

# The impact of Belt and Road Initiative (BRI) investment in infrastructure on achieving the Sustainable Development Goals

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## About this report

The K4D Emerging Issues report series highlights research and emerging evidence to policy-makers to help inform policies that are more resilient to the future. K4D staff researchers work with thematic experts and DFID to identify where new or emerging research can inform and influence policy.

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## Contents

<b>1. Overview</b>	<b>4</b>
1.1 <i>Introduction</i>	4
1.2 <i>Literature</i>	5
1.3 <i>Background</i>	5
<b>2. Literature Review</b>	<b>6</b>
2.1 <i>English-Language Literature</i>	6
2.2 <i>Chinese-Language Literature</i>	7
<b>3. The Western and Chinese Approaches to Development and Infrastructure</b>	<b>9</b>
<b>4. China and Infrastructure Development in Africa</b>	<b>14</b>
4.1 <i>China and Africa</i>	14
4.2 <i>Kenya</i>	15
4.3 <i>Ethiopia</i>	18
<b>5. Policy Implications for Future Development Cooperation</b>	<b>21</b>
<b>6. References</b>	<b>25</b>
6.1 <i>English Language References</i>	25
6.2 <i>Chinese Language References</i>	31
6.3 <i>Bibliography: Chinese Language References on China and Africa</i>	37

# 1. Overview

## 1.1 Introduction

*The Belt and Road Initiative is not a Chinese plot, as some people internationally have said. It is neither the post-World War Two Marshall Plan, nor is it a Chinese conspiracy. If you had to [call it something], it's an "overt plot."*

President Xi Jinping, Annual Meeting of the Chinese Boao Forum for Asia, April, 2018

This report addresses a major “emerging issue” and central question: “To what extent does China’s Belt and Road Initiative (BRI) contribute to closing the global ‘infrastructure gap’ and thereby help achieve the Sustainable Development Goals (SDGs) and Agenda 2030?” The Belt and Road Initiative (BRI) has grown from a proposal made by Chinese President Xi Jinping in 2013 and its formal launch in 2015 into a global project encompassing 65 countries across all continents, configured around a series of inter-locking trade and investment corridors. The BRI is intended to act as a primary force for facilitating critical investment to build closer and stronger channels of maritime and continental connections from China to international markets. The BRI concentrates on building greater capacity through infrastructure and prioritises key sectors such as transport, communications and energy. In its conception, the BRI operates through public-private partnerships. These partnerships are intended to harness the requisite financing as well as to provide collaboration on implementing projects.

The BRI strategic plan sets out five priorities:

1. stronger policy co-ordination;
2. building of closer, more integrated transport, energy and information infrastructure networks;
3. working to lower barriers to trade and investment;
4. development of more robust financial cooperation and integration;
5. the encouragement and facilitation of closer relations and connections at the sub-state, societal level of cooperation, referred to as “people-to-people relations”.

These form the core priorities for the BRI. Reinforcing these, and integral to each, are further objectives to establish and promote greater collaboration on green growth and environmental protection on the one hand, and enhanced cooperation over energy on the other.

In his speech to the BRI Forum in 2017, President Xi noted that the total trade between China and BRI countries in 2014-2016 was more than US\$3 trillion, with China’s investment alone amounting to US\$50 billion. The speech stated that Chinese companies had established 56 economic cooperation zones in over 20 countries, and that this commitment had generated some US\$1.1 billion of tax revenue and new opportunities employment for 180,000 workers (China Daily, 2017c, para. 6). However, the BRI has raised questions about its ambitions and operational performance. The emerging issue is whether the BRI has the ability to deliver on its potential, and how the traditional donor community should engage with the BRI.

This report explains critical perspectives on the BRI from an international development perspective. To address this question and central aim, the report has four sections: (i) a summary of the existing English and Chinese literature on key interactions between the BRI and SDGs and infrastructure development; (ii) an evaluation of complementarities and differences between the

approaches of the established or orthodox approach to infrastructure development and that of China; (iii) a short case study of Africa, with specific reference to Kenya and Ethiopia; and (iv) an explanation of the policy implications for traditional donors, such as the UK, in partnering with China on BRI investment in infrastructure. Based on evidence drawn from a literature review of English and Chinese language sources, the report's findings can be summarised in the following four aspects. *Firstly*, the BRI is a potentially important tool to help achieve the SDGs. The focus on infrastructure capacity and increasing connectivity can provide a practical framework that is already operating with global reach and impact. *Secondly*, the BRI faces concerns internationally and within China over its economic, corporate, environmental, socio-cultural and political governance and the need for transparency, accountability and alignment with international environmental and social safeguards. To realise the BRI's full potential, these concerns need to be addressed. *Thirdly*, there is a need for a closer and sustained dialogue between China, the BRI partners and the "traditional" donor countries. This could facilitate cooperation on infrastructure building in low-income countries and help deliver on the SDGs through the BRI. The BRI is now at a pivotal point in its development and it is timely to establish a process of meaningful dialogue and exchange. *Fourthly*, the BRI represents a significant opportunity for the UK. With the UK's comparative advantages and experience in financial services, transport and communications, and demonstrated commitment to international sustainable development, the BRI can offer new business and development opportunities for collaboration in a post-Brexit phase. The close UK-China bilateral relationship on sustainable development can be deepened through additional infrastructure cooperation related to the BRI, combined with a meaningful dialogue on the BRI's alignment with international standards.

## 1.2 Literature

There is a substantial and rapidly growing literature on the BRI, as well as on the SDGs and on infrastructure demand and financing. This report has conducted a review of evidence available in English and Chinese language sources and this is set out in Section 2 of this Report. The literature of the BRI extends across economic, socio-cultural, political and strategic aspects, financing, operational implementation and developmental impact. The body of writing covers all regions, with South Asia and Africa receiving particular attention. Early analyses focused on the aims and objectives of the BRI. This theme is particularly evident in Western literature and remains a source of discussion in the current writing on the BRI. More recent literature is focused on implementation and the details of specific projects. This focus can be found in English and Chinese language literature. As the Literature Review illustrates, an emerging theme, particularly in Chinese research, is a concern with the identification and management of risk. This covers a range of factors, from financial to socio-cultural risks. The evidence is sensitive to gender issues and to the linkage between the BRI, infrastructure investment and meeting the continuing challenges of gender inequality.

## 1.3 Background

The world faces an infrastructure investment gap. According to widely reported statistics, the estimated global demand for investment in infrastructure each year amounts to US\$3.7 trillion, with only around US\$2.7 trillion of this actually being met annually (World Economic Forum, 2013). A McKinsey Global Institute Report found that globally, there is a need to invest an average of US\$3.3 trillion annually in economic infrastructure in order to support currently expected rates of growth through to 2030. Emerging economies are projected to account for some 60% of that need. The McKinsey study concluded that if the present trajectory of under-investment is sustained, then

there will be an annual shortfall of approximately US\$350 billion, or some 11%. The study also concluded that this investment gap increases by a third if the cost of the infrastructure investment needed to achieve the SDGs is included (Woetzel, Garemo, Mischke, Hjerpe, & Palter, 2016).

The BRI represents a potentially practical instrument for delivering the 2030 Agenda. Liu Zhenmin, UN Under-Secretary-General for Economic and Social Affairs, speaking in June 2018, stated that the BRI and the 2030 Agenda for Sustainable Development have a similar vision and principles. He argued that the BRI's prioritisation of building connectivity in policy, facilities, trade, finance and among peoples is "extensively and intrinsically linked with the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda . . . such connectivity can effectively advance achievement of the goals of the 2030 Agenda." Liu went on to argue that:

Connectivity, including infrastructure investment, can play a crucial role in promoting productivity and sustainable economic growth. Infrastructure investment is important for eradicating poverty. Infrastructure investment is also a crucial catalyst to accelerate the achievement of gender equality and empowerment of women and girls. Sustainable infrastructure is a cornerstone for achieving sustainable consumption and production patterns, and for combating climate change. (Xinhua, 2018a, para. 5-6)

This shift in priority is attributable to the increased role and importance of "emerging economies", many acting as "new donors". Their approaches to development differ in key aspects of principle, policy, process and practice from the long-established system centred upon the OECD-DAC. Most prominent among these is China. Now the second-largest economy in the world with a global economic, political and steadily-emerging regional strategic reach, China has a growing role and influence as a provider of international development assistance and source of both state and private enterprise infrastructural investment in low-income economies.

## 2. Literature Review

This section reviews the body of English and Chinese language literature. The Chinese literature is taken from a wide range of recognised, good quality sources.

### 2.1 English-Language Literature

Beginning with the English-language literature, a number of points and themes can be identified. These include:

- evidence indicates a broad-based recognition that the BRI has the potential to contribute significantly to achieving Agenda 2030 as a major implementation platform;
- the focus on infrastructure capacity-building projects is a key potential driver for promoting greater regional and inter-regional connectivity and sustainable development;
- improved data collection and project assessments show that there are over 1,000 BRI-related projects;
- however, the evidence also indicates a growing concern at the number of agreed projects that are not completed, a concern increased by the adverse impact of US-China trade tensions, China's economic rebalancing and global market volatility;
- there remain substantial concerns over financing and a need to broaden the base of funding beyond the largesse of China and to increase private sector involvement;

- the evidence also points to political challenges, notably the antipathy of the Indian government, implications of US-China trade tensions, and a wider international caution in approaching the BRI project.

There is extensive English-language literature on the BRI. Key elements are: a continuing debate over China's aims and purpose for the BRI; the opportunities presented and risks involved; the manageability of a project of such magnitude and ambition; implementation challenges such as finance, data collection and project completions; legal, political and socio-cultural factors; and the extent to which the sustainable development and environmental protection and 'green growth' needs of China's BRI partners are actually met through the infrastructure capacity-building focus of the BRI. There are numerous background and contextual sources available, including the Chinese Government's own website (Government of China, 2018), as well as academic and business sources (Belt and Road Initiative, 2018; Ellwood, 2018; Financial Times, 2018; Hillman, 2018; Hong Kong Trade Development Council, 2018; HSBC, 2018; Jinchun, 2016; Kuo & Kommenda, 2018; Lee, undated; Luckock, 2016; Manuel, 2017; Phillips, 2017; RIIA [Chatham House], 2017; World Bank, 2018; World Economic Forum, 2013; Wolff, 2016). The BRI has generated a substantial debate regarding Chinese intentions lying behind it, with a number of commentaries assessing the BRI as a Chinese "global strategy" (Brînză, 2018) or "China's new grand strategy" (Clarke, 2017). Other writings in this category include those of Cai (2017) and Chin and He (2016), whilst Alek Chance (2017) examines the BRI as a new driver of globalisation. The debate over the BRI is entwined with an assessment by potential public, civil and private sector stakeholders and observers of the opportunities and risks (Baker McKenzie, 2017; He, 2017). The literature also indicates a need for more and better quality data on the BRI's projects, in order to undertake an evaluation of opportunities and risks, as well as the operational performance and effectiveness. Websites such as that of The Economist Intelligence Unit provide a useful, quality source of data.

As the BRI has evolved and demonstrated durability, the literature demonstrates increased interest in the challenges of implementation covering the essential thrust of strategy (Lagarde, 2017, 2018), trade promotion (McKinsey & Company, 2016), legal issues and coordination (Chinese European Legal Association (CELA), 2018), gender (Jolly, 2016), environmental protection and Green BRI (Green Growth Knowledge Platform, 2017), and high technology connectivity (Siemens, 2018). Recent writings examine the degree to which the BRI is able to meet development partner needs through infrastructure (Wiseman, 2015; Woetzel et al., 2016; Xinhua, 2018a; Zhu, 2017; Milanovic, 2017).

## 2.2 Chinese-Language Literature

This literature provides a number of key points:

- The BRI "fits" into a series of Chinese policies, notably China's approach to inclusive growth, South-South Cooperation, its "good neighbour" policy, "going out", and Green Growth and environmental protection, as well economic drivers of re-balancing and "smartening" the Chinese economy under the "new normal" definition of annual GDP growth, Chinese regional development. These, in turn, are framed within China's commitments under the 2030 Agenda and the goals and targets of the SDGs, the Accra Action plan, and COP21.
- In addition to these, largely expected thematic lines in the Chinese research on the BRI are now references to environmental protection, acknowledgement of the importance of

Chinese firms engaging positively and proactively with civil societies, and facilitating social development objectives in BRI partners.

- The BRI's prioritisation of infrastructure capacity-building and promoting of greater connectivity is examined across sectors, with transport figuring prominently.
- Trade and investment opportunities are assessed, for example with respect to energy, and are related to China's domestic development planning for its less developed provinces away from the seaboard and central regions.
- There is an increasing literature looking at "risk" associated with this massive project. This manifests itself not only in concerns over its financial exposure and the need to diversify the range of funding providers, but also in socio-cultural risk such as "religious risk", as well as a number of studies focusing on environmental risks generated by the growing number of projects.
- This focus on risk is related to literature arguing for tighter and more effective Chinese agency and process in monitoring and regulating the BRI.

The BRI is contextualised in the Chinese literature in many differing aspects of Chinese policy, specifically China's recognition and promotion of inclusive, equitable globalisation (Weidong, 2017; Yiwei, 2017). Against this backdrop, there has been research examining Xi Jinping Thought on Multilateral Diplomacy (Yan, 2017) as well as the geo-strategic implications (C.-C. Liu, 2015; Du & Ma, 2015; Ya Li, 2018a, 2018b; Z. Li, 2017; Liang, 2017a; Song, Lu, & Liang, 2017).

However, the bulk of Chinese-language literature is concerned with assessing the practicalities of implementation and increasing connectivity through infrastructure investment, particularly in energy and transport (W. Liu, 2015; Yangchang Liu, 2018; Chao & Hu, 2018; Dong, et al., 2016; Li & Zhiyu, 2018). With regard to transport, for example, recent research has examined China's "rail diplomacy" (Huang, Ge, Ma, & Liu, 2017), the "Go-out" Policy of Chinese High-speed Railway under the BRI (Xian-Jun, 2018), and road selection (Wei, Li, & Zhao, 2017), rail and shipping competition and cooperation (Lu, Chen, & Lu, 2018; Chengjin & Chen, 2017). Construction and the development of an 'infrastructure index' also figures prominently (Yuan Li, 2018).

The BRI is anticipated to generate significant economic returns for investing countries (Cui & Chi, 2017) - however, Chinese research is also concerned with tracking and evaluating how to integrate the external and internal sinews of the BRI. For example, the Guangdong-Hong Kong-Macau Greater Bay Area (Huang, Chen, Li, & Mu, 2018), promoting the development of Yangtze River Economic Belt (Lu and Dong, 2017), and research related to China's regional development strategies, including a new study on Xinjiang Province economic development and the BRI (Zhao, Zhang, Xu, & Chen, 2018) and Dalian (Zheng & Min, 2015). Increased private sector engagement is also the subject of analysis, such as work by Ying Liu (2017) and evaluations arguing to open up the BRI's financial reach (Tian, 2017; Y. Wang, 2017; W. Wang, 2018). Relatedly, recent work on the energy sector has sought to assess oil and gas Silk Road distribution and interdependency with China (Zhao, Liu, & Ge, 2017) as well as a cost-benefit analysis of accession to the energy charter (Wenhua, Wang, & Han, 2016). Socio-economic factors such as the impact upon China's urbanisation are also being exposed (Fang, Bao, Huang, & Li, 2018; X. Ji, Jiang, & Chen, 2018). Existing evidence indicates that the BRI facilitates increased trade, and recent Chinese analyses have mapped trade spatiality along the Silk Roads (Zhouying, Shuyun, & Wei, 2017), as well as highlighting the importance of industry zones and parks (Meng et al., 2018; Yeerken, Wei, & Zhigao, 2017). An emerging strand of Chinese literature mirrors that of the English-language literature in concluding that there is a need for a "scientific" understanding of the BRI and for more



and better quality research on what is being done in practice across the regions under the BRI (W. Liu, 2015; Weidong et al., 2018). This has been influenced by an increasing focus on investment and other risks, for example financial risk, monitoring and investment risk training (Ye Liu, 2018; Yuan Liu, 2017), geopolitical risks of major BRI projects (Juhua, Luo, Liang, & Zhu, 2018), foreign investment and security (Zou, Hu, & Wang, 2016), changing Chinese overseas interests and the BRI (Kong, 2016), and the regional interests of China, for example, in Central Asia (Kong, 2017).

An important current in the Chinese literature is that of infrastructure. A number of recent studies report on research into the investment and financing mode of China's overseas infrastructure construction under the BRI (Xingying, Zhou, & Ling, 2017) and the importance and role of China's technological capabilities on overseas investment in East Asia and Southeast Asia, focusing on infrastructure and institutional factors such as regulatory influences (Xiaobo, Su, & Zhi, 2015) and financing (Xu, 2017). The significance of risk is again highlighted in the infrastructure literature, with studies on risk management of overseas infrastructure investment (Yurui, 2016), risks arising from social organisation and countermeasures for China's foreign infrastructure investment (Haiyong, 2016; J. Ji & Liang, 2018), and the "Excellence" and "Risk" of China's overseas infrastructure investment strategy (Shaoqing, 2015).

Investing in infrastructure on the scale envisaged in the BRI also carries significant potential environmental risk. As Xiaofei Dang (2018, para. 8) explains:

Infrastructure construction consumes a lot of resources, such as steel, cement, stone, and wood. The infrastructure is very cyclical. The infrastructure construction on the "Belt and Road" will determine the energy consumption, resource utilization and waste discharge of countries along the route in the coming decades. Moreover, from the perspective of carbon emissions, the countries along the "Belt and Road" account for more than 60% of the world's carbon emissions, and the per capita emissions are 6.1 tons, which is higher than the world average of 4.5 tons. Therefore, the construction of green infrastructure has become an inevitable choice.

The Chinese Government's commitment to a Green BRI has seen research studies looking at the identification of arid and semi-arid regions under the BRI (Xinwu et al., 2016), environmental monitoring for SDGs under the BRI (Liu et al., 2018), and the Green BRI itself (Dongmei & Wang, 2017).

### **3. The Western and Chinese Approaches to Development and Infrastructure**

The international system of development assistance is changing significantly, driven by agencies seeking to widen and deepen inclusivity, guided by a new emphasis upon the sustainability and inclusivity of economic growth, grounded in principles of equality, equity, mutuality and reciprocity, and practices of cooperation supported by new multilateral institutions within the global institutional architecture and through root-and-branch reform of existing institutions. This process of change is due, in part, to perceived limitations and weaknesses in the established development culture and philosophy, institutional fabric and practices. As one expert, Branko Milanovic, has commented:

OBOR represents a major change in developmental philosophy. Since the 1980s, first with structural adjustment loans and then even more so after the fall of communism in the 1990s, western-led development organisations adopted a philosophy where development

was no longer seen as brick-and-mortar building of factories and bridges, but as institution-building and policy change. (2017, para. 6)

In large part, however, change is also due to the arrival of the “emerging economies”, as new development assistance partners for many low-income economies. These economies offer a different approach in the way that “development” is conceived and development assistance is understood and practiced (J. Gu, 2009; 2011; 2015; 2017; J. Gu, Chuanhong, Vaz, & Mukwereza, 2016; J. Gu, Shankland, & Chenoy, 2016). These economies are challenging the structural institutional architecture, central principles and underlying values of the established system, along with its managerial system and effectiveness of delivery. This is the result of many influences. Each of these new development partners brings the legacies and lessons of their historical experiences as colonies and their long, often bitter, roads to independence and renaissance, along with their experiences as recipients of international development assistance. Their relationship with the existing system is complex, one in which these new development partners simultaneously gain knowledge and understanding of the “traditional” system whilst stepping away from it to establish a “new” institutional architecture grounded in distinctive principles and practices. China is central to this process of change. The elaboration of the BRI by China during 2013-15 was entwined with the global conversations and negotiations for the two major global compacts concluded in 2015: the 2030 Sustainable Development Agenda and the Paris Climate Change Agreement. The BRI’s rationale is to realise a number of economic opportunities, both for China itself and partner countries, with the logic based on China’s conviction that it was the heavy investment in the country’s infrastructure that provided the impetus for national economic growth and the remarkable reduction in the numbers of people living in poverty in China. At the heart of this distinctive approach is an avoidance of the didacticism of policy conditionality which these states perceive to be associated with traditional development community approaches. The approach of China detaches economic and political interests by focusing on practical, achievable projects. President Xi has stated firmly that the BRI “should benefit local people” (Lin, 2018b). As Milanovic (2017) explains:

For development to happen, you need “hard” stuff: you need roads for farmers to bring their goods, you need fast railroads, bridges to cross the rivers, tunnels to link communities living at different ends of a mountain. Obor proposes an activist view of development scaled up to the level of three continents. (para. 9)

The Asian Development Bank estimates the annual infrastructure investment needs across the BRI countries to be at least US\$1.7 trillion until 2030 (He & Kuijs, 2017, para. 12). China’s BRI infrastructure capacity-building has seen it invest “more than 25 billion USD into BRI-related infrastructure projects according to the MERICS BRI database. Not included are the projects still under construction or in the planning phase, which involve much larger investment volumes” (Eder, 2018, para. 2). The China-led Silk Road Infrastructure Fund invests in BRI infrastructure projects. Initially capitalised at US\$40 billion, the Fund is to expand to US\$100 billion. The China Development Bank has stated that it set aside some US\$890 billion to underwrite over 900 projects in 2015 (He & Kuijs, 2017). In addition, the Asian Infrastructure Investment Bank membership has grown from 57 to 87 members. The AIIB’s projects were able to harness a total of over US\$30 billion in investments for both public and private sources. The AIIB has approved investment for projects worth over US\$5.3 billion. The NDB is a BRICS multilateral development bank (MDB), established with seed funding of US\$50 billion in capital with the stated aim to increase its capital to US\$100 billion.

Given the estimated size of the current and future infrastructure gaps, the role played by MDBs will be pivotal in delivering the goals of the BRI, by providing the vital investment in BRI projects, covering risks, and attracting private capital. In addition to the AIIB and NDB, four other MDBs formally agreed to support the BRI by signing a Memorandum of Understanding with the Chinese Ministry of Finance in May 2017, intended to strengthen international cooperation: the Asian Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank and the World Bank Group (China Daily, 2017a, Financial Cooperation section IV, para. 4).

The BRI economies are playing an increasingly important role in China's overall trade and investment relationships. Based on data from the EIU's BRI Quarterly reports for 2018,

[In the first quarter of 2018] Two-way trade between China and the 65 countries officially under the BRI grew by 19.4% year on year to US\$287.3bn, up from 13.8% expansion in the fourth quarter of 2017... Exports rose by 16.5% to US\$158bn, with imports up by 23.2% to US\$128.4bn over the same period. China's trade surplus with BRI countries fell to US\$30.4bn in January-March, from US\$49.9bn in the previous quarter... [In the first quarter of 2018] BRI countries accounted for 29.1% of China's total exports in January-March, up from 27.9% in October-December 2017. Similarly, imports from the BRI countries represented 25.8% of the total in January-March, rising from 25.4% in the fourth quarter of 2017. There was also a lift in the role played by BRI countries in China's overseas direct investment (ODI) flows. Although non-financial ODI flows to BRI countries fell to US\$3.6bn in the first quarter of 2018, from US\$4.8bn in October-December 2017, this represented 14.2% of total ODI flows – the highest proportion since the first quarter of [2017]. (Economist Intelligence Unit, 2018a, Trade and Investment section, para. 1-3).

The BRI Quarterly Report also highlights an important point when evaluating the overall development impact of the BRI. It notes that, whilst the BRI membership currently stands at 65 countries, in actual practice “China's trade and investment links are concentrated in relatively few of these. Ten countries accounted for 66.4% and 73.3% of China's export and import flows to BRI countries, respectively, in the first quarter of 2018, led by Vietnam, Malaysia, Russia, Indonesia and Thailand. Most of China's ODI flows to the BRI also went to a select number, principally Singapore, Malaysia, Indonesia and Vietnam” and the Report surmises that “this suggests that Chinese companies engaging with the BRI are seeking out the more developed, and stable, markets included in the initiative” (Economist Intelligence Unit, 2018a, Trade and Investment section, para. 5). The follow-on BRI Quarterly Report (Q3) identifies factors contributing to international and Chinese “pushback” against the BRI. The Q2 Report had noted increased concern within China about BRI projects and investment risk. The Q3 Report which, it argues, provides evidence of “a number of projects, both planned and under construction, which are facing delay, suspension, cancellation or other challenges in BRI countries” (Environment Intelligence Unit, 2018b, para. 1) in mid-2018, leads the authors to comment further that:

These developments have in turn raised questions within China over the economic and diplomatic feasibility of the BRI, which has been the subject of criticism in the past for its international largesse at a time when China still faces developmental challenges of its own. (Economist Intelligence Unit, 2018b, para. 2)

Reflecting this emerging perspective, March 2018 saw new regulations formulated by the National Development and Reform Commission (NDRC), referred to as “NDRC 11”, enter into force on outbound investment. The new regulations sought to make the approvals process for BRI-related

investment less cumbersome and more efficient and effective whilst, simultaneously, they implemented much stricter investment control regulations on those investments designated as “restricted” or “prohibited” under these regulations (Economist Intelligence Unit, 2018a, Trade and Investment section, para. 5). In addition, China’s policy banks underpinning the BRI, including the China Development Bank (CDB) and the Export-Import Bank of China (China EXIM) adopted a more cautious approach to lending on BRI projects, whilst a range of new guidelines were announced intended to standardise BRI investment processes and risk management. The EIU BRI Q2 Report also noted that these policy banks committed themselves to closer cooperation on investment risk and wider issues of financial governance with international financial institutions (Economist Intelligence Unit, 2018a, Trade and Investment section, para. 5).

The BRI also raises important questions about environmental and social governance and safeguards. Safeguard policies are “essential tools to prevent and mitigate undue harm to people and their environment in the development process” (Food and Agriculture Organisation, 2018, para. 1). Safeguards are central to processes of identifying and designing a project. The application of safeguards enable the assessment of potential environmental and social risks and the impacts (positive or negative) associated with a development intervention. Once a project is in the implementation stage, safeguards help define measures and processes to effectively manage risks and enhance positive impacts. The application of safeguard policies provides an important opportunity for stakeholder engagement, enhancing the quality of project proposals and increasing ownership. A number of international organisations, including the World Bank, OECD and European Union, have expressed concern that the large infrastructure projects at the core of the BRI’s activities carry very substantial environmental, social, and corruption risks. The World Bank argues that such risks include biodiversity loss, environmental degradation, or elite capture and argues that such risks

may be especially significant in countries involved in the BRI, which tend to have relatively weak governance. These risks will need to be identified and safeguards put in place to minimize their potential negative effects. The WBG and other Multilateral Development Banks could play a role in supporting the implementation of high environment, social and governance standards for BRI investments. (Ruta, 2018, Risks section, para. 2)

UN Environment and the Chinese Government have collaborated on an International Coalition for Green Development on the Belt and Road. In 2017, the Chinese Ministry of Environmental Protection and three other ministries issued “Guidance on Promoting Green Belt and Road” and the “Belt and Road Ecological and Environmental Cooperation Plan”. These policy documents are buttressed by the “Action Plan on Connecting the Belt and Road by Standards (2018-20)”. Under the Action Plan, China commits itself to expanding the fields of mutual recognition of standards and work with the countries along the BRI routes to formulate no fewer than 100 international standards, translate and launch more than 1,000 foreign versions of the Chinese standards, and carry out 2,000 key technical index comparisons in important fields (Ministry of Environmental Protection, 2017).

One innovative feature of China’s approach to a Green BRI are the Green Credit Guidelines (GCG), first announced in 2012 and described by Friends of the Earth as “one of the most progressive sustainable finance policies in the world” (Friends of the Earth, 2017, para. 2). With the advent of the BRI, a recent Friends of the Earth assessment concludes that

The Green Credit Guidelines offer China and its banking sector a unique opportunity to make good on their commitment to invest sustainably. But according to our report findings,

Chinese banks continue to struggle to meet their obligations to comply with host country law and international norms and standards in their overseas investments (2017, Report section, para. 2)

Issues of specific concern identified by the study include compliance with international norms, “related to banks requiring high quality environmental and social impact assessments from their clients, ensuring that public consultations are conducted based on Free, Prior and Informed Consent, and local conflict resolution”. Despite the issuing of Key Performance Indicators (KPIs) by the China Banking Regulatory Commission, the analysis concludes that “stronger bank-level and project-level disclosure, including public disclosure of their KPI self-assessments by banks, would promote more effective implementation of the GCGs and improve environmental and social risk management”. The key point raised by the study is that “Chinese banks should better use the GCG as a means to screen and assess how environmental and social risks may in fact undermine the financial viability and feasibility of projects, especially in the infrastructure sector” (2017, Report section, para. 2).

As noted above, the current Chinese literature on the BRI is increasingly concerned with risk and its management. This is mirrored in official statements. The tone of the BRI discourse is more sober as the challenges of putting the BRI into practice become more evident and signs of “pushback” within the BRI partners and from within China itself are also appearing. Mao Zhenhua, Chairman of China Chengxin Group, speaking at the National Risk and Opportunity Summit Forum in Beijing in November 2017 captured this change in tone well, “the ‘One Belt, One Road’ investment road is not an elegant road full of roses, but a road to opportunities and challenges, opportunities and risks” (Liang, 2017b, para. 2). This change in tone is evident in the assessment of problems facing the BRI. One recent Chinese assessment (Y. Zheng, 2017) clearly sets out six specific problems facing the BRI that need to be addressed:

1. It is necessary to formulate specific relevant Belt and Road action plans, which should include at least the specific participating countries, the areas targeted and the projects.
2. The nature and scope of the Belt and Road needs to be further clarified.
3. At the specific level of policy implementation, many countries along the route do not know which institution is responsible for implementing the “One Belt, One Road” initiative in China.
4. In addition to the coordination issues of various departments, the Belt and Road has a situation in which enterprises are absent. A recent survey of more than 50 state-owned enterprises by Deloitte showed that access to funds and risk management are two major obstacles for companies to go global. Enterprises are always the mainstay of foreign economic cooperation, and the government's policies should focus on how to solve the obstacles for enterprises to go global.
5. Assessing the viability of various projects in the future is another key issue in the implementation of the Belt and Road initiative. Without good project selection and project design, private capital is unlikely to participate in the investment.
6. State-owned enterprises need to rethink the system construction of the Belt and Road. Two points are particularly noteworthy. First, the assessment of project risks is important. Many of the investments of state-owned enterprises are high-value investment infrastructure projects, and the risks involved are not small. Second, in recent years some large-scale infrastructure projects involving Chinese investment have been suspended, or suspended in other countries by the host country.

## 4. China and Infrastructure Development in Africa

### 4.1 China and Africa

China's developmental relationship with Africa centres on trade, investment and technical development assistance, and China has been Africa's largest trade partner since 2009. China has set a target for bilateral trade of US\$400 billion by 2020. China's total trade with Africa rose 16.8% to US\$38.8 billion in the first quarter of 2017, the first year-on-year increase since 2015. This was due to a 46% rise in annual imports from Africa in the first quarter, with agricultural imports rising 18%, while Chinese exports recorded a small fall of 1% from a year earlier (Reuters, 2017). China's enterprises have been encouraged and supported by the Chinese government and Chinese financial agencies to internationalise and "go out" to Africa (Bräutigam, 2011; Gu & McCluskey, 2015), with Africa being regarded as "the last golden land" (J. Gu, 2009, 2011).

In addition to Sino-African bilateral relationships, China's engagement with Africa works multilaterally, principally through the structures, processes and agencies of the Forum on China Africa Cooperation (FOCAC). Reaching back over 18 years to the first ministerial conference held in Beijing in 2000, the FOCAC process frames the overall relationship between China and Africa, setting the priorities, planning, funding and implementation strategies. The 2015 Johannesburg and 2018 Beijing FOCAC Summits have set the current cooperation agenda. The Johannesburg Declaration and Action Plan (2016-2018) saw China commit US\$60 billion in development assistance, comprised of US\$15 billion of grants, interest-free loans and concessional loans; US\$20 billion of credit lines; the setting up of a US\$10 billion special fund for development financing; and a US\$5 billion special fund for financing African imports. The recent 2018 Beijing Summit saw the adoption of the Beijing Declaration and FOCAC Beijing Action Plan (2019-2021) (Xinhua, 2018b). Further engagement comes through the BRICS (Brazil, Russia, India, China and South Africa) group (J. Gu, Shankland, & Chenoy, 2016) and through trilateral cooperation (J. Gu, 2017).

There has been substantial coverage of China's commitment to infrastructural capacity-building in sub-Saharan Africa, with the Beijing Government receiving many plaudits for its funding and on-the-ground record of project delivery. This commitment is bilateral between China and each of the states in the region and operates through mechanisms such as the South-South Fund. However, it is also substantially multilateralised, not only through the Forum on China Africa Cooperation, but also via the AIIB and the NDB, the Contingency Reserve Agreement (CRA) and the infrastructure fund of the African Development Bank (AfDB).

The provision of high-quality infrastructure is critical for Africa to achieve the SDGs, Agenda 2063 of the African Union, and AfDB's High Five Goals. Infrastructure is the foundation for raising economic productivity and sustained economic growth. Africa's infrastructure need has long been recognised, with transport, electrification and communications capacity among the lowest in the world. The African Development Bank suggests that the continent's infrastructure needs amount to US\$130-170 billion a year, with a financing gap in the range of US\$68-108 billion (African Development Bank, 2018, p. 70, p. 82).

The BRI's focus on infrastructure is interwoven into the FOCAC process and strategic action plans. At the Johannesburg FOCAC Summit, China announced it would launch an infrastructure connectivity initiative centred on a China-Africa infrastructure cooperation plan developed with the African Union. The Chinese Government indicated that it would support Chinese companies to participate in Africa's infrastructure development through investment-construction-operation,

intended to strengthen cooperation on energy, transport, information, telecommunications and cross-border water resources, and focus on key connectivity projects.

In January 2015, China and the African Union signed a Memorandum of Understanding on China-Africa cooperation in infrastructure construction. Under the MOU, China will be in the “Africa Vision 2063” strategic framework, to strengthen cooperation with African countries in railway, highway, aviation and industrial areas of the region, and to promote the integration of African countries. Chinese companies have started construction of railways, airports, industrial parks and ports in countries such as Ethiopia, Djibouti, Kenya and Nigeria. Further commitment came in September 2018 at the Forum on China Africa Cooperation (FOCAC) held in Beijing. This event saw China sign MOUs with 37 African countries and the African Union (AU) on jointly developing the Belt and Road. Addressing the relevance of the BRI to the African Union’s Agenda 2063, James Wakiaga, Economic Advisor at the UN Development Programme (UNDP), noted:

The Belt and Road Initiative is very important particularly in terms of closing the infrastructure gap. Africa’s infrastructure gap is quite huge, like 95 billion dollars annually. So, we need to look for the different sources of financing to Africa’s infrastructure to be able to accelerate structural transformation and diversification. (AllAfrica, 2018, para. 13)

## 4.2 Kenya

Kenyan economic development has benefitted from a combination of a prolonged period of relative political stability following the introduction of the 2010 Constitution, and judicial nullification of the 2017 presidential election result – re-run, political violence and fresh legal challenge notwithstanding. The Constitution provided for devolution, a provision that the World Bank concludes has significantly improved the quality of governance in the country: “It is transformative and has strengthened accountability and public service delivery at local levels” (World Bank, 2018, Overview Context section, para. 3). This stability has contributed to Kenya being one of the fastest growing economies in sub-Saharan Africa. Kenya’s GDP annual growth rate averaged 5.45% from 2004 to 2018. The Kenyan economy grew by 5.7% year-on-year in the first quarter of 2018. This is the strongest growth rate since the last three months of 2016. The country’s economy has been strengthened by a stable macroeconomic environment, low oil prices, higher levels of tourism, strong remittance inflows and a government-led infrastructure development initiative (Trading Economics, 2018a).

The Kenyan government is seeking to implement its long-term national development “Vision 2030”. This aims to transform Kenya into a newly industrialising, “middle-income country providing a high-quality life to all its citizens by 2030” (Government of Kenya, 2018, Vision section, para. 1). Central to this are the “Big Four” development priorities, set out by President Kenyatta. The Big Four prioritise manufacturing, universal healthcare, affordable housing and food security. This is promoting national economic development by increasing infrastructure, promoting sustainable development and accelerating poverty eradication (World Bank in Kenya, 2018). According to Kenyan President Uhuru Kenyatta:

The Belt and Road Initiative gives our continent the opportunity to make a paradigm shift. Post-colonial Africa has been stuck in a rut... It will be a win-win situation when our people have the skills, assets and financing necessary to participate in the development of the infrastructure corridors that will enhance connectivity, support trade and reduce the cost of doing business between our countries... We will all win when the economic corridors we

develop hasten industrialization; and when they hasten the development of domestic private-sector capabilities. (China Daily, 2017a, para. 4, 10, 13)

The Kenyan Government has prioritised infrastructure as a key instrument for long-term sustainable development. Kenya's Industrial Transformation Programme is designed to meet the challenges of increasing manufacturing base and exports. The strategy sets out the aim of creating "an enabling environment to accelerate industrial development through industrial parks/zones along infrastructure corridors, technical skills, supporting infrastructure and ease of doing business" (Government of Kenya, 2015, p. 5).

China is playing an increasing role with respect to Kenya's infrastructure development aims. China's approach is based on a generally positive assessment of Kenya's investment conditions. For example, the Kenya Investment Environment Report 2017 concluded:

Kenya is generally a good investment environment, the Chinese enterprises intending to invest in the direction of Kenya should focus primarily on manufacturing, regional distribution should be based on three major cities in Kenya and around the main export processing zones. At the same time, investment companies should respect cultural differences between the two sides and understand local laws and regulations, always pay attention to the physical health of employees. (Yan & Hailong, 2017, Abstract and section 1)

From a Chinese standpoint, infrastructure cooperation and a resulting strengthening of Sino-Kenyan trade is very much framed by the FOCAC process and the BRI. Further evidence of China's increased role is set out in the Kenya Investment Outlook. According to this analysis, the scale of Chinese direct investment has continued to grow between 2003 and 2016, especially in the final three years of this period. China's direct investment contract value for Kenya shows that nearly three-quarters of the contract amount was signed in 2015 and 2016, attributable to China's economic growth and the construction of the Belt and Road. The study found that the majority of Chinese firms in Kenya are State-Owned Enterprises (SOEs), with the mainstays being construction and transportation companies. In Chinese FDI projects in Kenya, some 20 projects, there were 16 SOEs involved, which is four times that of private enterprises. In terms of the size of funds, the average value of SOEs was US\$56.33 million, which is higher than the average of US\$21.54 million per private enterprise. Among the 23 projects undertaken by China in Kenya, the ratio of SOEs to private investment was 22 to 1. The contract value of each project of the SOEs was US\$582.27 million, compared to the contract value of private engineering projects standing at US\$3.5 million (Feng, 2017).

The newly completed Mombasa-Nairobi single gauge railway is the flagship infrastructure project, not only for reasons of connectivity and the projected economic development stimulus it offers, but also for its symbolic importance. According to the Chinese Government, there are multiple gains for Kenya from the project. These include greater convenience for Mombasa-Nairobi commuters, shorter freight transfers, anticipated contribution to Kenya's GDP growth of around 1.5%, creation of 46,000 jobs and a multiplier effect through the local economy through extensive sub-contracting to Kenyan firms, technology transfers and mentoring through a new rail engineering academy and new study and training opportunities (Government of China, 2017, Question on Mombasa-Nairobi railway, para. 3-4).

However, the project has been controversial, with Kenya's debt level rising as a result of the rail project. According to one commentator, "Apart from the SGR loans, China is already the single-largest bilateral lender [to Kenya] owed \$3.5 billion (Sh361.6 billion), or 19.4 per cent of total



external debt by the end of the second quarter of the 2016/17 fiscal year” (Omondi, 2017, para. 5). There have also been Kenyan media allegations made of poor employment practices by the Chinese operating company and concerns about Chinese migrant labour – claims not accepted by the Chinese Government.

Following on from this commitment to production capacity-building along the new railway, and indicative of the Chinese approach to the BRI and wider international development partnership, the relationship with Kenya has seen active interest from Chinese firms in the Kenyan Government's commitment to establishing Special Economic Zones (SEZs) and industry parks announced in September 2015, with the initial three zones in Kisumu, Mombasa and Lamu (Oxford Business Group, 2016, MTP 2013-17 section, para. 1). In conjunction with the construction of the Mombasa-Nairobi SGR railway, Chinese firms are developing the Mombasa port and Mombasa Special Economic Zone. In addition, the Guangdong New South Group has signed a US\$1.94 billion agreement with the Kenyan government for the construction of an industrial park in Kenya at the Eldoret Special Economic Zone. Entitled the Africa Economic Zone (AEZ), the Zone is the first in Kenya to be privately-owned. The agreement “is to develop and operate a high-end Special Economic Zone, with world-class infrastructure in Eldoret, Uasin Gishu County” (AllAfrica, 2017, para. 5). The advantage of the location lies with the ease of access to raw agricultural materials and the development of land away from the over-populated cities (AllAfrica, 2017, para. 6-7).

Kenya's infrastructure construction can be categorised into highways, railways, ports, airports, water conservancy and electric power industries. In 2014, the total contract value of projects under construction exceeded US\$2 billion, and the market share in roads, water supply and water treatment projects stood at over 50%. The project sectors covered include power transmission capacity, provision of improved water supply systems and drainage, greater exploitation of geothermal wells, construction of urban electricity grids, airport extensions, consulting advice, and housing provision.

Apart from the growing concern over the level of Kenya's mounting indebtedness and trade deficit, the Sino-Kenyan relationship also has difficulties. These include Kenyan domestic criticisms and concerns raised in September 2018 over the continued commitment of China to the next stage of the SGR project, the Nairobi-Naivasha-Kisumu section, with questions raised when the China Exim Bank was reported in the Kenyan press as having cut its funding for the Naivasha route and that overall allocations to the SGR project dropped (Business Daily, 2018). This followed allegations the previous month over the issuing of instructions to employees regarding public divulgence of company information and claimed to be in contravention of Kenyan legal guarantees and Constitutional provisions (Otieno, 2018). Further issues involved concerns expressed over a Chinese-Kenyan agreement for a Chinese company to undertake an aerial mapping of Kenyan mineral deposits, complaints from the Kenyan fishing community that cheap Chinese fish imports are undercutting and marginalising local fisherman and their markets. Added to these concerns are complaints by Kenya's small traders and importers against what they claim is an the influx of Chinese formal and informal traders into Nairobi's retail market, arguing that unregulated entry of the Chinese will undermine local businesses and leave thousands of Kenyans unemployed (Ngugi, 2018).

### 4.3 Ethiopia

The creation and operation of industry parks is an important component of the BRI and China's role in implementing the 2030 Agenda. In the view of the Chinese Government, "China-Ethiopia cooperation can be regarded as a model of South-South cooperation, playing a leading and exemplary role in China-Africa cooperation" (Embassy of the People's Republic of China in the Federal Democratic Republic of Ethiopia, 2016, para. 2). This case study focuses on China's role in the development of Ethiopia's industry parks in the context of the BRI and its impact on Africa. China's approach to industry park development is predicated on its stated intention to seek closer coordination and synergies with the growth and development aims of its development partners. The Ethiopian experience indicates that there has been an active attempt by both Governments to synchronise industry policy and industry park development. For the Ethiopian Government, industry parks have been identified as the principal drivers of the country's economic development strategy, specifically in promoting Ethiopia as a leading African platform for light manufacturing, a priority of China's industry park strategy and production capacity dialogue. The bilateral relationship has a long history and was formally upgraded to the status of a "comprehensive strategic cooperative partnership" in May 2017.

China is Ethiopia's largest trading partner. Ethiopia has come to be a close economic partner with China, drawing in a growing number of Chinese firms into its economy. In part, this reflects Ethiopia's healthy economy growth over the past decade with rapid expansion reflected in growth rates repeatedly over 10.5% during the period (Trading Economics, 2018c). Chinese enterprises are drawn to Ethiopia for a variety of motivational reasons, including the high growth rate and projections of future economic stability and growth, the geo-economic location of the country and, as wage costs rise in China itself, Ethiopia's lower wage levels represent a comparative advantage for Chinese firms and investors. To help maximise the country's benefits from these key factors of Ethiopia's business investment climate, the Ethiopian Government has developed a strong set of policies designed to bring in overseas investment. Finally, one might also point to political similarities in practical policy and organisational culture between the Ethiopian ruling Ethiopian People's Revolutionary Democratic Front (EPRDF) and the Communist party of China.

According to China's Ambassador to Ethiopia, Tan Jian:

We are working closely with Ethiopia in advancing the Belt and Road Initiative. Ethiopia is a very important partner in this regard. We have been doing a lot of projects here in Ethiopia -- infrastructure, policy dialogue, trade, financing and people-to-people exchanges. (AIIAfrica, 2018, para. 7)

Central to this deepening development relationship focused on infrastructure is production capacity cooperation. Premier Li Keqiang met Ethiopian Prime Minister Hailemariam Desalegn in Beijing in September 2015. Premier Li emphasised that Ethiopia is China's priority partner in carrying out production capacity cooperation with Africa, saying:

China is willing to work with Ethiopia to strengthen cooperation in areas such as infrastructure construction, human resource development, construction of industrial parks, integrated development of energy resources from upstream to downstream, and investment and financing, boost Ethiopia's industrialization process and independent sustainable development through production capacity cooperation. (Government of China, 2015, para. 3)

The formal status of the relationship was raised, at the Chinese Government's prompting, to the status of comprehensive strategic cooperative partnership in 2017. Based in this upgraded status, there is a detailed agenda of agreed pathways of cooperation, including:

- exchange of experiences in state governance and administration;
- enhance security cooperation and support Ethiopia in improving its capacity for counter-terrorism and maintaining security and stability;
- advance production capacity cooperation;
- strengthen cooperation in human resources;
- strengthen cooperation in emerging fields such as aviation, building regional aviation hubs;
- advancing personnel exchanges;
- enhance communication;
- coordination on international and regional issues.

Central to this diplomatic and economic upgrade is a wide-ranging commitment to strengthening closer practical cooperation. President Xi called on the two countries to promote cooperation in areas such as connectivity, production capacity, trade and economy, people-to-people exchanges, and aviation. President Xi has also stated that “China welcomes Ethiopia’s participation in the Asian Infrastructure Investment Bank, and supports its role as a bridge between the Belt and Road Initiative and Africa's development” (China Daily, 2017d, para. 5).

The context for Sino-Ethiopian cooperation under the BRI is their strengthening economic relationship. Bilateral trade has increased significantly over the decade 2006-17. In 2006, trade turnover amounted to US\$735 million, China’s exports totalled US\$664 million and imports amounted to US\$72 million. The US\$1 billion turnover threshold was reached in 2007. There was an explosion in bilateral trade in 2014 between China and Ethiopia, with trade turnover increasing by 67.9% over 2013. In 2015, trade turnover grew by a more modest, albeit still substantial, 16.5%. However, of concern is a large and widening trade imbalance. China’s exports to Ethiopia are mainly industrial products, whilst its imports from Ethiopia are mostly in the agricultural sector. Unlike many of Africa’s experiencing high growth rates, Ethiopia does not have the mineral and energy resources and its economy is heavily reliant on the agricultural sector for exports and much needed revenues. China is a principal trading partner, representing 18% of total imports and 8% of exports in 2018 (Trading Economics, 2018b, Balance of Trade section).

The continuing trade imbalance that Ethiopia runs with China has been a significant influence on the development of the Ethiopian Government’s Industry Policy and export-oriented industrial parks strategy, and the adverse imbalance has prompted reservations within Ethiopia about the structure of Ethiopia-China trade. Nevertheless, “figures from the Ethiopian government show private operational Chinese investments from 1992-2015 stood at 16.2 billion birr (\$773m), bigger than any other country’s investment in Ethiopia during this period” (Gebreselassie, 2015, para. 15).

A significant number of Chinese enterprises have set up in Ethiopia. According to Ethiopian officials, industry parks are

on top of Ethiopia's investment landscape both in number and financial capital... 279 of the total 379 Chinese companies were set operational in Ethiopia with projects that worth over 13.16 billion Ethiopian birr (over \$572 million) from 2012 to 2017 period, while the remaining 100 are under implementation. (China Daily, 2017b, para. 1-2)

The key sector for Chinese firms is manufacturing:

A total of 28,391 jobs were created by 279 Chinese companies in the east African country during the period of January 2012 to January 2017, of which 20,072 were permanent, while the remaining 8,319 were temporary jobs. Out of these jobs, over 19,000 jobs were created in Ethiopia's manufacturing sector... with a total number of 276 projects both under implementation and operation during the stated period. (Xinhua, 2017, para 2)

Infrastructure capacity-building figures prominently in this bilateral development relationship. This relationship is characterised by a number of high-profile infrastructure projects funded by Chinese investment. These include: the US\$3.4 billion Addis Ababa Urban Rail project – the electrified Addis Ababa Light Rail Transit (AA-LRT) is the first light railway on the African continent, with two lines of a total length of 34 km; a major hydroelectric power plant, the Gibe III Hydropower Project – a loan from the Industrial and Commercial Bank of China (ICBC) financed 60% of the cost, while the balance has been covered by the Ethiopian Government; and the Addis-Africa International Convention and Exhibition Center (AAICEC) in Ethiopia's capital, Addis Ababa.

A significant amount of infrastructure investment has derived from China. China's EXIM Bank has provided commercial loans for a broad spectrum of infrastructure projects, including electricity distribution lines and cement factories, secured (and repaid) out of Ethiopia's exports to China – primarily sesame seeds. Under these arrangements, a Chinese company is awarded the project and the Ethiopian Government receives finance for development (Bräutigam, 2011). In September 2015, the China Development Bank stated its intention to encourage Chinese enterprises to invest in steel, cement and shipbuilding in Ethiopia. CDB President Zheng Zhijie stated in 2015 that “China has advanced extra production capacity in some sectors and Ethiopia, with rich natural resources and abundant labour, needs rapid industrialization” (Embassy of The People's Republic of China In The Federal Democratic Republic of Ethiopia, 2015, para. 2). In May 2017, the EXIM Bank provided a US\$262.2 million loan for the design and building of the Adama Machinery and Equipment Manufacturing Industrial Park. Ethiopia's Government also signed “218.6 and 171 million [US] dollars in loan agreements with the Export-Import Bank of China to finance the Aysha Wind Power Project, and the Arsi Negele-Hawassa section of the Modjo-Hawassa Highway project, respectively” (Ethiopia Panorama, 2017, para. 5).

The BRI rationale anticipates partner economies aligning their industrial development strategies with the BRI's aims, objectives and priorities. This synchronisation is evident in the case of Ethiopia. The Ethiopian Government's policies are embedded in its assessment of domestic factors, investment and business climates. Clearly, Ethiopia's national development plan is oriented and synchronised in such a way as to attract international investment as well as technical knowledge and related capacity to meet its country's core national development objectives and strategy. In particular, China is playing an increasingly pivotal role through its infrastructure investment in industrial parks. The development of the first Sino-Ethiopian “eco-park” and the more extended application of environmental impact assessments suggests that environmental and social safeguards are of greater priority as the Chinese government and enterprises seek to demonstrate practical implementation of their ‘green’ credentials. However, the industry park strategy is not without its challenges, such as low domestic enterprise take-up rates on some parks and administrative incoherence in some aspects of the tendering process for park units. The industry parks focus in Ethiopia is also interesting in attracting the involvement of Chinese provincial investment, something that is indicative of the Chinese Government's approach to devolving and widening sources of Chinese funding within the stricter regulatory framework and monitoring.

## 5. Policy Implications for Future Development Cooperation

The BRI represents a substantial emerging issue in sustainable development. There is widespread acknowledgement that this massive project presents significant potential to help implement the 2030 Agenda and attain the SDGs. The rationale of the BRI, with its stress upon infrastructure capacity-building and creating greater connectivity between markets and peoples, has received broad support from the international development community, with international organisations from the UNSC, General Assembly, World Bank, IMF, UNDP, World Meteorological Organization (WMO) (World Meteorological Organization, 2018) and regional IGOs all entering into agreements with China to collaborate on the BRI. Much of the debate over the BRI has moved from why it is being done to what is being done and its implications. This chimes with President Xi Jinping's statement that a "freehand brushwork" has been drawn. In the future, it is necessary to focus on the key points and carefully craft the "fine brushwork" (Embassy of the People's Republic of China in the United Kingdom, 2018, Natural Partners section).

The BRI represents a potentially important tool to help meet the 2030 Sustainable Development Agenda and help achieve the SDGs. By placing its emphasis on building infrastructure capacity and increasing market connectivity, the BRI can provide a viable mechanism to help implement the 2030 Agenda and achieve the SDGs. The advantage of the BRI is that it is already up and running, well advanced in its policy and operational functionality, with a global reach and impact. It has established itself as a prominent hub in the heart of the global institutional architecture on sustainable development and inclusive growth. The MERICS BRI database currently records over 1,000 BRI-related projects with project value over US\$25 million. Evidence from Kenya and Ethiopia indicates that China's infrastructure construction is adding to the production capacity of these countries.

Nevertheless, the sheer scale and magnitude of the BRI is daunting and challenging, raising concerns over its financial viability and the economic, financial, environmental, socio-cultural, governance, corporate and political impact on the BRI partners and the wider global development project. To realise the BRI's full potential and genuinely help attain the SDGs, these concerns need to be addressed. For example, as Eder has noted, "excessive debt levels of many target [BRI] countries receiving Chinese loans have... sparked concerns about the BRI's financial sustainability" (Eder, 2018, Security section, para. 3). Such concerns point to the need for clear and effective safeguarding provisions for the BRI, synchronised with established international norms, rules and regulations. There is an opportunity for this to be achieved. For example, China's introduction of tighter overseas lending and investment regulations has seen mobilisation of private investments and commercial lending become a priority, and new partnerships between Chinese and international private sector banks to support the BRI will necessitate engagement and closer alignment with international standards.

A key aspect such dialogue is facilitating BRI alignment with environmental and social governance (ESG) and, specifically, the formulation, adoption and application of ESG safeguards. To adapt the definition provided by the Green Climate Fund (GCF), safeguards refer to

a set of management processes and procedures that allow [organisations] to identify, analyse, avoid, minimise, and mitigate any potential adverse environmental and social impacts of its activities, to maximise environmental and social benefits, and to improve the environmental and social performance of [the organisation] and its activities consistently over time. This system of processes and procedures is an overarching framework for achieving improvements in environmental and social outcomes while addressing any

unintended adverse impacts of all the [organisation's] financed activities. It provides an opportunity for [organisations] to incorporate environmental and social considerations into [their] decision-making and operations in ways that not only include safeguard measures of “do no harm”, but also identify opportunities to “do good” and improve environmental and social outcomes. (Green Climate Fund, 2018, para. 2)

One means to advance such synchronisation and alignment to international policy and regulatory regimes is by establishing a regularised, sustained structure and process for dialogue between China, the BRI partners and the “traditional” donor countries. Such dialogue already takes place over environmental issues and the Green BRI. Such dialogue can facilitate the exchange of knowledge and build closer understanding between the respective parties. This could facilitate cooperation on infrastructure building in low-income countries and help deliver on the SDGs through the BRI.

To date, some members of the traditional donor community have reserved their positions on the BRI. Their stance is one of caution and a “wait, watch and see”, whilst encouraging China to introduce stronger governance and international compliance measures for the BRI (Zhou, 2018). Recent visits to China by European leaders have reconfirmed this shared perspective. Their reserve is based on concerns over public transparency and bidding equity with contracts awarded to Chinese firms. Chinese language commentaries refer to a US research finding that 89% of the Belt and Road contractors are Chinese enterprises (Jin, 2018). This is an issue addressed in 2017 at a workshop on “Public Tendering Processes and Bankability for Infrastructure Projects in Regulated Countries”, organised by the China-Britain Business Council (CBBC), Shanghai Municipal Commission of Commerce and CCPIT (China Council for the Promotion of International Trade). British Consul-General, John Edwards, stated that:

As China rolls out the Belt and Road Initiative, companies will have to adopt the commercial procedures and models relevant to the different markets. They will need to engage more actively at the feasibility stage. And they must build up the specialised knowledge and experience to comply with all the rules around public tenders and local financing for public infrastructure projects. (CBBC, 2017, para. 3)

Other governments have decided to explore the possibility of their own framework, notably the “Asia-Africa Growth Corridor” being advanced by the “Quad” (Australia, India, Japan and the United States), eliciting critical assessments in the Chinese literature (Sun, 2018; Tang, 2018; Yue, 2018). It should be noted, however, that none of these countries have fully stepped away from BRI engagement. Japan, for example, has expressed interest in working more closely with the BRI (Furuoka, 2018). Political and geo-strategic factors are influences here: India’s opposition to the China-Pakistan Economic Corridor and the Kashmir border dispute with China; Japan’s concern over expanding Chinese power and influence in the Asia-Pacific region; the Trump Administration’s trade dispute with China, as well as countering growing Chinese presence in Asia-Pacific and other regions. To the extent that this option becomes substantively operational, however, the existing scope, range and penetration of the BRI leaves possible alternatives relatively marginalised and potentially limited in comparison.

The BRI is an established and increasingly substantial component of the global economic and sustainable development landscape, and its inclusion in the Chinese Communist Party (CCP) Constitution in October 2017 signalled the long-term commitment and importance of the BRI to China (Goh & Ruwitch, 2017). The most effective approach for the traditional donor community is to actively engage with China through a dedicated, regularised dialogue process. The BRI is now

at a pivotal point in its development and it is timely to establish a process of meaningful dialogue and exchange. The European Union has been in a degree of tension with China over the BRI, citing problems of environmental protection, economic sustainability and fair tendering.

For the UK, the BRI can offer substantial new development cooperation opportunities in a post-Brexit phase. The existing close UK-China bilateral relationship on sustainable development can be deepened through additional infrastructure cooperation related to the BRI. As British Chancellor, Phillip Hammond, has indicated, the UK welcomes the Belt and Road initiative with its potential to promote and develop economic growth and the UK is a “natural partner” in the West (HM Treasury, 2017, Driving Forward section). The Chinese-language literature demonstrates a strong and positive interest in the UK signing a formal agreement with China on BRI cooperation, with discussion replete with references to the BRI bringing a “golden opportunity” to the UK, “Britain can lead the West” to participate in the BRI, the idea of the UK as the “natural partner” for the BRI (Zhang, 2018), “looking forward to the UK’s ‘more ambitious’ participation in the Belt and Road” and “How can we strengthen the ‘One Belt, One Road’ pragmatic cooperation under the urgency of the UK?” (Z. Gu & Jin, 2018; Huo, 2018; Lin, 2018a; Zhang, 2018; G. Wang, 2018). The central themes are: the importance attached to the UK’s willingness to be the first Western state to join the AIIB and take the lead on financial cooperation on the BRI, and on the complementarities of the UK’s strengths in financial services (Q. Zheng, 2018); the potential for strong intra-industry China-UK trade (Jiang, Zhang, & Huang, 2017); and the technical knowledge and experience in sectors such as engineering and transport. Agreements such as that concluded between Standard Chartered and the CDB to provide assistance in emerging funding for BRI-related projects are a positive step in helping to manage such expectations in China (Standard Chartered, 2018, para. 1). The UK’s departure from the European Union and the provisions of an exit agreement carries implications for the future of UK economic development. There is a strong case for the UK building a constructive avenue for BRI-related development cooperation projects with China, provided issues such as standards, transparency and accountability are addressed successfully through a regularised process of bilateral focused dialogue between the UK and China.

Reflecting the growing importance of the BRI, a new Parliamentary Group for the Belt and Road Initiative and China-Pakistan Economic Corridor was established in September 2018 by the UK’s All-Party Parliamentary Group (Embassy of the People’s Republic of China in the United Kingdom, 2018; Duan, 2018). The approach of pressing for better standardisation and transparency for the BRI retains utility and offers a degree of flexibility, and perhaps even bargaining capacity, to elicit change and strengthen the BRI’s ability to help achieve the SDGs. This approach has the added benefit of intersecting with domestic policy changes in China itself that are likely to necessitate Chinese agencies to be adaptive and open to the calls for transparency, accountability and better quality governance with international standards.

The successful implementation of the BRI over the medium-to-longer term will be influenced, in part, by the way in which the initiative is perceived by the wider global development community. Perception represents an important factor in terms of maximising domestic support for the BRI projects in the partner states of the respective corridors. A distinguishing characteristic of the BRI is the emphasis placed upon linking the global investment, trade and corporate instruments of economic growth to the creation of tangible economic and social benefits at the local level, to create new employment opportunities and community income generation and capacity-building. Here, China’s existing pre-BRI commitment to promoting stronger sub-state “people-to-people” trans-border relationships has also formed an important strand of the BRI approach to shared economic development and strategic partnerships. As President Xi has argued:

Development is ultimately for the people. To achieve more balanced development and ensure that the people have equal access to opportunities and share in the benefits of development, it is crucial to have a sound development philosophy and model and make development equitable, effective and balanced. (World Economic Forum, 2017, Fair and Equitable Governance section, para. 3)

The key point for further action is clearly expressed by Nicholas Rosellini, UN Resident Coordinator and UNDP Resident Representative in China: “[the initiative's] success will critically depend on the ability to contribute to national and local development objectives, and inter alia improving the livelihoods of local communities, through for example creating decent jobs, increasing capacities and overall living standards” (Rosellini, 2016, para. 7). To meet this need, the Chinese Government and its BRI partners need to initiate a major international public campaign to highlight and explain the developmental benefits accruing to people along the respective routes, and strengthen active engagement with civil societal and community organisations as mainstreamed stakeholders in project development, implementation and impact assessment.

There is a substantial “knowledge gap” specifically focused on the BRI-SDG relationship and particularly on the developmental gains being generated by *implementation and project development*. There is a substantial literature and emerging evidence base on the BRI and also on the SDGs. However, there is limited evidence on the interrelationship between the two initiatives. In particular, there is a clear need for further policy-oriented research to investigate and evaluate the growing number of BRI projects in terms of the specific aims, development and implementation and, most importantly, on effectiveness and impact in terms of the SDGs. Establishment of a BRI-wide multi-sector, multi-layered and multi-dimensional policy-oriented research programme to collect and evaluate project-focused evidence on performance, outcomes and impact relating to the SDGs and 2030 Agenda would contribute significantly to closing this knowledge gap, provide critical data on meeting the targets and goals of the SDGs, and strengthen evidence-based policy-making and future strategic development cooperation.



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