature of BRI engagement in Central Asia and the South Caucasus. All of the country notes cite specific examples of such investments being either already underway or at the planning stage. In the case of Kazakhstan and Uzbekistan these investments are subject to intensive centralized vetting to confirm their compatibility with governmental priorities, while in Georgia, the Kyrgyz Republic and Tajikistan they appear to be left largely to decentralized agreements between Chinese investors and individual government agencies or private partners. Chinese investments have also gone toward establishing logistic centers and special economic zones, notably the International Center Khorgos on the China-Kazakhstan border, but also free trade zones in Georgia and joint industrial parks for the production of high technology goods in Uzbekistan (Aitzhanova 2019, Khishtovani et al. 2019, Ganiev 2019). And in some CASC countries, Chinese banks have invested in or pledged to invest in local banks, private and public (including a pledge to support the establishment of a Georgian Development Bank) (Khishtovani et al. 2019). In Tajikistan, Chinese investors are also active in the telecommunications sector, in cement production and in agriculture and agroindustry (Aminjonov and Kholmatov 2019). In Georgia, Chinese investors have gained a foothold in the wine industry and in the promotion of wine exports to China (Khishtovani et al. 2019). Aside from creating critical supply capacity for domestic and foreign markets, these investments can generate local employment, transfer technology and know-how, and open access to Chinese markets. As such, they could play a significant role in supporting diversification away from natural resource extraction and toward a more balanced, export-oriented economy that is well integrated into regional and global value chains. As of yet, little is known quantitatively about the extent to which these benefits are generated or how Chinese foreign investments compare with those from other countries. This is a topic for further study. A key prerequisite for attracting FDI on a sustained basis and for FDI to make an effective contribution to national development is a supportive policy framework and business environment. So far it does not appear that BRI initiatives have focused on policy or business climate issues. These issues will be further explored below in assessing risks and missing issues.

The BRI has the potential to provide access to education, training and knowledge networks. Under the rubric of "people-to-people contacts," BRI initiatives have involved provision of scholarships for students from Kazakhstan and Uzbekistan (and possibly other CASC countries) to study in China (Aitzhanova 2019, Ganiev 2019). Confucius Institutes for the teaching of Chinese culture and for Chinese language training have been established in some of the CASC countries. Notably, the world's first Confucius Institute was established in Tashkent in 2004 (Ganiev 2019). Ganiev also mentions an agreement under the BRI umbrella between Uzbek and Chinese agencies to develop a joint entrepreneurship research and training program in Uzbekistan, as well as joint Uzbek-Chinese scientific study programs. Kazakh universities participate in BRI-sponsored associations for universities from various BRI countries (Aitzhanova 2019). Judging by the country notes, there appears to be less engagement under the BRI in these areas in other CASC countries, but this would have to be confirmed—or corrected—with further study. The extent to which these initiatives (a) contribute to the improvement of the human capital of CASC countries, (b) facilitate knowledge acquisition, and (c) contribute to better mutual understanding between the peoples of China and of BRI countries would also need to be further explored.

The BRI will contribute substantially to the economic growth and prosperity of the CASC countries—if and as the above benefits are sustainably achieved. This presumption underpins what appears to be an overall positive assessment of the BRI's potential for the CASC countries, as reflected in the country notes. However, the country notes also consistently flag certain risks that will have to be managed if the initiative's benefits are to materialize and its risks avoided. We turn next to the most important of these risks.

5.3. Potential Risks of the BRI for Countries in CASC

Our country experts are well aware of key risks. The authors of the country notes flag a number of key risks their countries face in engaging with China on the BRI. They refer to specific "Western" critiques, buttressed by references to academic, think tank and rating agency papers. And they cite recent cases in which BRI countries in other regions faced specific challenges under the BRI and/or took steps to disengage from BRI projects (e.g. Malaysia, Sri Lanka). They also flag concerns specific to their own countries. From the country notes one can conclude that the risks generally are greatest for smaller, poorer countries with substantial BRI engagement but limited capacity to manage and control BRI activities such that they align with national priorities and plans. Countries with poor governance are especially at risk, as rent-seeking leads to misallocation and to the inefficient and possibly corrupt use of resources. One should note that the risks flagged by the authors are all issues that also have consistently plagued the traditional external assistance of developed countries. So it behooves Western critics to be humble in judging the BRI and its approaches. Nonetheless, an honest assessment of risks is important for BRI countries if they wish to ensure that their participation in initiative will lead to sustained growth and prosperity.

In the energy and mining sectors, key risks from BRI engagement relate to lack of diversification, potentially unfair benefit sharing between producers/exporters and investors/importers (China), insufficient transparency regarding public revenues generated and their utilization, and lack of attention to environmental and climate impacts. As noted by Hu (2019) and in Section 6 below, China has an abiding interest in accessing Central Asia's natural resources. If not balanced by appropriate macroeconomic policies and productivity-enhancing investments in other sectors and in the human capital of the region, this can harm the diversification efforts of Central Asian governments. At the same time, care has to be taken to fairly share the resource rents between the resource-exporting countries and the importing countries through appropriate pricing and taxation mechanisms. Opaque arrangements to use gas exports for debt service on investments by China in Turkmenistan's pipelines[34] and low mining taxes in the Kyrgyz Republic (Mogilevskii 2019) are examples where questions of fair rent sharing have been raised. And the opaque manner in which investment and trade deals are struck invariably gives rise to suspicions—justified or not—that corrupt practices may be involved. The same applies to the utilization of natural resource revenues, which ideally should be channeled through transparently managed national resource funds like those established in Azerbaijan and Kazakhstan. Finally, risks related to potential environmental and climate change impacts need to be addressed, especially for mining and coal projects, as noted by Mogilevskii (2019) in the Kyrgyz context and Aminjonov and Kholmatov (2019) in the Tajik context. Most of these risks are mentioned in the country background notes. The main concern is that because of these issues the potential national benefits from natural resource extraction will not be realized, or worse, that these issues may actually impair countries' long-term development due to "Dutch disease" and poor governance.

In the transport sector, risks relate to possibly excessive competition between major corridors, potentially lacking demand, excessive and/or imbalanced investments, insufficient attention to soft infrastructure, and a poor business climate.

- Regarding possible competition among major corridors, various concerns have been raised: (i) Available evidence points to the fact that some of the east-west corridors will be more attractive than others for transcontinental transit. Vinokurov (2019) concludes that the New Eurasian Landbridge Corridor (China-Kazakhstan-Russia-Europe) is likely to be the preferred corridor, followed closely by a Northern Eurasian Corridor (China-Russia-Europe—not generally considered under the BRI), and at some distance by the China-Central Asia-West Asia Economic corridor. The preference for the New Eurasian Landbridge over the China-Central Asia-West Asia corridor is also confirmed by a World Bank study comparing the six BRI corridors

34. According to RFE/RL (2014), "China has agreed to purchase some 65 bcm of gas annually, a sizable amount. But the China-Turkmen gas deal is extremely opaque. Such reports as there have been cite figures of US$250 per 1,000 cubic meters down to US$195, the latter representing roughly half of current world market prices."

according to the trade facilitation conditions in the countries along the corridors (Johns et al., 2018) in overland container traffic imply that there should be plenty of demand for multiple east-west corridors. Annex 2 summarizes the analysis for these two assessments. (ii) Mogilevskii (2019) is concerned that there may be insufficient traffic on the proposed China-Kyrgyz Republic-Uzbekistan railway, which is being strongly supported by the Kyrgyz authorities as part of the China-Central Asia-West Asia Economic Corridor. He also notes that there are tensions among alternative routes for this line within the Kyrgyz Republic due to the much higher cost of a line that would maximize national benefits as compared with a line that would serve mainly international transit needs. (iii) Khishtovani et al. (2019) note that there is competition between Armenia and Azerbaijan regarding possible north-south corridors from Iran to Europe, mostly driven by political considerations. The key risk is that excessive transport capacity will be built way ahead of demand for purely political reasons or due to overly optimistic demand assumptions. Realistic demand assessments in route selection and project design will be critical.

- There is also the potential risk of imbalances in investment along corridors. As experience along CAREC transport corridors has demonstrated, the removal of a particular bottleneck may simply create more congestion at the next one along a route (CAREC 2014). Hence it is critical that investments be planned and implemented along a corridor in view of the efficient functioning of the corridor throughout.
- Lack of attention to soft infrastructure investments and to improvements in the business climate is a pervasive theme of the country background notes. As noted earlier, CASC countries do poorly in international rankings of trade facilitation, logistics, investment climate, etc.[35] Mogilevskii (2019) notes that soft infrastructure factors, rather than a shortage of adequate national transport capacity, appear to be binding constraints to the expansion of Kyrgyz exports at this time. Ganiev (2019) asserts that a broad range of economic and institutional reforms are needed in Uzbekistan if the benefits of the BRI are to be reaped there. Effective attention to these factors will be critical if CASC countries' connectivity is to be improved by the BRI.[36]
- More generally, the World Bank (2018) notes that connectivity is multidimensional and that a balanced approach across dimensions—including transport, trade, FDI, migration and telecommunications—is therefore needed. Insufficient attention to any of these elements risks impairing connectivity. Since the countries of the CASC region rank poorly on the Multidimensional Connectivity Index (see Table 1 above), there is great potential for improvement, but also a risk of unbalanced progress.
- Ganiev (2019) flags the risk of over-connectivity with China, which he believes could make Uzbekistan vulnerable to downside economic developments in China. He therefore recommends that his country strengthen its links with its neighbors to the north, west and south. Over-connectivity could also be a risk for other Central Asia countries.

Lack of attention to operations and maintenance (O&M) requirements of new infrastructure assets created under the BRI represents a serious risk to the sustainability of BRI benefits. In his country background paper, Ganiev (2019) notes: "Unfortunately, roads in Uzbekistan are generally not well maintained for a variety of reasons, including insufficient financing and the low quality of maintenance services. It is not clear if Uzbekistan and the neighboring countries have made any special arrangements to ensure that the roads along the China-Kyrgyz Republic-Uzbekistan-Afghanistan road corridor are properly maintained" (p. 70). Other background papers also mention this issue in passing. Effective O&M needs adequate finance: infrastructure maintenance usually requires at least 2 percent of the investment cost of the asset per year (KPMG 2017).[37] For example, the Angren-Pap railway project in Uzbekistan, which according to Ganiev (2019) cost about US$1.6 billion, would require annual maintenance worth an estimated US$32 million. But not only will O&M require the political will to allocate budgetary

35. Vinokurov (2019) also observes that for modern long-distance haulage, containerization is critical, but that the region still relies too little on container transport.

36. According to World Bank estimates (de Soyres et al. 2018), a 50 percent reduction in border crossing times would result in a 25.5 percent improvement in shipping times and a 21.6 percent reduction in trade costs along the China-Central Asia-West Asia Economic Corridor. This paper also notes that improved transport corridor management, including harmonization of standards, will be especially important for countries along this corridor (as well as along the New Eurasian Landbridge), including Kazakhstan and the Kyrgyz Republic, which would "gain at least one additional percentage point improvement in the average time-trade from better corridor management" (p. 30).

37. According to an IFC study, "On average operation and maintenance of the assets adds the equivalent of at least 50% of the investment needs (more in MENA)" (Estache and Garsous 2012).

resources to a task which is often not seen as a priority; in addition, as Ganiev points out, the countries need to have adequate institutional capacity to deliver effective O&M services, which again are often not adequate (Nag et al. 2017). In the absence of effective O&M there is a serious risk that the newly created assets will not be operated effectively and quickly deteriorate, while at the same time existing infrastructure may decay even more rapidly as O&M resources are stretched even more thinly. It is therefore troubling that many important recent reports on the urgency of infrastructure investments worldwide neglect to address the O&M challenge, which most countries, not only in the developing world, face (see Box 4). Similarly, there is no evidence that O&M needs are being considered explicitly as part of BRI programs around the world or in the CASC region. Fortunately, there are very helpful resources available (World Bank 1984, World Economic Forum 2014) to help countries develop appropriate approaches to O&M policies, institutions and management, provided they have the political will to give O&M the required priority.

Among macroeconomic risks, impaired debt sustainability is the most obvious. All country notes flag the risk of excessive indebtedness, with the Kyrgyz Republic and Tajikistan probably the most threatened by potentially unsustainable debt. In both countries, China is the largest single external creditor. A recent study by the Center for Global Development reinforced this concern and specifically flagged these two countries among the eight BRI countries exposed to "high" debt sustainability risks in connection with expected BRI investments (Hurley et al. 2018). All the countries in the South Caucasus have relatively high external debts (Khishtovani et al. 2019), but Azerbaijan and Georgia were judged by CGD to have "low" debt risk vis-à-vis the BRI, while Armenia is assessed to face a "significant" risk.[38] For all countries in the region, the authors

38. This is surprising in view of the fact that so far there appear to be

Box 4: Infrastructure Maintenance—An Important, Yet Often Missing Ingredient

It is well-known and well-documented that effective O&M is critical for infrastructure asset management. For example, the World Development Report 1994 (World Bank 1994) notes that returns on road maintenance are almost double those on new construction, an observation strongly endorsed by Felix Rioja (2013) in his survey of infrastructure maintenance benefits. Ingram, Liu and Brandt (2013) note: "A reduction in road maintenance increases private vehicle user costs by much more than the maintenance savings. Repairing neglected roads is two to three times more costly than appropriate ongoing maintenance" (p. 361).

At the same time, examples of neglect of infrastructure maintenance needs abound around the world. The decay of infrastructure assets in the US is well documented—including the dramatic case of the Metro (subway) in Washington, DC. For the US, Jaffe (2015) notes that annual spending on road maintenance is US$16.5 billion, while requirements are US$45.2 billion. It is increasingly a problem also in Europe, exemplified by the recent collapse of a major highway bridge in Northern Italy. And it is a potential problem for China, where it appears more attention also needs to be paid to the maintenance of its rapidly expanding infrastructure (Liu 2013). A recent ESCAP study on Central Asia notes: "Countries need to invest more to develop their infrastructure networks, but more importantly, financing for rehabilitation and maintenance needs to be increased. Sixty percent of roads are aging and require rehabilitation in Armenia, Azerbaijan and Uzbekistan. The situation is even more challenging in Tajikistan" (Lezhava 2017, p. 17).

Despite the overwhelming evidence that infrastructure maintenance is critical, recent studies on infrastructure, connectivity and the BRI often neglect the O&M dimension, and specifically the need to adequately maintain infrastructure assets. For example, two studies on sustainable infrastructure by Brookings and OECD respectively on sustainable, climate-smart infrastructure (Bhattacharya et al. 2015, OECD 2017) do not mention O&M needs; nor do two World Bank studies on connectivity—one on Europe and Central Asia (World Bank 2018) and the other on the connectivity benefits of the BRI (de Soyres et al. 2018). A 2013 commentary by McKinsey on China's track record of infrastructure investments and future needs makes no mention of maintenance requirements generated by the rapid expansion of China's infrastructure (Chen et al. 2013). And a recent study on infrastructure needs and investments in Central Asia does not address O&M needs either (Cohen and Grant 2018). Finally, O&M was not mentioned at a recent event on the BRI during the IMF/World Bank Annual Meetings, during which new research findings by the World Bank on BRI were presented and discussed.[1]

Looking ahead, it is clear that, as is well explained in the World Development Report 1994, what matters is that infrastructure services are efficiently delivered, which requires an appropriate balance between efficient, climate-smart new investment and spending on O&M, supported by strong institutions that can deliver both. Helping to create such institutions and supporting spending that appropriately balances new investment with effective O&M should become an explicit goal of the BRI.

1. For a video recording of the event see http://live.worldbank.org/economics-belt-and-road

advise careful management of external indebtedness, including BRI-related borrowing, and careful monitoring of debt sustainability, preferably with the involvement of the international financial institutions. Other macroeconomic risks relate to poor fiscal management, including lack of effective tax policies and of effective public expenditure management, which result in ineffective domestic resource mobilization to repay debt and in wasteful public expenditure allocations. As and when Chinese banks invest in troubled banking systems in the CASC countries (Kazakhstan and Tajikistan, for example, have high rates of non-performing loans), risks of financial crisis may persist or be deepened unless appropriate steps are taken to put individual banks and banking systems on firmer footing.

BRI projects have so far contributed little to domestic employment creation and technology transfer, while raising the probability of Chinese immigration (especially in countries neighboring China), of Chinese land acquisition and of popular unrest. Since Chinese firms and contractors rely heavily on Chinese management, technical staff and labor, their domestic employment impact is very limited, which is a problem especially for the poor, labor surplus economies such as the Kyrgyz Republic and Tajikistan. But more generally, this practice also limits transfers of technology, skills and knowledge. Together with fears of excessive Chinese immigration and cultural dominance, there is the risk of a popular backlash among the populations of the CASC countries. For now, the countries with the greatest Chinese and BRI engagement are the most at risk of such a backlash. The country background note on Tajikistan specifically addresses these issues (Aminjonov and Kholmatov 2019), but other research also flags these concerns (Laruelle ed. 2018). Of particular sensitivity is the actual or potential purchase of agricultural land by Chinese investors, rumors of which have led to violent protests in Kazakhstan (Aitzhanova 2019).

Another source of expert and popular concern are environmental risks that are not adequately addressed by BRI projects. These concerns are flagged in particular in the country notes on the Kyrgyz Republic (mining) and Tajikistan (coal mining and coal-fired power plants). Weak local environmental regulations and monitoring, possible corruption, and inadequate safeguards in project preparation and implementation all contribute to potential environmental damage. Community protests over mining projects have been particularly disruptive in the Kyrgyz Republic and may endanger the willingness of investors to do business in the country (Mogilevskii 2019). The Tajikistan report (Aminjonov and Kholmatov 2019) also notes that BRI energy investments do not focus on renewables and hence miss a chance to contribute to the mitigation of climate change.[39] A greater focus on environmental safeguards and monitoring, on support for renewable energy solutions (especially wind and solar), and more generally on climate-smart infrastructure investments would be required.[40]

There are multiple concerns about the governance aspects of the BRI, including issues of transparency, of whether resources flow into projects of the highest national priority (rather than low-productivity "show" projects or private pockets without broader social benefits), and of the potentially corrosive impact of the foregoing on domestic politics and bureaucracy. The country notes flag that there is generally little access to information about BRI investments and activities (the partial exception being in the Kyrgyz Republic). This lack of transparency makes it very difficult for researchers and the public to assess the impact of BRI investments and the concomitant debt and obligations assumed by BRI countries. This in turn means that it will be difficult to draw lessons and adjust policies; that mistakes will go unnoticed; and that accountability will not be assured. Of particular concern is lack of transparency in procurement, as noted by Ganiev (2019) for Uzbekistan. There is also the risk that easy access to financing will distort decisions about investment priorities by channeling resources into show projects (such as gleaming government buildings) and into poorly appraised, politically expedient investments (Aminjonov and Kholmatov 2019). Given the poor governance context in many of the CASC countries, there is also the risk that money will flow into corrupt channels, as is alleged in connection with some of the scandals related to BRI projects in the Kyrgyz Republic (Mogilevskii 2019).

5.4. "Dogs that Didn't Bark"

Some potential issues and concerns were not fully explored in the country notes. This may be for various reasons, among them the fact that the catalogue of questions that authors were asked to address did not specify certain issues. As indicated by the country for some of the issues, future research can help determine the possible significance of the following concerns.

no plans for significant BRI investments, and hence debts, in Armenia, as noted earlier.

39. For a discussion for the potential of renewables in Central Asia, see Cohen and Grant (2018).
40. See Bhattacharya et al. (2015) for a discussion of the importance of climate-smart infrastructure investment.

There is little or no discussion of the private sector driving the BRI investments in the CASC countries. The country notes identify a number of ostensibly private-to-private investments under the BRI umbrella. To what extent these investments are due purely to private investors' preferences or reflects state-directed activity is not clear. Nor is it clear to what extent private business in CASC countries drives the process of investment from abroad. In this context, Pomfret's (2018) observation that the development in China-Europe rail freight traffic has been primarily driven by private interests (albeit supported by Chinese freight subsidies) is notable. The more Chinese investment activities in CASC are driven by private investors with purely commercial considerations, the more this would reflect improved business conditions in the countries concerned and the greater would be the chances that the investments are worthwhile.

There is no discussion of the possible loss of domestic productive capacity as connectivity improves and foreign competition becomes more of a threat to domestic producers no longer protected by high transport costs and trade barriers. While the disruptive impact of competition in the long term will provide for greater discipline on domestic firms and incentives to raise their productivity, in the short term it may well lead to painful contractions in domestic import-competing business activities. The World Bank's (2018) report on connectivity recognizes this risk, as does the Bluhm et al. (2007) analysis of the impact of Chinese investments. The latter analysis shows that on balance the impact of Chinese investments abroad has been positive. Nonetheless, it is important to understand that there are winners and losers from increased connectivity and to explore how best to address the political economy of the structural transformation that increased connectivity brings.[41]

The country notes did not raise major concerns about the quality of Chinese-supported and -implemented infrastructure projects. Concerns have been raised about the quality of infrastructure in China and also about Chinese-built infrastructure in Asia and Africa.[42] For Tajikistan, Martha Olcott (2012) notes that she "has traveled a new highway being built between Garm and Jirgatal, along a section that was being financed through Chinese assistance; the asphalt was being laid on dirt roadbed, without crushed rock or any other sort of stabilizer—which ironically even the Soviet-era road that it replaced had" (p. 255). Our country notes flag only isolated instances of quality issues with Chinese-supported programs. Mogilevskii (2019) notes that a serious accident that led to a prolonged breakdown of the Bishkek Heat and Power Plant during winter revealed major technical issues with the HPP's equipment and mismanagement of the enterprise, which had undergone a major Chinese-financed and -implemented rehabilitation. Aminjonov and Kholmatov (2019) report that in Tajikistan there were issues with the quality of technology and of agricultural seeds introduced by China. And Aitzhanova (2019) finds that opinion surveys in Kazakhstan reveal that over half of respondents with a negative attitude toward China (only 16.5 percent of all respondents) attribute it to dissatisfaction with the quality of Chinese goods and products. These observations point towards isolated, rather than pervasive quality problems among Chinese investments in the CASC region. However, to the extent that these concerns might linger, they could be explored in a comparative ex post evaluation of infrastructure projects financed and carried out by a range of financiers and contractors.

The potential impact of increased connectivity on the cross-border spillover of "bads" (crime (including the drug trade and human trafficking), epidemics, etc.) deserves attention. Ganiev (2019) mentions increased incidence of cross-border crime as possible risk of greater connectivity. Other negative spillovers ("bads") include more opportunities for illegal drug smuggling, human trafficking, communication of contagious diseases, etc. These have often been cited by governments in the past (e.g. Uzbekistan) as reasons for closing borders, or at least for introducing onerous border checks. Further exploration of such negative cross-border spillovers of greater connectivity in the CASC region would be helpful, considering how they can be controlled without unduly interfering with legitimate cross-border traffic.

41. It should be noted, however, that import penetration by Chinese goods in Central Asia is already relatively high and many of the effects on domestic production from increased Chinese competition may already have been absorbed. More research will be needed to establish to what extent further reductions in transport and trade cost would create additional winners and losers. The authors are grateful to Roman Mogilevskii for flagging this aspect.

42. For examples from China, see Ansar et al. (2016); from Asia, see Nikkei Asian Review (2017); and from Africa, see Farrells (2016). Farrells argues that common concerns about Chinese infrastructure in Africa are not borne out by her research on World Bank-financed projects implemented by Chinese contractors. However, this finding does not necessarily extend beyond projects financed by the World Bank and subject to the World Bank's quality standards and procurement requirements. Lintner (2018) also reports that "[w]hile the Japan-led [Partnership for Quality Infrastructure (PQI)] predates China's ambitious US$1 trillion Belt and Road Initiative (BRI) investment Program, Tokyo has recently rebranded its competitive offerings as 'quality infrastructure', a not-so-veiled reference to China's sometimes shoddy construction schemes." In 2017 the US joined up with Japan's initiative, "seeking to help countries throughout the region better understand the lifetime costs of their infrastructure investments to ensure countries are receiving the best value for their investment" (USTDA 2017).

Other important issues that governments in CASC countries might usefully consider for investment under the BRI include: (i) improvement of secondary and tertiary infrastructure for inclusive growth; (ii) opportunities for development in the water sector; and (iii) development of ICT.

i. A key challenge for BRI countries will be transforming transit corridors into economic corridors. Aside from improvements in logistics, the business climate, etc., this requires investment in or upgrading of secondary and tertiary infrastructure links in rural and urban communities, so that they are effectively linked to the trunk lines and roads built under the major corridor projects. In the Kyrgyz Republic, there is a BRI project that funds the development of the street network in Bishkek (Mogilevskii 2019). This is the type of project (which could just as easily apply to rural roads and to power distribution) that could usefully be explored under the BRI.

ii. The water sector is a key area for development, especially in Central Asia. During Soviet times, huge investments were made to develop the region's irrigation network and potable water supply systems. This involved not only dams, canals, pipes, and water treatment plants, but also huge pumping stations (UNDP 2005). However, much of this infrastructure has not been adequately maintained since independence. Therefore, significant portions of this water infrastructure today are no longer functional or at risk of collapse, with potentially serious consequences for the supply of residential, industrial and agricultural water (UNDP 2005). For Uzbekistan, Ganiev (2019) reports that China supports the modernization of the Uzbek irrigation system and the construction of small hydropower stations under the BRI. This type of engagement could also be relevant for the other Central Asian countries. However, it will be critical that there be not only investment in "hard" water infrastructure, but also policy and institutional reforms to support efficient water use in agriculture.

iii. Information and communications technology (ICT) is a critical component of modern multidimensional connectivity. It is thus appropriate that the BRI includes a "cyber route," as previously mentioned. Based on the analysis of the country papers, one would conclude that so far this element of the BRI has not yet been much developed in CASC. Aminjonov and Kholmatov (2019) note that China has invested in the Tajik telecommunications sector. And Ganiev observes that "Huawei has been active in Uzbekistan since the 1990s and supplies communication equipment to many local communication companies. In addition to conducting a study tour for Uzbek students, Huawei recently held a Central Asia Huawei Innovation Day in Tashkent. During the meeting, representatives of Huawei and the government of Uzbekistan reportedly agreed to collaborate in developing a digital economy in Uzbekistan and in building a Digital Silk Road."[43] Khishtovani et al. (2019) refer to TASIM (the Trans-Eurasian Information Super Highway), a joint initiative by the Azerbaijani, Russian, Kazakhstani and Turkish authorities to develop a transnational fiber-optic backbone linking Frankfurt to Hong Kong or Shanghai via Turkey, Georgia, Azerbaijan, and Kazakhstan.[44] There is no indication that this ambitious project has as yet been incorporated under the BRI umbrella.[45] Future work on the BRI in CASC might explore the current status of BRI engagement in ICT in the region and the best options for promoting a regional ICT agenda in greater detail.

The role of regional cooperation and regional institutions in the design and implementation of the BRI deserves more attention. Regional cooperation and regional institutions are considered in some of the country background notes, especially those on the Kyrgyz Republic and the South Caucasus. The issue is also suggested as an area for future analysis in some of the papers. A key question to be explored is whether—as Ganiev puts it in his note on Uzbekistan—the BRI is "a useful framework for bilateral cooperation with China" or whether it also is used to pursue "multilateral cooperation with China and other countries" (Ganiev 2019, p. 77). Especially for transport, energy and water projects, regional network aspects are critical, even where investments appear to be purely national in nature. For example, national investments in trunk roads or rail lines should be considered in terms of whether and how they also link with regional and continental transport corridors. China has traditionally

43. Personal communication to the authors.
44. See Azintelecom (2017). Cohen and Grant (2018) also report on this initiative and note that China Telecom is one of the participating operators. They also report on a number of other ICT projects involving China and selected CASC countries, including the Silk Road Gateway (SRG) cable system, a project to provide a terrestrial link between China and the Kyrgyz Republic, and investments by Chinese companies with Chinese loans in Central Asia's telecom systems.
45. The authors need to do more research to assess the current status of TASIM. An initial internet search resulted in very limited information.

preferred to work with countries on a bilateral basis, and this may have some advantages in terms of simplicity of planning and implementation compared to regionally coordinated approaches (International Crisis Group 2017). At the same time, China is a founding member of CAREC, which focuses on regional transport, trade and energy. The Shanghai Cooperation Organization (SCO), with China in the lead, also has a regional focus, although it is less engaged with economic aspects than CAREC. Russia and Kazakhstan have been pushing a regional trade integration agenda for the member countries of the EAEU, supported by infrastructure investments and the analytical work of its affiliate, the Eurasian Development Bank (EADB). At the country level, regional cooperation has been limited by the reluctance of Turkmenistan's and Uzbekistan's leadership to engage in regional institutions and most regional initiatives (except for regional pipelines and some regional water initiatives). However, as noted in Section 4 above, the recent thawing of relations between Uzbekistan and its neighbors may open the door to more regional cooperation and enhance the effectiveness of regional institutions and initiatives. In Central Asia it would be helpful if the BRI were to become a driver of improved regional cooperation by incorporating a regional focus and by engaging with existing regional institutions and initiatives. It would also improve the chances that regional dimensions are effectively incorporated in BRI project planning and implementation. In the South Caucasus, the prospects for region-wide cooperation are much less positive than in Central Asia due to the Armenia-Azerbaijan conflict. Nonetheless, an explicit consideration of regional aspects and exploration of how they can be explicitly reflected in project design and implementation in the South Caucasus would be appropriate, with Georgia potentially serving as the key link.

A final potential concern could be whether and to what extent Chinese engagement under the BRI in CASC countries is (seen to be) "predatory," "exploitative," "colonialist," or inimical to BRI countries' sovereignty. As highlighted by Aitzhanova (2019), the notion that Chinese engagement under the BRI could carry these risks is quite common in Western publications. However, as Laruelle (2018) demonstrates, these concerns are also common in Central Asia. Country background notes deal with these issues in different ways. The Kazakhstan note explicitly rejects these concerns for Kazakhstan on the grounds that the country's authorities are fully in control of BRI projects, and it reports that only 17 percent of surveyed citizens regard China as a threat to peace and security (Aitzhanova 2019). The Kyrgyz note flags the fact that some one-third of respondents to a survey considered China a threat (Mogilevskii 2019). The Tajikistan paper notes China's control of the telecommunications sector, notes the growing scale of Chinese control over scarce agricultural land, and expresses concern about possible Chinese demographic and cultural domination in Tajikistan (Aminjonov and Kholmatov 2019). The Uzbekistan and South Caucasus notes do not address these issues. Future research might explore the existence of and the grounds for negative national impressions and concerns of this type. It could also consider how these negative impressions can best be managed so that appropriate feedback is provided where there are real problems, and, where not, that accurate information is shared with the public and popular concerns hopefully are alleviated.

6. Perspectives of the BRI in CASC from Major Outside Partners

After having considered the BRI in CASC from an "inside-out" perspective at length, let us take a brief look at how the BRI in CASC is seen from the outside, i.e. from the perspective of some of the region's major partners: China, Russia, the EU, India and the US.[46] From Section 3 above, we recall that most countries in the region have a multi-vector approach to their external relations and hence would expect to rely on multiple partners to help advance their national economic and political agendas. Moreover, one of the preliminary conclusions we draw from our work so far is that to maximize the BRI's positive impact, cooperation not only among the countries of the region, but also with other partners—bilateral and multilateral—will be needed. It is thus important for the CASC countries to understand the motivations and concerns of the other big players that may have a role in making the BRI a success—or a failure, as the case may be. In this section we briefly summarize the main messages of the five background papers on the perspectives of outside partners and draw some preliminary conclusions about their significance for the countries in the region. As with the "inside-out" country notes, the reader is well advised to also read the notes on partner perspectives in full.

6.1. China

The background note by Hu Biliang (2019) focuses on China's BRI engagement in Central Asia. He notes that

46. Other partners also matter significantly, of course, for some or all of the regions' countries. These include Japan, Turkey, Iran, and South Korea. Future research should explore their perspectives. Moreover, an assessment of multilateral development institutions' engagement in the CASC region, both directly with BRI investments and their support for connectivity of the region more generally, would be a good topic for further research.

China and the Central Asian countries are all developing nations, with Kazakhstan's and China's per capita GDPs the highest among them, at just under US$9,000 each in 2017. China and Central Asia have complementary needs and strengths, as Central Asia suffers from poor infrastructure and weak manufacturing, but is rich in natural resources, which China in turn urgently needs. China is the largest customer of Central Asian oil and gas exports, as well as the largest foreign investor in most Central Asian countries. Under the BRI, China provides Central Asian countries with transport infrastructure, logistics facilities, and industrial and agricultural parks, creating local jobs (including 1,000 jobs in Uzbekistan) and enhancing tax revenues.

All Central Asian countries, except for Turkmenistan, have signed memorandums of understanding (MoUs) with China on the BRI to ensure that investments are aligned with national development strategies, pursuant to the principle of "consulting (planning) together, building together and sharing together." In Hu's assessment, Chinese investors do not contribute to undue indebtedness since project returns exceed debt service obligations; this criterion is accounted for in investment decisions by Chinese investors and lenders.

Hu notes that the BRI is consistent with, supportive of and supported by three key regional organizations: SCO, CAREC and the EAEU. From a Chinese perspective, cooperation with the EAEU is especially critical to building the two BRI east-west corridors running through Kazakhstan. A statement by the leaders of China and Russia in March 2015 pledged close cooperation and mutual support for the BRI and for EAEU integration. China is also very interested in cooperation with the EU under the BRI; although a majority of EU member states have signed BRI MoUs with China there has been little progress between Brussels and Beijing so far. China would also welcome cooperation with the US, but this depends on American readiness to engage with the BRI. Finally, China has signed MoUs with the major international financial institutions on BRI cooperation, but their actual engagement remains limited so far.

6.2. Russia

According to Vinokurov (2019), from a Russian perspective, the BRI is "(1) a good business opportunity on its own; (2) a means to advance ties with China and attract Chinese investments, and (3) generally, a political and economic means to counteract Western policies. [Russia] also views BRI as an inherent part of the nascent 'Greater Eurasia' framework" (p. 39). Russia therefore welcomes the BRI. Close cooperation on the BRI between China and Russia—and, more generally, the EAEU—is a priority for Russia, as witnessed by the 2015 agreement between China's and Russia's leaders mentioned above. The development of a China-EAEU-EU corridor is of clear benefit to Russia and the EAEU, since the BRI has the potential to significantly advance the development of "Inner-Eurasia" (Central Asia, Siberia, the Urals and the Caucasus) through better connectivity and hence access to regional and world markets, and the resulting impetus for industrial and agricultural development.

Based on a recent analysis by EADB, Vinokurov concludes that, among four potential major transcontinental East-West corridors, the Central Eurasian Corridor (a.k.a. the "New Eurasian Landbridge") and the Northern Eurasian Corridor of the Trans-Siberian Railroad have the highest investment potential. Container traffic between China and Europe has rapidly grown in recent years along these corridors, albeit from a low base, and with substantial future potential growth in demand expected, there is no conflict of interest between Russia and Kazakhstan in supporting the further development of each of these two corridors.

Vinokurov (2019) notes that a number of issues need to be addressed in order for Russia to reap the full benefit of the BRI:

- Growth in east-west transit trade and EAEU participation in it will depend on continued subsidization of container traffic by the Chinese, on increased containerization of EAEU cargo traffic, and on balanced two-way cargo utilization of rail traffic;
- Corridor investments should not principally fund mega-projects, but address the elimination of bottlenecks;
- There is a need to focus not only on east-west corridors, but increasingly also on north-south corridors;
- Coordination of investments within the EAEU needs to be improved;
- Institutional support for cross-border cooperation along the corridors needs to be strengthened by involving the key countries in well-focused coordination;
- Further corridor development under the BRI should involve support from the international financial institutions.

6.3. European Union

Michael Emerson (2019) succinctly summarizes the conclusions drawn by his background note on the EU perspective on the BRI in general and on its status in CASC in particular as follows:

"Europe's views on China's BRI are, in one word, mixed. There are both positive aspects and concerns, while Chinese diplomatic speeches about the BRI as a 'win-win' for the world at large are regarded as simplistic propaganda. Several cross-cutting European perspectives emerge:

1. *"The EU agrees in summit statements with China over the pursuit of synergies between the BRI and the EU's own trillion euro investment plan, which includes its extended European Transport networks (TEN-T). However, what this means in practice is not yet clear. Questions of functional linkages between BRI projects and the European networks are not yet thoroughly addressed, and deserve deeper research.*
2. *"Freight train traffic between China and the EU is already growing, and…is expected to increase, but still seems likely to remain only a marginal niche affair in total EU-China trade.*
3. *"The EU has an interest in the development of the southern BRI routes, through Kazakhstan either across the Caspian Sea and South Caucasus or through Iran into Turkey. For the time being, the main train connections take a northern route through Russia and Belarus into Poland, but for the EU, strategic considerations militate in favor of alternative routes to avoid a Russian transit monopoly. …*
4. *"The EU can see the interest of the states of Central Asia and the South Caucasus in a BRI that would rise above a mere transit function and develop supply chains linkages that add value to trade flows. The most promising example here is Georgia, which now has free trade agreements with both the EU and China, as well as with other Asian states. ... On the other hand, the states of the Eurasian Economic Union are less well placed to do this, given their membership of the customs union with Russia. …*
5. *"The BRI connects with China's '16+1' initiative, which brings together 11 'new' EU member states in central and eastern Europe with five 'not-yet' EU member states of the Balkans. This raises two types of concern. First, in the strictly economic sphere, there are concerns over respect for EU law in the contracting of BRI public infrastructure projects and, further, whether EU law (on public procurement, competition policy, trade policy and foreign investment screening) needs to be strengthened in relation to third countries such as China. …*
6. *"The '16+1' initiative also raises political concerns that it may serve as a 'divide and rule' instrument of Chinese power play. More precisely, it seems that China is establishing client dependency relationships with some of the 16+1 states, which translate into complications for EU foreign policy-making that requires unanimity…*
7. *"The EU and its member states are major suppliers of international development aid and supporters of the international financial institutions (IFIs), and therefore stakeholders in the promotion of high standards of global governance. In this context, the BRI is seen as having sponsored quite a number of major projects that were not screened as rigorously as they would have been by the IFIs. Excessive debt burdens from 'white elephant' projects are hazards that developing countries along the BRI route need to avoid.*
8. *"Finally, there is the wider question of the overall EU-Chinese relationship, of which the BRI is an important aspect. The EU has now to look at its China relationship as part of the big global 'quadrilateral', alongside its relationships with the US and Russia. This big quadrilateral is in a state of unprecedented uncertainty and tensions. For the EU there are problems with all three major partners: the Trump administration, which undermines the existing international order; Russia, which is unacceptably aggressive in the European neighborhood; and China, whose global economic expansion lacks 'level playing field' conditions and whose political values are so different. … Through coded language about level playing fields and political values, the EU and its member states see the need to 'protect' against the excessive or insufficiently principled expansion of Chinese interests."*

6.4. India

In his background note, Nag (2019) summarizes India's perspective on the BRI in general and its status in Central Asia in particular as follows:

"India's perspectives on the BRI are multilayered and driven by complex considerations. In one sense, given the huge infrastructure deficits in Asia, including in Central Asia, and Africa, India welcomes the BRI but also has some concerns and reservations. Given its long history of association with the ancient Silk Route, India feels a sense of pique at the BRI being branded as a Chinese initiative. …India considers the proposed projects, particularly in South Asia, as a possible attempt at encirclement. … India is also concerned about the potential 'debt traps' which the poorer and weaker countries might find themselves in as a result of participating in BRI. …

"India has had deep and long historical relations with Central Asia going back almost to the first century BC. India thus considers the BRI as part of a much larger geostrategic initiative by China in a region which India considers

its "extended neighborhood" and with which it very much wishes to remain engaged. India's concerns about the BRI in Central Asia are further exacerbated by the fact that India supports some major connectivity projects of its own in that region, namely the INSTC and TAPI. The former links India through Iran to Central Asia and thereafter to Russia and Northern Europe. The latter (TAPI) is a major pipeline project designed to transport gas from Turkmenistan to India via Afghanistan and Pakistan.

"To minimize, if not stave off the effects of the debt trap and its consequent geostrategic and security implications, India strongly supports efforts to multilateralize the BRI as far as possible by encouraging other donors and multilateral institutions to participate. … However, … unless India and others can offer alternate sources of funding support, borrowing countries, including in India's immediate and extended neighborhood, will find seeking and accepting (readily available) support from the BRI a very difficult and tempting proposition to turn down.

"All the points discussed above confirm India's skepticism and reservations about the BRI, leading to India not having agreed to formally endorse and join the BRI, at least as yet. But even this has to be placed in the larger context of India-China relations. Given their economic and population sizes, China and India are … both critically important in a multipolar global architecture, and in fact need each other both for their market sizes and economic prowess and potential. … These considerations have motivated, indeed pushed, both countries to take a larger geostrategic view of their relations. …India, the author believes, will…continue to be pragmatic and hopefully wise in practicing the art of realpolitik as befitting a country with an important role to play in a multipolar Asia and a multipolar world."

6.5. United States of America

Starr (2019), in his assessment of the US approach to the BRI in CASC, notes that the US generally has reacted "calmly and even positively," in contrast to its reaction to Chinese engagement in the Pacific and Indian Oceans. Starr attributes this attitude to a number of factors, including the following:

- The US and China share a historic preoccupation with large-scale infrastructure investments in support of continental regional integration (canals, hydropower dams, interstate highways, pipelines, etc.).
- In the CASC region, the US is principally concerned with preventing dominance by one regional power; in the US' view, China's increased engagement in the region under the BRI represents an effective balancing of Russia's historical dominance. If and when China becomes dominant, the US strategic position will likely change.
- BRI was preceded by, and complements, many investments in regional infrastructure in CASC by the countries themselves, by the EU (TRACECA) and by the international financial institutions (e.g. under CAREC). The US has been supportive of these investments and continues to support improvements of regional connectivity in CASC.
- The economic impact of hard infrastructure investments in the land-based BRI corridors will depend on whether not they meet real market needs and are complemented by effective "soft" investments in logistics, simplification of border procedures, and improvements in the local business climate.
- Past US initiatives in the CASC region either had a narrowly focused security interest related to the war in Afghanistan (supply routes to Afghanistan under the Northern Distribution Network) or were never fully developed, financed and implemented (Hillary Clinton's "New Silk Road Initiative" under the Obama administration).
- In any case, for the US, the CASC region has been and remains a secondary foreign policy priority, considering the US' limited trade and investment engagement in the region, the low participation of US firms in trans-Eurasian transit, and the predominance of other foreign policy concerns.
- Looking ahead, the US will likely not engage directly with China under the BRI in CASC, but will work with the countries in the region to help them develop and strengthen their economies, connectivity and sovereignty.

6.6. Implications for Countries in Central Asia and the South Caucasus

This review of the BRI in CASC from the perspective of major neighbors and partners is by no means definitive or exhaustive, but it provides some useful insights for policymakers from the CASC to consider.

China will continue stressing that the BRI is a cooperative venture that offers win-win solutions for all participating countries, as reflected in the background paper by Hu (2019). But given external criticism and rising internal recognition of potential problems, China will likely also recognize that it needs to tread carefully in managing the risks to BRI partners, as well as risks to its own financial institutions, its bilateral relations with BRI partners, and its global reputation. This may make the process of

BRI financing more similar to that of other bilateral and multilateral financiers, with more prudent, but also more time-consuming processes.

The other geopolitical partners/competitors broadly appreciate the potential benefits of a more integrated Eurasian continental economy and what this could mean for the CASC region. But they also distrust China's altruistic claims and see the BRI as an instrument of China's ambition of projecting its power and influence across the globe, which they view with concern.

None of the four major geopolitical actors is likely to interfere in the foreseeable future with the implementation of the two key BRI corridors in the CASC region or actively compete with China in a modern version of the 19th century "Great Game." This likely stands in contrast with the outlook in other regions, where BRI initiatives have been increasingly criticized and resisted by some of China's geopolitical competitors.

However, two concerns may change this relatively benign prognosis for the BRI in CASC. First, if countries in the region were to contract unsustainable debt burdens due to Chinese financing, other partners, including the IFIs, could well exert pressure on the concerned governments to contain their engagement with the BRI, as well as raise pressure on China to join the Paris Club of bilateral creditors. Second, if China were to become substantially more prominent in the region at the expense of Russia's influence and/or threaten the sovereignty of its Central Asian neighbors, this too would likely lead to pushback from other major players.

While there is support available for the countries of CASC from partners other than China, the scale of alternative financial resources is likely more limited and narrowly focused on specific areas of engagement compared to what China potentially offers under the BRI.[47] This means that China will remain an attractive partner for the CASC countries and the BRI an attractive program. It also puts the burden of managing BRI programs, their benefits and their risks squarely on the shoulders of China and (especially) the participating countries.

Although other partners will likely mobilize much more limited resources than the BRI will in support of regional connectivity and development in the CASC region, they can play a helpful role in supporting governments and other stakeholders in the region with investments that are complementary to Chinese-funded investments, in assisting with technical support, and in assuring that quality standards, regulatory consistency and due diligence practices of infrastructure projects are respected and that maintenance of infrastructure assets is given its due attention. Finding ways to benefit from the potential complementarities among partners in terms of project finance, quality enhancement, policy reforms and risk management will likely have important benefits for China, for the BRI countries in CASC and for the large neighbors and partners.

7. Conclusion: Preliminary Policy Lessons and Implications for Future Research

As noted in the introduction, this paper is the result of an initial, exploratory phase of research. Therefore, lessons drawn are necessarily preliminary in nature. They are to be read more as hypotheses subject to further testing rather than as definitive findings. In this spirit, let us first consider key preliminary policy lessons and then turn to a set of ideas that could be further explored in follow-up research and analysis.

7.1. Preliminary Policy Lessons

The inside-out analysis above provides us with some useful preliminary lessons for policymakers in the CASC region, in China and in other partner countries and organizations. These lessons include the following:

- Connectivity is critical for the future growth and prosperity of CASC and for greater economic integration in Eurasia.
- The BRI will support increased connectivity in CASC and provide other potential benefits, including higher growth and fiscal revenues, increases in productive capacity, technology transfers, and improved human capital and employment.
- But risks—including unsustainable debt accumulation, increased natural resource dependence, unproductive investments, environmental and social challenges, and weakened governance conditions—need to be managed. These risks are greater in the smaller countries and in those that are less well governed.
- The BRI should—and does in principle—have a broad-gauged approach, but a balanced engagement across and within sectors will be needed, including sufficient attention to operations and maintenance, to secondary and tertiary

47. According to Hillman (2018a), Japan's financial support for infrastructure investments in several countries of Southeast Asia has exceeded that of China in recent years. But it appears unlikely that Japan will step up its support for infrastructure investment in CASC on a scale comparable to that of China under the BRI. But according to Kobara and Nagai (2018), "China and Japan agreed [on August 2, 2018] to encourage deeper economic cooperation in the private sector, targeting infrastructure projects in the region as part of Beijing's Belt and Road Initiative."

infrastructure and to appropriate national policy and regulatory reforms.

- For the BRI to be successful in participating countries, it will be incumbent that BRI investments be effectively integrated with national plans and priorities and their execution, that they be subjected to rigorous cost-benefit, environmental and social analysis, and that their implementation be effectively monitored and evaluated.
- Consistency of BRI investments with regional plans and cooperation among the CASC countries is necessary to manage these investments' regional impacts and spillovers and to provide CASC countries with maximum leverage for an equal seat at the table in their dealings with their big neighbors.
- Support from other partners (including the IFIs) helps complement BRI investments in the CASC region and beyond by ensuring the effective economic integration of CASC countries with each other and with Eurasian and global markets.
- More openness, transparency and information sharing about BRI investments are critical for an efficient and credible project selection, procurement and implementation process that commands the support of the general public and avoids the pitfalls of corruption.

While these lessons are preliminary, given the exploratory nature of our analysis so far, we believe they are worth presenting to policymakers and other stakeholders in the CASC countries, in China and in partner countries and organizations for consideration and possible incorporation in the national and international policy debate about the BRI in the CASC region.

7.2. Key Issues for Future Research

While the main policy lessons above can and should be pursued by key actors, it would also be appropriate to explore selected issues in greater depth than our preliminary analysis is able to do. However, a key prerequisite for additional analysis would be improved access to BRI-related information held by national authorities and/or private actors engaged with BRI projects and programs.

Assuming that relevant information can be accessed, the following issues deserve further research and analysis:

Fact finding:

- Develop a complete database of BRI projects for all CASC countries, including Turkmenistan, to the extent possible.

Substantive issues:

- Detailed, quantitative analysis of the benefits and risks of major BRI projects in each CASC country, including assessment of any quality issues;
- Assessment of the development potential of alternative transport corridors, given alternative transport demand scenarios for continental, regional and national transit;
  - » Assessment of the potential for linking BRI investments with the EU's TRACECA and TEN-T programs;
- Analysis of trade potential and obstacles by country, sector and value chain, and of winners and losers from increased connectivity in CASC countries;
- Exploration of development options for inclusive economic corridor development under the BRI in CASC;
- Investigation of the role of ICT in CASC countries and options for the BRI to support its development as part of the BRI Cyber Route;
- Assessment of opportunities for and challenges to BRI engagement in the Central Asian water sector;
- Analysis of the role of the private sector (producers, traders, financiers) in China and the CASC countries as a driver of regional economic integration in connection with BRI programs;
- Exploration of the principles and best practices of natural resource taxation and revenue management in the energy and mining sectors for optimal application to BRI investments in the CASC region.

Institutional and process issues:

- Analysis of the extent of integration of BRI projects with national and regional investment plans;
- Analysis of the extent and potential use of advanced project planning and implementation management tools (including market analysis, financial analysis, cost-benefit analysis, social and environmental assessment, etc.);
- Assessment of the role of actual and potential regional organizations/processes in supporting BRI;

- Exploration of the role of bilateral and multilateral partners (especially IFIs/MDBs) in supporting countries in maximizing the benefits from the BRI and managing its risks.

Other:

- Drawing lessons from Chinese and BRI engagement in other regions, especially Africa and Southeast Asia;
- Surveys of public perception of Chinese engagement in general, and of BRI engagement in particular, in CASC countries.

In conclusion, more research would undoubtedly be helpful and important to pursue, but it should not prevent policy lessons from being explored with the appropriate actors (CASC countries, China, and other partners) and turned into action wherever possible and as soon as possible to ensure that BRI investments reap the best possible benefit for all concerned.

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Annex 1: Flows of BRI-related Finance to Central Asia and the South Caucasus

This annex discusses three types of flows of BRI-related finance to the CASC countries: Chinese official finance, Asian Infrastructure Investment Bank lending, and Silk Road Fund financing.

Flows of Chinese Official Finance to CASC

Flows of Chinese official finance to CASC countries are tracked by the Global Chinese Official Finance Dataset, version 1.0. Compiled by AidData, a research institute of the College of William and Mary, this dataset is the most comprehensive publicly available source of information on Chinese overseas official finance. Its time series runs between 2000 and 2014, thus encompassing the first two years of the BRI. The tables below only track funds that have been officially committed or disbursed without subsequent suspension or cancellation.

Table A1.1 displays patterns of Chinese official lending[48] (COL) to CASC countries between 2010 and 2014. During this period, South Caucasus countries received no COL at all. Central Asian countries, when taken together, received substantially more COL in the two years preceding the launch of the BRI than in the first two years of the initiative. However, this regional trend is driven largely by Kazakhstan's and Turkmenistan's lending receipts (and lack thereof), which revolve around natural resource extraction and processing projects. The other three Central Asian countries—whose COL receipts tend toward the power and transport sectors, both of which are mainstays of Belt and Road lending—do not mirror the regional trend.

Table A1.2. displays patterns of Chinese official grants (COGs) to CASC countries between 2010 and 2014. During this period, only four CASC countries received COGs of a specified monetary value. These grants varied widely in purpose between countries. In 2012, Armenia received a single COG for the dual purpose of re-equipping its customs service and building a school that specializes in teaching Chinese. Meanwhile, Azerbaijan received two COGs, both of which aimed to promote bilateral economic and technological ties. The Kyrgyz Republic received four COGs: one for hospital construction, one for civil servant training, and two for relief aid following ethnic clashes in the country's south in 2010. Finally, Uzbekistan received two COGs: the first, granted in 2010, consisted of humanitarian aid for refugees from the southern Kyrgyz Republic; the

48. AidData reports loans and export credits separately. In this annex, loans and export credits as reported by AidData have been combined and are referred to collectively as lending.

Table A1.1: Chinese Official Lending to CASC by Country and Sector, 2010-2014 (US$ millions)

Country: Sector	2010	2011	2012	2013	2014
Kazakhstan: Energy Generation and Supply	0	1,380	0	0	0
Kazakhstan: Industry, Mining, Construction	232	2,000	2,558	0	0
Kazakhstan: Total	232	3,380	2,558	0	0
Kyrgyz Republic: Energy Generation and Supply	0	208	390	386	0
Kyrgyz Republic: Transport and Storage	0	91	266	698	0
Kyrgyz Republic: Total	0	299	656	1,084	0
Tajikistan: Banking and Financial Services	0	0	0	0	20
Tajikistan: Energy Generation and Supply	37	27	0	0	349
Tajikistan: Government and Civil Society	0	0	0	21	0
Tajikistan: Industry, Mining, Construction	0	0	0	140	0
Tajikistan: Transport and Storage	0	0	49	0	57
Tajikistan: Total	37	27	49	161	426
Turkmenistan: Industry, Mining, Construction	0	4,100	0	0	0
Turkmenistan: Total	0	4,100	0	0	0
Uzbekistan: Communications	0	0	0	0	100
Uzbekistan: Energy Generation and Supply	70	0	257	166	0
Uzbekistan: Industry, Mining, Construction	42	92	50	300	90
Uzbekistan: Transport and Storage	0	42	0	700	0
Uzbekistan: Total	112	134	307	1,166	190
Regional Total	**381**	**7,940**	**3,570**	**2,410**	**615**

Source: AidData (2017)

second, granted in 2012, consisted of a water pumping station in Qorako'l.

Asian Infrastructure Investment Bank Lending to CASC

The Asian Infrastructure Investment Bank (AIIB) is a Beijing-based, Chinese-inspired MDB in operation since 2016. Its lending does not qualify as Chinese official finance, but nonetheless supports the BRI's development by financing infrastructure projects in BRI countries. Since its foundation, AIIB has funded four projects in CASC countries: an energy transport project in Azerbaijan[49], a power generation project in Tajikistan, and one road project each in Georgia and Tajikistan. Table A1.3 gives the specifics of these four projects. In line with its record of always financing projects in partnership with cofinanciers, AIIB joined with other MDBs, commercial lenders, and the borrowers themselves to fund each project as a minority cofinancier. For none of these projects did AIIB lend more than another MDB.

49. This particular item is not as it appears. The project in question is a natural gas pipeline on Turkish territory (TANAP), of which an Azerbaijani state-owned enterprise (Southern Gas Corridor, or SGC) owns a majority share. AIIB loaned US$600 million to SGC for the TANAP project, hence the project is attributed to Azerbaijan instead of Turkey (AIIB 2016).

Silk Road Fund Operations in CASC

Established in 2014 and managed by China's top state-owned financial bodies and planning institutions, the Silk Road Fund (SRF) has an explicit mandate to promote the implementation of the BRI through investments in infrastructure, resource and energy development, industrial capacity cooperation, and financial cooperation along the Belt and Road. Pursuant to its Articles of Association, SRF may invest in equity and debt, jointly establish funds with domestic and overseas institutions, manage entrusted assets, and commission others to invest (SRF 2018). As of end-2017, SRF had made only one confirmed investment in the CASC region: a US$2 billion capital injection to found the China-Kazakhstan Production Capacity Cooperation Fund. This joint fund, exclusively financed by SRF's investment, promotes the alignment of Kazakhstan's Nurly Zhol national development plan with the BRI by facilitating Sino-Kazakh cooperation in the fields of

Table A1.2: Chinese Official Grants to CASC by Country and Sector, 2010-2014 (US$ millions)

Country: Sector	2010	2011	2012	2013	2014
Armenia: Other Multisector	0	0	11.09	0	0
Armenia: Total	0	0	11.09	0	0
Azerbaijan: Other Multisector	0	0	0	4.84	0
Azerbaijan: Trade and Tourism	2.9	0	0	0	0
Azerbaijan: Total	2.9	0	0	4.84	0
Kyrgyz Republic: Emergency Response	1.18	5	0	0	0
Kyrgyz Republic: Government and Civil Society	0	0	0.79	0	0
Kyrgyz Republic: Health	0	0	6.65	0	0
Kyrgyz Republic: Total	1.18	5	7.45	0	0
Uzbekistan: Emergency Response	0.44	0	0	0	0
Uzbekistan: Energy Generation and Supply	0	0	7.92	0	0
Uzbekistan: Total	0.44	0	7.92	0	0
Regional Total	**4.52**	**5**	**26.46**	**4.84**	**0**

Source: AidData (2017)

Table A1.3: Asian Infrastructure Investment Bank Lending to CASC Countries

Project Name	Country	Board Approval Date	AIIB Contribution (US$ millions)	Total Project Cost (US$ millions)	Implementation Start Date	Implementation End Date
Trans Anatolian Natural Gas Pipeline Project (TANAP)	Azerbaijan	22-Mar-17	600	8,600.00		
Batumi Bypass Road Project	Georgia	15-Jun-17	114	315.2	Jul-17	Dec-22
Nurek Hydropower Rehabilitation Project, Phase I	Tajikistan	15-Jun-17	60	350	Jun-17	Jun-23
Dushanbe-Uzbekistan Border Road Improvement Project	Tajikistan	24-Jun-16	27.5	105.9	Dec-16	Dec-20

Source: AIIB (2018)

industrial capacity, innovation, and information technology (SRF 2015, 2017). In contrast with the Fund's portfolio in neighboring Russia, which leans overwhelmingly toward hydrocarbon extraction, this investment—SRF's largest ever—may help to diversify Kazakhstan's economy away from its natural resource sector.

Annex 2: Assessments of Alternative East-West Transport Corridors for Eurasia

Eurasian Development Bank (EADB) Assessment of Corridor Performance

As summarized by Vinokurov's (2019) background note for this study, EADB's analysis considers three principal corridors: (i) a Northern Eurasian Corridor (China-Russia-Europe), (ii) a Central Eurasian Corridor (China-Kazakhstan-Russia-Europe), and (iii) a Trans-Asian Corridor (routes to the south of Russia, but not including Turkey) (Figure A2.1). The second and third corridors broadly align with the BRI's New Eurasian Landbridge and China-Central Asia-West Asia Economic Corridor, respectively. In brief, Vinokurov (2019, p. 36) summarizes the findings as follows: "Each corridor and its constituent routes differ in length, number of transit states, throughput capacity, and level of development of transport and logistical infrastructure. Based on a comparative analysis of route efficiency metrics and current and anticipated cargo flows, the following two land transport corridors appear to offer the highest improvement potential: (1) a Central Eurasian Corridor (two routes: a northern route through Dostyk and Astana and a southern route through Khorgos, Almaty and Kyzyl-Orda); and (2) a Northern Eurasian Corridor through the Trans-Siberian Railway." He further concludes that there is no conflict between these two routes, since the potential traffic vastly exceeds current capacity constraints, which could be addressed through investments under the BRI. While he assesses the Trans-Asian corridor through CASC as less attractive than the principal alternatives, he notes that this corridor may eventually benefit from substantial traffic between China and Iran, and hence develop the required infrastructure. This corridor could then link up with a fourth corridor that he considers: a north-south route from Russia past the Caspian Sea to Iran.

World Bank Assessment of Trade Facilitation Conditions along Different BRI Corridors

The World Bank report on trade facilitation (Johns et al. 2018) analyzes the six principal corridors in terms of the average trade facilitation performance of the countries along the corridor. Figure A2.2 shows the relative performance of the six corridors according to two key trade facilitation variables: (a) average time to comply with import/export requirements, and (b) average customs and border management performance. The focus here is on the two CASC corridors. The authors assume that the New Eurasian Landbridge ("Land-Based") corridor involves China, Kazakhstan, Russia, Belarus, Poland and the Czech Republic, while the China-Central Asia-West Asia Economic Corridor crosses China, Kazakhstan, the Kyrgyz Republic, Tajikistan, Uzbekistan, Turkmenistan, Iran, Afghanistan, Russia, Azerbaijan, Georgia and Turkey.

The key conclusions of World Bank's analysis are these:

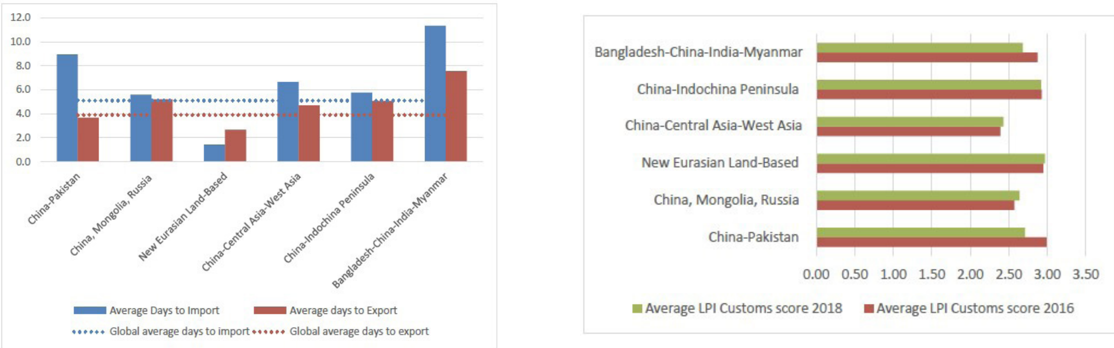
- The New Eurasian Landbridge corridor performs the best among all corridors in terms of trade facilitation, while the China-Central Asia-West Asia corridor is for a middling performer in terms of time required and the worst performer in terms of customs and border management performance.

Figure A2.1: Alternative East-West Corridors in EADB's Analysis

Source: Vinokurov (2019)

Figure A2.2: Performance of BRI Corridors on Trade Facilitation Variables

(a) Average time to comply with import/export requirements *(b) Average customs and border management performance*



Source: Johns et al. (2018)

- The good performance of the New Eurasian Landbridge is due to two principal factors: the strong performance of EU members and the fact that relatively few countries are involved (at least as compared with the China-Central Asia-West Asia corridor). However, the poor performance of Belarus represents a particular bottleneck, which reduces the attractiveness of this corridor.
- The relatively poor performance of the China-Central Asia-West Asia corridor is due to the fact that there are many countries along the corridor and many of them show weak performance, including some countries in CASC (though Georgia and the Kyrgyz Republic are among the better performers).

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