



4

Infrastructure Investment and Development Alongside the Belt and Road Initiative

Natalia Ribberink and Lisa Schubert

Introduction

Infrastructure is a key factor for achieving sustainable development goals such as economic growth, human development, and poverty reduction (Miyamoto & Chiofalo, 2015). To prevent under-provision or non-provision of infrastructure, infrastructure policies are introduced by governments or supranational bodies (Égert, Koźluk, & Sutherland, 2009; Estache & Wren-Lewis, 2012). These policies are said to drive investment in infrastructure, which in turn should benefit the economic growth of the recipient economy (Fleischer, 2003). Along with subsidies, allocation of funds to problematic regions and tax incentives, infrastructure investments in the context of BRI should be evaluated in the context of institutional theory on economic geography, focusing hereby on regional development and policy instruments with institutional

N. Ribberink (✉) • L. Schubert
Department of Business, Hamburg University of Applied Science,
Hamburg, Germany
e-mail: natalia.ribberink@haw-hamburg.de

dimensions (Kušar, 2011). The BRI may potentially provide evidence to revisit the theoretical institutional concepts of untraded interdependencies (Storper, 1997) and institutional space (Martin, 2005), which currently are investigated on the basis of successful and mainly homogeneous economic regions (Kušar, 2011).

Recently, to benefit from the effects of infrastructure, a number of countries are increasingly involving in the Belt and Road Initiative (BRI), a large-scale infrastructure project introduced by China (Liu, 2016; Vangeli, 2017). Kazakhstan will become a logistical linchpin in the BRI, as discussed later (see Selmier, 2020, this volume). This chapter analyzes the BRI and a special focus is placed on the criterion of private sector involvement opportunities. The analysis is based on the BRI website screenings and accompanied by additional literature-based insights. Here, the Belt and Road website established by the Hong Kong Trade Development Council (HKTDC) and the Business Opportunities' section of the Asian Infrastructure Investment Bank (AIIB) are screened. The HKTDC is a statutory body aiming at promoting and creating opportunities for Hong Kong businesses with a global network of 40 offices (HKTDC, 2018a). Under their website's Belt and Road section, they provide a database of investment projects from major economies along the Belt and Road that are open to cooperation (HKTDC, n.d.). The AIIB is a multilateral development bank, initiated by China, which focuses on the provision of financial support for the development of infrastructure (Zou, 2018).

Infrastructure and Large-scale Infrastructure Investment Policy

The term infrastructure can be defined in different ways, economic infrastructure, which comprises assets that enable the society and the economy to function, such as transport, telecommunications, electricity and water. The term also relates to social infrastructure, which comprises assets to support the provision of public services, such as schools, hospitals and social housing, human capital and institutional infrastructure (International Transport Forum, 2018; World Economic Forum and

Boston Consulting Group, 2014). Infrastructure is also characterized by the need for investment, meaning the need to set up and develop transport, energy, and telecommunication networks. Further, it is also characterized by long-term usage and capital commitment, as well as high capital requirements. Infrastructure is of the utmost importance for every country: it enlarges markets for labor and goods, as well as increasing output and productivity of an economy (Delmon, 2017). Therefore, poor infrastructure may impede economic growth and international competitiveness (ibid.).

Infrastructure policies are all public or governmental measures aiming at the supply and improvement of infrastructure in a country or across a region (Gabler, 2014). An adequate infrastructure is the base for potential economic growth as well as competitiveness, so therefore essential (Revoltella, Brutscher, Tsiotras, & Weiss, 2016). However, it is not only governments that may introduce infrastructure policy; it can also stem from supranational bodies. In this latter case, there are several options. The first may be centralized harmonization, meaning that a supranational body can make policy decisions that are binding to all member states. The second option is decentralized harmonization, which implies that the regulatory body has no power to affect the policy but may increase and facilitate information exchange between the member states. The third option would provide the supranational body with the power to introduce binding policies, where the exact implementation is responsibility of each member state (Estache & Wren-Lewis, 2012).

Different reasons for the introduction of infrastructure policies can also be identified. Generally, governments involve themselves in infrastructure sectors through policy introduction in order to prevent underprovision or non-provision of infrastructure. The reason for government involvement in the infrastructure sector and policy intervention may evolve from *market failure* (see Baldakhov & Heim, 2020, this volume). For example, in the case of the existence of a natural monopoly, private suppliers can exercise their market power by providing a service below the required level, but at a higher price, which needs to be regulated by the government. Furthermore, the policy could be a reaction to network

externalities and distributional concerns, such as environmental concerns, and the aim of providing infrastructure services at affordable prices. There can also be specific cases where the provision of infrastructure by the private sector is restrained by the costs of a project or its technical feasibility, in cases when infrastructure would not otherwise be if the government did not intervene (Égert et al., 2009).

Regardless of the issuing body, infrastructure policies can be seen as the drivers of infrastructure investment, in turn, a driving force of an economy (Fleischer, 2003). An infrastructure policy may be considered large-scale if it aims at improving infrastructure through increasing investment in more than one country. These policies are designed to ensure that infrastructure meets social needs, that the most appropriate providers are involved and that related investment is efficient (Égert et al., 2009). In order to achieve this, infrastructure policies can involve the public and private sector to different extents (ibid.).

Infrastructure Investment

Infrastructure investment can be classified as a key feature of governmental policy in both developed and developing countries (Chatterjee, Posch, & Wesselbaum, 2017). Such an infrastructure policy may influence provision and ownership of infrastructure, whereby different actors can be involved in the investment. Public policies may focus on public provision and ownership or private provision and ownership, as well as a mixture of both variants. The mix of public and private involvement in infrastructure investment and establishment could be in the form of public-private partnerships (PPPs) (Directorate-General for Internal Policies of the Union, 2010; Égert et al., 2009). A PPP can be understood as an agreement between a government authority and a private firm, having the delivery of a public infrastructure project and service under a long-term contract as its subject (McGuinn et al., 2016). These partnerships can accelerate infrastructure development, as the private sector's financial resources are incorporated in the investment and its skills in designing, building and operating infrastructure may be used (World Economic Forum and Boston Consulting Group, 2013). Recently, PPPs have

become increasingly relevant for public infrastructure investment, especially in the transport sector, as they serve as an alternative to spending by governments (Égert et al., 2009; Inderst, 2016). This form of infrastructure financing can be especially interesting if governments wish to reduce their fiscal deficit (Klein, 2012).

Considering investments in transport infrastructure, the term infrastructure investment covers all spending on new transport construction as well as the improvement of existing networks (OECD, 2018). At times, investment in infrastructure is classified as a foreign direct investment (FDI), where the investor invests in infrastructure assets abroad. These assets usually comprise gas, oil, petrochemicals, electricity utilities, transportation, mining, telecommunication and other tangible assets (Sawant, 2010). Yet, there is no unified definition of the term FDI, which means the term can be conceptualized differently and will not always be used in the matter of infrastructure investment. The most common concept of FDI is “the commitment by one country or firm or individual ... to put substantial resources in another country ... for the purpose of running a business in one sector or other of the recipient country” (Bodomo, 2017, p. 8). As indicated by the definition, the infrastructure investment would need to be on a larger scale, meaning across countries.

Investment in infrastructure has several effects on the host economy. If the investment is performed thoughtfully, it has the potential to increase an economy’s productive potential in the long-term perspective (Rhodes, 2018). This may be enabled through enhanced connectivity of transport infrastructure and through decreasing transportation costs (Bhattacharyay & Bhattacharyay, 2017). Since high logistical costs are seen as a factor negatively affecting trade volumes, a decrease in transportation costs would allow companies to increase the volume of traded goods and utilize the advantage of economies of scale (Celbis, Nijkamp, & Poot, 2014; Rhodes, 2018). Further, infrastructure investment can enable improvement of economic efficiency, as the newly established or improved infrastructure may allow people to move or commute easier and follow employment opportunities in accordance with their skills (Rhodes, 2018). Through these effects, infrastructure may increase economic

growth (Bhattacharyay & Bhattacharyay, 2017); however, the actual effect of infrastructure investment on growth is largely country-specific (Égert et al., 2009).

The Belt and Road Initiative

The Belt and Road Initiative, which was first proposed by President Xi Jinping in October 2013, may be understood as a systematic approach to jointly build the Silk Road Economic Belt (SREB), and the twenty-first-century Maritime Silk Road (MSR), often also simply referred to as Belt and Road (State Council of the People's Republic of China, 2015) and evolved from China's *Going Global* strategy (Liu, 2016). The initiative targets are, to a great extent, overseas investments in infrastructure projects, such as roads, railways and seaports, but also in information and communication technology as well as in energy (EY, 2015; Larçon & Barré, 2017), with a focus on improving transport connectivity along the targeted regions (Steer Davies Gleave, 2018).

However, the objective of the BRI is not limited to infrastructure establishment. According to the State Council of the People's Republic of China (2015) the initiative aims at “[...] promoting orderly and free flow of economic factors, highly efficient allocation of resources and deep integration of markets; encouraging the countries along the Belt and Road to achieve economic policy coordination and carry out broader and more in-depth regional cooperation of higher standards; and jointly creating an open, inclusive and balanced regional economic cooperation architecture that benefits all”. Geographically and economically, the initiative is said to cover, or rather involve, about 65 countries across Asia, Africa and Europe (Li & Tang, 2017), jointly comprising 30% of the world's population and around 60% of global GDP (Steer Davies Gleave, 2018).

The BRI as a large-scale initiative identifies several overland corridors (Derudder, Liu, & Kunaka, 2018), but it does not yet provide a clearly defined development plan nor a clear list of projects to be concluded under the BRI (Steer Davies Gleave, 2018). One underlying reason for this may be the intention of China to present the initiative as an open

and nonexclusive program (Grimmel & Li, 2018). The only available description of BRI projects can be found in the *Vision and Actions on Jointly Building a Silk Road Economic Belt and 21st-Century Maritime Silk Road*, published by the Chinese National Development and Reform Commission, Ministry of Foreign Affairs and Ministry of Commerce of the People's Republic of China (2015), which states that the initiative covers the area of the ancient Silk Road but does not limit its scope to this area. Projects under the BRI are not only limited to investment in transport infrastructure but also cover other areas such as telecommunication and electricity as well as “other projects conducive to the improvement of people's living standard along the Silk Road” (Bank of China, 2017). Concerning the definition of transport infrastructure under the BRI, there is no official document stating what is to be included under the broad definition of transport infrastructure. However, transport infrastructure, which is planned to be established under the BRI, will include, among others, railways, roads and seaports (Larçon & Barré, 2017).

An additional reason for the lack of clear definition of projects or a list of projects might be the evolving character of the BRI, as it is continuously reshaped and developing through engagement between third countries and China and the fact that the BRI may not be seen as a program of specific investments (Steer Davies Gleave, 2018). Besides, the initiative does not have a clearly defined timeline as to when the projects pursuing the development of all related corridors are to be completed. However, the initiative is believed to be in place until 2049, which will be the year of the 100th anniversary of the People's Republic of China (Hillman, 2018a). Besides the nature of the BRI, which seemingly does not provide an exact definition of a BRI project, it appears that there is no single branch of the Chinese government reporting and responsible for projects, which leads to the lack of a database enabling the identification of BRI projects (Steer Davies Gleave, 2018). Based on the findings, the BRI may allow any project to be part of the initiative as long as it falls into the geographical scope of the initiative.

Regional Participation

Considering the geographical scope of the project, the BRI covers a wide area and includes many countries. Until now, most of the engagement, and thereby most of the investment in infrastructure under the BRI, has come from China or Chinese enterprises (Baker McKenzie, 2017; Deloitte, 2018). However, the BRI is inviting countries to join the construction process of the SREB and the MSR (National Development and Reform Commission, 2015) and should not be understood as an investment plan exclusively led by China (Zou, 2018). The BRI is said to be open and inclusive, allowing any country or economy interested in participating, supporting and benefiting from the BRI to do so (ibid.). However, due to the heterogeneity of countries along the SREB and MSR as well as the fact that several countries covered by the BRI are classified as developing countries or regions, it is said to be more difficult to achieve regional integration (Grimmel & Li, 2018), and promoting participation in the implementation provides a greater challenge.

To accomplish regional participation, apart from the introduction of policies for domestic construction and development, the Chinese government attaches great importance to international bilateral and multilateral cooperation since the implementation of the initiative, and thereby the establishment of the Belt and Road greatly depends on the joint efforts of countries along the different routes as well as on the enterprises located within those countries (Donghong & Lingling, 2017). While striving for international bilateral and multilateral cooperation, the BRI also emphasizes policy coordination between target regions. This means that countries along the Belt and Road are asked to jointly formulate development plans and measures for advancing cross-national or regional cooperation, to function as support for practical cooperation in order to enable the implementation of large-scale projects (HKTDC, 2018b).

From September 2013 onward, China has repeatedly included the BRI on its diplomatic agenda, promoting the BRI on diversified platforms and made it a frequently mentioned term during official visits within all important countries and regional organizations along the Belt and Road, with the aim of deepening the understanding of target regions

and increasing their willingness to participate (Zou, 2018). So far, China has pursued several agreements and memoranda of understandings (MoUs) with foreign countries. The main aim of these agreements and MoUs is to achieve policy coordination, and many of them aim to align national or regional development plans of the BRI targeted regions with the plans to establish the SREB and the MSR (Pauls & Gottwald, 2018). By the end of 2017, China had signed 100 agreements to jointly build the Belt and Road with 86 countries and international organizations (Zou, 2018). However, since the BRI has only been introduced in 2013, the levels of regional participation, the mechanisms used to achieve it as well as a general commitment to regional integration and cooperation among foreign countries are not yet defined (Pauls & Gottwald, 2018).

In the case of Kazakhstan, some domestic efforts demonstrating the potential of interconnectedness and correspondence with the BRI objectives can already be reported. In 2015 the state program of infrastructure development *Nurly Zhol* for 2015–2019 was launched and approved by the President of the Republic of Kazakhstan through the Decree of April 6, 2015, No. 1030 (Ministry of Foreign Affairs Kazakhstan, 2018). The program aims at the integration of the main domestic regions in Kazakhstan through establishing an effective infrastructure by means of the hub approach. These efforts are expected to lead to the formation of an interlinked domestic market, with increased efficiency and long-term economic growth of the Kazakh economy. While initially designed for domestic needs, this program is eligible to complement the infrastructural development alongside the BRI campaign, through the integration of newly established domestic routes and nodes on the BRI grid.

Private Sector Involvement Opportunities Under the BRI

Private sector involvement is an objective that has been recognized under the BRI; although the BRI is promoted by the Chinese government, it is the enterprises that play the primary role in BRI construction (Zou, 2018, p. 161). So far, Chinese state-owned enterprises have, to a great extent, been the beneficiaries of the BRI project construction (Deloitte, 2018), which would imply little involvement of private-owned

companies or international companies. However, this is likely to change as the BRI is said to be not only for the benefit of Chinese state-owned enterprises (Zou, 2018) but also for the increasing number of MNEs obtaining deals for BRI project, both of which continue growing (Deloitte, 2018).

To increase private sector involvement, the problem of transparency, which seems to persist and may be a hurdle to an increased involvement of enterprises, including foreign enterprises, needs to be solved (*ibid.*). Deloitte (2018) suggests partnering with national, provincial or local government agencies such as the National Development and Reform Commission, Chinese state-owned and private-owned companies as well as other MNEs and professional institutions. This suggestion indicates a wide variety of options for partnering, again underlining the problem of the lack of a single Chinese government body responsible for BRI projects, while it also begs the question of how this process can be structured openly. Nevertheless, two institutions list opportunities for private sector involvement, namely the HKTDC and the AIIB, but these two institutions may not be the sole providers of information on participation opportunities.

The Belt and Road website established by the HKTDC provides a section that lists investment projects from major countries along the Belt and Road. The website aims to assist businesses by providing them with a database of opportunities. Most projects included in the database are said to be infrastructure related. However, they may also belong to other areas and the website allows for filtering by sector and region as well as a form of cooperation. A further opportunity for private sector involvement is provided by the AIIB; the AIIB serves its purpose as a support platform for building the Belt and Road, as it has been established by several countries and therefore also provides a platform for joint participation and consulting (Zhu, 2015). The website of the AIIB provides a section labeled “Business Opportunities”, under which project procurement opportunities can be found. These opportunities comprise AIIB-financed projects that are open for tender, and participation is open to suppliers, contractors, and consultants worldwide (Asian Infrastructure Investment Bank, *n.d.*).

Similar to the database provided by the HKTDC, the AIIB only serves as a platform for information on open opportunities but does not provide a platform where the actual tendering takes place. Therefore, it is unclear how exactly the process should take place. Although there are seemingly different platforms in place that allow for private sector involvement, the actual procedure of such involvement is nontransparent. Overall, Chinese projects are less open to local and international participation. Out of all contractors involved in Chinese-funded projects, 89% are Chinese companies, followed by a minority of local and foreign companies (Hillman, 2018b.).

Investment Volume, Funding, and Financing

The determination of the investment volume under the BRI is somewhat limited. This may be explained by a lack of clearly defined projects as well as lack of set plans for development and implementation of infrastructure along with the targeted and participating countries (Hillman, 2018a; Steer Davies Gleave, 2018). Therefore, numbers on investment volumes are only available for some countries; additionally, these numbers may include projects not directly related to the BRI or may not differentiate between the kinds of infrastructure to be established under the BRI.

The BRI may be the largest overseas investment program launched by a single country, and as a result, financing of the initiative is complex (Rizzi & Tettamanti, 2018). Currently, China has the highest financial commitment, through the involvement of different financial institutions but also the state itself. Different banks and funds are involved, of which the majority are Chinese or Chinese funded (Rizzi & Tettamanti, 2018; Steer Davies Gleave, 2018). The private sector is also regarded as an important funding channel, though the involvement has so far been minor (Tettamanti, 2018). However, this may change as the initiative aims to attract private capital, among others, in the form of public-private partnerships (Jianxun, 2017). Due to many different stakeholders, a complex structure of funds and financing options under the BRI framework is evolving. Some major financing and funding sources, which do not reflect all supporting institutions and mechanisms, are illustrated in Fig. 4.1.

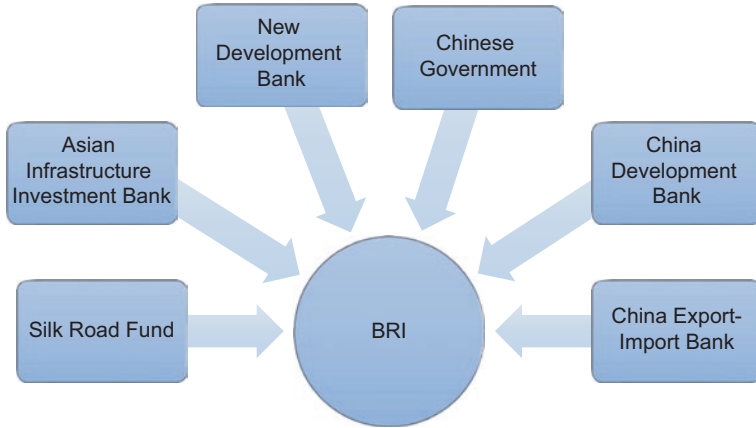


Fig. 4.1 Major financing and funding sources of the BRI. (Source: Authors' own graphic based on Baker McKenzie (2017), EY (2015) and Steer Davies Gleave (2018))

So far, the majority of investments into infrastructure has come from China or Chinese enterprises. Chinese policy banks, for example the China Development Bank (CDB) and the Export-Import Bank of China (EIBC), are especially active (Baker McKenzie, 2017; Steer Davies Gleave, 2018). The CDB is a financial institution set up by the Chinese government with a development-oriented focus, mainly supporting infrastructure development, construction and the development of basic and pillar industries. The EIBC is a Chinese governmental policy financial institution, which focuses on the financial support of electrical and mechanical equipment, high-tech product import and export as well as foreign project contracting and foreign investment. Both policy banks not only provide financing to Chinese companies engaged in infrastructure development along the Belt and Road but also contribute to the Silk Road Fund (SRF) (EY, 2015). So far, the China Development Bank (CDB) has pledged US \$38 billion as support for cooperation in the financing, infrastructure and industrial capacity, while the EIBC has pledged US \$20 billion for the same purpose (Steer Davies Gleave, 2018). Although China's commitment has been prevailing, this imbalance is expected to change over time, as the BRI grows in scale and size, and Chinese policy banks have no intention of fully funding the BRI projects

(Baker McKenzie, 2017). This is underlined by the fact that the CDB has signed a memorandum with Deutsche Bank which seeks cooperation under the BRI (Rizzi & Tettamanti, 2018). In addition to policy banks as major financiers of the BRI, the Chinese government has pledged US \$8 billion to support countries as well as international organizations participating in the BRI.

In 2014, as an additional support, the Silk Road Fund (SRF) was established (Larçon & Barré, 2017), providing a capital of US \$40 billion and 100 billion renminbi (RMB), contributed by multiple Chinese agencies: the State Administration of Foreign Exchange contributed 65%, the China Investment Corporation 15%, the CDB 5% and the EIBC 15% to the overall capital (Silk Road Fund, n.d.-a, n.d.-b). The fund, which has been established as a long-term development fund, aims at promoting social and economic development, as well as interconnection along the Belt and Road (EY, 2015).

The focus of the BRI lies in Central Asia, including Kazakhstan (Pauls & Gottwald, 2018). The fund is positioned to provide equity investment, including direct investment, debt investment such as loans and bonds as well as investment in funds, meaning that the fund may create sub-funds. With US \$2 billion of investment volume dedicated to Kazakhstan, the fund aims to provide equity predominantly for projects with the potential of successful implementation which would otherwise have too high a debt ratio, if financed with debt (Silk Road Fund, n.d.-a, n.d.-b). Investment is said to follow four principles, which are integration, profit, cooperation and openness. The principal of integration means that investments should be in line with national development strategies and the planning of involved countries. The principle of profit implies that investments should only be directed to profitable projects. The third principle demands cooperation with domestic and foreign enterprises as well as financial institutions. Lastly, the principle of openness describes an inclusive approach, referring to the openness to the involvement of any country that is interested in participating (Zou, 2018). Although these principles touch upon a clearer description of eligibility, they do not state in detail how financial support decisions are made or which exact variables are taken into account.

In addition to the Silk Road Fund, the AIIB, which was established in 2015, further aims to partially finance the large investment needed for projects across Asia and other target regions of the initiative. This multi-lateral financial institution has been founded by 57 countries (HKTDC, 2018b), of which 37 are regional, i.e. Asian, countries and 20 are non-regional countries (Pauls & Gottwald, 2018). Meanwhile, the number of shareholder countries in the AIIB has increased to 87, while the largest shareholders are China, Russia, Germany, France, India, Australia and Korea. The focus of the AIIB is on improvement of Asia's infrastructure (Asian Infrastructure Investment Bank, 2016b). Nevertheless, Article 11 (1) of the Articles of Agreement of the bank states that funding may be provided to all members, regional or non-regional, including any agency, instrumentality or political subdivision of members, as well as any entity or enterprise operating within any member's territory; this funding may also be extended to nonmembers, if support serves the objectives and interests of the bank (Asian Infrastructure Investment Bank, n.d.). Although financing is therefore not regionally limited, the actual financial support provided by the AIIB to non-regional members is limited. The current limit for the financing of non-regional members, set for 2018, amounts to 15% of the total approved financing by the bank (Asian Infrastructure Investment Bank, n.d.). The AIIB set three thematic priorities for its activities, namely the support of cross-border projects, the introduction of instruments improving private capital mobilization and the support of sustainable or green infrastructure. Funding provided by the AIIB will be in the form of sovereign-backed and non-sovereign-backed loans and equity participation as well as guarantees (Asian Infrastructure Investment Bank, 2016b). Regarding the loan provision of the bank, the projects submitted will be assessed across several criteria, taking into account the project's development objectives, scope and design, and the soundness of technology used. It will include other technical variables, as well as economic soundness, including an analysis of the project's costs, risks and financial soundness, as well as environmental and social variables. The other variables to be taken into account are integrity and financial management, legal concerns and procurement (Asian Infrastructure Investment Bank, 2016a, b). Non-sovereign-backed loans will only cover 35% of any project's value but

may be higher, if no other form of co-financing is available (Asian Infrastructure Investment Bank, 2016a, b).

With the aim of funding projects in developing countries, the BRICS New Development Bank was established in July 2014. This is an international multilateral financial institution and the initial capital of US \$100 billion was provided evenly by member state signatory to the establishment of the bank (EY, 2015). The BRICS countries are Brazil, Russia, India, China, and South Africa (Wulf, 2015). Although the name may indicate a sole focus on the BRICS countries, the bank focuses not only on those five countries but also on other emerging and developing economies (Carrai, 2018; Zou, 2018). Furthermore, even though the BRICS New Development Bank is frequently mentioned under the light of the BRI, the bank is not directly linked to it, as it will fund infrastructure-related projects across the world and is not limited to or aiming at financing BRI projects only, and has, so far, not financed any project directly linked to the BRI (Carrai, 2018; Rizzi & Tettamanti, 2018). Therefore, the findings on the BRICS New Development Bank stand in contrast to the claim that the bank is a major financier of the BRI.

Besides the main financial supporters illustrated above, other funds such as the China-Eurasia Economic Cooperation Fund, the China-CEE Investment Cooperation Fund and the China-ASEAN Maritime Cooperation Fund, as well as multilateral financial organizations such as the World Bank and the Asian Development Bank, are involved in the establishment of the SREB and the MSR by way of financing their establishment (Jianxun, 2017).

Overall, several options for financing are given; however, financial support available under the BRI is most likely not to cover the cost of a whole project in participating countries and is mainly focused on Asia. These financial options could potentially open up further project and partnership opportunities for Kazakhstan.

Conclusion

Large-scale infrastructure investment policies are introduced by governments or supranational bodies to cope with under-provision or even non-provision of infrastructure; these policies target a greater geographical region and the infrastructure can take many different forms, including economic and social infrastructure. The introduction of infrastructure investment policy aims at increasing investment in the provision or improvement of infrastructure, while the actors involved in the provision may be public, private or a combination of both, for example through public-private projects. The investment in infrastructure boosts economic growth, reduces trade costs, and increases competitiveness, while the actual effects on any individual economy may vary.

The BRI—being a representative and current example of a large-scale infrastructure investment policy—creates various opportunities for the Kazakh economy to catch up in terms of economic development, international trade and global value chain participation, assuming a sophisticated and sustainable integration of related projects and their proper implementation at the national level in correspondence with long-term domestic development goals.

Bibliography

- Asian Infrastructure Investment Bank. (2016a). *Operational policy on financing*. Retrieved from <https://www.aiib.org/en/policies-strategies/operational-policies/operational-policy-financing.html>
- Asian Infrastructure Investment Bank. (2016b). *Procurement policy*. Retrieved from https://www.aiib.org/en/opportunities/business/.content/index/_download/20160226051326635.pdf.
- Asian Infrastructure Investment Bank. (n.d.). *Business opportunities*. Retrieved from <https://www.aiib.org/en/opportunities/business/index.html?business=investment>.
- Balázs, P., Bodewig, K., Brinkhorst, L. J., Cox, P., Grosch, M., Peijs, K., Secchi, C., Simpson, B., Trautmann, C., Vinck, K., & Wojciechowski, P. (2017).

- Joint declaration of the European coordinators on the future of TEN-T & CEF*. Brussels, Belgium: European Commission.
- Baldakhov, U., & Heim, I. (2020). Institutional reform in Kazakhstan. In I. Heim (Ed.), *Kazakhstan's diversification from the natural resources sector: Strategic and economic opportunities*. London, UK: Palgrave Macmillan.
- Bank of China. (2017). *BoC economic review monthly*. Hong Kong, China: Bank of China.
- Bhattacharyay, B. N., & Bhattacharyay, M. (2017). *Institutional architecture for financing Pan-Asian infrastructure connectivity*. Munich, Germany: Center for Economic Studies and Ifo Institute (CESifo).
- Bodewig, K. (2018). *Baltic Adriatic – Third work plan of the European coordinator*. Brussels, Belgium: European Commission.
- Bodewig, K., & Secchi, C. (2014). *Attracting investment – towards transport infrastructure – potential lines for action*. Brussels, Belgium: European Commission.
- Bodomo, A. (2017). *The globalization of foreign investment in Africa – The role of Europe, China and India*. Bingley, UK: Emerald Publishing Limited.
- Brinkhorst, L. J. (2018). *Mediterranean – Third work plan of the European coordinator*. Brussels, Belgium: European Commission.
- Caesar, B., Heilmann, M., Saalbach, J., & Schreiner, W. (2018). Grenzüberschreitender Öffentlicher Verkehr: Immer noch Barrieren trotz EU. In K. M. Pallagst, A. Hartz, & B. Caesar (Eds.), *Border Futures – zukunfts Grenze – Avenir Frontière: Zukunftsfähigkeit grenzüberschreitender Zusammenarbeit* (pp. 207–2031). Hannover, Germany: Akademie für Raumforschung und Landesplanung.
- Carrai, M. A. (2018). It is not the end of history: The financing institutions of the belt and road initiative and the Bretton Woods system. In J. Chaisse & J. Górski (Eds.), *The belt and road initiative – Law, economics, and politics* (pp. 107–145). Leiden, Netherlands: Brill Nijhoff.
- Celbis, G., Nijkamp, P., & Poot, J. (2014). Infrastructure and trade: A meta-analysis. *Region: The Journal of ERSA*, 1(1), 25–62.
- Chatterjee, S., Posch, O., & Wesselbaum, D. (2017). *Delays in public goods* (Economics discussion papers, no. 1702). University of Otago.
- PwC China. (2017). *China and belt & road infrastructure – CEE transport infrastructure*. n.p.: PwC.
- Council of the European Union (CUN). (2018). *Multiannual financial framework: Shaping EU expenditure*. Retrieved from CUN webpage <https://www.consilium.europa.eu/en/policies/multiannual-financial-framework/>

- Decision No 1692/96/EC of the European Parliament and of the Council of 23 July 1996 on Community guidelines for the development of the trans-European transport network. (1996). *OJ L 228*, 9.9.1996, 1–103.
- Delmon, J. (2017). *Public-private partnership projects in infrastructure – an essential guide for policy makers*. New York, NY: Cambridge University Press.
- Deloitte. (2018). *Embracing the BRI ecosystem in 2018 – Navigating pitfalls and seizing opportunities*. Retrieved from https://www2.deloitte.com/content/dam/insights/us/articles/4406_Belt-and-road-initiative/4406_Embracing-the-BRI-ecosystem.pdf.
- Derudder, B., Liu, X., & Kunaka, C. (2018). *Connectivity along overland corridors of the belt and road initiative* (MTI discussion paper, 6). Washington, DC: World Bank Group.
- Directive 2014/15/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC. (2014). *OJ L 94*, 28.03.2014, 243–374.
- Directive 2014/24/EU of the European Parliament and the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC. (2014). *OJ L 28.03.2014*, 65–242.
- Directorate-General for Budget. (2017). *A guide to EU funding*. Retrieved from http://publications.europa.eu/resource/cellar/7d72330a-7020-11e7-b2f2-01aa75ed71a1.0001.02/DOC_1
- Directorate-General for Internal Policies of the Union. (2010). *New financing instruments for European transport infrastructure and services TEN-budget, loans, loan guarantee fund, PPP: How shall they be applied and combined to achieve an optimal result?* Brussels, Belgium: European Parliament.
- Directorate-General for Regional and Urban Policy. (2015). *European structural and investment funds 2014–2020: Official texts and documentaries*. Brussels, Belgium: European Commission.
- Donghong, L., & Lingling, T. (2017). China’s “belt and road” and business perspectives. In J.-P. Larçon (Ed.), *The new silk road – China meets Europe in the Baltic Sea region* (pp. 21–41). Hackensack, NJ: World Scientific.
- Égert, B., Koźluk, T., & Sutherland, D. (2009). *Infrastructure investment: Links to growth and the role of public policies*. Economic department working paper, no. 686. Paris: OECD.
- Estache, A., & Wren-Lewis, L. (2012). *Supranational infrastructure regulation: Institutional opportunities and challenges*. ECARES working paper, 2012–025. Brussels, Belgium: ECARES.

- European Commission (EC). (2018a). *EU budget for the future – The connecting Europe facility*. Retrieved from <https://ec.europa.eu/energy/en/content/connect-europe-facility-factsheet-06062018>
- European Commission (EC). (2018b). *Corridors*. Retrieved from <https://ec.europa.eu/transport/node/2443>
- European Commission (EC). (2018c). *Quality of railroad infrastructure*. Retrieved from https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/investments-infrastructure/quality-rail-infrastructure_en
- European Commission (EC). (2018d). *Quality of roads*. Retrieved from https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/investments-infrastructure/quality-roads_en
- European Commission (EC). (2018e). *Quality of port infrastructure*. Retrieved from https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/investments-infrastructure/quality-port-infrastructure_en
- European Commission (EC). (2018f). *Quality of Air transport infrastructure*. Retrieved from https://ec.europa.eu/transport/facts-fundings/scoreboard/compare/investments-infrastructure/quality-airports-infrastructure_en
- European Commission (EC). (2018g). *Connecting Europe Facility*. Retrieved from https://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/project-funding/cef_en
- European Commission (EC). (2018h). *Calls for tender*. Retrieved from EC web-site https://ec.europa.eu/transport/facts-fundings/tenders_en
- European External Action Service. (2014). *Facts and figures on EU-China trade*. Retrieved from EC web-site https://eeas.europa.eu/sites/eeas/files/tradoc_144591.pdf
- European Investment Bank (EIB). (2009a). *EIB financing of the trans-European networks*. Luxembourg, Luxembourg: European Investment Bank.
- European Investment Bank (EIB). (2009b). *Europe's leading public financial institutions launch "Marguerite", the 2020 European fund for energy, climate change and infrastructure*. Retrieved from <http://www.eib.org/en/infocentre/press/releases/all/2009/2009-242-europes-leading-public-financial-institutions-launch-marguerite-the-2020-european-fund-for-energy-climate-change-and-infrastructure>
- European Investment Bank (EIB). (2011). *EIB transport lending policy*. Luxembourg, Luxembourg: European Investment Bank.
- European Investment Bank (EIB). (2012). *An outline to project bonds credit enhancement and the project bond initiative*. Luxembourg, Luxembourg: European Investment Bank.

- European Investment Bank (EIB). (2018a). *Trans-European networks*. Retrieved from <http://www.eib.org/en/projects/sectors/tens/index.htm>
- European Investment Bank (EIB). (2018b). *The European fund for strategic investment: From crisis response to lasting impact*. Luxembourg, Luxembourg: European Investment Bank.
- European Investment Bank (EIB). (2018c). *Evaluation of the European Fund for Strategic Investment*. Luxembourg, Luxembourg: European Investment Bank.
- European Investment Bank and European Commission. (2008). *The loan guarantee instrument for trans-European transport network projects – Fact sheet*. Luxembourg, Luxembourg: European Investment Bank and European Commission.
- EY. (2015). *Navigating the belt and road – Financial sector paves the way for infrastructure*. Retrieved from <https://www.ey.com/cn/en/services/specialty-services/china-overseas-investment-network/ey-navigating-the-belt-and-road-financial-sector-help-pave-the-way-for-overseas-expansion>
- Federal Ministry of Transport and Digital Infrastructure. (2018). *An overview of the trans-European transport network (TEN-T)*. Retrieved from <https://www.bmvi.de/SharedDocs/EN/Articles/G/an-overview-of-the-trans-european-transport-network-ten-t.html>
- Fleischer, T. (2003). *Infrastructure networks in Central Europe and EU enlargement*. Budapest, Hungary: Institute for World Economics – Hungarian Academy of Science.
- Gabler. (2014). Infrastrukturpolitik. In E. Winter (Ed.), *Gabler Wirtschaftslexikon* (pp. 1574–1575). Wiesbaden, Germany: Springer Fachmedien Wiesbaden.
- Gajewska, A., & Abadie, R. (2017). *The road ahead – CEE transport infrastructure dynamics*. Retrieved from <https://www.pwc.pl/en/publikacje/2017/the-road-ahead-cee-transport-infrastructure-dynamics.html>
- Gelderman, C. J., Ghijsen, P. W., & Brugman, M. J. (2006). Public procurement and EU tendering directives – explaining non-compliance. *International Journal of Public Sector Management*, 19(7), 702–714.
- Gleave, S. D. (2018). *Research for TRAN committee: The new silk route – opportunities and challenges for EU transport*. Brussels, Belgium: European Parliament, Policy Department for Structural and Cohesion Policies.
- Góralczyk, B. (2017). China's interests in central and Eastern Europe: Enter the dragon. *European View*, 16(1), 1–10.
- Grimmel, A., & Li, Y. (2018). *The belt road initiative: A hybrid model of regionalism*. Working papers on East Asian studies (122/2018).

- Grosch, M. (2018). *Orient east med – third work plan of the European coordinator*. Brussels, Belgium: European Commission.
- Halvarsson, A., Rydell, I., Holström, M., Blagoeva, T., & Bain, R. (2014). *Ex-post evaluation of the loan guarantee instrument for trans-European transport network projects (LGTT)*. Brussels, Belgium: European Commission.
- Heyman, E. (2013). *Project bond initiative*. Frankfurt, Germany: Deutsche Bank.
- Hillman, J. E. (2018a, April 3). *How big is China's belt and road?* Retrieved from <https://www.csis.org/analysis/how-big-chinas-belt-and-road>.
- Hillman, J. E. (2018b). *China's belt and road initiative: Five years later*. Retrieved from <https://www.csis.org/analysis/chinas-belt-and-road-initiative-five-years-later-0>
- HKTDC. (2018a). *Annual report 2017–2018*. Hong Kong: HKTDC.
- HKTDC. (2018b). *The belt and road initiative*. Retrieved from <http://china-trade-research.hktdc.com/business-news/article/The-Belt-and-Road-Initiative/The-Belt-and-Road-Initiative/obor/en/1/1X3CGF6L/1X0A36B7.htm>
- HKTDC. (2018c). *The belt road initiative*. Retrieved from <http://china-trade-research.hktdc.com/business-news/article/The-Belt-and-Road-Initiative/The-Belt-and-Road-Initiative/obor/en/1/1X000000/1X0A36B7.htm>
- HKTDC. (n.d.). *Project database*. Retrieved from <https://beltandroad.hktdc.com/en/project-database>
- Holzner, M., Heimberger, P., & Kochnev, A. (2018). *A European silk road*. Vienna, Austria: Vienna Institute for International Economic Studies.
- Inderst, G. (2016). *Infrastructure investment, private finance, and institutional investors: Asia from a global perspective*. ADBI working papers, no. 555.
- International Transport Forum. (2018). *Private investment in transport infrastructure – Dealing with uncertainty in contracts*. Paris: International Transport Forum.
- Jianxun, S. (2017). Financing China's "belt and road" Initiative. In J.-P. Larçon (Ed.), *The new silk road – China meets Europe in the Baltic Sea region* (pp. 157–182). Hackensack, New Jersey: World Scientific.
- Johnson, D., & Turner, C. (1997). *Trans-European networks – The political economy of integrating Europe's infrastructure*. London: Macmillan Press LTD..
- Klein, M. (2012). *Infrastructure policy – basic design options*. Policy research working paper (6274). The World Bank.
- Kowalski, B. (2017). China's foreign policy towards central and Eastern Europe: The "16+1" format in the South – South cooperation perspective. Cases of the Czech Republic and Hungary. *Cambridge Journal of Eurasian Studies* 1, 1–16. <https://doi.org/10.22261/7R65ZH>.

- Kušar, S. (2011). The institutional approach in economic geography: An applicative view. *Hrvatski geografski glasnik*, 73(1), 39–49.
- Larçon, J.-P., & Barré, G. (2017). China meets Europe by the Baltic Sea. In J.-P. Larçon (Ed.), *The new silk road: China meets Europe in the Baltic Sea region* (pp. 1–20). Hackensack, NJ: World Scientific.
- Li, D., & Tang, L. (2017). China's "belt and road" and business perspectives. In J.-P. Larçon (Ed.), *The new silk road: China meets Europe in the Baltic Sea region* (pp. 21–42). Hackensack, NJ: World Scientific.
- Liu, Z. (2016). "The 16+1 cooperation" in the context of "the belt and road initiative". In D. Dimitrijević (Ed.), *Danube in the function of the new silk road* (pp. 155–179). Belgrade, Serbia: Institute of International Politics and Economics.
- Martin, R. (2005). Institutional approaches in economic geography. In E. Sheppard & T. J. Barnes (Eds.), *A companion to economic geography* (pp. 77–94). Oxford, UK: Blackwell Publishing.
- McGuinn, J., O'Brien, S., Moreira, G., Oulès, L., van den Bogaerde, S., & Vansina, F. (2016). *Study on permitting and facilitating the preparation of TEN-T core network projects*. Bruxelles, Belgium: Milieu Ltd..
- Baker McKenzie. (2017). *Belt & road: Opportunity & risk – the prospects and perils of building China's new silk road*. Retrieved from https://www.baker-mckenzie.com/-/media/files/insight/publications/2017/10/belt-road/baker_mckenzie_belt_road_report_2017.pdf?la=en.
- McKinsey & Company. (2016). *One belt and one road: connecting China and the world*. Retrieved from <https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/one-belt-and-one-road-connecting-china-and-the-world>
- Miyamoto, K., & Chiofalo, E. (2015). *Official development finance for infrastructure: Support by multilateral and bilateral development partners*. OECD development co-operation working papers, no. 25. Paris: OECD Publishing.
- National Development and Reform Commission, Ministry of Foreign Affairs, Ministry of Commerce of the People's Republic of China. (2015). *Visions and actions on jointly building silk road economic belt and 21st-century maritime silk road*. Retrieved from http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html
- OECD. (2018). *Infrastructure investment (indicator)*. Retrieved from <https://data.oecd.org/transport/infrastructure-investment.htm>
- Office of the Commissioner of the Ministry of Foreign Affairs of the People's Republic of China in Macao Special Administrative Region. (n.d.). *Five-*

- year outcome list of cooperation between China and Central and Eastern European Countries*. Retrieved from <http://www.fmcoprc.gov.mo/eng/news/t1514538.htm>.
- Pauls, R., & Gottwald, J.-C. (2018). Origins and dimensions of the belt and road initiative: Experimental patch work or grand strategy? In R. Taylor & J. Jaussaud (Eds.), *China's global political economy – managerial perspectives* (pp. 31–54). London, UK: Routledge.
- Peijs, K. (2018). *Rhine Danube – third work plan of the European coordinator*. Brussels, Belgium: European Commission.
- Ping, H., & Zuokui, L. (2017). *The cooperation between China and Central & Eastern European Countries (16+1): 2012–2017*. Beijing, China: Social Science Academic Press (China).
- Italian Presidency. (n.d.). *Building infrastructure to strengthen Europe's economy*. Retrieved from European Commission web-site: https://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines_en
- Press and Information team of the Delegation to China. (2016, May). *China and the EU*. Retrieved from https://eeas.europa.eu/topics/external-investment-plan/15394/china-and-eu_en
- Press and information team of the Delegation to China. (2017). *Chronology of EU-China Relations*. Retrieved from https://eeas.europa.eu/topics/external-investment-plan/18537/chronology-eu-china-relations_en
- PwC & London Economics & ECORYS. (2013). *Public procurement in Europe – cost and effectiveness..* European Commission.
- PwC; London Economics; ECORYS. (2013). *Public procurement in Europe – Cost and effectiveness – Annex: Detailed methodology and data*. n.p.: European Commission.
- Regulation (EU). (2013). No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility. *OJ L 348, 20.12.2013*, 129–171.
- Regulation (EU). (2015). No 2015/1017 of the European Parliament and the Council of 25 June 2015 on the European Fund for Strategic Investments, the European Investment Advisory Hub and the European Investment Project Portal. *OJ L 169, 1.7.2015*, 1–38.
- Regulation (EU) No 1300/2013 of the European Parliament and of the Council of 17 December 2013 on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006. (2013). *OJ L 347, 20.12.2013*, 281–288.
- Regulation (EU) No 1301/2013 of the European Parliament and of the Council of 17 December 2013 on the European Regional Development Fund and on

- specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006. (2013). *OJ L 347*, 20.12.2013, 289–302.
- Regulation (EU) No 1315/2013 of 11 December 2013 on Union guidelines for the development of the trans-European transport network. (2013). *OJ L 348*, 20.12.2013, 1–168.
- Revoltella, D., Brutscher, P.-B., Tsiotras, A., & Weiss, C. (2016). *Infrastructure Investment in Europe and international competitiveness*. EIB working papers, no 2016/01.
- Rhodes, C. (2018). *Infrastructure policies and investment* (Briefing paper (6594)). London, UK: House of Commons Library.
- Rizzi, C., & Tettamanti, M. (2018). The first pillar of the B&R initiative funding: The institutional funding. In X. Yu, C. T. Rizzi, F. E. Ziccardi, & L. Guo (Eds.), *China's belt and road – The initiative and its financial focus* (pp. 89–118). Singapore: World Scientific.
- Sawant, R. J. (2010). The economics of large-scale infrastructure FDI: The case of project finance. *Journal of International Business Studies*, 41, 1036–1055.
- Selmier, W. T., II. (2020). Kazakhstan as logistics linchpin in the belt and road initiative. In I. Heim (Ed.), *Kazakhstan's diversification from the natural resources sector: Strategic and economic opportunities*. London, UK: Palgrave Macmillan.
- Silk Road Fund. (n.d.-a). *Silk road fund*. Retrieved from <http://www.silkroadfund.com.cn/enweb/23775/23767/index.html>
- Silk Road Fund. (n.d.-b). *Types of investment*. Retrieved from <http://www.silkroadfund.com.cn/enweb/23798/23803/index.html>
- Stanzel, A., Kratz, A., Szczudlik, J., & Pavličević, D. (2016). *China's investment in influence: The future of 16 + 1 cooperation*. London, UK: The European Council of Foreign Relations.
- State Council of the People's Republic of China. (2015). *Full text: Action plan on the belt and road initiative*. Retrieved from http://english.gov.cn/archive/publications/2015/03/30/content_281475080249035.htm
- Steinicke, M. (2012). Public procurement. In B. Iversen, P. Wegener Jessen, B. O. Gram Mortensen, M. Steinicke, & E. Sørensen (Eds.), *Regulating competition in the EU* (pp. 701–754). Copenhagen, Denmark: DJØF Publishing.
- Storper, M. (1997). *The regional world: Territorial development in a global economy*. New York, NY/London, UK: Guilford Press.
- Tettamanti, M. (2018). The second pillar of the B&R Initiative Funding: The private sector. In X. Yu, C. Rizzi, M. Tettamanti, F. E. Ziccardi, & L. Guo

- (Eds.), *China's belt and road – The initiative and its financial focus* (pp. 119–162). Singapore: World Scientific.
- The Treaty on the Functioning of the European Union (Consolidated Version). (2012). *OJ C 326*, 26.10.2012, 1–390.
- Trautmann, C. (2018). *North Sea Baltic – Third work plan of the European coordinator*. Brussels, Belgium: European Commission.
- Tuszyńska, B., & Gouadères, F. (2018). *Trans-European Networks- guideline*. Retrieved from <http://www.europarl.europa.eu/factsheets/en/sheet/135/trans-european-networks-guidelines>
- Van der Putten, F.-P., Seaman, J., Huotari, M. E., & Otero-Iglesias, M. (2016). *Europe and China's new silk roads*. European Think-tank Network on China.
- Vangeli, A. (2017). China's engagement with the sixteen countries of central, east and Southeast Europe under the belt and road initiative. *China & World Economy*, 25(5), 101–124.
- World Economic Forum and Boston Consulting Group. (2013). *Strategic infrastructure: Steps to prepare and accelerate public-private partnerships*. Cologny/ Geneva: World Economic Forum.
- World Economic Forum and Boston Consulting Group. (2014). *Strategic infrastructure – steps to operate and maintain infrastructure efficiently and effectively*. Cologny/Geneva, Switzerland: World Economic Forum.
- World Economic Forum and Boston Consulting Group. (2015). *Africa strategic infrastructure initiative: A principled approach to infrastructure project preparation facilities*. Cologne/Geneva, Switzerland: World Economic Forum.
- Wulf, H. (2015). *BRICS. Realistische alternative für globale reformen? Global governance spotlight*, 6. Bonn, Germany: SEF.
- Zhu, L. (2015). The construction model of “one belt and one road”: Mechanisms an platforms. In R. Wang & C. Zhu (Eds.), *Annual report on the development of the Indian Ocean region* (pp. 111–127). Singapore: Springer Singapore.
- Zou, L. (2018). *The political economy of China's belt and road initiative*. Hackensack, NJ: World Scientific.